



NIGHT TRAIN HUB BERLIN
DRAWING SET P5

Connecting Berlin with the rest of Europe

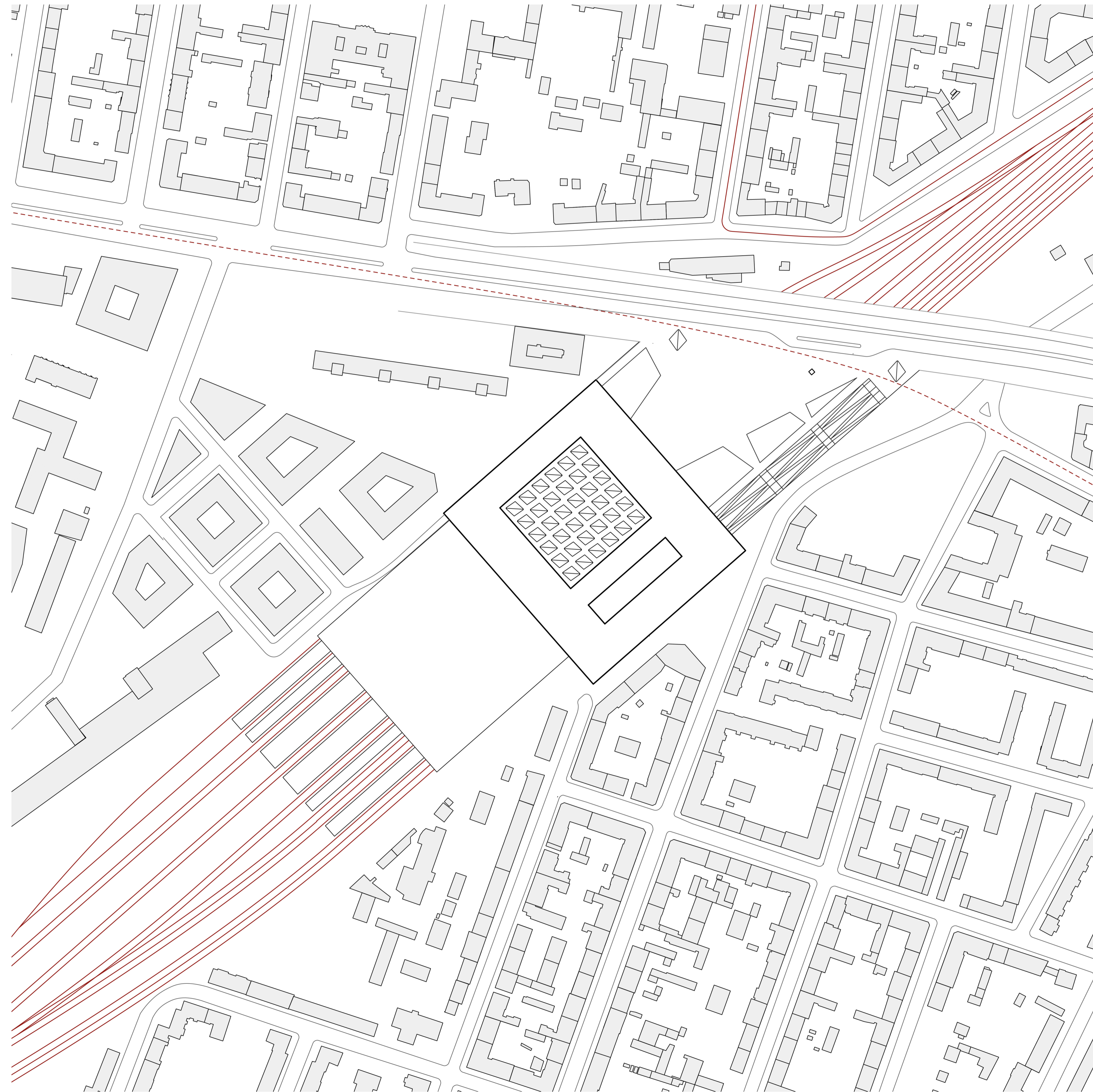
Broer Schipper - 4695488

21-03-2024

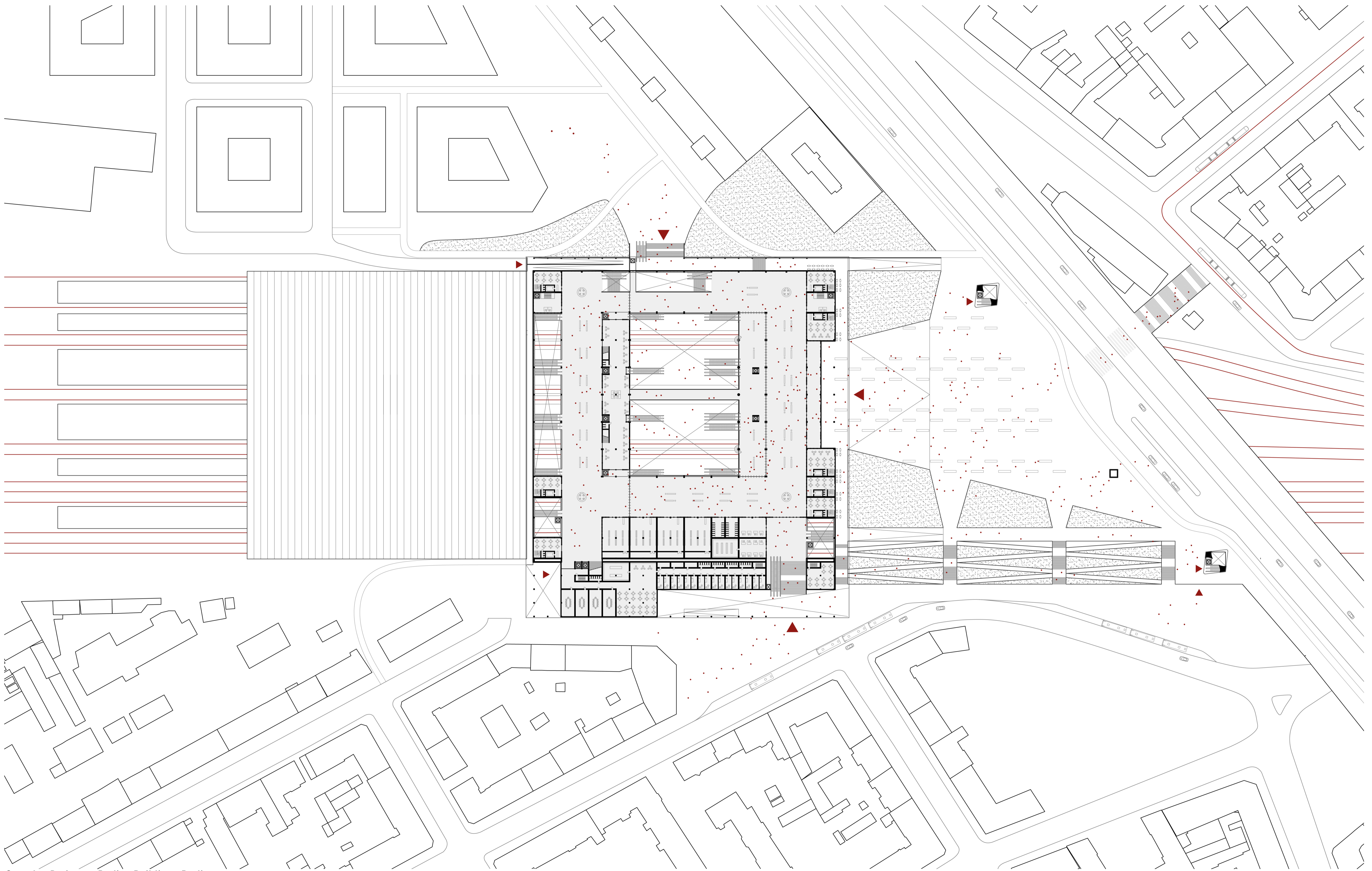
GROUP SITE PLAN



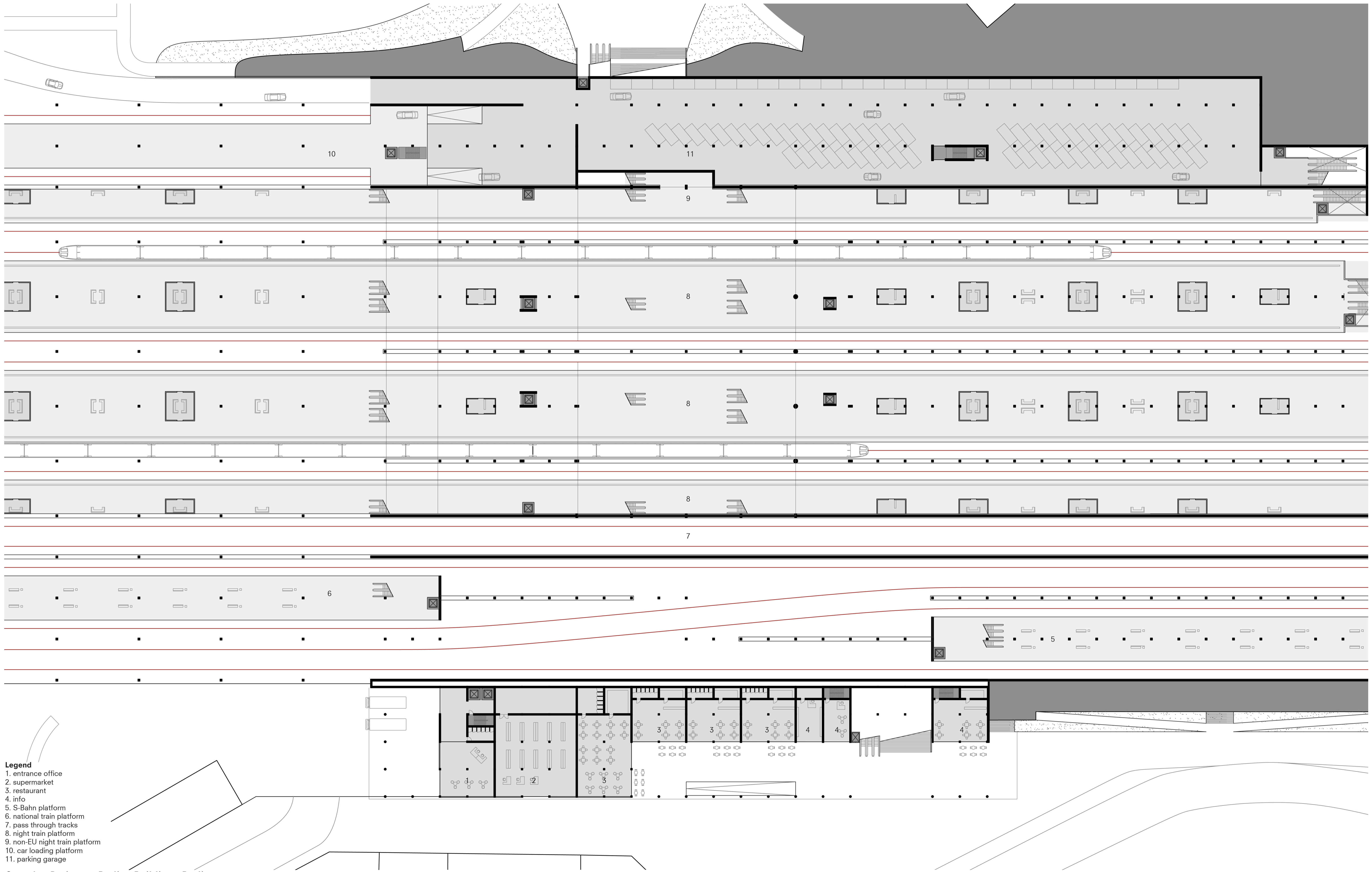
SITE PLAN



URBAN IMPLEMENTATION



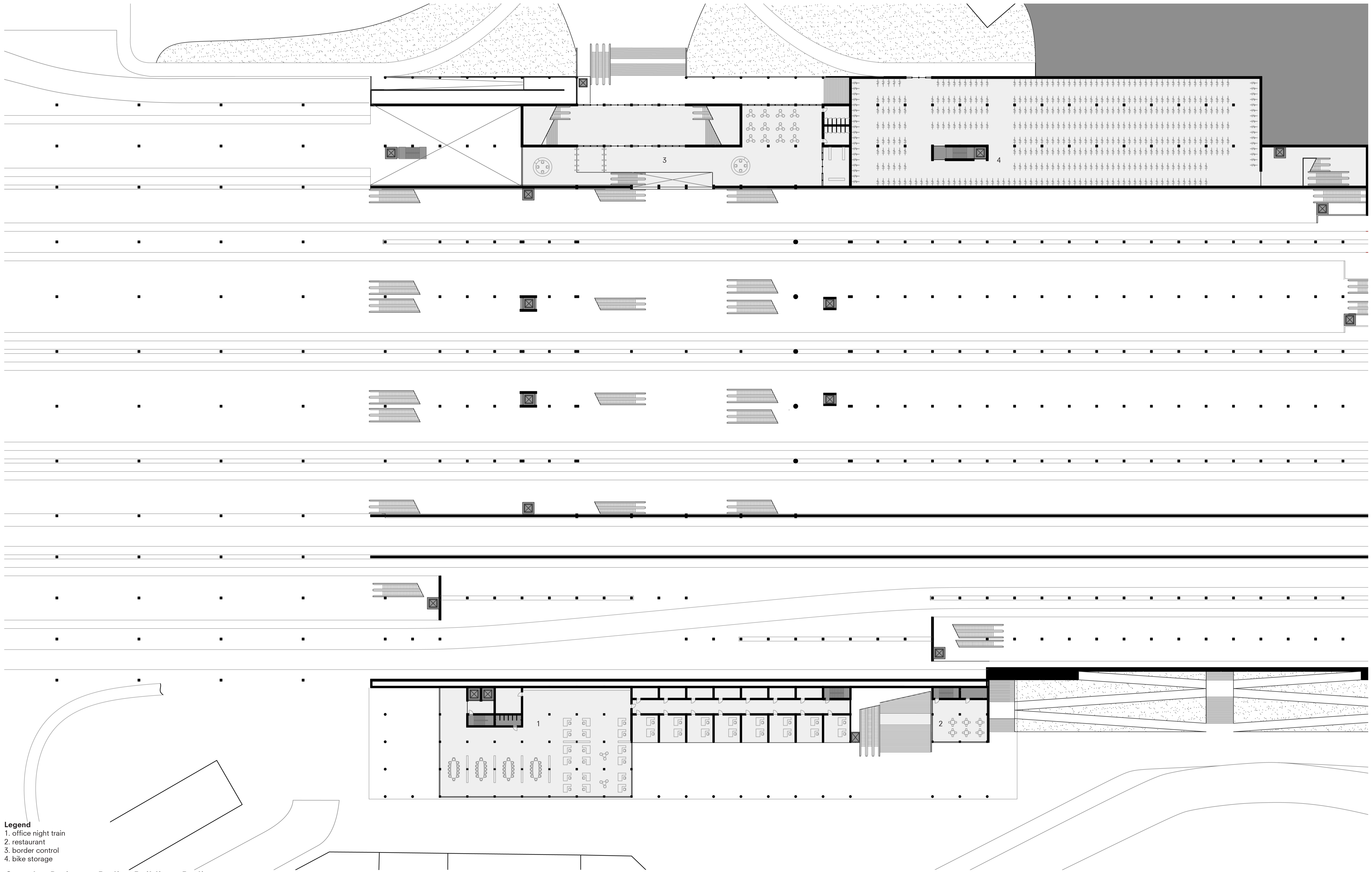
BASE



Legend

- 1. entrance office
- 2. supermarket
- 3. restaurant
- 4. info
- 5. S-Bahn platform
- 6. national train platform
- 7. pass through tracks
- 8. night train platform
- 9. non-EU night train platform
- 10. car loading platform
- 11. parking garage

BASE +

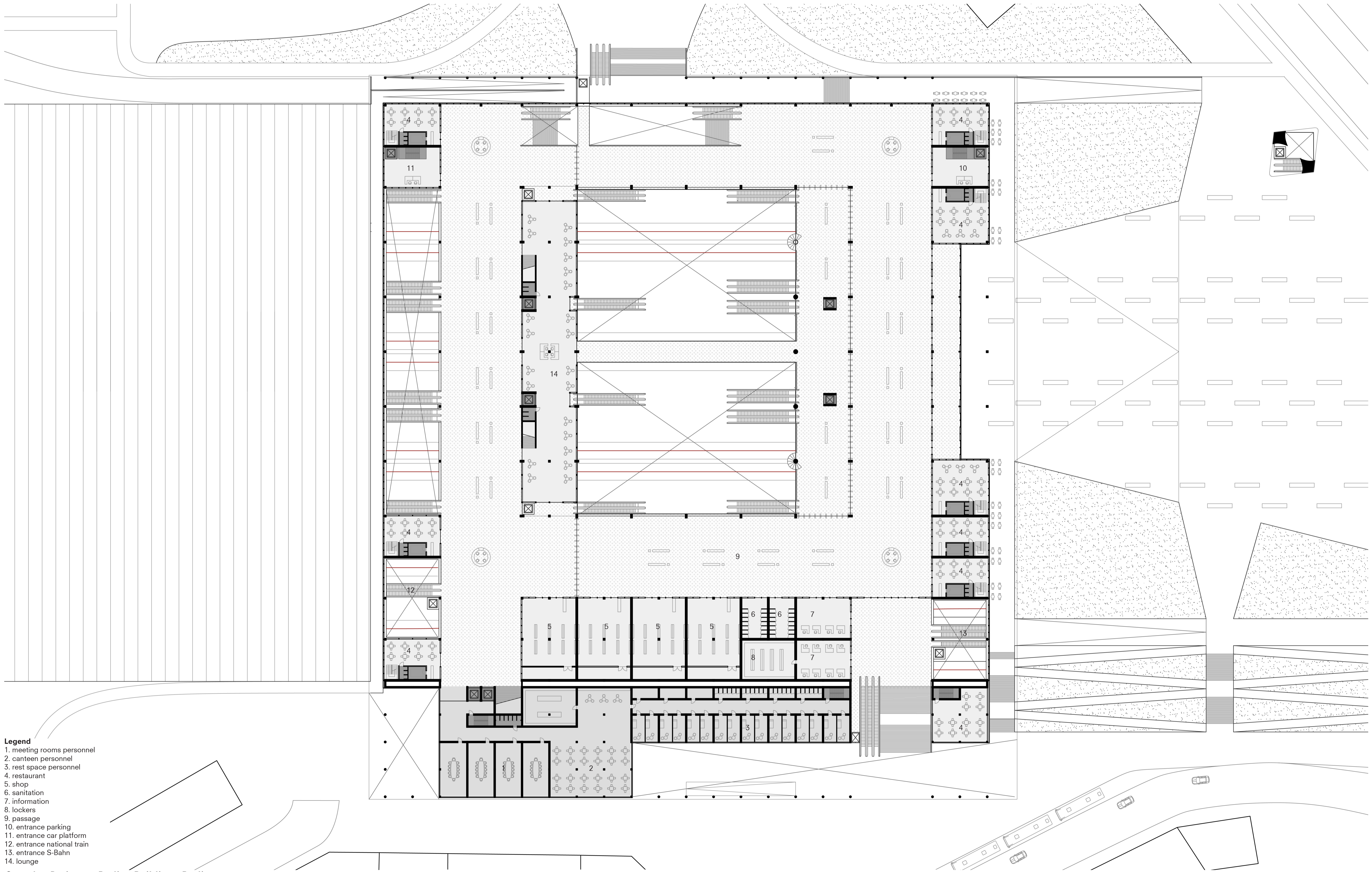


- Legend**
- 1. office night train
 - 2. restaurant
 - 3. border control
 - 4. bike storage

Complex Projects - Bodies Buildings Berlin
Night Train Hub Berlin
Broer Schipper
P5 - 21 march 2024



BUILDING

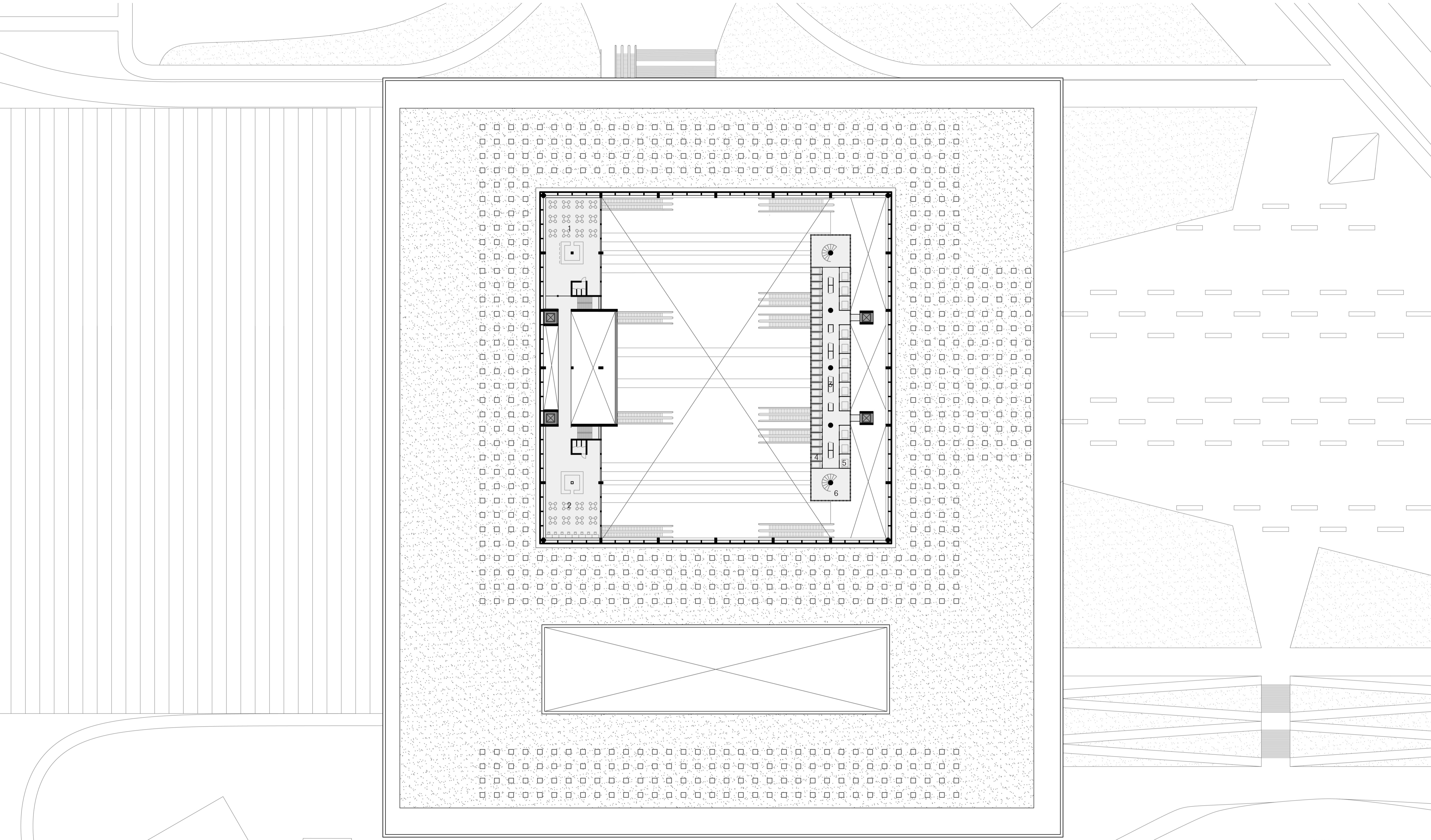


- Legend**
- 1. meeting rooms personnel
 - 2. canteen personnel
 - 3. rest space personnel
 - 4. restaurant
 - 5. shop
 - 6. sanitation
 - 7. information
 - 8. lockers
 - 9. passage
 - 10. entrance parking
 - 11. entrance car platform
 - 12. entrance national train
 - 13. entrance S-Bahn
 - 14. lounge

Complex Projects - Bodies Buildings Berlin
Night Train Hub Berlin
Broer Schipper
P5 - 21 march 2024



CROWN

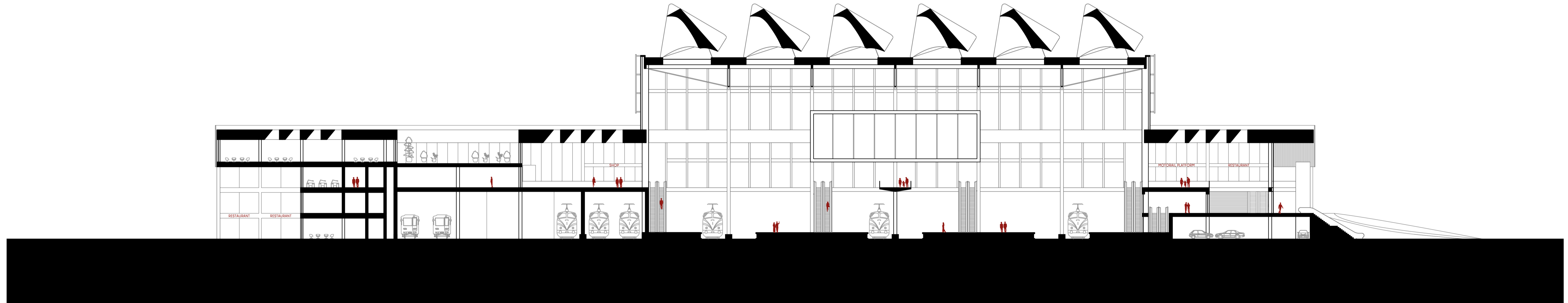
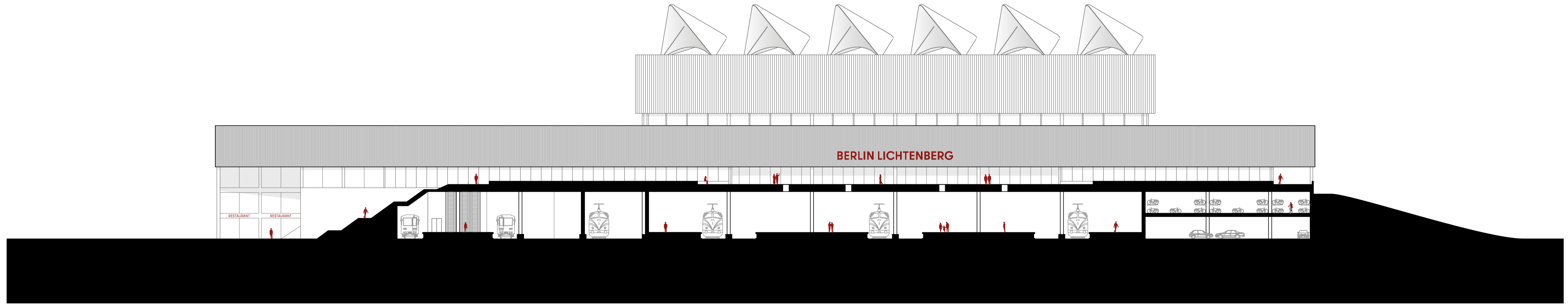


- Legend**
- 1. restaurant
 - 2. coffee bar/work space
 - 3. sanitation capsule hotel
 - 4. small sleepcapsule
 - 5. big sleep capsule
 - 6. entrance capsule hotel

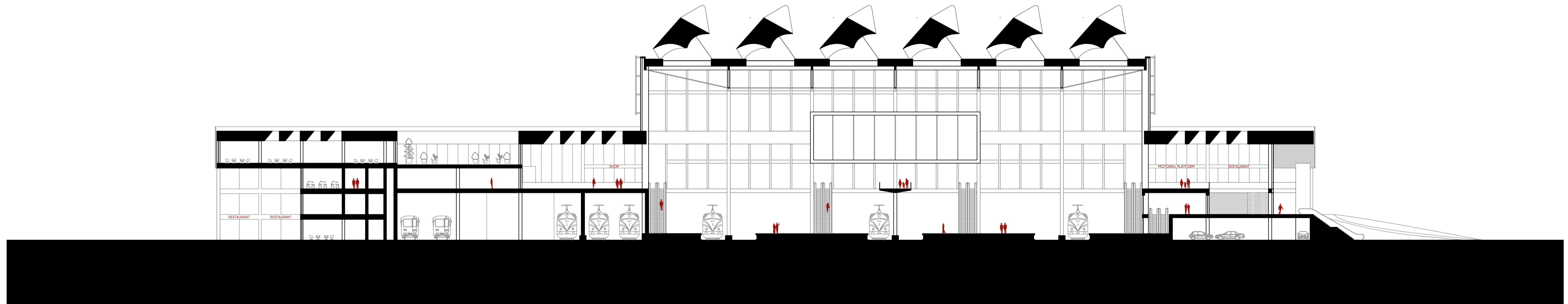
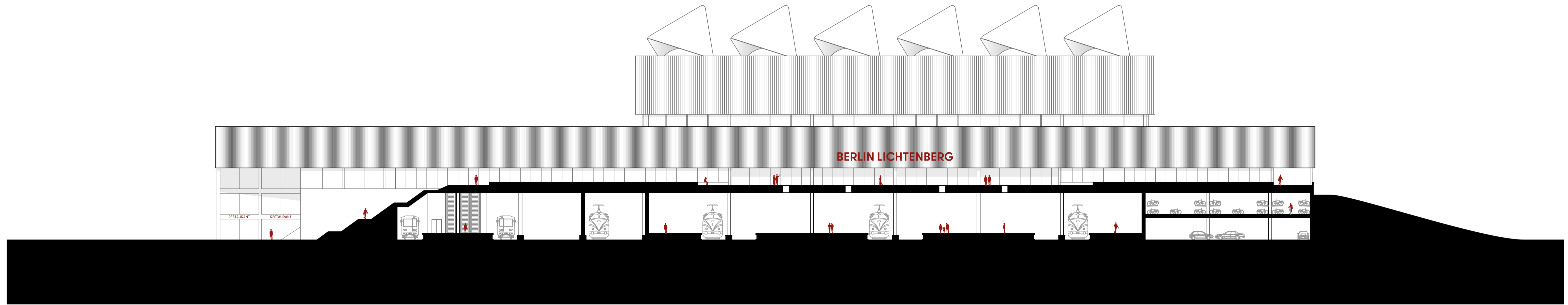
Complex Projects - Bodies Buildings Berlin
Night Train Hub Berlin
Broer Schipper
P5 - 21 march 2024



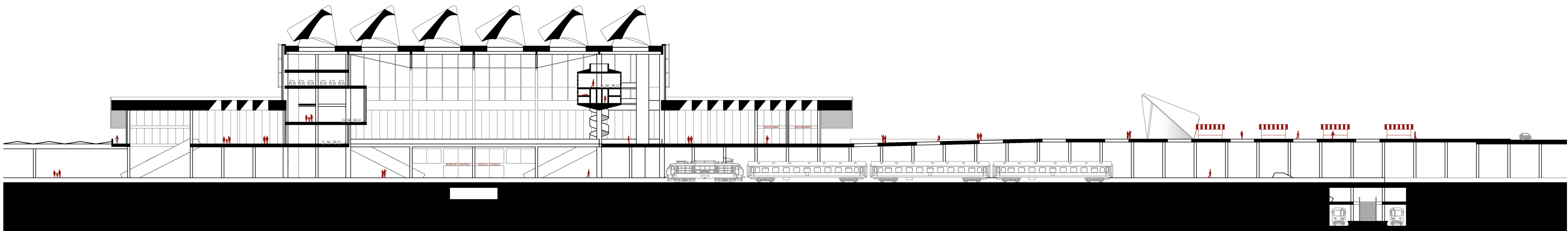
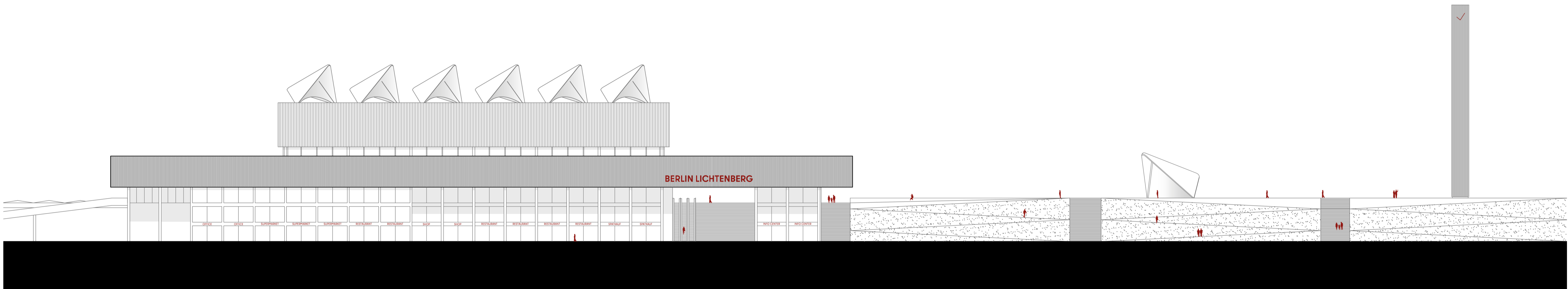
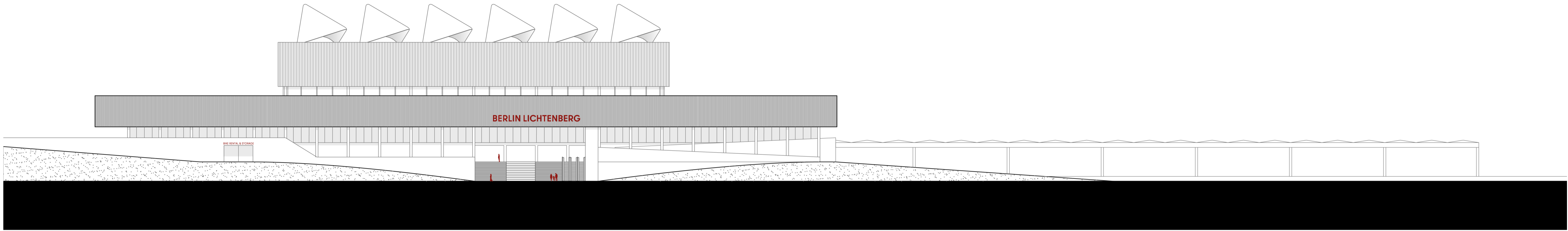
ELEVATION & SECTION



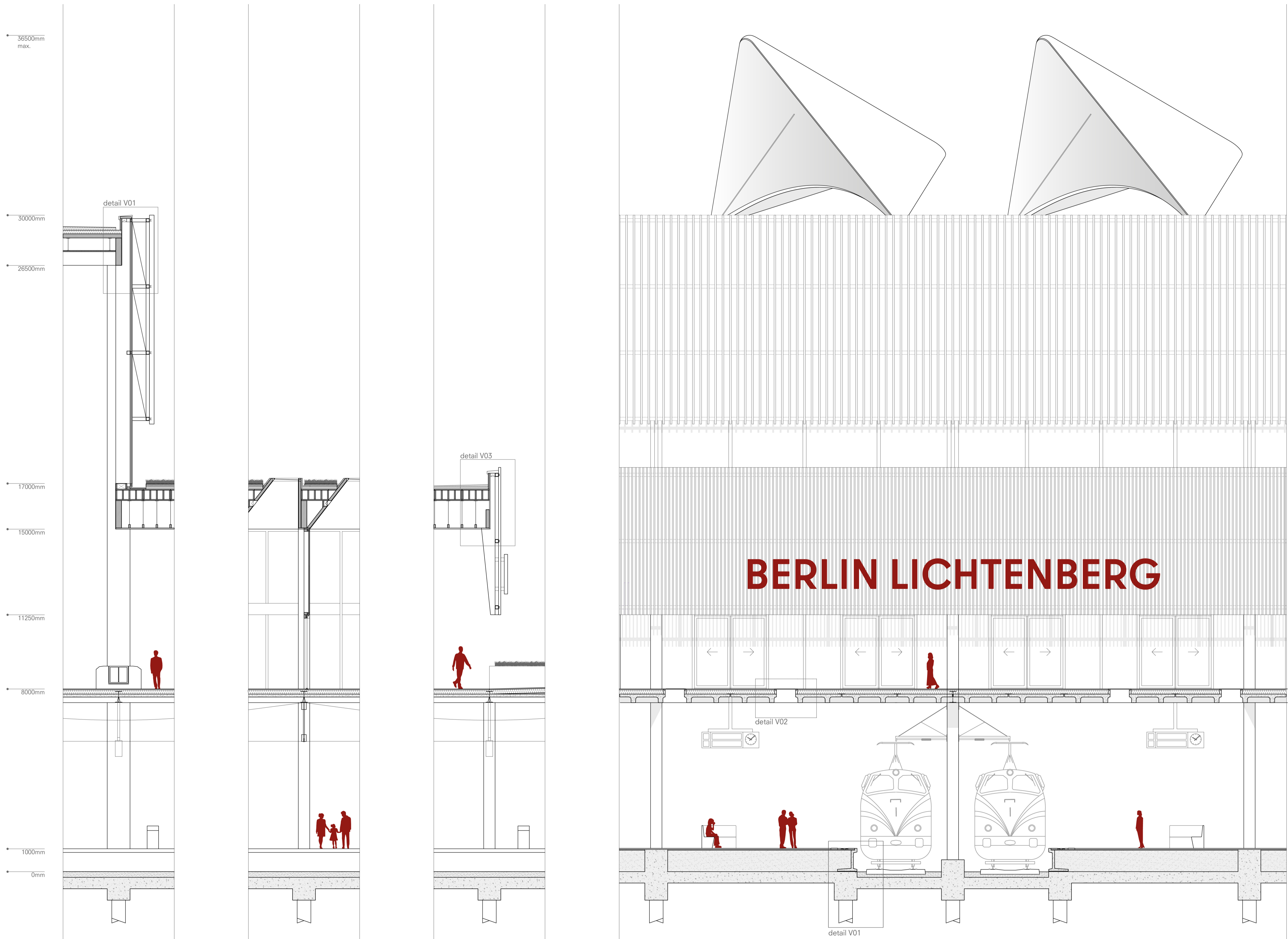
ELEVATION & SECTION



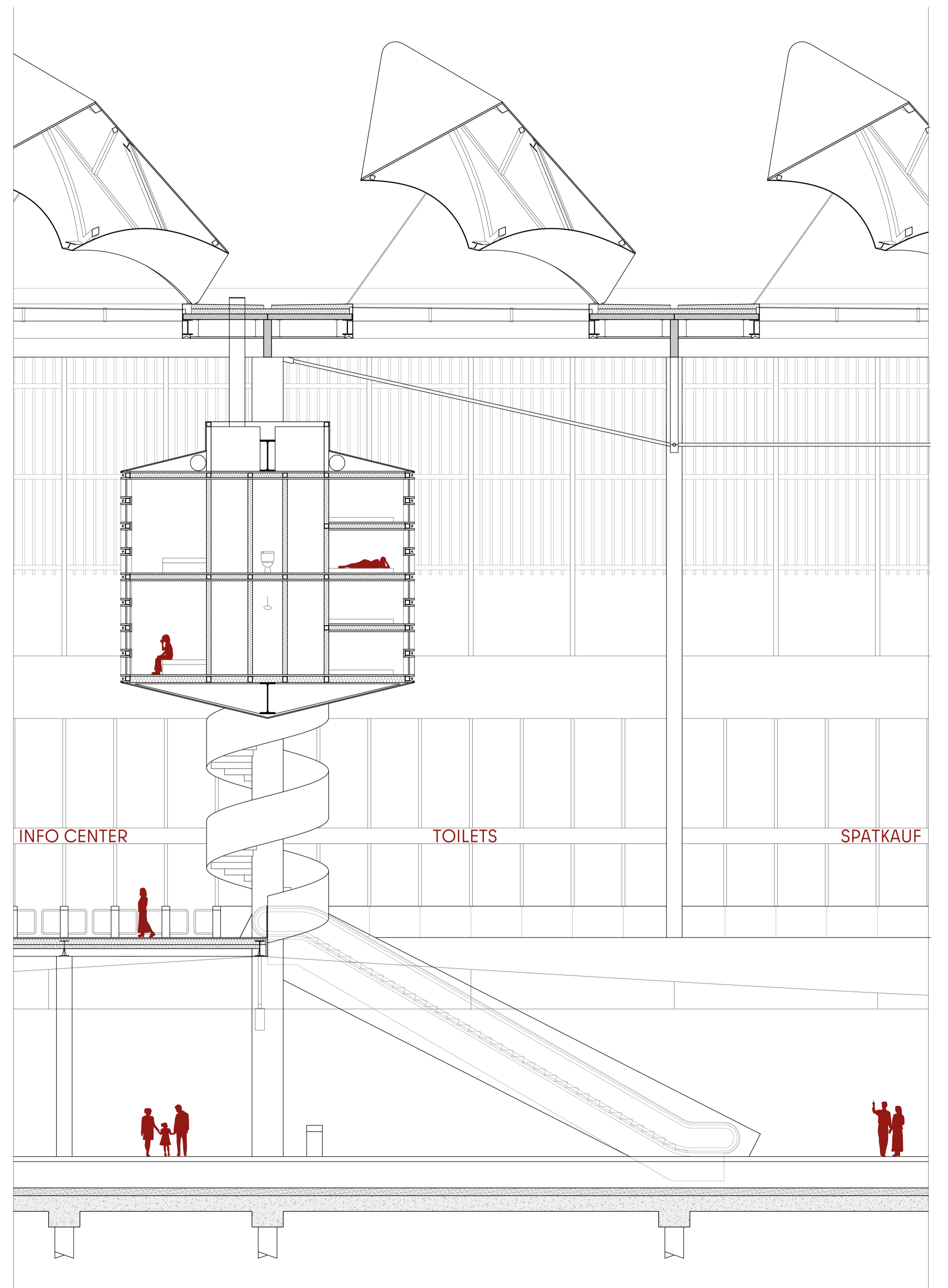
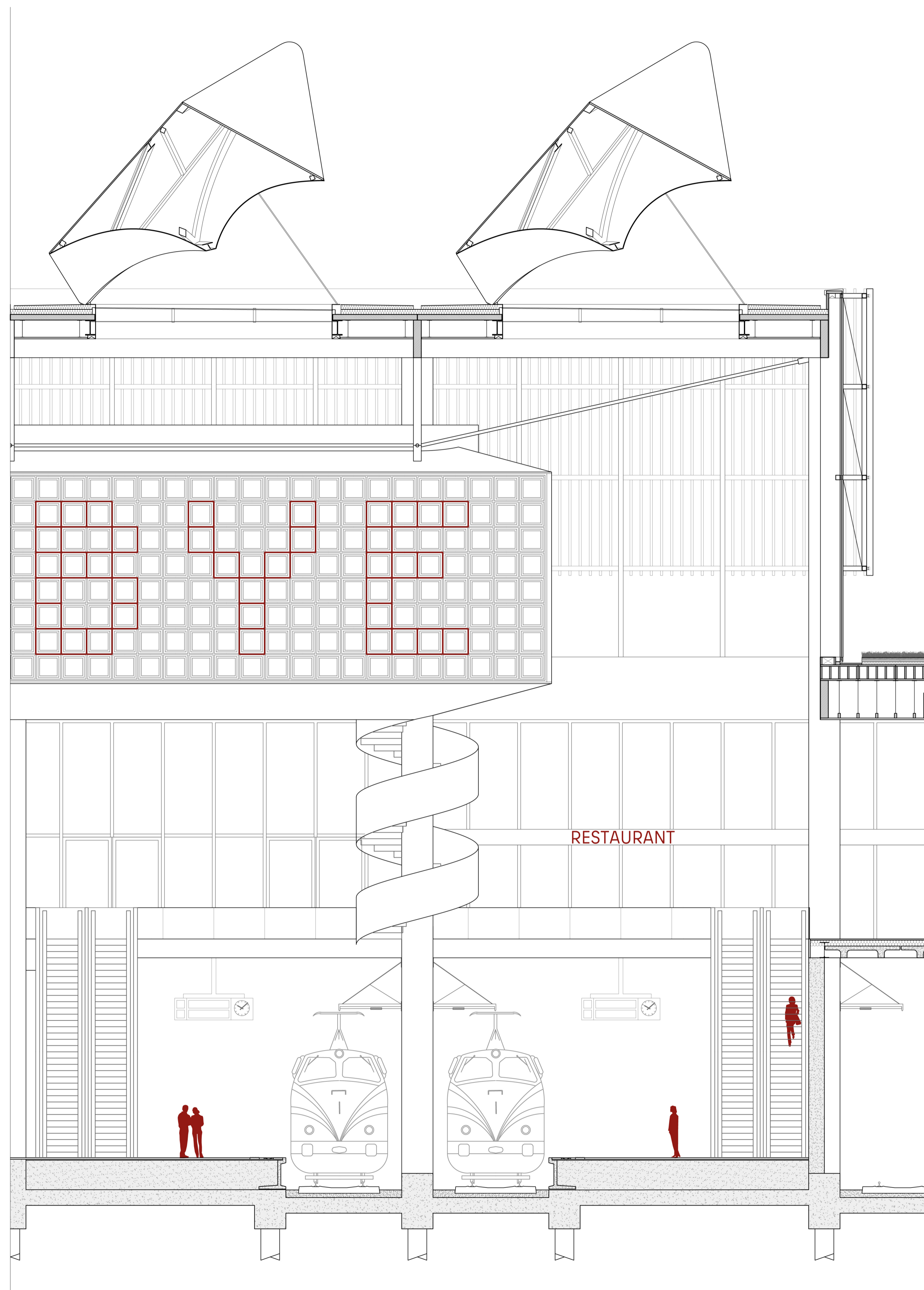
ELEVATIONS & SECTION



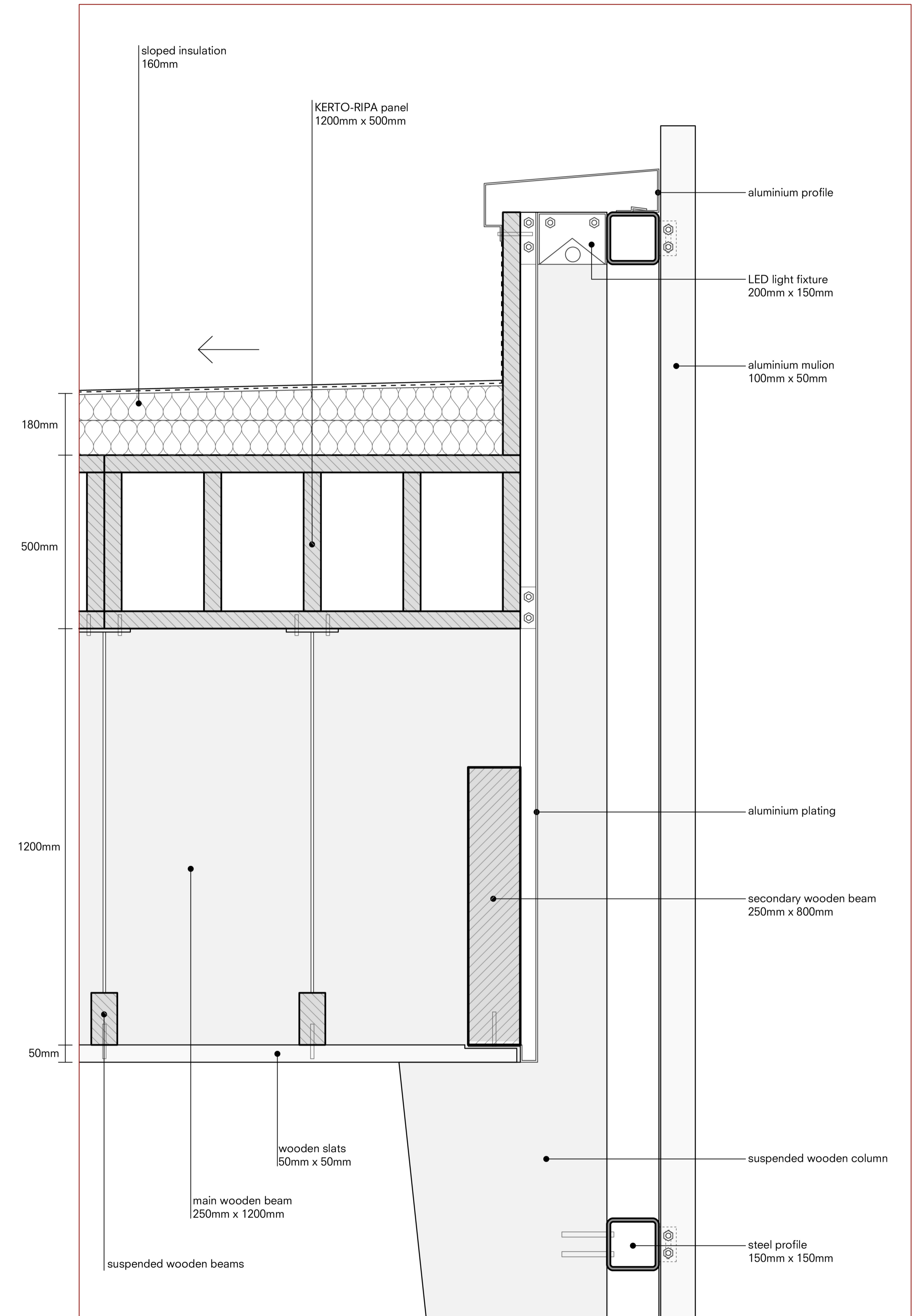
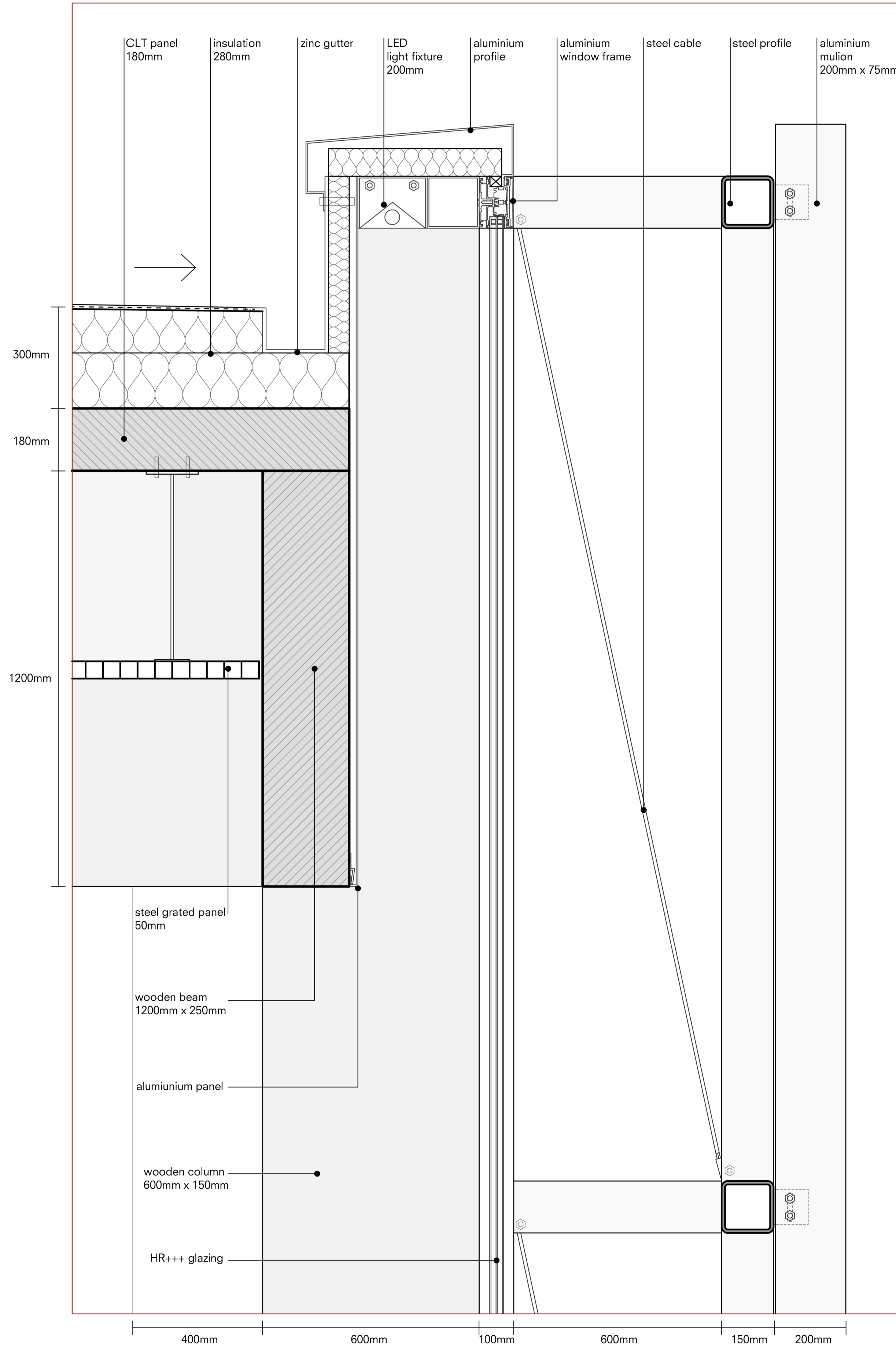
FACADE FRAGMENT



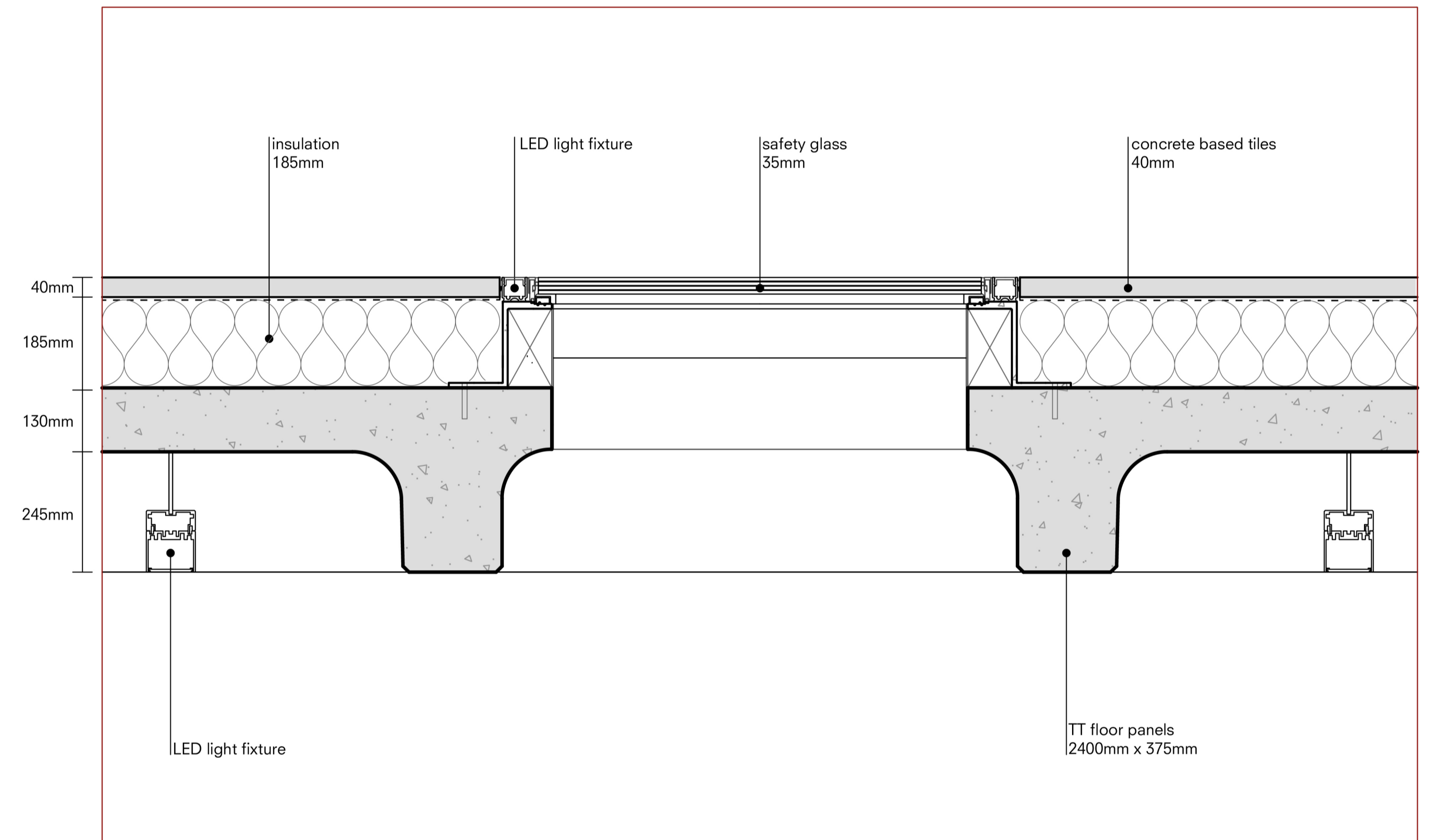
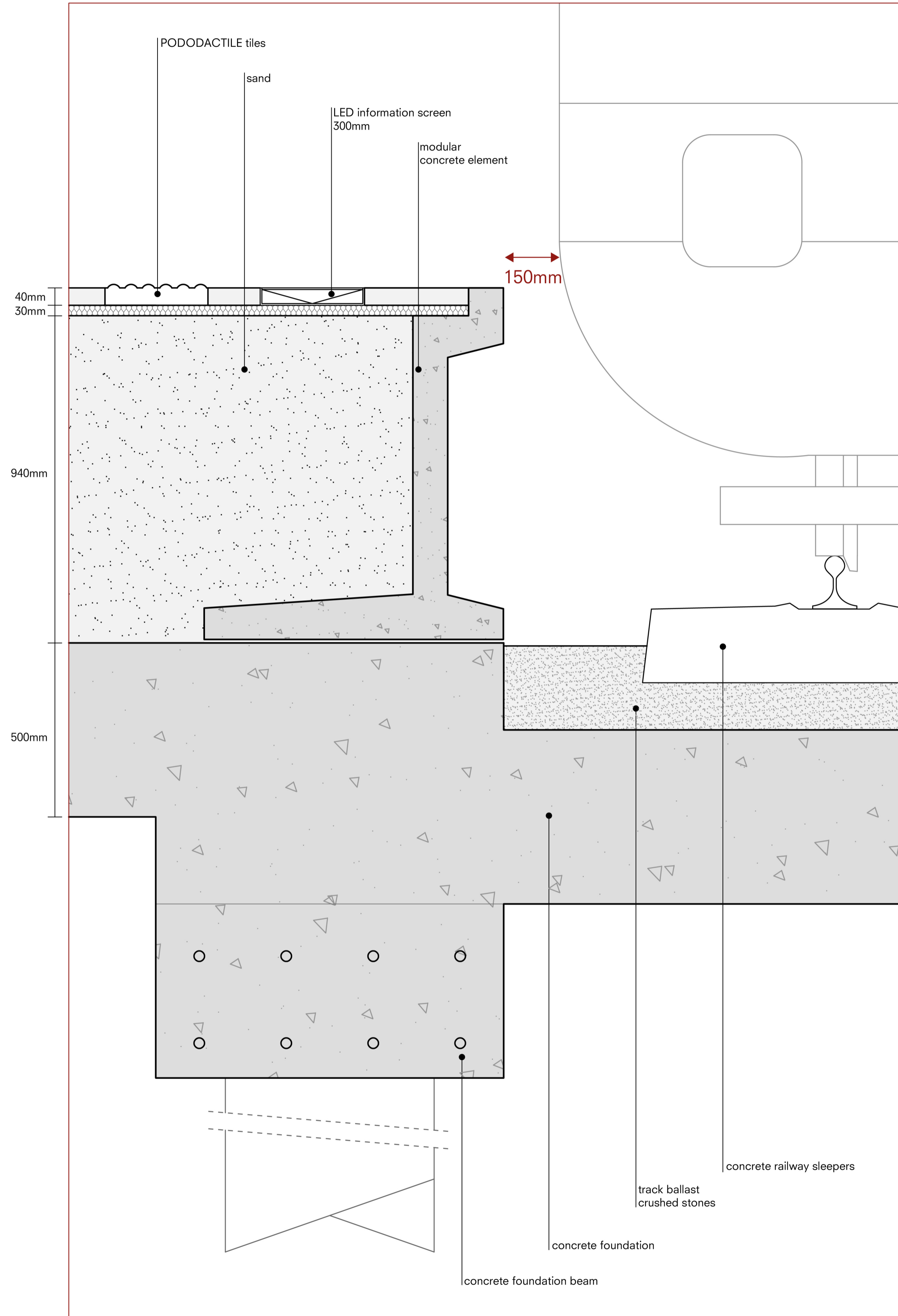
INTERIOR FRAGMENT



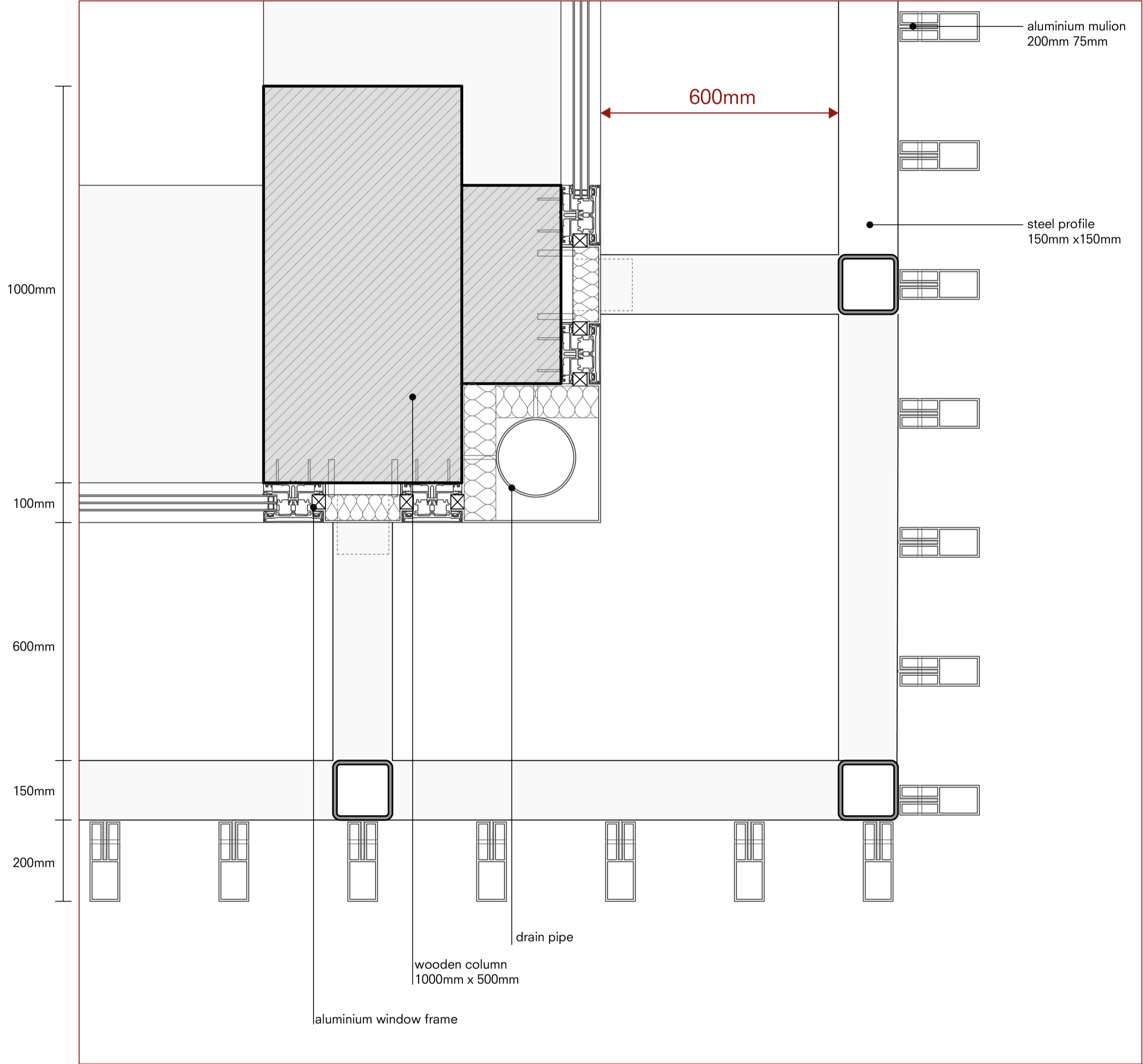
VERTICAL DETAILS



VERTICAL DETAILS



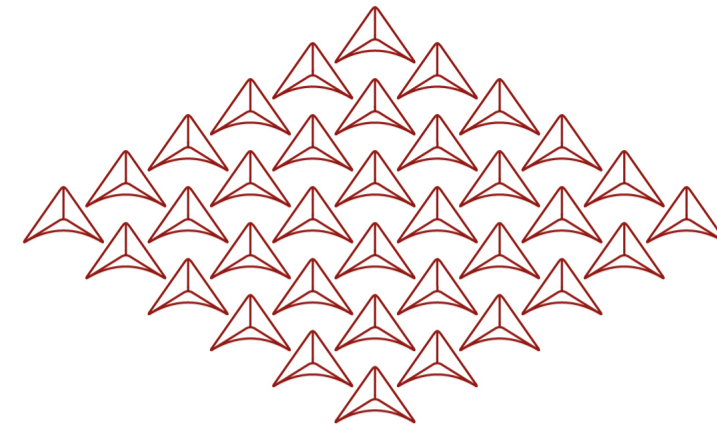
HORIZONTAL DETAIL



CONSTRUCTION AXO

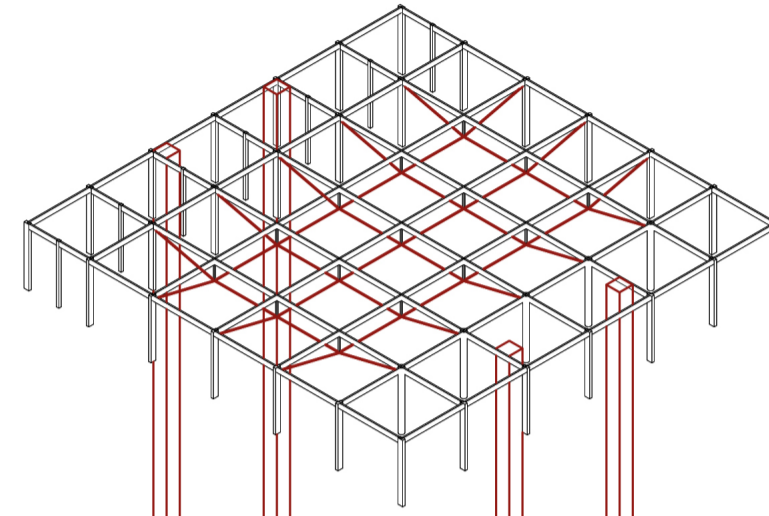
Skylights

steel construction, hinges on secondary metal structure, tensions cables for movement



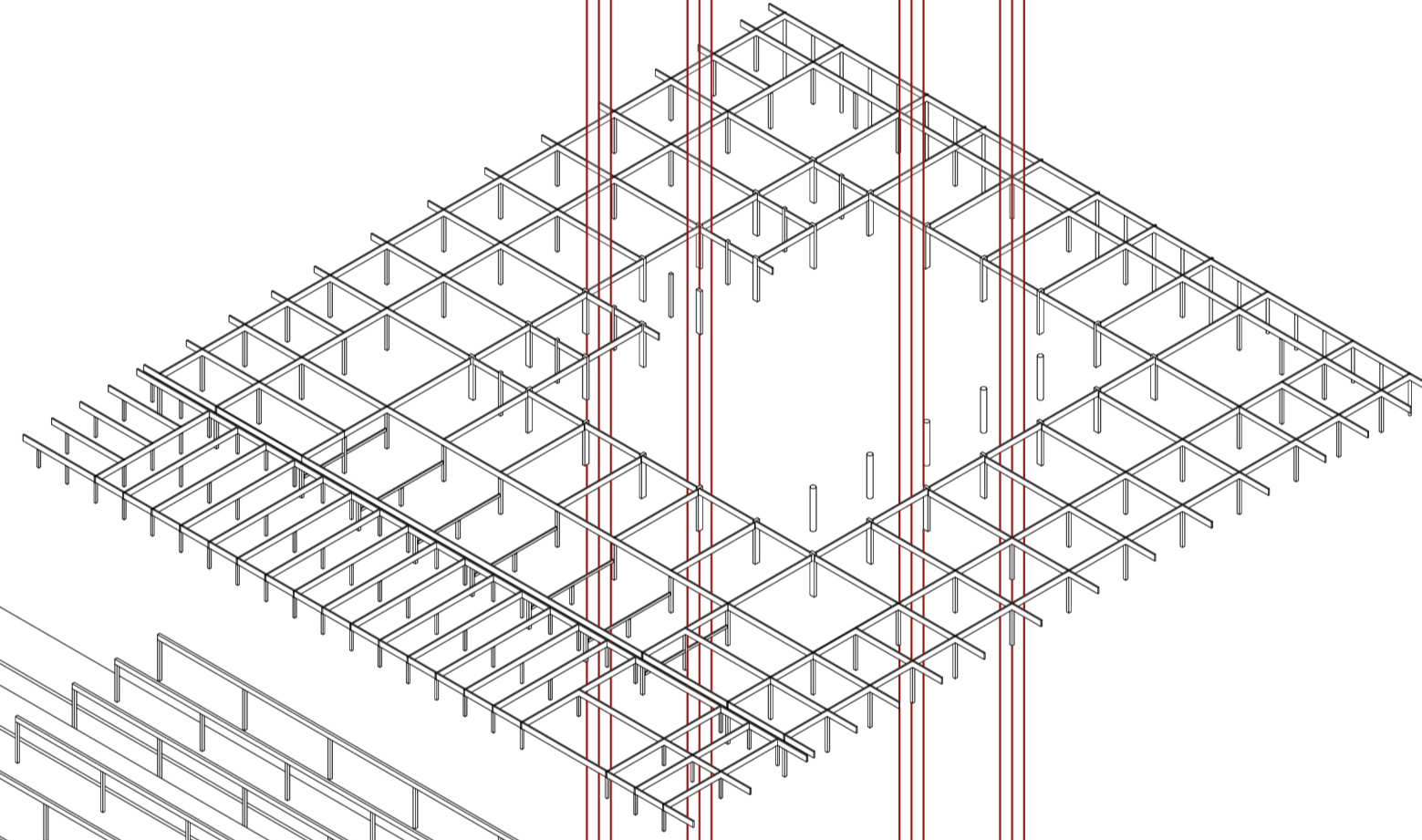
Crown

wood construction, tension cables used for main span, stability from concrete cores



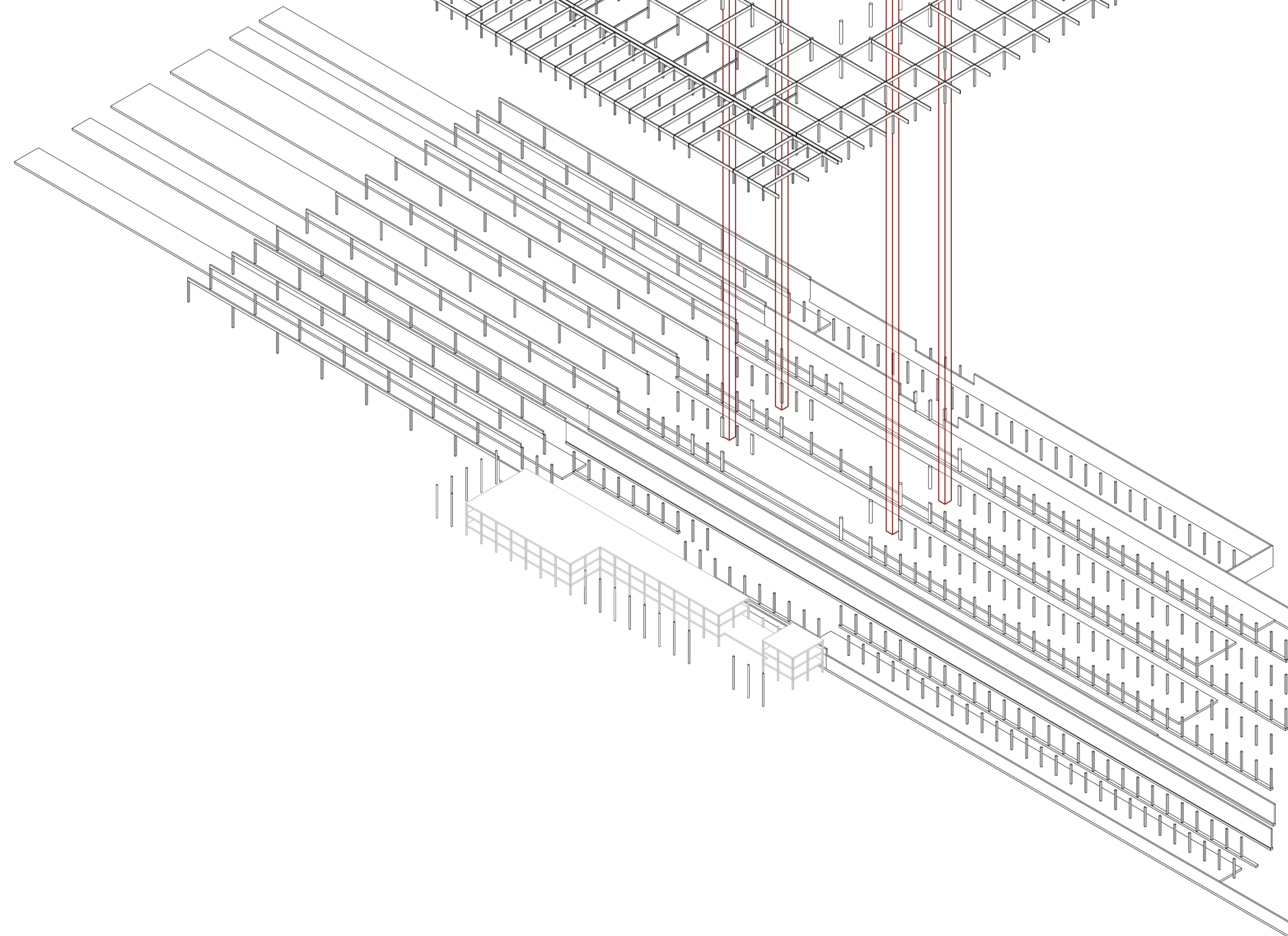
Building

wood construction, 6m overhangs for floating facade



Base

mainly concrete, bolted together, circular connections, foundation for building and crown



Existing Building

concrete structure re-used as office building and for restaurants, new entrance created through existing building



reference - hybrid wood-steel tension construction

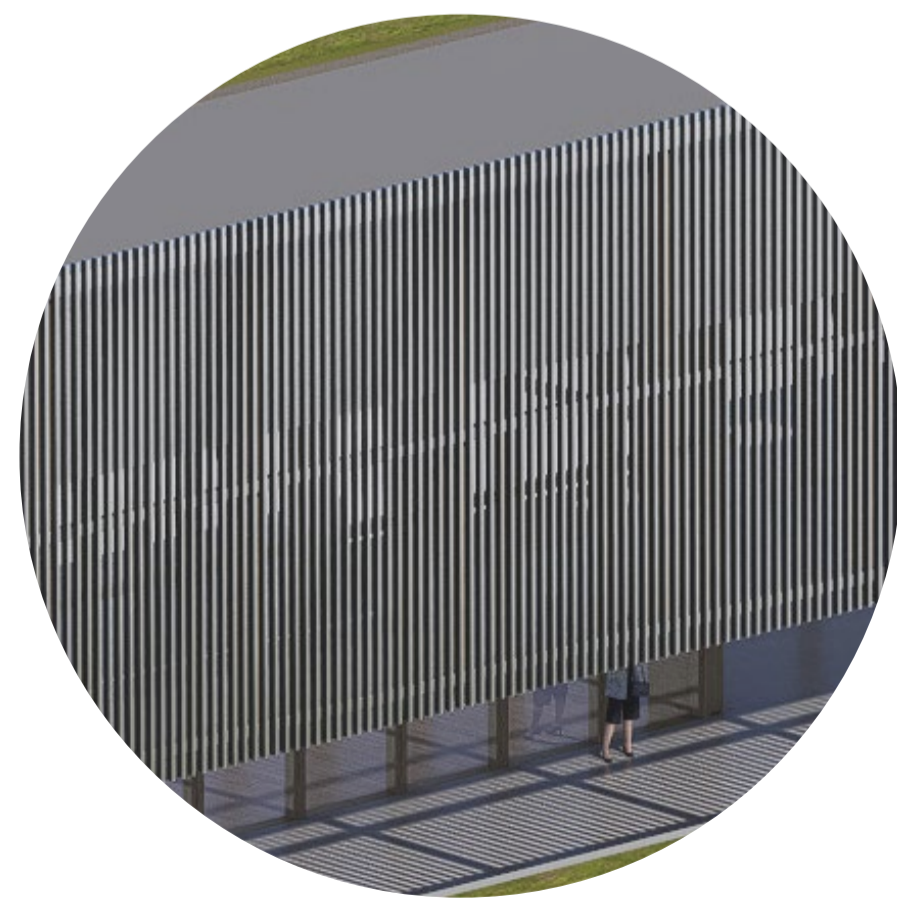
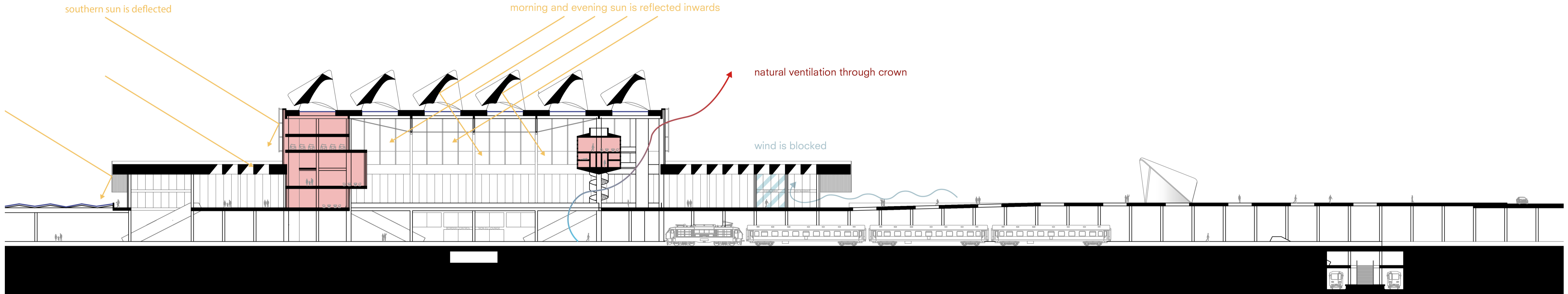
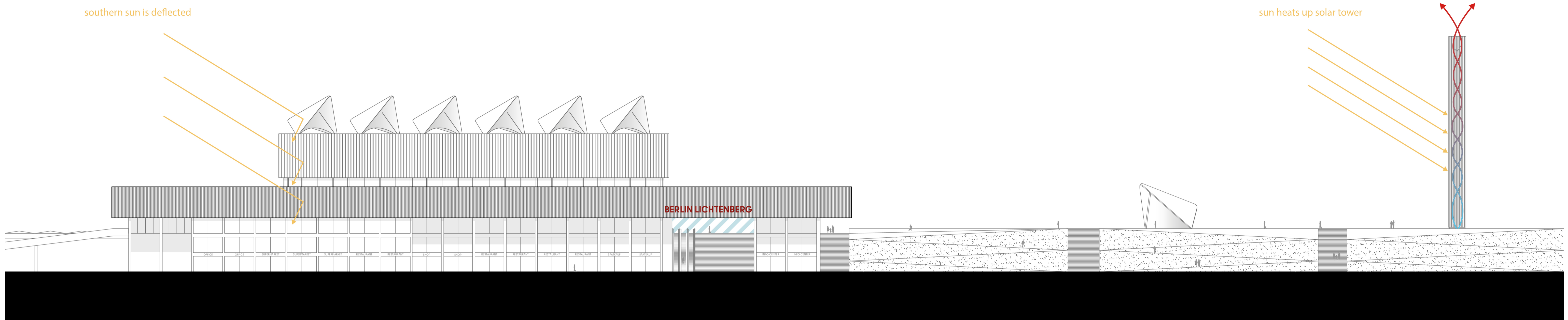


reference - wood overhang with floating facade

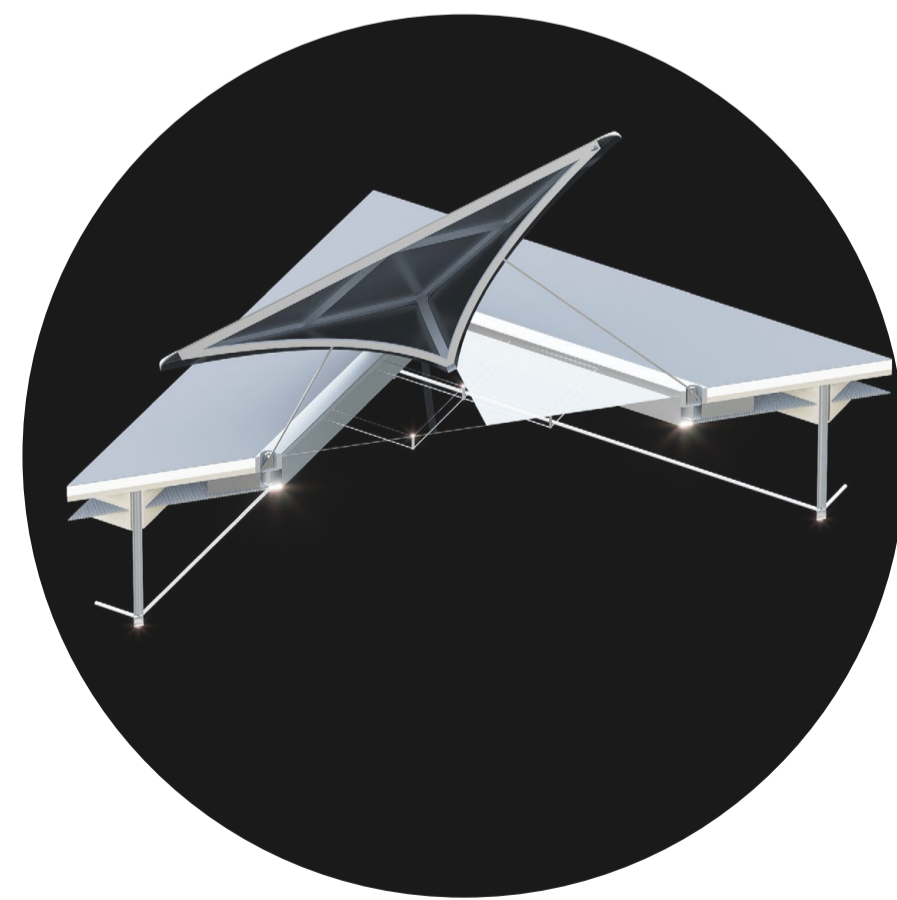


existing concrete station building to be re-used

CLIMATE DESIGN



facade protects against sun



skylights reflect morning and evening sun inwards, glass contains also solar cells



skylights can point east or west

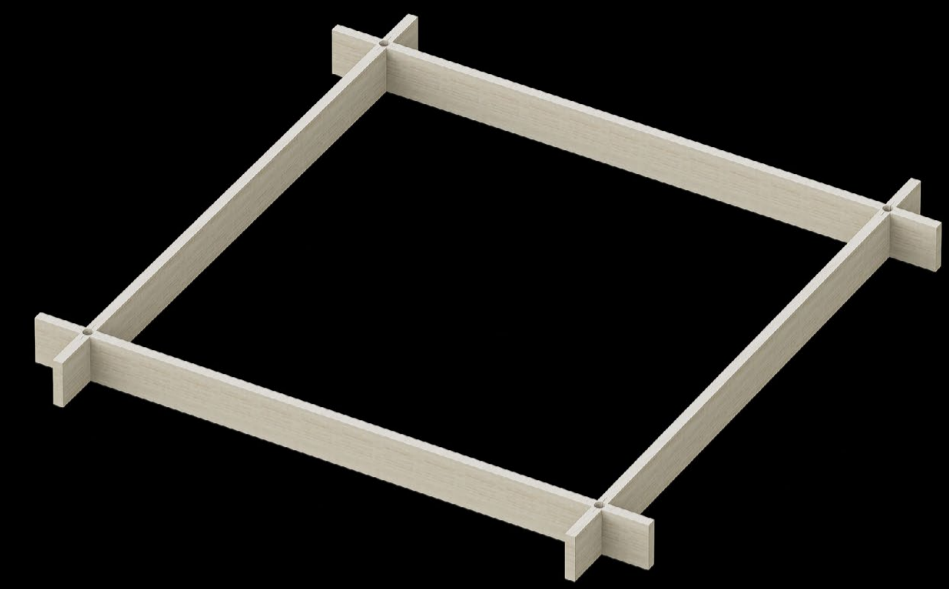


station hall is not heated, capsule hotel and lounge are

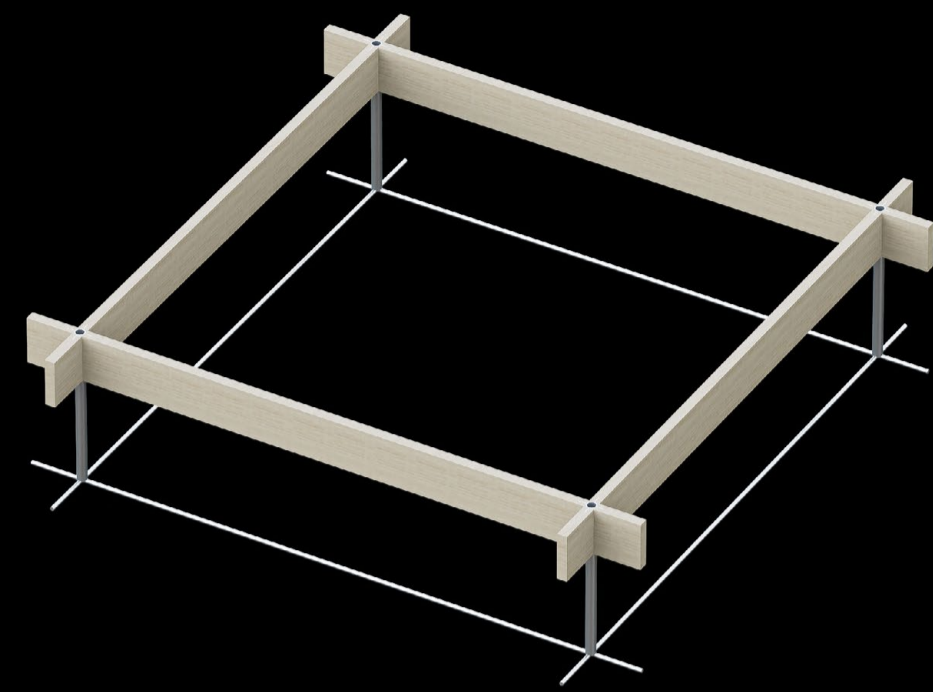


overhang functions as space inbetween outside and inside, making it more comfortable during night and bad weather

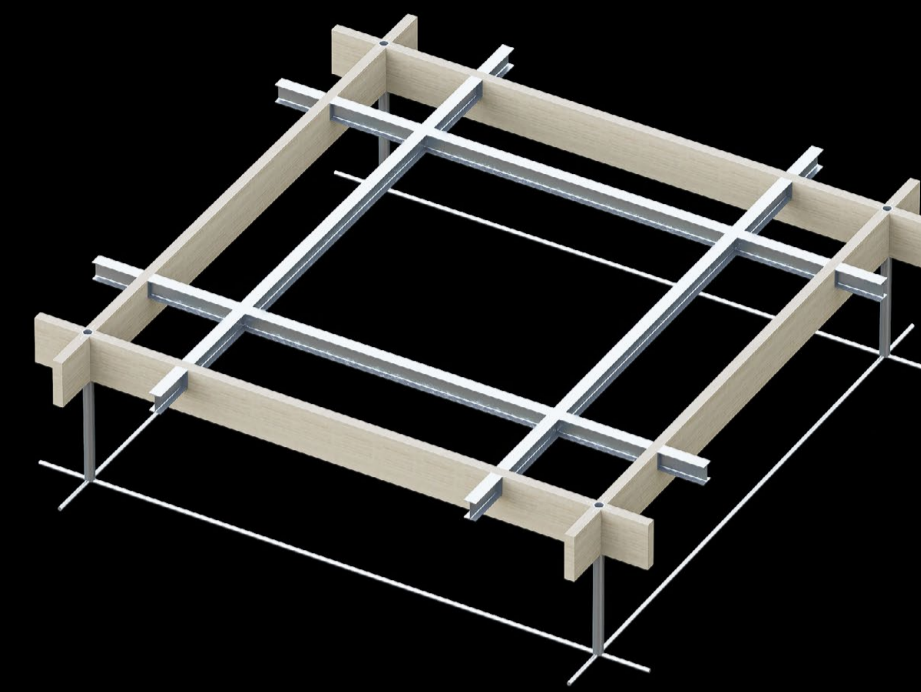
3D FRAGMENT ROOFLIGHT



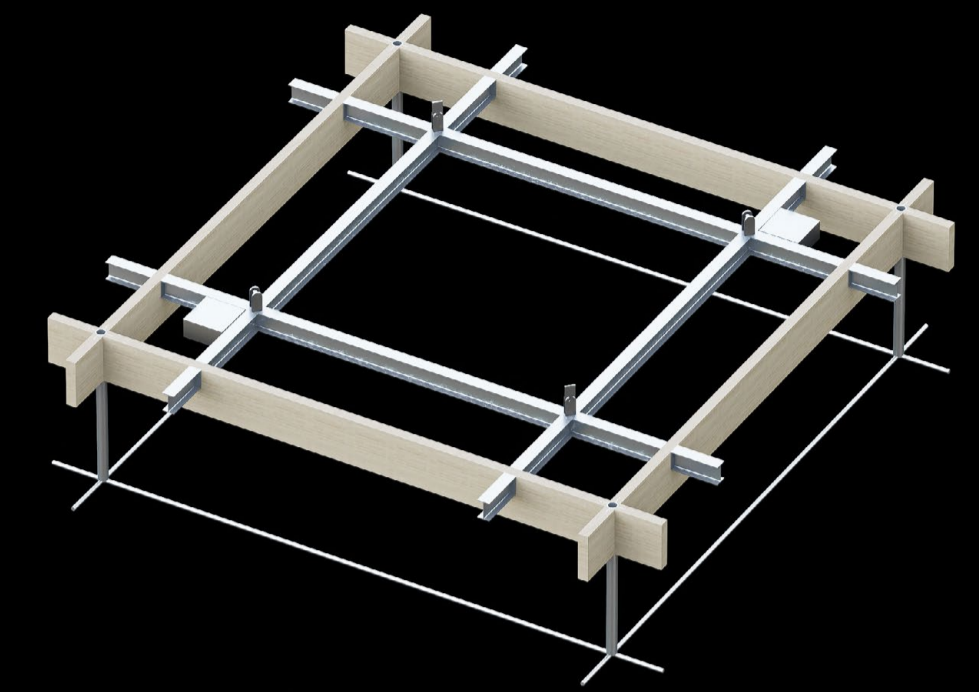
1. main wooden beams



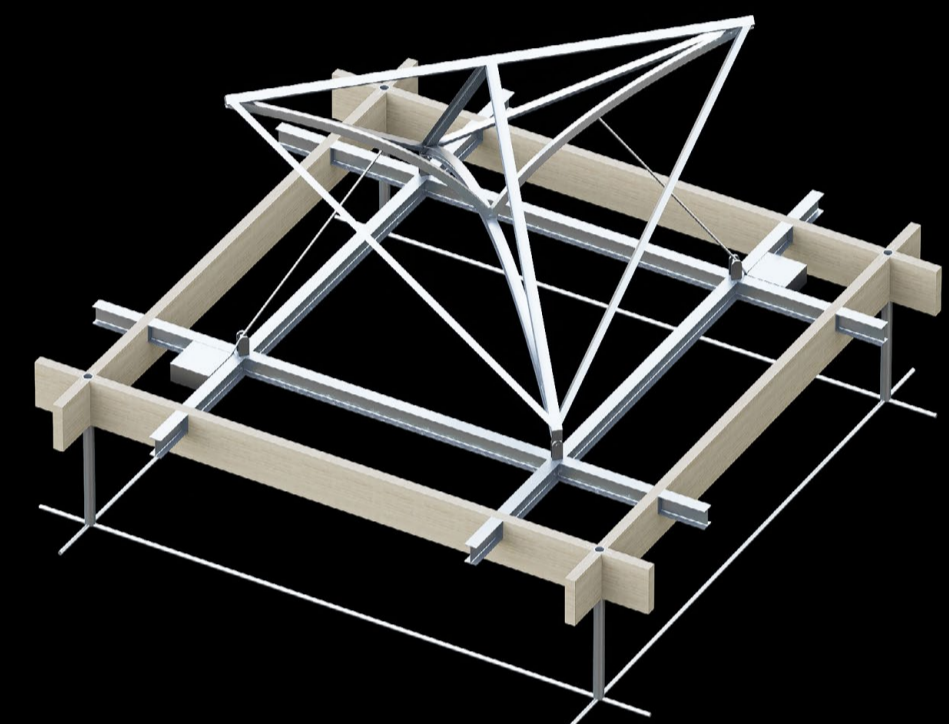
2. steel tension cables and push rods



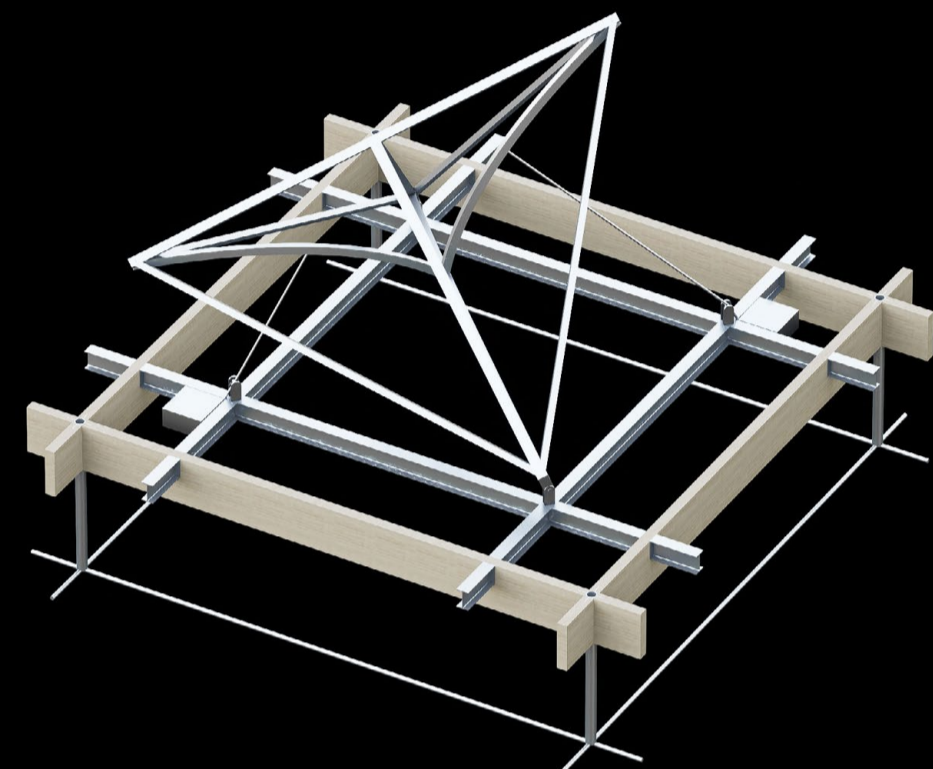
3. additional steel structure



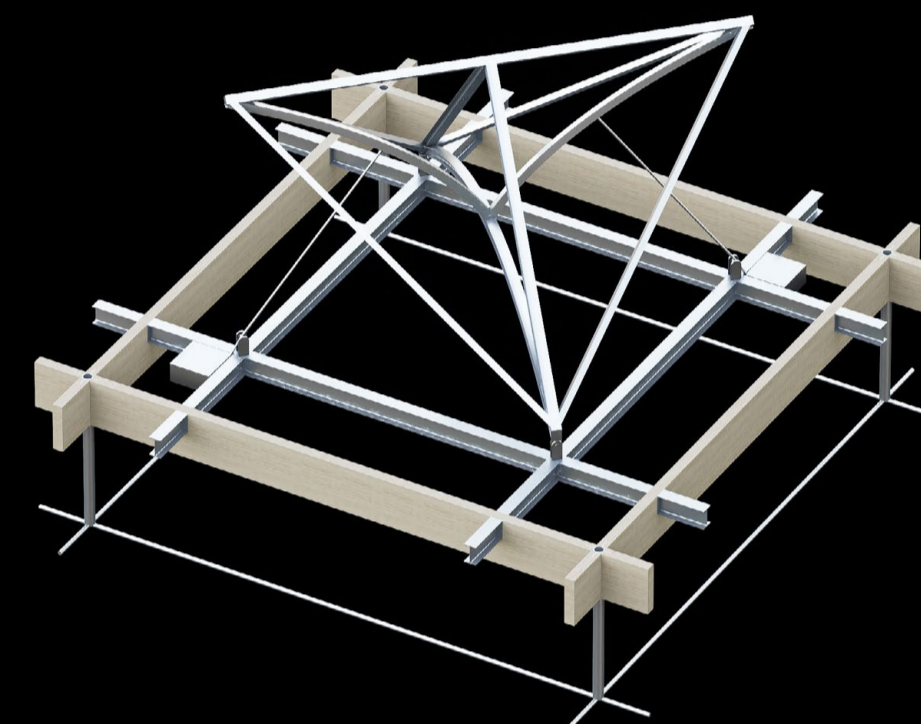
4. heavy duty steel hinges



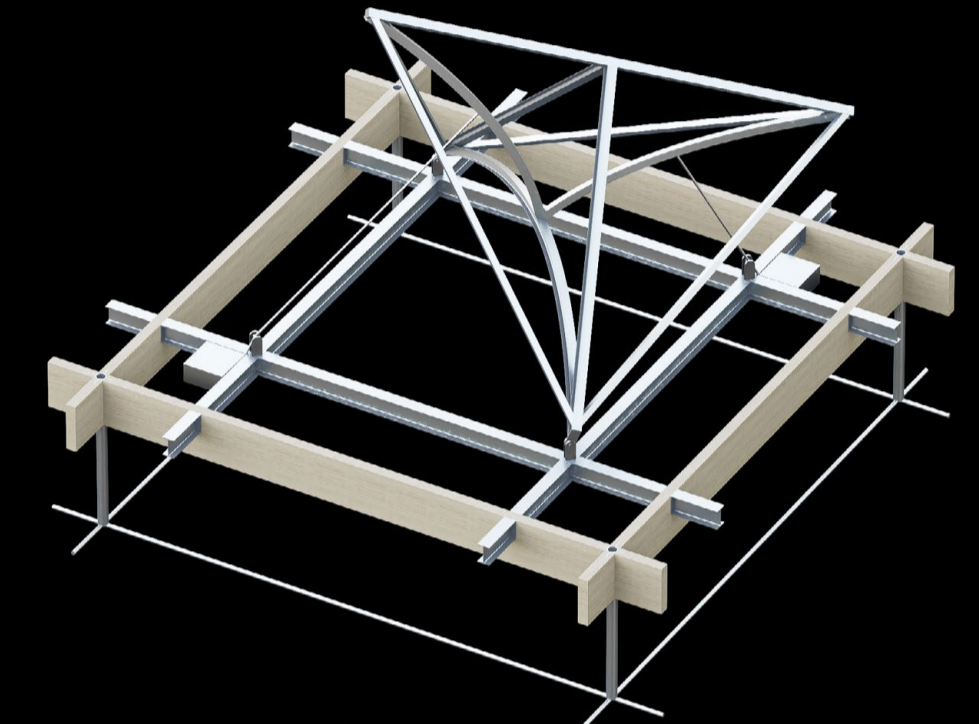
5. steel frame light catcher, balanced by tension cables



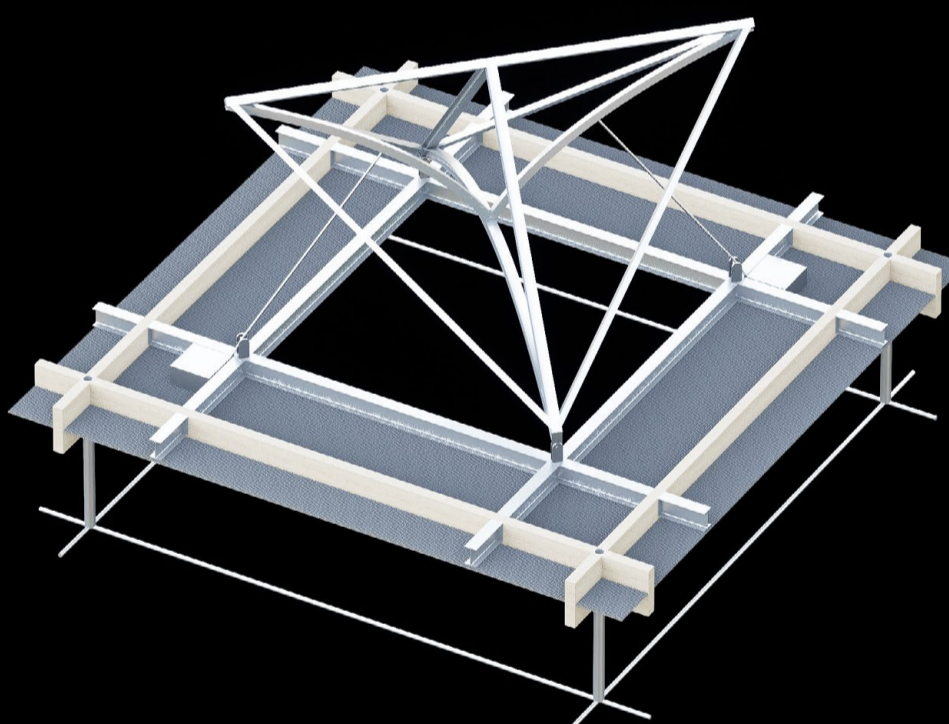
6. orientation east 22.5 degrees



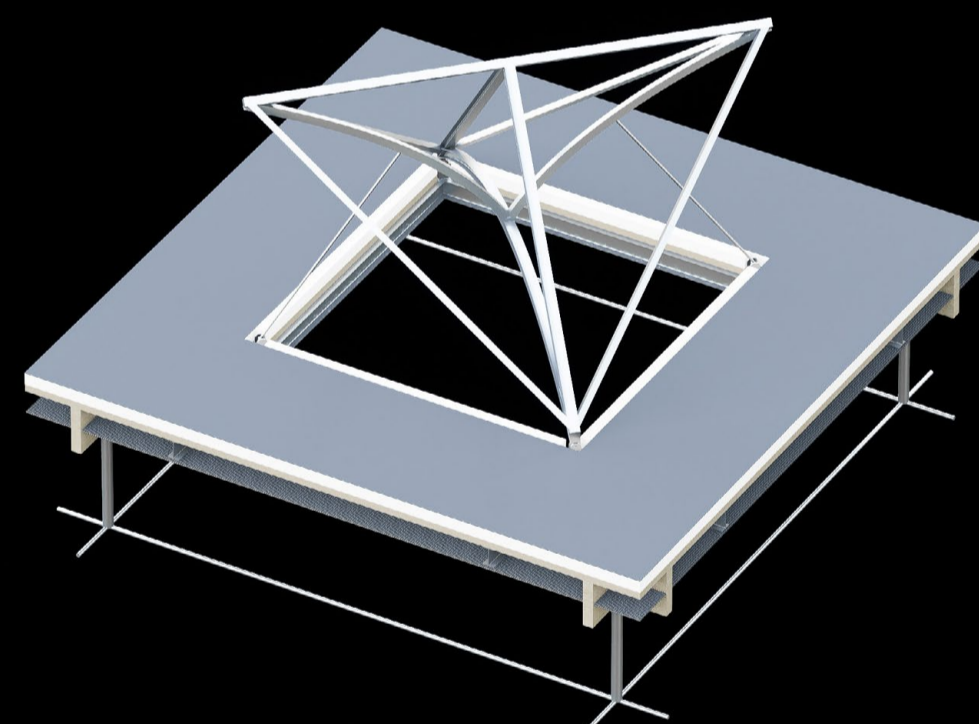
7. standard position



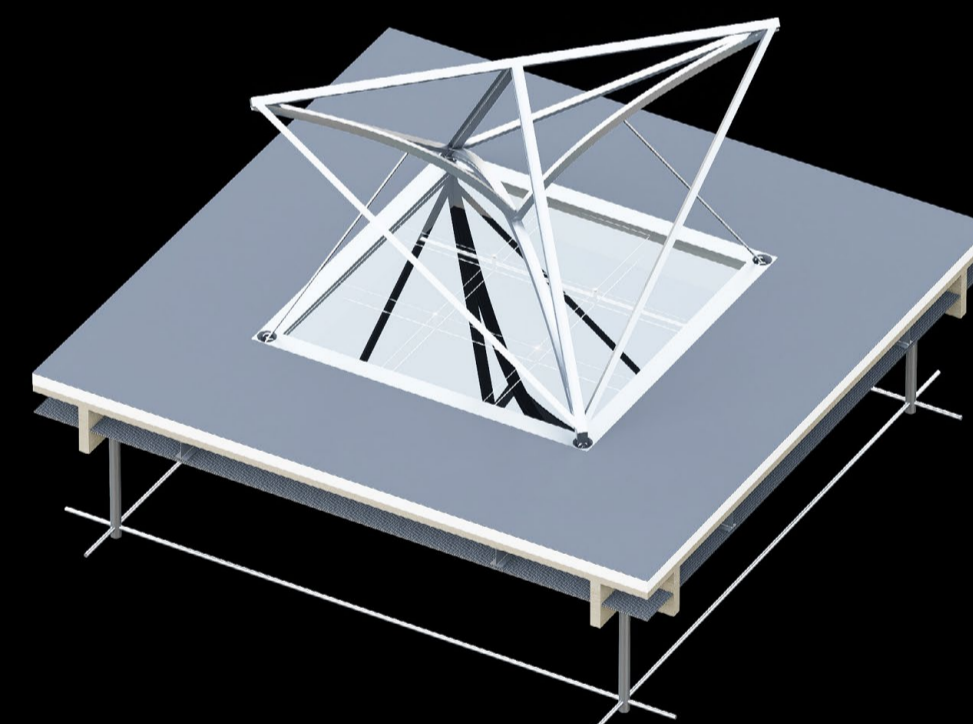
8. orientation west 22.5 degrees



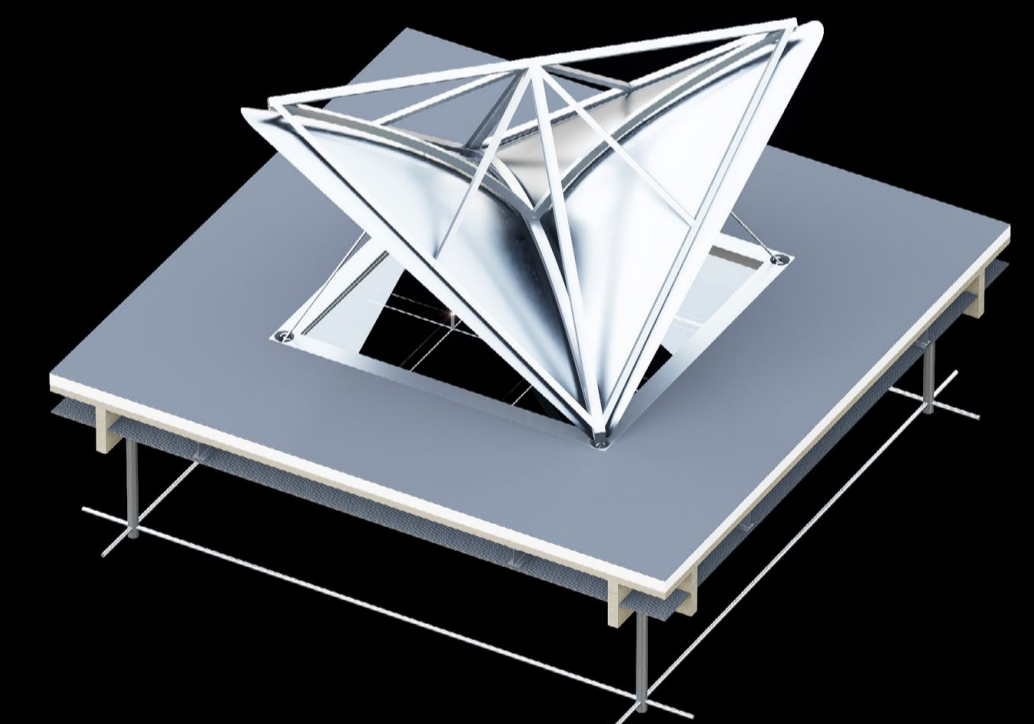
9. steel grid ceiling



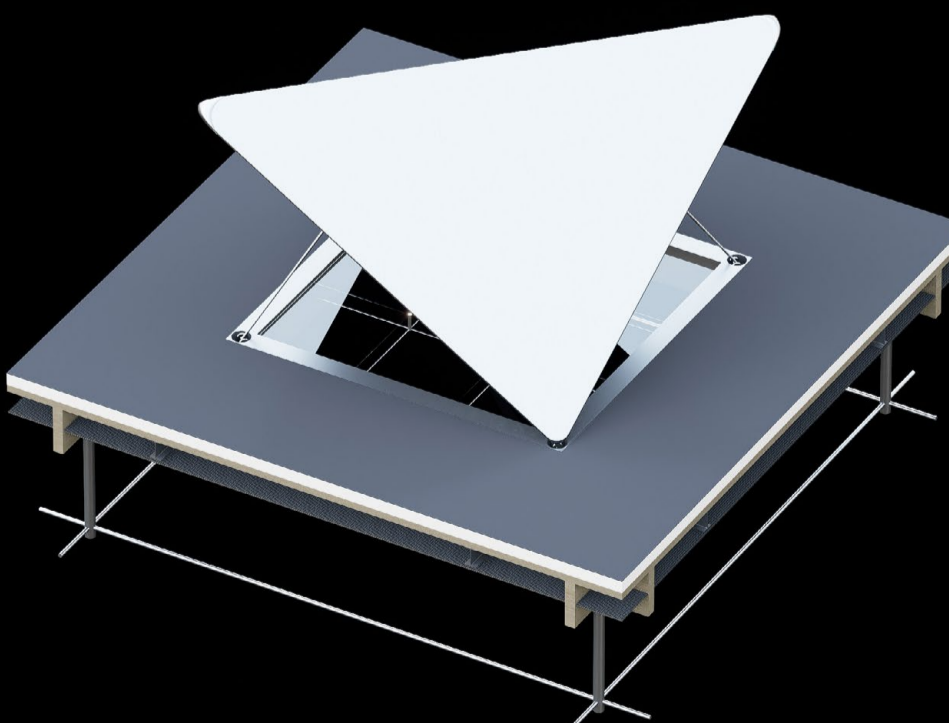
10. clt roof, insulation and waterproof layer



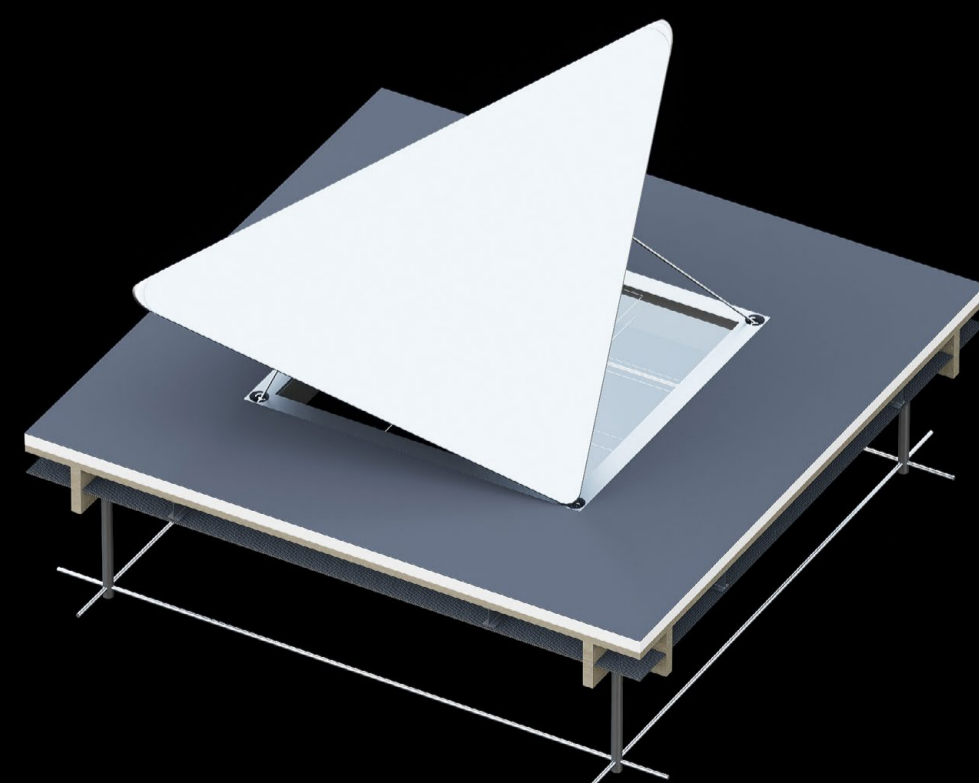
11. glass ceiling with solar cells supported by steel tension cables



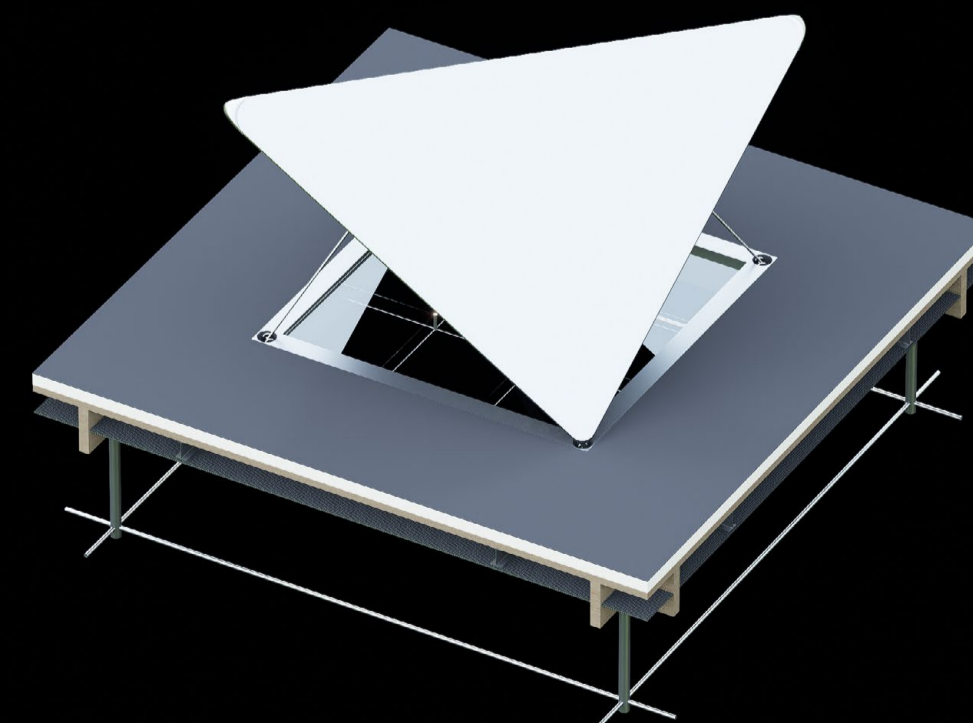
12. inner aluminium curved surface to reflect sunlight



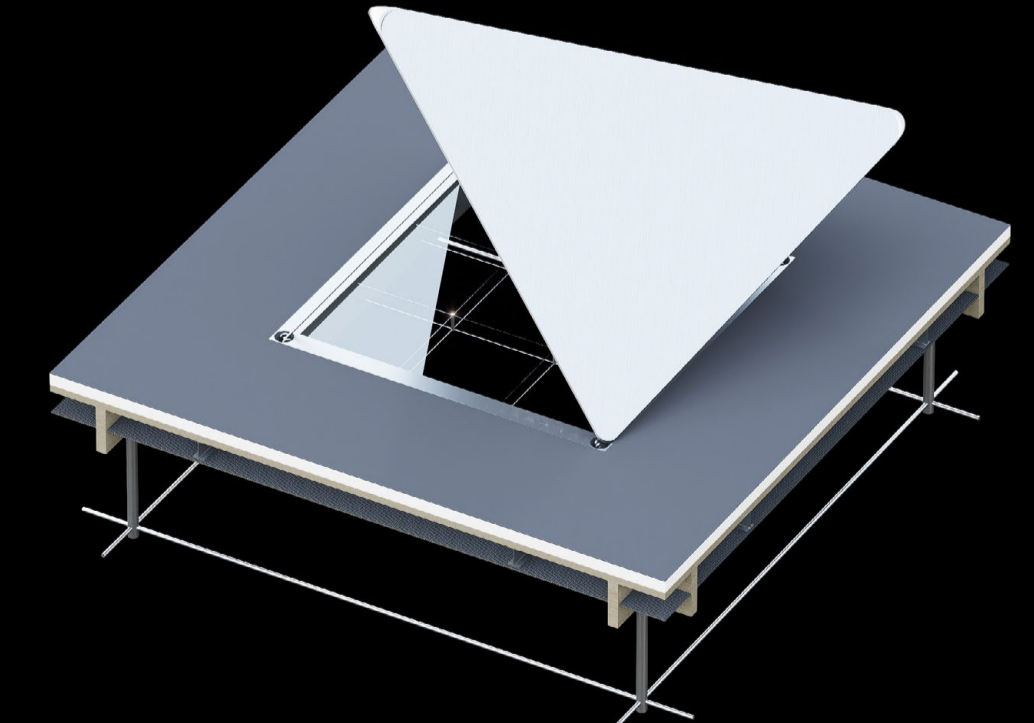
12. outer aluminium surface



13. orientation east 22.5 degrees

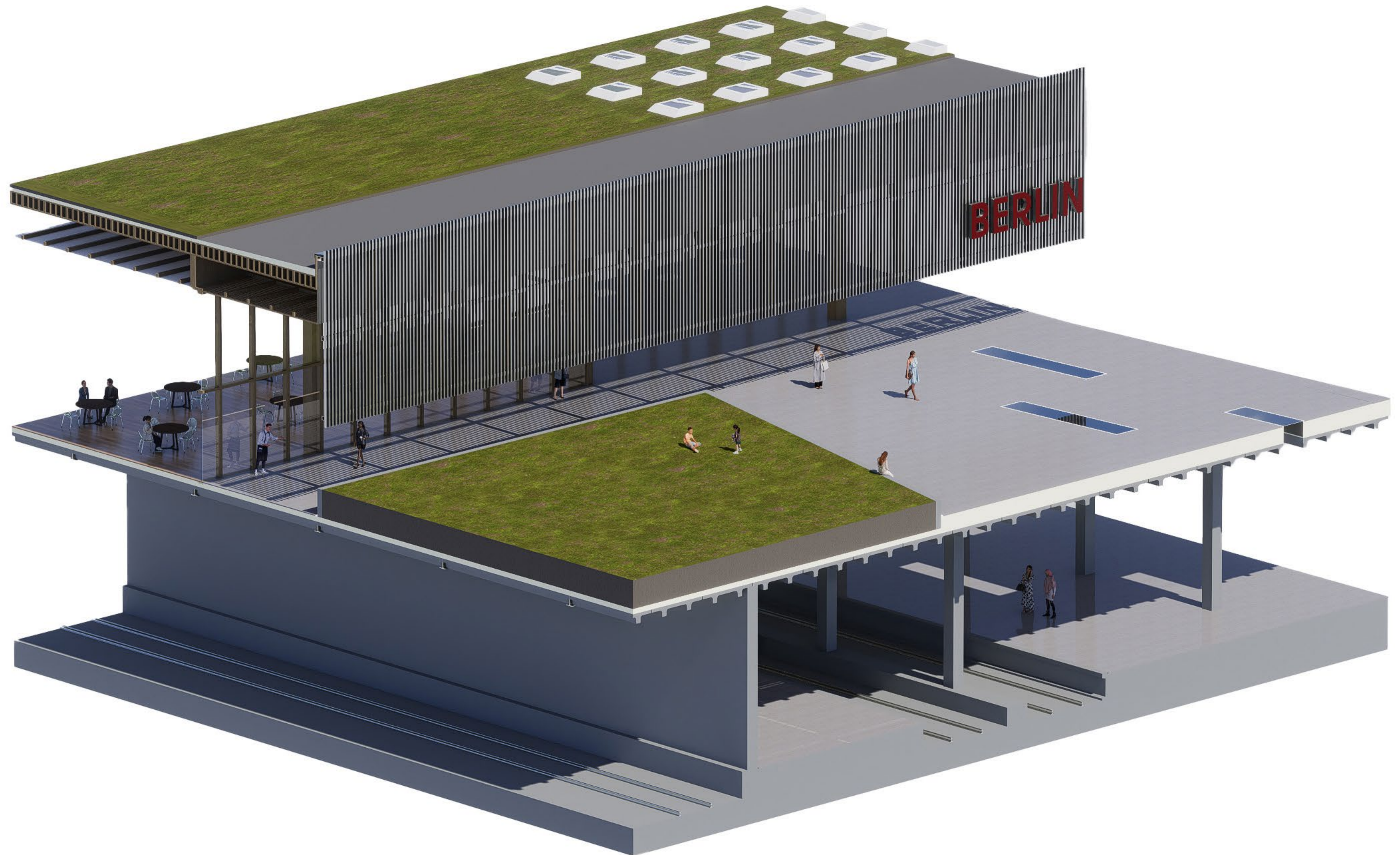


14. standard position



15. orientation west 22.5 degrees

3D FRAGMENT FACADE DAY



3D FRAGMENT FACADE NIGHT

