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School of Architecture Urban Planning Construction Engineering

Master of Science in Management of Built Environment

A BIM-based matching for interoperability of building classification systems

Supervisor: **Prof. Sonia Lupica Spagnolo**

Co-supervisor: **Martina Signorini**

Master graduation thesis by:

Gaetano Raffa
Matr. n° 904214

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Abstract

Within the construction industry, there is a growing demand for information, ever-changing products, technological developments and solutions that are spreading on the market.

The quality of the data exchange therefore, represents the key point towards which the greatest commitment is concentrated for the purpose of disseminating BIM, both from a procedural and software tools point of view.

The issue of international standards, guidelines, indications with the codification of the documents for the development of the procedures, the methods for their preparation and their minimum contents, are the guidelines to improve quality and reliability of BIM software.

But it is clear that the theme of the superimposition of the models and their ability to exchange data without loss of information, namely interoperability, is the biggest issue.

Although it is recognized that there are a variety of different classifications around the world, their different nature and their contents could be rearranged. This would help to provide evidence that would allow for a clearer view of existing classification systems that will permit to afford a single basis for all future classification systems.

The work carried out in this thesis aims to analyse the application of some existing classification systems, and subsequently match them with the one used in the BIMReL platform. The goal is to verify if there is the possibility of creating a structure capable of connecting the different classification systems most in use, which resulted in the production of a matching table.

The latter will serve to create a system capable of automatically identifying and associating the objects present in the BIMReL platform and automatically deducing the code and name with which the same object is classified with the most common classification systems, in order to reduce to minimum uncertainties, managing to guarantee the uniqueness of the information.

Italian abstract

All'interno del settore edile, c'è una crescente domanda di informazioni, prodotti in continua evoluzione, sviluppi tecnologici e soluzioni che si stanno diffondendo sul mercato.

La qualità dello scambio dati, quindi, rappresenta il punto chiave verso il quale si concentra il maggior impegno ai fini della diffusione del BIM, sia dal punto di vista procedurale che degli strumenti software.

L'emissione di standard internazionali, linee guida, indicazioni con la codificazione dei documenti per lo sviluppo delle procedure, le modalità per la loro preparazione e il loro contenuto minimo, sono le linee guida per migliorare la qualità e l'affidabilità dei software BIM.

Ma è chiaro che il tema della sovrapposizione dei modelli e della loro capacità di scambiare dati senza perdita di informazioni, ovvero l'interoperabilità, è il problema più grande.

Sebbene sia riconosciuto che ci sono una varietà di classificazioni diverse in tutto il mondo, la loro diversa natura e il loro contenuto potrebbero essere riorganizzati. Ciò contribuirebbe a fornire prove che consentirebbero una visione più chiara dei sistemi di classificazione esistenti che consentiranno di offrire una base unica per tutti i futuri sistemi di classificazione.

Il lavoro svolto in questa tesi mira ad analizzare l'applicazione di alcuni sistemi di classificazione esistenti, e successivamente abbinarli a quello utilizzato nella piattaforma BIMReL. L'obiettivo è verificare se esiste la possibilità di realizzare una struttura in grado di collegare i diversi sistemi di classificazione maggiormente in uso, che ha portato alla produzione di una matching table.

Quest'ultimo servirà a creare un sistema in grado di identificare ed associare automaticamente gli oggetti presenti nella piattaforma BIMReL e di dedurre automaticamente il codice e il nome con cui lo stesso oggetto è classificato con i più comuni sistemi di classificazione, al fine di ridurre al minimo le incertezze, riuscendo a garantire l'unicità delle informazioni.

1 Classification systems

1.1 Scope and basic principles of classification systems

The implementation of a management and design process, based on BIM, comes up against the problem of breaking down the building into uniquely defined constituent parts in order to associate these parts with the objects that BIM authoring software makes available. The multitude of subjects involved, of objects to manage and the different approaches to the problem create ambiguities in the definition of the objects.

The solution to these issues is to use a hierarchical structure built up on several levels, which allows to accurately identify the object of analysis, be it a building or a part of it.

The term classification refers to all those activities or processes necessary for knowledge management. Processes and activities perform the task of ordering the data in appropriate catalogues (classes, sections, categories) joined together by relationships and connections. [1]

To be valid, a classification system must meet the following requirements:

- stability: it should be applied and applicable in different context without undergoing substantial changes;
- flexibility: it should be expandable with the addition of new parts and topics.

The classification systems of building objects are many and, despite having the same purpose, they cover different areas and they are often structured in a difficult way to be compared, not so much at the detailed levels (components, products) as at the highest levels (technological or functional units). For this reason, it is necessary to view multiple structures, in order to be able to obtain a consistent deconstruction of the building complex that is useful for the definition of BIM objects and related information attributes.

Classification alone is not enough, in fact it is necessary to associate the various building, spatial and plant engineering objects with information attributes that allow the information to be processed, aggregating it in such a way as to make it understandable and available to all actors in the process.

To do this, the principles governing a classification system were initially analysed, and subsequently the bases on which the classification structure and the organization of the information, defined by the ISO 12006 standard. This allowed to define the purpose, properties, framework, organization and taxonomies of the main classification systems (UniClass, UNIFORMAT II, OmniClass, MasterFormat and ETIM) and to make a comparison among them.

1.2 Structuring principles

Even though most of the existing classification systems do not exclusively address one of the approaches described below, but are a combination of them, the following majora principles can be identified [2]:

- enumerative;
- faceted;
- enumerative and faceted (with entry class).

There is not a generic rule about the structure of a classification system. The decision should be made on a case-by-case basis in accordance with the requirements that result from the intended area of application. This includes subjects such as:

- structuring principle;
- use of properties (mandatory or optional);
- properties at any level or properties at leaf level only.

1.2.1 Enumerative classification systems

Enumerative classification systems attempt to list all possible subjects within their defined area of applicability. They are in many cases represented by the use of hierarchies. Nevertheless, in some cases enumerative schemes may be represented by simple unstructured sets of objects.

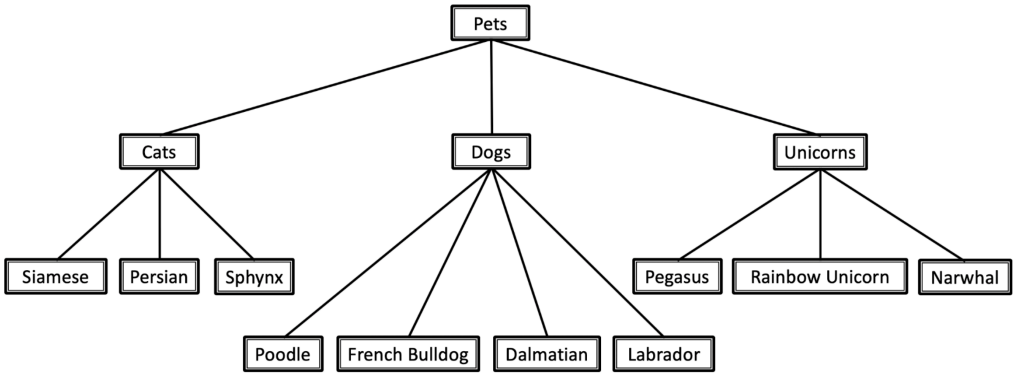


Figure1. Example of numerative classification system [3]

1.2.2 Faceted classification systems

Faceted classification systems allow the assignment of multiple attributes to an object. An object may be characterized by any combination of the classes from the facets. In general, faceted classification systems need fewer classes to express a certain variety of objects than enumerative classification systems. A difficulty may be the need to avoid absurd combinations of classes.

The classes within the facets may be arranged to form single level or multilevel hierarchies.

Faceted classification systems take advantage of the fact that in many domains the classes of a classification system share certain types of characteristics. Such shared characteristics may be grouped together into facets. The facets shall be orthogonal, and so their areas of application shall not overlap.

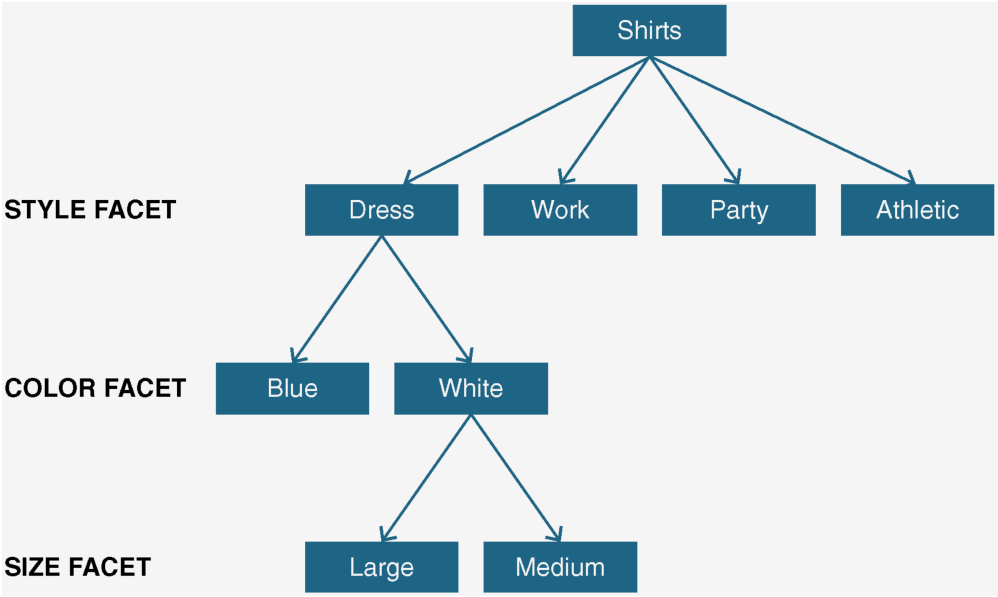


Figure 2. Example of faceted classification system [4]

In faceted classification systems, an entry class common to all facets is not required. However, the need for an entry class may arise for ease of use of the classification system. All facets taken together make up the classification system and, thus, share its area of applicability. Conversely, a faceted classification system shall be regarded as inconsistent if any of its facets are removed.

1.2.3 Enumerative and faceted classification systems

A combination of the enumerative and faceted approaches is advantageous in many cases. The higher levels of the classification system may follow an enumerative approach to narrow down the areas of applicability of the individual classes to a manageable size. At the lower level, faceted approaches are applied to clearly specify the nature of the concepts contained in the leaf classes of the classification system.

In contradiction to the purely faceted classification systems, the facets that, taken together, make up a branch of the classification system share a common entry class.

1.3 ISO 12006

ISO 12006 "Building construction - Organization of information about construction works" is an international standard dealing with structuring of information for construction. It is composed of two parts:

- ISO 12006:2020 *Building construction - Organization of information about construction works - Part 2: Framework for classification*;
- ISO 12006:2016 *Building construction - Organization of information about construction works - Part 3: Framework for object-oriented information*.

ISO 12006-2 defines a framework for the development of built environment classification systems. It identifies a set of recommended classification table titles for a range of information object classes according to particular views, e.g. by form or function, supported by definitions. It shows how the object classes classified in each table are related, as a series of systems and sub-systems.

This part of ISO 12006 does not provide a complete operational classification system, nor does it provide the content of the tables, though it does give examples. It is intended for use by organizations which develop and publish such classification systems and tables, which may vary in detail to suit local needs. However, if this part of ISO 12006 is applied to the development of local classification systems and tables, then harmonization between them will be facilitated.

This part of ISO 12006 applies to the complete life cycle of construction works, including briefing, design, documentation, construction, operation and maintenance, and demolition.

The different classes in the standard are related to a basic process model which states that a construction process uses construction resources to achieve construction results. It creates a principal structure for the classes of greatest interest. The stage of the construction process lifecycle characterizes a construction process. There are four main types of construction processes: pre-design process, design process, production process, and maintenance process.

Figure 3 represents the classes and the general relationship between them. A bold line with a circle depicts a type-of relation and a non-bold line defines other relations. The rounded box instead represents reference to another schema.

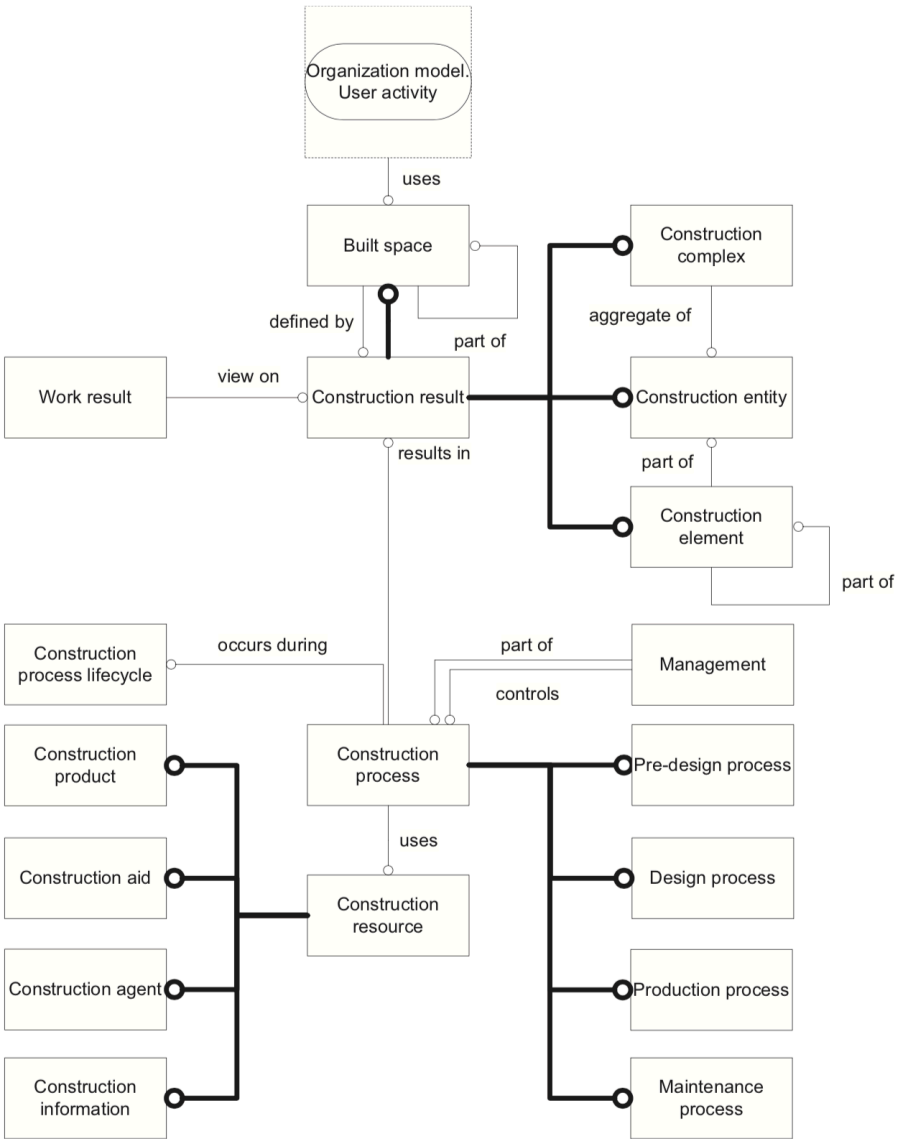


Figure 3. Classes and general relationship between them according to ISO 12006 – 2 [5]

ISO 12006-3 specifies a language-independent information model which can be used for the development of dictionaries used to store or provide information about construction works.

It enables classification systems, information models, object models and process models to be referenced from within a common framework. [5][6]

Below are listed the tables used for the classification of the members of each class, according to particular specializations. In particular: *tables A.2, A.3, A.4, A.5* are classes related to resource; *tables A.6, A.7* are classes related to process; *A.8, A.9, A.10, A.11, A.12* are classes related to results and *A.13* is a class related to property.

Table A.2			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction information	Content		Agreement
			Economy
			Analyses
			Minutes
			Geometry
			Specification
			Quality management
			Time Management
			Resource management

Table 1. Table A.2 ISO 12006-2 [5]

Table A.3			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction product	Function or form or material or any combination of these	By combination of function and form	Ground treatment and retention products
			sStructural and space division products
			Acces, barrier, and circulation products
			Covering, cladding, lining products
			General purpose civil engineering and construction fabric products
			Services products
			Fixtures and furnishing products
		By material	Wood products
			Stone products
			Cement-based products
			Metal products
			Plastic products
			Glass products
			Composite products

Table 2. Table A.3 ISO 12006-2 [5]

Table A.4			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction agent	Discipline or role or any combination of these	A.4(by discipline)	Architets
			Structural engineers
			Civil engineers
			Services engineers
			Project managers
			IT managers
			Real estate agents
			Financiers
			Building control officers
			Urban planners
			Facilities managers
			Commissioning agents
			Product designers
		A.4(by role)	Client
			Administrator
			Main contractor
			Sub-contractor
			Supplier
			Fabricator
			Manufacturer
			Designer
			Project managers
			Construction manager
			Quality controller
			Safety coordinator
			Supervisor

Table 3. Table A.4 ISO 12006-2 [5]

Table A.5			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction aid	Function or form or material or any combination of these		Ground water lowering plant, contractor's pumps
			Steel reinforcement cutting and bending plant and equipment
			Formwork and scaffolding
			Lifting appliances and conveyors
			Excavators, crawler and wheeled loaders, scrapers, bulldozers and graders
			Drafting equipment
			Model-making equipment
			Computers and ancillaries
			Maintenance tools
			Explosives
			Document copying equipment
			3D printers
			Portable production aids
			Ephemerals

Table 4. Table A.5 ISO 12006-2 [5]

Table A.6			
Class	**Classified by**	**Criteria of classification**	**Contents**
Management	management activity		Administrative management
			Financial management
			Personnel management
			Marketing/sales management
			Project management
			Risk management
			Cost management
			Time management

Table 5. Table A.6 ISO 12006-2 [5]

Table A.7			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction process	Construction activity or construction process lifecycle stage or any combination of these	By construction activity	Inception
			Procurement planning
			Feasibility study
			Development of business case
			Briefing
			Design competition
			Outline proposals, programme preparation
			Scheme design/costing
			Detail design/costing
			Production information and bills of quantities preparation
			Tender action
			Construction preparation (mobilization)
			Construction operations on site
			Completion
			Refurbishment, alteration and recommissioning
			Decommissioning/demolition
			Feedback
		By construction process lifecycle stage	Pre-design
			Design competition
			Production
			Maintenance

Table 6. Table A.7 ISO 12006-2 [5]

Table A.8			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction complex	Form or function or user activity or any combination of these		Transport complexes
			Public health complexes
			Industrial complexes
			Administrative complexes
			Health, welfare complexes
			Refreshment complexes
			Entertainment complexes
			Sports complexes
			Educational complexes
			Residential complexes

Table 7. Table A.8 ISO 12006-2 [5]

Table A.9			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction entity	Form or function or user activity or any combination of these	By form	Buildings
			Prefabricated buildings
			Roads
			Railways
			Landscapes
			Tunnels
			Embankments
			Retaining walls
			Tanks
			Bridges
			Masts
			Pipe ways
		By combination of form and function and user activity	Hospital buildings
			Footbridges
			Railway embankments
			Airport terminal buildings
			School buildings
			Sports grounds
			Houses
			Residential buildings
			Car traffic roadways
			Tram track ways
			Waste water pipe ways

Table 8. Table A.9 ISO 12006-2 [5]

Table A.10			
Class	**Classified by**	**Criteria of classification**	**Contents**
Built space	Form or function or user activity or any combination of these	By function	Space for living
			Space for sanitary
			Space for isolation
			Space for work
			Space for production
			Space for expression
			Space for gathering
			Space for materials
			Space for equipment
			Space for animals
			Space for plants
			Space for operational technique
			Space for production equipment
			Space for connecting spaces
			Space for routing
			Space for transportation
		By combination	Office spaces
			Operating theatres
			Hospital wards
			Consulting rooms
			Sick bays
			Canteens
			Auditoria
			Amphitheatres
			Sports stadium
			Living room
			Bedrooms
			Turnabout
			Roadways
			Corridors

Table 9. Table A.10 ISO 12006-2 [5]

Table A.11			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction element	Function or form or position or any combination of these	By function	Floor construction system;
			Wall construction system;
			Roof construction system;
			Water supply system
			Cooling supply system
			Ventilation supply system
			Power supply system
			Garbage system
			Transportation system
			Fre protection system
			Storage system
			Planting system
			Furniture system
		By combination of position and form	Pile
			Foundation masonry
			Natural ground
			Road embarkment
			Road pavement
			Railway tracks
			Slab
			Wall
			Beam
			Column
			Window
			Roof
			Furniture

Table 10. Table A.11 ISO 12006-2 [5]

Table A.12			
Class	**Classified by**	**Criteria of classification**	**Contents**
Work result	Work activity and resources used	Pre-design work results for construction complexes, entities and elements	Inception
			Procurement plan
			Feasibility study
			Business case
			Brief
		Design work results for construction complexes, entities and elements	Design competition result
			Outline proposal, programme
			Scheme design/cost
			Detail design/cost
			Production information and bills of quantities
		Production work results for construction complexes, entities and elements	Excavation and filling
			Ground anchoring
			Brick and block walling
			Structural precast concrete
			Stone slab cladding
			Mastic asphalt roofing
			Curtain walling
			Raised access flooring
			Ceramic wall and floor tiling
			Drainage below ground
			Low temperature hot water heating
			Fire splinkers
			Emergency lighting
			Lift installation
		Maintenance work results for construction complexes, entities and elements	Maintenance construction entity
			Refurbished or altered construction entity
			Decommissioned or demolished construction entity

Table 11. Table A.12 ISO 12006-2 [5]

Table A.13			
Class	**Classified by**	**Criteria of classification**	**Contents**
Construction property	Property type	Functional properties	Structural performance
			Mechanical operation
			Fire performance
			Thermal performance
			Environmental impact
			Acoustic performance
			Process performance
		Spatial and temporal properties	Shape,size
			Time
		Compositional properties	Methods of assembly and disassembly
			Weight, density
			Surface structure
			Behaviour
		Experiential properties	Colour
			Loudness
			Comform
		Symbolising properties	Meaning
			Inscription
		Administative properties	Name
			Style
			Class
			Price
			Metadata

Table 12. Table A.13 ISO 12006-2 [5]

1.4 UNI 10723

UNI 10723:1998 - Construction process - Classification and definitions of the process steps for new constructions aims at classify and define the phases of the construction process; it is applies to new construction interventions for any intended use of the building. [7]

The building process is an organized sequence of phases that leads from the identification of the needs of the Client-User of a building asset, to their satisfaction through the design, production, construction and management of the building asset.

In the production processes the relationship between design and implementation varies. The procedural relationships between the different subjects of the process are regulated by contracts. The relationships among operators are structured according to the organizational-procedural models regulated by the reference legislative framework.

The production process in the construction sector is presented as a sequence of complex activities to manage because of:

- multiplicity and heterogeneity of the actors involved in the process;
- contemporaneity and independence of the phases and sub-processes;
- uniqueness of the final product;
- specific production and contextual conditions.

Temporarily and logically the building process is divided into three well-defined logical moments:

- Decision-making process: all the procedural phases that precede the implementation of the intervention and define its objectives, meta-project development, project development and programming;
- Executive process: set of operating phases that lead to the realization of the building intervention on the basis of what is defined in the design and programming phases;
- Management process: set of operating phases which, starting from the entry into service of the building organization, follow one another, in order to ensure its operation, until the end of its functional and economic life cycle.

UNI 10723 standard seems to propose as the center of the production process, no longer the building object, but the project; the project and the design activity is the focus of the process and it is no longer considered one of its phases.

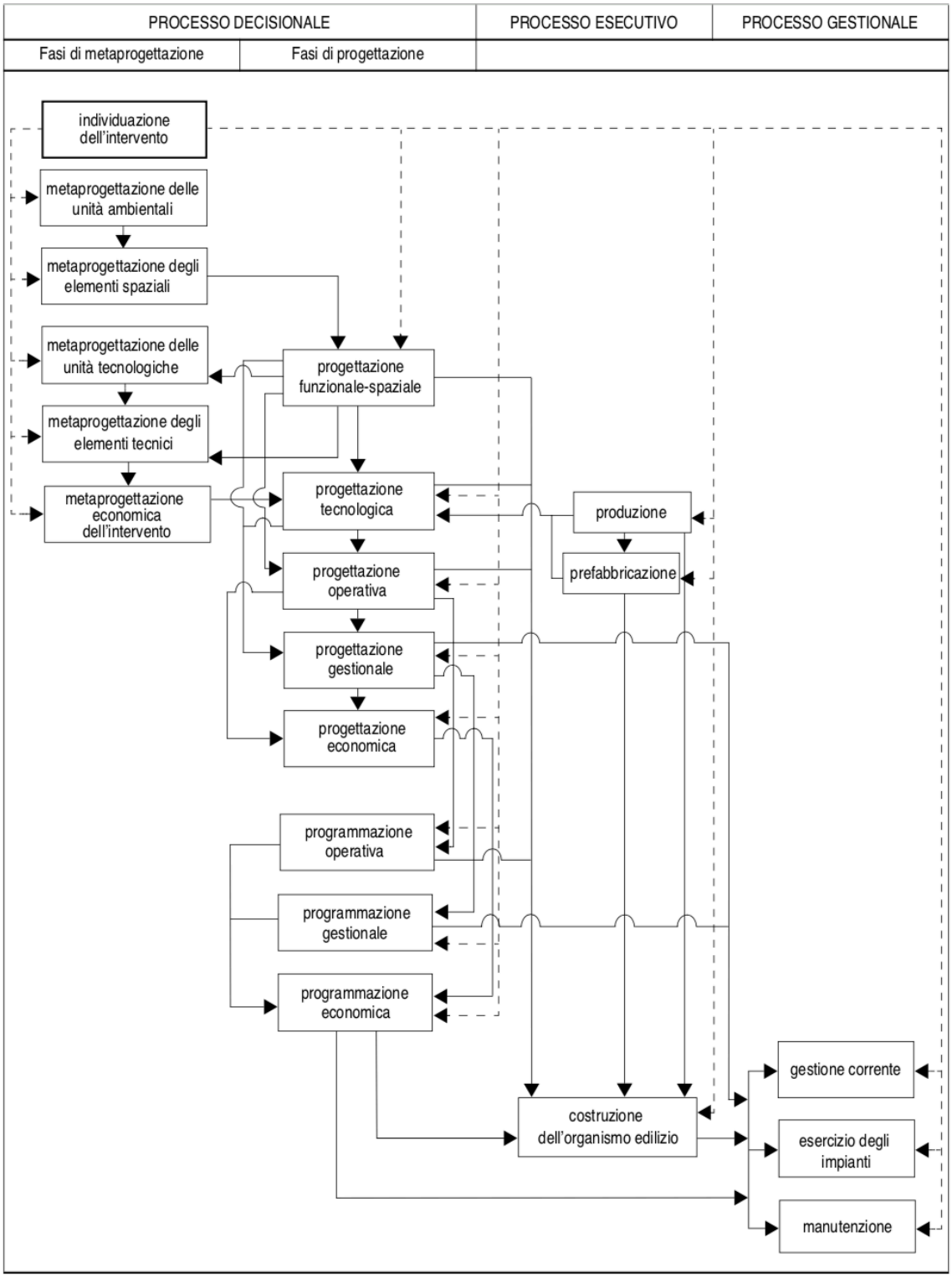


Figure 4. Timeline, relationship and constraints of the procedural phases of the building intervention according to UNI 10723 [7]

1.5 UniClass

1.5.1 Purpose and properties

UniClass (*Unified Classification for the Construction Industry)* is a unified classification system for all sectors of the UK construction industry. Originally released in 1997, UniClass allows project information to be structured to a recognized standard. It is intended for organizing library materials and for structuring product models and project information [8]. The original version has been heavily revised, to make it more suitable for use with modern construction industry practice, and to make it compatible with BIM. [9]

UniClass 2015 provides:

- A unified classification system for the construction industry;
- A hierarchical suite of tables that support classification;
- A numbering system that is flexible enough to accommodate future classification requirements;
- A system compliant with ISO 12006 that is mapped to NRM1[1] and supports mapping to other classification systems in the future
- A classification system that will be maintained and updated by NBS[2].

1.5.2 Framework

UniClass 2015 has been thought to be in accordance with ISO 12006-2 Building construction – Organization of information about construction works – Part 2: Framework for classification. This means that UniClass 2015 is particularly suited to use in an international context, as mapping to other similarly compliant schemes around the world is simplified.

[1]New rules of measurement (NRM1): Order of Cost Estimating and Cost Planning for Capital Building Works

[2]National Bureau of Standards (NBS)

1.5.3 Organization and Taxonomies

UniClass 2015 is divided into a set of tables which can be used to group information for costing, briefing, CAD layering, annotations, etc. as well as when preparing specifications or other production documents. [10]

The 12 tables are arranged in a hierarchical manner, and they allow information about a project to be defined from the broadest view to the most detailed. Spaces/Locations exist in Entities which form part of a wider Complex and Activities may take place in any of these. Entities are composed of Elements/Functions, Systems and then Products.

Entities can also be described using the Spaces and Activities tables if required, and at the more general level the Complex table contains terms that can be thought of as groupings of Entities, Activities and Spaces.

Looked at more closely, the tables comprise:

Uniclass 2015 tables			
n°	**Table code**	**Name of the table**	**Description**
1	Co	Complexes	A complex describes a project in overall terms.
2	En	Entities	Entities are discrete things like buildings, bridges, tunnels etc. They provide the areas where different
3	Ac	Activities	This defines the activities to be carried out in the complex, entity or space.
4	SL	Spaces/locations	In buildings, spaces are provided for various activities to take place.
5	EF	Elements/functions	Elements and functions: elements are the main components of a structure. Functions cover things like
6	Ss	Systems	Systems are the collection of components that go together to make an element or to carry out a function.
7	Pr	Products	Individual products used to construct a system can be specified.
8	TE	Tools and equipment	Tools and equipment needed for an individual product.
9	PM	Project management	Project management activities necessary for a project.
10	Zz	CAD	
11	FI	Form of information	How information is presented.
12	Ro	Roles	Subject and the roles that have in the activity.

Table 23. UniClass tables [10]

The tables need to be flexible and to be able to accommodate sufficient codes to ensure coverage, to allow for a multitude of items and circumstances, including new technologies and developments that are yet to emerge.

Each code consists of either four or five pairs of characters. The initial pair identifies which table is being used and employs letters. The four following pairs represent groups, sub-groups, sections and objects. [11]

The classification of some materials according to the UniClass 2015 will be presented below by way of example:

1. SS_30: Roof, floor and paving systems
2. SS_30_10: Pitched, arched and domed roof structure systems
3. SS_30_10_30: Framed roof structure systems
4. SS_30_10_30_25: Heavy steel roof framing systems

or

1. SS_50: Disposal systems
2. SS_50_75: Wastewater storage, treatment and disposal systems
3. SS_50_75_67: Primary sewage treatment and final settlement systems
4. SS_50_75_67_46: Lamella tank systems

1.6 UNIFORMAT II

1.6.1 Purpose and properties

UniFormat is a standard for classifying building specifications, cost estimating, and cost analysis in the U.S. and Canada and it is based on 2 main elements:

- the classification structure is hierarchical-enumerative;
- the classified objects were chosen based on the ratio of cost incidence and frequency of use.

A major benefit of performing an economic analysis based on an elemental framework instead of on a product-based classification is the reduction in time and costs for evaluating alternatives at the early design stage. This encourages more economic analyses and more economically efficient choices among buildings and building elements. Other UNIFORMAT II benefits include providing a standardized format for collecting and analysing historical data to use in estimating and budgeting future projects; providing a checklist for the cost estimation process as well as the creativity phase of the value engineering job plan; providing a basis for training in cost estimation; facilitating communications among members of a project team regarding the scope of work and costs in each discipline; and establishing a database for automated cost estimating.

Here below are presented the various table of UNIFORMAT II classification.

1.6.2 Framework

Elements usually perform a given function, regardless of the design specification, construction method, or materials used. UNIFORMAT II ensures consistency in the economic evaluation of building projects over time and from project to project, and it enhances project management and reporting at all stages of the building life cycle: planning, programming, design, construction, operations, and disposal. [12]

1.6.3 Organization and Taxonomies

UNIFORMAT II is organized in three principal hierarchical levels: level 1, the largest element grouping, identifies major group elements such as the substructure, envelope, and interiors; level 2 subdivides level 1 into group elements; level 3 breaks the group elements further into Individual elements; the proposed level 4 breaks the individual elements into smaller sub-elements. Here below are shows the UNIFORMAT II tables.

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
A Substructure	A10 Fondations	A1010 Standard Foundations	A1011 Wall Foundations
			A1012 Column Foundations & Pile Caps
			A1013 Perimeter Drainage & Insulation
		A1020 Special Foundations	A1021 Pile Foundations
			A1022 Grade Beams
			A1023 Caissons
			A1024 Underprinting
			A1025 Dewatering
			A1026 Raft Foundations
			A1027 Pressure Injected Grouting
			A1029 Other Special Conditions
		A1030 Slab on Grade	A1031 Standard Slab on Grade
			A1032 Structural Slab on Grade
			A1033 Inclined Slab on Grade
			A1034 Trenches, Pits & Bases
			A1035 Under-Slab Drainage & Insulation
	A20 Basement Construction	A2010 Basement Excavation	A2011 Excavation for Basements
			A2012 Structure Back Fill & Compaction
			A2013 Shoring
		A2020 Basement Walls	A2021 Basement Wall Construction
			A2022 Moisture Protection
			A2023 Basement Wall Insulation
			A2024 Interior Skin

Table 14. UNIFORMAT II table: A Substructure [12]

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
B Shell	B10 Super Structure	B1010 Floor Construction	B1011 Suspended Basement Floors Construction
			B1012 Upper Floors Construction
			B1013 Balcony Floors Construction
			B1014 Ramps
			B1015 Exterior Stairs and Fire Escapes
			B1016 Floor Raceway Systems
			B1019 Other Floor Construction
		B1020 Roof construction	B1021 Flat Roof Construction
			B1022 Pitched Roof Construction
			B1023 Canopies
			B1029 Other Roof Systems
	B20 Exterior Enclosure	B2010 Exterior Walls	B2011 Exterior Wall Construction
			B2012 Parapets
			B2013 Exterior Louvers, Screens, and Fencing
			B2014 Exterior Sun Control Devices
			B2015 Balcony Walls & Handrails
			B2016 Exterior Soffits
		B2020 Exterior Windows	B2021 Windows
			B2022 Curtain Walls
			B2023 Storefronts
		B2030 Exterior Doors	B2031 Glazed Doors & Entrances
			B2032 Solid Exterior Doors
			B2033 Revolving Doors
			B2034 Overhead Doors
			B2039 Other Doors & Entrances
	B30 Roofing	B3010 Roof Coverings	B3011 Roof Finishes
			B3012 Traffic Toppings & Paving Membranes
			B3013 Roof Insulation & Fill
			B3014 Flashings & Trim
			B3015 Roof Eaves and Soffits
			B3016 Gutters and Downspouts
		B3020 Roof Openings	B3021 Glazed Roof Openings
			B3022 Roof Hatches
			B3023 Gravity Roof Ventilators

Table 15. UNIFORMAT II table: B Shell [12]

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
C Interiors	C10 Interior Construction	C1010 Partitions	C1011 Fixed Partitions
			C1012 Demountable Partitions
			C1013 Retractable Partitions
			C1014 Site Built Toilet Partitions
			C1015 Site Built Compartments Cubicles
			C1016 Interior Balustrades and Screens
			C1017 Interior Windows & Storefronts
		C1020 Interior Doors	C1021 Interior Doors
			C1022 Interior Door Frames
			C1023 Interior Door Hardware
			C1024 Interior Door Wall Opening Elements
			C1025 Interior Door Sidelights & Transoms
			C1026 Interior Hatches & Access Doors
			C1027 Door Painting & Decoration
		C1030 Fittings	C1031 Fabricated Toilet Partitions
			C1032 Fabricated Compartments & Cubicles
			C1033 Storage Shelving and Lockers
			C1034 Ornamental Metals and Handrails
			C1035 Identifying Devices
			C1036 Closet Specialties
			C1037 General Fittings & Misc. Metals
	C20 stairs	C2010 Stair Construction	C2011 Regular Stairs
			C2012 Curved Stairs
			C2013 Spiral Stairs
			C2014 Stair Handrails and Balustrades
		C2020 Stair Finishes	C2021 Stair, Tread, and Landing Finishes
			C2022 Stair Soffit Finishes
			C2023 Stair Handrail & Balustrade Finishes
	C30 Interior Finishes	C3010 Wall Finishes	C3011 Wall Finishes to Inside Exterior Walls
			C3012 Wall Finishes to Interior Walls
			C3013 Column Finishes
		C3020 Floor Finishes	C3021 Floor Toppings
			C3022 Traffic Membranes
			C3023 Hardeners and Sealers
			C3024 Flooring
			C3025 Carpeting
			C3026 Bases, Curbs and Trim
			C3027 Access Pedastal Flooring
		C3030 Ceiling Finishes	C3031 Ceiling Finishes
			C3032 Suspended Ceilings
			C3033 Other Ceilings

Table 16. UNIFORMAT II table: C Interiors [12]

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
D Services	D10 Conveying	D1010 Elevators & Lifts	D1011 Passenger Elevators
			D1012 Freight Elevators
			D1013 Lifts
		D1020 Escalators & Moving Walks	D1021 Escalators
			D1022 Moving Walks
		D1090 Other Conveying Systems	D1091 Dumbwaiters
			D1092 Pneumatic Tube Systems
			D1093 Hoists & Cranes
			D1094 Conveyors
			D1095 Chutes
			D1096 Turntables
			D1097 Baggage Handling & Loading Systems
			D1098 Transportation Systems
	D20 Plumbing	D2010 Plumbing Fixtures	D2011 Water Closets
			D2012 Urinals
			D2013 Lavatories
			D2014 Sinks
			D2015 Bathtubs
			D2016 Wash Fountains
			D2017 Showers
			D2018 Drinking Fountains and Coolers
			D2019 Bidets and Other Plumbing Fixtures
		D2020 Domestic Water Distribution	D2021 Cold Water Service
			D2022 Hot Water Service
			D2023 Domestic Water Supply Equipment
		D2030 Sanitary Waste	D2031 Waste Piping
			D2032 Vent Piping
			D2033 Floor Drains
			D2034 Sanitary Waste Equipment
			D2035 Pipe Insulation
		D2040 Rain Water Drainage	D2041 Pipe & Fittings
			D2042 Roof Drains
			D2043 Rainwater Drainage Equipment
			D2044 Pipe Insulation
		D2090 Other Plumbing Systems	D2091 Gas Distribution
			D2092 Acid Waste Systems
			D2093 Interceptors
			D2094 Pool Piping and Equipment
			D2095 Decorative Fountain Piping Devices
			D2099 Other Piping Systems

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
D Services	D30 HVAC	D3010 Energy Supply	D3011 Oil Supply System
			D3012 Gas Supply System
			D3013 Coal Supply System
			D3014 Steam Supply System
			D3015 Hot Water Supply System
			D3016 Solar Energy System
			D3017 Wind Energy System
		D3020 Heat Generating Systems	D3021 Boilers
			D3022 Boiler Room Piping & Specialties
			D3023 Auxiliary Equipment
			D3024 Insulation
		D3030 Cooling Generating Systems	D3031 Chilled Water Systems
			D3032 Direct Expansion Systems
		D3040 Distribution	D3041 Air Distribution Systems
			D3042 Exhaust Ventilation Systems
			D3043 Steam Distribution Systems
			D3044 Hot Water Distribution
			D3045 Chilled Water Distribution
			D3046 Change-over Distribution System
			D3047 Glycol Distribution Systems
		D3050 Terminal & Package Units	D3051 Terminal Self-Contained Units
			D3052 Package Units
		D3060 Controls & Instrumentation	D3061 Heating Generating Systems
			D3062 Cooling Generating Systems
			D3063 Heating/Cooling Air Handling Units
			D3064 Exhaust & Ventilating Systems
			D3065 Hoods and Exhaust Systems
			D3066 Terminal Devices
			D3067 Energy Monitoring & Control
			D3068 Building Automation Systems
			D3069 Other Controls & Instrumentation
		D3070 Systems Testing & Balancing	D3071 Piping System Testing & Balancing
			D3072 Air Systems Testing & Balancing
			D3073 HVAC Commissioning
			D3079 Other Systems Testing and Balancing
		D3090 Other HVAC Systems & equipment	D3091 Special Cooling Systems & Devices D3092 Special Humidity Control
			D3093 Dust & Fume Collectors
			D3094 Air Curtains
			D3095 Air Purifiers
			D3096 Paint Spray Booth Ventilation
			D3097 General Construction Items (HVAC)
	D40 Fire Protection	D4010 Splinklers	D4011 Sprinkler Water Supply
			D4012 Sprinkler Pumping Equipment
			D4013 Dry Sprinkler System
		D4020 Standpipes	D4021 Standpipe Water Supply
			D4022 Pumping Equipment
			D4023 Standpipe Equipment
			D4024 Fire Hose Equipment
		D4030 Fire Protection Specialties	D4031 Fire Extinguishers D4032 Fire Extinguisher Cabinets
		D4090 Other Fire Protection Systems	D4091 Carbon Dioxide Systems
			D4092 Foam Generating Equipment
			D4093 Clean Agent Systems
			D4094 Dry Chemical System
			D4095 Hood & Duct Fire Protection
	D50 Electrical	D5010 Electrical Service & Distribution	D5011 High Tension Service & Dist.
			D5012 Low Tension Service & Dist.
		D5020 Lighting and Branch Wiring	D5021 Branch Wiring Devices
			D5022 Lighting Equipment
		D5030 Communications & Security	D5031 Public Address & Music Systems
			D5032 Intercommunication & Paging System
			D5033 Telephone Systems
			D5034 Call Systems
			D5035 Television Systems
			D5036 Clock and Program Systems
			D5037 Fire Alarm Systems
			D5038 Security and Detection Systems
			D5039 Local Area Networks
		D5090 Other Electrical Systems	D5091 Grounding Systems
			D5092 Emergency Light & Power Systems
			D5093 Floor Raceway Systems
			D5094 Other Special Systems & Devices
			D5095 General Construction Items (Elect.)

Table 17. UNIFORMAT II table: D Services [12]

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
E Equipment & Furnishing	E10 Equipment	E1010 Commercial Equipment	E1011 Security & Vault Equipment
			E1012 Teller and Service Equipment
			E1013 Registration Equipment
			E1014 Checkroom Equipment
			E1015 Mercantile Equipment
			E1016 Laundry & Dry Cleaning Equipment
			E1017 Vending Equipment
			E1018 Office Equipment
		E1020 Institutional Equipment	E1021 Ecclesiastical Equipment
			E1022 Library Equipment
			E1023 Theater & Stage Equipment
			E1024 Instrumental Equipment
			E1025 Audio-visual Equipment
			E1026 Detention Equipment
			E1027 Laboratory Equipment
			E1028 Medical Equipment
			E1029 Other Institutional Equipment
		E1030 Vehicular Equipment	E1031 Vehicular Service Equipment
			E1032 Parking Control Equipment
			E1033 Loading Dock Equipment
			E1039 Other Vehicular Equipment
		E1090 Other Equipment	E1091 Maintenance Equipment
			E1092 Solid Waste Handling Equipment
			E1093 Food Service Equipment
			E1094 Residential Equipment
			E1095 Unit Kitchens
			E1097 Window Washing Equipment
			E1099 Other Equipment
	E20 Furnishing	E2010 Fixed Furnishings	E2011 Fixed Artwork
			E2012 Fixed Casework
			E2013 Blinds and Other Window Treatment
			E2014 Fixed Floor Grilles and Mats
			E2015 Fixed Multiple Seating
			E2016 Fixed Interior Landscaping
		E2020 Movable Furnishings	E2021 Movable Artwork
			E2022 Furniture & Accessories
			E2023 Movable Rugs and Mats
			E2024 Movable Interior Landscaping

Table 18. UNIFORMAT II table: E Equipment & Furnishing [12]

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
F Special Construction & Demolition	F10 Special Construction	F1010 Special Structures	F1011 Air Supported Structures
			F1012 Pre-engineered Structures
			F1013 Other Special Structures
		F1020 Integrated Construction	F1021 Integrated Assemblies
			F1022 Special Purpose Rooms
			F1023 Other Integrated Construction
		F1030 Special Construction Systems	F1031 Sound, Vibration & Seismic Const.
			F1032 Radiation Protection
			F1033 Special Security Systems
			F1034 Vaults
			F1039 Other Special Construction Systems
		F1040 Special Facilities	F1041 Aquatic Facilities
			F1042 Ice Rinks
			F1043 Site Constructed Incinerators
			F1044 Kennels & Animal Shelters
			F1045 Liquid & Gas Storage Tanks
			F1049 Other Special Facilities
		F1050 Special Controls and Instrumentation	F1051 Recording Instrumentation
			F1052 Building Automation System
			F1059 Other Special Controls & Instrumentation
	F20 Selective Building Demolition	F2010 Building Elements Demolition	F2011 Building Interior Demolition
			F2012 Building Exterior Demolition
		F2020 Hazardous Components Abatement	F2021 Removal of Hazardous Components
			F2022 Encapsulation of Hazardous Components

Table 19. UNIFORMAT II table: F Special Construction & Demolition [12]

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
G Building Sitework	G10 Site preparation	G1010 Site Clearing	G1011 Clearing & Grubbing
			G1012 Tree Removal & Thinning
		G1020 Site Demolition and Relocations	G1021 Building Demolition
			G1022 Demolition of Site Components
			G1023 Relocation of Building & Utilities
			G1024 Utilities Relocation
		G1030 Site Earthwork	G1031 Site Grading Excavation
			G1032 Borrow Fill
			G1033 Soil Stabilization & Treatment
			G1034 Site Dewatering
			G1035 Site Shoring
			G1036 Embankments
			G1037 Erosion Control
		G1040 Hazardous Waste Remediation	G1041 Removal of Contaminated Soil
			G1042 Soil Restoration & Treatment
	G20 Site Improvements	G2010 Roadways	G2011 Bases and Sub-Bases
			G2012 Paving & Surfacing
			G2013 Curbs Gutters & Drains
			G2014 Guardrails and Barriers
			G2015 Painted Lines
			G2016 Markings & Signage
			G2017 Vehicular Bridges
		G2020 Parking Lots	G2021 Bases and Sub-Bases
			G2022 Paving & Surfacing
			G2023 Curbs, Rails & Barriers
			G2024 Parking Booths & Equipment
			G2025 Markings & Signage
		G2030 Pedestrian Paving	G2031 Paving & Surfacing
			G2032 Edging
			G2033 Exterior Steps
			G2034 Pedestrian Bridges
		G2040 Site Development	G2041 Fences & Gates
			G2042 Retaining Walls
			G2043 Terrace & Perimeter Walls
			G2044 Signage
			G2045 Site Furnishings
			G2046 Fountains, Pools, & Watercourses
			G2047 Playing Fields
			G2048 Flagpoles
			G2049 Miscellaneous Structures
		G2050 Landscaping	G2051 Fine Grading & Soil Preparation G2054 Seeding and Sodding
			G2052 Erosion Control Measures
			G2053 Top Soil and Planting Beds
			G2054 Seeding and Sodding
			G2055 Planting
			G2056 Planters
			G2057 Irrigation Systems
			G2059 Other Landscape Features

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
G Building Sitework	G30 Site Mechanical Utilities	G3010 Water Supply	G3011 Potable Water Distribution and Storage
			G3012 Non Potable Water Distrib. and Storage
			G3013 Well Systems
			G3014 Fire Protection Distribution and Storage
			G3015 Pumping Stations
			G3016 Package Water Treatment Plants
		G3020 Sanitary Sewer	G3021 Piping
			G3022 Manholes & Cleanouts
			G3023 Septic Disposal Systems
			G3024 Lift Stations
			G3025 Packaged Water Waste Treatment Plants
			G3026 Septic Tanks
			G3027 Drain Fields
		G3030 Storm Sewer	G3031 Piping
			G3032 Manholes
			G3033 Headwalls & Catch Basins
			G3034 Lift Stations
			G3035 Retention Ponds
			G3036 Ditches & Culverts
		G3040 Heating Distribution	G3041 Steam Supply
			G3042 Condensate Return
			G3043 Hot Water Supply System
			G3044 Pumping Stations
		G3050 Cooling Distribution	G3051 Chilled Water Piping
			G3052 Wells for Cooling/Heating
			G3053 Pumping Stations
			G3054 Cooling Towers on Site
		G3060 Fuel Distribution	G3061 Fuel Piping
			G3062 Fuel Equipment
			G3063 Fuel Storage Tanks
			G3064 Fuel Dispensing Stations
		G3090 Other Site Mechanical Utilities	G3091 Industrial Waste Systems
			G3092 POL (Petroleum Oil & Lubricants) Distribution Systems
	G40 Site Electrical Utilities	G4010 Electrical Distribution	G4011 Substations
			G4012 Overhead Power Distribution
			G4013 Underground Power Distribution
		G4020 Site Lighting	G4021 Fixtures & Transformers
			G4022 Poles
			G4023 Wiring Conduits & Ductbanks
			G4024 Site Lighting Controls
		G4030 Site Communications & Security	G4031 Site Communications Systems
			G4032 Site Security & Alarm Systems
		G4090 Other Site Electrical Utilities	G4091 Cathodic Protection
			G4092 Site Emergency Power Generation
	G90 Other Site Construction	G9010 Service and Pedestrian Tunnels	G9011 Service Tunnels
			G9012 Trench Boxes
			G9013 Pedestrian Tunnels
		G9090 Other Site Systems & Equipment	G9091 Snow Melting Systems

Table 20. UNIFORMAT II table: G Building Siteworks [12]

1.7 OmniClass

1.7.1 Purpose and properties

OmniClass is a comprehensive classification system for the construction industry adopted by U.S. from 2006. OmniClass can be used for many applications, such as organizing library materials, product literature, and project information, but its chief applications will be in providing a classification structure for electronic databases and software that implements them, to enrich the information available from those resources. [13]

OmniClass is designed to provide a standardized basis for classifying information created and used by the North American architectural, engineering, and construction industry, throughout the full facility life cycle from conception to demolition or reuse, and encompassing all of the different types of construction that make up the built environment. It is useful for Building Information Modelling (BIM), organizing reports and object libraries.

1.7.2 Framework

OmniClass follows the framework set out in ISO/TR 14177:1994 - Classification of information in the construction industry, that was later established as a standard in ISO 12006-2 [14]. It incorporates other systems currently in use as the basis of many of its tables such as MasterFormat for work results table, UniFormat for elements table, and EPIC (Electronic Product Information Cooperation) for structuring products. Among all frameworks, ISO 12006-2 and ISO12006-3 have a more immediate impact on OmniClass.

1.7.3 Organization and Taxonomies

OmniClass comprises 15 tables, some of which focus on buildings and landscapes, and some of which also serve civil and/or process engineering. Each table can be used independently to classify a particular type of information, or entries on it can be combined with entries on other tables to classify more complex subjects. These tables correspond to ISO 12006-2 arrangement of

information. Among fifteen tables, *table 21, 22* and *23* specifically address the classification of building products. *Table 21 (Elements)* is based on UniFormat, *Table 22 (Work Results)* is based on MasterFormat. *Table 23 (Products)* is based on EPIC (Electronic Product Information Classification) in which each object is defined with a code consisting of 8 fields divided into 4 pairs. The first refers to the table and the others to the various levels of detail.

Work Results are construction results achieved in the production stage or by subsequent alteration, maintenance, or demolition processes, and identified by one or more of the following: the particular skill or trade involved; the construction resources used; the part of the construction entity which results; the temporary work or other preparatory or completion work which results.

Omniclass construction classification system			
n° of the table	**Cod. number**	**Name of the table**	**Definition**
Table 11	11-00 00 00	Construction entities by function	Construction entities by function are significant, definable units of the built environment comprised of interrelated spaces and elements and characterized by function.
Table 12	12-00 00 00	Construction entities by form	Construction entities by form are significant, definable units of the built environment comprised of interrelated spaces and elements and characterized by form.
Table 13	13-00 00 00	Space by function	Spaces by function are basic units of the built environment delineated by physical or abstract boundaries and characterized by their function or primary use.
Table 14	14-00 00 00	Space by form	Spaces by form are basic units of the built environment delineated by physical or abstract boundaries and characterized by physical form.
Table 21	21-00 00 00	Elements	An Element is a major component, assembly, or "construction entity part which, in itself or in combination with other parts, fulfills a predominating function of the construction entity" (ISO 12006-2). Predominating functions include, but are not limited to, supporting, enclosing, servicing, and equipping a facility. Functional descriptions can also include a process or an activity.
Table 22	22-00 00 00	Work results	Work results are construction results achieved in the production stage or by subsequent alteration, maintenance, or demolition processes, and identified by one or more of the following: the particular skill or trade involved; the construction resources used; the part of the construction entity which results; the temporary work or other preparatory or completion work which results. (ISO 12006-2).
Table 23	23-00 00 00	Products	Products are components or assemblies of components intended for permanent incorporation into construction entities.
Table 31	31-00 00 00	Phases	A phase is a period of time in the duration of a construction project identified by the overall character of the construction processes which occur within it.
Table 32	32-00 00 00	Services	Services are the activities, processes and procedures provided by participants in the design and construction process, and relating to the construction, design, maintenance, renovation, demolition, commissioning, decommissioning, and all other functions occurring in relation to the life cycle of a construction entity.
Table 33	33-00 00 00	Disciplines	Disciplines are the practice areas and specialties of the actors (participants) that carry out the processes and procedures that occur during the life cycle of a construction entity.
Table 34	34-00 00 00	Organizational roles	Organizational roles are the technical positions occupied by the participants, both individuals and groups, that carry out the processes and procedures which occur during the life cycle of a construction entity.
Table 35	35-00 00 00	Tools	Tools are the resources used to develop the design and construction of a project, that do not become a permanent part of the facility, including computer systems, vehicles, scaffolding and other items needed to execute the processes and procedures relating to the life cycle of a construction entity.
Table 36	36-00 00 00	Information	Information is data referenced and utilized during the process of creating and sustaining the built environment.
Table 41	41-00 00 00	Materials	Materials are basic substances used in construction or to manufacture products and other items used in construction. These substances may be raw materials or refined compounds, and are presented entirely without reference to their form.
Table 49	49-00 00 00	Properties	Properties are characteristics of construction entities. Property definitions gain meaning through reference to one or more construction objects to which they may be applied.

Table 21. OmniClass tables [13]

1.8 MasterFormat

1.8.1 Purpose and Properties

MasterFormat is a standard for organizing specifications and other written information for commercial and institutional building projects in the U.S. and Canada. The standard is a product of the Construction Specifications Institute (CSI) and Construction Specifications Canada (CSC). It provides a master list of *divisions*, and *section numbers* with associated titles within each Division, to organize information about a facility's construction requirements and associated activities. [15][16]

Standardizing the presentation of such information improves communication among all parties involved in construction projects, which helps the project team delivering structures to owners according to their requirements, timelines, and budgets.

MasterFormat is used throughout the construction industry to format specifications for construction contract documents. The purpose of this format is to assist the user in organizing information into distinct groups when creating contract documents, and to assist the user searching for specific information in consistent locations.

1.8.2 Framework

MasterFormat is organized in a standardized outline format within divisions. Each division is subdivided into a number of sections. MasterFormat is developed based on the recognition of data filing problem started in 1972 [17] and its frameworks were established before ISO 12006. The framework of MasterFormat relies on publishing index, industry practice and gradual development.

1.8.3 Organization and Taxonomies

Each MasterFormat number and title defines a *section* arranged in *levels*. The main collections of related construction products and activities are level one titles or *divisions*. Each division is made up of level two, three, and often four level numbers and titles that gradually specifies more detailed about a product.

Masterformat division		
Procurement and contracting requirements group	Division 00	Procurement and contracting requirements
Specifications group		
General requirements subgroup	Division 01	General requirements
Facility construction subgroup	Division 02	Existing conditions
	Division 03	Concrete
	Division 04	Masonry
	Division 05	Metals
	Division 06	Wood,plastics, and conmposites
	Division 07	Thermal and moisture protection
	Division 08	Openings
	Division 09	Finishes
	Division 10	Specialties
	Division 11	Equipment
	Division 12	Furnishings
	Division 13	Special construction
	Division 14	Conveying equipment
Facility services subgroup	Division 21	Fire suppression
	Division 22	Plumbing
	Division 23	Heating, ventilating, and air conditioning (HVAC)
	Division 25	Integrated automation
	Division 26	Electical
	Division 27	Communications
	Division 28	Electronic safety and security
Site and infrastructure subgroup	Division 31	Earthwork
	Division 32	Exterior improvements
	Division 33	Utilities
	Division 34	Transportation
	Division 35	Waterway and marine construction
Process equipment subgroup	Division 40	Process interconnections
	Division 41	Material processing and handling equipment
	Division 42	Process heating, cooling, and drying equipment
	Division 43	Process gas and liquid handling, purification and storage equipment
	Division 44	Pollution and waste control equipment
	Division 45	Industry specific manufacturing equipment
	Division 46	Water and wastewater equipment
	Division 48	Electrical power generation

Table 22. MasterFormat division [15]

1.9 ETIM

1.9.1 Purpose and Properties

ETIM is the standard for grouping and declining the technical specifications of products in the installation sector (plumbing and heating, electrical, construction, hardware).

Through a uniform product classification model that uses product classes, characteristics, values and synonyms, it facilitates the sharing of technical/commercial characteristics.

The ETIM product features complete the set of indispensable product information (data and digital assets): item identification, order details, aggregations, prices, related items, packaging, images, documents, drawings, BIM objects, videos, presentations.

1.9.2 Framework

ETIM classification is organized into Groups and Product Classes; each Product Class is divided into Features; each Characteristic can be of the numeric type (with the possible unit of measurement already fixed), of the range type (from... to with the possible unit of measurement already fixed), of the logical type (yes - no) or of the alphanumeric type (selection list characterized by Preset values).

Groups, Classes, Features and Values are uniquely coded (EGXXXXX, ECXXXXX, EFXXXXX, EVXXXXX).

1.9.3 Organization and Taxonomies

The ETIM classification system is structured in two levels: groups and product classes. Groups are used to divide classes. Each product class is in fact assigned to a single product group. The ETIM system is mainly based on the definition of the product classes and their characteristics. [18]

The classes describe similar products, and also include products from different suppliers. All product classes have the ability to specify the technical characteristics of the products within the classes, and also the latter are ordered according to a logical and importance criterion.

A characteristic is exhaustively composed of: description, type of characteristic, unit and / or value. The types of features are as follows:

A – alphanumeric: list of possible values (e.g. red, green, long, short)

L – logic: yes/no (or true/false) answer questions

N – numeric: a numeric value

R – range: range composed of a range outlined by two numerical values

The synonyms represent alternative names for a product class (but not for a group of products), and a reference to multiple product classes is possible: in fact, a product class can have multiple synonyms, which are not necessarily linked to each other. In fact, a synonym does not have an ID, but is directly assigned to an ETIM class.

An example of a product classified according to ETIM is shown in Figure 5:

ETIM International - Classification Management Tool - Class Viewer

Group : EG000009 - Cable and wire entry systems
Description : **Cable plug sealing clamp**
ArtClassID : **EC000451**
ArtClassVersion : **4 (11/26/2007 11:27:14 AM)**
Status : **5**

Synonyms: Cable entry; Cable inlet; Cable plug sealing clamp; Insert; Nozzle; Sealing plug

Features

No.	Description	A/N/L/R	Unit	Value
1	Nominal diameter	N	mm	
2	Nominal size PG	N		
3	Model	A		Open; Closed; Trimmable (cut away);
4	Sealing range	R	mm	
5	For wall thickness	R	mm	
6	Degree of protection (IP)	A		IP00; IP10; IP12; IPX7; Other;
7	Material	A		Rubber; Plastic; Other;
8	Colour	A		Light grey; Black; White; Natural colour; Other;
9	Halogen free	L		

(End Features)

Figure 5. Example of ETIM classification system [18]

1.10 Comparison among classification systems

1.10.1 Comparison based on characteristics of classification systems

In general, there is a need to have a structured guideline for combining classification systems in international scale. In fact, mapping information between major product classification systems would benefit the industry. The rapid development of information technology within the construction sector and globalization of construction material and products, requires international coordination of standards and classification systems. Here is presented a table that permit to compare the main classification systems, according to the criteria considered: purpose and properties, framework of the system, organization and taxonomy of the tables.

Comparison between classification systems		Classification systems				
		Uniclass	Uniformat	Omniclass	Masterformat	ETIM
Criteria	Country of origin	UK	North America	North America	North America	Germany
	Purpose and Properties	For all aspects of the design and construction process. For organizing library materials and structuring product literature and project information.	For arranging construction information, organized around the physical parts of a facility known as functional elements mainly used for cost estimates.	Organization, sorting and retrieval of product information for all objects in the built environment in the project life cycle.	A master list for organizing construction work results, requirements, products and activities. Mostly used in bidding and specifications.	ETIM is the standard for grouping and declining the technical specifications of products in the installation sector.
	Framework	ISO 12006-2 , SfB, CAWS, EPIC, CESMM	ISO 12006-2 , Professional judgment	ISO 12006-2, ISO 12006-3, MasterFormat, UniFormat, EPIC	Industry practice and gradual development	Industry practice and gradual development
	Grouping principle	Faceted	Hierarchical	Faceted	Hierarchical	Hierarchical
	Organization and taxonomies	12 tables to define information from the broadest view to the most detailed. Each code of product consists of four or five pairs of characters that identifies: table used groups, sub-groups, sections and objects.	It is organized in 4 levels with alphanumeric designations and titles: level 1: major group elements; level 2 group elements; level 3 Individual elements; level 4 sub-elements.	15 inter-related tables categorized by number and name. A combination of Table 21, Table 22 & Table 23 allows for classifying a product precisely.	One table with a series of six numbers and name: Level one with divisions each is made up of level two, level three, and sometimes level four numbers and titles for more detailed areas of work results.	The model is built using categories or entities: product groups, product classes, synonyms (Keywords), features, values and units.

Table 23. Comparison between principal classification systems

By using these benchmarks, fundamental features of each classification system can be distinguished and analysed in relation to other systems. For instance, UniClass and MasterFormat have different purpose and different grouping principles. So, in order to compare them, only the corresponding table in UniClass that is related to work results can be compared with MasterFormat table. Furthermore, this structure points out the challenging areas that require more attention when

mapping between classification systems. For example, considering UniClass and OmniClass, despite both have similar purpose and similar grouping principles in classifying product models, they present differences in frameworks that should be considered. The fundamental differences in object classes within OmniClass and UniClass lies in the fact that each system is following different sets of frameworks. So, despite adhering to some common frameworks such as ISO 12006-2, each classification system has its own interpretation of the framework classes while combined with other frameworks. Furthermore, these systems have different strategies for their internal organization and taxonomies. Although within each faceted classifications the tables can be used in combination with each other, the differences in organization strategies of each system makes it challenging to cross reference tables among different classification systems.

The challenge is to find logic between tables with similar terminology, sequencing, grouping and coding. Future work should further investigate this comparison analysis for other national product classification systems.

1.10.2 Benchmarks comparison between classification systems

The need to classify classification systems is apparent to present a holistic, yet specific view of existing systems, in proving guidance for implementation and provide the basis of future classification systems. The study conducted by Lou and Goulding [19] presents a different point of view in classifying the classification systems considering some benchmarks.

In particular, they split the systems into 2 major categories: International, Domestic and Inter-Industry Classification System and Construction/Building Entities and Contractor Classification System.

1.10.2.1 Construction/Building Entities and Contractor Classification System

This category presents classifications by construction/building entities and by contractor. The classification by construction/building entities is further split into manual referencing system and

the electronic referencing system; the classification by contractors is also split by contractor work specialization and by combination of capabilities.

The construction/building entities manual referencing systems dominate – this is preferred in classifications such as the CI/SfB, Uniclass, CAWS, SfB, BSAB, MasterFormat, UNSPSC, OmniClass, CICS, EICS and in the Yellow Pages; while classification by electronic referencing systems are shown in STABU LexiCon, POSC/Caesar, BARBi, ISO/DIS 12006-3 and in the IAI-IFC.

Contractor classification by work specialization is practiced by the HBS of New South Wales in Australia and CSLB of California in the USA. Contractor classification by the BCA in Singapore and the Works Branch of Hong Kong are meticulous as they combine stringent rules in work specialization, financial capabilities and ISO qualifications in their system. These arrangements can be seen in Figure 6.

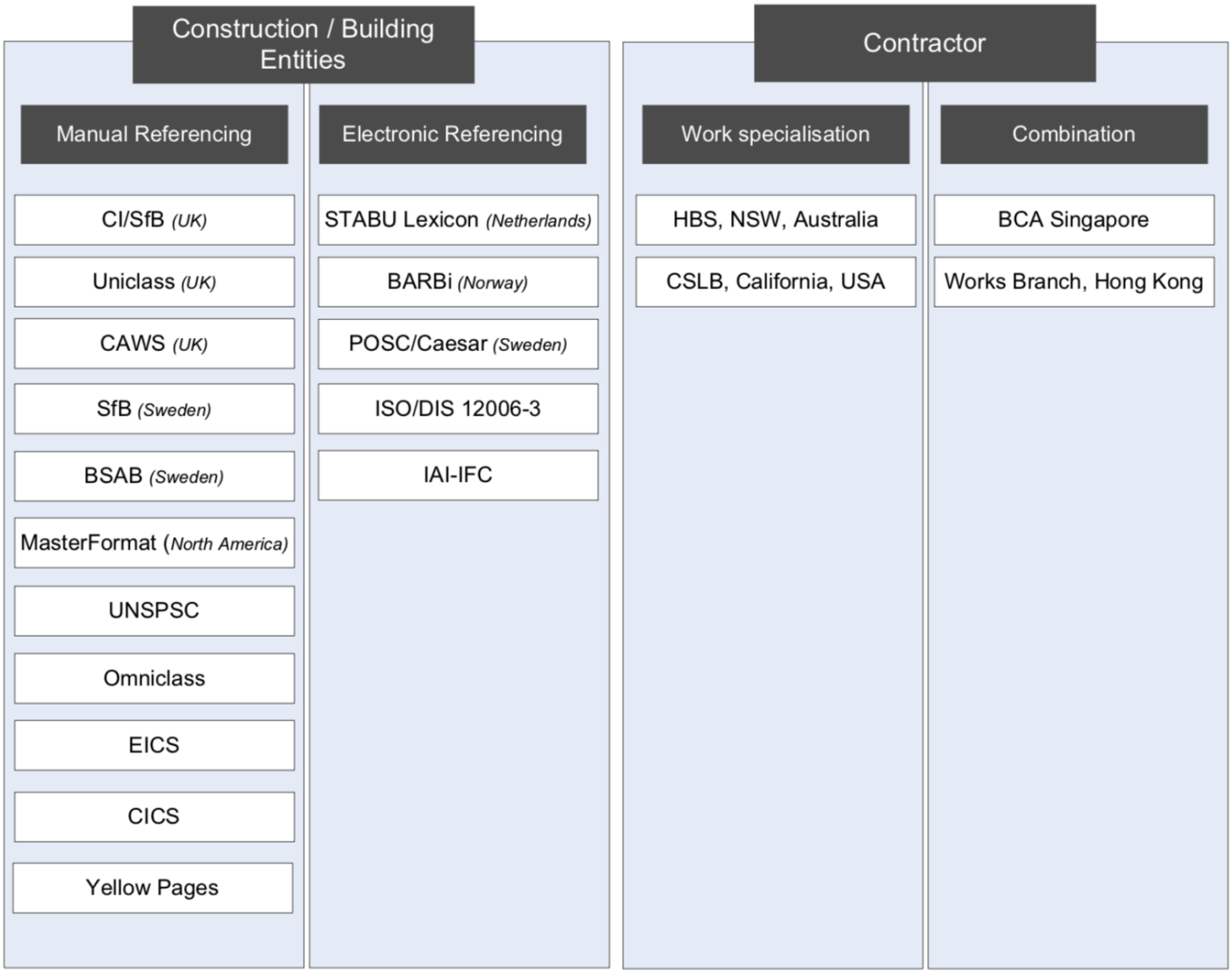


Figure 6. Construction/Building Entities and Contractor Classification System [19]

1.10.2.2 Analysis

This research uses the radar diagram as a diagnostic tool to evaluate the level of strengths, weaknesses and exclusivity of classification system. The areas plotted through the radar diagram represent the areas of specialization and/or advantages (or lacking) of each classification system, when compared to each other. From the diagrams, it is possible to extract the best practices from existing classification system.

The evaluation of the classification systems is conducted considering six different categories, and each of which is then rated from 1, being the lowest score to 5, being the highest. Five different consultations sessions were undertaken with the senior management of CIDB (Construction Industry Development Board of Malaysia) to provide feedback and assist in scoring.

The considered benchmarks are:

- Simplicity: the user-friendliness of the system dictates the ratings for the 'ease of use' of the system, the presentation of a simple interface between the users and the classification system. This is essential to provide maximum information to the user at a glance.
- Easy to take: it relates to the adoption of the system for any user or how simple it is to use the classification system. Manual systems are generally easier to adopt then the complex electronic systems.
- Expandability: the ability for the system to expand and evolve in the future is fundamental to be kept updated with the current construction evolution.
- Compatibility: the system must be able to be compatible with other existing systems for inter-system integration.
- Depth: considers the details, features and specification of the system.
- Acceptance: the use, recognition and acknowledgment of the system by the international or local construction communities; industry or research communities.

The score and the radar graph are presented below.

Classification systems scores		Benchmarks					
		Ease of use	Easy up to take	Expandability	Compatibility	Depth	Acceptance
Classification systems	BCA, Singapore	4	4	3	1	5	3
	HSB, NSW, Australia	5	1	1	1	2	3
	CSLB, California, USA	5	3	2	1	2	3
	Works Branch, Hong Kong	4	4	3	1	5	3
	CI/SfB, UK	4	4	3	4	2	5
	Uniclass, UK	3	5	3	3	3	3
	CAWS, UK	5	3	3	3	4	4
	STABU LexiCon, Netherlands	2	1	5	4	5	3
	POSC/Caesar, Norway	1	1	5	3	5	2
	BARBi, Norway	2	2	5	4	5	3
	SfB, Sweden	5	5	1	4	2	5
	BSAB, Sweden	4	4	4	3	3	3
	Masterformat, North America	3	4	5	3	4	4
	Yellowpages	5	3	3	2	5	5
	CICS	4	4	2	2	3	2
	EICS	4	3	2	2	3	2
	UNSPSC	5	3	5	3	4	4
	ISO/DIS 12006-3	1	5	5	4	5	4
	IAI-IFC	1	3	5	4	5	4
	Omniclass	3	3	4	4	5	4

Table 24. Classification systems scores [19]

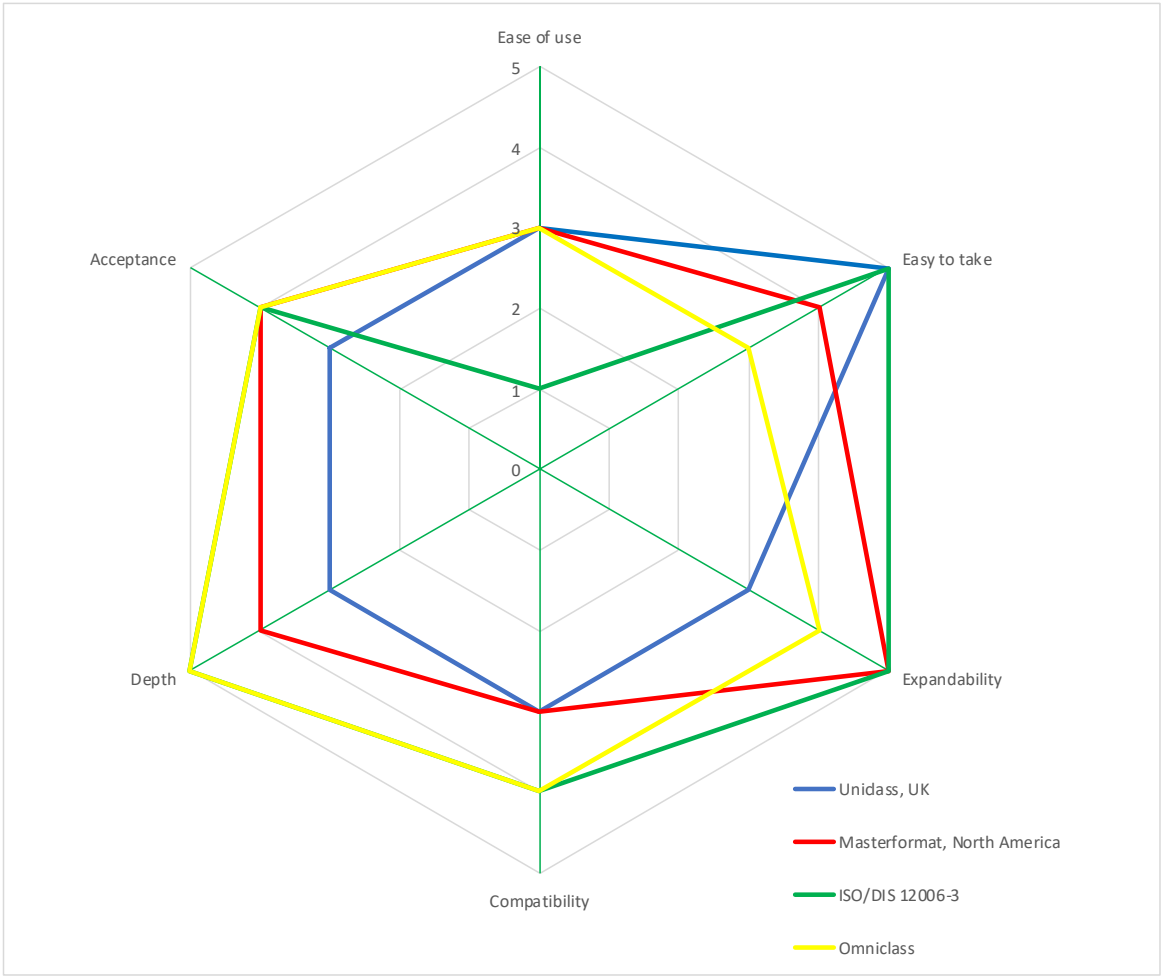


Figure 7. Radar graph for UniClass, MasterFormat, ISO/DIS 12006-3, OmniClass

On the basis of the scores we can made some considerations:

- The national classification systems as used by the BCA, HSB, CSLB and Works Branch score highly in the in the simplicity section. However, these systems are not compatible as it is produced specifically in national interest, low tolerance for change or expandability, while the acceptance is compulsory in every country. Classification by the BCA and Works Branch are especially in depth, with strict pre-registration requirements, personnel counts, ISO qualifications, and health and safety regulations. This makes these country-specific classifications rigid, not compatible but simple to update.
- The older country-international classification, such as SfB and CI/SfB, scores highly in its ease of use, easy up- take, acceptance and compatibility, but very low in depth and expandability. Created about 20 years ago, these systems form the foundations for the more recent classification systems available today. Due to its low acceptance for expandability, the use of these systems was replaced by other more detailed and complex classification.
- The UniClass and CAWS classification are manually referenced and have similar capabilities to expand and evolve its classification for the future; score relatively high in depth and acceptance. The UniClass is easier for up to take by contractors while the CAWS us easier to use. BSAB from Sweden is based in ISO standards, focused for the Swedish construction industry. This classification forms an ideal balance between the ease of use, easy up to take and expandability, but imperfect in terms of compatibility, depth and acceptance. Similarly, the worldwide Yellowpages is an industry driven directory controlled by suppliers, thus, its low expandability and poor compatibility with other systems, but gaining much in the ease of use, depth and acceptance.
- Research-driven classifications such as the CICS and EICS are both fairly similar; difference being the CICS is for construction works and EICS for engineering works. Its expandability is limited due to its fixed facets and format, poor compatibility to other systems and low acceptance by the industry. More recently developed classifications such as the MasterFormat, UNSPSC and OmniClass offer a more complete and widely accepted system. These classifications are open, offering global electronic commerce standards that provide a logical framework throughout the global marketplace and supply chain. Perhaps the most obvious change is the specific provisions for expandability in the future, highly specific and easy up to take of the system. The only drawback is the MasterFormat system is developed

and used widely only in North America; the UNSPSC and OmniClass have worldwide audiences.

- Electronic classifications such as STABU LexiCon, POSC/Caesar and BARBi rate almost similar to each other. All being difficult to use and complicated to up-take due to its electronic nature. On the other hand, it holds the advantage of unlimited expandability, depth and compatibility as these classification systems can be rewritten, re-edited and modified to accommodate future changes for the industry. The acceptance of the systems is nominal as all systems are developed in national interest.
- The ISO/DIS 12006-3 and IAI-IFC classifications are electronic classifications and have similar characteristics. With the exception that both these systems are united-international classifications, developed, received, and acknowledged by experts worldwide. Despite being a complex system, both the ISO/DIS 12006-3 and IAI-IFC have extremely high expandability, compatibility, depth, and up-take. Bring an electronic classification system, all entities can be customized, amended, and improved to be implemented in any nation or organization globally.

2 Problem analysis

2.1 Introduction

The final objective of the study is to produce a system that is able to uniquely codify the same object of analysis, connecting the different classification systems of greatest use through the in-depth study of the latter, bringing out for each of them potential and criticality.

These criticalities are evident in the construction sector, which requires flexible design systems capable of creating an identical key to reading and deciphering the elements that compose it, in order to allow an effective exchange of information between the operators involved. The operator who has to use different classification systems, each of them built in such a way as to meet different needs, will therefore have to face the problem of reprocessing the information contained in them based on different parameters. This involves problems of communication and processing of the output data, in particular for all those information systems, such as BIMReL that receive different input data on the same object.

2.2 Interoperability problem

Adopting the BIM methodology means moving towards collaborative work processes, based on information tools capable of creating virtual models of the product to be created. The conceptual development of this new methodology has allowed these collaborative processes to be defined more and more accurately over the years, to then be codified and progressively refined in regulatory standards, guidelines, etc. But as for processes, even the very idea of a virtual model has been the subject of reflections and rethinking, evolving from the initial one of a single file managed by a single software engine to the current conception of a federation of models capable of communicating between them. Below is the diagram on the levels of maturity of BIM representing precisely the level of diffusion and use, and above all of exploitation of the potential of BIM.

It starts from the CAD, which represents the lowest level (level 0), up to level 3 corresponding to the iBIM.

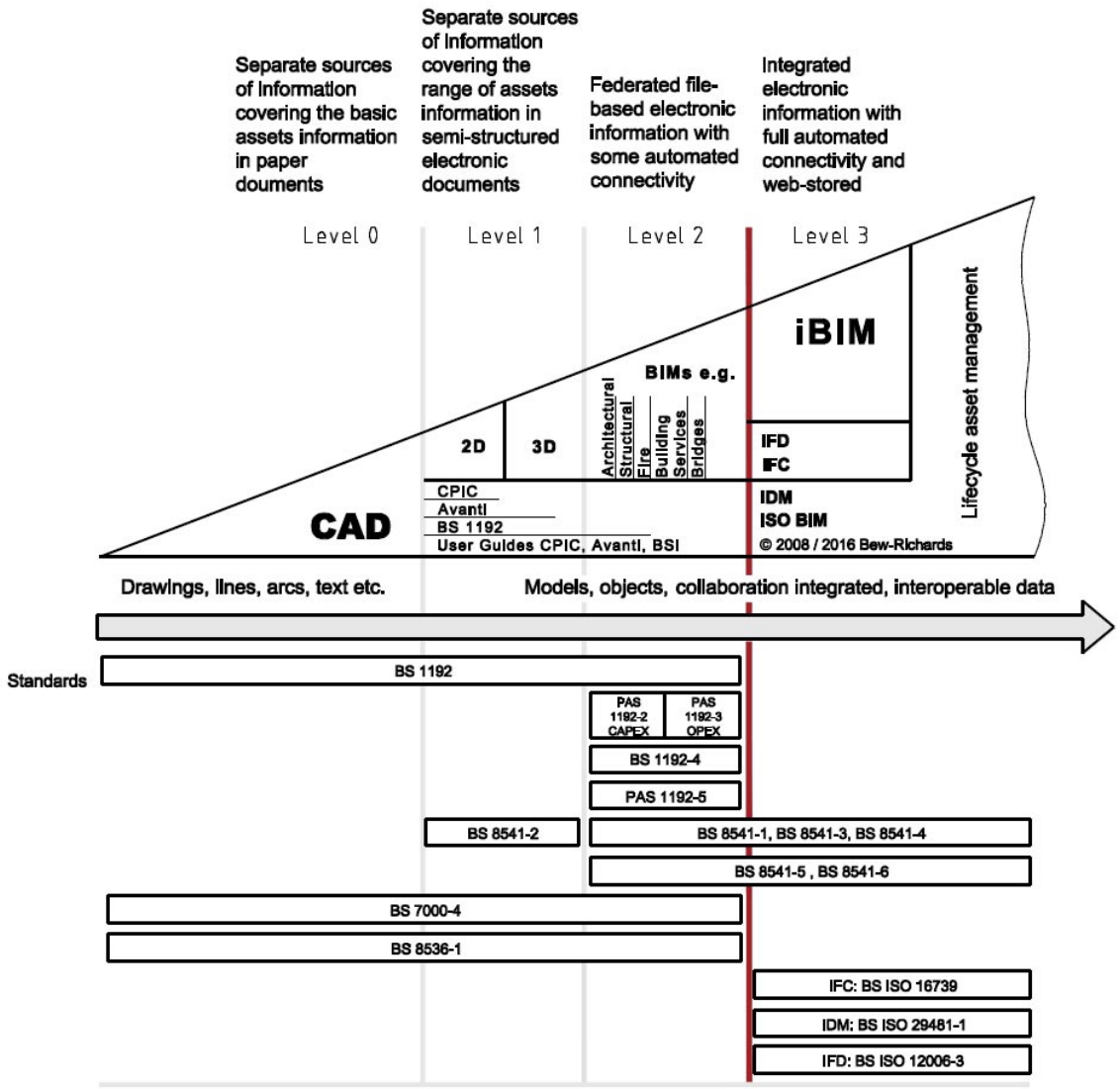


Figure 8. Maturity levels of BIM [20]

The quality of the data exchange is, therefore, the direction towards which the greatest commitment is concentrated for the purpose of spreading BIM, both from a procedural and software tools point of view.

The issue of international standards, guidelines, indications with the codification of the key documents for the organic development of the procedures and the methods for their drafting and their minimum contents are the efforts that are made to operationally decline the BIM methodology to the various typological and dimensional cases.

But it is clear that the theme of the superimposition of the models and their ability to dialogue without loss of information, represents the key aspect for the effective possibility of using the federation of models. [20]

The quality of the information to be exchanged goes far beyond the simple graphic data, as the use of objects allows the management and transfer of information also relating to materials, quantities, costs, times, energy and structural analyses, etc.

Therefore, in order to make the object loaded in the design software as real as possible, a Classification System must be associated with which to be able to detail the peculiar characteristics of that object through a code (such as the material , the type, the colour and the performances it must guarantee). This association allows you to uniquely identify it at any time.

The problem arises when using an uncommon classification system, as the association between the different systems is difficult and results in a different interpretation of the same product by the end user.

To better explain the problem, a product loaded on the BIMReL platform is presented below. The quality of the information to be exchanged goes beyond simple graphic data, as the use of objects allows the management and transfer of information relating to materials, quantities, costs, times, energy and structural analyses, etc.

Figure 9. Mortar Ytong FIX N200 Xella [26]

According to the classification system used in BIMReL it is classified as a thin-layer (T) masonry mortar. Through the study of the classification systems it was possible to deduce that in the other systems it is classified as:

- UniFormat: C3010 Wall finishes
- MasterFormat: 09 25 00 Service wall
- OmniClass (table 23): 23-15 00 00 Interior and finish product
- UniClass: Pr 35-31-64 Plaster and renders
- ETIM: /

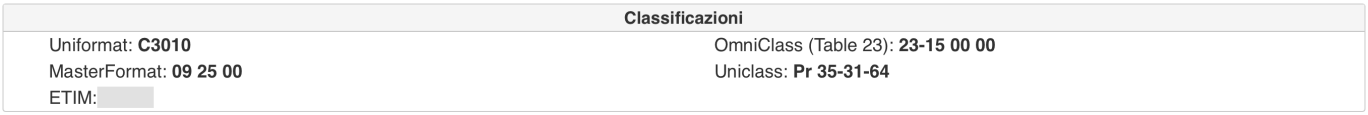


Figure 10. Classification of Mortar Ytong FIX N200 Xella [21]

As you can see at first glance, they are cataloged in different categories with different names all referring to the same object. But if, on the one hand, the UniFormat, OmniClass and UniClass systems present more or less the same information, the user who instead uses the MasterFormat classification system will have, on the other hand, a much lower degree of detail.

2.3 Objectives of the thesis

The objective of this thesis is to try to solve the problems mentioned above, and therefore to find a system that is able to uniquely associate the same product present in a model, even if classified with different classification methods from one State to another.

To achieve this goal, we started by considering a common classification system, used in the BIMReL platform. Through the study of the different classification systems and of the properties, purposes and structure necessary for the identification and characterization of an object, we will try to apply several classification systems for the identification of the elements; a matching will be developed between the naming attributes necessary for the coding of an object and the information contained within the tables themselves.

3 The BIMReL platform

3.1 Introduction

BIMReL is a digital system for managing information along the entire life cycle of a building, based on the definition of information and technology needs. [21]

This platform has been developed thanks to a cooperation among Politecnico di Milano, One Team S.r.l e TraceParts S.r.l, and it aims to create an open-source database of products and building components and promote the Lombardy industry visibility at an international Level.

One Team is Autodesk Platinum Partner and it works in the Italian market for supporting the adoption of BIM (and more generally the digitization of processes) in companies, with over 200 projects completed in the last 3 years and over 11,000 active software maintenance contracts [22].

TraceParts is a leader in 3D digital content for engineering, design, purchasing, manufacturing and maintenance processes and operations. It offers digital marketing services that can help suppliers of components, 3D printing services, computer software and hardware to promote their products and services and generate quality B2B leads [23]. It provides internet solutions for creating and managing component libraries, catalogues and product configurators and digital marketing services to help manufacturers in promoting more effectively their products and services. Among those services, TraceParts develops portals that are freely accessible to users and store more than 100 million components.

To implement BIMReL, research and development activities were carried out with the final goal of:

- creating an open-source interoperable database of all data related to construction elements, which can be technological packages, functional layers or construction products on the market, based on the technical data sheets linked to BIM objects;
- developing a web platform accessible by multiple users (citizens, private clients, public administrations, designers, manufacturing companies, construction companies and trade associations), which allows the user to immediately find any useful information during the

selection and use, maintenance and disposal of the building element itself, through a user-friendly but exhaustive consultation of all the information on the database;

- creating an online platform through which users can easily upload and exchange all technical and commercial information regarding the products, with particular attention to performance data such as those relating to the needs of safety, health, well-being, energy efficiency, environmental sustainability , economic and social in a logic of life cycle management;
- promoting Lombard and national manufacturing companies through the visibility of products at an international level and with detailed specifications suitable for enhancing the quality of building products;
- populating and validating the platform with the collaboration of some of the main stakeholders interested in its operation and with some of the main trade associations of material and component manufacturers.

BIMReL aims to optimize the planning, construction and management of constructions by creating a database. Through it, all relevant building data can be collected, combined and linked digitally.

It is therefore possible to immediately find any information both in the initial selection phase and then in the use, maintenance or disposal of the building element itself. Furthermore, users can easily and intuitively compare materials and technologies because the data is displayed in a transparent and, therefore, controllable way. [24] [25]

3.2 Structure of the platform and use

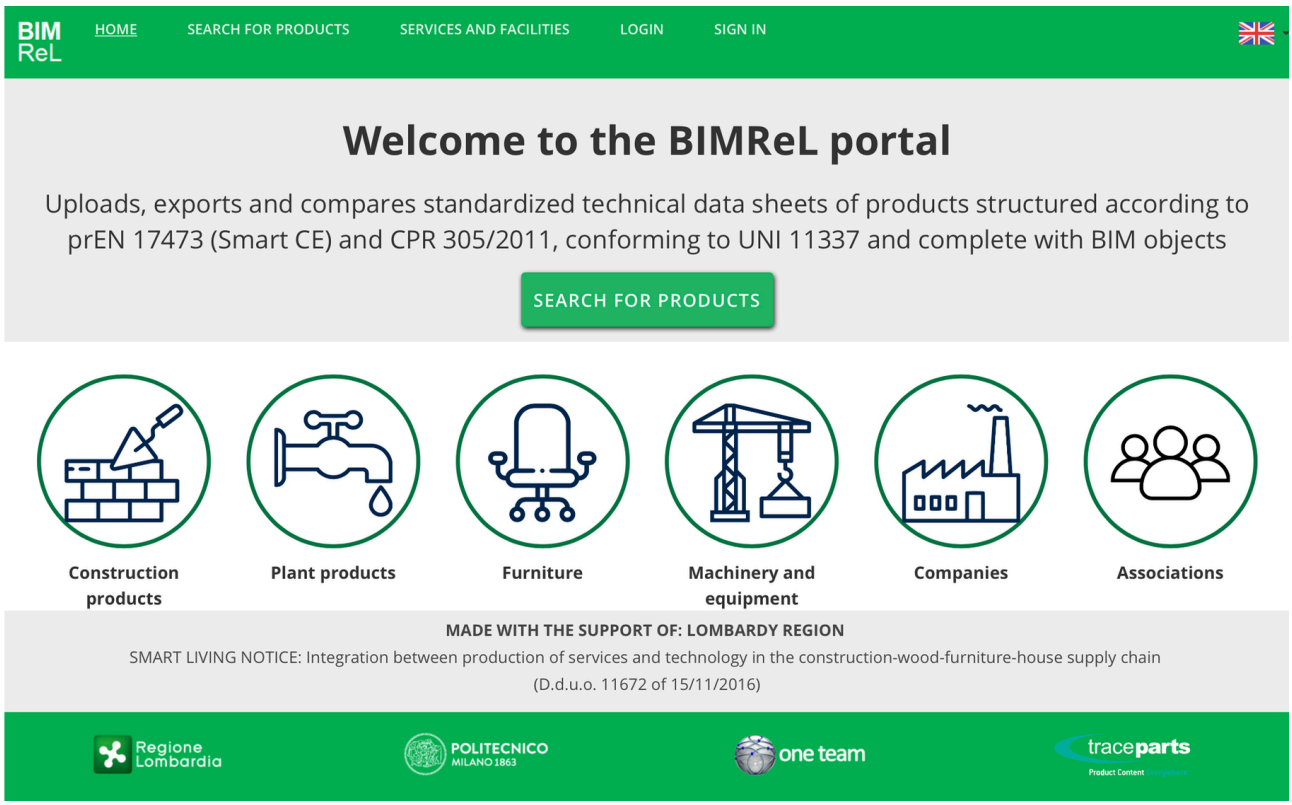


Figure 11. BIMReL Platform website [21]

Within the BIMRel platform it is possible to both search for products and upload them. It is possible to search the product within the library by the product name or applying various filters regarding the product classification.

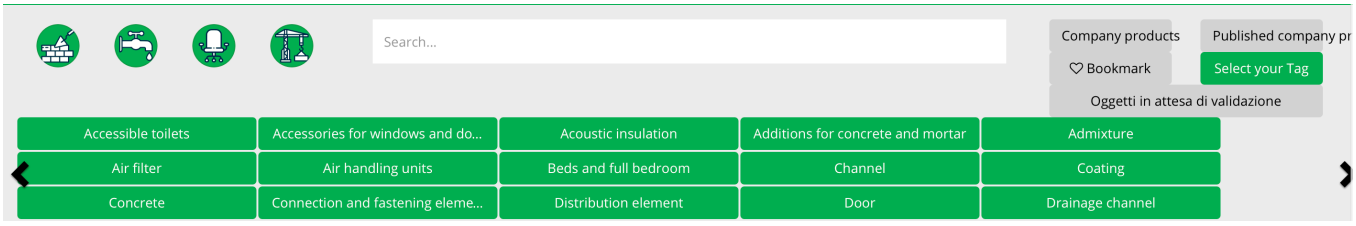


Figure 12. Product search on the BIMReL portal [21]

For a more accurate and specific research, you can set other filters based on the structure with which the platform is built, which are: family, macro category, category, type, main characteristic, file and information (company and commercial name).

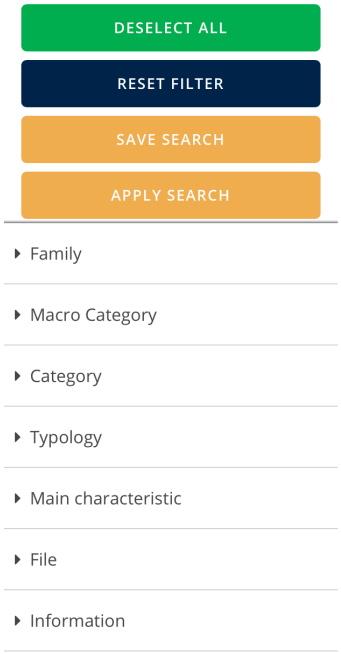


Figure 13. Advanced product search options [21]

The various users who wish to use the portal must register for use. Through this it is therefore possible to both consult and upload products in the platform.

To upload objects in this portal, there are ten different sections in which the user can upload data. Those sections are:

1. Element;
2. Product identification;
3. DoP card;
4. Data card;
5. Dossier;
6. BIM Model;
7. Documents;
8. Portals;
9. Anonymous card;
10. Completeness.

In this paper, different types of products of the Y-TONG and Rockwool companies have been analysed [26] [27]. The sheets of each product have been uploaded to BIMReL. All data are presented in the appendix D.

3.2.1 Element

This section defines the first information regarding the product you want to load. In particular, the family to which it belongs, the category, the type, the reference characteristic (material, use, configuration) and whether the product is subject to the CE marking are defined.

The four main families on which the library is based are:

- Construction products;
- Plant products;
- Furniture;
- Machinery and equipment.

For each family there are different categories each defining a different type of product. This structure will be highlighted later in Appendix A-B-C on which the study conducted is based.

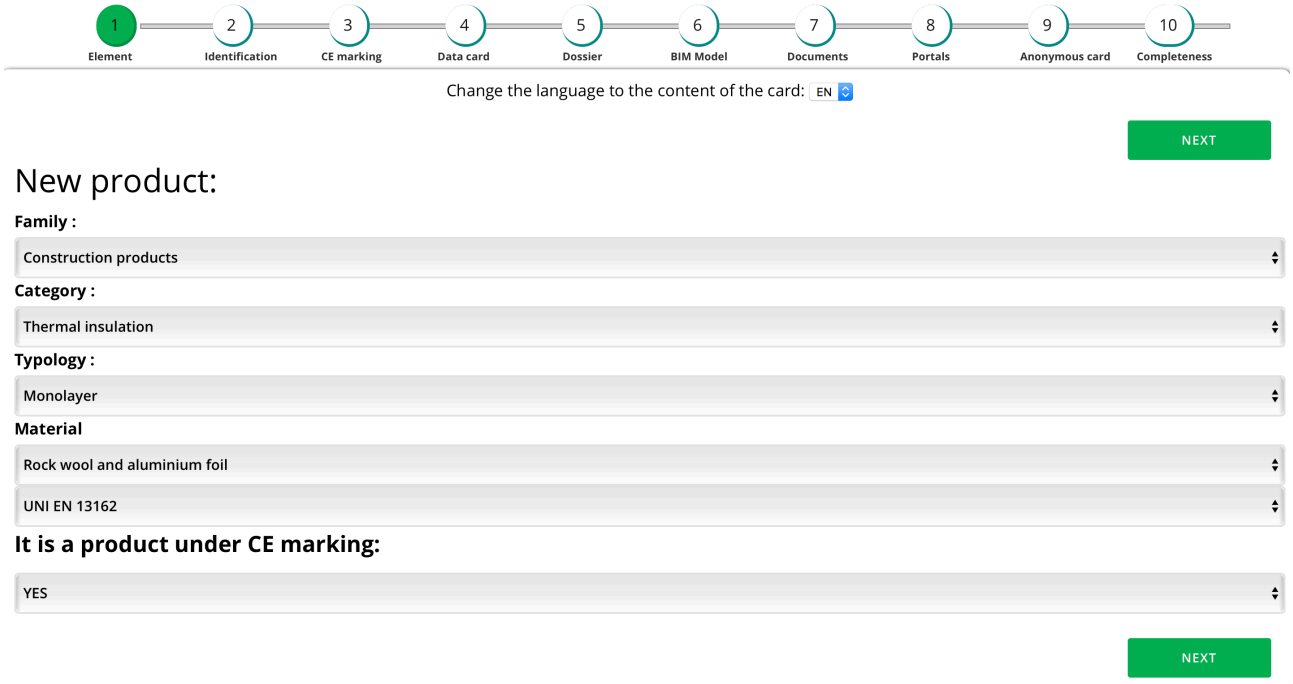


Figure 14. Element definition [21]

Extract form the construction product table				
Family	**Category**	**Tipology**	**Characteristic**	**Value**
Construction product	Gypsum-based adhesive	For gypsum blocks	Material	Calcium sulfate and additives
		For coupled thermal / acoustic panels and coated gypsum boards	Material	Calcium sulfate and additives
	Tile adhesive		Material	Cementitious adhesives for tiles for internal use
			Material	Cementitious adhesives for tiles for indoor and outdoor use
			Material	Dispersion adhesives for tiles
			Material	Reactive adhesives for tiles
	Addition for concrete and mortar	Virtually inert (type I)	Material	Ground granulated blast furnace slag
			Material	Fly ash
			Material	Silica fumes
		Pozzolanic or latent hydraulic activity (type II)	Material	Ground granulated blast furnace slag
			Material	Fly ash
			Material	Silica fumes

Figure 15. Example of construction products within BIMReL platform

3.2.2 Product identification

This part allows entering information regarding the trade name, commercial description and data that permit to identify the product through its intended use, keywords, synonyms and the CPV code.

The CPV is a single classification system for public procurement aimed at unifying the references used by administrations and contracting entities for the description of the subject of procurement. [28]

This code includes a main vocabulary for describing the procurement subject and an additional vocabulary for adding qualitative information to the subject. The main vocabulary is based on a tree structure of codes that can have up to 9 digits (an 8-digit code plus a control code), to which corresponds a denomination that describes the supplies, works or services covered by the market.

The main vocabulary is based on a tree structure of codes that can have up to 9 digits, which correspond to a name that describes the supplies, works or services covered by the contract.

- The first two digits identify the divisions (XX000000-Y);
- The first three digits identify the groups (XXX00000-Y);
- The first four digits identify the classes (XXXX0000-Y);

- The first five digits identify the categories (XXXXX000-Y);

Each of the last three digits provides an additional degree of accuracy within each category.

A ninth digit is used to verify the previous digits.

This section also contains the classification of the product according to the Uniformat II, MasterFormat, OmniClass, UniClass and ETIM standards. There are also data regarding the identification of the manufacturing industry.

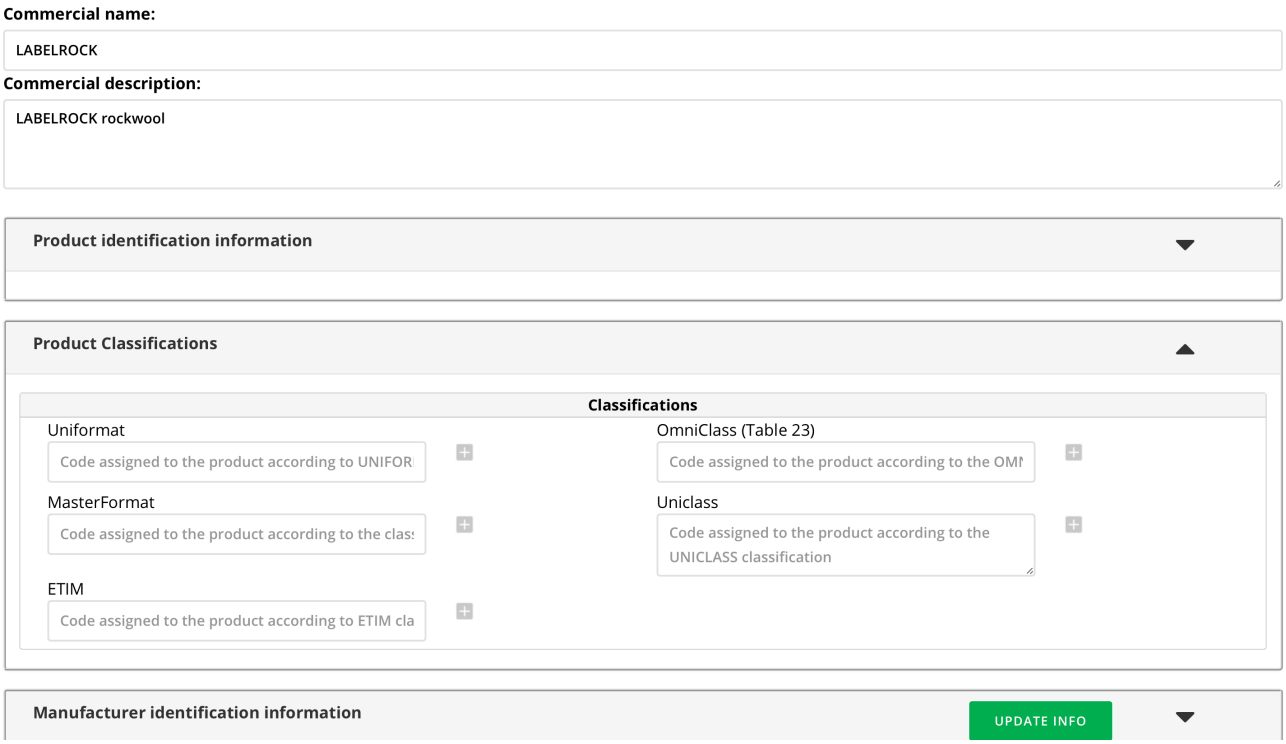


Figure 16. Product Identification [21]

3.2.3 DoP card

This section contains all the data available from the DoP of each product and its essential characteristics. The CPR (Construction Products Regulation) 305/2011 [29], introduced into Italian law with Legislative Decree 106 / 2017 [30], establishes harmonized conditions for the marketing of construction products. It introduces simplified procedures that make it possible to reduce the costs incurred by businesses. The DoP (Declaration of Performance) is the basic document on which the CPR is based. The DoP contains the main information about a product. The manufacturer draws up the DoP when a product is covered by a harmonized standard (EN) or by a European technical assessment issued by a specific body.

CPR 305/2011 [29] provides for the implementation of a factory production control manual (CPF) according to the assessment system provided for 1/1 +/2 +/3/4. It certifies the permanent internal control of production and that the elements, requirements and provisions are systematically documented in the form of written procedures. The CPF must be drawn up according to the EN ISO 9000 standard [31], and certified by a specific certified body.

The DoP is divided into 10 sections as shown below:

ROCKWOOL

DECLARATION OF PERFORMANCE

N° CPR-DoP-ADR-084

1- **Unique identification code of the product-type:**

MW - EN13162-T4-DS(70,90)-WS-WL(P)

2- **Identification of the product as required persuant to article 11, § 4 - Regulation n° 305/2011 :**

AIRROCK 33 KRAFT

(see product label)

3- **Intended use of the construction product, in accordance with the applicable harmonized technical specification, as foreseen by the manufacturer:**

Thermal insulation for buildings (ThIB)

4- **Name, registered trade name or trade mark and contact address of the manufacturer as required pursuant article 11, § 5 - Regulation n° 305/2011::**

ROCKWOOL ADRIATIC d.o.o.
Poduzetnička zona Pićan Jug 130, Zajci, HR - 52333 Potpićan, Croatia

5- **Name and contact address of the authorized representative:**

Not applicable

6- **System of assessment and verification of constancy of performance of the construction as set out in CPR, Annex V - Regulation n° 305/2011:**

AVCP System 3 for the other characteristics.

7- **In case of the declaration of performance concerning a construction product covered by a harmonised standard:**

IGH (notified certification body n° 2477) performed the determination of the product-type on the basis of type testing, according System 3.

The test reports have been issued.

8- **In case of the declaration of performance concerning a construction product for which a European Technical Assessment has been issued:**

not applicable

ROCKWOOL

9- Declared Performance:

Essential Characteristics		Performance	Harmonized technical specification
		AIRROCK 33 KRAFT	
Thermal resistance	Thermal resistance (m^2K/W) for thickness (*)	from 1,20 th. 40 mm to 5,45 th. 180 mm	EN 13162:2012+A1: 2015
	thermal conductivity W/(mK)	0,033	
	Thickness	T4	
Reaction to fire	Reaction to fire	NPD	
Durability of reaction to fire against heat, weathering, ageing/degradation	Durability characteristics	(a)	
Durability of thermal resistance against heat, weathering, ageing/degradation	Thermal resistance and Thermal conductivity	(b)	
	Durability characteristics	(c) DS(70,90)	
Compressive strength	Compressive stress or compressive strength	NPD	
	Point load	NPD	
Tensile/Flexural strength	Tensile strength perpendicular to faces (d)	NPD	
Durability of compressive strength against ageing/degradation	Compressive creep	NPD	
Water permeability	Short term water absorption	WS	
	Long term water absorption	WL(P)	
Water vapour permeability	Water vapour transmission	NPD	
Impact noise transmission index *(for floors)*	Dynamic stiffness	NPD	
	Thickness, d_L	NPD	
	Compressibility, *c*	NPD	
	Air flow resistivity	NPD	
Acoustic absorption index	Sound absorption	NPD	
Direct airborne sound insulation index	Air flow resistivity	NPD	
Release of dangerous substances to the indoor environment	Release of dangerous substances	(e)	
Continuous glowing combustion	Continuous glowing combustion	(e)	

(*) See label declared thermal resistance for thickness

NPD - No Performance Determined

(a) No change in reaction to fire properties for mineral wool products. The fire performance of mineral wool does not deteriorate with time. The Euroclass classification of the product is related to the organic content, which cannot increase with time.

(b) Thermal conductivity of mineral wool products does not change with time, experience has shown the fibre structure to be stable and the porosity contains no other gases than atmospheric air.

(c) For dimensional stability thickness only.

(d) This characteristic also covers handling and installation.

(e) European test methods are under development.

10- The performance of the product identified in points 1 and 2 is in conformity with the declared performance in point 9. This declaration of performance is issued under the sole responsibility of the manufacturer identified in point 4.

Signed for and on behalf of the manufacturer by

ROCKWOOL ADRIATIC d.o.o

Factory Manager

(Aleks Fonović)

Potpićan, 11/9/2019

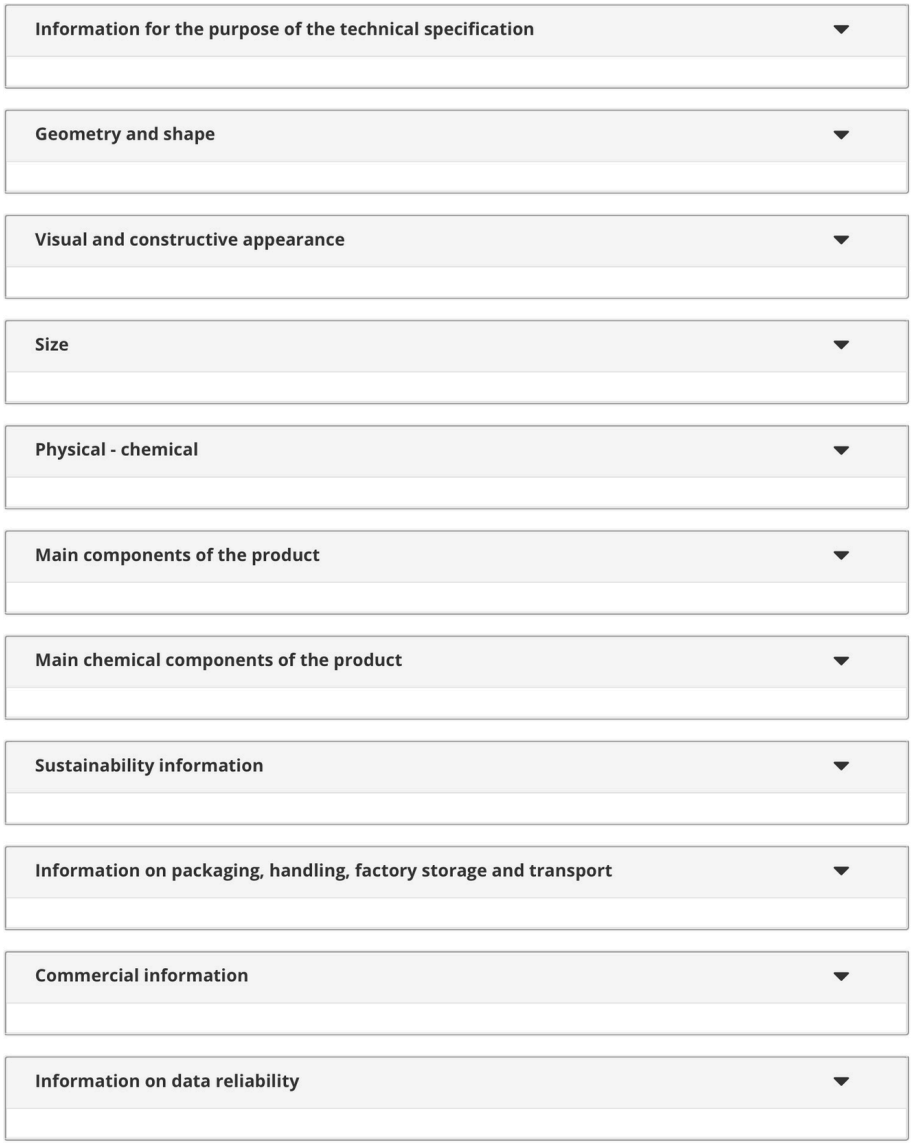
Figure 17. Declaration of Performance Airrock 33 kraft Rockwool [27]

3.2.4 Data card

This section includes all information regarding the product. They can be deduced both from the DoP and from the product data sheet. This data is divided into the following categories:

- Information for the purposes of the technical specification: denomination according to technical specification, classification of the product according to technical specification, definition of the product according to technical specification, year of technical specification and use/intended use of the product according to the technical specification;
- Geometry and shape;
- Visual and constructive appearance: data regarding the finishing;
- Size: product length, height, length and thickness;
- Physical and chemical characteristics: weight and density;
- Main components of the product;
- Main chemical components of the product: data regarding the chemical components of the product;
- Sustainability data: data regarding the sustainability of the product, such as the product life cycle information, the EN 15804 [32] parameters, the resources use to product the construction component, data regarding the production flow and materials, the data regarding the material waste, data regarding the carbon emissions on the manufacturing process and data regarding the emission of pollutants;
- Packaging, handling, storage and transport: data regarding the type of packing of the product, packing dimensions, number of products per packing and mode of transport;
- Commercial information: data regarding the specification's descriptions, price list description, commercial notes and the product yield;
- Reliability information: data regarding the responsible of the company for updating the information, the date of the upload and date of revision;
- Additional technical information: BIMReL permit to add extra data if they are relevant for product description;

- Other data: in this section is possible to add commercial data, like the price of the product.



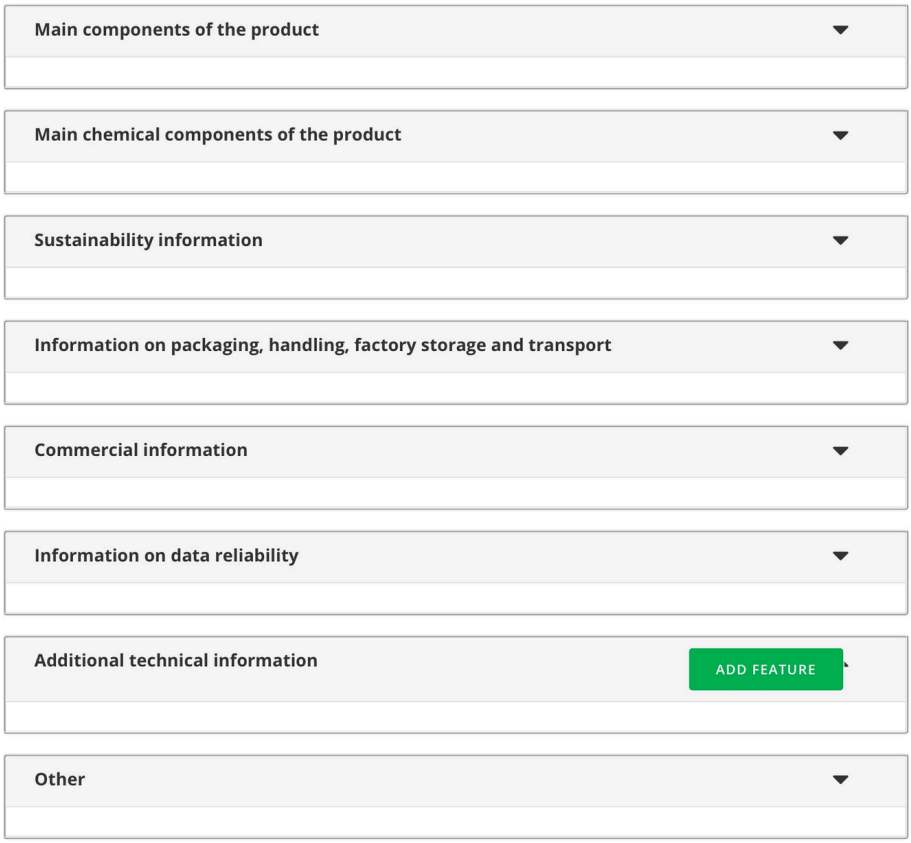


Figure 18. Product datasheet characteristics [21]

3.2.5 Dossier

This section includes all the data concerning the life cycle of the product, from the construction site to its disposal. In particular, information is provided regarding:

- the transport, handling and storage phase on site;
- the installation phase of the product with information relating to safety in use and installation methods;
- the maintenance phase with reference to works, frequency and life cycle;
- the phase of disposal with indications regarding the disposal of waste.

It is also possible to add attachments regarding this section such as drawings, videos, photos and graphic details.

Dossier guide

Product identification information

Effective use

Employment

Trading name

Name by which the manufacturer identifies the product

Information on transport, handling and storage

Transport

Indications about the process adopted by the manufacturer for the proper transport of the product

Type of handling

Indications about the correct handling of the product in the company

Storage mode

Indications about the proper storage of the construction product in factory

Requirements for the disposal of packaging

Information on the correct disposal of the packaging

Commercial information

Sales network

Bridges between company and potential buyers

Application information

In this section it is possible to indicate or (if there are the relevant sl

UPDATE DATA

Number	Construction products	

Installation

/

Prescriptions for use

/

Suitable related materials and products

/

Laying method

/

Incompatible related materials and products

/

Acceptance criteria

/

Type of handling from the storage area to the processing area

/

Indications on the disposal of waste

/

Preconditions necessary for installation

/

Further specific needs

/

Use and maintenance

Sales network

Indicate the number of planned maintenance activities and select u

UPDATE DATA

Planned intervention	Frequency	

Useful life reference years

Indicate the value of Reference Service Life for the product in qu -

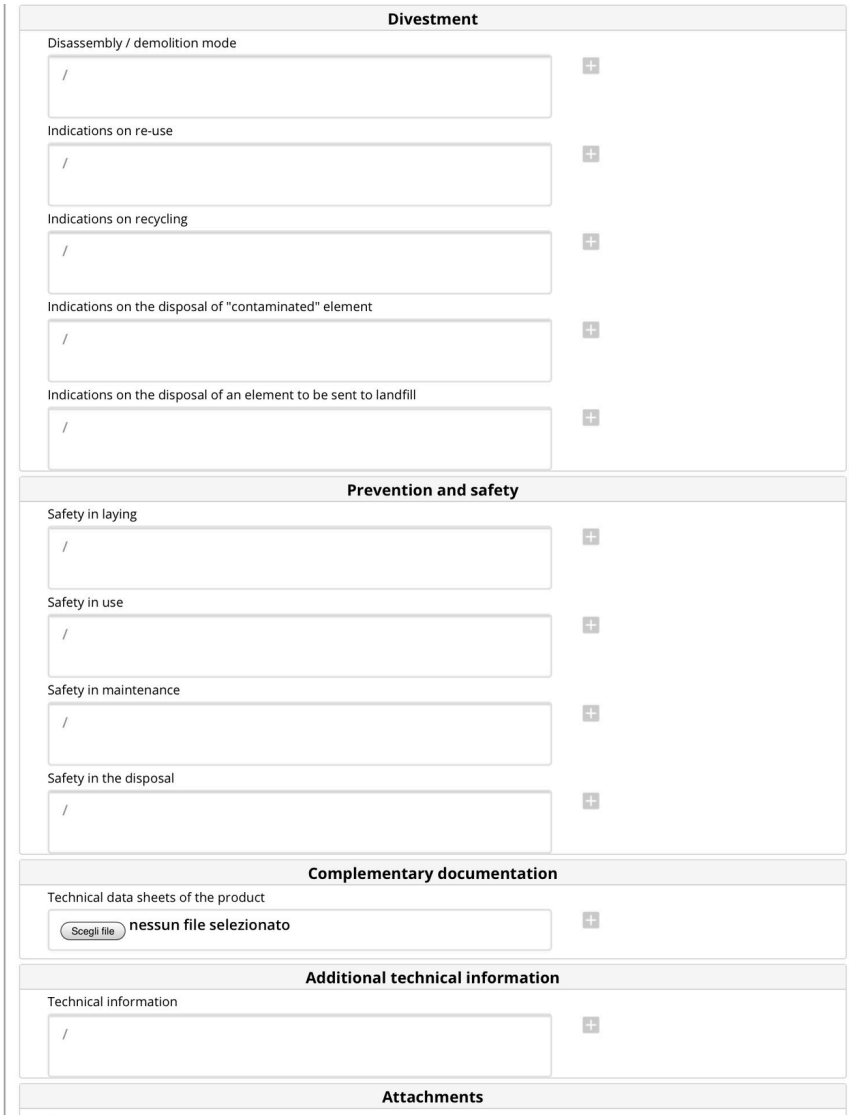


Figure 19. Product Dossier [21]

3.2.6 BIM Model

At this section is possible to update the BIM models that represent the product, add a description of the model and define the LOD of the digital object.

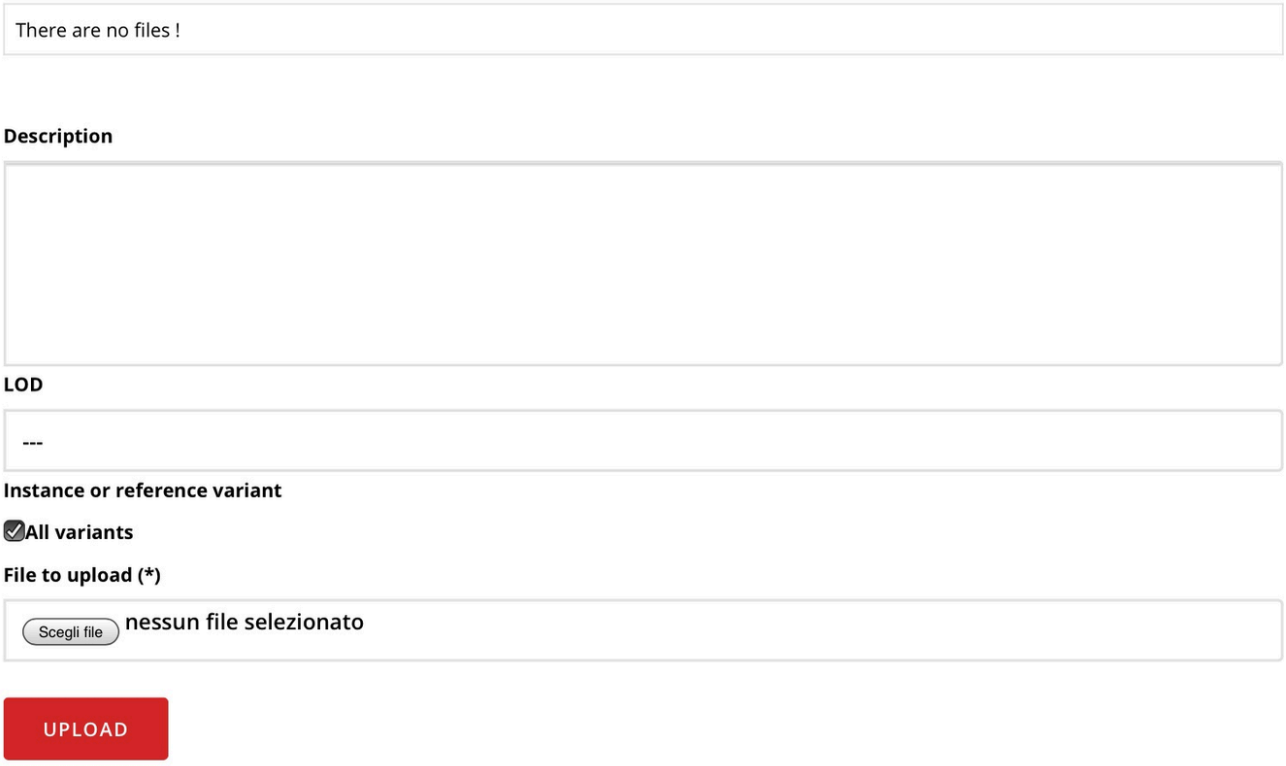


Figure 20. BIM Model [21]

3.2.7 Documents

All documents concerning the company and the product such as the corporate brochure, company certifications, product brochure, technical sheets, product certifications, manuals, safety data sheet, specification items, price list, environmental product declaration (EPD), sustainability report, and maintenance guide can be uploaded in this section.

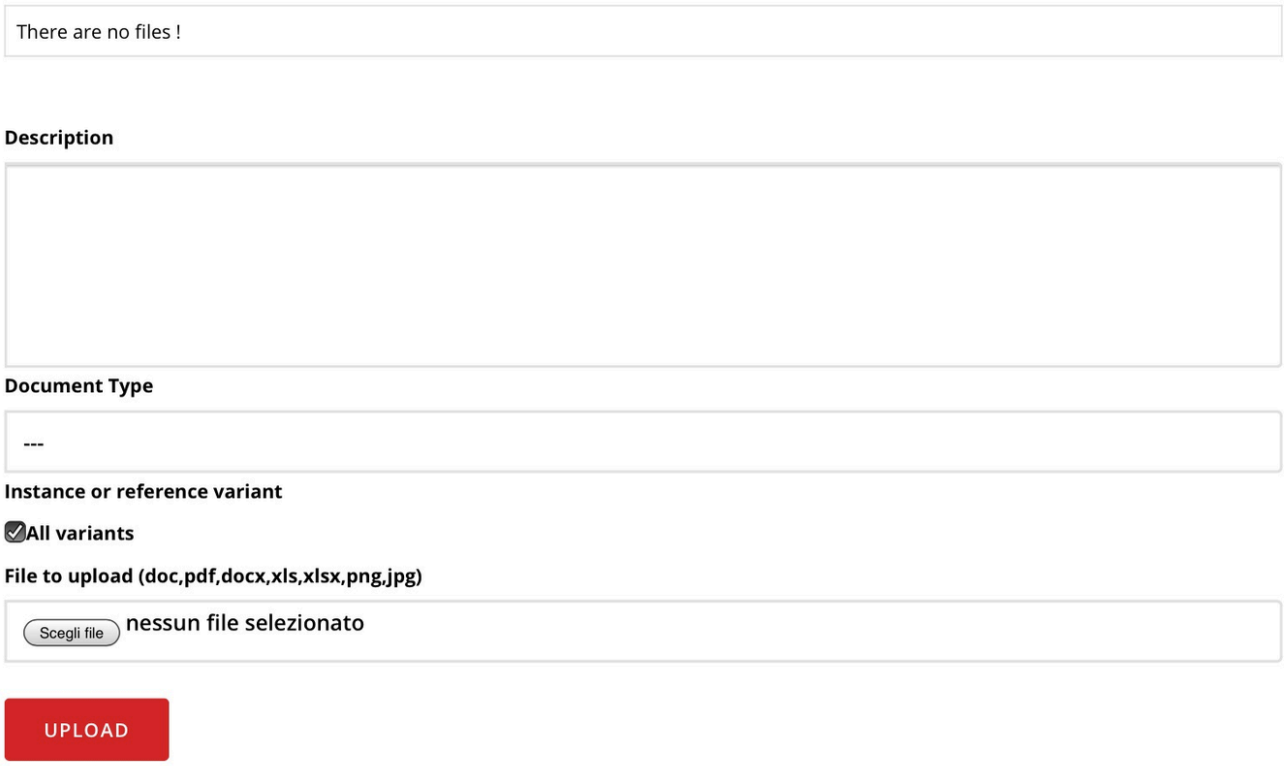


Figure 21. Product Documents [21]

3.2.8 Portals

As previously said, Politecnico di Milano is the leader of the project, supported by One Team S.r.l. and TraceParts S.r.l.

This section of BIMRel allows you to replicate the loaded product on other libraries, such as BIM&Co and OneTeam.

3.2.9 Anonymous card

Article 68 of Legislative Decree 50/2016 states [24]:

''1. The technical specifications indicated in point 1 of Annex XIII are included in the tender documents and define the characteristics provided for works, services or supplies. These characteristics may also refer to the specific process or method of production or performance of the works, supplies or services requested, or to a specific process for another phase of their life cycle even if these factors are not part of their substantial content, provided that they are linked to the subject of the contract and proportionate to its value and objectives.

2. The technical specifications may also indicate whether the transfer of intellectual property rights is required.

3. For all contracts intended for use by natural persons, whether they are the public or the staff of a contracting authority, it is necessary that the technical specifications, except in duly justified cases, be developed in such a way as to account of accessibility criteria for people with disabilities or adequate design for all users. Where the mandatory accessibility requirements are adopted by a legal act of the European Union, the technical specifications must be defined by reference to them with regard to the criteria of accessibility for persons with disabilities or of adequate design for all users.

4. The technical specifications shall allow economic operators equal access to the award procedure and must not directly or indirectly lead to unjustified obstacles to the opening of public procurement to competition.

5. Without prejudice to mandatory national technical rules, the technical specifications are formulated in one of the following ways:

a) in terms of performance or functional requirements, including environmental characteristics, provided that the parameters are sufficiently precise to allow the tenderers to determine the subject of the contract and the contracting authorities to award the contract;

b) by reference to technical specifications and, in order of preference, to the standards that implement European standards, to the European technical assessments, to the common technical specifications, to the international standards, to other technical reference systems adopted by the European standardization bodies or failing that , to national standards, technical approvals or technical specifications regarding the design, calculation and construction of works and use of supplies. Each reference contains the term "or equivalent";

c) in terms of performance or functional requirements referred to in letter a), with reference to the specifications referred to in letter b) as a means of presuming compliance with such performance or functional requirements;

d) by reference to the technical specifications referred to in letter b) for certain characteristics and to the performance or functional requirements referred to in letter a) for the other characteristics.

6. Unless justified by the subject matter of the contract, the technical specifications may not mention a specific manufacture or provenance or a particular process characteristic of the goods or services provided by a specific economic operator, nor refer to a trademark, a patent or a specific type, origin or production which would have the effect of favoring or eliminating certain companies or certain products. This mention or reference is however permitted, exceptionally, in the event that a sufficiently precise and intelligible description of the object of the contract is not possible by applying paragraph 5. In this case the mention or reference is accompanied by the expression « or equivalent".

7. When making use of the possibility of referring to the technical specifications referred to in paragraph 5, letter b), the contracting authorities may not declare inadmissible or exclude an offer on the grounds that the works, supplies or services offered do not comply the technical specifications to which they referred, if in its offer the tenderer demonstrates, by any appropriate means, including the means of proof referred to in Article 86, that the proposed solutions comply in an equivalent manner with the requirements defined by the technical specifications.

8. When making use of the right, provided for in paragraph 5, letter a), to define the technical specifications in terms of performance or functional requirements, the contracting authorities cannot declare inadmissible or exclude an offer of works, supplies or services that comply with a standard that transposes a European standard, a European technical approval, a common technical specification, an international standard or a technical reference system adopted by a European standardization body if these specifications include the performance or functional requirements to be they prescribed. In his tender, the tenderer is required to demonstrate by any appropriate means, including the means of proof referred to in Article 86, that the works, supplies or services conforming to the standard comply with the performance and functional requirements of the contracting authority ."

BIMReL allows you to generate an anonymous product model, containing all product data except those relating to the manufacturer. This allows it to be used in public procurement contracts guaranteeing the principle of transparency and equality, such that if the latter were not respected, they would have the effect of favouring or eliminating certain companies or certain products.

3.2.10 Completeness

The last section is devoted to completeness. Based on the information uploaded to the platform, a percentage score is associated for each section, which will give a final total result. Also in this part you can check the number of visitors to the product and get a QR code that is linked to the object within the portal.

Figure 22. Data completeness of the product [21]

4 Solution development

4.1 Introduction

In order to verify the possibility of produce a unique communication between the different classification systems, first of all the current state, as well as the study of those classification systems currently in use in the rest of the world was analysed to identify its main strengths and weaknesses. A fundamental aspect not to be overlooked in order to make a comparison between them is the verification of the level of detail they provide, paying particular attention to the level of description offered for an element.

It was decided to focus on the problem of the interoperability of the classification chosen in BIMReL, related to the other existing classification systems. In particular, once the family, category, type and material have been chosen in the BIMReL platform, the product classification can be defined according to the various classification systems.

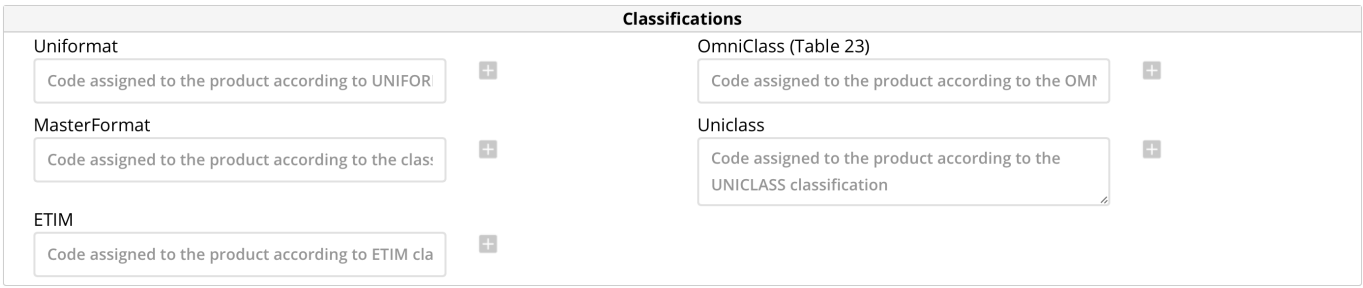


Figure 23. Product classification according to the various classification systems in BIMReL [21]

The goal is to verify if there was the possibility of creating a structure capable of connecting the different Classification Systems most in use. In this regard it was decided to develop a table common to all. To pursue this goal, the work was divided into the following steps:

1. Definition of objects's subdivision in BIMReL;
2. Analysis and verification of the tables contained in the various classification systems;
3. Matching between the naming attributes necessary for the coding of an object and the information contained within the tables themselves.

4.2 Objects subdivision in BIMReL

BIMReL, as previously mentioned, divides the products into four families: construction products; plant products; furniture; machinery and equipment.

To allow the identification of a product on the platform, which is unique, other sub-groups are defined.

Once the family is chosen, the category is specified. This allows you to perform a first skimming with which the objects are divided according to families of elements (additive, aggregate, concrete, window, etc...).

The typology, on the other hand, represents a level of specification of the category with which a family of elements is clarified in greater detail (flat net, aerating additive, filler, self-compacting concrete, etc...).

An additional level of detail is provided by the characteristic (material, use, configuration, geometry) and material subgroup through which specific information is provided that make the object unique.

BIMRel classification system			
Category	**Tipology**	**Characteristic**	**Value**
Sealant	For glazing joints (type G)	Material	Based on lime and marble powder
		Material	Based on gypsium, rock flour and additives
		Material	Based on vegetable oils and iron oxides
		Material	Based on vegetable oils and titanium oxides
		Material	Based on inert vegetablr, mineral and soil oils
		Material	Polyester-based
		Material	Based on alkyd resins and mineral fillers
		Material	Based on calcium and magnesium hydraulic silicates
		Material	Acetic
		Material	Acrylic
		Material	Bituminous
		Material	Cement
		Material	Elastomeric
		Material	Polyurethane
		Material	Silicon
	For joints in buildings other than glazing joints (type F)	Material	Based on lime and marble powder
		Material	Based on gypsium, rock flour and additives
		Material	Based on vegetable oils and iron oxides
		Material	Based on vegetable oils and titanium oxides
		Material	Based on inert vegetablr, mineral and soil oils
		Material	Polyester-based
		Material	Based on alkyd resins and mineral fillers
		Material	Based on calcium and magnesium hydraulic silicates
		Material	Acetic
		Material	Acrylic
		Material	Bituminous
		Material	Cement
		Material	Elastomeric
		Material	Polyurethane
		Material	Silicon

Table 25. BIMReL classification system

4.3 Analysis and verification of the contents of the classification systems

Once the classification system used in the BIMReL platform was defined, the structure, organization and generation of the final product code was analysed according to the logic of the various classification systems. In particular, it had as its purpose to make a first analysis on the criteria that make it possible to uniquely identify a product. In this phase, therefore, the contents of the various classification systems were initially analysed to verify that they contained information that could be traced back to or similar to the classification adopted by BIMReL. This procedure was done to refine the large number of tables present in the various classification systems. Object of this analysis are: UniClass, UNIFORMAT II, OmniClass, MasterFormat and ETIM. Each of them, as previously explained, has a different structure, organization and properties, such that different approaches had to be used to develop the final result.

Comparison of structure of classification systems						
		Uniclass	**UNIFORMAT II**	**Omniclass**	**Masterformat**	**ETIM**
BIMReI	Family	X	X	X	X	X
	Category	X	X	X	X	X
	Tipology	X		X	X	X
	Characteristic			X		X
	Value			X		X

Table 26. Comparison of BIMReL structure vs. other classification systems

- *UniClass*

From the analysis conducted, UniClass has the family, category and typology attributes in Table 7 (products table) and in Table 6 (systems table). As for the other attributes, no information emerged with respect to the attribute sought.

The Table 7 (product table) was used for the subsequent phase of the analysis: the matching. The unique final object code of each material is derived from the group, subgroup, section and object, as highlighted in the following table.

Uniclass Table n. 7 Products					
Code	**Group**	**Sub group**	**Section**	**Object**	**Title**
Pr_20	20				Structure and general products
Pr_20_29	20	29			Fastener products
Pr_20_29_03	20	29	03		Anchors and components
Pr_20_29_03_04	20	29	03	04	Anchor blocks
Pr_20_29_03_05	20	29	03	05	Anchor rails
Pr_20_29_03_10	20	29	03	10	Carbon steel anchor plates
Pr_20_29_03_11	20	29	03	11	Carbon steel chemical anchor rods
Pr_20_29_03_12	20	29	03	12	Carbon steel chemical anchor sockets
Pr_20_29_03_13	20	29	03	13	Carbon steel post base plates
Pr_20_29_03_14	20	29	03	14	Carbon steel post spikes
Pr_20_29_03_15	20	29	03	15	Cavity anchors
Pr_20_29_03_16	20	29	03	16	Chemical anchor capsules
Pr_20_29_03_17	20	29	03	17	Chemical anchor cartridges
Pr_20_29_03_18	20	29	03	18	Chemical anchors
Pr_20_29_03_28	20	29	03	28	Expansion anchors
Pr_20_29_03_30	20	29	03	30	Fixing discs
Pr_20_29_03_31	20	29	03	31	Framing anchors
Pr_20_29_03_32	20	29	03	32	Framing fasteners
Pr_20_29_03_33	20	29	03	33	Ground anchor heads
Pr_20_29_03_34	20	29	03	34	Ground plate anchors
Pr_20_29_03_35	20	29	03	35	Grouted ground anchors
Pr_20_29_03_36	20	29	03	36	Hammer-in fasteners
Pr_20_29_03_44	20	29	03	44	J-pins
Pr_20_29_03_47	20	29	03	47	Lifting anchors
Pr_20_29_03_48	20	29	03	48	Lifting hoops
Pr_20_29_03_66	20	29	03	66	Prestressing anchors
Pr_20_29_03_72	20	29	03	72	Rock bolts
Pr_20_29_03_73	20	29	03	73	Rock dowels
Pr_20_29_03_77	20	29	03	77	Socket anchors
Pr_20_29_03_78	20	29	03	78	Solar module roof anchors
Pr_20_29_03_79	20	29	03	79	Split rings
Pr_20_29_03_80	20	29	03	80	Sprayed concrete anchor studs
Pr_20_29_03_81	20	29	03	81	Sprayed concrete ties
Pr_20_29_03_82	20	29	03	82	Stainless steel anchor plates
Pr_20_29_03_83	20	29	03	83	Stainless steel chemical anchor rods
Pr_20_29_03_84	20	29	03	84	Stainless steel chemical anchor sockets
Pr_20_29_03_86	20	29	03	86	Structural anchors
Pr_20_29_03_88	20	29	03	88	Threaded anchors
Pr_20_29_03_92	20	29	03	92	Undercut anchors
Pr_20_29_03_97	20	29	03	97	Wedge anchors

Table 27. UniClass: final code generation [10]

- *UNIFORMAT II*

The UNIFORMAT II classification system has a great advantage: considering an economic analysis based on an elemental framework instead of on a product-based classification will have the effect of reducing in time and costs for evaluating alternatives at the early design stage. It is therefore incomplete of almost all the subgroups considered in BIMReL. The only one that is roughly contained within it is the family and category that appears in the tables.

Uniformat II is organized in 3 main hierarchical levels: level 1, the largest element grouping, identifies major group elements such as the substructure, shell, and interiors; level 2 subdivides level 1 elements into group elements; level 3 breaks the group elements further into Individual elements; the proposed level 4 breaks the individual elements into yet smaller sub-elements. The final object code is derived from the 4 levels.

UNIFORMAT II: Classification for building elements-Related Sitework			
Level 1 **Major group elements**	**Level 2** **Group elements**	**Level 3** **Individual elements**	**Level 4** **Sub-Elements**
B Shell	B10 Super Structure	B1010 Floor Construction	B1011 Suspended Basement Floors Construction
			B1012 Upper Floors Construction
			B1013 Balcony Floors Construction
			B1014 Ramps
			B1015 Exterior Stairs and Fire Escapes
			B1016 Floor Raceway Systems
			B1019 Other Floor Construction
		B1020 Roof construction	B1021 Flat Roof Construction
			B1022 Pitched Roof Construction
			B1023 Canopies
			B1029 Other Roof Systems
	B20 Exterior Enclosure	B2010 Exterior Walls	B2011 Exterior Wall Construction
			B2012 Parapets
			B2013 Exterior Louvers, Screens, and Fencing
			B2014 Exterior Sun Control Devices
			B2015 Balcony Walls & Handrails
			B2016 Exterior Soffits
		B2020 Exterior Windows	B2021 Windows
			B2022 Curtain Walls
			B2023 Storefronts
		B2030 Exterior Doors	B2031 Glazed Doors & Entrances
			B2032 Solid Exterior Doors
			B2033 Revolving Doors
			B2034 Overhead Doors
			B2039 Other Doors & Entrances
	B30 Roofing	B3010 Roof Coverings	B3011 Roof Finishes
			B3012 Traffic Toppings & Paving Membranes
			B3013 Roof Insulation & Fill
			B3014 Flashings & Trim
			B3015 Roof Eaves and Soffits
			B3016 Gutters and Downspouts
		B3020 Roof Openings	B3021 Glazed Roof Openings
			B3022 Roof Hatches
			B3023 Gravity Roof Ventilators

Table 28. UNIFORMAT II: final code generation [12]

- *OmniClass*

  The OmniClass tables are built in the same way as the structure adopted by BIMReL. In fact they possess all the subgroups considered. The product table was used for the matching. The unique final object code of each material is derived from different levels each of which provides greater product characterization.

OmniClass table 23:Products										
OmniClass Number	**Level 1 Title**	**Level 2 Title**	**Level 3 Title**	**Level 4 Title**	**Level 5 Title**	**Level 6 Title**	**Level 7 Title**	**Synonym**	**Definitions**	**Discussion/Examples**
23-11 00 00	**Site Products**								Products used on the project grounds and site.	Includes bricks, blocks, basic materials, concrete mixtures, landscaping and horticulture products, planting equipment, ground anchorages, ground improvement products, sheeting and revetments, retention structures. Also includes temporary site products.
23-11 11 00		**Ground Anchorages**							Plates or augers imbedded in the soil that limit lateral	
23-11 11 11			**Retaining Stabilizing Ground Anchors**							
23-11 11 11 11				Retaining Stabilizing Ground Components						
23-11 11 11 11 11					Stabilizing Ground Anchor Heads					
23-11 11 11 11 13					Stabilizing Ground Tendons					
23-11 11 11 13				Stabilizing Ground Grouted Anchors						
23-11 11 11 15				Stabilizing Ground Plate Anchors						
23-11 11 11 17				Stabilizing Ground Rock Bolts						
23-11 11 11 19				Stabilizing Ground Rock Anchors						
23-11 11 11 21				Stabilizing Ground Anchor Tiebacks						
23-11 11 13			**Earth Reinforcement Anchors**							
23-11 11 13 11				Earth Reinforcement Soil Nails						

Table 29. OmniClass: final code generation [13]

- *MasterFormat*

From the analysis conducted, MasterFormat possesses the family, category and typology attributes, but lacks information relating to characteristics and value since it does not have specific tables but directly associates the material with an object; this excludes the possibility of associating that material with any other object.

MasterFormat is organized in a standardized outline format within divisions. Each division is subdivided into a number of sections. The final object code expresses the division, section and final product to which it refers.

09 60 00	**Flooring**
09 61 00	**Flooring Treatment**
09 61 13	Slip-Resistant Flooring Treatment
09 61 19	Concrete Floor Staining
09 61 36	Static-Resistant Flooring Treatment
09 62 00	**Specialty Flooring**
09 62 13	Asphaltic Plank Flooring
09 62 19	Laminate Flooring
09 62 23	Bamboo Flooring
09 62 26	Leather Flooring
09 62 29	Cork Flooring
09 62 35	Acid-Resistant Flooring
09 62 48	Acoustic Flooring
09 62 53	Synthetic Turf Flooring
09 62 63	Metal Flooring
09 62 63.13	Aluminum Flooring
09 62 63.16	Stainless Steel Flooring
09 62 83	Structural Glass Flooring
09 63 00	**Masonry Flooring**
09 63 13	Brick Flooring
09 63 13.35	Chemical-Resistant Brick Flooring
09 63 40	Stone Flooring
09 63 43	Composition Stone Flooring
09 64 00	**Wood Flooring**
09 64 16	Wood Block Flooring
09 64 19	Wood Composition Flooring
09 64 23	Wood Parquet Flooring
09 64 23.13	Acrylic-Impregnated Wood Parquet Flooring
09 64 29	Wood Strip and Plank Flooring
09 64 33	Laminated Wood Flooring
09 64 53	Resilient Wood Flooring Assemblies
09 64 66	Wood Athletic Flooring
09 65 00	**Resilient Flooring**
09 65 13	Resilient Base and Accessories
09 65 13.13	Resilient Base
09 65 13.23	Resilient Stair Treads and Risers
09 65 13.26	Resilient Stair Nosings
09 65 13.33	Resilient Accessories
09 65 13.36	Resilient Carpet Transitions
09 65 16	Resilient Sheet Flooring
09 65 16.23	Vinyl Sheet Flooring
09 65 16.33	Rubber Sheet Flooring
09 65 16.43	PVC-Free Sheet Flooring

Figure 24. MasterFormat: final code generation [15]

- *ETIM*

ETIM like OmniClass is also complete taking into consideration BIMReL. The only flaw to be attributed to it is the lack of references to the world of construction products and furniture, as it is mainly based on plant products.

ETIM classification is organized into Groups and Product Classes; each Product Class is divided into Features; each Characteristic can be of the numeric type (with the possible unit of measurement already fixed), of the range type (from... to with the possible unit of measurement already fixed), of the logical type (yes - no) or of the alphanumeric type (selection list characterized by Preset values).

Groups, Classes, Features, Values and Units are uniquely coded (EGXXXXX, ECXXXXX, EFXXXXX, EVXXXXX, EUXXXXX).

ETIM: classification of products													
Class ID	Class version	Class	Sort Feature	Feature ID	Type	Feature	Sort Value	Value ID	Value	Unit ID	Unit	Group ID	Group
EC000006	6	Coperchio scatola incasso	1	EF007902	N	lunghezza della piastra di copertura				EU570448	mm	EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	2	EF000041	A	applicazione	1	EV003662	serbatoio a pavimento			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	2	EF000041	A	applicazione	2	EV007337	cassetta per apparecchi			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	2	EF000041	A	applicazione	3	EV007443	uscita canale			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	2	EF000041	A	applicazione	4	EV007898	cassetta di uscita sotterranea			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	3	EF001118	N	numero di aperture singole						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	4	EF001119	N	numero di aperture doppie						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	5	EF001120	N	numero di aperture triple						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	6	EF001121	N	numero di aperture CEE/Perilex						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	7	EF005598	N	numero di aperture quadrate						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	8	EF006412	N	numero di aperture circolari						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	9	EF006413	N	numero di aperture ovali						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	10	EF001474	A	tecnica di installazione	1	EV007172	CEE 60×60 mm			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	10	EF001474	A	tecnica di installazione	2	EV007173	CEE 70×70 mm			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	10	EF001474	A	tecnica di installazione	3	EV007636	dimensione modulare 45			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	10	EF001474	A	tecnica di installazione	4	EV007854	ansa			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	10	EF001474	A	tecnica di installazione	5	EV010137	anello portante circolare			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	10	EF001474	A	tecnica di installazione	6	EV010136	anello portante angolato			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	10	EF001474	A	tecnica di installazione	7	EV000154	altri			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	11	EF002442	A	tipo di fissaggio	1	EV007635	bloccare			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	11	EF002442	A	tipo di fissaggio	2	EV000766	avvitare			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	11	EF002442	A	tipo di fissaggio	3	EV000154	altri			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	12	EF005651	L	piastra cieca						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	13	EF005040	L	con campo per dicitura						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	14	EF004523	L	adatto per campo di etichettatura						EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	15	EF002169	A	materiale	1	EV000402	poliammide			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	15	EF002169	A	materiale	2	EV000163	PVC			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	15	EF002169	A	materiale	3	EV000166	acciaio inossidabile			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	15	EF002169	A	materiale	4	EV000179	acciaio			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	15	EF002169	A	materiale	5	EV000154	altri			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	16	EF000007	A	colore	1	EV000083	marrone			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	16	EF000007	A	colore	2	EV000270	grigio			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	16	EF000007	A	colore	3	EV000206	nero			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	16	EF000007	A	colore	4	EV000202	bianco			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	16	EF000007	A	colore	5	EV000154	altri			EG000005	sistemi sotto pavimento
EC000006	6	Coperchio scatola incasso	16	EF000007	A	colore	6	EV000494	senza			EG000005	sistemi sotto pavimento

Table 30. ETIM: final code generation [18]

4.4 Results

This study has had the purpose to establish a foundation for development of an effective information systems for the construction and facilities management sector. However, there are marked differences structure and organization of the various classification systems. The aim of this research has been to compare the structure of the standards, to point at similarities and differences, in order firstly to understand why these standards are so different, and secondly to initiate a discussion about the need and the possibility to coordinate them.

The separation of classes from spatial, functional, and compositional views and the possibilities to combine these is characteristic to several processes in construction and facilities management. The difference of view is motivated by the purpose of using the information, for example, whether it is of importance to identify a construction entity by main construction method or by function or user activity.

Therefore, once the objects subdivision have been defined in the BIMReL platform, and the structure, organization and contents of the products according to the various classification systems have been highlighted, we continued to elaborate a comparison between the latter, which resulted in the production of a matching table. Its final purpose is to compare the various classification systems, and also to give to the final users a major quantity of information about the product.

By way of example, part of the results produced are proposed below.

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Gusset	With leaf guard	Material	Rubber EPDM	Pr_25_96_35 Grids and grilles	B2010 Exterior Walls	23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	Thermoplastic rubber	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	PVC-U	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	Steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
	Without leaf guard	Material	Rubber EPDM	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	Thermoplastic rubber	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	PVC-U	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	Steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
Building lime	calcic lime (CL)	Material	Calcica viva CL70-Q	Pr_20_31_12 Cements and limes	B1010 Floor Construction B1020 Roof Construction	23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcica viva CL80-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcica viva CL90-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcic Hydrated CL70-S	Pr_20_31_12_38 Hydrated limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcic Hydrated CL80-S	Pr_20_31_12_38 Hydrated limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcic Hydrated CL90-S	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
	Dolomitic lime (DL)	Material	Dolomitica viva DL90-30-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitica viva DL90-5-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitica viva DL85-30-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitica viva DL80-5-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitic hydrated DL90-30-S	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitic hydrated DL90-5-S	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitic hydrated DL85-30-S	Pr_20_31_12_38 Hydrated limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitic hydrated DL80-5-S	Pr_20_31_12_38 Hydrated limes		23-13 13 11 13 Lime	09 00 00 Finishes	
	Hydraulic natural lime (NHL)	Material	Natural NHL	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
	Formed lime (FL)	Material	Formulated FL A	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Formulated FL B	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Formulated FL C	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
	Hydraulic lime (HL)	Material	Hydraulic HL	Pr_20_31_12_39 Hydraulic limes		23-13 13 11 13 Lime	09 00 00 Finishes	
Concrete	On request composition			Pr_20_85_13 Concrete base and foundation products	B1010 Floor Construction B1020 Roof Construction	23-13 15 11 Concretes	03 31 00 Structural Concrete	EV000079 Concrete
	With guaranteed performance			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 30 00 Structural Concrete	EV000079 Concrete
	Self-compacting			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 31 26 Self-Compacting Concrete	EV000079 Concrete
	Lightweight non-structural			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 33 16 Lightweight Architectural Concrete	EV000079 Concrete
	For massive castings			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 31 13 Heavyweight Structural Concrete	EV000079 Concrete
	For flooring			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 35 00 Concrete Finishing	EV000079 Concrete
	For substrates (lean concrete)			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 35 00 Concrete Finishing	EV000079 Concrete

Table 31. Extract from the construction products matching table

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Thermal insulation		Material	Expanded sintered polystyrene and single-reinforced polymer bitumen membrane with polyester fabric	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation	C30 Interior Finishes B20 Exterior Enclosure	23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Sintered expanded polystyrene and single-reinforced polymer-bitumen membrane with self-protected polyester fabric with slate flakes	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Sintered expanded polystyrene and glass fiber membrane	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and aluminum	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and membrane reinforced with glass felt	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and polymer-bitumen membrane with polyester reinforcement	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and polymer-bitumen membrane with glass fleece reinforcement	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and elastoplastomeric polymer-bitumen membrane reinforced with reinforced glass fleece	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and membrane with glass fiber	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rigid polyurethane foam	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane and steel	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane and aluminum	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane and saturated glass fleece	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane foam and membrane reinforced with glass felt	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane foam and membrane with glass fiber	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane foam and aluminum	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane, steel and zinc	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	

Table 32. Extract from the construction products matching table

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Coating	Internal	Material	Bitumen	Pr_35_31_68_10 Black bitumen coatings	C30 Interior Finishes B2010 Exterior Walls	23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Paper	Pr_35_57_22 Decorative papers and roll coverings		23-15 13 15 13 Composition Interior Siding	09 72 23 Wallpapering	
		Material	Plasterboard	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and aluminium	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and wood fibre	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and polyester fibre	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and mineral wool	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and lead	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Extruded plasterboard and expanded polystyrene	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Sintered plasterboard and expanded polystyrene	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and phenolic foam	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and polyurethane foam	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard, glass fibre and vermiculite	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Ceramic	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Wood fibre	Pr_25_71_97_92 Wood fibre boards		23-15 13 15 15 Mineral Fiber Cement Interior Siding	09 70 00 Wall Finishes	
		Material	Fibre cement	Pr_35_31_22_15 Concrete finishing coats		23-15 13 15 15 Mineral Fiber Cement Interior Siding	09 97 23 Concrete and Masonry Coatings	
		Material	Chalk	Pr_35_90_43_29 Fibrous plaster mouldings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Porcelain stoneware	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Brickwork	Pr_25_93_60_10 Clay paving tiles		23-15 13 15 13 Metal Interior Siding	09 97 23 Concrete and Masonry Coatings	
		Material	Wood	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings	
		Material	Extruded wood and expanded polystirene	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings	
		Material	Sintered wood and expanded polystyrene	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings	
		Material	Textile material	Pr_35_57_88 Textiles		23-15 13 15 13 Composition Interior Siding	09 72 19 Textile Wall Coverings	
		Material	Natural straw	Pr_35_90_22_88 Timber grass edgings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Natural stone	Pr_35_93_96_86 Stone tiles		23-15 13 15 13 Composition Interior Siding	09 78 16 Stone-Faced Interior Wall Paneling	
		Material	Lead	Pr_35_90_30_47 Lead slates		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Polycarbonate	Pr_35_31_68 Protective coatings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Polyester	Pr_35_57_71_44 Jute or polyester felt-backed polyvinyl chloride (PVC) tiles		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	PVC	Pr_35_57_71_44 Jute or polyester felt-backed polyvinyl chloride (PVC) tiles		23-15 13 15 17 Plastic Interior Siding	09 70 00 Wall Finishes	
		Material	Copper	Pr_35_31_68_19 Copper plating		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	

Table 33. Extract from the construction products matching table

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Electrical and pneumatic sensors	Wind direction sensor			Pr_75_50_76 Sensors and detectors	D5090 Other Electrical Systems	23-27 11 00 General Instruments and Controls	23 09 23 Direct-Digital Control System for HVAC	EV002610 Wind sensor
	External relative humidity sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	External humidity and relative air temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	External humidity / relative air temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Air flow sensor			Pr_75_50_76 Sensors and detectors		23-27 11 15 15 Flow Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Optical distance sensor			Pr_75_50_76 Sensors and detectors		23-27 11 29 15 Infrared Controllers	28 27 00 Video Surveillance Sensors	EV008160 Sensor
	Air quality sensor in the duct			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Solar sensor, active			Pr_70_70_47_21 Daylight sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Immersion temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV010204 Immersion probe
	Immersion temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV010204 Immersion probe
	Ambient temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV022538 Room temperature sensor
	Ambient temperature sensor			Pr_75_50_76_03 Air temperature sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV022538 Room temperature sensor
	Channel temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Cable temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Cable temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Window temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Contact temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Frost temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Coating temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Surface temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Surface temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	External temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Smoke temperature sensor			Pr_75_75_30_82 Smoke and heat multi-sensor detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Exhaust gas temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Motion sensor			Pr_75_50_76_58 Occupancy sensors		23-27 11 29 15 Infrared Controllers	28 27 00 Video Surveillance Sensors	EV001242 Presence sensor
Separator	Fat separator			Pr_65_55_76 Sensors and detectors	D2090 Other Plumbing Systems	23-27 55 35 Liquid Separators	33 44 36 Oil and Stormwater Separators	
	Light liquid separator			Pr_65_55_76 Sensors and detectors		23-27 55 35 Liquid Separators	33 44 36 Oil and Stormwater Separators	

Table 34. Extract from the plant products matching table

Family	Macro category	Category	Typology	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Furnitures	Bathroom	Bath furniture	Complete bathroom furniture	Pr_40_30_78_05 Bathroom furniture	E1094 Residential Equipment	23-21 23 17 Residential Storage Units	12 58 00 Residential Furniture	
			Electric hand dryer	Pr_70_60_36_26 Electric heated towel rails		23-31 25 25 11 Electric Heated Towel Bars	12 58 00 Residential Furniture	EV001672 Handheld hair dryer
			Bathroom furniture	Pr_40_30_78_05 Bathroom furniture		23-21 23 17 Residential Storage Units	12 58 00 Residential Furniture	
			Washbasin furniture	Pr_40_30_78_05 Bathroom furniture		23-21 23 17 Residential Storage Units	12 58 00 Residential Furniture	
			Bathroom mirrors	Pr_25_71_53 Mirrors		23-21 37 13 15 Mirrors	12 58 00 Residential Furniture	
		Accessible toilets	Folding and fixed bars	Pr_40_20_06 Bathing fittings	E1094 Residential Equipment	23-31 25 00 Toilet and Bath Specialties	12 58 00 Residential Furniture	
			Accessible shower enclosure	Pr_40_20_06_84 Shower trays		23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001063 Shower
			Accessible washbasin	Pr_40_20_96 Washbasins, sinks and troughs		23-31 11 00 Faucets	22 41 00 Residential Plumbing Fixtures	EV003266 Washbasin/sink
			Accessible bathtubs	Pr_40_20_96_15 Ceramic sinks		23-31 15 00 Bathtubs	22 41 00 Residential Plumbing Fixtures	EV001130 Bathtub/shower
			Disabled WC	Pr_40_20_93 Urinal and WC fittings		23-31 19 00 Toilets	22 41 00 Residential Plumbing Fixtures	EC011289 Toilets
		Laundry and household cleaning	Tumble dryers	Pr_40_70_47_91 Tumble dryers	E1094 Residential Equipment	23-21 41 00 Commercial Laundry Equipment	12 58 00 Residential Furniture	
			Washer-dryer	Pr_40_70_47_07 Pr_40_70_47_07		23-21 41 00 Commercial Laundry Equipment	12 58 00 Residential Furniture	
			Washing machines	Pr_40_70_47_97 Washer dryers		23-21 41 00 Commercial Laundry Equipment	12 58 00 Residential Furniture	
		Tapware	Sanitary taps for bidets	Pr_35_90_87 Tapes, strips and profile fillers	E1094 Residential Equipment	23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
			Sanitary taps for showers	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
			Sanitary taps for washbasins and sinks	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
			Sanitary taps for urinals	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV003415 Drain tap
			Sanitary taps for bathtubs	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
			Sanitary taps for WC	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV003415 Drain tap
			Overhead showers	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
		Sanitary appliance	Bidets	Pr_40_20_06_11 Bidets	D2010 Plumbing Fixtures	23-31 23 00 Bidets	22 41 00 Residential Plumbing Fixtures	EV004796
			WC and urinal flushing cisterns	Pr_65_52_63_21 Copper waste water pipes and fittings		23-31 27 00 Floor Drains	22 41 00 Residential Plumbing Fixtures	EV007898
			Washbasins	Pr_40_20_96 Washbasins, sinks and troughs		23-31 11 00 Faucets	22 41 00 Residential Plumbing Fixtures	EV003266
			Wall-hung urinals	Pr_40_20_93 Urinal and WC fittings		23-31 19 00 Toilets	22 41 00 Residential Plumbing Fixtures	EC011289
			WC	Pr_40_20_93 Urinal and WC fittings		23-31 19 00 Toilets	22 41 00 Residential Plumbing Fixtures	EC011289
		Showers and bathtubs	Shower enclosure	Pr_40_20_06_84 Shower trays	D2010 Plumbing Fixtures	23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001063
			Shower panels	Pr_40_20_06_84 Shower trays		23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001063
			Shower trays	Pr_40_20_06_84 Shower trays		23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001063
			Bath tubs	Pr_40_20_96_15 Ceramic sinks		23-31 15 00 Bathtubs	22 41 00 Residential Plumbing Fixtures	EV001130

Table 35. Extract from the furniture matching table

The exchange of models and data between the different software platforms is one of the main changes required by the construction sector for a complete integration and collaboration between the different actors of the building process. In order to unambiguously define the conditions for the exchange of information, detailed technical standards were required. Therefore, as a starting point, the relevance of the classification of construction products was questioned as it only allows one user to classify the elements according to different points of view proposed by each of them. The intent is to find a way to connect the various systems as much as possible, and in the greatest degree of detail.

A problem encountered when studying this type of approach is the idea that elements can be identified independently of e.g. a spatial, functional or compositional view. This approach is supported by Froese and Yu who argue that, in general, things should be modelled as "what they are" rather than "the role they play" [33]. This contradicts the general idea that we know the world only "as we see it", not "as it is". Popper, for example, says that "If we wish to study a thing, we must select some aspects of it". We see the world through our concepts and these are classes by definition. It is impossible to focus on an object without assigning it to a class at the same time. [34]

Thus, it was noted that, despite the different approaches used in the various classification systems, and taking into consideration the fact of evaluating each classification system according to the degree of detail provided, looking at the products for what they are rather than what category belong, it was possible to build this matching table.

It is highlighted that, with the exception of the ETIM classification system which has a strong specialization on plant products, but not on construction products and furniture, they can be integrated with each other. The UniClass and OmniClass systems, on the other hand, proved to be the most complete from the point of view of analysis if we consider a multi-level classification.

Therefore, each product considered present in the BIMReL platform, according to this analysis, presents for each classification system studied the maximum level of detail allowed by each of them. The complete matching table of all products is present in Appendix A-B-C.

5 Conclusions

Building classification systems have established standard terminology for construction sector that can be used in different aspects. This has the final goal to summarize and organize the knowledge in a structured way. In the construction sector, using classification systems is critical when dealing with specifications, structuring of documents, calculation of costs, exchanging information, etc. More importantly, in BIM, classifying building product models in a standard way is one of the critical phases in organizing the product models. By giving an appropriate classification code to product models, they can be arranged for construction information or cost estimation within the building model and also they can be sorted within product databases.

With the growing use of BIM in the construction sector, the actors require organized collection of product models for different purposes. Moreover, the need for exchanging the information of building product models, through the lifecycle of a building, both nationally and internationally is growing.

This highlight that organizing such information in a systematic way is the goal to be reached in order to better understand and use in an appropriate way the data. However, there has been various classification systems developed by several countries and institutions. Even though these classification systems have been all developed with the purpose of classifying building product, there are major differences among them. In fact, each system has its own way of classifying the objects. The same collection of products, can be classified differently in each classification system.

By the study it emerges that there are marked differences structure and organization of the various classification systems.

In order to unambiguously define the conditions for the exchange of information, detailed technical standards were required. Therefore, as a starting point, the relevance of the classification of construction products was questioned as it only allows one user to classify the elements according to different points of view proposed. The intent was to find a way to connect the various systems as much as possible, and in the greatest degree of detail.

A problem encountered was the idea that elements can be identified independently of e.g. a spatial, functional or compositional view.

Thus, it was noted that, despite the different approaches used in the various classification systems, and taking into consideration the fact of evaluating each classification system according to the degree of detail provided, looking at the products for what they are rather than what category belong, it was possible to build this matching table.

Therefore, through the matching table that was elaborated, it is possible to attribute to each product present in the BIMReL platform, a code referring to each classification system studied, representing the maximum level of detail allowed by each of them.

From this, emerges the direction in which the future should go towards the interoperability of classification systems, providing the use of tables common to all. Alternatively, it could be envisaged to integrate the existing tables by standardizing their contents. Through this solution of unification, the passage of information would be made easier, avoiding association errors, and ensuring that the actors involved have a unique reading of the data regardless of the type of system used.

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Appendix A: Construction products matching table

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Accessories for windows and doors	Counterframes			Pr_20_85_32 Frames and grids	B2021 Windows	23-17 13 11 17 Window Frames	08 10 00 Doors and Frames	EV004214 Window
	Hinges			Pr_30_36_36 Hinges and hanging hardware		23-17 13 11 17 Window Frames	08 10 00 Doors and Frames	EV004214 Window
	Locks			Pr_30_36_08 Bolting, latching and locking hardware		23-17 13 11 17 Window Frames	08 10 00 Doors and Frames	EV004214 Window
	Handles			Pr_30_36_59 Opening hardware		23-17 13 11 17 Window Frames	08 10 00 Doors and Frames	EV004214 Window
	Bins			Pr_45_63_63_97 Window boxes		23-17 13 11 17 Window Frames	08 10 00 Doors and Frames	EV004214 Window
	Flat net	Material	Steel	Pr_25_71_51_15 Carbon steel sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Steel and clay	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Stainless steel	Pr_25_71_51_86 Stainless steel sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Stainless steel and clay	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Galvanized steel	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Aluminium	Pr_25_71_51_05 Aluminium sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Zinc alloys	Pr_25_71_51_96 Zinc profiled sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
	Corrugated net	Material	Steel	Pr_25_71_51_15 Carbon steel sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Steel and clay	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Stainless steel	Pr_25_71_51_86 Stainless steel sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Stainless steel and clay	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Galvanized steel	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Aluminium	Pr_25_71_51_05 Aluminium sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Zinc alloys	Pr_25_71_51_96 Zinc profiled sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Accessory for plaster	Ribbed net	Material	Steel	Pr_25_71_51_15 Carbon steel sheets	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Steel and clay	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Stainless steel	Pr_25_71_51_86 Stainless steel sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Stainless steel and clay	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Galvanized steel	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Aluminium	Pr_25_71_51_05 Aluminium sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Zinc alloys	Pr_25_71_51_96 Zinc profiled sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
	Welded mesh	Material	Steel	Pr_25_71_51_15 Carbon steel sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Steel and clay	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Stainless steel	Pr_25_71_51_86 Stainless steel sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Stainless steel and clay	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Galvanized steel	Pr_25_71_51 Metal sheets and strips		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Aluminium	Pr_25_71_51_05 Aluminium sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
		Material	Zinc alloys	Pr_25_71_51_96 Zinc profiled sheets		23-13 19 11 Thin Flexible Sheets	07 60 00 Flashing and Sheet Metal	
	Angle profile	Material	Steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV003736 Angular profile
		Material	Steel and clay	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV003736 Angular profile
		Material	Stainless steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV003736 Angular profile
		Material	Stainless steel and clay	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV003736 Angular profile
		Material	Galvanized steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV003736 Angular profile
		Material	Aluminium	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV003736 Angular profile
		Material	Zinc alloys	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV003736 Angular profile
	End profile	Material	Steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV010534 Stop end for plenum space
		Material	Steel and clay	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV010534 Stop end for plenum space
		Material	Stainless steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV010534 Stop end for plenum space
		Material	Stainless steel and clay	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV010534 Stop end for plenum space
		Material	Galvanized steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV010534 Stop end for plenum space
		Material	Aluminium	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV010534 Stop end for plenum space
		Material	Zinc alloys	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	09 22 13 Metal Furring	EV010534 Stop end for plenum space

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Profile for expansion joints	Material	Steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	07 95 00 Expansion Control	
		Material	Steel and clay	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	07 95 00 Expansion Control	
		Material	Stainless steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	07 95 00 Expansion Control	
		Material	Stainless steel and clay	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	07 95 00 Expansion Control	
		Material	Galvanized steel	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	07 95 00 Expansion Control	
		Material	Aluminium	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	07 95 00 Expansion Control	
		Material	Zinc alloys	Pr_20_85_46 Lathings and furrings		23-13 19 11 Thin Flexible Sheets	07 95 00 Expansion Control	
	Percussion pad	Material	Steel	Pr_20_29_23_11 Carbon steel dowel bars		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Steel and clay	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Stainless steel	Pr_20_29_23_83 Stainless steel dowel bars		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Stainless steel and clay	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Galvanized steel	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Aluminium	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Zinc alloys	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
	Screw-on dowel	Material	Steel	Pr_20_29_23_11 Carbon steel dowel bars		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Steel and clay	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Stainless steel	Pr_20_29_23_83 Stainless steel dowel bars		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Stainless steel and clay	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Galvanized steel	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Aluminium	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
		Material	Zinc alloys	Pr_20_29_23 Dowels and rods		23-13 23 11 13 Multi Purpose Mechanical Fasteners	09 22 16 Non-Structural Metal Framing	EV009712 Dowel
	Hardening accelerator	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Setting accelerator	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
	Setting accelerator and fluidifying agent	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
	Non-alkaline setting accelerator	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 21 Cement Setting Accelerators	03 20 00 Concrete Reinforcing	
	Aerating	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 15 Cement Air Entraining Agents	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 15 Cement Air Entraining Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 15 Cement Air Entraining Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 15 Cement Air Entraining Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 15 Cement Air Entraining Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 15 Cement Air Entraining Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Additive	Expanding	Use	For concrete	Pr_20_31_01 Additives	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
	Fluidifier	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
	Adhesion improver	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 33 Cement Adherence Proofing Agents	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 33 Cement Adherence Proofing Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 33 Cement Adherence Proofing Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 33 Cement Adherence Proofing Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 33 Cement Adherence Proofing Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 33 Cement Adherence Proofing Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 33 Cement Adherence Proofing Agents	03 20 00 Concrete Reinforcing	
	Consistency regulator	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 25 Cement Waterproofing Agents	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 25 Cement Waterproofing Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 25 Cement Waterproofing Agents	03 20 00 Concrete Reinforcing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Waterproof	Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 25 Cement Waterproofing Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 25 Cement Waterproofing Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 25 Cement Waterproofing Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 25 Cement Waterproofing Agents	03 20 00 Concrete Reinforcing	
	Setting retardant	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
	Setting retardant and fluidifying agent	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
	Setting retardant and super-fluidifying agent	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 19 Cement Setting Retarders	03 20 00 Concrete Reinforcing	
	Water retainer	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 13 Cement Water Retaining Agents	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 13 Cement Water Retaining Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 13 Cement Water Retaining Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 13 Cement Water Retaining Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 13 Cement Water Retaining Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 13 Cement Water Retaining Agents	03 20 00 Concrete Reinforcing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 13 Cement Water Retaining Agents	03 20 00 Concrete Reinforcing	
	super-fluidifying agent	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
	Anti-shrinkage	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 39 Cement Replacements	03 20 00 Concrete Reinforcing	
	Viscosizer	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 11 Cement Plasticizing Agents	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 11 Cement Plasticizing Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 11 Cement Plasticizing Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 11 Cement Plasticizing Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 11 Cement Plasticizing Agents	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 11 Cement Plasticizing Agents	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 11 Cement Plasticizing Agents	03 20 00 Concrete Reinforcing	
	Disarming	Use	For concrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For shotcrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar and concrete	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For injection mortar	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For injection mortar for prestressing cables	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	
		Use	For mortar for masonry works	Pr_20_31_01 Additives		23-13 13 13 39 Other Cement Admixtures	03 20 00 Concrete Reinforcing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Gypsum-based adhesive	For gypsum blocks	Material	Calcium sulfate and additives	Pr_20_31_02 Adhesives and bonding compounds	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 23 15 Adhesives	03 20 00 Concrete Reinforcing	
	For coupled thermal / acoustic panels and coated gypsum boards	Material	Calcium sulfate and additives	Pr_20_31_02 Adhesives and bonding compounds		23-13 23 15 Adhesives	03 50 00 Cast Decks and Underlayment	
Tile adhesive		Material	Cementitious adhesives for tiles for internal use	Pr_20_31_02 Adhesives and bonding compounds	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 23 15 Adhesives	03 50 00 Cast Decks and Underlayment	
		Material	Cementitious adhesives for tiles for indoor and outdoor use	Pr_20_31_02 Adhesives and bonding compounds		23-13 23 15 Adhesives	03 50 00 Cast Decks and Underlayment	
		Material	Dispersion adhesives for tiles	Pr_20_31_02 Adhesives and bonding compounds		23-13 23 15 Adhesives	03 50 00 Cast Decks and Underlayment	
		Material	Reactive adhesives for tiles	Pr_20_31_02 Adhesives and bonding compounds		23-13 23 15 Adhesives	03 50 00 Cast Decks and Underlayment	
Addition for concrete and mortar	Virtually inert (type I)	Material	Ground granulated blast furnace slag	Pr_20_31_35_33 Granulated blast furnace slag	B Shell C Interiors	23-13 15 11 Concretes	03 20 00 Concrete Reinforcing	
		Material	Fly ash	Pr_20_31_35_30 Fly ash		23-13 15 11 Concretes	03 20 00 Concrete Reinforcing	
		Material	Silica fumes	Pr_20_31_35_81 Silica fume		23-13 15 11 Concretes	03 20 00 Concrete Reinforcing	
	Pozzolanic or latent hydraulic activity (type II)	Material	Ground granulated blast furnace slag	Pr_20_31_35_33 Granulated blast furnace slag		23-13 15 11 Concretes	03 20 00 Concrete Reinforcing	
		Material	Fly ash	Pr_20_31_35_30 Fly ash		23-13 15 11 Concretes	03 20 00 Concrete Reinforcing	
		Material	Silica fumes	Pr_20_31_35_81 Silica fume		23-13 15 11 Concretes	03 20 00 Concrete Reinforcing	
	Aggregates	Material	Expanded clay	Pr_20_31_04_25 Expanded clay lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Gravel	Pr_20_31_04_60 Pea gravel		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Secondary raw material from recovery plants	Pr_20_31_04_71 Recycled lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Bituminous material	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Inorganic material previously used in construction	Pr_20_31_04_71 Recycled lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Perlite	Pr_20_31_04_61 Perlite aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Stone	Pr_20_31_04_20 Crushed stone aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Polystyrene	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Pomice	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Sand	Pr_20_31_04_31 Fine lightweight aggregates for concrete and mortar		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Vermiculite	Pr_20_31_04_94 Vermiculite aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Glass	Pr_20_31_04_26 Expanded glass aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
	Filler	Material	Expanded clay	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Gravel	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Secondary raw material from recovery plants	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Bituminous material	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Inorganic material previously used in construction	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Perlite	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Stone	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Polystyrene	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Aggregate	Aggregates for bituminous mixtures	Material	Pomice	Pr_35_31_65 Preparation materials, fillers and stoppers	B Shell C Interiors	23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Sand	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Vermiculite	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Glass	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Expanded clay	Pr_20_31_04_25 Expanded clay lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Gravel	Pr_20_31_04_60 Pea gravel		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Secondary raw material from recovery plants	Pr_20_31_04_71 Recycled lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Bituminous material	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Inorganic material previously used in construction	Pr_20_31_04_71 Recycled lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Perlite	Pr_20_31_04_61 Perlite aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Stone	Pr_20_31_04_20 Crushed stone aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Polystyrene	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Pomice	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Sand	Pr_20_31_04_31 Fine lightweight aggregates for concrete and mortar		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Vermiculite	Pr_20_31_04_94 Vermiculite aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Glass	Pr_20_31_04_26 Expanded glass aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
	Filler for bituminous mixtures	Material	Expanded clay	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Gravel	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Secondary raw material from recovery plants	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Bituminous material	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Inorganic material previously used in construction	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Perlite	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Stone	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Polystyrene	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Pomice	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Sand	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Vermiculite	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	
		Material	Glass	Pr_35_31_65 Preparation materials, fillers and stoppers		23-13 11 11 Powder Fillers	03 30 00 Cast-in-Place Concrete	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Aggregates for unalloyed materials and alloyed with hydraulic binders	Material	Expanded clay	Pr_20_31_04_25 Expanded clay lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Gravel	Pr_20_31_04_60 Pea gravel		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Secondary raw material from recovery plants	Pr_20_31_04_71 Recycled lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Bituminous material	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Inorganic material previously used in construction	Pr_20_31_04_71 Recycled lightweight aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Perlite	Pr_20_31_04_61 Perlite aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Stone	Pr_20_31_04_20 Crushed stone aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Polystyrene	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Pomice	Pr_20_31_04 Aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Sand	Pr_20_31_04_31 Fine lightweight aggregates for concrete and mortar		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Vermiculite	Pr_20_31_04_94 Vermiculite aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
		Material	Glass	Pr_20_31_04_26 Expanded glass aggregates		23-13 11 13 Aggregates	03 30 00 Cast-in-Place Concrete	
Structural support	Fixed	Configuration	Elastomeric bearings		B1010 Floor Construction B1020 Roof Construction			
		Configuration	Roller supports					
		Configuration	Elastomeric disc bearings					
		Configuration	Supports in linear contact					
		Configuration	Spherical and cylindrical bearings in PTFE					
		Configuration	Guides and restraints					
	Multidirectional	Configuration	Elastomeric bearings					
		Configuration	Roller supports					
		Configuration	Elastomeric disc bearings					
		Configuration	Supports in linear contact					
		Configuration	Spherical and cylindrical bearings in PTFE					
		Configuration	Guides and restraints					
	Unidirectional longitudinal	Configuration	Elastomeric bearings					
		Configuration	Roller supports					
		Configuration	Elastomeric disc bearings					
		Configuration	Supports in linear contact					
		Configuration	Spherical and cylindrical bearings in PTFE					
		Configuration	Guides and restraints					
	Unidirectional transversal	Configuration	Elastomeric bearings					
		Configuration	Roller supports					
		Configuration	Elastomeric disc bearings					
		Configuration	Supports in linear contact					
		Configuration	Spherical and cylindrical bearings in PTFE					
		Configuration	Guides and restraints					

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Concrete reinforcement	By punching	Material	Steel with epoxy coating	Pr_20_96_71 Reinforcement	B1010 Floor Construction B1020 Roof Construction	23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Steel with epoxy coating	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Tempered steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Prestressing steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Galvanized steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Non-weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Corrosion resistant steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
	With improved grip	Material	Weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Tempered steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Prestressing steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Galvanized steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Non-weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Corrosion resistant steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
	Notched	Material	Steel with epoxy coating	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Tempered steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Prestressing steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Galvanized steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Non-weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Corrosion resistant steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
	Smooth	Material	Steel with epoxy coating	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Tempered steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Prestressing steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Galvanized steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Non-weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Corrosion resistant steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Preshaped with improved adhesion	Material	Steel with epoxy coating	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Tempered steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Prestressing steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Galvanized steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Non-weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Corrosion resistant steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
		Material	Weldable steel	Pr_20_96_71 Reinforcement		23-13 31 21 Reinforcement and Prestressing Components	03 20 00 Concrete Reinforcing	
Ceiling block	Collaborating	Material	Concrete	Pr_20_93_52_01 Aggregate concrete blocks	B1010 Floor Construction B1020 Roof Construction	23-13 21 11 11 Concrete Masonry Units	03 40 00 Precast Concrete	
		Material	Lightweight concrete	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 11 Concrete Masonry Units	03 40 00 Precast Concrete	
		Material	Brick	Pr_20_93_52_14 Clay blocks		23-13 21 19 11 Clay Masonry Units	03 40 00 Precast Concrete	
		Material	Expanded polystyrene	Pr_15_93_30_28 Expanded polystyrene (EPS) fill blocks		23-13 21 00 Blocks and Bricks	03 40 00 Precast Concrete	
		Material	Glass	Pr_20_93_33_34 Glass blocks		23-13 21 19 17 Glazed Bricks	03 40 00 Precast Concrete	
		Material	Lightweight blocks	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 00 Blocks and Bricks	03 40 00 Precast Concrete	
		Material	Joists	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 00 Blocks and Bricks	03 40 00 Precast Concrete	
	Not collaborating	Material	Concrete	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 11 Concrete Masonry Units	03 40 00 Precast Concrete	
		Material	Lightweight concrete	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 11 Concrete Masonry Units	03 40 00 Precast Concrete	
		Material	Brick	Pr_20_93_52_14 Clay blocks		23-13 21 19 11 Clay Masonry Units	03 40 00 Precast Concrete	
		Material	Expanded polystyrene	Pr_15_93_30_28 Expanded polystyrene (EPS) fill blocks		23-13 21 00 Blocks and Bricks	03 40 00 Precast Concrete	
		Material	Glass	Pr_20_93_33_34 Glass blocks		23-13 21 19 17 Glazed Bricks	03 40 00 Precast Concrete	
		Material	Lightweight blocks	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 00 Blocks and Bricks	03 40 00 Precast Concrete	
		Material	Joists	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 00 Blocks and Bricks	03 40 00 Precast Concrete	
Gusset	With leaf guard	Material	Rubber EPDM	Pr_25_96_35 Grids and grilles	B2010 Exterior Walls	23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	Thermoplastic rubber	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	PVC-U	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	Steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
	Without leaf guard	Material	Rubber EPDM	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	Thermoplastic rubber	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	PVC-U	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
		Material	Steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	05 50 00 Metal Fabrications	
	calcic lime (CL)	Material	Calcica viva CL70-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcica viva CL80-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcica viva CL90-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcic Hydrated CL70-S	Pr_20_31_12_38 Hydrated limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcic Hydrated CL80-S	Pr_20_31_12_38 Hydrated limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Calcic Hydrated CL90-S	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Building lime	Dolomitic lime (DL)	Material	Dolomitica viva DL90-30-Q	Pr_20_31_12 Cements and limes	B1010 Floor Construction B1020 Roof Construction	23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitica viva DL90-5-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitica viva DL85-30-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitica viva DL80-5-Q	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitic hydrated DL90-30-S	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitic hydrated DL90-5-S	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitic hydrated DL85-30-S	Pr_20_31_12_38 Hydrated limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Dolomitic hydrated DL80-5-S	Pr_20_31_12_38 Hydrated limes		23-13 13 11 13 Lime	09 00 00 Finishes	
	Hydraulic natural lime (NHL)	Material	Natural NHL	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
	Formed lime (FL)	Material	Formulated FL A	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Formulated FL B	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
		Material	Formulated FL C	Pr_20_31_12 Cements and limes		23-13 13 11 13 Lime	09 00 00 Finishes	
	Hydraulic lime (HL)	Material	Hydraulic HL	Pr_20_31_12_39 Hydraulic limes		23-13 13 11 13 Lime	09 00 00 Finishes	
Concrete	On request composition			Pr_20_85_13 Concrete base and foundation products	B1010 Floor Construction B1020 Roof Construction	23-13 15 11 Concretes	03 31 00 Structural Concrete	EV000079 Concrete
	With guaranteed performance			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 30 00 Structural Concrete	EV000079 Concrete
	Self-compacting			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 31 26 Self-Compacting Concrete	EV000079 Concrete
	Lightweight non-structural			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 33 16 Lightweight Architectural Concrete	EV000079 Concrete
	For massive castings			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 31 13 Heavyweight Structural Concrete	EV000079 Concrete
	For flooring			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 35 00 Concrete Finishing	EV000079 Concrete
	For substrates (lean concrete)			Pr_20_85_13 Concrete base and foundation products		23-13 15 11 Concretes	03 35 00 Concrete Finishing	EV000079 Concrete
Dreinage channel	Type I	Material	Steel	Pr_25_96_35 Grids and grilles	B2010 Exterior Walls	23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Stainless steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Rolled steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Concrete	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Reinforced concrete	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Concrete with fibre	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Concrete with synthetic resins	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Cast iron	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
	Type M	Material	Steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Stainless steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Rolled steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Concrete	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Reinforced concrete	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Concrete with fibre	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Concrete with synthetic resins	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	
		Material	Cast iron	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	33 41 16 Subdrainage Piping	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Gate	Hinged			Pr_30_59_34 Gates and turnstiles	B2030 Exterior Doors	23-11 25 15 Perimeter Gates	08 40 00 Entrances, Storefronts, and Curtain Walls	
	A book			Pr_30_59_34 Gates and turnstiles		23-11 25 15 Perimeter Gates	08 40 00 Entrances, Storefronts, and Curtain Walls	
	A lateral book			Pr_30_59_34 Gates and turnstiles		23-11 25 15 Perimeter Gates	08 40 00 Entrances, Storefronts, and Curtain Walls	
	A rotation			Pr_30_59_34 Gates and turnstiles		23-11 25 15 Perimeter Gates	08 40 00 Entrances, Storefronts, and Curtain Walls	
	Vertical lift			Pr_30_59_34 Gates and turnstiles		23-11 25 15 11 Drop Arm Gates	08 40 00 Entrances, Storefronts, and Curtain Walls	
	Roller shutter			Pr_30_59_34 Gates and turnstiles		23-11 25 15 13 Rolling Gates	08 40 00 Entrances, Storefronts, and Curtain Walls	
	Extensible			Pr_30_59_34 Gates and turnstiles		23-11 25 15 Perimeter Gates	08 40 00 Entrances, Storefronts, and Curtain Walls	
	Sliding			Pr_30_59_34 Gates and turnstiles		23-11 25 15 15 Sliding Gates	08 40 00 Entrances, Storefronts, and Curtain Walls	
Cement	Special	Composition	At very low heat of hydration	Pr_20_31_12 Cements and limes	B1010 Floor Construction B1020 Roof Construction	23-13 13 11 11 Cement	09 24 00 Cement Plastering	EV021773 Cement
		Composition	Oversulfated	Pr_20_31_12 Cements and limes		23-13 13 11 11 Cement	09 24 00 Cement Plastering	EV021773 Cement
		Composition	Alluminated	Pr_20_31_12_11 Calcium aluminate cements		23-13 13 11 11 13 17 Alumina Cement	09 24 00 Cement Plastering	EV021773 Cement
	Common	Composition		Pr_20_31_12 Cements and limes		23-13 13 11 11 Cement	09 24 00 Cement Plastering	EV021773 Cement
	Common-sulphate resistant	Composition		Pr_20_31_12_86 Sulfate-resisting Portland cements		23-13 13 11 11 13 11 High Sulfate Resistant Cement	09 24 00 Cement Plastering	EV021773 Cement
	Common-initial low resistance	Composition		Pr_20_31_12 Cements and limes		23-13 13 11 11 Cement	09 24 00 Cement Plastering	EV021773 Cement
Shutter or filter closure	Hinged	Function	Blackout closures and external venetian blinds	Pr_30_59_07 Blinds and shading devices	C1010 Partitions	23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
		Function	External blinds and awnings	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
	A book	Function	Blackout closures and external venetian blinds	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
		Function	External blinds and awnings	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
	A lateral book	Function	Blackout closures and external venetian blinds	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
		Function	External blinds and awnings	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
	A rotation	Function	Blackout closures and external venetian blinds	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
		Function	External blinds and awnings	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
	Vertical lift	Function	Blackout closures and external venetian blinds	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
		Function	External blinds and awnings	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
	Roller shutter	Function	Blackout closures and external venetian blinds	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
		Function	External blinds and awnings	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
	Extensible	Function	Blackout closures and external venetian blinds	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
		Function	External blinds and awnings	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
	Sliding	Function	Blackout closures and external venetian blinds	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	
		Function	External blinds and awnings	Pr_30_59_07 Blinds and shading devices		23-17 21 00 Protection of Openings	08 10 00 Doors and Frames	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Device for outputs	Emergency			Pr_75_30_27_27 Electromechanical door locks	D5030 Communications & Security	23-35 47 13 Emergency Lighting	25 50 00 Integrated Automation Facility Controls	
	Antipanic			Pr_75_30_27_27 Electromechanical door locks		23-17 19 11 29 13 Door Position Switches	25 50 00 Integrated Automation Facility Controls	
	Electronic controlled			Pr_75_30_27_27 Electromechanical door locks		23-17 19 11 27 Door Key Control Systems	25 50 00 Integrated Automation Facility Controls	
Connection and fastening elements	Anchors and gussets		Steel	Pr_20_29_03 Anchors and components	B1010 Floor Construction B1020 Roof Construction	23-13 23 11 13 Multi Purpose Mechanical Fasteners	05 45 00 Metal Support Assemblies	EV009712 Dowel
			Aluminium	Pr_20_29_03 Anchors and components		23-13 23 11 13 Multi Purpose Mechanical Fasteners	05 45 00 Metal Support Assemblies	EV009712 Dowel
	Construction joints		Steel	Pr_20_29_03 Anchors and components		23-13 23 11 13 Multi Purpose Mechanical Fasteners	05 45 00 Metal Support Assemblies	
			Aluminium	Pr_20_29_03 Anchors and components		23-13 23 11 13 Multi Purpose Mechanical Fasteners	05 45 00 Metal Support Assemblies	
	Plates		Steel	Pr_20_29_03 Anchors and components		23-13 23 11 13 Multi Purpose Mechanical Fasteners	05 54 00 Metal Floor Plates	
			Aluminium	Pr_20_29_03 Anchors and components		23-13 23 11 13 Multi Purpose Mechanical Fasteners	05 54 00 Metal Floor Plates	
	Anchor shoes		Steel	Pr_20_29_03 Anchors and components		23-13 23 11 13 Multi Purpose Mechanical Fasteners	05 45 00 Metal Support Assemblies	
			Aluminium	Pr_20_29_03 Anchors and components		23-13 23 11 13 Multi Purpose Mechanical Fasteners	05 45 00 Metal Support Assemblies	
	Screws and bolts		Steel	Pr_20_29_03 Anchors and components		23-13 23 11 13 19 Screws	05 45 00 Metal Support Assemblies	EV009179 Bolt
			Aluminium	Pr_20_29_03 Anchors and components		23-13 23 11 13 19 Screws	05 45 00 Metal Support Assemblies	EV009179 Bolt
	With horizontal channel	Material	Concrete	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 00 Concrete Unit Masonry	
	With horizontal drilling	Material	Autoclaved aerated concrete	Pr_20_93_52_05 Autoclaved aerated concrete (AAC) blocks		23-13 21 11 Concrete Masonry Units	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
	Horizontal drilling with mortar pocket	Material	Lightweight concrete	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	With vertical drilling	Material	Concrete with wood chips	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	With rectified vertical drilling	Material	Concrete with wood chips and wood fibers (WF)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Vertical drilling with interlocking	Material	Concrete with wood chips and wood wool (WW)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Vertical perforation ground with interlocking	Material	Concrete with wood chips and mineral wool (MW)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Vertical drilling with grip holes	Material	Concrete with wood chips and expanded perlite (EPB)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Vertical drilling with mortar pocket	Material	Concrete with wood chips and expanded polystyrene (EPS)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Vertical drilling with rectified mortar pocket	Material	Concrete with wood chips and extruded polystyrene foam (XPS)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Vertical drilling for reinforced masonry	Material	Concrete with wood chips and rigid polyurethane foam (PU)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Vertical drilling for reinforced masonry	Material	Concrete with wood chips and expanded phenolic resins (PF)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Filled up	Material	Concrete with wood chips and expanded cork (ICB)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Formwork block	Material	Concrete with wood chips and cellular glass (CG)	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Formwork block with integrated thermal insulation	Material	Concrete and expanded clay	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	
	Formwork block without integrated thermal insulation	Material	Vibrocompressed concrete	Pr_20_93_52_01 Aggregate concrete blocks		23-13 21 11 Concrete Masonry Units	04 22 19 Insulated Concrete Unit Masonry	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Masonry element	Hollow	Material	Plaster	Pr_20_93_52_36 Gypsum blocks	B2010 Exterior Walls	23-13 21 00 Blocks and Bricks	04 28 00 Concrete Form Masonry Units	
	Full	Material	Brick	Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
	Full extruded	Material		Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
	Full soft dough	Material		Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
	Trieste	Material		Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material		Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material	Lightened brick	Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material		Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material		Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material	Lightened brick and rock wool	Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material	Lightened brick and perlite	Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material	Lightened brick and polystyrene	Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material	Lightened brick and cork	Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material	Lightened brick, polystyrene and graphite	Pr_20_93_52_14 Clay blocks		23-13 21 19 Clay Masonry Units	04 21 13 Brick Masonry	
		Material	Laterogesso	Pr_20_93_52_36 Gypsum blocks		23-13 21 00 Blocks and Bricks	04 28 00 Concrete Form Masonry Units	
		Material	Wood and concrete	Pr_35_93_97 Wood block units		23-13 21 00 Blocks and Bricks	06 15 00 Wood Decking	
		Material	Wood, concrete and sintered expanded polystyrene	Pr_35_93_97 Wood block units		23-13 21 00 Blocks and Bricks	06 15 00 Wood Decking	
		Material	Wood, concrete and cork	Pr_35_93_97 Wood block units		23-13 21 00 Blocks and Bricks	06 15 00 Wood Decking	
		Material	Wood, concrete, sintered expanded polystyrene and graphite	Pr_35_93_97 Wood block units		23-13 21 00 Blocks and Bricks	06 15 00 Wood Decking	
		Material	Agglomerated stone	Pr_25_93_60_52 Natural stone blocks		23-13 21 00 Blocks and Bricks	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_25_93_60_52 Natural stone blocks		23-13 21 00 Blocks and Bricks	04 43 00 Stone Masonry	
		Material	Natural pumice and cement	Pr_25_93_60_52 Natural stone blocks		23-13 21 00 Blocks and Bricks	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_93_52_11 Calcium silicate blocks		23-13 21 13 Calcium Silicate Masonry Units	04 71 00 Manufactured Brick Masonry	
		Material	Tuff	Pr_25_93_60_52 Natural stone blocks		23-13 21 00 Blocks and Bricks	04 43 00 Stone Masonry	
		Material	Glass	Pr_20_93_33_34 Glass blocks		23-13 21 19 17 Glazed Bricks	04 21 26 Glazed Structural Clay Tile Masonry	
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-15 17 13 17 Masonry Flooring	09 63 00 Masonry Flooring	EV010528 Basic tile
		Material	Ceramic	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Ceramic clinker	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Cooked	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Cottoforte	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Grit	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 65 00 Resilient Flooring	EV010528 Basic tile

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	External use	Material	Porcelain stoneware	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 17 11 Porcelain Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Agglomerated stone	Pr_35_93_96_86 Stone tiles		23-15 17 13 17 13 Stone Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Brick	Pr_25_93_60_10 Clay paving tiles		23-15 17 13 17 11 Brick Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Wood - mosaic	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 63 00 Masonry Flooring	EV010528 Basic tile
		Material	Wood - untreated plank	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - stave treated by impregnation	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - regular formwork lamella	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - lamella laid sideways	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - head laid lamella	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid with interlocking	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid with assembly system	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid without joint	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - plywood with interlocking	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - square treated by impregnation	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - untreated square	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - veneer facing	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - individual board	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - pre-assembled board	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Majolica	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Single firing (red/clear)	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Monoporous (red/clear)	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Natural stone	Pr_35_93_96_86 Stone tiles		23-15 17 13 17 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	White earthenware-body	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-15 17 13 17 Masonry Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Ceramic	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Ceramic clinker	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 67 26 Quartz Flooring	EV010528 Basic tile
		Material	Cooked	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Cottoforte	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 66 23 Resinous Matrix Terrazzo Flooring	EV010528 Basic tile
		Material	Rubber	Pr_35_57_71_68 Polyvinyl chloride (PVC) tiles		23-15 17 15 15 Rubber Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Grit	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Porcelain stoneware	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 17 11 Porcelain Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Floor element	Internal use	Material	Agglomerated stone	Pr_35_93_96_86 Stone tiles	B1010 Floor Construction	23-15 17 13 17 13 Stone Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Brick	Pr_25_93_60_10 Clay paving tiles		23-15 17 13 17 11 Brick Flooring	09 63 00 Masonry Flooring	EV010528 Basic tile
		Material	Wood - mosaic	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - untreated plank	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - stave treated by impregnation	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - regular formwork lamella	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - lamella laid sideways	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - head laid lamella	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid with interlocking	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid with assembly system	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid without joint	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - plywood with interlocking	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - square treated by impregnation	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - untreated square	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - veneer facing	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - individual board	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - pre-assembled board	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Linoleum	Pr_35_57_71_49 Linoleum tiles			09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Majolica	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Single firing (red/clear)	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Monoporous (red/clear)	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Natural stone	Pr_35_93_96_86 Stone tiles		23-15 17 13 17 13 Stone Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	PVC and glass fiber	Pr_35_57_71_68 Polyvinyl chloride (PVC) tiles		23-15 17 15 13 Plastic Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Quartz, PVC and vinyl resins	Pr_35_93_96_19 Ceramic tiles		23-15 17 15 21 Other Resilient Flooring	09 67 26 Quartz Flooring	EV010528 Basic tile
		Material	PVC and vinyl resins	Pr_35_93_13_71 Resin-bonded mineral wool infill units		23-15 17 15 21 Other Resilient Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Vinyl resins, PVC, polyurethane resins, fiberglass and polyester	Pr_35_93_13_71 Resin-bonded mineral wool infill units		23-15 17 15 21 Other Resilient Flooring	09 66 23 Resinous Matrix Terrazzo Flooring	EV010528 Basic tile
		Material	White earthenware-body	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Ceramic	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Ceramic clinker	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 67 26 Quartz Flooring	EV010528 Basic tile
		Material	Cooked	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Cottoforte	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 66 23 Resinous Matrix Terrazzo Flooring	EV010528 Basic tile

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Internal and external use	Material	Porcelain stoneware	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 17 11 Porcelain Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Wood - mosaic	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - untreated plank	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - stave treated by impregnation	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - regular formwork lamella	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - lamella laid sideways	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - head laid lamella	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid with interlocking	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid with assembly system	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - solid without joint	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - plywood with interlocking	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - square treated by impregnation	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - untreated square	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - veneer facing	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - individual board	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Wood - pre-assembled board	Pr_35_93_97 Wood block units		23-15 17 13 11 21 Wood Composition Flooring	09 64 00 Wood Flooring	EV010528 Basic tile
		Material	Majolica	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 63 40 Stone Flooring	EV010528 Basic tile
		Material	Single firing (red/clear)	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Monoporous (red/clear)	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	White earthenware-body	Pr_35_93_96_19 Ceramic tiles		23-15 17 13 13 13 Ceramic Tile Flooring	09 62 00 Specialty Flooring	EV010528 Basic tile
		Material	Steel	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	03 40 00 Precast Concrete	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Architrave	Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures	B10 Super Structure B20 Exterior Enclosure B30 Roofing	23-13 35 11 13 13 Columns	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Columns	06 25 00 Prefinished Paneling	
	Balcony	Material	Steel	Pr_20_65_50_65 Prefabricated balconies	B10 Super Structure B20 Exterior Enclosure B30 Roofing	23-13 35 23 17 15 Metal Balconies and Overhang Units	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 15 Metal Balconies and Overhang Units	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 15 Metal Balconies and Overhang Units	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 15 Metal Balconies and Overhang Units	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 15 Metal Balconies and Overhang Units	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 15 Metal Balconies and Overhang Units	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 15 Metal Balconies and Overhang Units	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 Balconies and Overhang Units	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 13 Concrete Balconies and Overhang Units	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 13 Concrete Balconies and Overhang Units	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 13 Concrete Balconies and Overhang Units	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 13 Concrete Balconies and Overhang Units	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 13 Concrete Balconies and Overhang Units	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 Balconies and Overhang Units	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 15 Metal Balconies and Overhang Units	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 13 Concrete Balconies and Overhang Units	04 21 00 Clay Unit Masonry	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Bilama wood	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 Balconies and Overhang Units	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65_50_65 Prefabricated balconies		23-13 35 23 17 17 Wood Balconies and Overhang Units	06 25 00 Prefinished Paneling	
	Duct	Material	Steel	Pr_20_65 Prefabricated buildings and structures	B10 Super Structure B20 Exterior Enclosure B30 Roofing	23-27 39 00 Piping	05 12 00 Structural Steel Framing	EV021698 Tap water
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	05 14 00 Structural Aluminum Framing	EV021698 Tap water
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	05 14 00 Structural Aluminum Framing	EV021698 Tap water
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	05 14 00 Structural Aluminum Framing	EV021698 Tap water
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	05 14 00 Structural Aluminum Framing	EV021698 Tap water
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	05 14 00 Structural Aluminum Framing	EV021698 Tap water
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	05 14 00 Structural Aluminum Framing	EV021698 Tap water
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	32 11 13 Subgrade Modifications	EV021698 Tap water
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	03 40 00 Precast Concrete	EV021698 Tap water
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	04 22 26 Autoclaved Aerated Concrete Unit Masonry	EV021698 Tap water
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	03 40 00 Precast Concrete	EV021698 Tap water
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	03 40 00 Precast Concrete	EV021698 Tap water
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	03 40 00 Precast Concrete	EV021698 Tap water
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	03 40 00 Precast Concrete	EV021698 Tap water
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	05 10 00 Structural Metal Framing	EV021698 Tap water
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	04 21 00 Clay Unit Masonry	EV021698 Tap water
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	06 25 00 Prefinished Paneling	EV021698 Tap water
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	06 25 00 Prefinished Paneling	EV021698 Tap water
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	06 25 00 Prefinished Paneling	EV021698 Tap water
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	06 25 00 Prefinished Paneling	EV021698 Tap water
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	06 25 00 Prefinished Paneling	EV021698 Tap water

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	06 25 00 Prefinished Paneling	EV021698 Tap water
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	04 43 00 Stone Masonry	EV021698 Tap water
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	04 43 00 Stone Masonry	EV021698 Tap water
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	04 70 00 Manufactured Masonry	EV021698 Tap water
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-27 39 00 Piping	06 25 00 Prefinished Paneling	EV021698 Tap water
	Garage	Material	Steel	Pr_20_65 Prefabricated buildings and structures	B10 Super Structure B20 Exterior Enclosure B30 Roofing	23-13 35 21 17 Metal Framed Structural Walls	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 21 Other Structural Walls	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 21 Other Structural Walls	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 13 Concrete Structural Walls	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 21 13 Calcium Silicate Masonry Units	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Plate	Material	Steel	Pr_20_65 Prefabricated buildings and structures	B10 Super Structure B20 Exterior Enclosure B30 Roofing	23-13 35 21 17 Metal Framed Structural Walls	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 21 Other Structural Walls	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 21 Other Structural Walls	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 13 Concrete Structural Walls	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 21 13 Calcium Silicate Masonry Units	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Steel	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Retaining wall	Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures	B2010 Exterior Walls	23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 21 Other Structural Walls	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 11 Concrete Structural Walls	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 21 Other Structural Walls	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 17 Metal Framed Structural Walls	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 13 Concrete Structural Walls	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 21 13 Calcium Silicate Masonry Units	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 21 15 Wood Framed Structural Walls	06 25 00 Prefinished Paneling	
		Material	Steel	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 22 26 Autoclaved Aerated Concrete Unit Masonry	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Palancola	Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures	B10 Super Structure B20 Exterior Enclosure B30 Roofing	23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
	Foundation pale	Material	Steel	Pr_20_65 Prefabricated buildings and structures	A1010 Standard Foundations	23-13 35 11 Structural Frames	31 62 16 Steel Piles	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 16 Steel Piles	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 16 Steel Piles	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 16 Steel Piles	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 16 Steel Piles	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 16 Steel Piles	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 16 Steel Piles	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 13 Concrete Piles	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 13 Concrete Piles	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 13 Concrete Piles	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 13 Concrete Piles	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 13 Concrete Piles	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 23 Concrete Piles	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 10 00 Structural Metal Framing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Prefabricated structural element		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 23 Composite Piles	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 19 Timber Piles	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 19 Timber Piles	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 19 Timber Piles	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 19 Timber Piles	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 19 Timber Piles	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 19 Timber Piles	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 23 Composite Piles	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 23 Composite Piles	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 23 Composite Piles	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	31 62 19 Timber Piles	
	Pillar	Material	Steel	Pr_20_65 Prefabricated buildings and structures	B2010 Exterior Walls	23-13 35 11 13 11 Columns	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	06 25 00 Prefinished Paneling	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 11 Columns	06 25 00 Prefinished Paneling	
	Platea	Material	Steel	Pr_20_65 Prefabricated buildings and structures	B10 Super Structure B20 Exterior Enclosure B30 Roofing	23-13 35 11 Structural Frames	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 70 00 Manufactured Masonry	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
	Plinth	Material	Steel	Pr_20_65 Prefabricated buildings and structures	A1010 Standard Foundations	23-13 35 11 Structural Frames	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 Structural Frames	06 25 00 Prefinished Paneling	
		Material	Steel	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	05 14 00 Structural Aluminum Framing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Stair	Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures	C2010 Stair Construction C2020 Stair Finishes	23-17 23 17 Stairs	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-17 23 17 Stairs	06 25 00 Prefinished Paneling	
		Material	Steel	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 15 Metal Roof Shingles	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 15 Metal Roof Shingles	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 15 Metal Roof Shingles	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 15 Metal Roof Shingles	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 15 Metal Roof Shingles	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 15 Metal Roof Shingles	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 15 Metal Roof Shingles	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 11 Asphalt Roof Shingles	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 25 Concrete Roof Shingles	03 40 00 Precast Concrete	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Tile	Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures	B1020 Roof Construction	23-13 39 15 25 Concrete Roof Shingles	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 25 Concrete Roof Shingles	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 25 Concrete Roof Shingles	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 25 Concrete Roof Shingles	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 Roof Shingles	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 15 Metal Roof Shingles	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 11 Clay Roof Tiles	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 11 Clay Roof Tiles	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 11 Clay Roof Tiles	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 11 Clay Roof Tiles	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 11 Clay Roof Tiles	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 11 Clay Roof Tiles	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 11 Clay Roof Tiles	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 21 Ceramic Roof Tiles	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 21 Ceramic Roof Tiles	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 39 15 Roof Shingles	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 39 17 11 Clay Roof Tiles	06 25 00 Prefinished Paneling	
	Slab	Material	Steel	Pr_20_65 Prefabricated buildings and structures	A1030 Slab on Grade	23-13 35 11 13 13 Beams	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
	Foundation slab	Material	Steel	Pr_20_65 Prefabricated buildings and structures	A1030 Slab on Grade	23-13 35 11 13 13 Beams	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 43 00 Stone Masonry	
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
	joist	Material	Steel	Pr_20_65 Prefabricated buildings and structures	B1020 Roof Construction	23-13 35 11 13 13 Beams	05 12 00 Structural Steel Framing	
		Material	Aluminium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and manganese	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and copper	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum and zinc	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Aluminum, silicon and magnesium	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 14 00 Structural Aluminum Framing	
		Material	Bitumen	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	32 11 13 Subgrade Modifications	
		Material	Concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Autoclaved aerated concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 22 26 Autoclaved Aerated Concrete Unit Masonry	
		Material	Lightweight reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Prestressed reinforced concrete	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Fiber cement	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	03 40 00 Precast Concrete	
		Material	Cast iron	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	05 10 00 Structural Metal Framing	
		Material	Brick	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 21 00 Clay Unit Masonry	
		Material	Bilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Solid wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Micro laminated wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Trilama wood	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	OSB	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
		Material	Worked stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 43 00 Stone Masonry	
		Material	Natural stone	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 43 00 Stone Masonry	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Calcium silicate	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	04 70 00 Manufactured Masonry	
		Material	X-LAM	Pr_20_65 Prefabricated buildings and structures		23-13 35 11 13 13 Beams	06 25 00 Prefinished Paneling	
Continuous facade	Mullions and transoms			Pr_20_76_51 Metal sections	B2010 Exterior Walls	23-13 33 27 11 Curtain Walls	08 44 00 Curtain Wall and Glazed Assemblies	
	A cell			Pr_20_76_51 Metal sections		23-13 33 27 11 Curtain Walls	08 44 00 Curtain Wall and Glazed Assemblies	
	A panel			Pr_20_76_51 Metal sections		23-13 33 27 11 Curtain Walls	08 44 00 Curtain Wall and Glazed Assemblies	
	Extruded	material	Steel	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Aramids	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Carbon	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Cellulose	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Kevlar	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Nylon	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Poliacrylic	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyacrylonitrile	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyester	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyethylene	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polypropylene	Pr_20_31_01_75 Polypropylene (PP) fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	PVA	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Glass	Pr_20_31_01_32 Glass fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Basalt	Pr_20_31_01 Additives		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
	Cold drawn	material	Steel	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Aramids	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Carbon	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Cellulose	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Kevlar	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Nylon	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Poliacrylic	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyacrylonitrile	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyester	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyethylene	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polypropylene	Pr_20_31_01_75 Polypropylene (PP) fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	PVA	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Fibres for concrete		material	Glass	Pr_20_31_01_32 Glass fibres	A10 Foundations A20 Basement Construction B10 Super Structure B20 Exterior Enclosure B30 Roofing	23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Basalt	Pr_20_31_01 Additives		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
	From cut sheet metal	material	Steel	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Aramids	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Carbon	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Cellulose	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Kevlar	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Nylon	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Poliacrylic	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyacrylonitrile	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyester	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyethylene	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polypropylene	Pr_20_31_01_75 Polypropylene (PP) fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	PVA	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Glass	Pr_20_31_01_32 Glass fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Basalt	Pr_20_31_01 Additives		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
	Milled from blocks	material	Steel	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Aramids	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Carbon	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Cellulose	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Kevlar	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Nylon	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Poliacrylic	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyacrylonitrile	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyester	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyethylene	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polypropylene	Pr_20_31_01_75 Polypropylene (PP) fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	PVA	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Glass	Pr_20_31_01_32 Glass fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Basalt	Pr_20_31_01 Additives		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	From molten mass	material	Steel	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Aramids	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Carbon	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Cellulose	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Kevlar	Pr_20_31_01_11 Carbon steel fibres		23-13 31 21 11 15 11 Steel Fibrous Reinforcing	03 24 00 Fibrous Reinforcing	
		material	Nylon	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Poliacrylic	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyacrylonitrile	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyester	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polyethylene	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Polypropylene	Pr_20_31_01_75 Polypropylene (PP) fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	PVA	Pr_20_31_01_86 Synthetic fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Glass	Pr_20_31_01_32 Glass fibres		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
		material	Basalt	Pr_20_31_01 Additives		23-13 31 21 11 15 13 Synthetic Fibrous Reinforcing	03 25 00 Composite Reinforcing	
	Hinged with inward opening	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Hinged with outward opening	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Revolving	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	With internal visor	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Window	With external visor	Geometry	Single door	Pr_30_59_98 Window units	B2020 Exterior Windows	23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	A vasistas internal	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	A vasistas external	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Horizontal pivot	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Vertical pivot	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Oscillobattente (tilt and turn)	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	With ups and downs	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	A pantograph	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Accordion	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Up-and-over	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Coplanar sliding (flip-slide)	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Horizontally sliding	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Vertically sliding	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Lift and slide	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Fixed	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Roof window	Geometry	Single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc single door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc double door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc triple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
		Geometry	Monobloc quadruple door	Pr_30_59_98 Window units		23-17 13 00 Windows	08 50 00 Windows	EV004214 Window
	Barrier (B)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Dreinage (D)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Filtering (F)	Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
	Filtering and drainage (F + D)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	33 41 23 Drainage Layers	EV003719 Membrane
	Filtering and reinforce (F + R)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Filtering and separation (F + S)	Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
	Filtering, reinforcement and separation (F + R + S)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Geosynthetic		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics	E1090 Other Equipment	23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
	Filtering, separation and drainage (F + S + D)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 05 00 Common Work Results for Earthwork	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Protection (P)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 35 19 Geosynthetic Slope Protection	EV003719 Membrane
		Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Stress reduction (STR)	Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
	Stress reduction and barrier(STR+B)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
	Reinforce (R)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
	Reinforce and protection (R + P)	Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Reinforce and separation (R + S)	Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 32 19 Geosynthetic Soil Stabilization and Layer Separation	EV003719 Membrane
		Use	Construction of roads and other traffic areas (excluding railways and inclusion in bituminous conglomerates)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Railway construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Earth buildings, foundations and support structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Draining systems	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Erosion control works (coastal protection, bank coatings)	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Construction of tunnels and underground structures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Reinforcement, stress reduction and barrier (R + STR + B)	Use	Landfills for solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Liquid waste containment projects	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Asphalt paving and roofing	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of reservoirs and dams	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in canal construction	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Fluid barrier function in the construction of tunnels and associated undergroundstructures	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of landfills for disposal, transfer works or secondary containment of liquid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
		Use	Barrier function in the construction of landfills for the accumulation and disposal of solid waste	Pr_15_57_33 Geosynthetics		23-11 15 11 Sheeting Geosynthetics	31 34 19 Geosynthetic Soil Reinforcement	EV003719 Membrane
	Drive-over	Material	ABS	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast stell	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Stainless steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Rolled steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Aluminium	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Reinforced concrete	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with fibers	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with synthetic resins	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast iron	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Lamellar graphite cast iron	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Spheroidal graphite cast iron	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Copper-based alloys	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Wood	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Polypropylene	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	PVC	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Fiberglass	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	ABS	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast stell	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Drive-over for drainage channel	Material	Stainless steel	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Rolled steel	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Aluminium	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Reinforced concrete	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with fibers	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with synthetic resins	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast iron	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Lamellar graphite cast iron	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Spheroidal graphite cast iron	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Copper-based alloys	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Wood	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Polypropylene	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	PVC	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Fiberglass	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
	Pedestrian	Material	ABS	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast stell	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Stainless steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Rolled steel	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Aluminium	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Reinforced concrete	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with fibers	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with synthetic resins	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast iron	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Lamellar graphite cast iron	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Spheroidal graphite cast iron	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Copper-based alloys	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Wood	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Polypropylene	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	PVC	Pr_25_96_35 Grids and grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Grid		Material	Fiberglass	Pr_25_96_35 Grids and grilles	B2010 Exterior Walls	23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
	Pedestrian for drainage channel	Material	ABS	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast stell	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Stainless steel	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Rolled steel	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Aluminium	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Reinforced concrete	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with fibers	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with synthetic resins	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast iron	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Lamellar graphite cast iron	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Spheroidal graphite cast iron	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Copper-based alloys	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Wood	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Polypropylene	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	PVC	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Fiberglass	Pr_25_96_35_96 Water grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
	Per For false ceiling	Material	ABS	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast stell	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Stainless steel	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Rolled steel	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Aluminium	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Reinforced concrete	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with fibers	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Concrete with synthetic resins	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Cast iron	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Lamellar graphite cast iron	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Spheroidal graphite cast iron	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Copper-based alloys	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Wood	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Polypropylene	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	PVC	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
		Material	Fiberglass	Pr_25_96_35_37 Headwall and outfall grilles		23-13 19 15 Gratings	10 82 13 Exterior Grilles and Screens	
	For fence	Material	ABS	Pr_25_96_35 Grids and grilles		23-11 25 19 Fences	32 31 13 Chain Link Fences and Gates	
		Material	Cast stell	Pr_25_96_35 Grids and grilles		23-11 25 19 19 Chain Link Metal Fences	32 31 13 Chain Link Fences and Gates	
		Material	Stainless steel	Pr_25_96_35 Grids and grilles		23-11 25 19 19 Chain Link Metal Fences	32 31 13 Chain Link Fences and Gates	
		Material	Rolled steel	Pr_25_96_35 Grids and grilles		23-11 25 19 19 Chain Link Metal Fences	32 31 13 Chain Link Fences and Gates	
		Material	Aluminium	Pr_25_96_35 Grids and grilles		23-11 25 19 19 Chain Link Metal Fences	32 31 13 Chain Link Fences and Gates	
		Material	Concrete	Pr_25_96_35 Grids and grilles		23-11 25 19 Fences	32 31 13 Chain Link Fences and Gates	
		Material	Reinforced concrete	Pr_25_96_35 Grids and grilles		23-11 25 19 Fences	32 31 13 Chain Link Fences and Gates	
		Material	Concrete with fibers	Pr_25_96_35 Grids and grilles		23-11 25 19 Fences	32 31 13 Chain Link Fences and Gates	
		Material	Concrete with synthetic resins	Pr_25_96_35 Grids and grilles		23-11 25 19 Fences	32 31 13 Chain Link Fences and Gates	
		Material	Cast iron	Pr_25_96_35 Grids and grilles		23-11 25 19 19 Chain Link Metal Fences	32 31 13 Chain Link Fences and Gates	
		Material	Lamellar graphite cast iron	Pr_25_96_35 Grids and grilles		23-11 25 19 19 Chain Link Metal Fences	32 31 13 Chain Link Fences and Gates	
		Material	Spheroidal graphite cast iron	Pr_25_96_35 Grids and grilles		23-11 25 19 19 Chain Link Metal Fences	32 31 13 Chain Link Fences and Gates	
		Material	Copper-based alloys	Pr_25_96_35 Grids and grilles		23-11 25 19 19 Chain Link Metal Fences	32 31 13 Chain Link Fences and Gates	
		Material	Wood	Pr_25_96_35 Grids and grilles		23-11 25 19 31 Wood Fences	32 31 13 Chain Link Fences and Gates	
		Material	Polypropylene	Pr_25_96_35 Grids and grilles		23-11 25 19 Fences	32 31 13 Chain Link Fences and Gates	
		Material	PVC	Pr_25_96_35 Grids and grilles		23-11 25 19 23 Plastic Fences	32 31 13 Chain Link Fences and Gates	
		Material	Fiberglass	Pr_25_96_35 Grids and grilles		23-11 25 19 Fences	32 31 13 Chain Link Fences and Gates	
	To control the passage of air	Function	To control the passage of air	Pr_35_90_33 Gaskets, weatherstrips and baffles	D3090 Other HVAC Systems & equipment	23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of water	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of noise	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
	To control the passage of water	Function	To control the passage of air	Pr_35_90_33 Gaskets, weatherstrips and baffles	D2090 Other Plumbing Systems	23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of water	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of noise	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Gasket	To control the passage of noise	Function	To control the passage of air	Pr_35_90_33 Gaskets, weatherstrips and baffles	D Services	23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of water	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of noise	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
	To control the passage of energy	Function	To control the passage of air	Pr_35_90_33 Gaskets, weatherstrips and baffles	D5020 Lighting and Branch Wiring	23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of water	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of noise	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
	To control the passage of energy and noise	Function	To control the passage of air	Pr_35_90_33 Gaskets, weatherstrips and baffles	D Services	23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of water	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of noise	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
	To control the passage of air and water	Function	To control the passage of air	Pr_35_90_33 Gaskets, weatherstrips and baffles	D Services	23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of water	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
		Function	To control the passage of noise	Pr_35_90_33 Gaskets, weatherstrips and baffles		23-17 19 15 Weatherstripping and Seals	07 91 16 Joint Gaskets	EV011019 Sealing
Acoustic insulation		Material	Wood fibers	Pr_25_57_06_97 Wood fibre batt insulation	C10 Interior Construction	23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Wood fibers and synthetic fibers	Pr_25_57_06_97 Wood fibre batt insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Wood and lead fibers	Pr_25_57_06_97 Wood fibre batt insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	EPDM and plasterboard	Pr_80_77_76_25 Ethylene propylene diene monomer(EPDM) rubber insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Rubber and plasterboard	Pr_80_77_76_29 Flexible elastomeric foam insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Vulcanized rubber	Pr_80_77_76_29 Flexible elastomeric foam insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Wood wool	Pr_25_57_06_97 Wood fibre batt insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Rock wool and plasterboard	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 21 15 13 Rock Wool Blanket Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Rock wool and plastomeric mass	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 21 15 13 Rock Wool Blanket Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Glass wool and plasterboard	Pr_25_57_06_30 Flexible glass wool mat insulation		23-13 25 21 15 11 Fiberglass Blanket Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Mineral wool	Pr_25_57_06_53 Mineral wool insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Plasterboard	Pr_25_57_06 Batt and quilt products		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Plasterboard and lead	Pr_25_57_06 Batt and quilt products		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Polyester and aluminized film	Pr_25_57_06 Batt and quilt products		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Polyester and polyethylene	Pr_25_57_06 Batt and quilt products		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Polyester, bitumen-polymer and fabric	Pr_25_57_06 Batt and quilt products		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Polyethylene	Pr_25_57_06 Batt and quilt products		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Polyethylene and plasterboard	Pr_80_77_76_25 Ethylene propylene diene monomer(EPDM) rubber insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Polyethylene and elastomeric sheath	Pr_80_77_76_25 Ethylene propylene diene monomer(EPDM) rubber insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Polyethylene and lead	Pr_80_77_76_25 Ethylene propylene diene monomer(EPDM) rubber insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Stretch expanded polystyrene (EPS T)	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Cork and plasterboard	Pr_25_31_48_27 Expanded cork loose insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Expanded cork	Pr_25_31_48_27 Expanded cork loose insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Hemp fiber	Pr_80_77_76_12 Canvas insulation protection		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Cellulose fiber	Pr_25_31_48_12 Canvas insulation protection		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Coconut fiber	Pr_25_31_48_34 Granular mineral wool insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Sheep wool	Pr_25_57_06_76 Sheep wool insulation		23-13 25 21 Sound Isolation Insulation	09 81 00 Acoustic Insulation	
		Material	Mineral wool	Pr_25_57_06_53 Mineral wool insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool and bitumen	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool and kraft paper	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool and aluminum sheets	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool and membrane reinforced with glass felt	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool and glass fiber membrane	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool and polymer lead	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool and varnished mineral veil	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool and glass fleece	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rock wool, polyethylene and lead polymer	Pr_25_57_06_31 Flexible rock wool mat insulation		23-13 25 19 13 13 Rock Wool Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Fiberglass	Pr_25_57_06_30 Flexible glass wool mat insulation		23-13 25 19 13 11 Fiberglass Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Glass wool and kraft paper	Pr_25_57_06_30 Flexible glass wool mat insulation		23-13 25 19 13 11 Fiberglass Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Glass wool and metallized polypropylene	Pr_25_57_06_30 Flexible glass wool mat insulation		23-13 25 19 13 11 Fiberglass Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Glass wool and glass fleece	Pr_25_57_06_30 Flexible glass wool mat insulation		23-13 25 19 13 11 Fiberglass Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Glass wool, glass fleece and aluminum	Pr_25_57_06_30 Flexible glass wool mat insulation		23-13 25 19 13 11 Fiberglass Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Glass wool, glass fleece and bitumen	Pr_25_57_06_30 Flexible glass wool mat insulation		23-13 25 19 13 11 Fiberglass Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Glass wool, glass fleece and kraft paper	Pr_25_57_06_30 Flexible glass wool mat insulation		23-13 25 19 13 11 Fiberglass Blanket Thermal Insulation	07 21 13.13 Foam Board Insulation	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Thermal insulation		Material	Sintered expanded polystyrene	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation	C30 Interior Finishes B20 Exterior Enclosure	23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Expanded sintered polystyrene and graphite	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Sintered expanded polystyrene and polyester felt	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Sintered expanded polystyrene and membrane reinforced with glass felt	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Expanded sintered polystyrene and polymer-bitumen membrane reinforced with reinforced glass fleece	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Expanded sintered polystyrene and single-reinforced polymer bitumen membrane with polyester fabric	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Sintered expanded polystyrene and single-reinforced polymer-bitumen membrane with self-protected polyester fabric with slate flakes	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Sintered expanded polystyrene and glass fiber membrane	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and aluminum	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and membrane reinforced with glass felt	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and polymer-bitumen membrane with polyester reinforcement	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and polymer-bitumen membrane with glass fleece reinforcement	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and elastoplastomeric polymer-bitumen membrane reinforced with reinforced glass fleece	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Extruded expanded polystyrene and membrane with glass fiber	Pr_25_31_48_28 Expanded polystyrene (EPS) bead insulation		23-13 25 19 11 11 11 Expanded Polystyrene Slab and BoardThermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Rigid polyurethane foam	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane and steel	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane and aluminum	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Polyurethane and saturated glass fleece	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane foam and membrane reinforced with glass felt	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane foam and membrane with glass fiber	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane foam and aluminum	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane, steel and zinc	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane, aluminum and bitumen-polymer	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane, aluminum and zinc	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane, mineral fiber and bitumen-polymer	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane, mineral fiber and laminglass	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Polyurethane, bitumen glass fleece and mineral fiber	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 11 13 Urethane Slab and Board Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Expanded phenolic resins	Pr_25_31_28_67 Polyurethane (PUR) foam insulation		23-13 25 19 Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Cellular glass	Pr_25_71_52_13 Cellular glass insulation boards		23-13 25 19 Thermal Insulation	07 21 13.13 Foam Board Insulation	
		Material	Wood wool	Pr_25_57_06_97 Wood fibre batt insulation		23-13 25 19 Thermal Insulation	07 21 13.19 Mineral Board Insulation	
		Material	Expanded perlite	Pr_25_31_48_61 Perlite loose insulation		23-13 25 19 11 15 Perlite Slab and Board Thermal Insulation	07 21 13.19 Mineral Board Insulation	
		Material	Expanded cork	Pr_25_31_48_27 Expanded cork loose insulation		23-13 25 19 Thermal Insulation	07 21 13.19 Mineral Board Insulation	
		Material	Cork	Pr_25_31_48_27 Expanded cork loose insulation		23-13 25 19 Thermal Insulation	07 21 13.19 Mineral Board Insulation	
		Material	Natural cork	Pr_25_31_48_27 Expanded cork loose insulation		23-13 25 19 Thermal Insulation	07 21 13.19 Mineral Board Insulation	
		Material	Toasted cork	Pr_25_31_48_27 Expanded cork loose insulation		23-13 25 19 Thermal Insulation	07 21 13.19 Mineral Board Insulation	
		Material	Wood fiber	Pr_25_57_06_97 Wood fibre batt insulation		23-13 25 19 Thermal Insulation	07 21 13.16 Fibrous Board Insulation	
		Material	Pressed wood fibers	Pr_25_57_06_97 Wood fibre batt insulation		23-13 25 19 Thermal Insulation	07 21 13.16 Fibrous Board Insulation	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
sheet metal	Ashlar	Material	Hot rolled steel	Pr_25_71_51_15 Carbon steel sheets	E Equipment & Furnishing	23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Cold rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Plasticized steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Pre-painted steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Galvanized steel	Pr_25_71_51_96 Zinc profiled sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Natural aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Pre-painted aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
	Corrugated	Material	Hot rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Cold rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Plasticized steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Pre-painted steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Galvanized steel	Pr_25_71_51_96 Zinc profiled sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Natural aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Pre-painted aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
	Ribbed	Material	Hot rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Cold rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Plasticized steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Pre-painted steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Galvanized steel	Pr_25_71_51_96 Zinc profiled sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Natural aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
		Material	Pre-painted aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 13 Standing Seam Sheet Metal Roofing	
	Strech	Material	Hot rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Cold rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Plasticized steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Pre-painted steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Galvanized steel	Pr_25_71_51_96 Zinc profiled sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Natural aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Pre-painted aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Striated	Material	Hot rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Cold rolled steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Plasticized steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Pre-painted steel	Pr_25_71_51_15 Carbon steel sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Galvanized steel	Pr_25_71_51_96 Zinc profiled sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Natural aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
		Material	Pre-painted aluminum	Pr_25_71_51_05 Aluminium sheets		23-13 39 11 Exterior Roof Panels	07 61 19 Flat Seam Sheet Metal Roofing	
Bituminous binder	Hard	Material	Bitumen	Pr_20_31_02_07 Bitumen bonding compounds	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen and additives	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen with sbs polymers	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen with polymers and additives	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
	Fluidified	Material	Bitumen	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen and additives	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen with sbs polymers	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen with polymers and additives	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
	Fluxed	Material	Bitumen	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen and additives	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen with sbs polymers	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen with polymers and additives	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
	Modified	Material	Bitumen	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen and additives	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen with sbs polymers	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
		Material	Bitumen with polymers and additives	Pr_20_31_02_07 Bitumen bonding compounds		23-13 13 11 15 Bitumen Asphalt	04 28 00 Concrete Form Masonry Units	EV003508 Bitumen
Hydraulic binder for non-structural applications	Class 1,5	Material	Portland cement clinker and other inorganic constituents	Pr_20_31_02_12 Cementitious adhesives	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 13 11 11 Cement	04 28 00 Concrete Form Masonry Units	
	Class 3	Material	Portland cement clinker and other inorganic constituents	Pr_20_31_02_12 Cementitious adhesives		23-13 13 11 11 Cement	04 28 00 Concrete Form Masonry Units	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Binder for screeds	Magnesite-based screeds	Material	Based on magnesium chloride	Pr_20_31_02 Adhesives and bonding compounds	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
		Material	Based on caustic magnesia	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
	Calcium sulphate-based screeds	Material	Calcium sulphate-based binder	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
		Material	Composite binder based on calcium sulphate	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
		Material	Factory made blends	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
	Unique	Material	Based on magnesium chloride	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
		Material	Based on caustic magnesia	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
		Material	Calcium sulphate-based binder	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
		Material	Composite binder based on calcium sulphate	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
		Material	Factory made blends	Pr_20_31_02 Adhesives and bonding compounds		23-13 11 11 Powder Fillers	04 28 00 Concrete Form Masonry Units	
Skylight	With opening dome	Geometry	With opening dome	Pr_30_59_72_77 Skylights	B2020 Exterior Windows	23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	Fixed dome	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	With opening shed	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	With fixed shed	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	Continuous opening	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	Continuous fixed	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
	Fixed dome	Geometry	With opening dome	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	Fixed dome	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	With opening shed	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	With fixed shed	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	Continuous opening	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
		Geometry	Continuous fixed	Pr_30_59_72_77 Skylights		23-17 17 13 11 Domed Unit Skylights	08 62 13 Domed Unit Skylights	EV004214 Window
	On the floor	Geometry	With opening dome	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Fixed dome	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	With opening shed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	With fixed shed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Continuous opening	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Continuous fixed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	With opening shed	Geometry	With opening dome	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Fixed dome	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	With opening shed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	With fixed shed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Continuous opening	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Continuous fixed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
	Continuous fixed	Geometry	With opening dome	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Fixed dome	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	With opening shed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	With fixed shed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Continuous opening	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
		Geometry	Continuous fixed	Pr_30_59_72_77 Skylights		23-17 17 13 Unit Skylights	08 60 00 Roof Windows and Skylights	EV004214 Window
Masonry mortar	For general purposes(G)			Pr_20_31_53_32 General purpose cement:sand mortars	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	Thin layer(T)			Pr_20_31_53_88 Thin-layer mortars		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	Light (L)			Pr_20_31_53_47 Lightweight masonry mortars		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
Restoration mortar	Not thixotropic			Pr_20_31_53 Mortars and grouts	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	thixotropic			Pr_20_31_53_90 Thixotropic resin grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	Betoncino			Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	Pourable			Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For colored outdoors	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	For single-layer exteriors	Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For interior and exterior renovation	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For indoors and outdoors light	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For indoors and outdoors for thermal insulation	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Plastering and rendering mortar		Composition	PMGRG	Pr_20_31_53 Mortars and grouts	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For indoor and outdoor for general purposes	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For interiors and exteriors reinforced with fibers	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For light interiors	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	For interiors for acoustic insulation	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For interiors for thermal insulation	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For interiors for shaving	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	For interiors for fire resistance	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For interiors for general purposes	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
	For interiors reinforced with fiber	Composition	Based on gypsum	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on gypsum reinforrced with fibre	Pr_20_31_53 Mortars and grouts		23-13 15 13 17 Gypsum Based Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	GRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Plaster application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Not based on organic binders - Render application	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	PMGRG	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	
		Composition	Tradizional (fibrous gypsium)	Pr_20_31_53 Mortars and grouts		23-13 15 13 Mortars	04 28 23 Mortar-Set, Concrete-Filled Masonry Units	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Material for screeds	With prescribed composition	Material	Based on magnesite	Pr_35_31_06 Bedding and underlay compounds	B1010 Floor Construction	23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
		Material	Based on asphalt mastic	Pr_35_31_06 Bedding and underlay compounds		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
		Material	Based on synthetic resins	Pr_35_31_06 Bedding and underlay compounds		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
		Material	Based on calcium sulphate	Pr_35_31_06_72 Bedding and underlay compounds		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
		Material	Based on cement	Pr_35_31_06_12 Cementitious levelling screed mixes		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
	With guaranteed performance	Material	Based on magnesite	Pr_35_31_06 Bedding and underlay compounds		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
		Material	Based on asphalt mastic	Pr_35_31_06 Bedding and underlay compounds		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
		Material	Based on synthetic resins	Pr_35_31_06 Bedding and underlay compounds		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
		Material	Based on calcium sulphate	Pr_35_31_06_72 Bedding and underlay compounds		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
		Material	Based on cement	Pr_35_31_06_12 Cementitious levelling screed mixes		23-13 39 33 Roof Decking	03 50 00 Cast Decks and Underlayment	
Flexible waterproofing membrane	For roofing	Composition	Armed bituminous	Pr_25_57_08 Bitumen-based membranes, sheets and fabrics	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 25 25 Air Barriers	07 11 13 Bituminous Dampproofing	
		Composition	Plastic or rubber material	Pr_25_57_65 Plastics membranes		23-13 25 25 Air Barriers	07 13 53 Elastomeric Sheet Waterproofing	
		Composition	Polypropylene	Pr_15_57_33_97 Woven polypropylene (PP) membranes		23-13 25 25 Air Barriers	07 13 54 Thermoplastic Sheet Waterproofing	
	For wall substrates (to avoid the penetration of wind and air from the outside)	Composition	Polypropylene	Pr_15_57_33_97 Woven polypropylene (PP) membranes		23-13 25 25 Air Barriers	07 13 53 Elastomeric Sheet Waterproofing	
	To prevent moisture from rising from the ground	Composition	Bituminous	Pr_25_57_08 Bitumen-based membranes, sheets and fabrics		23-13 25 25 Air Barriers	07 11 13 Bituminous Dampproofing	
		Composition	Plastic or rubber material	Pr_25_57_65 Plastics membranes		23-13 25 25 Air Barriers	07 13 53 Elastomeric Sheet Waterproofing	
	For the control of water vapor	Composition	Plastic or rubber material	Pr_25_57_65 Plastics membranes		23-13 25 27 Vapor Barriers	07 13 53 Elastomeric Sheet Waterproofing	
		Composition	Bituminous	Pr_25_57_08 Bitumen-based membranes, sheets and fabrics		23-13 25 27 Vapor Barriers	07 11 33 Bituminous Dampproofing	
	For concrete bridge decks and other traffic-prone concrete surfaces	Composition	Armed bituminous	Pr_25_57_08 Bitumen-based membranes, sheets and fabrics		23-13 25 25 Air Barriers	07 11 13 Bituminous Dampproofing	
	For base layers	Composition	Mastic asphalt	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate with high void content	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Closed anti-slip bituminous conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate with nails	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate for very thin layers (BBTM)	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate for ultra thin layers (AUTL)	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Hot-produced bituminous conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Very soft bitumen conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Bituminous mixture	For connecting layers	Composition	Mastic asphalt	Pr_35_31_05 Asphalt, bitumen and resin mixtures	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-13 13 11 15 Bitumen Asphalt	32 11 13.16 Bituminous-Treated Subgrades	EV003508 Bitumen
		Composition	Bituminous conglomerate with high void content	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 13.16 Bituminous-Treated Subgrades	EV003508 Bitumen
		Composition	Closed anti-slip bituminous conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 13.16 Bituminous-Treated Subgrades	EV003508 Bitumen
		Composition	Bituminous conglomerate with nails	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 13.16 Bituminous-Treated Subgrades	EV003508 Bitumen
		Composition	Bituminous conglomerate for very thin layers (BBTM)	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 13.16 Bituminous-Treated Subgrades	EV003508 Bitumen
		Composition	Bituminous conglomerate for ultra thin layers (AUTL)	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 13.16 Bituminous-Treated Subgrades	EV003508 Bitumen
		Composition	Hot-produced bituminous conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 13.16 Bituminous-Treated Subgrades	EV003508 Bitumen
		Composition	Very soft bitumen conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 13.16 Bituminous-Treated Subgrades	EV003508 Bitumen
	For reshaping layers	Composition	Mastic asphalt	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate with high void content	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Closed anti-slip bituminous conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate with nails	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate for very thin layers (BBTM)	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate for ultra thin layers (AUTL)	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Hot-produced bituminous conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Very soft bitumen conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
	For surface wear layers	Composition	Mastic asphalt	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate with high void content	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Closed anti-slip bituminous conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate with nails	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate for very thin layers (BBTM)	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Bituminous conglomerate for ultra thin layers (AUTL)	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Hot-produced bituminous conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
		Composition	Very soft bitumen conglomerate	Pr_35_31_05 Asphalt, bitumen and resin mixtures		23-13 13 11 15 Bitumen Asphalt	32 11 26.19 Bituminous-Stabilized Base Courses	EV003508 Bitumen
self-supporting insulating sandwich panel	For interior and exterior finishes of walls and ceilings			Pr_25_71_14 Cladding and lining panels	B2010 Exterior Walls	23-13 35 23 Structural Floors and Flat Roofs	08 45 23 Fiberglass-Sandwich-Panel Assemblies	
	For roofing			Pr_25_71_14 Cladding and lining panels		23-13 35 23 Structural Floors and Flat Roofs	08 45 23 Fiberglass-Sandwich-Panel Assemblies	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Parapet	With horizontal profiles	Material	Steel	Pr_25_71_14_12 Carbon steel external panels	B2010 Exterior Walls	23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Steel and glass	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 73 00 Decorative Metal Railings	
		Material	Aluminium	Pr_25_71_14_07 Aluminium external panels		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Aluminium and glass	Pr_25_71_14_33 Glass-faced aluminium core panels		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 73 00 Decorative Metal Railings	
		Material	Iron	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Wrought iron	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Iron and wood	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Wood	Pr_25_71_57 Non-metal barrier panels		23-13 17 11 15 Wood Rigid Profiles	06 15 00 Wood Decking	
		Material	Marble	Pr_25_71_14_19 Composite stone panels		23-13 17 11 13 Non Ferrous Metal Rigid Profiles	09 75 13 Stone Wall Facing	
		Material	Stone	Pr_25_71_14_19 Composite stone panels		23-13 17 11 13 Non Ferrous Metal Rigid Profiles	09 75 13 Stone Wall Facing	
	With vertical profiles	Material	Steel	Pr_25_71_14_12 Carbon steel external panels		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Steel and glass	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 73 00 Decorative Metal Railings	
		Material	Aluminium	Pr_25_71_14_07 Aluminium external panels		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Aluminium and glass	Pr_25_71_14_33 Glass-faced aluminium core panels		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 73 00 Decorative Metal Railings	
		Material	Iron	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Wrought iron	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Iron and wood	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Wood	Pr_25_71_57 Non-metal barrier panels		23-13 17 11 15 Wood Rigid Profiles	06 15 00 Wood Decking	
		Material	Marble	Pr_25_71_14_19 Composite stone panels		23-13 17 11 13 Non Ferrous Metal Rigid Profiles	09 75 13 Stone Wall Facing	
		Material	Stone	Pr_25_71_14_19 Composite stone panels		23-13 17 11 13 Non Ferrous Metal Rigid Profiles	09 75 13 Stone Wall Facing	
	With vertical and horizontal profile	Material	Steel	Pr_25_71_14_12 Carbon steel external panels		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Steel and glass	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 73 00 Decorative Metal Railings	
		Material	Aluminium	Pr_25_71_14_07 Aluminium external panels		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Aluminium and glass	Pr_25_71_14_33 Glass-faced aluminium core panels		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 73 00 Decorative Metal Railings	
		Material	Iron	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Wrought iron	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Iron and wood	Pr_25_71 Rigid board, panel and sheet products		23-13 17 11 11 Ferrous Metal Rigid Profiles	05 58 00 Formed Metal Fabrications	
		Material	Wood	Pr_25_71_57 Non-metal barrier panels		23-13 17 11 15 Wood Rigid Profiles	06 15 00 Wood Decking	
		Material	Marble	Pr_25_71_14_19 Composite stone panels		23-13 17 11 13 Non Ferrous Metal Rigid Profiles	09 75 13 Stone Wall Facing	
		Material	Stone	Pr_25_71_14_19 Composite stone panels		23-13 17 11 13 Non Ferrous Metal Rigid Profiles	09 75 13 Stone Wall Facing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Pigment for colouring	For lime-based materials			Pr_35_31_22 Decorative coatings	B2010 Exterior Walls B2030 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-15 21 00 Surface Applied Coatings	09 90 00 Painting and Coating	
	For cement-based materials			Pr_35_31_22 Decorative coatings		23-15 21 00 Surface Applied Coatings	09 90 00 Painting and Coating	
	For cement and limebased materials			Pr_35_31_22 Decorative coatings		23-15 21 00 Surface Applied Coatings	09 90 00 Painting and Coating	
Door	Indoor pedestrian			Pr_30_59 Openings and opening component products	B2030 Exterior Doors C1020 Interior Doors	23-17 00 00 Openings, Passages, and Protection Products	08 10 00 Doors and Frames	EV004216 Door
	Pedestrian exterior			Pr_30_59 Openings and opening component products		23-17 00 00 Openings, Passages, and Protection Products	08 10 00 Doors and Frames	EV004216 Door
	From garage			Pr_30_59 Openings and opening component products		23-17 11 45 Traffic Doors	08 38 00 Traffic Doors	EV004216 Door
	Bullet resistant			Pr_30_59 Openings and opening component products		23-17 00 00 Openings, Passages, and Protection Products	08 10 00 Doors and Frames	EV004216 Door
	Fire resistant			Pr_30_59 Openings and opening component products		23-17 11 31 Fire Doors	08 10 00 Doors and Frames	EV004216 Door
	Resistant to burglary			Pr_30_59 Openings and opening component products		23-17 11 49 Security Rated Door	08 10 00 Doors and Frames	EV004216 Door
	Industrial			Pr_30_59 Openings and opening component products		23-17 00 00 Openings, Passages, and Protection Products	08 10 00 Doors and Frames	EV004216 Door
	Commercial			Pr_30_59 Openings and opening component products		23-17 00 00 Openings, Passages, and Protection Products	08 10 00 Doors and Frames	EV004216 Door
	French window			Pr_30_59 Openings and opening component products		23-17 00 00 Openings, Passages, and Protection Products	08 60 00 Roof Windows and Skylights	EV004216 Door
	Antenna base	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Base for trapdoor	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Base for chimney	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Base for skylight	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Cup	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Aeration cup	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Double cup	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Snowdriver cup	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Dispusion	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Ridge head element	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Corrugated slab	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Ventilation tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	One-way ridge tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Two-way ridge tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Product for discontinuous roofing		Material	Plastic	Pr_25_93_72 Roofing and cladding units	C3010 Wall Finishes	23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Roman double tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Snowdriver tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Lateral roof tile on board	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Marseillaise tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Dutch tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Tuscan tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Terminal ridge tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Tile tegal	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Roman tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Portuguese tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Portuguese tile double wave	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Four-way ridge tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Three-way ridgle tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Venting element	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Marseillaise half tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Side profile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Scandola	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 31 26 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 31 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 31 19 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 31 00 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 31 00 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 31 53 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 31 53 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 31 53 Plastic Roof Tiles	EV011062 Slate/asphalt nail
	Canadian tile	Material	Slate	Pr_25_93_72_11 Ceramic slates		23-13 39 17 21 Ceramic Roof Tiles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 00 Roof Tiles	EV011062 Slate/asphalt nail
		Material	Bitumen with mineral and/or synthetic reinforcements	Pr_25_93_72_08 Bitumen membrane shingles		23-13 39 15 11 Asphalt Roof Shingles	07 32 23 Mineral-Fiber Cement Roof Tiles	EV011062 Slate/asphalt nail
		Material	Concrete	Pr_25_93_72_18 Concrete plain tiles		23-13 39 15 25 Concrete Roof Shingles	07 32 16 Concrete Roof Tiles	EV011062 Slate/asphalt nail
		Material	Brickwork	Pr_25_93_72_13 Clay plain tiles		23-13 39 17 11 Clay Roof Tiles	07 32 13 Clay Roof Tiles	EV011062 Slate/asphalt nail
		Material	Plastic	Pr_25_93_72 Roofing and cladding units		23-13 39 15 19 Plastic Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail
		Material	Multilayer polycarbonate	Pr_25_93_72 Roofing and cladding units		23-13 39 15 17 Mineral Fiber Cement Roof Shingles	07 32 26 Plastic Roof Tiles	EV011062 Slate/asphalt nail

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Product for the protection and repair of concrete structures	Injection	Use	For transmission of forces	Pr_15_31_04_16 Concrete treatment surface and injection chemicals	A10 Foundations A20 Basement Construction	23-13 13 13 29 Cement Admixtures for Injections	03 01 40.61 Resurfacing of Precast Concrete	
		Use	For ductile filing of concrete cracks	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.61 Resurfacing of Precast Concrete	
		Use	For filing concrete cracks with foam	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.61 Resurfacing of Precast Concrete	
	For coating and protecting concrete	Use	Hydrophobic impregnation	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.61 Resurfacing of Precast Concrete	
		Use	Impregnation against penetration risks	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.61 Resurfacing of Precast Concrete	
		Use	Impregnation resistance fiscia	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.61 Resurfacing of Precast Concrete	
		Use	Coating against penetration risks	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.72 Strengthening of Precast Concrete	
		Use	Coating-humidity control	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.72 Strengthening of Precast Concrete	
		Use	Coating-physical resistance	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.72 Strengthening of Precast Concrete	
		Use	Chemical resistance-Coating	Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.72 Strengthening of Precast Concrete	
	For corrosion protection	Use		Pr_15_31_04_16 Concrete treatment surface and injection chemicals		23-13 13 13 29 Cement Admixtures for Injections	03 01 40.72 Strengthening of Precast Concrete	
	Rust converter			Pr_35_31_22 Decorative coatings		23-15 21 13 11 Corrosion Prevention Paints	09 91 00 Painting	EV009660 Fire-proof paint
	Solvent bottom			Pr_35_31_22 Decorative coatings		23-15 21 11 11 General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based bottom			Pr_35_31_22 Decorative coatings		23-15 21 11 13 Water Based General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based antirust bottom			Pr_35_31_22 Decorative coatings		23-15 21 13 11 Corrosion Prevention Paints	09 91 00 Painting	EV009660 Fire-proof paint
	Solvent impregnating agent			Pr_35_31_22 Decorative coatings		23-15 21 23 Protective Surface Impregnations	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based impregnating agent			Pr_35_31_22 Decorative coatings		23-15 21 23 Protective Surface Impregnations	09 91 00 Painting	EV009660 Fire-proof paint
	Solvent paint			Pr_35_31_22_81 Solvent-based masonry paints		23-15 21 11 11 General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based paint			Pr_35_31_22_96 Water-based masonry paints		23-15 21 11 13 Water Based General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Germicidal paint and solvent-based fungicide			Pr_35_31_67_41 Insecticidal paint additives		23-15 21 23 13 Impregnations Protecting from Biological Attack	09 91 00 Painting	EV009660 Fire-proof paint

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Paint product	Water-based germicidal and fungicidal painting			Pr_35_31_67_41 Insecticidal paint additives	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-15 21 23 13 Impregnations Protecting from Biological Attack	09 91 00 Painting	EV009660 Fire-proof paint
	Intumescent solvent paint			Pr_35_31_22 Decorative coatings		23-15 21 21 23 Intumescent Paints	09 91 00 Painting	EV009660 Fire-proof paint
	Intumescent water-based paint			Pr_35_31_22 Decorative coatings		23-15 21 21 23 Intumescent Paints	09 91 00 Painting	EV009660 Fire-proof paint
	Intumescent solvent paint			Pr_35_31_22 Decorative coatings		23-15 21 11 Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based insulating paint			Pr_35_31_22 Decorative coatings		23-15 21 11 Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Solvent primer			Pr_35_31_66_68 Primer-undercoats		23-15 21 11 11 General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based primer			Pr_35_31_66_68 Primer-undercoats		23-15 21 11 13 Water Based General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Solvent varnish			Pr_35_31_68_55 Multicoloured finish glaze coats		23-15 21 11 11 General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based varnish			Pr_35_31_68_55 Multicoloured finish glaze coats		23-15 21 11 13 Water Based General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Solvent paint			Pr_35_31_22_81 Solvent-based masonry paints		23-15 21 11 11 General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based paint			Pr_35_31_22_96 Water-based masonry paints		23-15 21 11 13 Water Based General Purpose Paints and Varnishes	09 91 00 Painting	EV009660 Fire-proof paint
	Solvent antirust paint			Pr_35_31_22 Decorative coatings		23-15 21 13 11 Corrosion Prevention Paints	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based antirust paint			Pr_35_31_22 Decorative coatings		23-15 21 13 11 Corrosion Prevention Paints	09 91 00 Painting	EV009660 Fire-proof paint
	Solvent flame retardant paint			Pr_35_31_22 Decorative coatings		23-15 21 23 15 Wood Treatment Protecting from Biological Attack	09 91 00 Painting	EV009660 Fire-proof paint
	Water-based flame retardant paint			Pr_35_31_22 Decorative coatings		23-15 21 23 15 Wood Treatment Protecting from Biological Attack	09 91 00 Painting	EV009660 Fire-proof paint
	Open	Material	Steel	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Iron	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Galvanized iron	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Aluminum	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 16 Aluminum Frames	EV008043 Profiled
		Material	Brass	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Copper	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 23 Bronze Frames	EV008043 Profiled
		Material	PVC	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Profile	Cable	Material	Steel	Pr_20_76_52 Metal tubes and hollow sections	A Substructure B Shell C Interiors D Services E Equipment & Furnishing F Special Construction & Demolition	23-13 17 15 11 Precast Hollow Core Sheets	08 12 13 Hollow Metal Frames	EV008043 Profiled
		Material	Iron	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 13 Hollow Metal Frames	EV008043 Profiled
		Material	Galvanized iron	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 13 Hollow Metal Frames	EV008043 Profiled
		Material	Aluminum	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 13 Hollow Metal Frames	EV008043 Profiled
		Material	Brass	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 13 Hollow Metal Frames	EV008043 Profiled
		Material	Copper	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 13 Hollow Metal Frames	EV008043 Profiled
		Material	PVC	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 13 Hollow Metal Frames	EV008043 Profiled
	Closed	Material	Steel	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Iron	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Galvanized iron	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Aluminum	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 16 Aluminum Frames	EV008043 Profiled
		Material	Brass	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Copper	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 23 Bronze Frames	EV008043 Profiled
		Material	PVC	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
	Full	Material	Steel	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Iron	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Galvanized iron	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Aluminum	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 16 Aluminum Frames	EV008043 Profiled
		Material	Brass	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Copper	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 23 Bronze Frames	EV008043 Profiled
		Material	PVC	Pr_20_76_52 Metal tubes and hollow sections		23-13 17 00 Profiles	08 12 00 Metal Frames	EV008043 Profiled
		Material	Steel	Pr_35_31_68 Protective coatings		23-15 13 15 11 Metal Interior Siding	09 97 13 Steel Coatings	
		Material	Porcelainized steel	Pr_35_31_68 Protective coatings		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Aluminium	Pr_35_31_68 Protective coatings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Bitumen	Pr_35_31_68_10 Black bitumen coatings		23-15 13 15 13 Metal Interior Siding	09 70 00	
		Material	Paper	Pr_35_57_22 Decorative papers and roll coverings		23-15 13 15 13 Metal Interior Siding	09 72 23	
		Material	Plasterboard	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and aluminium	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and wood fibre	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and polyester fibre	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and mineral wool	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Exterior	Material	Plasterboard and lead	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Extruded plasterboard and expanded polystyrene	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Sintered plasterboard and expanded polystyrene	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and phenolic foam	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and polyurethane foam	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard, glass fibre and vermiculite	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Ceramic	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Wood fibre	Pr_25_71_97_92 Wood fibre boards		23-15 13 15 15 Mineral Fiber Cement Interior Siding	09 70 00 Wall Finishes	
		Material	Fibre cement	Pr_35_31_22_15 Concrete finishing coats		23-15 13 15 15 Mineral Fiber Cement Interior Siding	09 97 23	
		Material	Chalk	Pr_35_90_43_29 Fibrous plaster mouldings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Porcelain stoneware	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Brickwork	Pr_25_93_60_10 Clay paving tiles		23-15 13 15 13 Metal Interior Siding	09 97 23	
		Material	Wood	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13	
		Material	Extruded wood and expanded polystirene	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13	
		Material	Sintered wood and expanded polystyrene	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13	
		Material	Textile material	Pr_35_57_88 Textiles		23-15 13 15 13 Metal Interior Siding	09 72 19	
		Material	Natural straw	Pr_35_90_22_88 Timber grass edgings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Natural stone	Pr_35_93_96_86 Stone tiles		23-15 13 15 13 Metal Interior Siding	09 75 00	
		Material	Lead	Pr_35_90_30_47 Lead slates		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Polycarbonate	Pr_35_31_68 Protective coatings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Polyester	Pr_35_57_71_44 Jute or polyester felt-backed polyvinyl chloride (PVC) tiles		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	PVC	Pr_35_57_71_44 Jute or polyester felt-backed polyvinyl chloride (PVC) tiles		23-15 13 15 17 Plastic Interior Siding	09 70 00 Wall Finishes	
		Material	Copper	Pr_35_31_68_19 Copper plating		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Thermosetting resins	Pr_35_31_22_72 Resin-based breathable masonry paints		23-15 13 15 17 Plastic Interior Siding	09 70 00 Wall Finishes	
		Material	Cork	Pr_35_57_22_15 Cork roll coverings		23-15 13 15 19 Wood Interior Siding	09 72 13 Cork Wall Coverings	
		Material	Vinyl	Pr_35_57_22_95 Vinyl roll coverings		23-15 13 15 13 Metal Interior Siding	09 72 16 Vinyl-Coated Fabric Wall Coverings	
		Material	Zinc	Pr_35_31_68_99 Zinc plating		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Coating	Internal	Material	Steel	Pr_35_31_68 Protective coatings	C30 Interior Finishes B2010 Exterior Walls	23-15 13 15 11 Metal Interior Siding	09 78 13 Metal Interior Wall Paneling	
		Material	Porcelainized steel	Pr_35_31_68 Protective coatings		23-15 13 15 11 Metal Interior Siding	09 78 13 Metal Interior Wall Paneling	
		Material	Aluminium	Pr_35_31_68 Protective coatings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Bitumen	Pr_35_31_68_10 Black bitumen coatings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Paper	Pr_35_57_22 Decorative papers and roll coverings		23-15 13 15 13 Composition Interior Siding	09 72 23 Wallpapering	
		Material	Plasterboard	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and aluminium	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and wood fibre	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and polyester fibre	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and mineral wool	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and lead	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Extruded plasterboard and expanded polystyrene	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Sintered plasterboard and expanded polystyrene	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and phenolic foam	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and polyurethane foam	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard, glass fibre and vermiculite	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Ceramic	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Wood fibre	Pr_25_71_97_92 Wood fibre boards		23-15 13 15 15 Mineral Fiber Cement Interior Siding	09 70 00 Wall Finishes	
		Material	Fibre cement	Pr_35_31_22_15 Concrete finishing coats		23-15 13 15 15 Mineral Fiber Cement Interior Siding	09 97 23 Concrete and Masonry Coatings	
		Material	Chalk	Pr_35_90_43_29 Fibrous plaster mouldings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Porcelain stoneware	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 13 15 13 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Brickwork	Pr_25_93_60_10 Clay paving tiles		23-15 13 15 13 Metal Interior Siding	09 97 23 Concrete and Masonry Coatings	
		Material	Wood	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings	
		Material	Extruded wood and expanded polystirene	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings	
		Material	Sintered wood and expanded polystyrene	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings	
		Material	Textile material	Pr_35_57_88 Textiles		23-15 13 15 13 Composition Interior Siding	09 72 19 Textile Wall Coverings	
		Material	Natural straw	Pr_35_90_22_88 Timber grass edgings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Natural stone	Pr_35_93_96_86 Stone tiles		23-15 13 15 13 Composition Interior Siding	09 78 16 Stone-Faced Interior Wall Paneling	
		Material	Lead	Pr_35_90_30_47 Lead slates		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Polycarbonate	Pr_35_31_68 Protective coatings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Polyester	Pr_35_57_71_44 Jute or polyester felt-backed polyvinyl chloride (PVC) tiles		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	PVC	Pr_35_57_71_44 Jute or polyester felt-backed polyvinyl chloride (PVC) tiles		23-15 13 15 17 Plastic Interior Siding	09 70 00 Wall Finishes	
		Material	Copper	Pr_35_31_68_19 Copper plating		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Thermosetting resins	Pr_35_31_22_72 Resin-based breathable masonry paints		23-15 13 15 17 Plastic Interior Siding	09 70 00 Wall Finishes	
		Material	Cork	Pr_35_57_22_15 Cork roll coverings		23-15 13 15 19 Wood Interior Siding	09 72 13 Cork Wall Coverings	
		Material	Vinyl	Pr_35_57_22_95 Vinyl roll coverings		23-15 13 15 13 Composition Interior Siding	09 72 16 Vinyl-Coated Fabric Wall Coverings	
		Material	Zinc	Pr_35_31_68_99 Zinc plating		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
	Internal and external	Material	Steel	Pr_35_31_68 Protective coatings		23-15 13 15 11 Metal Interior Siding	09 97 13 Steel Coatings	
		Material	Porcelainized steel	Pr_35_31_68 Protective coatings		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Aluminium	Pr_35_31_68 Protective coatings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Bitumen	Pr_35_31_68_10 Black bitumen coatings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Paper	Pr_35_57_22 Decorative papers and roll coverings		23-15 13 15 13 Composition Interior Siding	09 72 23 Wallpapering	
		Material	Plasterboard	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and aluminium	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and wood fibre	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and polyester fibre	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and mineral wool	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and lead	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Extruded plasterboard and expanded polystyrene	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Sintered plasterboard and expanded polystyrene	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and phenolic foam	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard and polyurethane foam	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Plasterboard, glass fibre and vermiculite	Pr_35_31_64_35 Gypsum plasters		23-15 13 23 Interior Plasters	09 70 00 Wall Finishes	
		Material	Ceramic	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Wood fibre	Pr_25_71_97_92 Wood fibre boards		23-15 13 15 15 Mineral Fiber Cement Interior Siding	09 70 00 Wall Finishes	
		Material	Fibre cement	Pr_35_31_22_15 Concrete finishing coats		23-15 13 15 15 Mineral Fiber Cement Interior Siding	09 97 23 Concrete and Masonry Coatings	
		Material	Chalk	Pr_35_90_43_29 Fibrous plaster mouldings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Porcelain stoneware	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Brickwork	Pr_25_93_60_10 Clay paving tiles		23-15 13 15 13 Composition Interior Siding	09 97 23 Concrete and Masonry Coatings	
		Material	Wood	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings Flexible Wood Veneers	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Material	Extruded wood and expanded polystirene	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings Flexible Wood Veneers	
		Material	Sintered wood and expanded polystyrene	Pr_35_90_43_89 Wood cover strips		23-15 13 15 19 Wood Interior Siding	09 74 13 Wood Wall Coverings Flexible Wood Veneers	
		Material	Textile material	Pr_35_57_88 Textiles		23-15 13 15 13 Composition Interior Siding	09 72 19 Textile Wall Coverings	
		Material	Natural straw	Pr_35_90_22_88 Timber grass edgings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Natural stone	Pr_35_93_96_86 Stone tiles		23-15 13 15 13 Composition Interior Siding	09 75 00	
		Material	Lead	Pr_35_90_30_47 Lead slates		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Polycarbonate	Pr_35_31_68 Protective coatings		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	Polyester	Pr_35_57_71_44 Jute or polyester felt-backed polyvinyl chloride (PVC) tiles		23-15 13 15 13 Composition Interior Siding	09 70 00 Wall Finishes	
		Material	PVC	Pr_35_57_71_44 Jute or polyester felt-backed polyvinyl chloride (PVC) tiles		23-15 13 15 17 Plastic Interior Siding	09 70 00 Wall Finishes	
		Material	Copper	Pr_35_31_68_19 Copper plating		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	
		Material	Thermosetting resins	Pr_35_31_22_72 Resin-based breathable masonry paints		23-15 13 15 17 Plastic Interior Siding	09 70 00 Wall Finishes	
		Material	Cork	Pr_35_57_22_15 Cork roll coverings		23-15 13 15 19 Wood Interior Siding	09 72 13 Cork Wall Coverings	
		Material	Vinyl	Pr_35_57_22_95 Vinyl roll coverings		23-15 13 15 13 Composition Interior Siding	09 72 16 Vinyl-Coated Fabric Wall Coverings	
		Material	Zinc	Pr_35_31_68_99 Zinc plating		23-15 13 15 11 Metal Interior Siding	09 70 00 Wall Finishes	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Sealant	For glazing joints (type G)	Material	Based on lime and marble powder	Pr_30_31_76 Sealants	B2010 Exterior Walls B3010 Roof Coverings C3010 Wall Finishes C3030 Ceiling Finishes	23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Based on gypsium, rock flour and additives	Pr_30_31_76 Sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Based on vegetable oils and iron oxides	Pr_30_31_76_58 Oil-based mastic joint sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Based on vegetable oils and titanium oxides	Pr_30_31_76_58 Oil-based mastic joint sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Based on inert vegetablr, mineral and soil oils	Pr_30_31_76_58 Oil-based mastic joint sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Polyester-based	Pr_30_31_76 Sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Based on alkyd resins and mineral fillers	Pr_30_31_76 Sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Based on calcium and magnesium hydraulic silicates	Pr_30_31_76 Sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Acetic	Pr_30_31_76 Sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Acrylic	Pr_30_31_76_02 Acrylic construction joint sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Bituminous	Pr_30_31_76_14 Cold-applied bituminous joint sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Cement	Pr_30_31_76 Sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Elastomeric	Pr_30_31_76 Sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Polyurethane	Pr_30_31_76_65 Polyurethane (PUR) construction joint sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
		Material	Silicon	Pr_30_31_76_77 Silicone construction joint sealants		23-17 15 23 15 Glazing Sealants and Tapes	08 40 00 Entrances, Storefronts, and Curtain Walls	
	For joints in buildings other than glazing joints (type F)	Material	Based on lime and marble powder	Pr_30_31_76 Sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Based on gypsium, rock flour and additives	Pr_30_31_76 Sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Based on vegetable oils and iron oxides	Pr_30_31_76_58 Oil-based mastic joint sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Based on vegetable oils and titanium oxides	Pr_30_31_76_58 Oil-based mastic joint sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Based on inert vegetablr, mineral and soil oils	Pr_30_31_76_58 Oil-based mastic joint sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Polyester-based	Pr_30_31_76 Sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Based on alkyd resins and mineral fillers	Pr_30_31_76 Sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Based on calcium and magnesium hydraulic silicates	Pr_30_31_76 Sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Acetic	Pr_30_31_76 Sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Acrylic	Pr_30_31_76_02 Acrylic construction joint sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Bituminous	Pr_30_31_76_14 Cold-applied bituminous joint sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Cement	Pr_30_31_76 Sealants		23-13 23 19 15 Construction Sealants	07 92 00 Joint Sealants	
		Material	Elastomeric	Pr_30_31_76 Sealants		23-13 23 19 15 11 Elastomeric Construction Sealants	07 92 00 Joint Sealants	
		Material	Polyurethane	Pr_30_31_76_65 Polyurethane (PUR) construction joint sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	
		Material	Silicon	Pr_30_31_76_77 Silicone construction joint sealants		23-13 23 19 Joint Fillers, Sealants, and Mastics	07 92 00 Joint Sealants	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Solar-controlled	Composition	Basic alkaline matrix glass products	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Silvered float glass mirrors for indoor use	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Insulating glazing	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Borosilicated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Coated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Ceramic glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Thermally toughened borosilicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Thermally toughened alkaline matrix safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Heat soaked thermally toughened soda lime silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	soda-calcium silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Thermally toughened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Chemically hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Thermally hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Laminated glass and laminated safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
	Self-cleaning	Composition	Basic alkaline matrix glass products	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Silvered float glass mirrors for indoor use	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Insulating glazing	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Borosilicated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Coated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Ceramic glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Thermally toughened borosilicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Thermally toughened alkaline matrix safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Heat soaked thermally toughened soda lime silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	soda-calcium silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Thermally toughened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Chemically hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Thermally hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	
		Composition	Laminated glass and laminated safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 80 00 Glazing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Glass	Security	Composition	Basic alkaline matrix glass products	Pr_25_71_33 Glass and glazing sheets and profiles	B2020 Exterior Windows	23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Silvered float glass mirrors for indoor use	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Insulating glazing	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Borosilicated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Coated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Ceramic glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Thermally toughened borosilicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Thermally toughened alkaline matrix safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Heat soaked thermally toughened soda lime silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	soda-calcium silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Thermally toughened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Chemically hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Thermally hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
		Composition	Laminated glass and laminated safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 15 Security Glass	08 88 53 Security Glazing	
	For decoration	Composition	Basic alkaline matrix glass products	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Silvered float glass mirrors for indoor use	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Insulating glazing	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Borosilicated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Coated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Ceramic glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Thermally toughened borosilicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Thermally toughened alkaline matrix safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Heat soaked thermally toughened soda lime silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	soda-calcium silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Thermally toughened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Chemically hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Thermally hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Laminated glass and laminated safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 81 13 Decorative Glass Glazing	
		Composition	Basic alkaline matrix glass products	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Silvered float glass mirrors for indoor use	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	For acoustic insultation	Composition	Insulating glazing	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Borosilicated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Coated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Ceramic glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Thermally toughened borosilicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Thermally toughened alkaline matrix safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Heat soaked thermally toughened soda lime silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	soda-calcium silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Thermally toughened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Chemically hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Thermally hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Laminated glass and laminated safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
	For thermal insulation	Composition	Basic alkaline matrix glass products	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Silvered float glass mirrors for indoor use	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Insulating glazing	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Borosilicated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Coated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Ceramic glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Thermally toughened borosilicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Thermally toughened alkaline matrix safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Heat soaked thermally toughened soda lime silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	soda-calcium silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Thermally toughened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Chemically hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Thermally hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Laminated glass and laminated safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 00 Special Function Glazing	
		Composition	Basic alkaline matrix glass products	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Silvered float glass mirrors for indoor use	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Insulating glazing	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Borosilicated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	For fire protection	Composition	Coated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Ceramic glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Thermally toughened borosilicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Thermally toughened alkaline matrix safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Heat soaked thermally toughened soda lime silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	soda-calcium silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Thermally toughened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Chemically hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Thermally hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
		Composition	Laminated glass and laminated safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 00 Glazing	08 88 13 Fire-Resistant Glazing	
	Special	Composition	Basic alkaline matrix glass products	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Silvered float glass mirrors for indoor use	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Insulating glazing	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Borosilicated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Coated glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Ceramic glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Thermally toughened borosilicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Thermally toughened alkaline matrix safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Heat soaked thermally toughened soda lime silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	soda-calcium silicate safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Thermally toughened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Chemically hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Thermally hardened soda lime silicate glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	
		Composition	Laminated glass and laminated safety glass	Pr_25_71_33 Glass and glazing sheets and profiles		23-17 15 19 Glazing by Special Function	08 88 00 Special Function Glazing	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Skirting	For outdoor use	Material	Aluminium	Pr_35_90_43_02 Aluminium skirtings	C3010 Wall Finishes B2010 Exterior Walls	23-15 15 23 Wall Linings	07 62 00 Sheet Metal Flashing and Trim	
		Material	Ceramic	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Ceramic clinker	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Grit	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Porcelain stoneware	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Agglomerated stone	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Natural stone	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 75 19 Stone Trim	
		Material	Brickwork	Pr_35_93_96_67 Quarry tile cove skirtings		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Wood	Pr_35_93_96_98 Wood skirtings		23-15 15 23 Wall Linings	06 46 00 Wood Trim	
		Material	PVC	Pr_35_90_43_64 Polyvinyl chloride (PVC) cove skirtings		23-15 15 23 Wall Linings	06 65 00 Plastic Trim	
	For indoor use	Material	Aluminium	Pr_35_90_43_02 Aluminium skirtings		23-15 15 23 Wall Linings	07 62 00 Sheet Metal Flashing and Trim	
		Material	Ceramic	Pr_35_93_96_14 Ceramic tile cove skirtings		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Ceramic clinker	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Grit	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Porcelain stoneware	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Agglomerated stone	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Brickwork	Pr_35_93 Unit covering and finish products		23-15 15 23 Wall Linings	09 75 19 Stone Trim	
		Material	Wood	Pr_35_90_43_67 Quarry tile cove skirtings		23-15 15 23 Wall Linings	09 70 00 Wall Finishes	
		Material	Natural stone	Pr_35_93_96_98 Wood skirtings		23-15 15 23 Wall Linings	06 46 00 Wood Trim	
		Material	PVC	Pr_35_90_43_64 Polyvinyl chloride (PVC) cove skirtings		23-15 15 23 Wall Linings	06 65 00 Plastic Trim	

Appendix B: Plant products matching table

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Accumulation	Phase change accumulation			Pr_60_50_20_02 Accumulators	D2020 Domestic Water Distribution	23-33 11 00 Commercial Boilers	33 16 00 Water Utility Storage Tanks	EV004795 Hot water tank
	Hot water storage			Pr_60_50_20_02 Accumulators		23-33 11 00 Commercial Boilers	33 16 00 Water Utility Storage Tanks	EV004795 Hot water tank
	Refrigerated water storage			Pr_60_50_20_02 Accumulators		23-33 11 00 Commercial Boilers	33 16 00 Water Utility Storage Tanks	EV004795 Hot water tank
Softener	Automatic for residential use			Pr_60_55_97_44 Ion exchange softening units	D2010 Plumbing Fixtures	23-27 55 11 Liquid Filters	22 31 13 Residential Domestic Water Softeners	
	Automatic for civil and industrial use			Pr_60_55_97_44 Ion exchange softening units		23-27 55 11 Liquid Filters	22 31 16 Commercial Domestic Water Softeners	
Aspirator	Axial centrifugal duct aspirator			Pr_60_55_33_94 Vacuum plant	D5090 Other Electrical Systems	23-19 25 13 13 Vacuum System s	22 62 00 Vacuum Systems for Laboratory and Healthcare Facilities	EV001750 Hard floor cleaner
	Centrifugal aspirator for expulsion			Pr_60_55_33_94 Vacuum plant		23-19 25 13 13 Vacuum System s	22 62 00 Vacuum Systems for Laboratory and Healthcare Facilities	EV001750 Hard floor cleaner
	Helical industrial vacuum cleaner			Pr_60_55_33_94 Vacuum plant		23-19 25 13 13 Vacuum System s	22 62 00 Vacuum Systems for Laboratory and Healthcare Facilities	EV001750 Hard floor cleaner
Autoclave	Autoclave for water lifting			Pr_40_70_51_04 Autoclaves	D2020 Domestic Water Distribution	23-33 11 00 Commercial Boilers	33 16 00 Water Utility Storage Tanks	
	Autoclave for lifting liquids			Pr_40_70_51_04 Autoclaves		23-33 11 00 Commercial Boilers	33 16 00 Water Utility Storage Tanks	
Channel	Spyral channel			Pr_65_52_38 Hoses, hose reels and ancillaries	D2010 Plumbing Fixtures	23-27 39 00 Piping	22 00 00 Plumbing	EV003691 Pipe
	Channel			Pr_65_52_38 Hoses, hose reels and ancillaries		23-27 39 00 Piping	22 00 00 Plumbing	EV003691 Pipe
	Special piece			Pr_65_52_38 Hoses, hose reels and ancillaries		23-27 39 00 Piping	22 00 00 Plumbing	EV003691 Pipe
	connection			Pr_65_52_38 Hoses, hose reels and ancillaries		23-27 39 00 Piping	22 00 00 Plumbing	EV000414 Plug-in connection
Electric cable	Energy cable			Pr_65_70_11 Cable management and accessories	D5020 Lighting and Branch Wiring	23-35 33 21 Electrical Bus Ducts	26 40 00 Electrical Protection	EV010401 Power cord
	Signaling cable			Pr_65_70_11 Cable management and accessories		23-35 33 21 Electrical Bus Ducts	26 40 00 Electrical Protection	EV010401 Power cord

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Cogenerator	Eight-cycle endothermic engine			Pr_60_70_65 Power generators, engines and packaged combined heat and power (CHP) units	D3020 Heat Generating Systems	23-35 11 00 Electrical Generators	26 32 00 Packaged Generator Assemblies	EC002823 Power generator
	Diesel cycle endothermic engine			Pr_60_70_65 Power generators, engines and packaged combined heat and power (CHP) units		23-35 11 00 Electrical Generators	26 32 00 Packaged Generator Assemblies	EC002823 Power generator
	Gas turbine with recovery			Pr_60_70_65 Power generators, engines and packaged combined heat and power (CHP) units		23-35 11 00 Electrical Generators	26 32 00 Packaged Generator Assemblies	EC002823 Power generator
	Stirling cycle engine			Pr_60_70_65 Power generators, engines and packaged combined heat and power (CHP) units		23-35 11 00 Electrical Generators	26 32 00 Packaged Generator Assemblies	EC002823 Power generator
	ORC turbine			Pr_60_70_65 Power generators, engines and packaged combined heat and power (CHP) units		23-35 11 00 Electrical Generators	26 32 00 Packaged Generator Assemblies	EC002823 Power generator
	Steam turbine			Pr_60_70_65 Power generators, engines and packaged combined heat and power (CHP) units		23-35 11 00 Electrical Generators	26 32 00 Packaged Generator Assemblies	EC002823 Power generator
	Fuel cells			Pr_60_70_65 Power generators, engines and packaged combined heat and power (CHP) units		23-35 11 00 Electrical Generators	26 32 00 Packaged Generator Assemblies	EC002823 Power generator
Fireplaces	Terracotta/ceramic terminal			Pr_70_65_30 Flues and chimneys	B3020 Roof Openings	23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Concrete blocks			Pr_70_65_30_16 Concrete chimney pots		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Clay/ceramic blocks for single-wall fireplaces			Pr_70_65_30_14 Clay chimney pots		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Metal fireplaces			Pr_70_65_30_51 Metal flues and chimneys		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Strructurally independent chymneys			Pr_70_65_30 Flues and chimneys		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Concrete flue pipes			Pr_70_65_30_16 Concrete chimney pots		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Internal terracotta/ceramic pipes			Pr_70_65_30 Flues and chimneys		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	External conctrete elements			Pr_70_65_30_16 Concrete chimney pots		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Requirements and test methods for metal chimneys and air supply ducts of all materials for leakproof heating appliance			Pr_70_65_30_51 Metal flues and chimneys		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	External terracotta/ceramic coatings for fireplace systems			Pr_70_65_30 Flues and chimneys		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Chimney systems with internal terracotta/ceramic ducts			Pr_70_65_30 Flues and chimneys		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place
	Chimney systems with internal plastic ducts			Pr_70_65_30 Flues and chimneys		23-19 17 00 Fireplaces	10 32 00 Fireplace Specialties	EC000811 Electric fire place

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Anti-flooding devices for buildings	Anti-flooding devices for buildings			Pr_65_54_24_04 Anti-flood valves	D2090 Other Plumbing Systems	23-27 17 13 Centrifugal Pumps	10 71 19 Flood Barriers	EC010733 Submersible wastewater pump
Electric pump	Single-impeller centrifugal electric pump for medium flow rates			Pr_65_53_24 Drainage pumps	D2020 Domestic Water Distribution	23-27 17 13 Centrifugal Pumps	33 11 00 Groundwater Sources	EC010733 Submersible wastewater pump
	Single-impeller standardized monobloc centrifugalelectric pump for large flow rates			Pr_65_53_24 Drainage pumps		23-27 17 13 Centrifugal Pumps	33 11 00 Groundwater Sources	EC010733 Submersible wastewater pump
	Standard centrifugal electric pump with two opposing impellers			Pr_65_53_24 Drainage pumps		23-27 17 13 Centrifugal Pumps	33 11 00 Groundwater Sources	EC010733 Submersible wastewater pump
	Self-priming centrifugal pump			Pr_65_53_24 Drainage pumps		23-27 17 13 Centrifugal Pumps	33 11 00 Groundwater Sources	EC010733 Submersible wastewater pump
	Submersible centrifugal electric pump for wells			Pr_65_53_24 Drainage pumps		23-27 17 13 Centrifugal Pumps	33 11 00 Groundwater Sources	EC010733 Submersible wastewater pump
Water filter	Anti-sediment filter			Pr_65_57_96 Water filters and strainers	D2010 Plumbing Fixtures	23-27 55 11 Liquid Filters	22 32 00 Domestic Water Filtration Equipment	EV001859 Water filter
	Anti-sand filter			Pr_65_57_85_75 Sand water filters		23-27 55 11 Liquid Filters	22 32 00 Domestic Water Filtration Equipment	EV001859 Water filter
Air filter	Primary air filter in air treatment system			Pr_65_57_02 Air filters	D3060 Controls & Instrumentation	23-27 57 27 Air Filters	43 15 00 Process Air and Gas Filters	EV023629 Air filter
	Filter for dry dust			Pr_65_57_02 Air filters		23-27 57 27 Air Filters	43 15 00 Process Air and Gas Filters	EV023629 Air filter
Fuel filter	Grease filter			Pr_65_57_33 Gas and air filters	D3060 Controls & Instrumentation	23-27 55 11 Liquid Filters	22 32 00 Domestic Water Filtration Equipment	EV002047 Grease/odour filter
	Dry grease filter			Pr_65_57_33 Gas and air filters		23-27 55 11 Liquid Filters	22 32 00 Domestic Water Filtration Equipment	EV002047 Grease/odour filter
Switch/connector ranges for installations	Switch/pushbutton for venetian blind			Pr_60_75_08_55 Multiswitches	D5020 Lighting and Branch Wiring	23-35 37 00 Electrical Switches	26 23 00 Low-Voltage Switchgear	EV000416 Earth leakage switch
	Button			Pr_60_75_08_55 Multiswitches		23-35 37 00 Electrical Switches	26 23 00 Low-Voltage Switchgear	EV020247 Button
	Flush-mounted switch and pushbutton			Pr_60_75_08_55 Multiswitches		23-35 37 00 Electrical Switches	26 23 00 Low-Voltage Switchgear	EV006509 1-pole switch and push switch
	Switch/pushbutton for venetian blind			Pr_60_75_08_55 Multiswitches		23-35 37 00 Electrical Switches	26 23 00 Low-Voltage Switchgear	EV006509 1-pole switch and push switch
	Power socket			Pr_60_75_08_55 Multiswitches		23-35 37 00 Electrical Switches	26 23 00 Low-Voltage Switchgear	EV000381 Socket outlet
Wind generator	Vertical axis turbine				D5010 Electrical Service & Distribution	23-35 11 15 23 Wind Generator Sets	26 32 19 Hydro-Turbine Generators	
	Horizontal axis turbine					23-35 11 15 23 Wind Generator Sets	26 32 19 Hydro-Turbine Generators	
Generator	height cycle endothermic engine			Pr_60_70_65_34 Generator sets	D5010 Electrical Service & Distribution	23-35 11 00 Electrical Generators	26 11 00 Substations	EC002823 Power generator
	Diesel cycle endothermic engine			Pr_60_70_65_34 Generator sets		23-35 11 00 Electrical Generators	26 11 00 Substations	EC002823 Power generator
	Gas turbine			Pr_60_70_65_34 Generator sets		23-35 11 00 Electrical Generators	26 11 00 Substations	EC002823 Power generator
	Fuel cells			Pr_60_70_65_34 Generator sets		23-35 11 00 Electrical Generators	26 11 00 Substations	EC002823 Power generator

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Outdoor lighting	Outdoor spotlights			Pr_70_70_46 Lamps	D5020 Lighting and Branch Wiring	23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Suspension lamps for outdoor			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Immersion lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Outdoor wall lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Outdoor ceiling lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Outdoor floor lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Outdoor lampposts			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV010988 Living room luminaire
	Garden lampposts			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV010988 Living room luminaire
	Bollard lights			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV010988 Living room luminaire
	Outdoor steplight			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
Indoor lighting	Spotlights			Pr_70_70_46 Lamps	D5020 Lighting and Branch Wiring	23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Track lighting			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Emergency lighting			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Suspension lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Wall lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Ceiling lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Table lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Floor lamps			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Linear lighting profiles			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
	Steplight			Pr_70_70_46 Lamps		23-35 27 00 Electrical Terminals	26 50 00 Lighting	EV006889 Living room luminaire
Fire-fighting systems and components	Hydrants, hoses and manikes		Column hydrants	Pr_70_55_97_01 Above-ground fire hydrants	D4010 Sprinklers	23-29 25 13 Fire Hydrants	21 12 13 Fire-Suppression Hoses and Nozzles	
			Idranti a muro	Pr_70_55_97_01 Above-ground fire hydrants		23-29 25 13 Fire Hydrants	21 12 13 Fire-Suppression Hoses and Nozzles	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Fire extinguishing system with gaseous extinguishers	Fire extinguishing system with gaseous extinguishers		Pneumatic warning devices	Pr_65_54_30_63 Pneumatic alarm devices	D4090 Other Fire Protection Systems	23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Mechanical weighing devices	Pr_65_72_59_06 Balance weight anchor tensioning devices		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Automatic electrical devices for switching off and delay control and management	Pr_75_50_33_25 Electrical actuation devices		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Manual actuation and locking devices	Pr_75_50_33_56 Non-electrical gas fire extinguishing disable devices		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Automatic non-electric devices for switching off and delay control and management	Pr_75_50_33_56 Non-electrical gas fire extinguishing disable devices		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Non-electrical devices for taking out of service	Pr_75_50_33_56 Non-electrical gas fire extinguishing disable devices		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Manometers and pressure switches	Pr_65_52_34_50 Manometers		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Fittings	Pr_65_65_25_30 Fire-resisting ductwork and fittings		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Special fire detectors	Pr_75_75_30_82 Smoke and heat multi-sensor detectors		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Nozzles for CO2 systems	Pr_70_55_33 Gas and foam nozzles and sprinklers		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Exhaust valve	Pr_65_54_30_85 Sprinkler system alarm valves		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Check valves and non-return valves	Pr_65_54_30_85 Sprinkler system alarm valves		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
			Directional valves	Pr_65_54_30_85 Sprinkler system alarm valves		23-29 25 00 Fire Fighting Equipment	21 20 00 Fire-Extinguishing Systems	
Vacuum cleaner system	Vacuum cleaner system for industrial use			Pr_60_55_33_94 Vacuum plant	D5090 Other Electrical Systems		22 62 00 Vacuum Systems for Laboratory and Healthcare Facilities	EC002703 Vacuum cleaner for central hovering installation
	Vacuum cleaner system for civil uses			Pr_60_55_33_94 Vacuum plant			22 62 00 Vacuum Systems for Laboratory and Healthcare Facilities	EC002703 Vacuum cleaner for central hovering installation
Smoke and heat extraction system	Power equipment			Pr_25_80 Smoke and fire control products	D40 Fire Protection	23-29 27 00 Fire Ventilation Equipment	28 46 00 Fire Detection and Alarm	
	Smoke barriers			Pr_25_80_79 Smoke and fire barriers		23-29 27 00 Fire Ventilation Equipment	28 46 00 Fire Detection and Alarm	
	Smoke control pipes			Pr_25_80 Smoke and fire control products		23-29 27 00 Fire Ventilation Equipment	28 46 00 Fire Detection and Alarm	EV001031 Suction gas pipe
	Forced smoke and heat evacuators			Pr_65_67_29_64 Powered smoke and heat exhaust ventilators		23-29 27 00 Fire Ventilation Equipment	28 46 00 Fire Detection and Alarm	
	Natural smoke and heat evacuators			Pr_70_65_04_56 Natural smoke and heat exhaust ventilators		23-29 27 00 Fire Ventilation Equipment	28 46 00 Fire Detection and Alarm	
	Smoke control dampers			Pr_25_80 Smoke and fire control products		23-29 27 00 Fire Ventilation Equipment	28 46 00 Fire Detection and Alarm	
	Differential pressure systems			Pr_25_80 Smoke and fire control products		23-29 27 00 Fire Ventilation Equipment	28 46 00 Fire Detection and Alarm	EV021687 Pressure difference
Medicinal gas plant	Medical gas and vacuum systems			Pr_75_50_51 Medical gases controls	D3020 Heat Generating Systems		22 63 00 Gas Systems for Laboratory and Healthcare Facilities	
Technical gas system	Technical gas system				D3020 Heat Generating Systems		22 63 00 Gas Systems for Laboratory and Healthcare Facilities	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Sheath		Factory made flexible elastomeric foam (FEF)	Pr_65_70_48_31 Flexible cables with cross-linked elastomeric insulation	D3040 Distribution	23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Mineral wool (MW) obtained at the factory	Pr_80_77_76_54 Mineral wool pipe section insulation		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded perlite (EP) made on site	Pr_25_71_52_22 Expanded perlite boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made polyethylene foam (PEF)	Pr_65_52_63_23 Cross-linked polyethylene (PE-X) pipes and fittings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made expanded polyisocyanurate (PIR)	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid expanded polyisocyanurate (PIR) formed on site by injection	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyisocyanurate foam (PIR) sprayed and formed on site	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made expanded polystyrene (EPS)	Pr_15_57_25_36 Heavy-duty polystyrene geocell sheets		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made extruded expanded polystyrene (XPS)	Pr_15_57_25_36 Heavy-duty polystyrene geocell sheets		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyurethane foam (PUR) and rigid polyisocyanurate foam (PIR) sprayed and formed on site	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyurethane foam (PUR) formed on site by injection	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made rigid polyurethane foam (PUR)	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded phenolic resins (PF) obtained in the factory	Pr_25_71_63_59 Phenolic foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made calcium silicate (CS)	Pr_25_71_52_24 Fibre-reinforced calcium silicate fire protection boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded vermiculite (EV) made on site	Pr_25_71_52_95 Vermiculite-silicate fire protection boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Cellular glass (CG) obtained at the factory	Pr_25_71_52_13 Cellular glass insulation boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
	Insulating tube		Factory made flexible elastomeric foam (FEF)	Pr_65_70_48_31 Flexible cables with cross-linked elastomeric insulation	D3040 Distribution	23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Mineral wool (MW) obtained at the factory	Pr_80_77_76_54 Mineral wool pipe section insulation		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded perlite (EP) made on site	Pr_25_71_52_22 Expanded perlite boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made polyethylene foam (PEF)	Pr_65_52_63_23 Cross-linked polyethylene (PE-X) pipes and fittings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made expanded polyisocyanurate (PIR)	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid expanded polyisocyanurate (PIR) formed on site by injection	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyisocyanurate foam (PIR) sprayed and formed on site	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made expanded polystyrene (EPS)	Pr_15_57_25_36 Heavy-duty polystyrene geocell sheets		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Pipe and duct insulation			Factory made extruded expanded polystyrene (XPS)	Pr_15_57_25_36 Heavy-duty polystyrene geocell sheets		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyurethane foam (PUR) and rigid polyisocyanurate foam (PIR) sprayed and formed on site	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyurethane foam (PUR) formed on site by injection	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made rigid polyurethane foam (PUR)	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded phenolic resins (PF) obtained in the factory	Pr_25_71_63_59 Phenolic foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made calcium silicate (CS)	Pr_25_71_52_24 Fibre-reinforced calcium silicate fire protection boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded vermiculite (EV) made on site	Pr_25_71_52_95 Vermiculite-silicate fire protection boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Cellular glass (CG) obtained at the factory	Pr_25_71_52_13 Cellular glass insulation boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
	Coating tube		Factory made flexible elastomeric foam (FEF)	Pr_65_70_48_31 Flexible cables with cross-linked elastomeric insulation	D3040 Distribution	23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Mineral wool (MW) obtained at the factory	Pr_80_77_76_54 Mineral wool pipe section insulation		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded perlite (EP) made on site	Pr_25_71_52_22 Expanded perlite boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made polyethylene foam (PEF)	Pr_65_52_63_23 Cross-linked polyethylene (PE-X) pipes and fittings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made expanded polyisocyanurate (PIR)	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid expanded polyisocyanurate (PIR) formed on site by injection	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyisocyanurate foam (PIR) sprayed and formed on site	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made expanded polystyrene (EPS)	Pr_15_57_25_36 Heavy-duty polystyrene geocell sheets		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made extruded expanded polystyrene (XPS)	Pr_15_57_25_36 Heavy-duty polystyrene geocell sheets		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyurethane foam (PUR) and rigid polyisocyanurate foam (PIR) sprayed and formed on site	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyurethane foam (PUR) formed on site by injection	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made rigid polyurethane foam (PUR)	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded phenolic resins (PF) obtained in the factory	Pr_25_71_63_59 Phenolic foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made calcium silicate (CS)	Pr_25_71_52_24 Fibre-reinforced calcium silicate fire protection boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded vermiculite (EV) made on site	Pr_25_71_52_95 Vermiculite-silicate fire protection boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Cellular glass (CG) obtained at the factory	Pr_25_71_52_13 Cellular glass insulation boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Coating panel		Factory made flexible elastomeric foam (FEF)	Pr_65_70_48_31 Flexible cables with cross-linked elastomeric insulation	D3040 Distribution	23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Mineral wool (MW) obtained at the factory	Pr_80_77_76_54 Mineral wool pipe section insulation		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded perlite (EP) made on site	Pr_25_71_52_22 Expanded perlite boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made polyethylene foam (PEF)	Pr_65_52_63_23 Cross-linked polyethylene (PE-X) pipes and fittings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made expanded polyisocyanurate (PIR)	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid expanded polyisocyanurate (PIR) formed on site by injection	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyisocyanurate foam (PIR) sprayed and formed on site	Pr_25_71_63_66 Polyisocyanurate (PIR) foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made expanded polystyrene (EPS)	Pr_15_57_25_36 Heavy-duty polystyrene geocell sheets		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made extruded expanded polystyrene (XPS)	Pr_15_57_25_36 Heavy-duty polystyrene geocell sheets		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyurethane foam (PUR) and rigid polyisocyanurate foam (PIR) sprayed and formed on site	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Rigid polyurethane foam (PUR) formed on site by injection	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made rigid polyurethane foam (PUR)	Pr_35_31_68_64 Polyurethane (PUR) waterproof coatings		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded phenolic resins (PF) obtained in the factory	Pr_25_71_63_59 Phenolic foam boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Factory made calcium silicate (CS)	Pr_25_71_52_24 Fibre-reinforced calcium silicate fire protection boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Expanded vermiculite (EV) made on site	Pr_25_71_52_95 Vermiculite-silicate fire protection boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
			Cellular glass (CG) obtained at the factory	Pr_25_71_52_13 Cellular glass insulation boards		23-33 49 17 Duct Insulation	40 40 00 Process Piping and Equipment Protection	EC010258 Pipe insulation
Refrigeration machine	Air/air compression refrigeration machine			Pr_70_65_03 Air conditioning units	D3030 Cooling Generating Systems	23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Air/water compression refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Brine/air compression refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Brine/water compression refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Water/air compression refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Water/water compression refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Air/air absorption refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Air/water absorption refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Brine/air absorption refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Brine/water absorption refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Water/air absorption refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
	Water/water absorption refrigeration machine			Pr_70_65_03 Air conditioning units		23-33 37 00 Refrigerant Condensing Units	23 60 00 Central Cooling Equipment	
Manometer	Circular capillary pressure gauge			Pr_70_65_03 Air conditioning units	D50 Electrical	23-27 11 13 15 Pressure Controllers	23 09 23.23 Pressure Instruments	EV022428 Pressure gauge
	Manometer with dial			Pr_70_65_03 Air conditioning units		23-27 11 13 15 Pressure Controllers	23 09 23.23 Pressure Instruments	EV022428 Pressure gauge
Meter and counter	Gas meters			Pr_80_51_51_33 Gas meters	D50 Electrical	23-27 11 27 Gas Instrument And Controls	40 71 00 Flow Measurement	EV011960 Gas meter
	Water meters			Pr_80_51_51_97 Water meters		23-27 11 15 Flow Measuring Instrument And Controls	40 71 00 Flow Measurement	EV004579 Counter
	Heat meters			Pr_80_51_51_37 Heat meters		23-27 11 19 Heat Measuring Instrument And Controls	40 71 00 Flow Measurement	EV004579 Counter
Photovoltaic module	Mono crystalline silicon			Pr_60_70_65_63 Photovoltaic modules	D3010 Energy Supply	23-35 11 17 11 Photoelectric Cell	26 31 00 Photovoltaic Collectors	EC001746 Photovoltaics module
	Poly crystalline silicon			Pr_60_70_65_63 Photovoltaic modules		23-35 11 17 11 Photoelectric Cell	26 31 00 Photovoltaic Collectors	EC001746 Photovoltaics module
	Thin film of amorphous silicon			Pr_60_70_65_63 Photovoltaic modules		23-35 11 17 11 Photoelectric Cell	26 31 00 Photovoltaic Collectors	EC001746 Photovoltaics module
	More layers of thin film			Pr_60_70_65_63 Photovoltaic modules		23-35 11 17 11 Photoelectric Cell	26 31 00 Photovoltaic Collectors	EC001746 Photovoltaics module
	Indium-copper-gallium diselenide thin film (gics)			Pr_60_70_65_63 Photovoltaic modules		23-35 11 17 11 Photoelectric Cell	26 31 00 Photovoltaic Collectors	EC001746 Photovoltaics module
	Cadmium telluride thin film (cdte)			Pr_60_70_65_63 Photovoltaic modules		23-35 11 17 11 Photoelectric Cell	26 31 00 Photovoltaic Collectors	EC001746 Photovoltaics module
Motor pump	Centrifugal motor pump for medium flow rates			Pr_65_53_96 Water supply and wastewater pumps	D3040 Distribution	23-27 17 13 Centrifugal Pumps	22 11 00 Facility Water Distribution	EC010980 Built-in circulation pump
	Centrifugal motor pump for large flow rates			Pr_65_53_96 Water supply and wastewater pumps		23-27 17 13 Centrifugal Pumps	22 11 00 Facility Water Distribution	EC010980 Built-in circulation pump
Solar thermal panel	Glazed flat collectors			Pr_60_60_81 Solar heat collectors	D3020 Heat Generating Systems	23-35 11 17 15 Photovoltaic Collectors	26 31 00 Photovoltaic Collectors	EV004855 Flat collector
	Non-glazed collectors			Pr_60_60_81 Solar heat collectors		23-35 11 17 15 Photovoltaic Collectors	26 31 00 Photovoltaic Collectors	EV004855 Flat collector
	Vacuum tube collectors with flat absorber			Pr_60_60_81 Solar heat collectors		23-35 11 17 15 Photovoltaic Collectors	26 31 00 Photovoltaic Collectors	EV004854 Tube collector
	Vacuum tube collectors with circular absorber			Pr_60_60_81 Solar heat collectors		23-35 11 17 15 Photovoltaic Collectors	26 31 00 Photovoltaic Collectors	EV004854 Tube collector
	Air/air compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Air/water compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Brine/air compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Brine/water compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Water/air compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Water/water compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Air/air absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Air/water absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Brine/air absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Heat pumps	Brine/water absorption		With electric compressor	Pr_70_60_37 Heat pumps	D3020 Heat Generating Systems	23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Water/air absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Water/water absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Air/air compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Air/water compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Brine/air compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Brine/water compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Water/air compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Water/water compression		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Air/air absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Air/water absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Brine/air absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Brine/water absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Water/air absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
	Reversible with Water/water absorption		With electric compressor	Pr_70_60_37 Heat pumps		23-27 25 00 Heaters for Supplied Liquids	23 22 00 Steam and Condensate Piping and Pumps	EV001183 Heat pump
Temperature controller and chronothermostat	Analog temperature controller				D50 Electrical	23-27 11 19 13 Heating Controllers	23 09 33 Electric and Electronic Control System for HVAC	EV001235 Temperature controller
	Industrial analogue temperature controller					23-27 11 19 13 Heating Controllers	23 09 33 Electric and Electronic Control System for HVAC	EV001235 Temperature controller
	Digital temperature controller					23-27 11 19 13 Heating Controllers	23 09 33 Electric and Electronic Control System for HVAC	EV001235 Temperature controller
	Industrial digital temperature controller					23-27 11 19 13 Heating Controllers	23 09 33 Electric and Electronic Control System for HVAC	EV001235 Temperature controller
	Analog room chronothermostat					23-27 11 19 13 Heating Controllers	23 09 33 Electric and Electronic Control System for HVAC	EV000615 Thermostat
	Digital room chronothermostat					23-27 11 19 13 Heating Controllers	23 09 33 Electric and Electronic Control System for HVAC	EV000615 Thermostat
Fire detection	Fire detection			Pr_75_75_30_82 Smoke and heat multi-sensor detectors	D40 Fire Protection	23-27 11 27 11 Gas Alarm Modules	21 20 00 Fire-Extinguishing Systems	EC011139 Testgas fire alarm installation

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Sanitary	Freestanding toilet and toilet combined with cistern (with integrated trap)			Pr_40_20_93 Urinal and WC fittings	D2010 Plumbing Fixtures	23-31 19 00 Toilets	22 41 00 Residential Plumbing Fixtures	EC011289 Toilet closet
	Sink			Pr_40_20_96_81 Sinks		23-31 13 00 Sinks	22 41 00 Residential Plumbing Fixtures	EV001061 Sink
	Washbasin			Pr_40_20_96 Washbasins, sinks and troughs		23-31 11 00 Faucets	22 41 00 Residential Plumbing Fixtures	EC011328 Washbasin mixing tap
	Cistern for toilet bowls and urinals			Pr_65_52_63_21 Copper waste water pipes and fittings		23-31 27 00 Floor Drains	22 41 00 Residential Plumbing Fixtures	EV011232 Water drain hose
	Bidet			Pr_40_20_06_11 Bidets		23-31 23 00 Bidets	22 41 00 Residential Plumbing Fixtures	EV004796 Bidet
	Bathtub			Pr_40_20_96_15 Ceramic sinks		23-31 15 00 Bathtubs	22 41 00 Residential Plumbing Fixtures	EV001130 Bathtub/shower
	Shower tray			Pr_40_20_06_84 Shower trays		23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001130 Bathtub/shower
Heat exchanger	Liquid/liquid heat exchanger			Pr_60_60_38 Calorifiers and plate heat exchangers	D3020 Heat Generating Systems	23-27 23 00 Heat Exchangers	22 41 00 Residential Plumbing Fixtures	EV004866 Heat exchanger
	Liquid/gas heat exchanger			Pr_60_60_38 Calorifiers and plate heat exchangers		23-27 23 00 Heat Exchangers	22 41 00 Residential Plumbing Fixtures	EV004866 Heat exchanger
Electical box	Built-in			Pr_65_72_97_27 Electrical connection boxes	D5020 Lighting and Branch Wiring	23-35 33 15 Electrical Junction Boxes	26 40 00 Electrical Protection	EV001005 Built-in installation box
	Semi-built-in			Pr_65_72_97_27 Electrical connection boxes		23-35 33 15 Electrical Junction Boxes	26 40 00 Electrical Protection	EV006015 Housing/housing
	Panel			Pr_65_72_97_27 Electrical connection boxes		23-35 33 15 Electrical Junction Boxes	26 40 00 Electrical Protection	EV006015 Housing/housing
	For jambs			Pr_65_72_97_27 Electrical connection boxes		23-35 33 15 Electrical Junction Boxes	26 40 00 Electrical Protection	EV006015 Housing/housing
	Furnishings			Pr_65_72_97_27 Electrical connection boxes		23-35 33 15 Electrical Junction Boxes	26 40 00 Electrical Protection	EV006015 Housing/housing
	Tabletop (single or multiple)			Pr_65_72_97_27 Electrical connection boxes		23-35 33 15 Electrical Junction Boxes	26 40 00 Electrical Protection	EV006015 Housing/housing
	Built-in roof			Pr_65_72_97_27 Electrical connection boxes		23-35 33 15 Electrical Junction Boxes	26 40 00 Electrical Protection	EV006015 Housing/housing
	Ambient sensor for relative air humidity			Pr_75_50_76_71 Relative humidity sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV004049 Humidity sensor
	Ambient sensor for humidity and relative air temperature			Pr_75_50_76_71 Relative humidity sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV001488 Humidity/temperature sensor
	Fluid level sensor			Pr_75_50_47 Pr_75_50_47		23-27 11 15 15 Flow Controllers	40 72 00 Level Measurement	EV008160 Sensor
	Ambient dew point sensor			Pr_75_50_76_84 Steam and condensate sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Duct sensor for relative air humidity			Pr_75_50_76_84 Steam and condensate sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV022539 Duct temperature sensor
	Channel sensor for absolute humidity / temperature			Pr_75_50_76_84 Steam and condensate sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV022539 Duct temperature sensor
	Conductivity sensor			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	28 41 15 Radiation Detection Sensors	EV008160 Sensor
	Contrast sensor			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	28 41 15 Radiation Detection Sensors	EV008160 Sensor
	Direction sensor			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	28 41 15 Radiation Detection Sensors	EV008160 Sensor
	Ultrasonic distance sensor			Pr_75_50_76 Sensors and detectors		23-27 11 29 15 Infrared Controllers	28 27 00 Video Surveillance Sensors	EV008160 Sensor
	Inductive distance sensor			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	28 27 00 Video Surveillance Sensors	EV008160 Sensor
	Limit switch sensor			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Flow sensor			Pr_75_50_76 Sensors and detectors		23-27 11 15 15 Flow Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Electrical and pneumatic sensors	Luminescence sensor			Pr_75_50_76 Sensors and detectors	D5090 Other Electrical Systems	23-27 11 00 General Instruments and Controls	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Brightness sensor			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	23 09 23 Direct-Digital Control System for HVAC	EV006400 Sensor
	Pressure sensor			Pr_75_50_47_39 Hydrostatic sensors		23-27 11 13 15 Pressure Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Differential pressure sensor			Pr_75_50_76 Sensors and detectors		23-27 11 13 15 Pressure Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Ultrasonic proximity sensor			Pr_75_50_76 Sensors and detectors		23-27 11 29 15 Infrared Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Contact temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Channel temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV022539 Duct temperature sensor
	Frost temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Ceiling temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Absolute humidity sensor for duct			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Wind direction sensor			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	23 09 23 Direct-Digital Control System for HVAC	EV002610 Wind sensor
	External relative humidity sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	External humidity and relative air temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	External humidity / relative air temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Air flow sensor			Pr_75_50_76 Sensors and detectors		23-27 11 15 15 Flow Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Optical distance sensor			Pr_75_50_76 Sensors and detectors		23-27 11 29 15 Infrared Controllers	28 27 00 Video Surveillance Sensors	EV008160 Sensor
	Air quality sensor in the duct			Pr_75_50_76 Sensors and detectors		23-27 11 00 General Instruments and Controls	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Solar sensor, active			Pr_70_70_47_21 Daylight sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Immersion temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV010204 Immersion probe
	Immersion temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV010204 Immersion probe
	Ambient temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV022538 Room temperature sensor
	Ambient temperature sensor			Pr_75_50_76_03 Air temperature sensors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV022538 Room temperature sensor
	Channel temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Cable temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Cable temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Window temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Contact temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Frost temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Coating temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Surface temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Surface temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	External temperature sensor, active			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Smoke temperature sensor			Pr_75_75_30_82 Smoke and heat multi-sensor detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Exhaust gas temperature sensor			Pr_75_50_76 Sensors and detectors		23-27 11 11 15 Temperature Controllers	23 09 23 Direct-Digital Control System for HVAC	EV008160 Sensor
	Motion sensor			Pr_75_50_76_58 Occupancy sensors		23-27 11 29 15 Infrared Controllers	28 27 00 Video Surveillance Sensors	EV001242 Presence sensor
Separator	Fat separator			Pr_65_55_76 Sensors and detectors	D2090 Other Plumbing Systems	23-27 55 35 Liquid Separators	33 44 36 Oil and Stormwater Separators	
	Light liquid separator			Pr_65_55_76 Sensors and detectors		23-27 55 35 Liquid Separators	33 44 36 Oil and Stormwater Separators	
Tank	For water		Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns	D20 Plumbing	23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
			Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
	For solid fuels		Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
			Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
	For liquid fuels		Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
			Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
	For gas fuels		Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
			Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
	For fire-fighting system		Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
			Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
	For wastewater		Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
			Steel for above-ground deposits	Pr_60_50_96 Water tanks and cisterns		23-27 29 19 Tanks	22 12 00 Facility Potable-Water Storage Tanks	EV003662 Surface tank
Shutter	Calibration Shutter			Pr_20_29_10_21 Dampers	D5090 Other Electrical Systems	23-27 31 00 Valves	40 05 61 Gate Valves	
	Overpressure shutter			Pr_65_65_24_68 Pressure relief dampers		23-27 31 00 Valves	40 05 61 Gate Valves	
	Adjustment shutter			Pr_20_29_10_21 Dampers		23-27 31 00 Valves	40 05 61 Gate Valves	
	Fire shutter			Pr_65_65_24_30 Fire dampers		23-27 31 00 Valves	40 05 61 Gate Valves	
Control and management system	Building automation and control system (BACS)				D50 Electrical	23-27 15 00 Building Automation and Control	27 20 00 Data Communications	
	Technical building management (TBM)					23-27 15 00 Building Automation and Control	27 20 00 Data Communications	

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Sanitary system for the discharge and disposal of organic waste	Cistern for clear water, washing machine and dishwasher			Pr_60_50_96 Water tanks and cisterns	D2030 Sanitary Waste	23-39 29 00 Waste Water Collection and Removal	22 13 00 Facility Sanitary Sewerage	EV011232 Water drain hose
	Cistern for complete bathroom waste			Pr_60_50_96 Water tanks and cisterns		23-39 29 00 Waste Water Collection and Removal	22 13 00 Facility Sanitary Sewerage	EV011232 Water drain hose
	Cistern for shower tray and washbasin			Pr_60_50_96 Water tanks and cisterns		23-39 29 00 Waste Water Collection and Removal	22 13 00 Facility Sanitary Sewerage	EV011232 Water drain hose
	Cistern for toilet only			Pr_60_50_96 Water tanks and cisterns		23-39 29 00 Waste Water Collection and Removal	22 13 00 Facility Sanitary Sewerage	EV011232 Water drain hose
	Cistern for toilet and washbasin			Pr_60_50_96 Water tanks and cisterns		23-39 29 00 Waste Water Collection and Removal	22 13 00 Facility Sanitary Sewerage	EV011232 Water drain hose
	Cistern for suspended toilet, washbasin and shower			Pr_60_50_96 Water tanks and cisterns		23-39 29 00 Waste Water Collection and Removal	22 13 00 Facility Sanitary Sewerage	EV011232 Water drain hose
	Hygienic toilet with backpack box			Pr_60_50_96 Water tanks and cisterns		23-39 29 00 Waste Water Collection and Removal	22 13 00 Facility Sanitary Sewerage	EV011232 Water drain hose
Alarm, emergency call and signaling systems	Alarm control unit for intrusion detection system			Pr_75_75_50_02 Alarm interface units	D5030 Communications & Security	23-29 11 00 Security Detection and Monitoring	27 50 00 Distributed Communications and Monitoring Systems	EV007378 House alarm (blue)
	Access control system			Pr_75_75_27_03 Access control units		23-29 13 00 Security Access Controls	27 50 00 Distributed Communications and Monitoring Systems	EV007378 House alarm (blue)
	Video surveillance system			Pr_60_75_03 Audio and video players and recorders		23-29 11 13 Security Video Imaging System Equipment	27 50 00 Distributed Communications and Monitoring Systems	EV007378 House alarm (blue)
	Alarm transmitter			Pr_75_75_27_01 Access control digital keypads – stand-alone		23-29 11 27 Security Keypads	27 50 00 Distributed Communications and Monitoring Systems	EV007378 House alarm (blue)
	Video camera for surveillance system			Pr_75_75_15_22 Digital cameras		23-29 11 13 Security Video Imaging System Equipment	27 50 00 Distributed Communications and Monitoring Systems	EV007163 Camcorder
	Video recorder for video surveillance system			Pr_60_75_03_22 Digital video recorders		23-29 11 13 Security Video Imaging System Equipment	27 50 00 Distributed Communications and Monitoring Systems	EV007163 Camcorder
Leak detection systems	Leak detection systems			Pr_75_50_18_47 Liquid leak detection control panels	D20 Plumbing			EV003160 Leakage sensor
	Class B type atmospheric heat generator * (1 star)			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Class B type atmospheric heat generator ** (2 star)			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Type C sealed chamber heat generator for autonomous system classified *** (3 stars)			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Gas or diesel heat generator, blown air or premix burner, modulating classified ** (2 stars)			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Gas or diesel heat generator, blown air or premix burner, modulating classified * (1 star)			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Condensing gas heat generator, rated **** (4 stars)			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Gas water heater			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EV001064 Hot water device

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Thermal generation technology	Gas or diesel hot air generator with blown or premixed air burner, on-off operation			Pr_60_60_84 Steam generators	D3010 Energy Supply	23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Sealed chamber gas hot air generator with fan in the type B or C combustion circuit, on-off operation			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Gas or diesel hot air generator, blown air or premix burner, two-stage or modulating operation			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Sealed chamber hot air generator with fan in the combustion circuit installed in the B or C version			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Condensing gas hot air generator with modulating air gas regulation			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Biomass heat generator with manual aspiration and with fan			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Automatically loading biomass heat generator with fan			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Condensing biomass heat generator with automatic loading and fan			Pr_60_60_84 Steam generators		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Electric water heater			Pr_60_60_08 Boilers		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EV001064 Hot water device
	Electric boiler			Pr_60_60_08 Boilers		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Gas heating boiler			Pr_60_60_08 Boilers		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Manual loading fireplace			Pr_70_60_82 Space heating fittings and equipment		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Manual loading thermo cooker			Pr_70_60_82 Space heating fittings and equipment		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Manual loading thermo stove			Pr_70_60_82 Space heating fittings and equipment		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Fireplace			Pr_70_60_82 Space heating fittings and equipment		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Closed hearth insert			Pr_70_60_82 Space heating fittings and equipment		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Manual loading stove			Pr_70_60_82 Space heating fittings and equipment		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Manual loading kitchen			Pr_70_60_82 Space heating fittings and equipment		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit
	Open hearth gas appliance			Pr_40_70_24_35 Pr_40_70_24_35		23-33 15 00 HVAC Heating Units	26 32 00 Packaged Generator Assemblies	EC000390 Boiling water unit

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Dispensing terminal	Fire fighting		Component for sprinkler and water spray systems	Pr_70_55_97_84 Sprinkler heads	D4010 Splinkers	23-29 25 13 Fire Hydrants	21 10 00 Water-Based Fire-Suppression Systems	
			Wall hydrant with flexible pipes	Pr_70_55_97_57 Nozzles		23-29 25 13 Fire Hydrants	21 10 00 Water-Based Fire-Suppression Systems	
			Above ground column fire hydrant	Pr_70_55_97_01 Above-ground fire hydrants		23-29 25 13 Fire Hydrants	21 10 00 Water-Based Fire-Suppression Systems	
			Underground fire hydrant	Pr_70_55_97_93 Underground fire hydrants		23-29 25 13 Fire Hydrants	21 10 00 Water-Based Fire-Suppression Systems	
			Fire hose reel with semi-rigid pipes	Pr_70_55_97_57 Nozzles		23-29 25 13 Fire Hydrants	21 10 00 Water-Based Fire-Suppression Systems	
	Irrigation		Component for sprinkler and water spray systems	Pr_70_55_97_84 Sprinkler heads	D2090 Other Plumbing Systems	23-29 25 13 Fire Hydrants	22 52 00 Fountain Plumbing Systems	
			Wall hydrant with flexible pipes	Pr_70_55_97_57 Nozzles		23-29 25 13 Fire Hydrants	22 52 00 Fountain Plumbing Systems	
			Above ground column fire hydrant	Pr_70_55_97_01 Above-ground fire hydrants		23-29 25 13 Fire Hydrants	22 52 00 Fountain Plumbing Systems	
			Underground fire hydrant	Pr_70_55_97_93 Underground fire hydrants		23-29 25 13 Fire Hydrants	22 52 00 Fountain Plumbing Systems	
			Fire hose reel with semi-rigid pipes	Pr_70_55_97_57 Nozzles		23-29 25 13 Fire Hydrants	22 52 00 Fountain Plumbing Systems	
	Air		Suspended radiant panels for heating and cooling	Pr_70_60_36_71 Radiant panels	D3050 Terminal & Package Units	23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV015124 Radiant panel
			Radiators and convectors	Pr_70_60_36_73 Radiators		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV004846 Cradle radiator
			Suspended gas radiant tubes with single burner for non-domestic use	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System D	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System E	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System F	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System H	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
	Water		Suspended radiant panels for heating and cooling	Pr_70_60_36_71 Radiant panels	D3050 Terminal & Package Units	23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV015124 Radiant panel
			Radiators and convectors	Pr_70_60_36_73 Radiators		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV004846 Cradle radiator
			Suspended gas radiant tubes with single burner for non-domestic use	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System D	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System E	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System F	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System H	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Emission terminal	Gas		Suspended radiant panels for heating and cooling	Pr_70_60_36_71 Radiant panels	D3050 Terminal & Package Units	23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV015124 Radiant panel
			Radiators and convectors	Pr_70_60_36_73 Radiators		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV004846 Cradle radiator
			Suspended gas radiant tubes with single burner for non-domestic use	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System D	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System E	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System F	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System H	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
	Steam		Suspended radiant panels for heating and cooling	Pr_70_60_36_71 Radiant panels	D3050 Terminal & Package Units	23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV015124 Radiant panel
			Radiators and convectors	Pr_70_60_36_73 Radiators		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV004846 Cradle radiator
			Suspended gas radiant tubes with single burner for non-domestic use	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System D	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System E	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System F	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System H	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
	Electrical		Suspended radiant panels for heating and cooling	Pr_70_60_36_71 Radiant panels	D3050 Terminal & Package Units	23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV015124 Radiant panel
			Radiators and convectors	Pr_70_60_36_73 Radiators		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV004846 Cradle radiator
			Suspended gas radiant tubes with single burner for non-domestic use	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System D	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System E	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System F	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System H	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended radiant panels for heating and cooling	Pr_70_60_36_71 Radiant panels		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV015124 Radiant panel
			Radiators and convectors	Pr_70_60_36_73 Radiators		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV004846 Cradle radiator

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	With diathermic oil		Suspended gas radiant tubes with single burner for non-domestic use	Pr_70_60_36_72 Radiant tube heaters	D3050 Terminal & Package Units	23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System D	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System E	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System F	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
			Suspended gas radiant tubes with multiple burners for non-domestic use - System H	Pr_70_60_36_72 Radiant tube heaters		23-33 41 00 HVAC Air Terminals	23 36 00 Air Terminal Units	EV003691 Pipe
Intercom set	Set citofono			Pr_75_75_27 Electronic access control products	D5030 Communications & Security	23-29 11 13 Security Video Imaging System Equipment	27 00 00 Communications	
Thermometer	Circular capillary thermometer				D3070 Systems Testing & Balancing	23-27 11 11 Temperature Measuring Instrument And Controls	40 74 00 Temperature Measurement	EV004410 Thermometer
	Circular capillary thermomanometer					23-27 11 11 Temperature Measuring Instrument And Controls	40 74 00 Temperature Measurement	EV004410 Thermometer
	Bulb thermometer					23-27 11 11 Temperature Measuring Instrument And Controls	40 74 00 Temperature Measurement	EV004410 Thermometer
	Bimetal immersion thermometer					23-27 11 11 Temperature Measuring Instrument And Controls	40 74 00 Temperature Measurement	EV004410 Thermometer
	Straight immersion thermometer with well					23-27 11 11 Temperature Measuring Instrument And Controls	40 74 00 Temperature Measurement	EV004410 Thermometer
Cooling tower	Pre-assembled cooling tower			Pr_60_60_13 Pr_60_60_13	D3010 Energy Supply	23-33 23 00 Cooling Towers	42 21 00 Process Cooling Towers	EC002516 Recooling unit (switchgear cabinet)
	Modular cooling tower			Pr_60_60_13 Pr_60_60_13		23-33 23 00 Cooling Towers	42 21 00 Process Cooling Towers	EC002516 Recooling unit (switchgear cabinet)
Overflow for static tanks for liquid fuels	Overflow prevention devices with closing device			Pr_60_50_46_59 Pr_60_50_46_59	D3070 Systems Testing & Balancing	23-27 11 15 15 Flow Controllers	40 05 61 Gate Valves	EV001129 Inflation valve
	Overflow prevention devices without closing device			Pr_60_50_46_59 Pr_60_50_46_59		23-27 11 15 15 Flow Controllers	40 05 61 Gate Valves	EV001129 Inflation valve
Heat recovery unit	Sensitive air/air recovery unit			Pr_70_65_03 Air conditioning units	D3010 Energy Supply	23-33 00 00 HVAC Specific Products and Equipment	23 20 00 HVAC Piping and Pumps	
	Enthalpy air/air recovery unit			Pr_70_65_03 Air conditioning units		23-33 00 00 HVAC Specific Products and Equipment	23 20 00 HVAC Piping and Pumps	
	Gas/liquid recovery			Pr_70_65_03 Air conditioning units		23-33 00 00 HVAC Specific Products and Equipment	23 20 00 HVAC Piping and Pumps	
Air handling unit	Pre-assembled air handling units			Pr_70_65_03 Air conditioning units	D30 HVAC	23-33 00 00 HVAC Specific Products and Equipment	23 20 00 HVAC Piping and Pumps	EC010168 Plenum for air handling unit
	Assembled air handling units			Pr_70_65_03 Air conditioning units		23-33 00 00 HVAC Specific Products and Equipment	23 20 00 HVAC Piping and Pumps	EC010168 Plenum for air handling unit
	Batterfly		Ball and conical male cock	Pr_65_54_95_08 Butterfly valves	D20 Plumbing	23-27 31 17 Butterfly Valves	40 05 64 Butterfly Valves	EV007453 Flap
			Sprinkler	Pr_65_54_95_08 Butterfly valves		23-27 31 17 Butterfly Valves	40 05 64 Butterfly Valves	EV007453 Flap
			Dry alarm valve	Pr_65_54_95_08 Butterfly valves		23-27 31 17 Butterfly Valves	40 05 64 Butterfly Valves	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_95_08 Butterfly valves		23-27 31 17 Butterfly Valves	40 05 64 Butterfly Valves	EV007453 Flap
			Gas safety valve	Pr_65_54_95_08 Butterfly valves		23-27 31 17 Butterfly Valves	40 05 64 Butterfly Valves	EV007453 Flap

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Valve	Globe		Ball and conical male cock	Pr_65_54_95_82 Steel globe valves	D20 Plumbing	23-27 31 27 Globe Valves	40 05 63 Ball Valves	EV007453 Flap
			Sprinkler	Pr_65_54_95_82 Steel globe valves		23-27 31 27 Globe Valves	40 05 63 Ball Valves	EV007453 Flap
			Dry alarm valve	Pr_65_54_95_82 Steel globe valves		23-27 31 27 Globe Valves	40 05 63 Ball Valves	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_95_82 Steel globe valves		23-27 31 27 Globe Valves	40 05 63 Ball Valves	EV007453 Flap
			Gas safety valve	Pr_65_54_95_82 Steel globe valves		23-27 31 27 Globe Valves	40 05 63 Ball Valves	EV007453 Flap
	Shpere		Ball and conical male cock	Pr_65_54_95_81 Steel ball valves	D20 Plumbing	23-27 31 15 Ball Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
			Sprinkler	Pr_65_54_95_81 Steel ball valves		23-27 31 15 Ball Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
			Dry alarm valve	Pr_65_54_95_81 Steel ball valves		23-27 31 15 Ball Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_95_81 Steel ball valves		23-27 31 15 Ball Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
			Gas safety valve	Pr_65_54_95_81 Steel ball valves		23-27 31 15 Ball Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
	Of interception		Ball and conical male cock	Pr_65_54_40_16 Control valves	D20 Plumbing	23-27 31 39 Plug Valves	40 05 62 Plug Valves	EV007453 Flap
			Sprinkler	Pr_65_54_40_16 Control valves		23-27 31 39 Plug Valves	40 05 62 Plug Valves	EV007453 Flap
			Dry alarm valve	Pr_65_54_40_16 Control valves		23-27 31 39 Plug Valves	40 05 62 Plug Valves	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_40_16 Control valves		23-27 31 39 Plug Valves	40 05 62 Plug Valves	EV007453 Flap
			Gas safety valve	Pr_65_54_40_16 Control valves		23-27 31 39 Plug Valves	40 05 62 Plug Valves	EV007453 Flap
	Retention		Ball and conical male cock	Pr_65_54_40_16 Control valves	D20 Plumbing	23-27 31 00 Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
			Sprinkler	Pr_65_54_40_16 Control valves		23-27 31 00 Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
			Dry alarm valve	Pr_65_54_40_16 Control valves		23-27 31 00 Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_40_16 Control valves		23-27 31 00 Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
			Gas safety valve	Pr_65_54_40_16 Control valves		23-27 31 00 Valves	40 05 00 Common Work Results for Process Interconnections	EV007453 Flap
	Security and control		Ball and conical male cock	Pr_65_54_40_16 Control valves	D20 Plumbing	23-27 31 53 Safety Valves	40 05 65 Valves for Pump Control and Check Service	EV007453 Flap
			Sprinkler	Pr_65_54_40_16 Control valves		23-27 31 53 Safety Valves	40 05 65 Valves for Pump Control and Check Service	EV007453 Flap
			Dry alarm valve	Pr_65_54_40_16 Control valves		23-27 31 53 Safety Valves	40 05 65 Valves for Pump Control and Check Service	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_40_16 Control valves		23-27 31 53 Safety Valves	40 05 65 Valves for Pump Control and Check Service	EV007453 Flap
			Gas safety valve	Pr_65_54_40_16 Control valves		23-27 31 53 Safety Valves	40 05 65 Valves for Pump Control and Check Service	EV007453 Flap
			Ball and conical male cock	Pr_65_54_95_26 Double regulating valves		23-27 31 00 Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Calibration damper		Sprinkler	Pr_65_54_95_26 Double regulating valves	D20 Plumbing	23-27 31 00 Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Dry alarm valve	Pr_65_54_95_26 Double regulating valves		23-27 31 00 Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_95_26 Double regulating valves		23-27 31 00 Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Gas safety valve	Pr_65_54_95_26 Double regulating valves		23-27 31 00 Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
	Of interception and regulation		Ball and conical male cock	Pr_65_54_40_16 Pr_65_54_40_16	D20 Plumbing	23-27 31 39 Plug Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Sprinkler	Pr_65_54_40_16 Pr_65_54_40_16		23-27 31 39 Plug Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Dry alarm valve	Pr_65_54_40_16 Pr_65_54_40_16		23-27 31 39 Plug Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_40_16 Pr_65_54_40_16		23-27 31 39 Plug Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Gas safety valve	Pr_65_54_40_16 Pr_65_54_40_16		23-27 31 39 Plug Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
	Mixer		Ball and conical male cock	Pr_65_54_95_88 Thermostatic mixing valves	D20 Plumbing	23-27 31 29 Mixing Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Sprinkler	Pr_65_54_95_88 Thermostatic mixing valves		23-27 31 29 Mixing Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Dry alarm valve	Pr_65_54_95_88 Thermostatic mixing valves		23-27 31 29 Mixing Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_95_88 Thermostatic mixing valves		23-27 31 29 Mixing Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Gas safety valve	Pr_65_54_95_88 Thermostatic mixing valves		23-27 31 29 Mixing Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
	Gate valve		Ball and conical male cock	Pr_65_54_40_16 Pr_65_54_40_16	D20 Plumbing	23-27 31 25 Stop Check Valves	40 05 61 Gate Valves	EV007453 Flap
			Sprinkler	Pr_65_54_40_16 Pr_65_54_40_16		23-27 31 25 Stop Check Valves	40 05 61 Gate Valves	EV007453 Flap
			Dry alarm valve	Pr_65_54_40_16 Pr_65_54_40_16		23-27 31 25 Stop Check Valves	40 05 61 Gate Valves	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_40_16 Pr_65_54_40_16		23-27 31 25 Stop Check Valves	40 05 61 Gate Valves	EV007453 Flap
			Gas safety valve	Pr_65_54_40_16 Pr_65_54_40_16		23-27 31 25 Stop Check Valves	40 05 61 Gate Valves	EV007453 Flap
	Thermostatic - holder		Ball and conical male cock	Pr_65_54_95_86 Thermostatic balancing valves	D20 Plumbing	23-27 31 61 Thermostatic Expansion Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Sprinkler	Pr_65_54_95_86 Thermostatic balancing valves		23-27 31 61 Thermostatic Expansion Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Dry alarm valve	Pr_65_54_95_86 Thermostatic balancing valves		23-27 31 61 Thermostatic Expansion Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Hydraulic alarm valve	Pr_65_54_95_86 Thermostatic balancing valves		23-27 31 61 Thermostatic Expansion Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
			Gas safety valve	Pr_65_54_95_86 Thermostatic balancing valves		23-27 31 61 Thermostatic Expansion Valves	40 05 67 Specialized Pressure and Flow-Control Valves	EV007453 Flap
Expansion vessel	Expansion vessel without membrane			Pr_60_50_20_28 Expansion vessels	D20 Plumbing	23-33 49 21 Ductwork Expansion Vessels	22 05 16 Expansion Fittings and Loops for Plumbing Piping	EV007453 Flap
	Expansion vessel with membrane			Pr_60_50_20_28 Expansion vessels		23-33 49 21 Ductwork Expansion Vessels	22 05 16 Expansion Fittings and Loops for Plumbing Piping	EV007453 Flap
Fan	Centrifugal fan			Pr_30_59_29 Fixed roof ventilators, terminals and accessories	D3064 Exhaust & Ventilating Systems	23-33 25 15 Heating and Ventilating Units	23 82 23 Unit Ventilators	EV007191 Ceiling ventilator

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Pipe for conveying water		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
	Fluid conveying piping		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
	Piping for conveying pressurized fluids		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Distribution element	Piping for conveying hot and corrosive fluids		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
	Piping for conveying hot and corrosive pressurized fluids		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
	Piping for conveying drinking water and food fluids		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Piping for civil and industrial drains		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV003691 Pipe
	Welded fittings		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV020811 Welded end
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV020811 Welded end
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV020811 Welded end
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV020811 Welded end
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV020811 Welded end
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV020811 Welded end
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV020811 Welded end
	Push-in fittings		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV000414 Plug-in connection
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV000414 Plug-in connection
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV000414 Plug-in connection
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV000414 Plug-in connection
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV000414 Plug-in connection
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV000414 Plug-in connection
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV000414 Plug-in connection

Category	Tipology	Characteristic	Value	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Tighten fittings		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV008864 Bolt connection
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV008864 Bolt connection
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV008864 Bolt connection
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV008864 Bolt connection
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV008864 Bolt connection
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV008864 Bolt connection
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV008864 Bolt connection
	Threaded fittings		Steel - Transport of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings	D20 Plumbing	23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV007343 Thread connection
			Stainless steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV007343 Thread connection
			Unalloyed steel - Conveying of water and other aqueous liquids	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV007343 Thread connection
			Cast iron - Gas pipes	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV007343 Thread connection
			Cast iron - Evacuation of water from buildings	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV007343 Thread connection
			Cast iron - Sewer	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV007343 Thread connection
			Copper - Transport of water and gas in sanitary and heating applications	Pr_65_52_63 Pipes and fittings		23-27 39 00 Piping	22 11 00 Facility Water Distribution	EV007343 Thread connection

Appendix C: Furniture matching table

Family	Macro category	Category	Typology	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Indoor furniture	Beds and full bedroom	Full bedroom	Pr_40_50_06 Beds	E1094 Residential Equipment	23-21 23 19 Residential Bedroom Furniture	12 58 29 Beds	
			Beds	Pr_40_50_06 Beds		23-21 23 19 Residential Bedroom Furniture	12 58 29 Beds	
			Bunk beds and high beds	Pr_40_50_06 Beds		23-21 23 19 Residential Bedroom Furniture	12 58 29 Beds	
			Children's cots and folding cots for domestic use	Pr_40_50_06 Beds		23-21 23 19 Residential Bedroom Furniture	12 58 29 Beds	
			Foldaway beds	Pr_40_50_06 Beds		23-21 23 19 Residential Bedroom Furniture	12 58 29 Beds	
			Mirrors	Pr_25_71_53 Mirrors		23-21 37 13 15 Mirrors	12 58 29 Beds	
		Storage units	Wardrobes	Pr_40_30_78_96 Wardrobes	E1094 Residential Equipment	23-21 23 17 Residential Storage Units	12 58 83 Custom Residential Furniture	
			Walk-in closets	SL_90_50_93 Walk-in wardrobes		23-21 15 11 Wardrobes	12 58 83 Custom Residential Furniture	
			Drawers	Pr_40_30_78_25 Drawer units		23-21 15 13 Chests of Drawers	12 58 83 Custom Residential Furniture	
			Bedside tables	Pr_40_30_78_07 Bedside units		23-21 23 19 15 Residential Bedside Units	12 58 83 Custom Residential Furniture	
			Cupboards	Pr_40_30_78_43 Kitchen bench cupboards		23-21 23 17 Residential Storage Units	12 58 83 Custom Residential Furniture	
			Bookcases	Pr_40_30_78_47 Library shelf units		23-21 25 21 Library and Archive Equipment and Furnishings	12 58 83 Custom Residential Furniture	
			Wall cabinets	Pr_40_30_78_96 Wardrobes		23-21 23 17 Residential Storage Units	12 58 83 Custom Residential Furniture	
			Sideboards	Pr_40_30_30_18 Countertops		23-21 23 17 Residential Storage Units	12 58 83 Custom Residential Furniture	
			Shoes cabinets	Pr_40_30_78_80 Shoe trees		23-21 23 17 Residential Storage Units	12 58 83 Custom Residential Furniture	
			Display cabinets	Pr_40_30_78_96 Wardrobes		23-21 23 17 Residential Storage Units	12 58 83 Custom Residential Furniture	
		Indoor seating	Sofas	Pr_40_50_12_81 Sofas	E1094 Residential Equipment	23-21 23 13 Residential Seating	12 58 13 Couches and Loveseats	
			Benches	Pr_40_50_12 Chairs, seats and benches		23-21 23 13 Residential Seating	12 58 13 Couches and Loveseats	
			Armchairs and Chaise longue	Pr_40_50_12 Chairs, seats and benches		23-21 23 13 Residential Seating	12 58 13 Couches and Loveseats	
			Pouf	Pr_40_50_12 Chairs, seats and benches		23-21 23 13 Residential Seating	12 58 13 Couches and Loveseats	
			Chairs	Pr_40_50_12 Chairs, seats and benches		23-21 23 13 Residential Seating	12 58 16 Residential Chairs	
			Stools	Pr_40_50_12 Chairs, seats and benches		23-21 23 13 Residential Seating	12 58 16 Residential Chairs	
		Tables and desks	Desks	Pr_40_50_21_85 Study desks	E1094 Residential Equipment	23-21 23 15 Residential Tables	12 58 19 Dining Tables and Chairs	
			Tables	Pr_40_50_21 Desks, tables and worktops		23-21 23 15 Residential Tables	12 58 19 Dining Tables and Chairs	
			Side tables	Pr_40_50_21 Desks, tables and worktops		23-21 23 15 Residential Tables	12 58 19 Dining Tables and Chairs	

Family	Macro category	Category	Typology	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Furniture for public structures and commercial activities	Hospital furniture	Hospital reception desks	Pr_40_50_21_21 Desks	E1028 Medical Equipment	23-25 45 00 Patient Care Products	11 70 00 Healthcare Equipment	
			Hospital desks	Pr_40_50_52 Medical desks, tables and worktops		23-25 45 00 Patient Care Products	11 70 00 Healthcare Equipment	
			Visitor waiting chairs and office chairs for hospital use	Pr_40_50_51 Medical chairs and couches		23-25 45 00 Patient Care Products	11 70 00 Healthcare Equipment	
		Shops furniture	Exhibitors for shops	Pr_40_50_84_28 Exhibit stands	E1017 Vending Equipment	23-21 11 11 11 Commercial Storage Shelves	11 20 00 Commercial Equipment	
			Shop shelves	Pr_40_30_78_71 Retail shelf units		23-21 11 11 15 Commercial Storage Racking	11 20 00 Commercial Equipment	
			Display windows	Pr_40_50_84_28 Exhibit stands		23-21 11 11 19 Commercial Filing Cabinets	11 20 00 Commercial Equipment	
		Restaurant and cafè furniture	Bar counters	Pr_40_50_21 Desks, tables and worktops	E1093 Food Service Equipment	23-21 21 00 Food Service Equipment and Furnishings	11 40 00 Foodservice Equipment	
			Bar stools	Pr_40_50_12 Chairs, seats and benches		23-21 21 00 Food Service Equipment and Furnishings	11 40 00 Foodservice Equipment	
			Coffe tables	Pr_40_50_21 Desks, tables and worktops		23-21 21 00 Food Service Equipment and Furnishings	11 40 00 Foodservice Equipment	
		Public buildings furniture	Cabinets for public buildings	Pr_40_30_78_96 Wardrobes	E1020 Institutional Equipment	23-21 15 00 Wardrobe and Closet Specialties	11 60 00 Entertainment and Recreation Equipment	
			Reception desks	Pr_40_30_30_71 Reception desks		23-21 21 00	11 60 00 Entertainment and Recreation Equipment	
			Drawers for public facilities	Pr_40_30_78_25 Drawer units		23-21 15 13 Chests of Drawers	11 60 00 Entertainment and Recreation Equipment	
			Bedside table for public buildings	Pr_40_30_78_07 Bedside units		23-21 23 19 15 Residential Bedside Units	11 60 00 Entertainment and Recreation Equipment	
			Bookcases for public buildings	Pr_40_30_78_47 Library shelf units		23-21 25 21 Library and Archive Equipment and Furnishings	11 60 00 Entertainment and Recreation Equipment	
			Sideboards for public buindings	Pr_40_30_78_96 Wardrobes		23-21 15 00 Wardrobe and Closet Specialties	11 60 00 Entertainment and Recreation Equipment	
			Storage units for medicines	Pr_40_30_78_96 Wardrobes		23-21 15 00 Wardrobe and Closet Specialties	11 60 00 Entertainment and Recreation Equipment	
			Wall cabinets for public buildings	Pr_40_30_30_18 Countertops		23-21 23 17 Residential Storage Units	11 60 00 Entertainment and Recreation Equipment	
			Auditorium chairs	Pr_40_50_12_05 Auditorium chairs		23-21 25 11 Group Seating	11 60 00 Entertainment and Recreation Equipment	
			Chairs for educational institutions	Pr_40_50_12_86 Study chairs		23-21 25 11 13 Classroom Furniture	11 60 00 Entertainment and Recreation Equipment	
			Ranked seating	Pr_40_70_75_84 Suspended chairs		23-21 25 11 15 Multiple Use Fixed Seating	11 60 00 Entertainment and Recreation Equipment	
			Tables for educational institutions and desks	Pr_40_50_21_13 Pr_40_50_21_13		23-21 23 15 Residential Tables	11 60 00 Entertainment and Recreation Equipment	
			Turnstiles	Pr_30_59_34 Gates and turnstiles		23-29 13 23 Access Control Turnstiles	11 60 00 Entertainment and Recreation Equipment	
			Display cabinets for public buildings	Pr_40_30_78_96 Wardrobes		23-21 25 23 Access Control Turnstiles	11 60 00 Entertainment and Recreation Equipment	
		Bath furniture	Complete bathroom furniture	Pr_40_30_78_05 Bathroom furniture	E1094 Residential Equipment	23-21 23 17 Residential Storage Units	12 58 00 Residential Furniture	
			Electric hand dryer	Pr_70_60_36_26 Electric heated towel rails		23-31 25 25 11 Electric Heated Towel Bars	12 58 00 Residential Furniture	EV001672 Handheld hair dryer
			Bathroom furniture	Pr_40_30_78_05 Bathroom furniture		23-21 23 17 Residential Storage Units	12 58 00 Residential Furniture	
			Washbasin furniture	Pr_40_30_78_05 Bathroom furniture		23-21 23 17 Residential Storage Units	12 58 00 Residential Furniture	
			Bathroom mirrors	Pr_25_71_53 Mirrors		23-21 37 13 15 Mirrors	12 58 00 Residential Furniture	

Family	Macro category	Category	Typology	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
Furnitures	Bathroom	Accessible toilets	Folding and fixed bars	Pr_40_20_06 Bathing fittings	E1094 Residential Equipment	23-31 25 00 Toilet and Bath Specialties	12 58 00 Residential Furniture	
			Accessible shower enclosure	Pr_40_20_06_84 Shower trays		23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001063 Shower
			Accessible washbasin	Pr_40_20_96 Washbasins, sinks and troughs		23-31 11 00 Faucets	22 41 00 Residential Plumbing Fixtures	EV003266 Washbasin/sink
			Accessible bathtubs	Pr_40_20_96_15 Ceramic sinks		23-31 15 00 Bathtubs	22 41 00 Residential Plumbing Fixtures	EV001130 Bathtub/shower
			Disabled WC	Pr_40_20_93 Urinal and WC fittings		23-31 19 00 Toilets	22 41 00 Residential Plumbing Fixtures	EC011289 Toilets
		Laundry and household cleaning	Tumble dryers	Pr_40_70_47_91 Tumble dryers	E1094 Residential Equipment	23-21 41 00 Commercial Laundry Equipment	12 58 00 Residential Furniture	
			Washer-dryer	Pr_40_70_47_07 Pr_40_70_47_07		23-21 41 00 Commercial Laundry Equipment	12 58 00 Residential Furniture	
			Washing machines	Pr_40_70_47_97 Washer dryers		23-21 41 00 Commercial Laundry Equipment	12 58 00 Residential Furniture	
		Tapware	Sanitary taps for bidets	Pr_35_90_87 Tapes, strips and profile fillers	E1094 Residential Equipment	23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
			Sanitary taps for showers	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
			Sanitary taps for washbasins and sinks	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
			Sanitary taps for urinals	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV003415 Drain tap
			Sanitary taps for bathtubs	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
			Sanitary taps for WC	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV003415 Drain tap
			Overhead showers	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
		Sanitary appliance	Bidets	Pr_40_20_06_11 Bidets	D2010 Plumbing Fixtures	23-31 23 00 Bidets	22 41 00 Residential Plumbing Fixtures	EV004796
			WC and urinal flushing cisterns	Pr_65_52_63_21 Copper waste water pipes and fittings		23-31 27 00 Floor Drains	22 41 00 Residential Plumbing Fixtures	EV007898
			Washbasins	Pr_40_20_96 Washbasins, sinks and troughs		23-31 11 00 Faucets	22 41 00 Residential Plumbing Fixtures	EV003266
			Wall-hung urinals	Pr_40_20_93 Urinal and WC fittings		23-31 19 00 Toilets	22 41 00 Residential Plumbing Fixtures	EC011289
			WC	Pr_40_20_93 Urinal and WC fittings		23-31 19 00 Toilets	22 41 00 Residential Plumbing Fixtures	EC011289
		Showers and bathtubs	Shower enclosure	Pr_40_20_06_84 Shower trays	D2010 Plumbing Fixtures	23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001063
			Shower panels	Pr_40_20_06_84 Shower trays		23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001063
			Shower trays	Pr_40_20_06_84 Shower trays		23-31 17 00 Showers	22 41 00 Residential Plumbing Fixtures	EV001063
			Bath tubs	Pr_40_20_96_15 Ceramic sinks		23-31 15 00 Bathtubs	22 41 00 Residential Plumbing Fixtures	EV001130
		Kitchen appliance	Hoods	Pr_60_65_94_46 Kitchen extractor hoods	E1095 Unit Kitchens	23-21 23 43 Residential Cooking Ventilation Equipment	11 40 00 Foodservice Equipment	EV005362 Open air dome
			Freezers	Pr_40_70_31_32 Fridge-freezers		23-21 21 27 Commercial Refrigerators And Freezers	11 40 00 Foodservice Equipment	EV004743 Freezer
			Ovens	Pr_40_70_65_41 Gas ovens		23-21 21 13 31 Commercial Ovens	11 40 00 Foodservice Equipment	EV001812 Baking oven
			Microwave ovens	Pr_40_70_65_51 Microwave ovens		23-21 21 13 31 Commercial Ovens	11 40 00 Foodservice Equipment	EV007530 Microwave
			Fridge	Pr_40_70_31_32 Fridge-freezers		23-21 21 27 Commercial Refrigerators And Freezers	11 40 00 Foodservice Equipment	EV007478 Fridge/freezer
			Dishwashers	Pr_40_70_21 Dishwashers		23-21 21 19 Commercial Dishwasher Equipment	11 40 00 Foodservice Equipment	
			Kitchen worktops	Pr_40_50_21_45 Kitchen worktops		23-21 23 23 25 11 Residential Stoves	11 40 00 Foodservice Equipment	EV007241 Installation hob

Family	Macro category	Category	Typology	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
	Kitchen	Professional kitchen appliances	Refrigerator cabinets	Pr_40_70_31_32 Fridge-freezers	E1095 Unit Kitchens	23-21 21 27 Commercial Refrigerators And Freezers	11 40 00 Foodservice Equipment	EV007478 Fridge/freezer
			Ventilation hoods	Pr_60_65_94_46 Kitchen extractor hoods		23-21 23 43 Residential Cooking Ventilation Equipment	11 40 00 Foodservice Equipment	EV005362 Open air dome
			Professional ovens	Pr_40_70_65_41 Gas ovens		23-21 21 13 31 Commercial Ovens	11 40 00 Foodservice Equipment	EV001812 Baking oven
			Professional fryers	Pr_40_70_65_23 Electric fryers		23-21 21 13 21 Commercial Deep Fryers	11 40 00 Foodservice Equipment	EV009784 Deep fryer
			Professional grills	Pr_70_65_04 Air terminals and diffusers		23-21 21 13 27 Commercial Grills	11 40 00 Foodservice Equipment	EV002521 Steel nickel plated grill grid
			Professional dishwashers	Pr_40_70_21 Dishwashers		23-21 21 19 Commercial Dishwasher Equipment	11 40 00 Foodservice Equipment	
			Worktops with covered burners, heated plates and professional grills	Pr_40_50_21_45 Kitchen worktops		23-21 23 23 25 11 Residential Stoves	11 40 00 Foodservice Equipment	EV007241 Installation hob
		Sink and kitchen taps	Sinks	Pr_40_20_96_81 Sinks	E1095 Unit Kitchens	23-31 13 00 Sinks	22 41 00 Residential Plumbing Fixtures	EV001061 Sink
			Kitchen taps	Pr_35_90_87 Tapes, strips and profile fillers		23-31 11 00 Faucets	12 58 00 Residential Furniture	EV004789 Handle tap
	Fire-fighting systems and components	Fire-fighting systems and components	Fire extinguishers	Pr_70_55_97_01 Above-ground fire hydrants	D4010 Splinklers	23-29 25 13 Fire Hydrants	21 12 13 Fire-Suppression Hoses and Nozzles	
			Hydrants, hoses	Pr_70_55_97_01 Above-ground fire hydrants		23-29 25 13 Fire Hydrants	21 12 13 Fire-Suppression Hoses and Nozzles	
			Panic exit devices	Pr_75_30_27_27 Electromechanical door locks		23-17 19 11 29 13 Door Emergency Exit Panic Bars	25 50 00 Integrated Automation Facility Controls	
	Outdoor	Outdoor furniture	Outdoor cabinets	Pr_40_30_78_96 Wardrobes	E1094 Residential Equipment	23-21 15 13 Chests of Drawers	12 90 00 Other Furnishings	
			Outdoor sideboards	Pr_40_30_78_96 Wardrobes		23-21 15 13 Chests of Drawers	12 90 00 Other Furnishings	
			Outdoor tables and side tables	Pr_40_30_30_62 Picnic tables		23-11 29 15 Exterior Tables	12 90 00 Other Furnishings	
		Garden furniture	Outdoor sofas	Pr_40_50_12_81 Sofas	E1094 Residential Equipment	23-11 29 17 11 Patio Seating	12 90 00 Other Furnishings	
			Outdoor swing seats	Pr_40_50_12_87 Swing chairs		23-21 29 17 31 17 Seat Swings	12 90 00 Other Furnishings	
			Planters and garden pots	Pr_45_30_36_05 Aquatic plant pots and baskets		23-21 00 00 Furnishings, Fixtures and Equipment Products	12 90 00 Other Furnishings	
			Outdoor benches	Pr_40_50_12 Chairs, seats and benches		23-11 29 13 11 Exterior Benches	12 90 00 Other Furnishings	
			Outdoor armchairs	Pr_40_50_12 Chairs, seats and benches		23-11 29 13 13 Exterior Chairs	12 90 00 Other Furnishings	
			Outdoor Pouf	Pr_40_50_12 Chairs, seats and benches		23-11 29 13 13 Exterior Chairs	12 90 00 Other Furnishings	
			Deck chairs	Pr_40_50_12 Chairs, seats and benches		23-11 29 13 13 Exterior Chairs	12 90 00 Other Furnishings	
			Outdoor chairs	Pr_40_50_12 Chairs, seats and benches		23-11 29 13 13 Exterior Chairs	12 90 00 Other Furnishings	
			Outdoor hanging chairs	Pr_40_50_12 Chairs, seats and benches		23-11 29 13 11 Exterior Benches	12 90 00 Other Furnishings	
			Outdoor stools	Pr_40_50_12 Chairs, seats and benches		23-11 29 13 13 Exterior Chairs	12 90 00 Other Furnishings	
		Street furniture	Traffic bollards	Pr_20_76_08 Bollards and impact protectors	E1029 Other Institutional Equipment	23-39 11 19 Bollards	12 90 00 Other Furnishings	
			Street lamps	Pr_70_70_46 Lamps		23-35 47 23 Lamps	12 90 00 Other Furnishings	EV010988 Lampion
			Various benches and seats	Pr_40_50_12 Chairs, seats and benches		23-11 29 13 11 Exterior Benches	12 90 00 Other Furnishings	
			Litter bins	Pr_40_50_07_25 Dustbins		23-21 17 11 Interior Waste Bins	12 90 00 Other Furnishings	
			Ashtray for public spaces	Pr_40_50_07_04 Ashtrays		23-21 17 13 Interior Ash Trays	12 90 00 Other Furnishings	
			Racks	Pr_40_30_78_17 Coat racks		23-21 11 11 15 Commercial Storage Racking	12 90 00 Other Furnishings	
			Tables for public spaces	Pr_40_50_21_58 Occasional tables		23-11 29 15 Exterior Tables	12 90 00 Other Furnishings	
			Pots and planters for public spaces	Pr_45_30_36_05 Aquatic plant pots and baskets		23-21 00 00 Furnishings, Fixtures and Equipment Products	12 90 00 Other Furnishings	

Family	Macro category	Category	Typology	Uniclass	Uniformat II	Omniclass	Masterformat	ETIM
		Temporary structures	Gazebos	Pr_40_50_84_92 Umbrella stands	E1094 Residential Equipment	23-19 29 13 25 Garden Umbrellas	12 90 00 Other Furnishings	
			Garden umbrellas	Pr_40_50_33_34 Garden umbrellas		23-19 29 13 25 Garden Umbrellas	12 90 00 Other Furnishings	
			Pergolas	SL_90_10_64 Porches		23-19 29 13 25 Garden Umbrellas	12 90 00 Other Furnishings	
	Spa	Spa	Steam rooms	Co_35_50_90 Turkish baths	E1090 Other Equipment	23-21 29 19 Recreational Equipment	13 24 00 Special Activity Rooms	
			Outdoor showers	Pr_40_20_06_84 Shower trays		23-21 29 19 Recreational Equipment	13 24 00 Special Activity Rooms	EV001063 Shower
			Saunas	Pr_40_20_60_75 Sauna room packages		23-21 29 19 Recreational Equipment	13 24 00 Special Activity Rooms	
			Whirlpools	Pr_40_20_96_15 Ceramic sinks		23-21 29 19 Recreational Equipment	13 24 00 Special Activity Rooms	EV001130 Bathtub/shower
	Office	Office furniture	Office reception desks	Pr_40_30_30_71 Reception desks	E1018 Office Equipment	23-21 13 00 Retail and Office Equipment and Furnishings	12 41 00 Office Accessories	
			Workstations	Pr_40_50_21_96 Workstations		23-21 13 00 Retail and Office Equipment and Furnishings	12 41 00 Office Accessories	
			Office work chairs	Pr_40_50_12_57 Office chairs		23-21 13 00 Retail and Office Equipment and Furnishings	12 41 00 Office Accessories	
			Office visitors chairs	Pr_40_50_12_48 Lounge chairs		23-21 13 00 Retail and Office Equipment and Furnishings	12 41 00 Office Accessories	
			Conference tables	Pr_40_50_21_15 Conference tables		23-21 13 00 Retail and Office Equipment and Furnishings	12 41 00 Office Accessories	
		Office furniture	Office cabinets	Pr_40_30_78_96 Wardrobes	E1018 Office Equipment	23-21 13 25 Office Equipment	11 28 00 Office Equipment	
			Office drawers	Pr_40_30_78_25 Drawer units		23-21 13 25 Office Equipment	11 28 00 Office Equipment	
			Filing cabinets	Pr_60_45_34_76 Screw classifiers		23-21 13 25 Office Equipment	11 28 00 Office Equipment	
			Office bookcases	Pr_40_30_78_47 Library shelf units		23-21 25 21 Library and Archive Equipment and Furnishings	11 28 00 Office Equipment	
			Office wall cabinets	Pr_40_30_30_18 Countertops		23-21 13 25 Office Equipment	11 28 00 Office Equipment	
			Office dispay cabinets	Pr_40_30_78_96 Wardrobes		23-21 13 25 Office Equipment	11 28 00 Office Equipment	

Appendix D: Products datasheet uploaded on BIMReL platform

SCHEDA TECNICA

Informazioni identificative del prodotto

Sinonimi: Calcestruzzo cellulare

Denominazione commerciale: Ytong Blocco sottile Ytong Y-Pro sp. 10x62,5x25 maschiato

Destinazione d'uso: Tramezzi interni, divisori, contropareti e pareti resistenti al fuoco, divisori tagliafuoco

Codice CPV: 44111100-2-Mattoni;44111600-7-Blocchi

Descrizione Commerciale: Blocchi in calcestruzzo aerato autoclavato maschiati per tramezzi, divisori, contropareti e pareti resistenti al fuoco.

Classificazioni del prodotto	
Classificazioni	
Uniformat	B2010
OmniClass (Table 23)	23-13 21 11
MasterFormat	04 22 26
Uniclass	Pr_20_93_52_05

Informazioni ai fini della specifica tecnica

Specifica Tecnica: UNI EN 771-4

Denominazione secondo specifica tecnica: Specifica per elementi per muratura - Parte 4: Elementi di calcestruzzo aerato autoclavato per muratura

Classificazione del prodotto secondo specifica tecnica: Unità di muratura di Categoria I

Anno della specifica tecnica: 2015

Uso\Impiego previsto del prodotto secondo specifica tecnica: I principali impieghi previsti sono diversi tipi di applicazioni portanti e non portanti in tutte le forme di muratura, tra cui anta singola, intercapedine, divisori, contenimento, basamento e uso generale sotto il livello del suolo, comprese le pareti pe

Aspetto visivo e costruttivo	
Colore	Bianco
Fisico - chimiche	
Materiale	Calcestruzzo aerato autoclavato
Peso	10 kg

SCHEDA TECNICA

Principali componenti del prodotto

NUMERO	DESCRIZIONE	COMPONENTE LINK	Scheda Componente
1	Sabbia		✗
2	Cemento		✗
3	Calce viva		✗
4	Anidrite/gesso		✗
5	Alluminio (agente porogeno)		✗
6	Acqua		✗

Principali componenti chimiche del prodotto

NUMERO	DESCRIZIONE	Num. CAS	Num CE	% Peso	Nota
1	Sabbia			60-70	
2	Cemento			15-25	
3	Calce viva			5-15	
4	Anidrite/gesso			2-5	
5	Alluminio (agente porogeno)			0.05-0.1	
6	Acqua			50-75	

CARATTERISTICHE PRESTAZIONALI DICHIARATE

Caratteristiche prestazionali essenziali	
Lunghezza	624 mm - UNI EN 772-16
Larghezza	100 mm - UNI EN 772-16
Altezza	249 mm - UNI EN 772-16
Tolleranza, Altezza	TLMB - UNI EN 998-2
Planarità della faccia base	TLMB - UNI EN 998-2
Parallelismo piano di facce	TLMB - UNI EN 998-2
Forma	Parallelepipedo rettangolo
Resistenza alla compressione	3.9 N/mm2 - UNI EN 772-1:2011
Reazione al fuoco	A1 - UNI EN 13501-1
Permeabilità al vapore acqueo	0.0000000000032 kg/(m s Pa) - UNI EN ISO 12572
Potere fonoisolante	38 dB - EN ISO 140-3 and UNI EN 1793-2
Densità lorda secca	500 kg/m3
Durabilità al gelo/disgelo	Da non lasciare esposto - European Standard
Sostanze pericolose	Nessuna - National regulations on dangerous substances
Conduttività termica	0.12 W/(m K) - UNI EN 1745
Densità lorda secca	500 kg/m3

CE

SCHEDA TECNICA

Informazioni sulla sostenibilità	
Parametri obbligatori ai sensi della EN 15804	
Potenziale di riscaldamento globale, GWP	18.65 kg CO2 eq
EP acqua dolce	297.94 kg (PO4)3- eq
Potenziale di riduzione dello strato d'ozono stratosferico, ODP	0.94 kg CFC-11 eq
Potenziale di acidificazione del suolo e dell'acqua, AP	240.63 kg SO2 eq
Potenziale di formazione dell'ozono troposferico, POCP	291.06 kg C2H4 eq
Informazioni che descrivono i flussi di produzione	
Materiali riciclabili	0 kg
Parametri che descrivono le categorie di rifiuti	
Rifiuti pericolosi	0 kg
Rifiuti radioattivi	0 kg
Parametri che descrivono l'emissione di inquinanti dai materiali	
Contenuto di VOC	0 g/l
Informazioni ai fini del rispetto dei CAM (ai sensi di DM 11 ottobre 2017)	
Sostanze dannose per l'ozono: utilizzo di prodotti contenenti sostanze ritenute dannose per lo strato d'ozono	no
Sostanze pericolose: additivi a base di cadmio, piombo, cromo VI, mercurio, arsenico e selenio; ftalati; sostanze identificate come "estremamente preoccupanti" (SVHCs); sostanze e miscele classificate come cancerogene, mutagene o tossiche per la riproduzi	no
Informazioni su imballaggio, movimentazione, immagazzinamento in stabilimento e trasporto	
Tipologia dell'imballaggio	Teli da imballaggio in polietilene ed pallets in legno, entrambi riciclabili
Altezza dell'imballaggio	1300 mm
Peso dell'imballaggio	785 kg
N. pezzi dell'imballaggio	72

CE

SCHEDA TECNICA

Informazioni commerciali	
Descrizione da capitolato	Blocchi sottili in calcestruzzo aerato autoclavato, Ytong Y-Pro, con dichiarazione di prestazione DOP (marcatura CE) conforme a UNI EN 771-4, materiale naturale a basso impatto ambientale ed esente da emissioni nocive (dichiarazione EPD), delle dimensioni 62,5 cm (L) x 25 cm (H) x 10 cm (sp.), con profili maschio-femmina, densità nominale 500 kg/m³, con contenuto di riciclato ai sensi del decreto CAM Criteri Ambientali Minimi del 10.11.2019 pari al 16,8%
Descrizione da elenco prezzi	Blocchi sottili in calcestruzzo aerato autoclavato, Ytong Y-Pro, con dichiarazione di prestazione DOP (marcatura CE) conforme a UNI EN 771-4, materiale naturale a basso impatto ambientale ed esente da emissioni nocive (dichiarazione EPD), delle dimensioni 62,5 cm (L) x 25 cm (H) x 10 cm (sp.), con profili maschio-femmina, densità nominale 500 kg/m³, con contenuto di riciclato ai sensi del decreto CAM Criteri Ambientali Minimi del 10.11.2019 pari al 16,8%

Informazioni sull'affidabilità dei dati	
Compilatore	Barbara Gilardi
Data di realizzazione della scheda tecnica	05/12/2019
Revisore	Barbara Gilardi
Data di revisione della scheda tecnica	13/12/2019

Informazioni identificative del fabbricante

Ragione sociale: Xella Italia

Sito WEB: https://www.ytong.it/

Note: Il Gruppo Xella è protagonista di primo piano a livello mondiale nella produzione e commercializzazione di materiali da costruzione. Con le tre divisioni - materiali da costruzione, sistemi di costruzione a secco e calce - l'azienda si presenta come il più grande produttore al mondo di calcestruzzo cellulare e arenaria calcarea, nonché leader nella fabbricazione di lastre in gessofibra. Attualmente il gruppo è presente in oltre 30 Paesi, con stabilimenti non solo in Europa ma anche in Cina, Stati Uniti e Messico. Nel 2017 Xella ha raggiunto un fatturato pari a € 1.5 miliardi con circa 6,700 dipendenti. Il Gruppo Xella riunisce e sviluppa competenze e know-how dei marchi Ytong, Silka, Multipor, Hebel e Ursa. Concetti innovativi e nuovi approcci di sistema consentono lo sviluppo di materiali da costruzione efficienti e sostenibili. I marchi del Gruppo Xella offrono prodotti di elevata qualità e soluzioni personalizzate, per costruzioni con prestazioni eccezionali, pronte in tempi veloci e dai costi contenuti.

Sede legale

Via/piazza, n° civico: Zanica

CAP: 24050

Città: Grassobbio

Prov.: Bergamo

Nazione: Italy

E-mail: ytong-it@xella.com

Numero: 0354522272

CE

SCHEDA TECNICA

IMMAGINI

CE

SCHEDA TECNICA

Informazioni identificative del prodotto

Sinonimi: Calcestruzzo cellulare

Denominazione commerciale: Ytong Climaplus sp.36x62,5x20

Destinazione d'uso: Murature di tamponamento

Codice CPV: 44111100-2-Mattoni;44111600-7-Blocchi

Descrizione Commerciale: Blocchi in calcestruzzo aerato autoclavato maschiati, isolanti, ecosostenibili e traspiranti per tamponamenti esterni monostrato ad elevato isolamento termico.

Classificazioni del prodotto	
Classificazioni	
Uniformat	B2010
OmniClass (Table 23)	23-13 21 11
MasterFormat	04 22 26
Uniclass	Pr_20_93_52_05

Informazioni ai fini della specifica tecnica

Specifica Tecnica: UNI EN 771-4

Denominazione secondo specifica tecnica: Specifica per elementi per muratura - Parte 4: Elementi di calcestruzzo aerato autoclavato per muratura

Classificazione del prodotto secondo specifica tecnica: Unità di muratura di Categoria I

Anno della specifica tecnica: 2015

Uso\Impiego previsto del prodotto secondo specifica tecnica: I principali impieghi previsti sono diversi tipi di applicazioni portanti e non portanti in tutte le forme di muratura, tra cui anta singola, intercapedine, divisori, contenimento, basamento e uso generale sotto il livello del suolo, comprese le pareti pe

Aspetto visivo e costruttivo	
Colore	Bianco
Fisico - chimiche	
Materiale	Calcestruzzo aerato autoclavato
Peso	20 kg

SCHEDA TECNICA

Principali componenti del prodotto

NUMERO	DESCRIZIONE	COMPONENTE LINK	Scheda Componente
1	Sabbia		✗
2	Cemento		✗
3	Calce viva		✗
4	Anidrite/gesso		✗
5	Alluminio (agente porogeno)		✗
6	Acqua		✗

Principali componenti chimiche del prodotto

NUMERO	DESCRIZIONE	Num. CAS	Num CE	% Peso	Nota
1	Sabbia			60-70	
2	Cemento			15-25	
3	Calce viva			5-15	
4	Anidrite/gesso			2-5	
5	Alluminio (agente Porogeno)			0.05-0.1	
6	Acqua			50-75	

CARATTERISTICHE PRESTAZIONALI DICHIARATE

Caratteristiche prestazionali essenziali	
Lunghezza	624 mm - UNI EN 772-16
Larghezza	360 mm - UNI EN 772-16
Altezza	199 mm - UNI EN 772-16
Tolleranza, Altezza	TLMB - UNI EN 998-2
Planarità della faccia base	TLMB - UNI EN 998-2
Parallelismo piano di facce	TLMB - UNI EN 998-2
Forma	Parallelepipedo rettangolo
Resistenza alla compressione	1.90 N/mm2 - UNI EN 772-1:2011
Reazione al fuoco	A1 - UNI EN 13501-1
Permeabilità al vapore acqueo	0.0000000000032 kg/(m s Pa) - UNI EN ISO 12572
Potere fonoisolante	48 dB - EN ISO 140-3 and UNI EN 1793-2
Densità lorda secca	325 kg/m3
Durabilità al gelo/disgelo	Da non lasciare esposto - European Standard
Sostanze pericolose	Nessuna - National regulations on dangerous substances
Conduttività termica	0.078 W/(m K) - UNI EN 1745
Densità lorda secca	325 kg/m3

CE

SCHEDA TECNICA

Informazioni sulla sostenibilità	
Parametri obbligatori ai sensi della EN 15804	
Potenziale di riscaldamento globale, GWP	39.66 kg CO2 eq
EP acqua dolce	633.79 kg (PO4)3- eq
Potenziale di riduzione dello strato d'ozono stratosferico, ODP	1.99 kg CFC-11 eq
Potenziale di acidificazione del suolo e dell'acqua, AP	511.88 kg SO2 eq
Potenziale di formazione dell'ozono troposferico, POCP	619.16 kg C2H4 eq
Informazioni che descrivono i flussi di produzione	
Materiali riciclabili	0 kg
Parametri che descrivono le categorie di rifiuti	
Rifiuti pericolosi	0 kg
Rifiuti radioattivi	0 kg
Parametri che descrivono l'emissione di inquinanti dai materiali	
Contenuto di VOC	0 g/l
Informazioni ai fini del rispetto dei CAM (ai sensi di DM 11 ottobre 2017)	
Sostanze dannose per l'ozono: utilizzo di prodotti contenenti sostanze ritenute dannose per lo strato d'ozono	no
Sostanze pericolose: additivi a base di cadmio, piombo, cromo VI, mercurio, arsenico e selenio; ftalati; sostanze identificate come "estremamente preoccupanti" (SVHCs); sostanze e miscele classificate come cancerogene, mutagene o tossiche per la riproduzi	no
Informazioni su imballaggio, movimentazione, immagazzinamento in stabilimento e trasporto	
Tipologia dell'imballaggio	Teli da imballaggio in polietilene ed pallets in legno, entrambi riciclabili
Altezza dell'imballaggio	1180 mm
Peso dell'imballaggio	530 kg
N. pezzi dell'imballaggio	24

CE

SCHEDA TECNICA

Informazioni commerciali	
Descrizione da capitolato	Blocchi in calcestruzzo aerato autoclavato per tamponamento esterno, Ytong Climaplus,con dichiarazione di prestazione DoP e marcatura CE conforme a UNI EN 771-4, materiale naturale a basso impatto ambientale ed esente da emissioni nocive (dichiarazione EPD), delle dimensioni di 62,5 cm (L) x 20 cm (H) x 36 cm (sp.), dotati di maniglie e profili maschio-femmina, densità nominale 325 kg/mc, conducibilità termica a secco 0,078 W/mK. Con contenuto di riciclato ai sensi del decreto CAM Criteri Ambientali Minimi del 10.11.2019 pari al 19%
Descrizione da elenco prezzi	Blocchi in calcestruzzo aerato autoclavato per tamponamento esterno, Ytong Climaplus,con dichiarazione di prestazione DoP e marcatura CE conforme a UNI EN 771-4, materiale naturale a basso impatto ambientale ed esente da emissioni nocive (dichiarazione EPD), delle dimensioni di 62,5 cm (L) x 20 cm (H) x 36 cm (sp.), dotati di maniglie e profili maschio-femmina, densità nominale 325 kg/mc, conducibilità termica a secco 0,078 W/mK. Con contenuto di riciclato ai sensi del decreto CAM Criteri Ambientali Minimi del 10.11.2019 pari al 19%

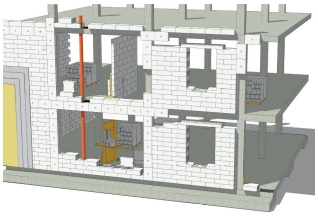
Informazioni sull'affidabilità dei dati	
Data di revisione della scheda tecnica	05/12/2019

Informazioni identificative del fabbricante

Ragione sociale: Xella

Note: Il Gruppo Xella è protagonista di primo piano a livello mondiale nella produzione e commercializzazione di materiali da costruzione. Con le tre divisioni - materiali da costruzione, sistemi di costruzione a secco e calce - l'azienda si presenta come il più grande produttore al mondo di calcestruzzo cellulare e arenaria calcarea, nonché leader nella fabbricazione di lastre in gessofibra. Attualmente il gruppo è presente in oltre 30 Paesi, con stabilimenti non solo in Europa ma anche in Cina, Stati Uniti e Messico. Nel 2017 Xella ha raggiunto un fatturato pari a € 1.5 miliardi con circa 6,700 dipendenti. Il Gruppo Xella riunisce e sviluppa competenze e know-how dei marchi Ytong, Silka, Multipor, Hebel e Ursa. Concetti innovativi e nuovi approcci di sistema consentono lo sviluppo di materiali da costruzione efficienti e sostenibili. I marchi del Gruppo Xella offrono prodotti di elevata qualità e soluzioni personalizzate, per costruzioni con prestazioni eccezionali, pronte in tempi veloci e dai costi contenuti.

IMMAGINI



CE

SCHEDA TECNICA

Informazioni identificative del prodotto

Parole chiave: malta;malta leggera;intonaco

Sinonimi: Intonaco

Denominazione commerciale: Malta Leggera Multipor

Codice commerciale: Malta Leggera Multipor

Destinazione d'uso: Malta leggera per intonaco per uso esterno/interno in pareti, colonne e partizioni, come trattato nello scopo e campo di applicazione della EN 998-1

Descrizione Commerciale: Malta Leggera Multipor Ytong Xella

Classificazioni del prodotto	
Classificazioni	
Uniformat	B2010-B3010-C3010-C3030
OmniClass (Table 23)	23-13 15 13
MasterFormat	04 28 23
Uniclass	Pr_20_31_53_88

Informazioni ai fini della specifica tecnica

Specifica Tecnica: UNI EN 15824

Denominazione secondo specifica tecnica: Intonaci esterni e interni a base di leganti organici

Anno della specifica tecnica: 2017

Uso\Impiego previsto del prodotto secondo specifica tecnica: Su pareti, soffitti, pilastri e partizioni interni

Aspetto visivo e costruttivo	
Composizione	A base di leganti organici - Applicazione plaster
Fornitura	In sacchi
Colore	Grigio
Aspetto	Materiale solido, polvere finemente macinata
Dimensione	
Dimensione massima dell'aggregato	1 mm

SCHEDA TECNICA

Informazioni sulla sostenibilità	
Fase del ciclo di vita	Valore from cradle to gate
Informazioni su imballaggio, movimentazione, immagazzinamento in stabilimento e trasporto	
Tipologia dell'imballaggio	sacco da 20 Kg
N. pezzi dell'imballaggio	24
Informazioni sull'affidabilità dei dati	
Data di realizzazione della scheda tecnica	13/11/2019
Data di revisione della scheda tecnica	15/5/2020

CE

SCHEDA TECNICA

Informazioni identificative del fabbricante

Ragione sociale: Politecnico di Milano

Sito WEB: www.polimi.it

Note: Il Politecnico è un'università scientifico-tecnologica che forma ingegneri, architetti e designer. Da sempre punta sulla qualità e sull'innovazione della didattica e della ricerca, sviluppando un rapporto fecondo con la realtà economica e produttiva attraverso la ricerca sperimentale e il trasferimento tecnologico. La ricerca è sempre più legata alla didattica e costituisce un impegno prioritario che consente al Politecnico di Milano di raggiungere risultati di alto livello internazionale e di realizzare l'incontro tra università e mondo delle imprese. L'attività di ricerca costituisce, inoltre, un percorso parallelo a quello della cooperazione e delle alleanze con il sistema industriale. Conoscere il mondo dove si andrà a operare è requisito indispensabile per la formazione degli studenti. Rapportarsi alle esigenze del mondo produttivo, industriale e della pubblica amministrazione, aiuta la ricerca a percorrere terreni nuovi e a confrontarsi con la necessità di una costante e rapida innovazione. L'alleanza con il mondo industriale, in molti casi favorita dalla Fondazione Politecnico e da consorzi partecipati dal Politecnico, consente all'Ateneo di assecondare la vocazione dei territori in cui opera e di essere da stimolo per il loro sviluppo. La sfida che si gioca oggi proietta questa tradizione di forte radicamento territoriale oltre i confini del paese, in un confronto che si sviluppa prima di tutto a livello europeo con l'obiettivo di contribuire alla creazione di un "mercato unico" della formazione. Il Politecnico partecipa a numerosi progetti di ricerca e di formazione collaborando con le più qualificate università europee e internazionali, dal Nord America al Sud-Est Asiatico all'Est Europeo. Oggi la spinta all'internazionalizzazione vede il Politecnico di Milano partecipare al network europeo e mondiale delle principali università tecniche e offrire numerosi programmi di scambio e di doppia laurea e diversi corsi di studio interamente in inglese.

Sede legale

Via/piazza, n° civico: Piazza Leonardo da Vinci

CAP: 20133

Città: Milano

Prov.: MI

Nazione: Italy

Numero: 0223995167

Certificazioni aziendali: 1234;5678

Stabilimento di produzione

Ragione Sociale: G&CO

Forma Sociale: S.p.A

Via/piazza, n° civico: Via Italia 8

CAP: 13900

Città: Biella

Prov.: Biella

Nazione: Italy

E-mail: gustavo.amosso@outlook.com

Numero: 015 5254563

Certificazioni aziendali: ISO 9001

IMMAGINI

SCHEDA TECNICA

Informazioni identificative del prodotto

Parole chiave: malta;intonaco

Sinonimi: malta;intonaco

Denominazione commerciale: Ytong RY25

Codice commerciale: Ytong RY25

Destinazione d'uso: Malta per intonaco per scopi generali (GP) per uso interno in pareti, colonne e partizioni, come trattato nello scopo e campo di applicazione della EN 998-1

Descrizione Commerciale: Malta Ytong RY25 xella

Classificazioni del prodotto

Classificazioni	
Uniformat	B2010-B3010-C3010-C3030
OmniClass (Table 23)	23-13 15 13
MasterFormat	04 28 23
Uniclass	Pr_20_31_53_88

Informazioni ai fini della specifica tecnica

Specifica Tecnica: UNI EN 15824

Denominazione secondo specifica tecnica: Intonaci esterni e interni a base di leganti organici

Classificazione del prodotto secondo specifica tecnica: EN 998-1

Definizione del prodotto secondo specifica tecnica: Malta per intonaco per scopi generali (GP) per uso interno in pareti, colonne e partizioni

Anno della specifica tecnica: 2017

Uso\Impiego previsto del prodotto secondo specifica tecnica: Su pareti, soffitti, pilastri e partizioni interni

Aspetto visivo e costruttivo	
Composizione	A base di leganti organici - Applicazione plaster
Fornitura	In sacchi
Colore	bianco/grigio
Aspetto	granelli
Dimensione	
Dimensione massima dell'aggregato	0.25 mm

SCHEDA TECNICA

Informazioni identificative del fabbricante

Ragione sociale: Politecnico di Milano

Sito WEB: www.polimi.it

Note: Il Politecnico è un'università scientifico-tecnologica che forma ingegneri, architetti e designer. Da sempre punta sulla qualità e sull'innovazione della didattica e della ricerca, sviluppando un rapporto fecondo con la realtà economica e produttiva attraverso la ricerca sperimentale e il trasferimento tecnologico. La ricerca è sempre più legata alla didattica e costituisce un impegno prioritario che consente al Politecnico di Milano di raggiungere risultati di alto livello internazionale e di realizzare l'incontro tra università e mondo delle imprese. L'attività di ricerca costituisce, inoltre, un percorso parallelo a quello della cooperazione e delle alleanze con il sistema industriale. Conoscere il mondo dove si andrà a operare è requisito indispensabile per la formazione degli studenti. Rapportarsi alle esigenze del mondo produttivo, industriale e della pubblica amministrazione, aiuta la ricerca a percorrere terreni nuovi e a confrontarsi con la necessità di una costante e rapida innovazione. L'alleanza con il mondo industriale, in molti casi favorita dalla Fondazione Politecnico e da consorzi partecipati dal Politecnico, consente all'Ateneo di assecondare la vocazione dei territori in cui opera e di essere da stimolo per il loro sviluppo. La sfida che si gioca oggi proietta questa tradizione di forte radicamento territoriale oltre i confini del paese, in un confronto che si sviluppa prima di tutto a livello europeo con l'obiettivo di contribuire alla creazione di un "mercato unico" della formazione. Il Politecnico partecipa a numerosi progetti di ricerca e di formazione collaborando con le più qualificate università europee e internazionali, dal Nord America al Sud-Est Asiatico all'Est Europeo. Oggi la spinta all'internazionalizzazione vede il Politecnico di Milano partecipare al network europeo e mondiale delle principali università tecniche e offrire numerosi programmi di scambio e di doppia laurea e diversi corsi di studio interamente in inglese.

Sede legale

Via/piazza, n° civico: Piazza Leonardo da Vinci

CAP: 20133

Città: Milano

Prov.: MI

Nazione: Italy

Numero: 0223995167

Certificazioni aziendali: 1234;5678

Stabilimento di produzione

Ragione Sociale: G&CO

Forma Sociale: S.p.A

Via/piazza, n° civico: Via Italia 8

CAP: 13900

Città: Biella

Prov.: Biella

Nazione: Italy

E-mail: gustavo.amosso@outlook.com

Numero: 015 5254563

Certificazioni aziendali: ISO 9001

IMMAGINI

SCHEDA TECNICA

Informazioni identificative del prodotto

Parole chiave: muratura;blocco; calcestruzzo; calcestruzzo aerato

Sinonimi: muratura;blocco;Calcestruzzo;calcestruzzo aerato

Denominazione commerciale: Blocco Ytong Taglio Termico sp.10x62,5x25 maschiato

Codice commerciale: IT014054640031814

Destinazione d'uso: In pareti, colonne e divisori in muratura

Codice CPV: 44111100-2-Mattoni;44111600-7-Blocchi

Descrizione Commerciale: Blocco Ytong Taglio Termico Xella

Classificazioni del prodotto	
Classificazioni	
Uniformat	B2010
OmniClass (Table 23)	23-13 21 11
MasterFormat	04 22 26
Uniclass	Pr_20_93_52_05

Informazioni ai fini della specifica tecnica

Specifica Tecnica: UNI EN 771-4

Denominazione secondo specifica tecnica: Specifica per elementi per muratura - Parte 4: Elementi di calcestruzzo aerato autoclavato per muratura

Anno della specifica tecnica: 2015

Uso\Impiego previsto del prodotto secondo specifica tecnica: I principali impieghi previsti sono diversi tipi di applicazioni portanti e non portanti in tutte le forme di muratura, tra cui anta singola, intercapedine, divisori, contenimento, basamento e uso generale sotto il livello del suolo, comprese le pareti pe

Aspetto visivo e costruttivo	
Finitura	Maschiato
Colore	mattone
Fisico - chimiche	
Materiale	Calcestruzzo aerato autoclavato

Principali componenti chimiche del prodotto

POLITECNICO
MILANO 1863

SCHEDA TECNICA

Informazioni sulla sostenibilità	
Fase del ciclo di vita	Valore from cradle to gate
Fonte del dato	brochure sostenibilità
Parametri obbligatori ai sensi della EN 15804	
Potenziale di riscaldamento globale, GWP	36.61 kg CO2 eq
Eccedenza accumulata, AE (EP terrestre)	585.4 mol N eq.
Potenziale di riduzione dello strato d'ozono stratosferico, ODP	1.84 kg CFC-11 eq
Potenziale di acidificazione del suolo e dell'acqua, AP	472.5 kg SO2 eq
Potenziale di formazione dell'ozono troposferico, POCP	571.54 kg C2H4 eq
Informazioni su imballaggio, movimentazione, immagazzinamento in stabilimento e trasporto	
Tipologia dell'imballaggio	teli da imballaggio in polietilene ed i pallets in legno
Informazioni sull'affidabilità dei dati	
Data di realizzazione della scheda tecnica	12/11/2019
Data di revisione della scheda tecnica	15/5/2020

CE

SCHEDA TECNICA

Informazioni identificative del fabbricante

Ragione sociale: Politecnico di Milano

Sito WEB: www.polimi.it

Note: Il Politecnico è un'università scientifico-tecnologica che forma ingegneri, architetti e designer. Da sempre punta sulla qualità e sull'innovazione della didattica e della ricerca, sviluppando un rapporto fecondo con la realtà economica e produttiva attraverso la ricerca sperimentale e il trasferimento tecnologico. La ricerca è sempre più legata alla didattica e costituisce un impegno prioritario che consente al Politecnico di Milano di raggiungere risultati di alto livello internazionale e di realizzare l'incontro tra università e mondo delle imprese. L'attività di ricerca costituisce, inoltre, un percorso parallelo a quello della cooperazione e delle alleanze con il sistema industriale. Conoscere il mondo dove si andrà a operare è requisito indispensabile per la formazione degli studenti. Rapportarsi alle esigenze del mondo produttivo, industriale e della pubblica amministrazione, aiuta la ricerca a percorrere terreni nuovi e a confrontarsi con la necessità di una costante e rapida innovazione. L'alleanza con il mondo industriale, in molti casi favorita dalla Fondazione Politecnico e da consorzi partecipati dal Politecnico, consente all'Ateneo di assecondare la vocazione dei territori in cui opera e di essere da stimolo per il loro sviluppo. La sfida che si gioca oggi proietta questa tradizione di forte radicamento territoriale oltre i confini del paese, in un confronto che si sviluppa prima di tutto a livello europeo con l'obiettivo di contribuire alla creazione di un "mercato unico" della formazione. Il Politecnico partecipa a numerosi progetti di ricerca e di formazione collaborando con le più qualificate università europee e internazionali, dal Nord America al Sud-Est Asiatico all'Est Europeo. Oggi la spinta all'internazionalizzazione vede il Politecnico di Milano partecipare al network europeo e mondiale delle principali università tecniche e offrire numerosi programmi di scambio e di doppia laurea e diversi corsi di studio interamente in inglese.

Sede legale

Via/piazza, n° civico: Piazza Leonardo da Vinci

CAP: 20133

Città: Milano

Prov.: MI

Nazione: Italy

Numero: 0223995167

Certificazioni aziendali: 1234

Stabilimento di produzione

Ragione Sociale: G&CO

Forma Sociale: S.p.A

Via/piazza, n° civico: Via Italia 8

CAP: 13900

Città: Biella

Prov.: Biella

Nazione: Italy

E-mail: gustavo.amosso@outlook.com

Numero: 015 5254563

Certificazioni aziendali: ISO 9001

IMMAGINI

CE

SCHEDA TECNICA

Informazioni identificative del prodotto

Parole chiave: Isolante;isolante termico

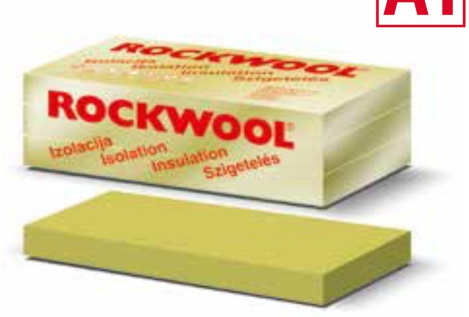
Denominazione commerciale: Floorrock GP

Codice commerciale: MW-EN 13162-T7-MU1-SDi-CP2-CC (1,5/0,3/10)22- AFr100

Destinazione d'uso: Isolamento termico degli edifici

Codice CPV: 44111520-2 Isolanti termici

Descrizione Commerciale: Isolante termico Floorrock GP Rockwool



Classificazioni del prodotto

Classificazioni	
Uniformat	C30-B20
OmniClass (Table 23)	23-13 25 19 13 13
MasterFormat	07 21 13.13
Uniclass	Pr_25_57_06_31

Informazioni ai fini della specifica tecnica

Specifica Tecnica: UNI EN 13162

Denominazione secondo specifica tecnica: Isolanti termici per edilizia - Prodotti di lana minerale (MW) ottenuti in fabbrica

Classificazione del prodotto secondo specifica tecnica: EN 13162:2012+A1:2015

Anno della specifica tecnica: 2015

Geometria e forma	
Geometria	In pannelli
Aspetto visivo e costruttivo	
Finitura	Non rivestito
Colore	Giallo

SCHEDA TECNICA

Dimensione		
Lunghezza	1000 mm - UNI EN 822	
Tolleranza Min.	**Tolleranza Med.**	**Tolleranza Max.**
Larghezza	625 mm - UNI EN 822	
Tolleranza Min.	**Tolleranza Med.**	**Tolleranza Max.**
Spessore	20 mm - UNI EN 823	
Tolleranza Min.	**Tolleranza Med.**	**Tolleranza Max.**

Fisico - chimiche	
Materiale	Lana di roccia e fogli di alluminio
Massa volumica	180 kg/m3

SCHEDA TECNICA

CARATTERISTICHE PRESTAZIONALI DICHIARATE

Caratteristiche prestazionali essenziali	
Caratteristiche di durabilità	NPD
Scorrimento a compressione	CC(1,5/0,3/10)22 - UNI EN 1606
Rigidità dinamica	55 - UNI EN 29052-1
Coefficiente di assorbimento acustico, αp	NPD
Fattore di resistenza alla diffusione del vapore acqueo, μ	NPD
Assorbimento d'acqua a breve termine	NPD - UNI EN 1609
Resistenza del flusso d'aria	AFr100 - UNI EN 29053
Resistenza alla trazione perpendicolare alle facce	NPD - UNI EN 1607
Sollecitazione a compressione	NPD - UNI EN 826
Resistenza termica, R	0.50 m2 K/W
Rilascio di sostanze pericolose	NPD - European and national provisions
Reazione al fuoco	A1 - UNI EN 13501-1
Resistenza termica	0.50
Spessore, dL	20 - UNI EN 12431
Assorbimento d'acqua a lungo termine	NPD - UNI EN 12087
Conduttività termica, λ	0.039 W/(m K)
Conduttività termica	0.039
Livelli di comprimibilità	CP2 - UNI EN 1991-1-1
Spessore, d	20 mm - UNI EN 823
Caratteristiche di durabilità	NPD
Resistenza del flusso d'aria	AFr100 - UNI EN 29053

CE

SCHEDA TECNICA

Informazioni sulla sostenibilità	
Fase del ciclo di vita	Valore from cradle to gate
Informazioni su imballaggio, movimentazione, immagazzinamento in stabilimento e trasporto	
Tipologia dell'imballaggio	Pallet
Larghezza dell'imballaggio	2000 mm
Lunghezza dell'imballaggio	1250 mm
Altezza dell'imballaggio	1350 mm
N. pezzi dell'imballaggio	224
Informazioni sull'affidabilità dei dati	
Compilatore	Gaetano Raffa
Data di realizzazione della scheda tecnica	13/11/2020
Revisore	Gaetano Raffa
Data di revisione della scheda tecnica	13/11/2020
Altro	
Prezzo	9.47 €

CE

SCHEDA TECNICA

Informazioni identificative del fabbricante

Ragione sociale: Politecnico di Milano

Sito WEB: www.polimi.it

Note: Il Politecnico è un'università scientifico-tecnologica che forma ingegneri, architetti e designer. Da sempre punta sulla qualità e sull'innovazione della didattica e della ricerca, sviluppando un rapporto fecondo con la realtà economica e produttiva attraverso la ricerca sperimentale e il trasferimento tecnologico. La ricerca è sempre più legata alla didattica e costituisce un impegno prioritario che consente al Politecnico di Milano di raggiungere risultati di alto livello internazionale e di realizzare l'incontro tra università e mondo delle imprese. L'attività di ricerca costituisce, inoltre, un percorso parallelo a quello della cooperazione e delle alleanze con il sistema industriale. Conoscere il mondo dove si andrà a operare è requisito indispensabile per la formazione degli studenti. Rapportarsi alle esigenze del mondo produttivo, industriale e della pubblica amministrazione, aiuta la ricerca a percorrere terreni nuovi e a confrontarsi con la necessità di una costante e rapida innovazione. L'alleanza con il mondo industriale, in molti casi favorita dalla Fondazione Politecnico e da consorzi partecipati dal Politecnico, consente all'Ateneo di assecondare la vocazione dei territori in cui opera e di essere da stimolo per il loro sviluppo. La sfida che si gioca oggi proietta questa tradizione di forte radicamento territoriale oltre i confini del paese, in un confronto che si sviluppa prima di tutto a livello europeo con l'obiettivo di contribuire alla creazione di un "mercato unico" della formazione. Il Politecnico partecipa a numerosi progetti di ricerca e di formazione collaborando con le più qualificate università europee e internazionali, dal Nord America al Sud-Est Asiatico all'Est Europeo. Oggi la spinta all'internazionalizzazione vede il Politecnico di Milano partecipare al network europeo e mondiale delle principali università tecniche e offrire numerosi programmi di scambio e di doppia laurea e diversi corsi di studio interamente in inglese.

Sede legale

Via/piazza, n° civico: Piazza Leonardo da Vinci

CAP: 20133

Città: Milano

Prov.: MI

Nazione: Italy

Numero: 0223995167

Certificazioni aziendali: 1234;5678

IMMAGINI

CE

SCHEDA TECNICA

Informazioni identificative del prodotto

Parole chiave: Isolante termico

Sinonimi: isolante;Isolante termico

Denominazione commerciale: Dachrock

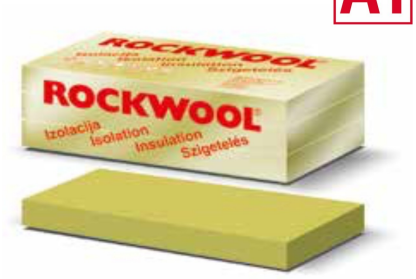
Codice commerciale: MW-EN 13162-T5-DS(70,-)-DS(70,90)-CS (10)70-PL(5)600-WS-WL(P)- TR15-MU1

Destinazione d'uso: Isolamento termico degli edifici

Codice CPV: 44111520-2 Isolanti termici

Descrizione Commerciale: Dachrock Rockwool

A1



Classificazioni del prodotto	
Classificazioni	
Uniformat	C30-B20
OmniClass (Table 23)	23-13 25 19 13 13
MasterFormat	07 21 13.13
Uniclass	Pr_25_57_06_31

Informazioni ai fini della specifica tecnica

Specifica Tecnica: UNI EN 13162

Denominazione secondo specifica tecnica: Isolanti termici per edilizia - Prodotti di lana minerale (MW) ottenuti in fabbrica

Anno della specifica tecnica: 2015

Geometria e forma	
Geometria	In pannelli
Aspetto visivo e costruttivo	
Finitura	non rivestito
Colore	giallo

SCHEDA TECNICA

Dimensione		
Lunghezza	1200 mm - UNI EN 822	
Tolleranza Min.	**Tolleranza Med.**	**Tolleranza Max.**
Larghezza	600 mm - UNI EN 822	
Tolleranza Min.	**Tolleranza Med.**	**Tolleranza Max.**
Spessore	40 mm - UNI EN 823	
Tolleranza Min.	**Tolleranza Med.**	**Tolleranza Max.**

Fisico - chimiche	
Materiale	Lana di roccia e fogli di alluminio
Massa volumica	156 kg/m3

CE

SCHEDA TECNICA

CARATTERISTICHE PRESTAZIONALI DICHIARATE

Caratteristiche prestazionali essenziali	
Scorrimento a compressione	NPD - UNI EN 1606
Rigidità dinamica	NPD - UNI EN 29052-1
Coefficiente di assorbimento acustico, αp	NPD
Fattore di resistenza alla diffusione del vapore acqueo, μ	MU1
Assorbimento d'acqua a breve termine	1 - UNI EN 1609
Resistenza del flusso d'aria	NPD - UNI EN 29053
Resistenza alla trazione perpendicolare alle facce	15 - UNI EN 1607
Sollecitazione a compressione	NPD - UNI EN 826
Resistenza termica, R	1 m2 K/W
Rilascio di sostanze pericolose	NPD - European and national provisions
Reazione al fuoco	A1 - UNI EN 13501-1
Resistenza termica	1
Spessore, dL	40 - UNI EN 12431
Assorbimento d'acqua a lungo termine	3 - UNI EN 12087
Carico puntuale	NPD - UNI EN 12430
Conduttività termica, λ	0.040 W/(m K)
Conduttività termica	0.040
Livelli di comprimibilità	CP2 - UNI EN 1991-1-1
Spessore, d	40 mm - UNI EN 823
Resistenza del flusso d'aria	NPD - UNI EN 29053

CE

SCHEDA TECNICA

Informazioni sulla sostenibilità	
Fase del ciclo di vita	Valore from cradle to gate

Informazioni su imballaggio, movimentazione, immagazzinamento in stabilimento e trasporto	
Tipologia dell'imballaggio	pallet
Larghezza dell'imballaggio	2400 mm
Lunghezza dell'imballaggio	1200 mm
Altezza dell'imballaggio	1310 mm
N. pezzi dell'imballaggio	120

Informazioni sull'affidabilità dei dati	
Compilatore	Gaetano Raffa
Data di realizzazione della scheda tecnica	13/11/2020
Revisore	Gaetano Raffa
Data di revisione della scheda tecnica	13/11/2020

Altro	
Prezzo	11.03 €

CE

SCHEDA TECNICA

Informazioni identificative del fabbricante

Ragione sociale: Politecnico di Milano

Sito WEB: www.polimi.it

Note: Il Politecnico è un'università scientifico-tecnologica che forma ingegneri, architetti e designer. Da sempre punta sulla qualità e sull'innovazione della didattica e della ricerca, sviluppando un rapporto fecondo con la realtà economica e produttiva attraverso la ricerca sperimentale e il trasferimento tecnologico. La ricerca è sempre più legata alla didattica e costituisce un impegno prioritario che consente al Politecnico di Milano di raggiungere risultati di alto livello internazionale e di realizzare l'incontro tra università e mondo delle imprese. L'attività di ricerca costituisce, inoltre, un percorso parallelo a quello della cooperazione e delle alleanze con il sistema industriale. Conoscere il mondo dove si andrà a operare è requisito indispensabile per la formazione degli studenti. Rapportarsi alle esigenze del mondo produttivo, industriale e della pubblica amministrazione, aiuta la ricerca a percorrere terreni nuovi e a confrontarsi con la necessità di una costante e rapida innovazione. L'alleanza con il mondo industriale, in molti casi favorita dalla Fondazione Politecnico e da consorzi partecipati dal Politecnico, consente all'Ateneo di assecondare la vocazione dei territori in cui opera e di essere da stimolo per il loro sviluppo. La sfida che si gioca oggi proietta questa tradizione di forte radicamento territoriale oltre i confini del paese, in un confronto che si sviluppa prima di tutto a livello europeo con l'obiettivo di contribuire alla creazione di un "mercato unico" della formazione. Il Politecnico partecipa a numerosi progetti di ricerca e di formazione collaborando con le più qualificate università europee e internazionali, dal Nord America al Sud-Est Asiatico all'Est Europeo. Oggi la spinta all'internazionalizzazione vede il Politecnico di Milano partecipare al network europeo e mondiale delle principali università tecniche e offrire numerosi programmi di scambio e di doppia laurea e diversi corsi di studio interamente in inglese.

Sede legale

Via/piazza, n° civico: Piazza Leonardo da Vinci

CAP: 20133

Città: Milano

Prov.: MI

Nazione: Italy

Numero: 0223995167

Certificazioni aziendali: 1234;5678

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