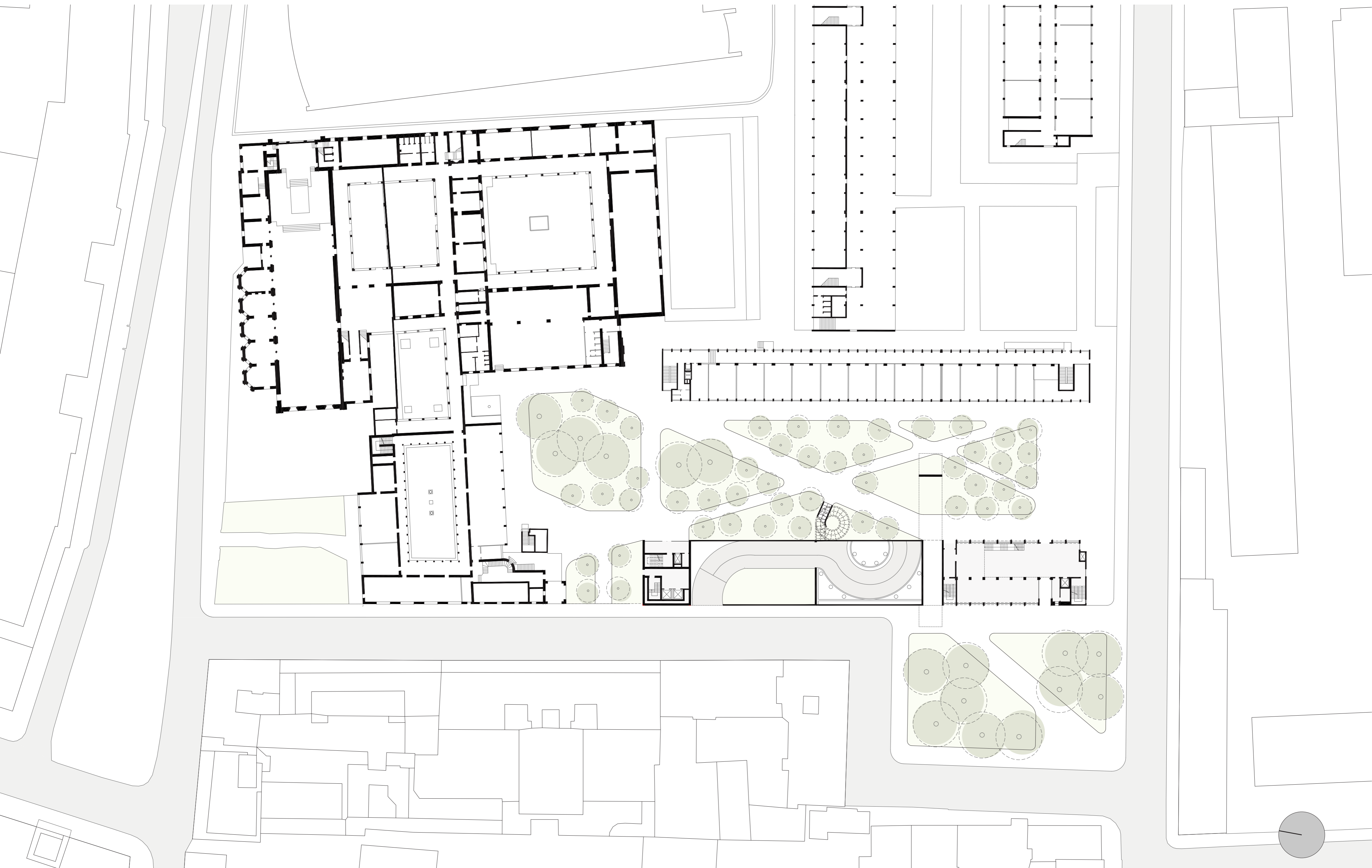
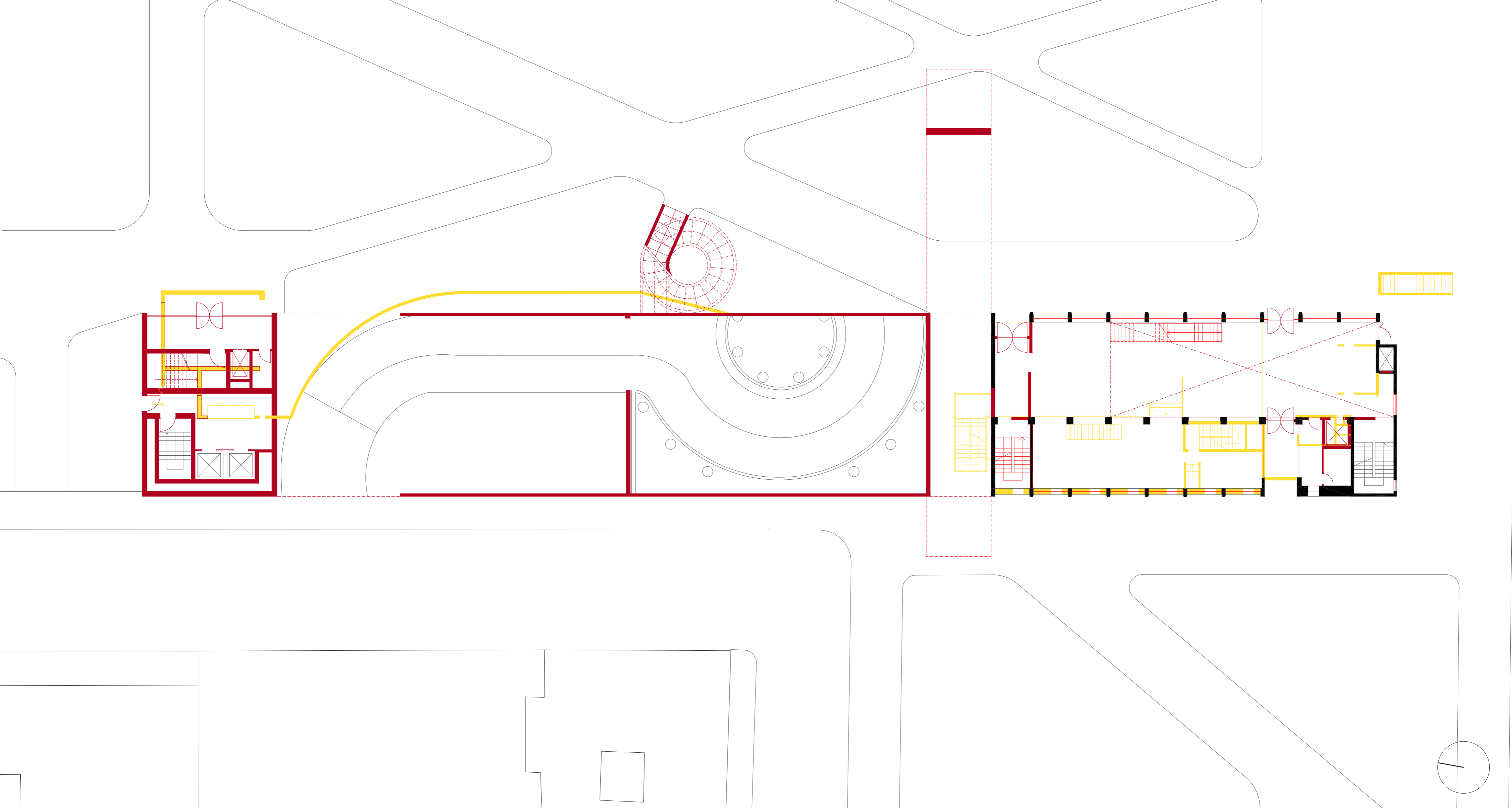


Planimetric
SCALE 1:1000

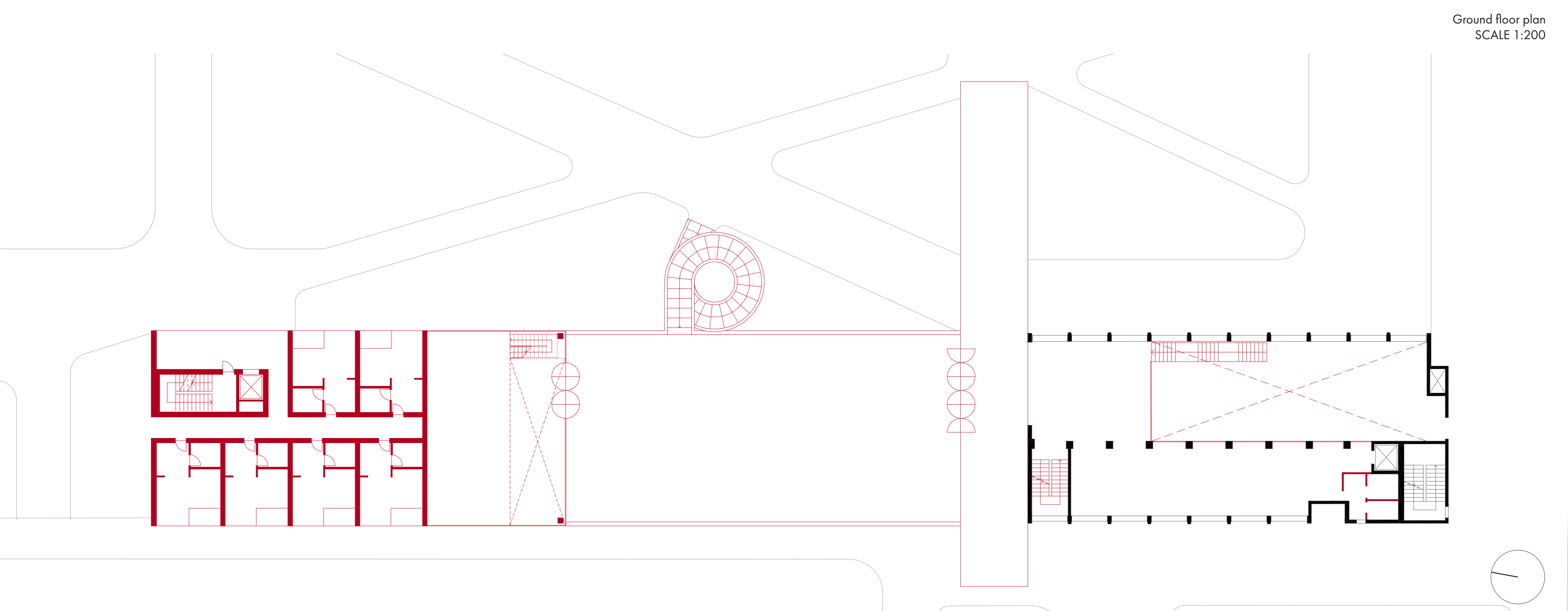


General site plan
SCALE 1:500

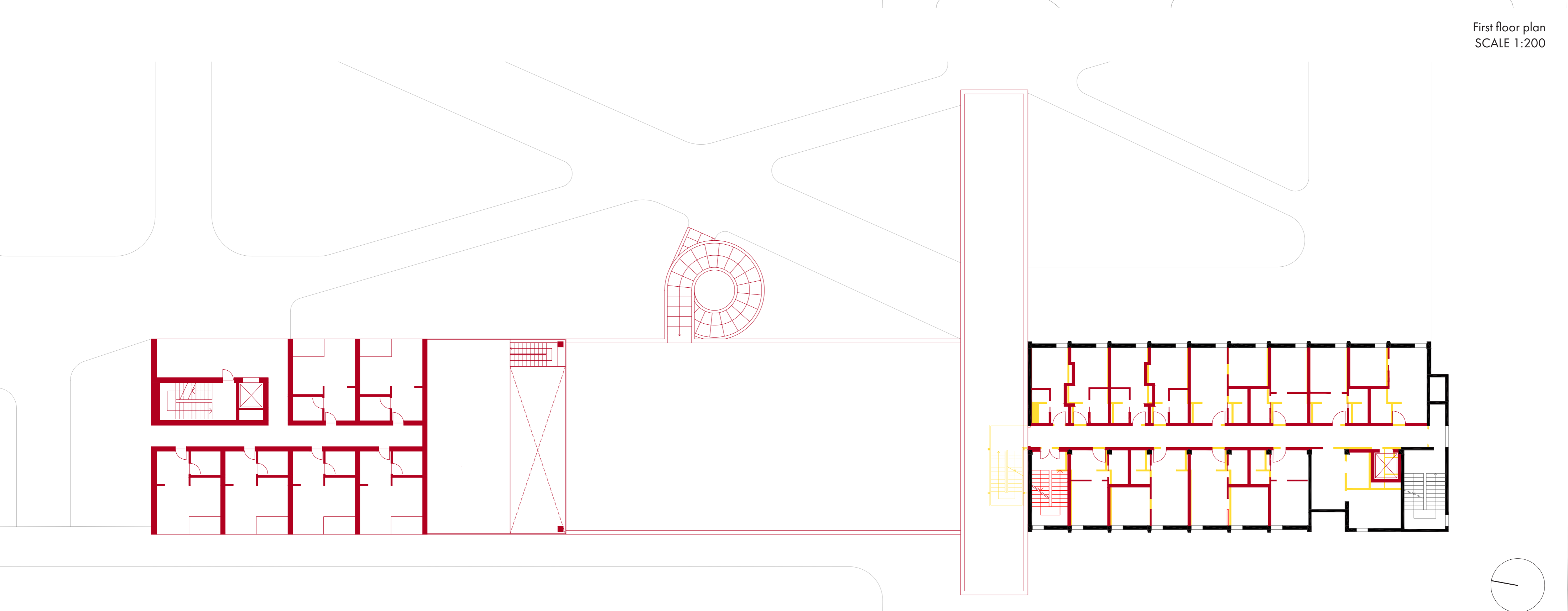




Ground floor plan
SCALE 1:200

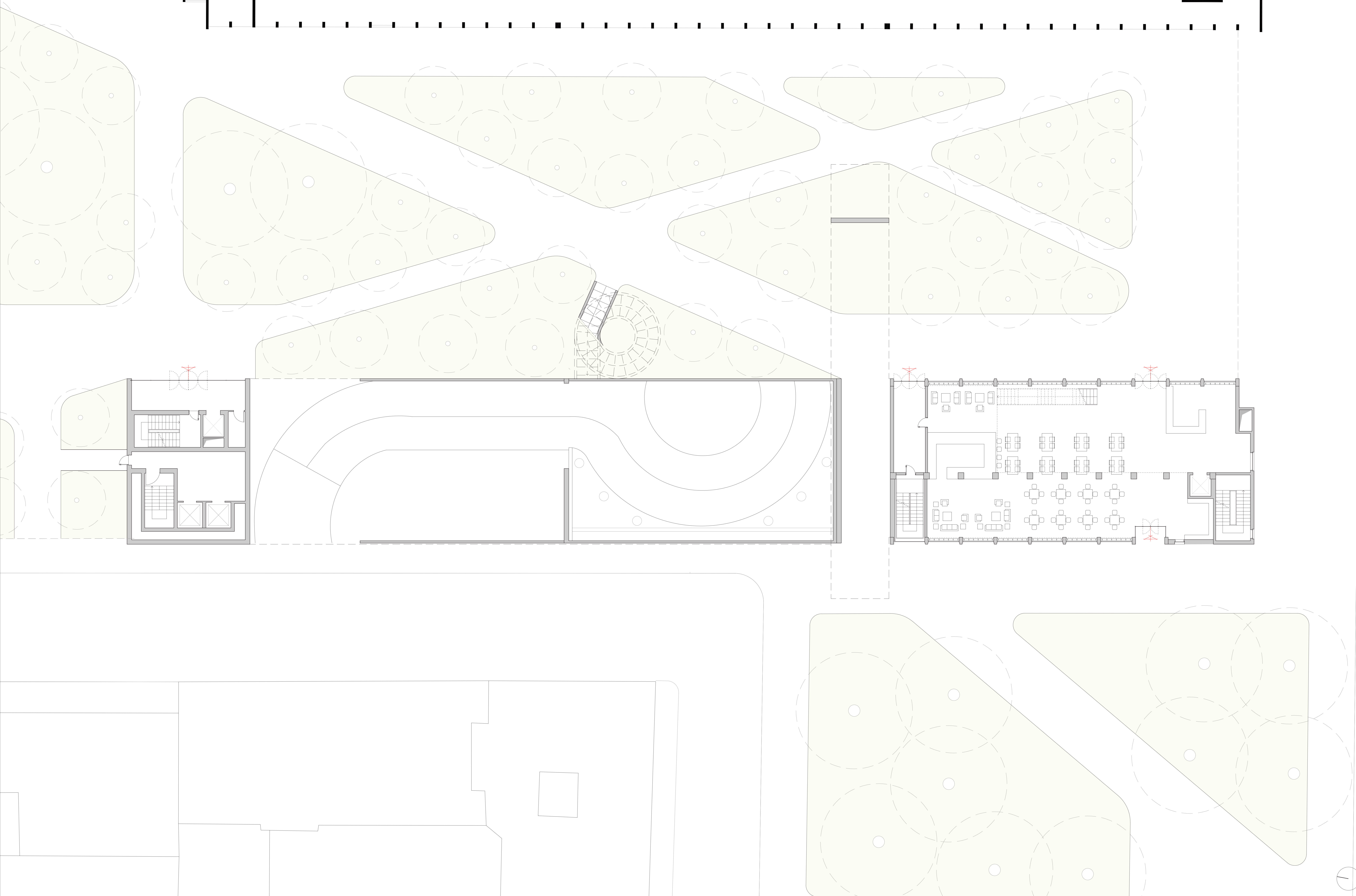


First floor plan
SCALE 1:200



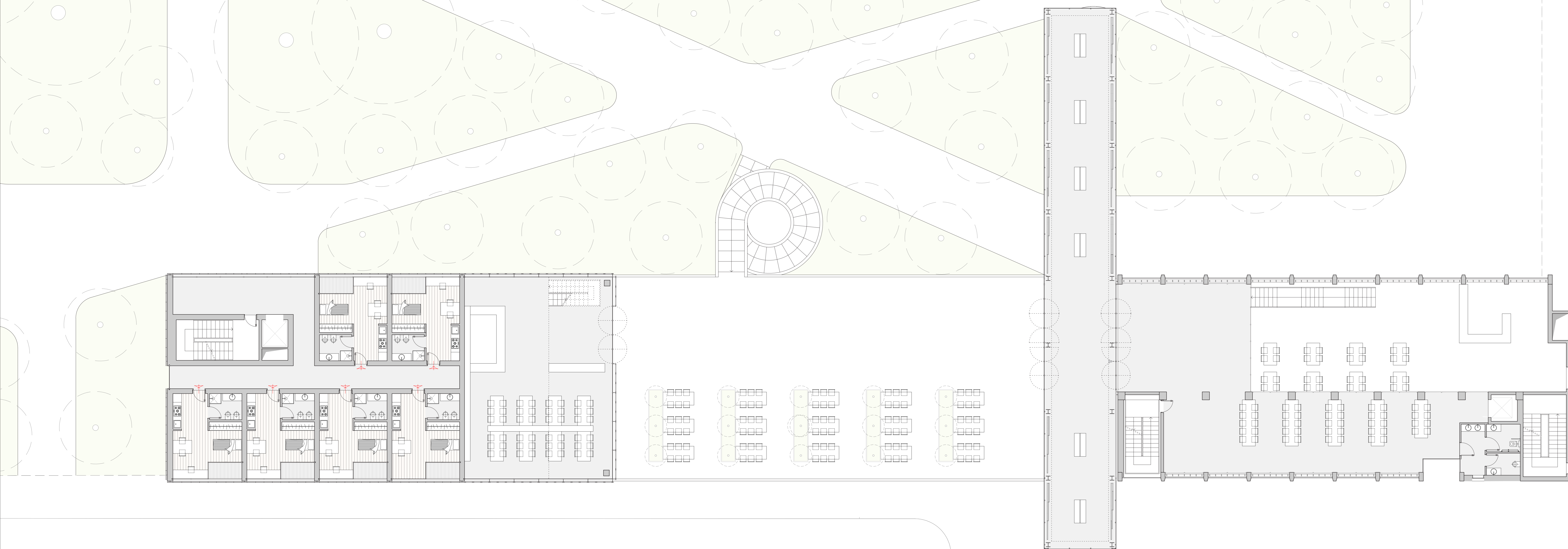
Second floor plan
SCALE 1:200



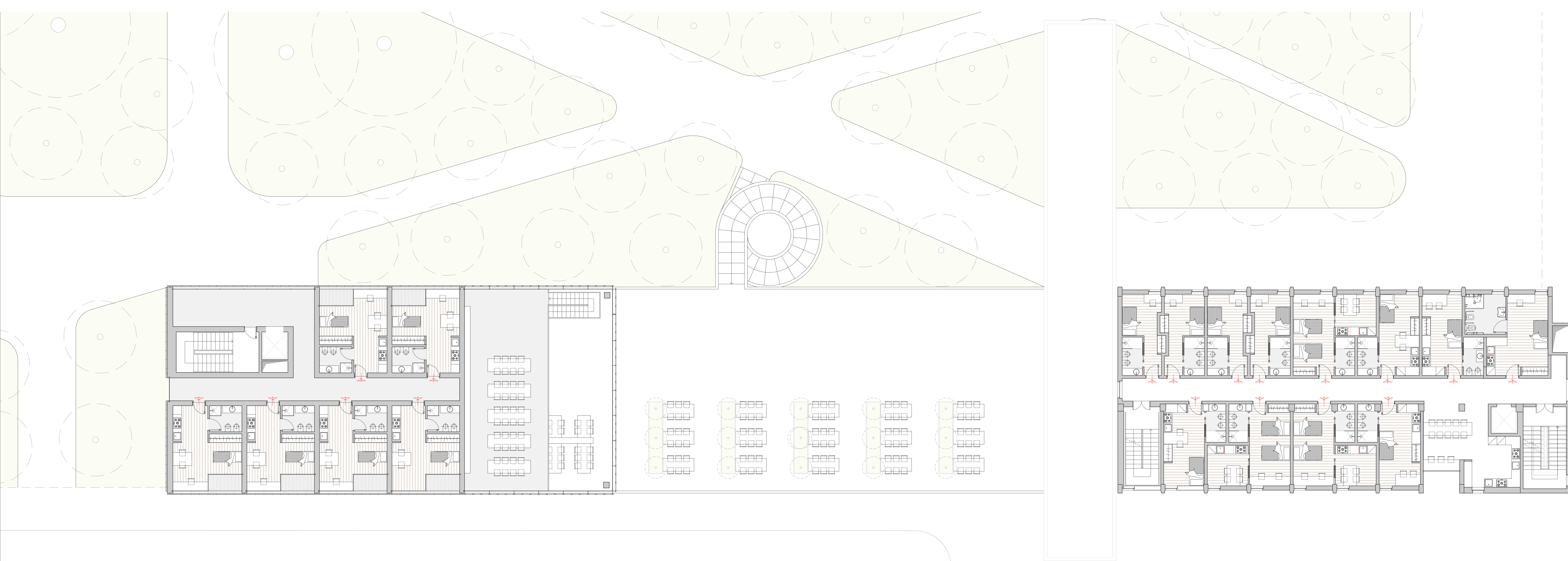


Ground floor plan
SCALE 1:200





First floor plan
SCALE 1:200

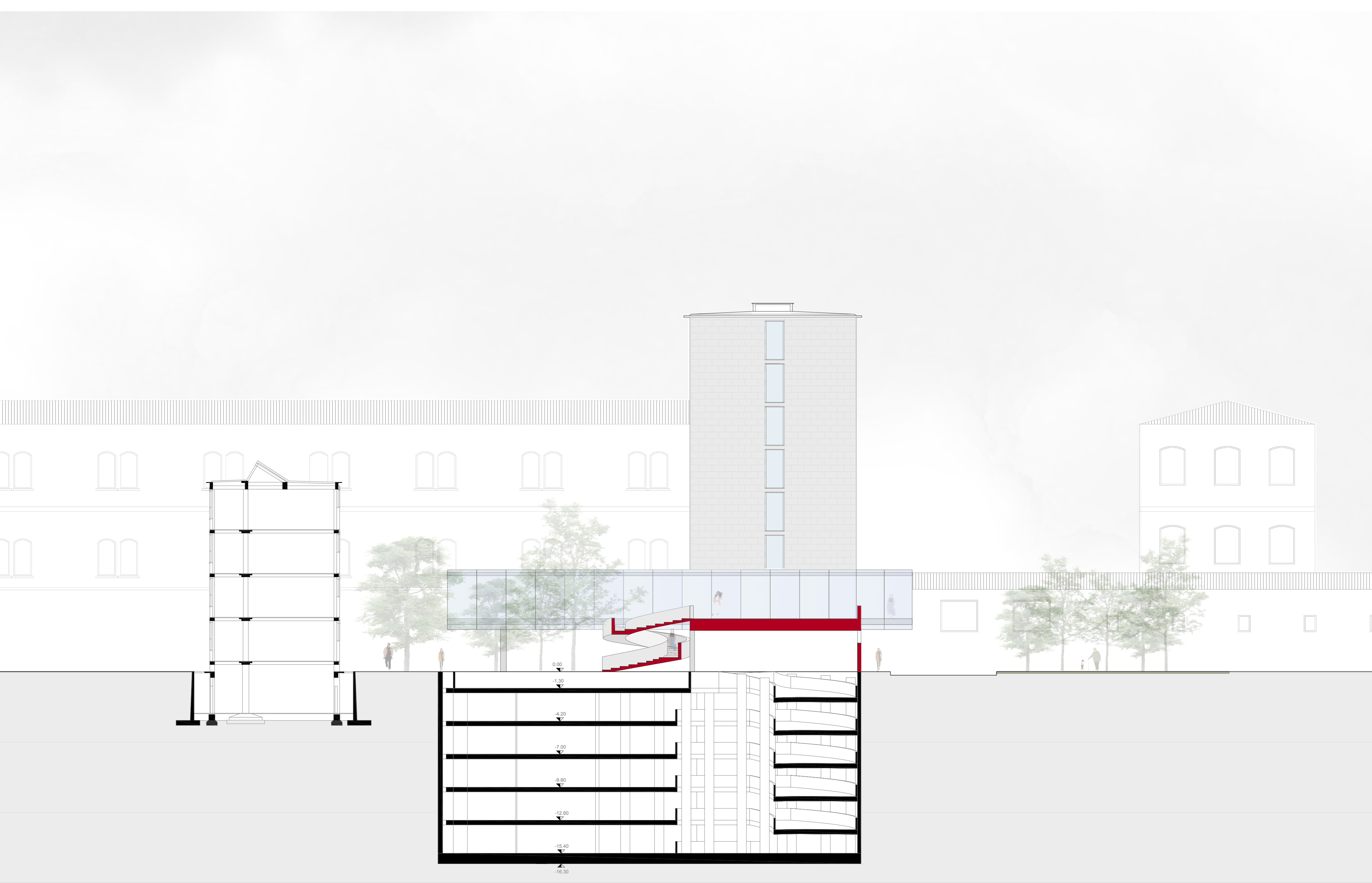


Second floor plan
SCALE 1:200

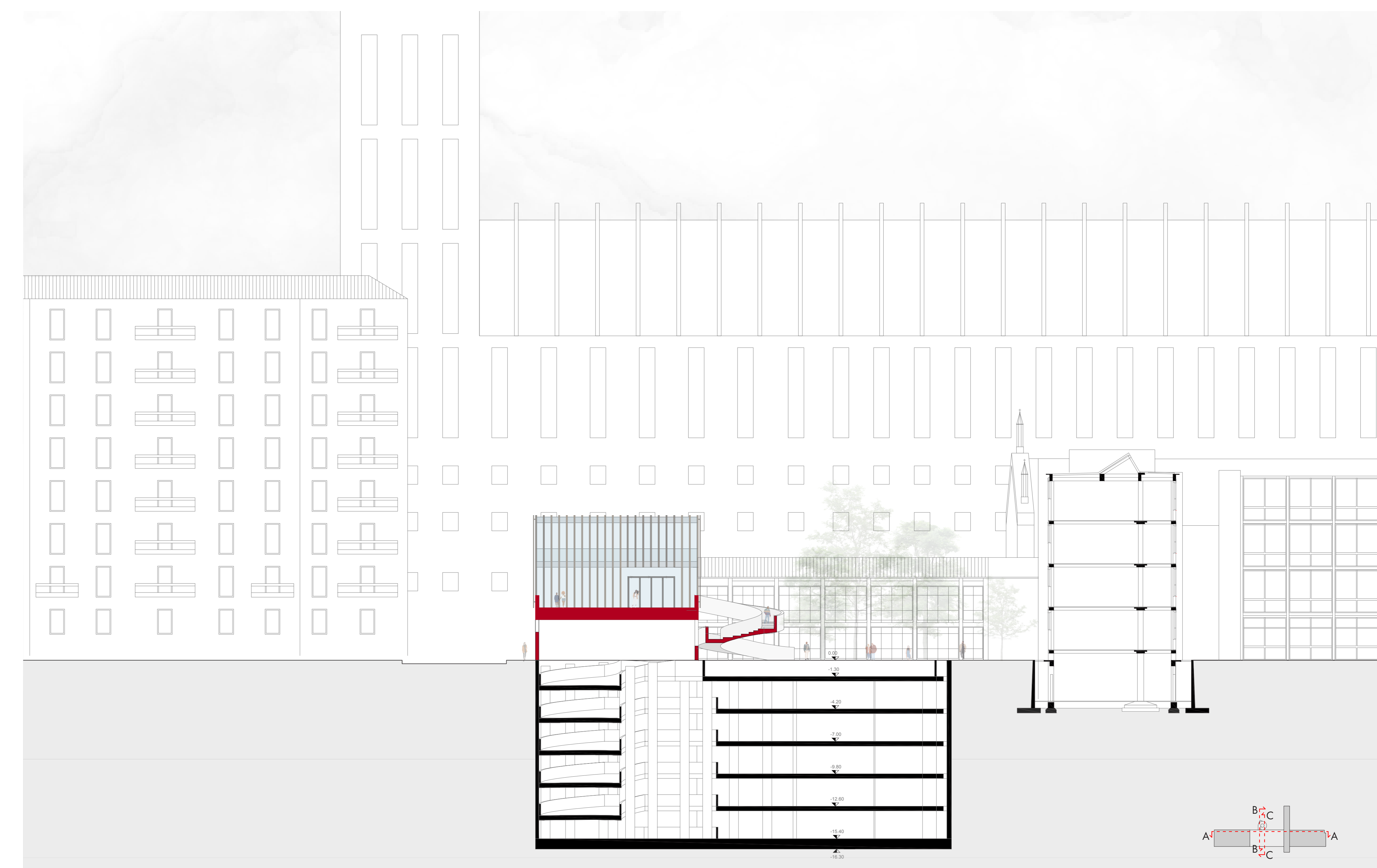




Longitudinal section AA
SCALE 1:200



Cross section BB
SCALE 1:200

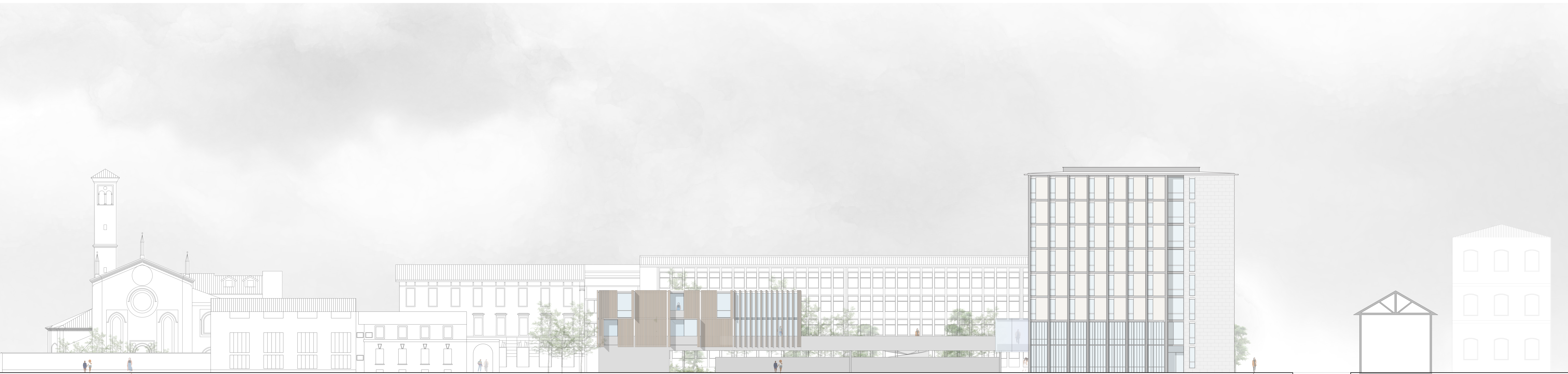


Cross section CC
SCALE 1:200





East elevation
SCALE 1:200



West elevation
SCALE 1:200





North elevation
SCALE 1:200

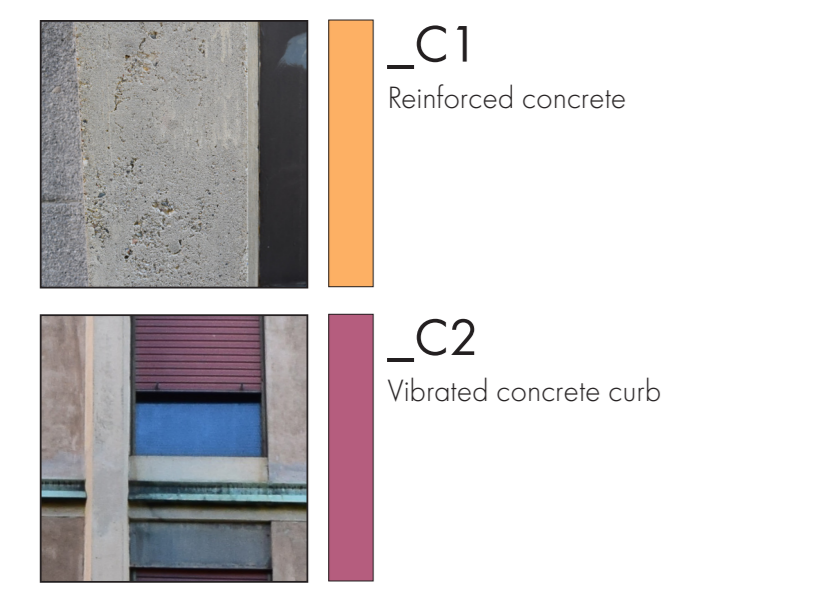


South elevation
SCALE 1:200

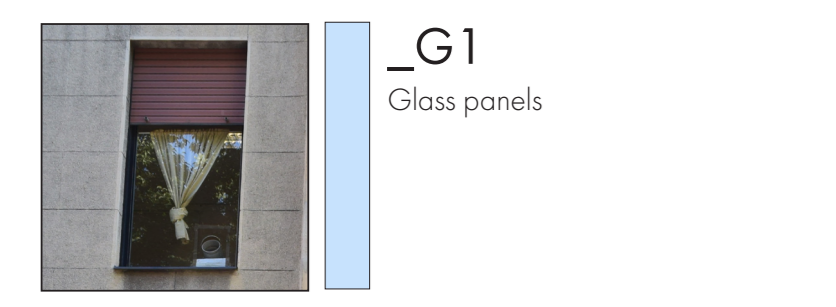




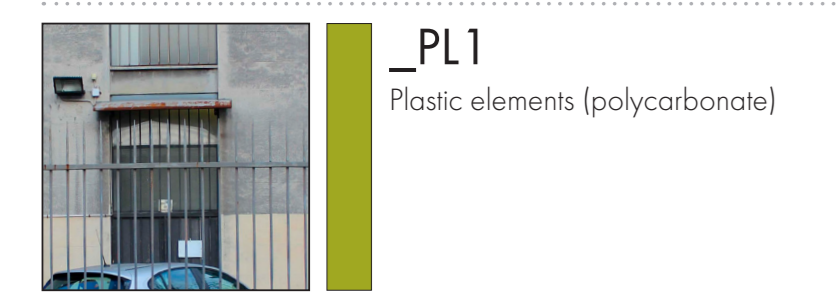
CONCRETE



GLASS



PLASTIC ELEMENTS



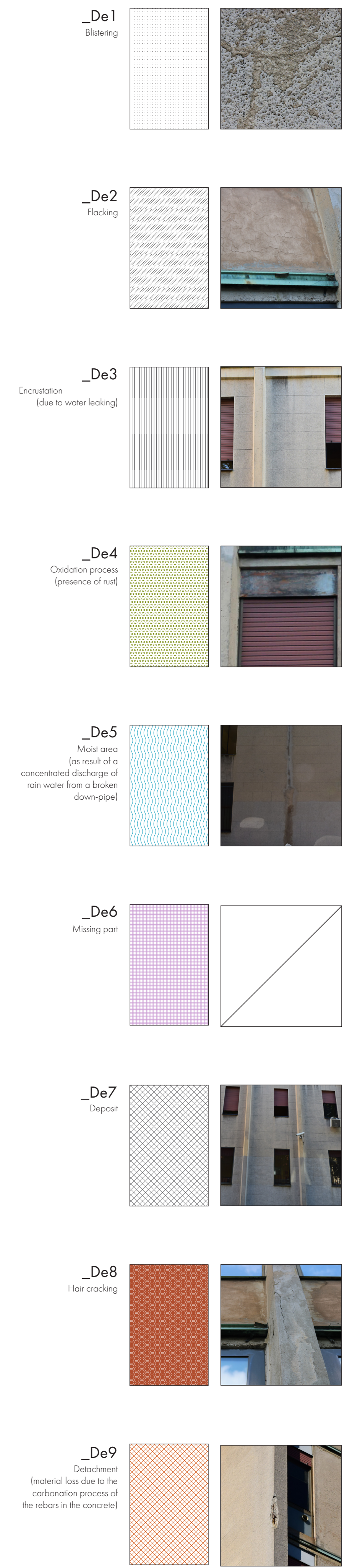
FINISHINGS



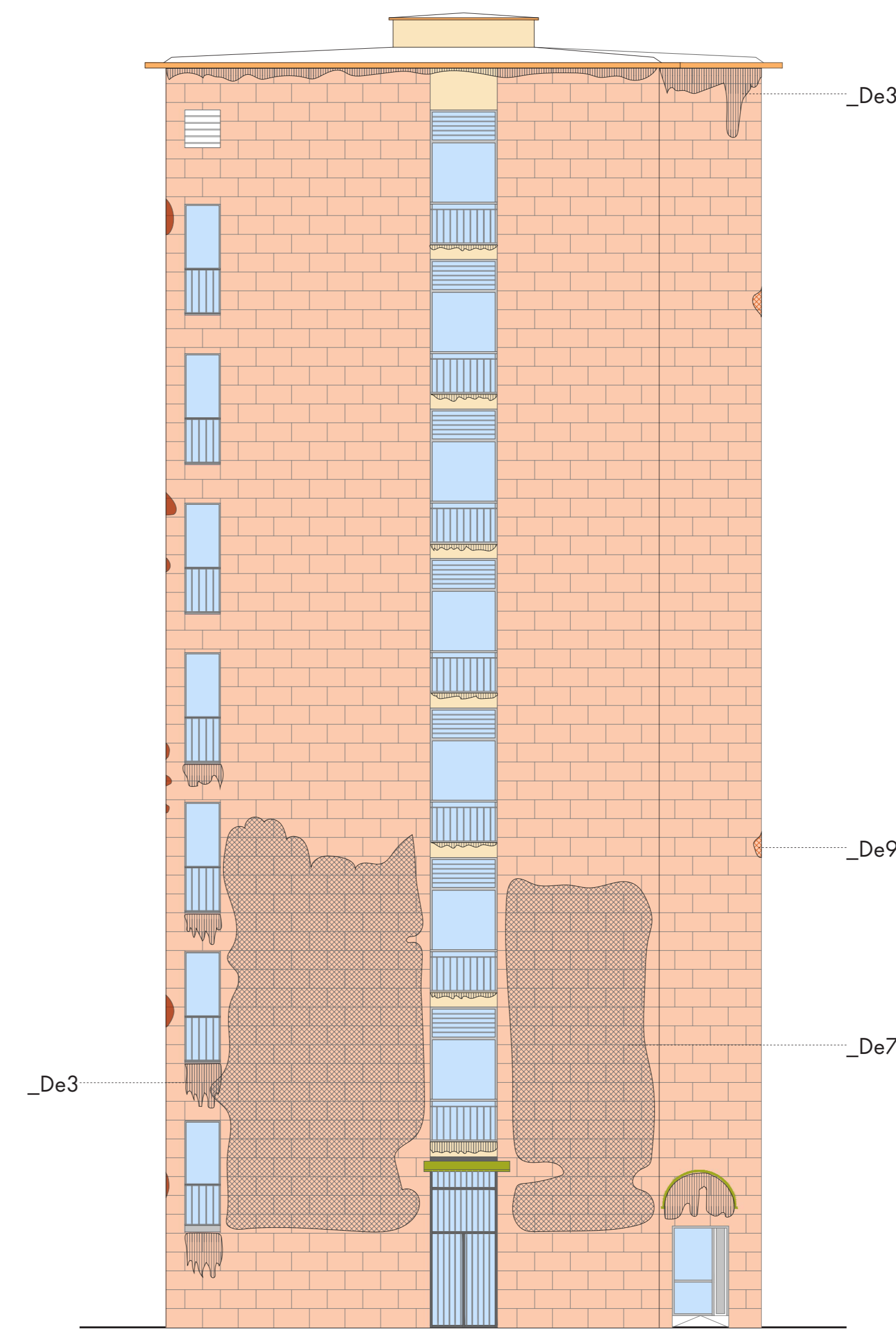
METAL CARPENTRY



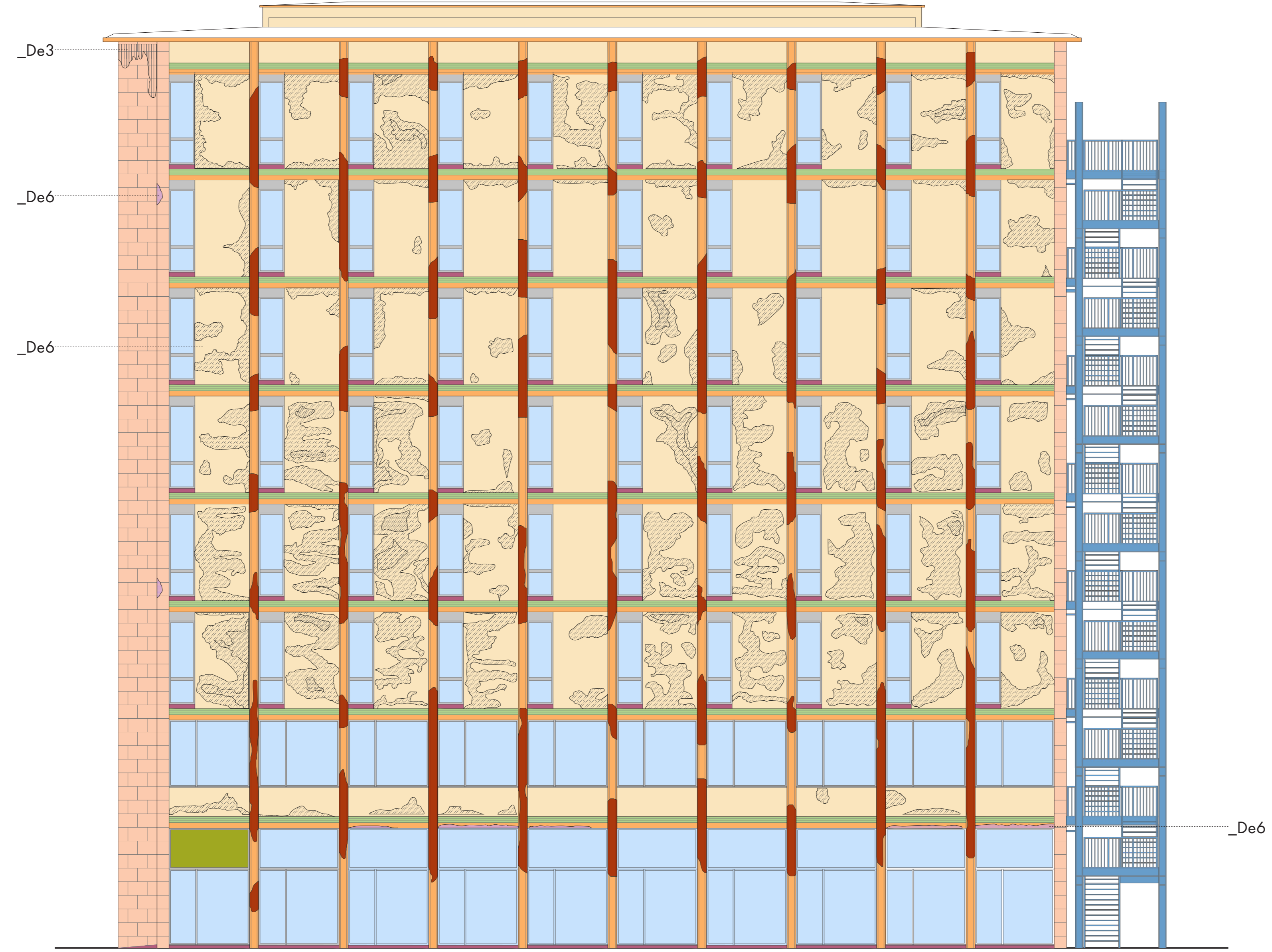
DECAYS



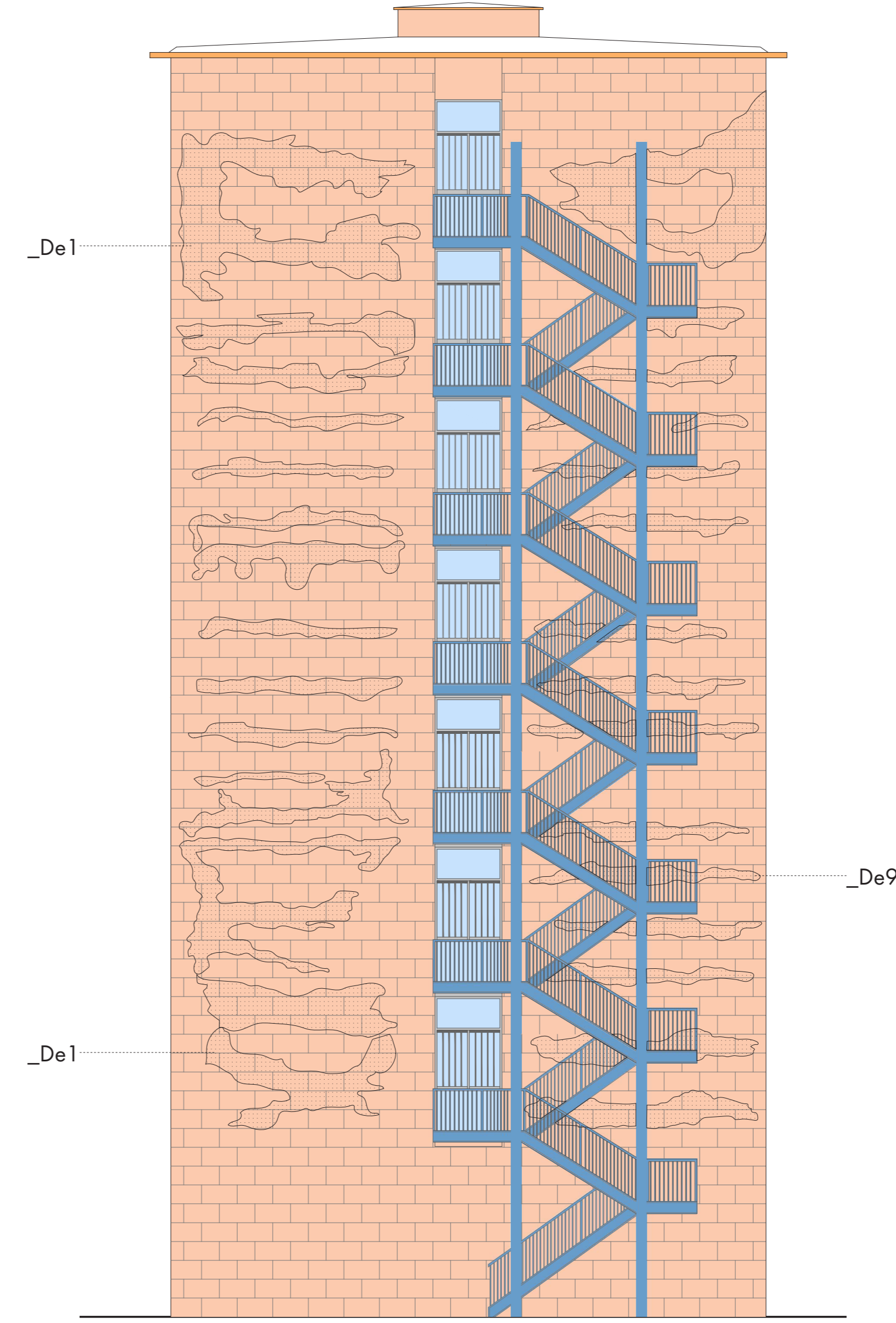
West elevation
SCALE 1:100



South elevation
SCALE 1:100



East elevation
SCALE 1:100



North elevation
SCALE 1:100



REMOVAL WORKS

R.01
Controlled removal of light detached plaster with brushes and solvents.

CLEANING WORKS

Pl.01
Hydro cleaning with deionized and rebulbilized water (by spray).

Pl.02
Cleaning of copper elements by brushes with chemical products.

Pl.03
Cleaning of existing flashings.

CONSOLIDATION WORKS

Co.01
Sealing borders of light plaster.

Co.02
Application of fillers and masking primers (silicate finishing).

Co.03
Sealing of the micro cracks with adequate sealants. (RC)

Co.04
Consolidation of the pillars. (RC)

PUNCTUAL INTERVENTIONS

I.01
Replacement of existing window frames.

PROTECTION WORKS

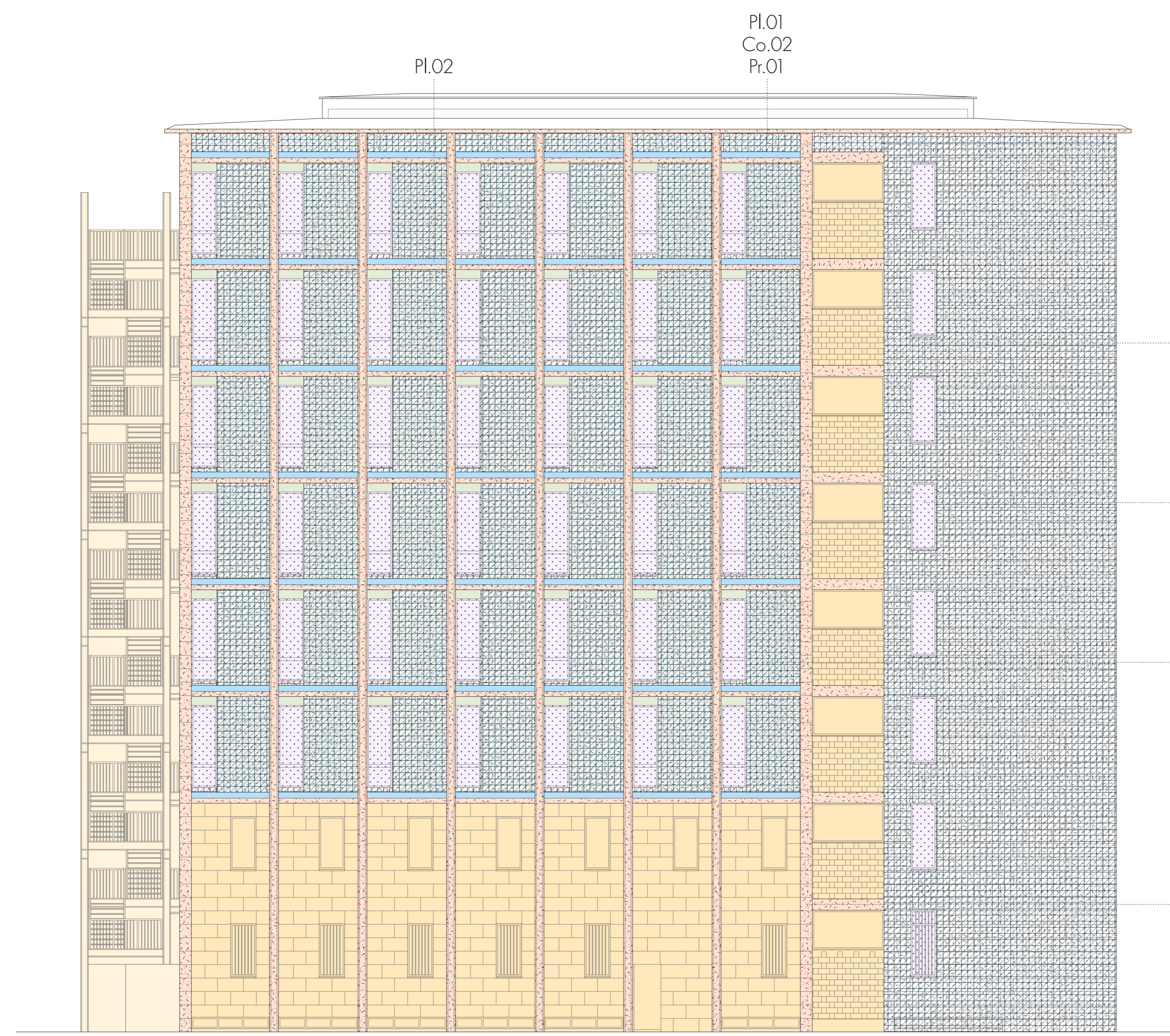
Pr.01
Application of water repellent treatments.

Pr.02
Consolidation of the meteoric water disposal system.

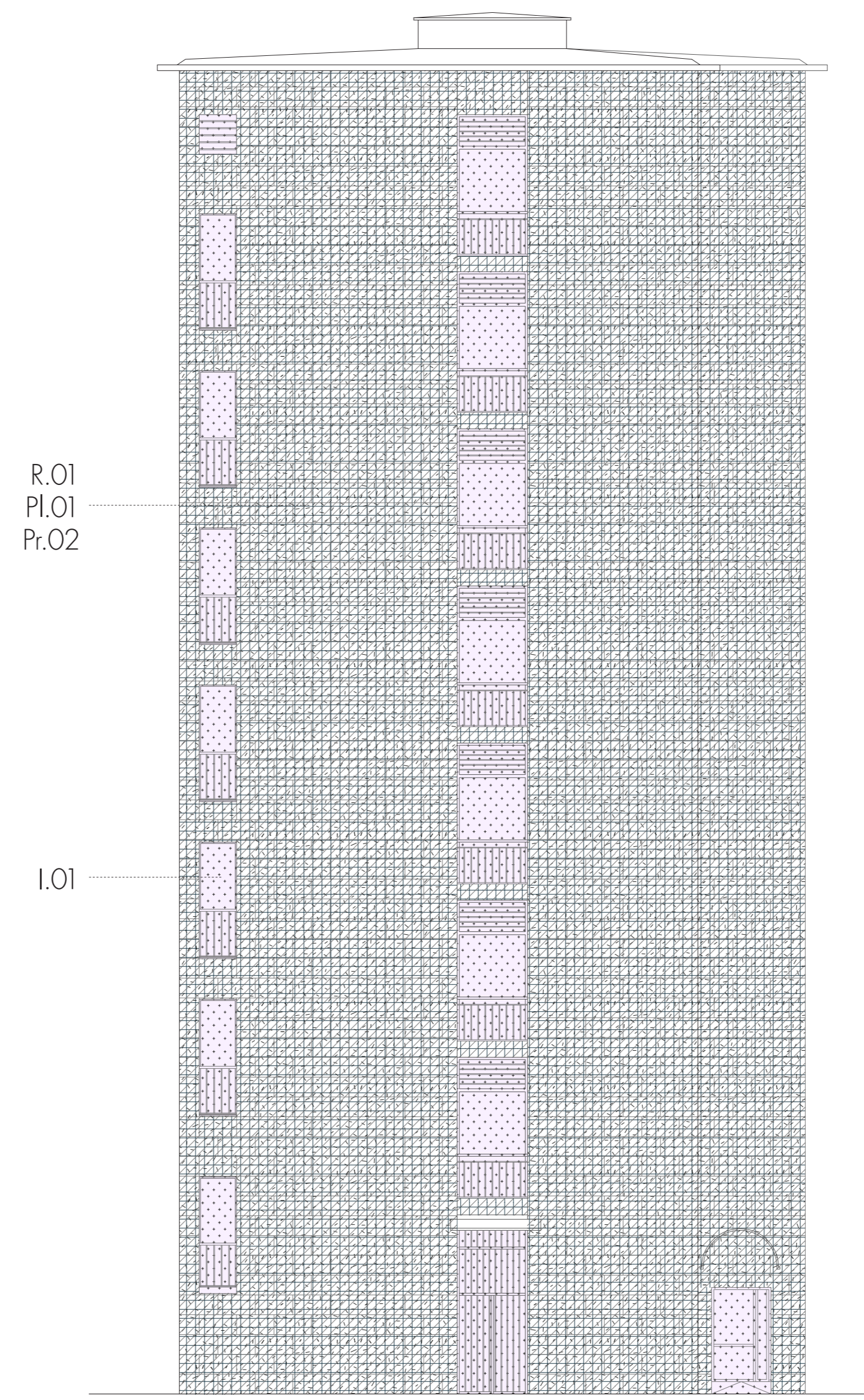
DESIGN CHOICES

Dm.01
Demolished and re-built areas.

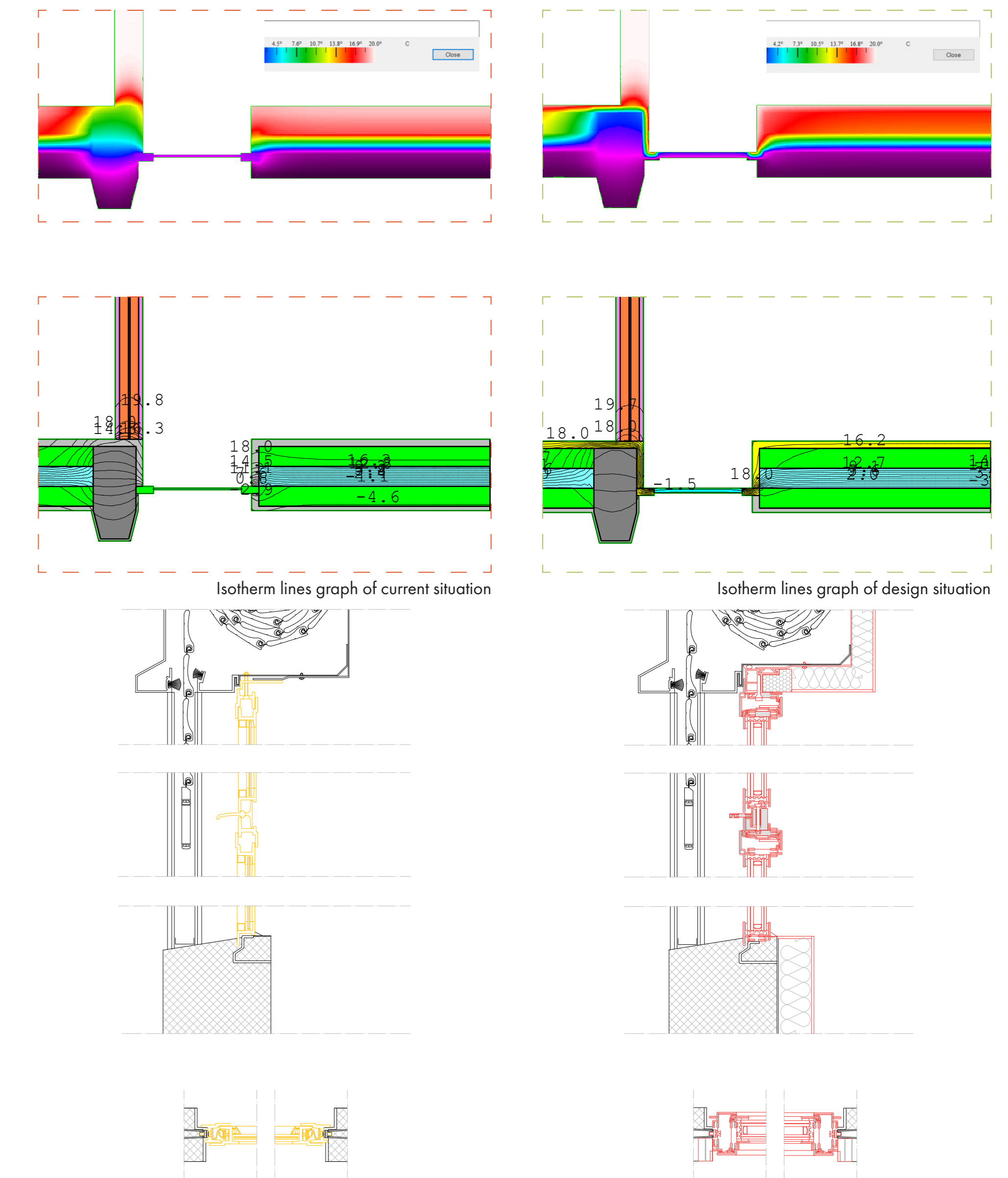
Dm.02
Demolished elements.



West elevation
SCALE 1:100

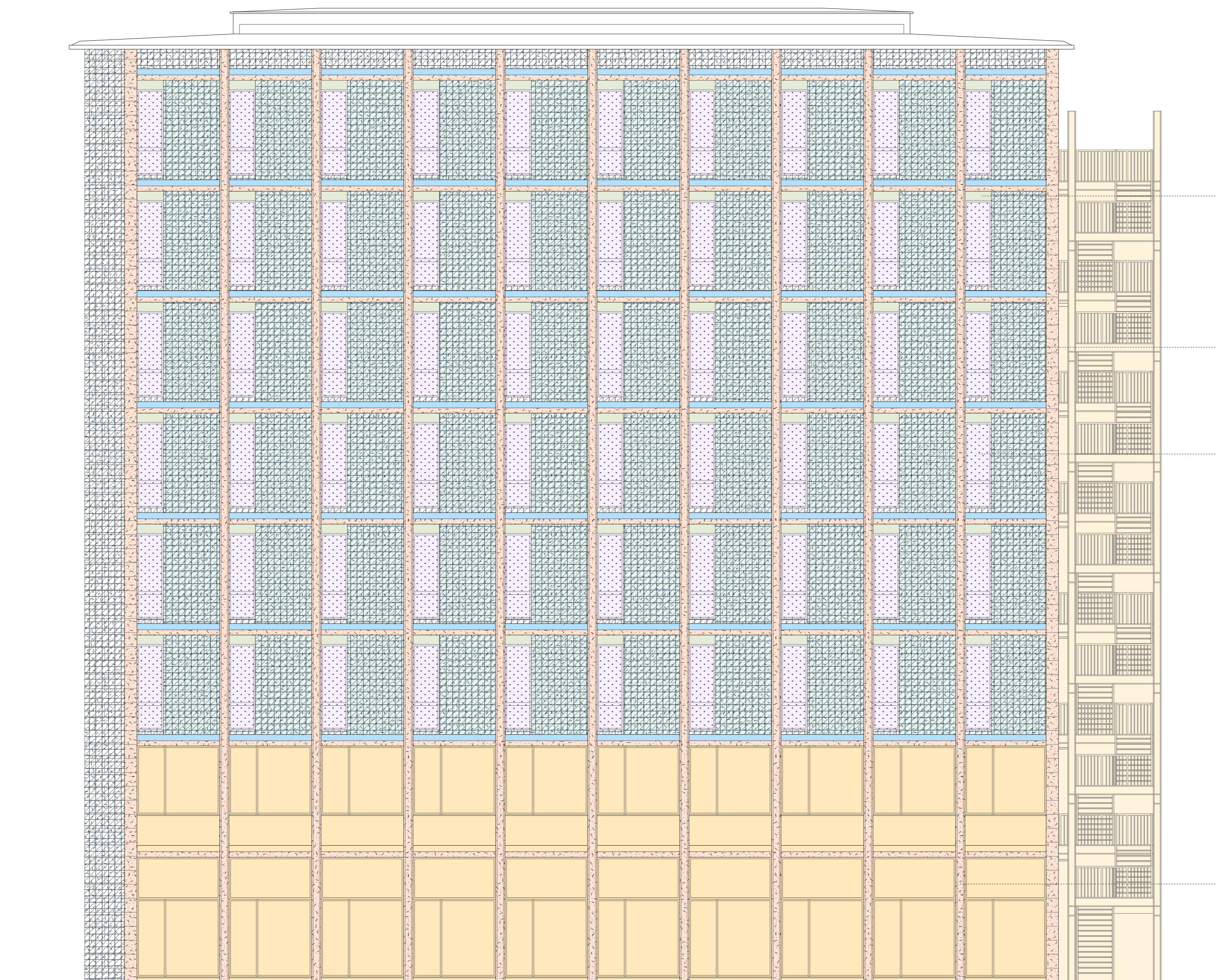


South elevation
SCALE 1:100

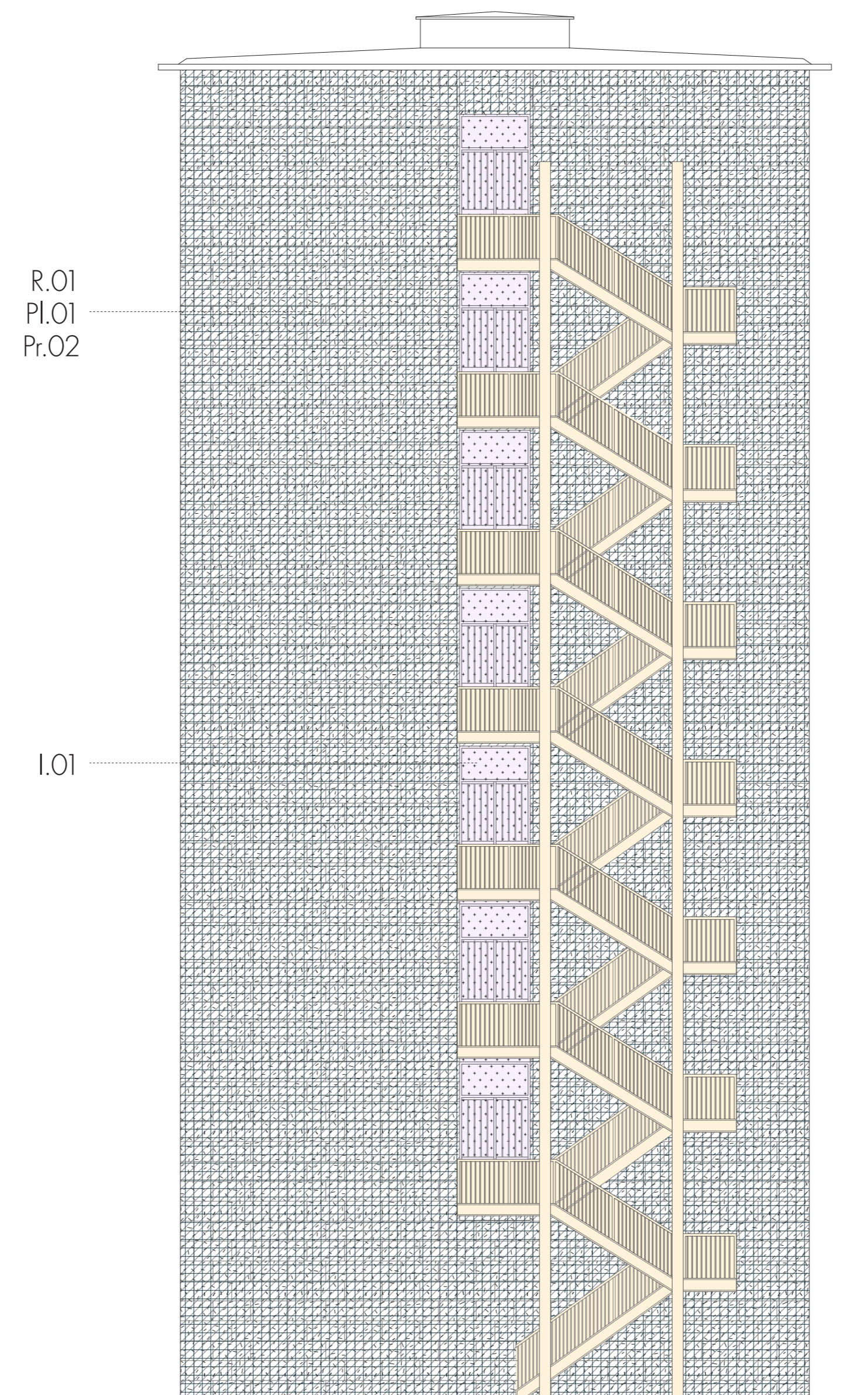


Existing window frames
SCALE 1:5

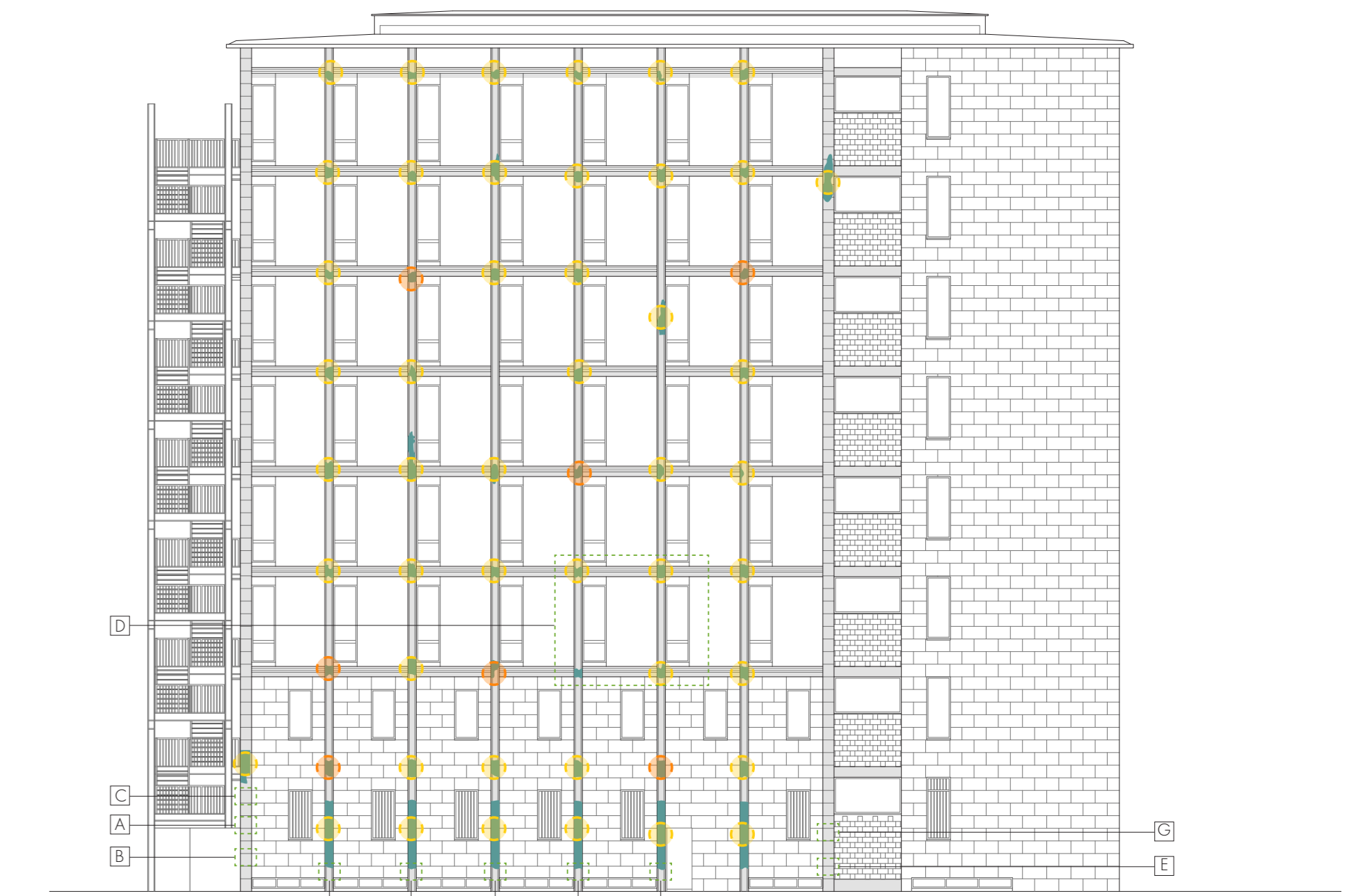
Substitution of the window frames
SCALE 1:5



East elevation
SCALE 1:100



North elevation
SCALE 1:100



Necessary investigations

- A. Sclerometry
- B. Magnetometry
- C. Ultrasonds
- D. Infrared thermography
- E. Electrochemistry
- F. Map cracking (on the whole structure)
- G. Core drilling
- H. Compression tests
- I. Colorimetric analysis
- L. Physical and microstructural tests

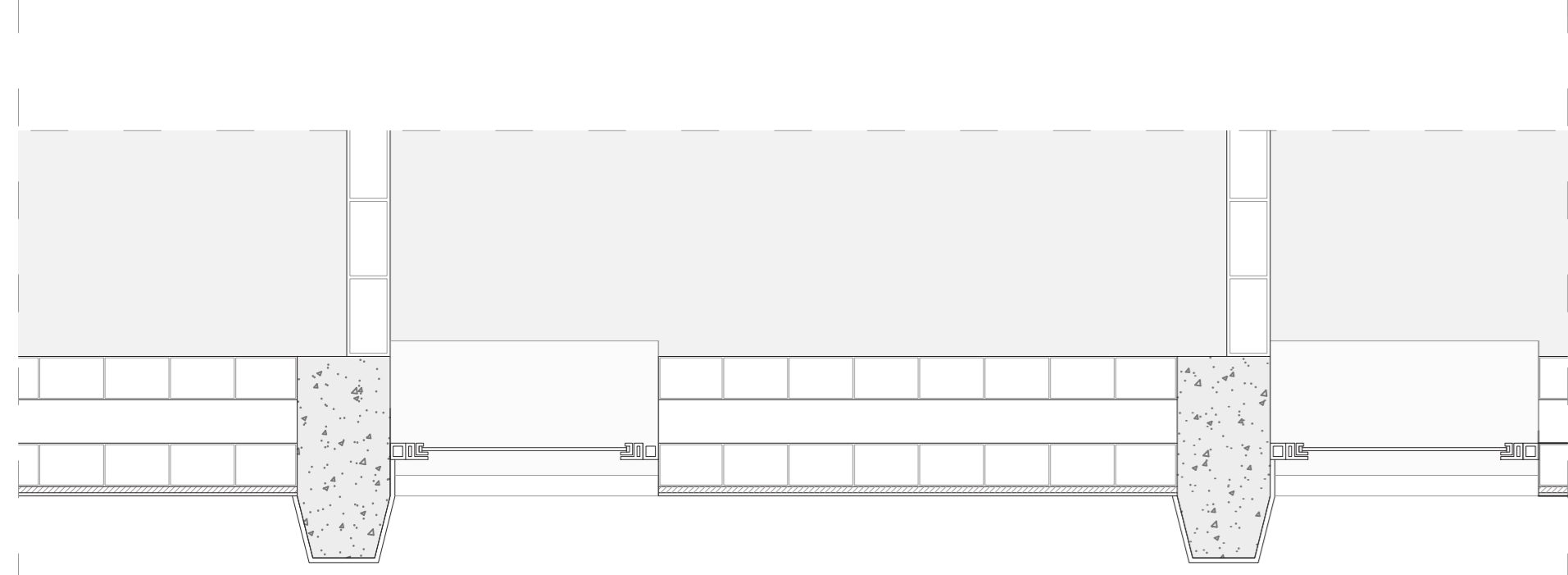
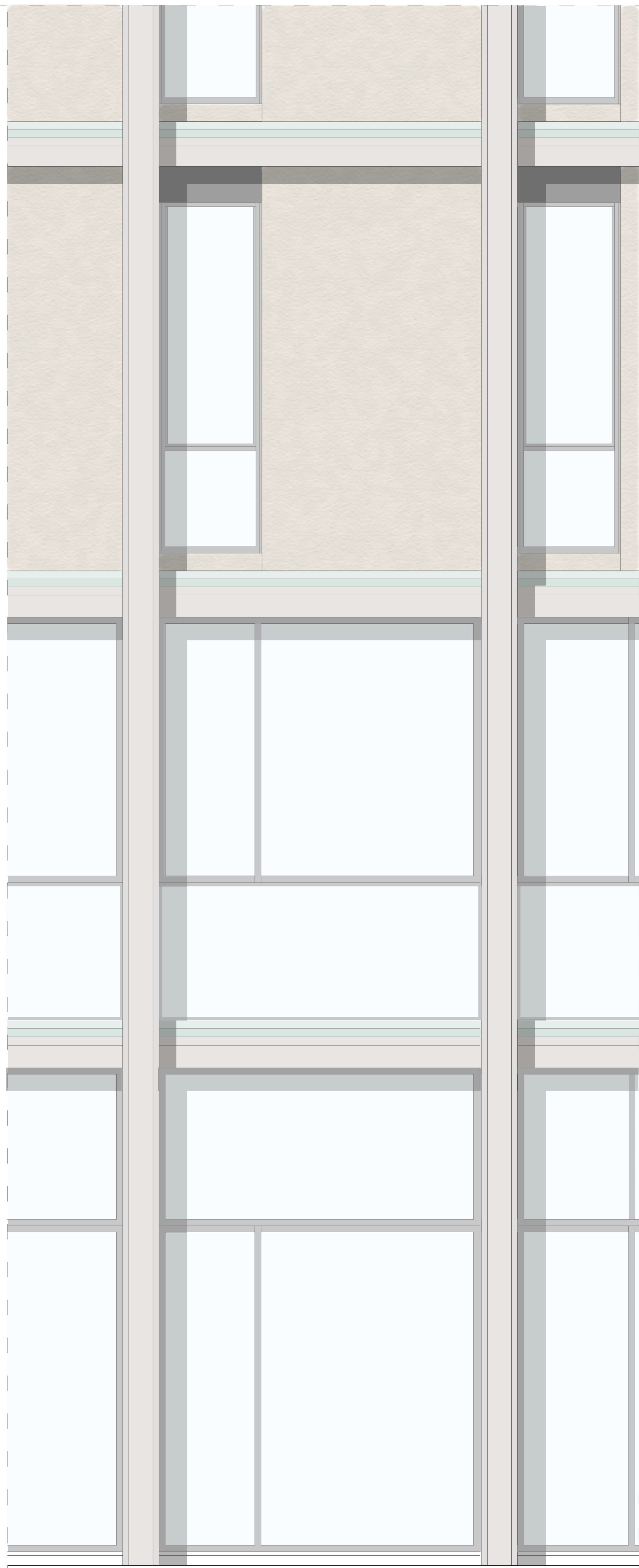
Level of decay

- Level 1: detachment of plaster
- Level 2: presence of cracks
- Level 3: presence of exposed rebars

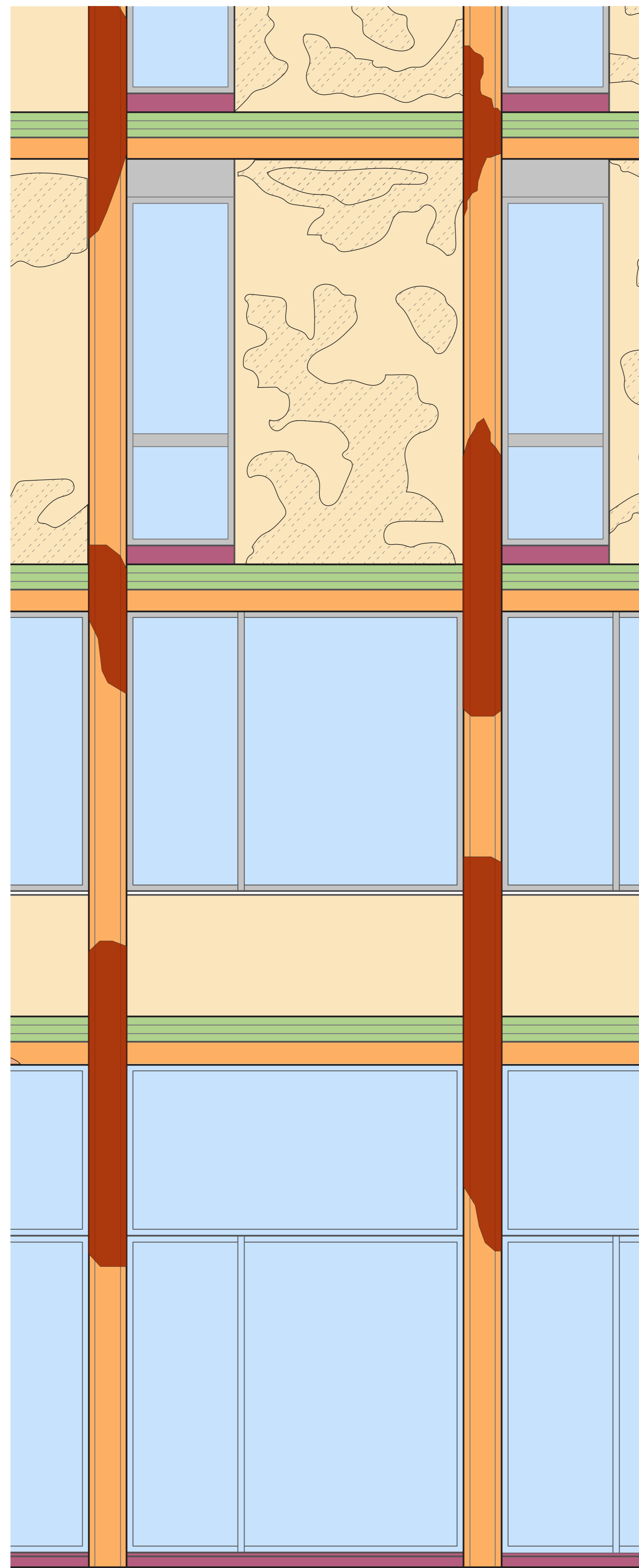
- Exposed reinforced concrete structure
- Damaged parts

Mapping of the diagnostics works



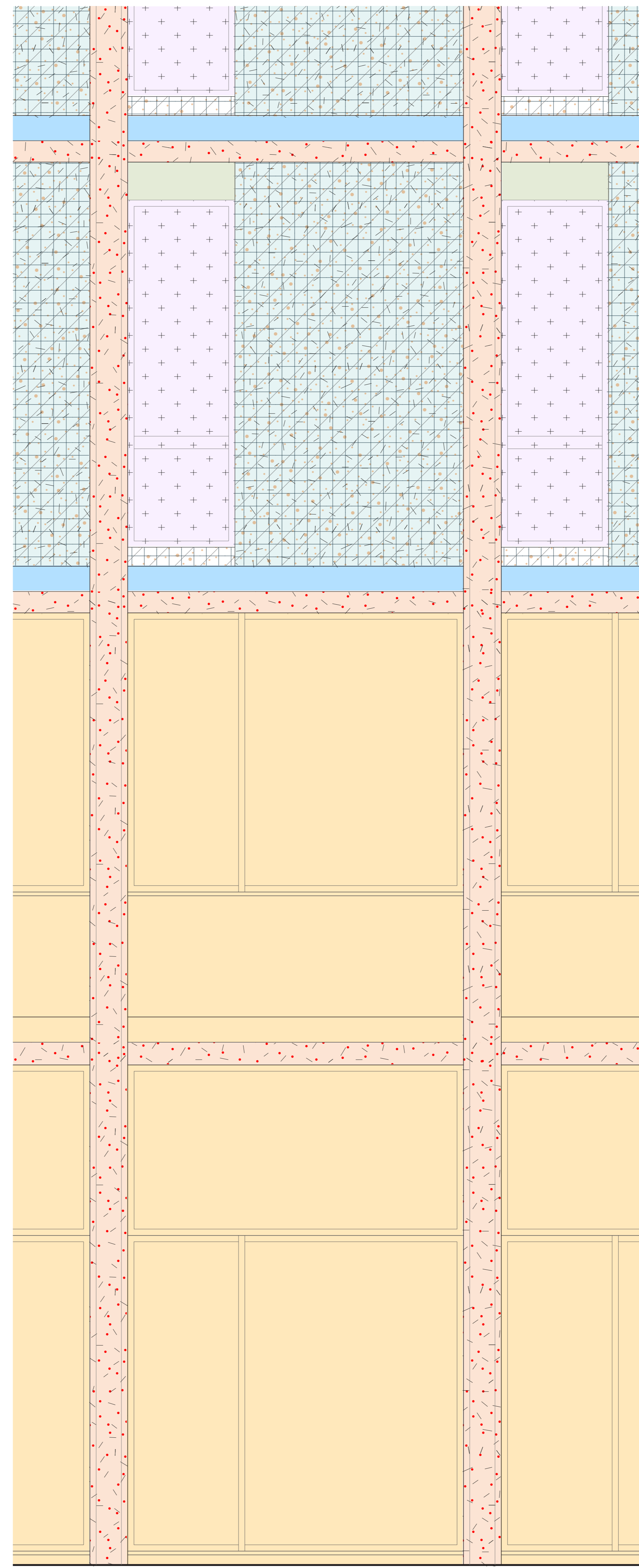


Typical span of the Convitto in elevation and plan (survey situation)
SCALE 1:20



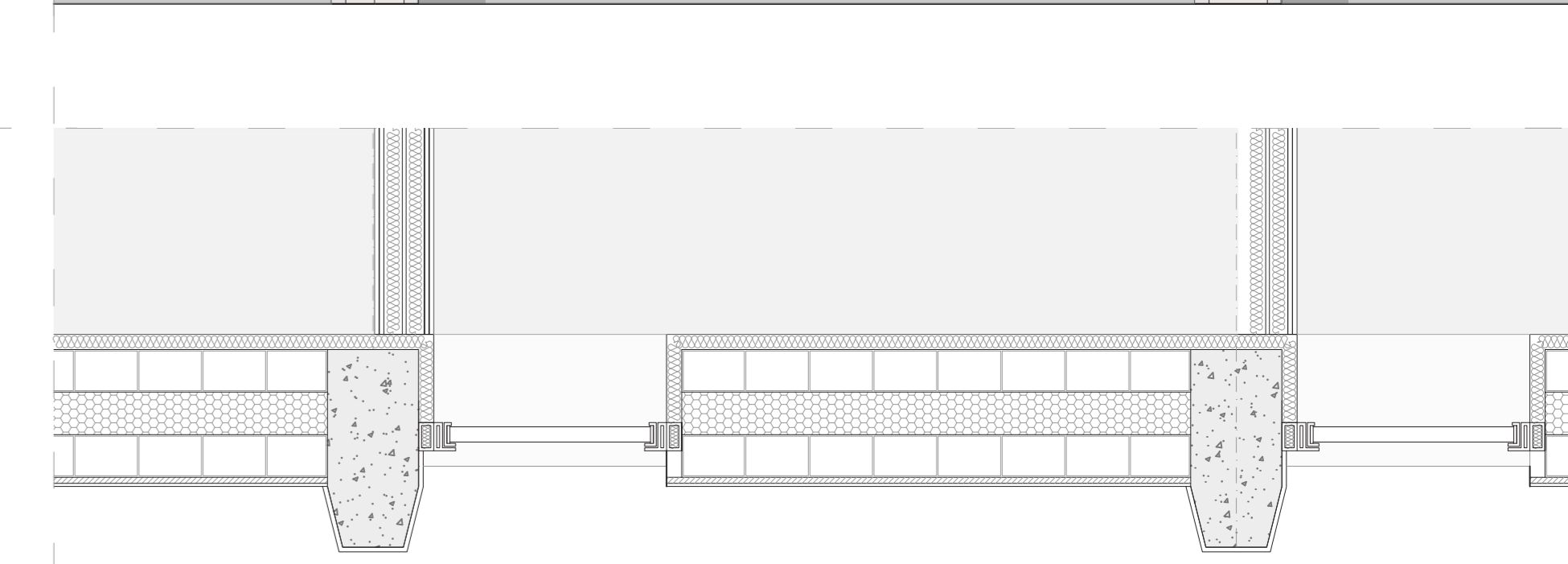
_C1 Reinforced concrete	_M2 Galvanized steel	_P2 Vetro-cemento	_De1 Blistering	_De5 Moist area
_C2 Vibrated RC curb	_M3 Cemented metal sheets	_P3 Graniglia martellinata	_De2 Flaking	_De6 Missing part
_G1 Glass panels	_M4 Aluminum	_P4 Mortar integrations	_De3 Encrustation	_De7 Deposit
_M1 Copper	_P1 Rustic plaster	_PL1 Plastic elements	_De4 Oxidation process	_De8 Hair cracking

Materials and decays mapping
SCALE 1:20



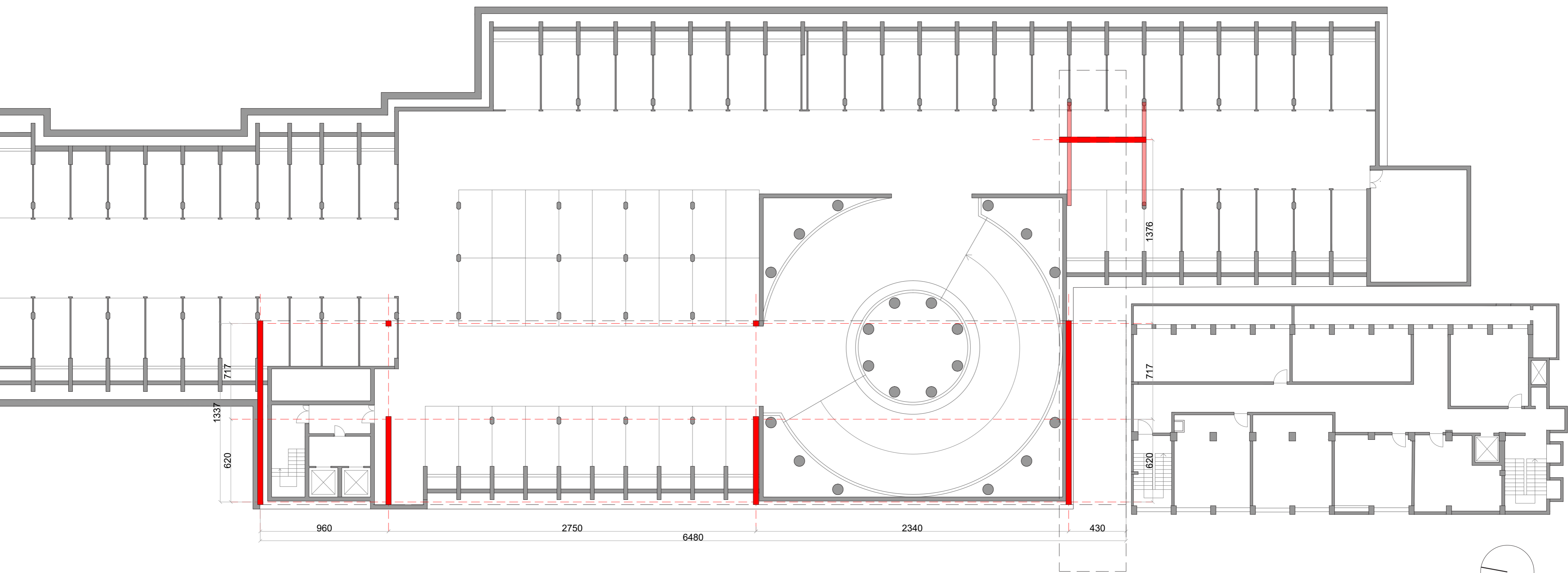
R.01	Co.01	I.01
Pl.01	Co.02	Pr.01
Pl.02	Co.03	Pr.02
Pl.03	Co.04	

Interventions mapping
SCALE 1:20

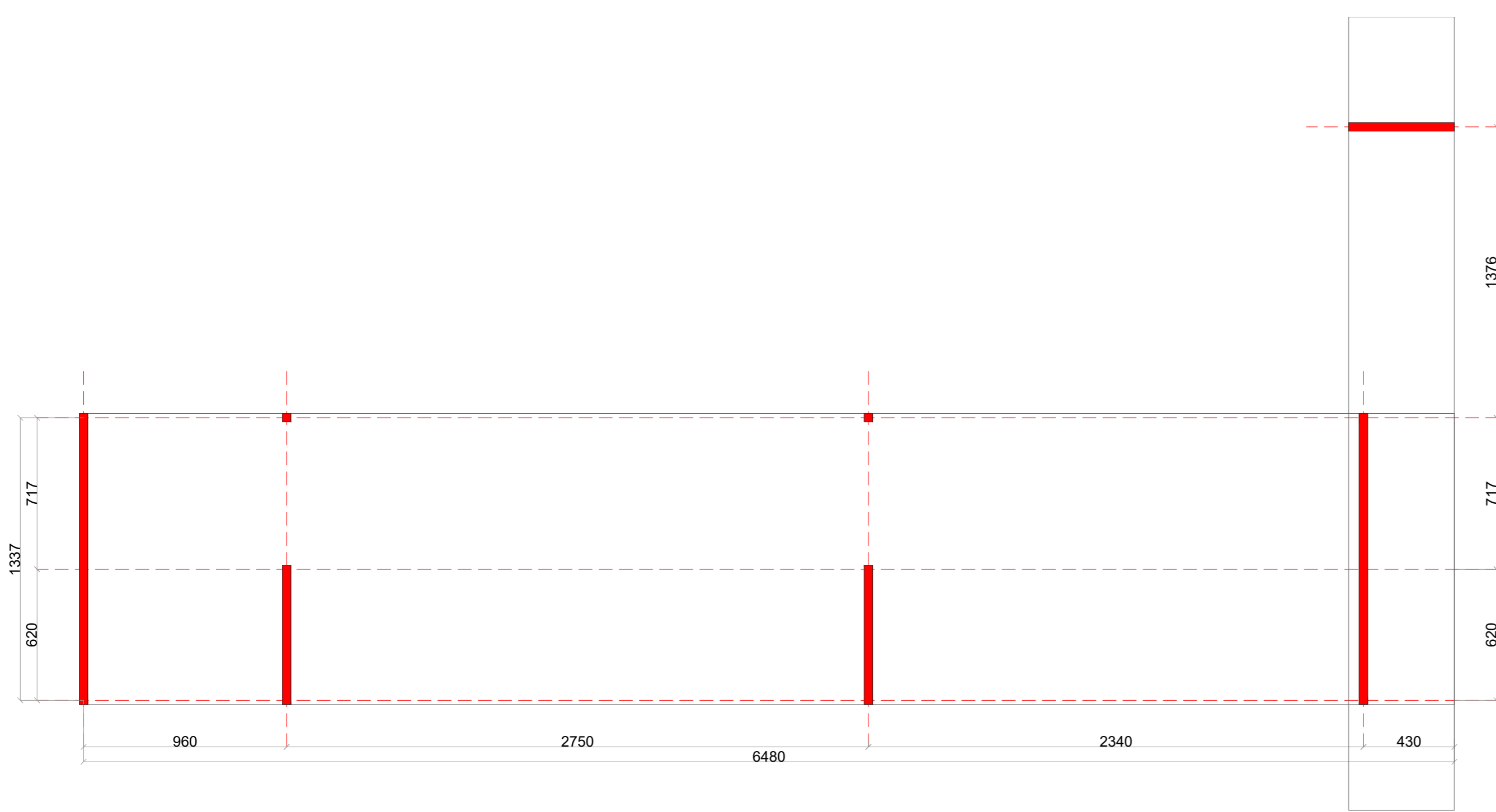


Typical span of the Convitto in elevation and plan (design situation)
SCALE 1:20

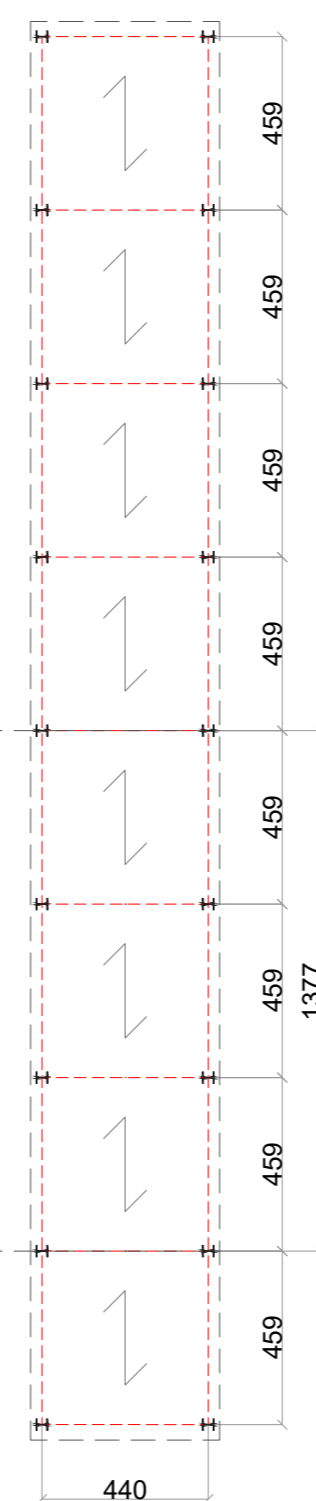
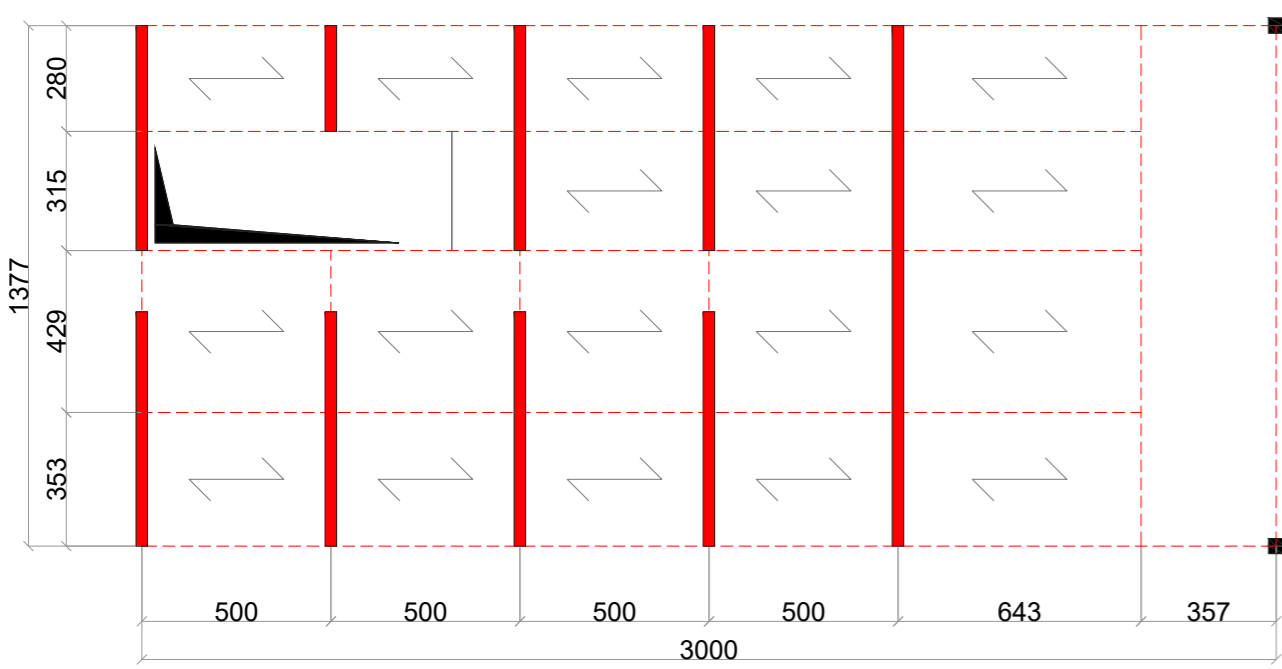
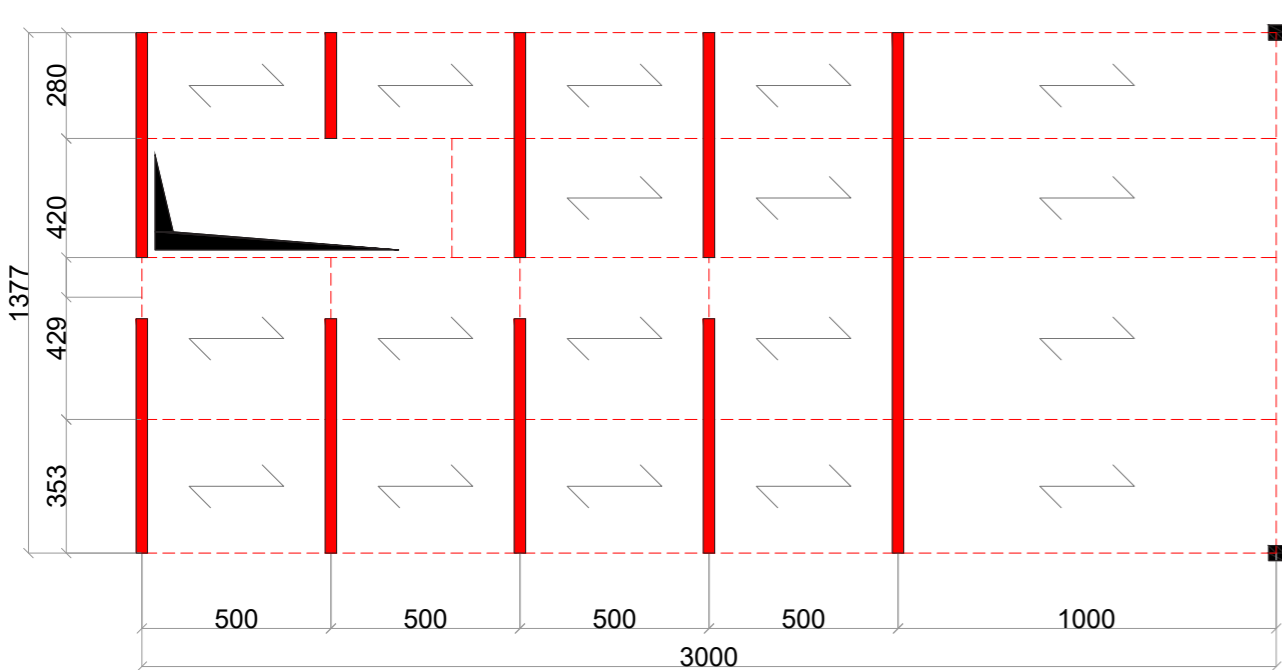




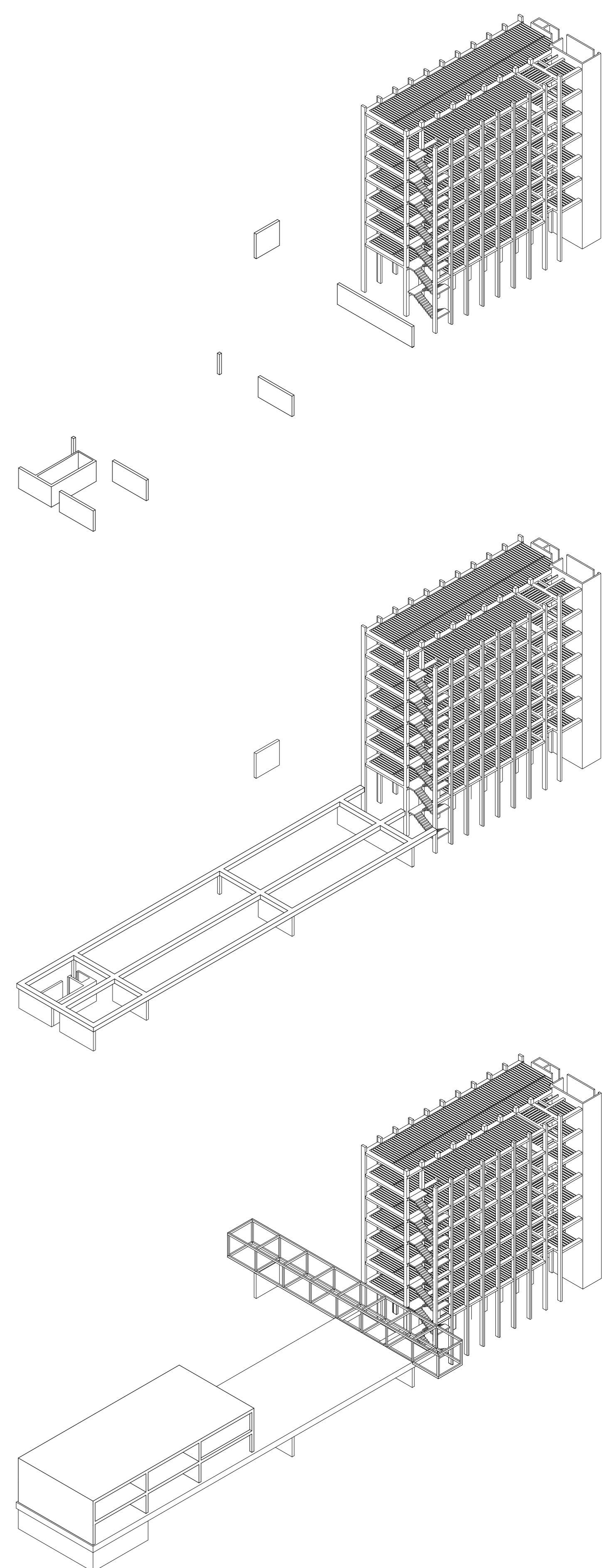
Underground structural floor plan
SCALE 1:200



Ground structural floor plan
SCALE 1:200

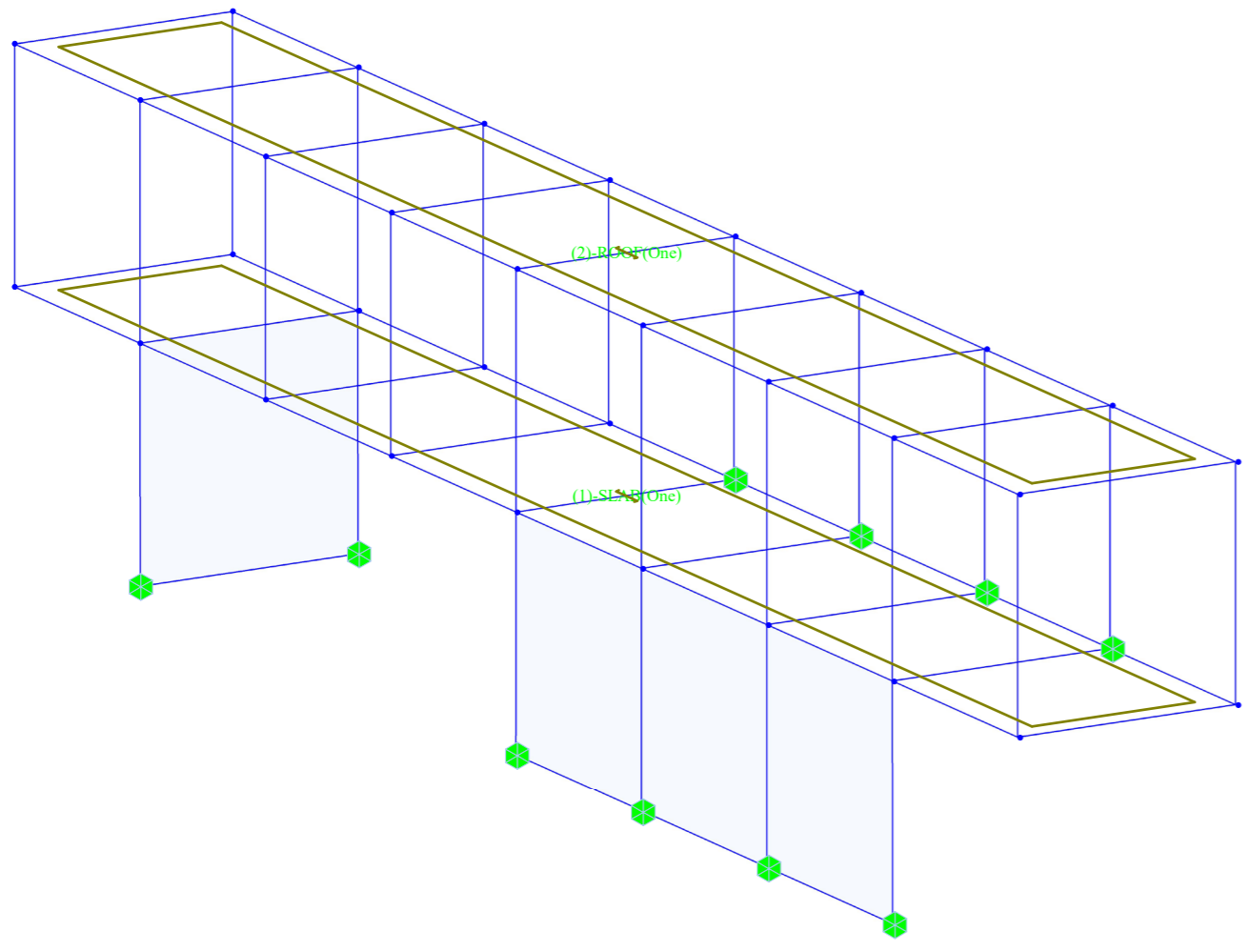


First and second structural floor plan
SCALE 1:200

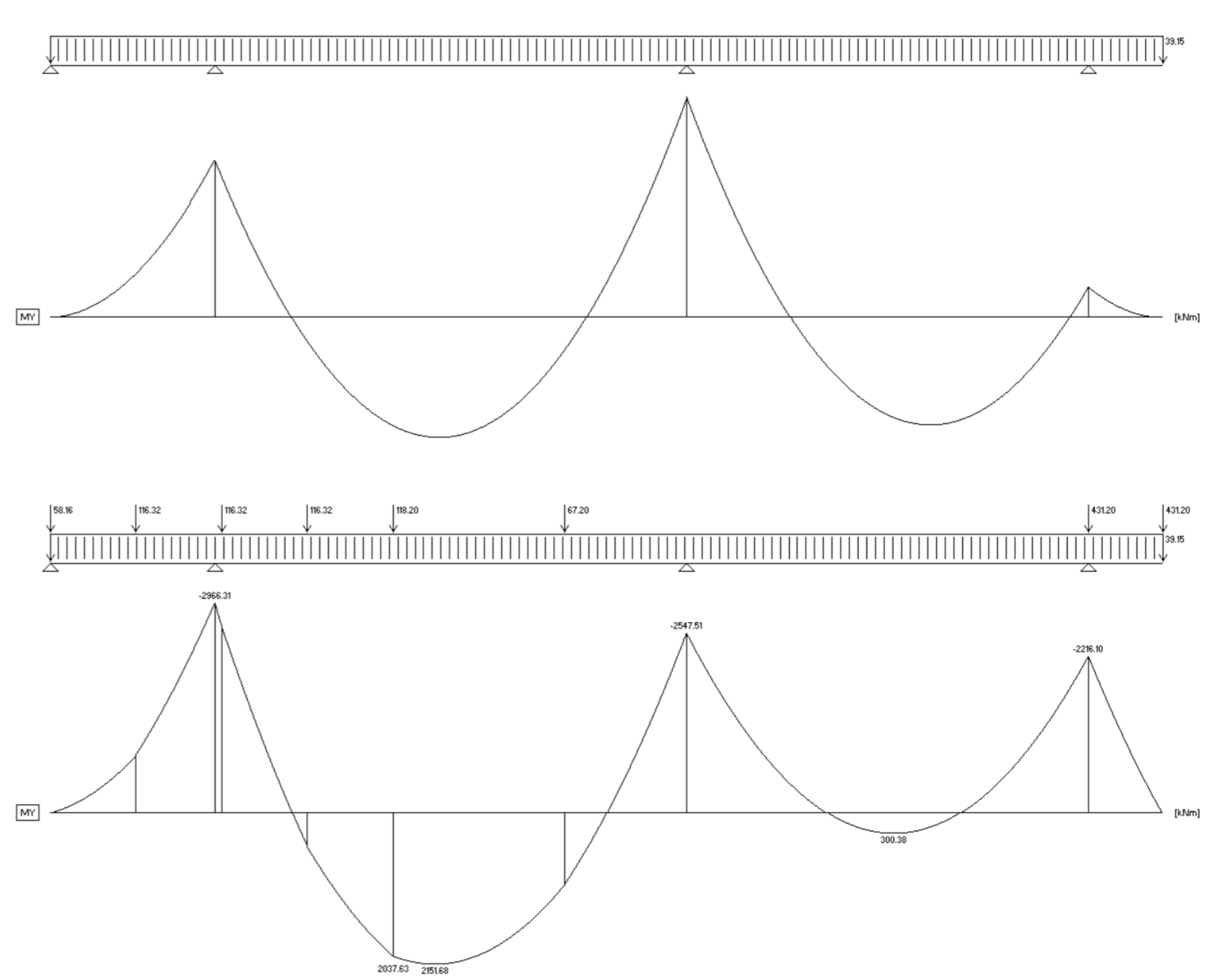


Axonometric view of the structural proposal

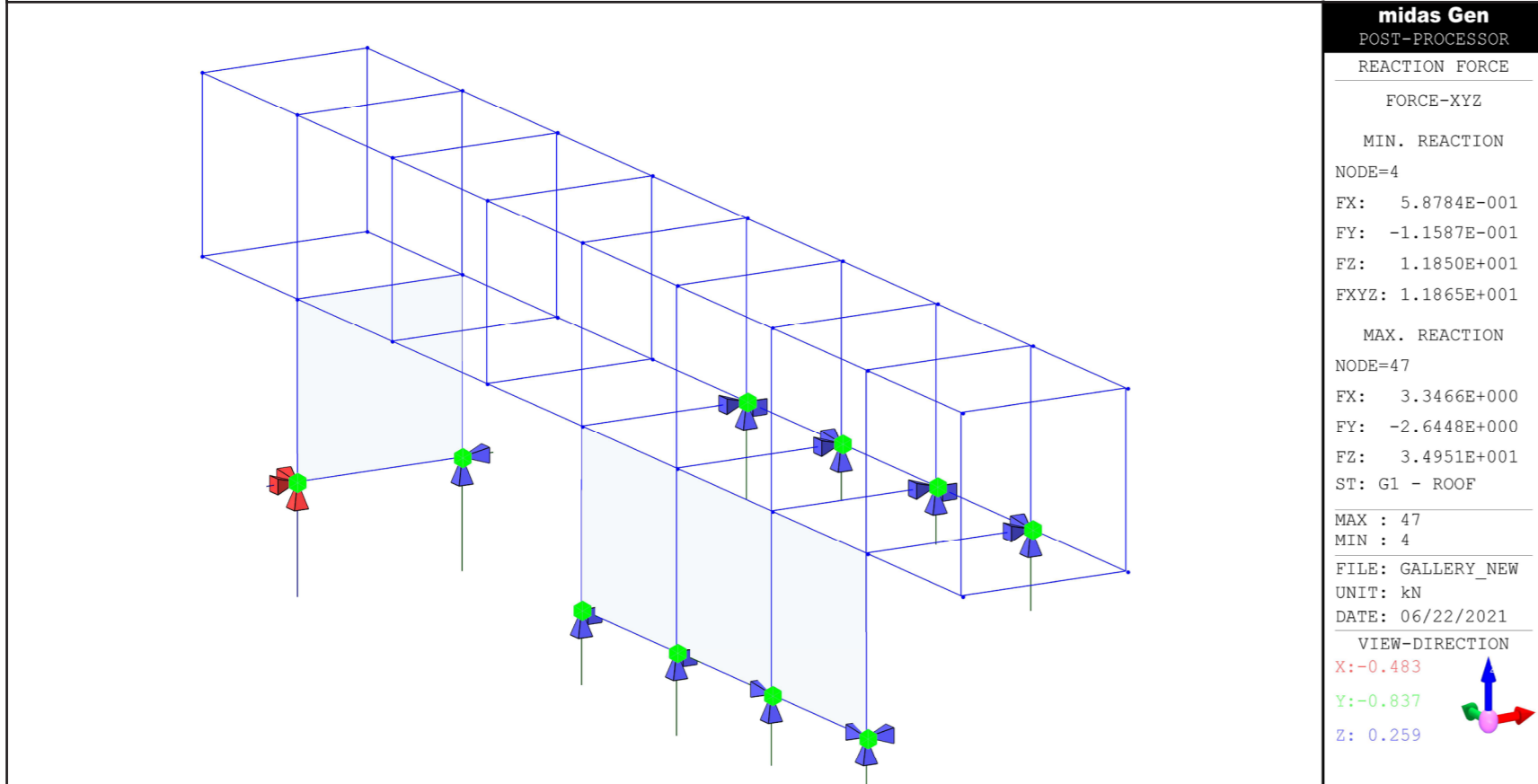
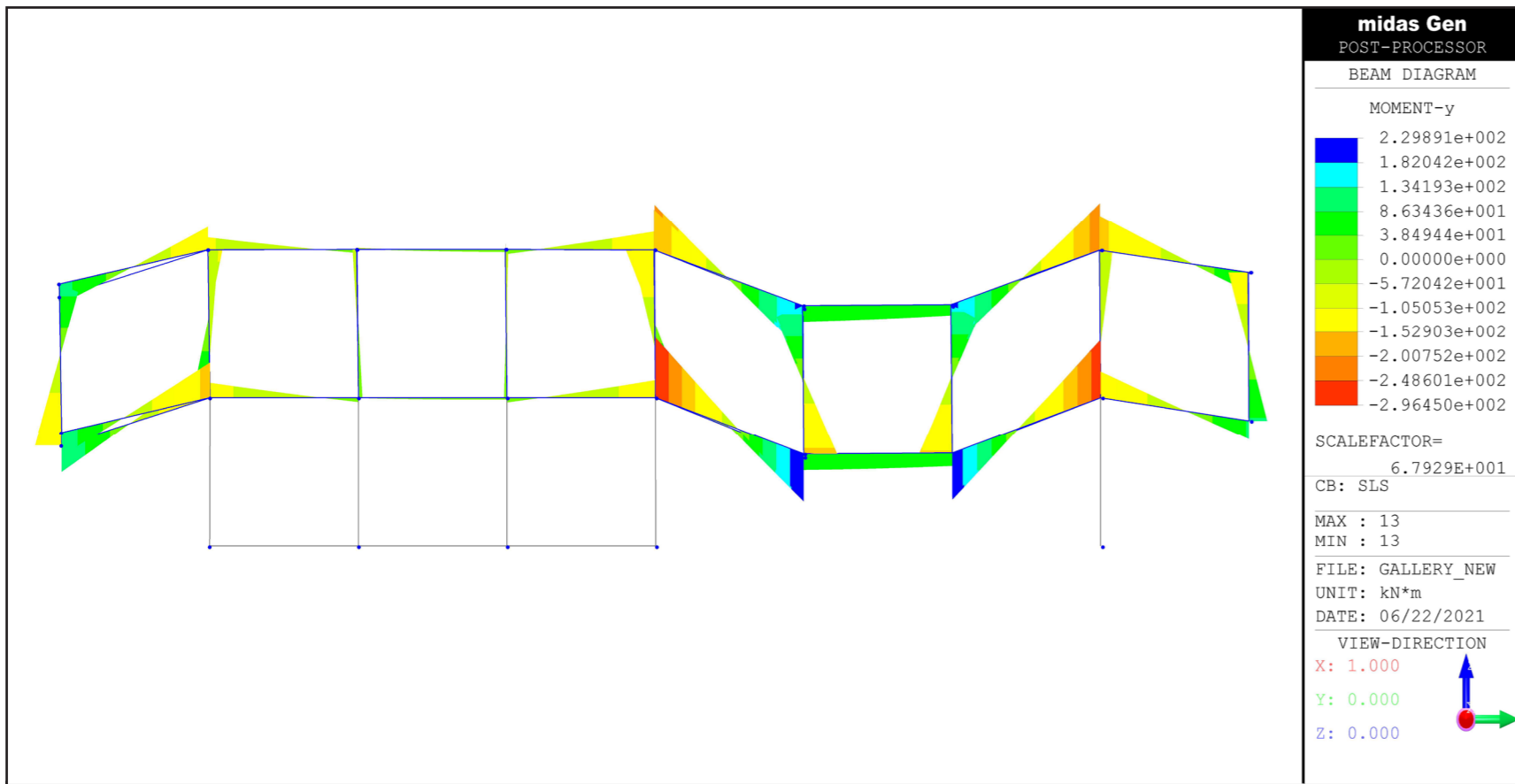




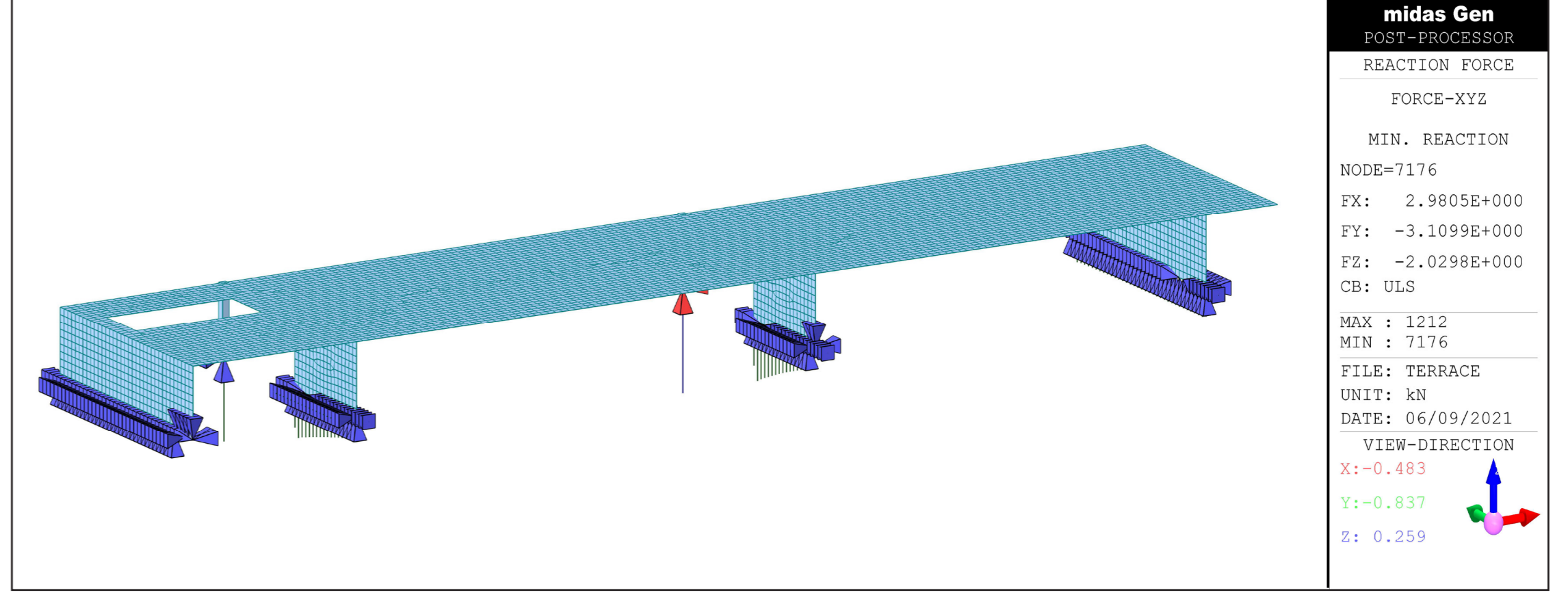
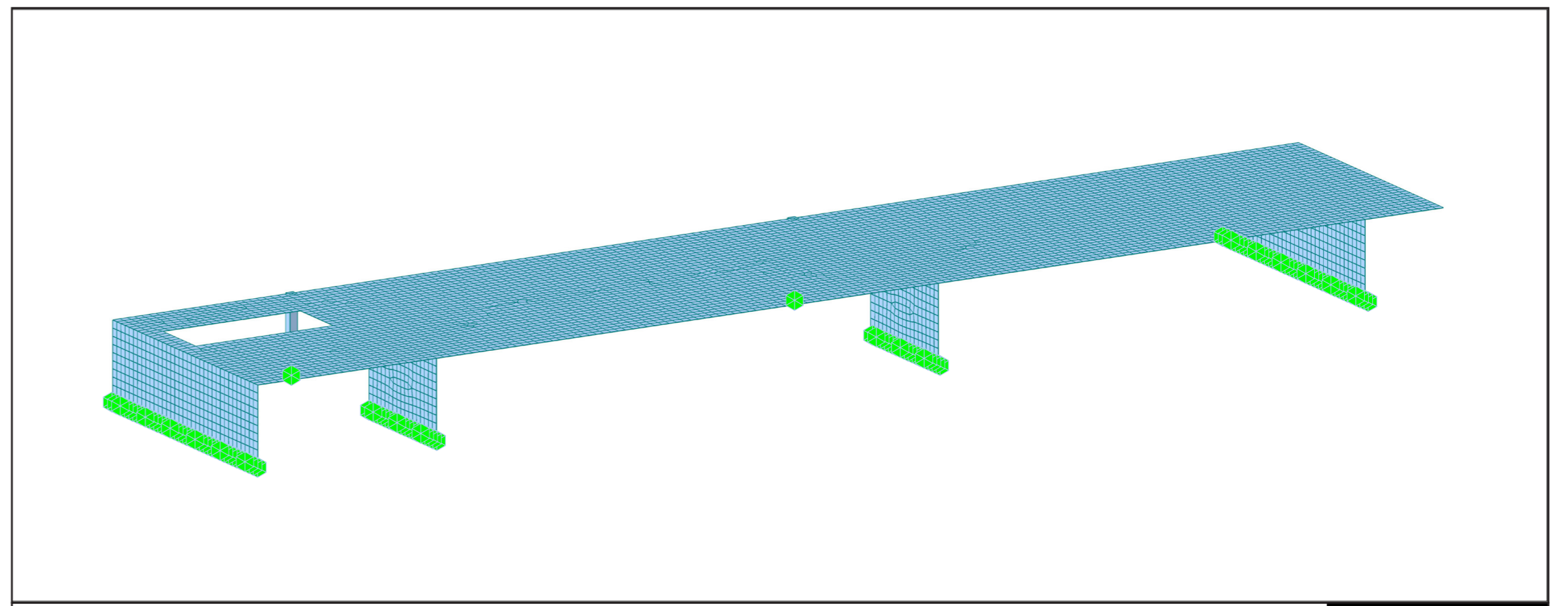
Axonometry of the gallery's supports



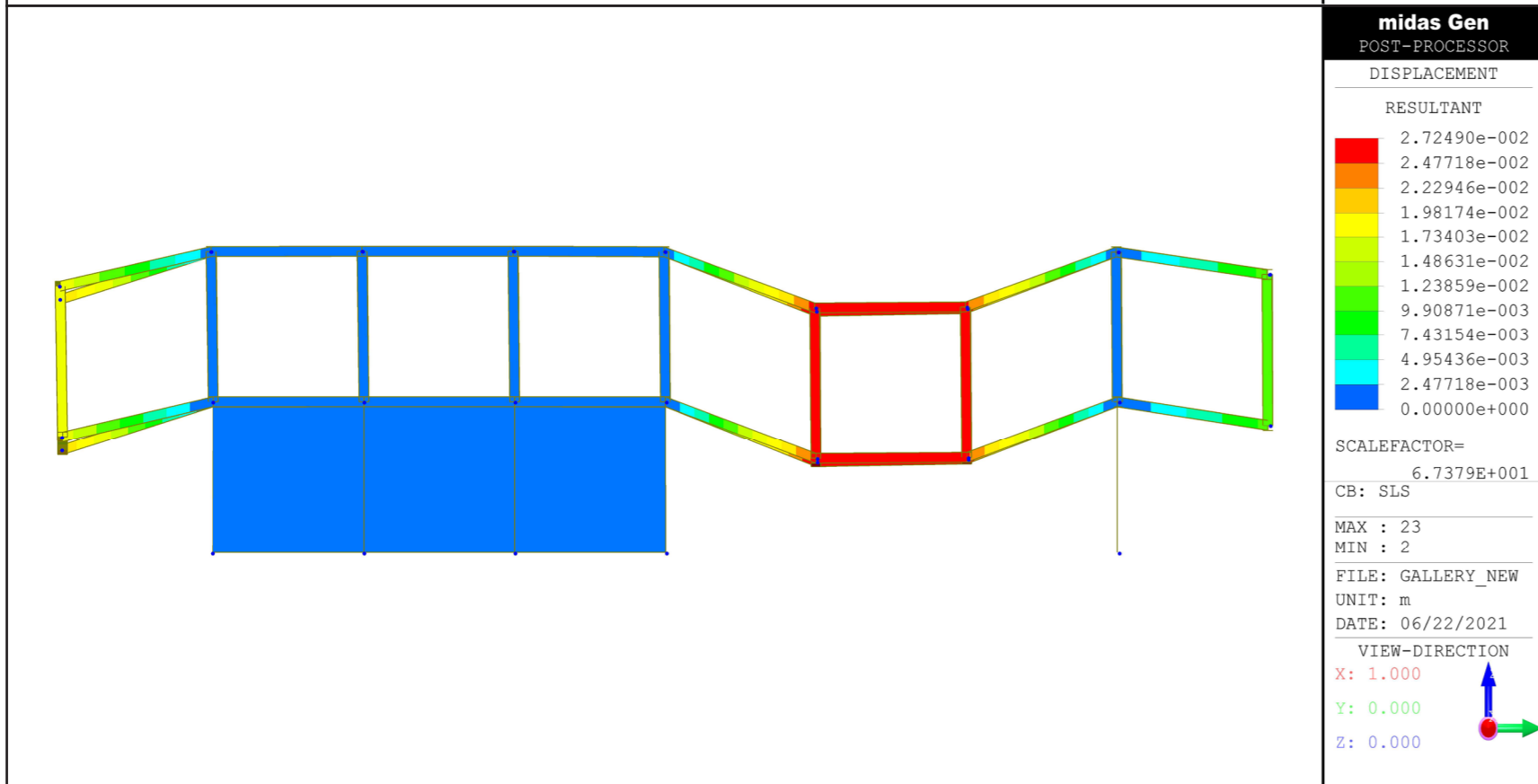
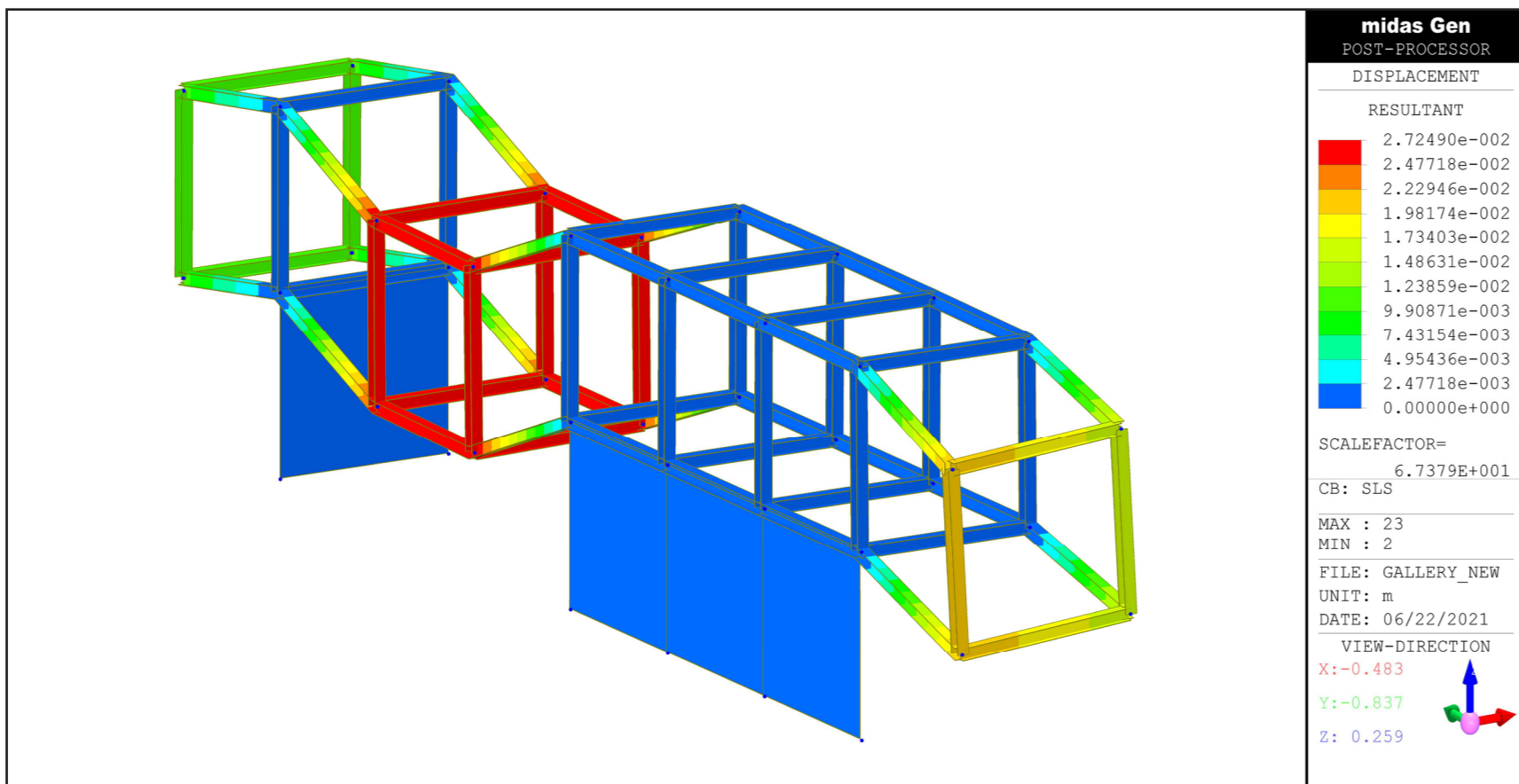
Static scheme of the terrace with the self-weight of the reinforced concrete
Static scheme with self-weight and external loads (guest's building and gallery)



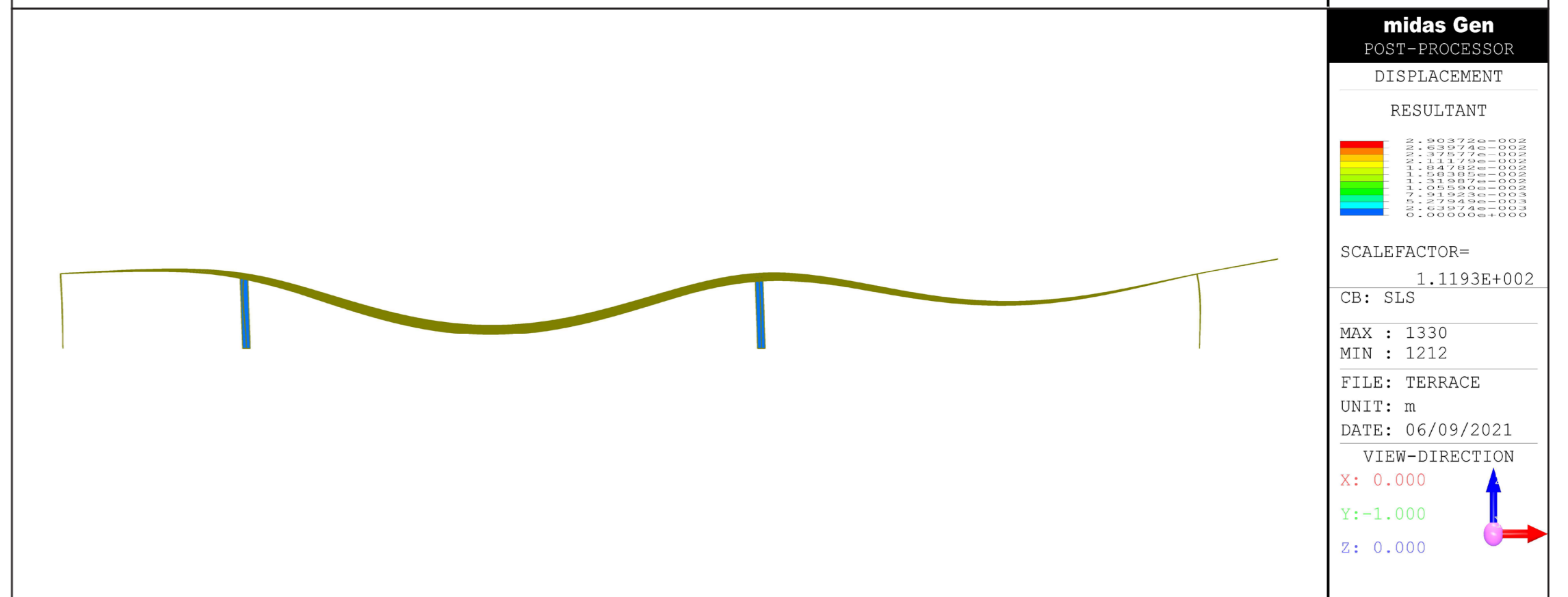
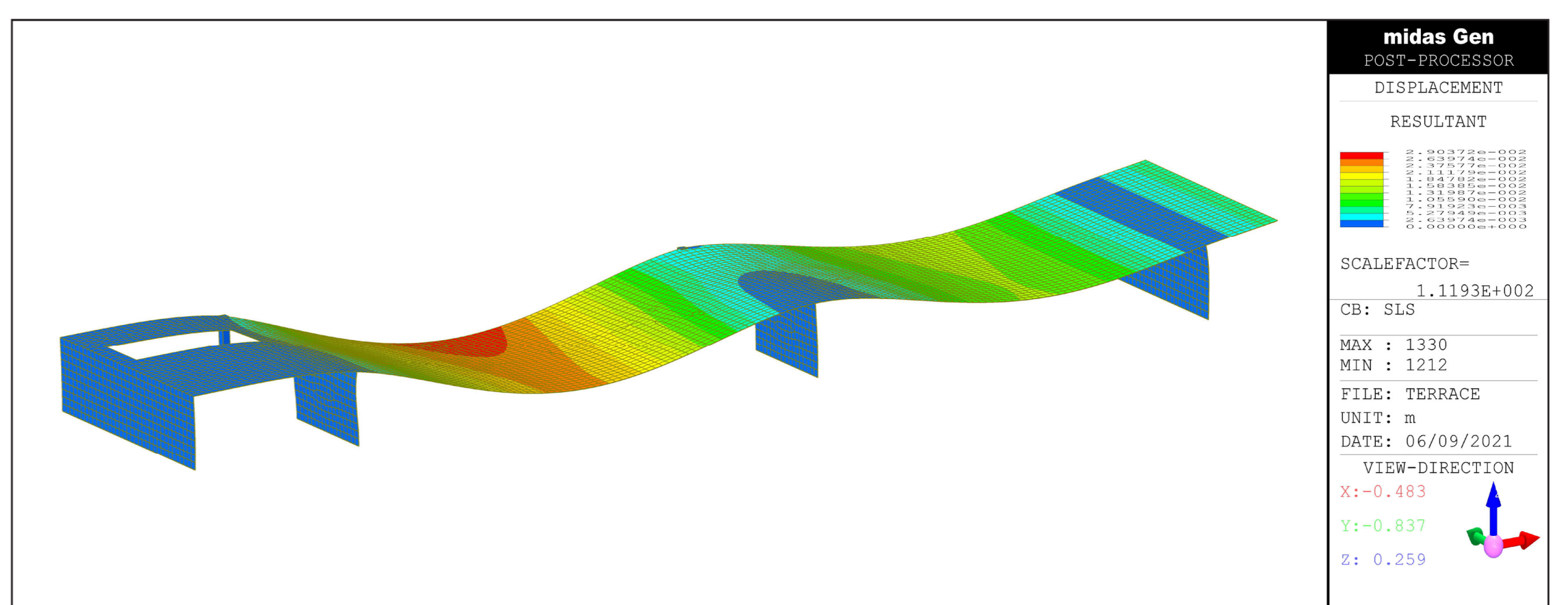
Bending moment stresses
Reaction forces on the supports



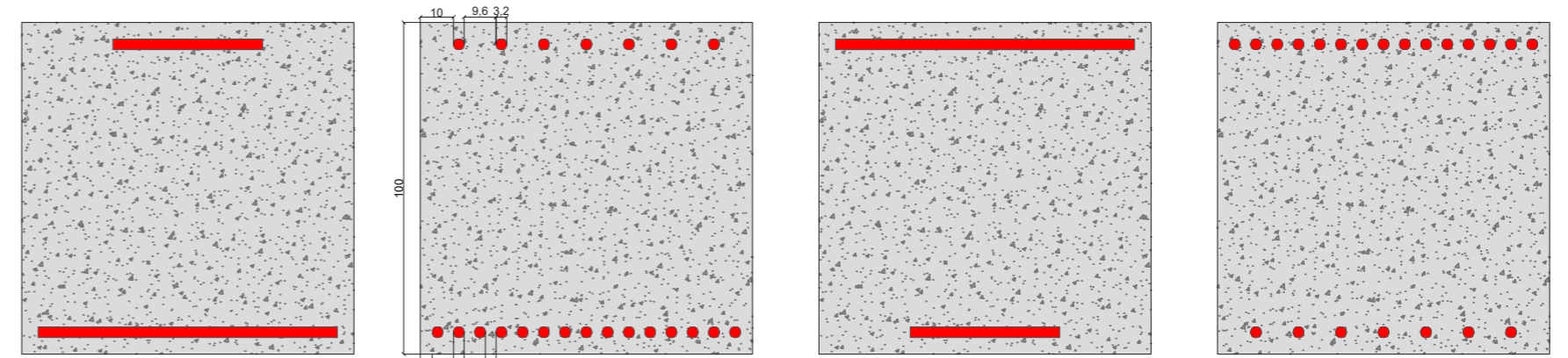
Axonometry of the supports and of the type of plate
Reaction forces on the supports



Displacements results in axonometry and elevation (south side)

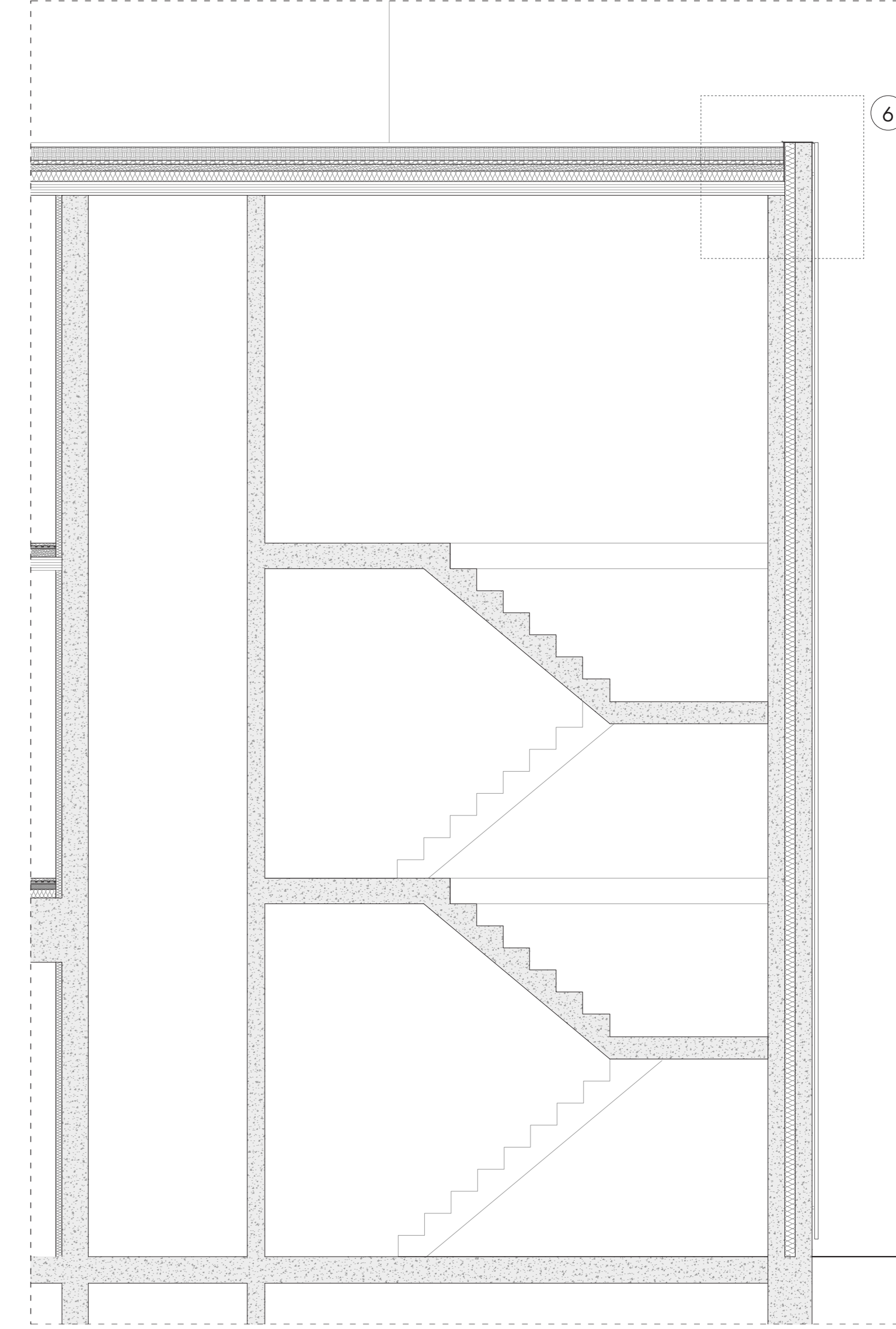
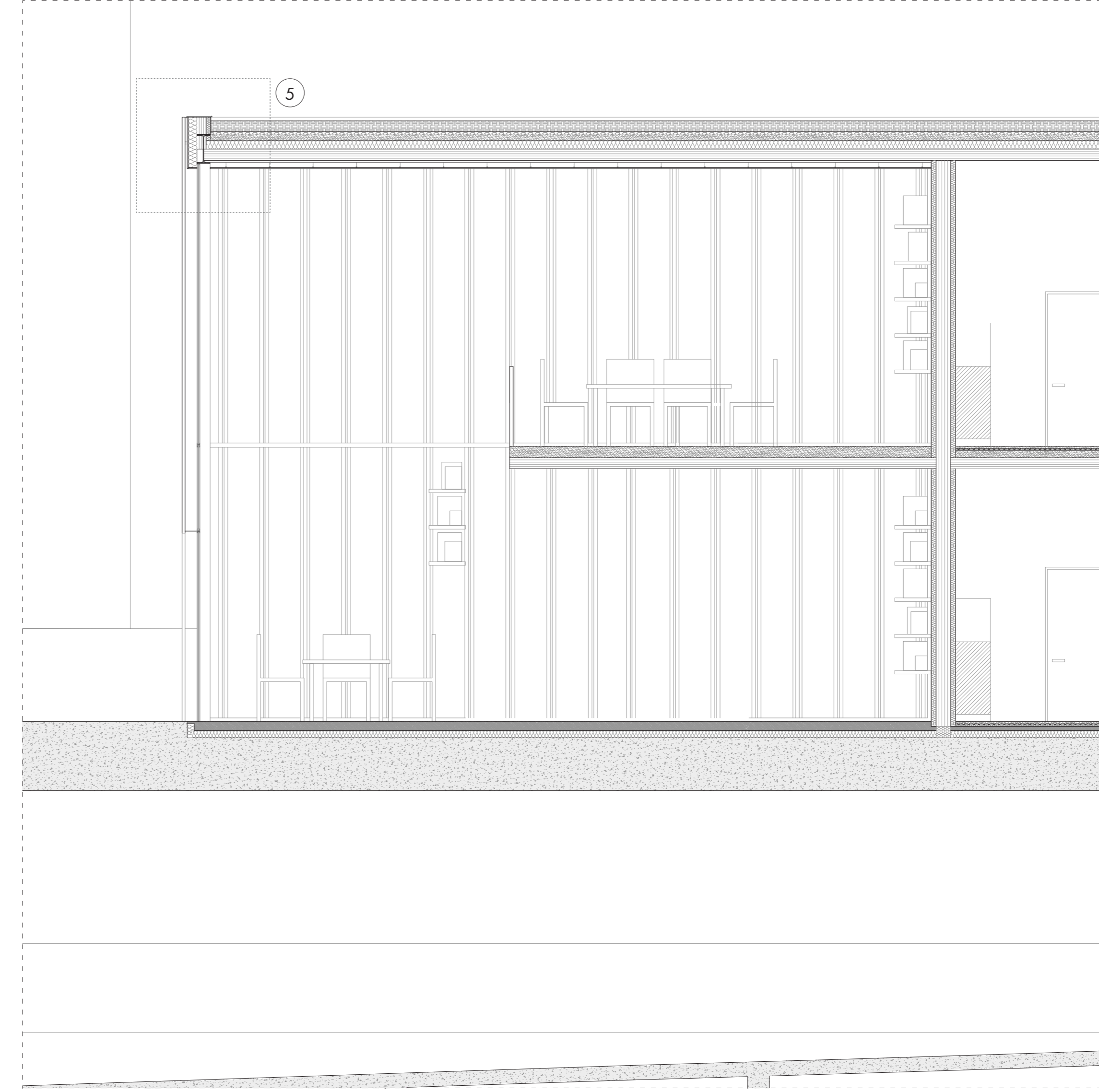
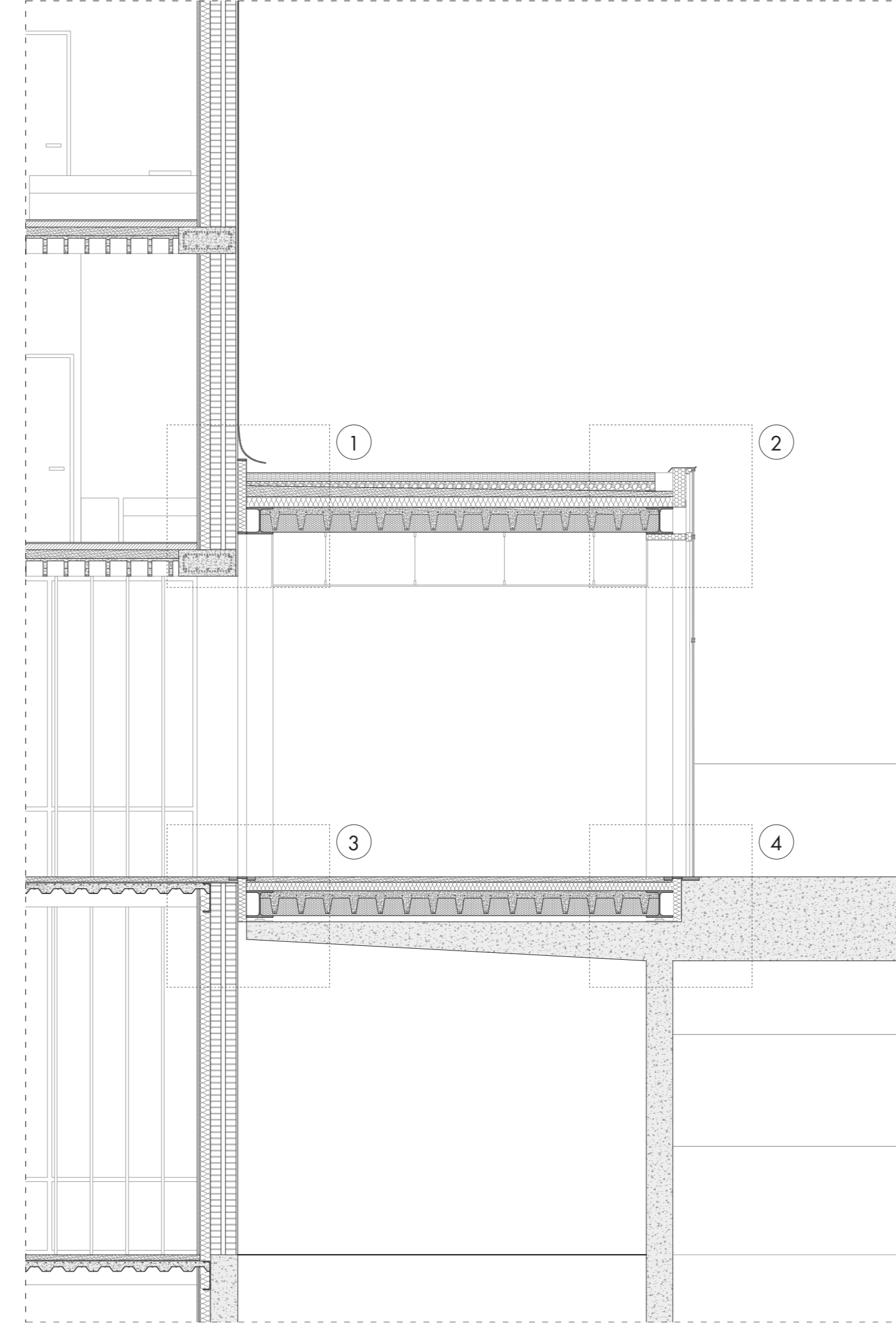
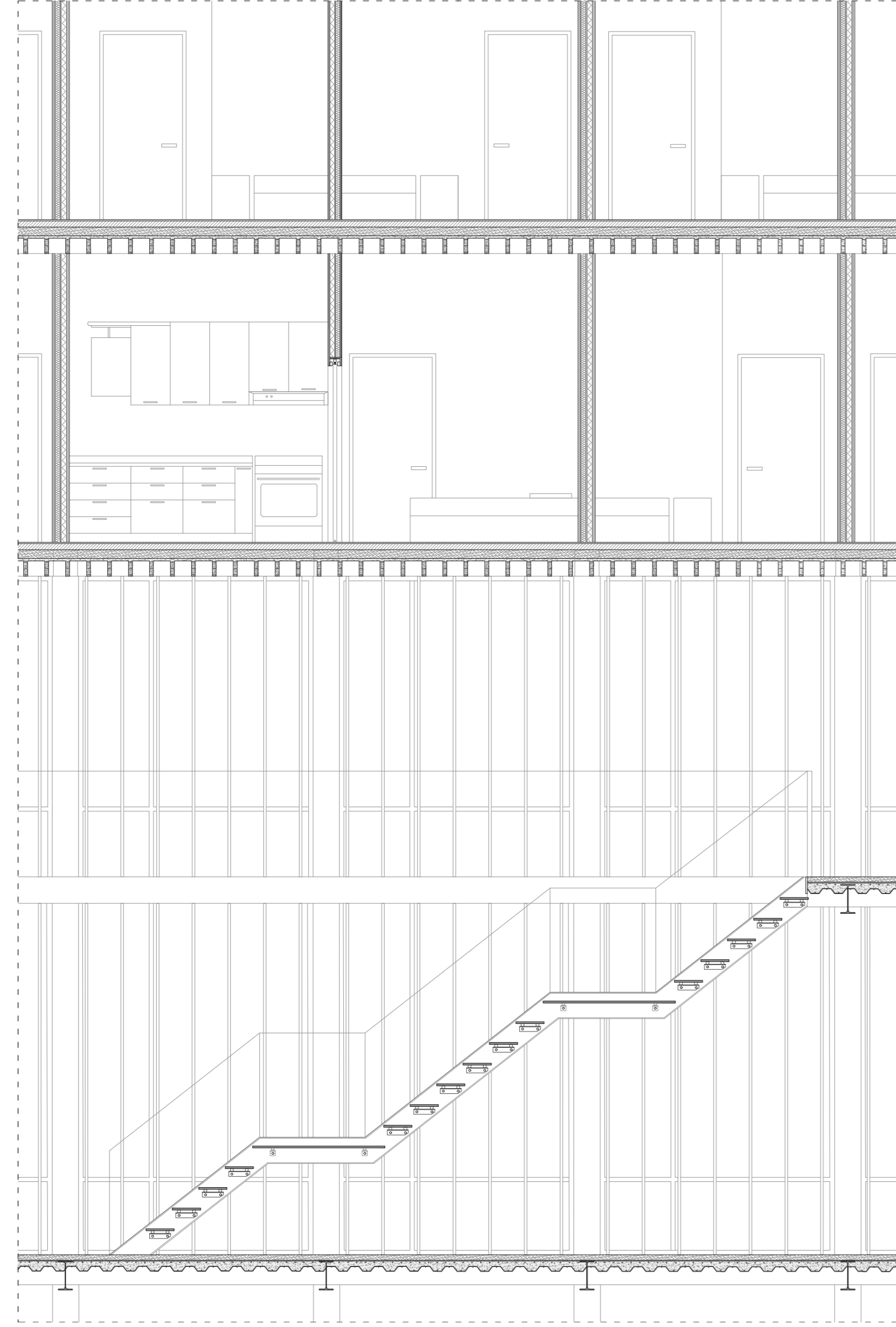
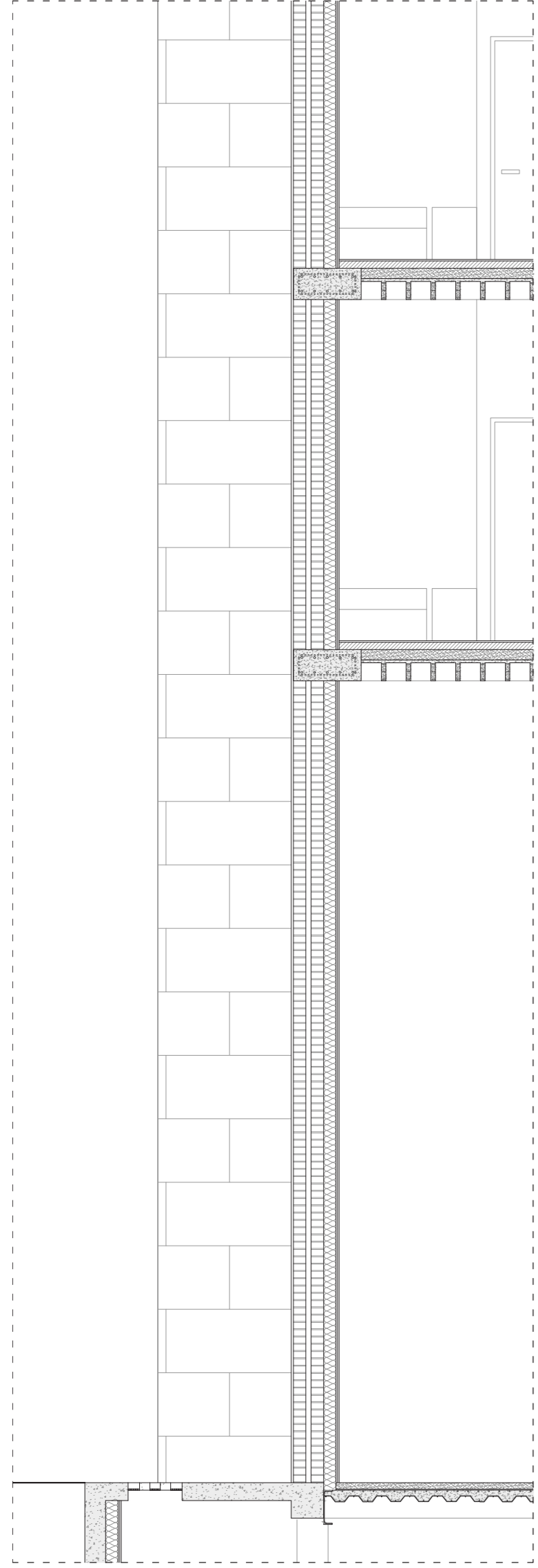
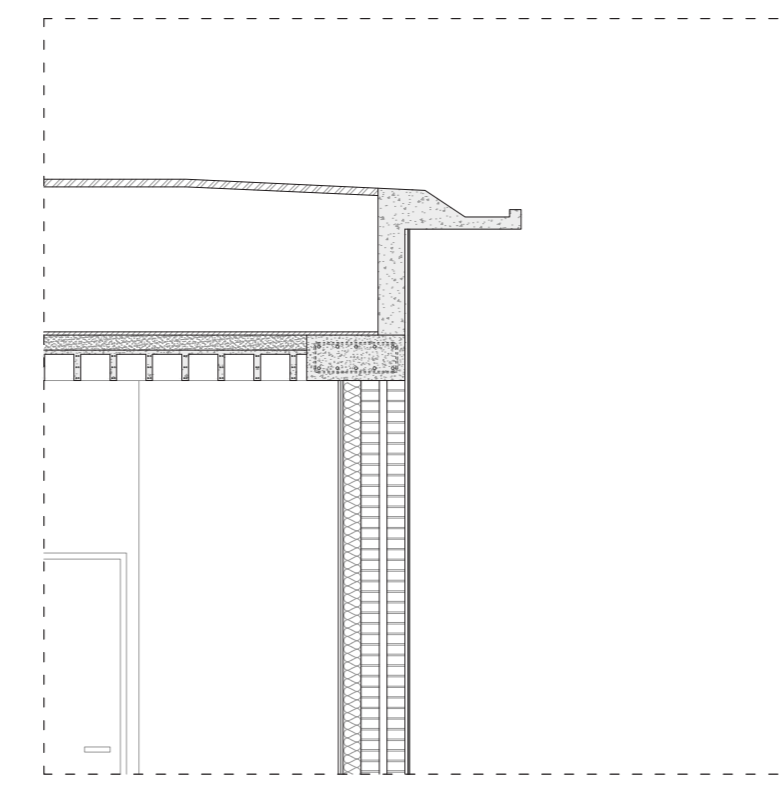
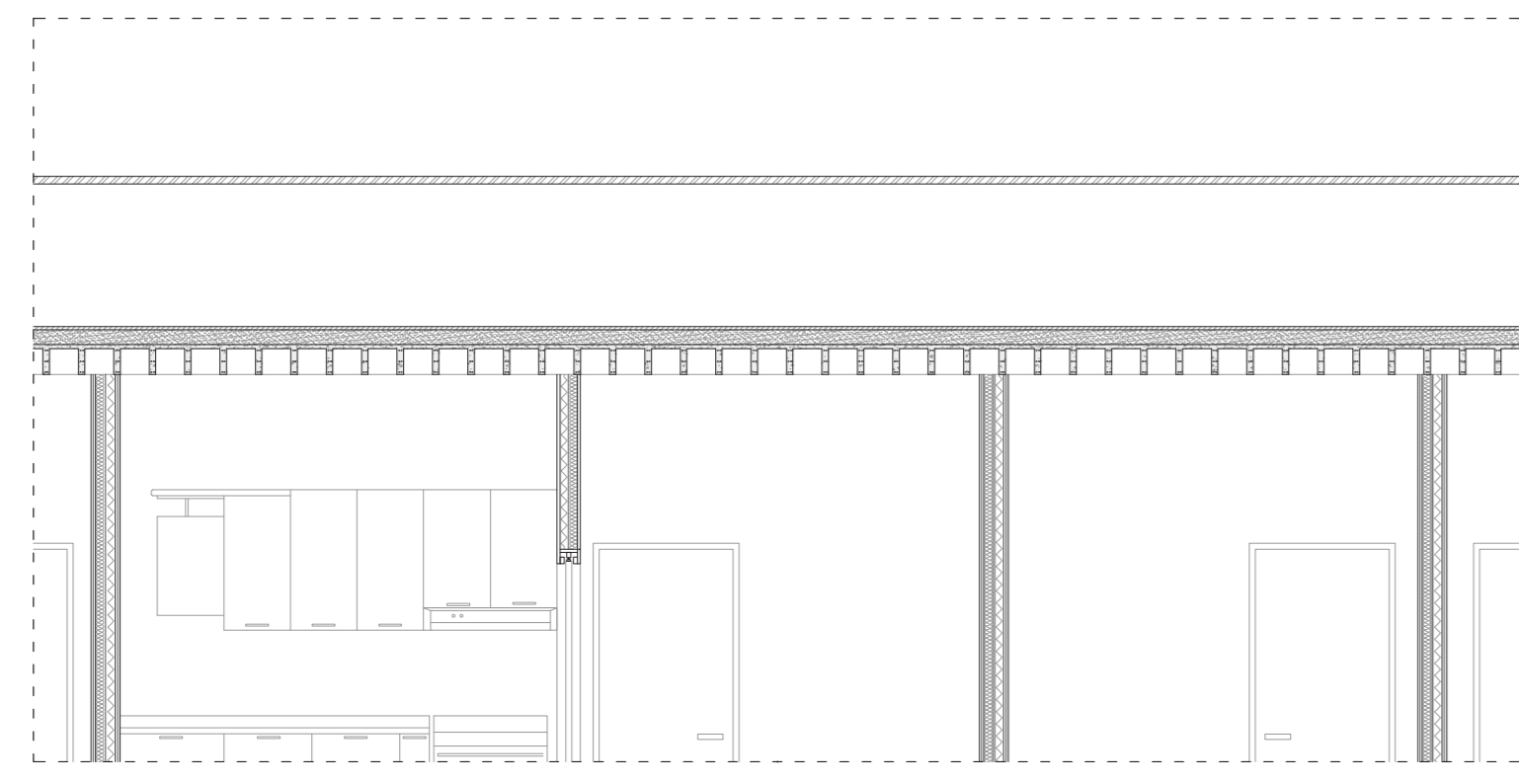
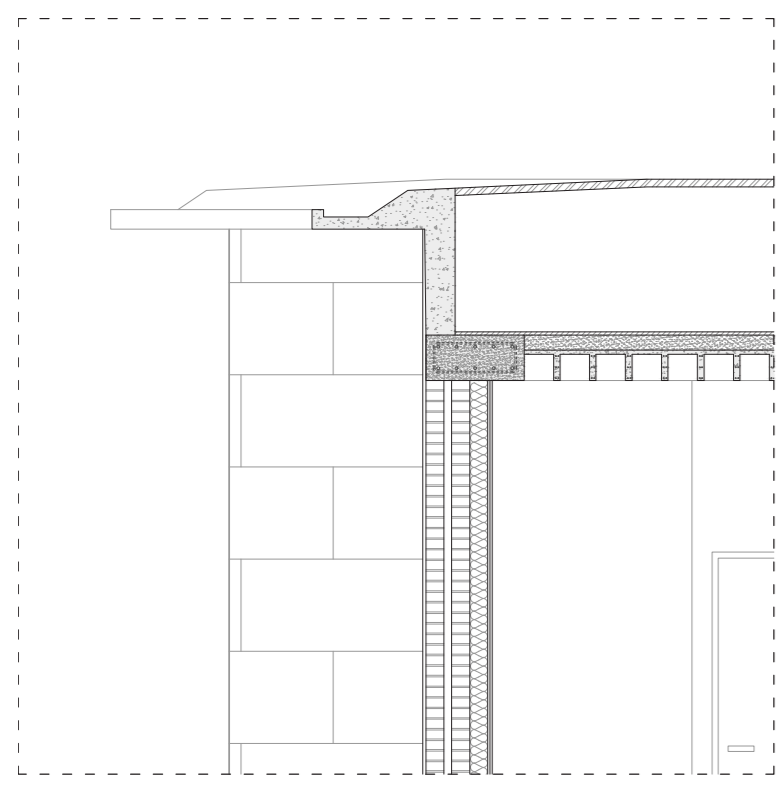


Displacements results in axonometry and elevation (west side)

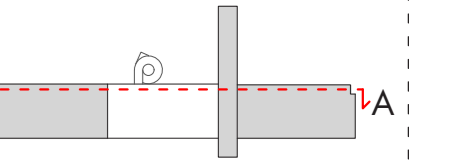
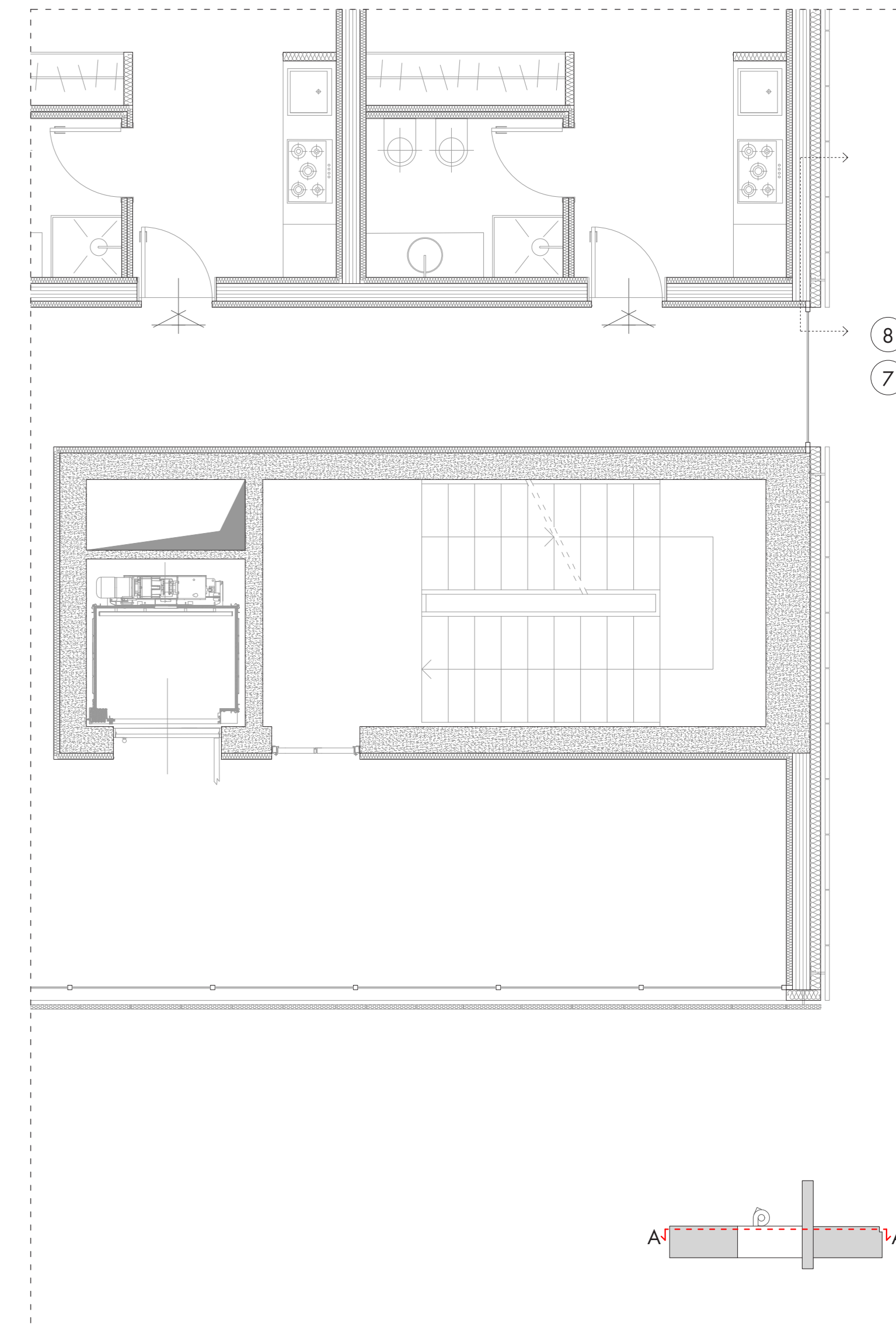
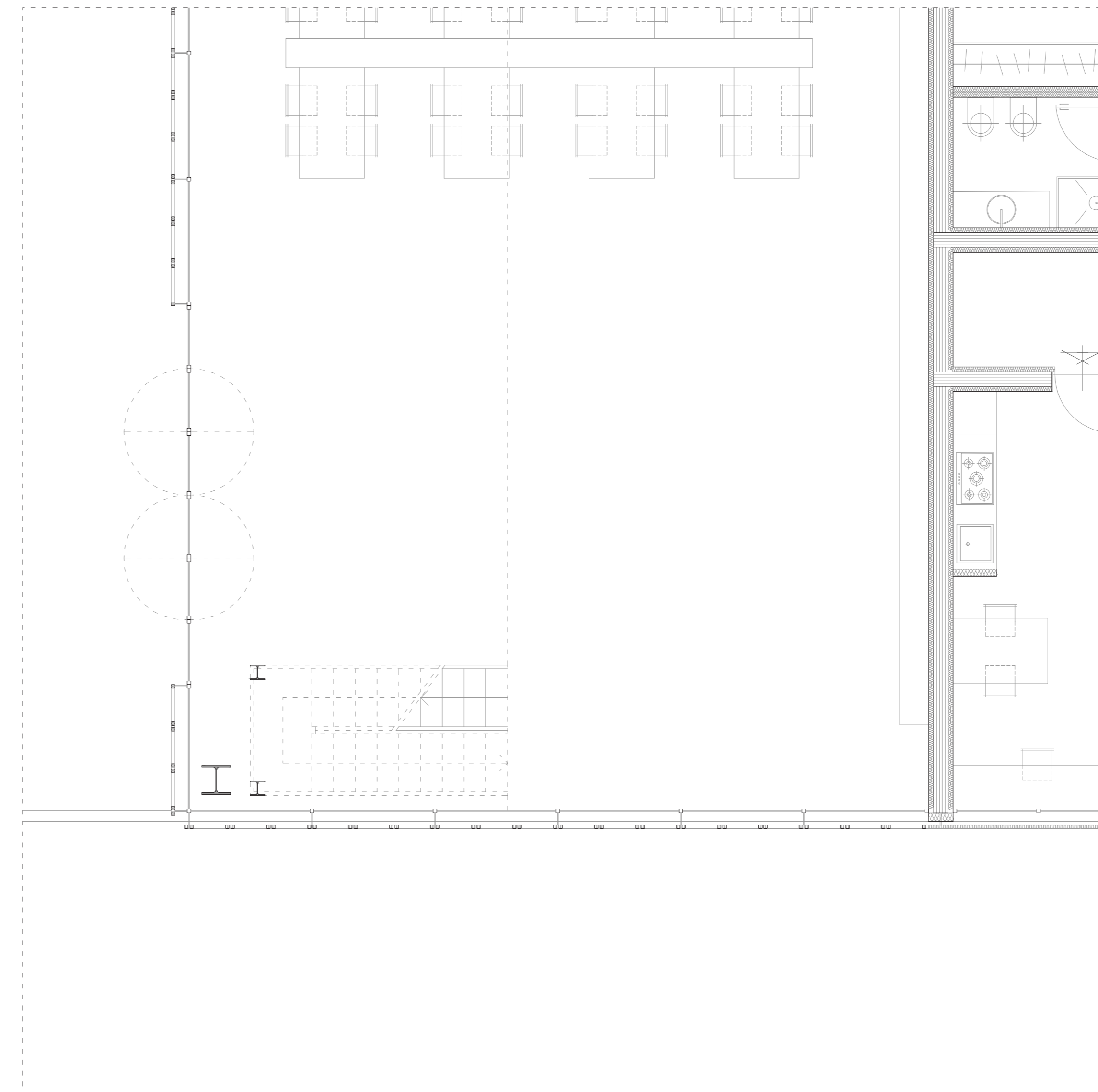
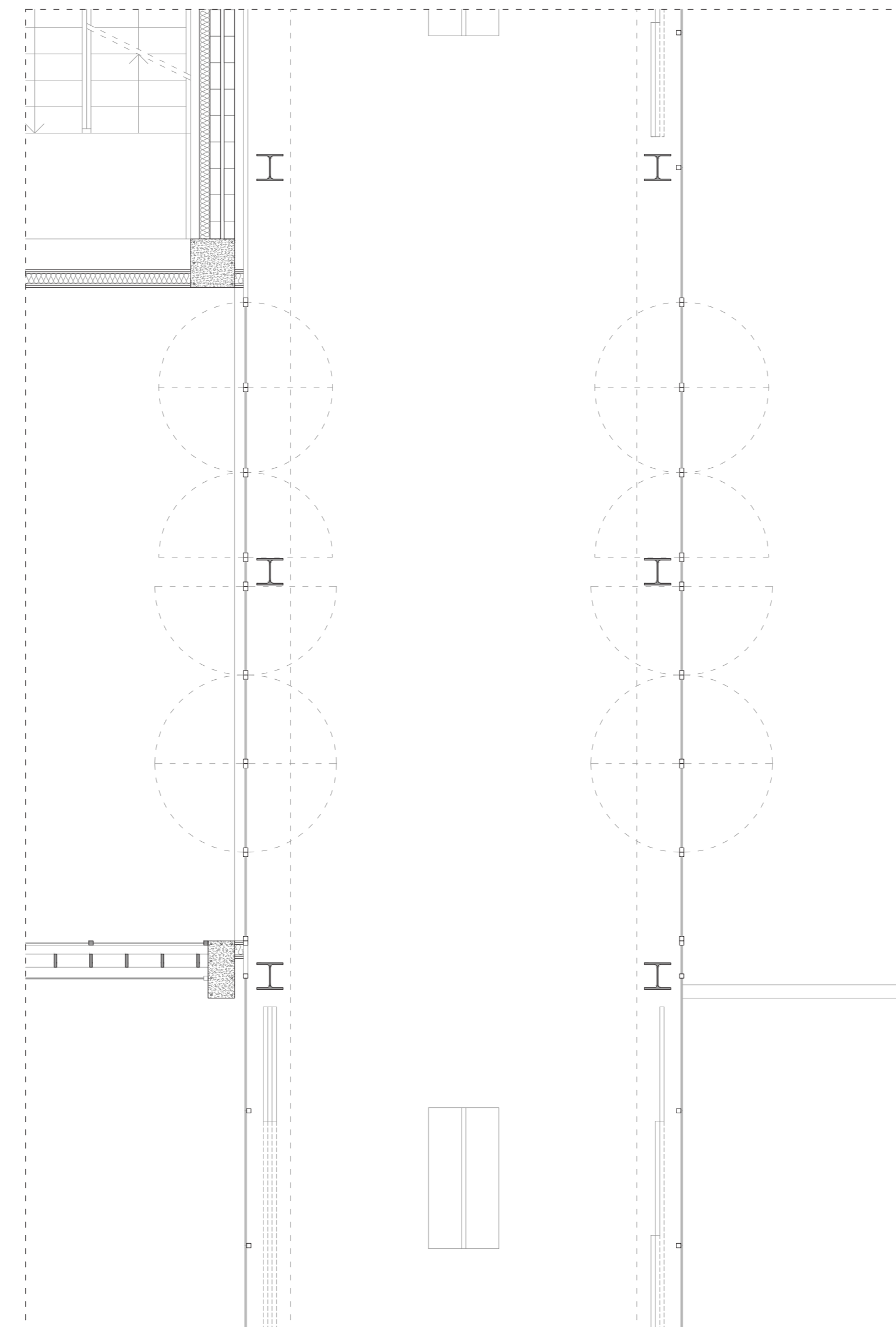
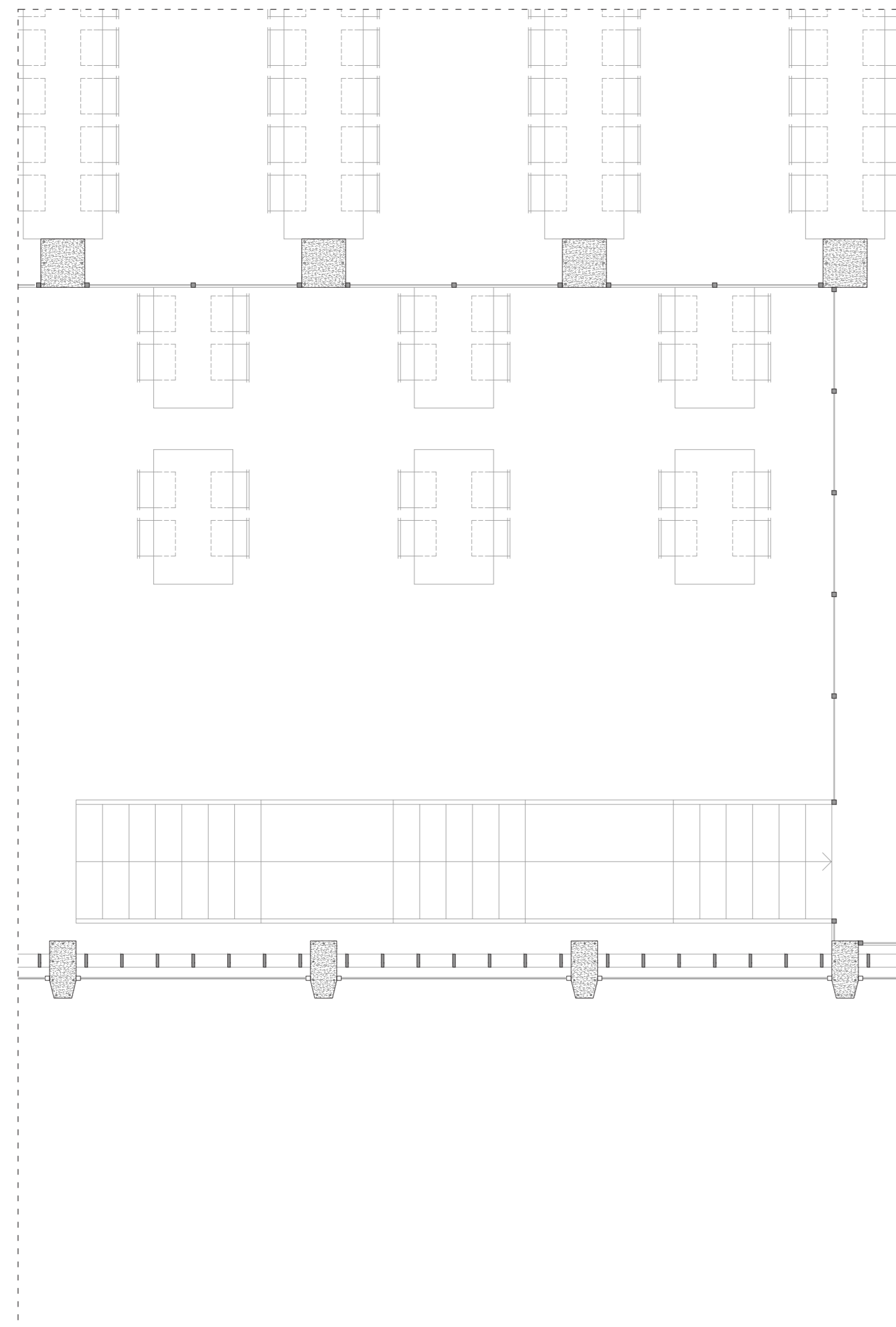
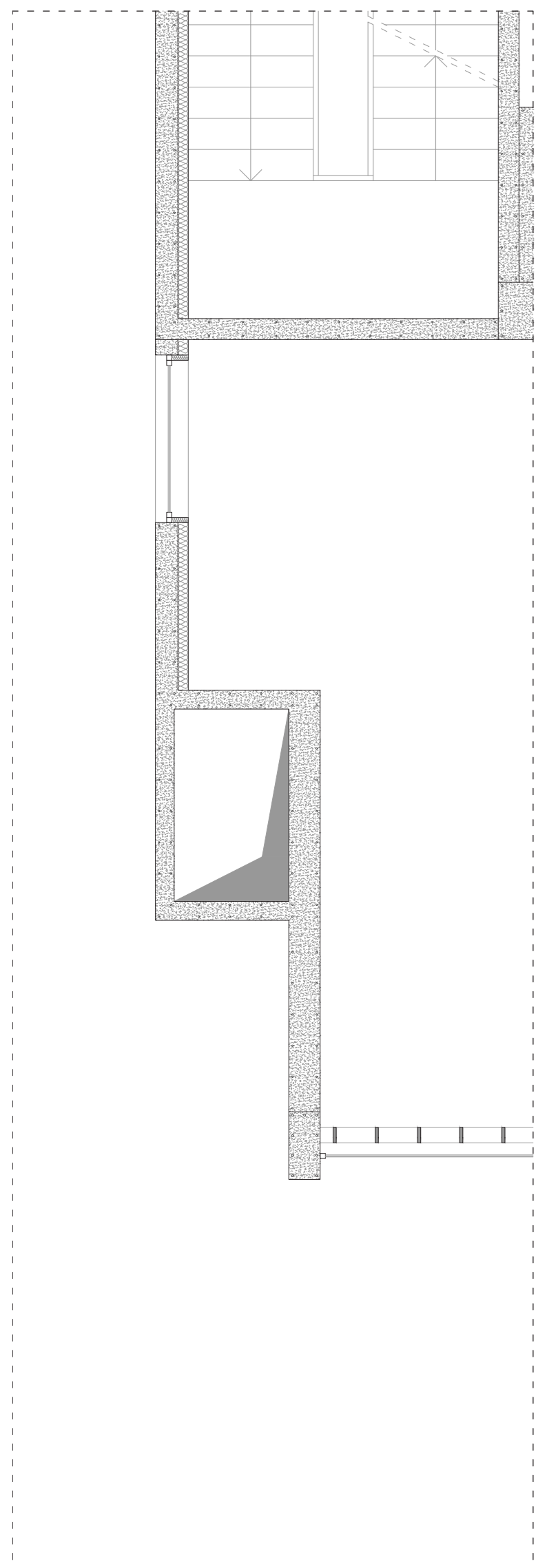


Cross section of the design beam with the disposition of the steel rebars (considering positive moment and negative moment)
SCALE 1:20



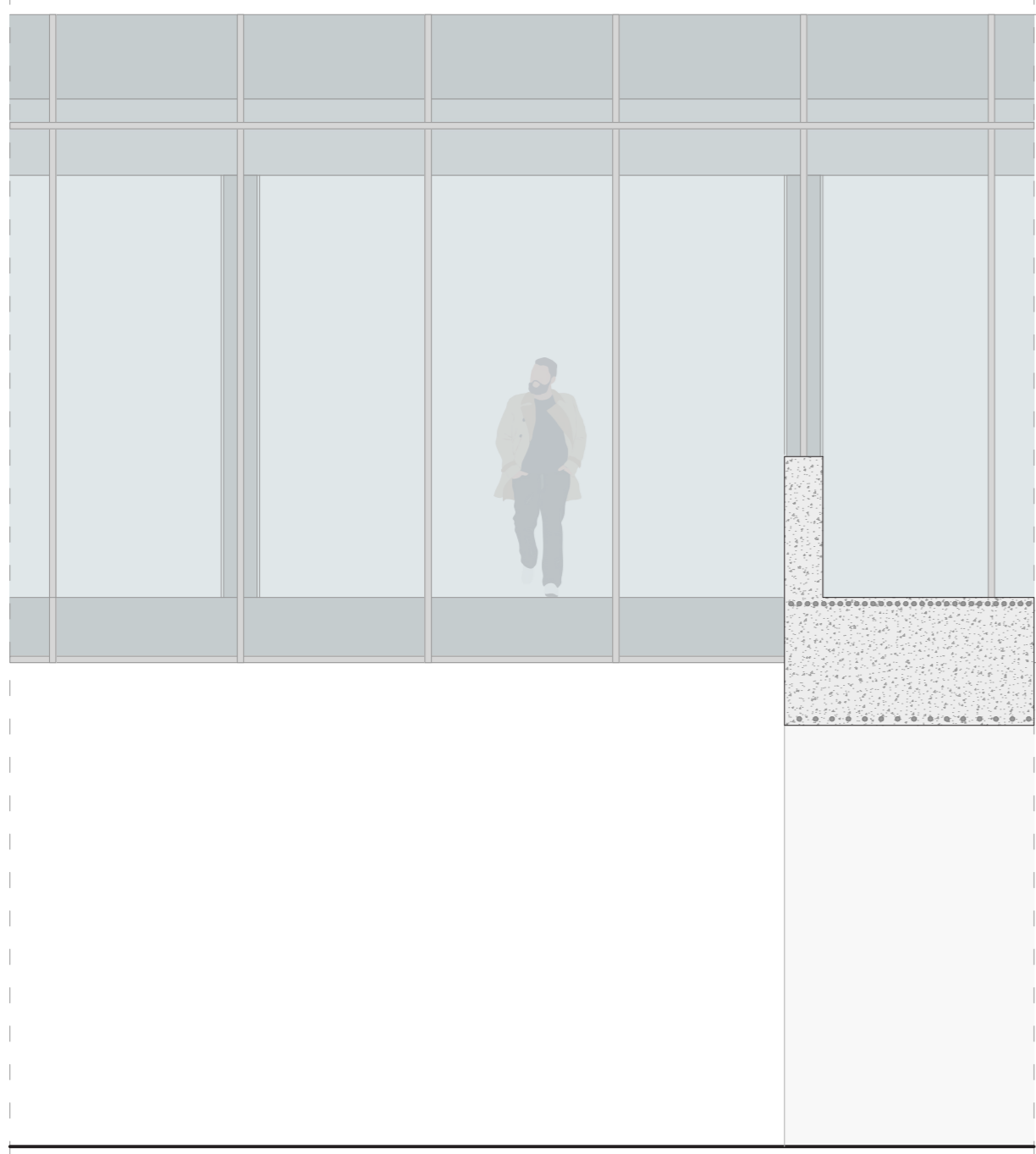


Spans of longitudinal section
SCALE 1:50

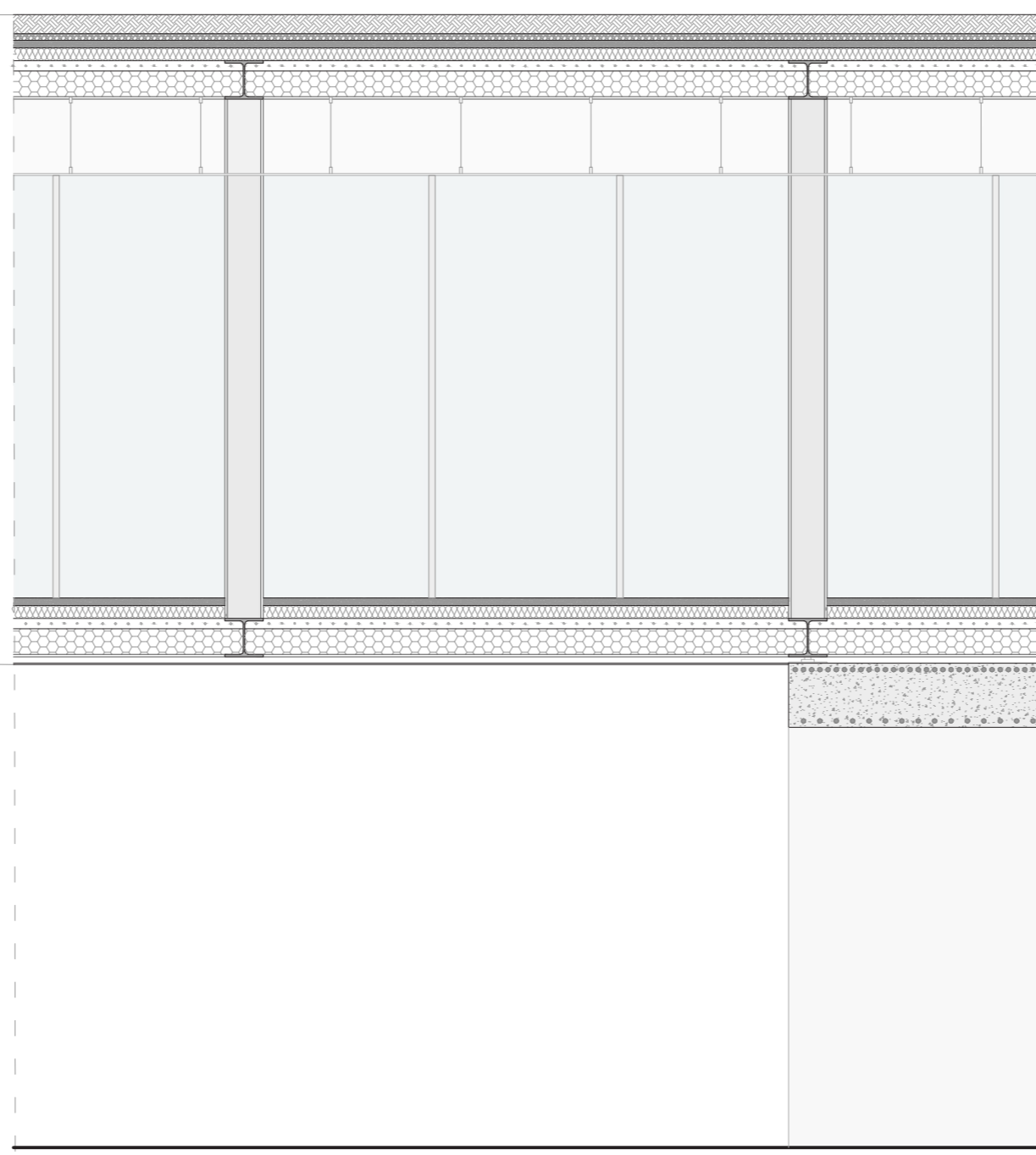


First floor plan spans
SCALE 1:50

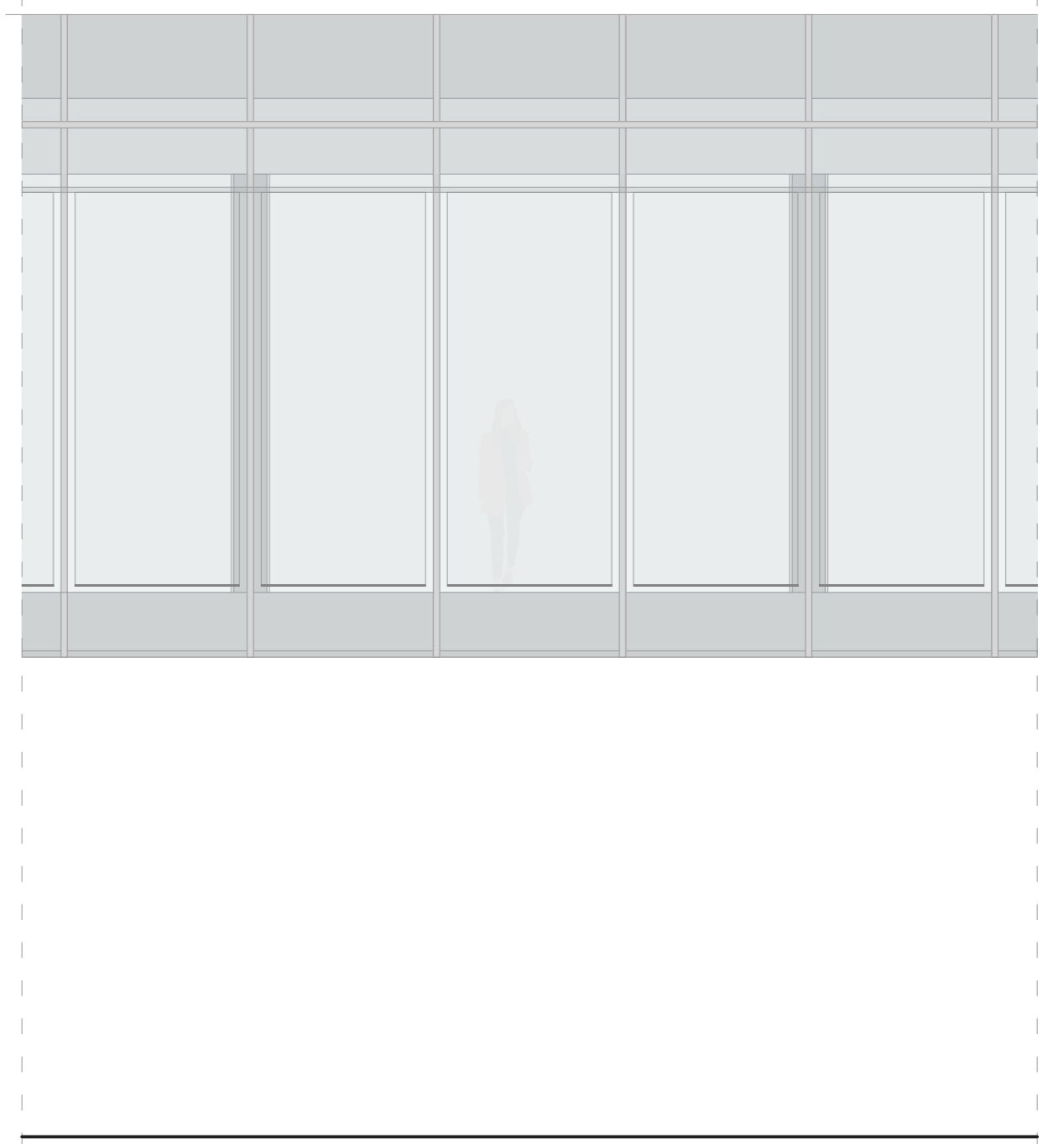




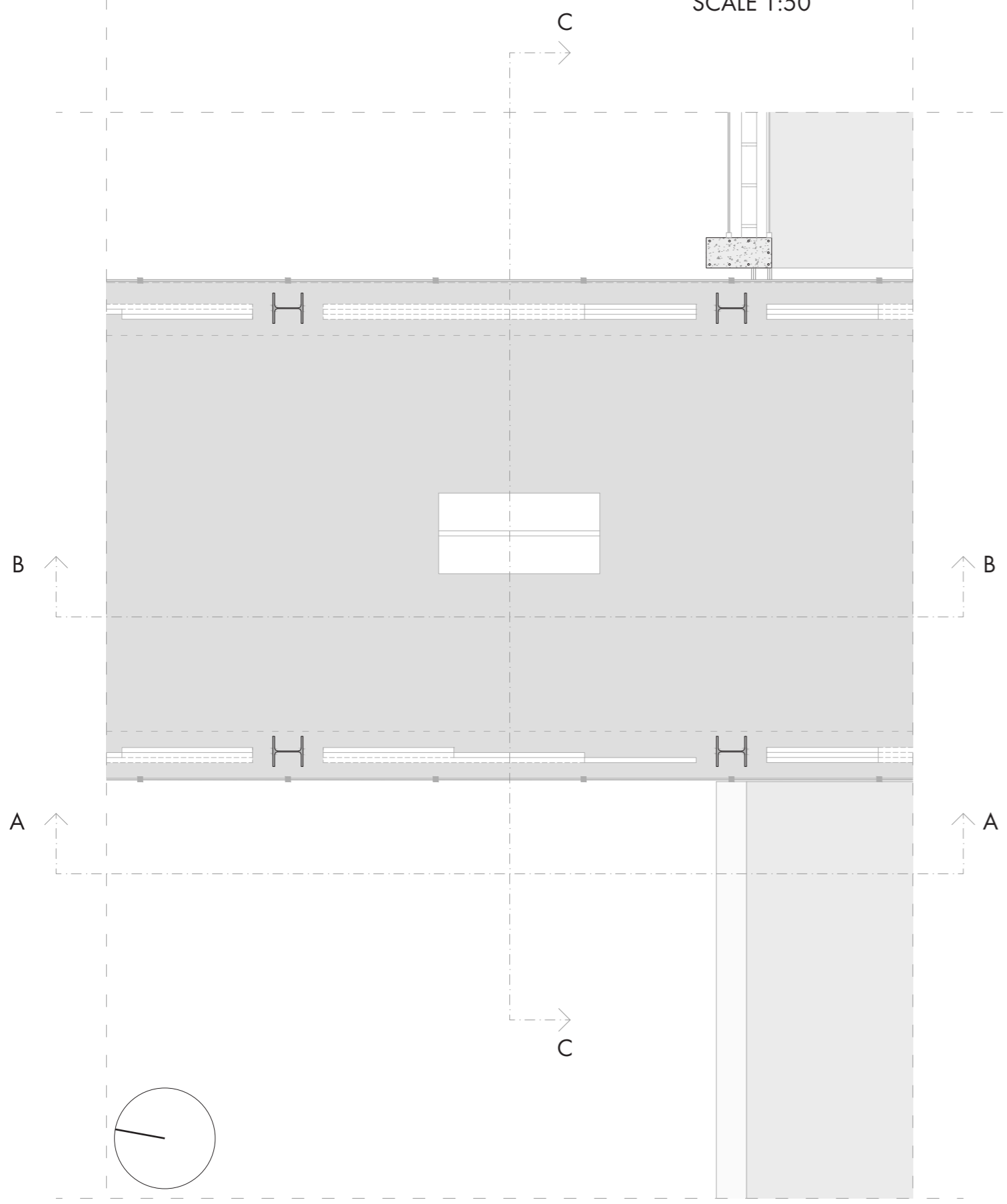
Cross section AA
SCALE 1:50



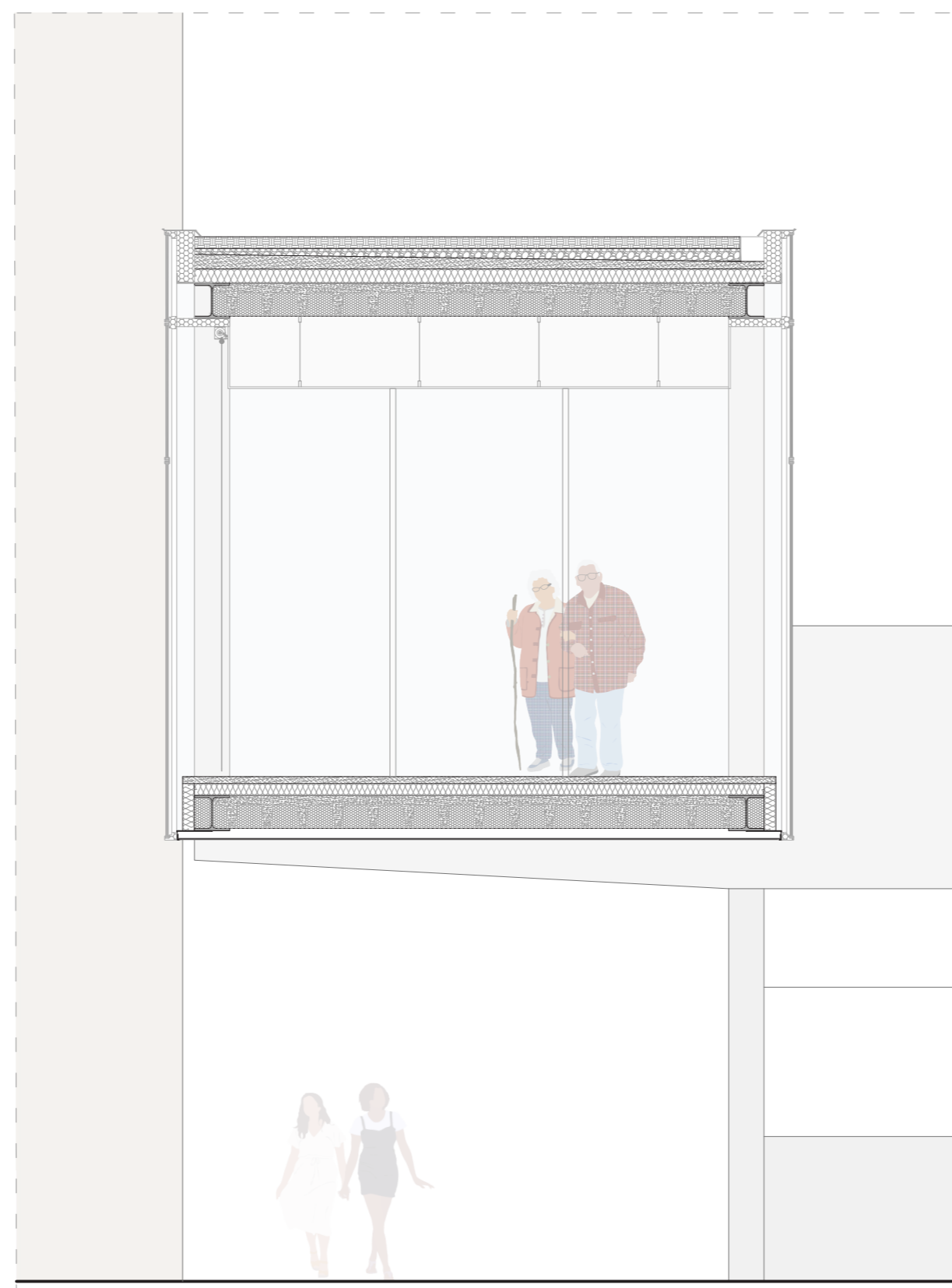
Cross section BB
SCALE 1:50



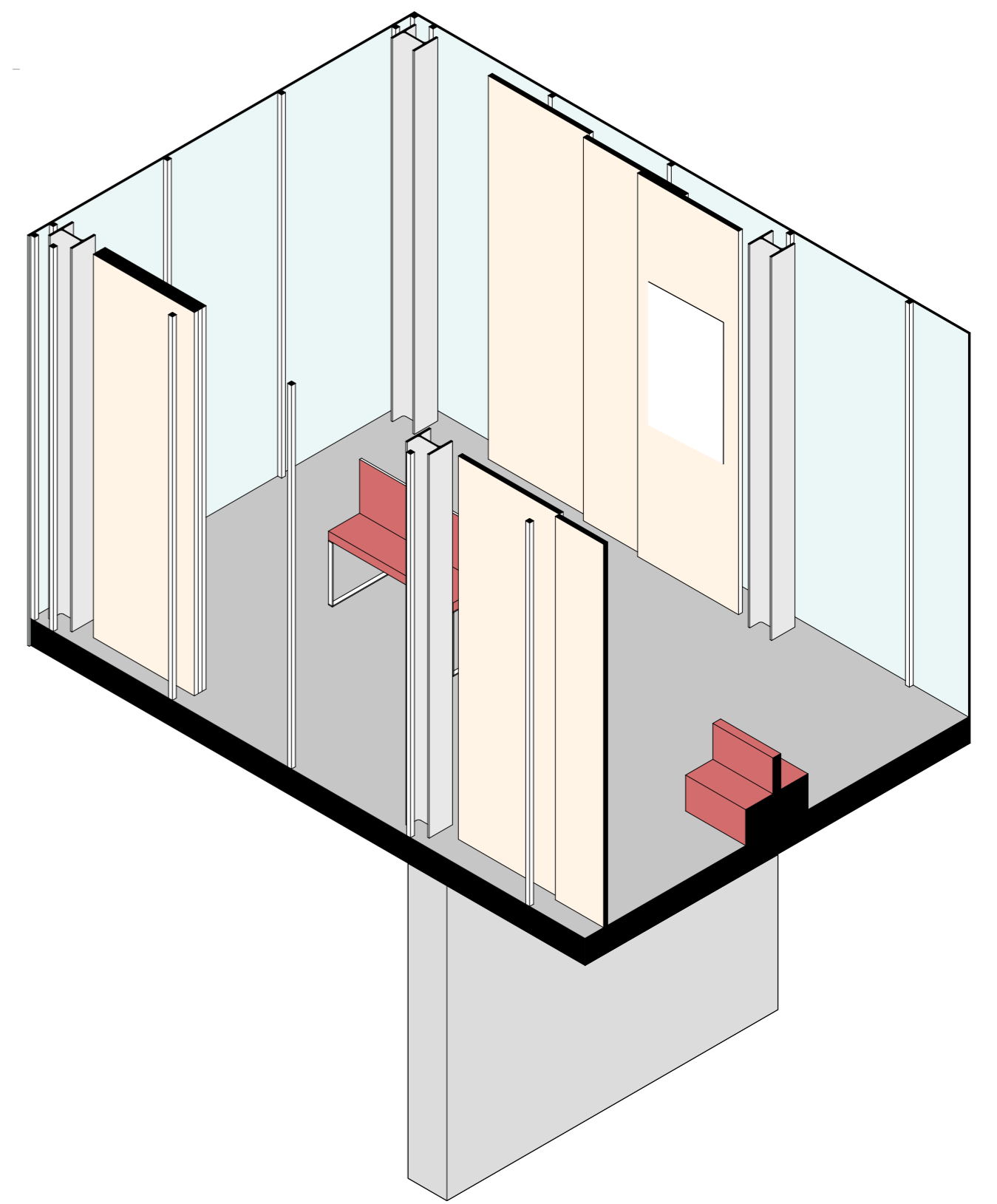
South elevation of the typical span
SCALE 1:50



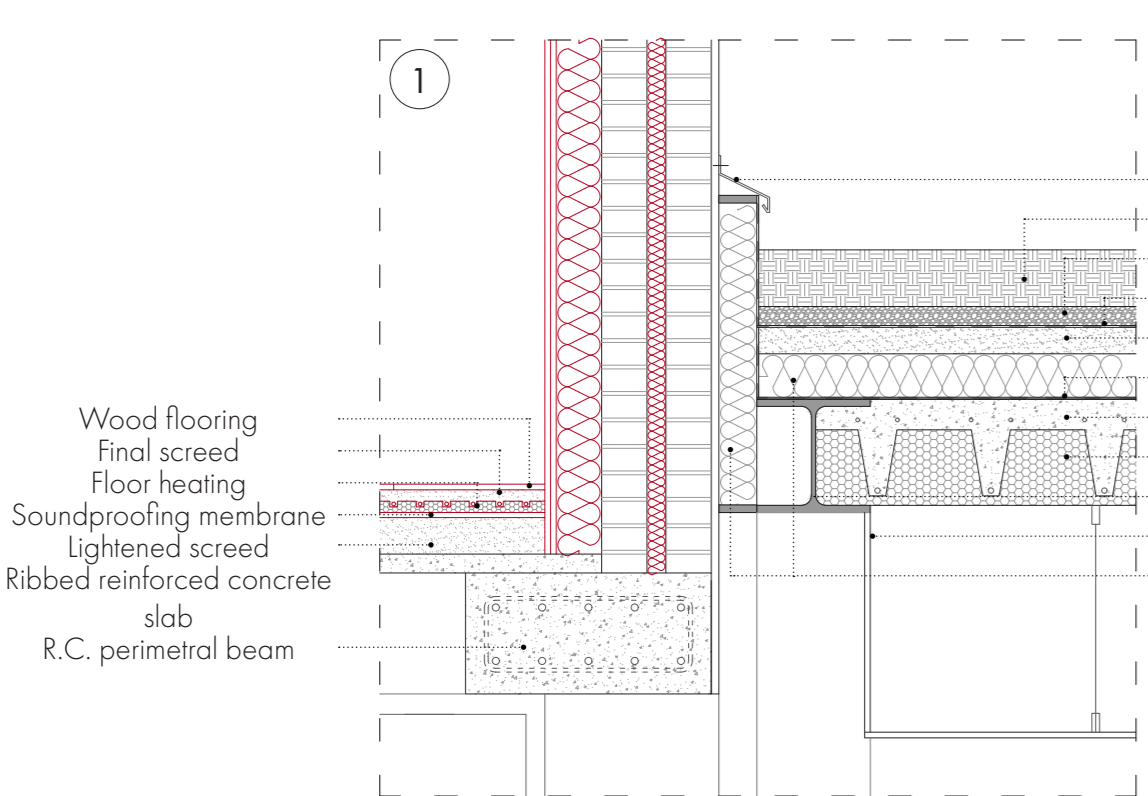
Gallery detailed floor plan
SCALE 1:50



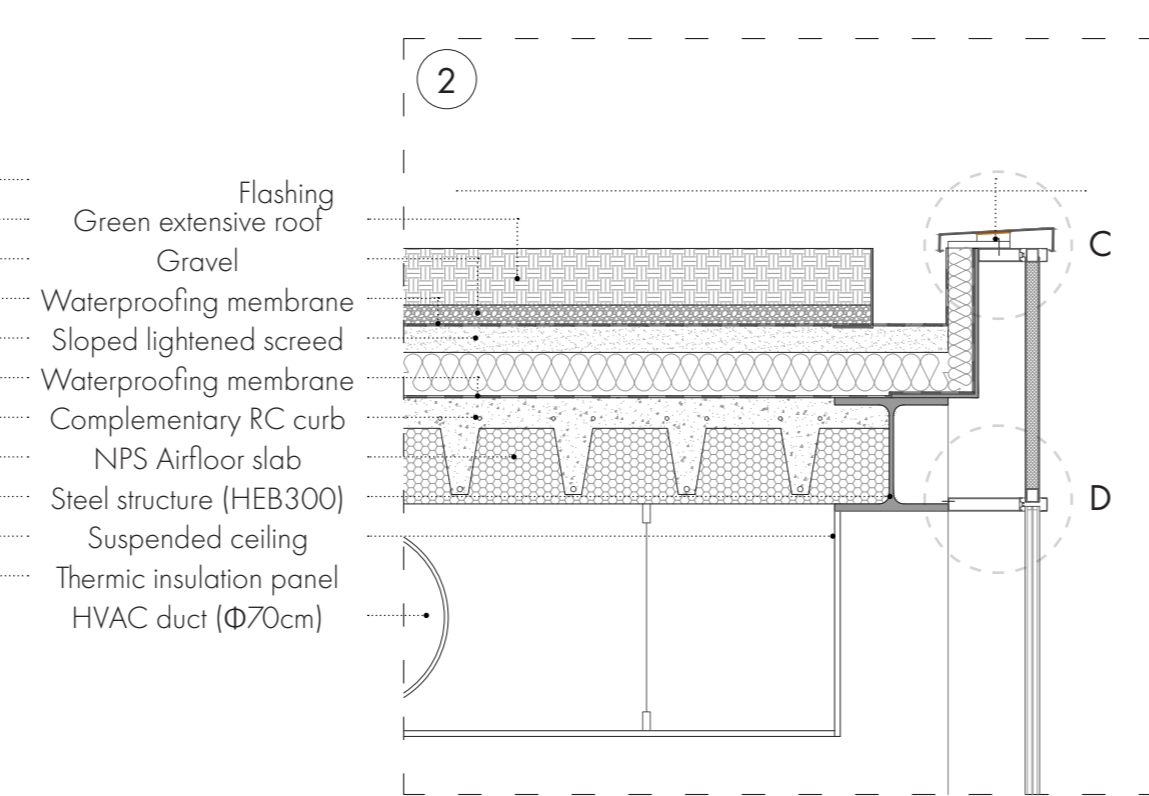
Cross section CC
SCALE 1:50



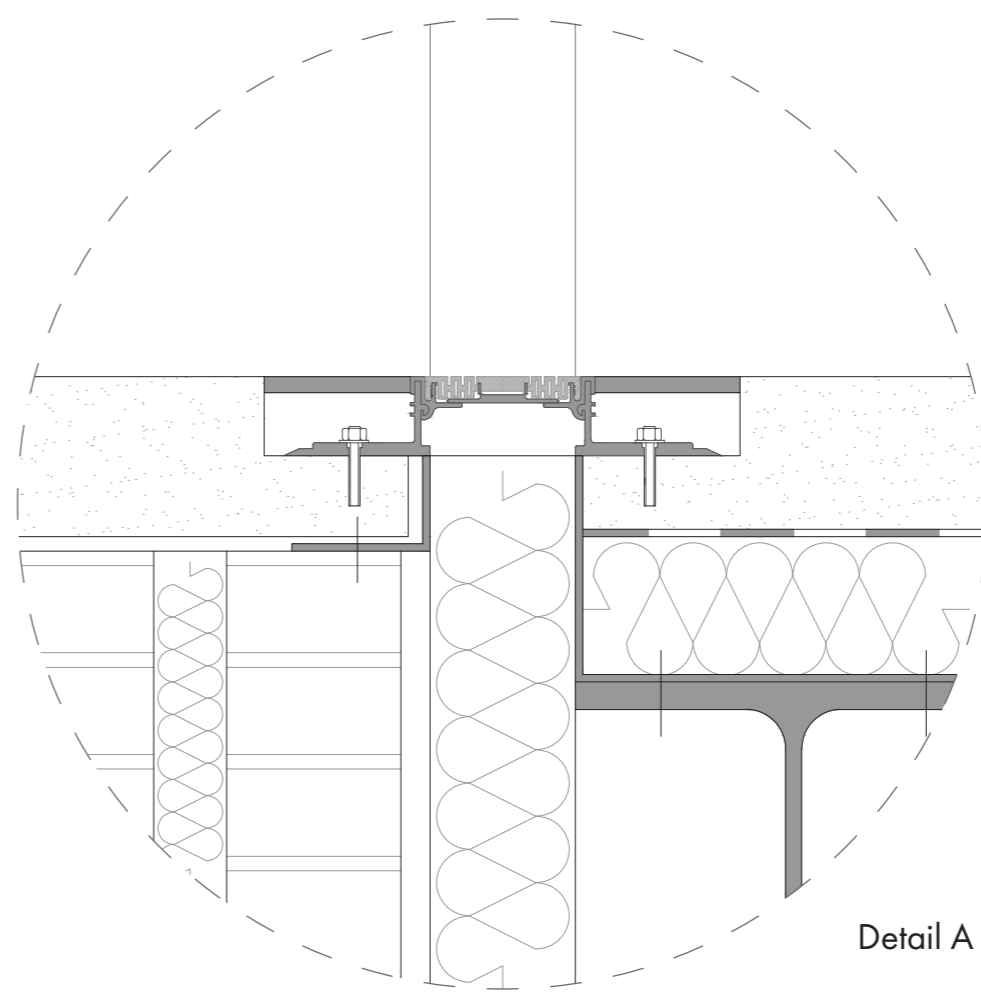
Isometric view of the typical span of the gallery



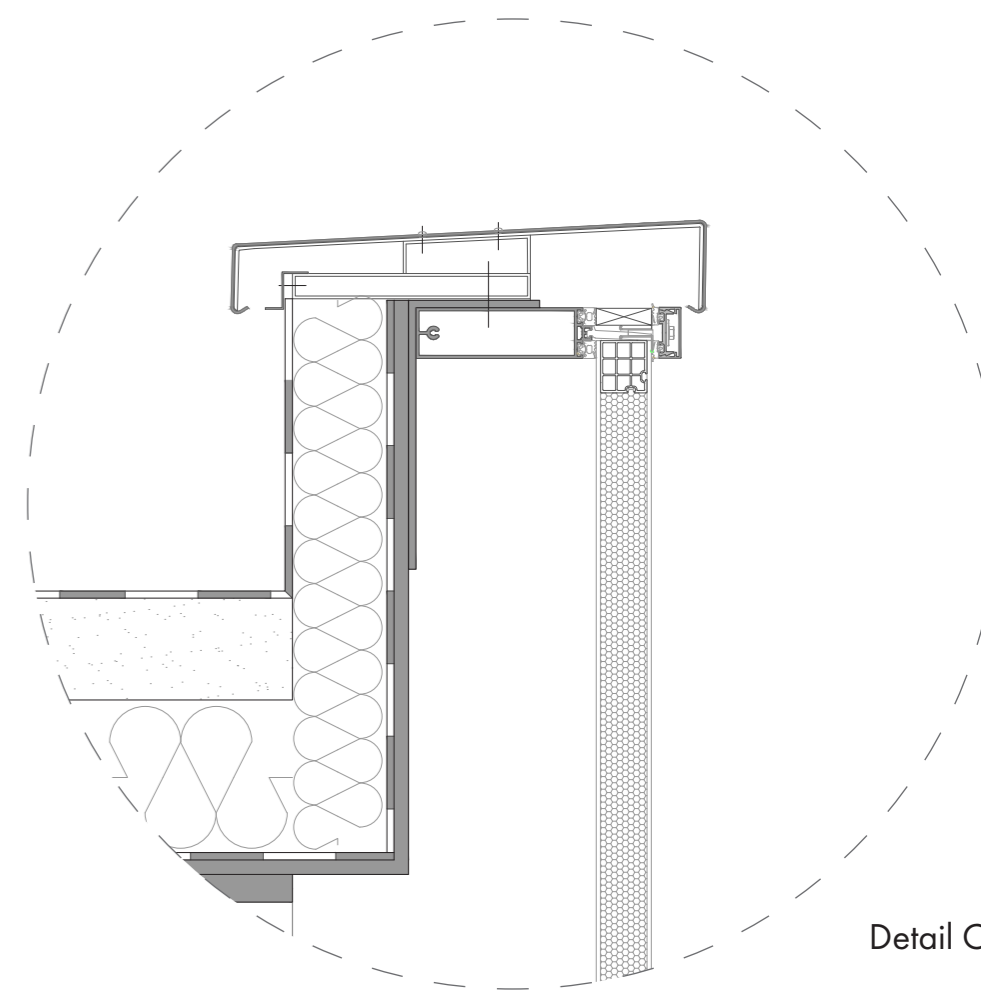
Detail of the connection between gallery and Convitto tower
SCALE 1:20



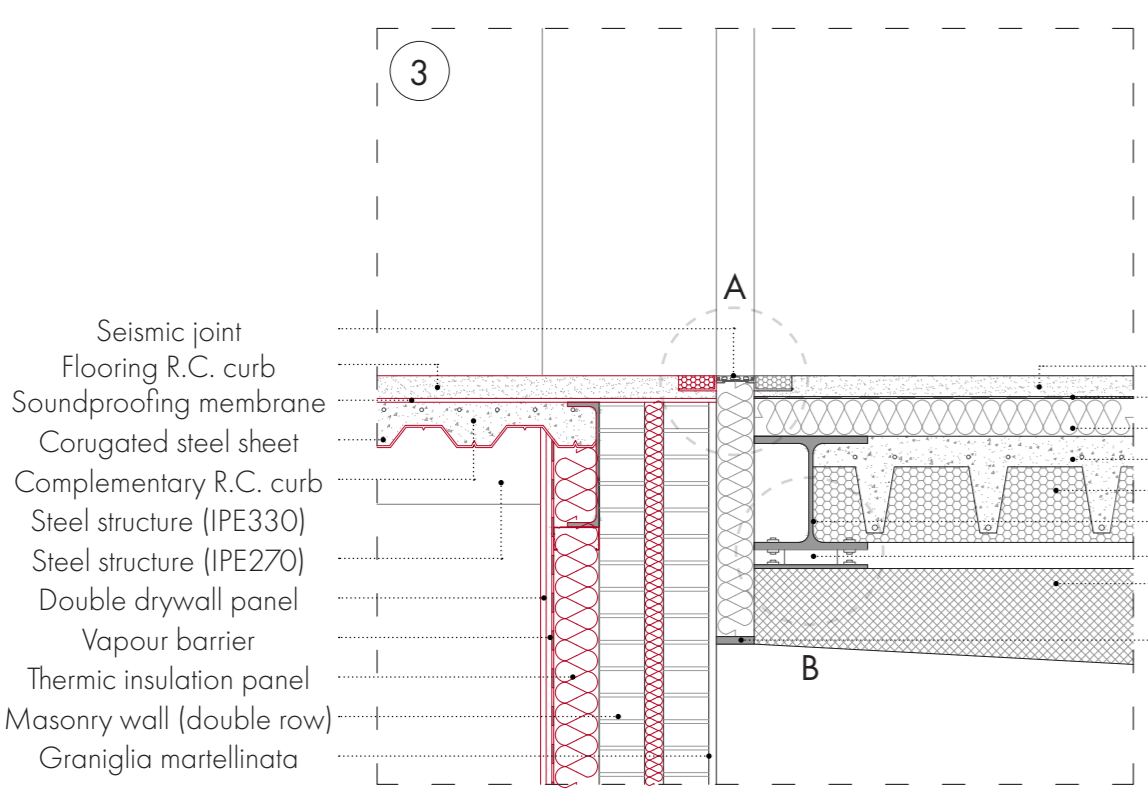
Detail of the gallery's roof
SCALE 1:20



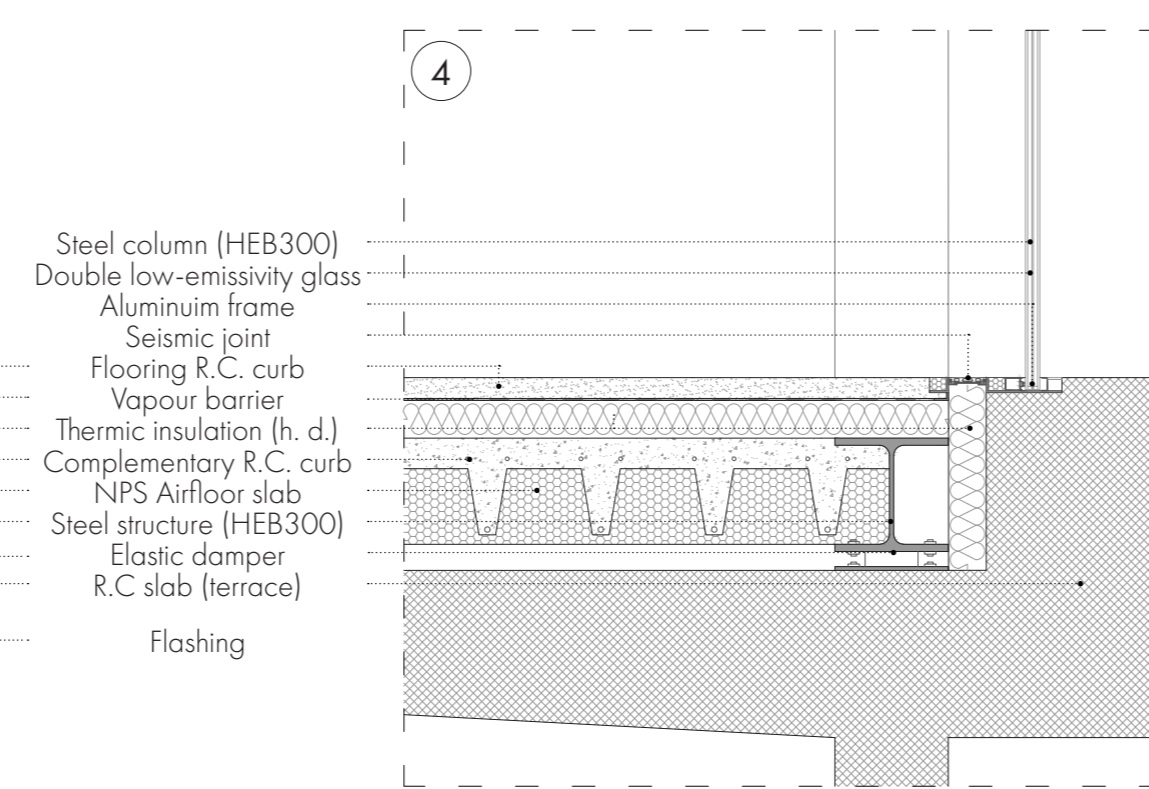
Detail A



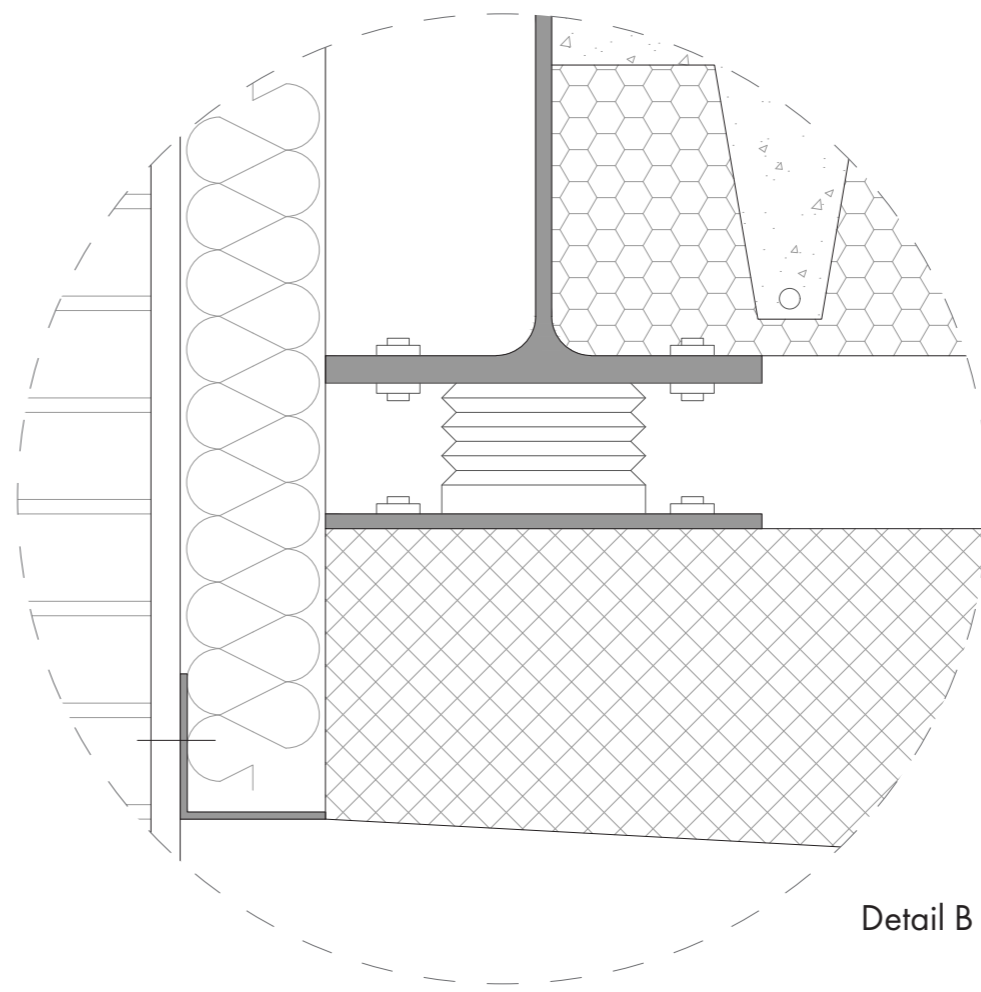
Detail C



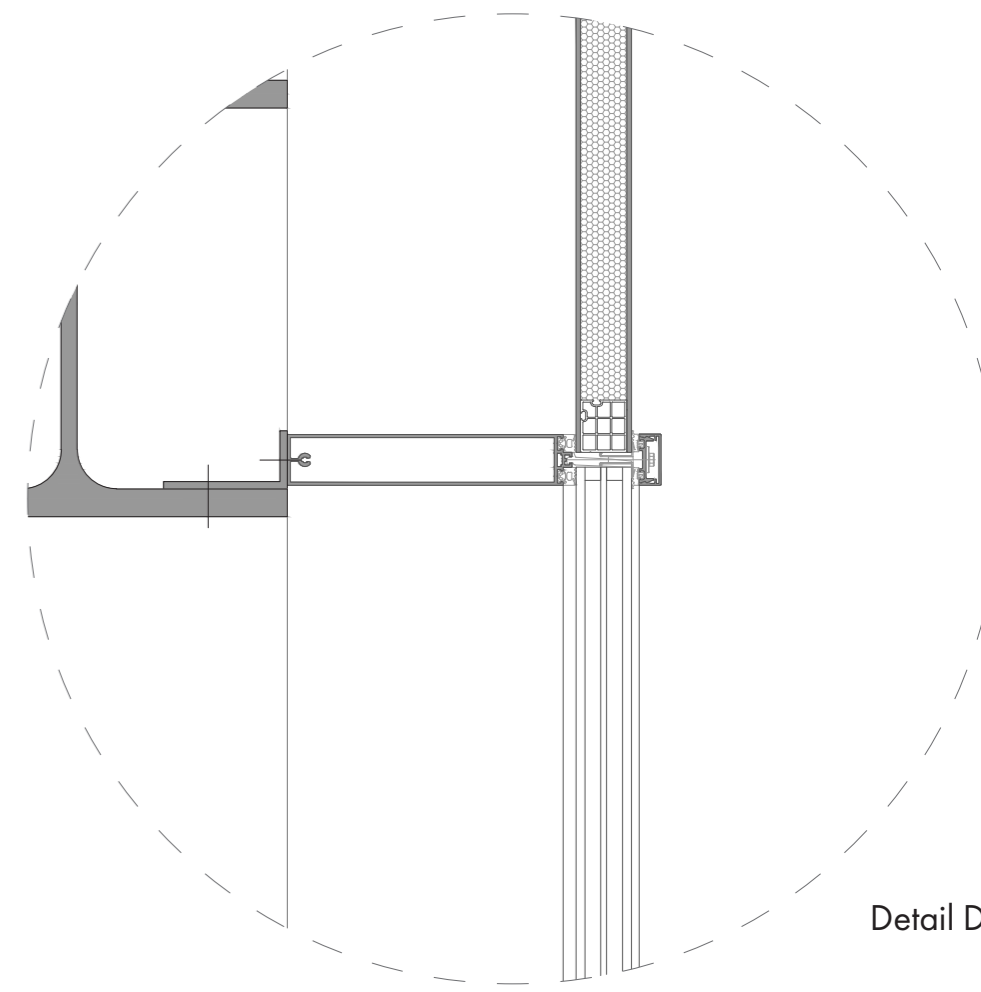
Detail of the connection between gallery and Convitto tower
SCALE 1:20



Detail of the connection between gallery and open terrace
SCALE 1:20



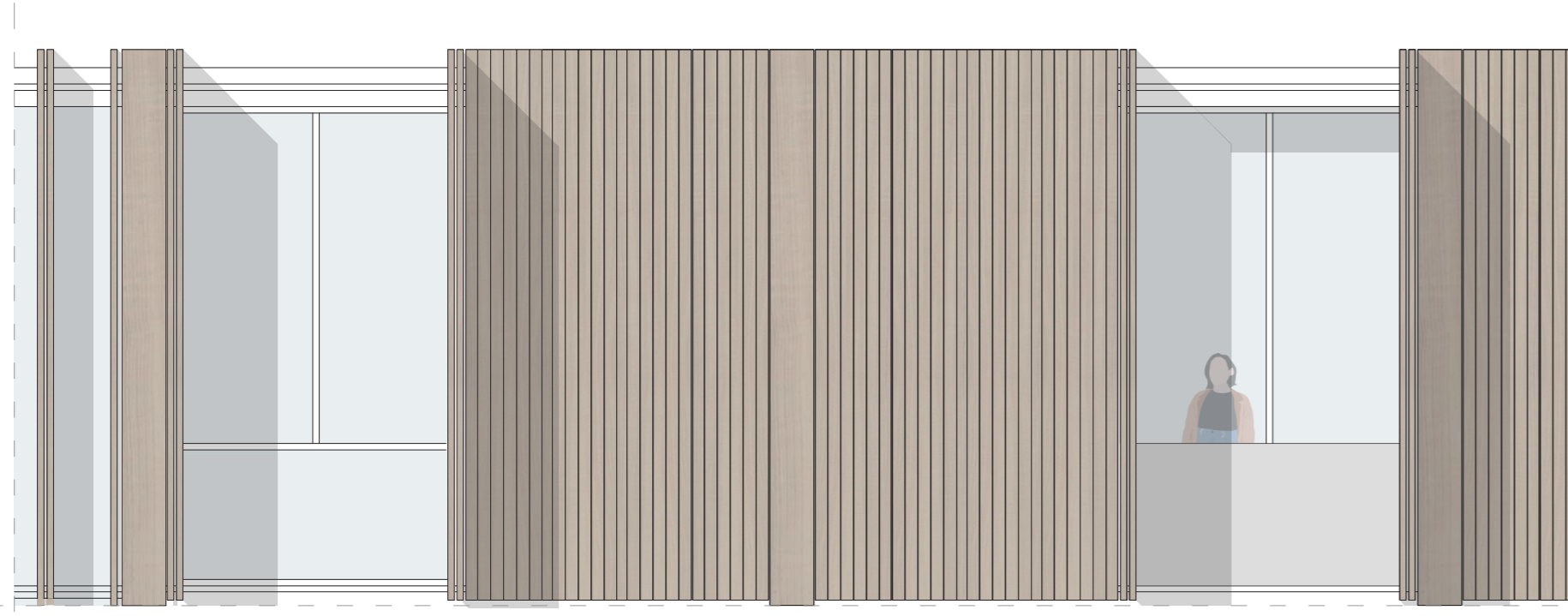
Detail B



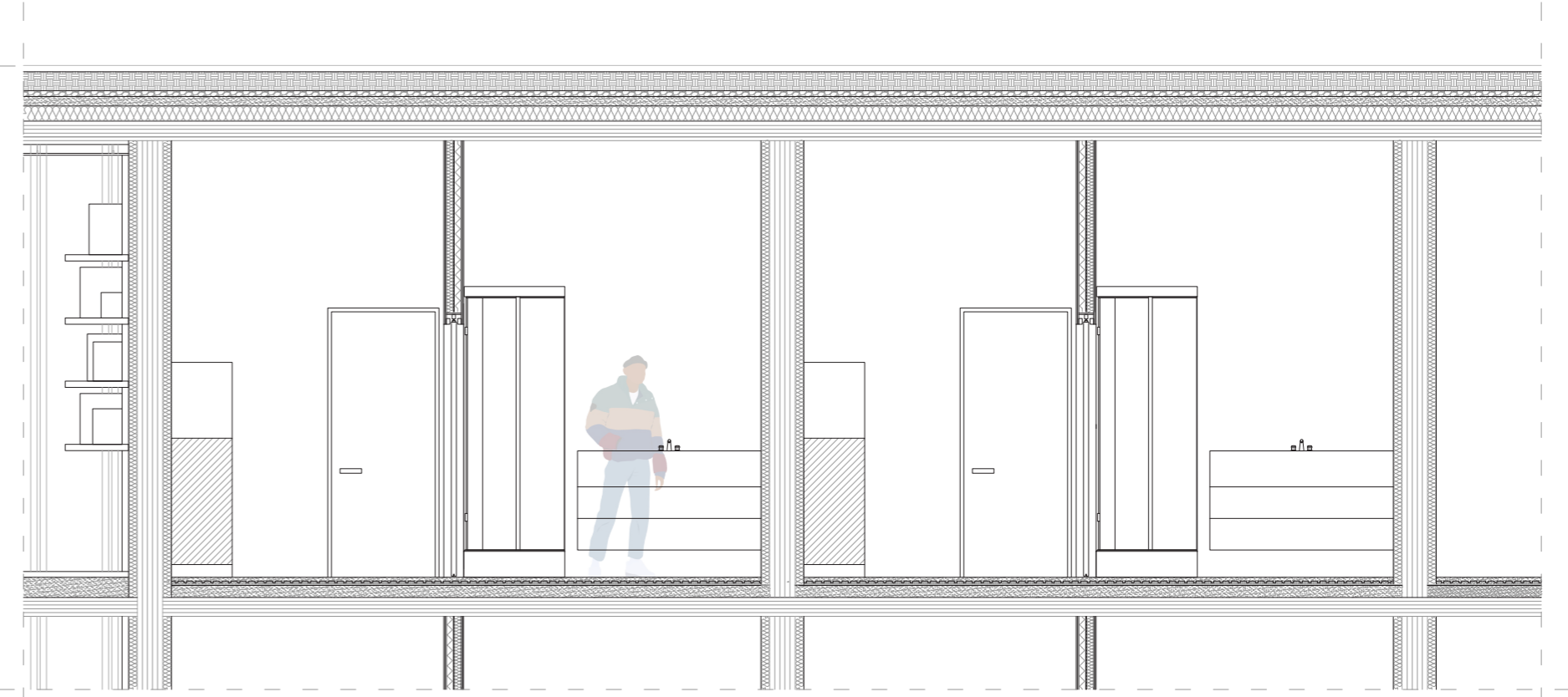
Detail D

Blow-up details
SCALE 1:5

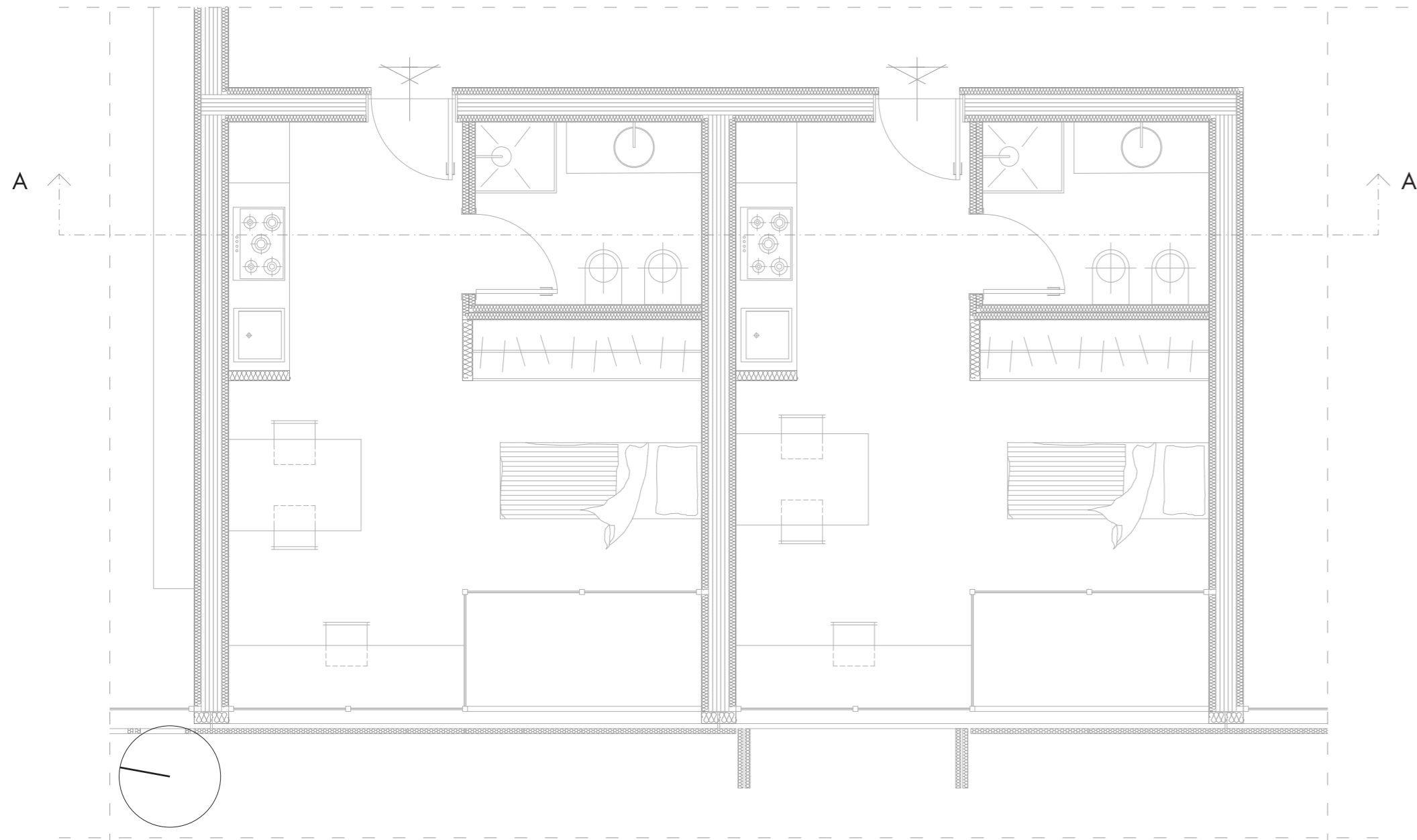




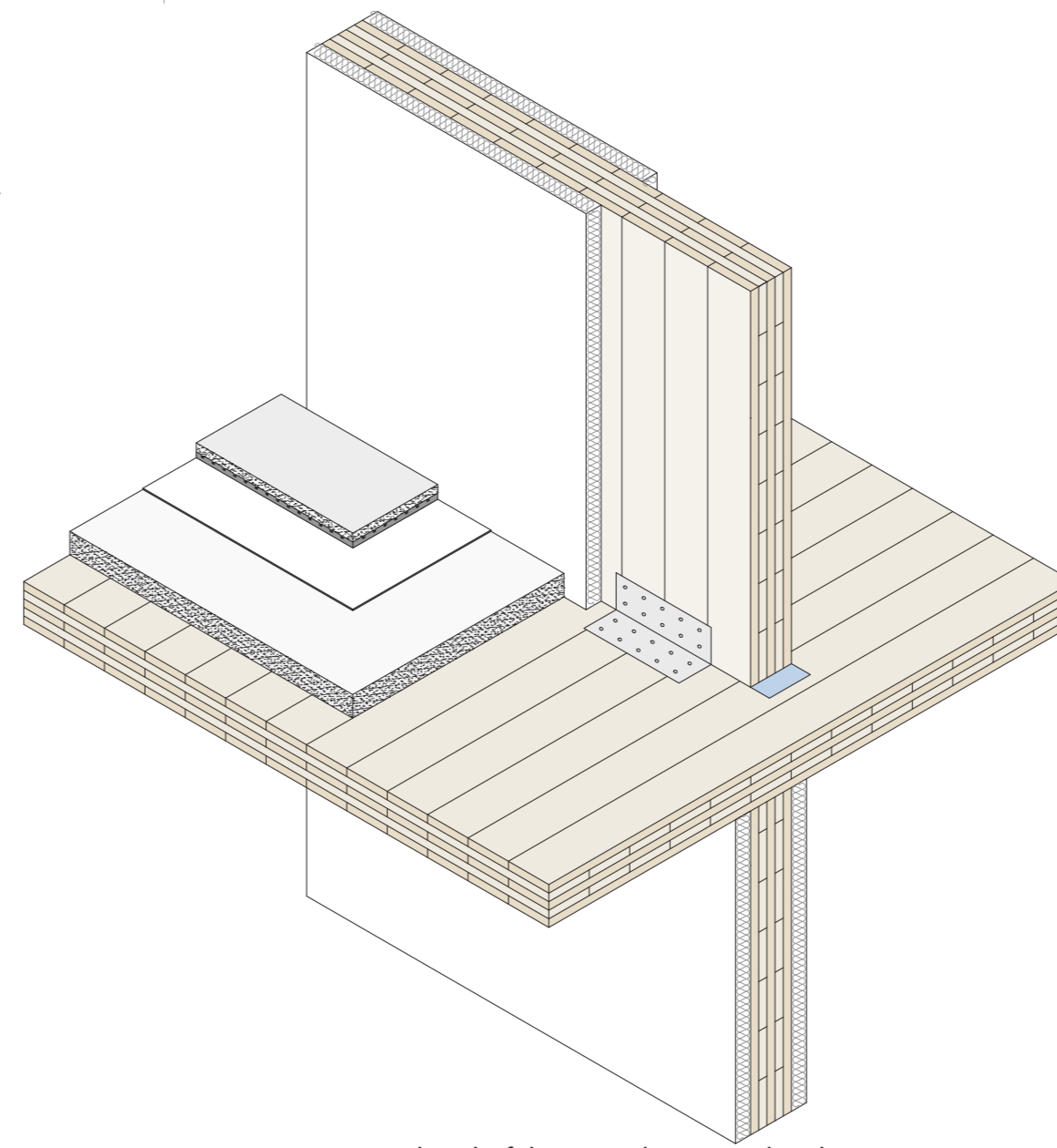
Guest's building typical span elevation
SCALE 1:50



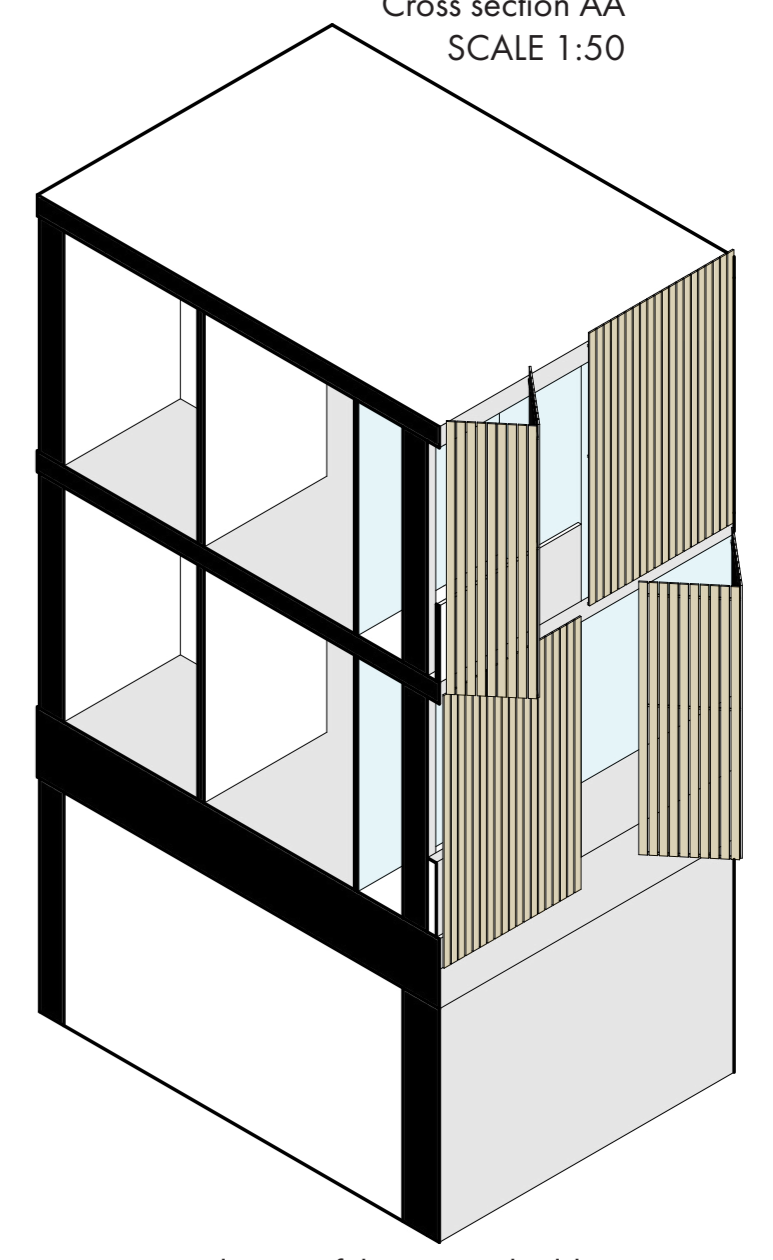
Cross section AA
SCALE 1:50



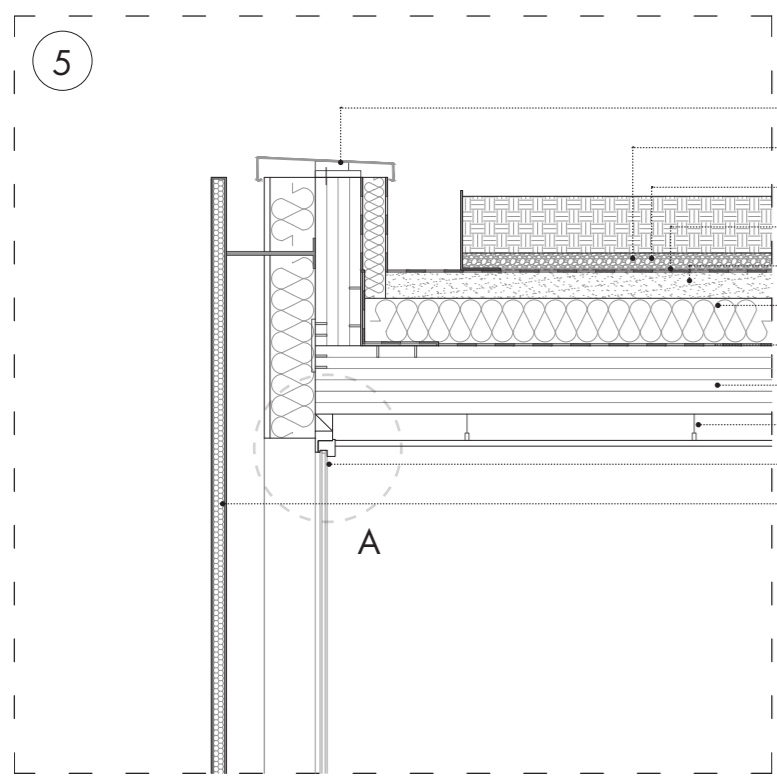
Guest's building floor plan
SCALE 1:50



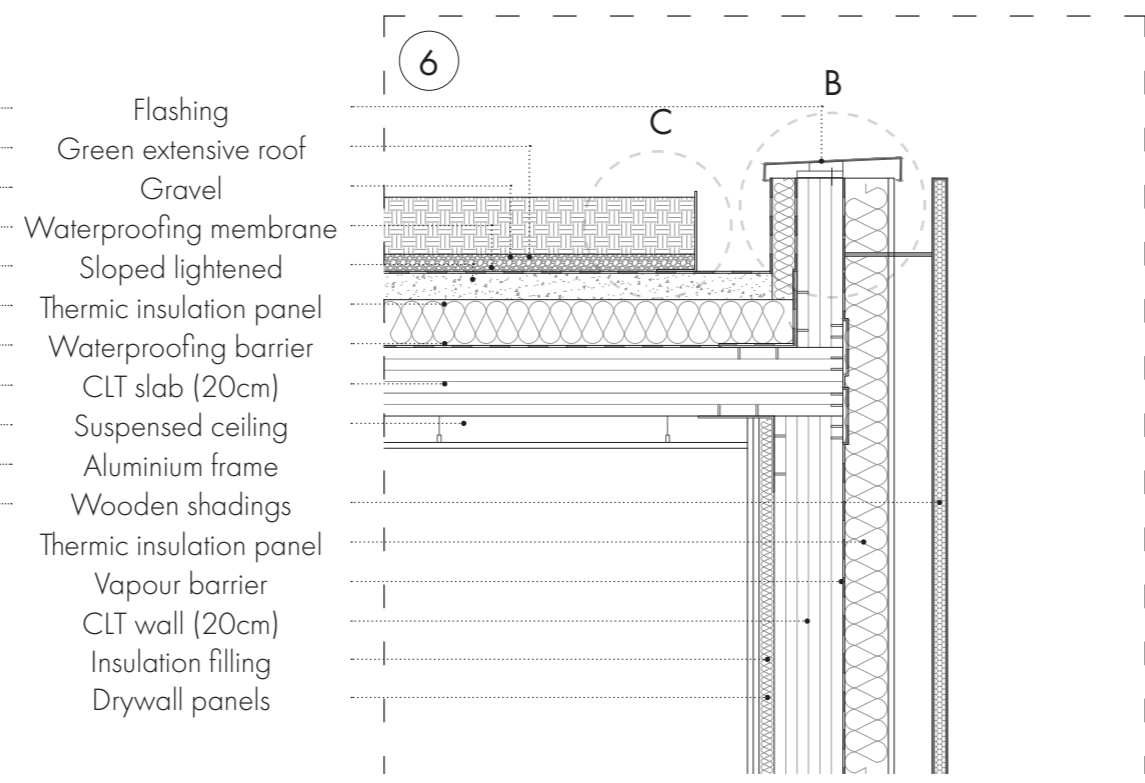
Construction detail of the cross laminated timber joints



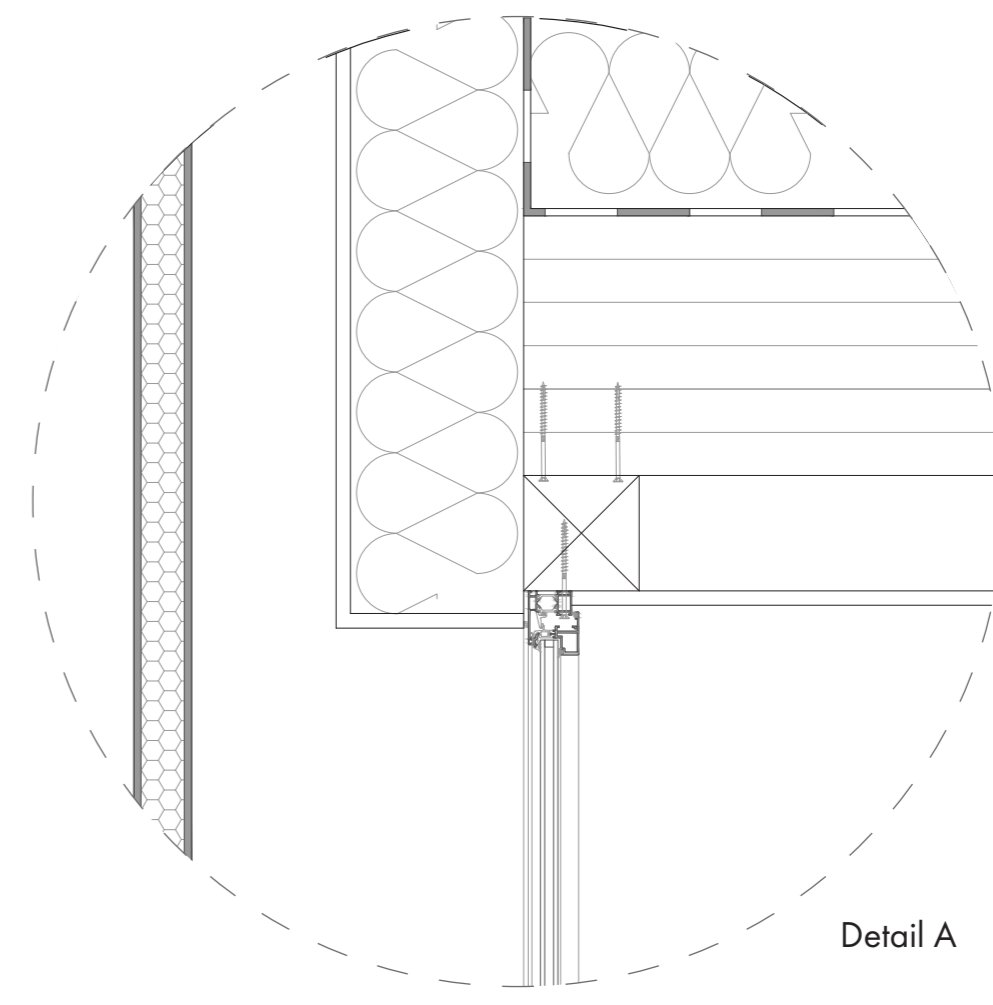
Typical span of the guest's building



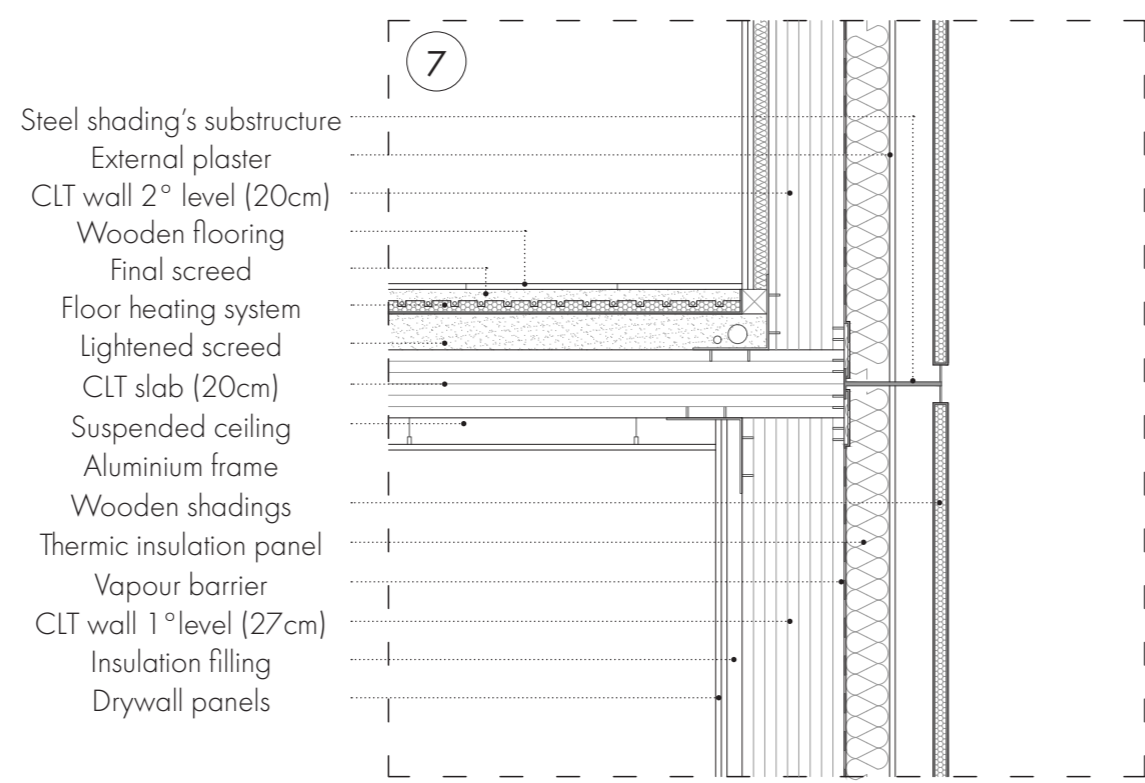
Detail of the roof of the guest's building
SCALE 1:20



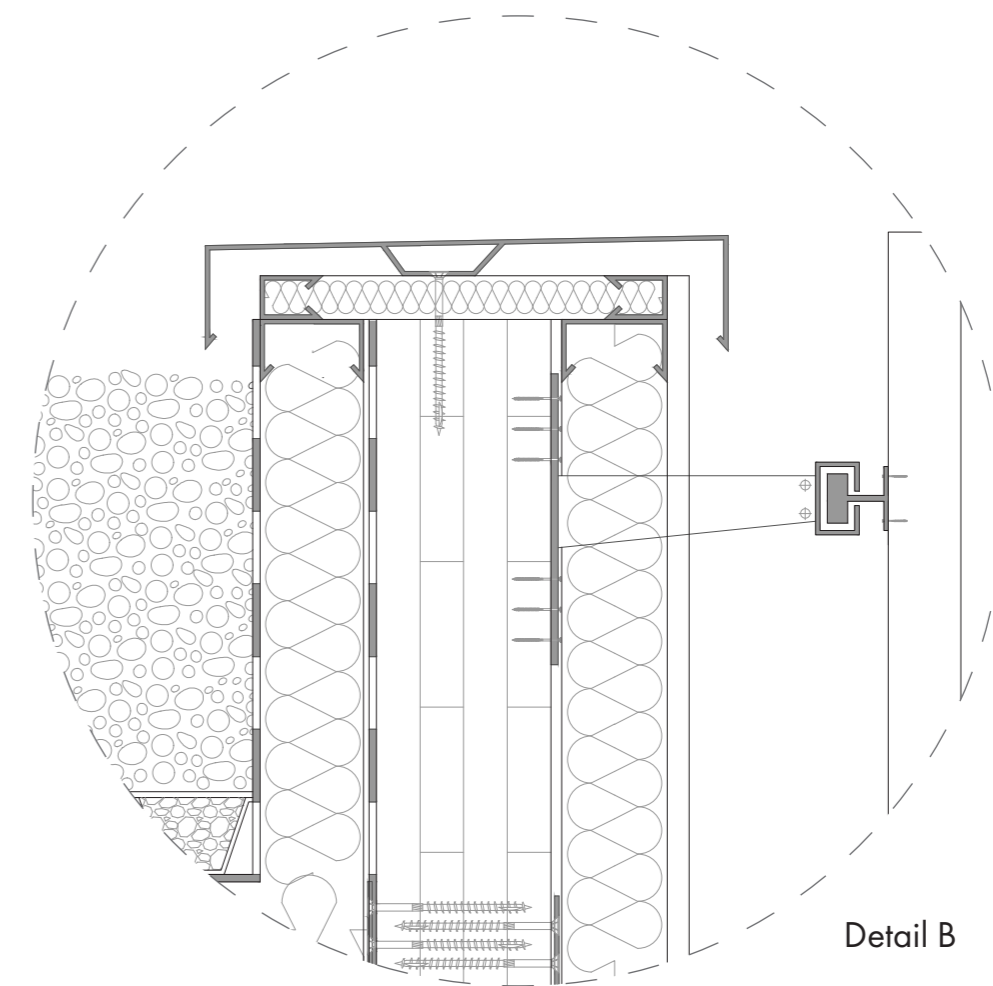
Detail of the roof of the guest's building
SCALE 1:20



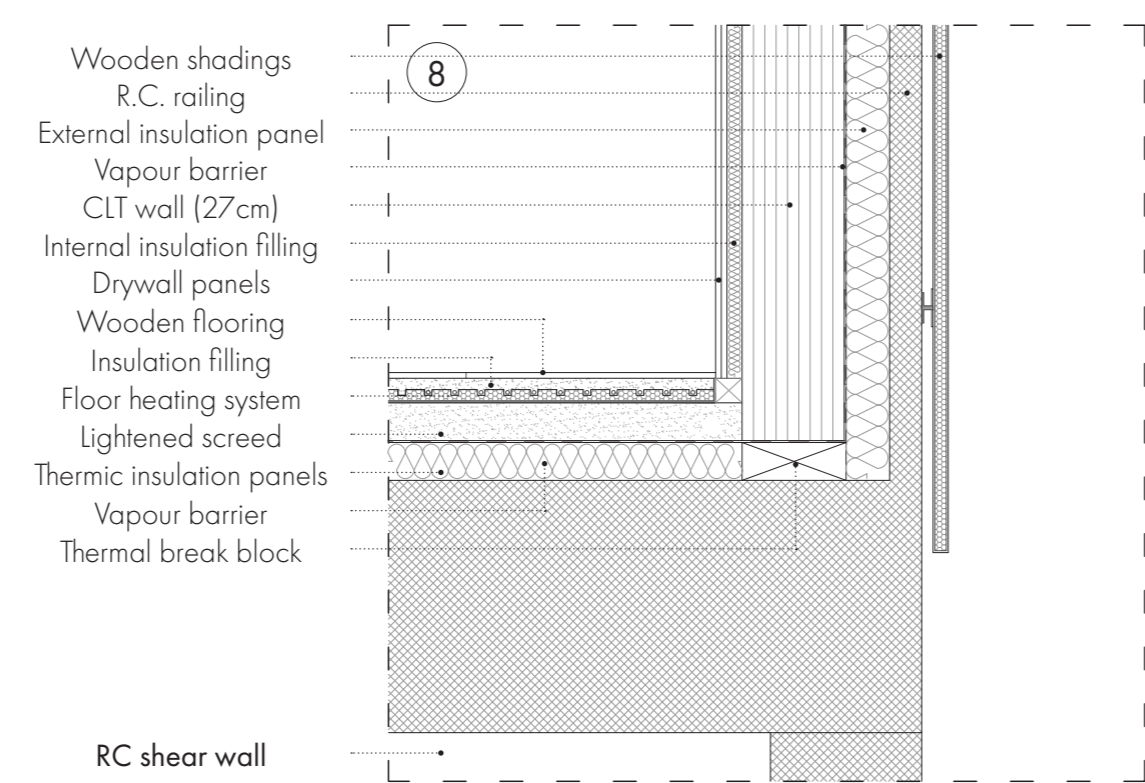
Detail A



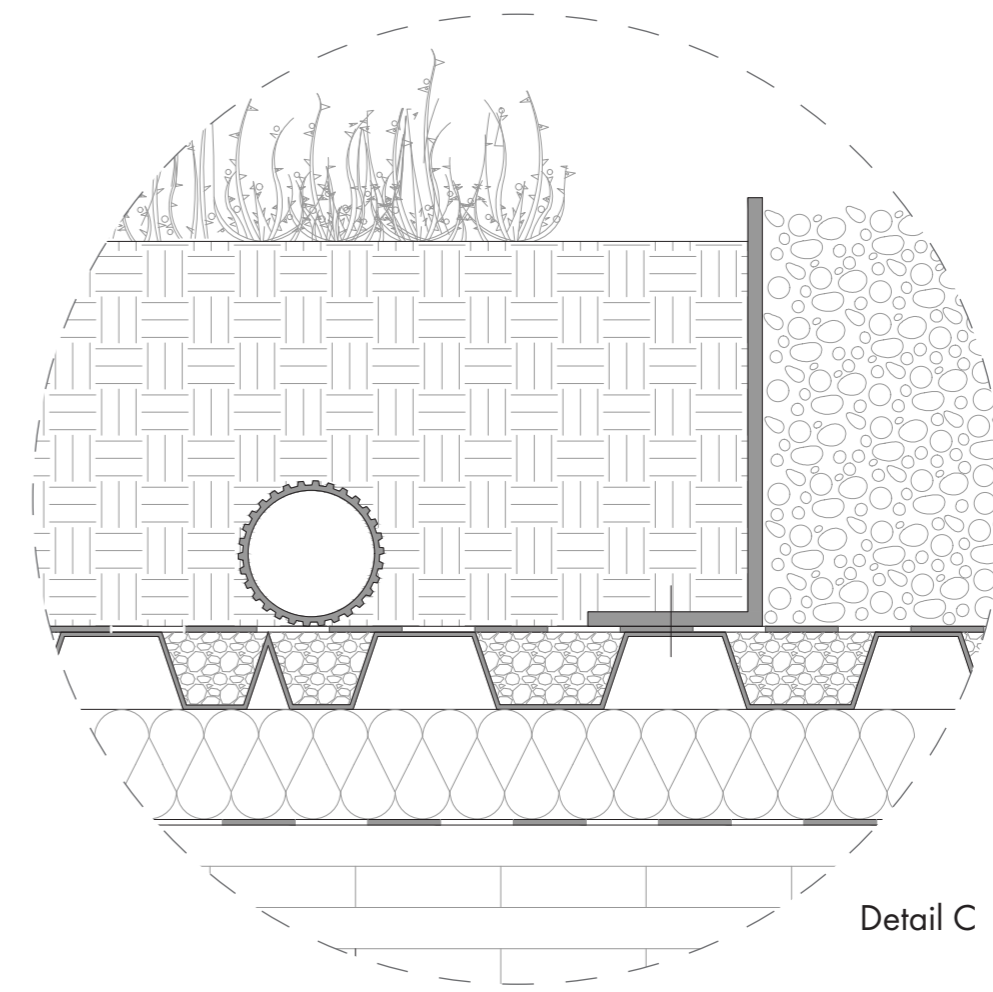
Detail of the internal slab connection in the guest's building
SCALE 1:20



Detail B



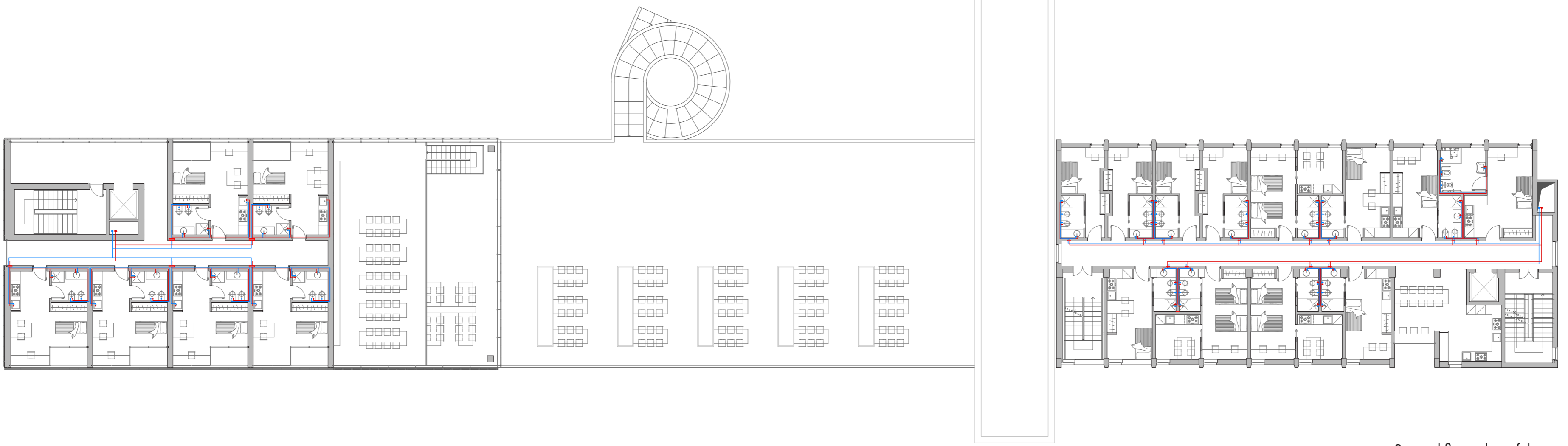
Detail of the connection of the guest's building with the terrace
SCALE 1:20



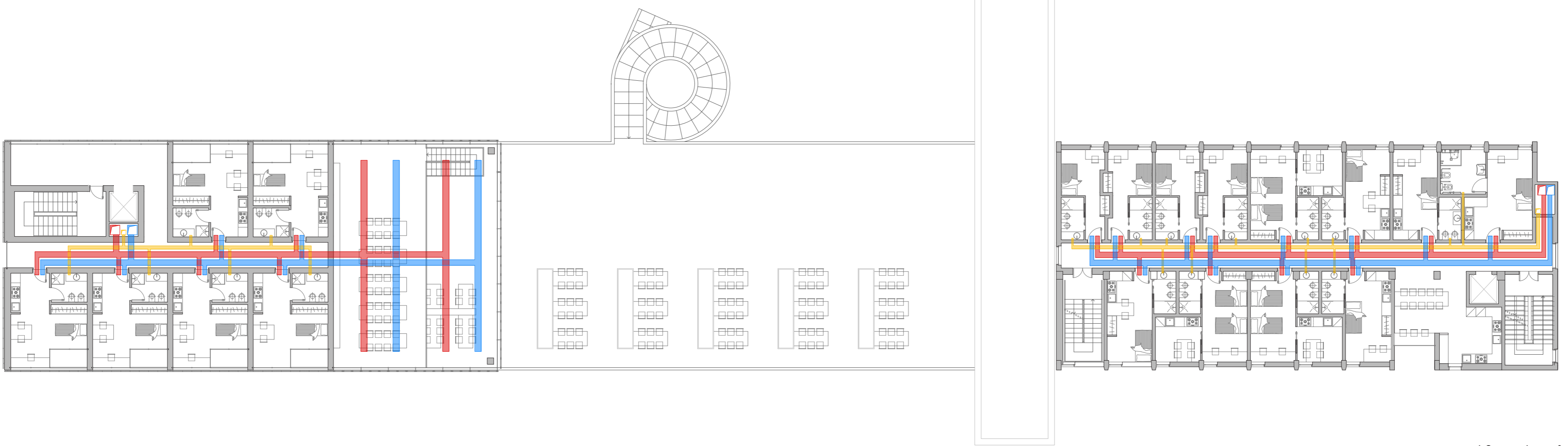
Detail C

Blow-up details
SCALE 1:5

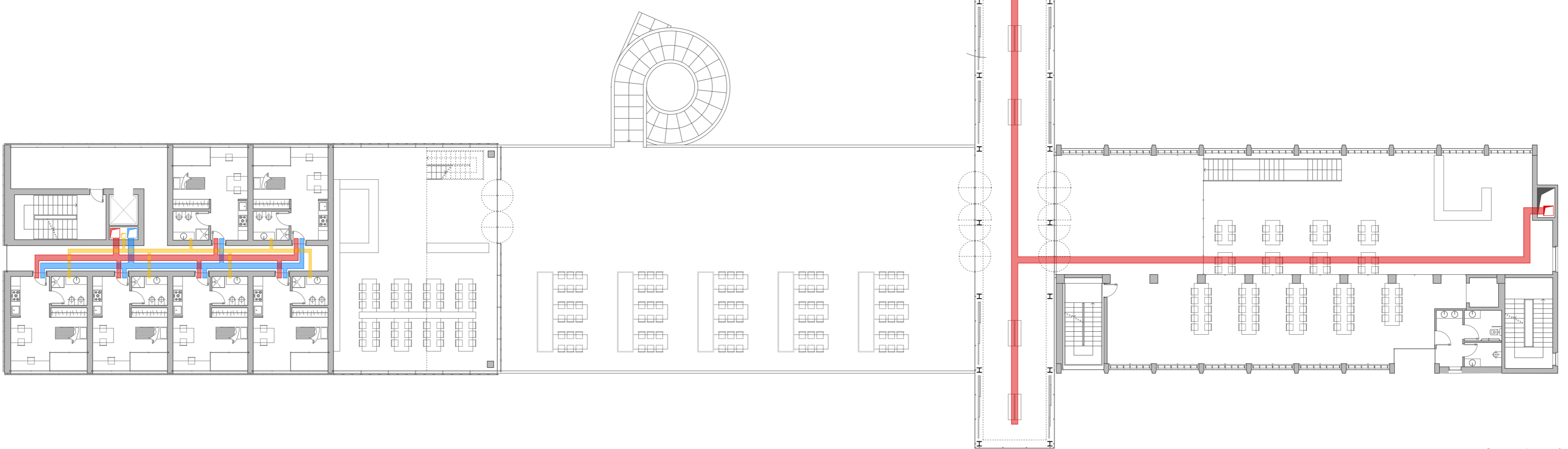




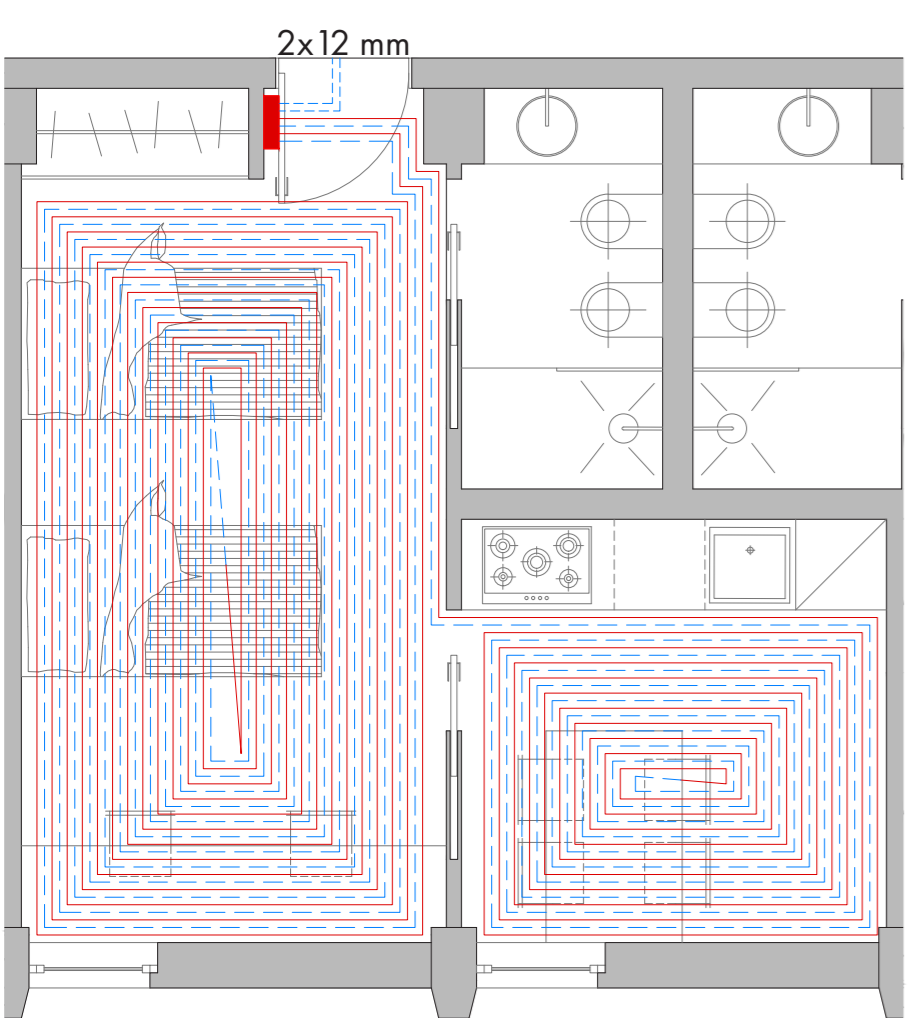
Second floor plan of the water supply system
SCALE 1:200



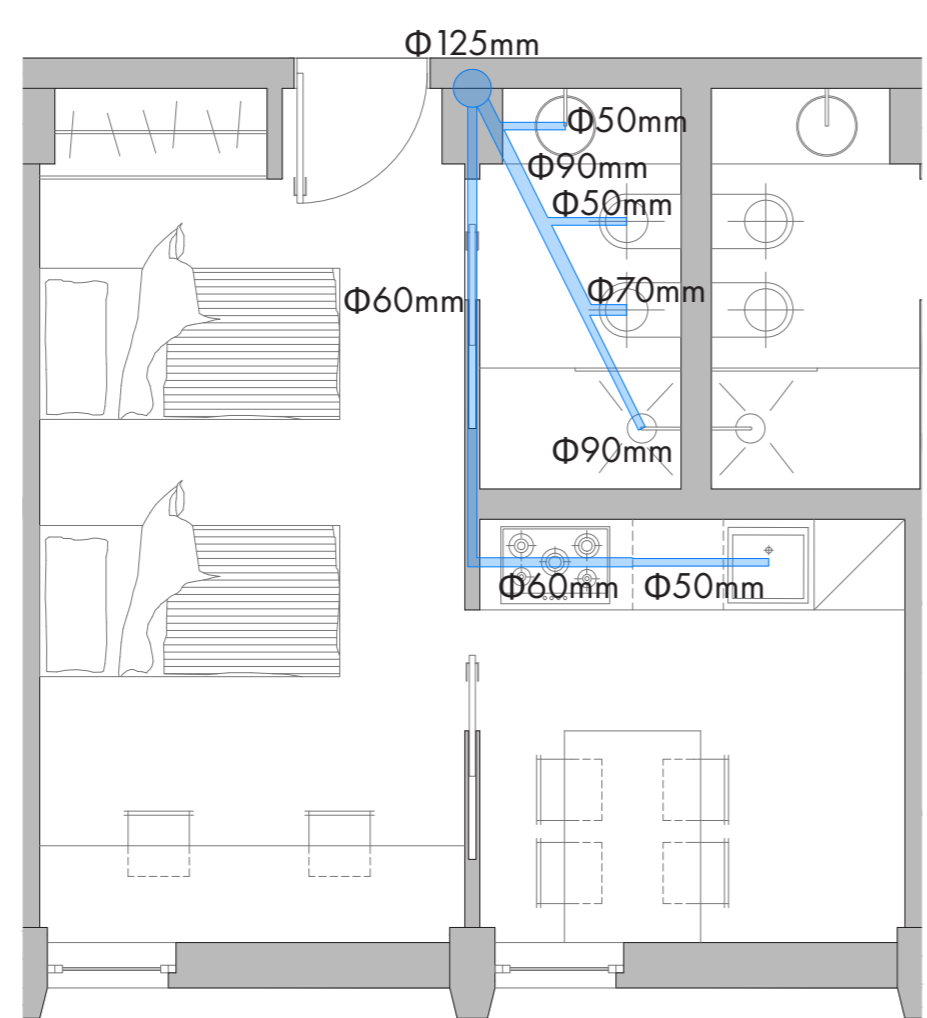
Second floor plan of the HVAC system
SCALE 1:200



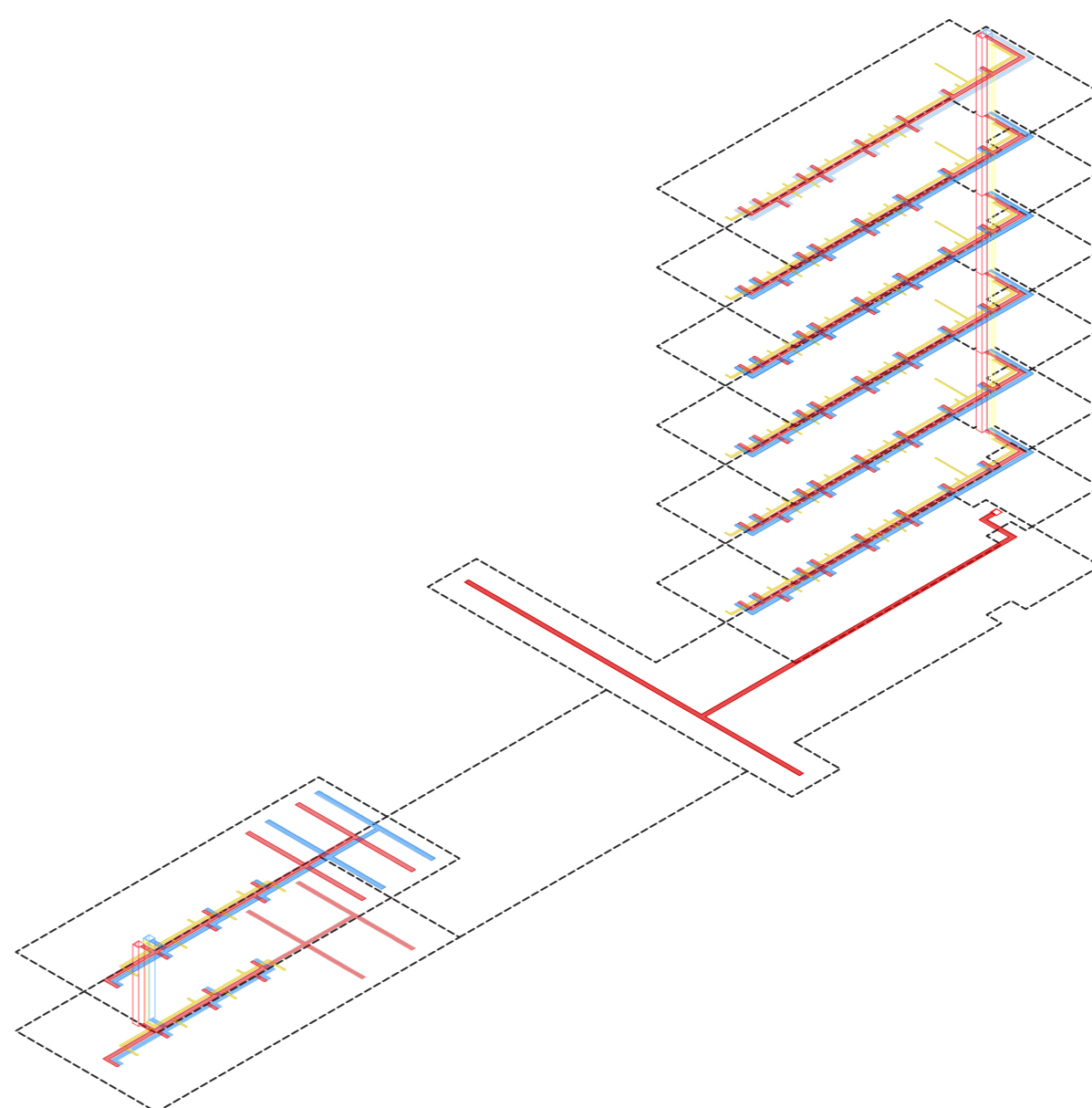
First floor plan of the HVAC system
SCALE 1:200



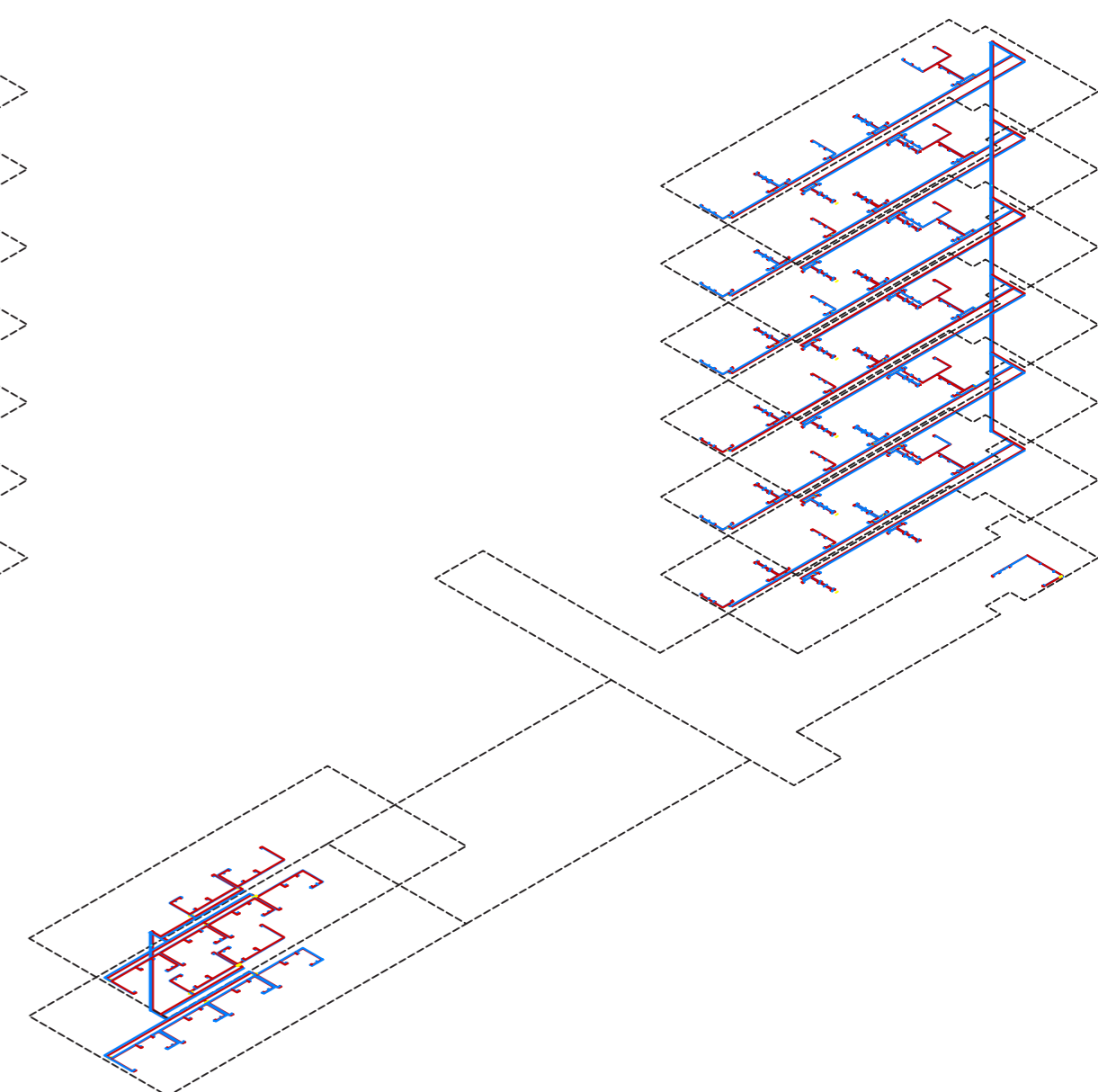
Plan of the floor heating system for a typical span of the Convitto
SCALE 1:50



Plan of the water discharge system for a typical span of the Convitto
SCALE 1:50



Axonometry of the HVAC system



Axonometry of the water supply system



