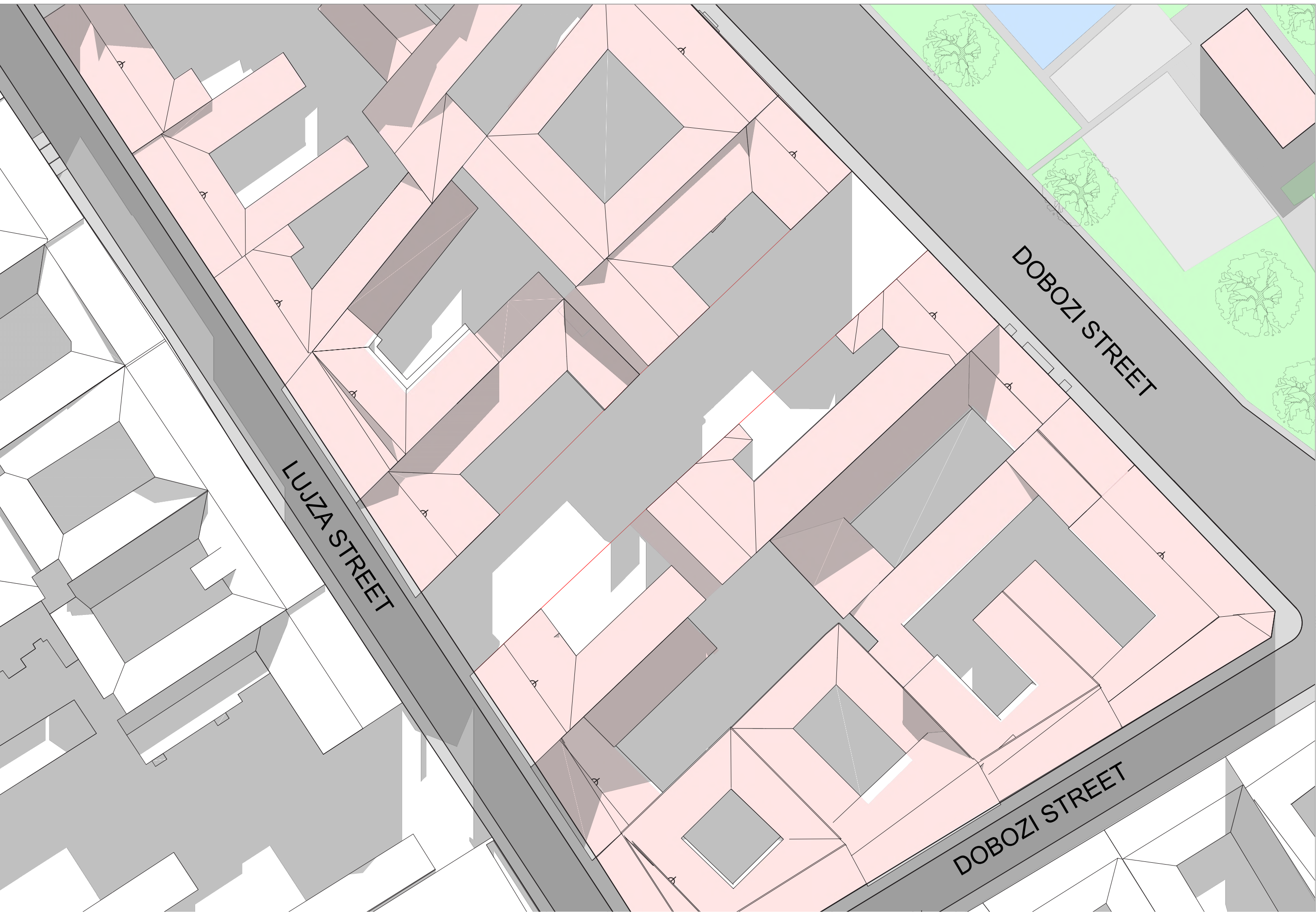


PROJECT TITLE: BICYCLE DORMITORY

SITE PLANS

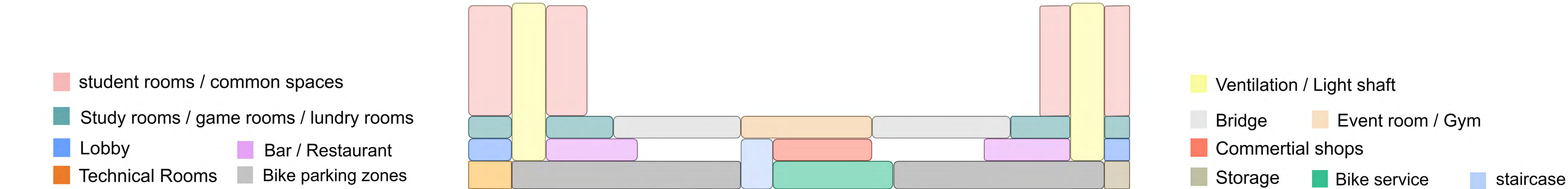
SCALE 1:500



AXONOMETRIC VIEW



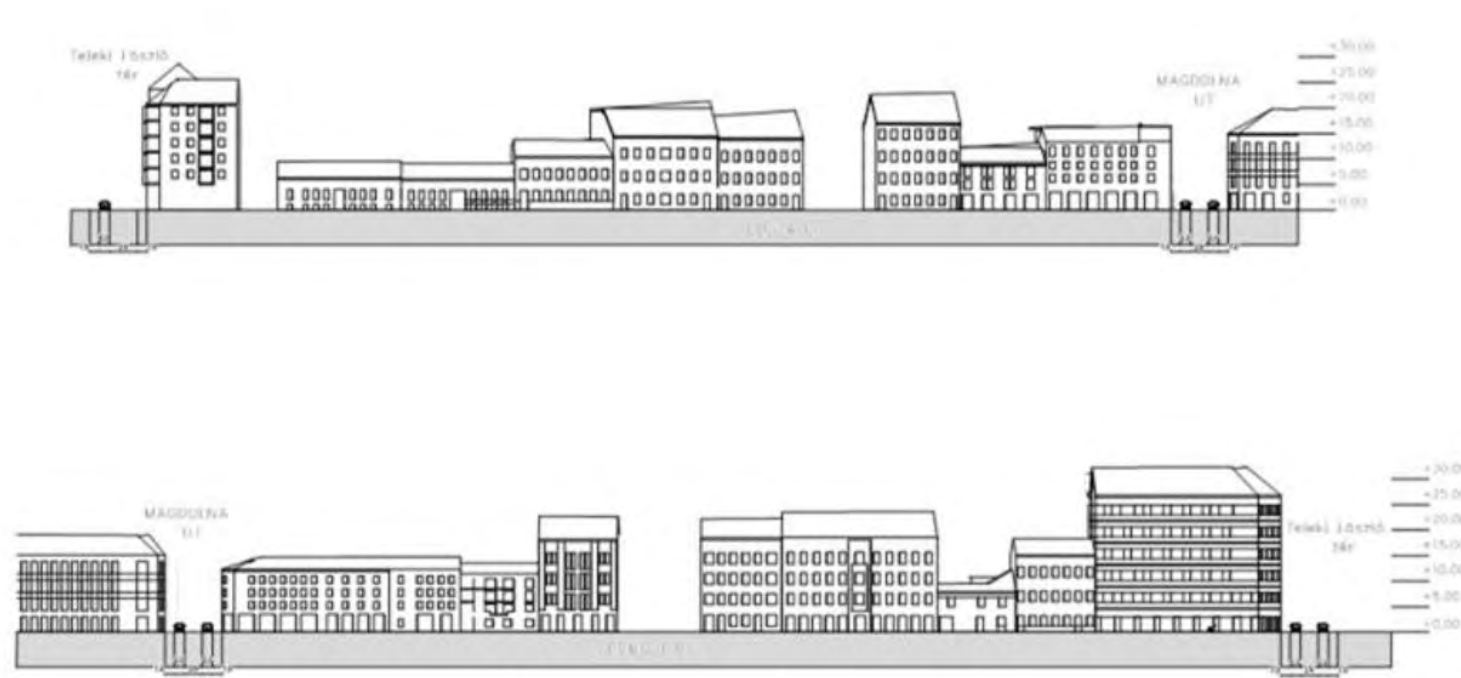
3D SECTION VIEW



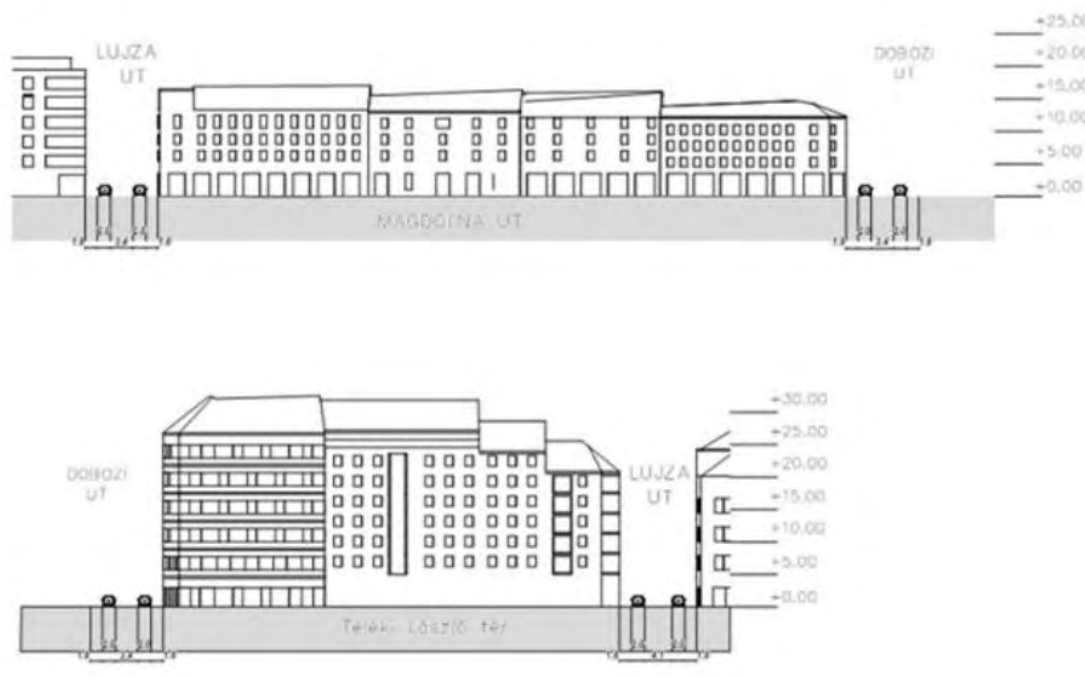
ANALYSIS

BUILDINGS HEIGHTS ANALYSIS

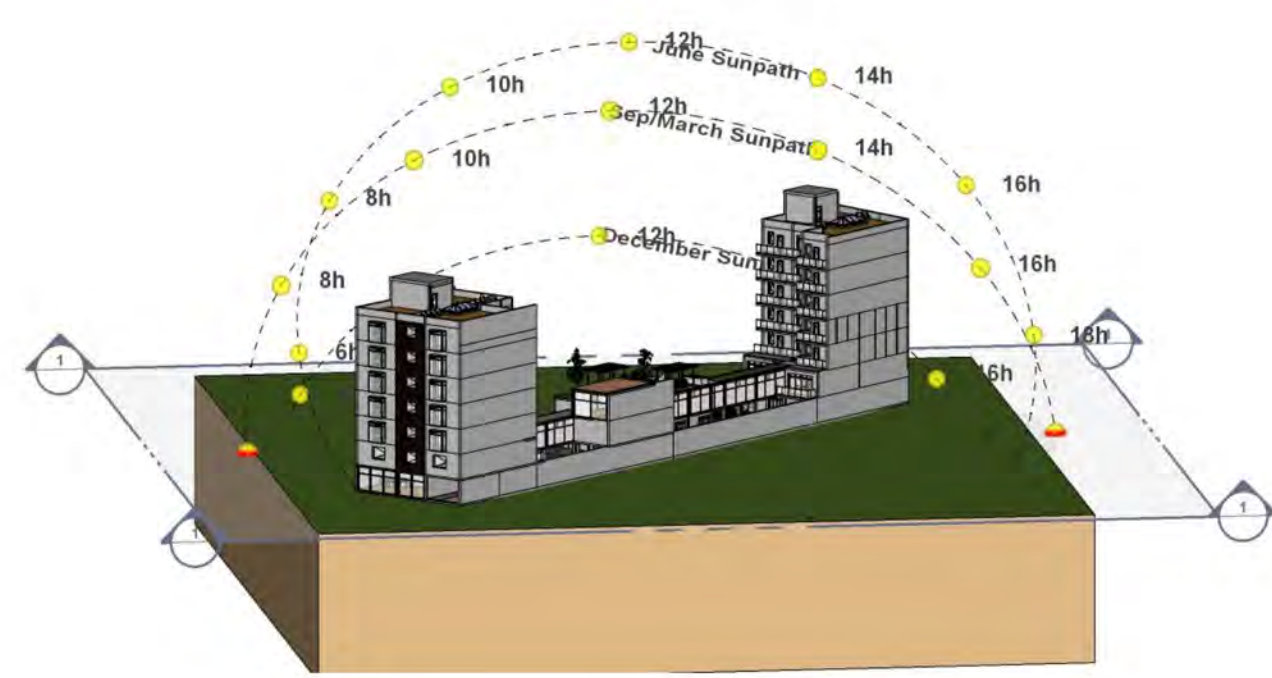
ELEVATIONS



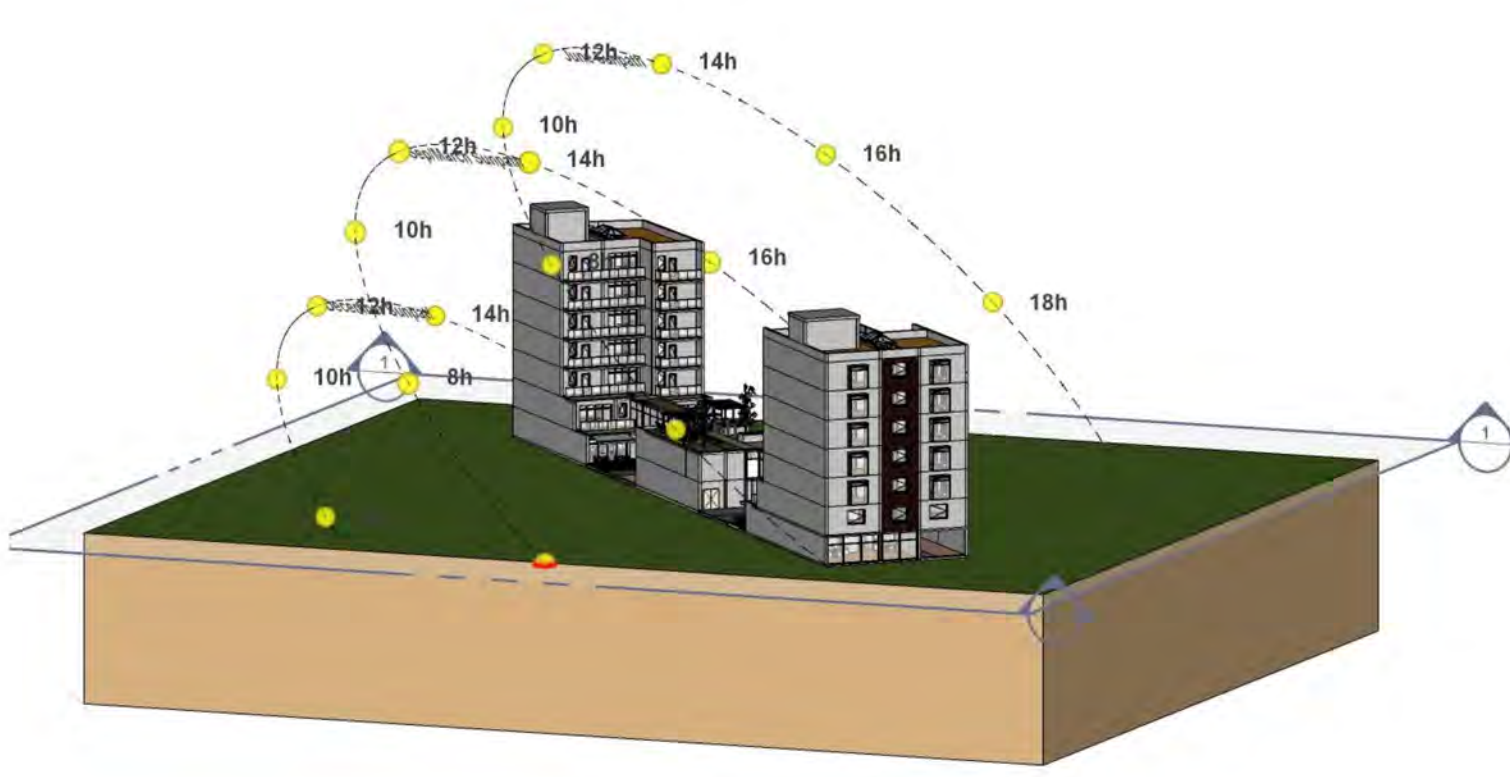
SECTIONS



SUN ANALYSIS

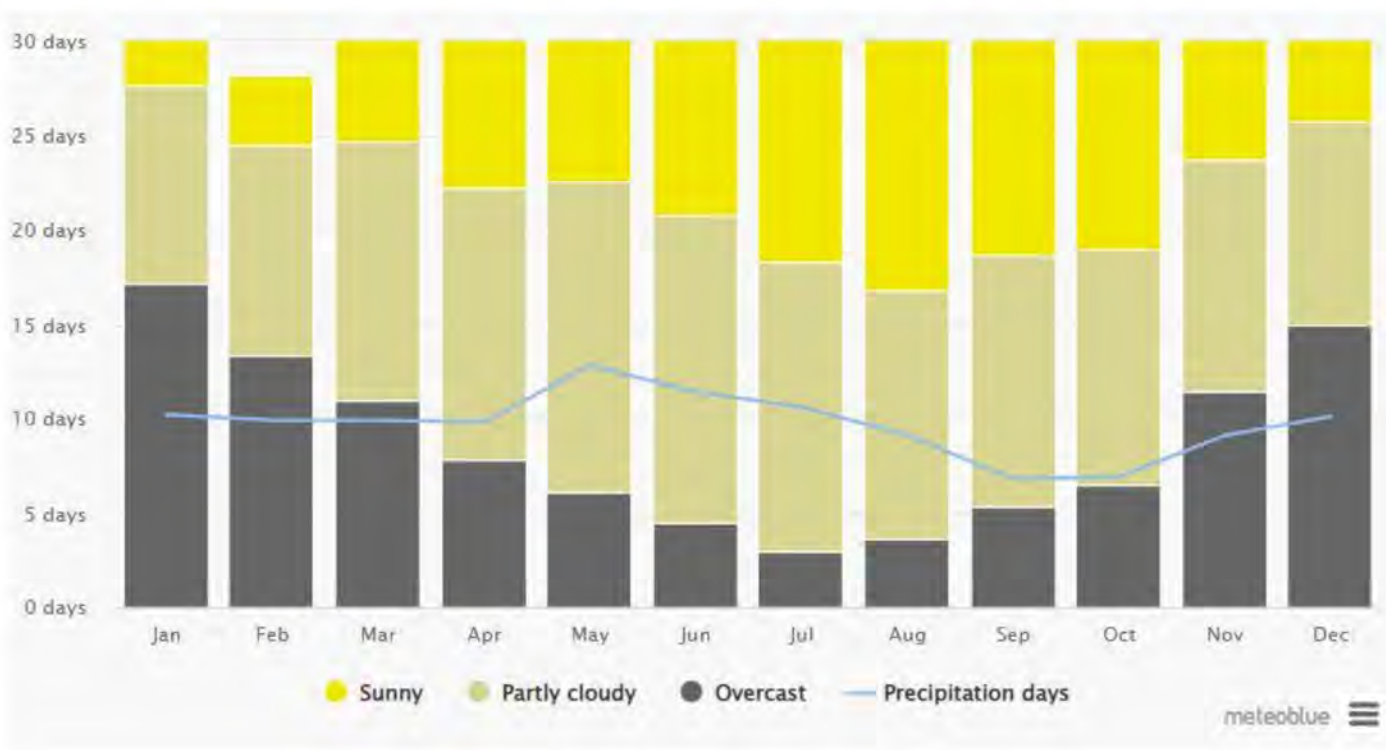


AMENITIES ANALYSIS

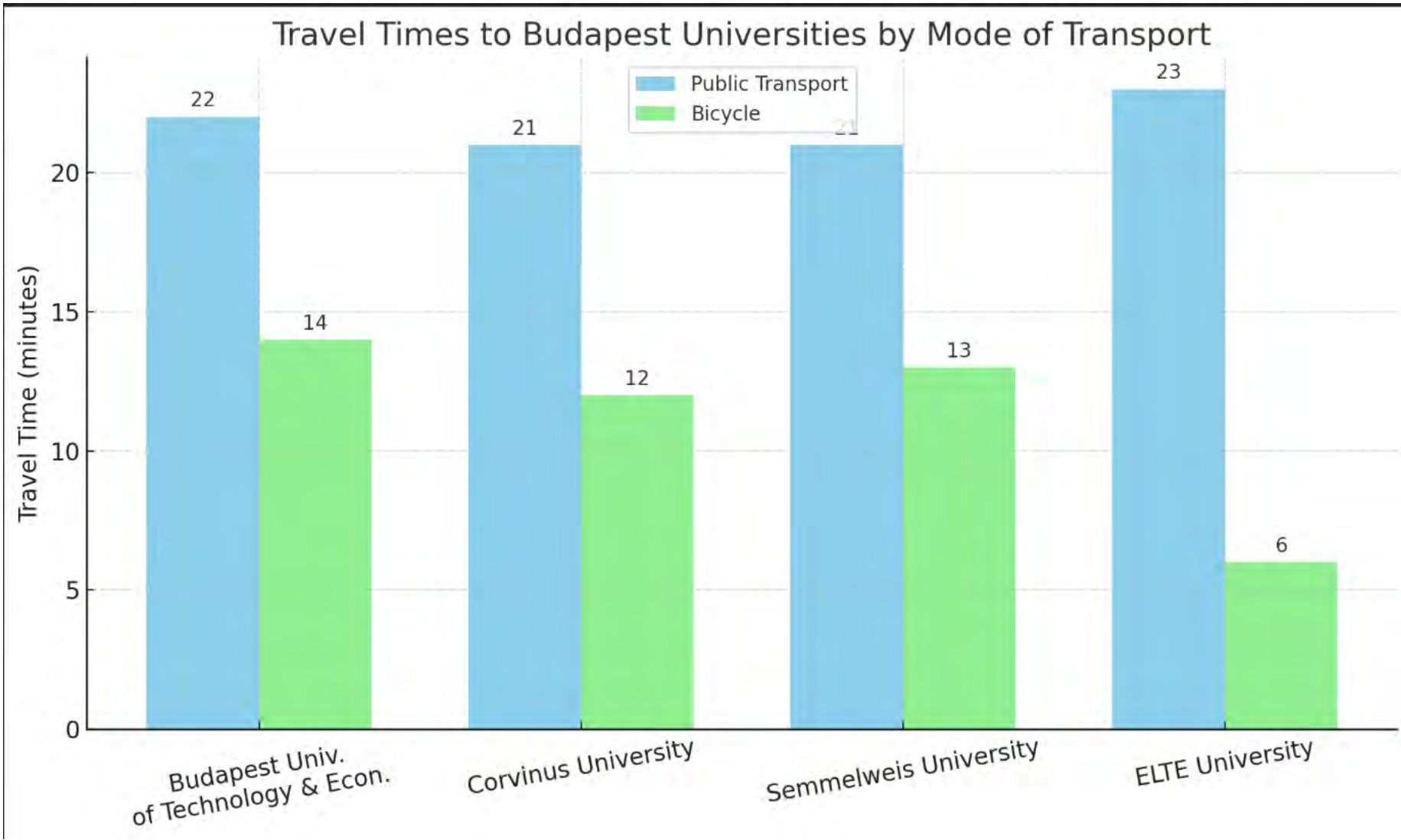
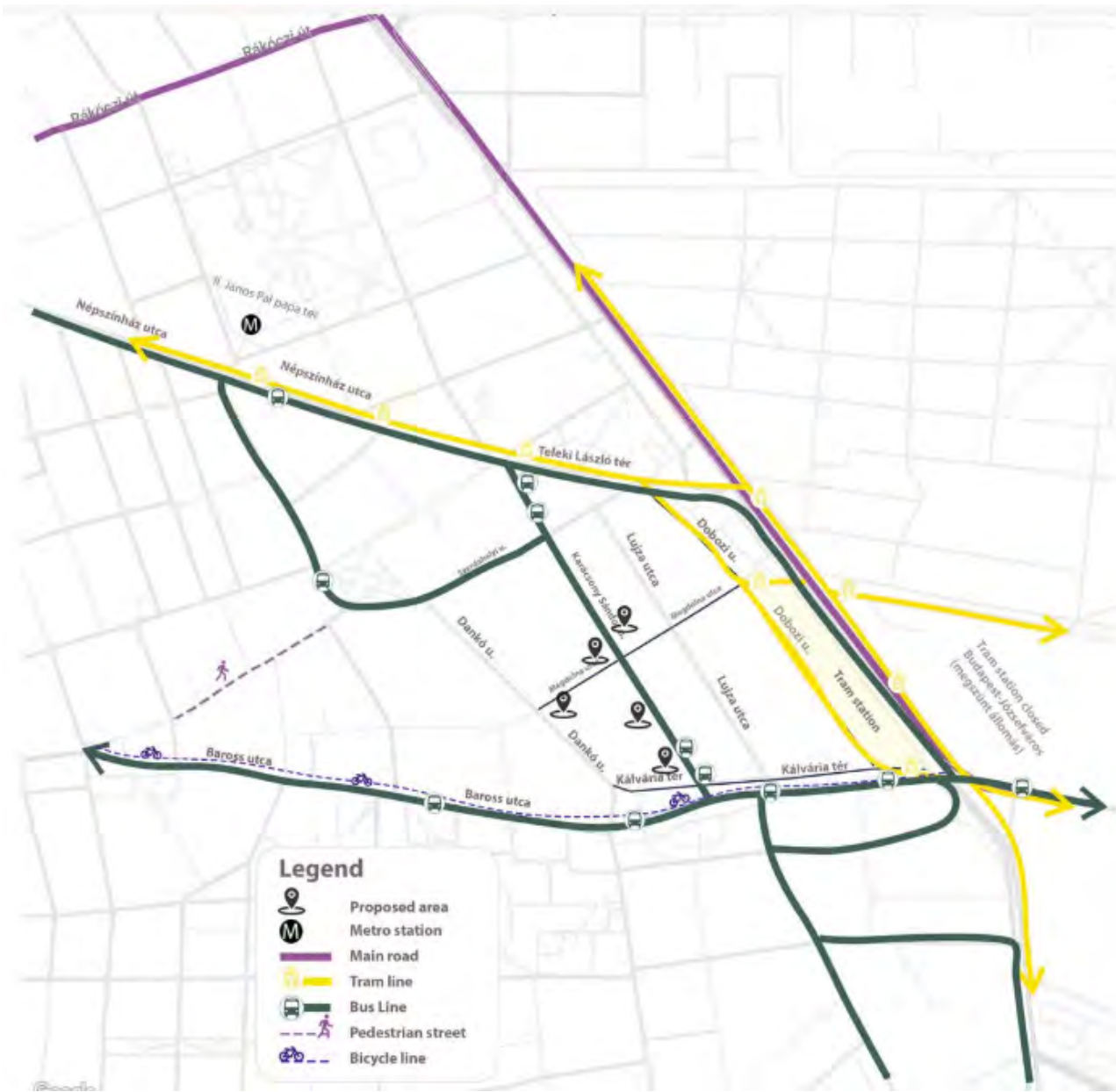


The length of the day varies significantly over the course of the year. In 2023 , the shortest day is December 21, with 8 hours, 26 minutes of daylight; the longest day is June 21, with 15 hours, 58 minutes of daylight. The earliest sunrise is at 4:45 AM on June 16, and the latest sunrise is 2 hours, 46 minutes later at 7:31 AM on January 1. The earliest sunset is at 3:52 PM on December 11, and the latest sunset is 4 hours, 53 minutes later at 8:45 PM on June 26. Daylight saving time (DST) is observed in Budapest during 2022, starting in the spring on March 27, lasting 7.1 months, and ending in the fall on October 30

ACTIVITES ANALYSIS



TRANSPORTATION ANALYSIS



URBAN CONCEPT

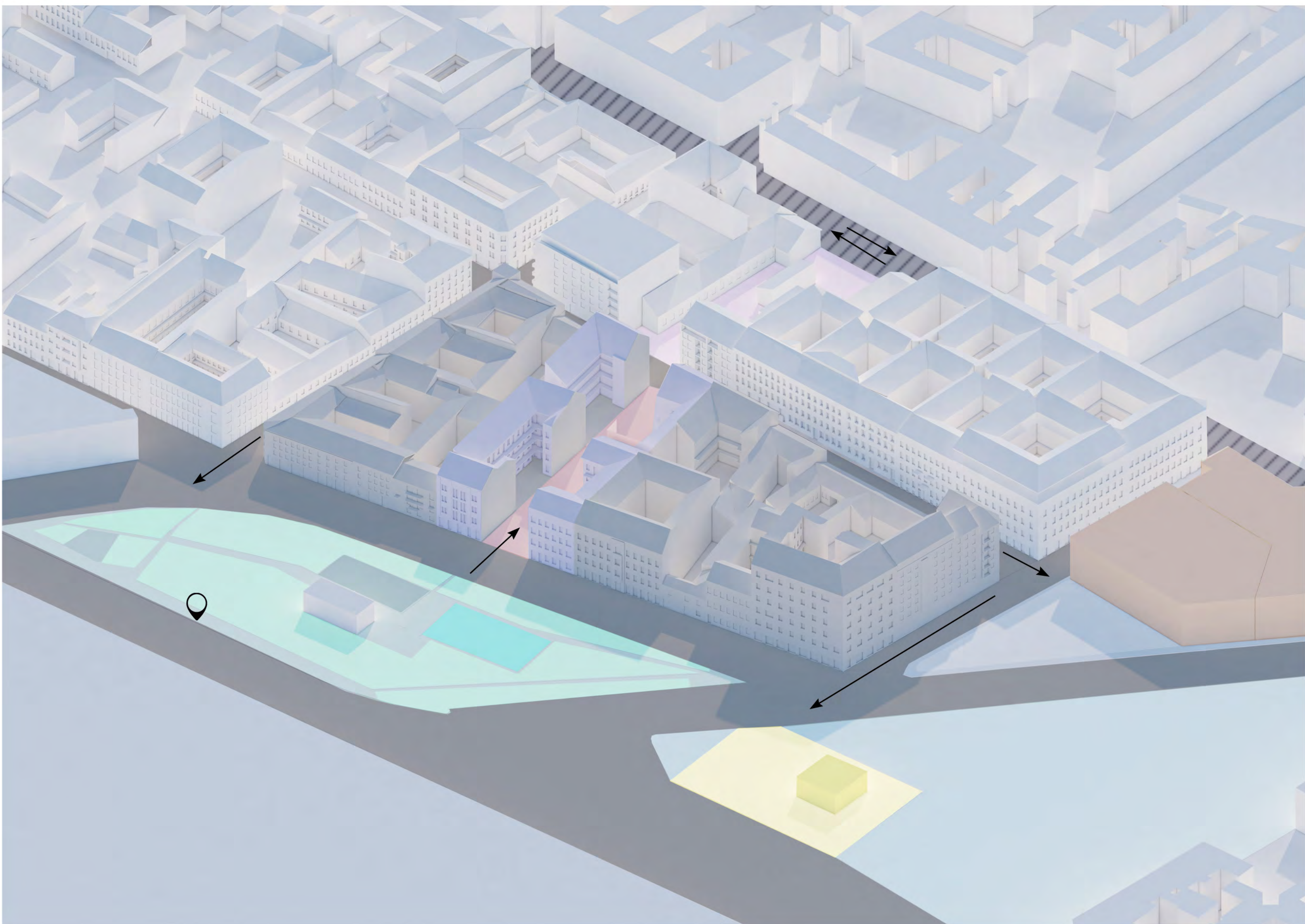
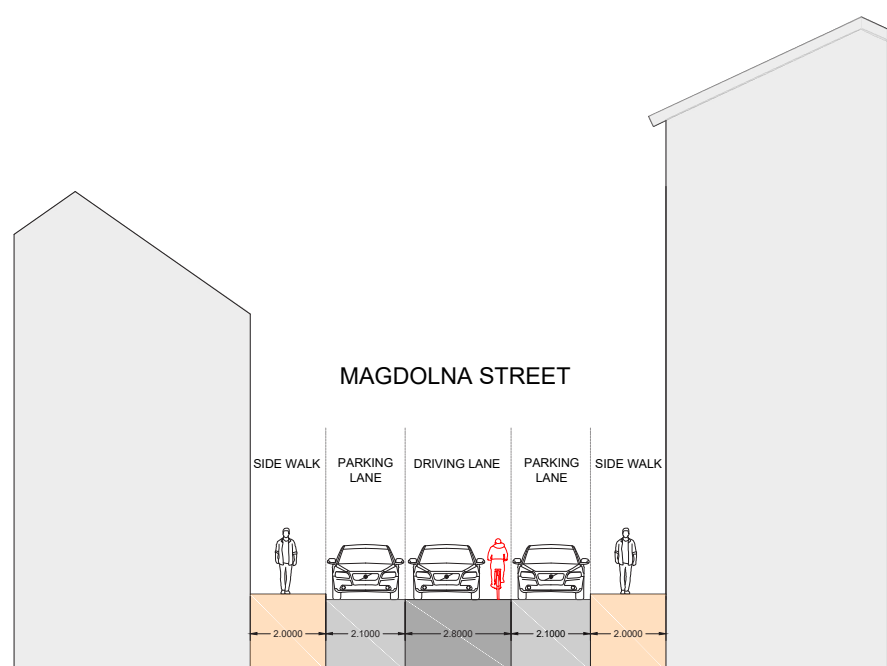
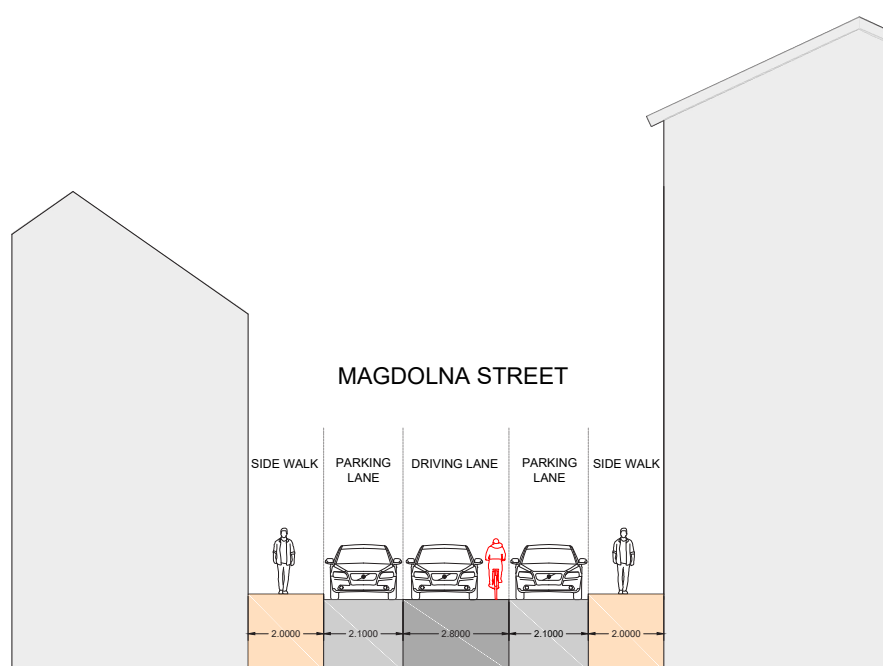
CAR CIRCULATION



BICYCLE CIRCULATION

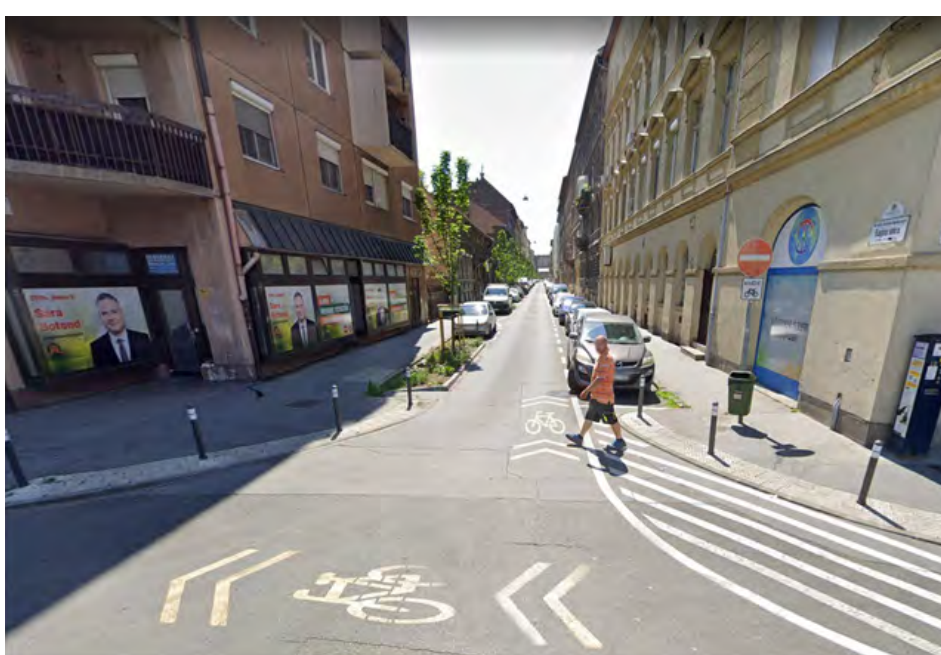
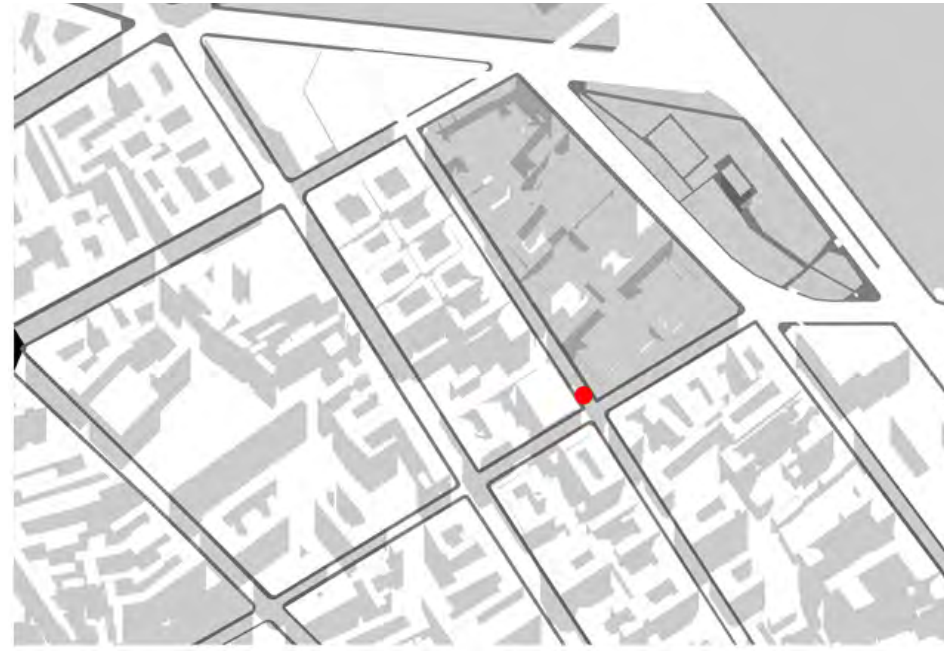
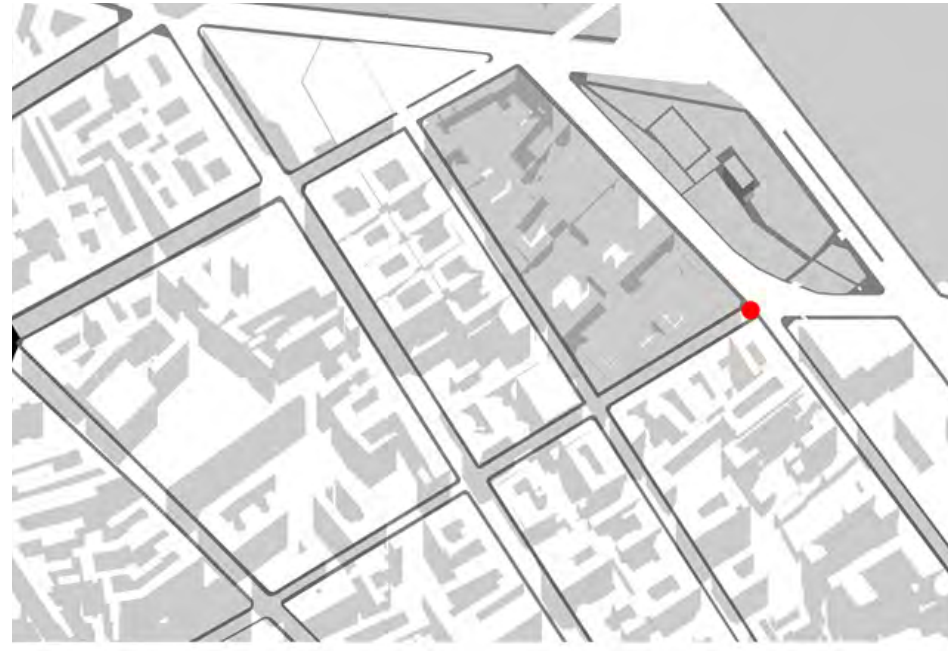
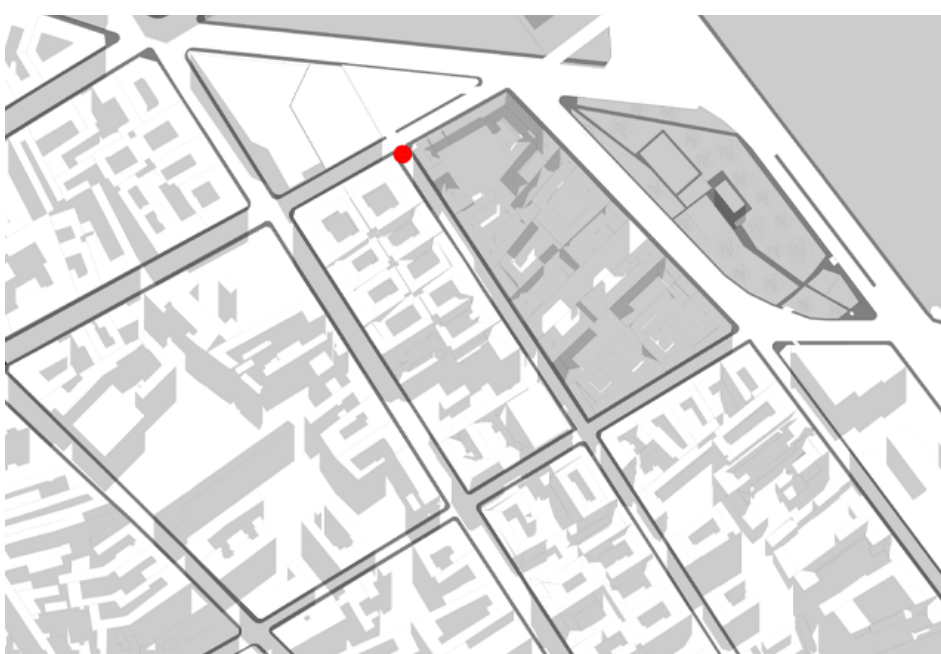


STREET SECTIONS



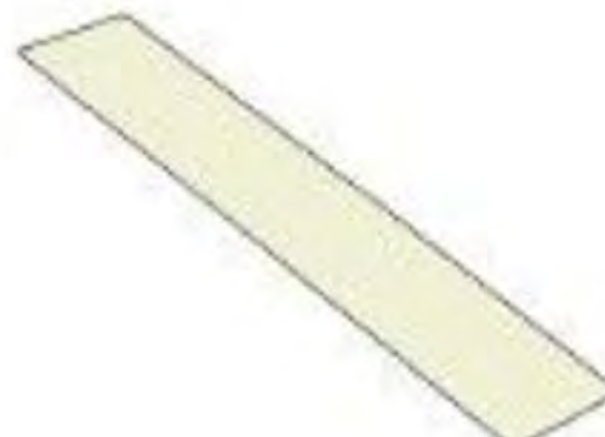
- Plot
- Public Park
- Public Football pitch
- Market / supermarket
- Gas station
- Neighbouring buildings
- Two way street
- Tram Stop

CURRENT STREET VIEWS CONFLICT

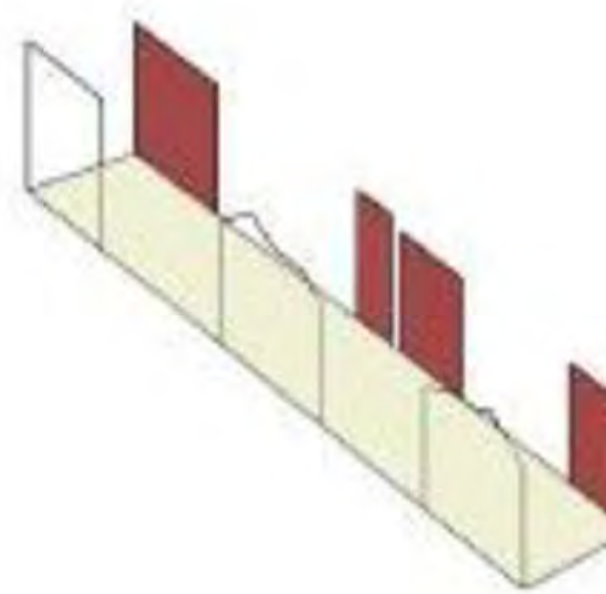


LOCATED BETWEEN LUJZA AND DOBOZI STREETS IN DISTRICT 8, THE SITE OFFERS A RARE STREET-TO-STREET CONNECTION. SURROUNDING STREETS ARE NARROW AND SHARED BY CARS, BIKES, AND PEDESTRIANS, CAUSING FREQUENT CONFLICTS—ESPECIALLY AS BOTH STREETS DIRECT CARS IN THE SAME DIRECTION, FORCING BIKES TO GO AGAINST TRAFFIC. TO ADDRESS THIS, THE PROJECT INTRODUCES A SAFE PEDESTRIAN AND BICYCLE PASSAGE THROUGH THE PLOT, RELIEVING PRESSURE ON EXISTING STREETS. OVERLOOKING THIS AXIS ARE SMALL COMMUNITY-FACING AMENITIES THAT ACTIVATE THE SPACE AND PROVIDE LOCAL JOBS CONTRIBUTING TO SAFER CIRCULATION AND A MORE VIBRANT, INCLUSIVE NEIGHBORHOOD.

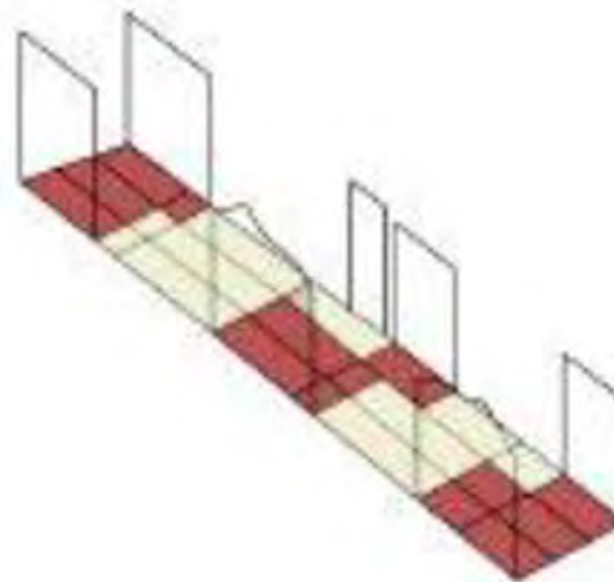
MASS CONCEPT



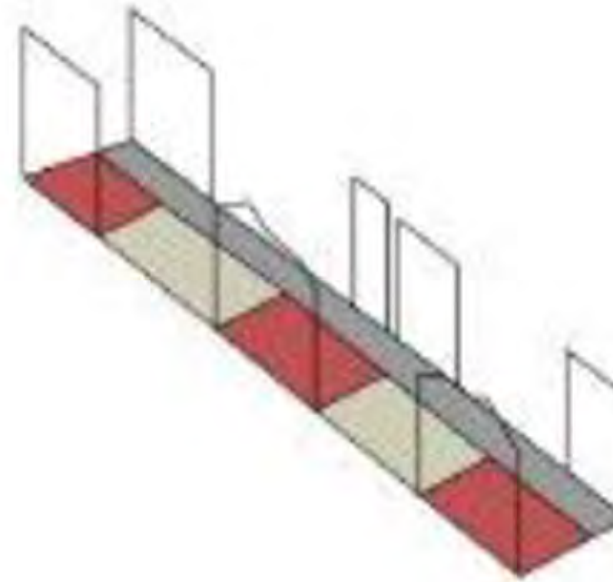
Full land area 1300 m



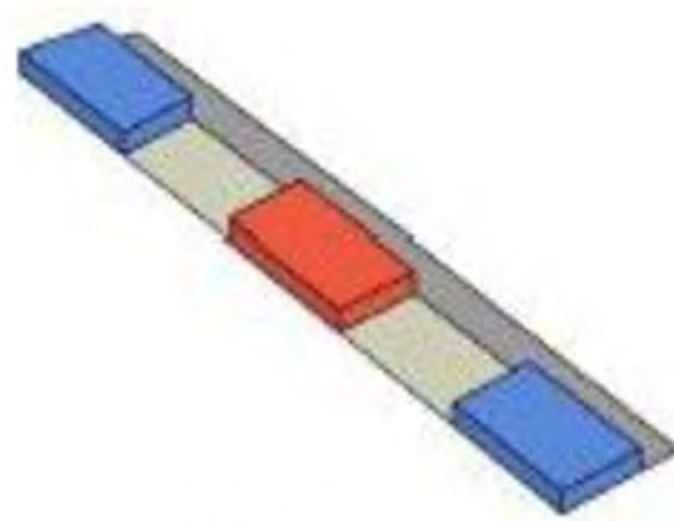
firewalls of the neighboring building are taken into account defining different zones of the land



A grid system is introduced helping defining best building zones and overall building mass

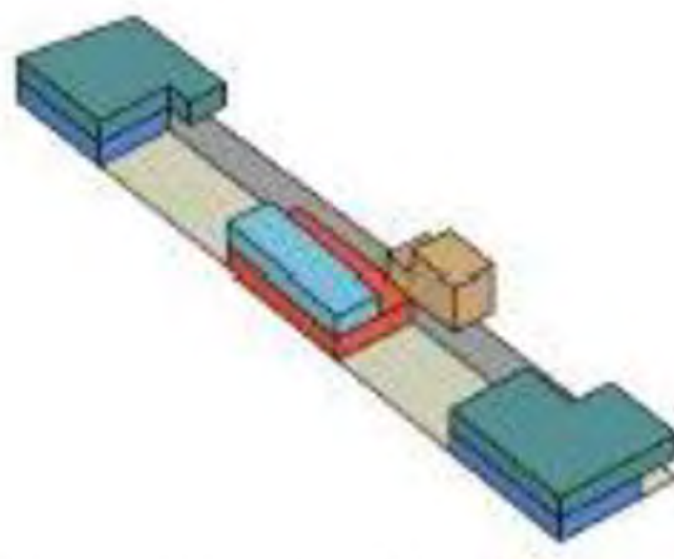


A pedestrian and bike pathway is introduced in the ground floor making the building more permeable



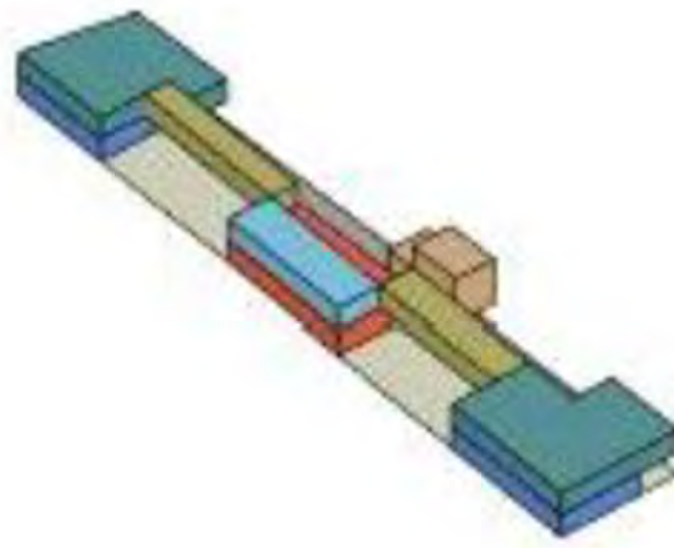
commercial shops are introduced in the central zone serving both the dorm residents and people going through the introduced pathway

entrance Lobby / small student restaurant and bars are introduced at each end of the land

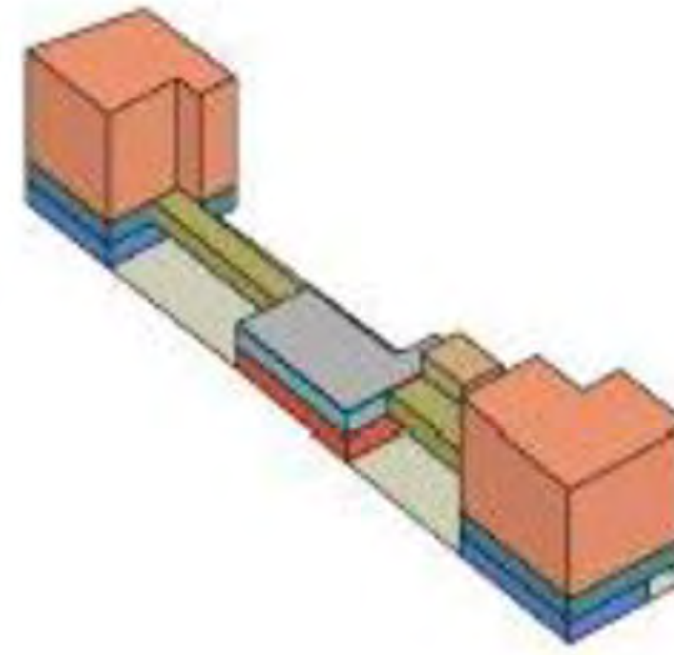


shared common functions are added in the first floor such as laundry rooms, game rooms and study rooms

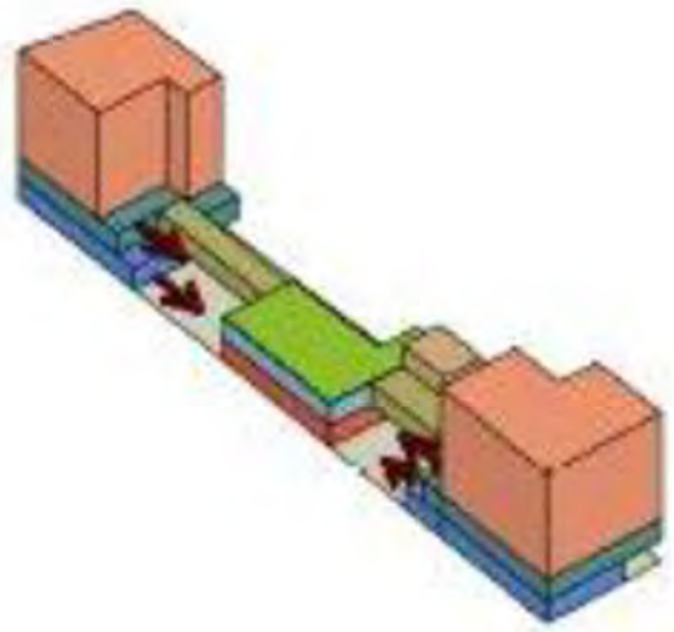
functions that need bigger amount of space are pushed to the middle such as the GYM and events room



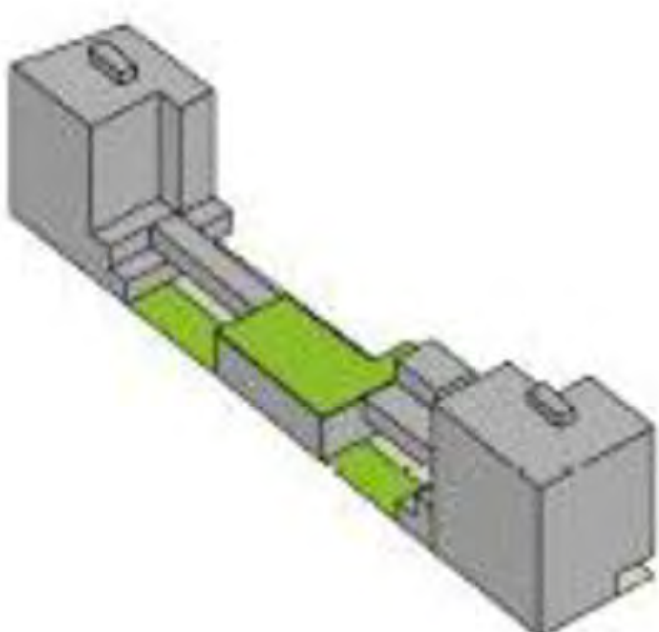
A bridge is added connecting all the three blocks together on the first floor



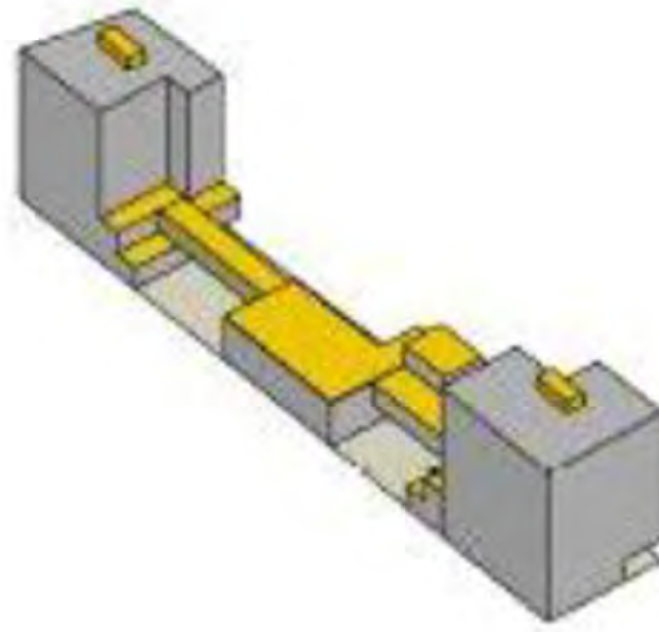
students' residential units then continue all the way up until the 6th floor



building masses closer to the ground floor are then pulled towards the inner courtyards to be able to gain more sunlight due to the narrow nature of the plot



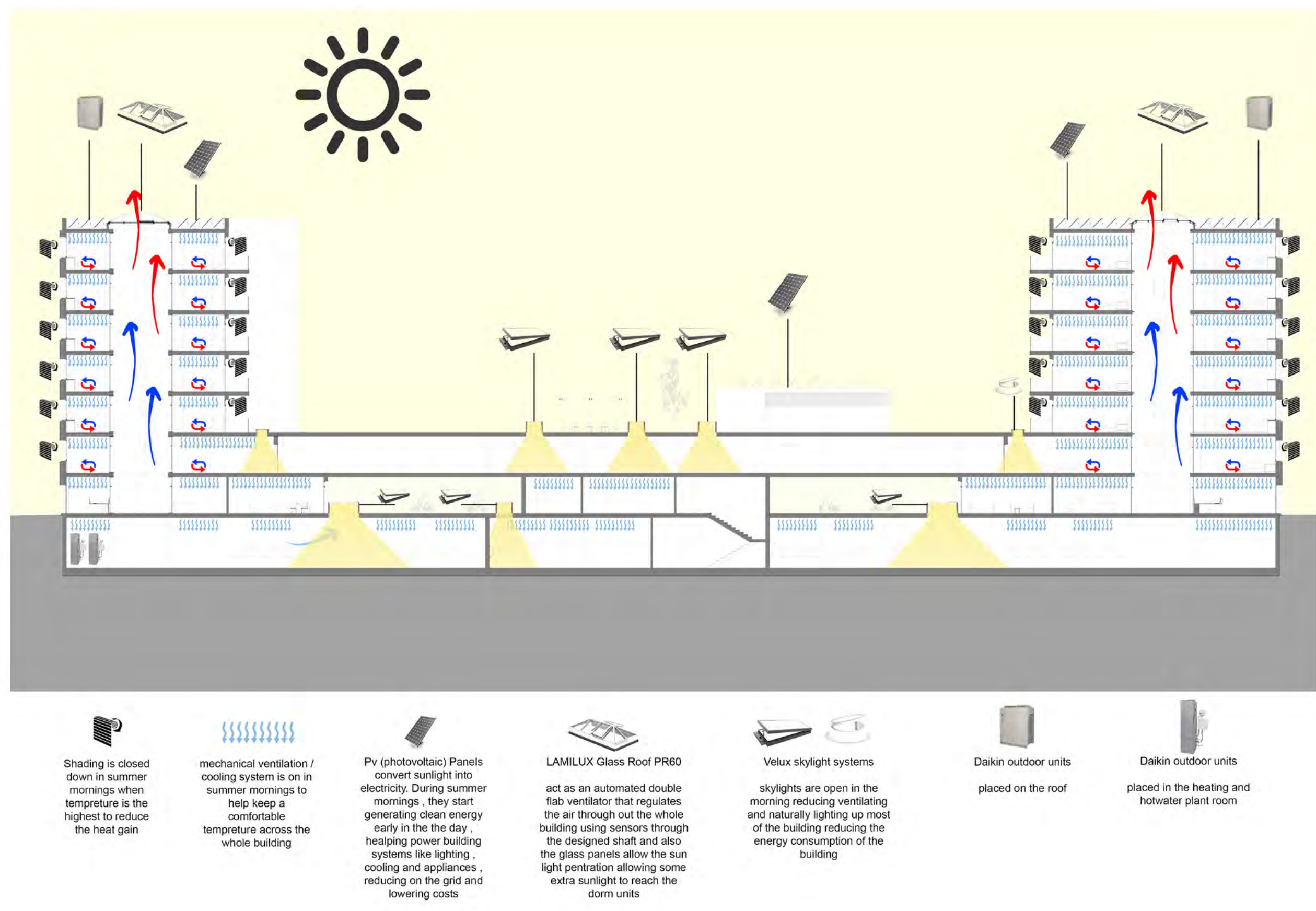
The bridge creates a transition between the public pedestrian and bike lane defining further the best location for green spaces in the inner courtyard also a green roof is introduced over the midrise block in the middle creating a common garden for students



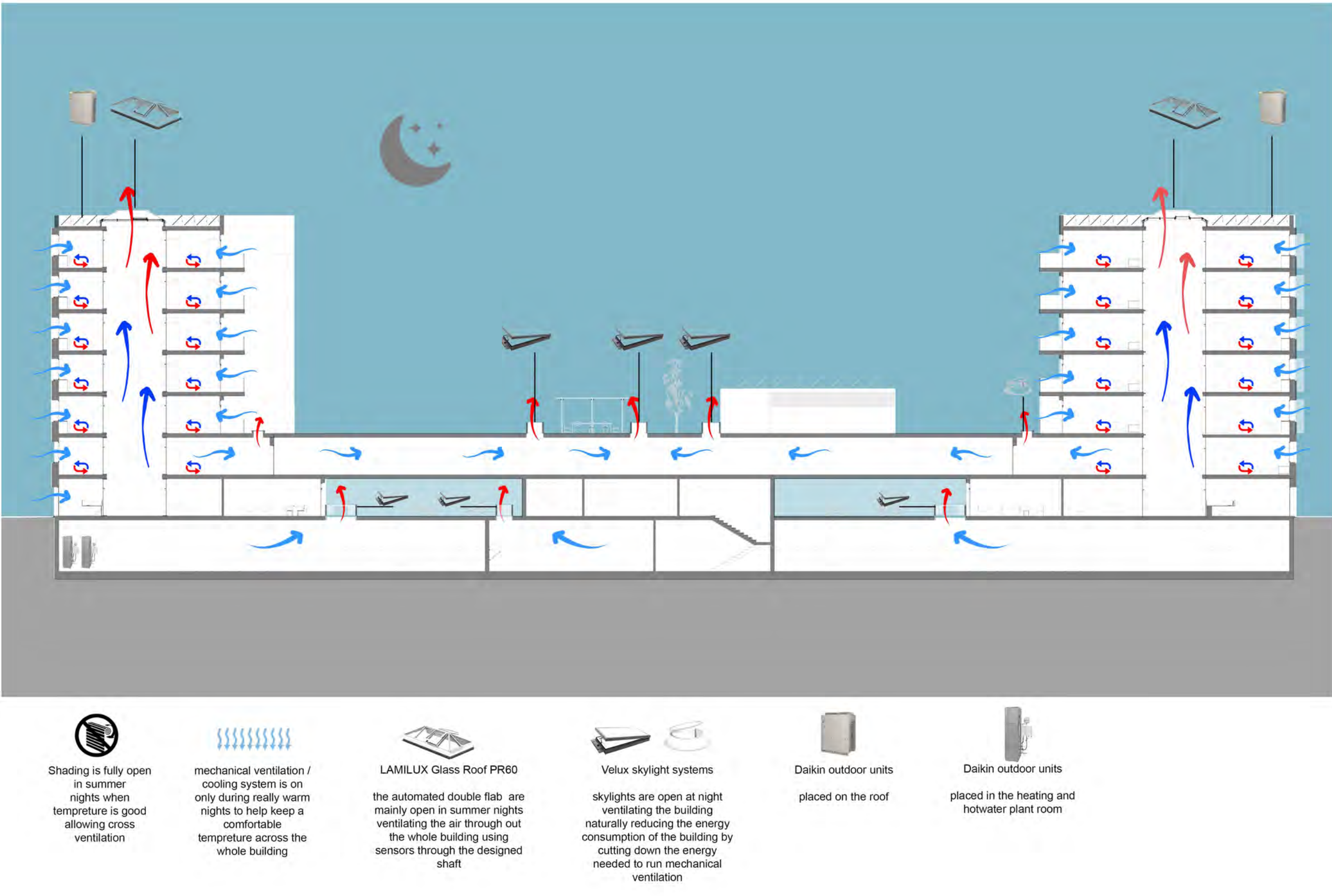
Zones where it's possible to control and obtain more sunlight are highlighted making sure sunlight reaches all the different zones of the building

BUILDING SERVICE ENGINEERING CONCEPT

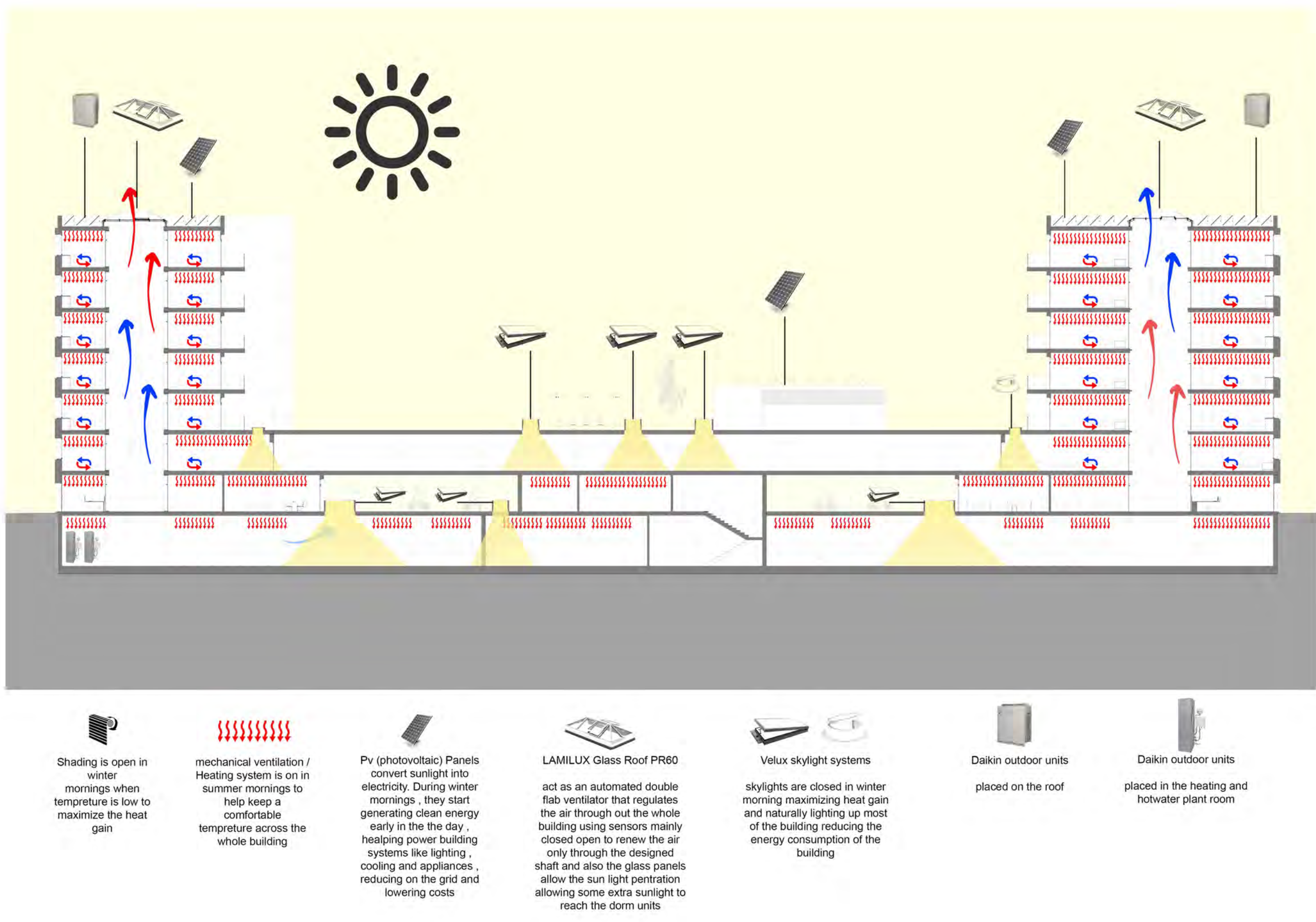
SUMMER MORNING



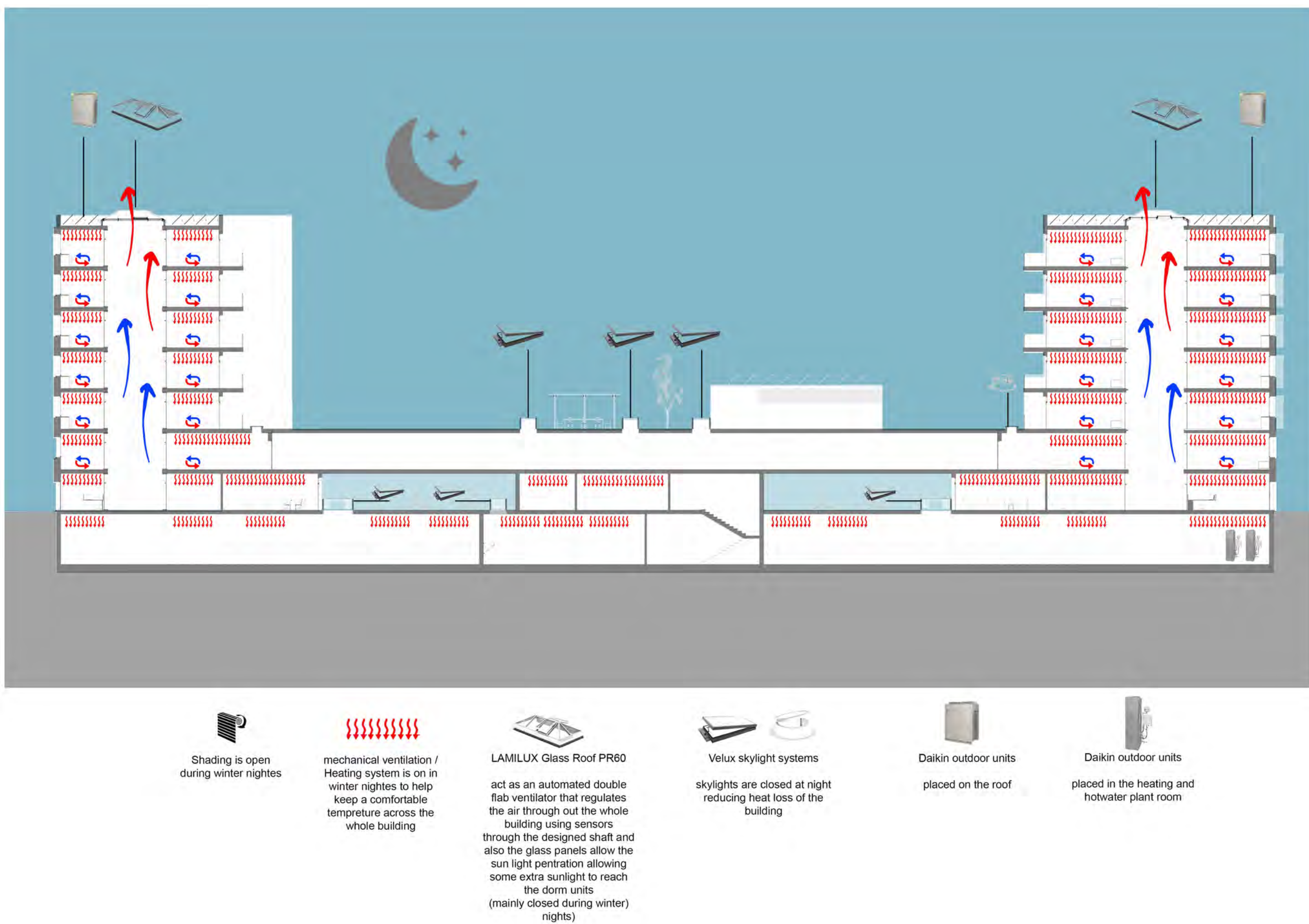
SUMMER NIGHT



WINTER MORNING



WINTER NIGHT



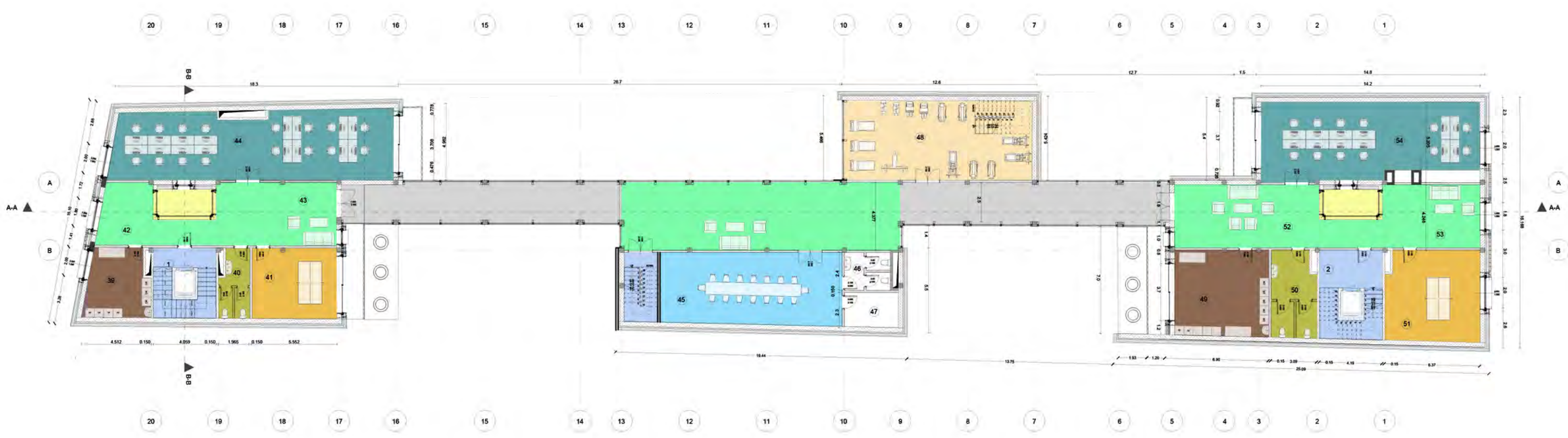
PLAN CONCEPT



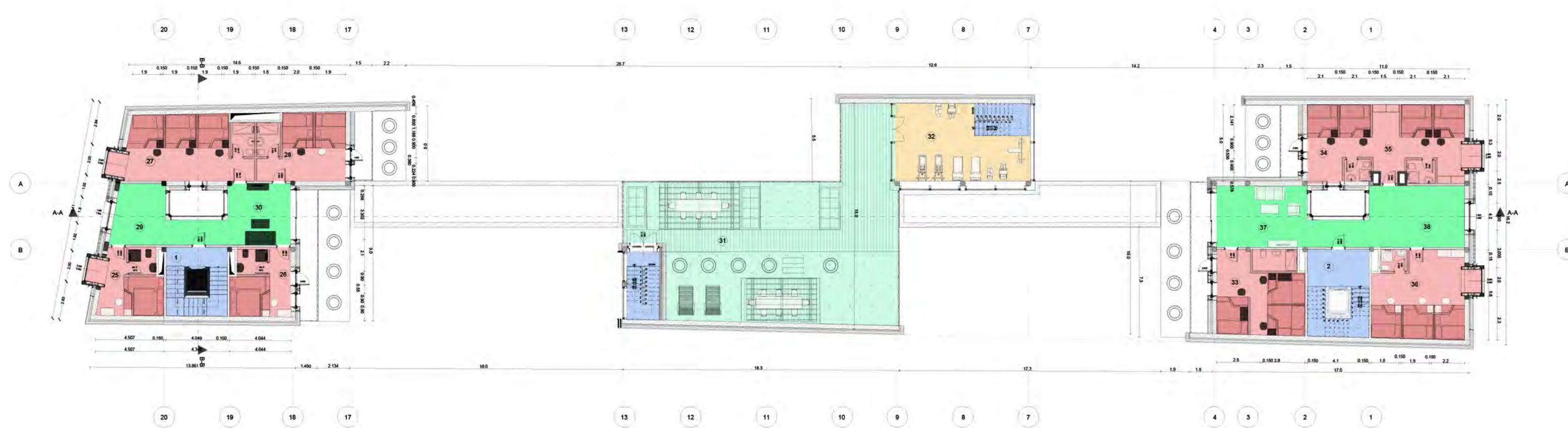
- Lobby
- staircase / elevator box (flowing fire safety regulations)
- Waiting area / restaurant entrance
- toilets
- Bar / Restaurant for students
- Entrance & Ventilation / Light shaft
- Commercial functions serving on the open pathway and the dorm students (Copy shop / used student goods sale)



- Storage
- Technical Rooms
- Bike Ramp
- shared toilets
- Bike service
- Bike parking zones
- staircase / elevator box (flowing fire safety regulations)



- Lundry Room
- common spaces
- Study room
- Events room
- Game room
- staircase / elevator box (flowing fire safety regulations)
- shared toilets
- GYM



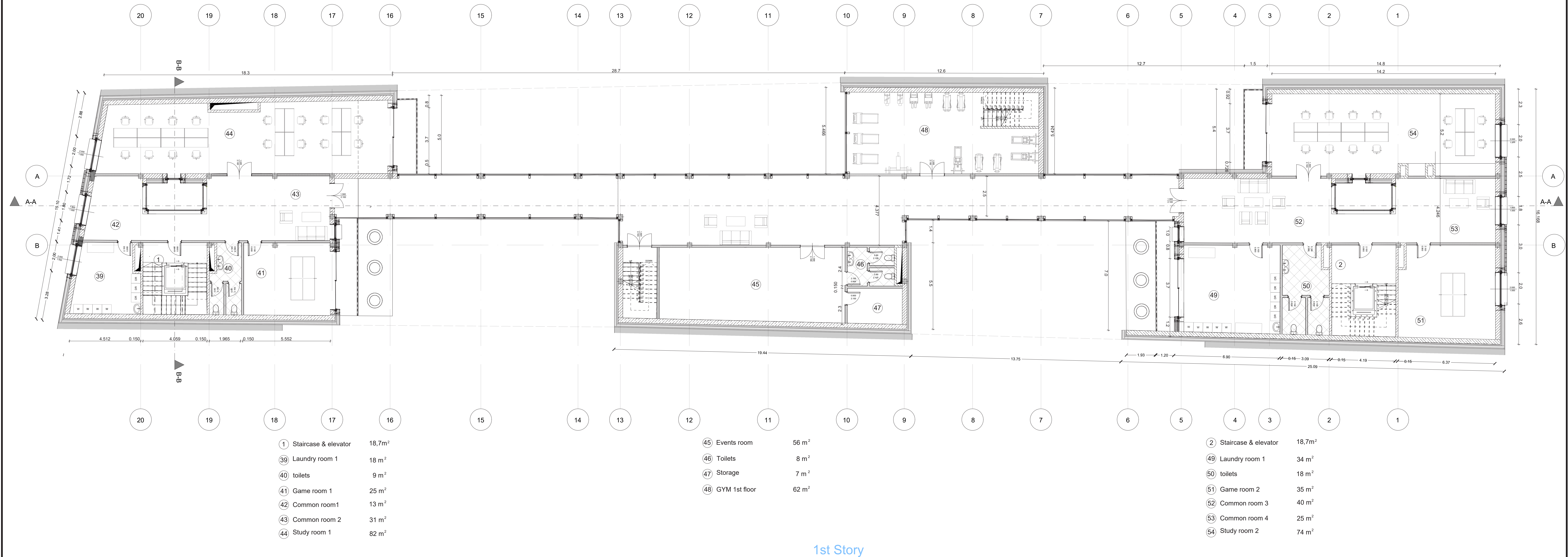
- common spaces such as common kitchen / tv rooms
- student rooms
- student Cabinets
- Roof garden
- Ventilation / Light shaft
- staircase / elevator box (flowing fire safety regulations)
- corridor connecting spaces
- GYM

SCALE 1:100

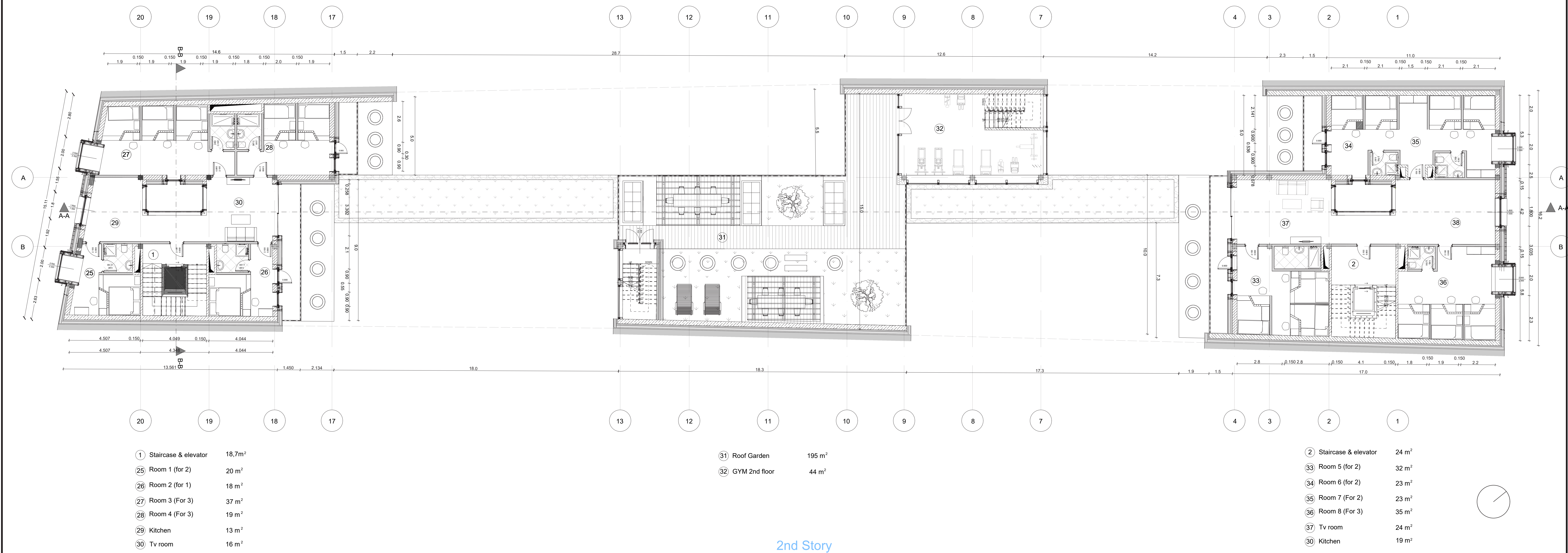


SCALE 1:100





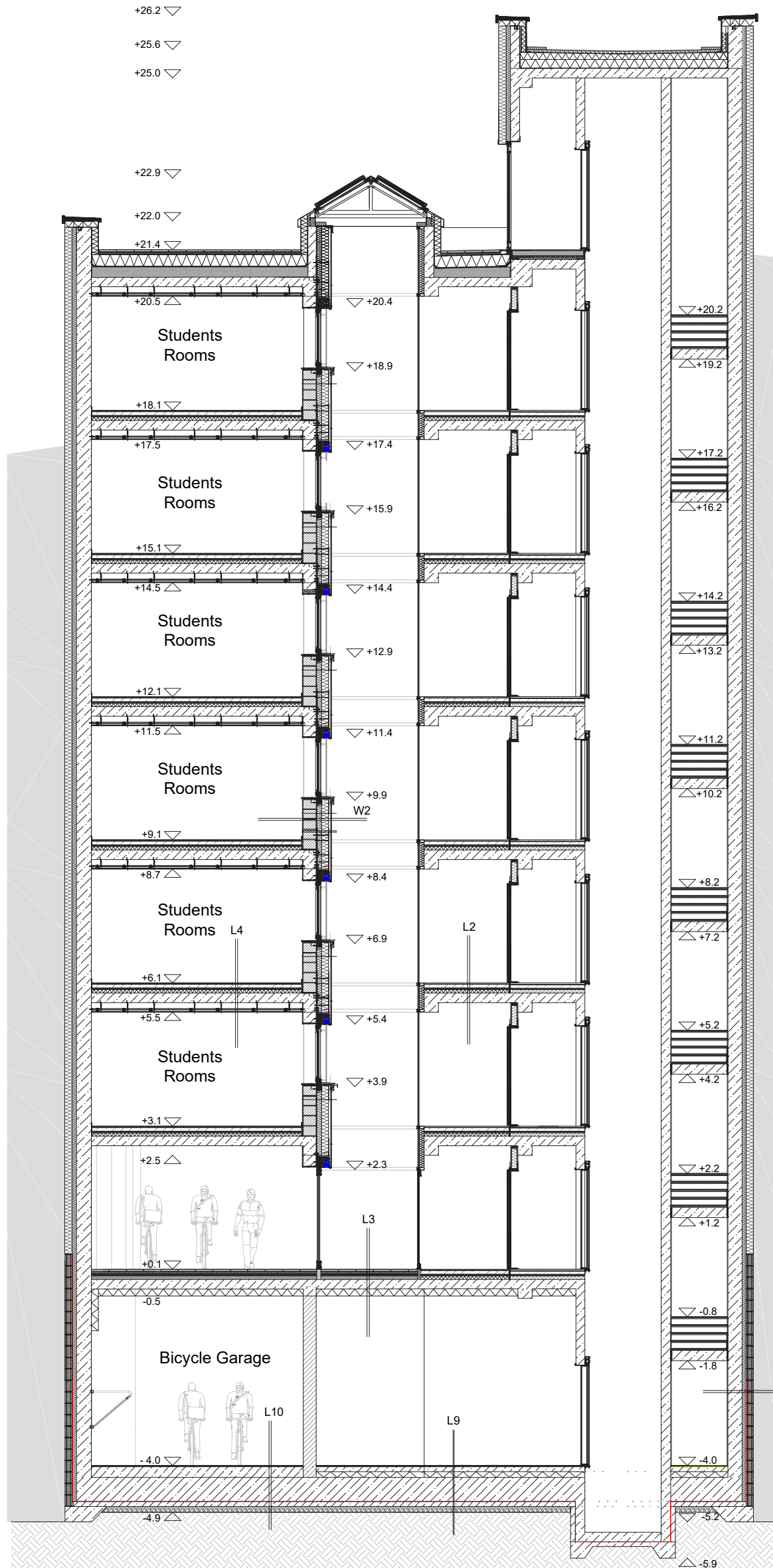
1st Story



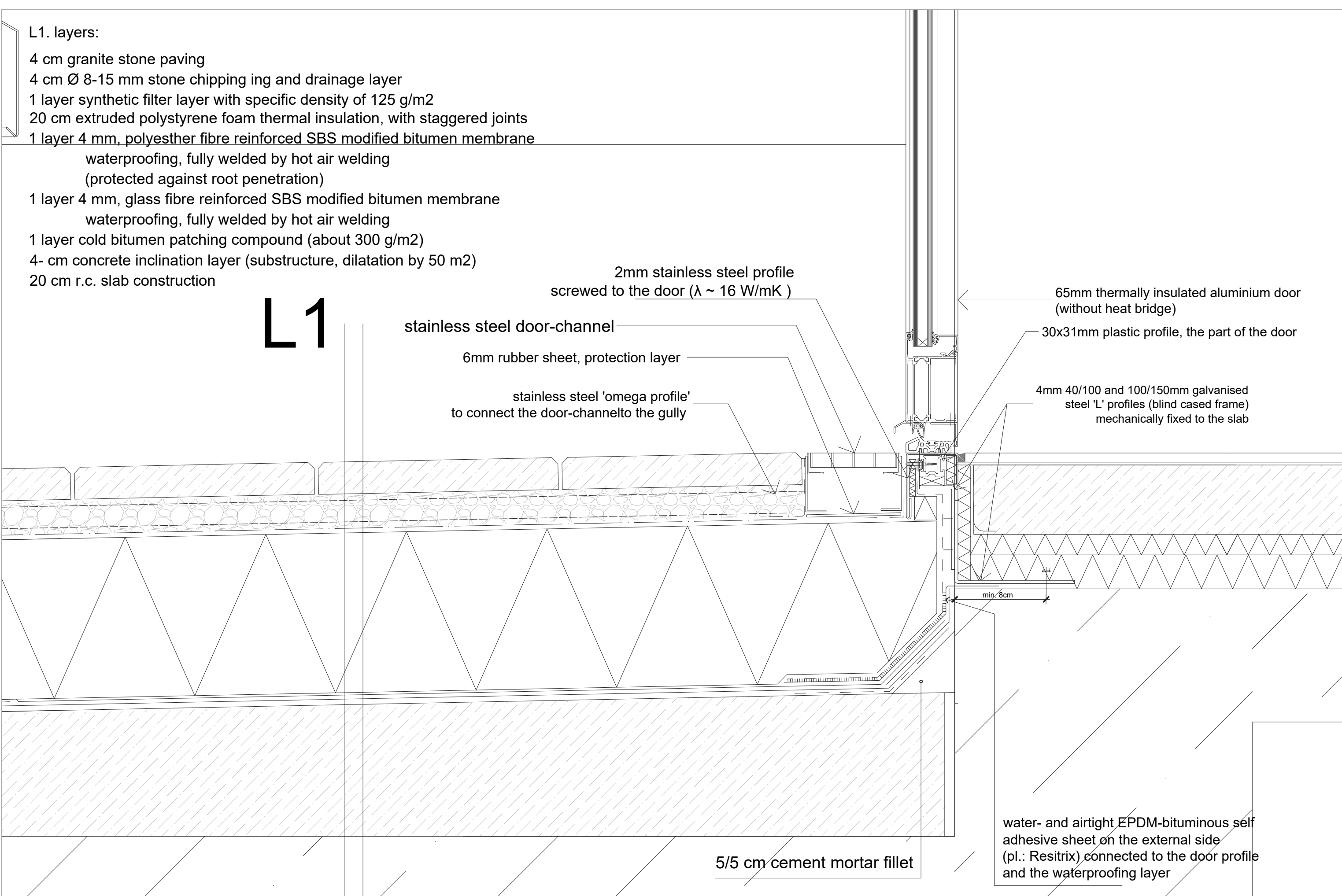
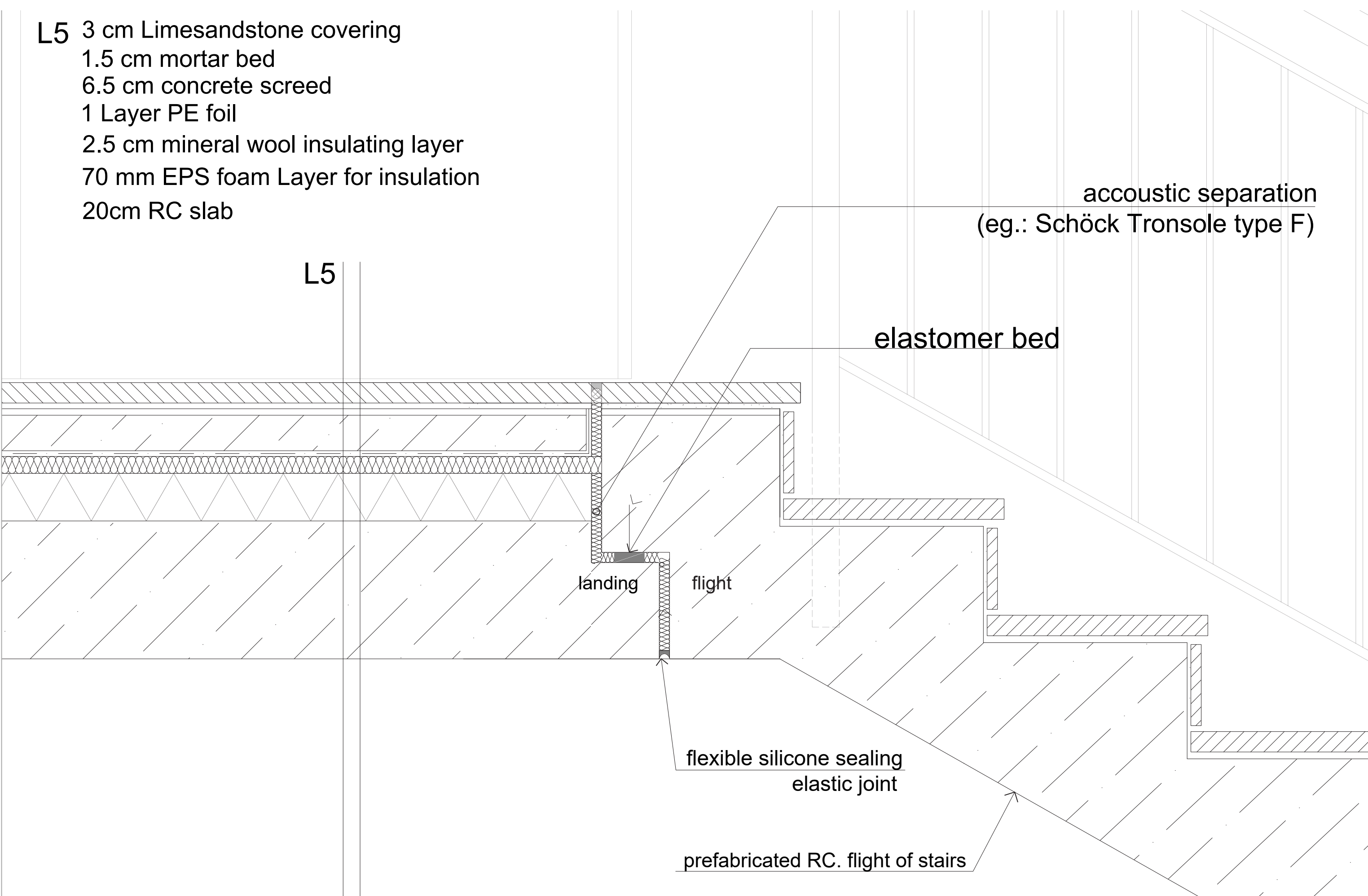
2nd Story

DETAILS

SCALE 1:5

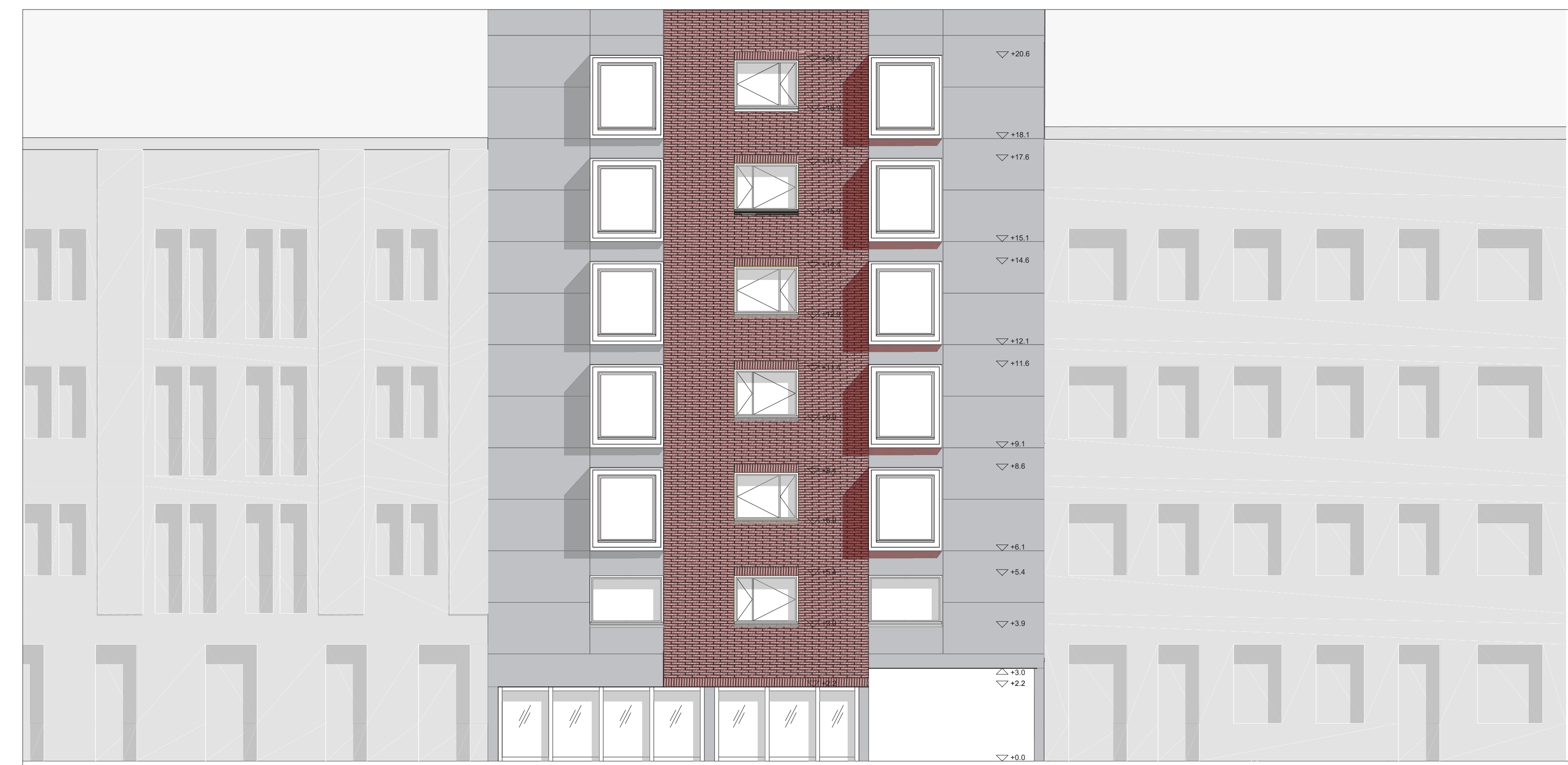


- W2. layers:**
- 1.5 cm plaster
 - 30 cm calcium silicate wall
 - 1 cm airgap base plaster
 - 20 cm mineral wool thermal insulation
 - 4 cm reinforced concrete
 - 0.8 mm fiber cement panels
- W1. layers:**
- 1.5 cm plaster
 - 30 cm calcium silicate wall
 - 1 cm airgap base plaster
 - 20 cm mineral wool thermal insulation
 - 1 layer waterproofing against subsoil water pressure
 - 15 cm RC supporting wall
 - 5 cm Gap
- L1. layers:**
- 4 cm granite stone paving
 - 4 cm Ø 8-15 mm stone chipping ing and drainage layer
 - 1 layer reinforced fiber layer with specific density of 125 g/m²
 - 20 cm extruded polystyrene foam thermal insulation, with staggered joints
 - 1 layer 4 mm, polyester fibre reinforced SBS modified bitumen membrane
 - waterproofing, fully welded by hot air welding
 - 1 layer 4 mm, glass fibre reinforced SBS modified bitumen membrane
 - waterproofing, fully welded by hot air welding
 - 1 layer cold bitumen patching compound (about 300 g/m²)
 - 4 cm concrete inclination layer (substructure, dilatation by 50 m²)
 - 20 cm c.c. slab construction
 - 1.5 cm Plaster
- L2. layers:**
- 6 mm Limestone
 - 2 mm glue
 - 75 mm concrete screed (reinforced)
 - 1 layer PE foil
 - 25 mm mineral wool (floating layer)
 - 50 mm EPS foam (layer for insulation)
 - 20 cm insula made reinforced concrete slab
 - 1.5 cm Plaster
- L4. layers:**
- 22 mm parquet with adhesive
 - 5 mm self-healing smoothing compound
 - 50 mm concrete screed (reinforced)
 - 1 layer PE foil
 - 25 mm mineral wool (floating layer)
 - 50 mm EPS foam (layer for insulation)
 - 20 cm insula made reinforced concrete slab
 - 1.5 cm Plaster
- L5. layers:**
- 3 cm Limesandstone covering
 - 1.5 cm mortar bed
 - 6.5 cm concrete screed
 - 1 Layer PE foil
 - 2.5 cm mineral wool insulating layer
 - 70 mm EPS foam Layer for insulation
 - 20cm RC slab
 - 1.5 cm Plaster
- L8. layers:**
- 4 cm granite stone paving
 - 4 cm Ø 8-15 mm stone chipping ing and drainage layer
 - 1 layer reinforced fiber layer with specific density of 125 g/m²
 - 20 cm extruded polystyrene foam thermal insulation, with staggered joints
 - 1 layer 4 mm, polyester fibre reinforced SBS modified bitumen membrane
 - waterproofing, fully welded by hot air welding
 - 1 layer 4 mm, glass fibre reinforced SBS modified bitumen membrane
 - waterproofing, fully welded by hot air welding
 - 1 layer cold bitumen patching compound (about 300 g/m²)
 - 20 cm c.c. slab construction
 - 1.5 cm Plaster

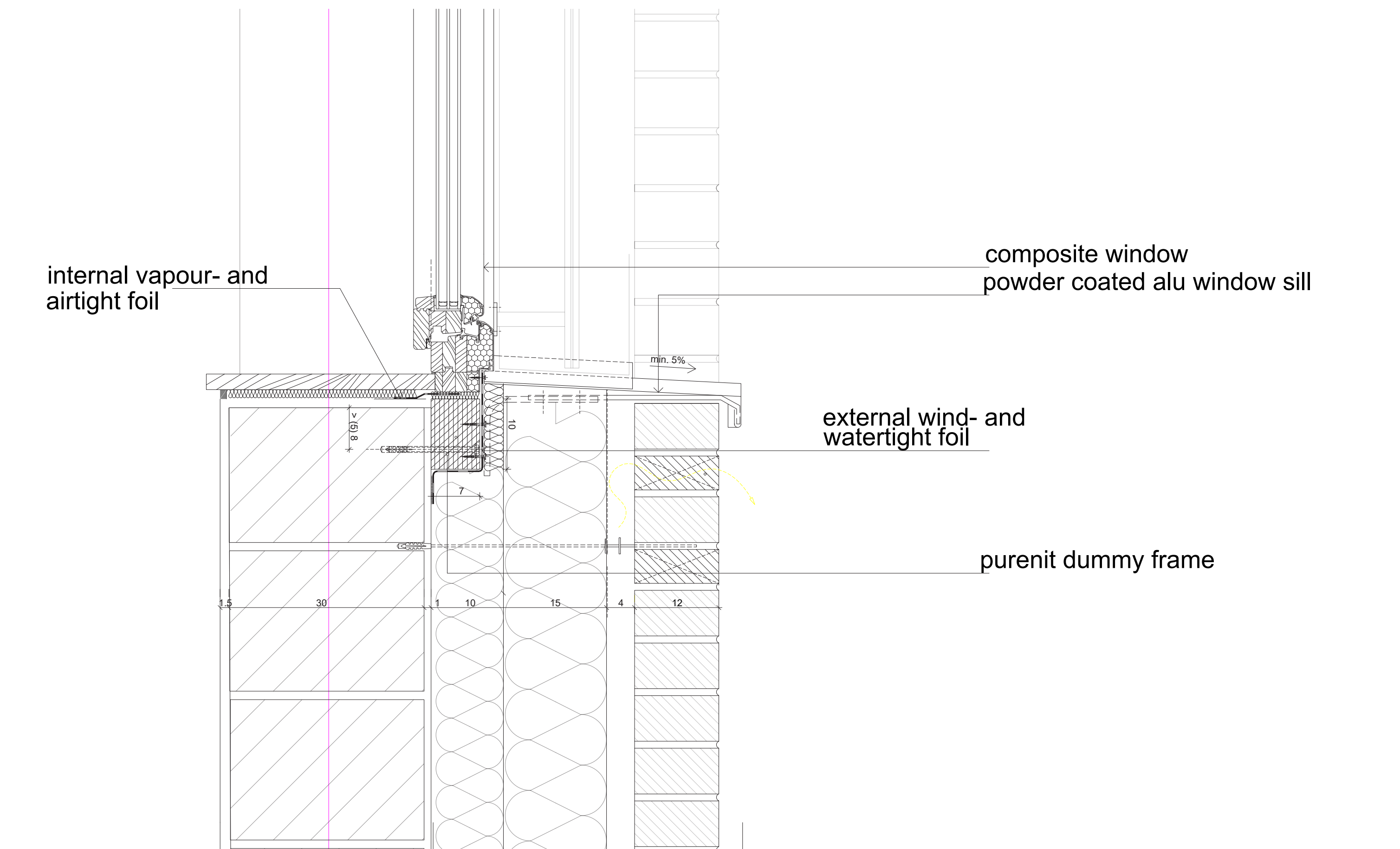
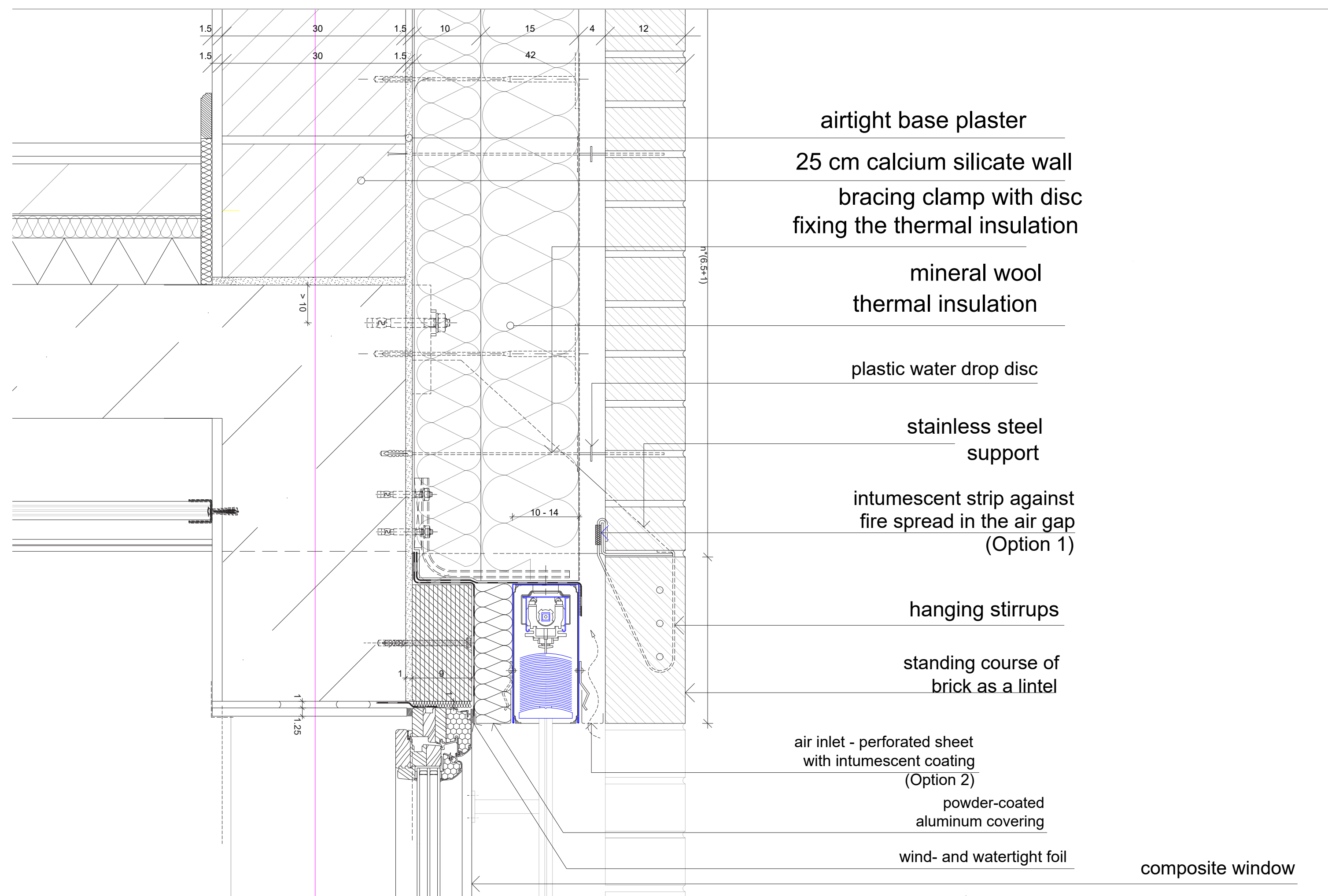
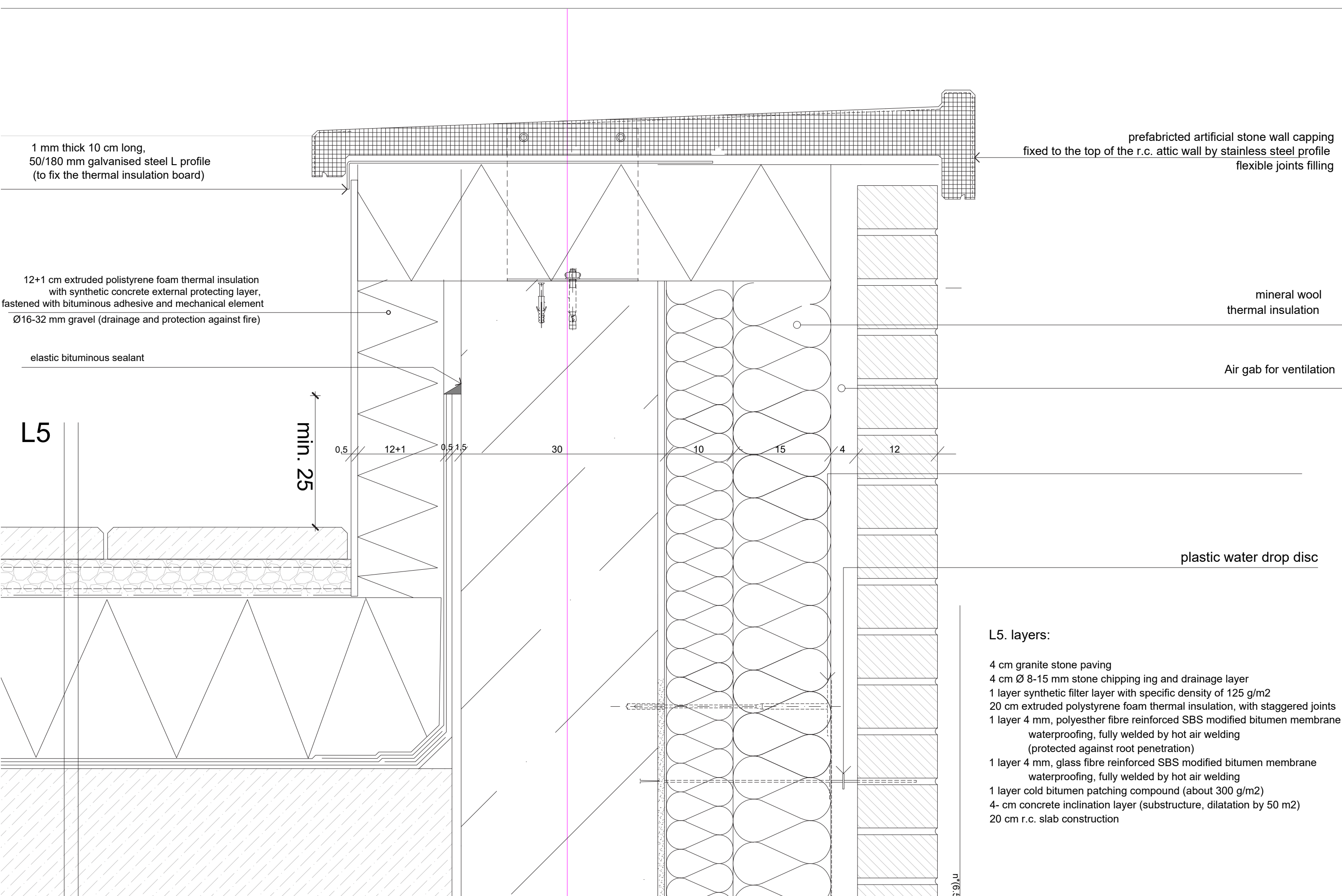


ELEVATIONS

SCALE 1:100

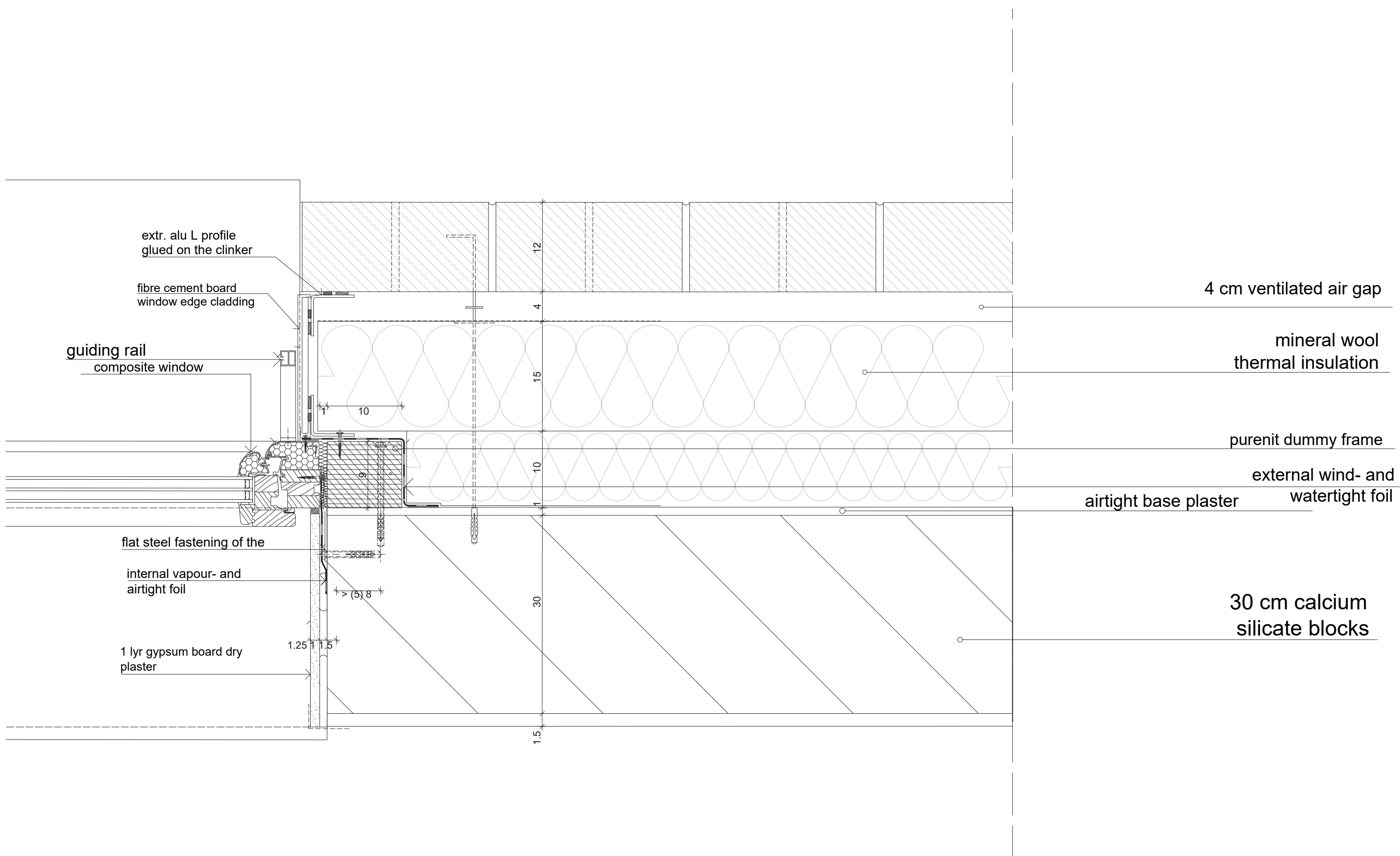
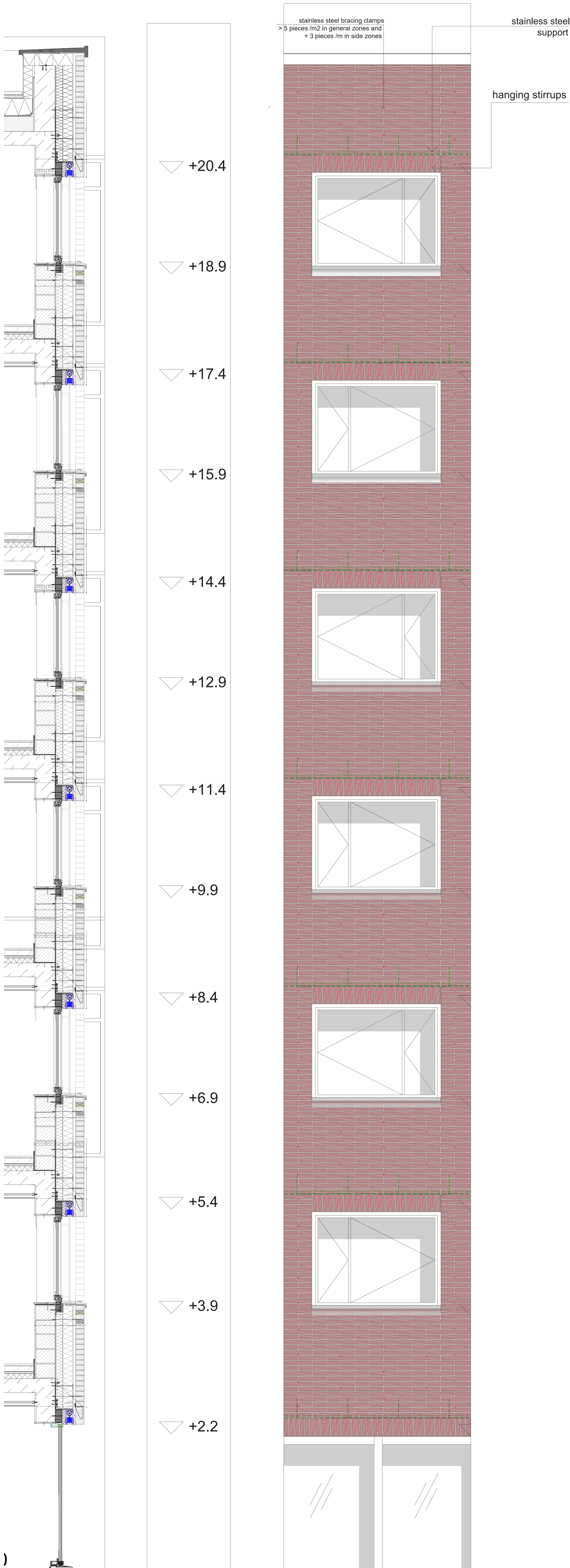


DETAILS



ELEVATION DETAILED

SCALE 1:20



DETAILED ROOM

SCALE 1:20

