

Small living, Big cohesion

286 SMALL DWELLINGS OF

5 DIFFERENT TYPES

TARGETED FOR SINGLE-PERSON HOUSEHOLDS

P5 presentation

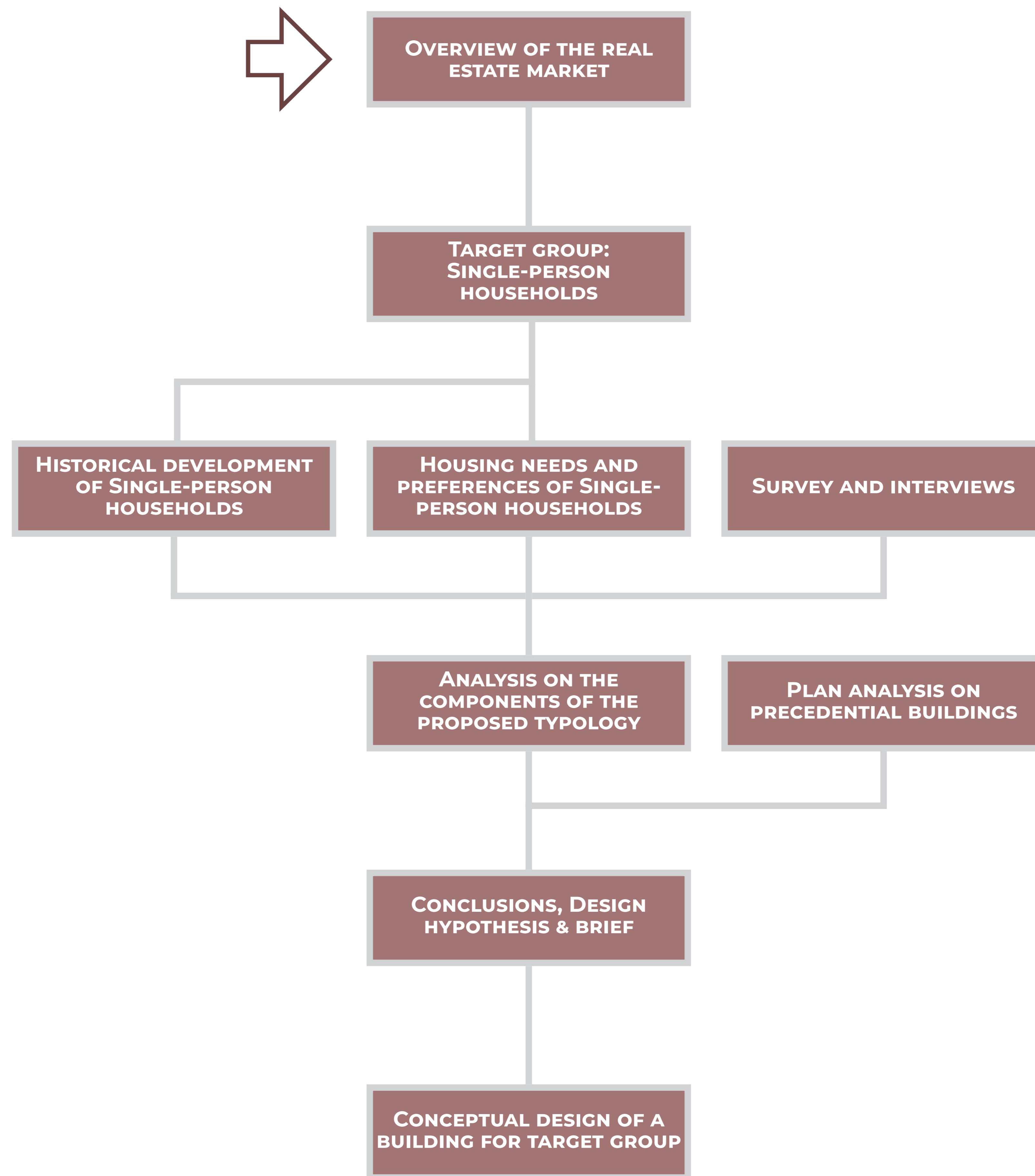
AR3AD100 Advanced Housing Design

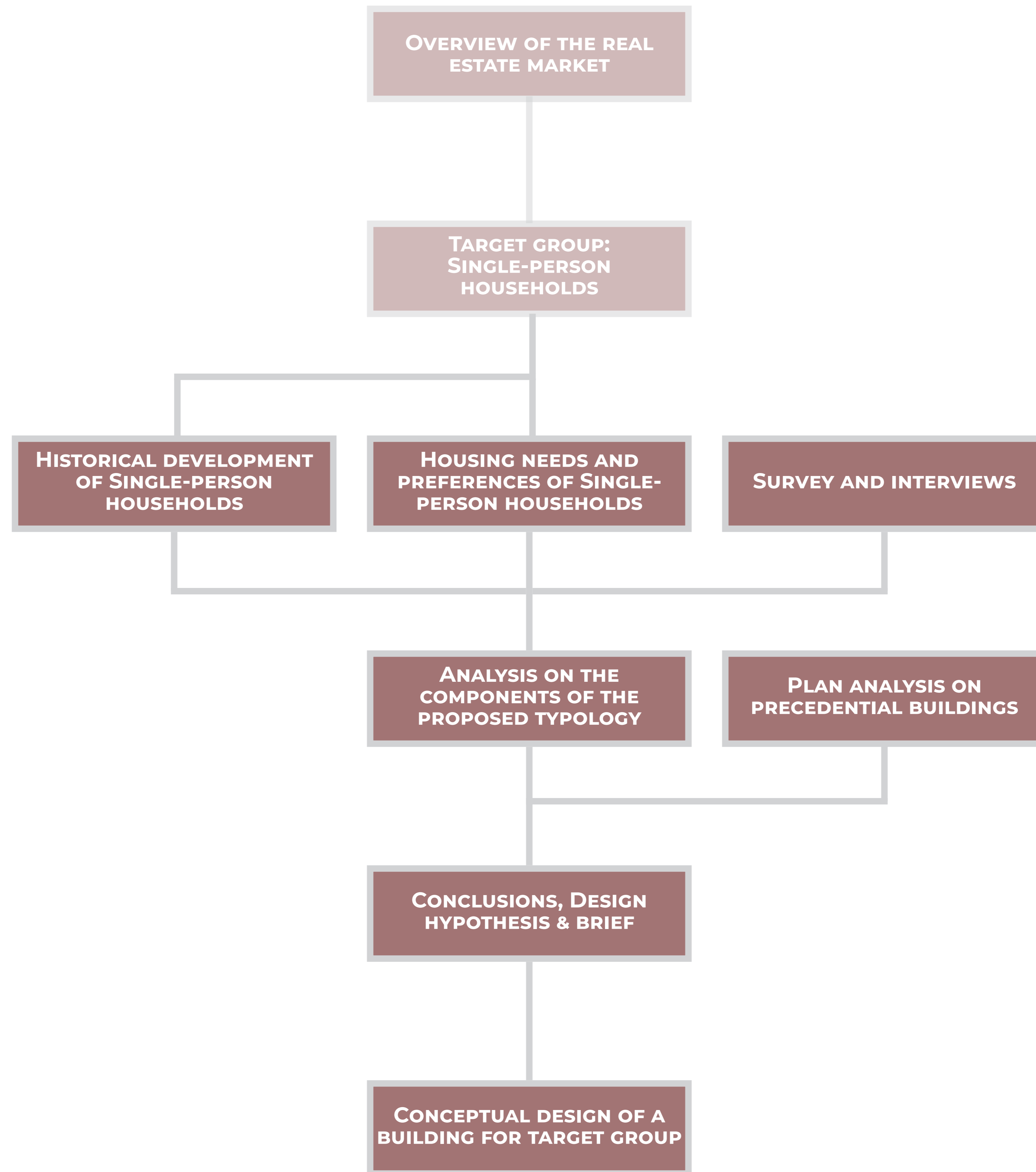
Raya Nanova

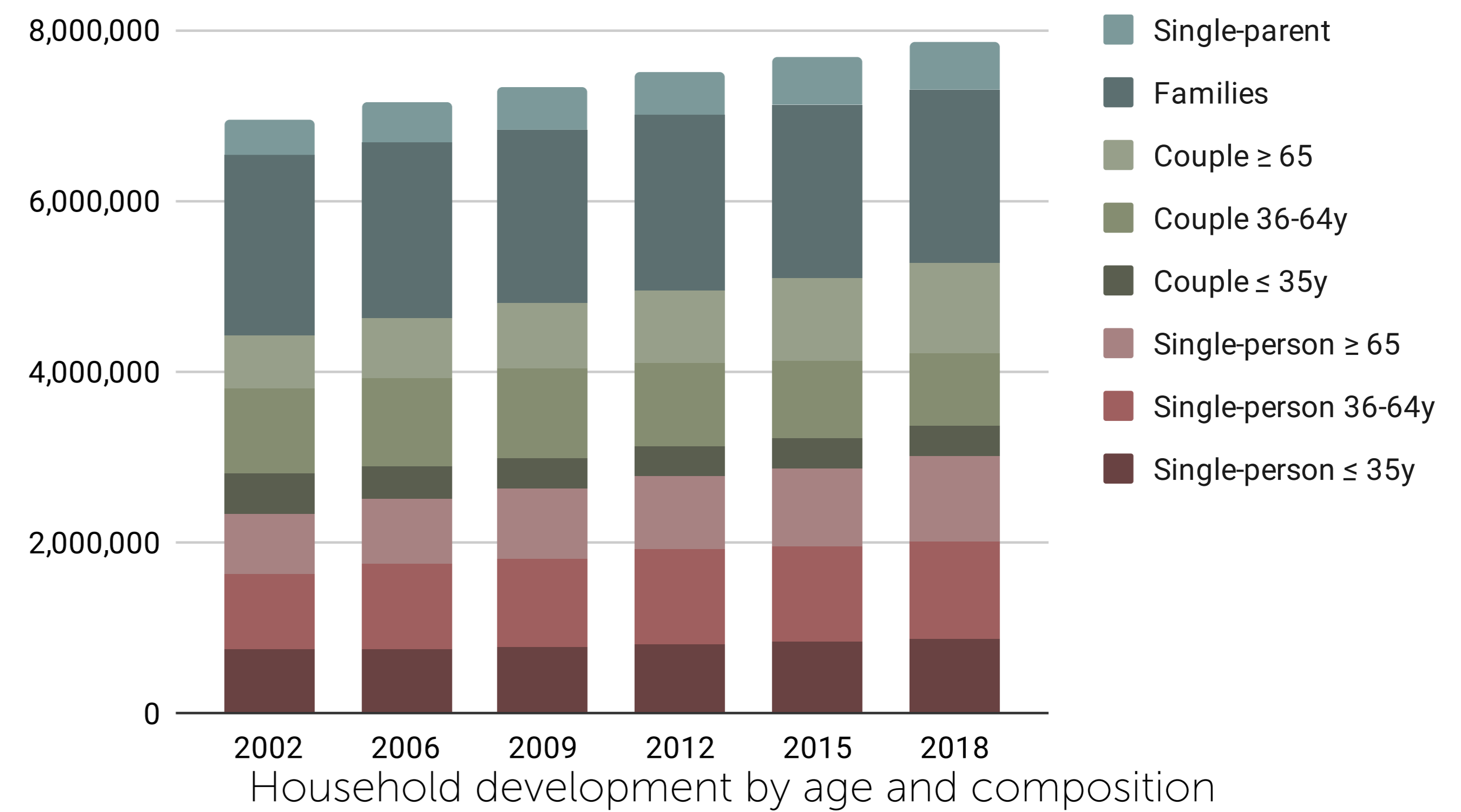
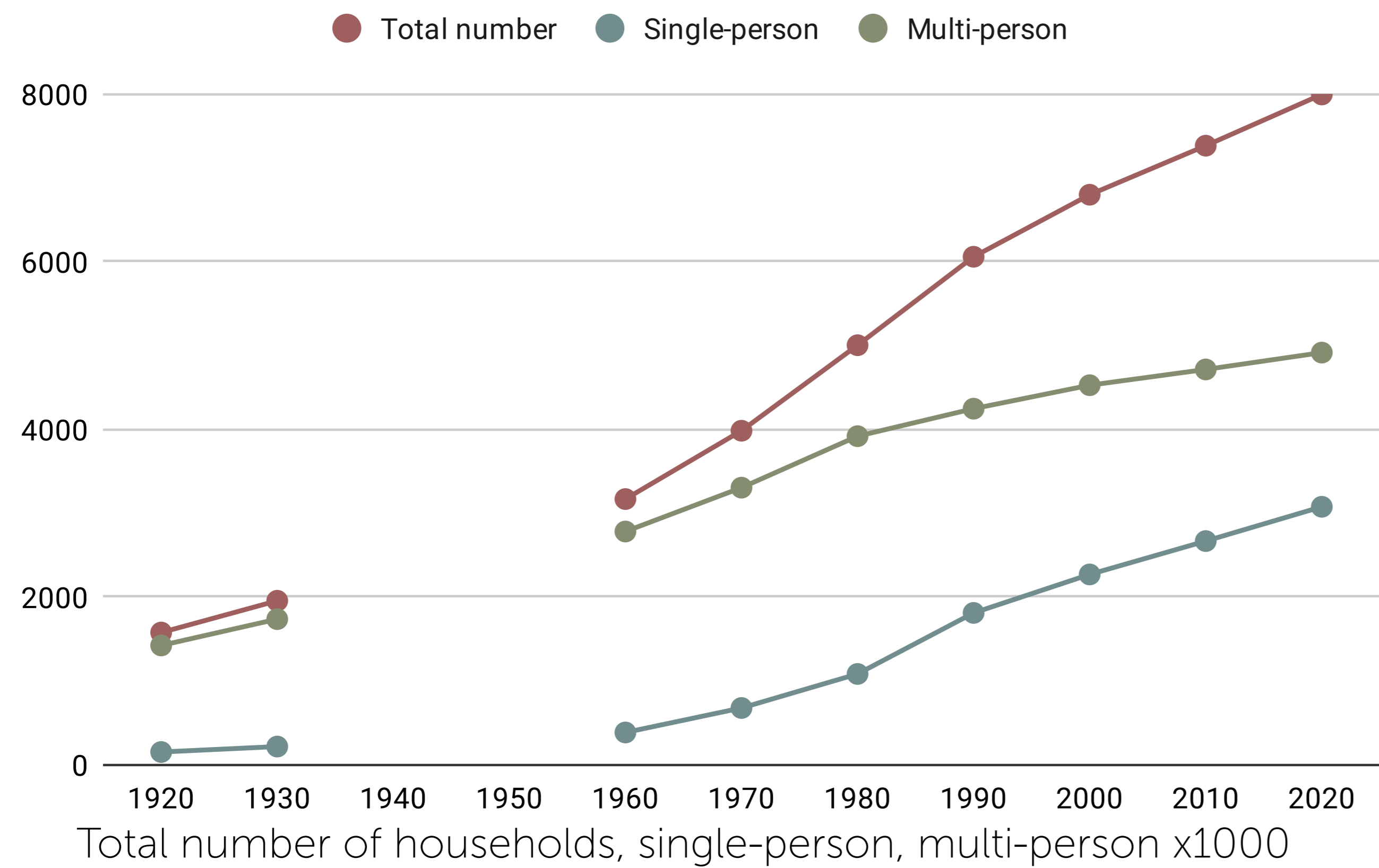
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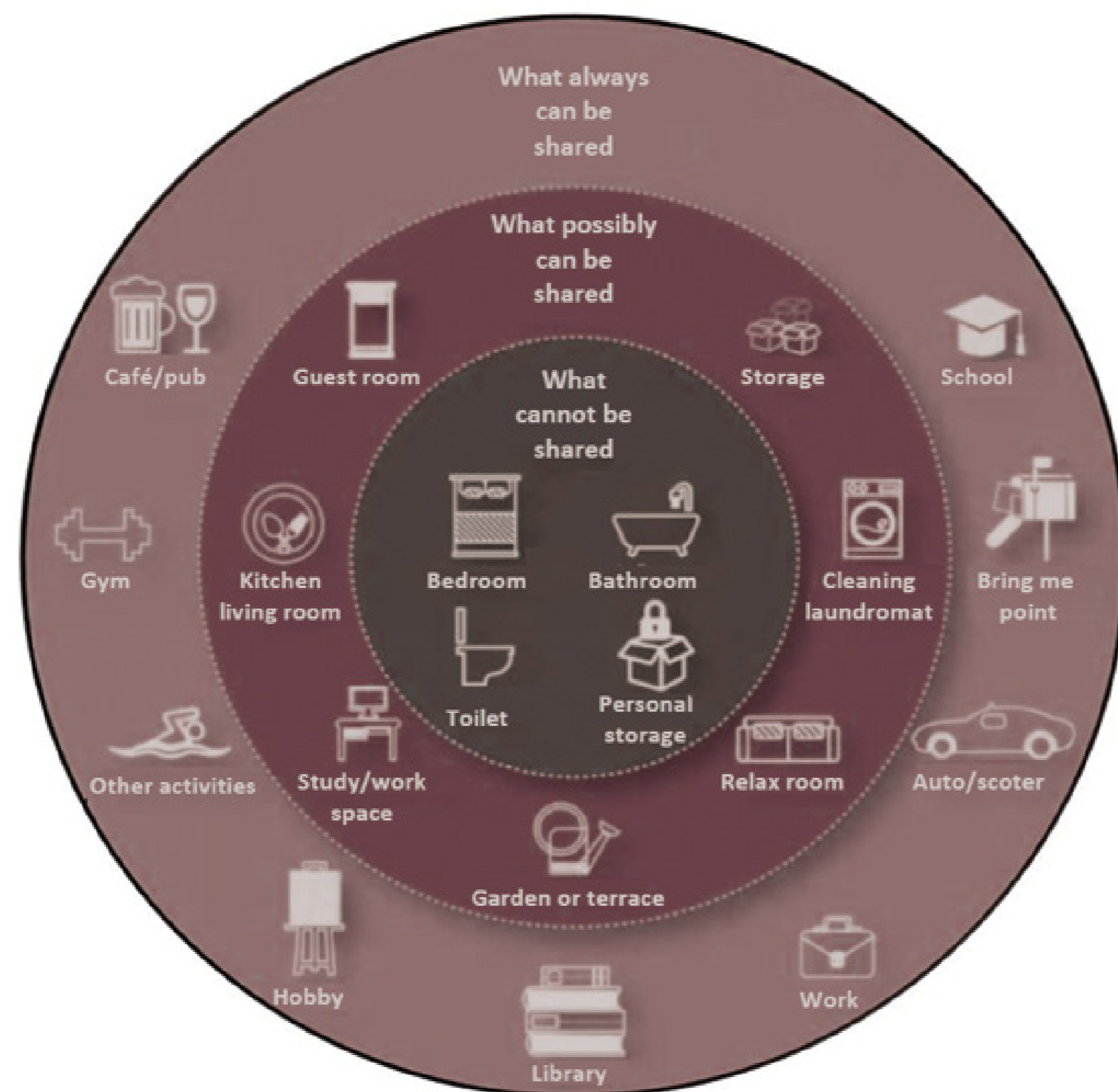


“What housing environment is suitable to address the needs of single-person households with regards to shared facilities and dwelling typology?”

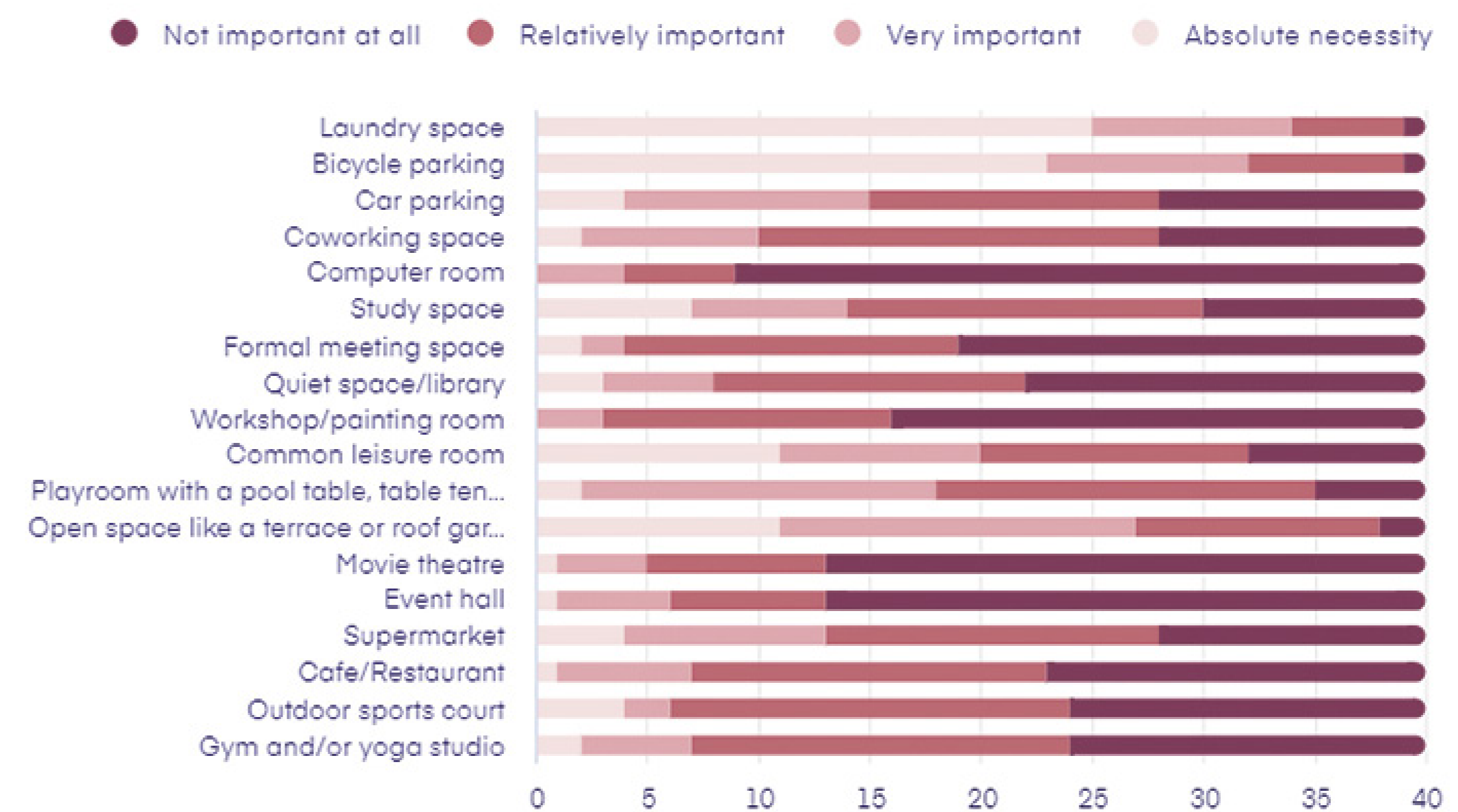




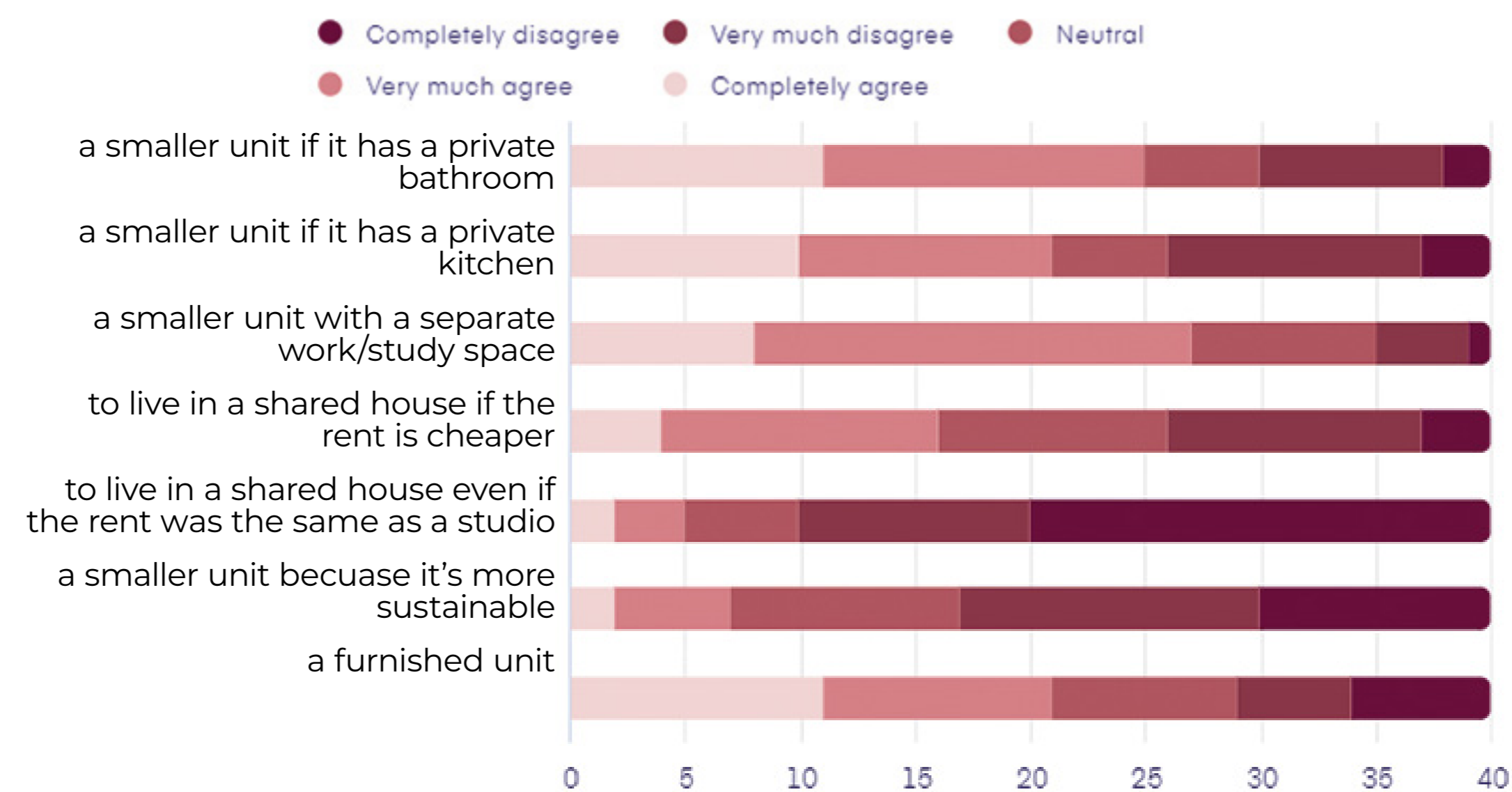




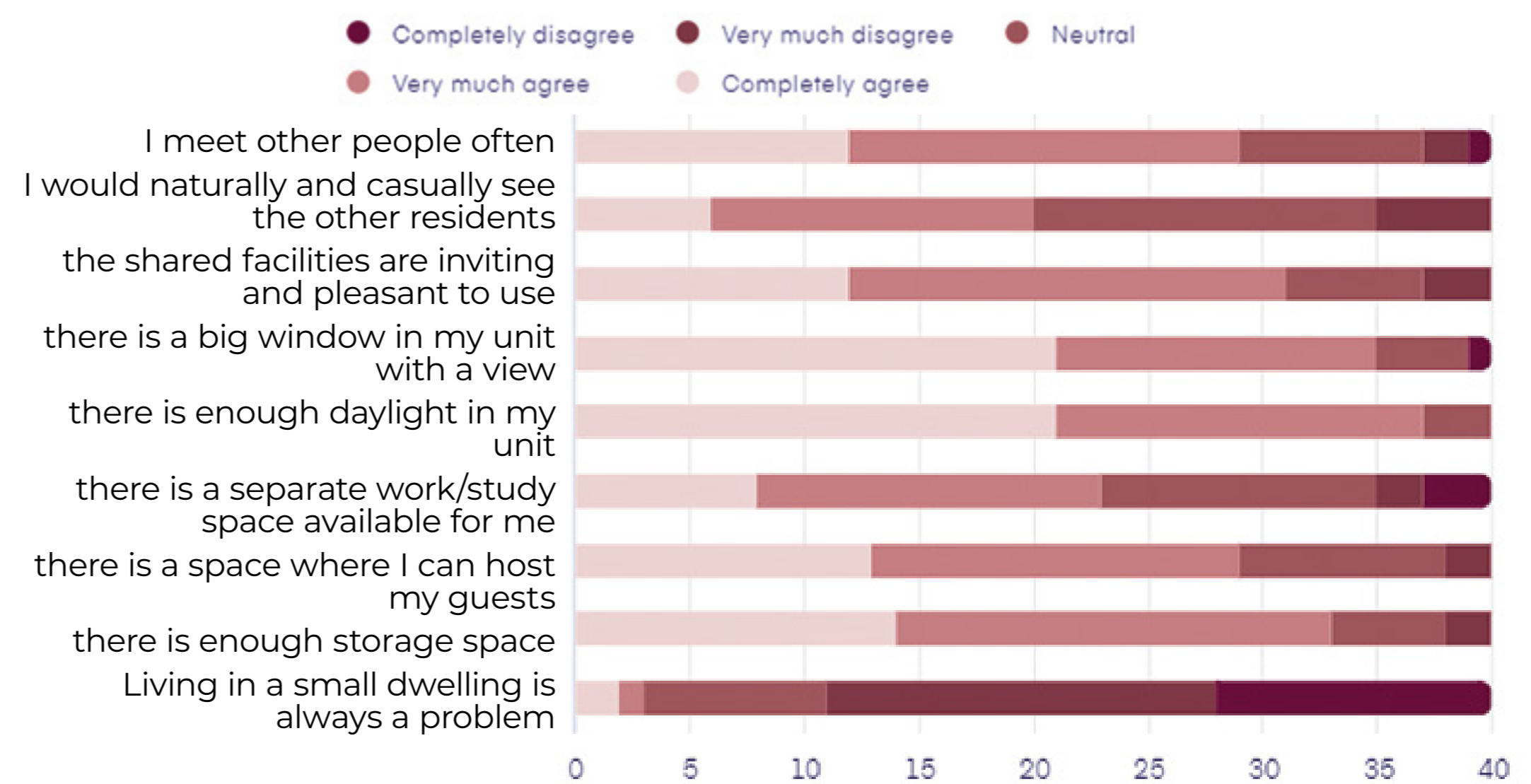
Levels of shareability for single-person households



How important do you find the availability of those functions in a building with small dwellings?



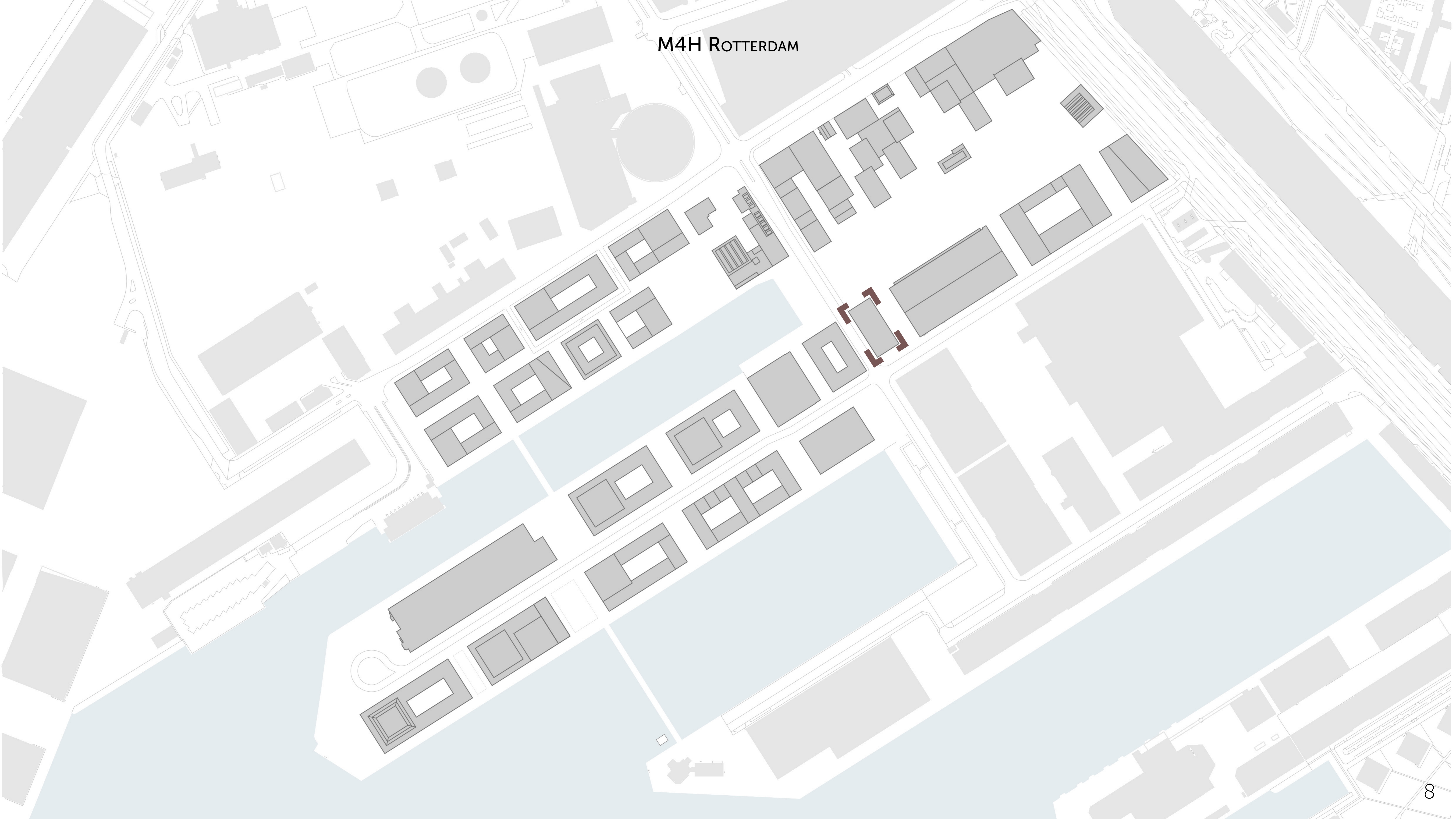
How much do you agree with these statements? I would choose ...

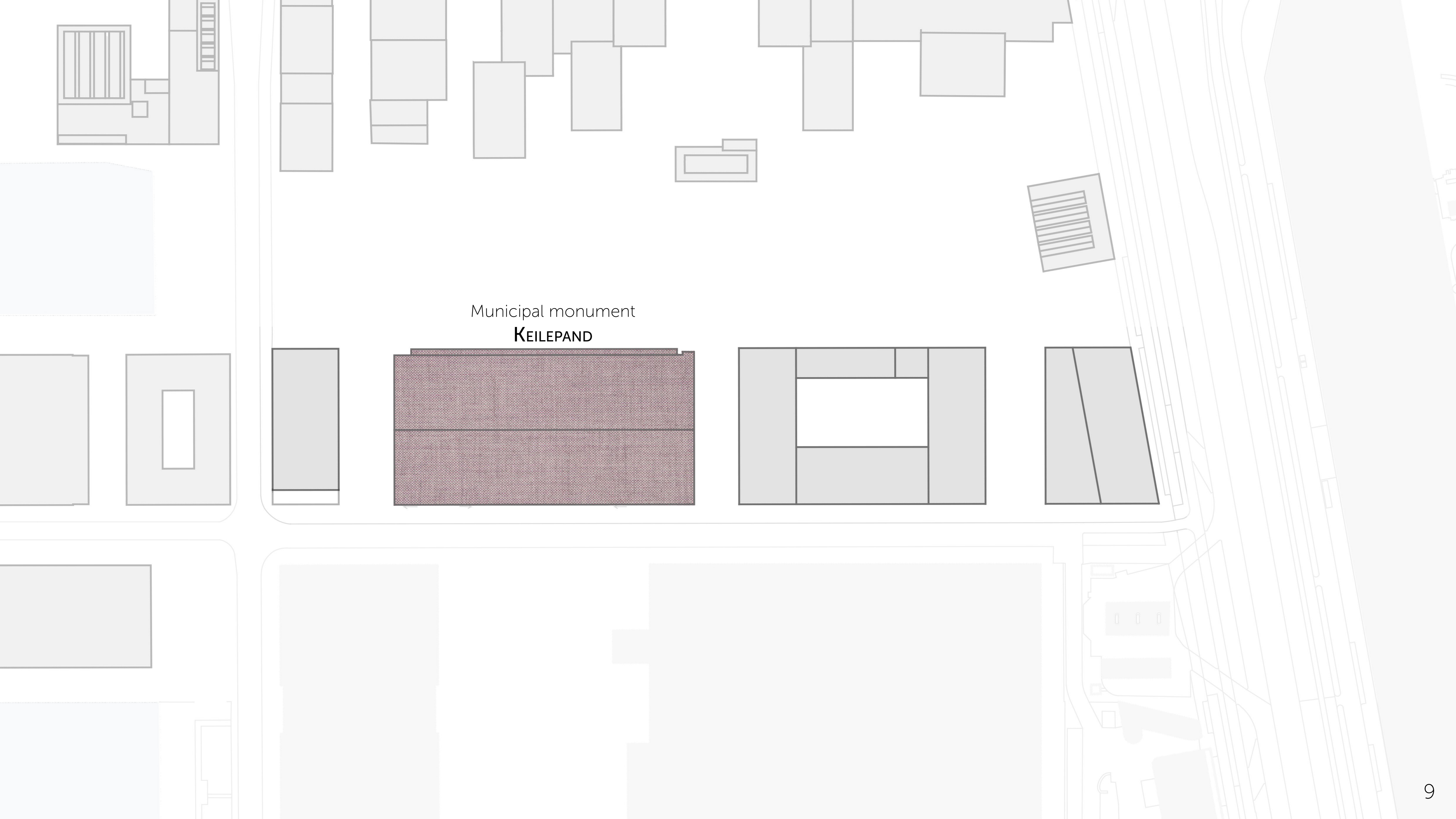


Living in a small dwelling is not a problem as long as...

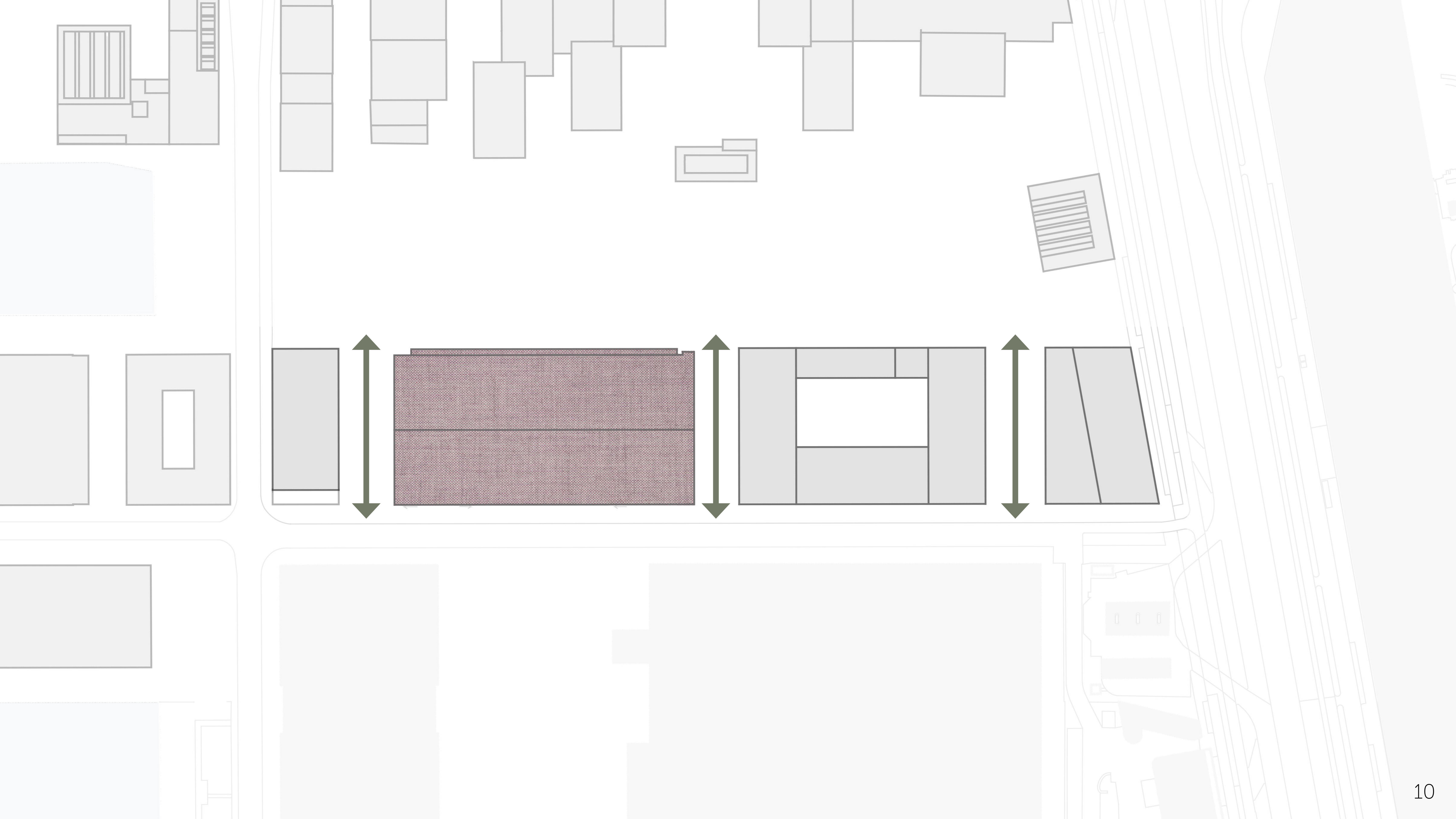


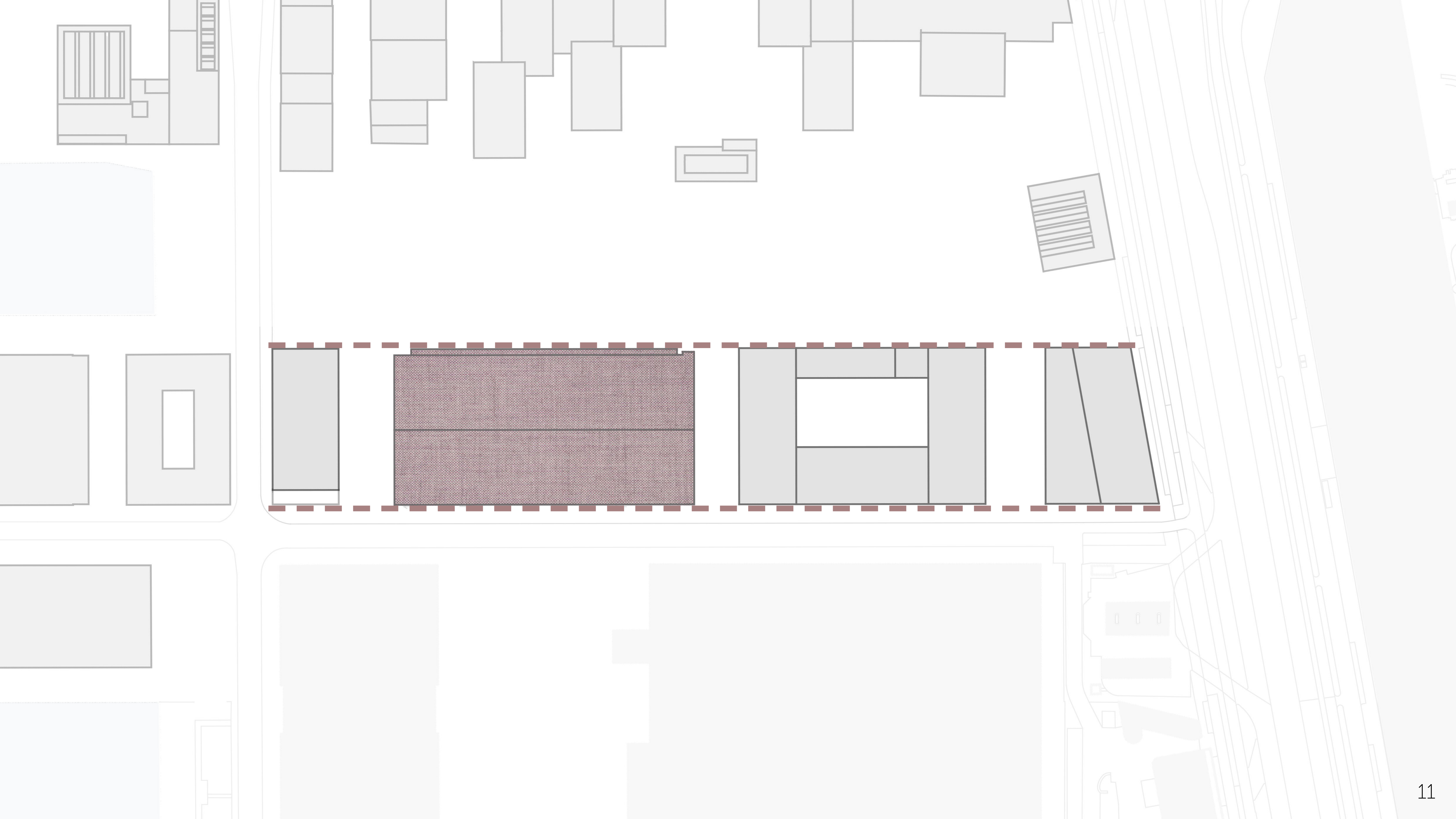
M4H ROTTERDAM



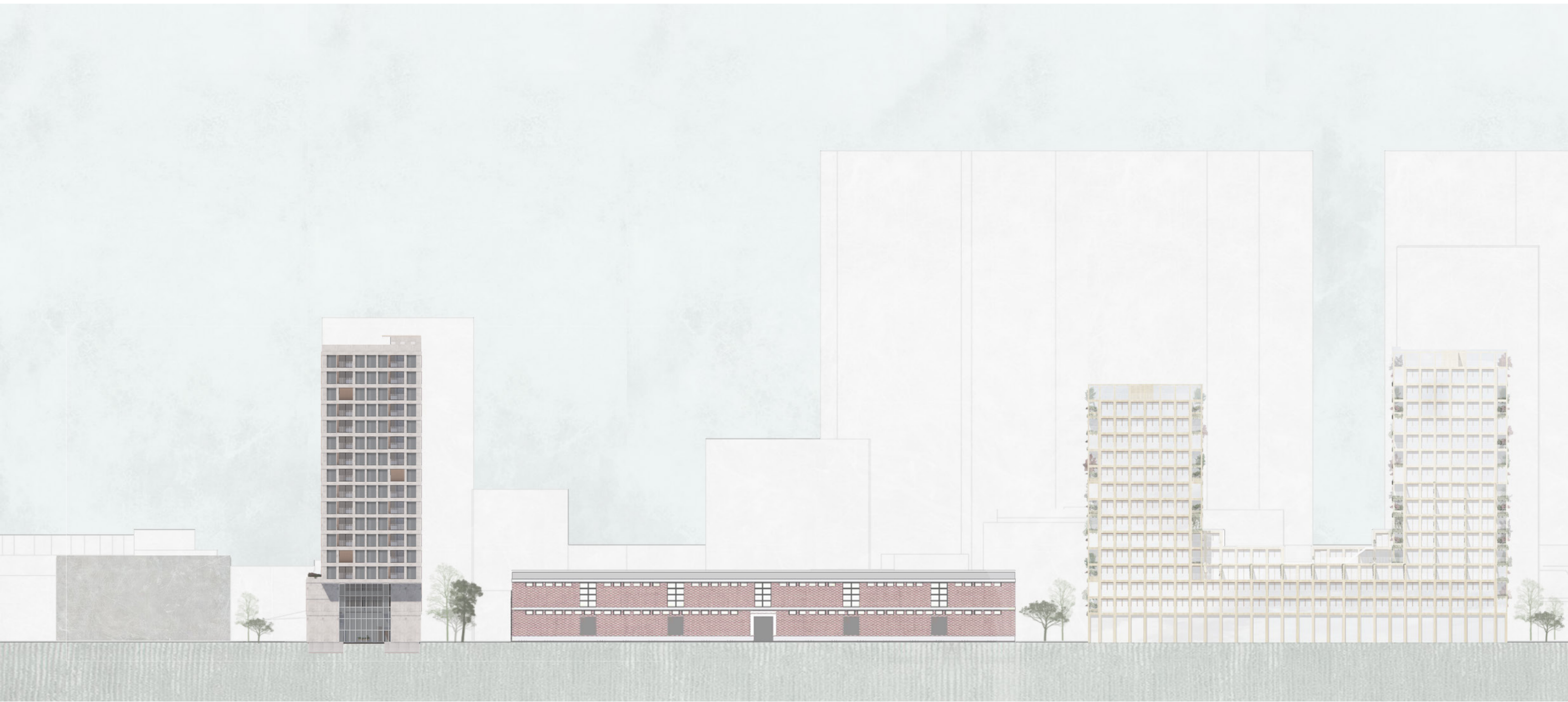


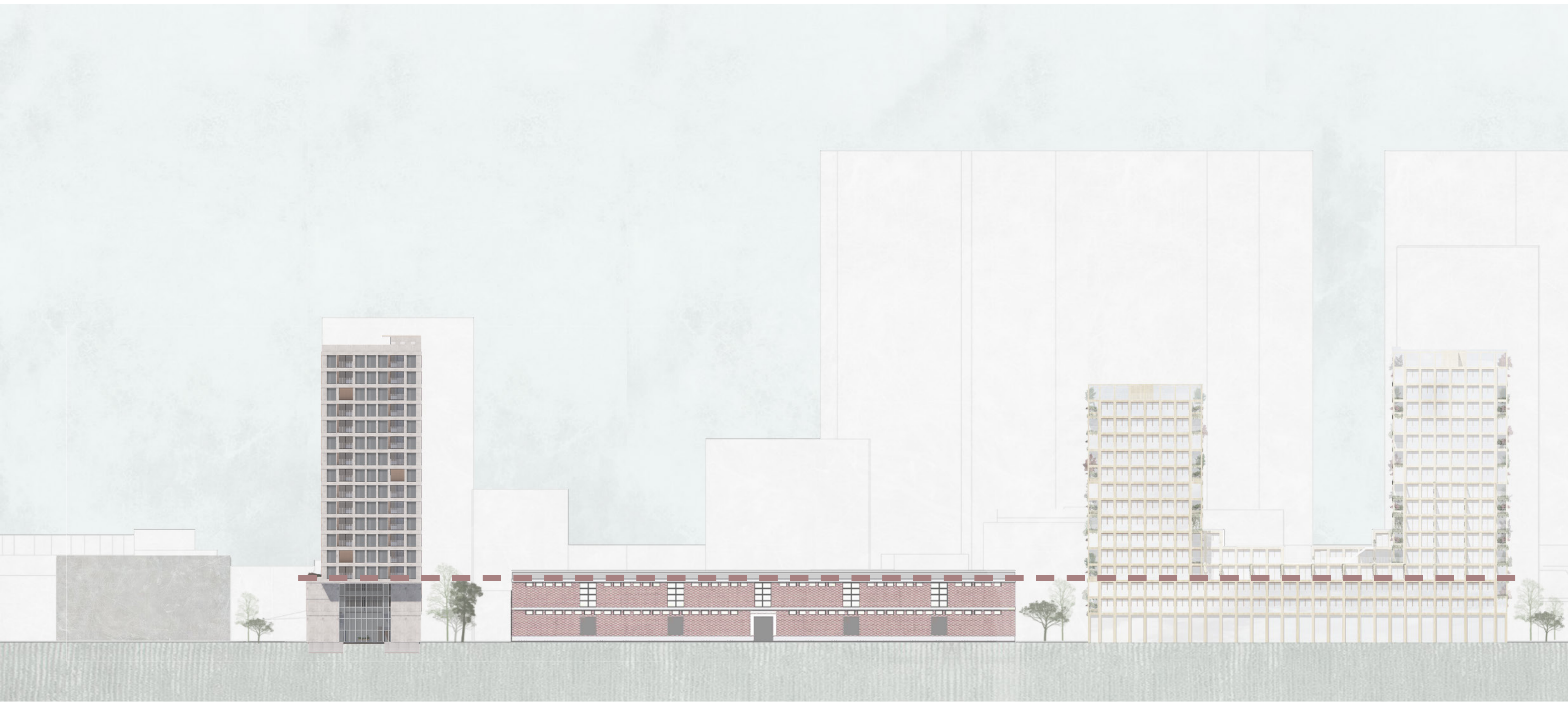
Municipal monument
KEILEPAND



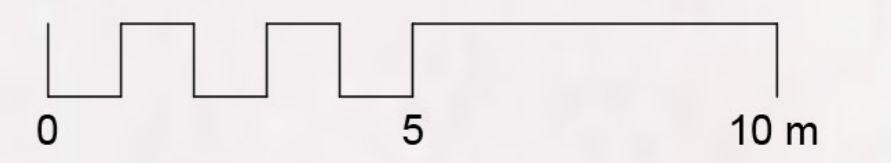


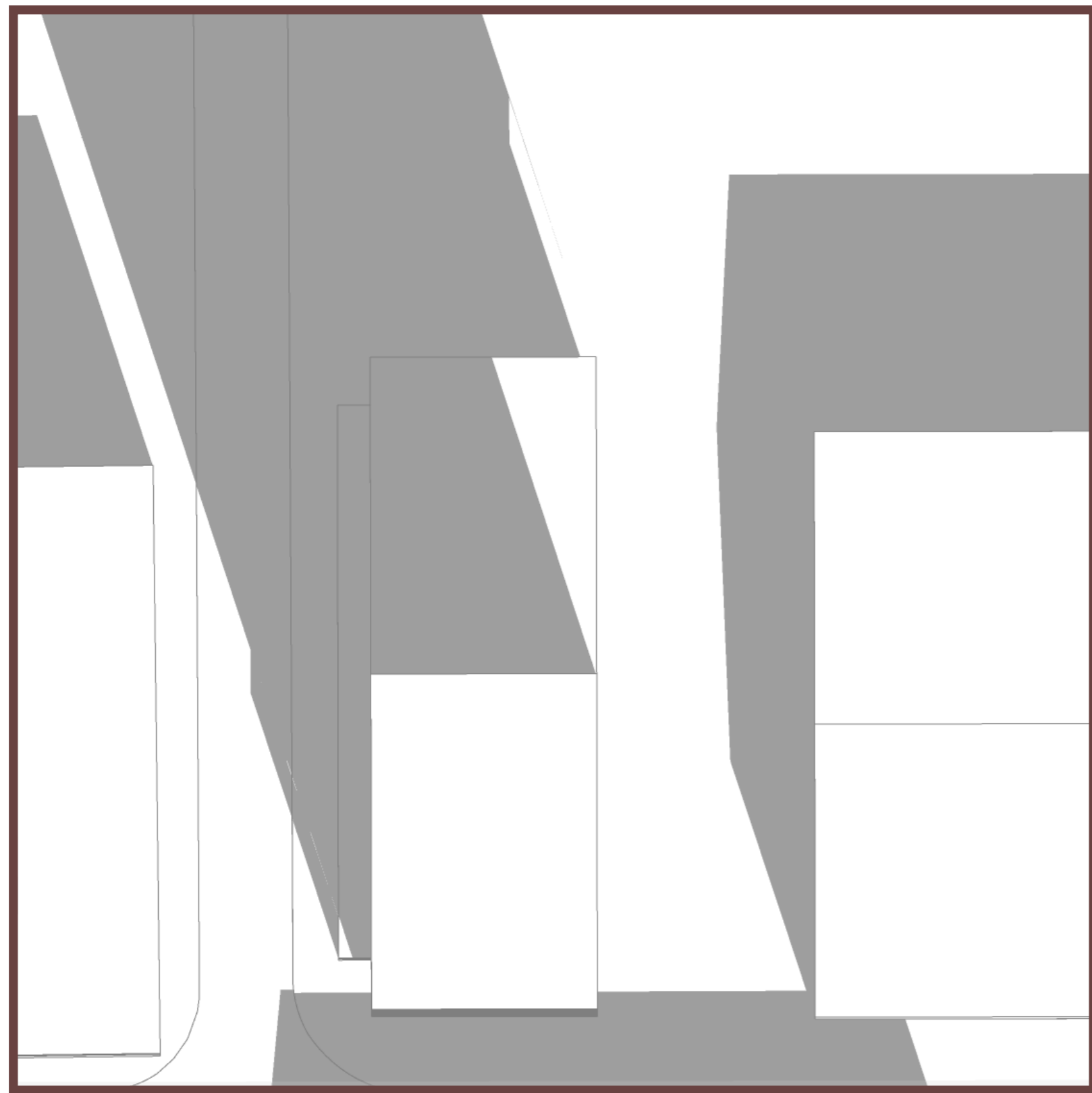




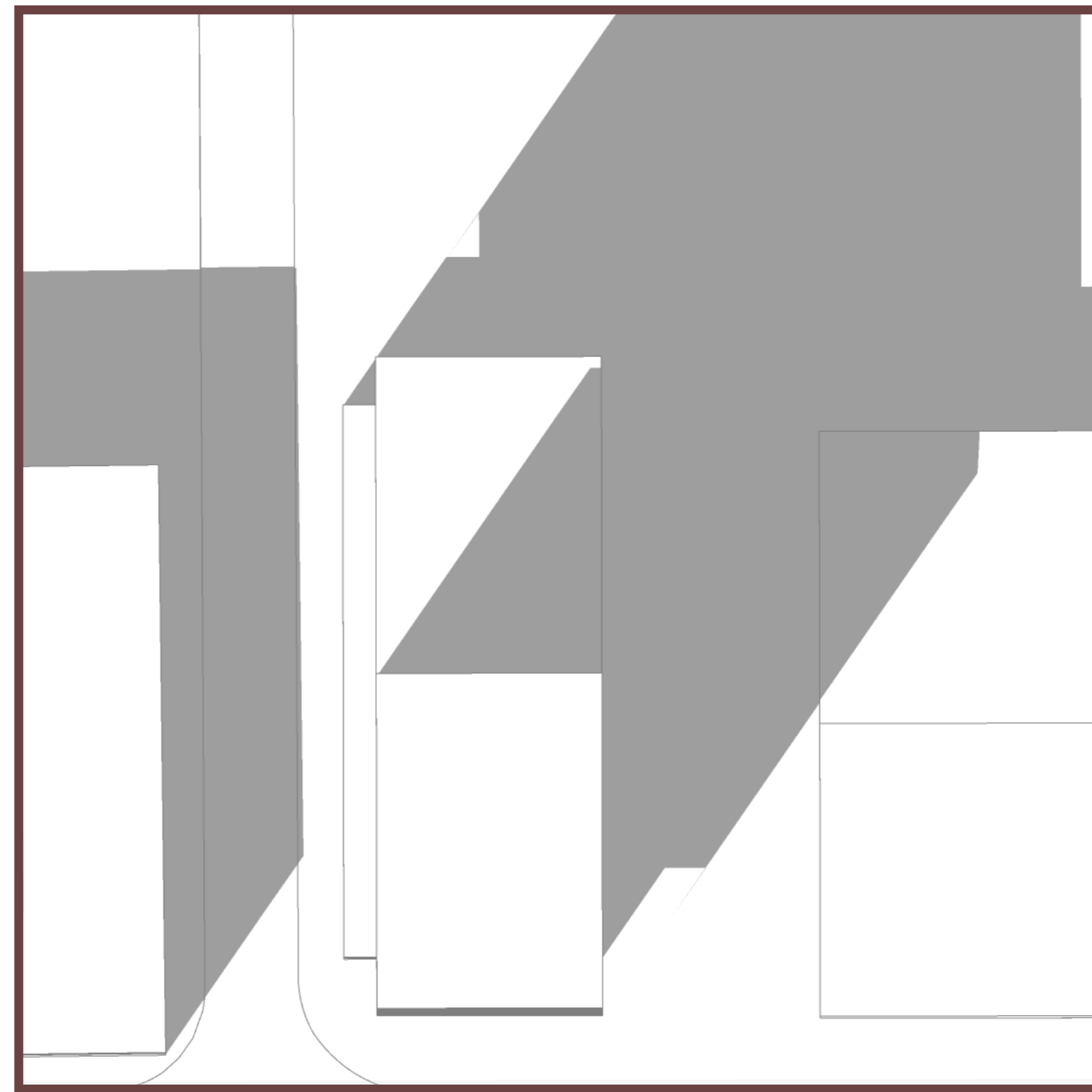




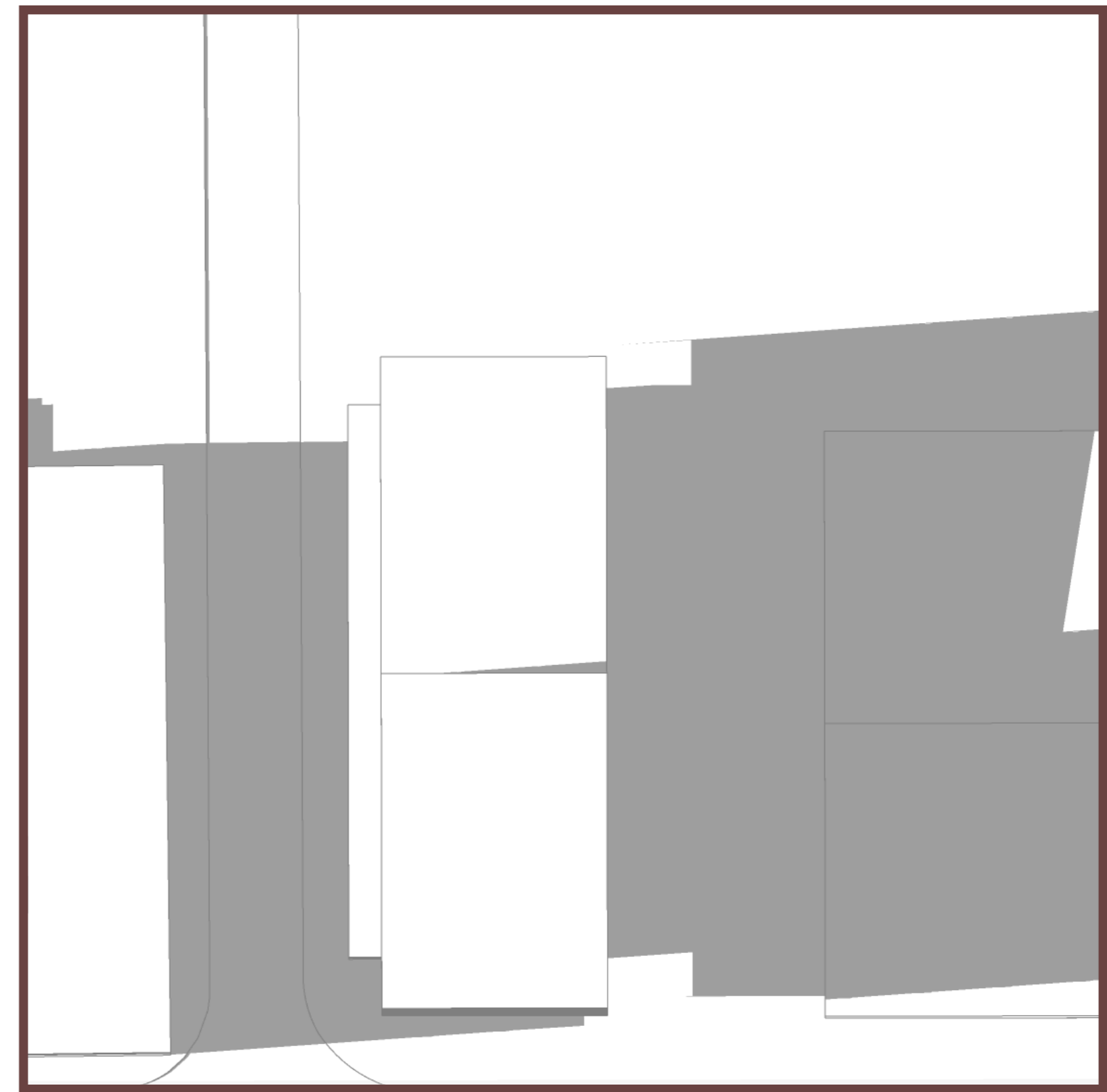




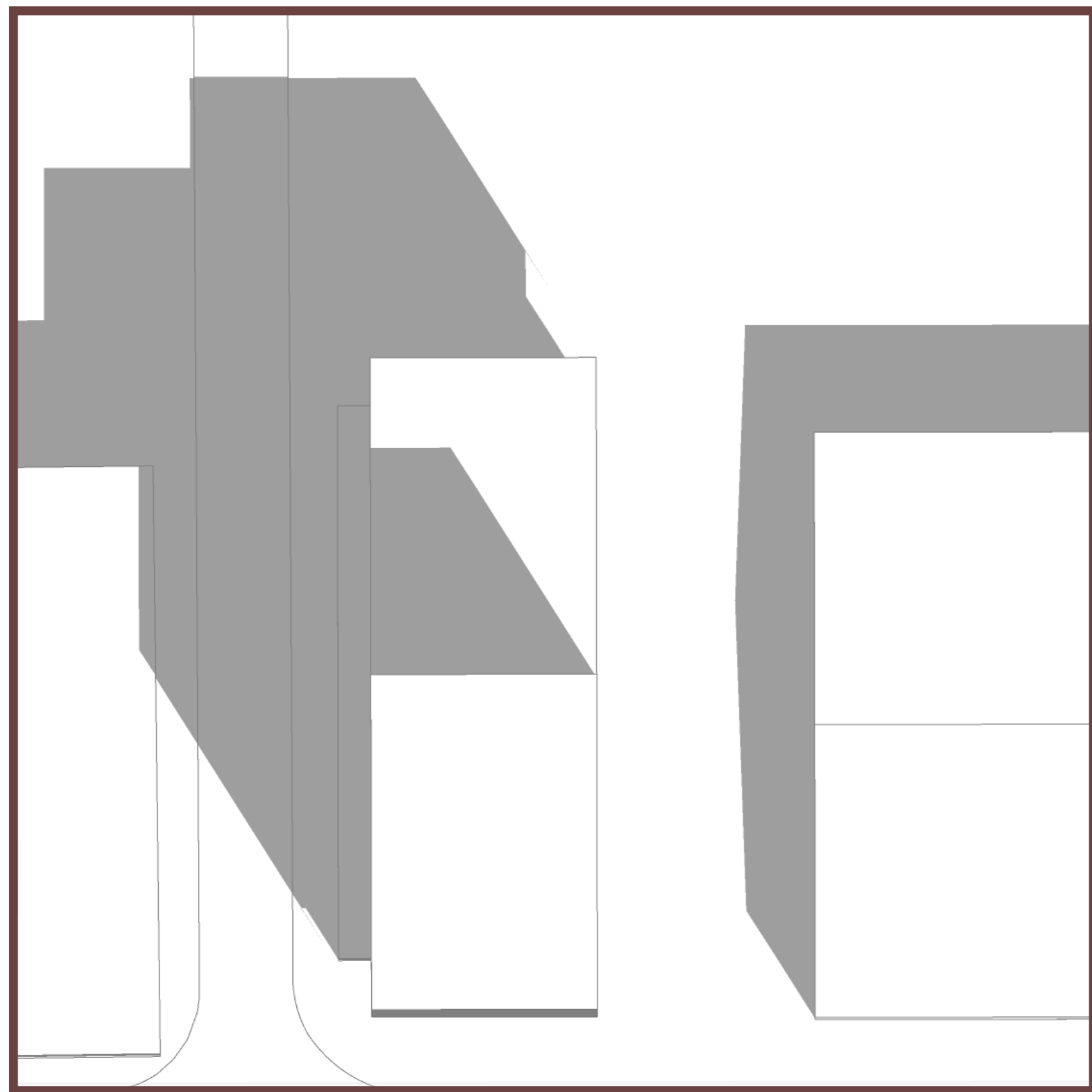
21 March 9:00



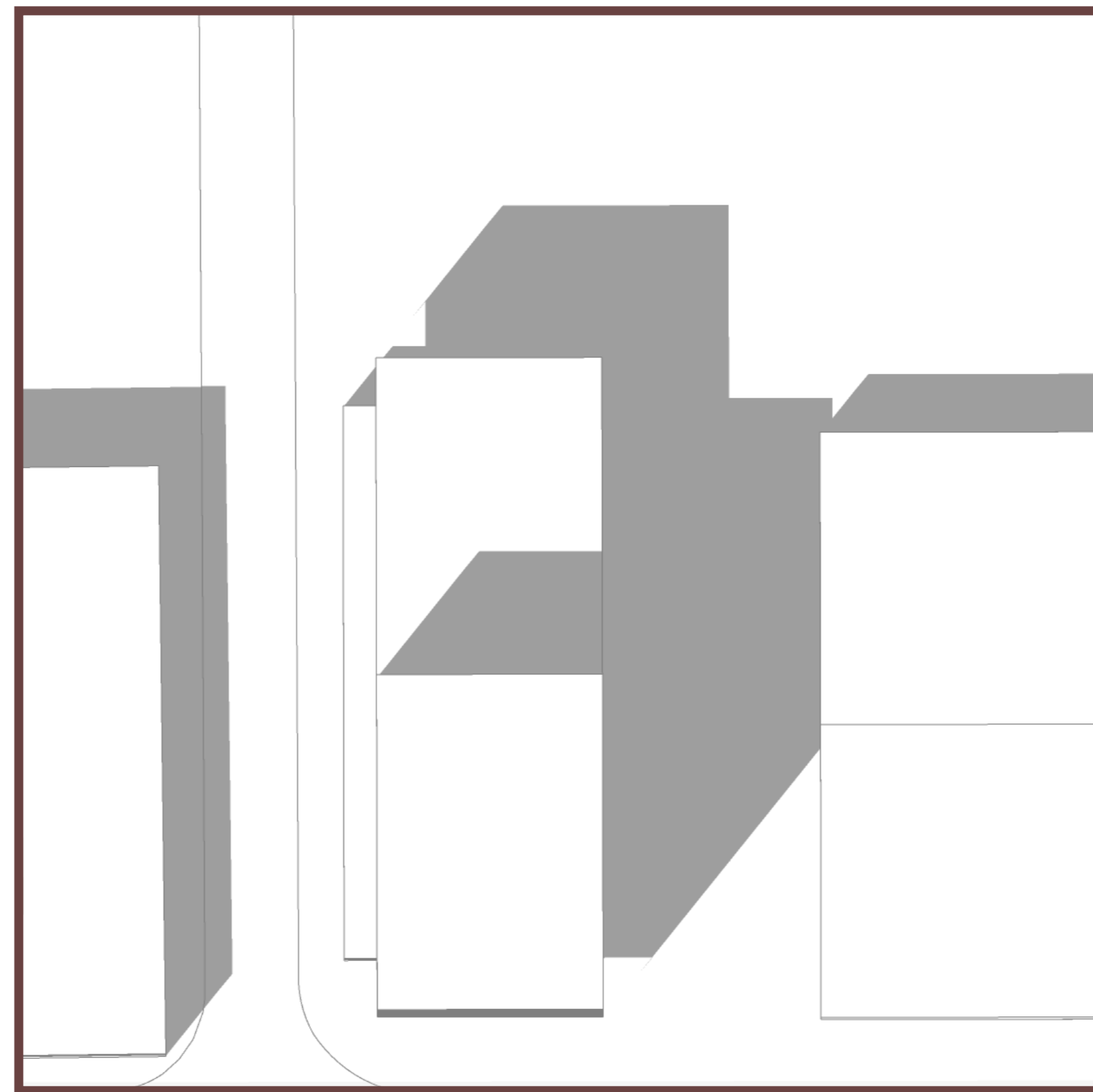
21 March 12:00



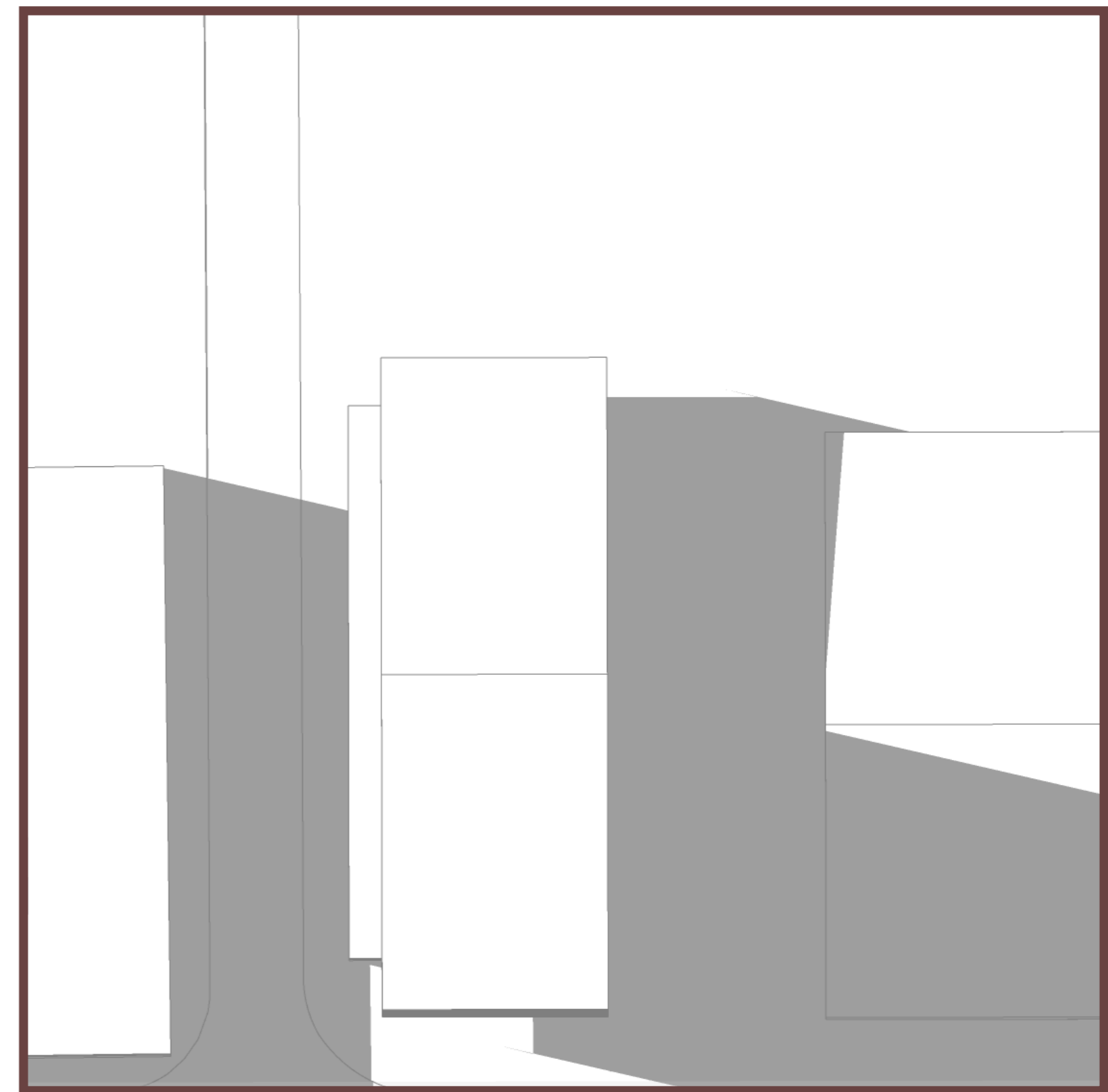
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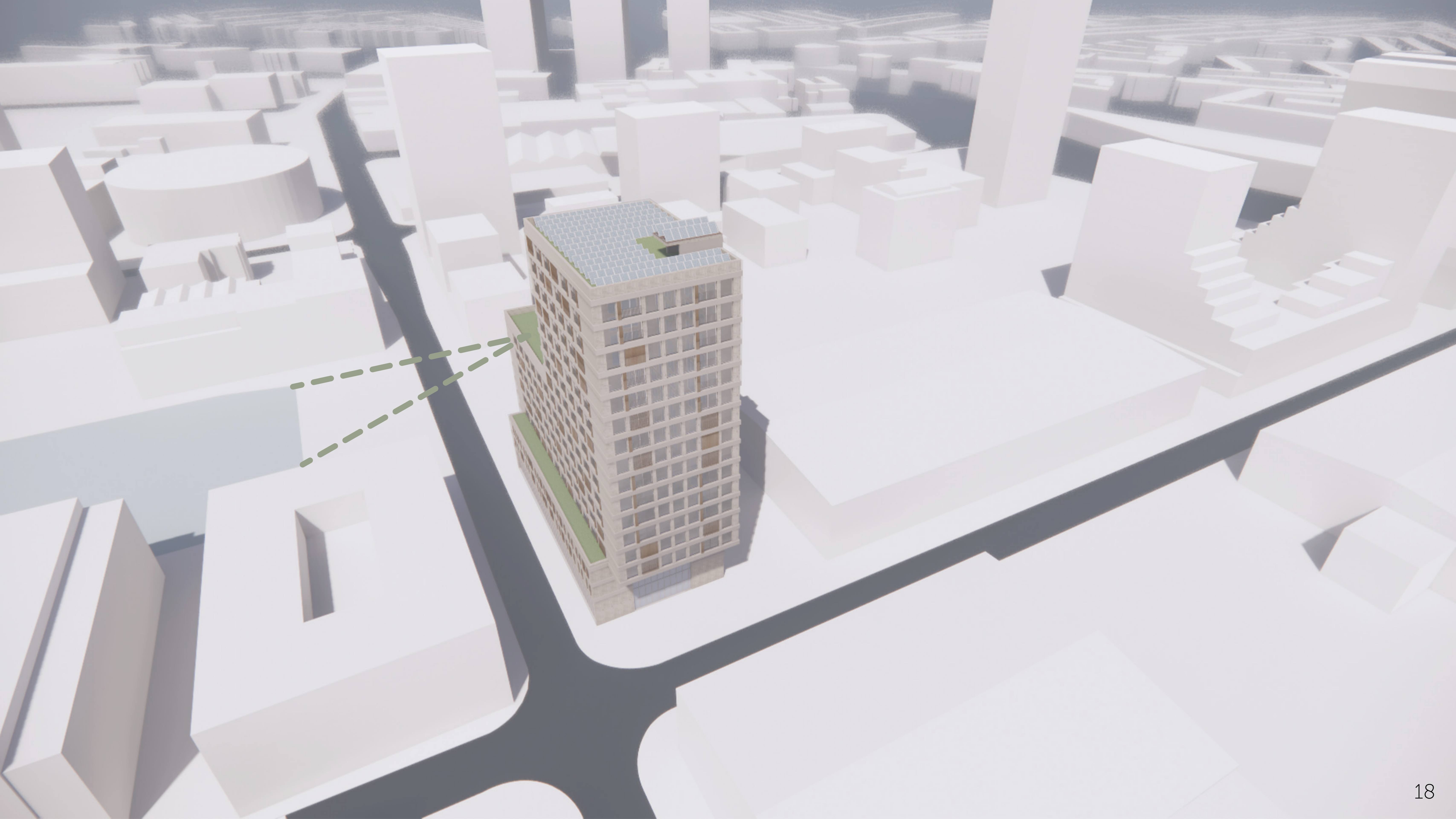
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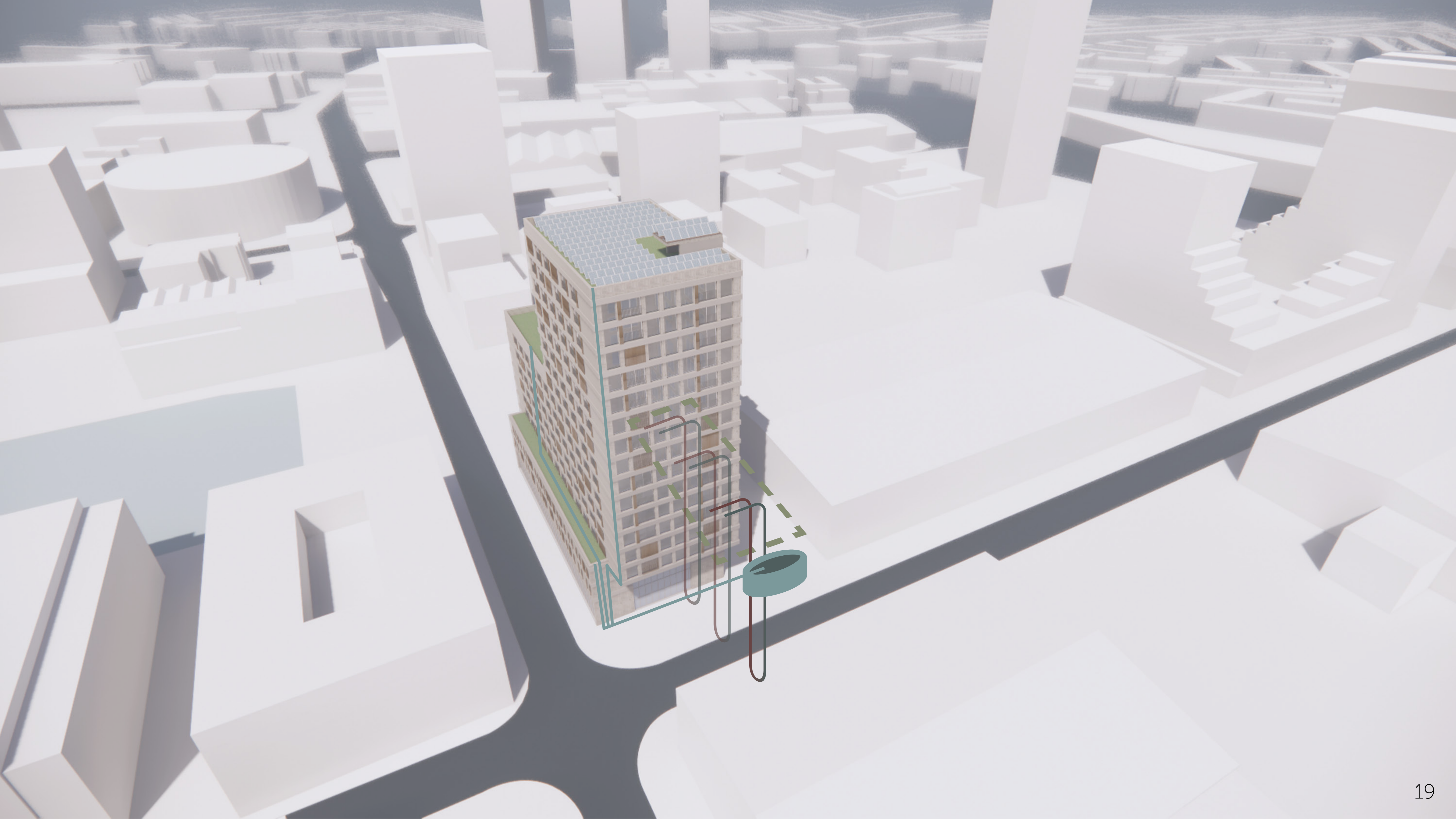


21 June 12:00



21 June 15:00

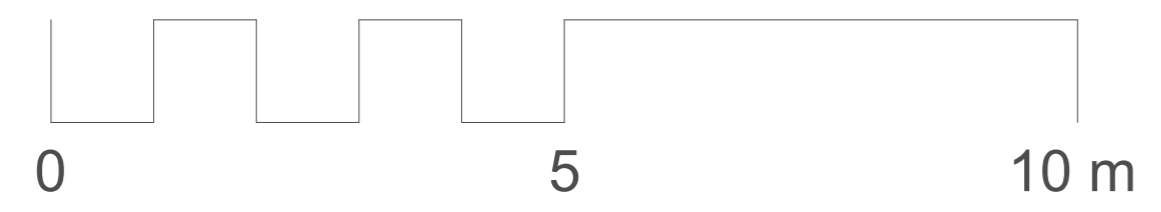








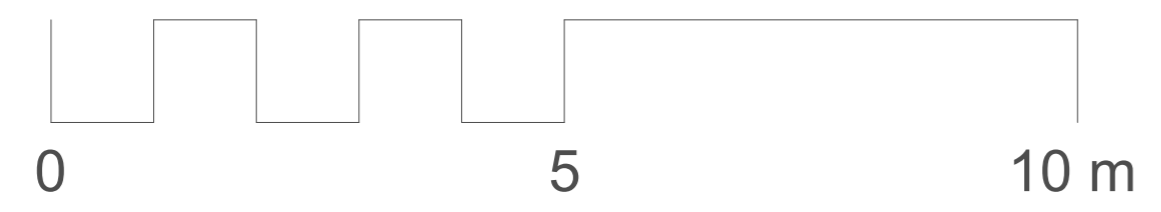




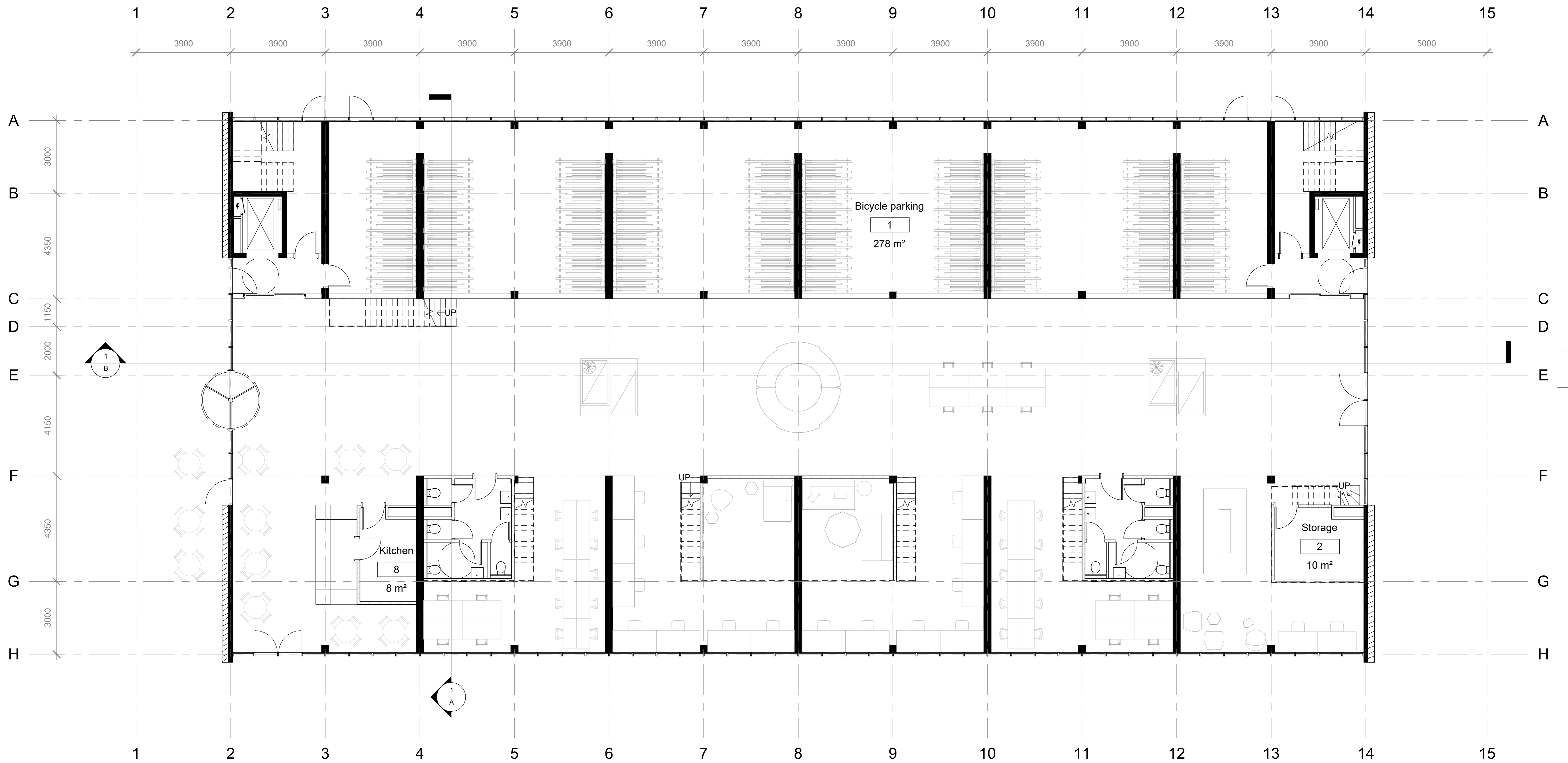
- Public
- Private



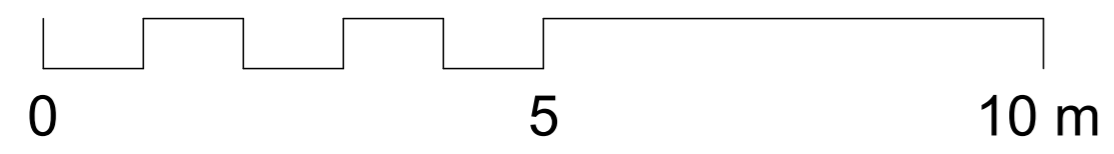
Gym

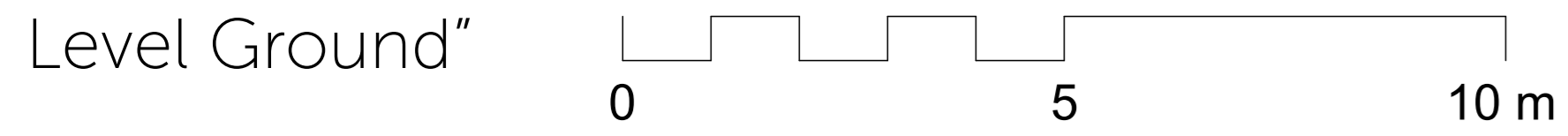
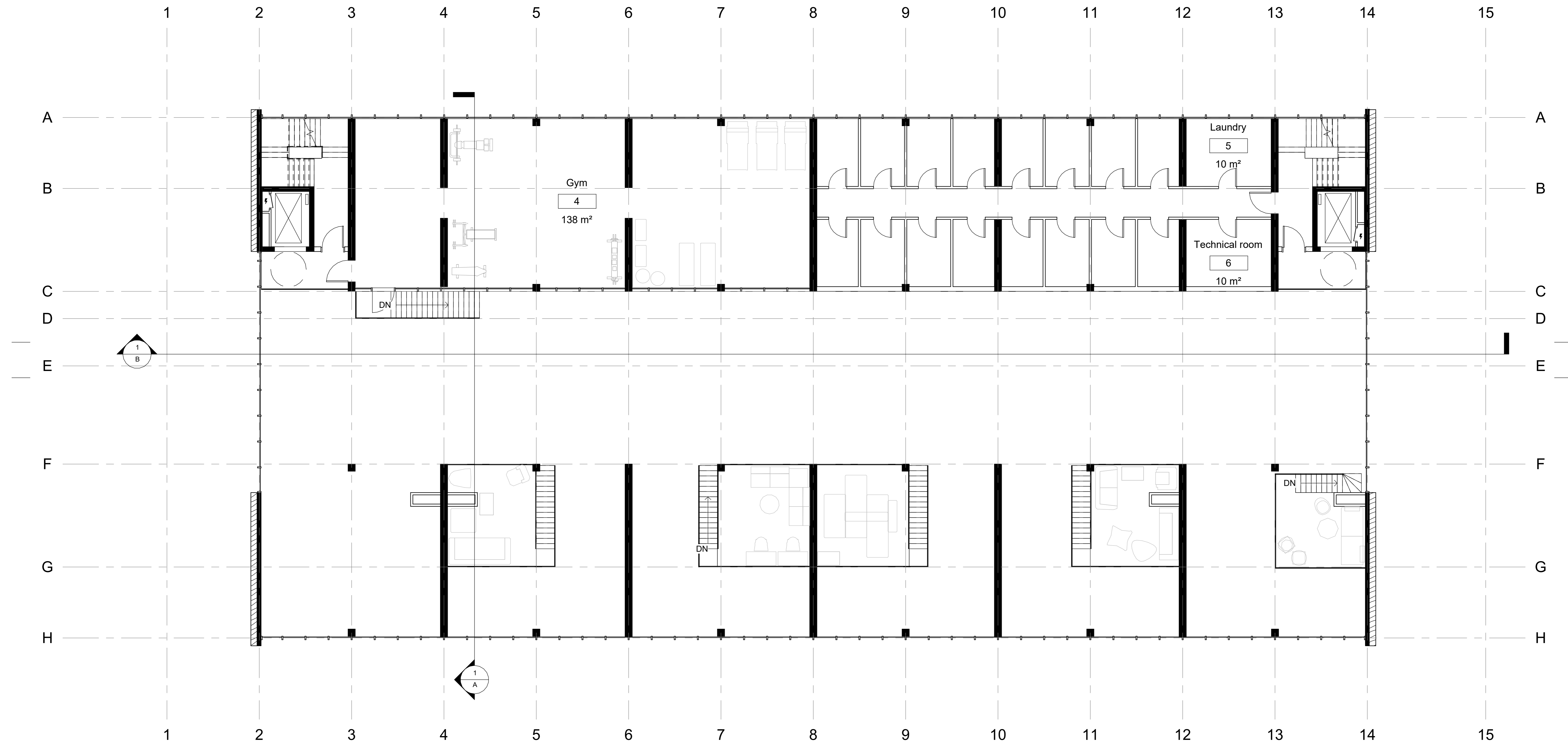


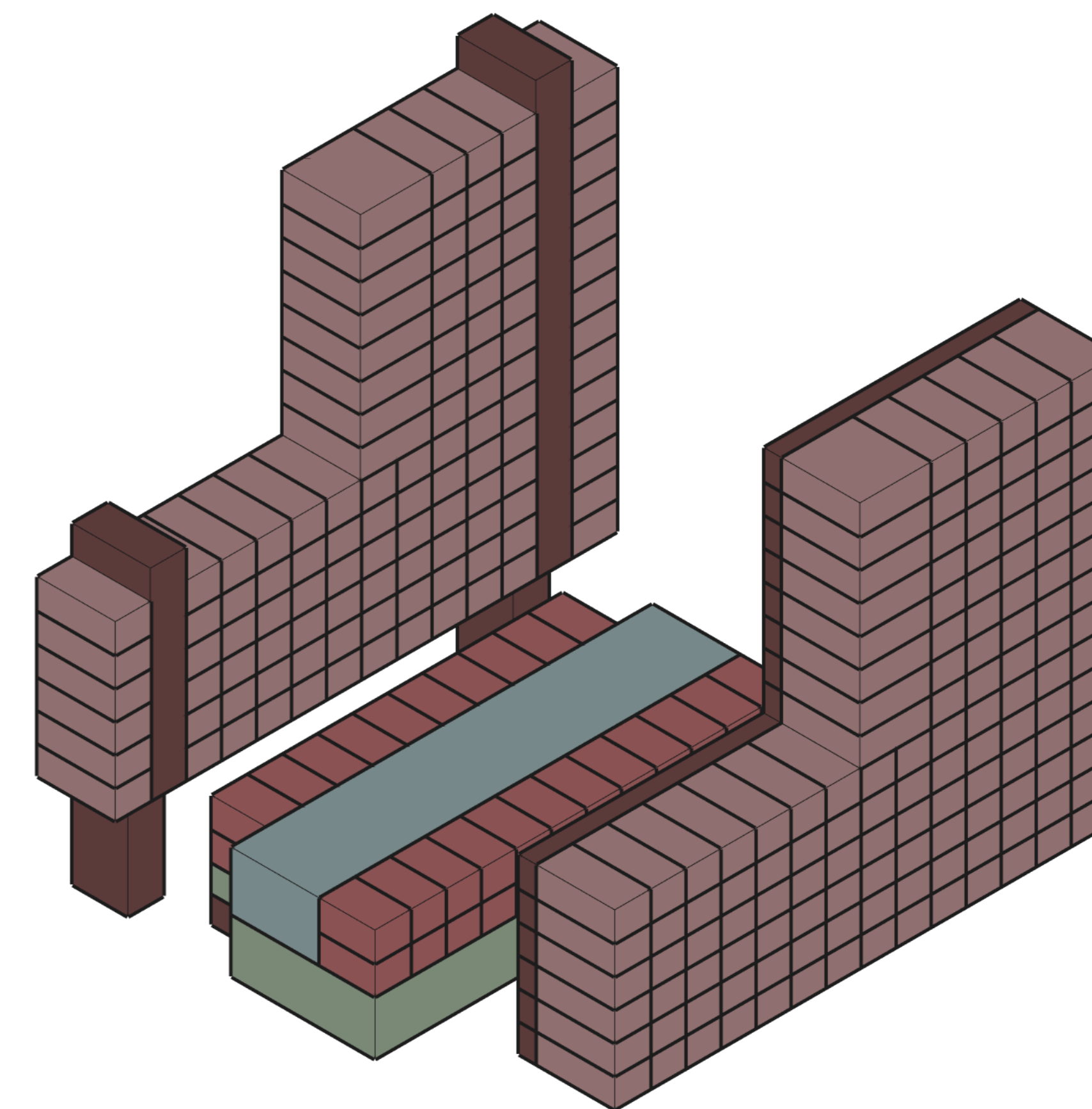
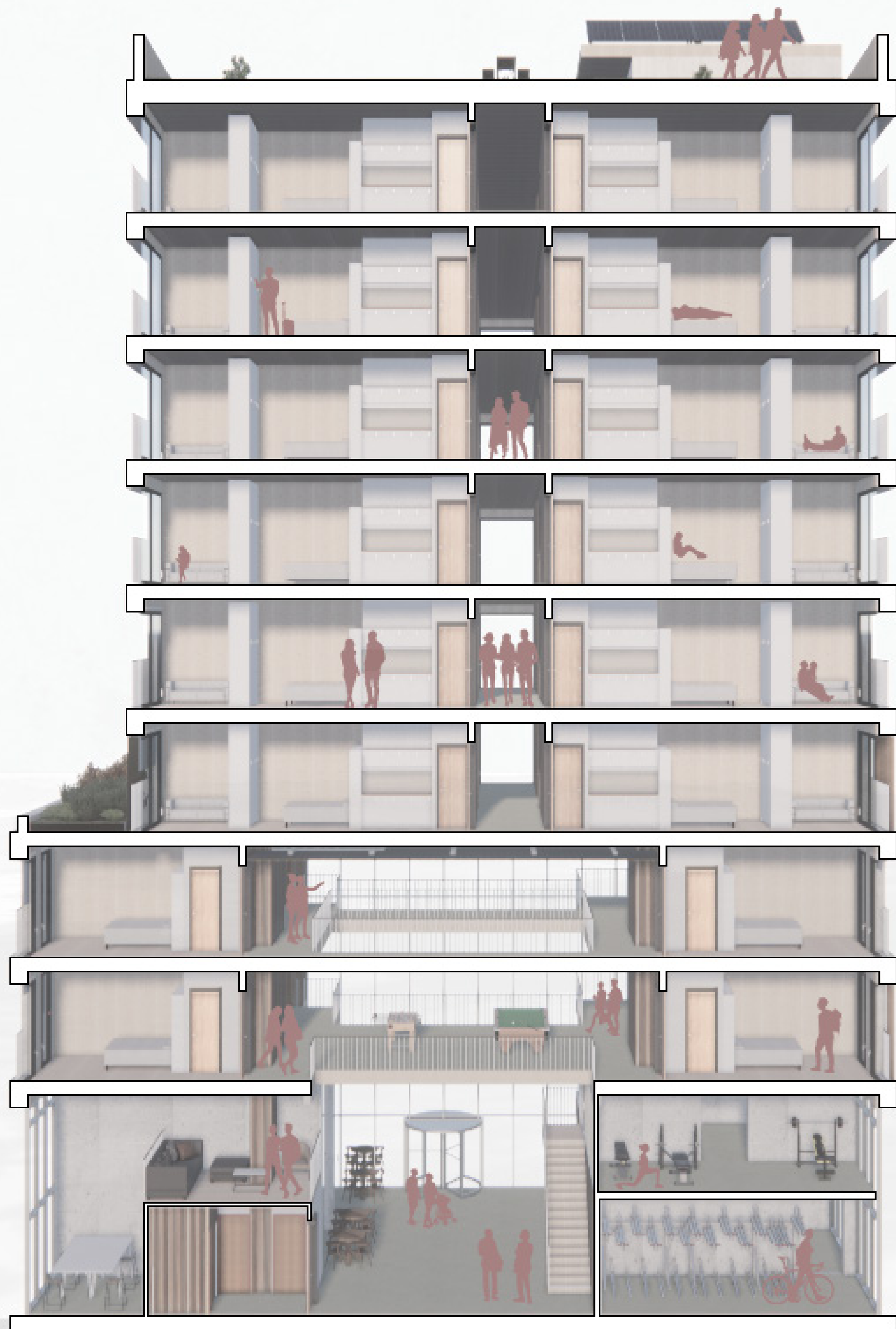
- Public
- Private



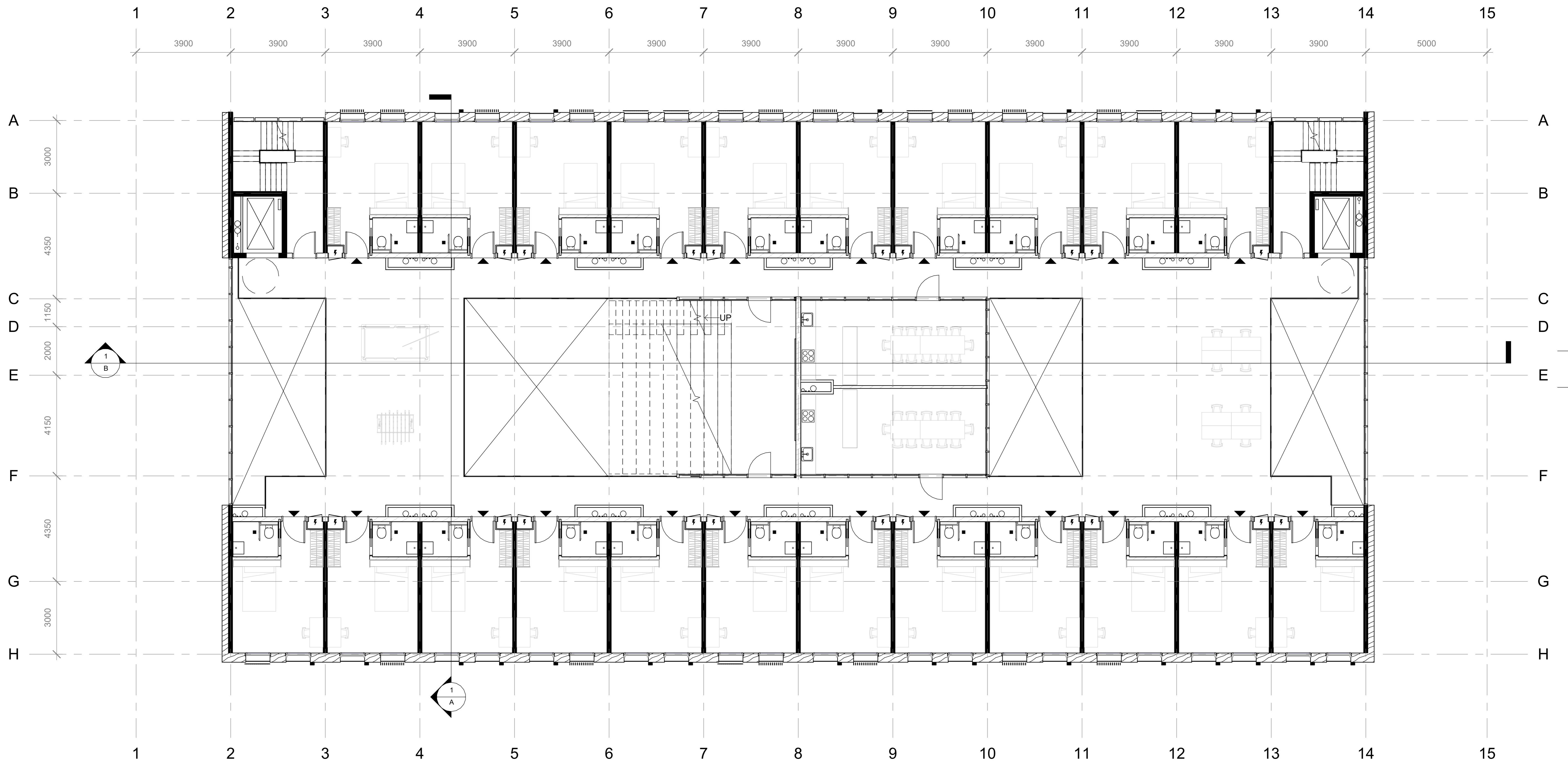
Level Ground



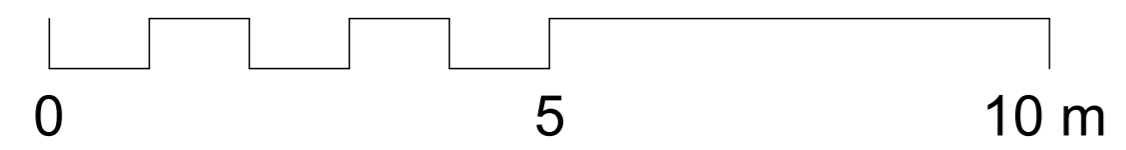


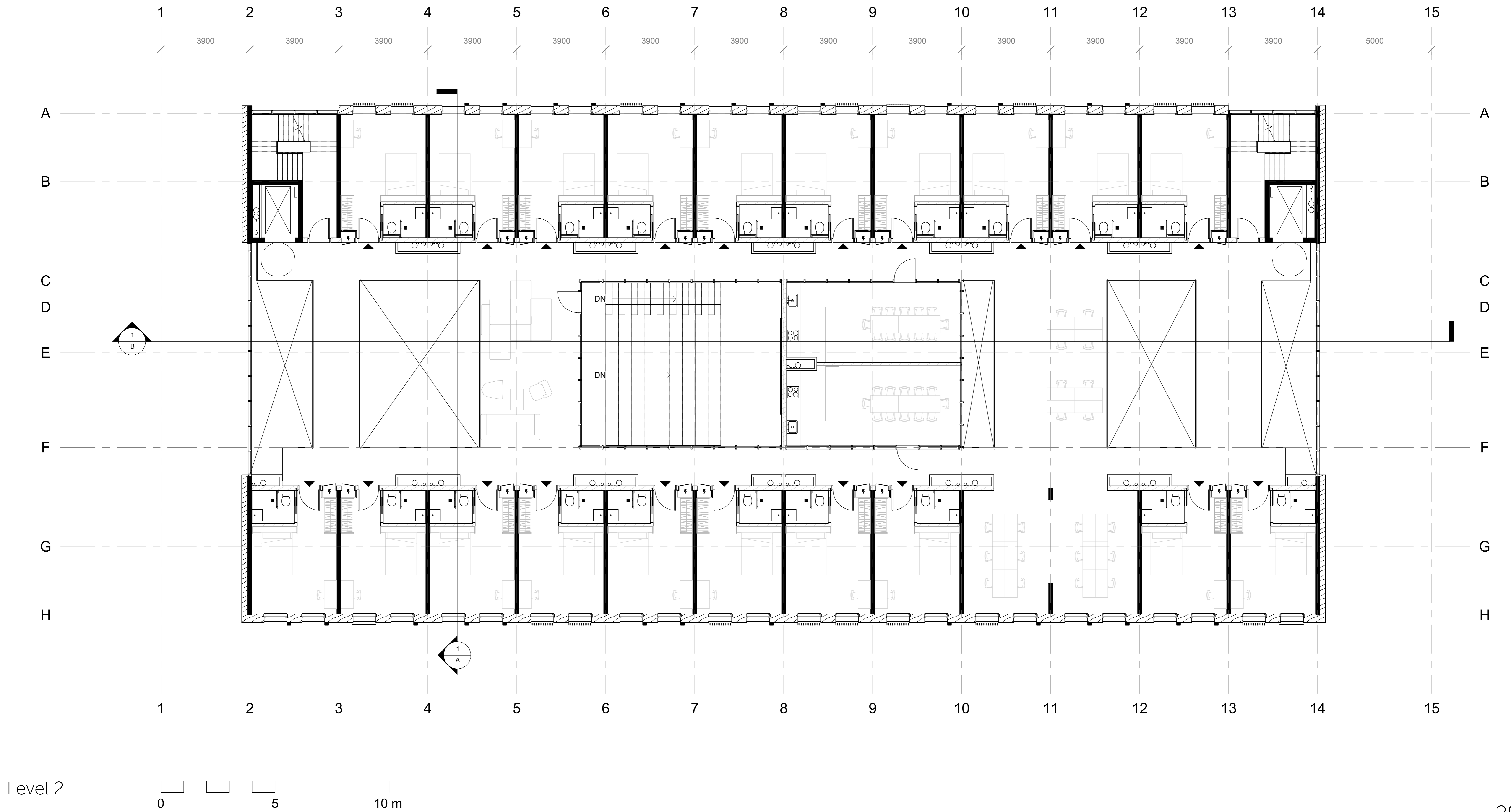


- Public
- Indefinite
- Short-stay
- Circulation
- Collective



Level 1



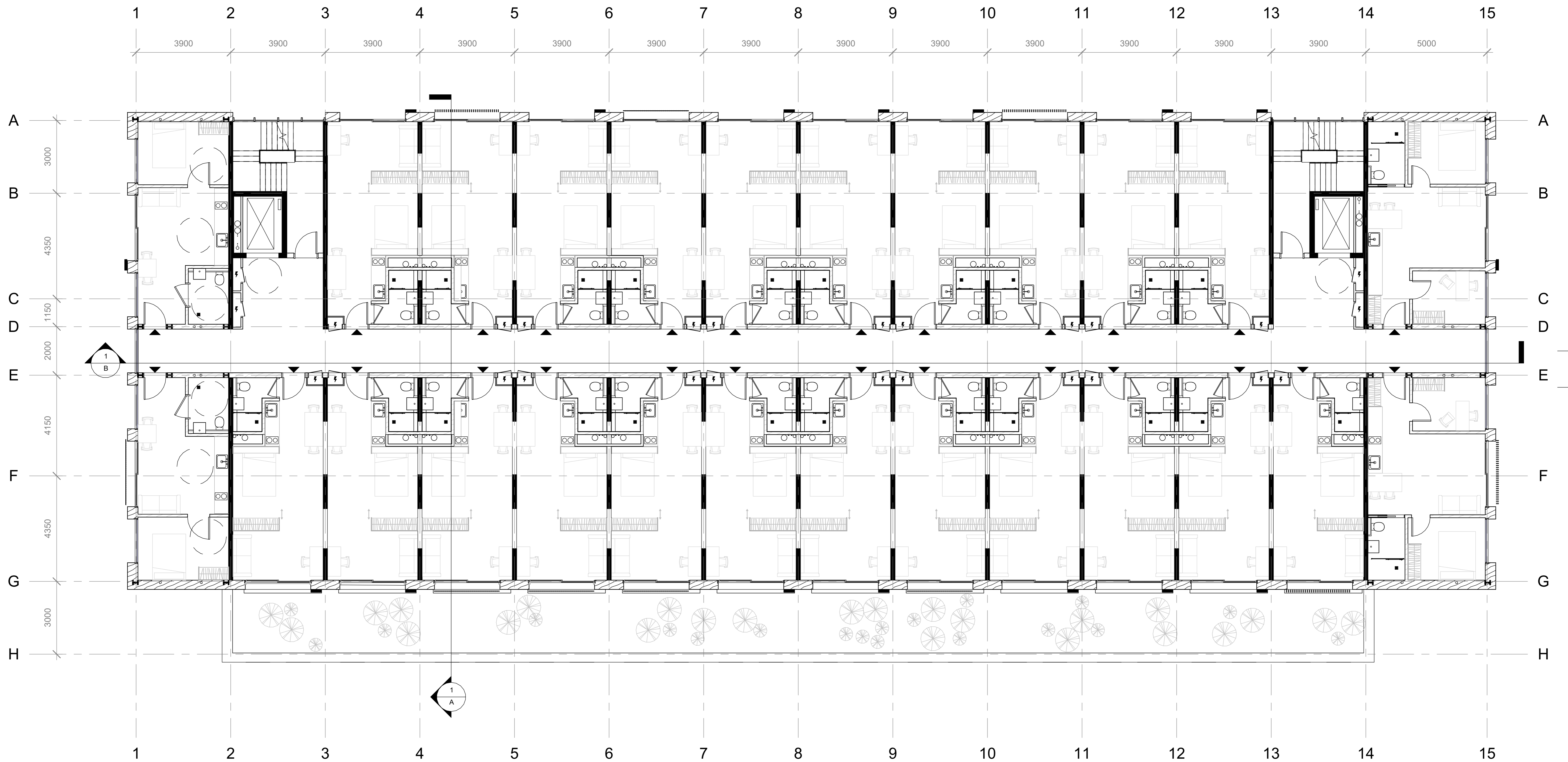


Level 2



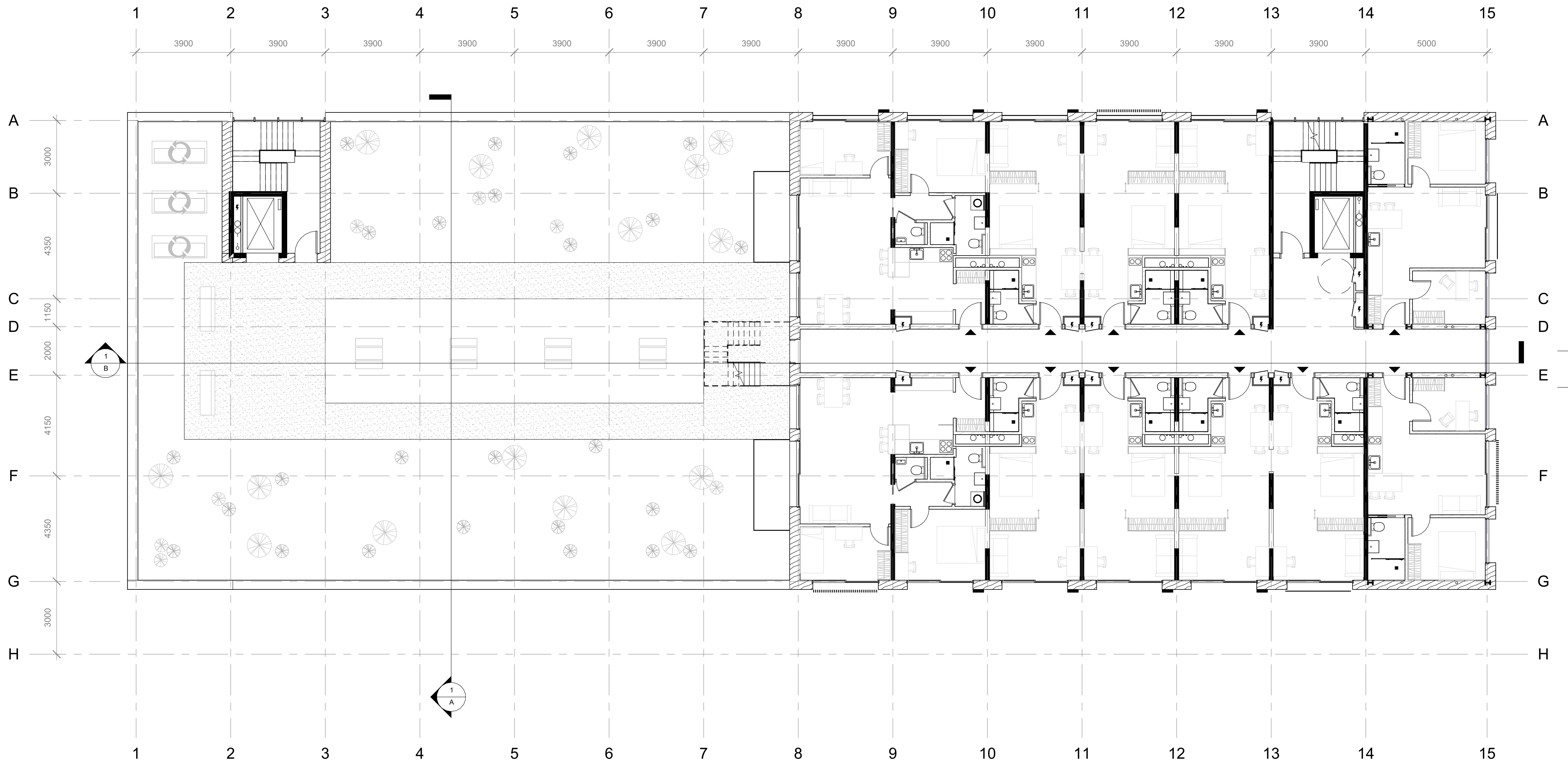






Level 3-8

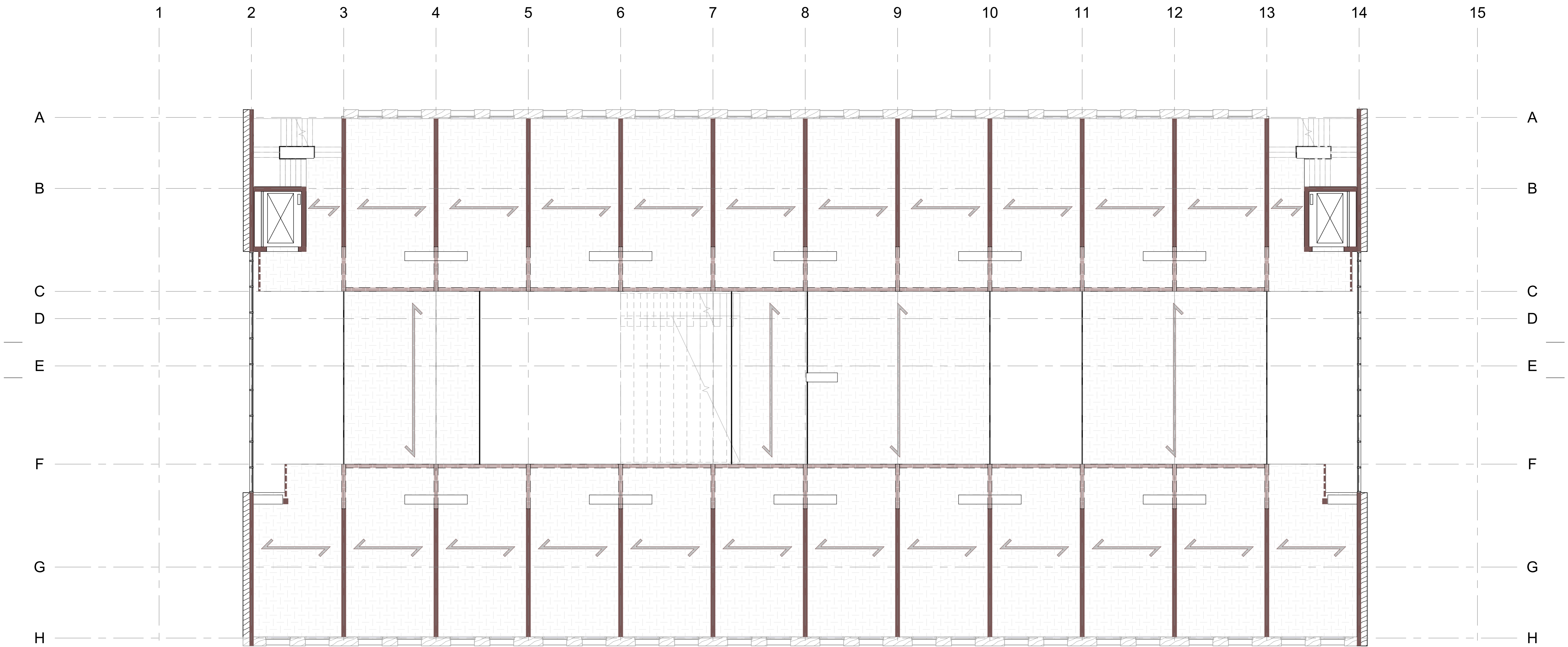




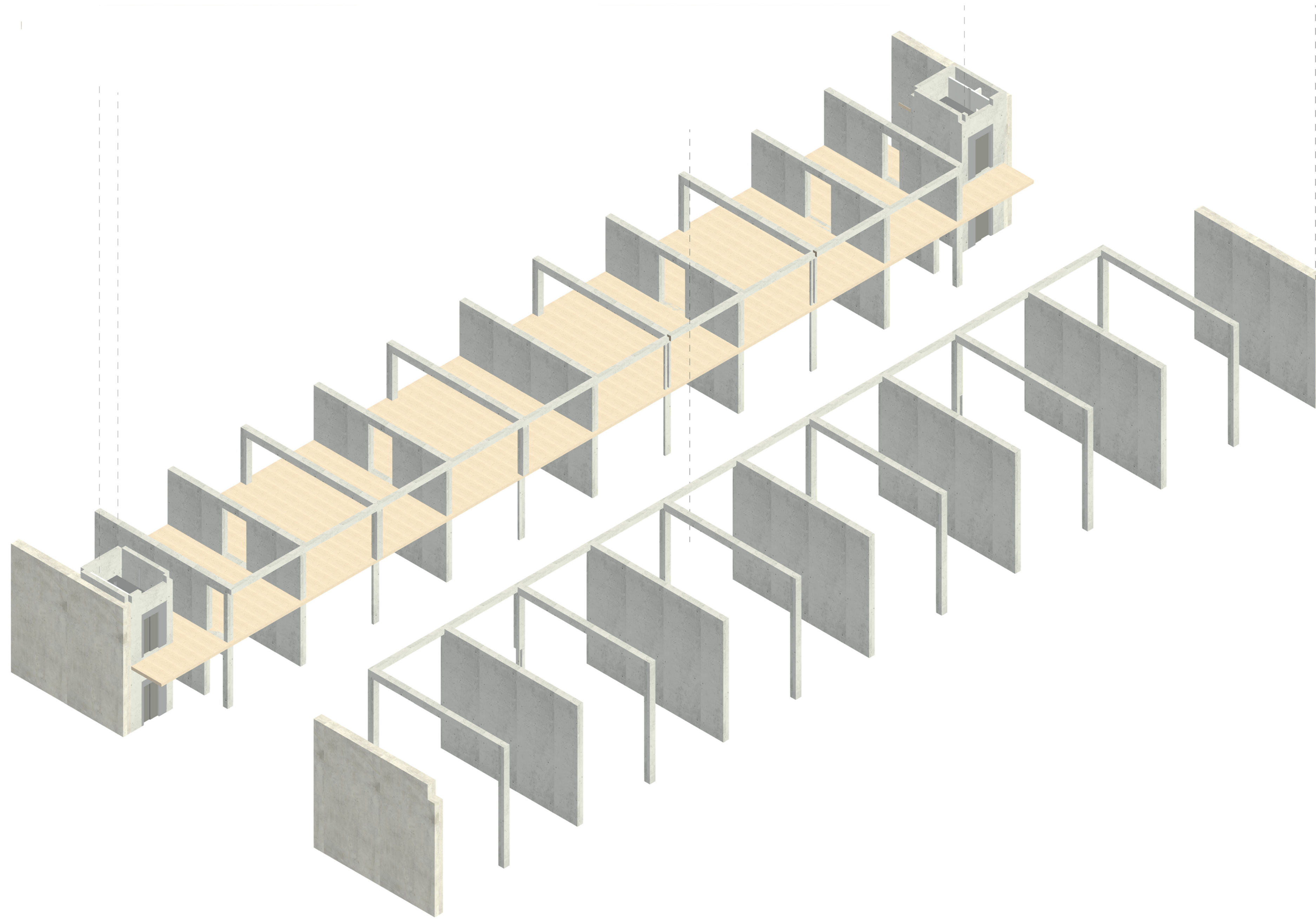
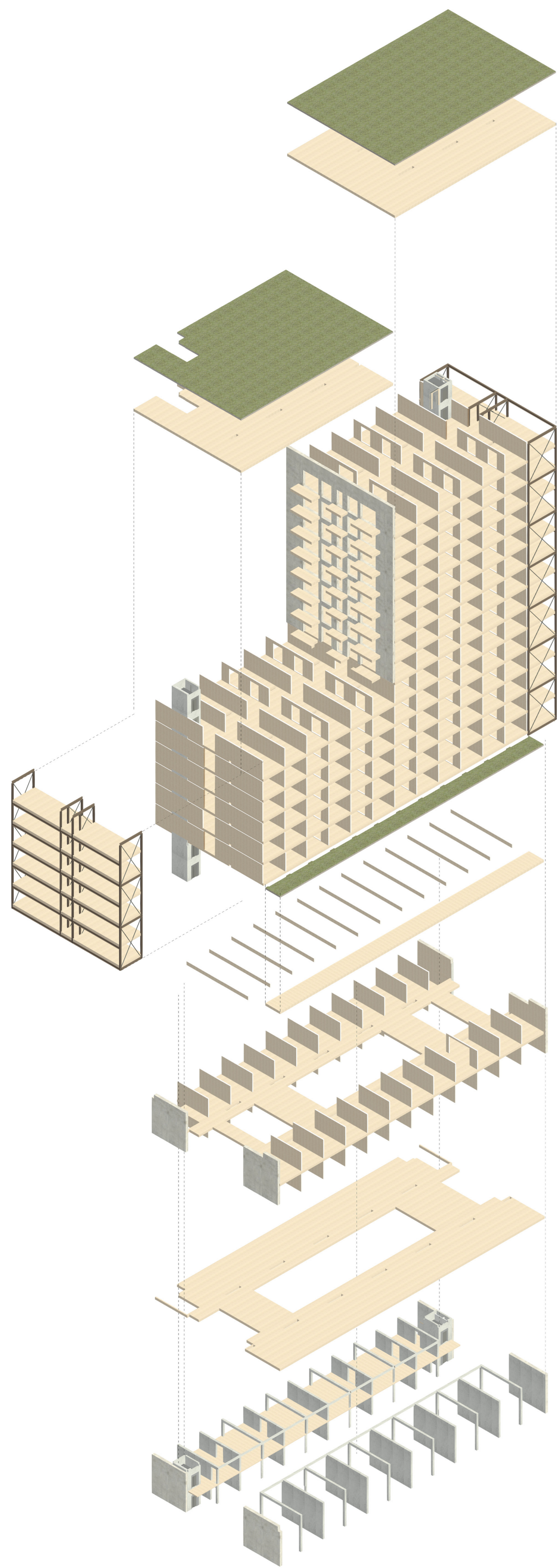
Level 9-16







- ▨ Structural railing
- Steel frame
- Structural wall
- ▨ Structure on floor below
- ↔ Floor span direction



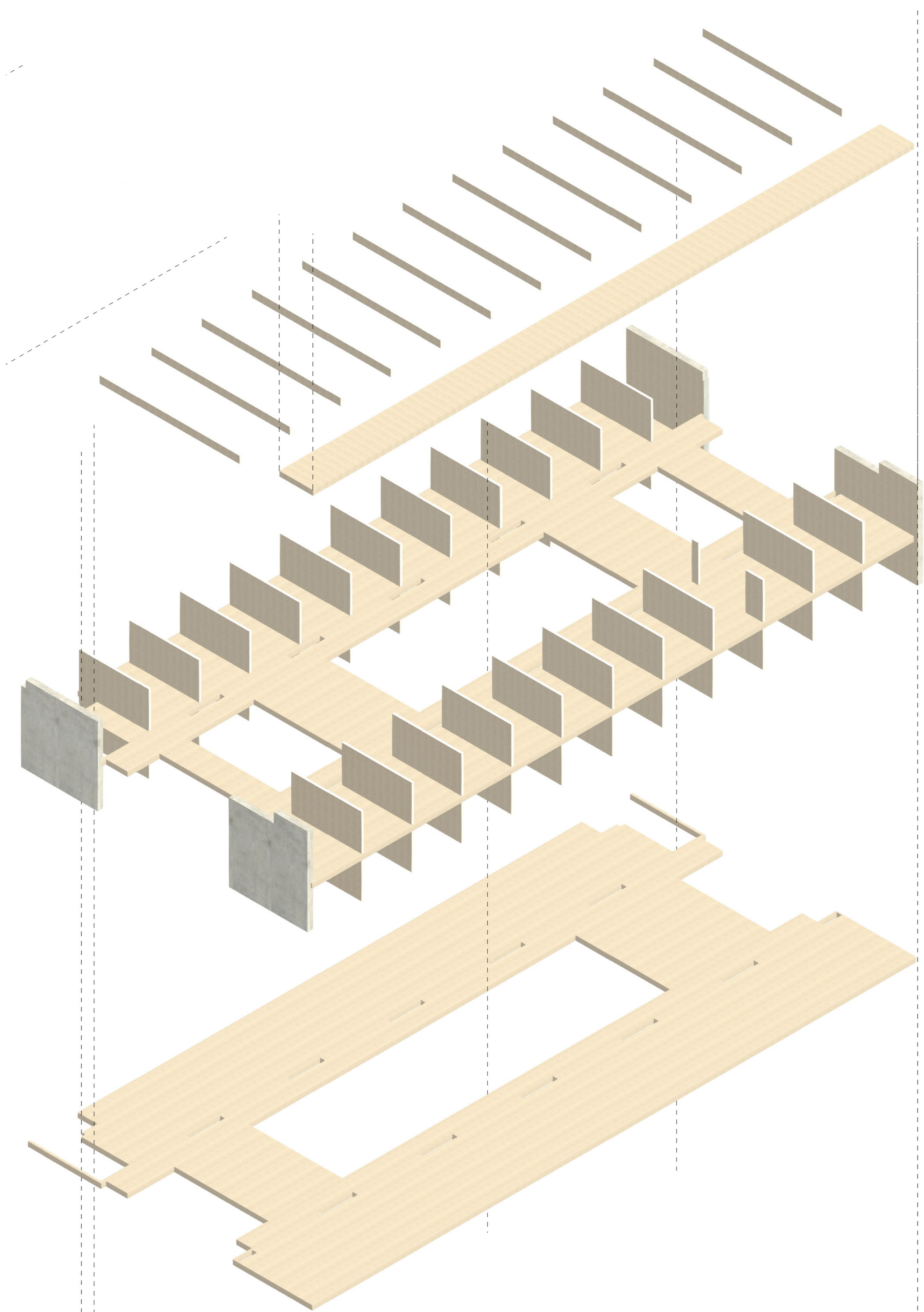
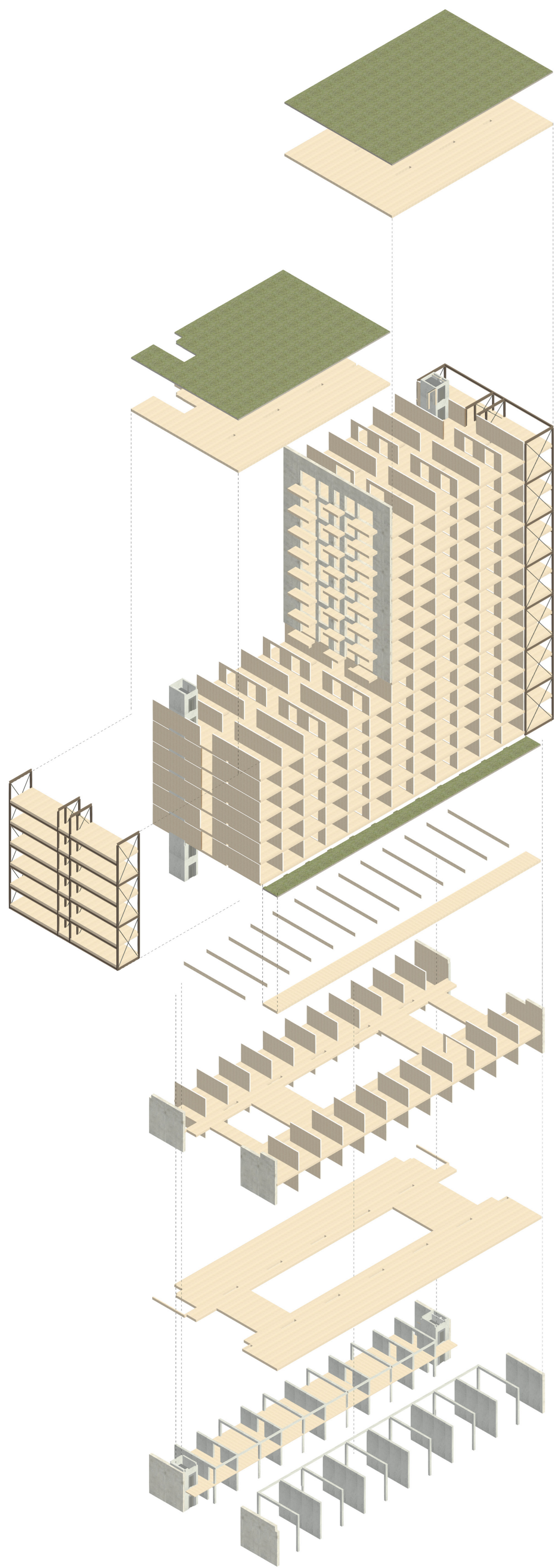
Concrete walls, columns, beams



Load-bearing concrete facade; ceramic cladding



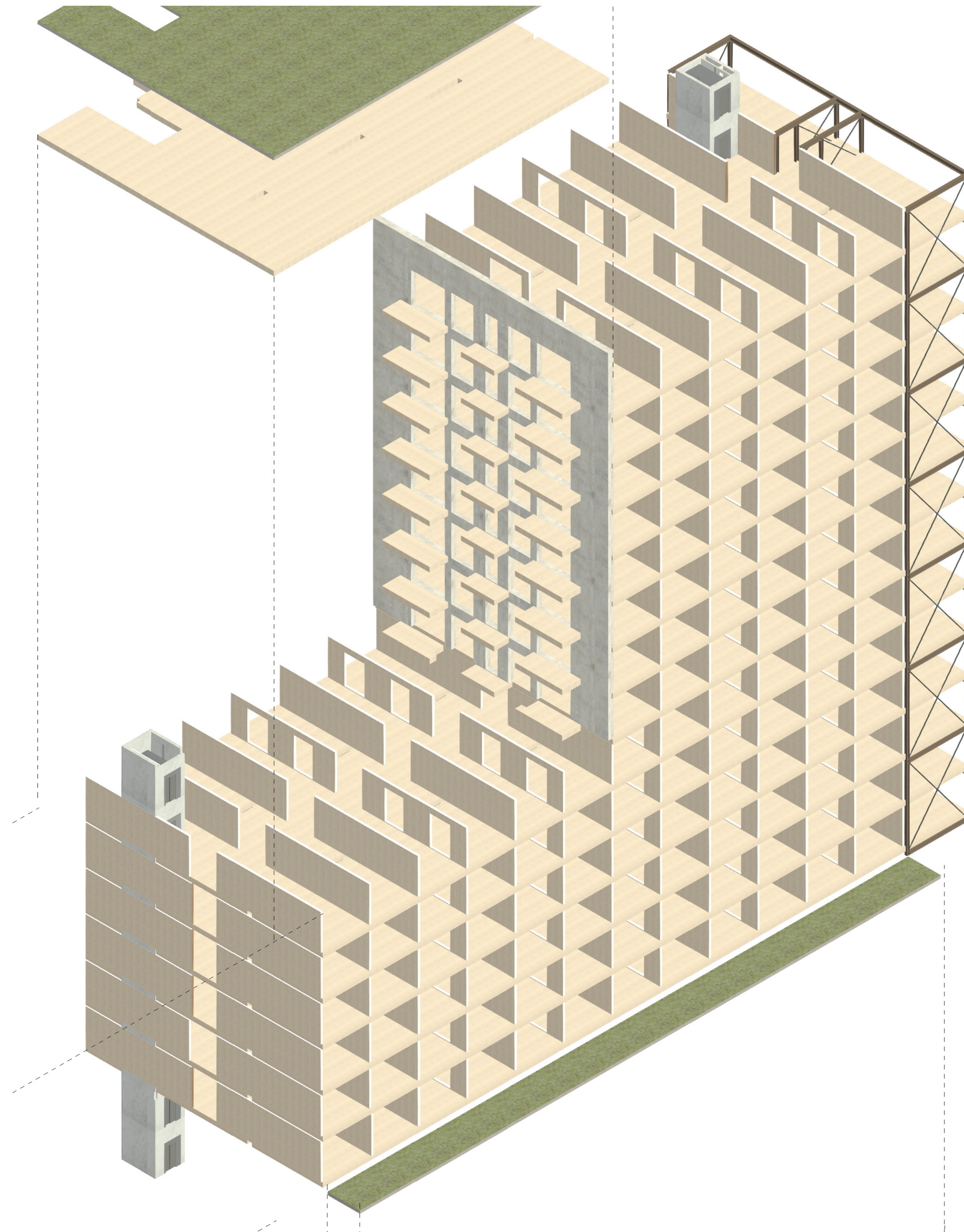
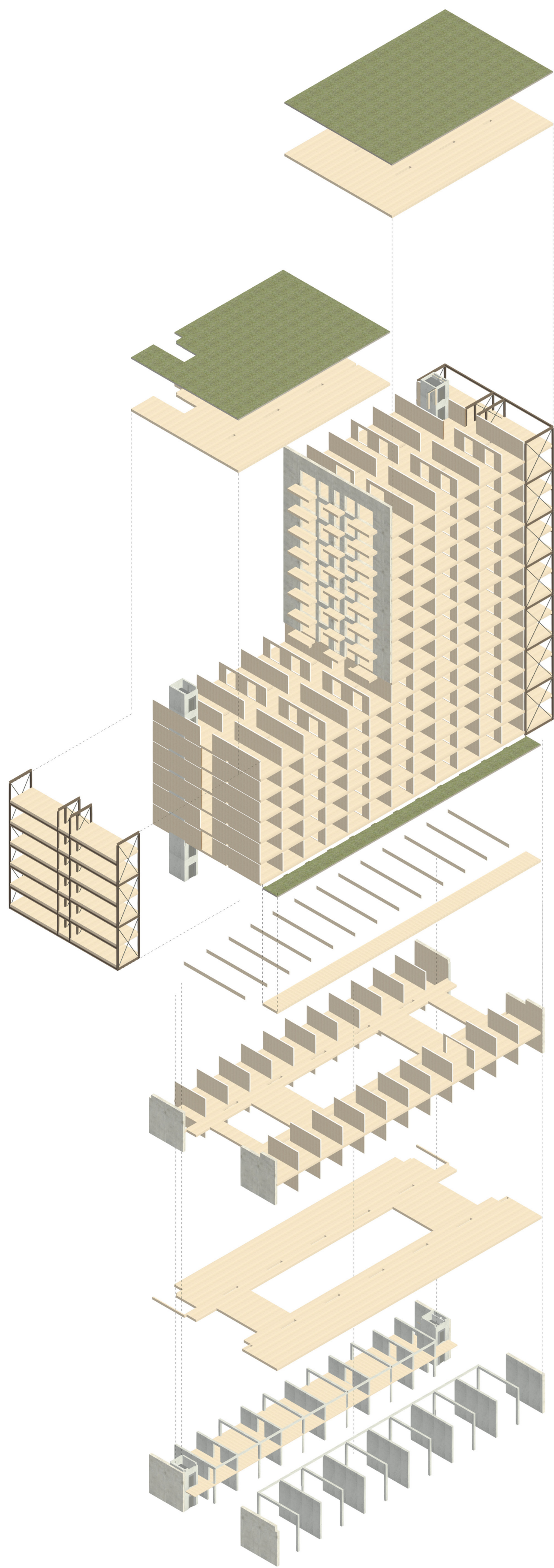
CLT floor



Load-bearing CLT facade;
ceramic cladding



CLT floors, walls



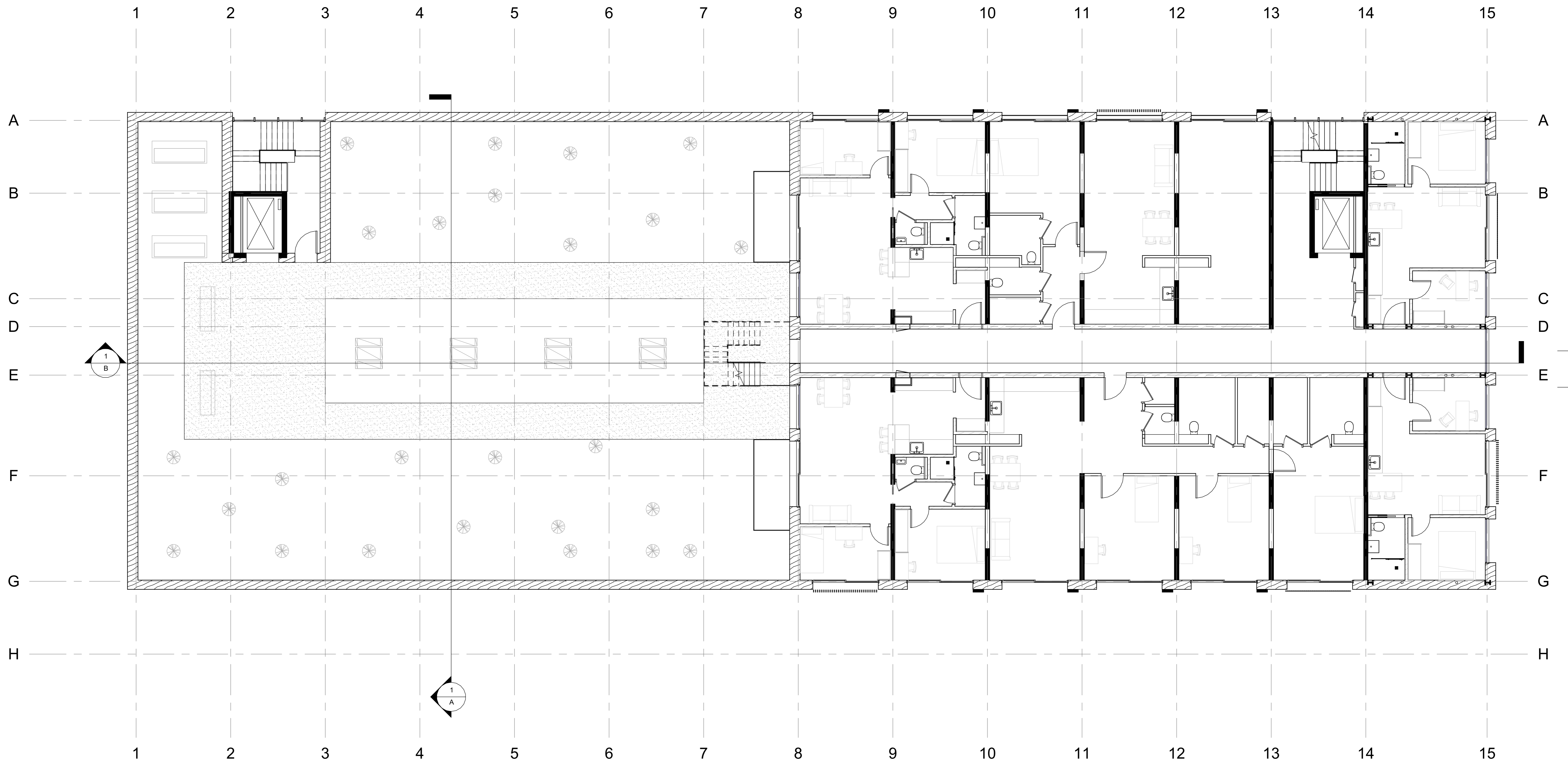
Concrete elevator core



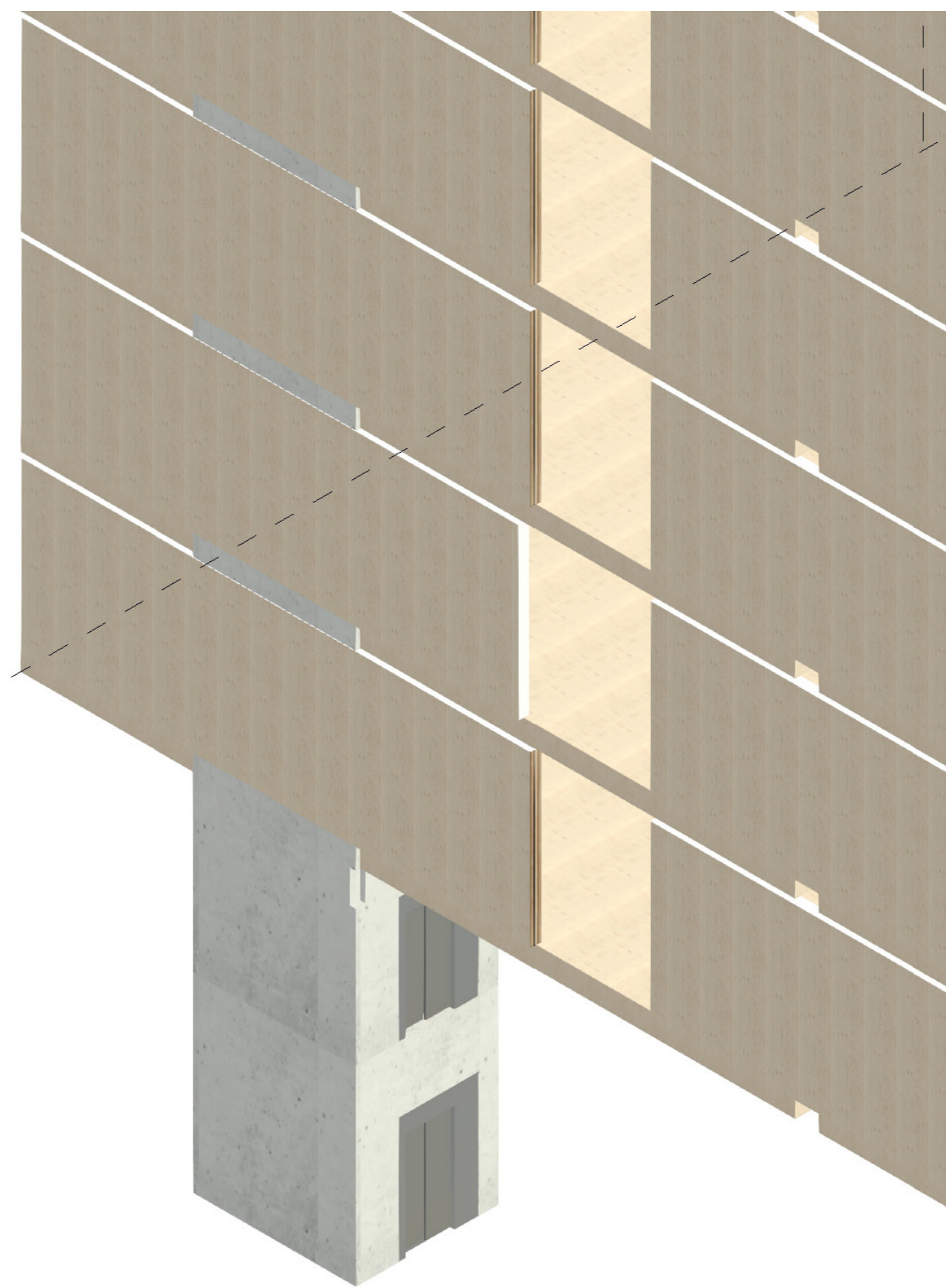
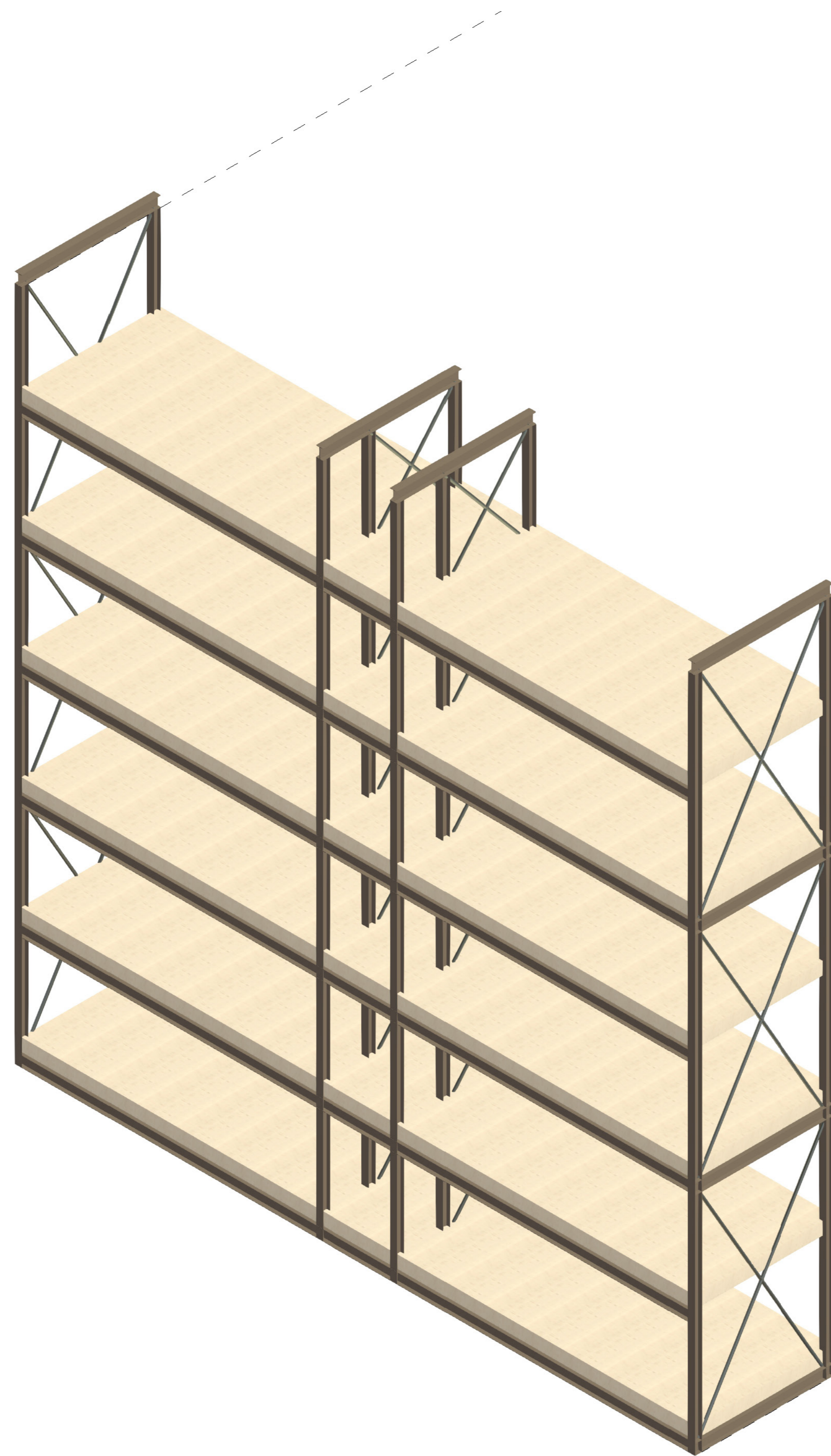
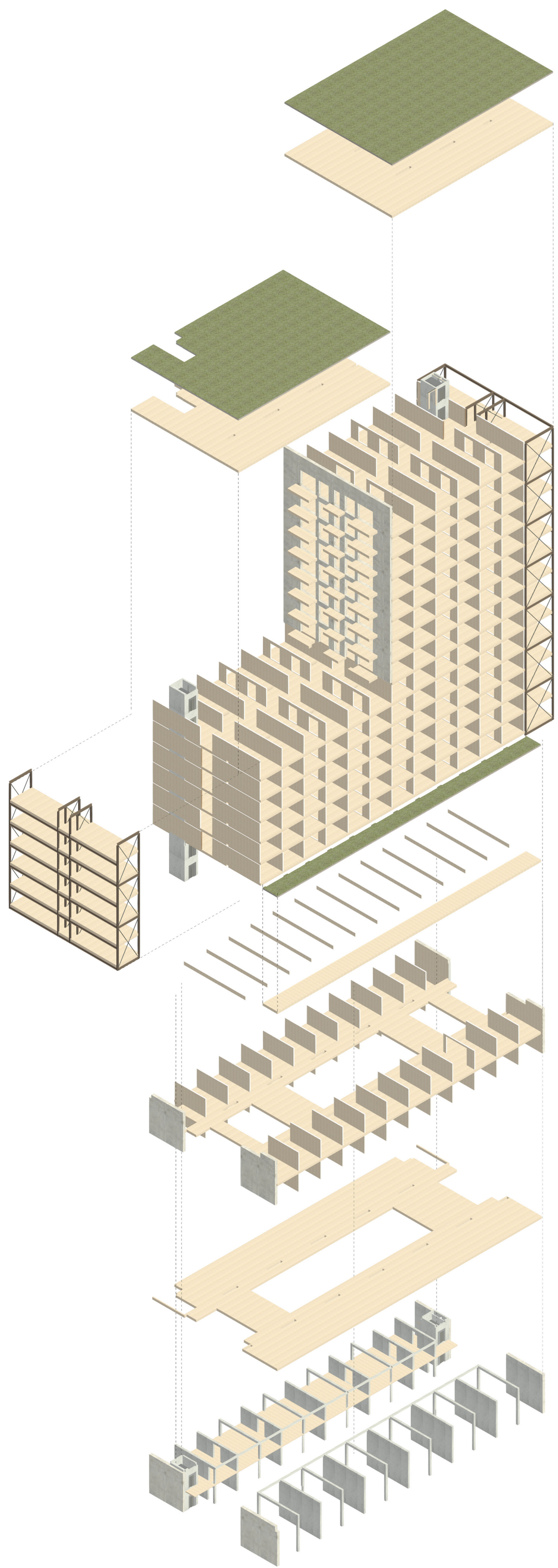
Load-bearing CLT facade;
ceramic cladding



CLT floors, walls



Level 9 proposal for future



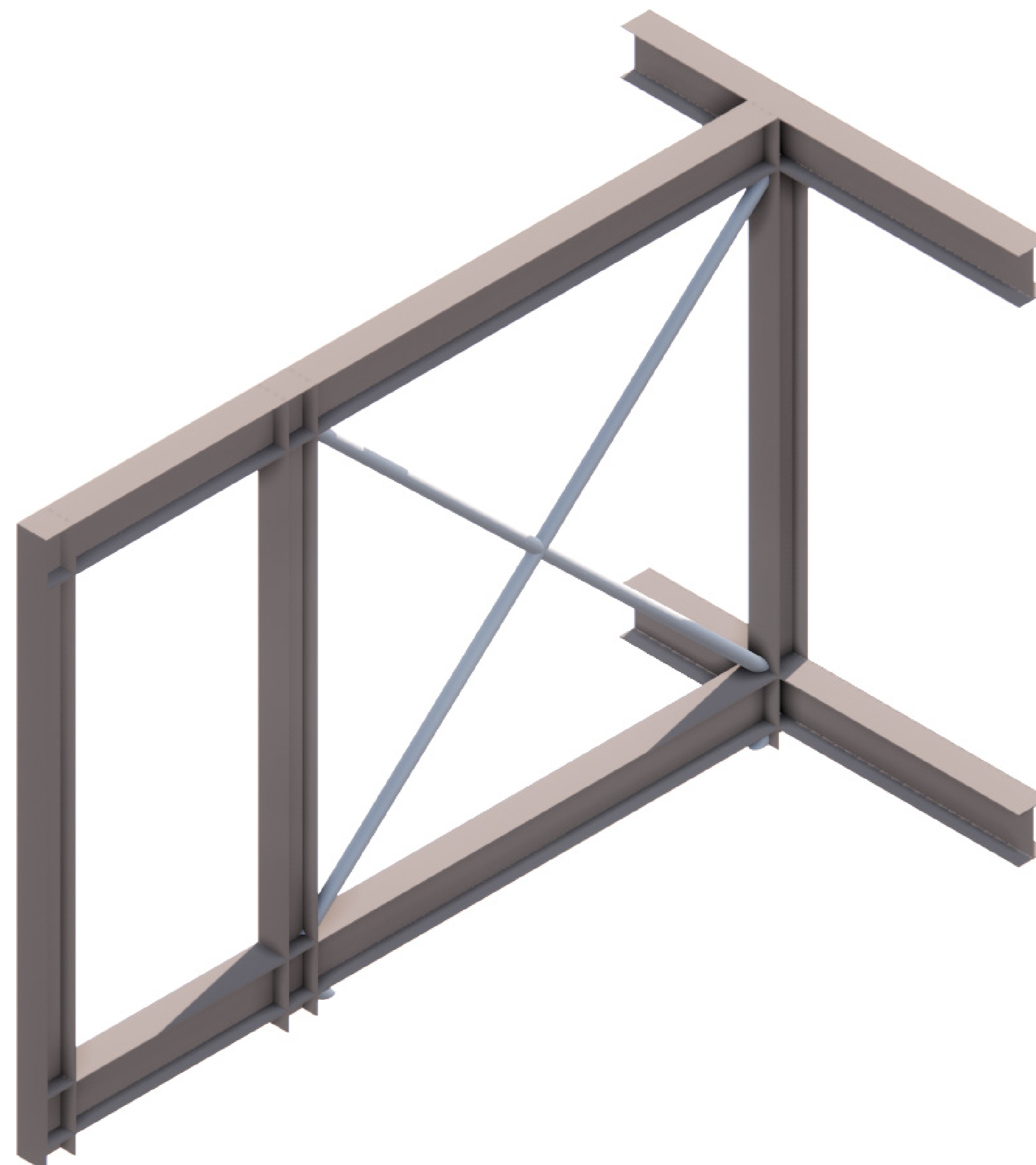
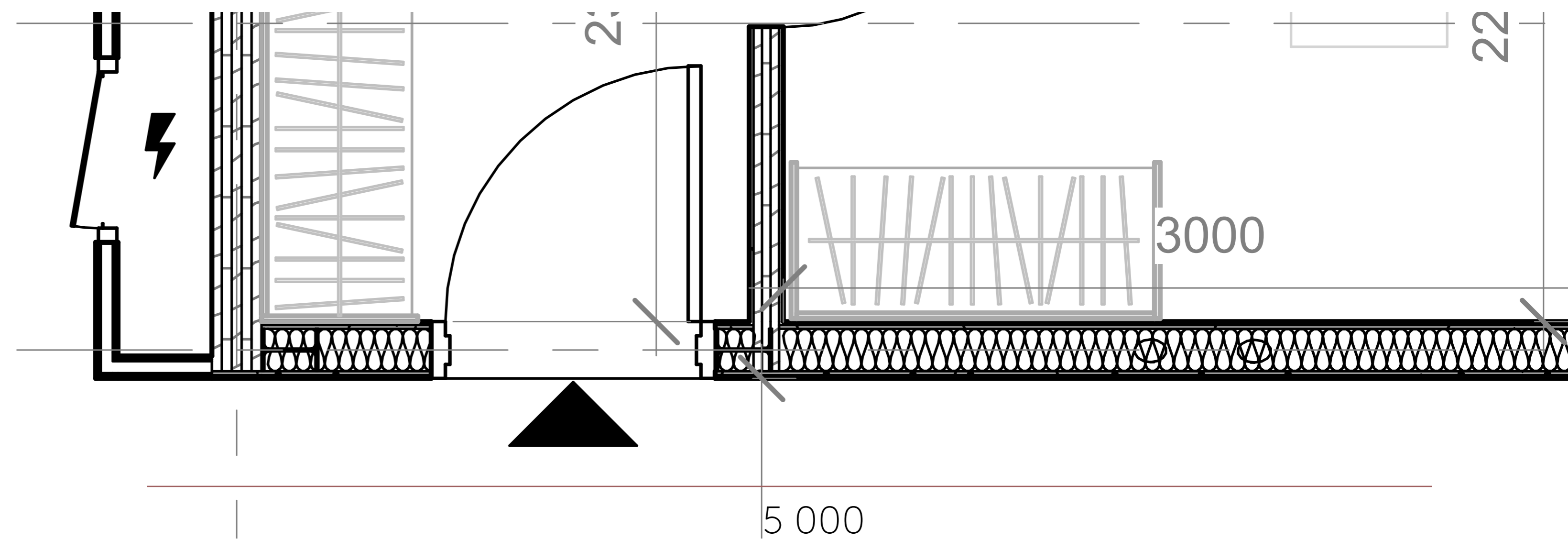
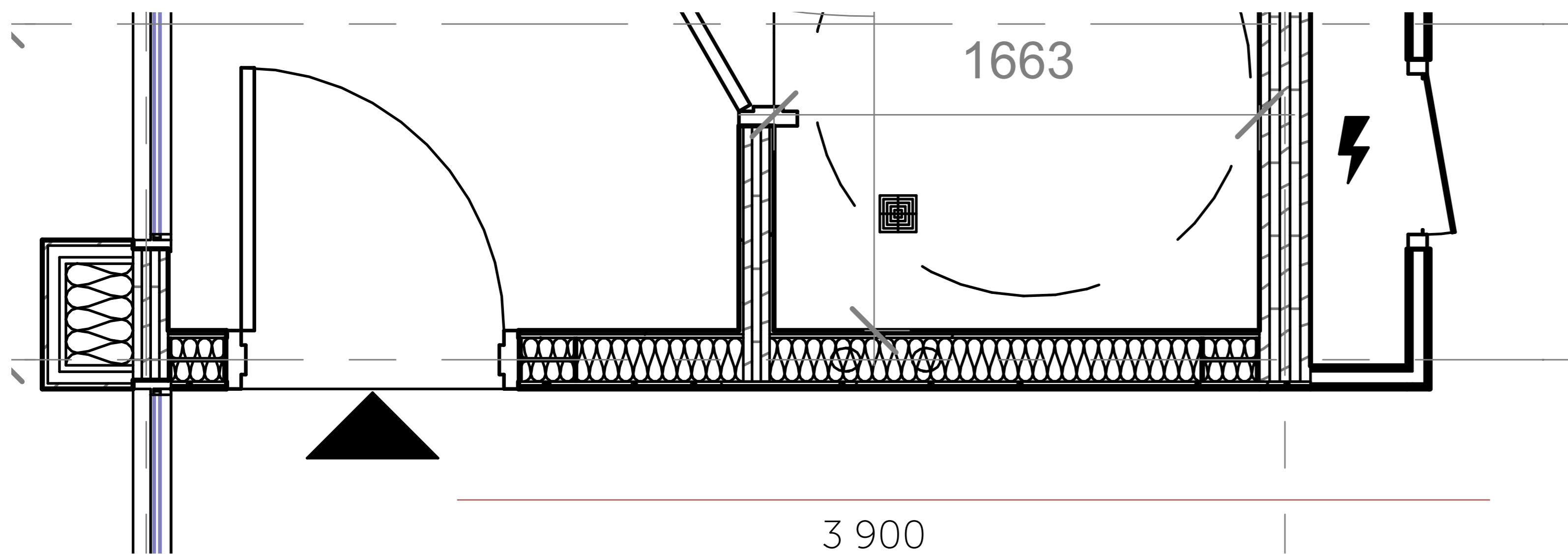
Concrete elevator core



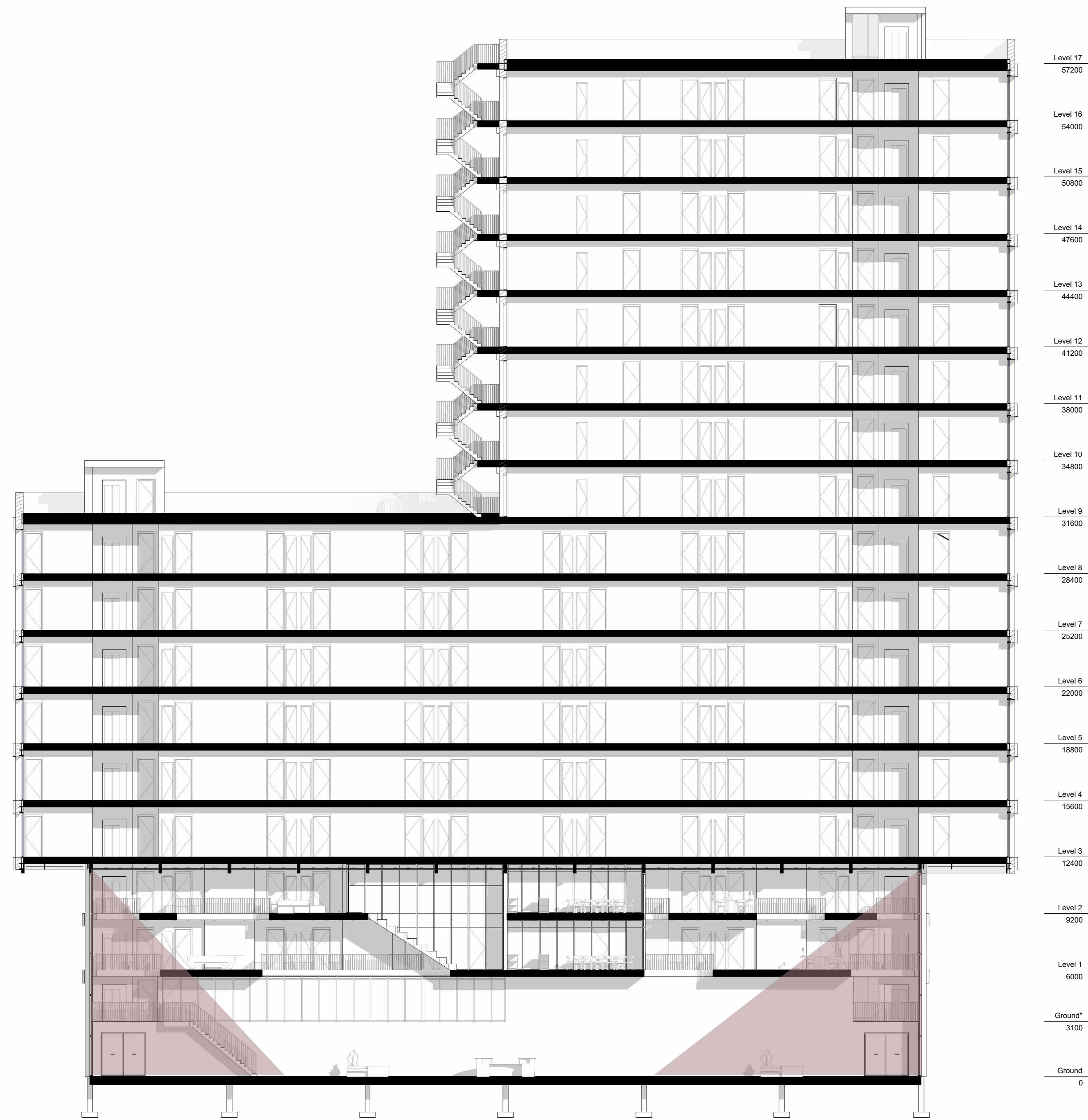
Steel frame cantilever



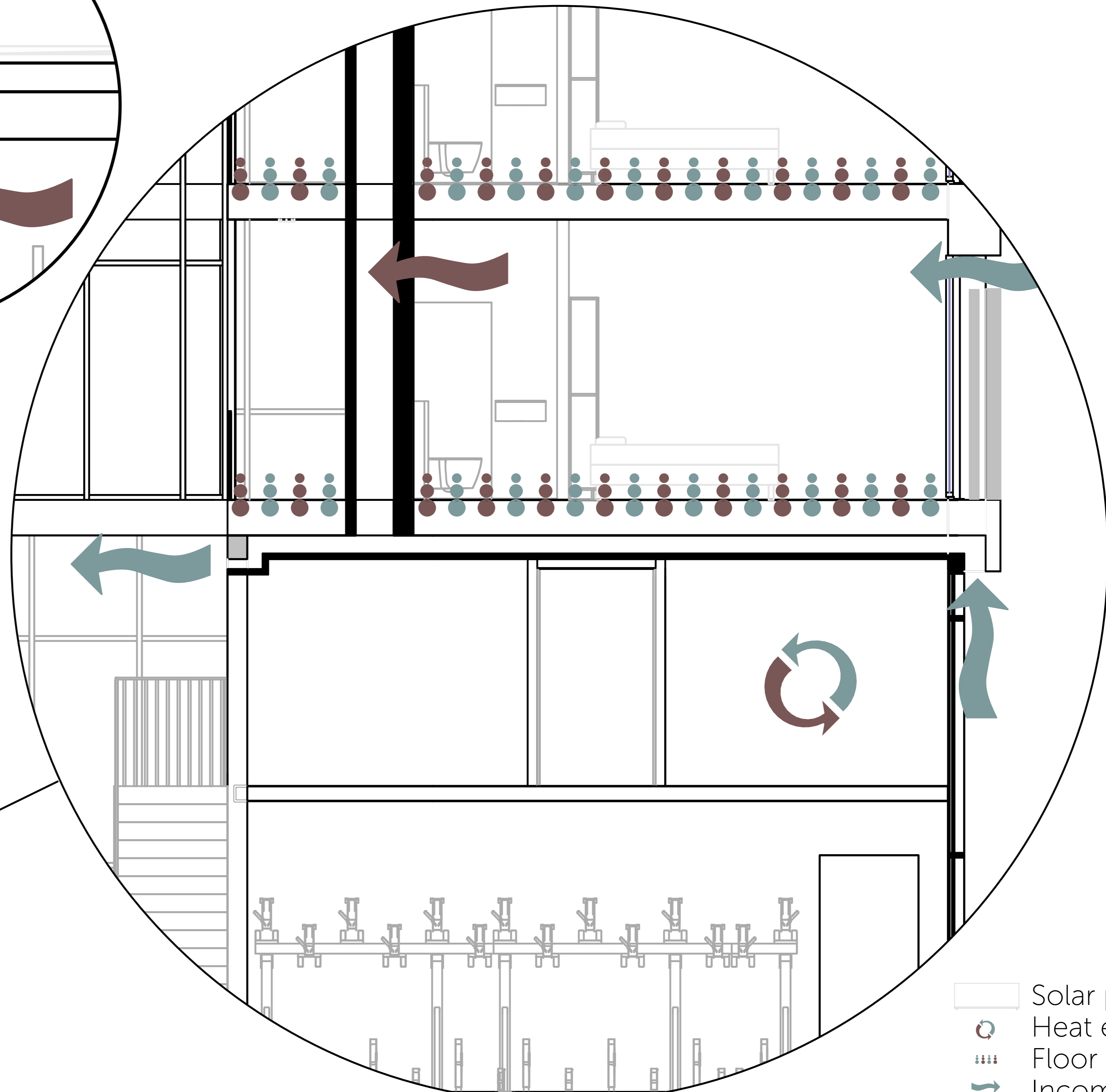
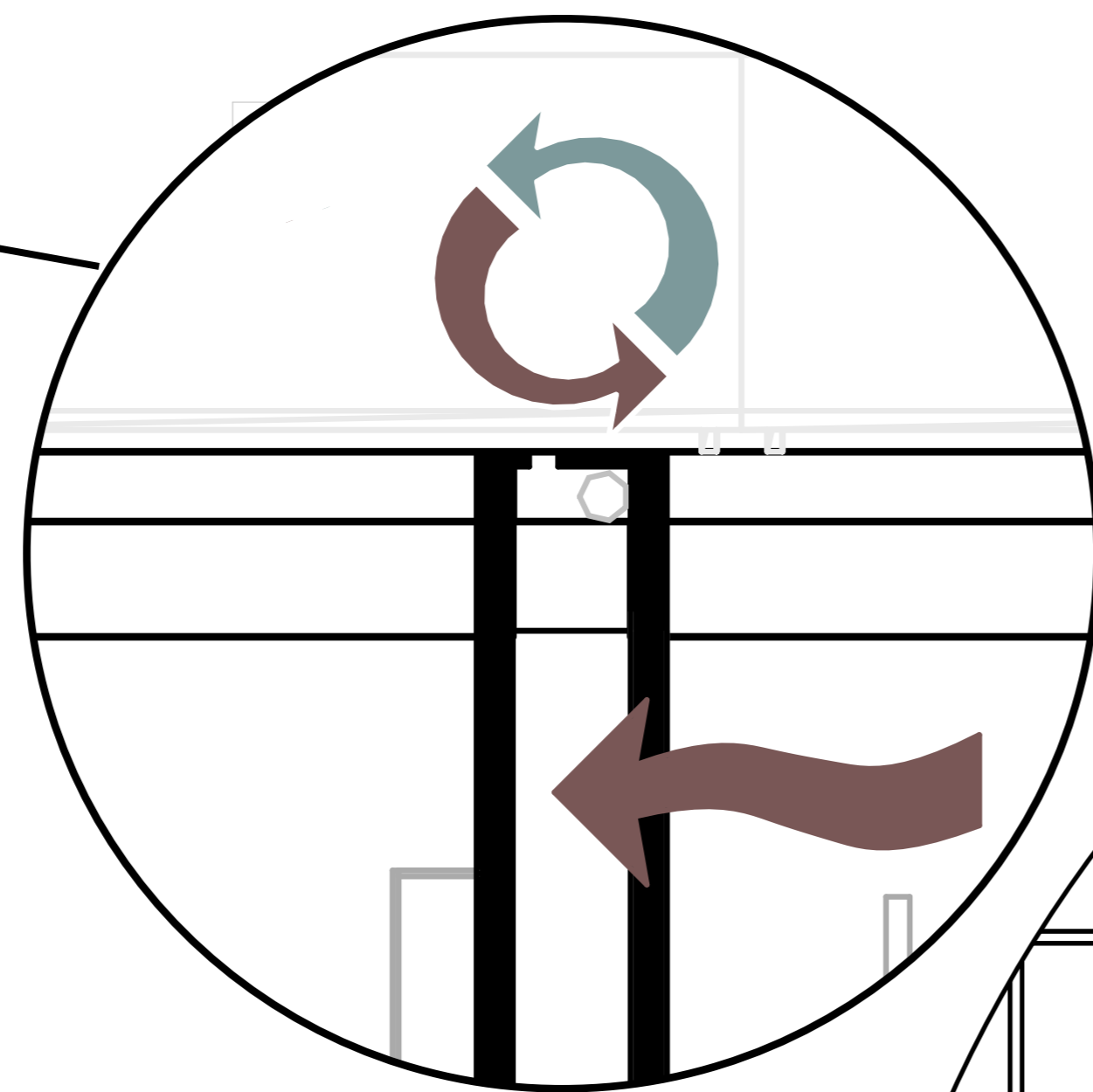
CLT floors



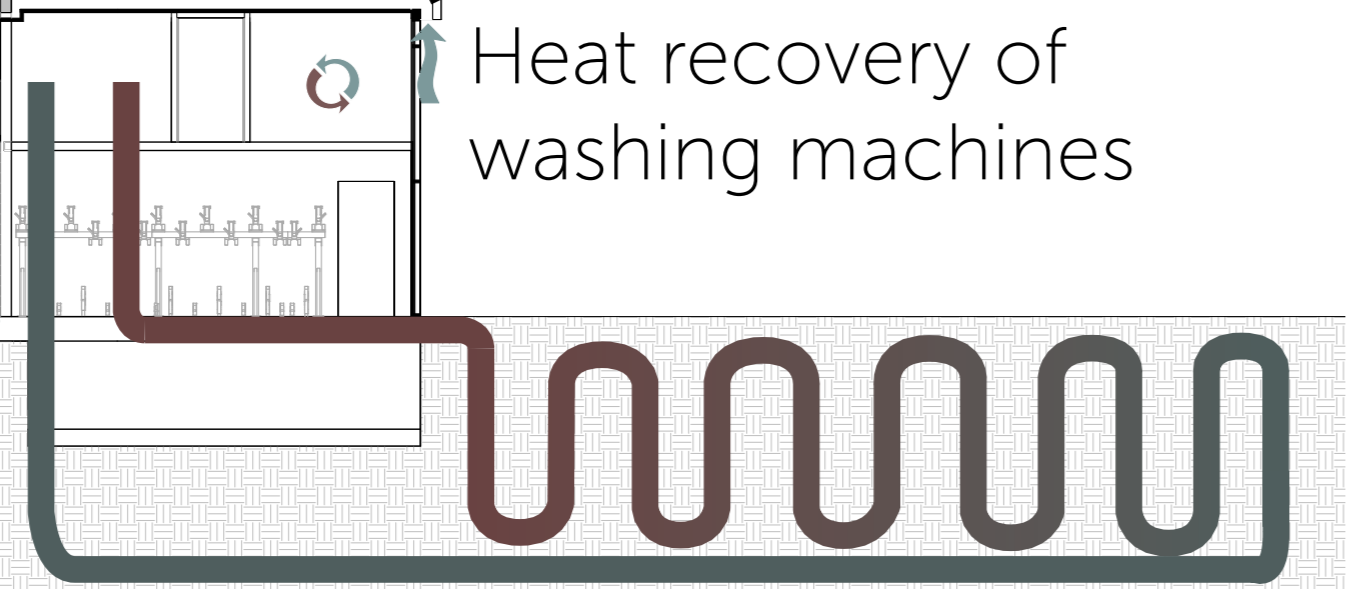










Heat recovery of exhaust air



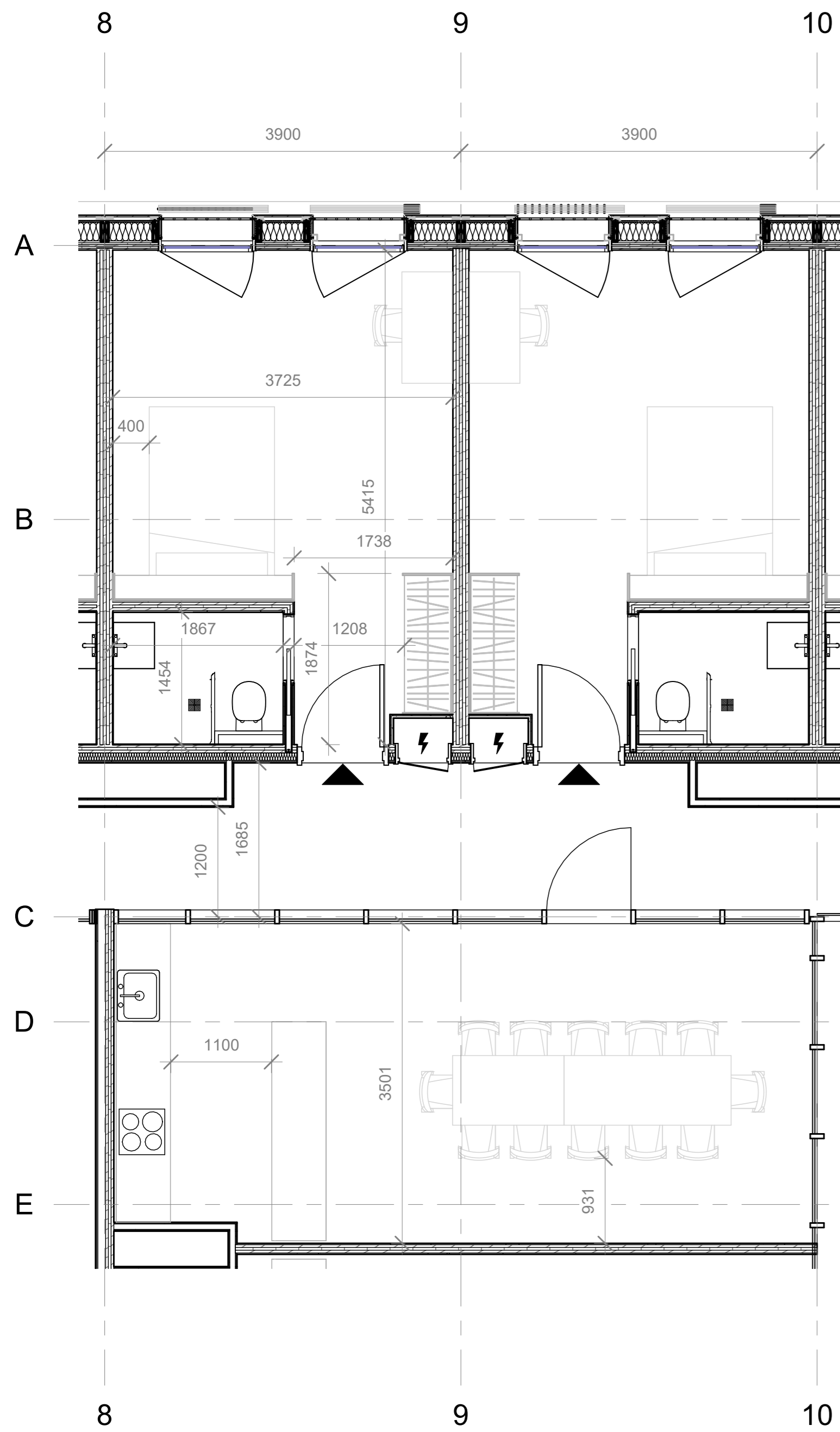
Heat recovery of washing machines



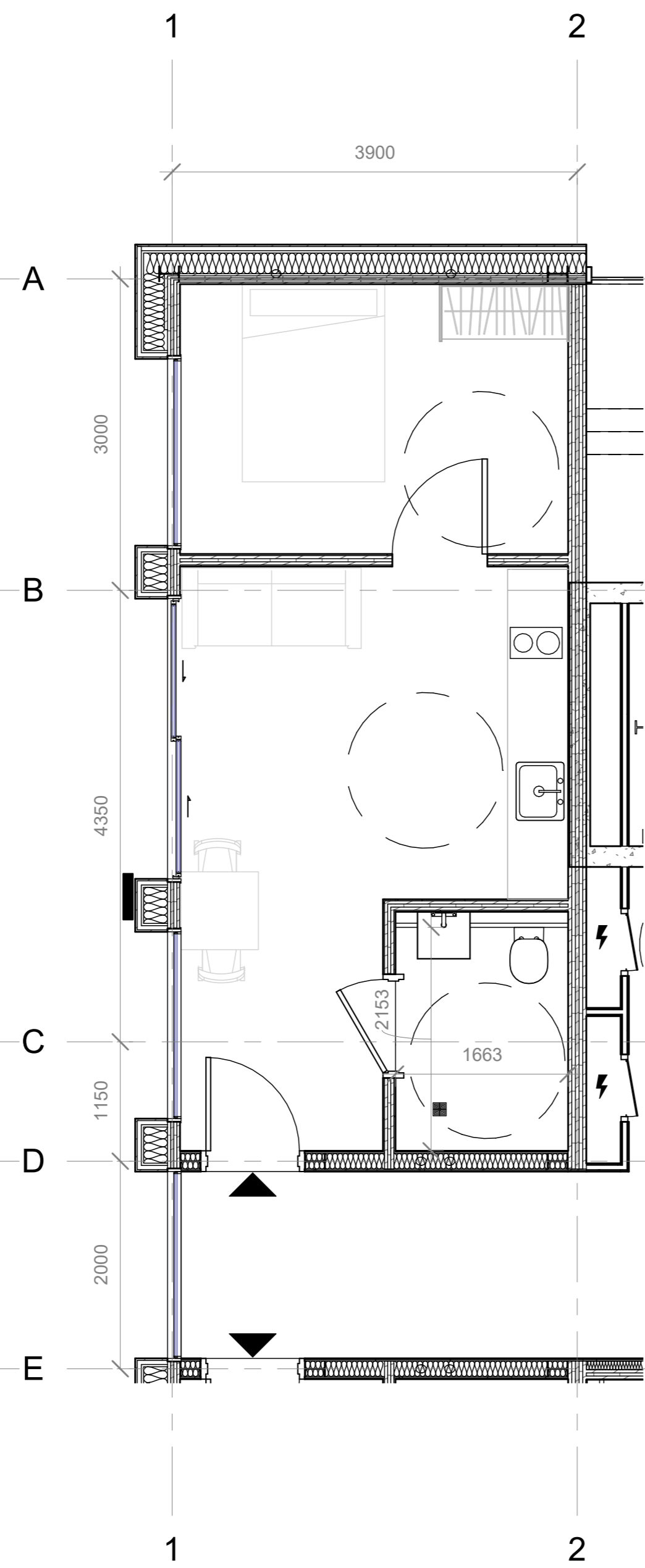
1000 m²
Vertical ground heat ex-
change

-  Solar panels
-  Heat exchange
-  Floor heating and cooling
-  Incoming fresh air
-  Exhaust air
-  2-layer Smart shading system

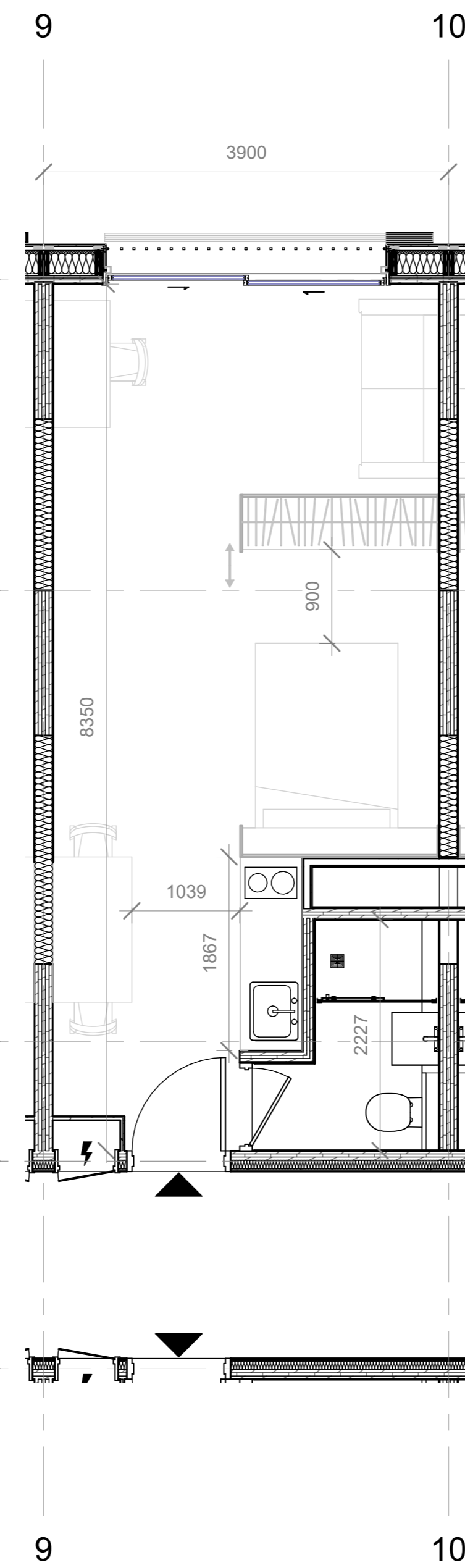
Dwelling type A x42



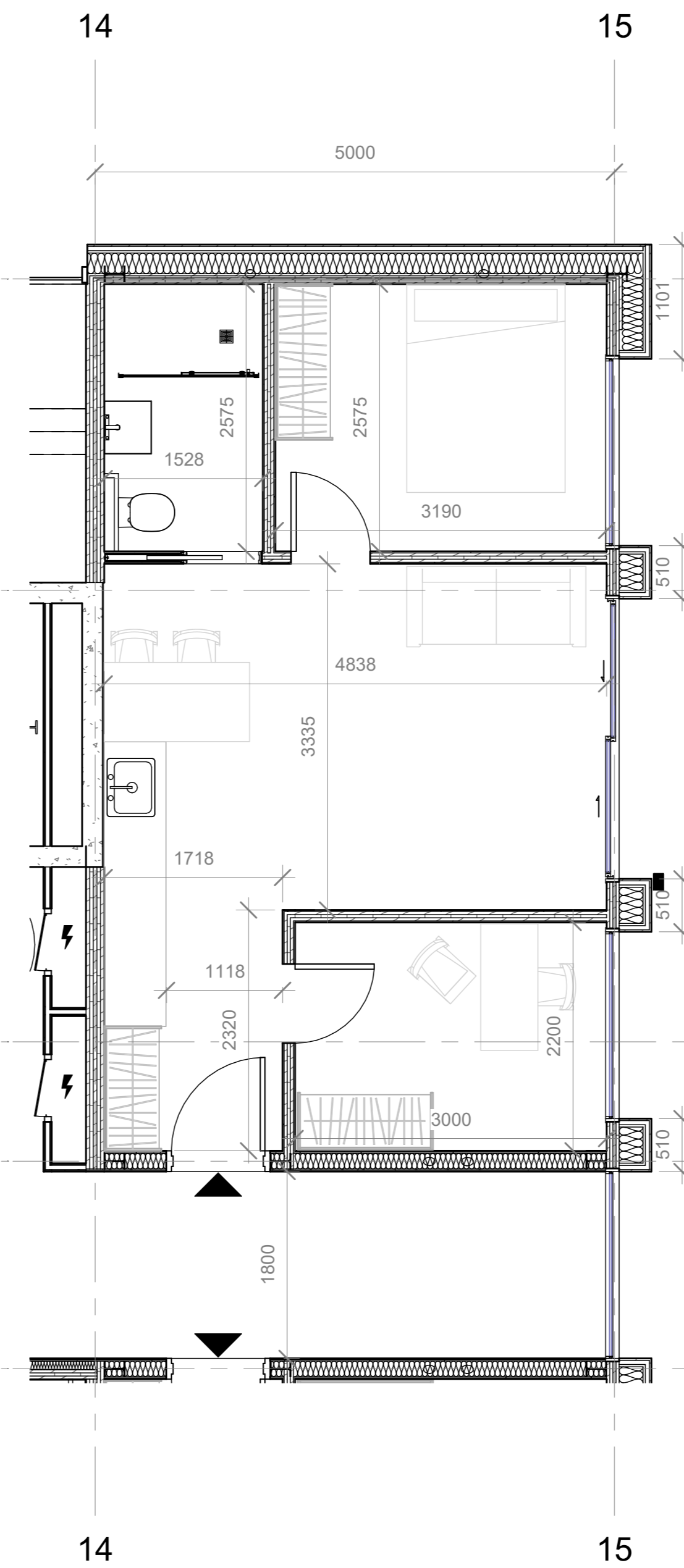
Dwelling type B x12



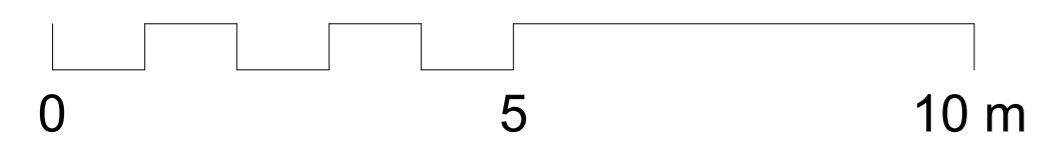
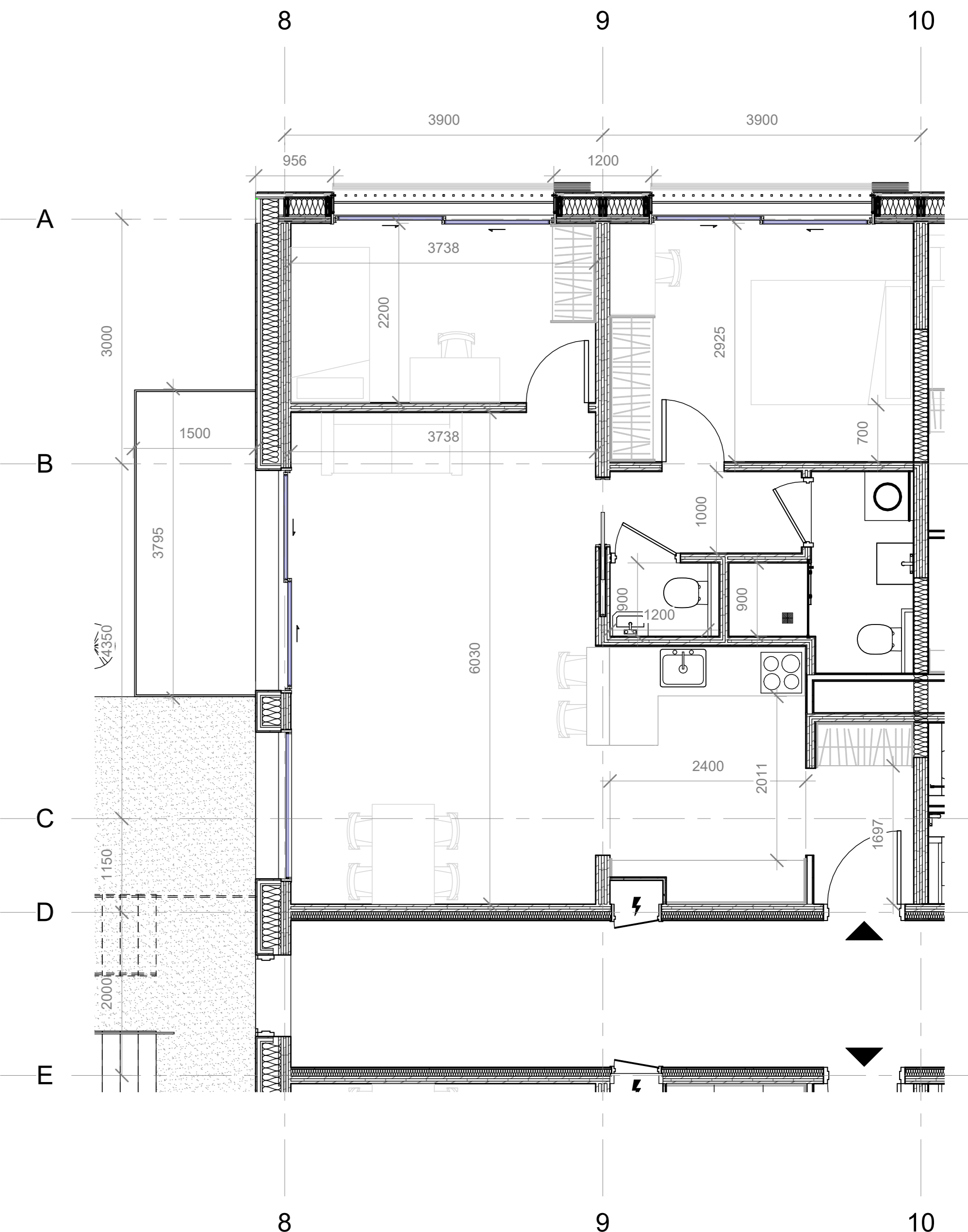
Dwelling type C x188



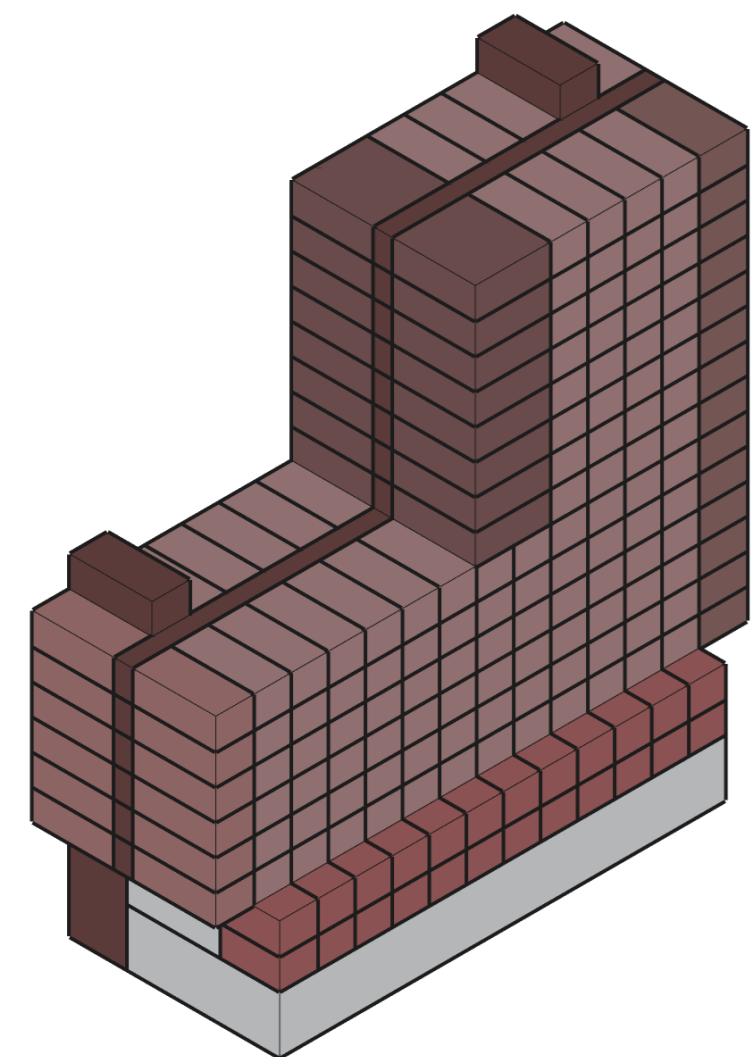
Dwelling type D x28



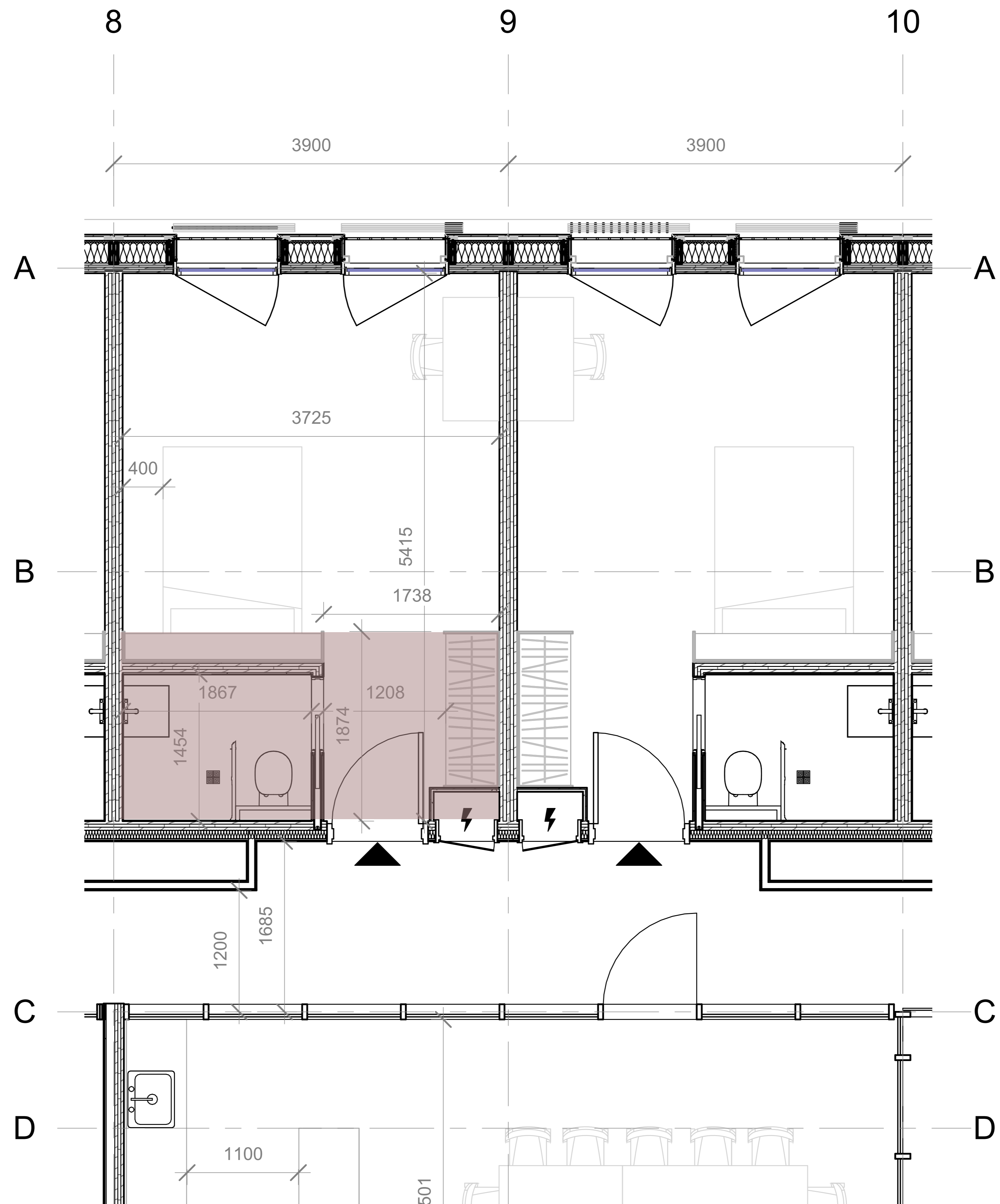
Dwelling type E x16



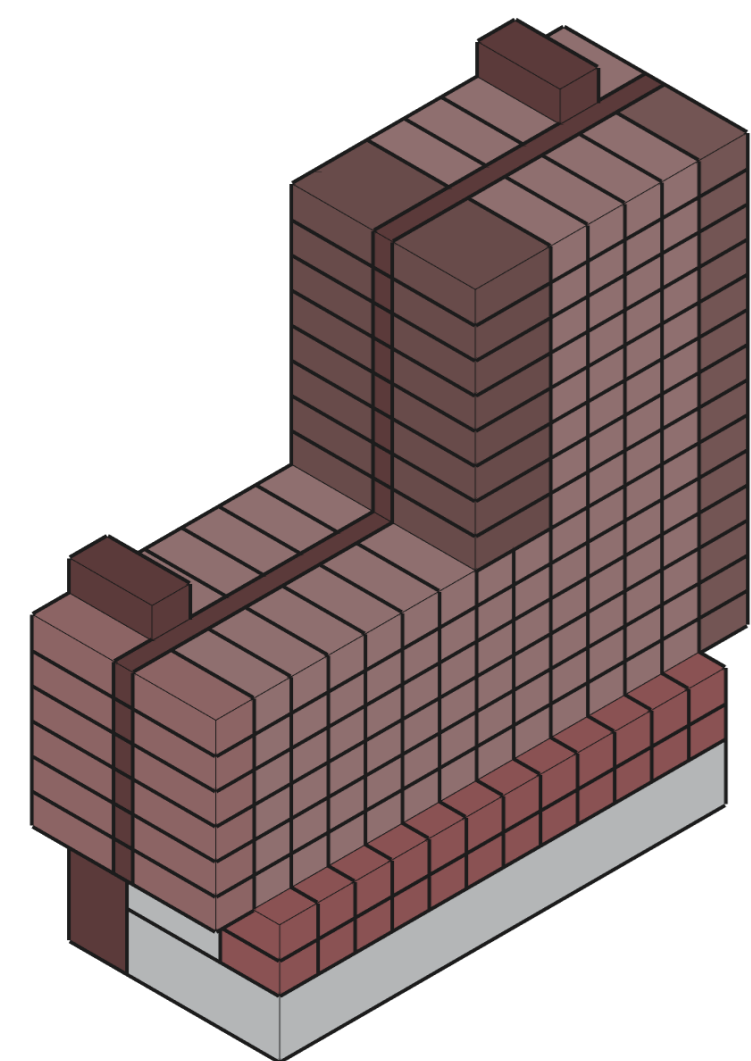
Dwelling type A x42
20m²



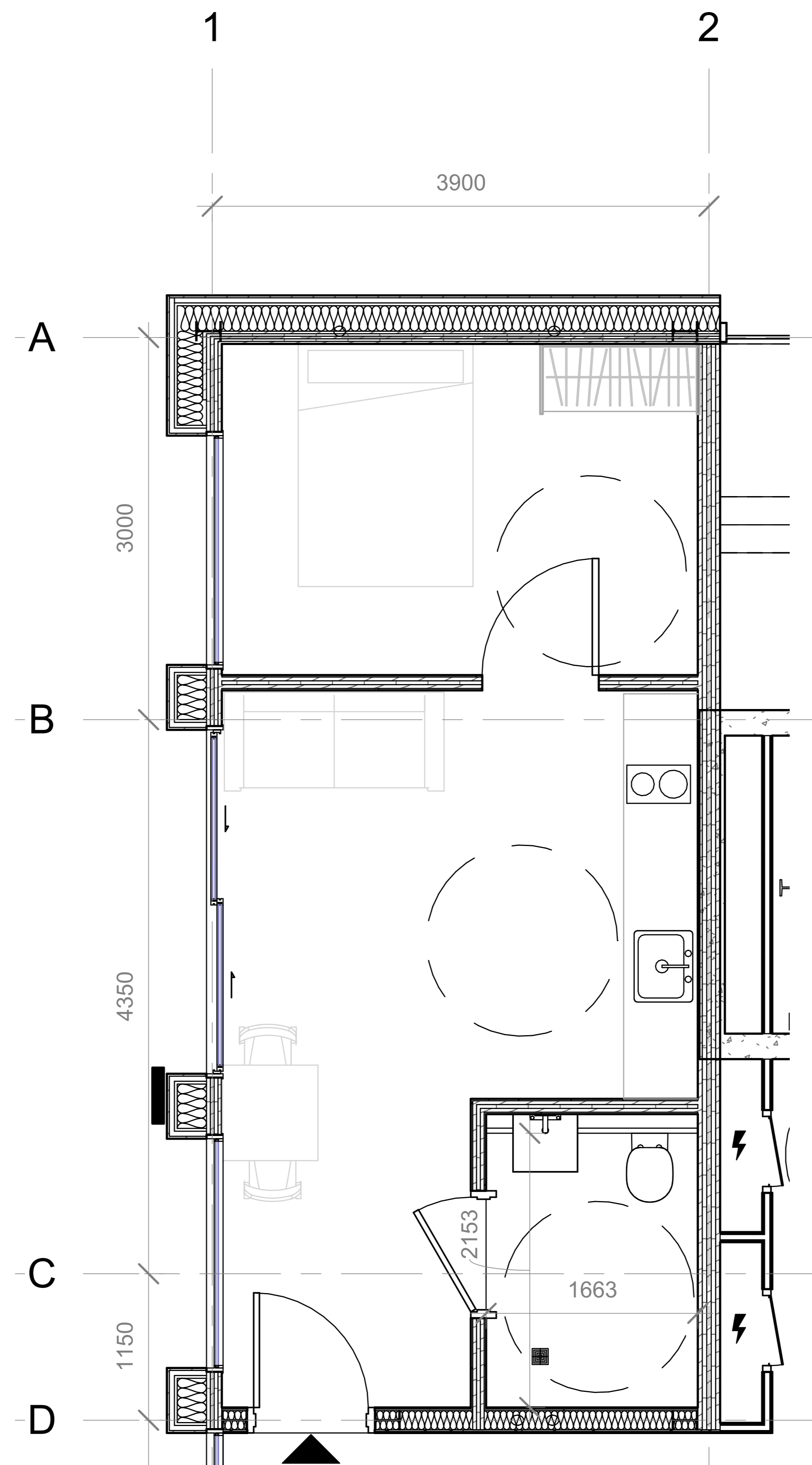
- Dwelling A
- Dwelling B
- Dwelling C
- Dwelling D
- Dwelling E
- Circulation



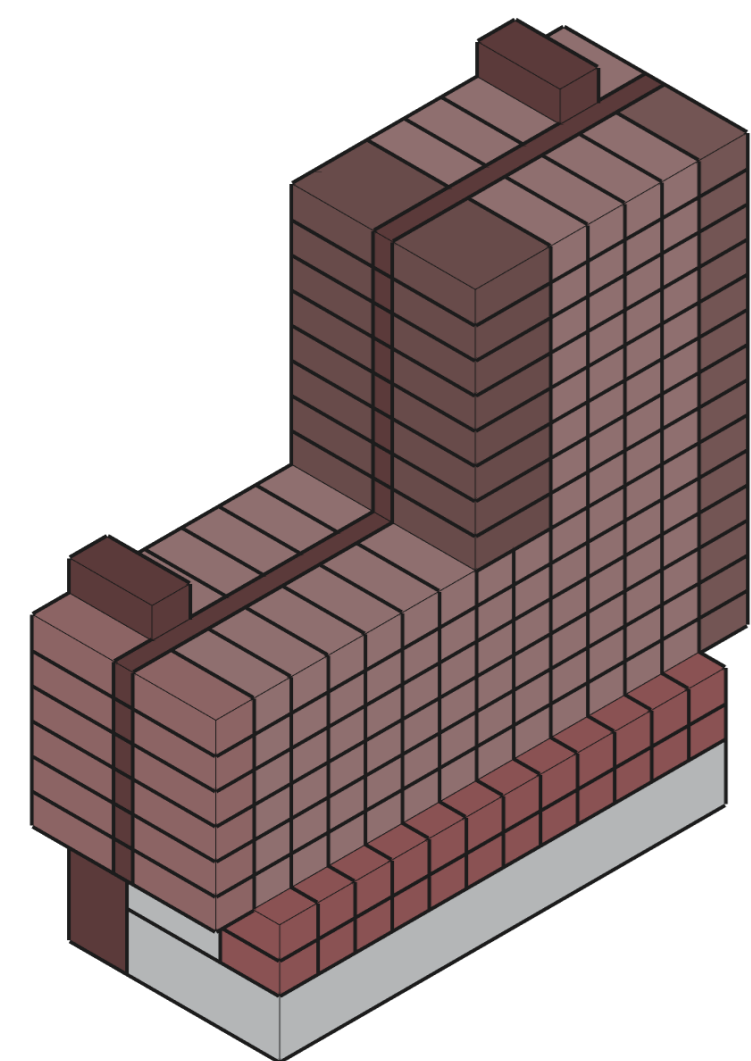
Dwelling type B x12
31m²



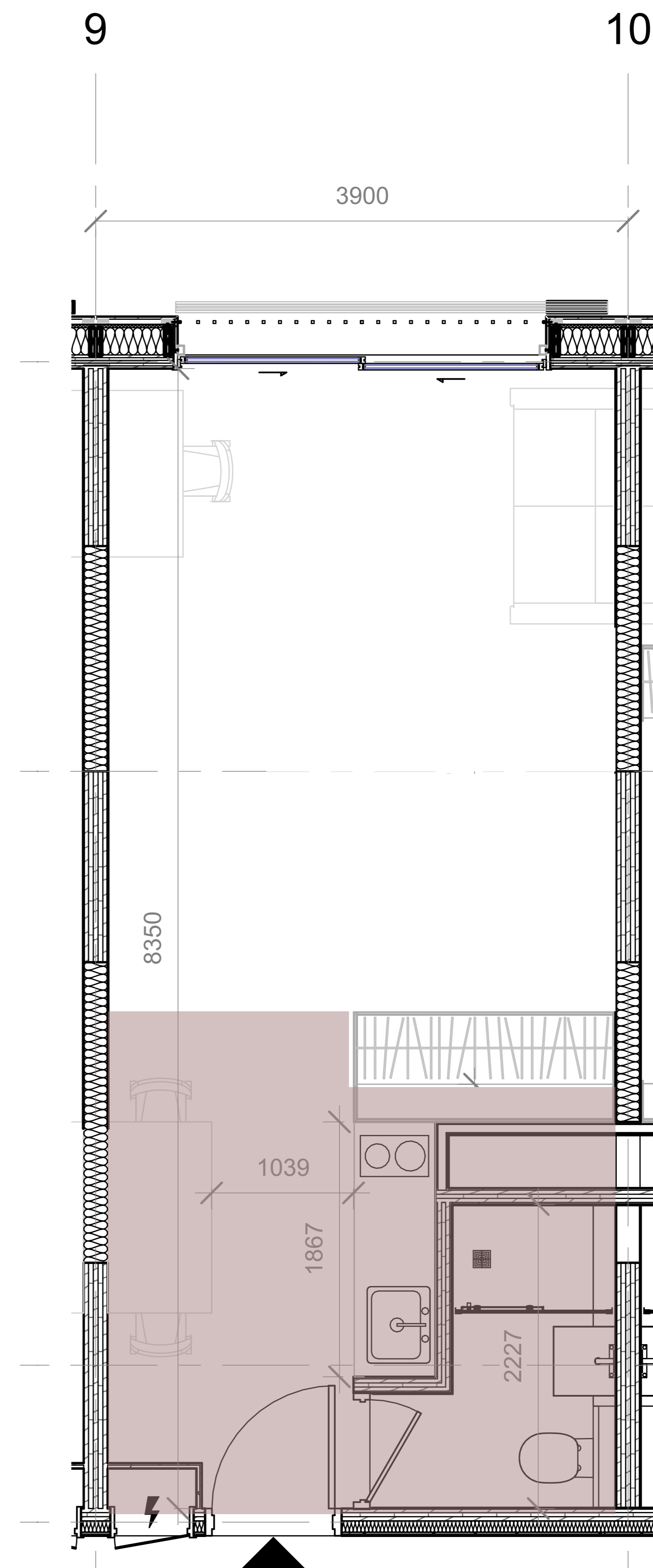
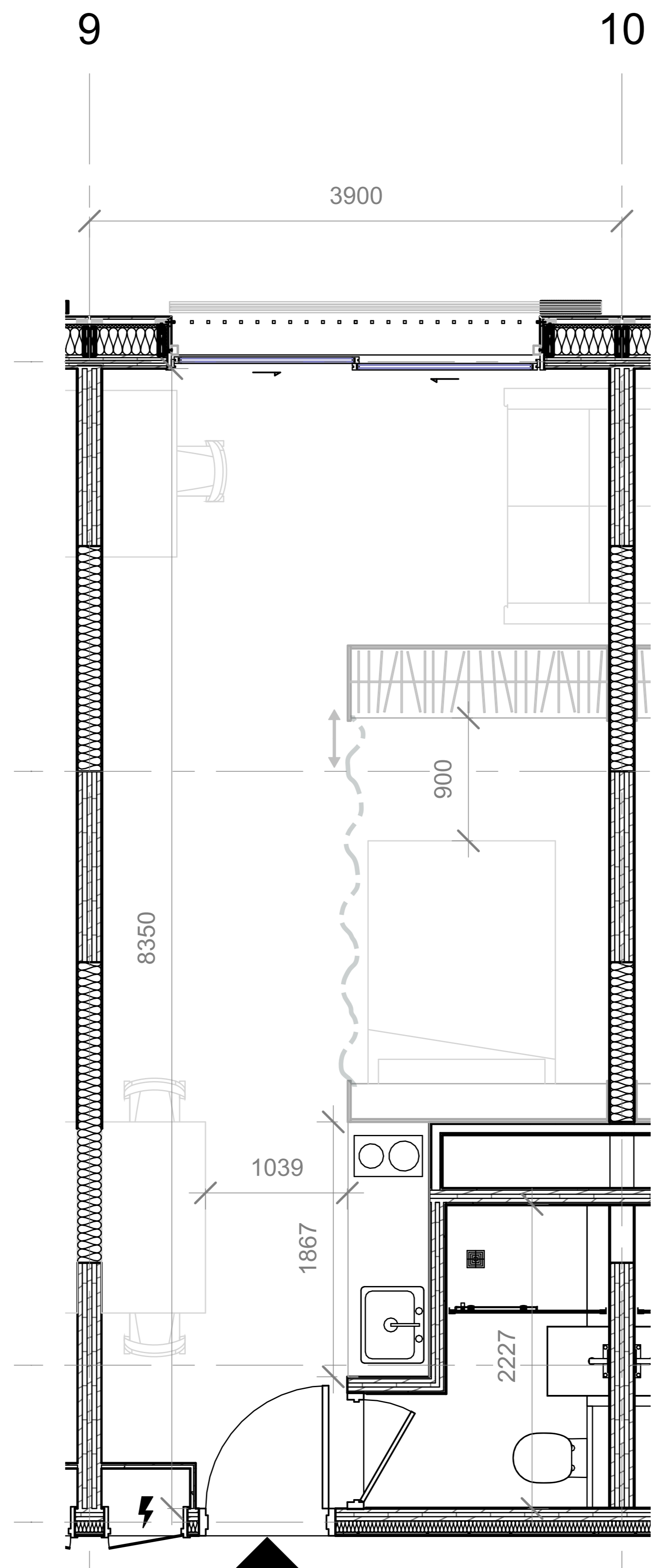
- Dwelling A
- Dwelling B
- Dwelling C
- Dwelling D
- Dwelling E
- Circulation



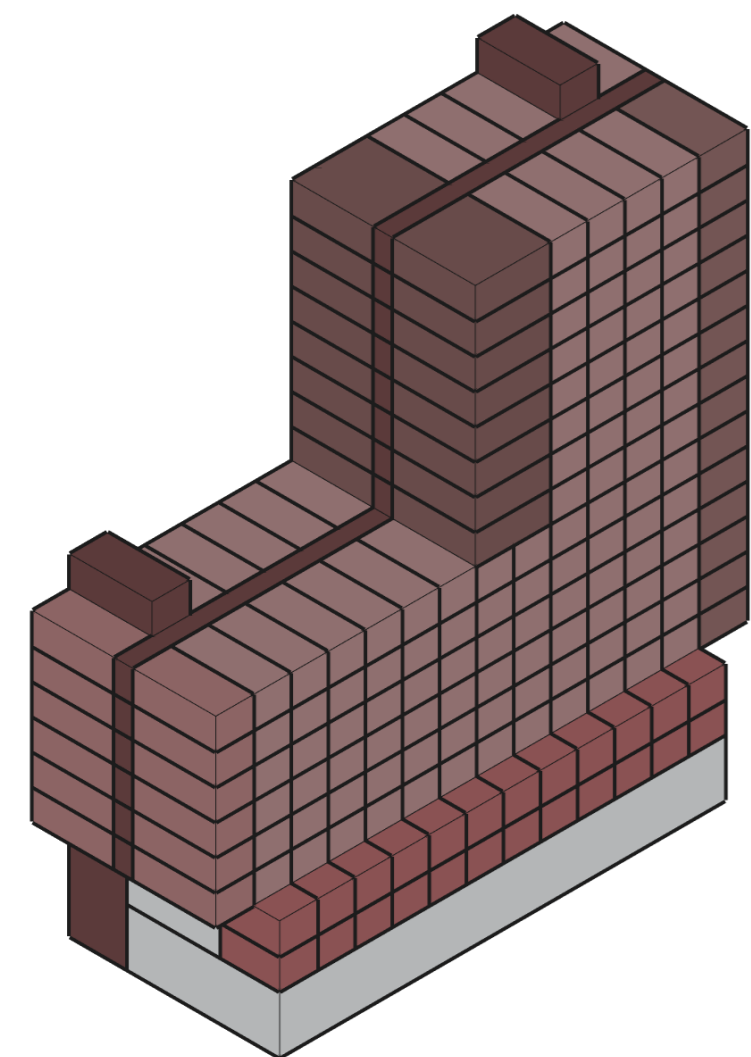
Dwelling type C x188
31m²



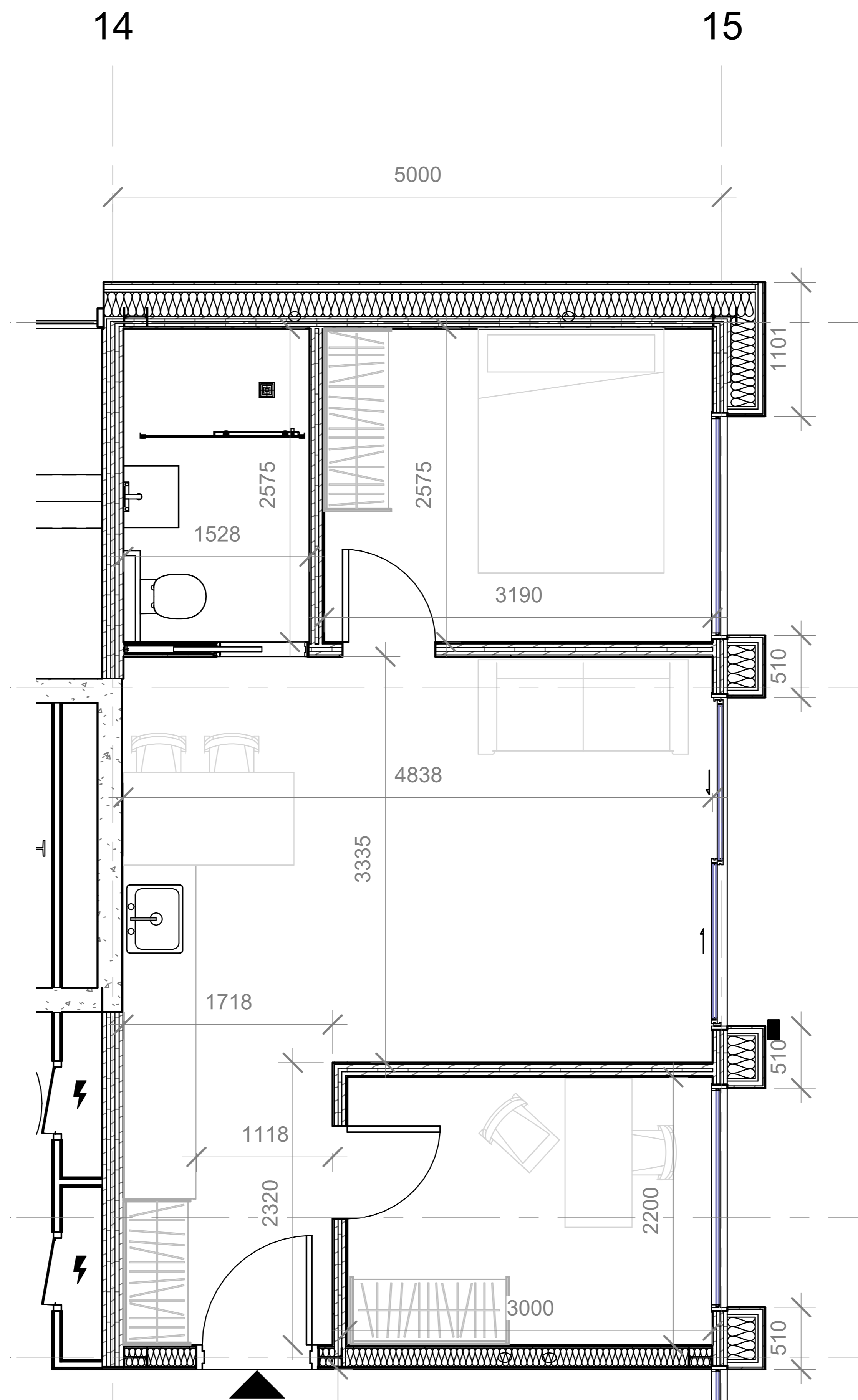
- Dwelling A
- Dwelling B
- Dwelling C
- Dwelling D
- Dwelling E
- Circulation



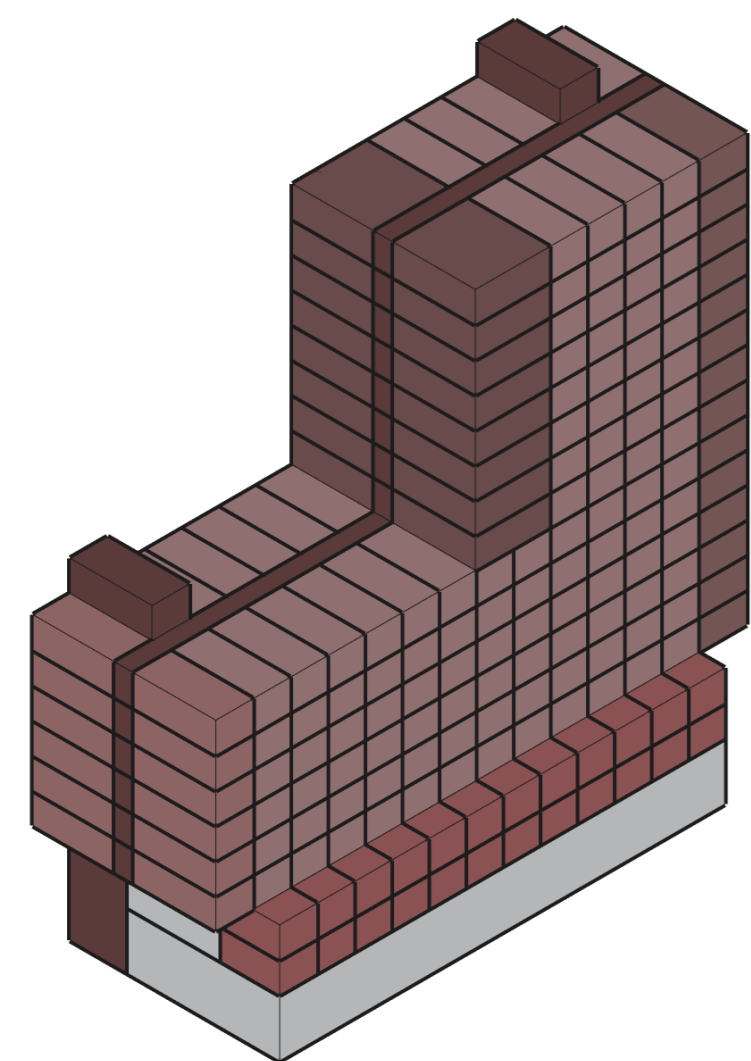
Dwelling type D x28
40m²



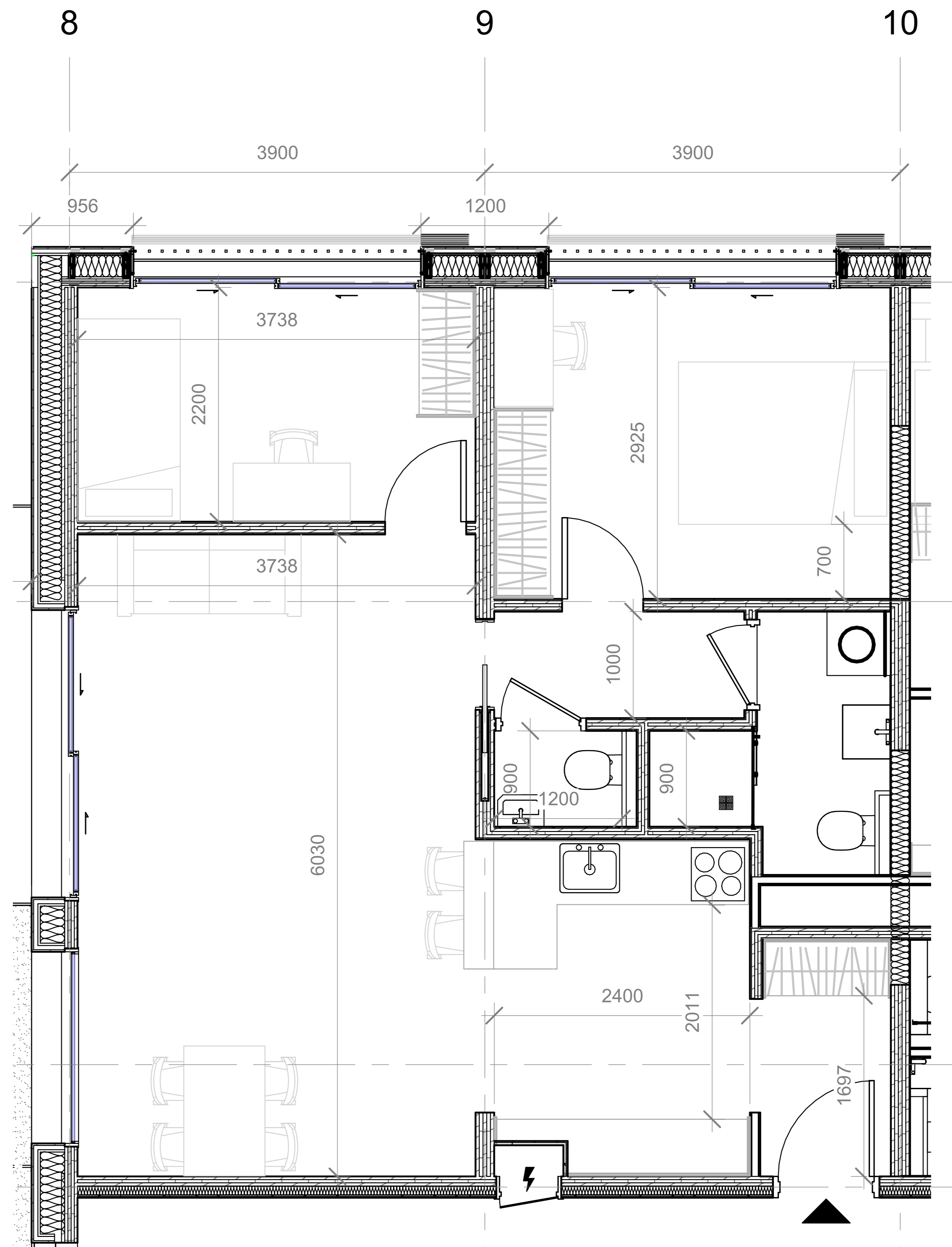
- Dwelling A
- Dwelling B
- Dwelling C
- Dwelling D
- Dwelling E
- Circulation

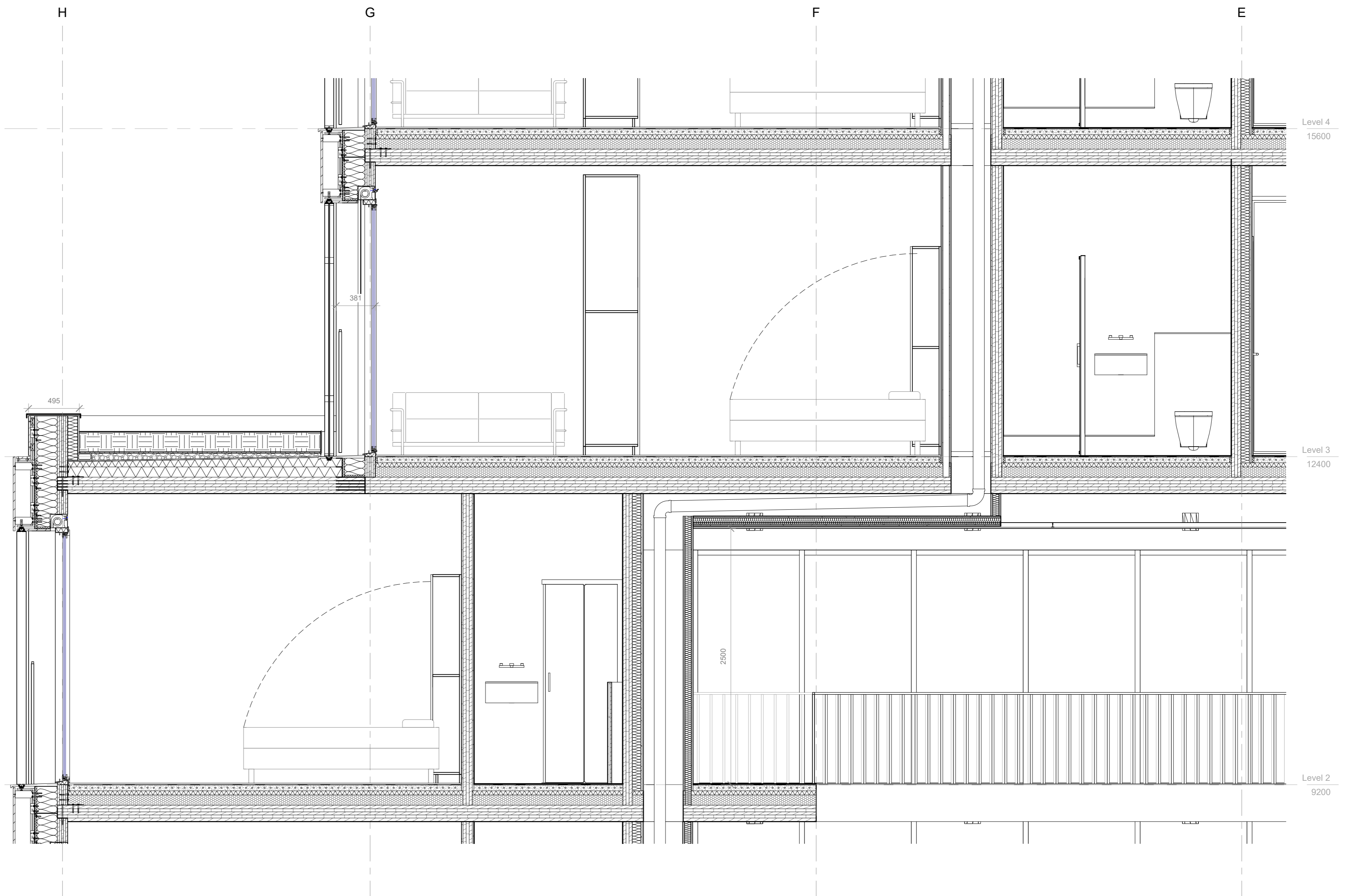
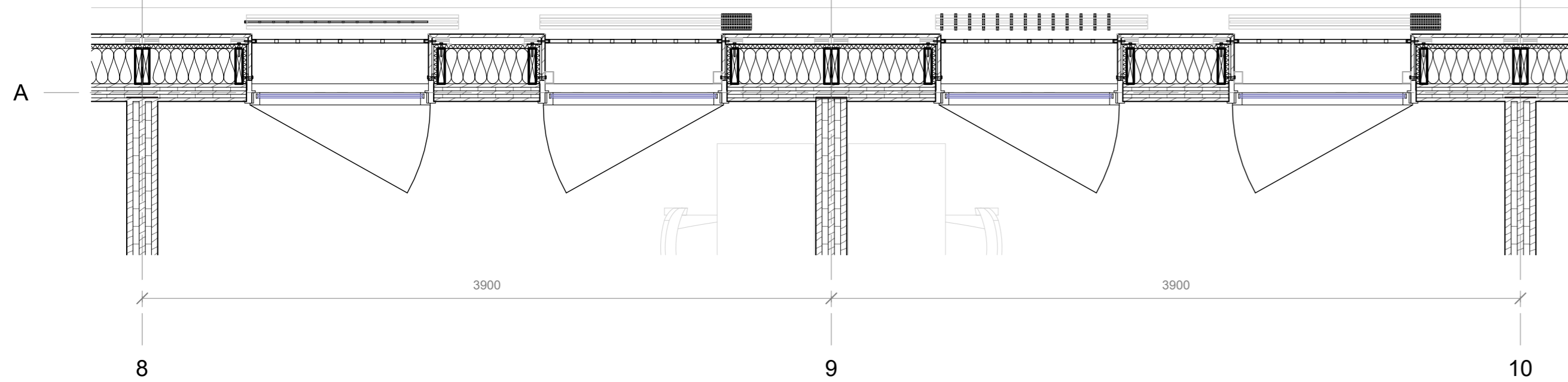
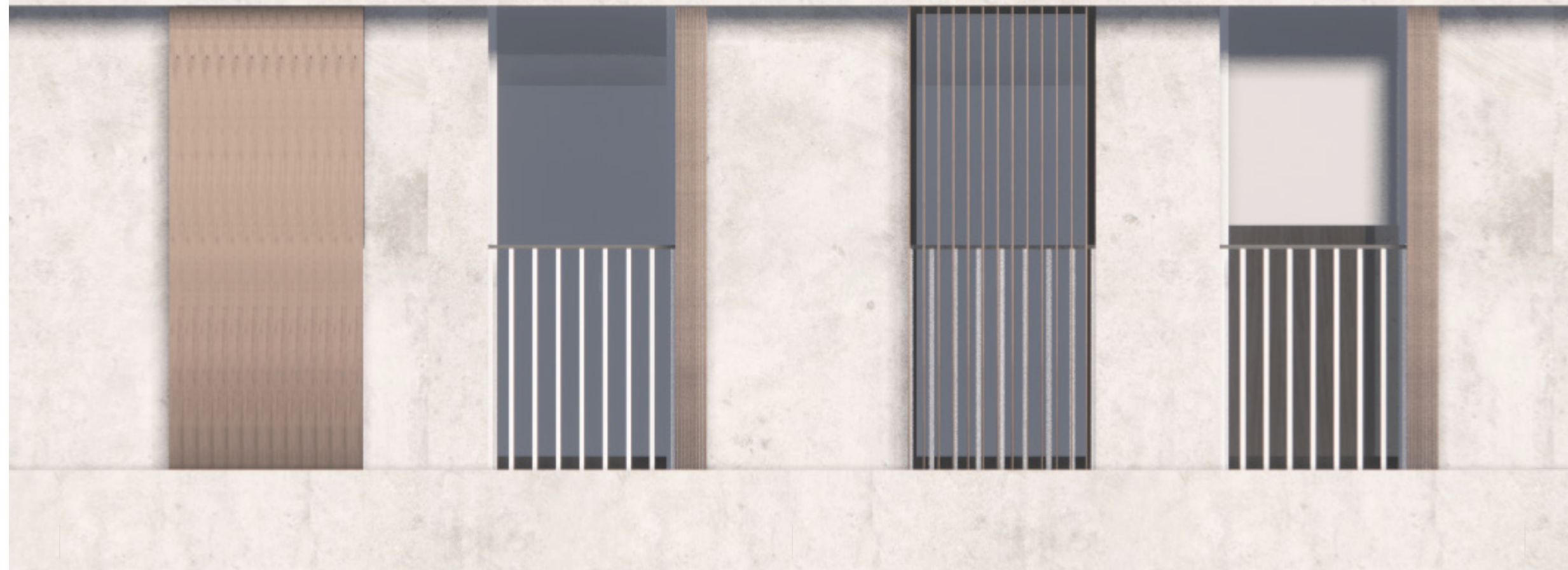
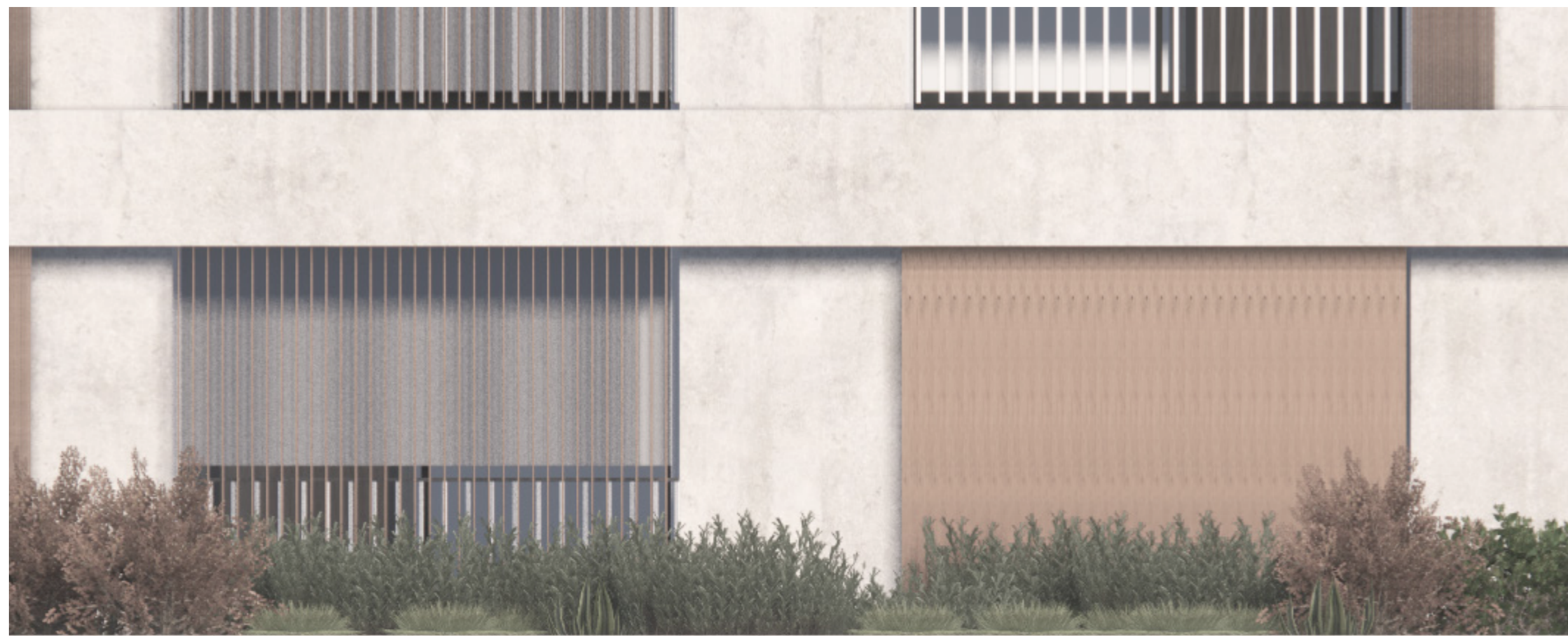


Dwelling type E x16
64m²

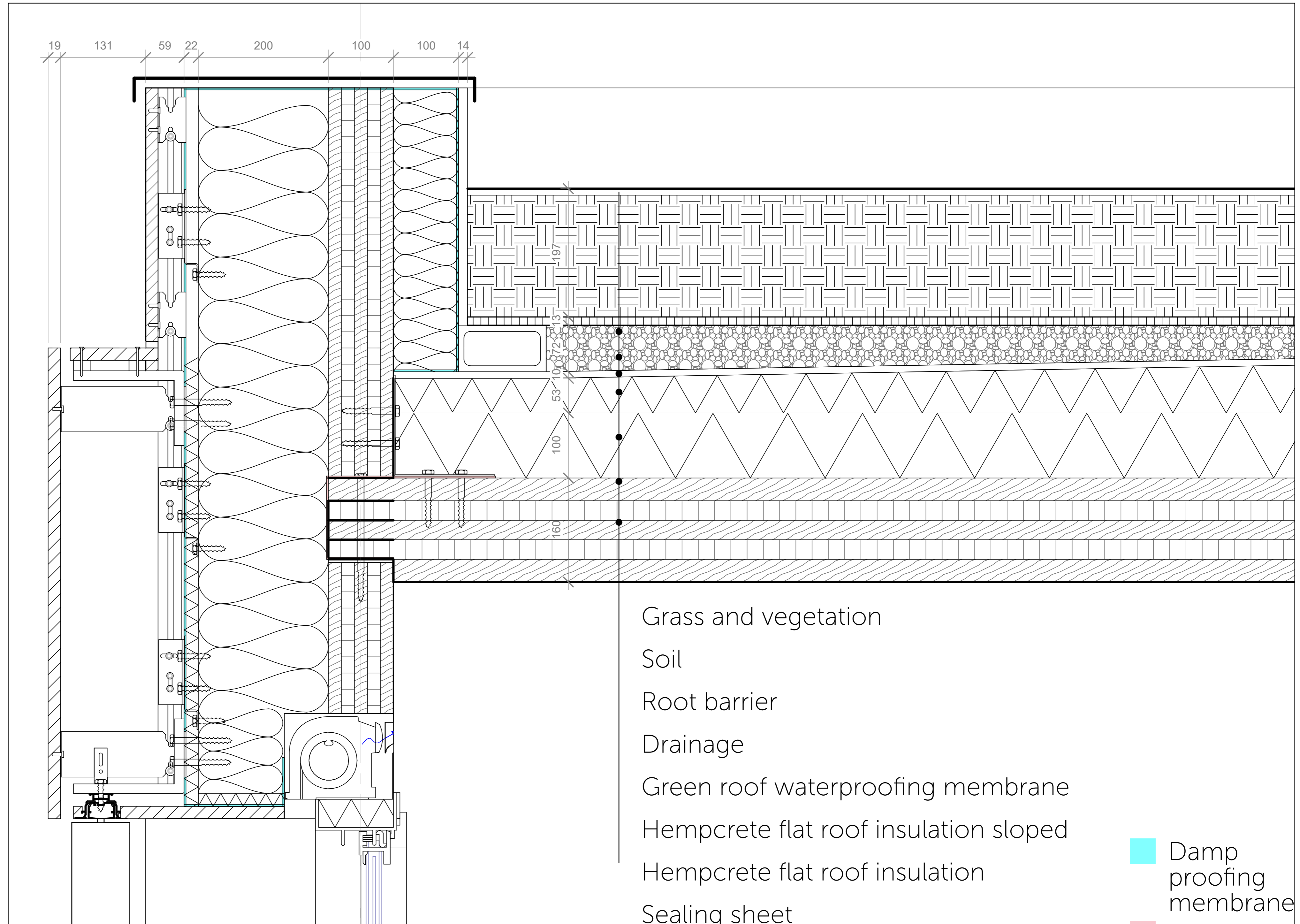
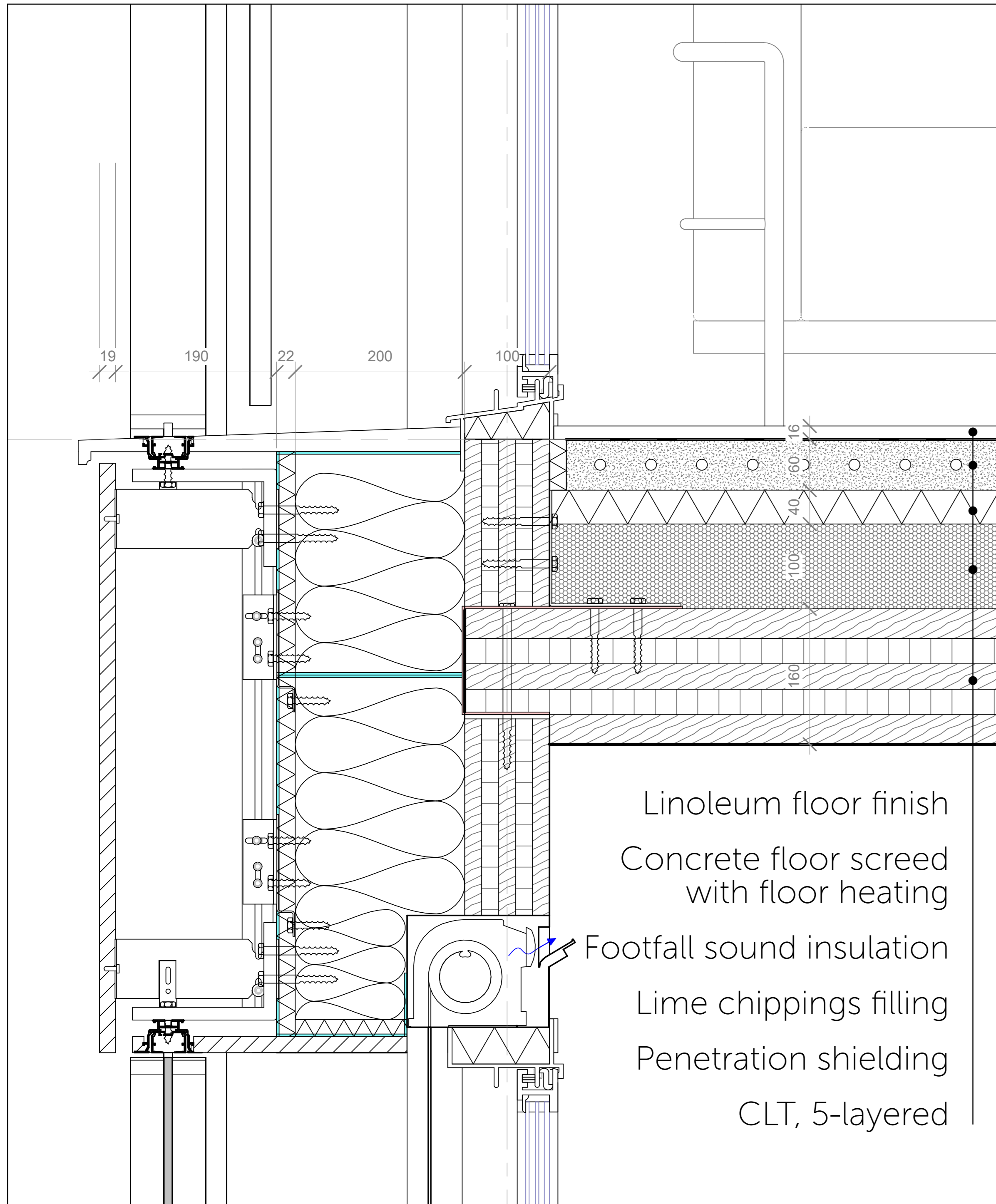


- Dwelling A
- Dwelling B
- Dwelling C
- Dwelling D
- Dwelling E
- Circulation

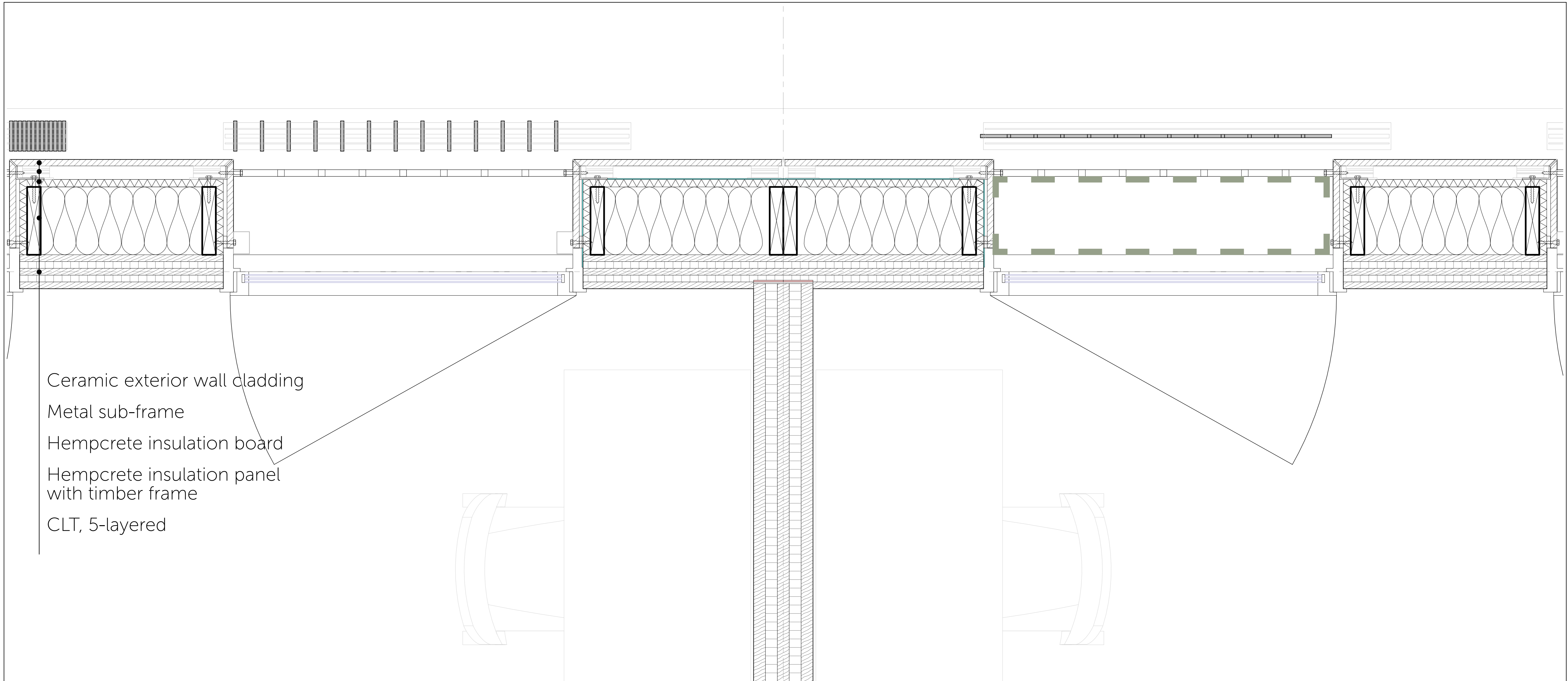




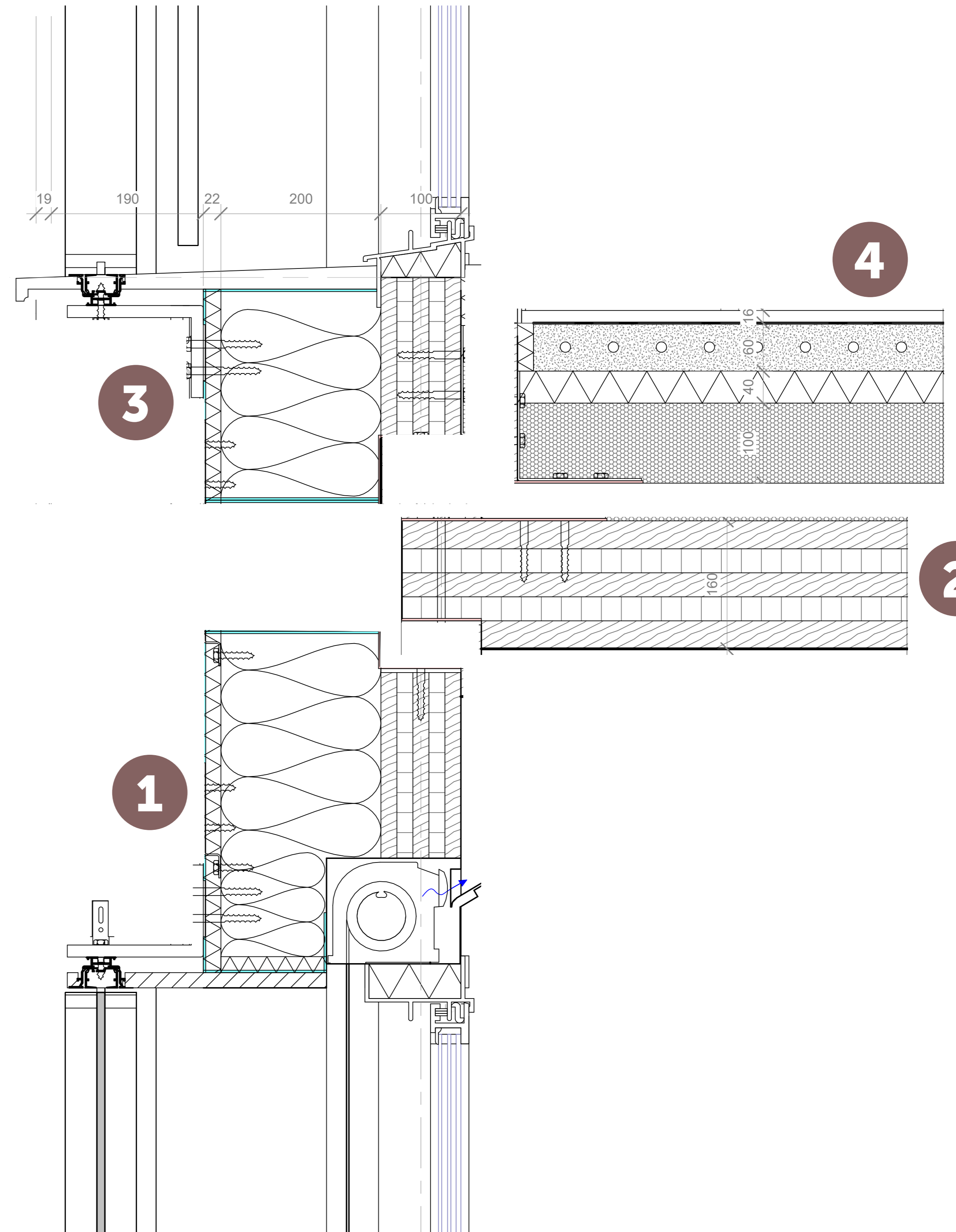
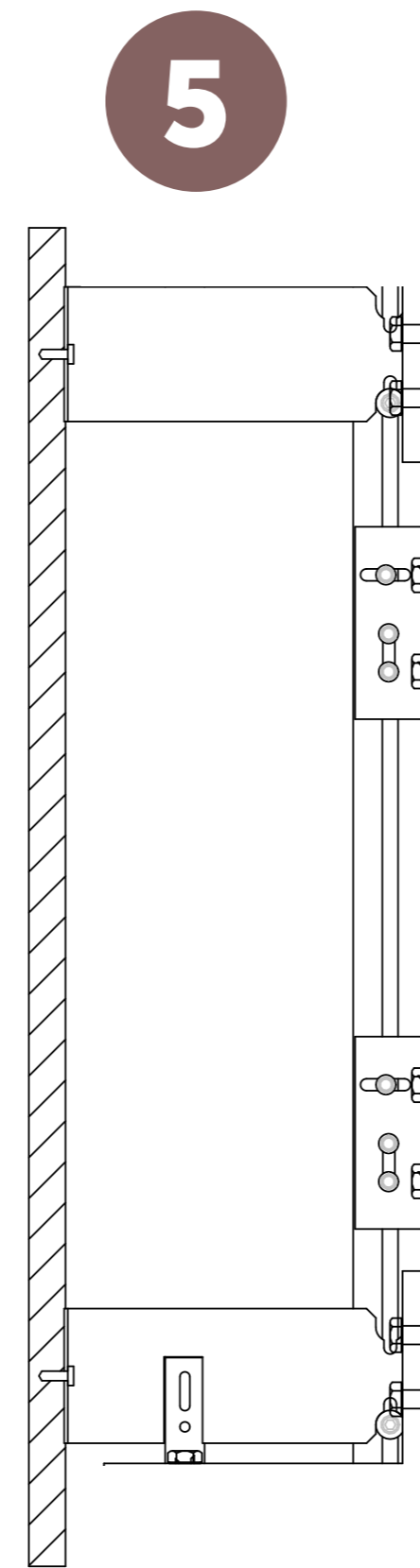
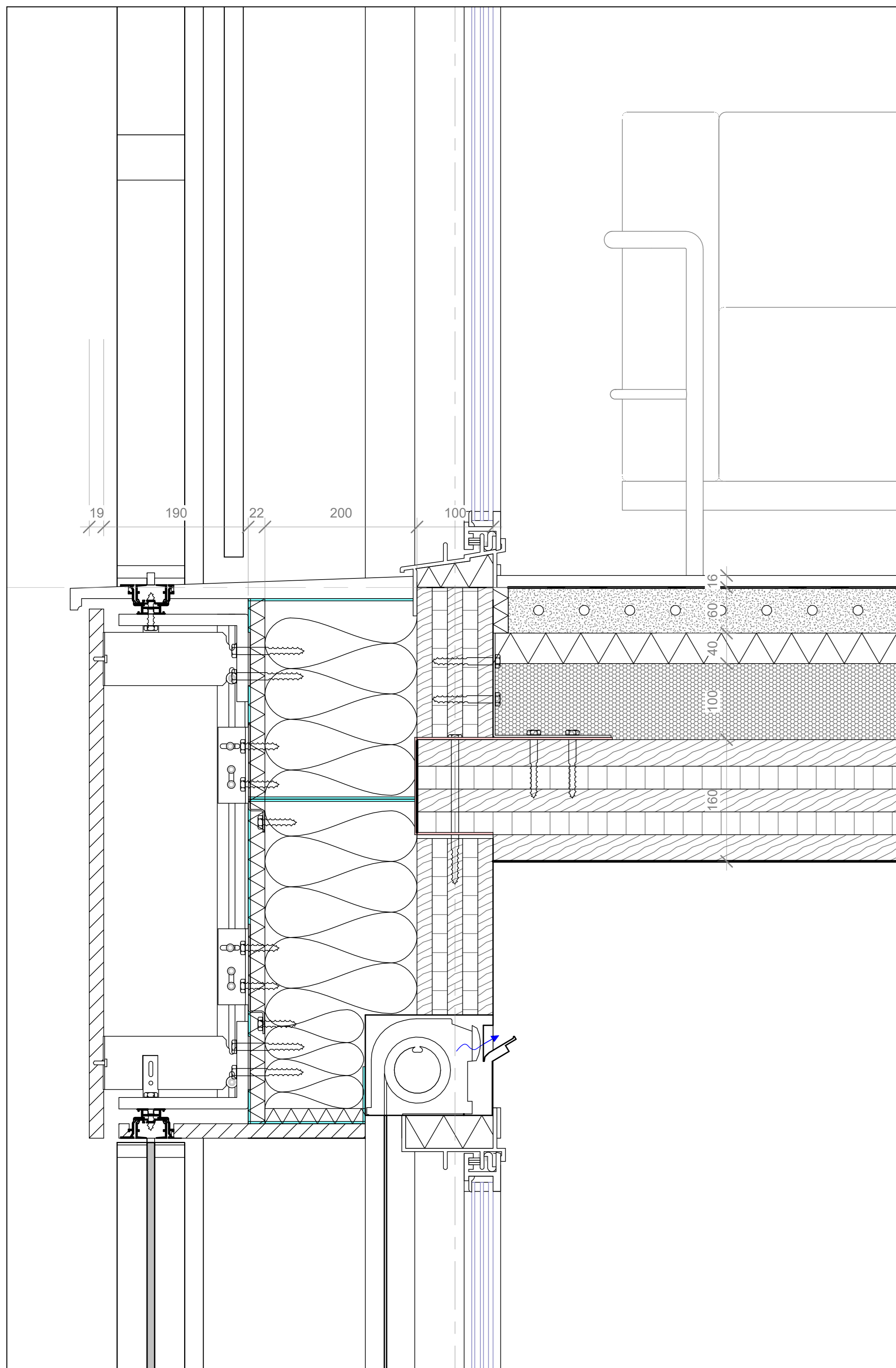
Proteus CX Stone
Colour: Dover

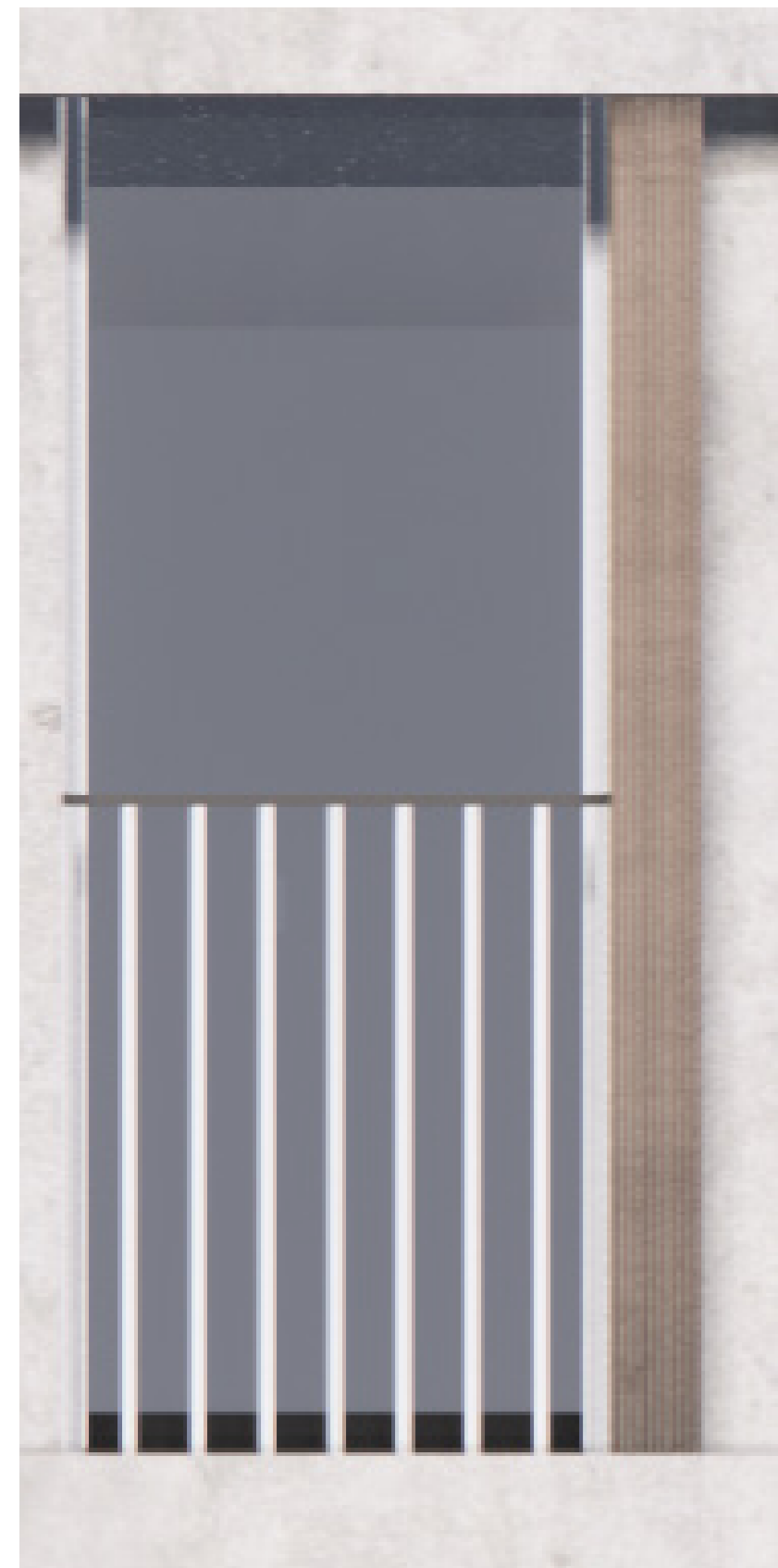


■ Damp proofing membrane
 ■ Acoustic Sealant Tape

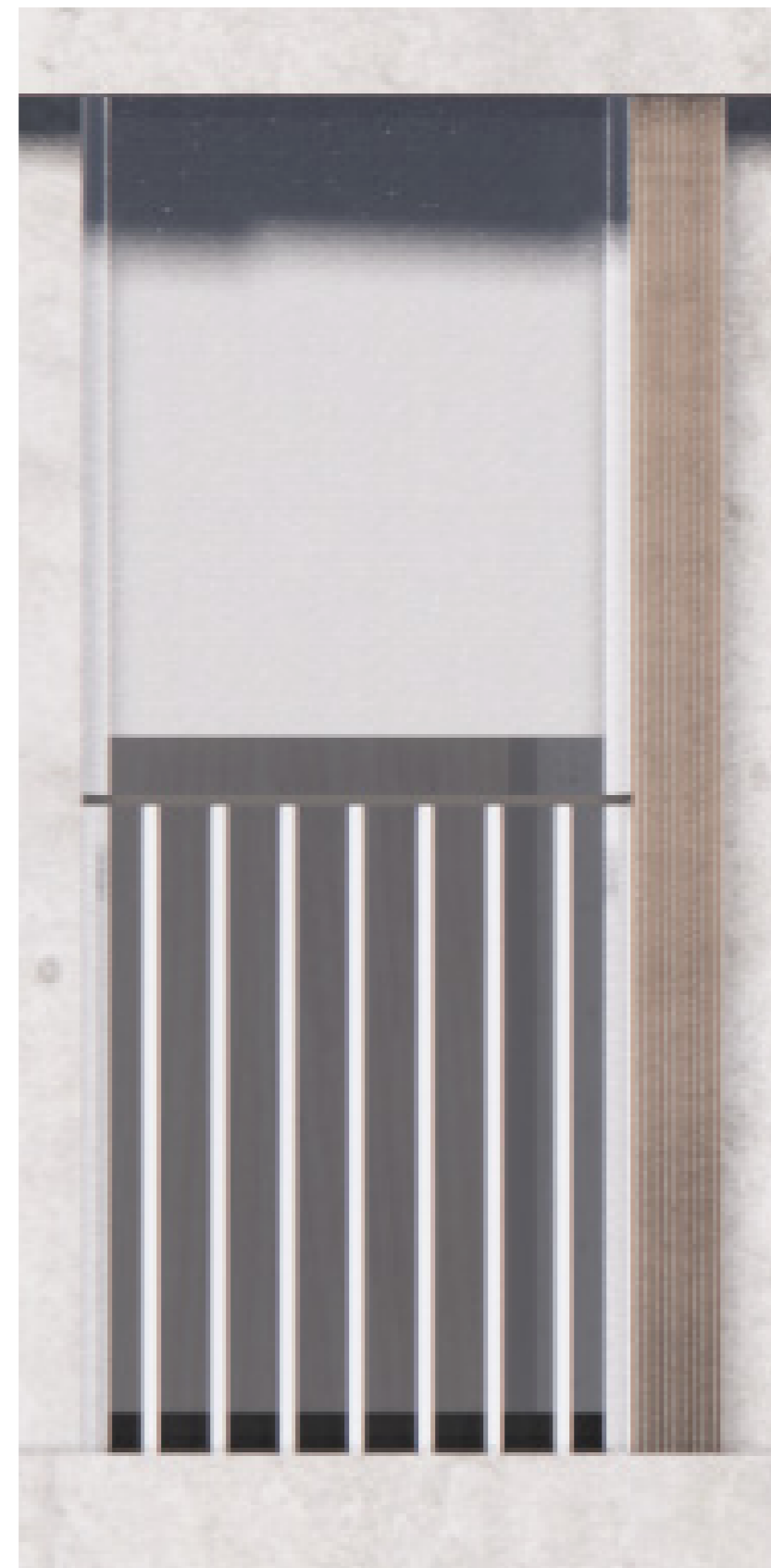


Ceramic exterior wall cladding
 Metal sub-frame
 Hempcrete insulation board
 Hempcrete insulation panel
 with timber frame
 CLT, 5-layered





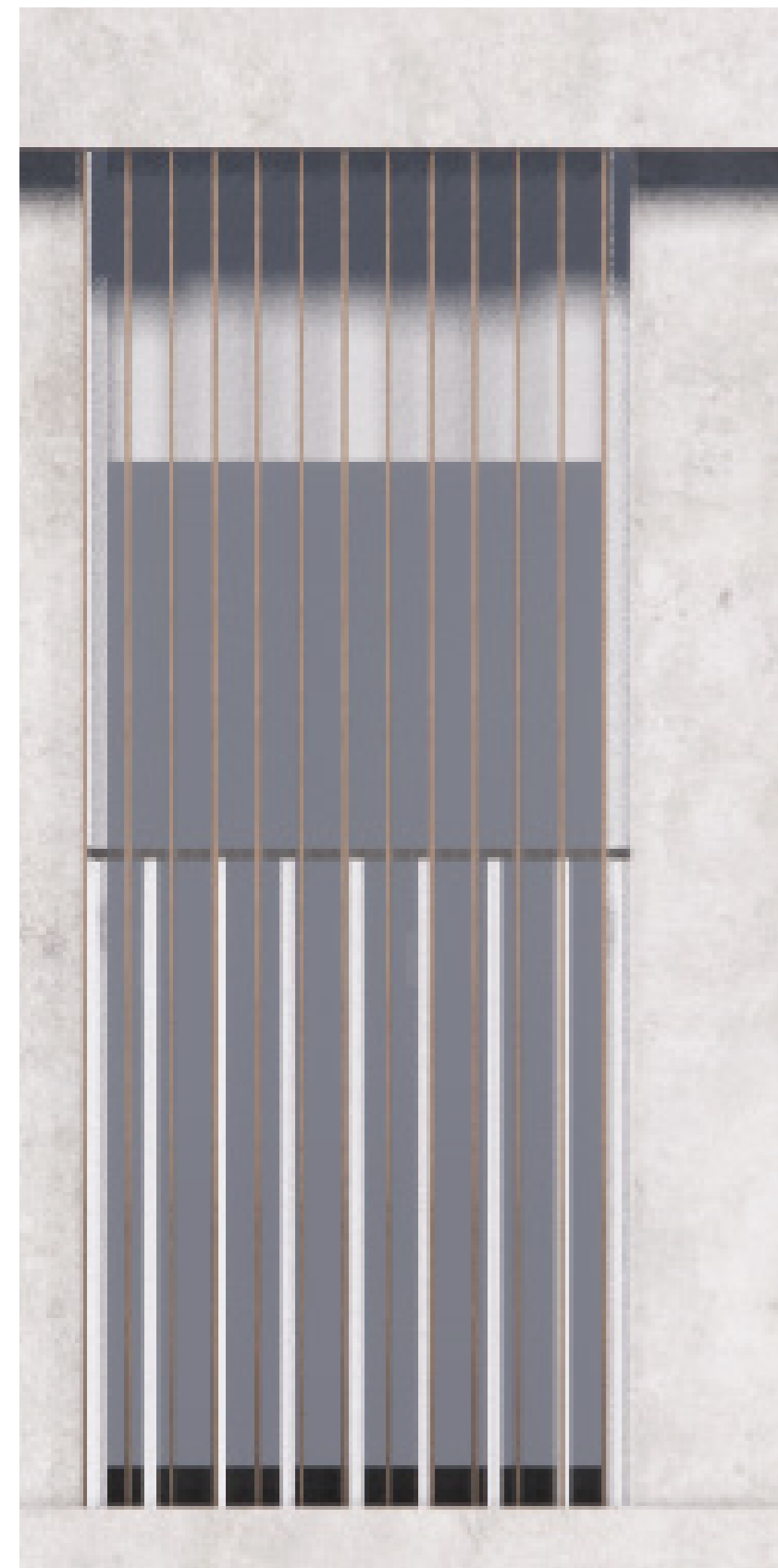
BLINDS - UP; LOUVERS - OPEN



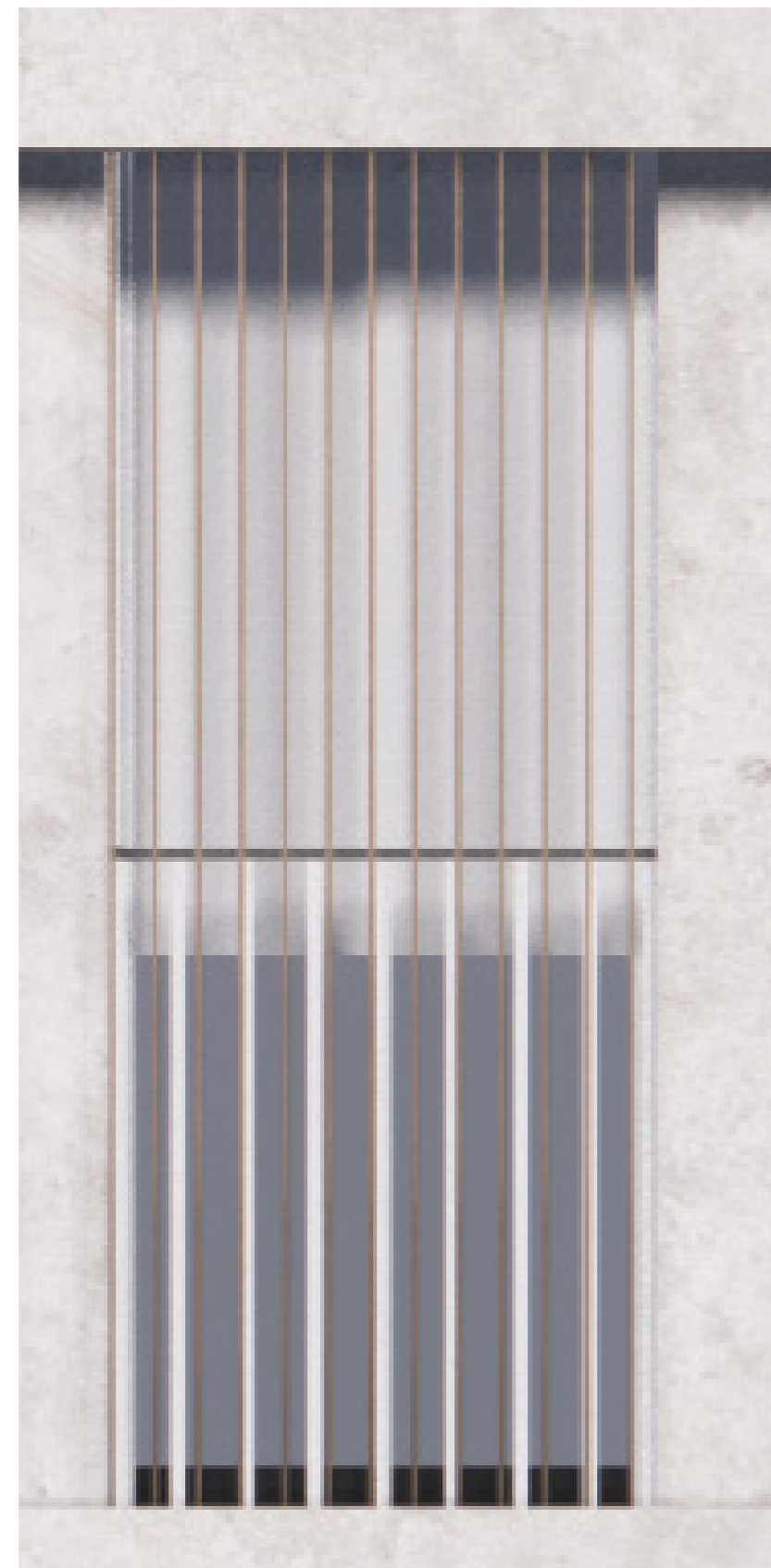
BLINDS - HALFWAY; LOUVERS - OPEN



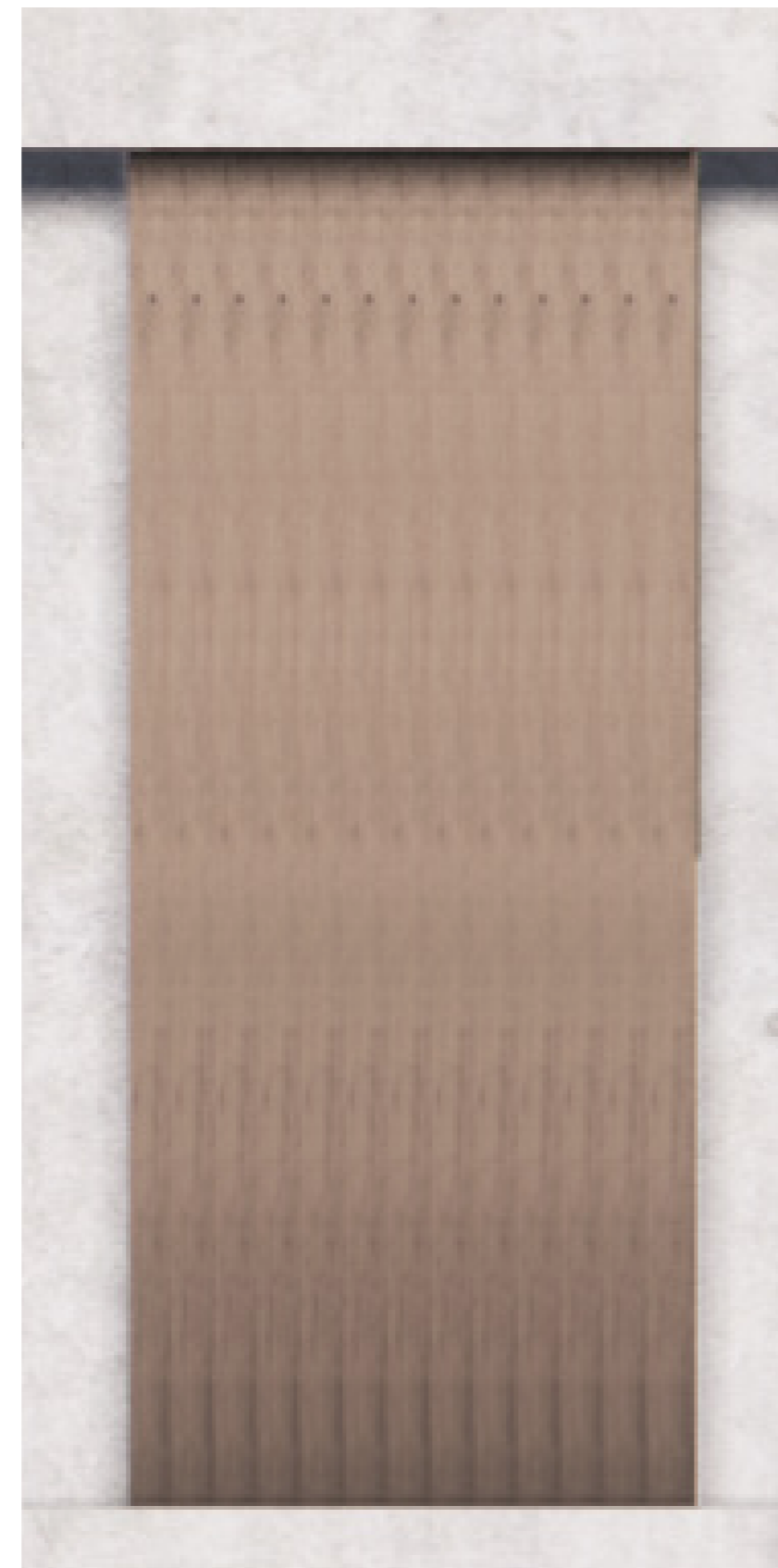
BLINDS - DOWN; LOUVERS - OPEN



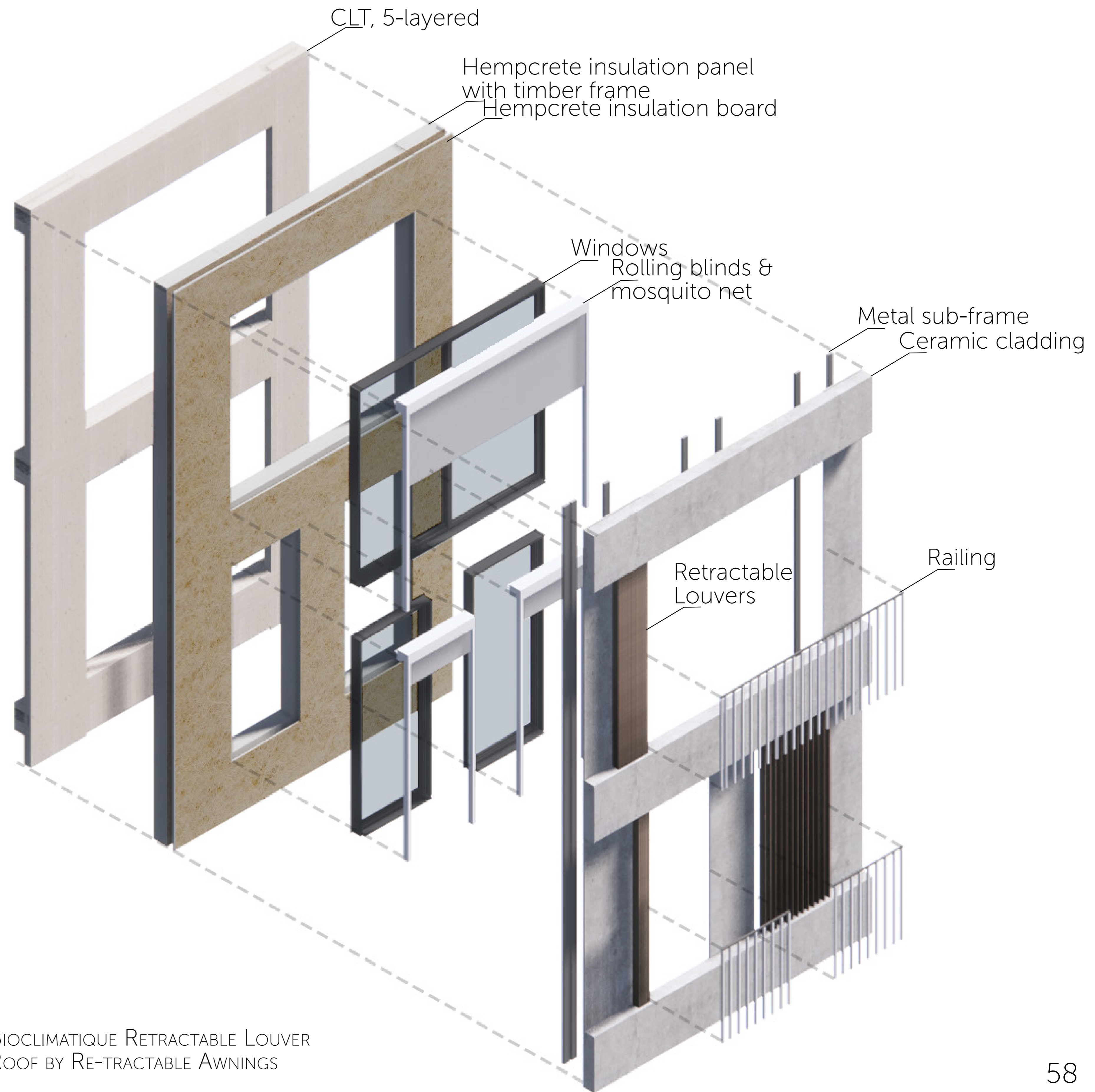
BLINDS - UP; LOUVERS - SEMI-CLOSED



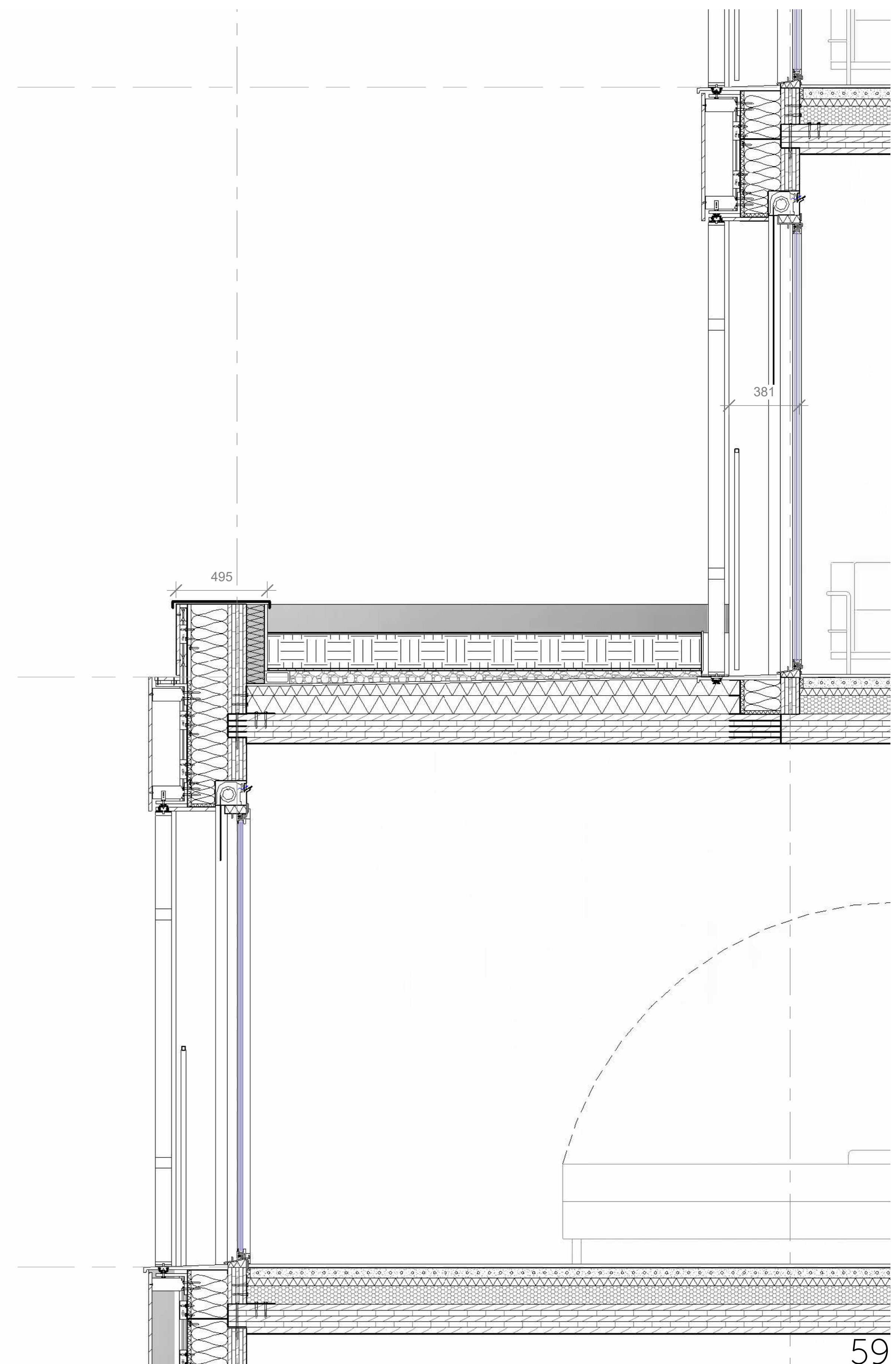
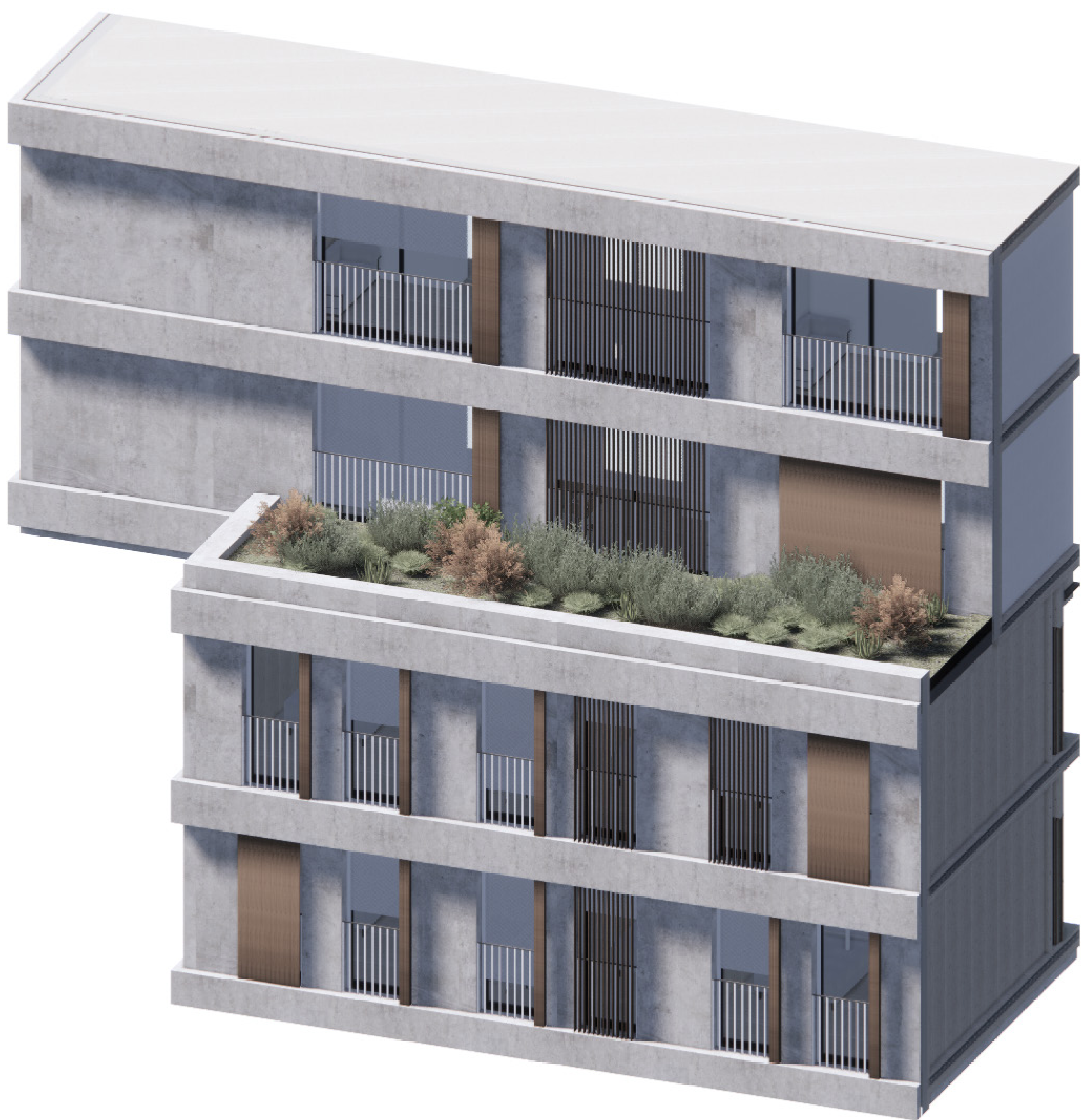
BLINDS - HALFWAY; LOUVERS - SEMI-CLOSED

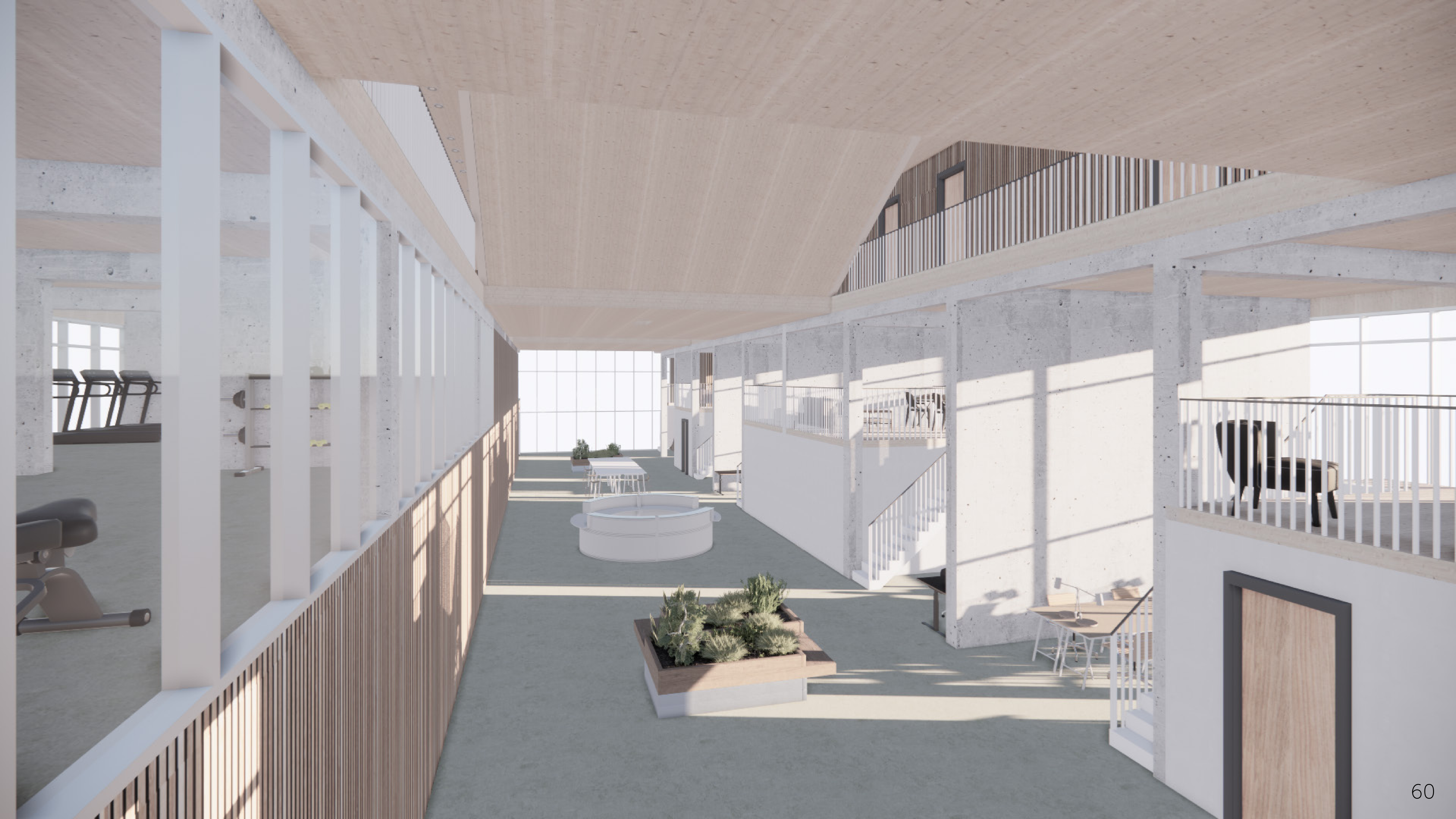


BLINDS - UP/DOWN; LOUVERS - CLOSED

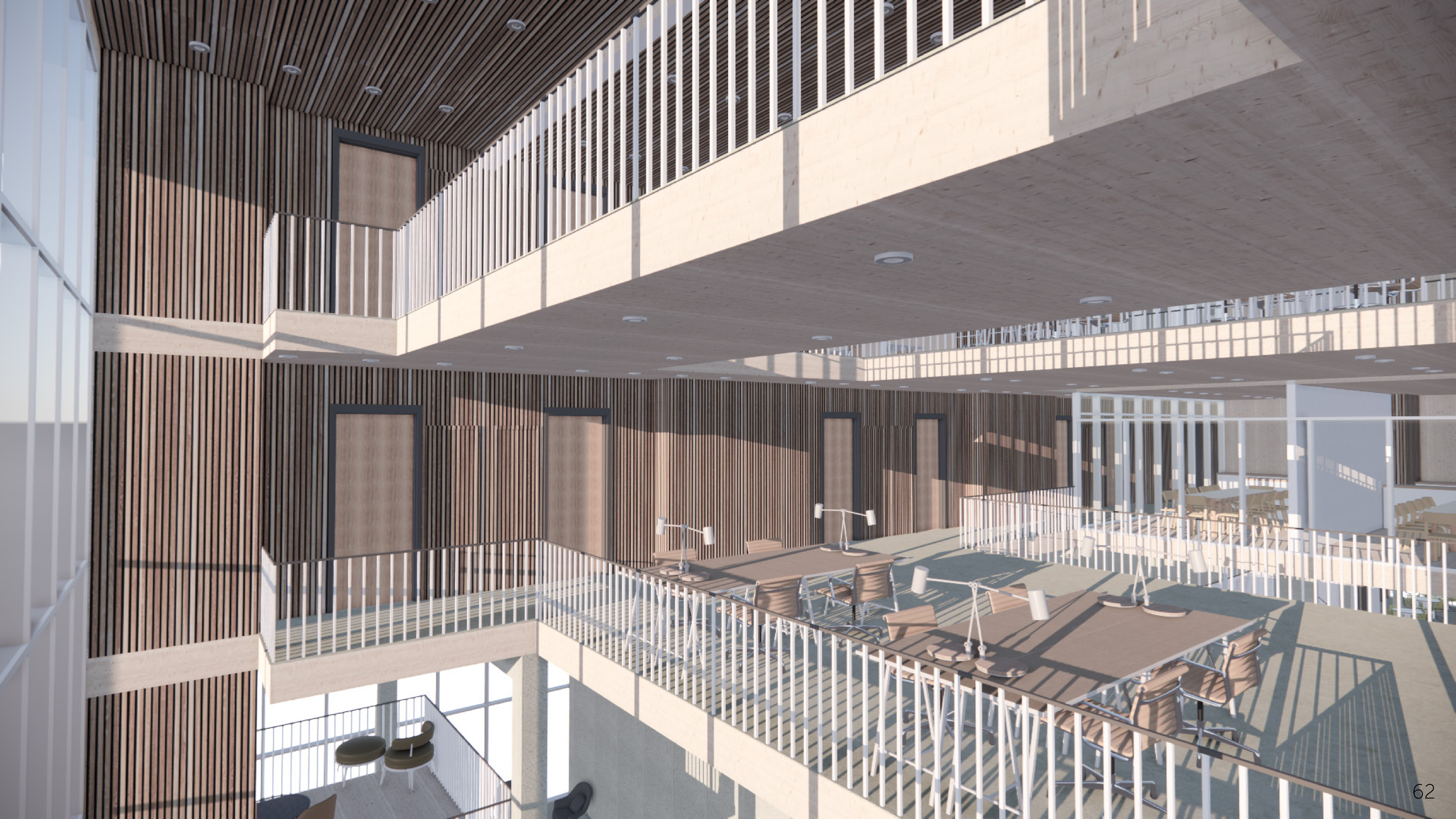


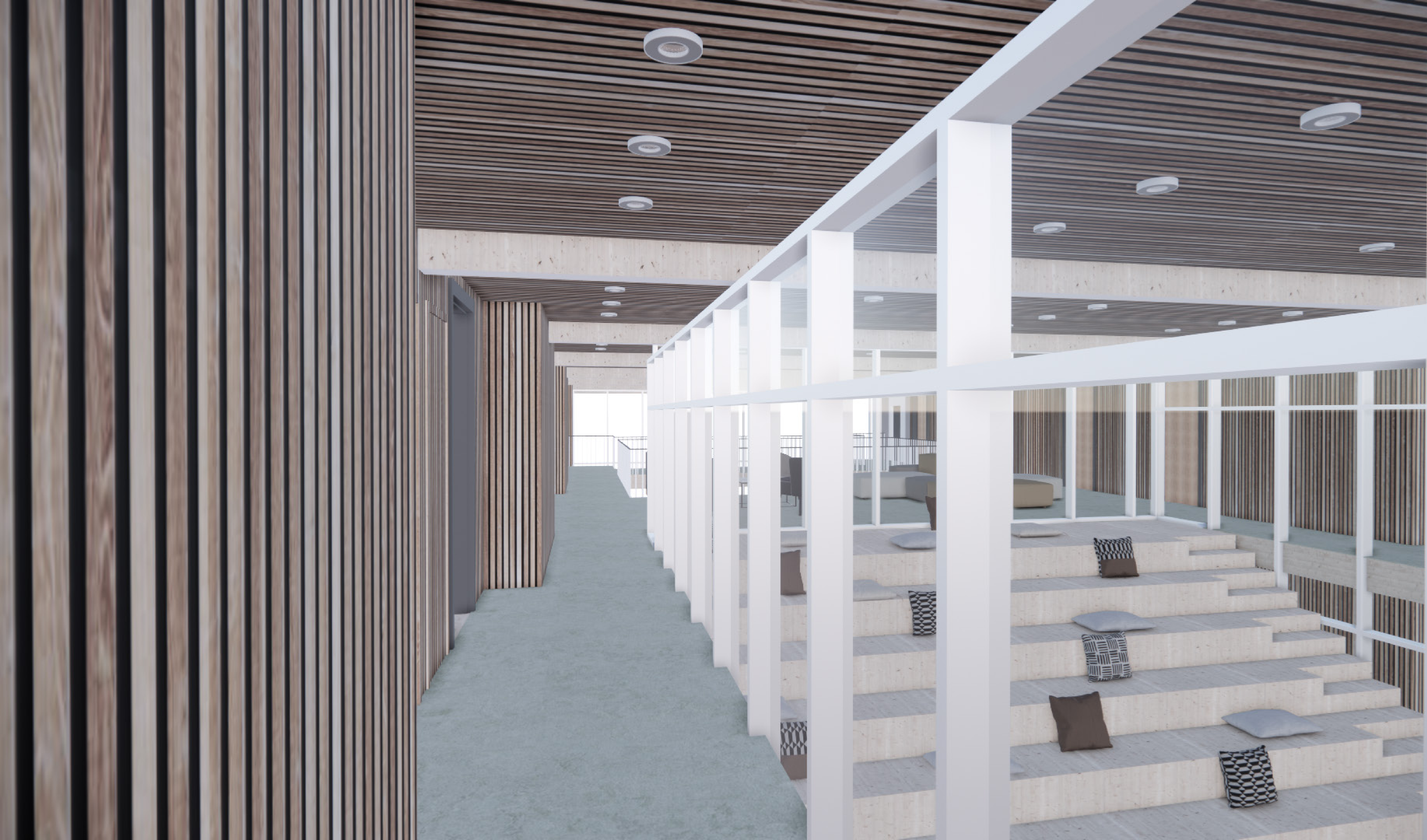
BIOCLIMATIQUE RETRACTABLE LOUVER ROOF BY RE-TRACTABLE AWNINGS















THANK YOU