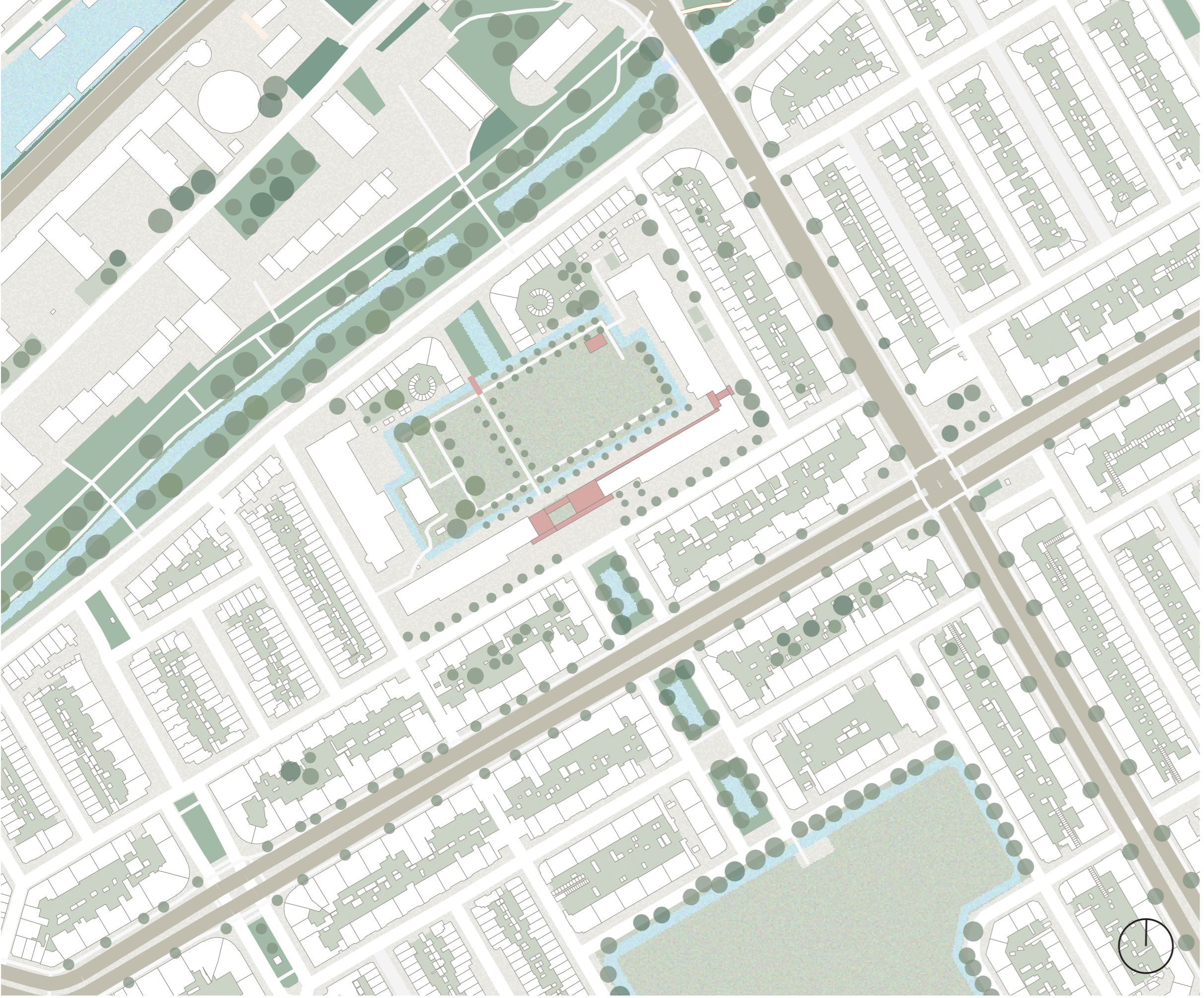


# Autonomy-supportive environment for young adults with intellectual and developmental disabilities.

*From formal education towards autonomous living.*

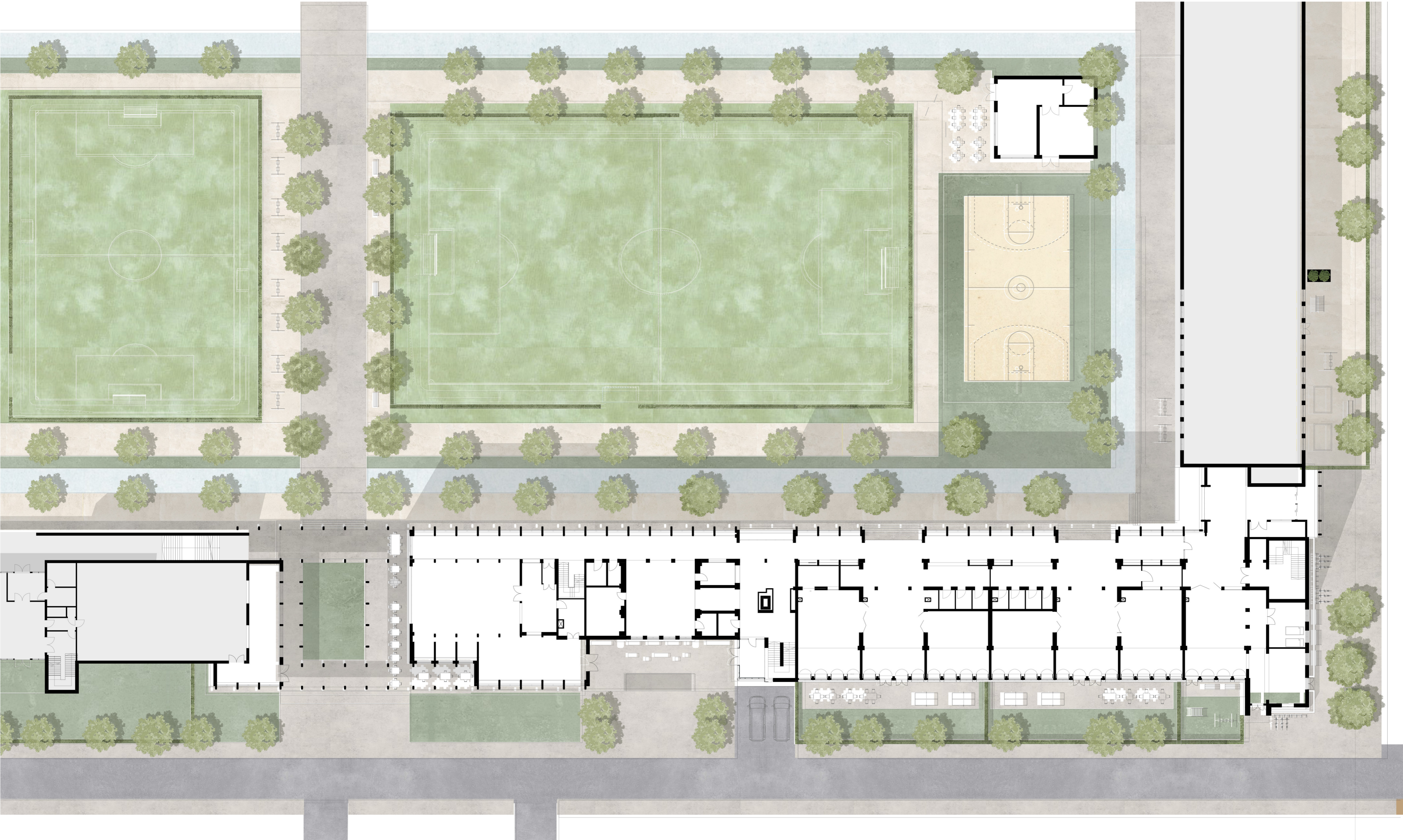
Families of young people with intellectual and/or developmental disabilities (YAIDD) reported that poor safety, social skills training and the unreadiness of the parents delays YAIDD from becoming autonomous adults. The research aims to improve Independence, Social participation and Wellbeing of the target group, to create a stimulating and welcoming environments specific to IDD. The study offers a recommended framework that could prepare YAIDD for autonomous living. The main functions that are present in the project are: short-stay residences, classrooms, community center and recreational areas. The following design concepts are addressed in detail through literature study and applied to the design at varying scales: Legibility and wayfinding, Prospect and refuge, Territoriality and control, Privacy and choice, Design for senses, Design for routine.



Context map, scale 1:2500



Impression of the football field



Site plan, scale 1:300



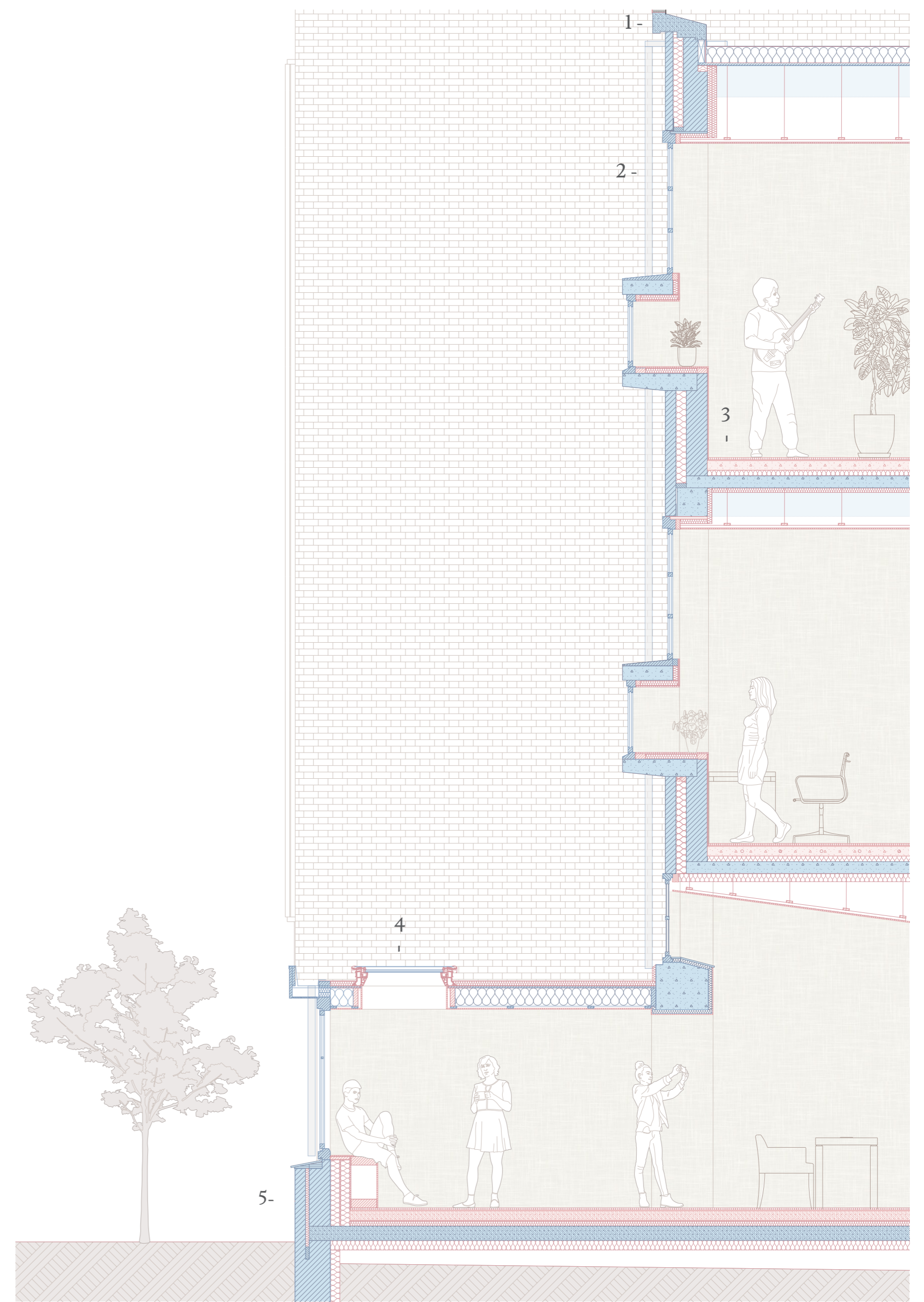
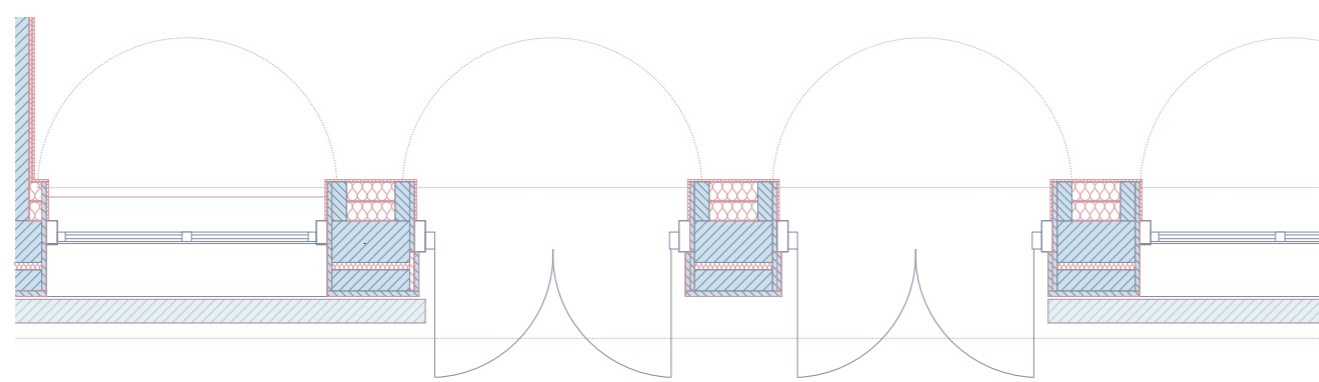
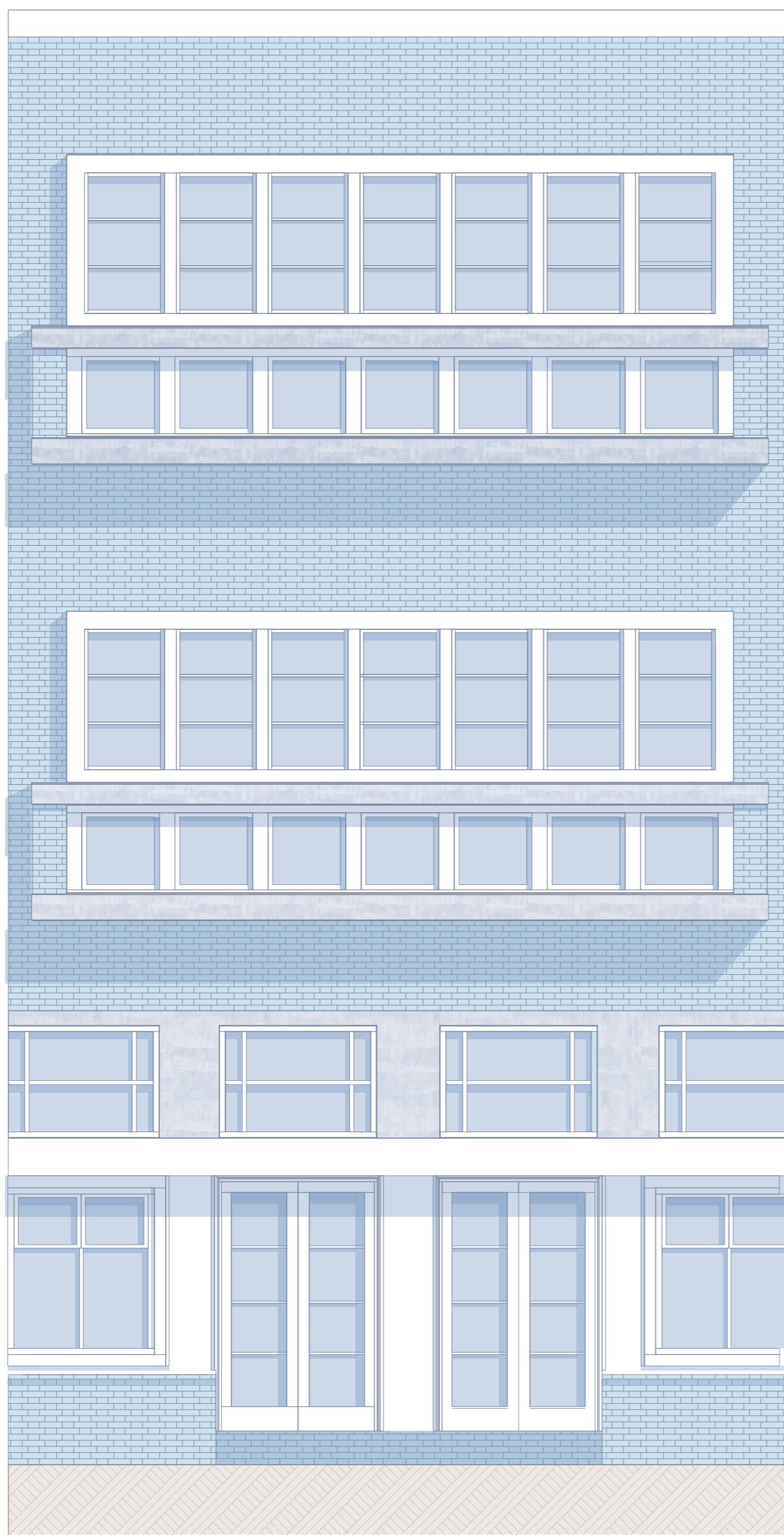
1 - Roof aluminum trim, concrete roof cover, bituminous roof bed over roof cover

2 - Drainpipe

3 - Radiant floor heating: floor finish, floor finish adhesive, concrete slab with the embedded heating tubing, rigid foam board insulation, existing concrete floor slab

4 - Skylight: Velux skylight with customized shape, mechanical fixing for roof covering, vapor barrier foil, trimmer through the existing timber beams, mineral wool insulation in between the beams, mounted ceiling with vapor barrier and fire resistance

5 - Brickwork (110 mm), foam-fill (40 mm), brickwork (220 mm), double-layered fiberglass wool insulation, wall finish, timber seat construction



Protected facade (South) combination drawing, scale 1:40

1 - Vegetation, extensive substrate, drainage filled with substrate, non-woven storage layer, anti-root barrier, concrete roof cover layer, insulation (mineral wool), timber roof beams with insulation layered in-between, vapor control layer, fiberboard, suspended ceiling  
2 - Cantilevered drainage system with drainpipe

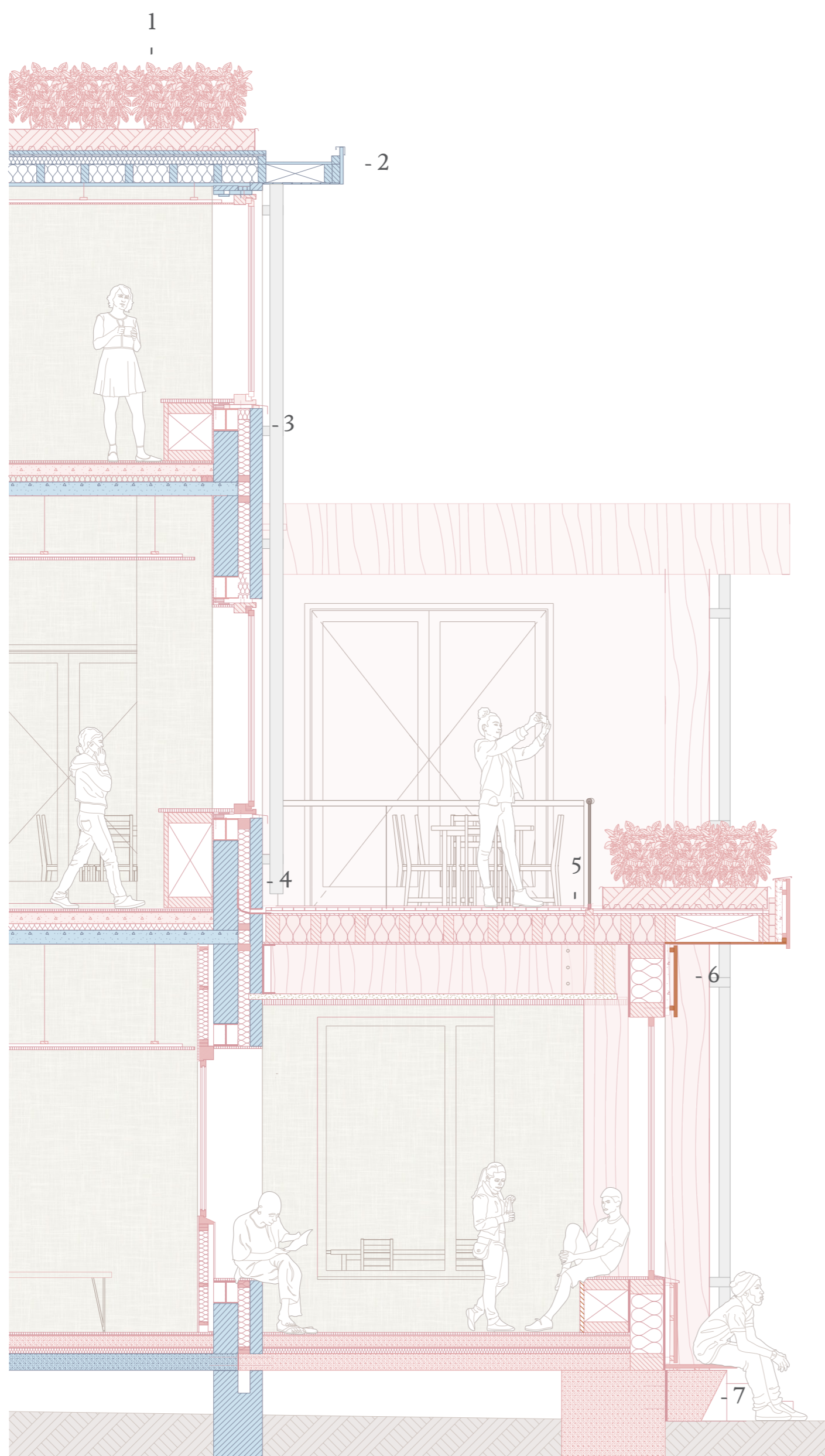
3 - Brickwork (110), foam-fill (110), brickwork (220), steel profile (to increase the existing window openings), timber window-bay seat

4 - Lead flashing for water drainage behind the brick layer

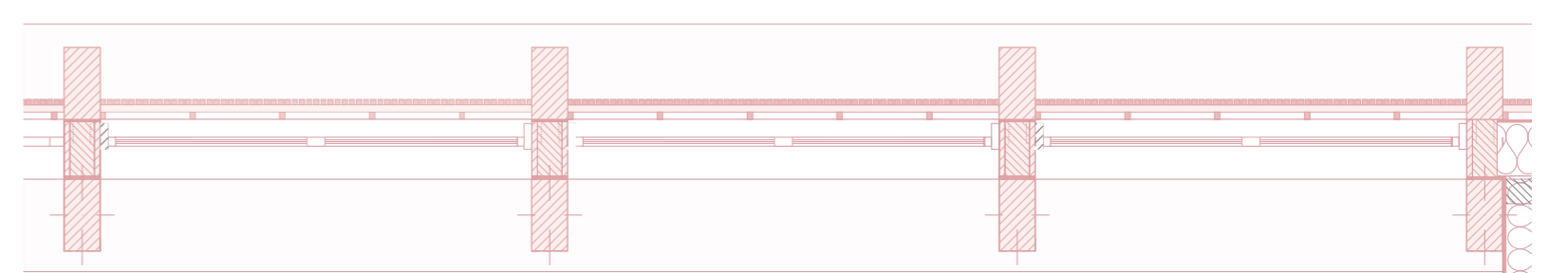
5 - Balcony railing, timber panels floor finish, mounting block, waterproofing layer, timber wood beams structure with mineral wool insulation in-between, vapor retarder, glulam counter-beam supported by a steel profile on the brickwork and glulam column (400 mm x 200 mm), battens for ceiling mounting, counter battens for ceiling mounting, noise-absorbing timber-slats ceiling

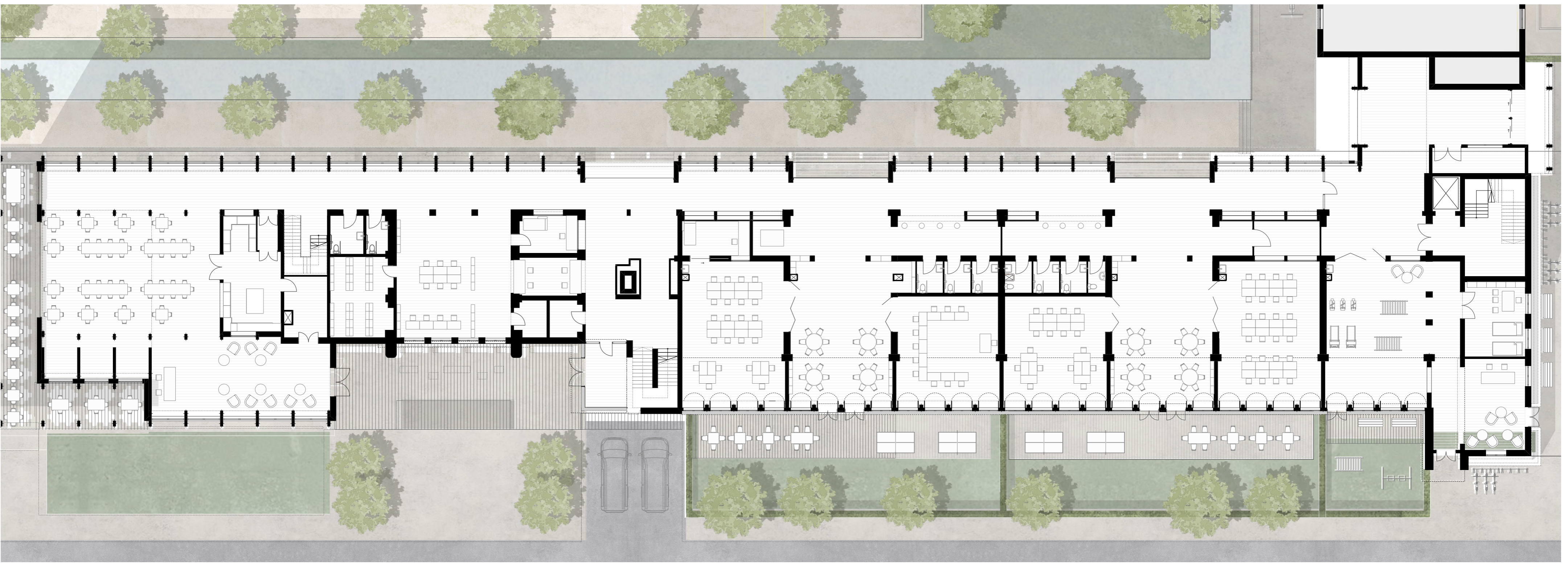
6 - Facade: exterior timber column (non-load-bearing), timber slats vertical cladding (40 mm x 40 mm), counter battens for slats fixture, battens for slats fixture, wind proofing paper, permeable wooden fiberboard, supporting structure (spruce) filled with thermal insulation (mineral wool), OSB panel, load-bearing glulam column

7 - Concrete block (bench) mounted to the concrete foundation blocks through steel plate and mounting anchors

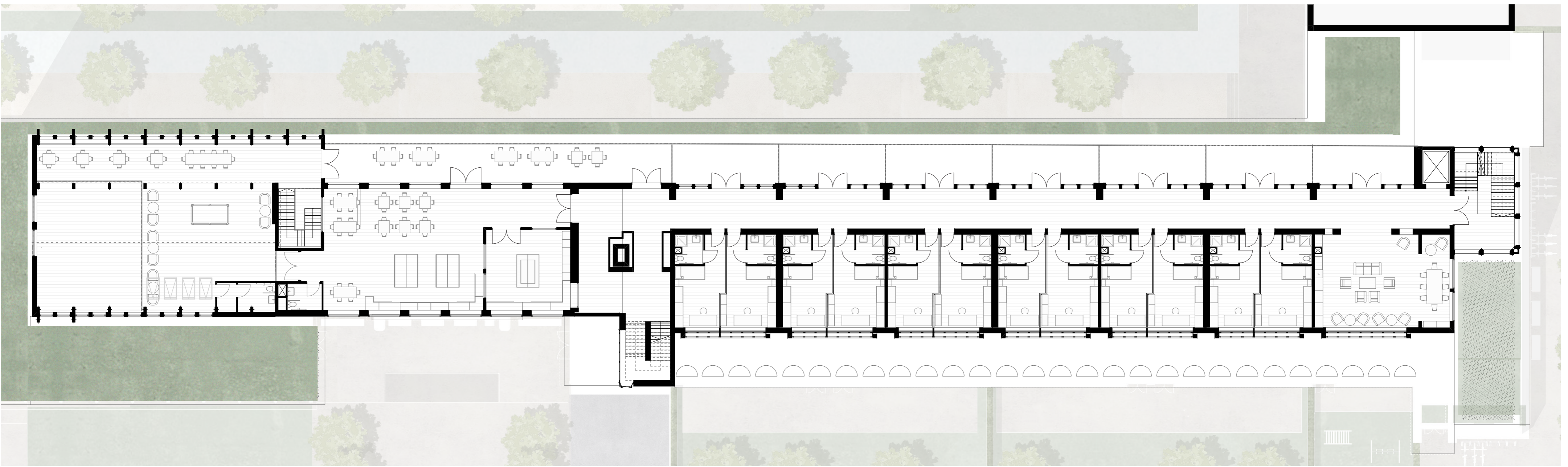


Extended facade (North) combination drawing, scale 1:40

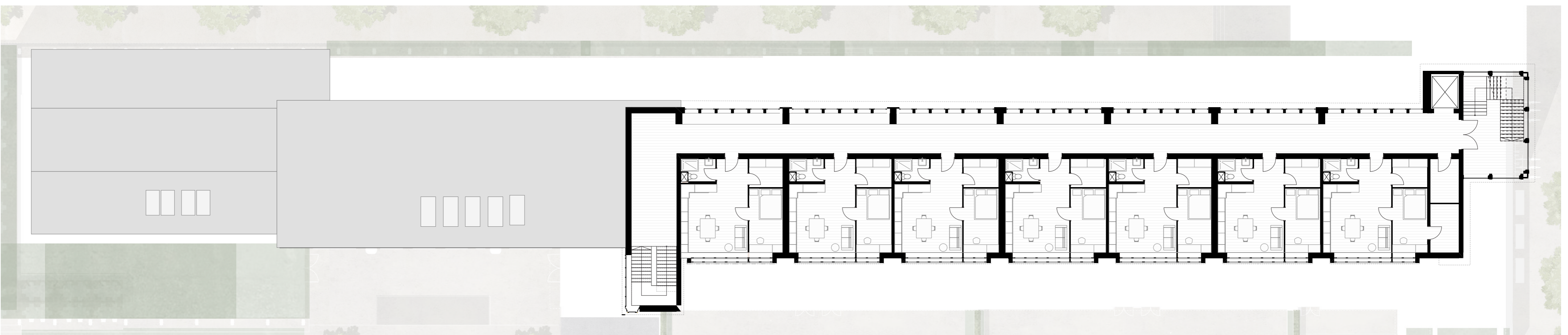




Ground floor, scale 1:200



First floor, scale 1:200



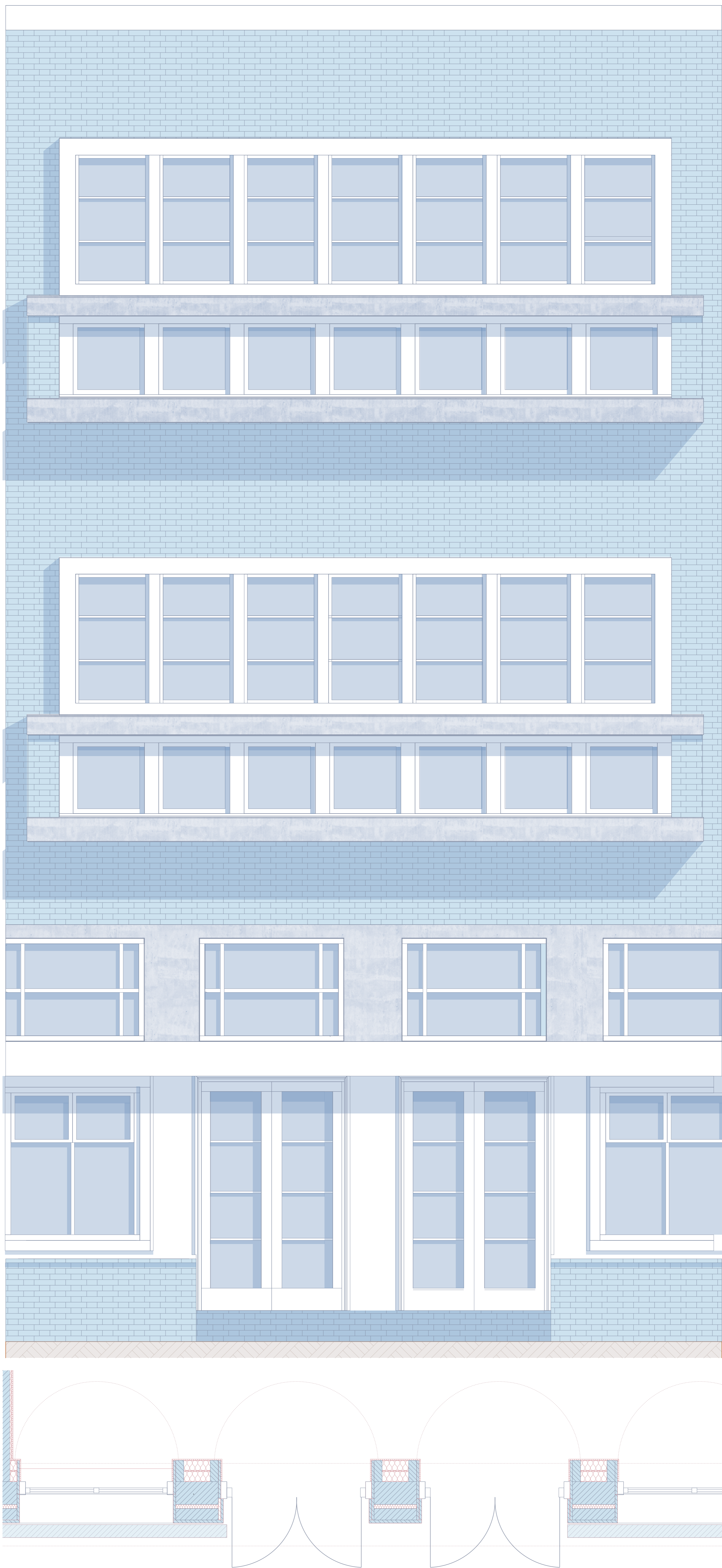
Second floor, scale 1:200



Protected facade (North): elevation, scale 1:200

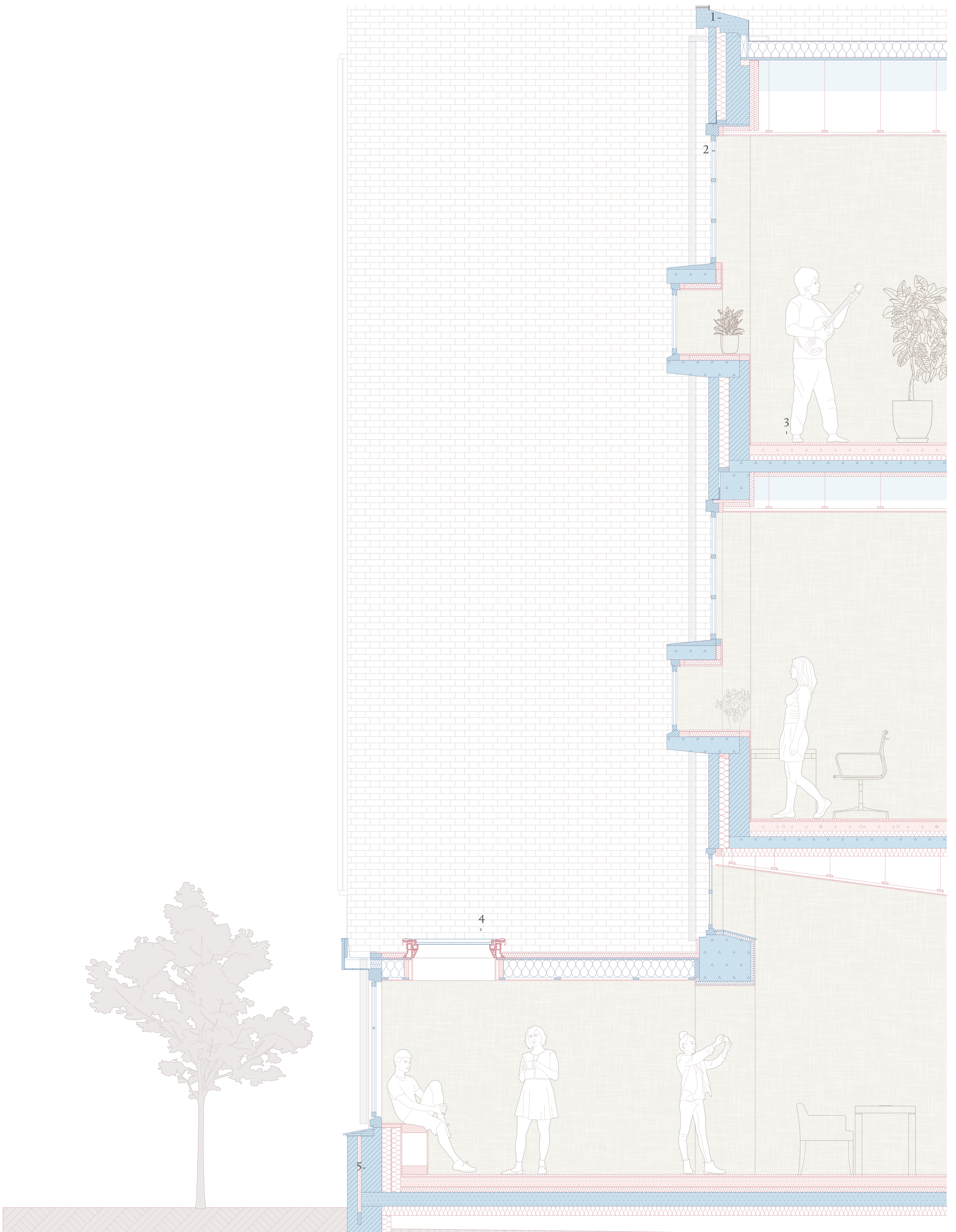


Extended facade (South): elevation, scale 1:200



Protected facade (South)

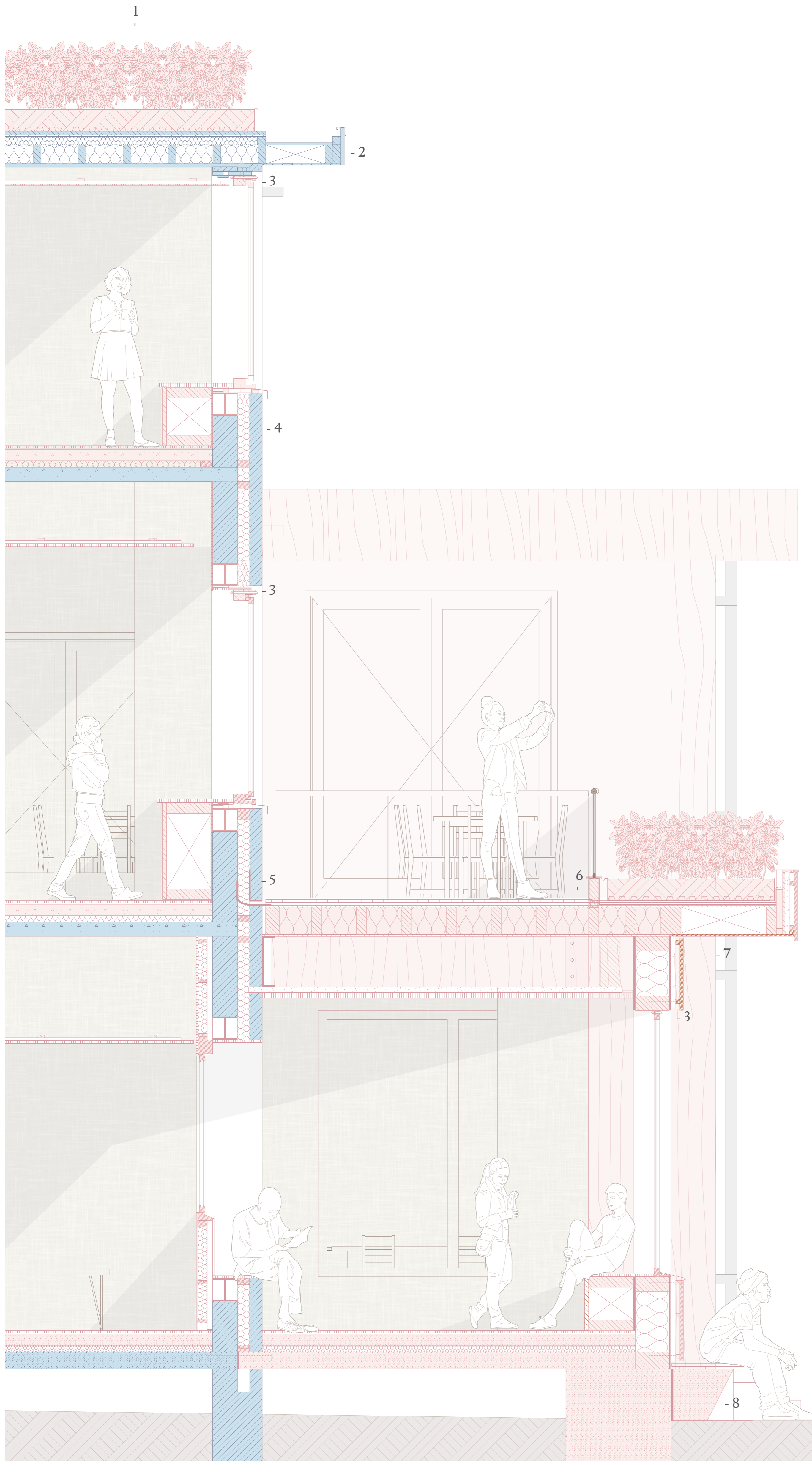
Scale 1:20



- 1 - Roof aluminum trim, concrete roof cover, bituminous roof bed over roof cover
- 2 - Drainpipe
- 3 - Radiant floor heating: floor finish, floor finish adhesive, concrete slab with the embedded heating tubing, rigid foam board insulation, existing concrete floor slab
- 4 - Skylight: Velux skylight with customized shape, mechanical fixing for roof covering, vapor barrier foil, trimmer through the existing timber beams, mineral wool insulation in between the beams, mounted ceiling with vapor barrier and fire resistance
- 5 - brickwork (110 mm), foam-fill (40 mm), brickwork (220 mm), double-layered fiberglass wool insulation, wall finish, timber seat construction

## Protected facade (South): detailed section

Scale 1:20



1 - Vegetation, extensive substrate, drainage filled with substrate, non-woven storage layer, anti-root barrier, concrete roof cover layer, insulation (mineral wool), timber roof beams with insulation layered in-between, vapor control layer, fiberboard, suspended ceiling

2 - Roof aluminum trim, concrete roof cover, bituminous roof bed over roof cover

3 - Trickle vent in window frame for natural ventilation

4 - Brickwork (110 mm), foam-fill (110 mm), brickwork (220 mm), steel profile (to increase the existing window openings), timber window-bay seat

5 - Lead flashing for water drainage behind the brick layer

6 - Balcony railing integrated to the drainage system, timber panels floor finish, mounting block, waterproofing layer, timber wood beams structure with mineral wool insulation in-between, vapor retarder, glulam counter-beam supported by a steel profile on the brickwork and glulam column (400 mm x 200 mm), battens for ceiling mounting, counter battens for ceiling mounting, noise-absorbing timber-slats ceiling

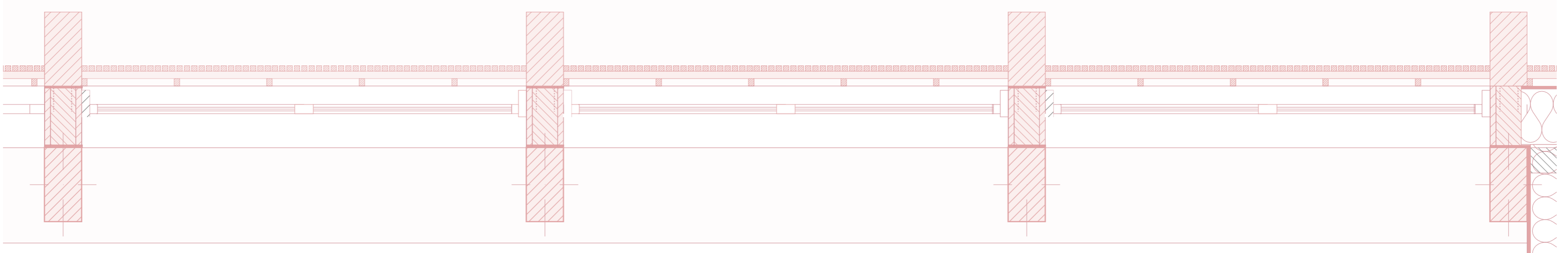
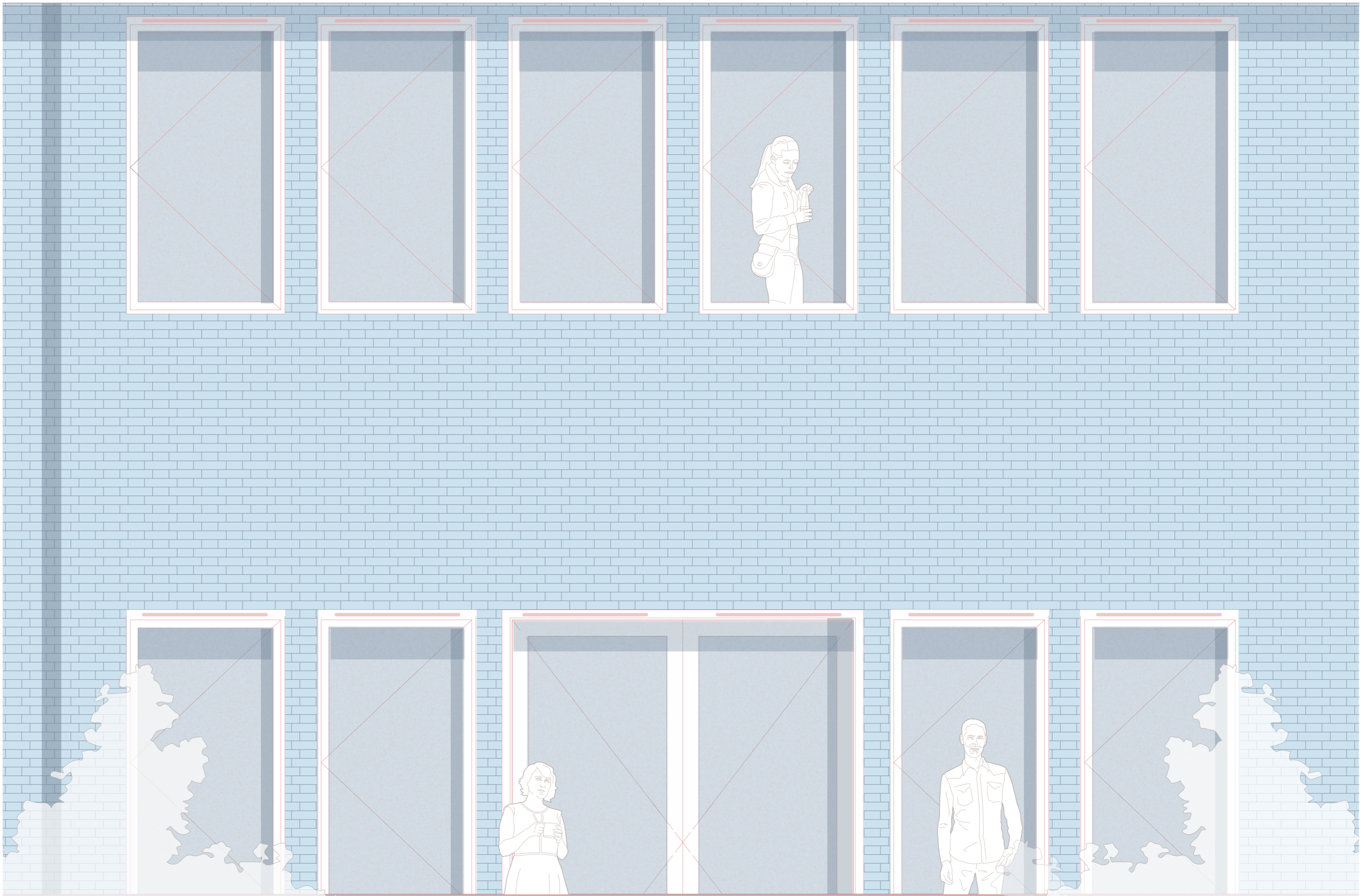
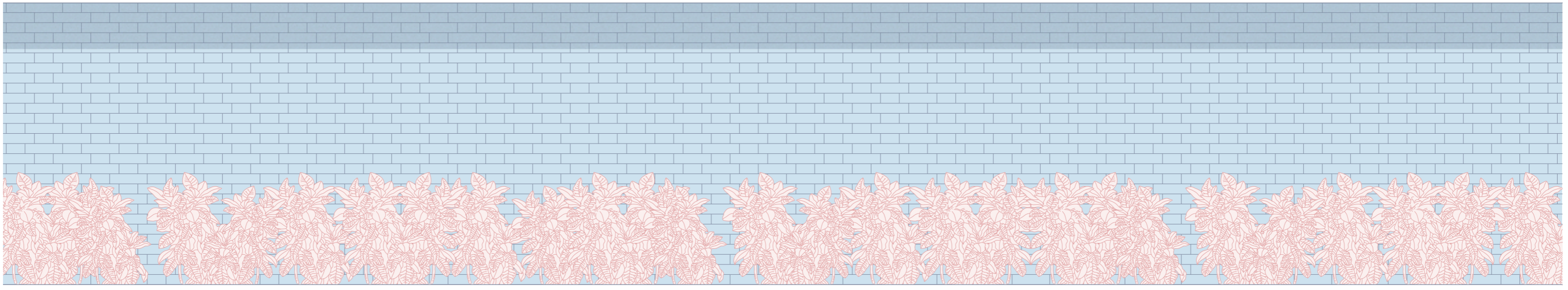
7 - Facade: exterior timber column (non-load-bearing), timber slats vertical cladding (40 mm x 40 mm), counter battens for slats fixture, battens for slats fixture, wind proofing paper, permeable wooden fiberboard, supporting structure (spruce) filled with thermal insulation (mineral wool), OSB panel, load-bearing glulam column

8 - Concrete block (bench) mounted to the concrete foundation blocks through steel plate and mounting anchors



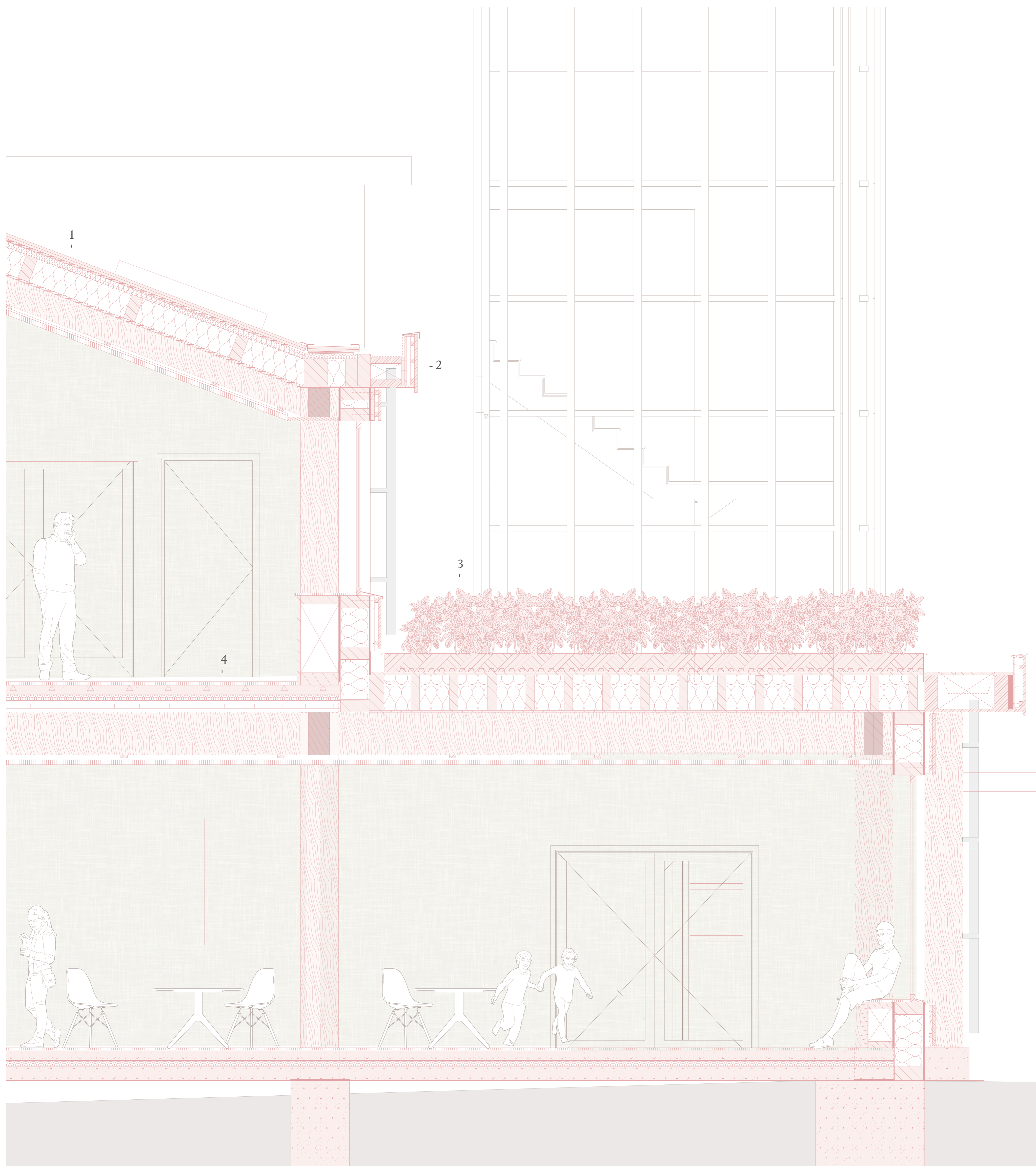
## Extension facade (North): detailed section

Scale 1:20



Extension facade (North)

Scale 1:20



1 - Zinc roofing, plywood, mineral wool (pressure resistant) between timber battens, counter timber battens with thermal insulation in-between, waterproofing, fiberboard, glulam rafters, battens for ceiling mounting, counter battens for ceiling mounting, noise-absorbing timber-slats ceiling

2 - Cantilevered roof edge with built-in gutter and the drainpipe, exterior finish with timber slats

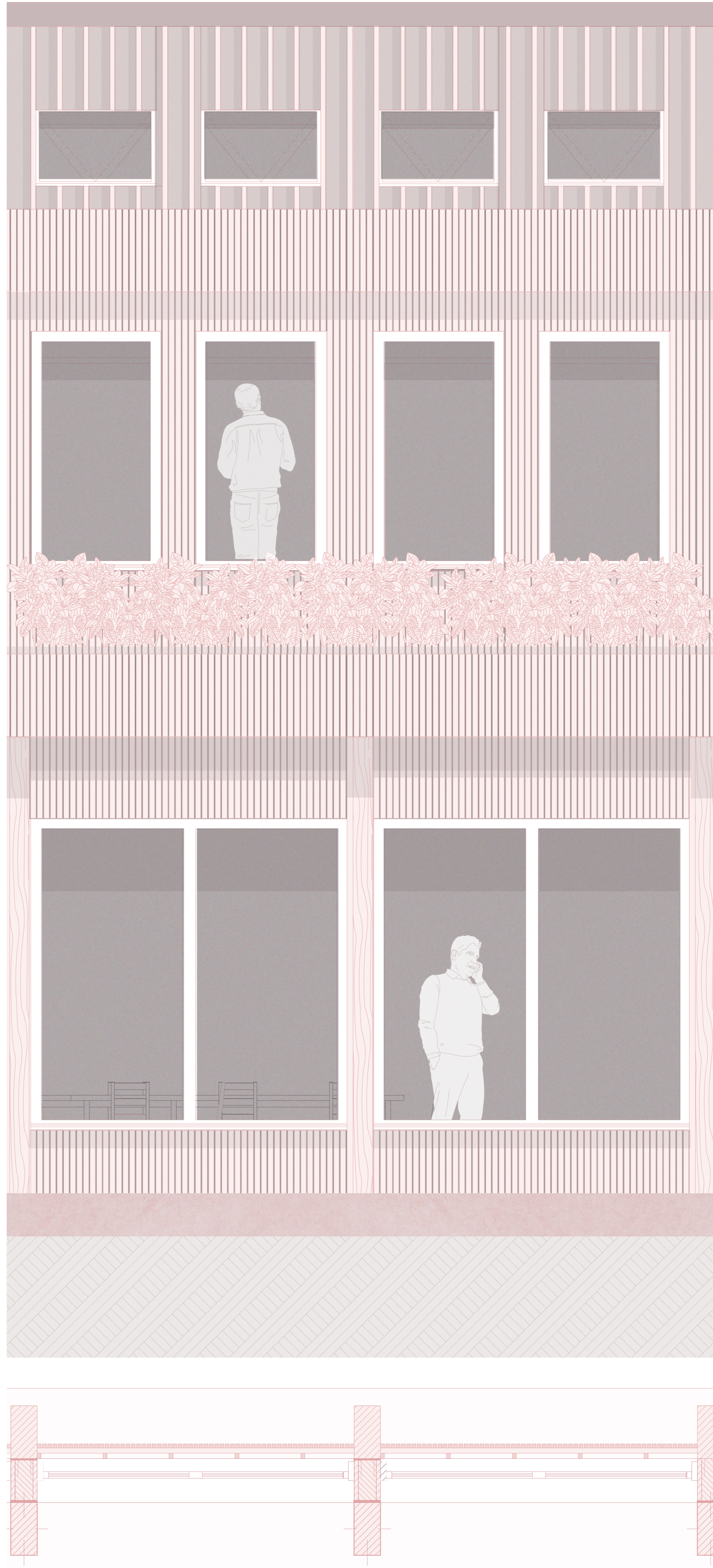
3 - Vegetation, extensive substrate, drainage filled with substrate, non-woven storage layer, anti-root barrier, waterproofing, timber roof beams with mineral wool insulation in-between, fiberboard, glulam beam, battens for ceiling mounting, counter battens for ceiling mounting, noise-absorbing timber-slats ceiling

4 - Floor finishing, floor finish adhesive, concrete slab with embedded heating tubing, rigid foam board insulation (x2), CLT floor panels resting on glulam beams, battens for ceiling mounting, counter battens for ceiling mounting, noise-absorbing timber-slats ceiling.

## Community center: detailed section

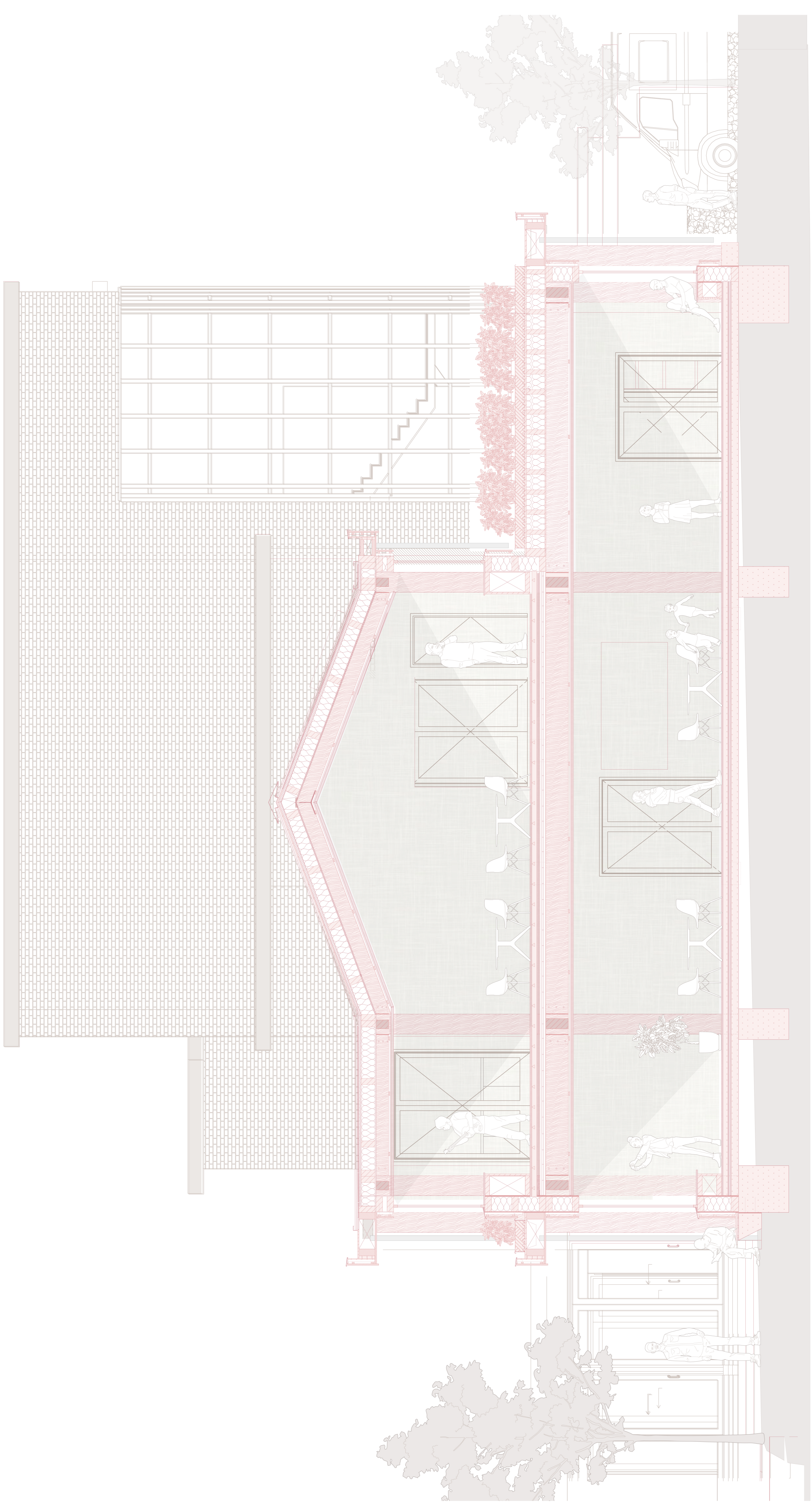
Scale 1:20





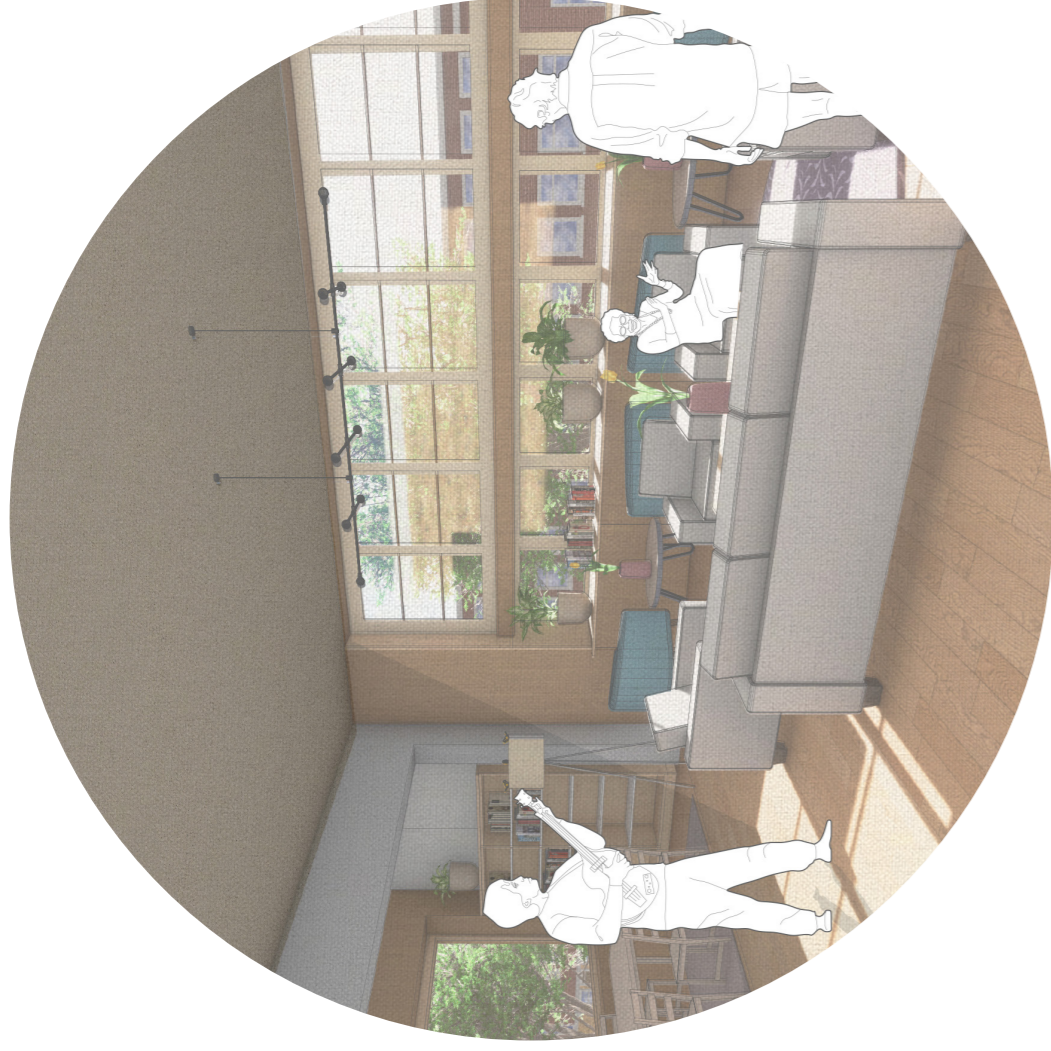
Community center facade

Scale 1:20



Community center  
Scale 1/40

Shared living room



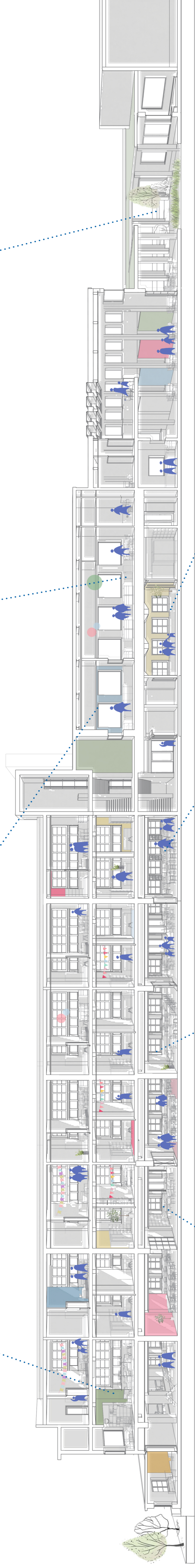
Shared laundry room



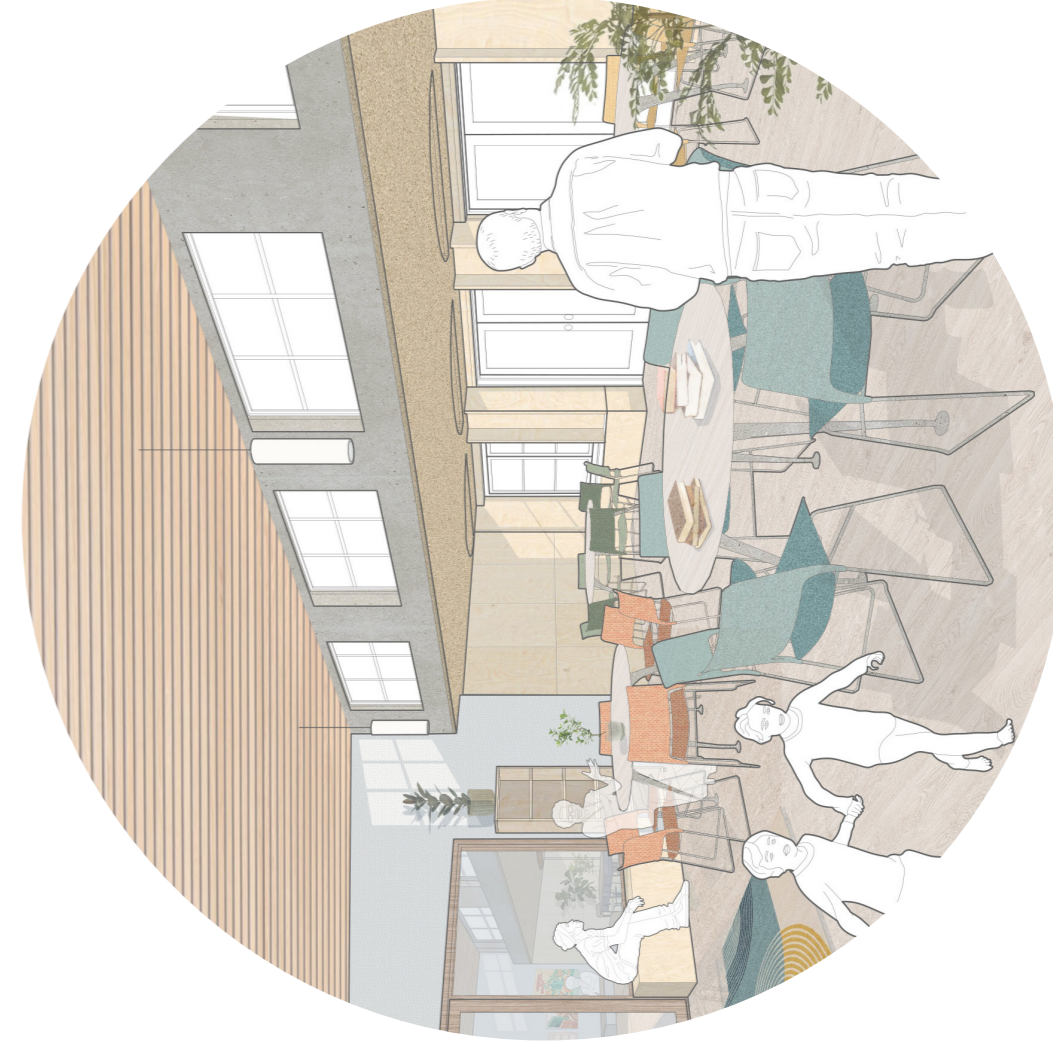
Shared kitchen and activity room



Plaza view



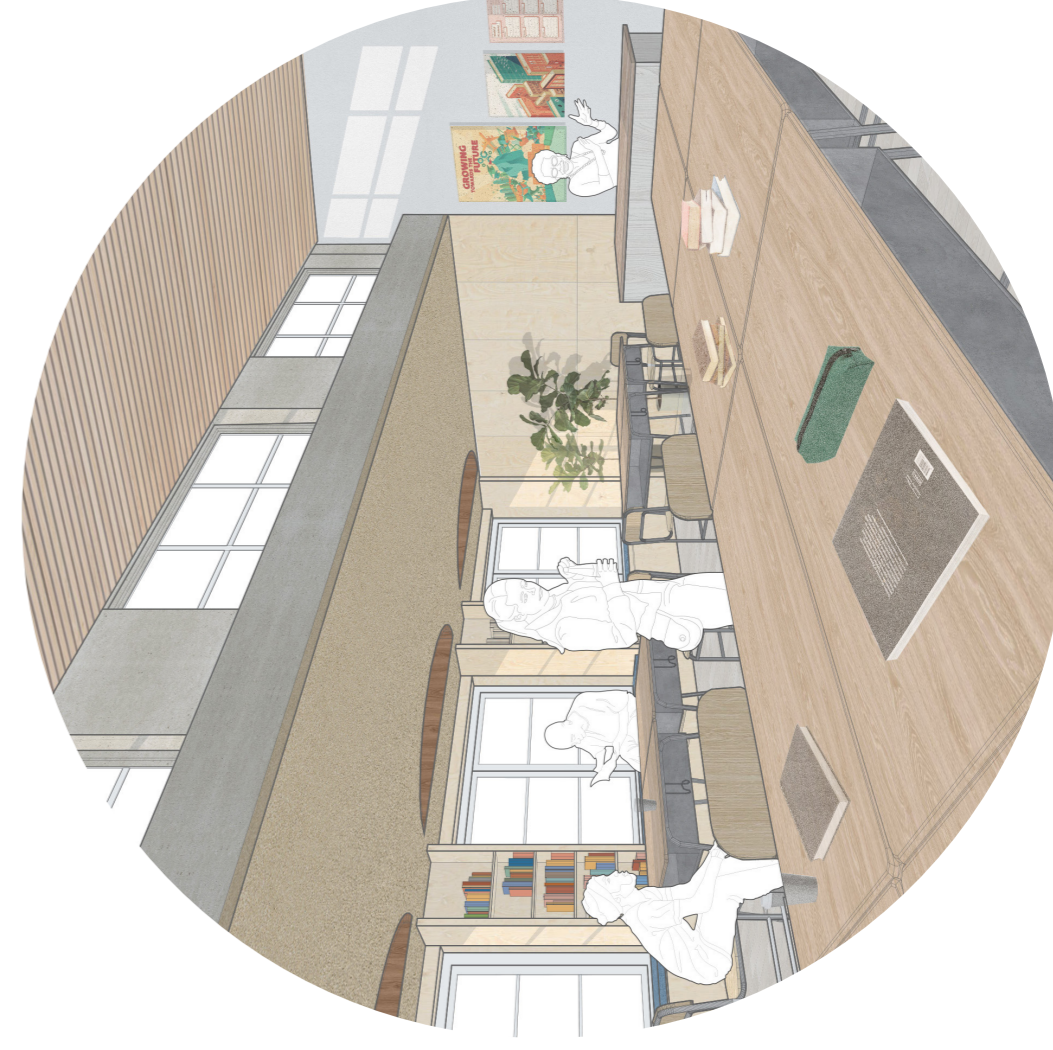
Longitudinal section



Leisure space connecting two classrooms



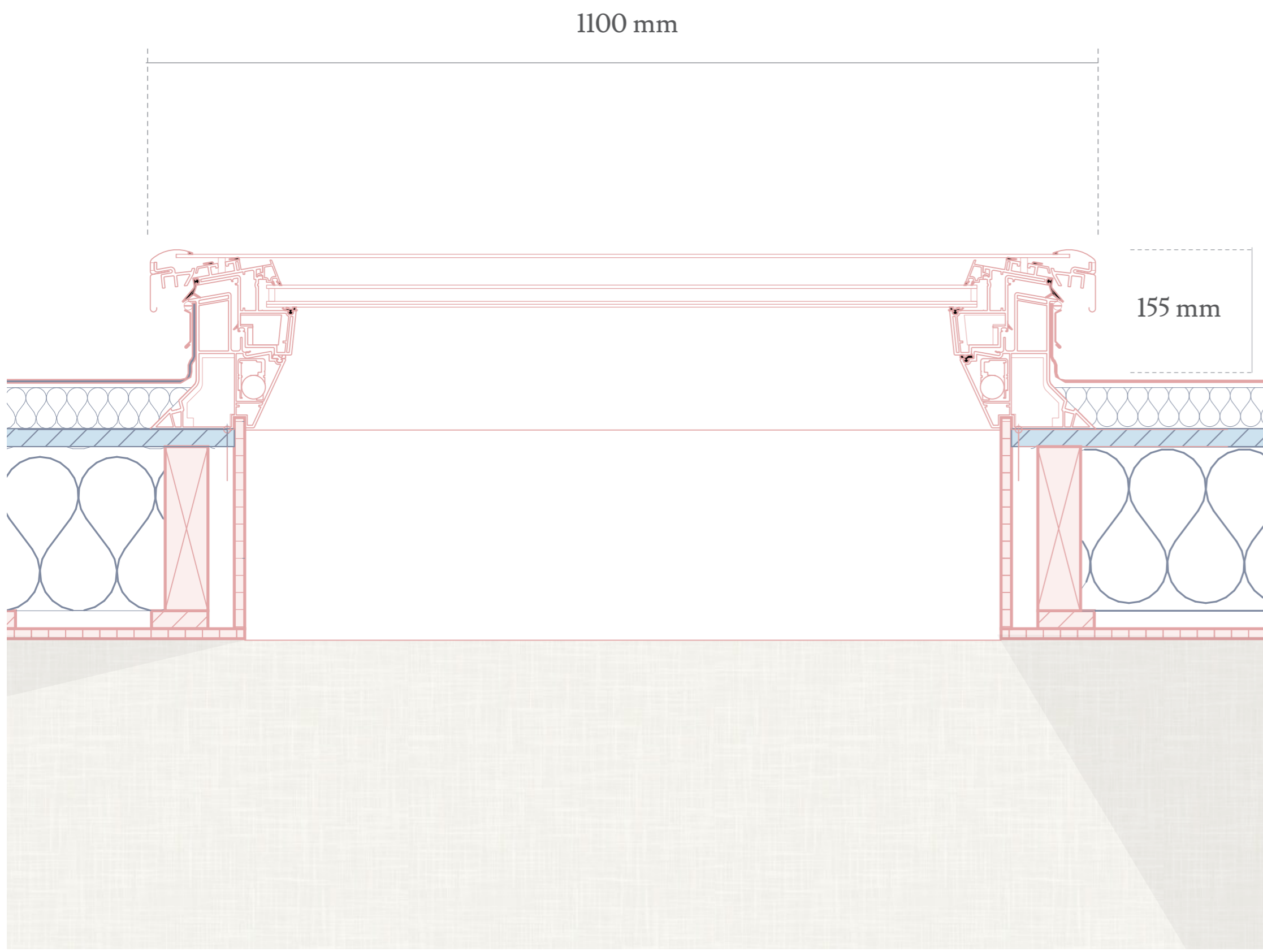
Window bay seat in classrooms



Classroom: group work arrangement

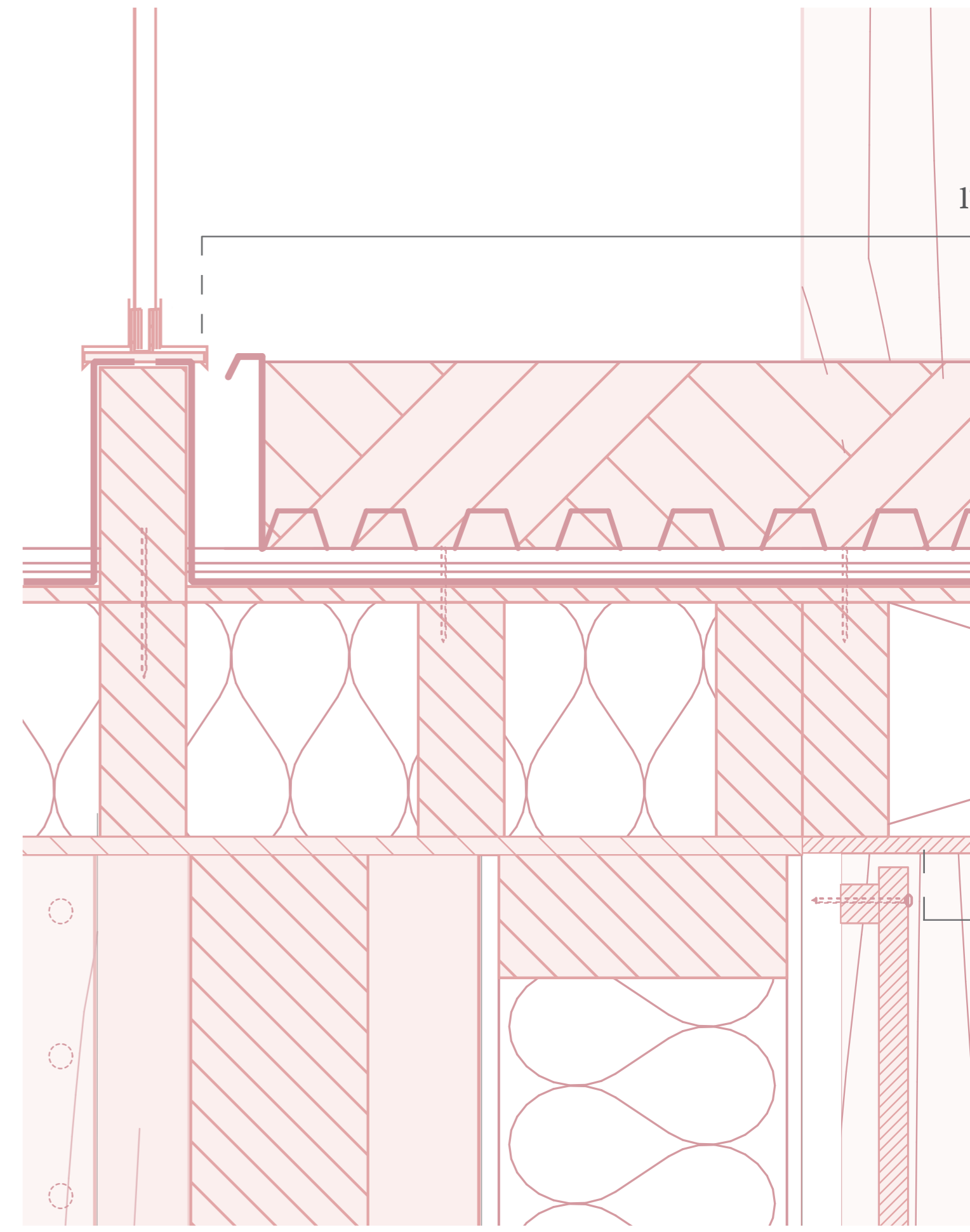


Library and study space



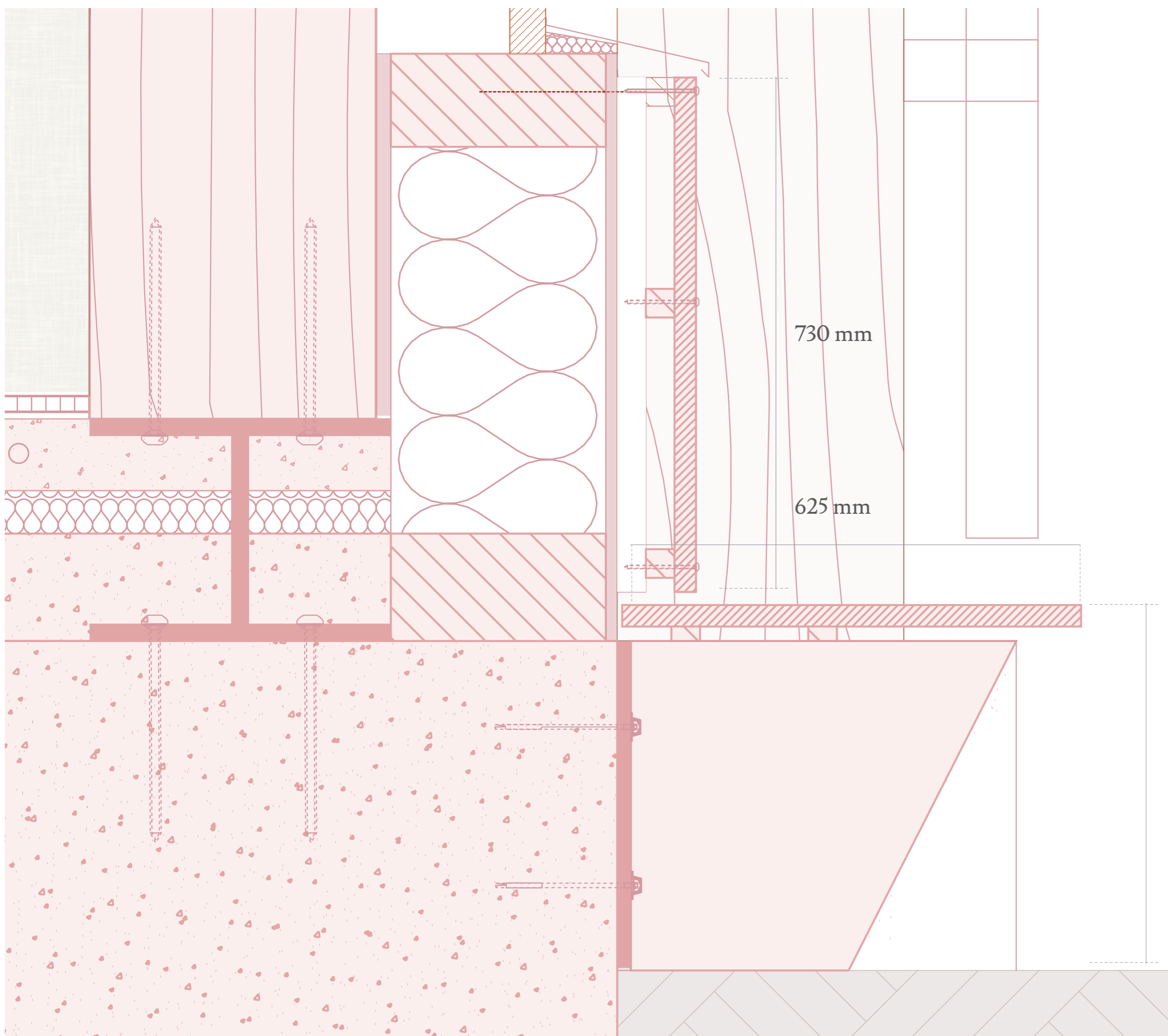
Velux skylight (standard), School - Ground floor

Scale 1:5



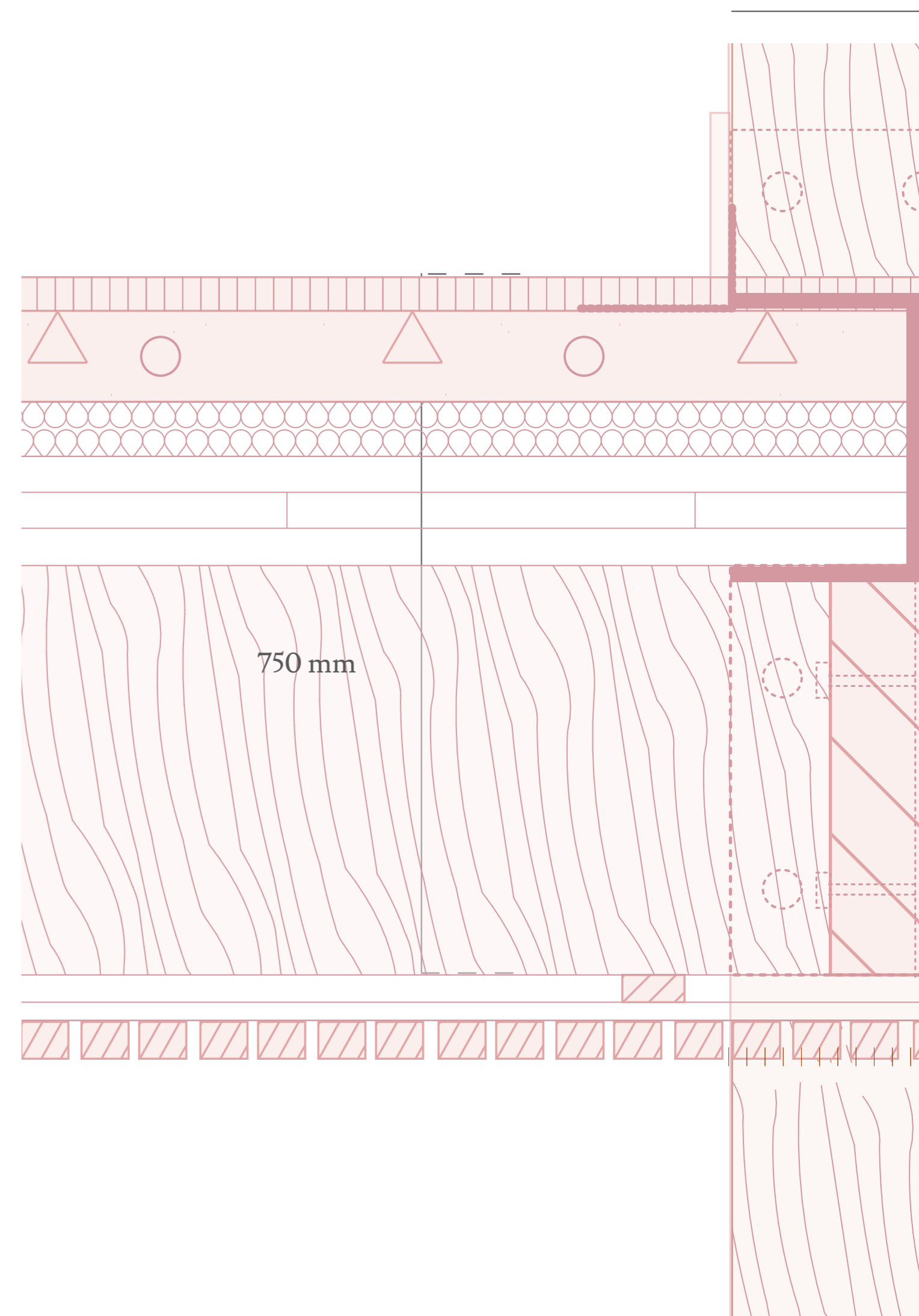
North facade: balcony edge detail

Scale 1:5



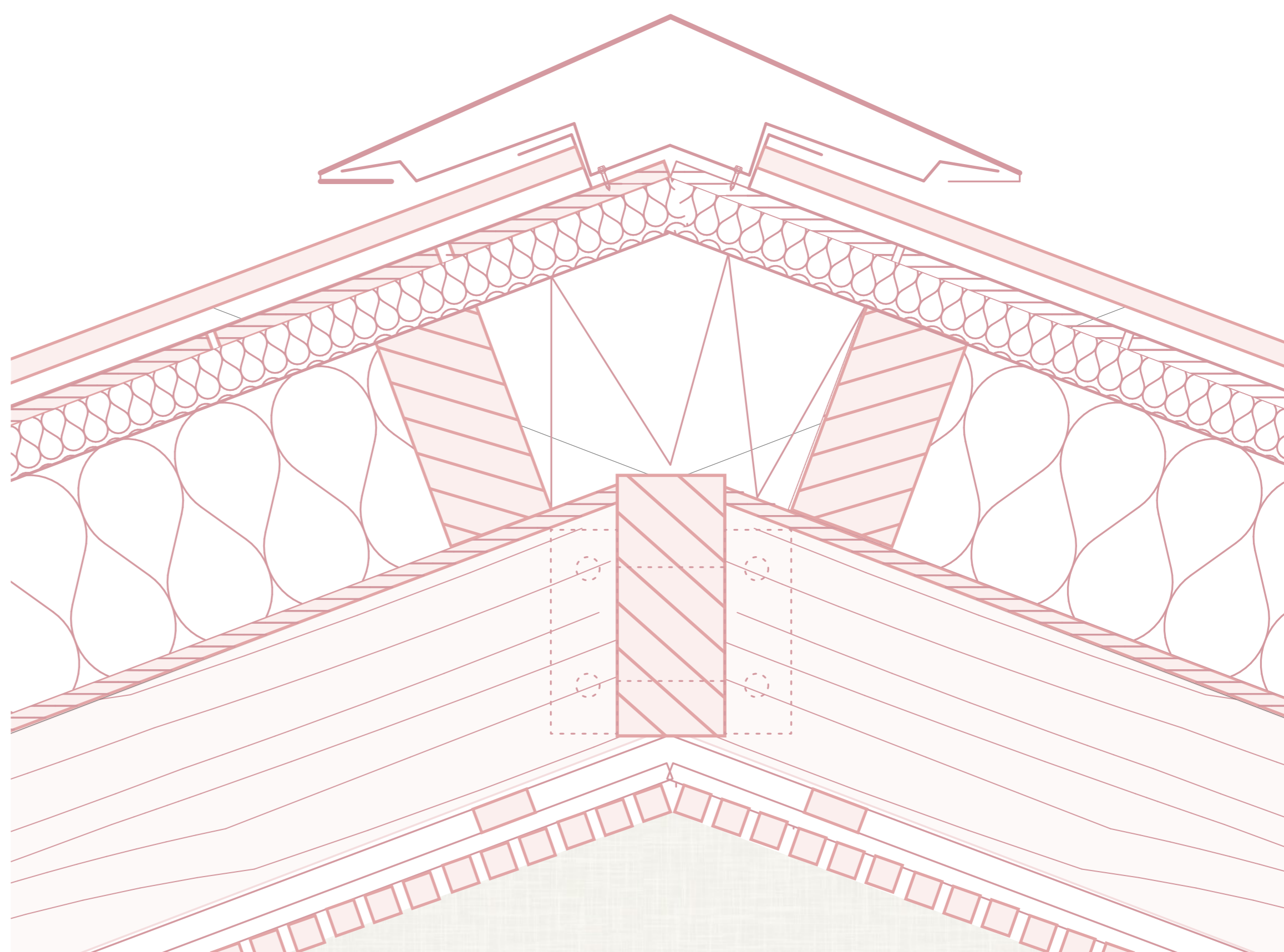
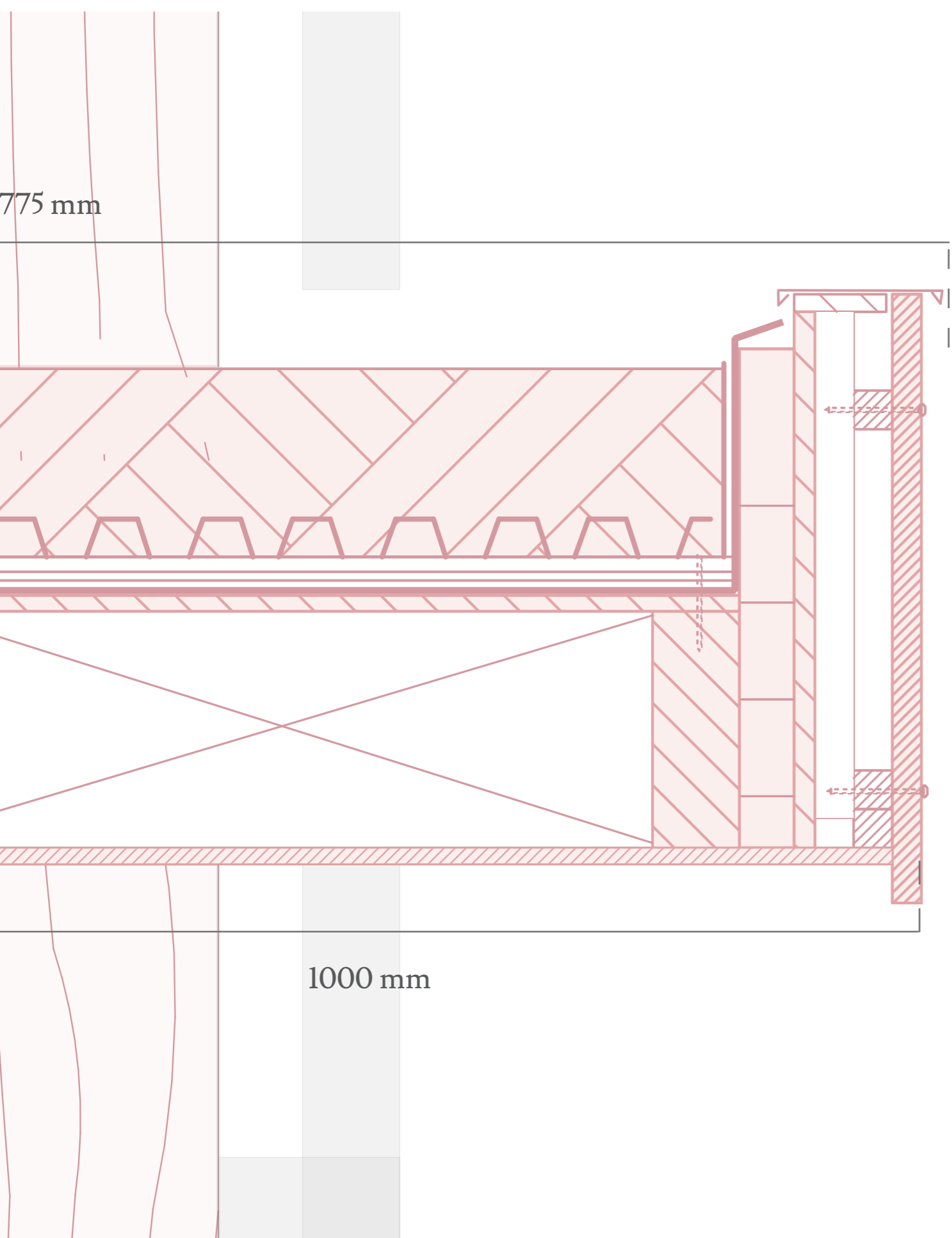
North facade: column to foundation detail

Scale 1:5



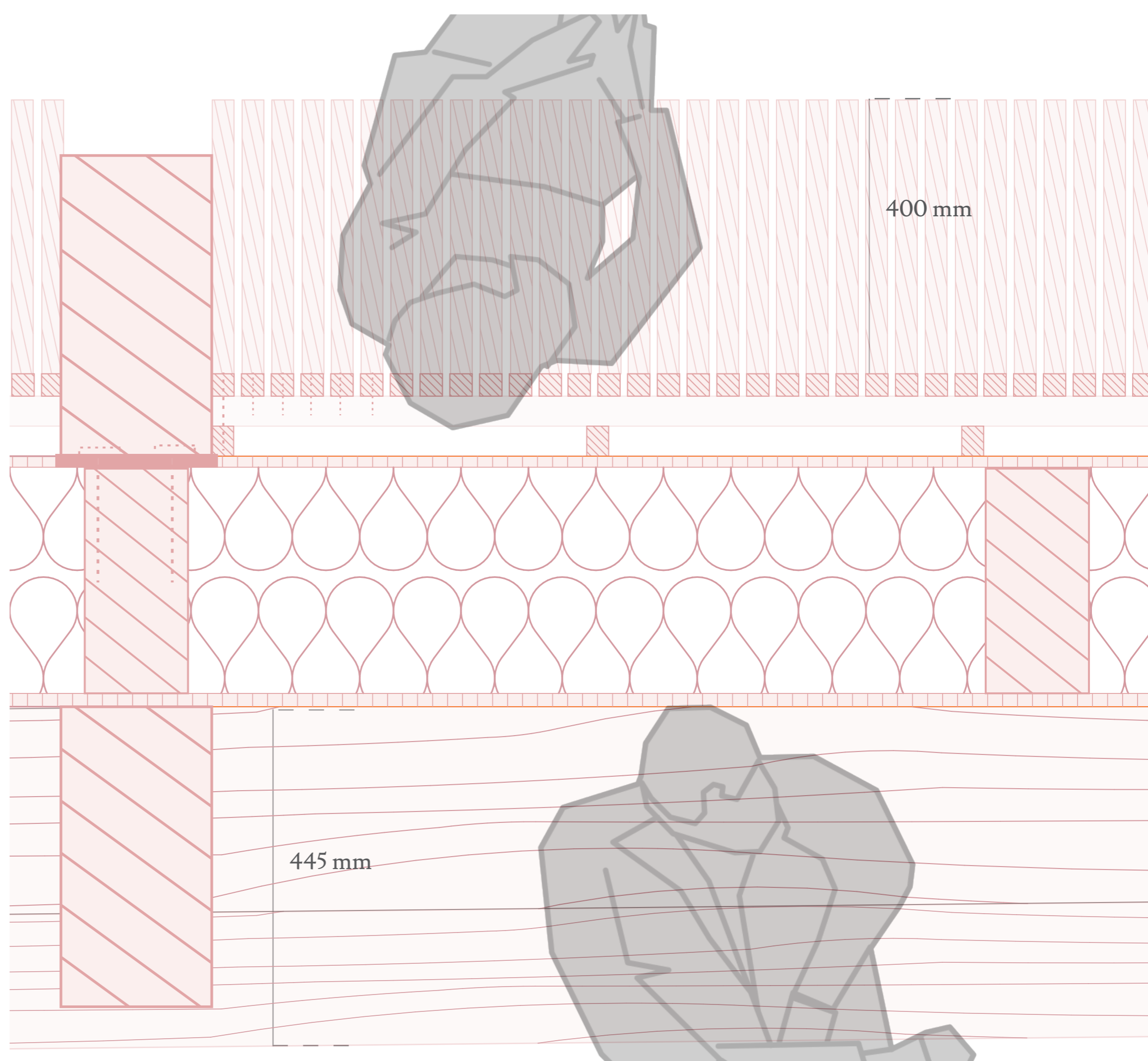
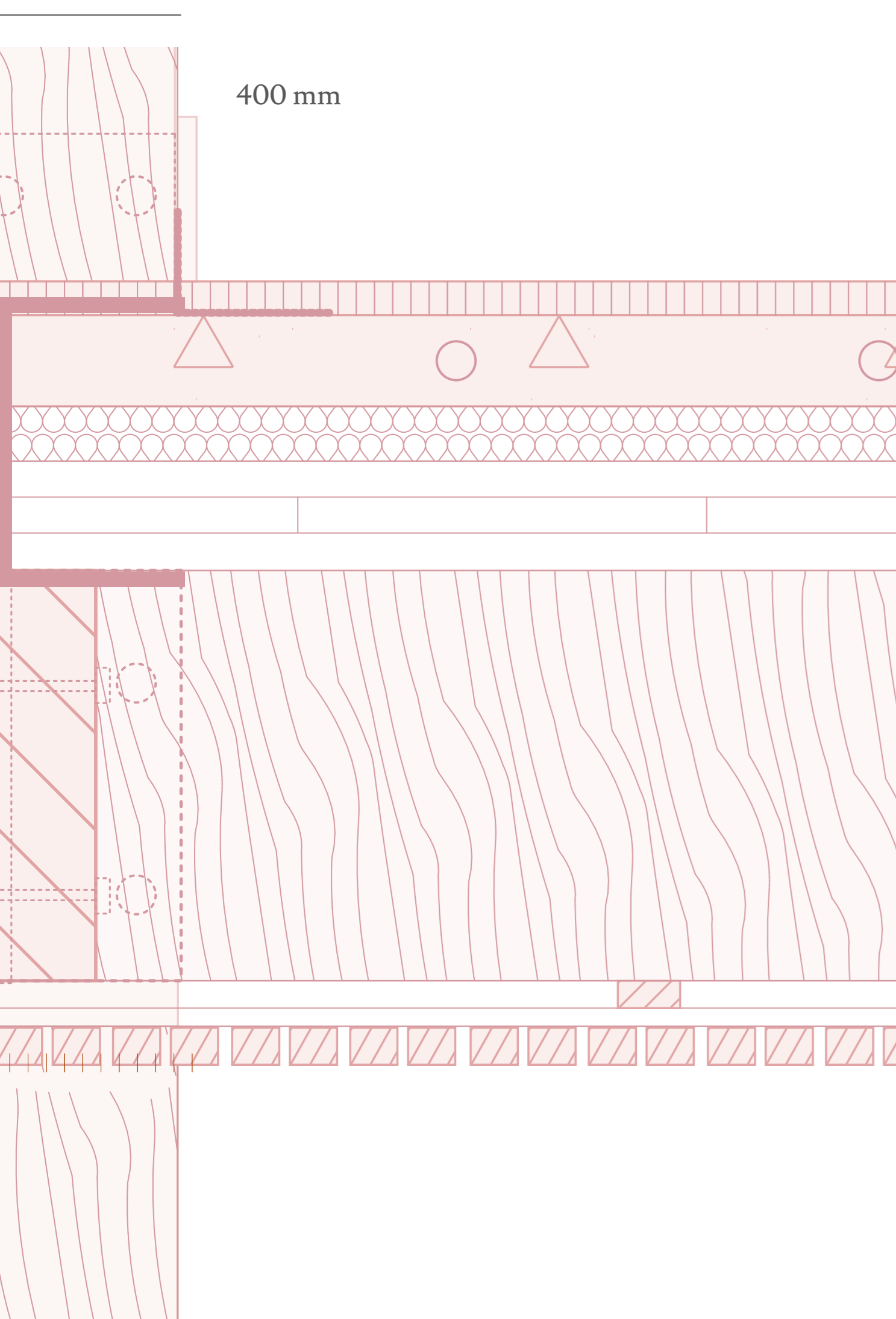
Glulam column-beams-floor connection

Scale 1:5



Roof ridge, Community center

Scale 1:5



North facade: integrated baywindow seats and outdoor bench

Scale 1:5