

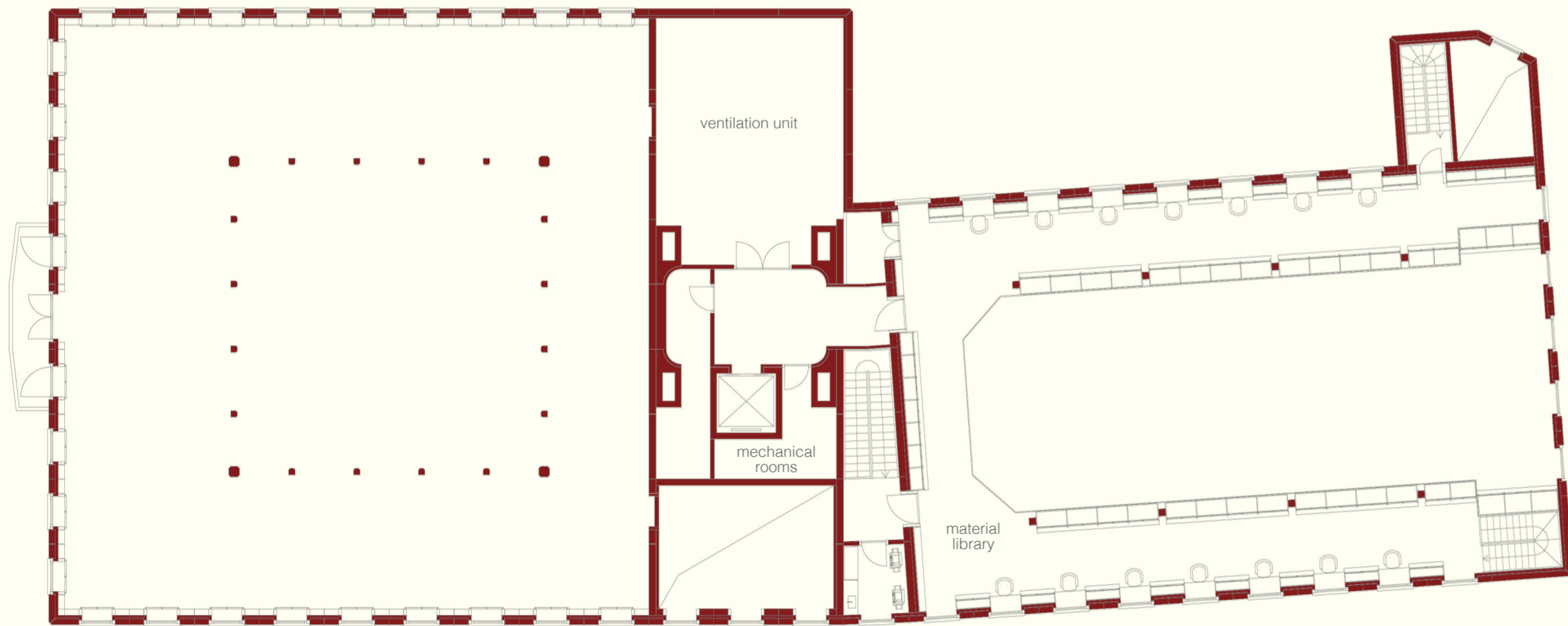
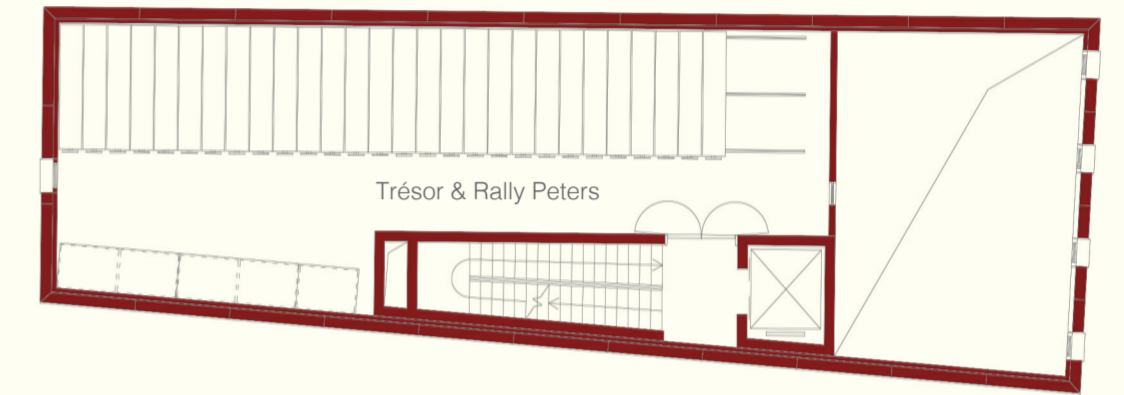
GROUND FLOOR PLAN

1:200

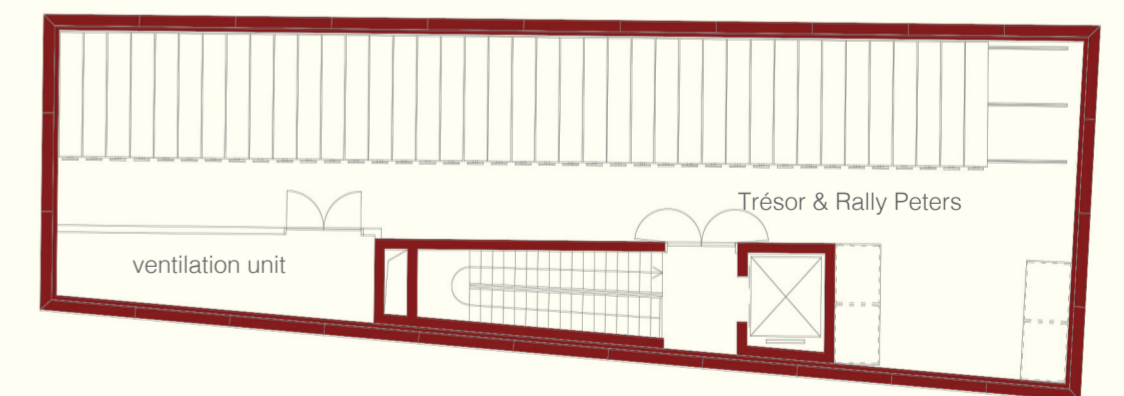


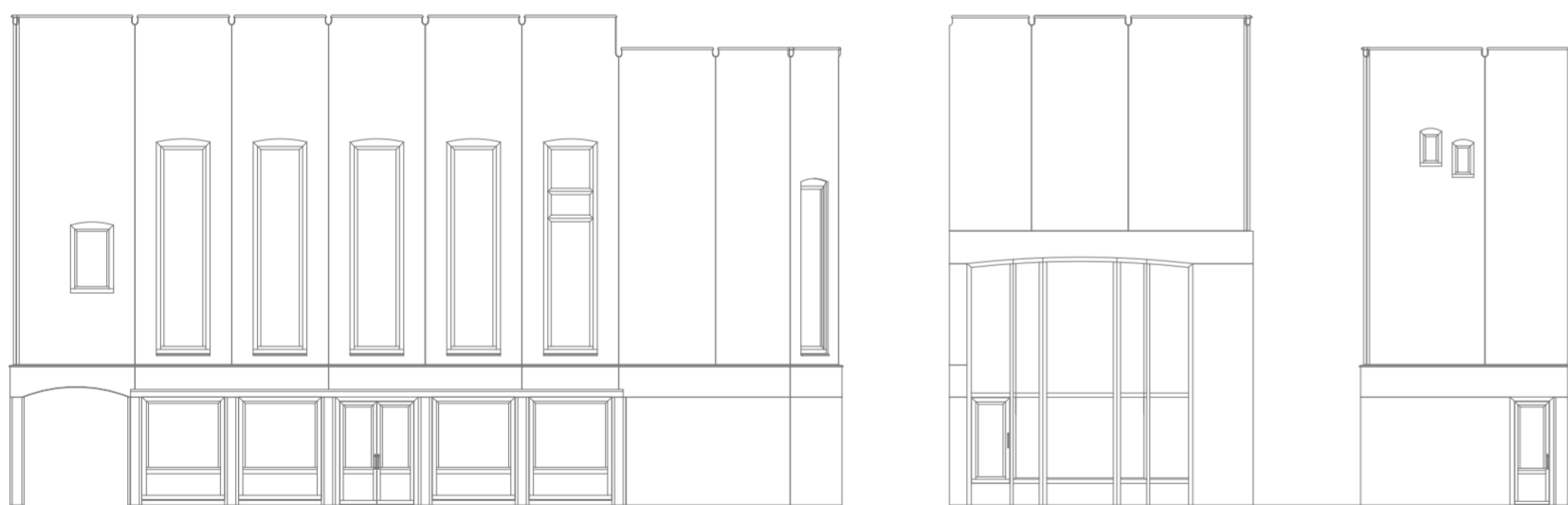
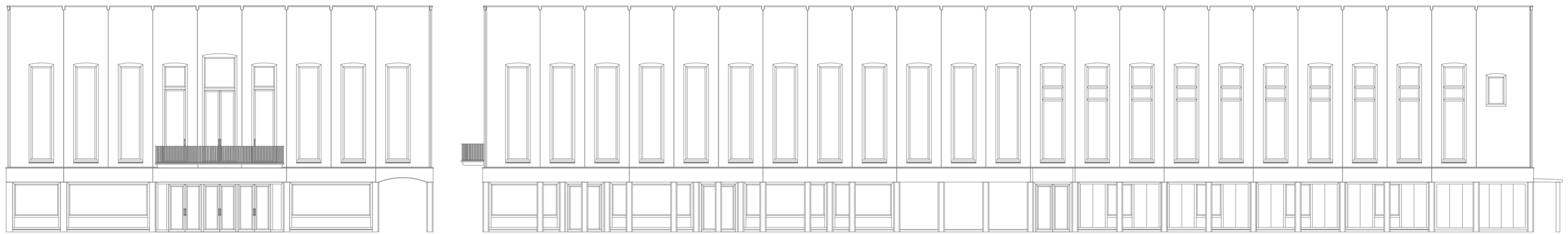
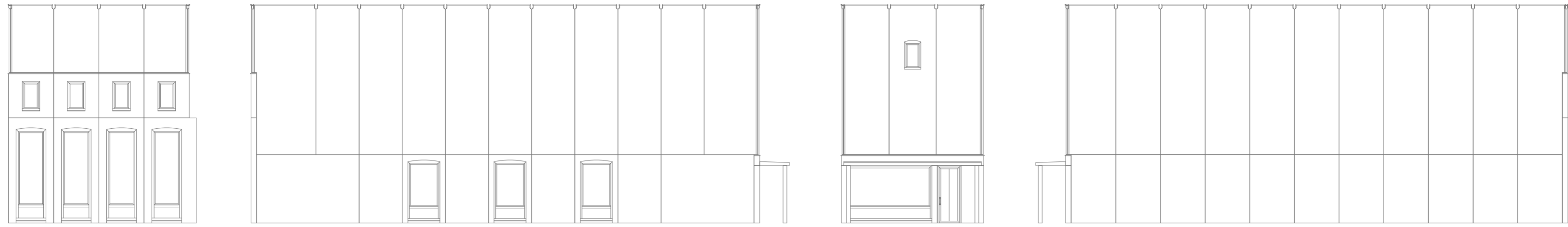


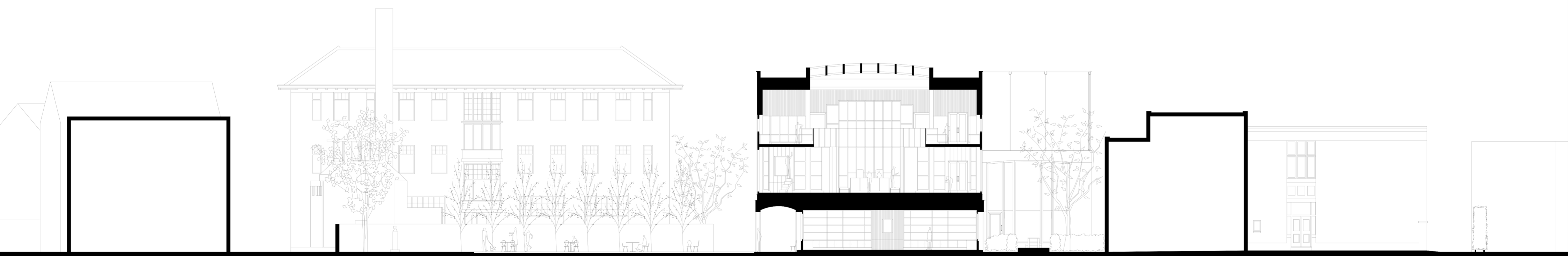
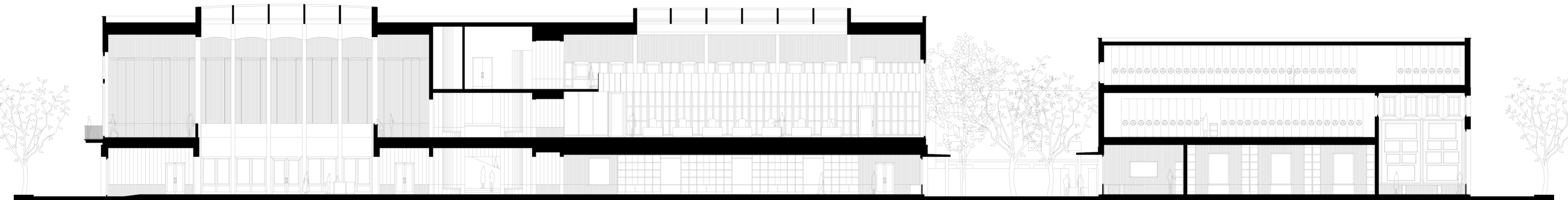
FIRST FLOOR PLAN
1:200



SECOND FLOOR PLAN
1:200

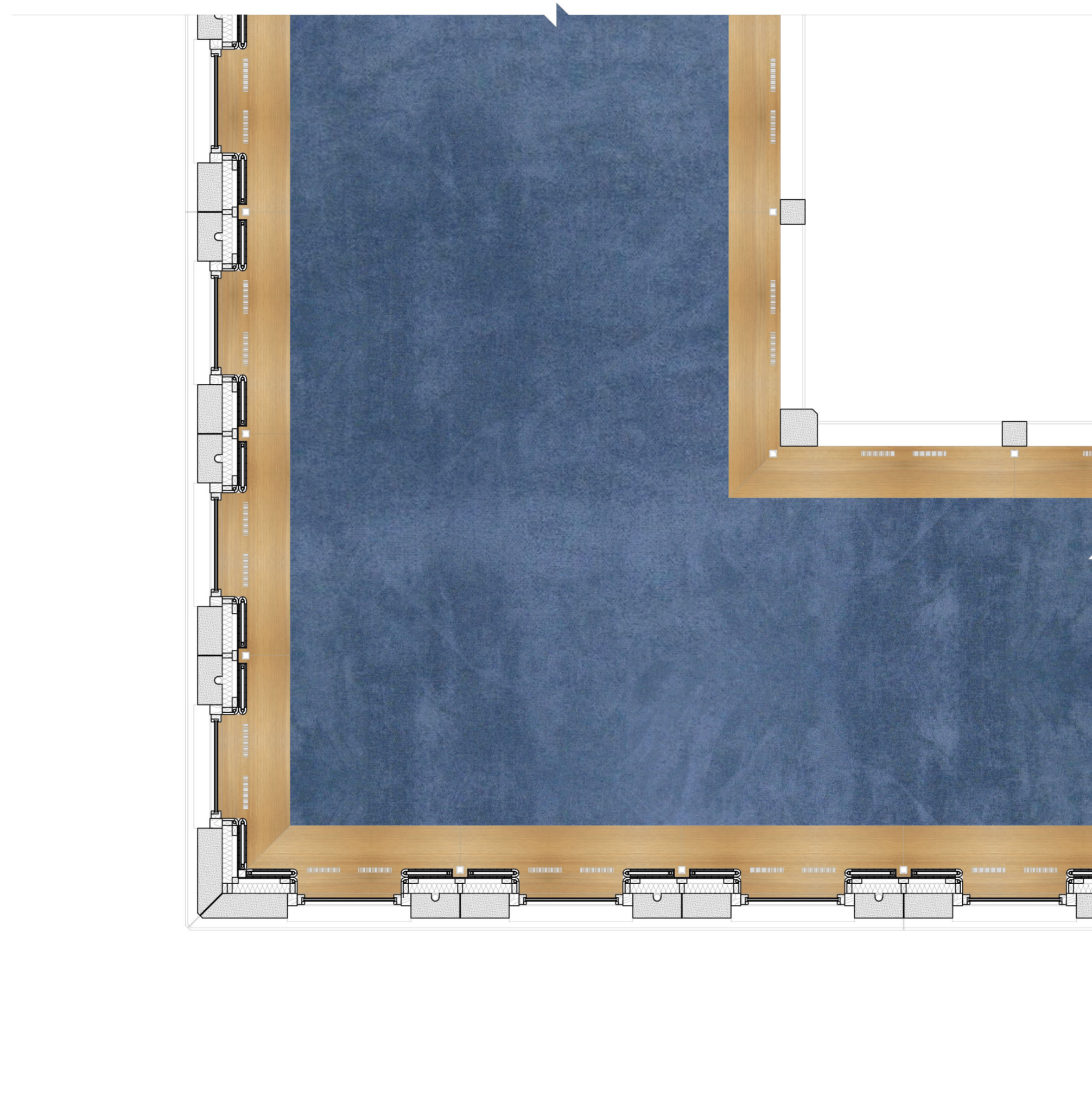




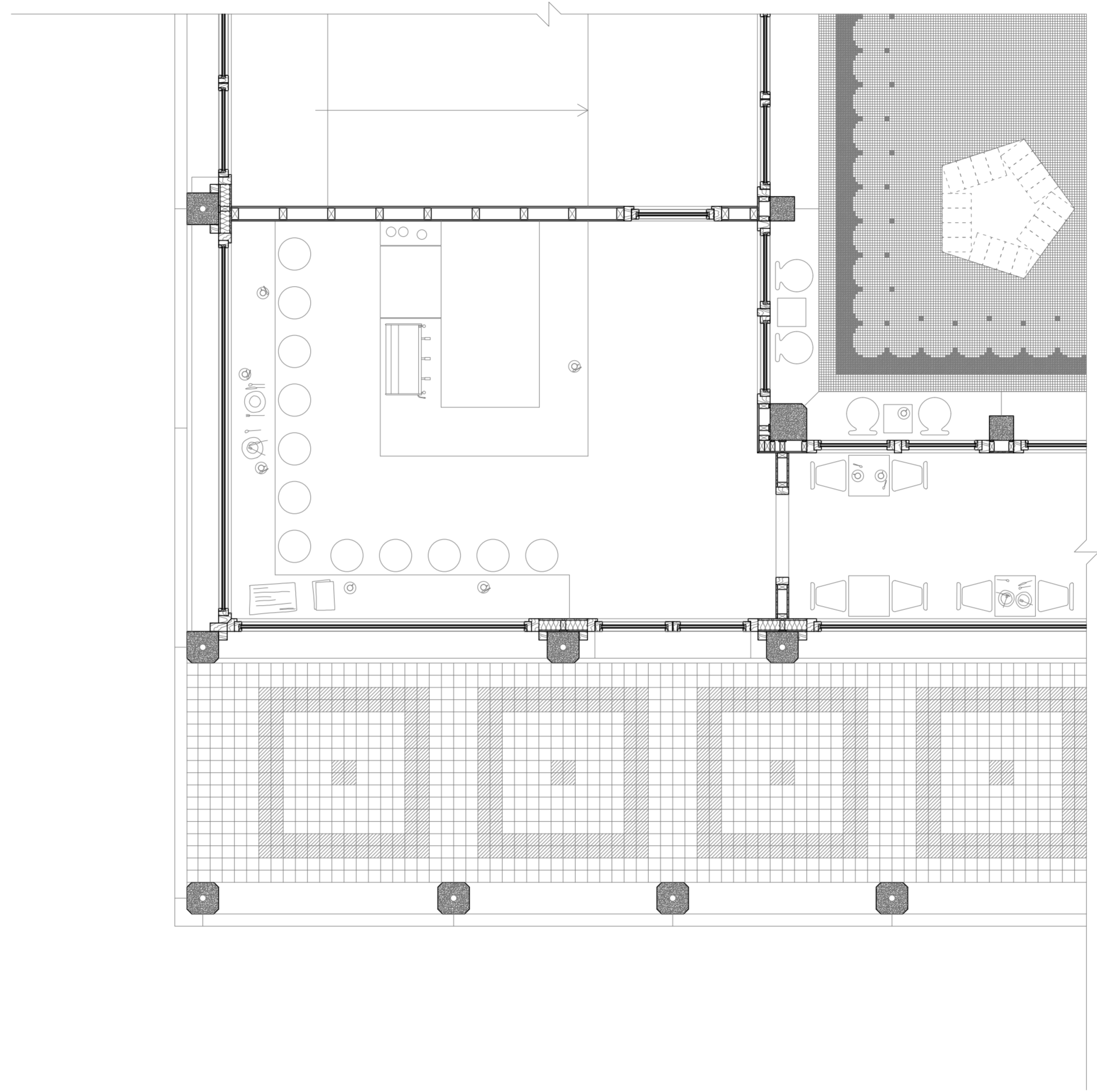




WALL SECTION SERIES 1:50
SOUTH FAÇADE AT WEST CORNER



WALL SECTION SERIES 1:50
1ST FLOOR PLAN



WALL SECTION SERIES 1:50
GROUND FLOOR PLAN





WALL SECTION SERIES 1:50
SECTION AT RESEARCH EXHIBITION SETTING

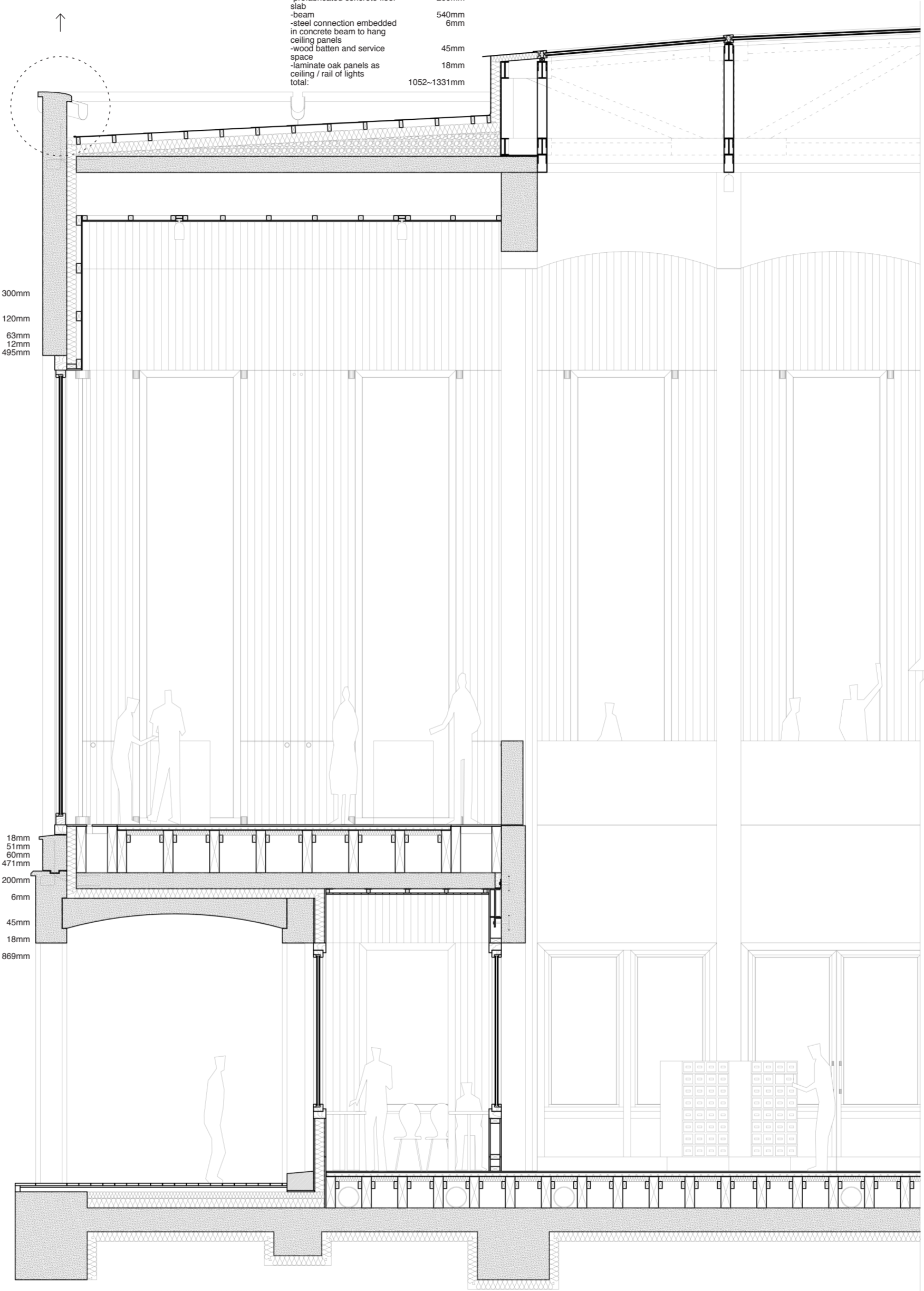
galvanized aluminium components on top of the gap between 2 facade panels to lead rainwater to roof and cover imperfection of precast concrete panels



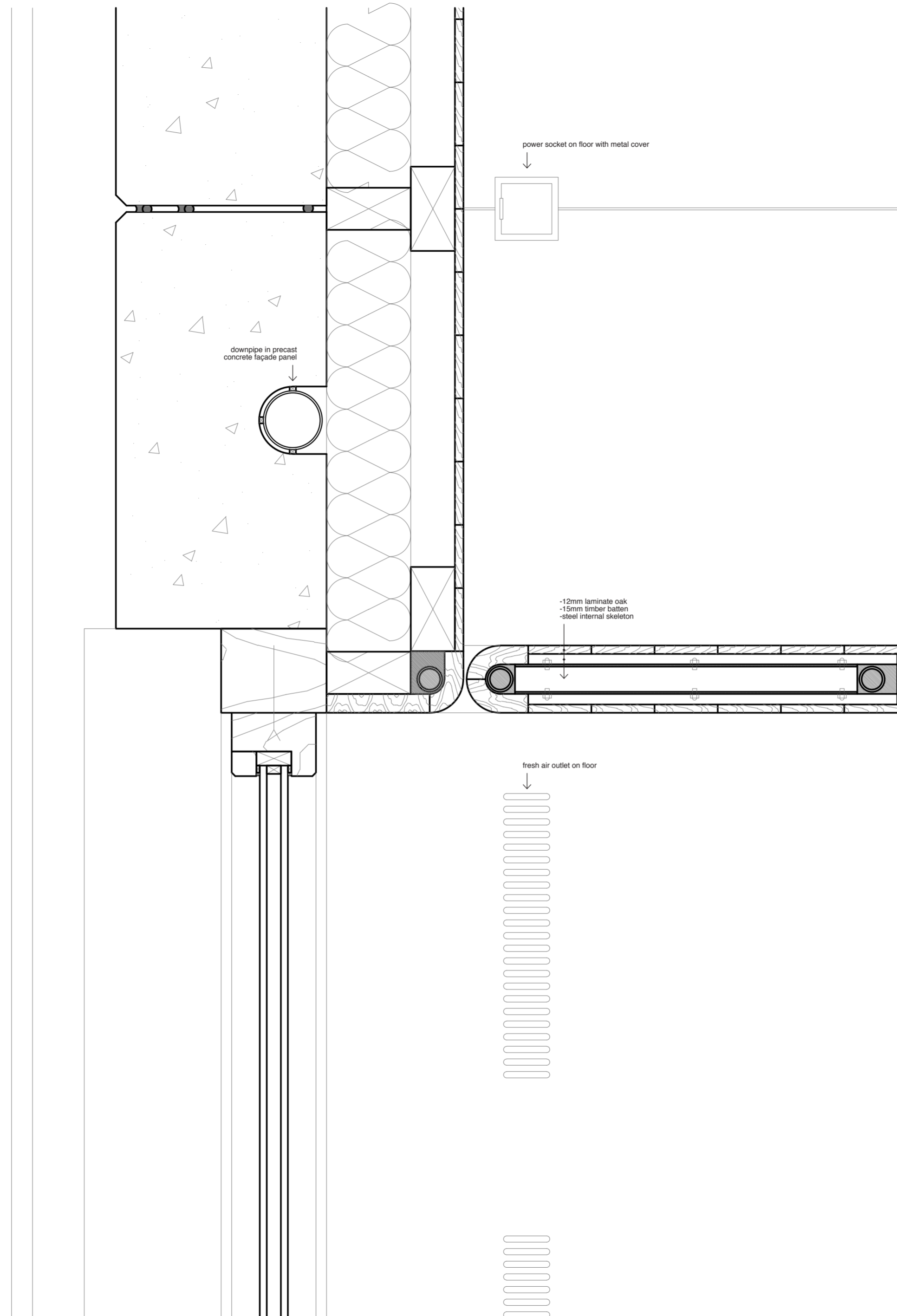
roof construction:
 (ceiling part)
 -steel sheets as roof covering and cavity 3mm
 -timber batten and cavity 90mm
 -waterproofing layer 120mm
 -thermal insulation 30-309mm
 -gravel screed / 3° ramp 200mm
 -prefabricated concrete floor slab 540mm
 -beam 6mm
 -steel connection embedded in concrete beam to hang ceiling panels 45mm
 -wood batten and service space 18mm
 -laminated oak panels as ceiling / rail of lights 1052-1331mm
 total:

wall construction:
 -loadbearing precast pigmented concrete panels, with imbedded downpipe 300mm
 -thermal insulation, vapourproof 120mm
 -timber studs 63mm
 -laminated oak panels 12mm
 total: 495mm

1st floor construction:
 -carpet 18mm
 -floor heat tubes and mass 51mm
 -thermal insulation 60mm
 -cavity for floor ventilation channels 471mm
 -prefabricated concrete floor slab 200mm
 -steel connection embedded in concrete floor slab to hang ceiling panels 6mm
 -wood batten and service space 45mm
 -laminated oak panels as ceiling 18mm
 total: 869mm



WALL SECTION SERIES 1:50
 CONSTRUCTION



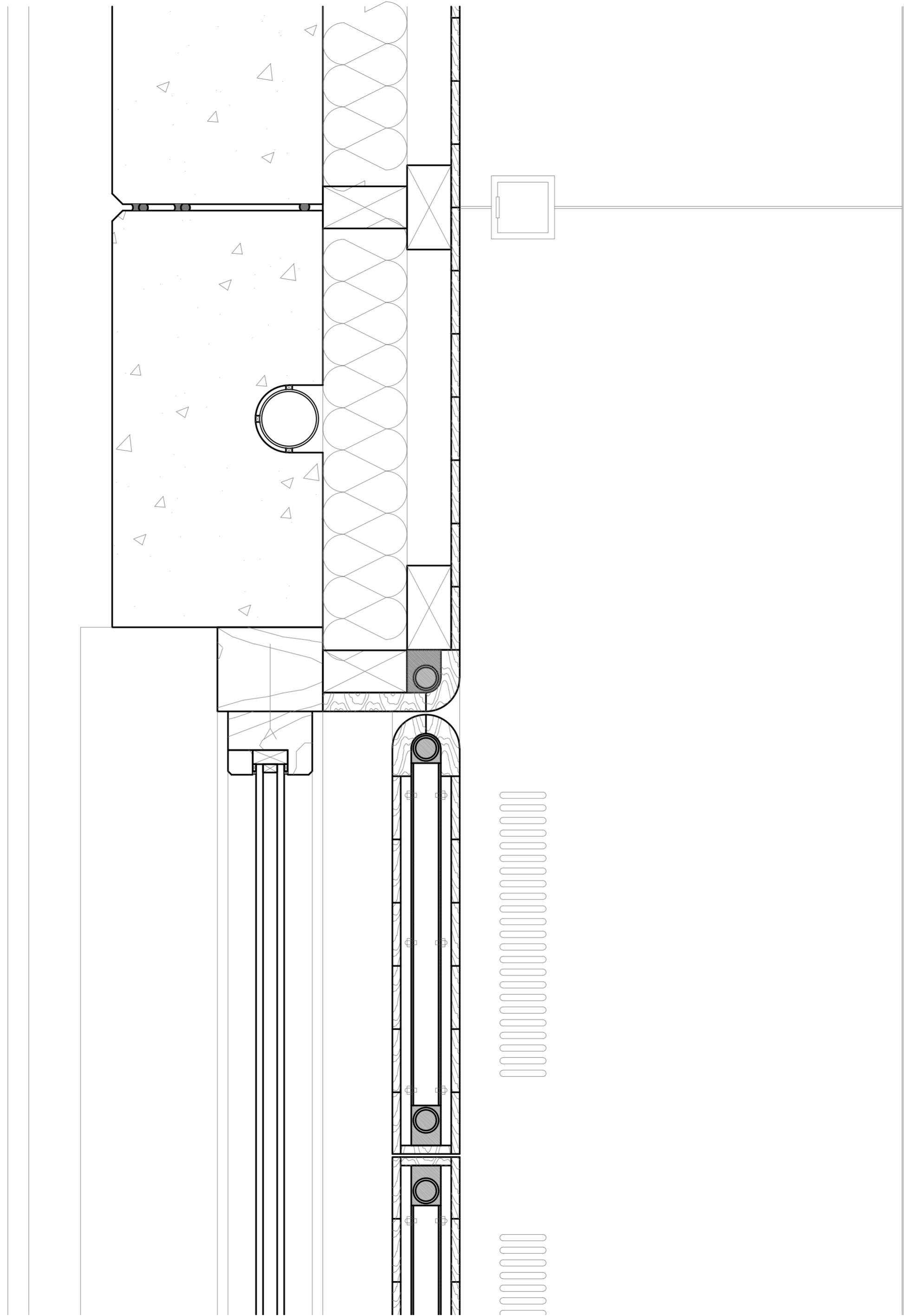
downpipe in precast
concrete façade panel

power socket on floor with metal cover

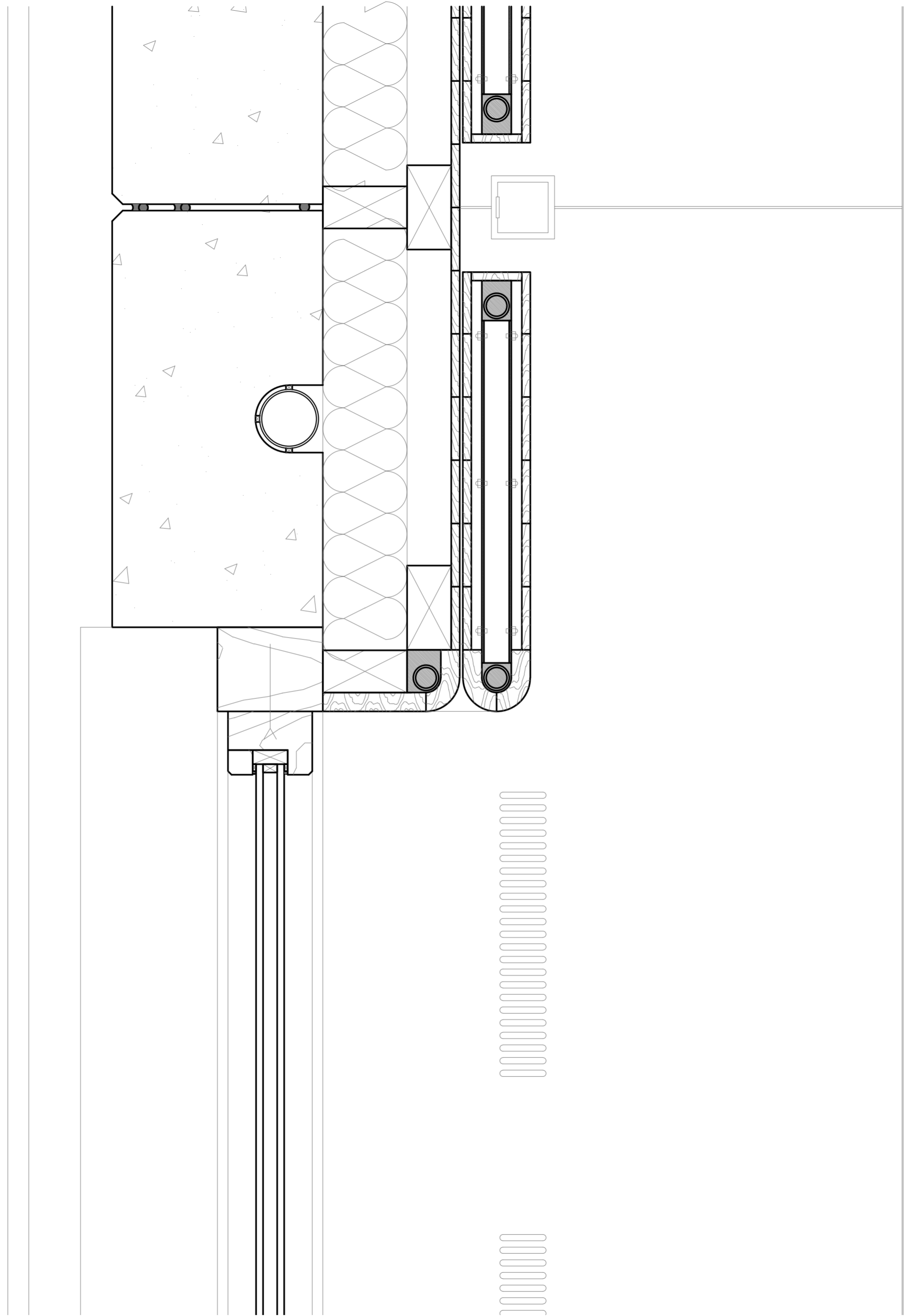
-12mm laminate oak
-15mm timber batten
-steel internal skeleton

fresh air outlet on floor

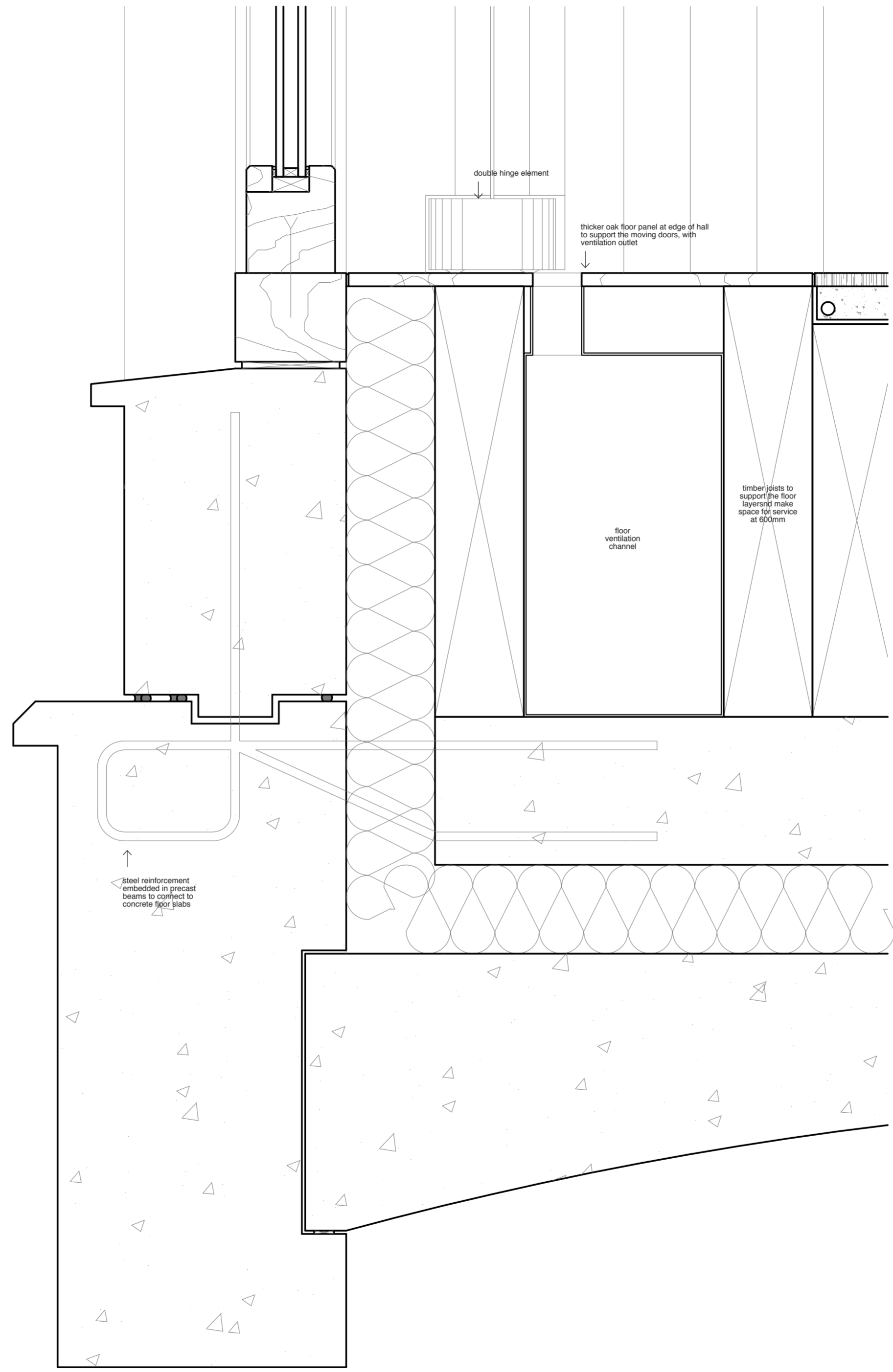
DETAIL 1:5
HALL DOORS AT INTERMEDIATE POSITION



DETAIL 1:5
HALL DOORS AT CLOSED POSITION



DETAIL 1:5
HALL DOORS AT OPENED POSITION



double hinge element

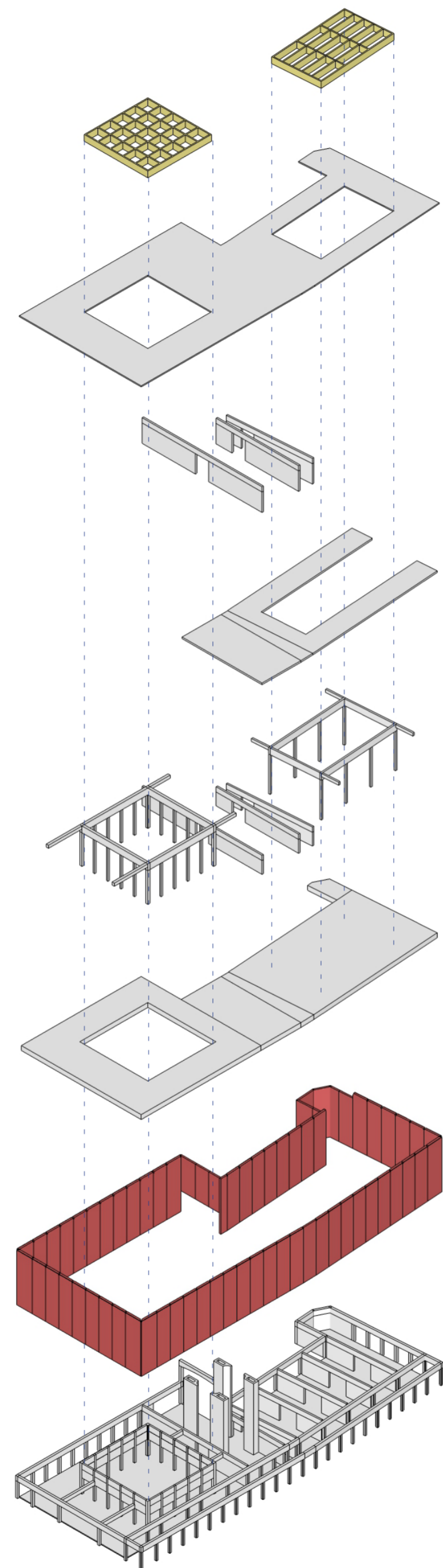
thicker oak floor panel at edge of hall to support the moving doors, with ventilation outlet

floor ventilation channel

timber joists to support the floor layers and make space for service at 600mm

steel reinforcement embedded in precast beams to connect to concrete floor slabs

DETAIL 1:5
FLOOR - BEAM - WALL CONNECTION



skylight
with secondary vertical tubes
inside to block direct heat

roof level

internal load-bearing walls and
beams
second floor

second floor

load-bearing elements
1st floor
(columns in big hall continue to
ground floor)

1st floor

load-bearing façade upper tier
precast pigmented concrete
panels

load-bearing façade lower
tier and internal load-bearing
elements
precast white concrete panels
with fine aggregates

STRUCTURE ANATOMY

both buildings:
-floor ventilation
-because human activities mainly remain near the floor in the great space
-ventilation exchange unit at top floor
-air travels through shafts

constant temperature and humidity for ancient books and maps collections
← polluted air
→ fresh air

