

SOCIAL SYNERGYST

The city - Place for all

Exploring the possibilities to attract families back in the city through the case of the Expat families



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- 69% in a home
- 2% in a bar/restaurant
- 5% in a vehicle
- 11% in an outdoor/indoor location
- 5% in an office/factory
- 8% outdoors



Jane, England
Child: 0-4 years



Daan and Anna, the Netherlands
Child: 0-4 years



Tom and Sarah, USA
Child: 0-4 years
Child: 4-8 years
Child: 12+ years

Research question

What benefits does living in the city bring to expatriate families?

What design solutions will enhance social interaction between residents and provide a safe and child-friendly neighbourhood?

Target group - The expat family

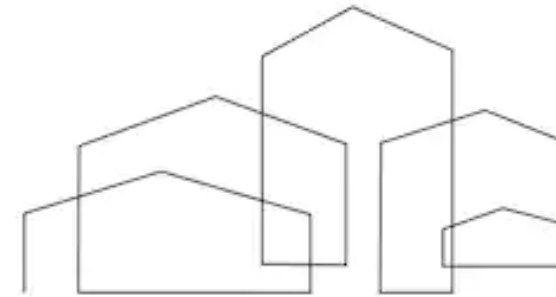
Who is the expat?

“highly skilled migrant”

- Highly skilled migrant 30 years and older -
monthly
salary of minimum EUR 4,612
- Highly skilled migrant younger than 30
years -
monthly salary of minimum EUR 3,381

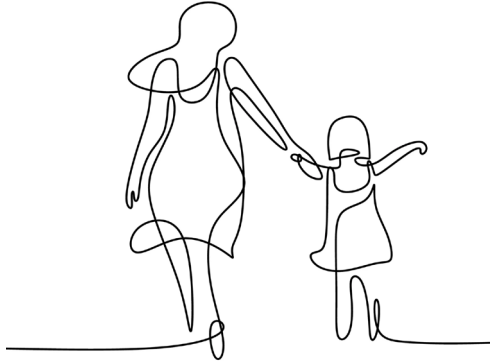
AND

What are their housing needs?

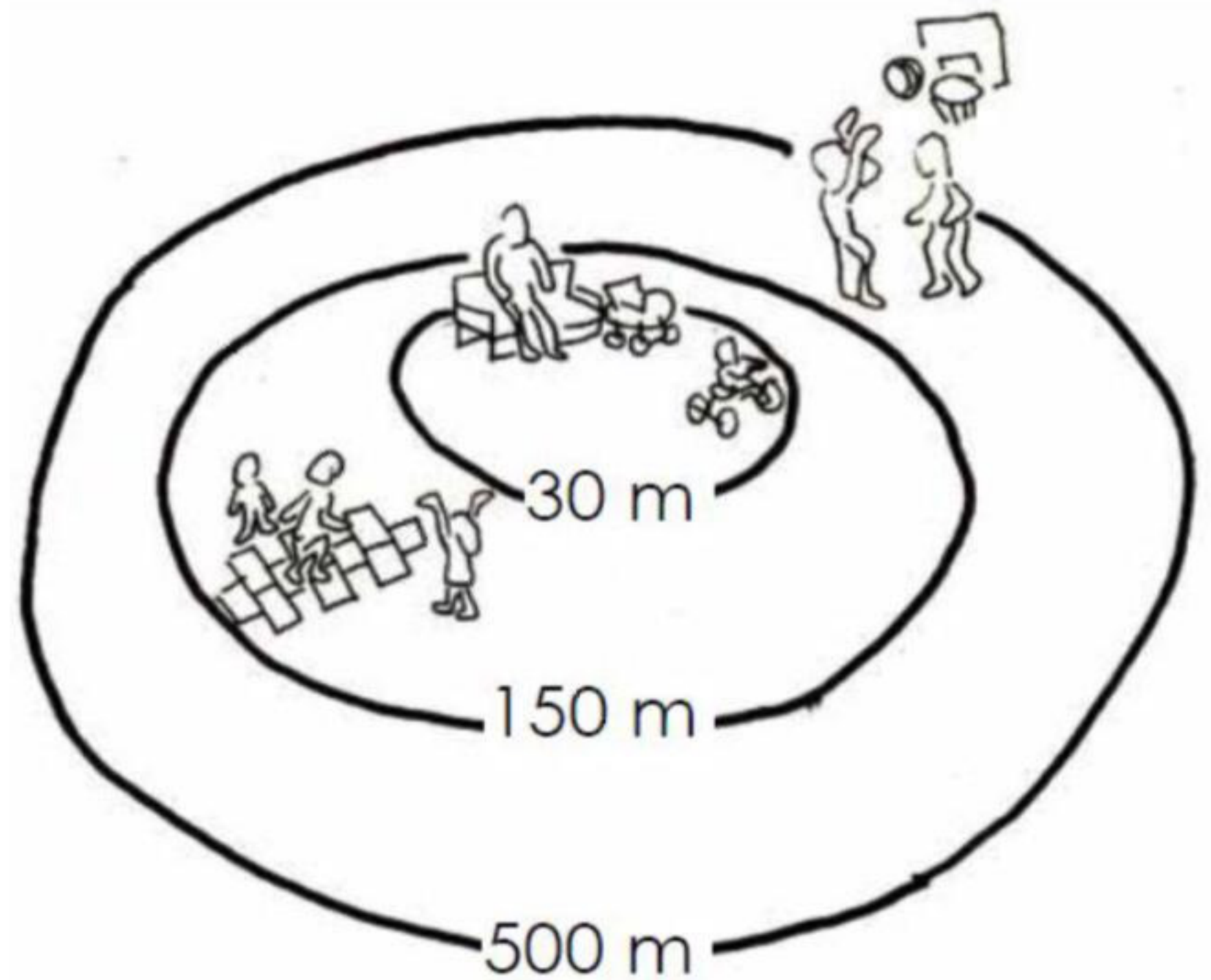


Statistics and Interviews

Target group - The expat family

		
Household type: married/unmarried couple without children	Household type: married/unmarried couple with 1 or more children (family)	Household type: single parent with 1 or more children
Dwelling type: one level - compact Dwelling size: 50 - 80 m² Bedrooms: 1- 2	Dwelling type: one or two - levels (loft) Dwelling size: 85 - 160 m² Bedrooms: 2 or more	Dwelling type: one level - compact Dwelling size: 50-80 m² Bedrooms: 2 or more
Shared spaces: kitchen, event space, shared working space, exercise room Facilities: shops, cafe	Shared spaces: playgrounds, play rooms, multifunctional zones, exercise room Facilities: children daycare, shops	Shared spaces: playgrounds, play rooms, multifunctional zones, exercise room Facilities: children daycare, shops

Children age group

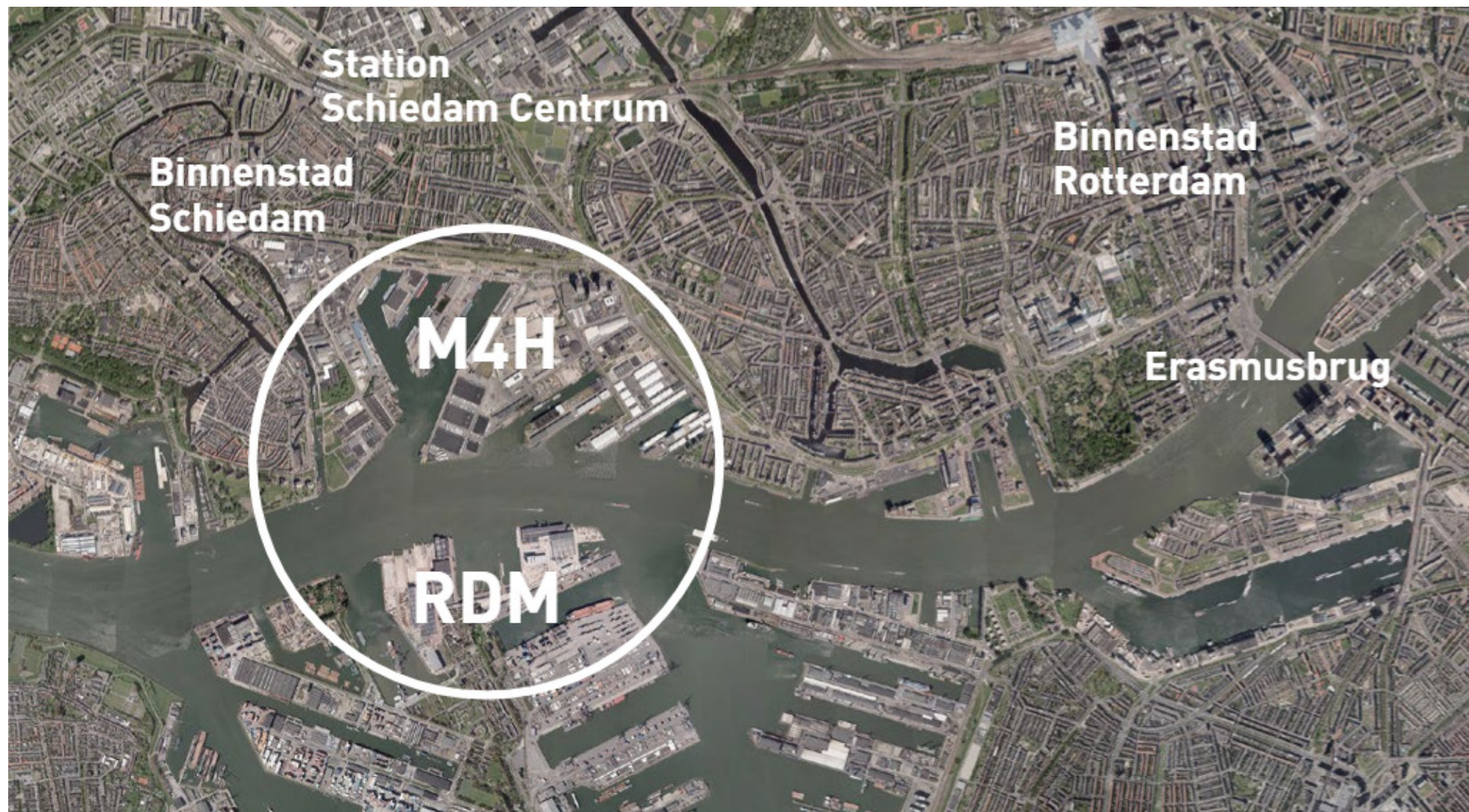


Range 1: 0-4 years

Range 2: 4-8 years

Range 3: 8-12 years

Rotterdam and the relevance to the target group



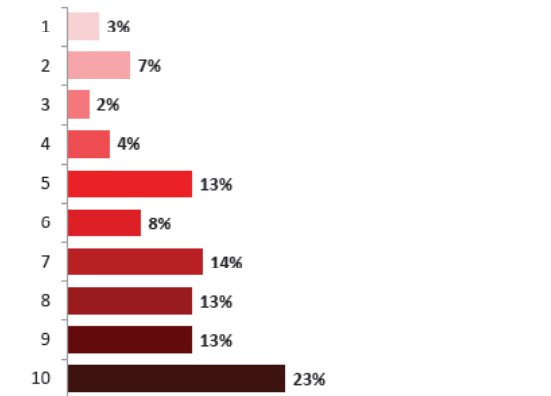
Family gentrification

Rotterdam as the best expat city for 2019

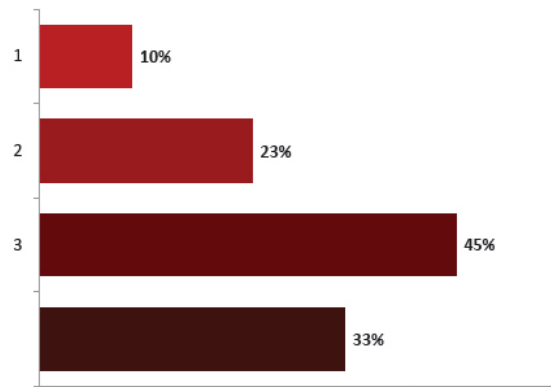
Questionnaire



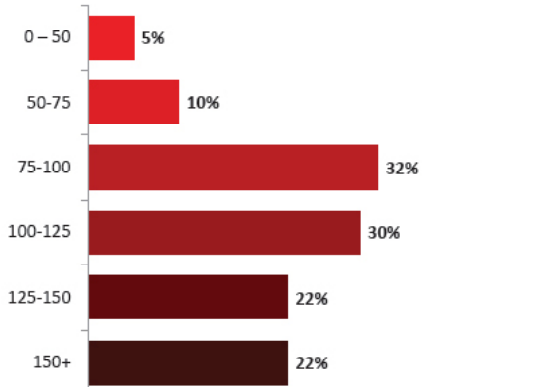
Important aspects



Stress related to finding proper housing



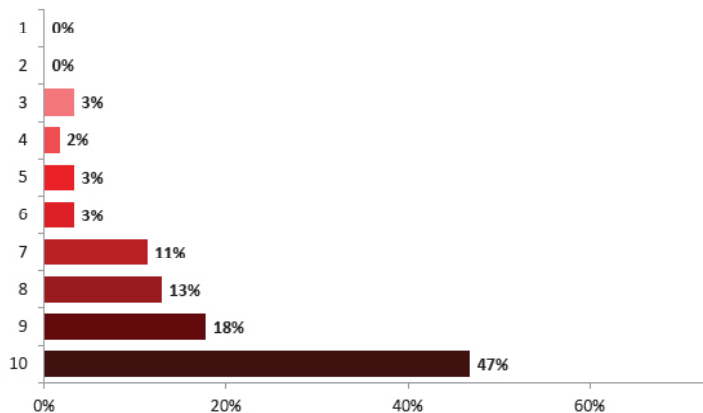
Responses to the question "How many bedrooms do you need?"



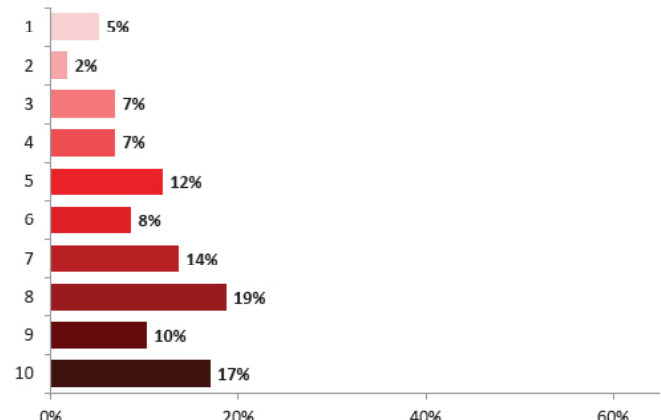
Responses to the question "How many square meters do you need?"

31 questions in 5 sections

99 responses



Results from rating (1 - 10) the importance of having a private outdoor space



Results from rating (1 - 10) the importance of having a shared outdoor space

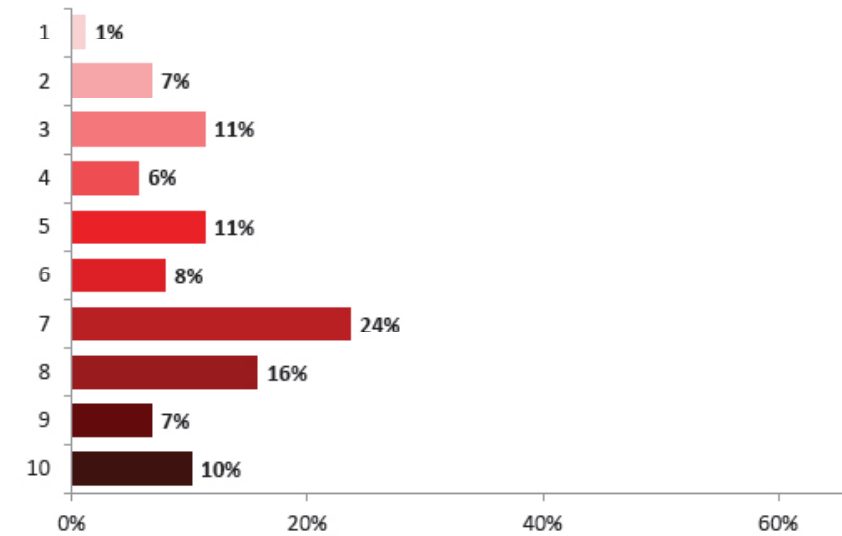
Interviews



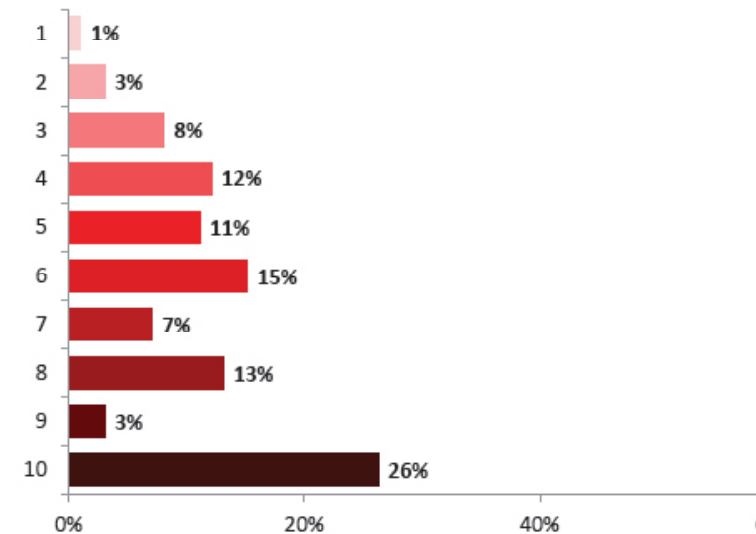
8 personal interviews

6 of them matching the target group

Communication as a key to design

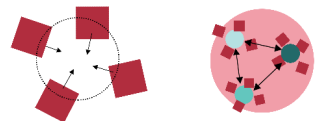


Results from rating (1 - 10) Stress related to finding friends and communication issues

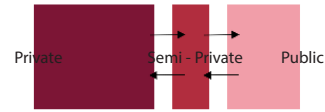


Results from rating (1 - 10) Stress related to finding a proper housing

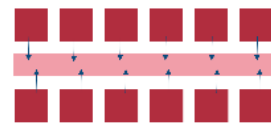
Examples



Interaction between clusters



Transition zones



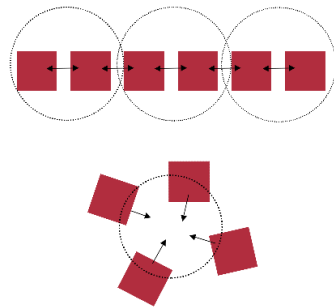
Surveillance in row layout



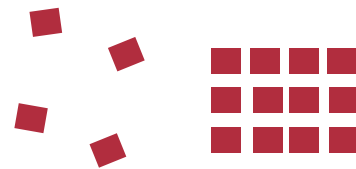
Babel by Laurens Bootd Architects



Fenix by mei architects



Row vs. Cluster layout



Low vs. High density



Querbeet by Synn architecten

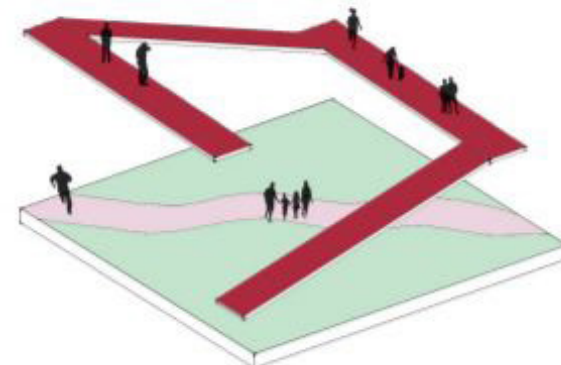


Republica by Marc Koehler Architects

From research to design



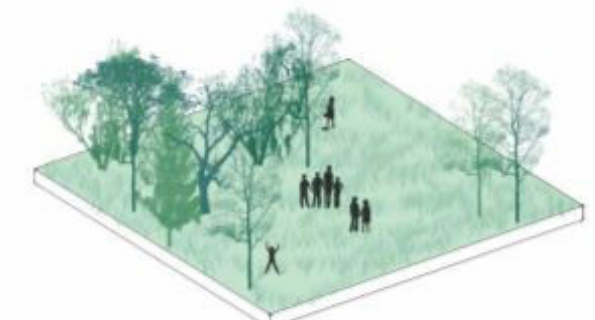
Multifunctional zones



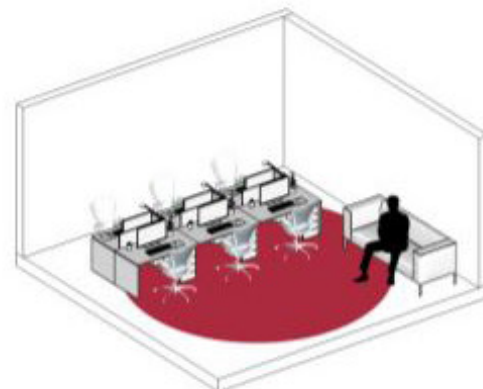
Paths



Playgrounds



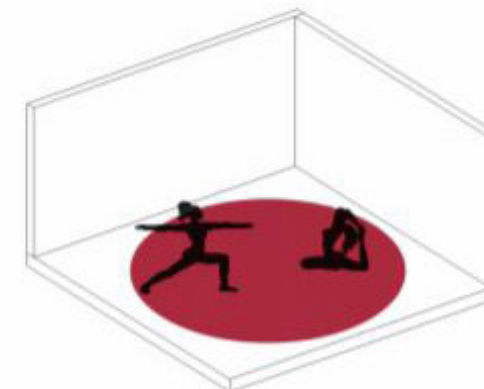
Green/ wild zones



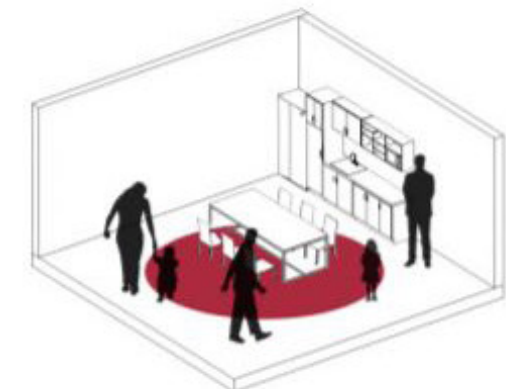
Working place



Multifunctional zones

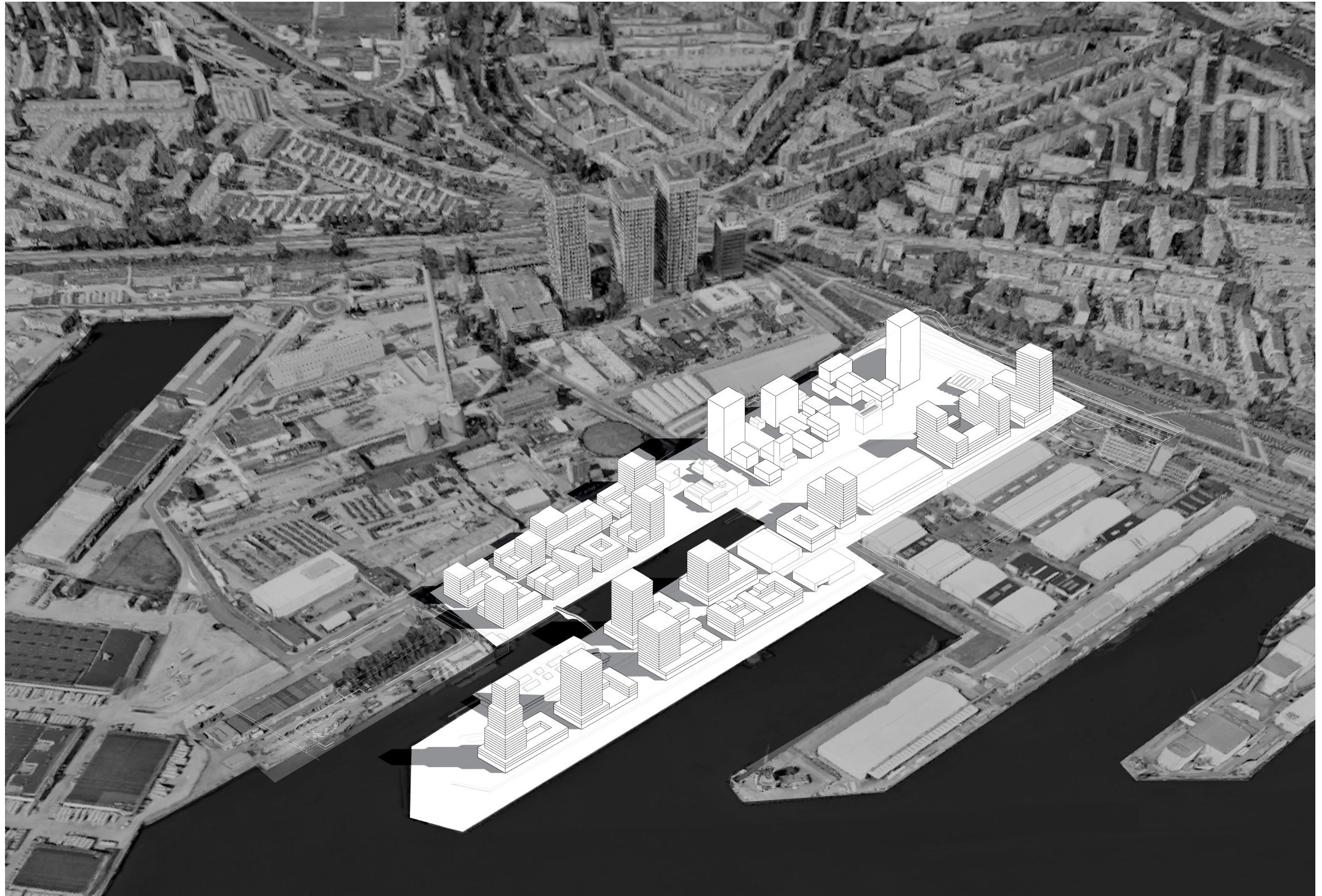


Exercise room

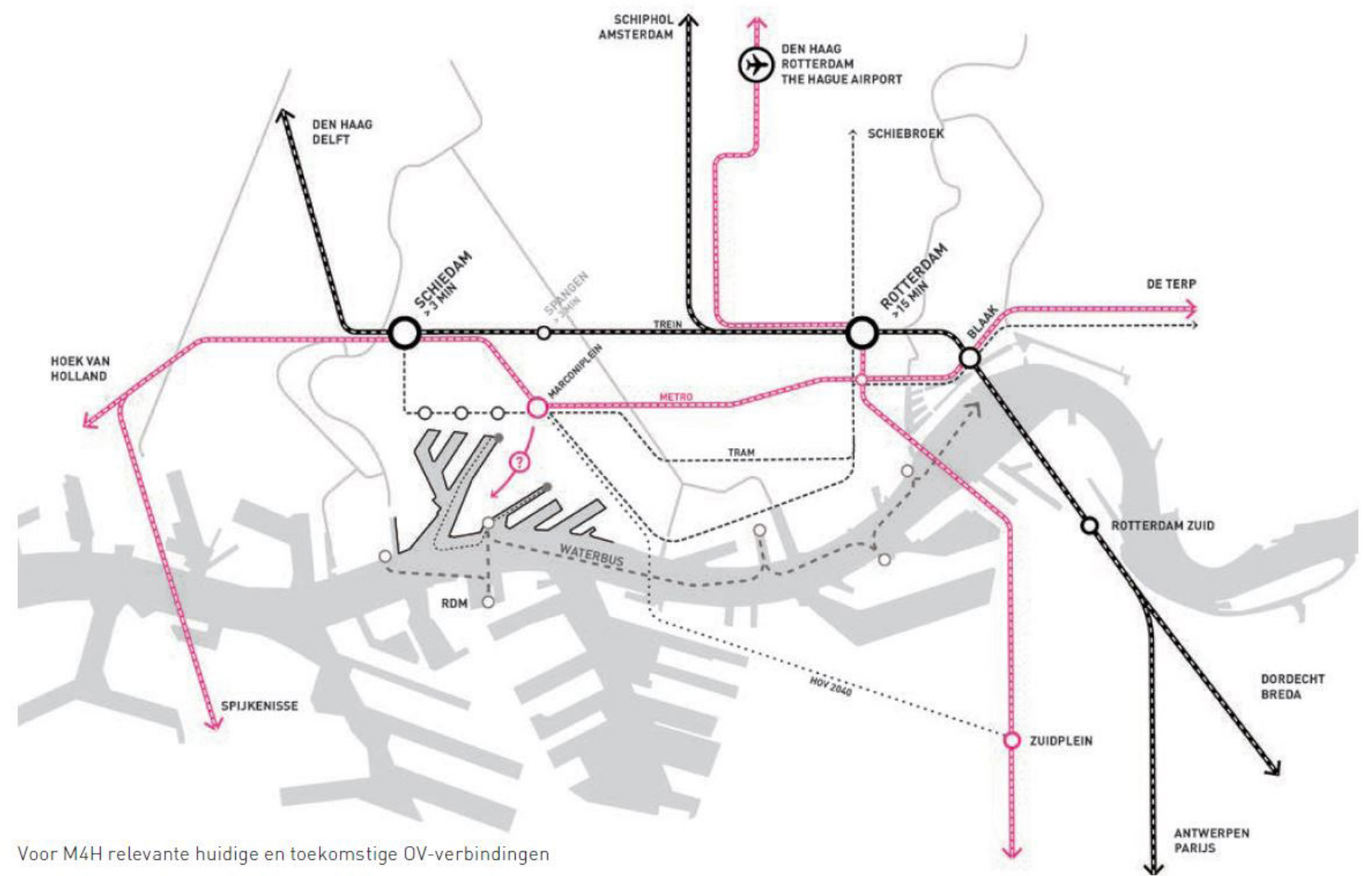
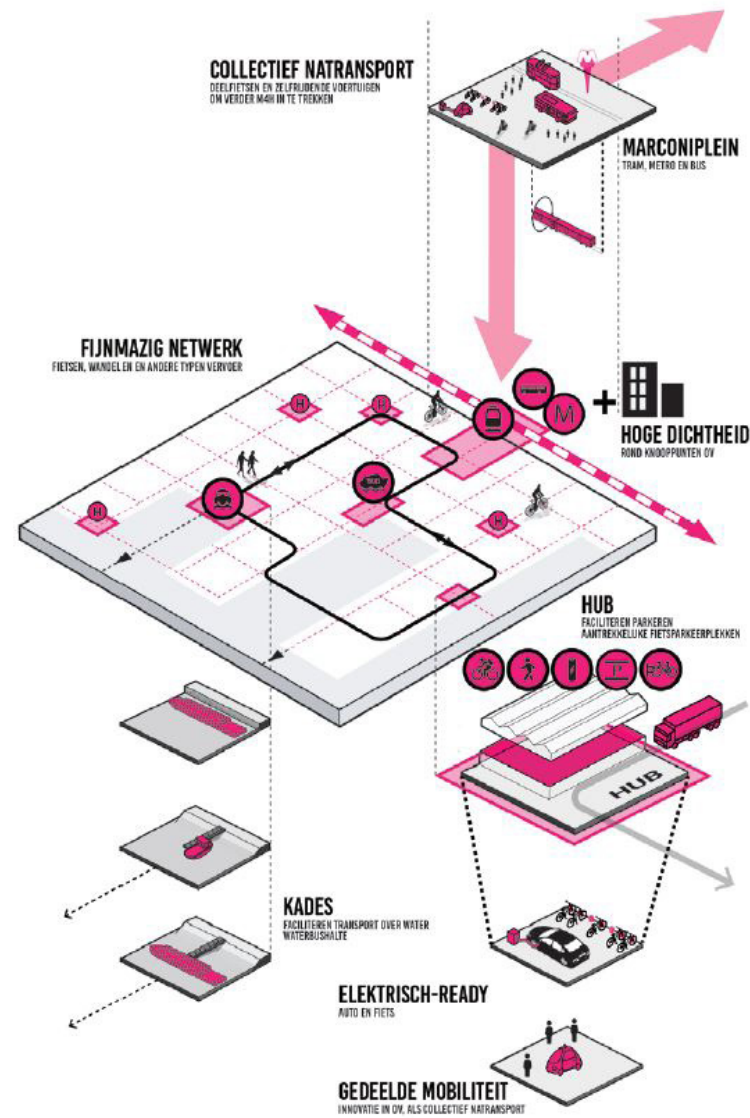


Kitchen

M4H, Rotterdam

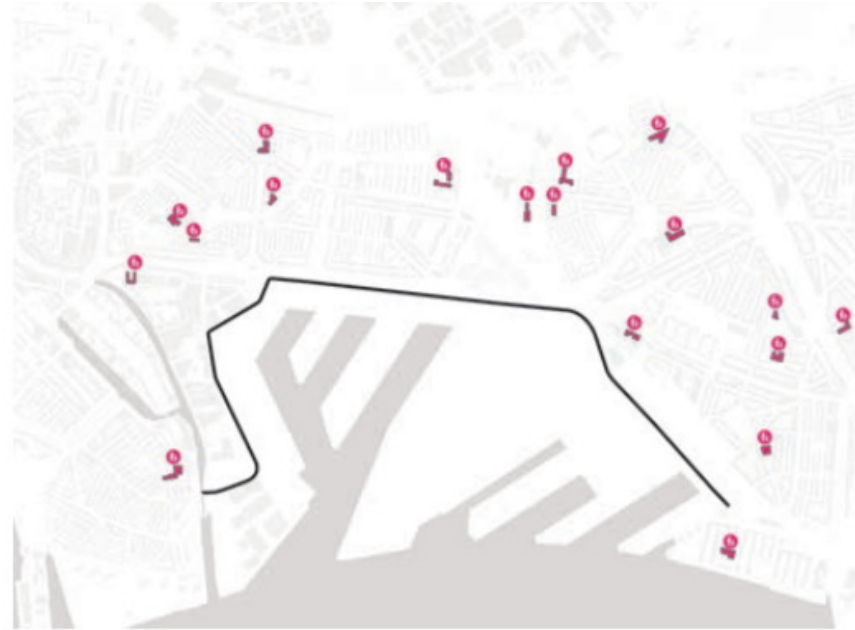


Mobility



Voor M4H relevante huidige en toekomstige OV-verbindingen

Public amenities



Schools



Middle schools



Parks



Supermarkets

Masterplan



Masterplan



Connection





Entrance



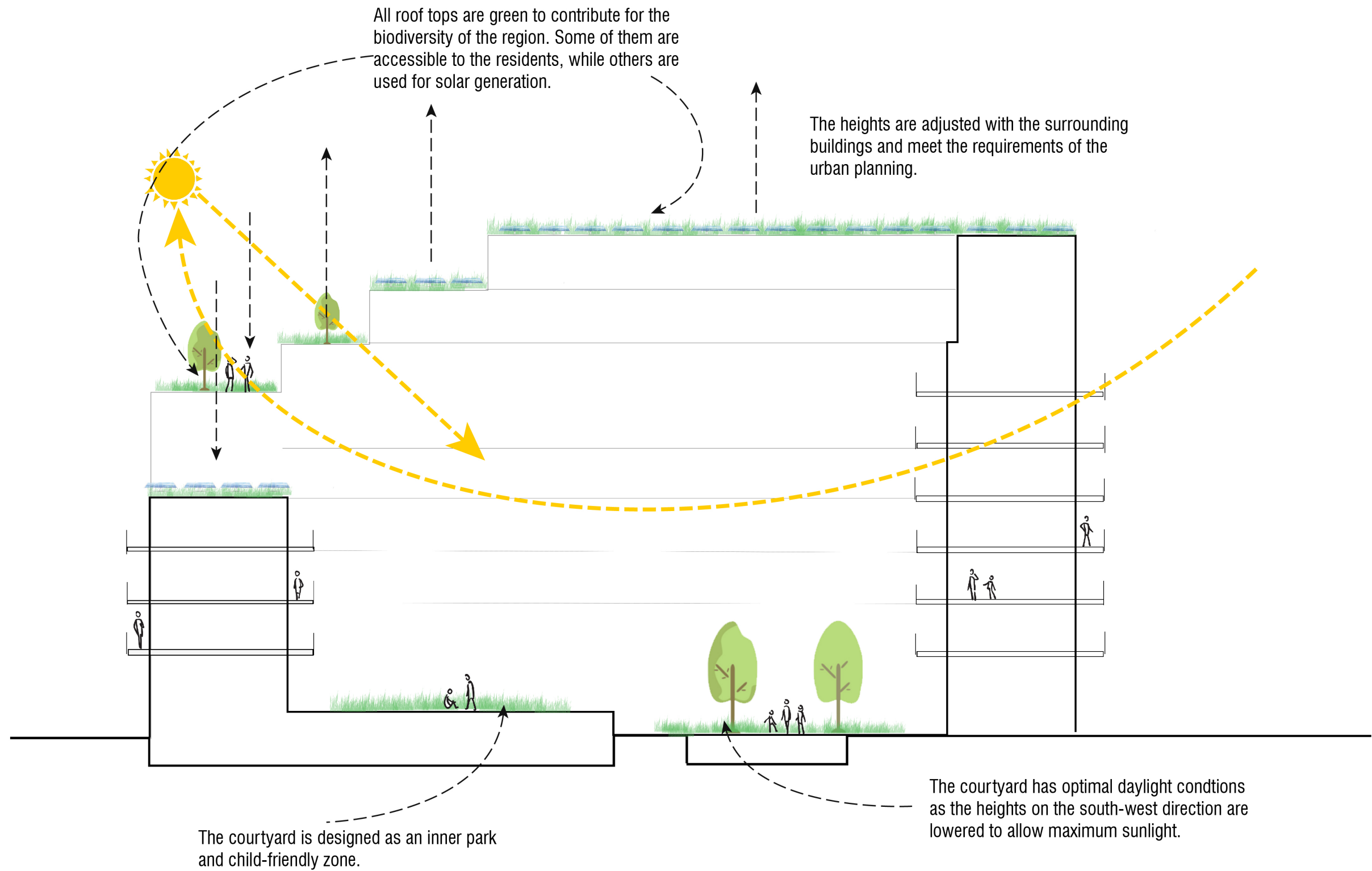
Entrance

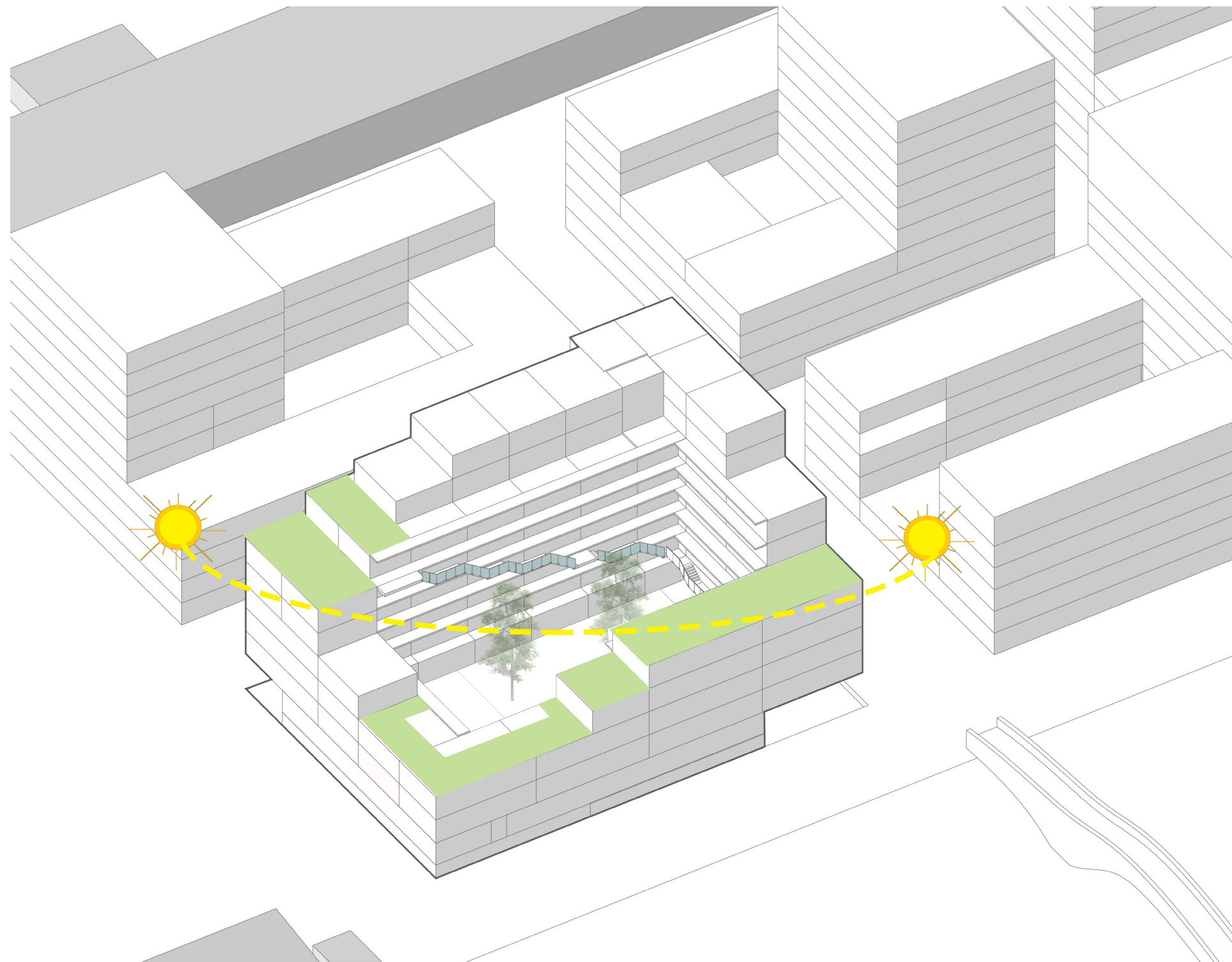


Urban section



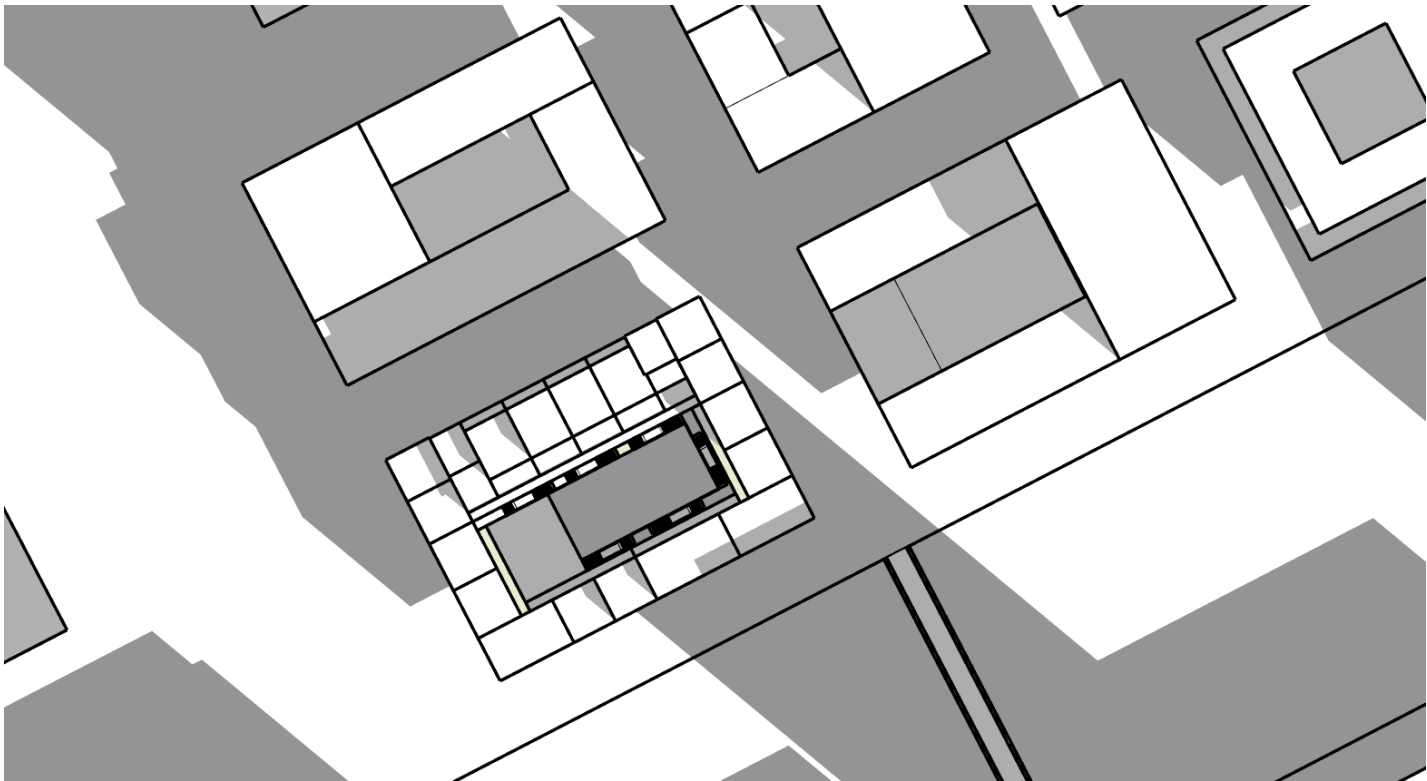
Concept





Maximize the sunlight

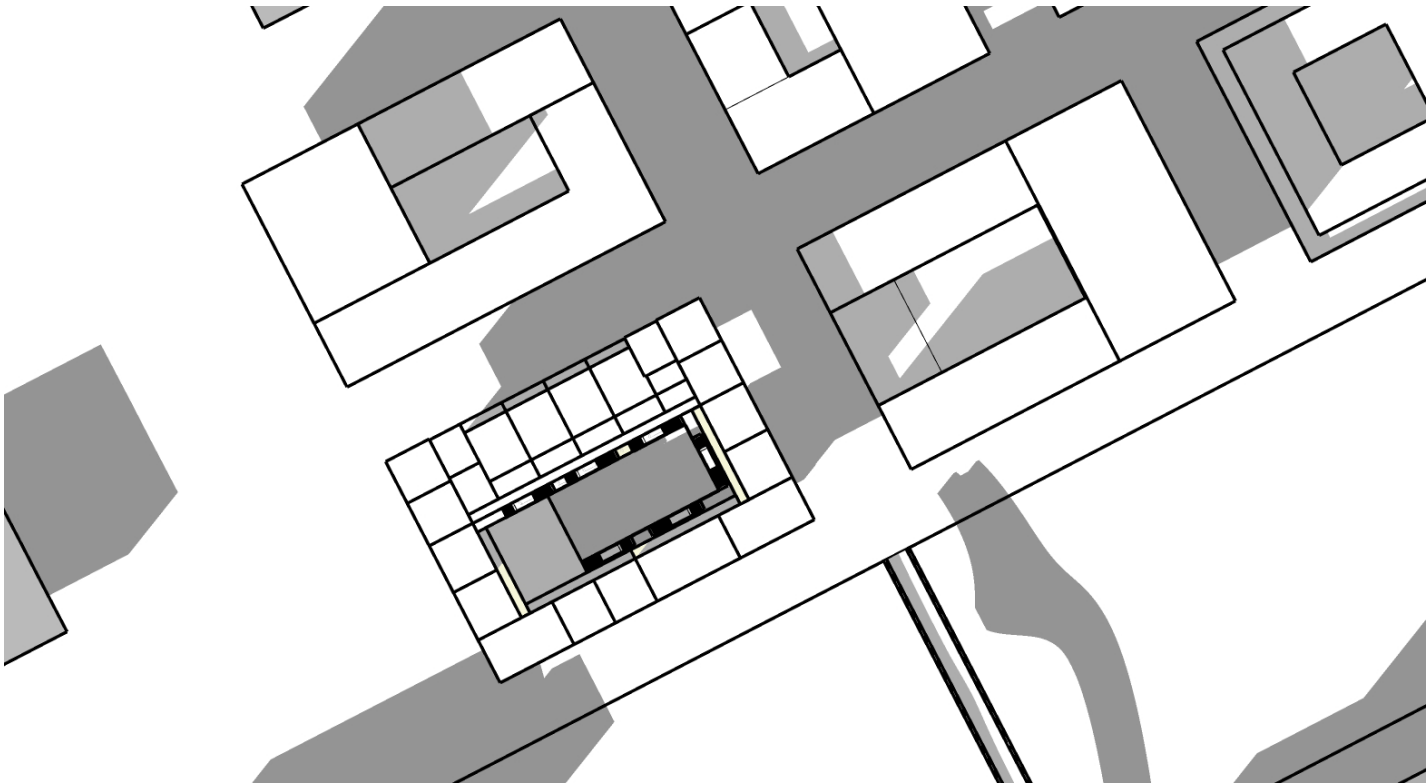
Shadows



March 21st, 9:00



March 21st, 12:00



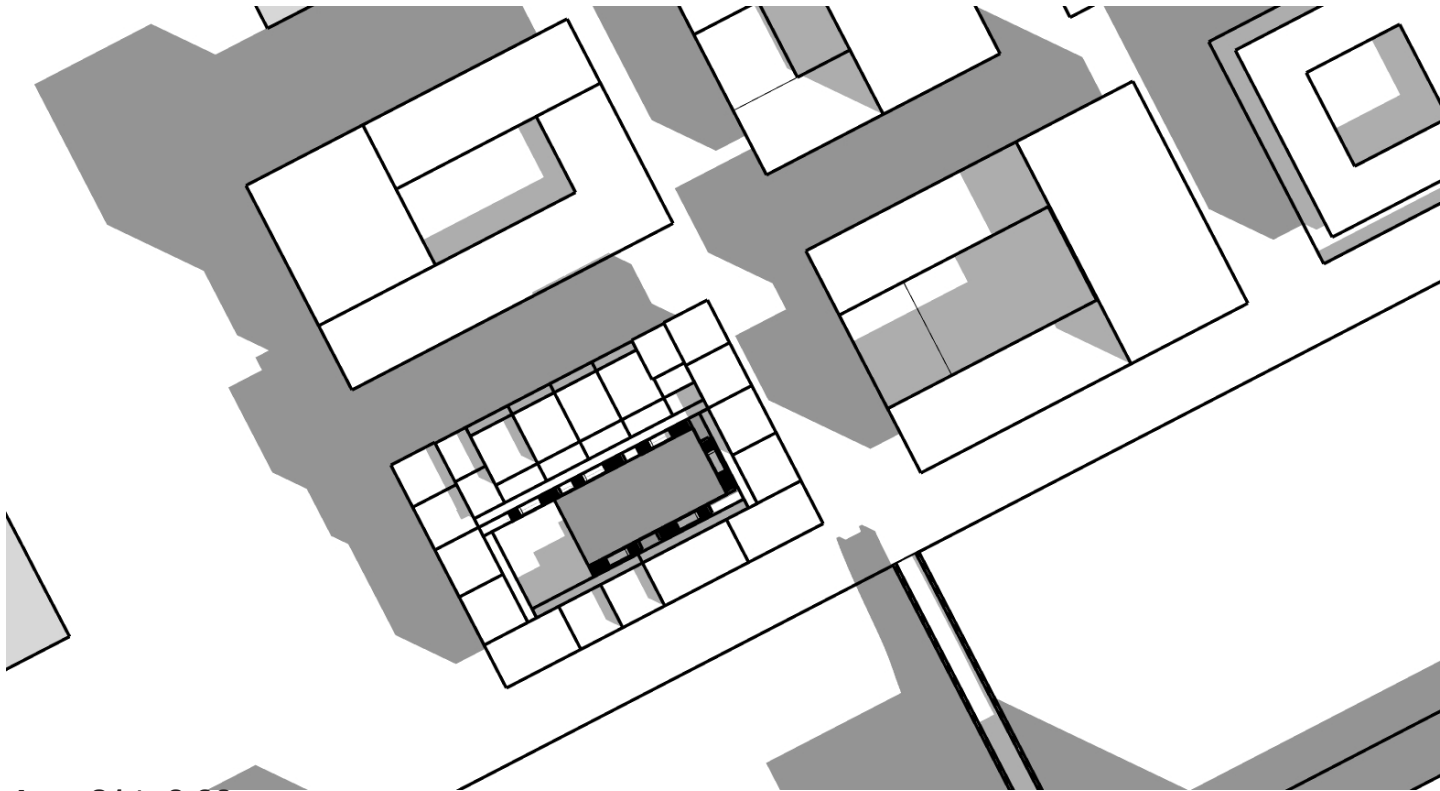
March 21st, 15:00



March 21st, 17:00



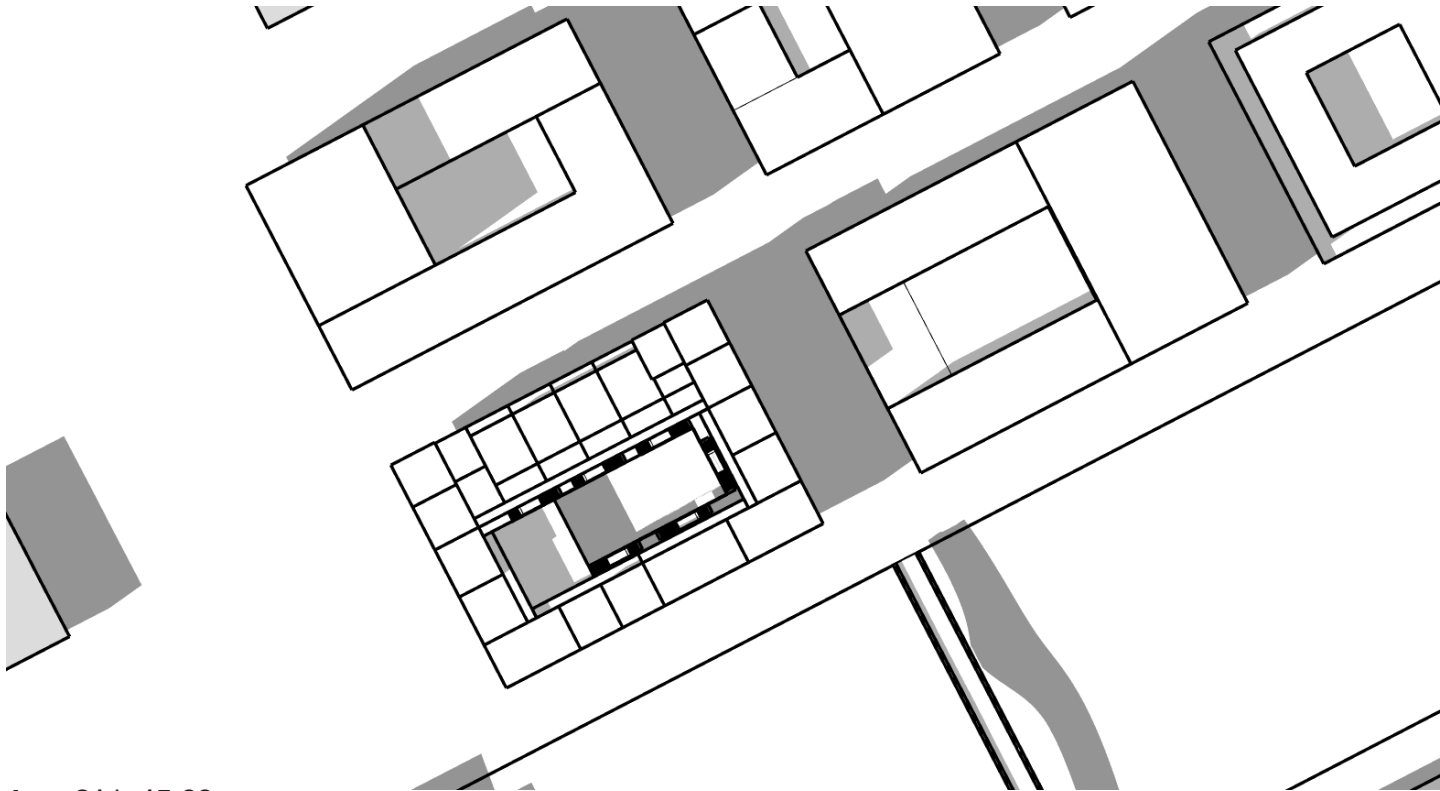
Shadows



June 21st, 9:00



June 21st, 12:00

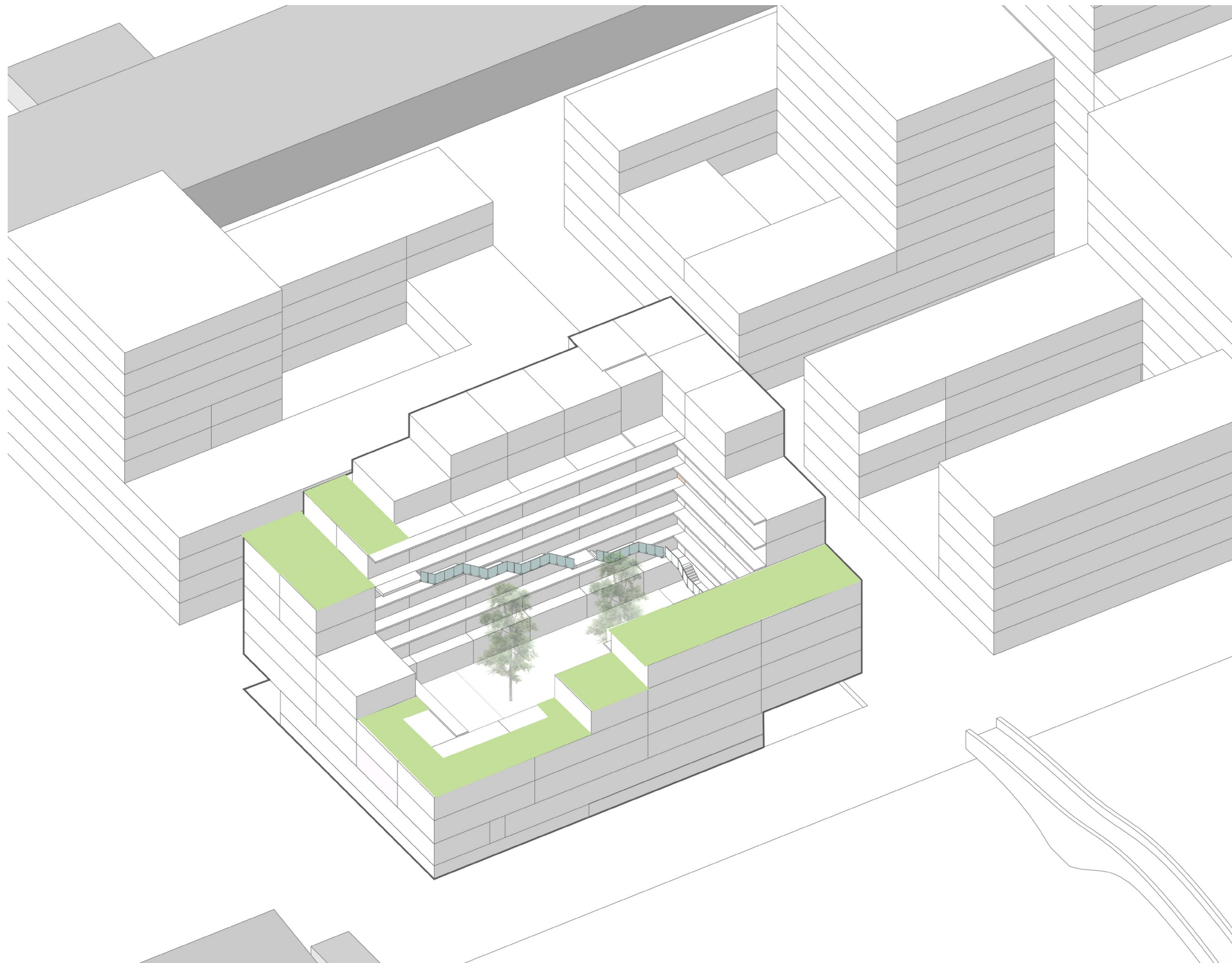


June 21st, 15:00

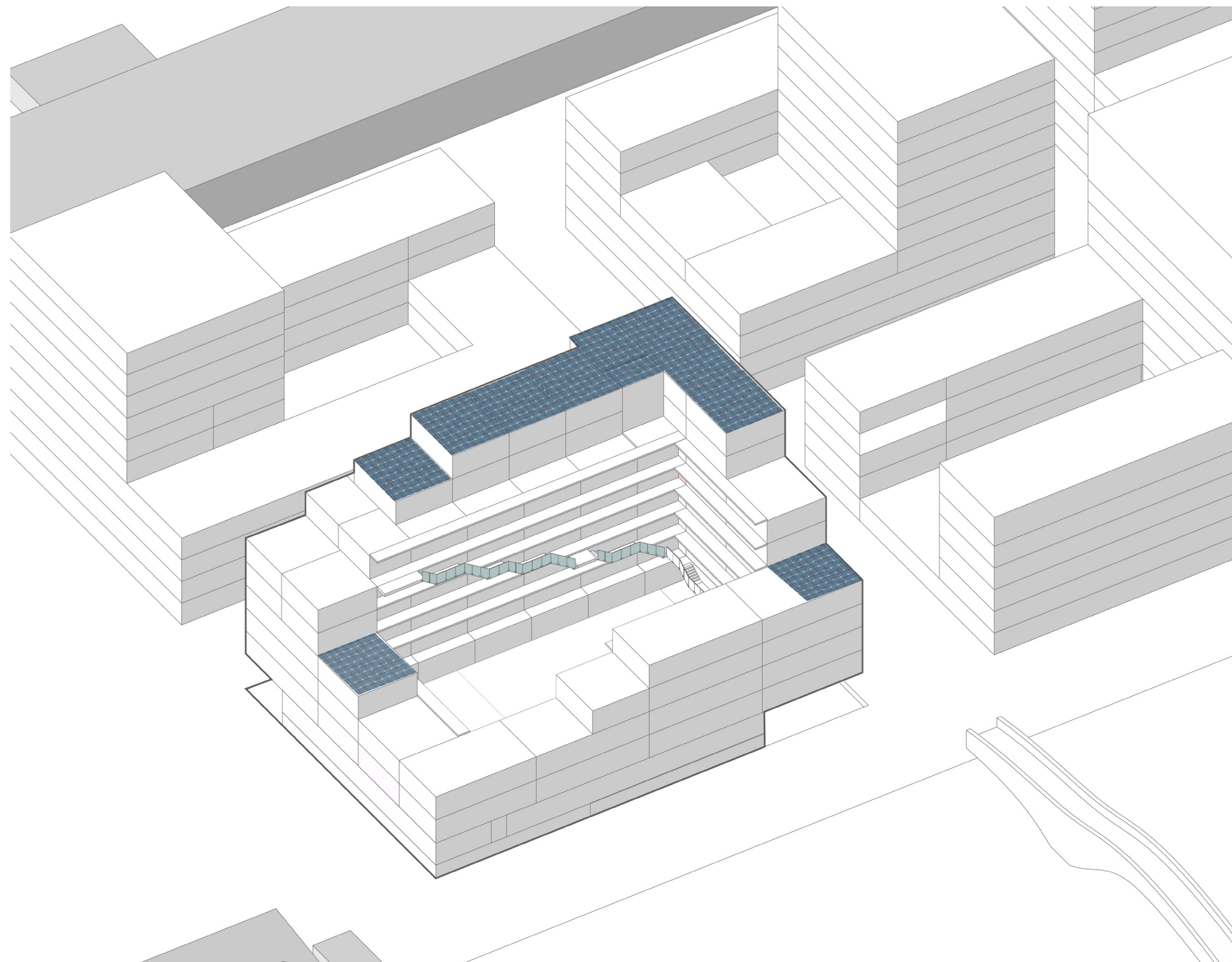


June 21st, 17:00

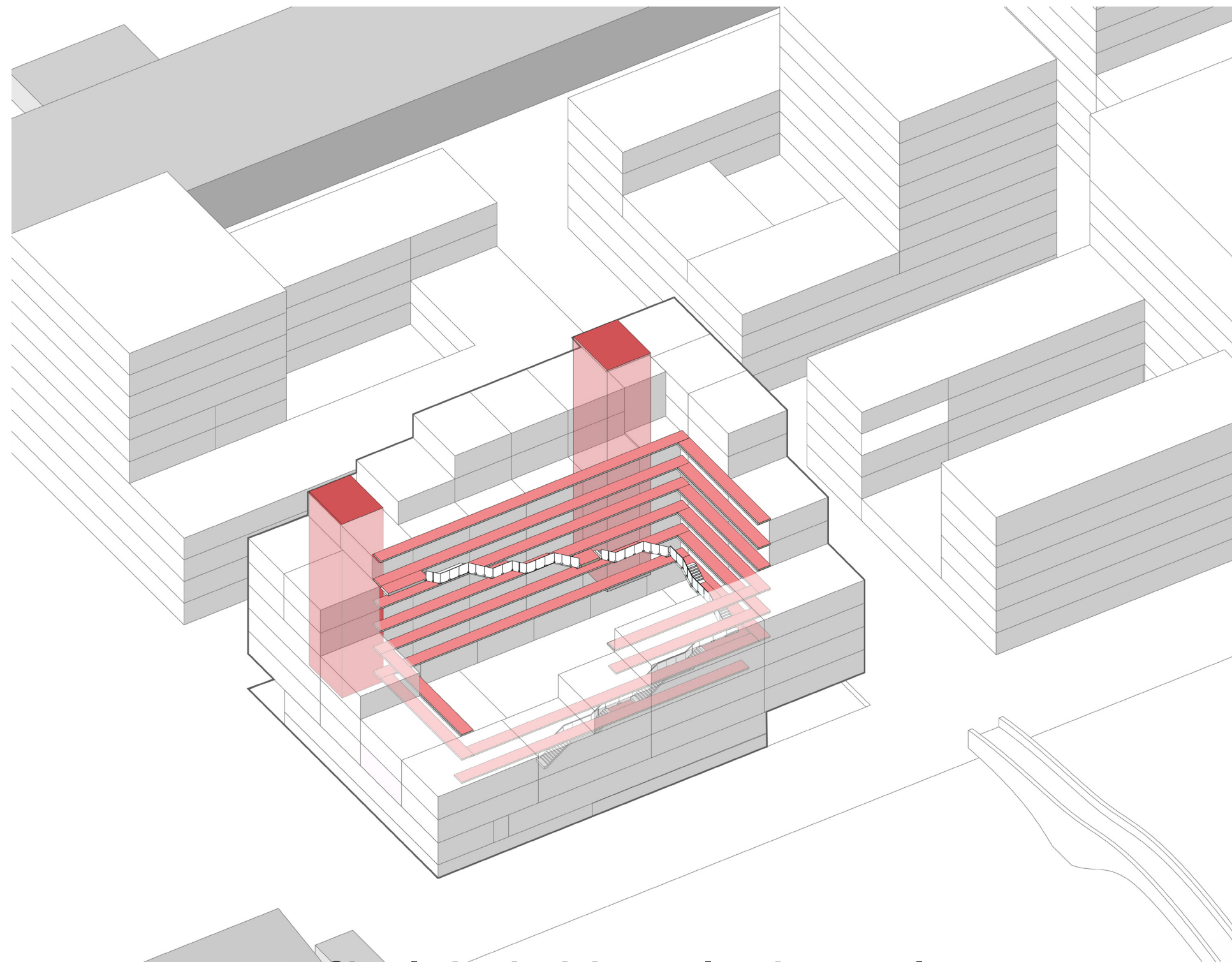




Maximize the green spaces



Create space for generation of solar energy



Circulation both internal and external

Galleries and staircase





Structure



Child friendly



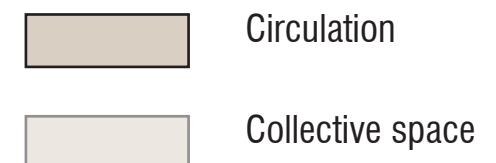
Internal and external circulation



Level 1 and 2 - same principle



Level 3



Internal circulation with collective space



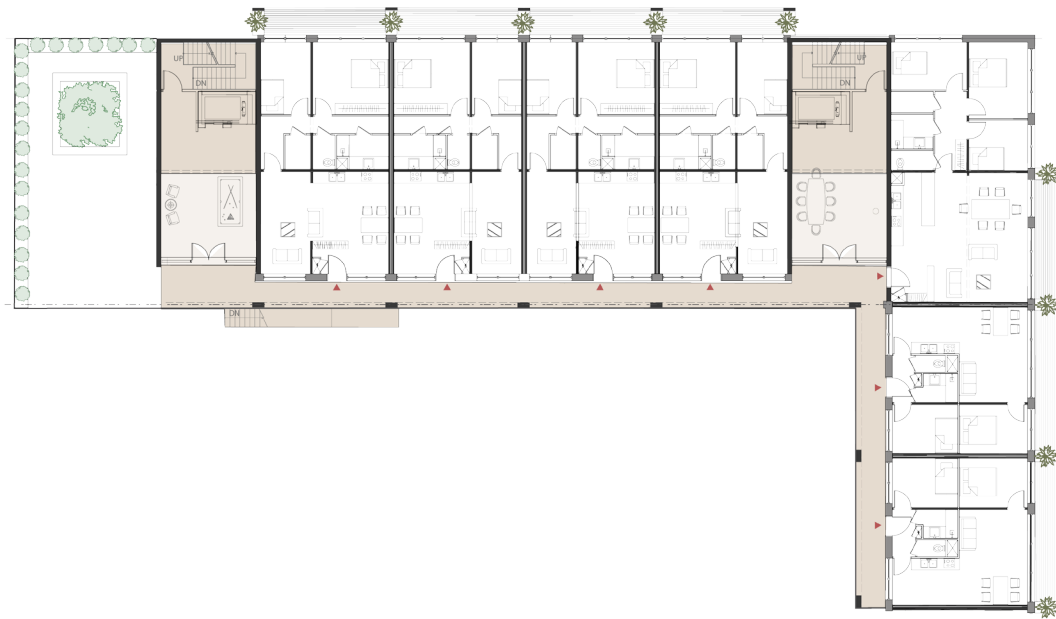
Circulation and collective spaces



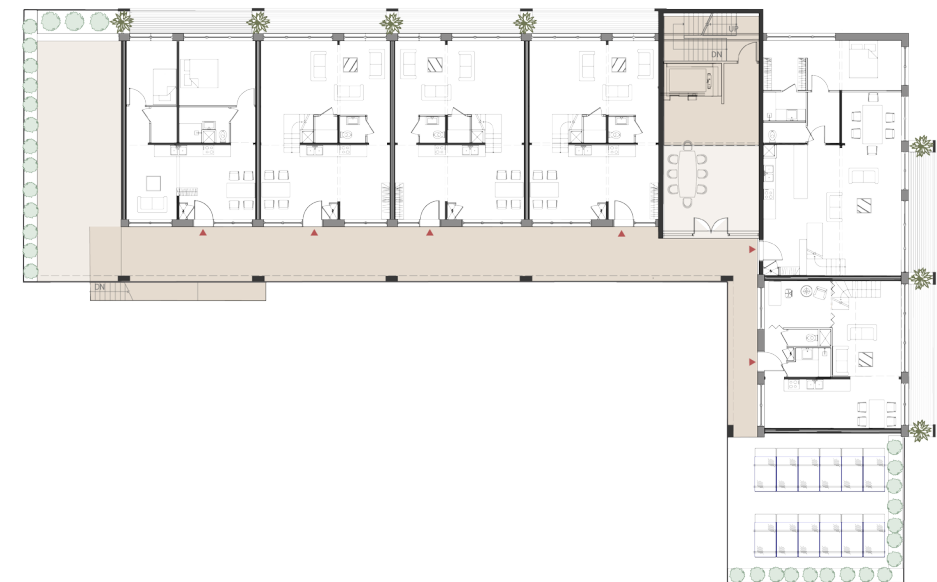
Level 4



Level 5



Level 6

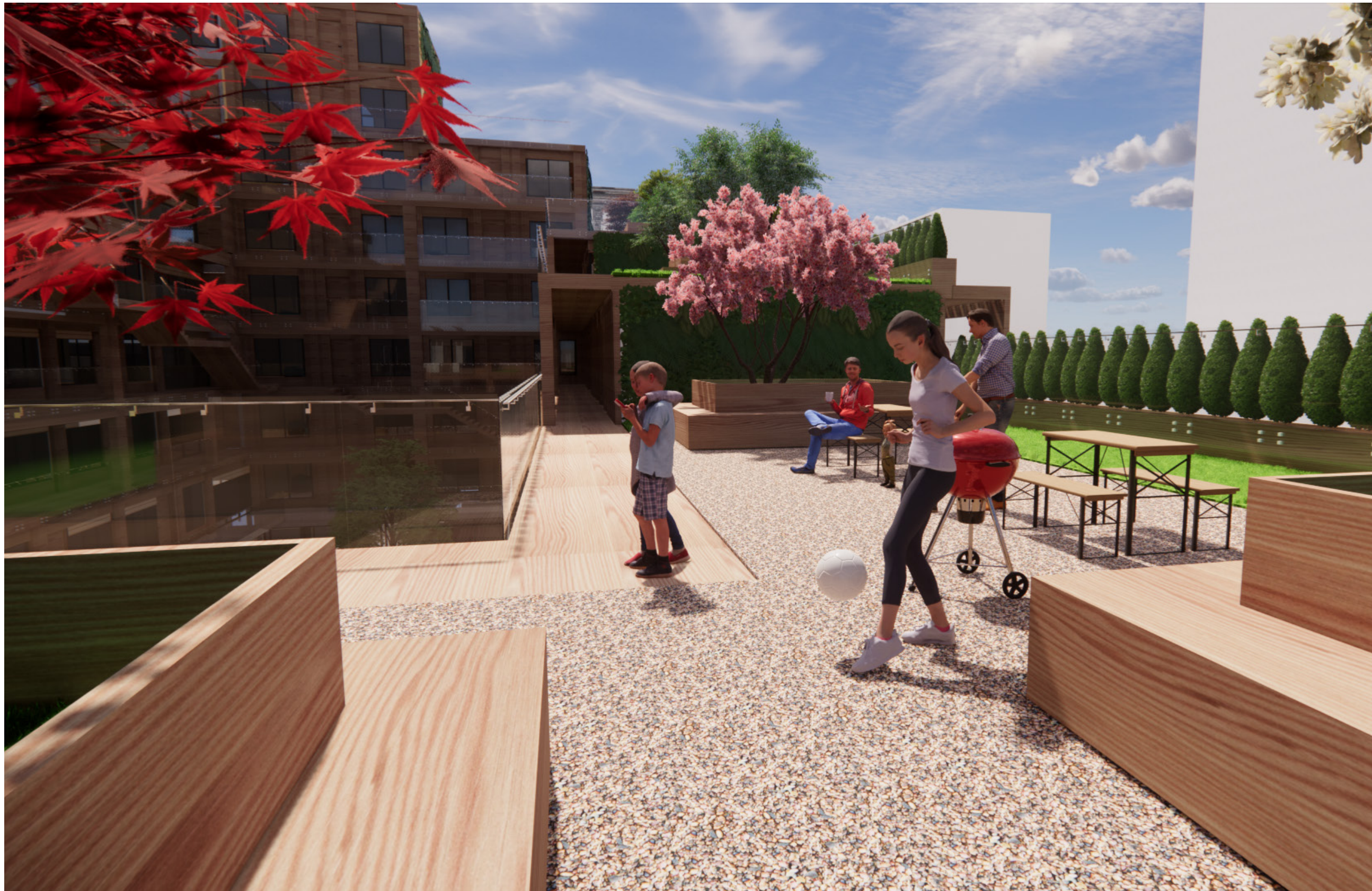


Level 7

Level 3



Roof top



Unaccompanied: 8+



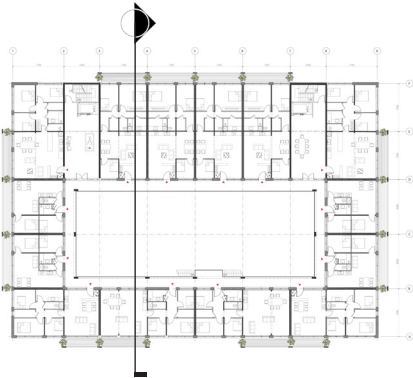
Accompanied: 0-8



Level 0



SECTION



The courtyard



Unaccompanied: 4+



Accompanied: 0-4



The courtyard



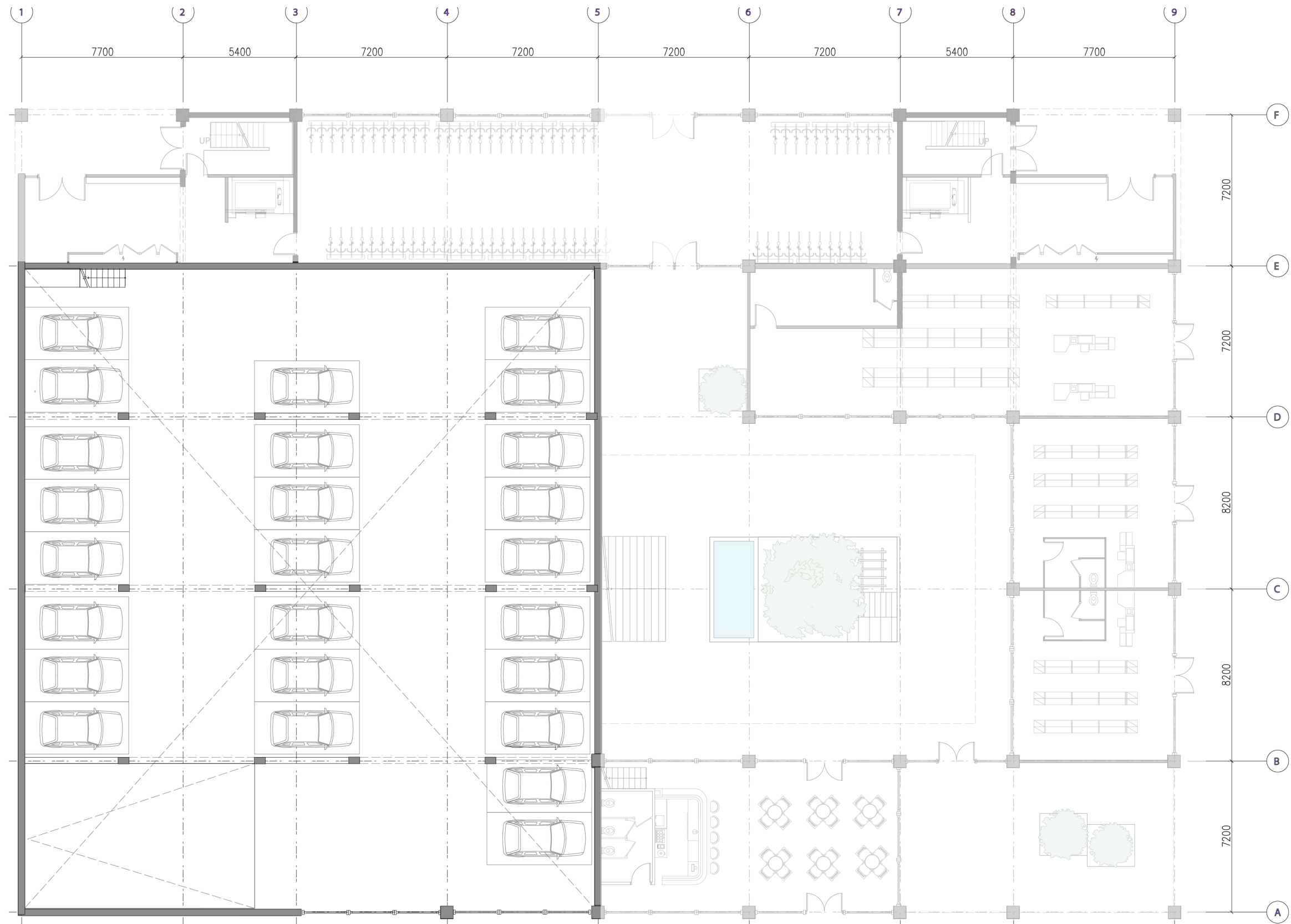
Collective space



Collective space



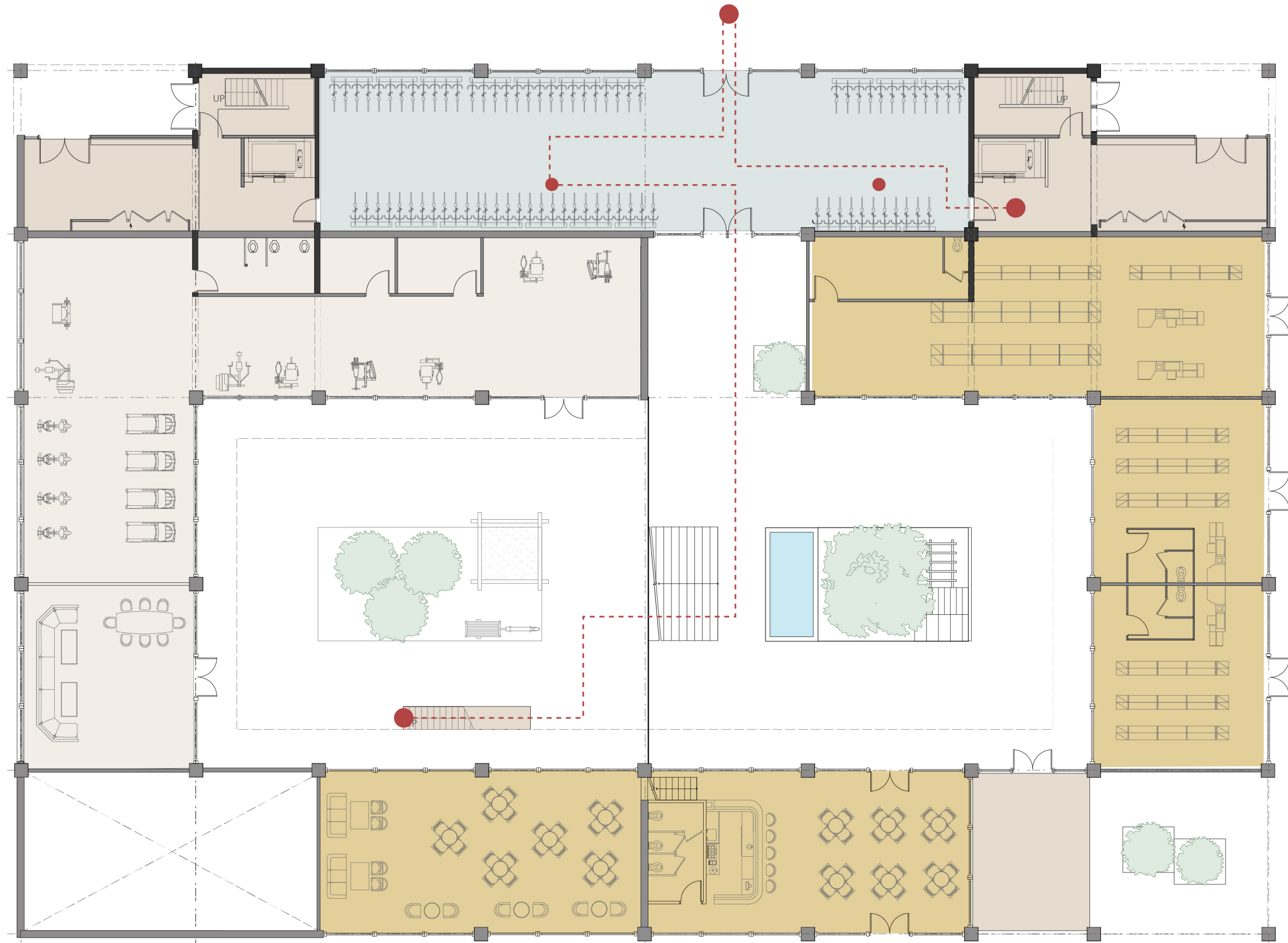
Garage



Shops



Bicycle storage



North Elevation



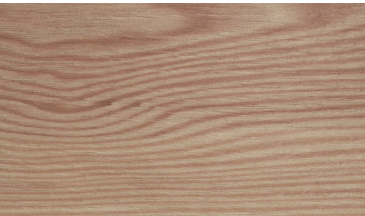
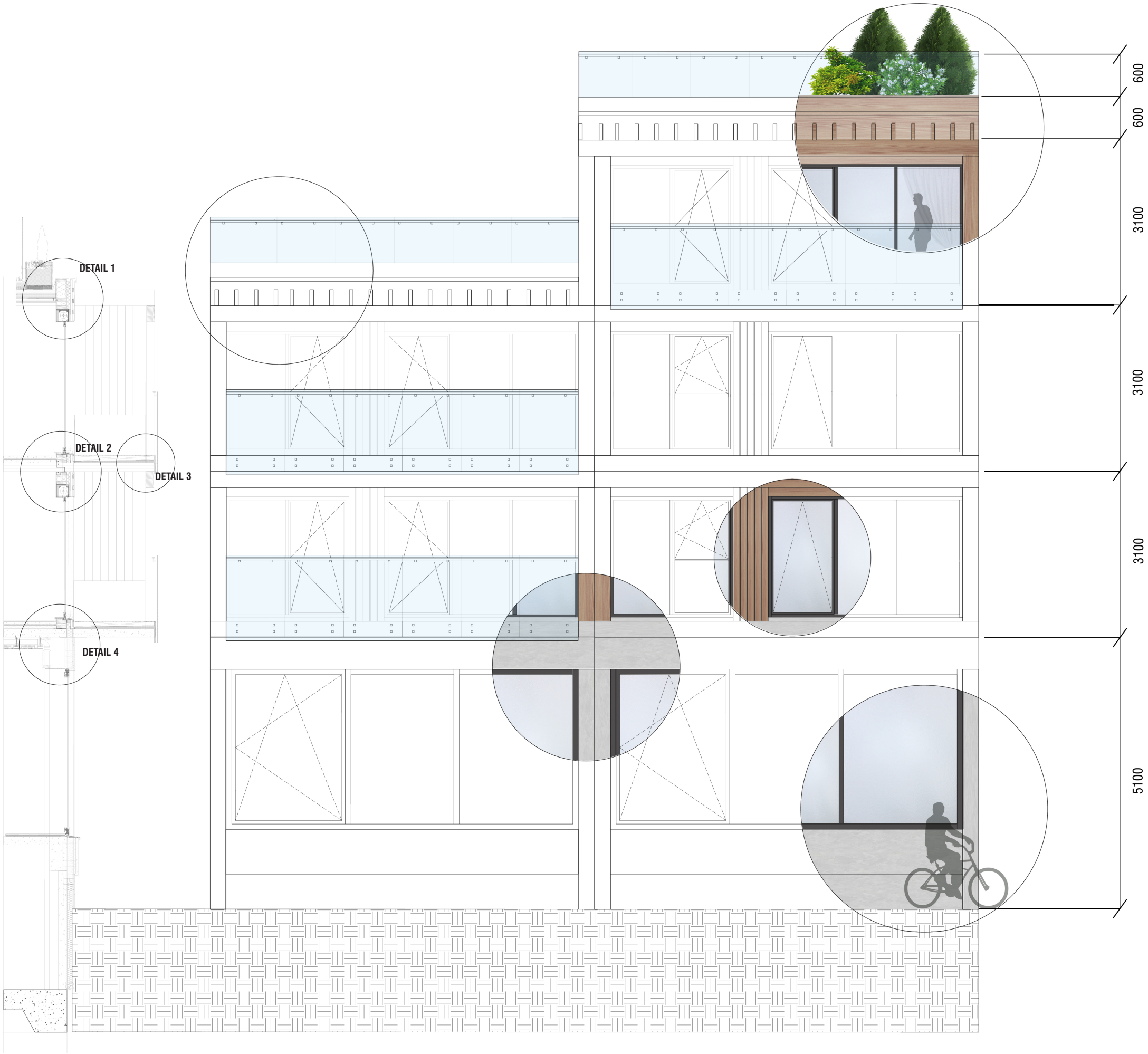
West Elevation



East Elevation



Materials and Facade types



Treated western cedar



Concrete

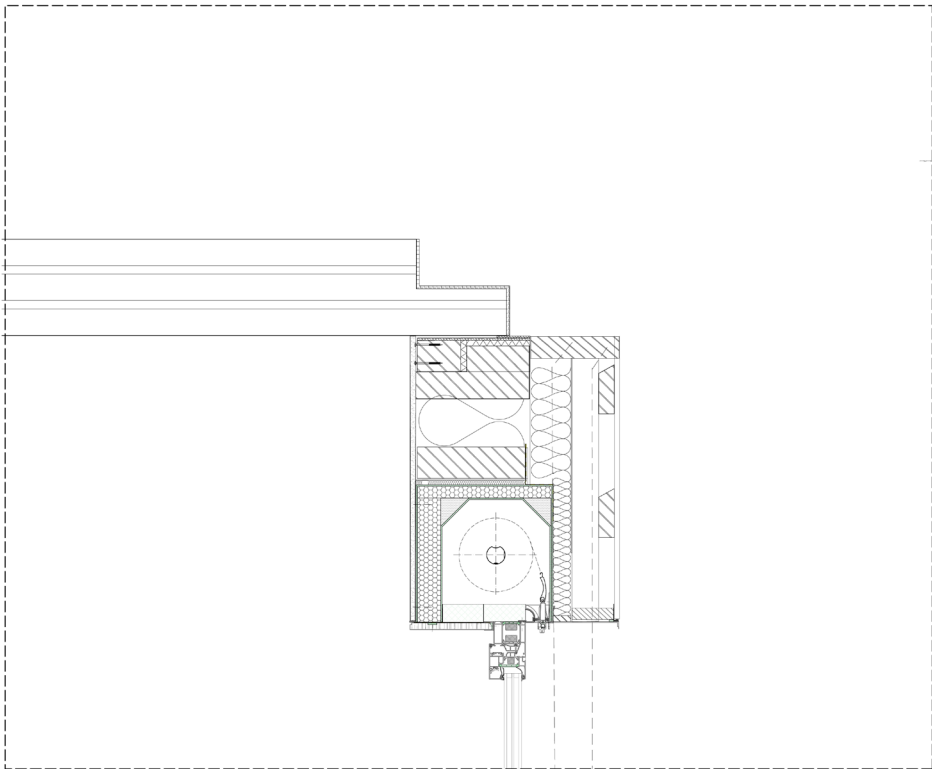


Green

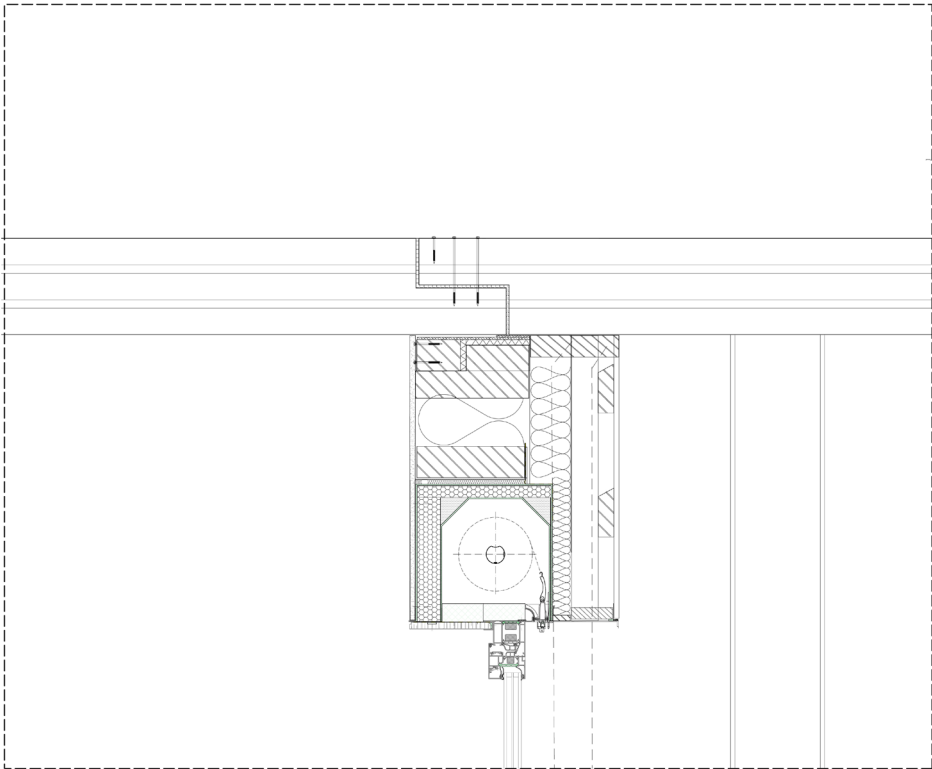


Black schuco window frames

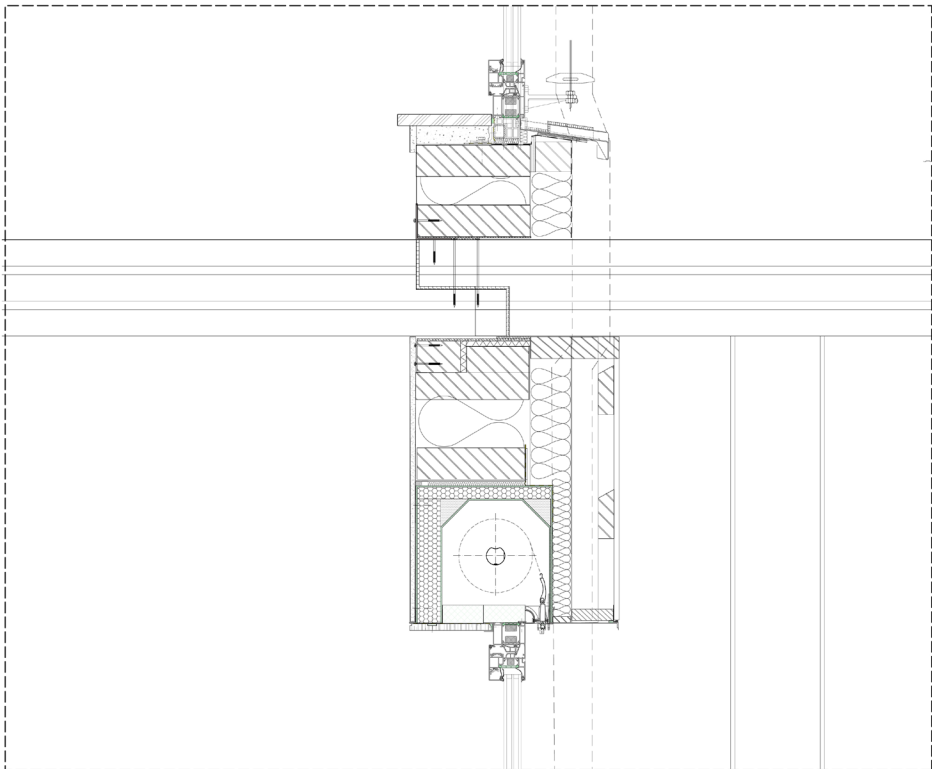
Sequence of assembly



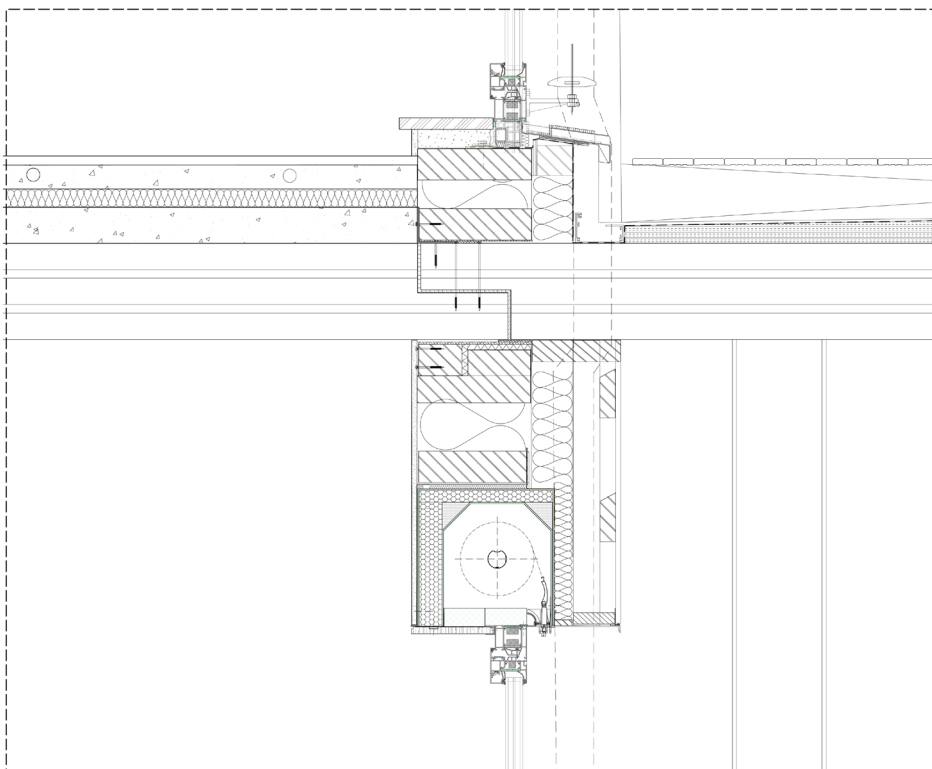
1. Start point (load-bearing structure and facade on lower floor is on place)



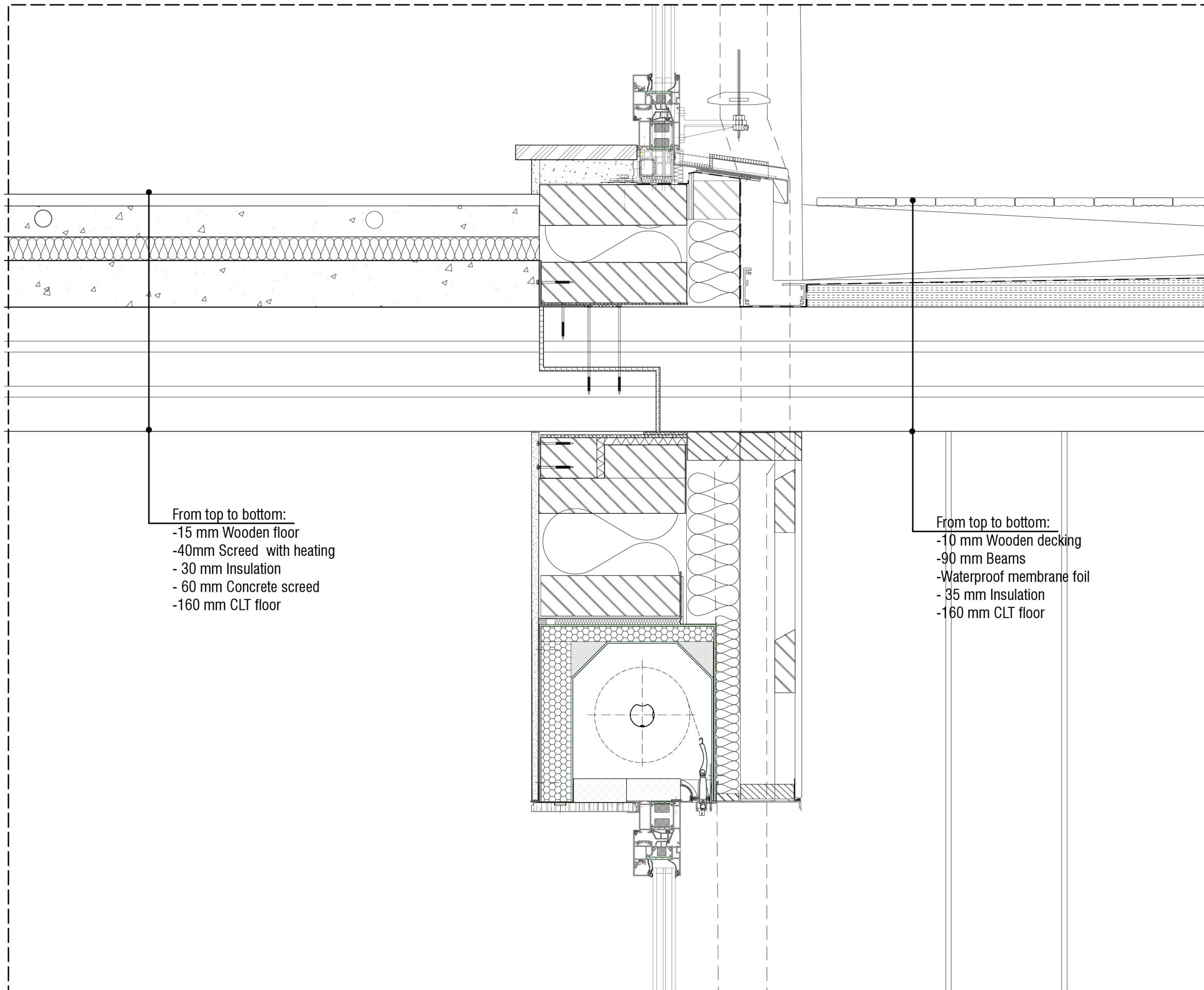
2. Connecting the structure of the balcony with the structure of the floor



3. Mounting the facade element (prefabricated)



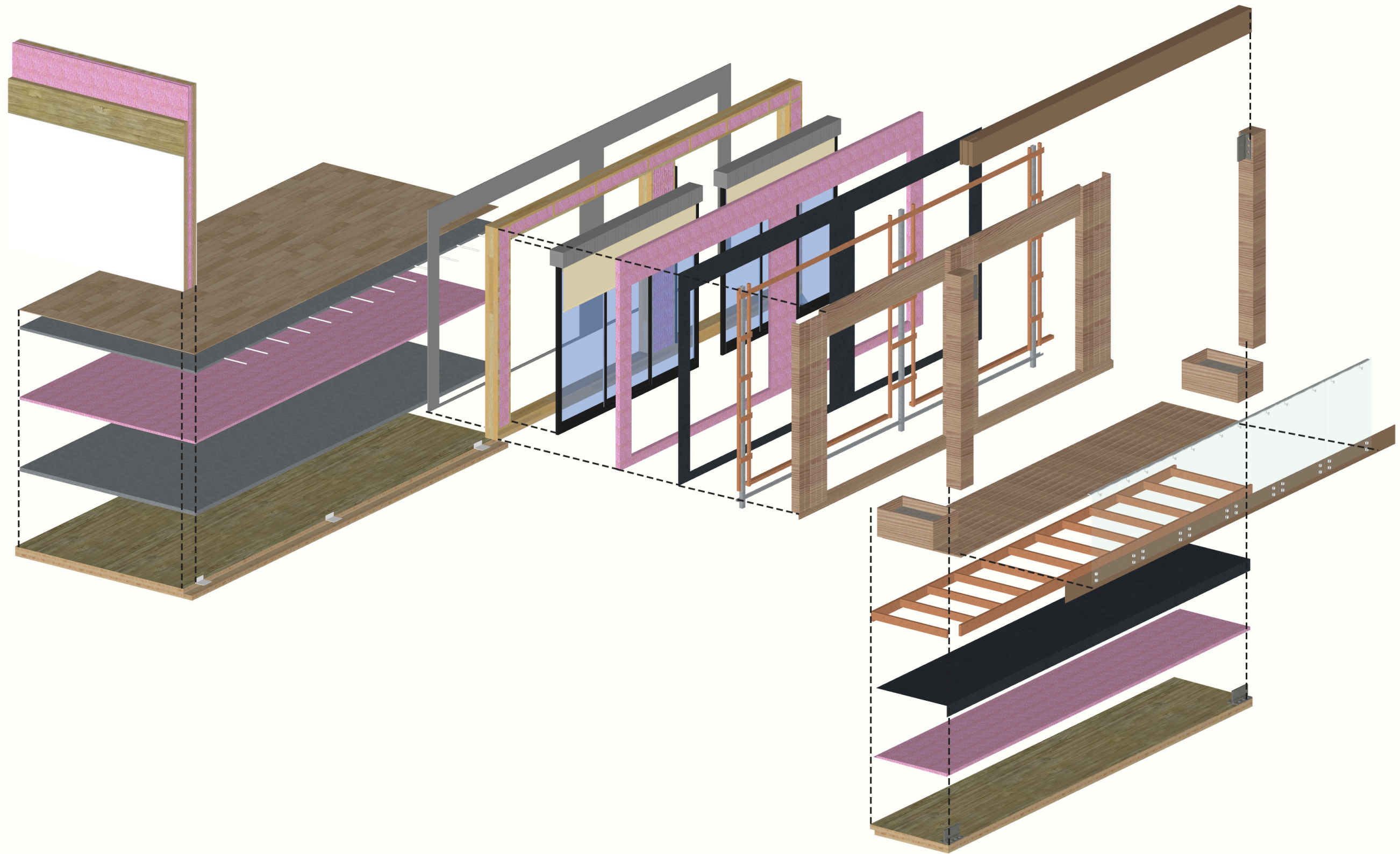
4. Adding the top layers of the floor and balcony on site



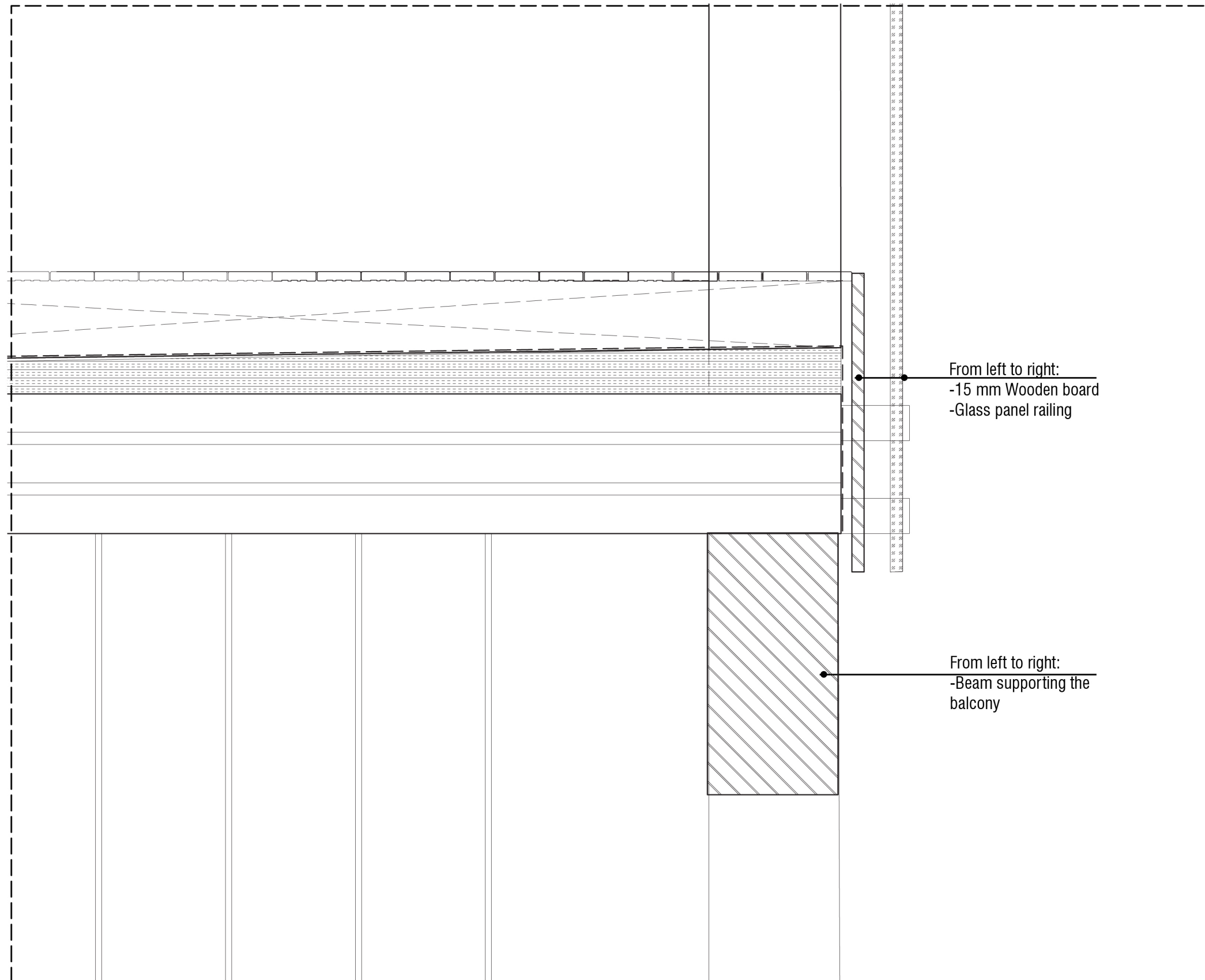
Balcony



Exploded view of balcony



Railing



South elevation



Biodiversity

Grass types



Stipa



Pennisetum



Luzula



Stipa -fireworks



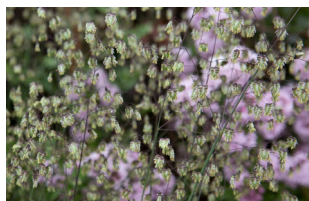
Carex



Langurus



Stipa -pony teilor



Briza



Juncus

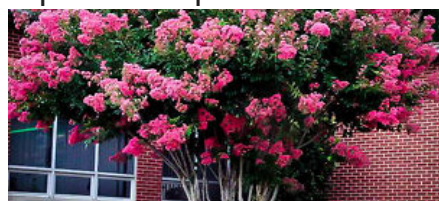
Trees



Acacia dealbata (Silver Wattle)



Japanese maple



Shorter Crepe Myrtles



Chaste tree



Fringe tree



Olea europaea



Cornus florida

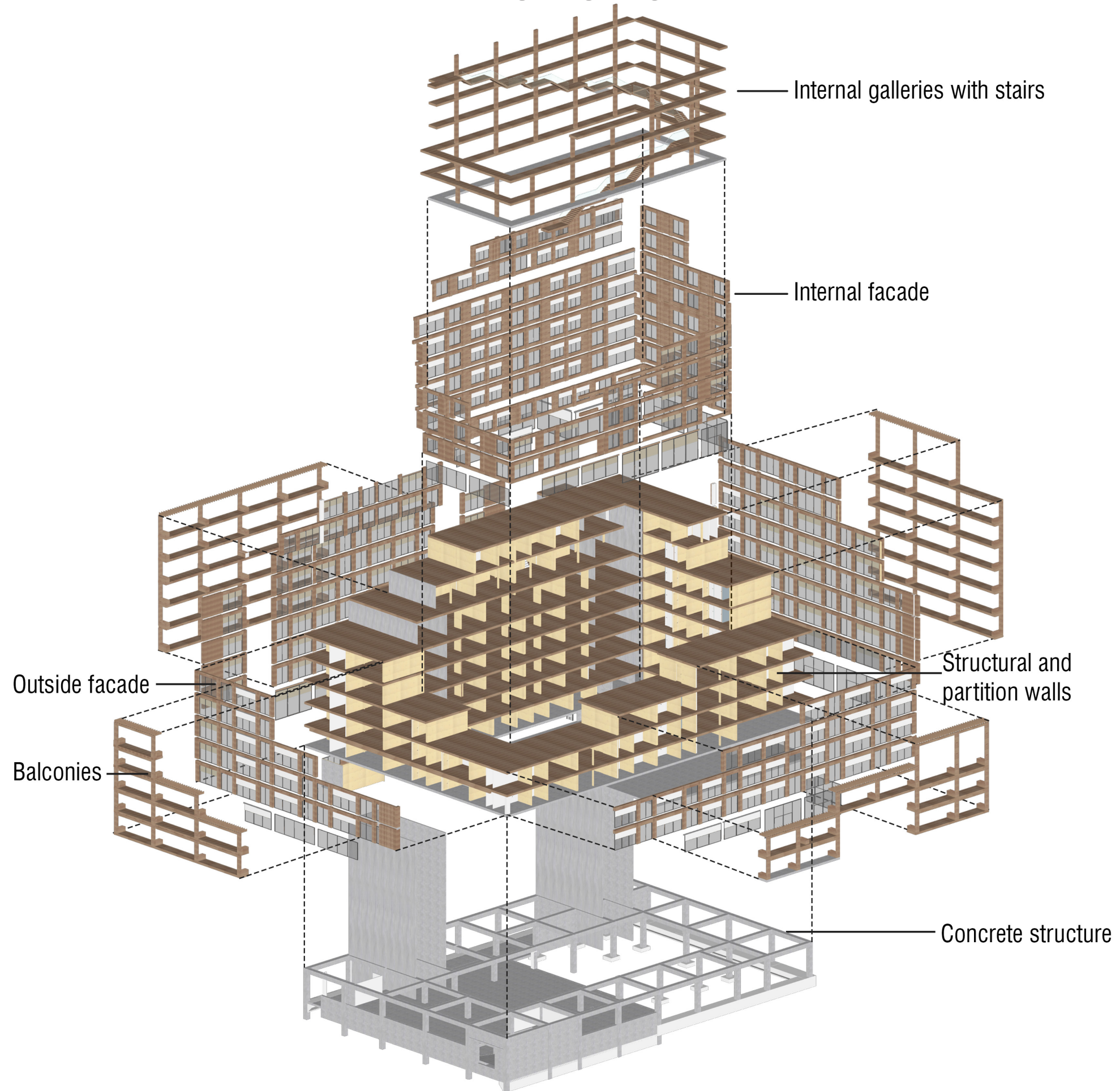


Italian cyrpress

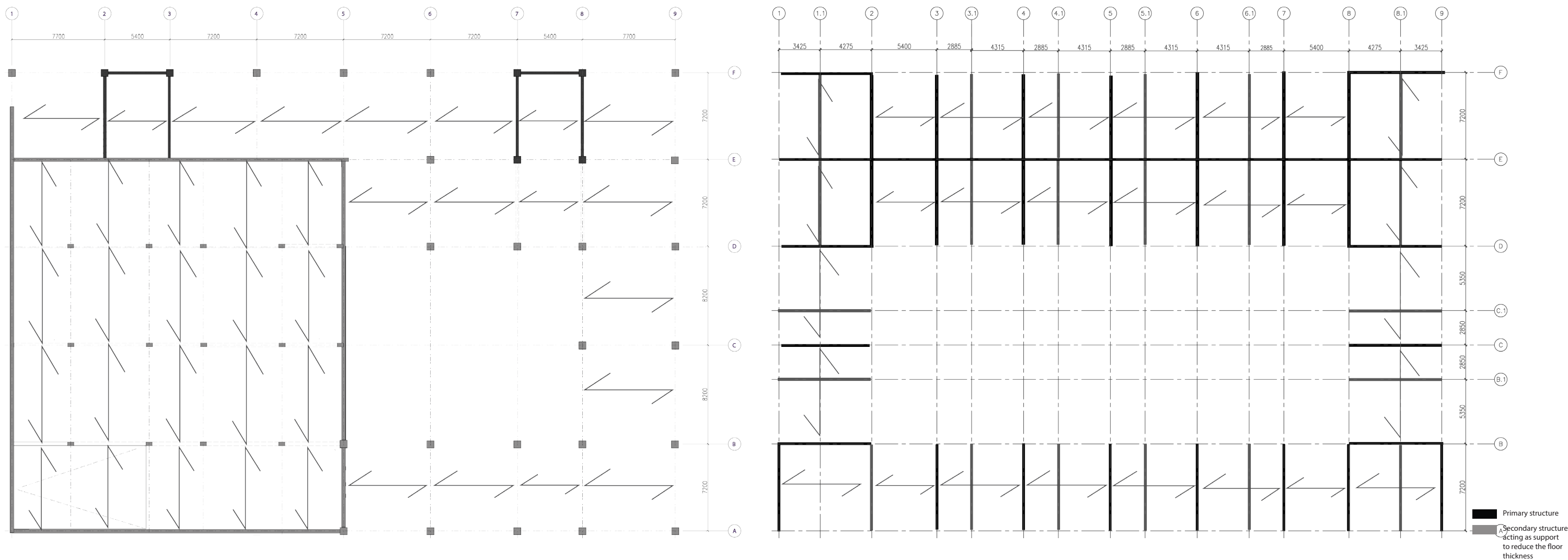


Persian silk

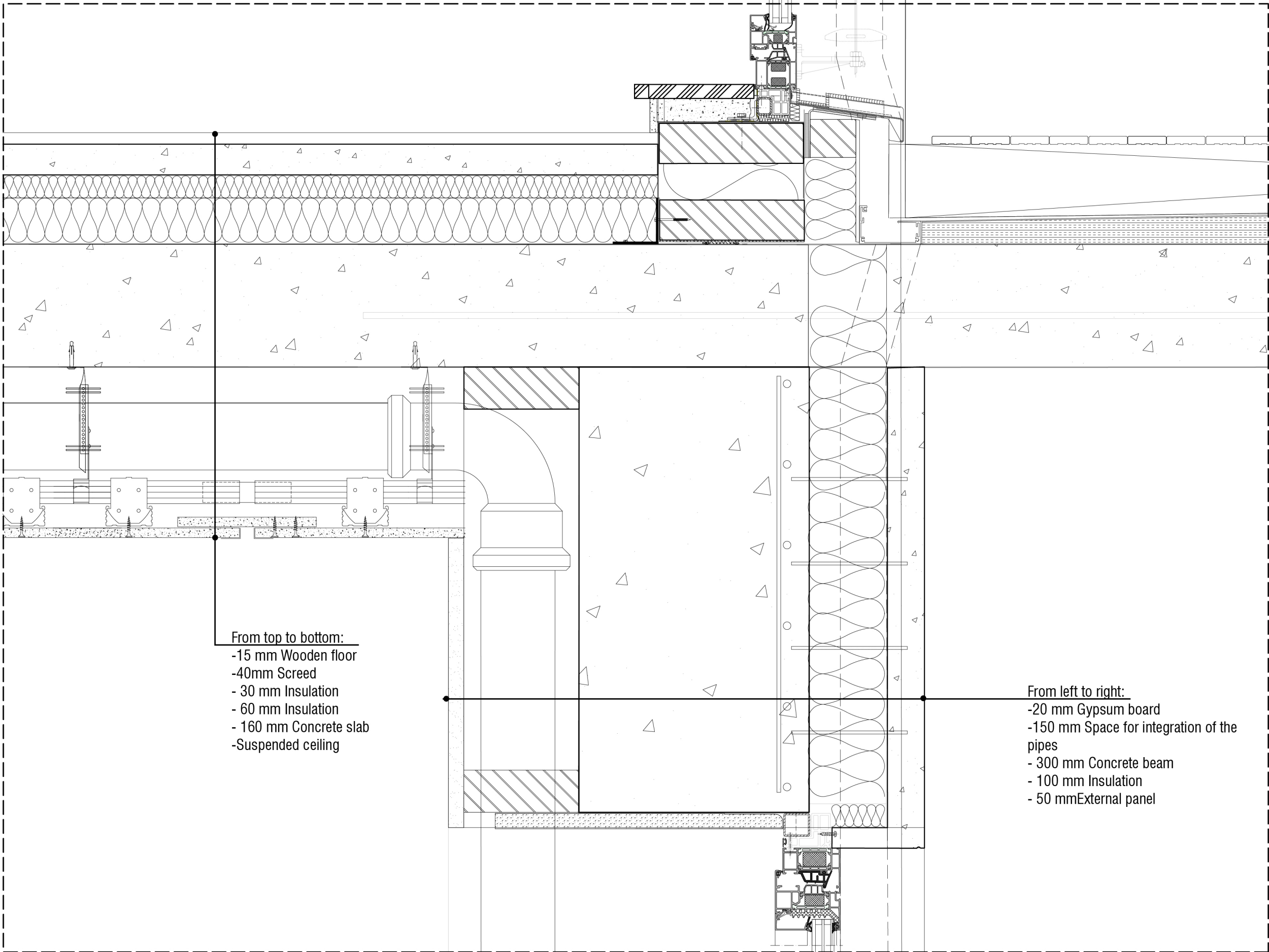
Elements



Structure



Concrete



From top to bottom:

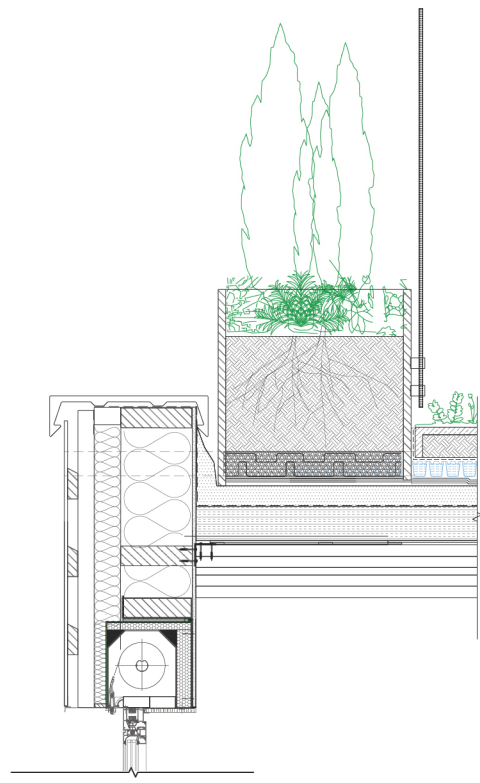
- 15 mm Wooden floor
- 40mm Screed
- 30 mm Insulation
- 60 mm Insulation
- 160 mm Concrete slab
- Suspended ceiling

From left to right:

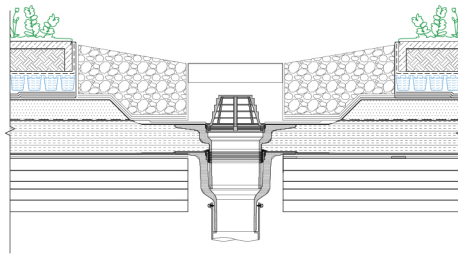
- 20 mm Gypsum board
- 150 mm Space for integration of the pipes
- 300 mm Concrete beam
- 100 mm Insulation
- 50 mm External panel



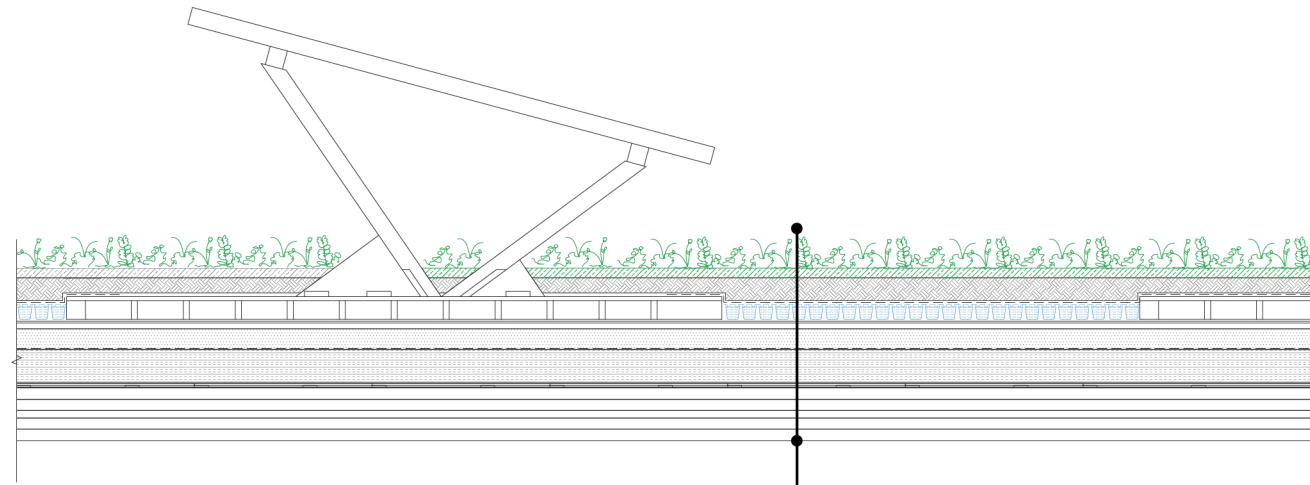
The roof



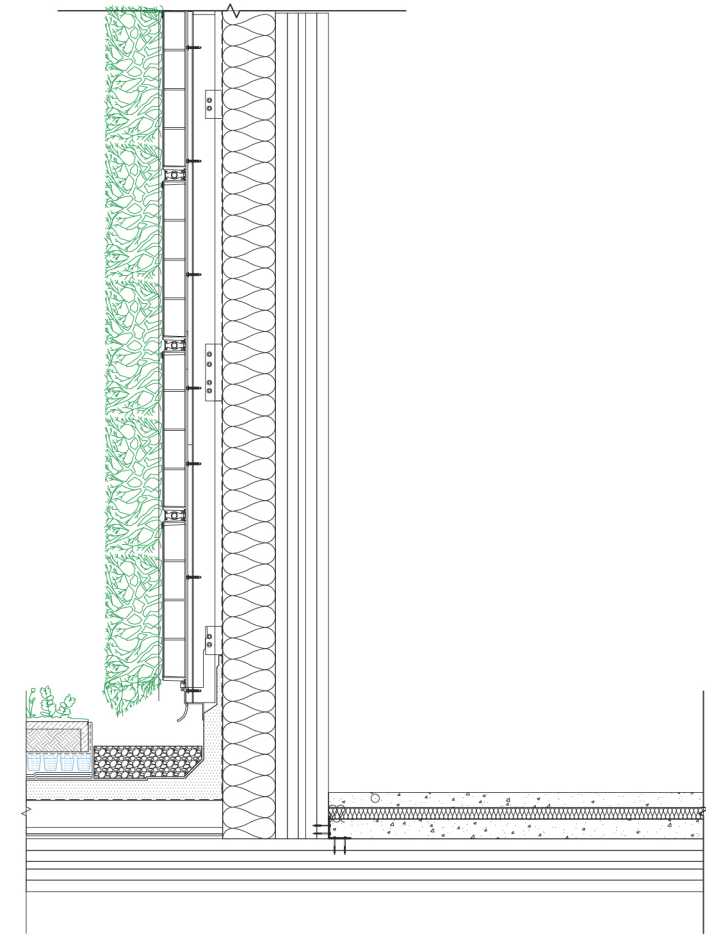
① Roof edge with pot for higher vegetation



② Blue roof with vegetation



③ Blue roof with vegetation and PV Panels

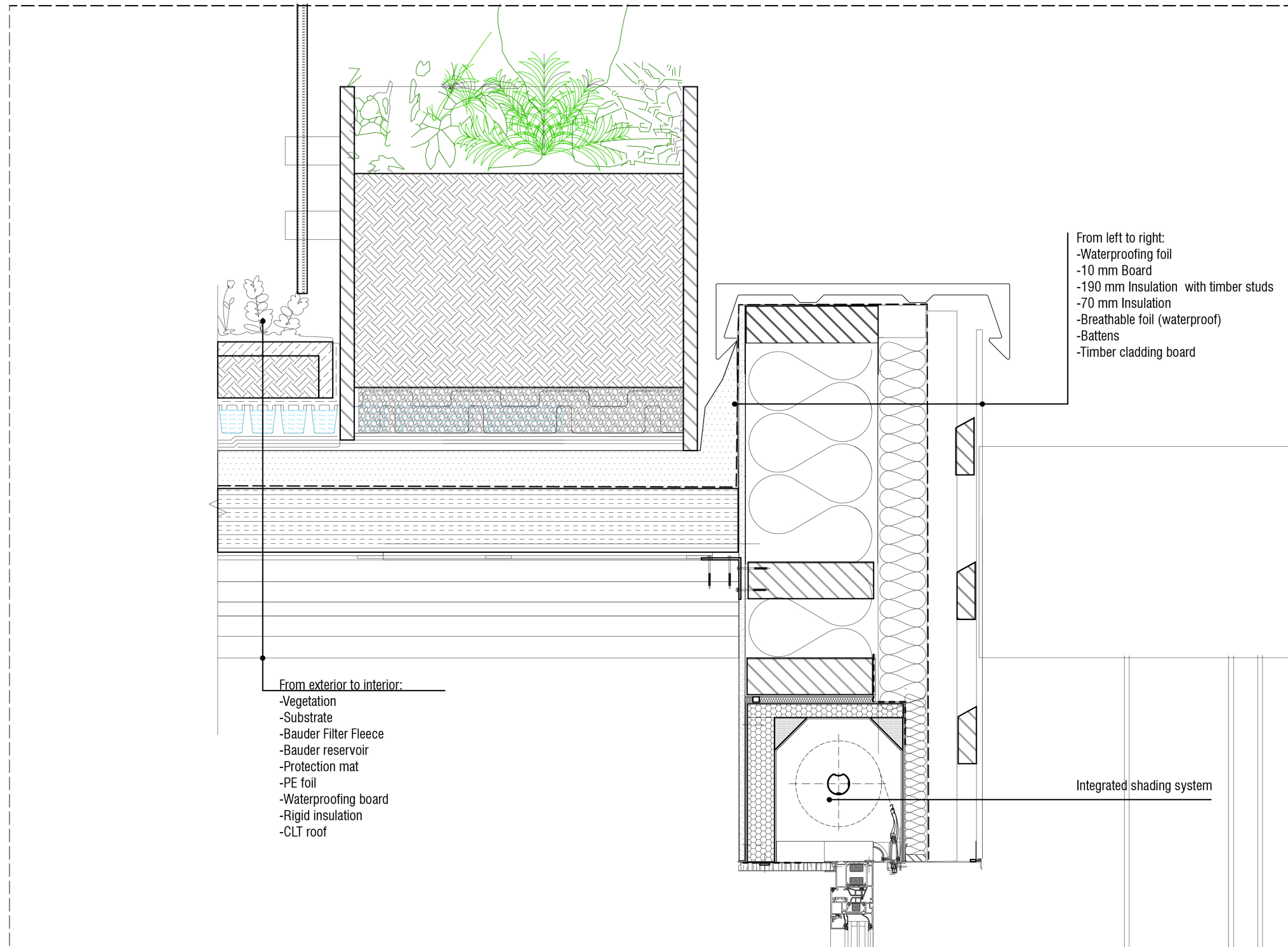


④ Blue roof with green wall

From exterior to interior:

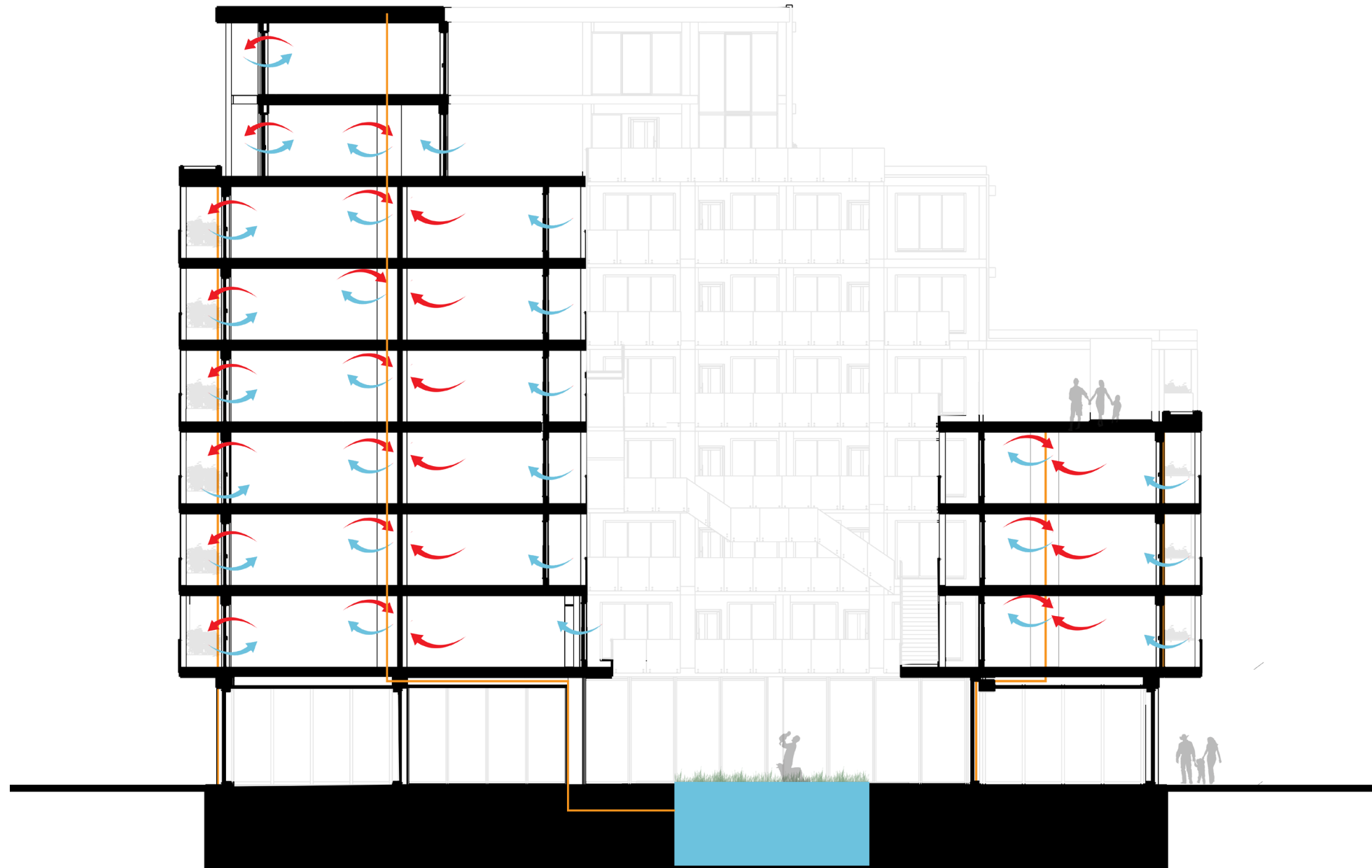
- Vegetation
- Substrate
- Bauder Filter Fleece
- Bauder reservoir
- Protection mat
- PE foil
- Waterproofing board
- Rigid insulation
- CLT roof

The edge



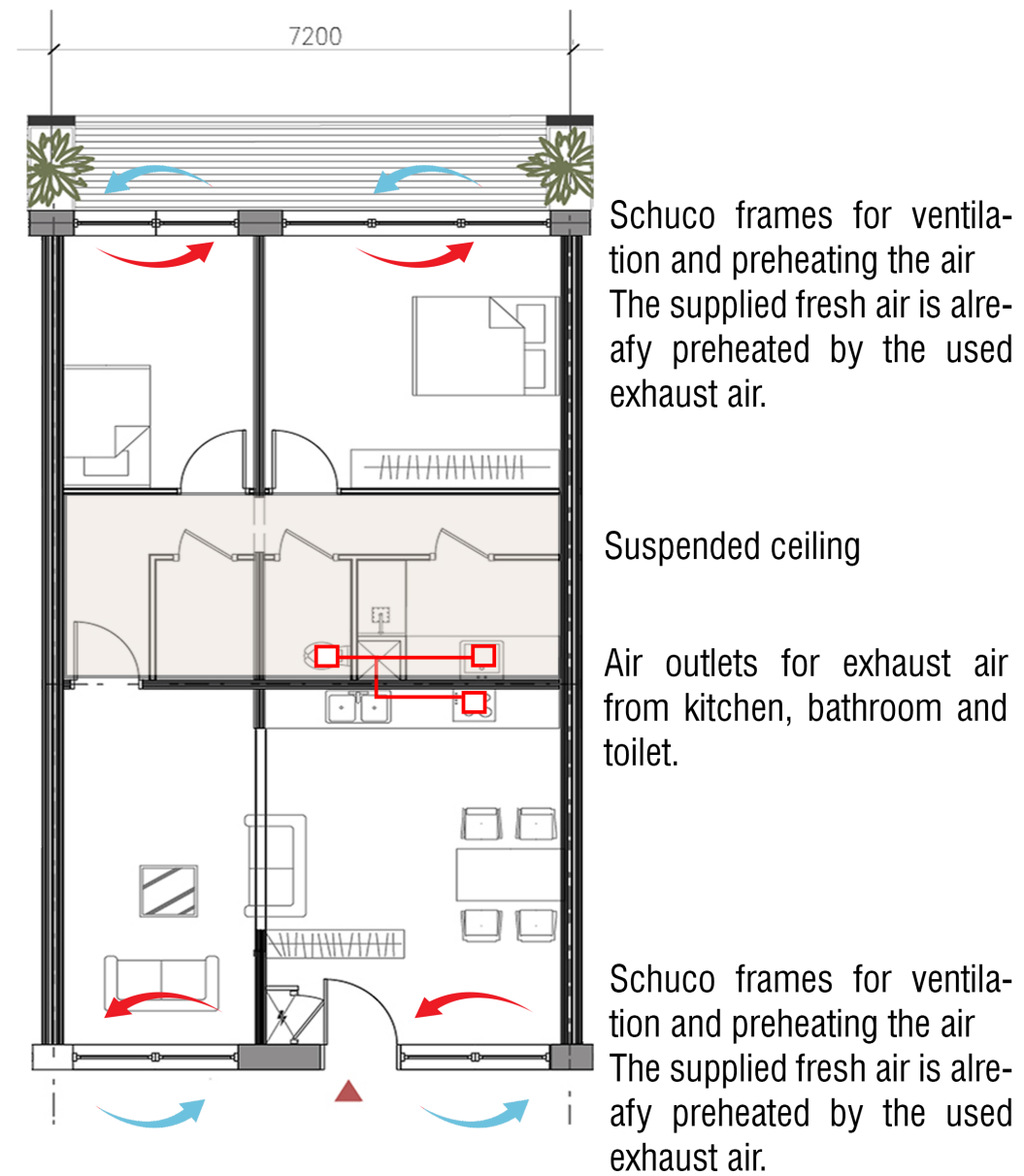


Ventilation and water collection

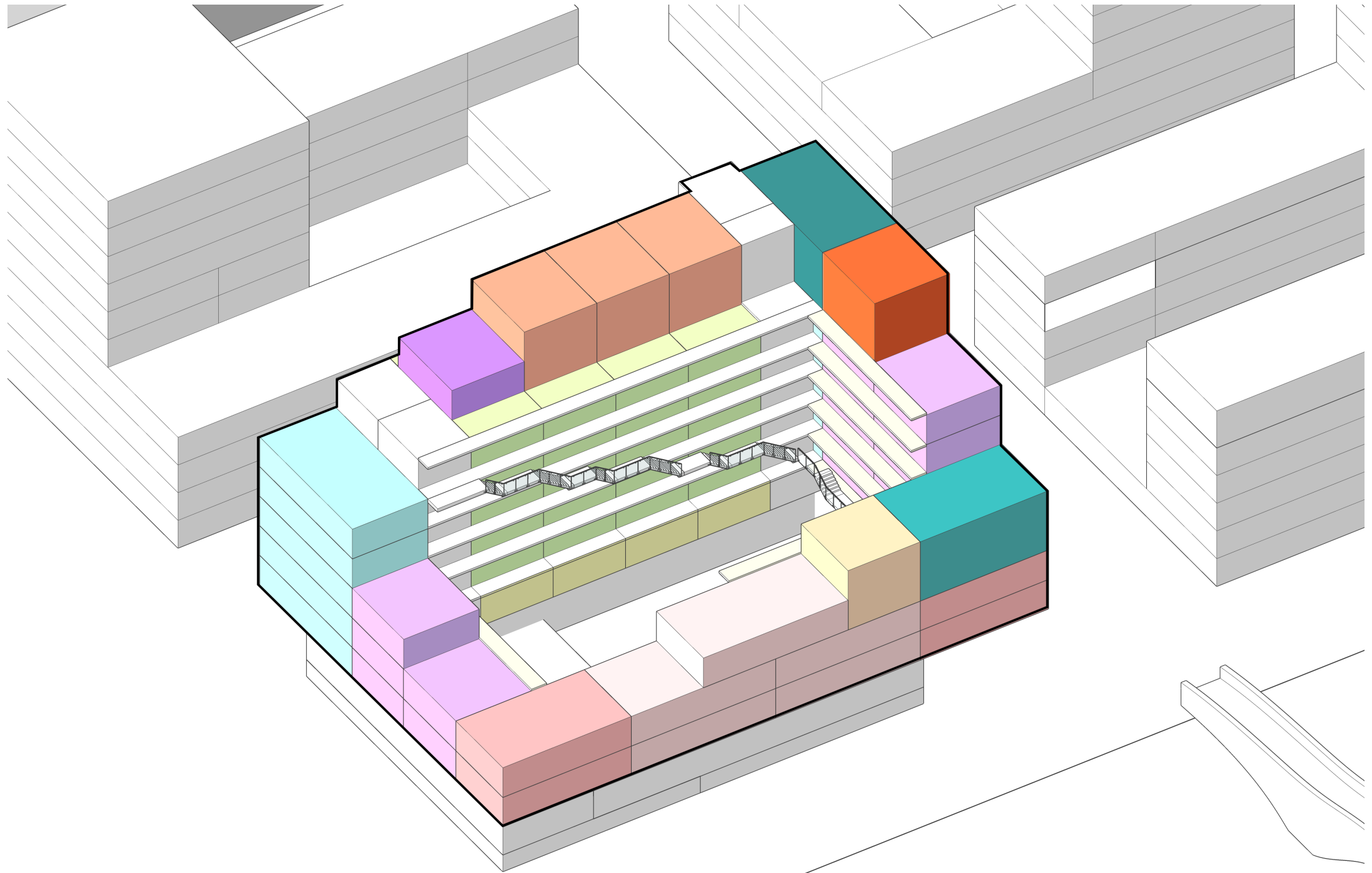


Collection of the rainwater from the balconies and the rooftops would allow reusing the water for watering the plants.

Ventilation

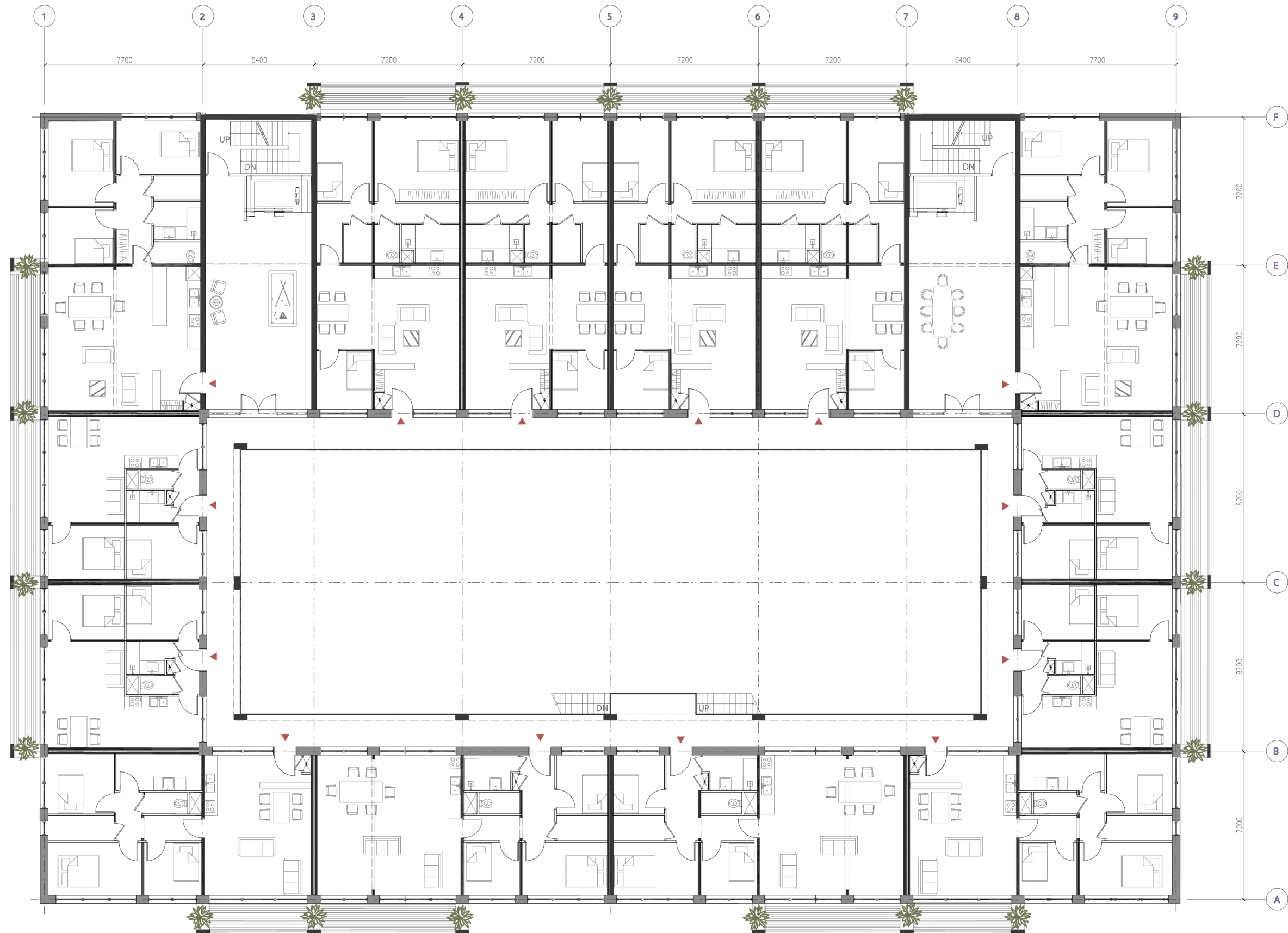


Dwelling types



Number of dwellings: 69
Range: 63,8 - 177,8 m²
Types: 12

Level 1



DWELLING 1

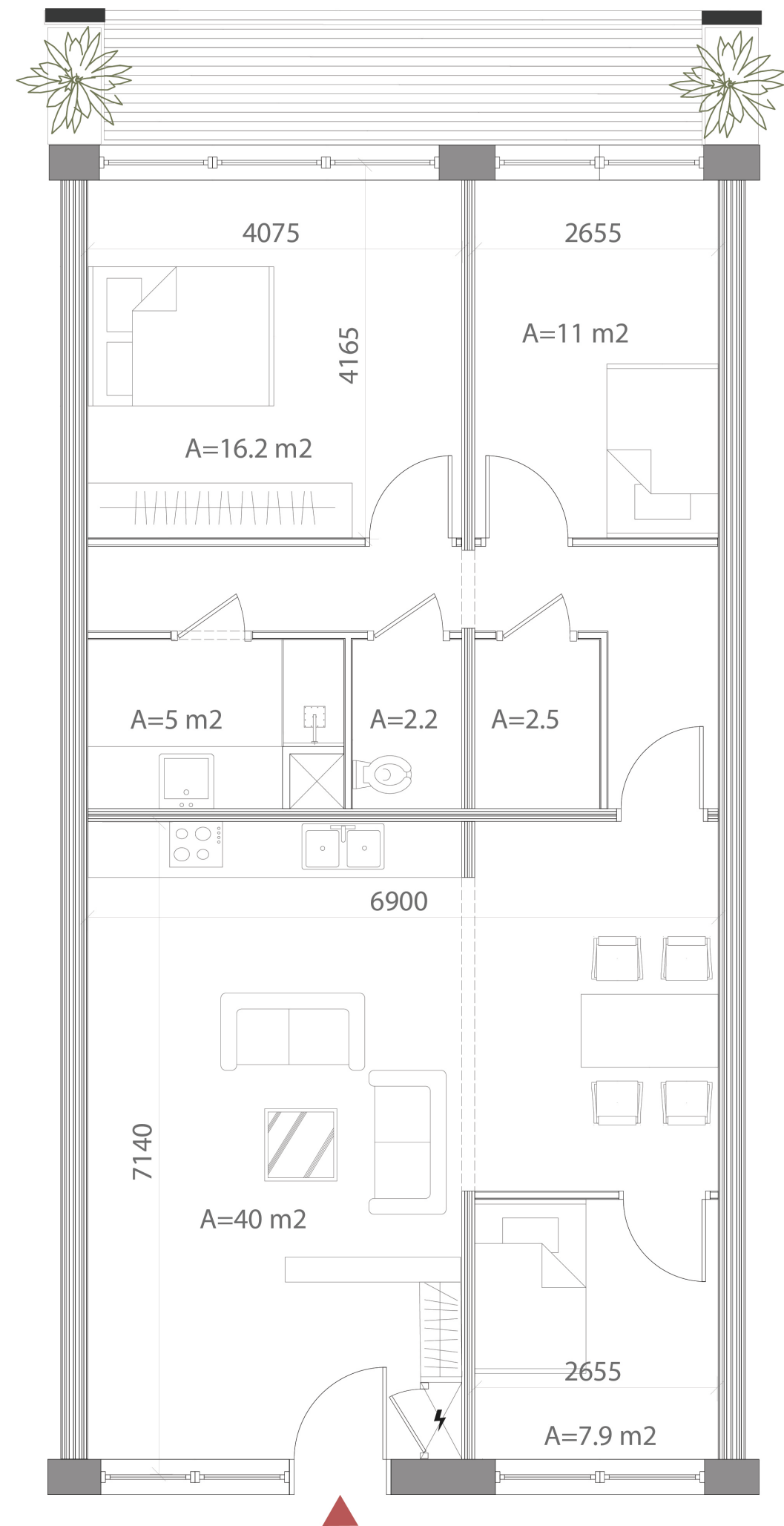
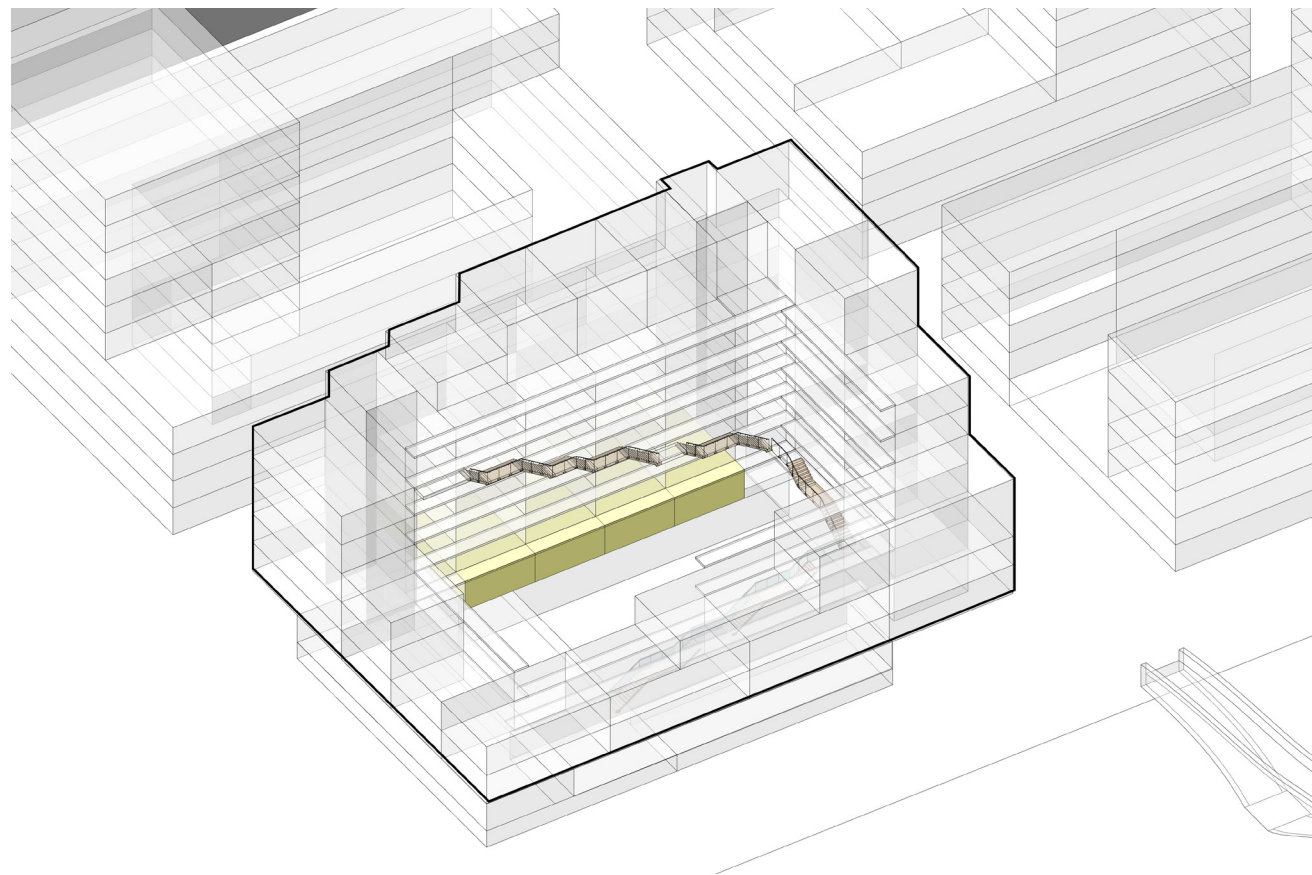
Dwelling size: 107,5 m²

Outside space: 10,5 m²

Number of bedrooms: 3

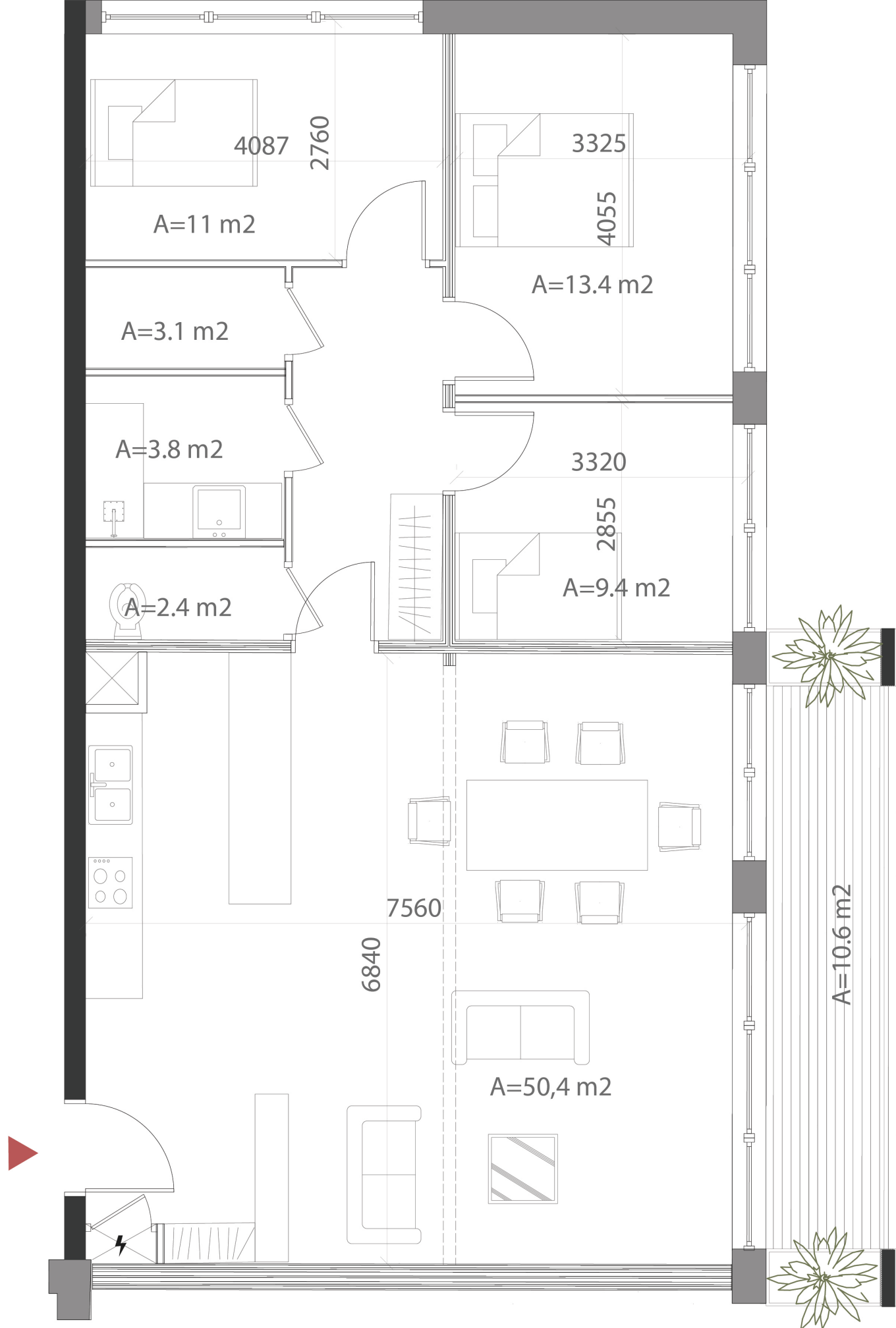
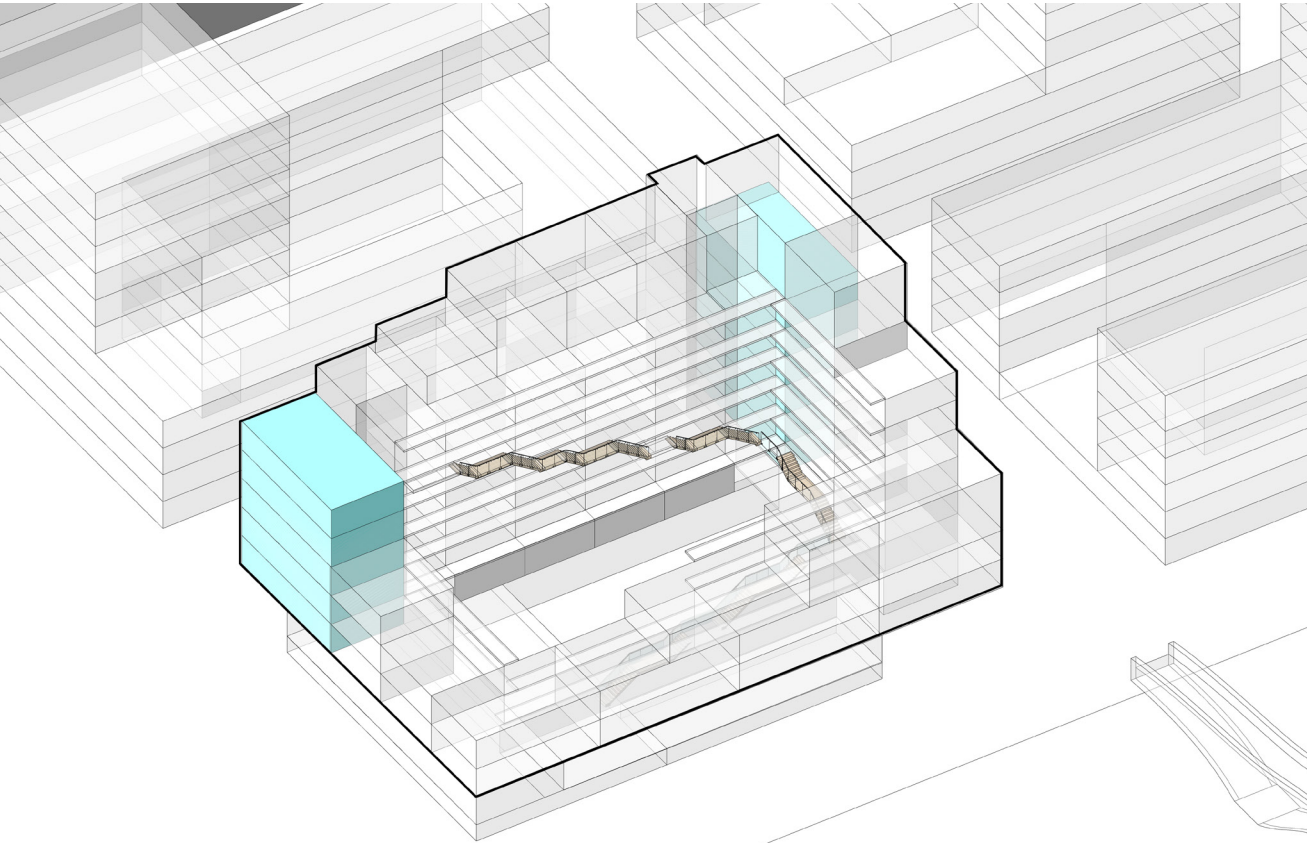
Suitable household: Family

Number of dwellings: 4 on Level 1



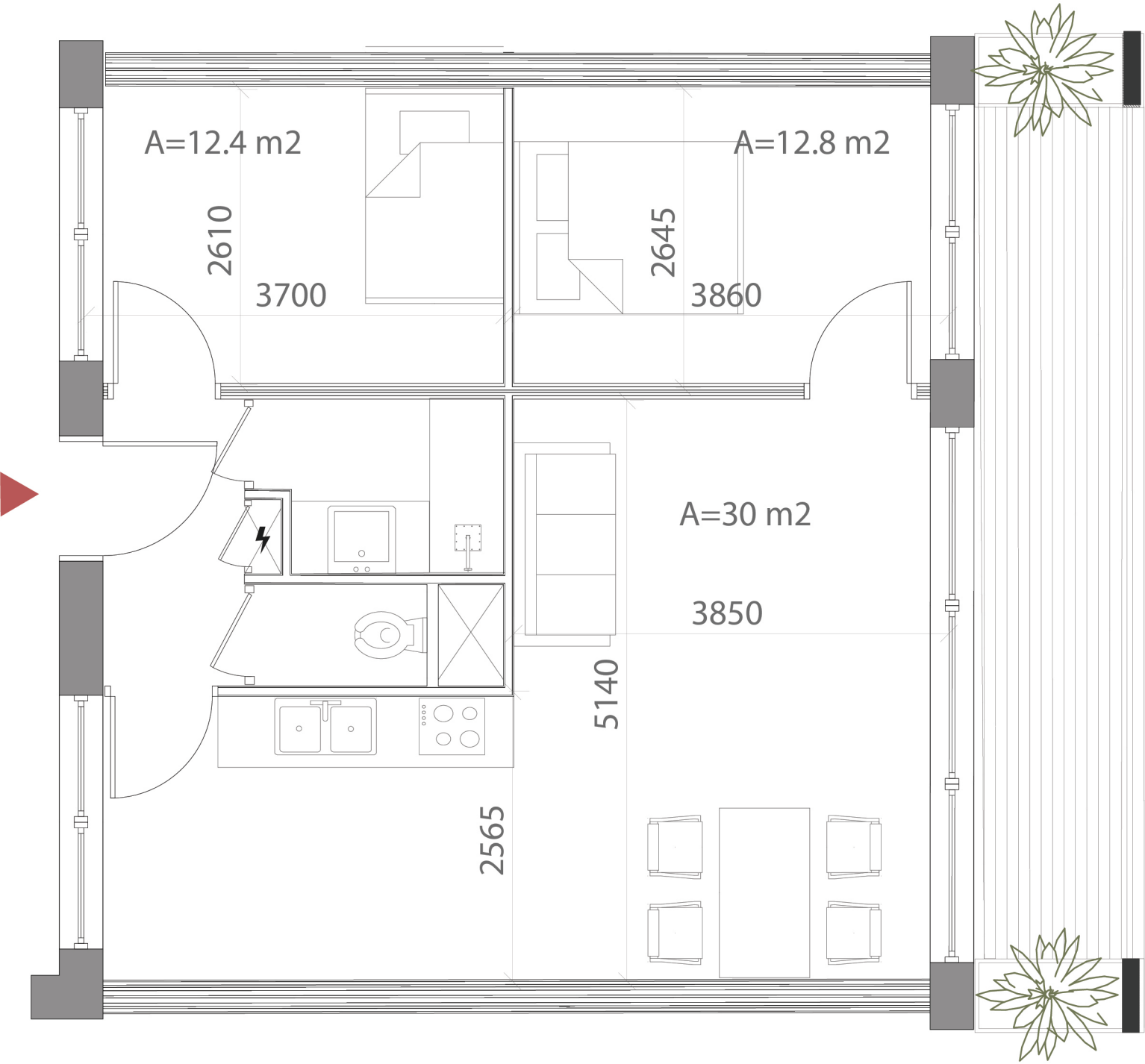
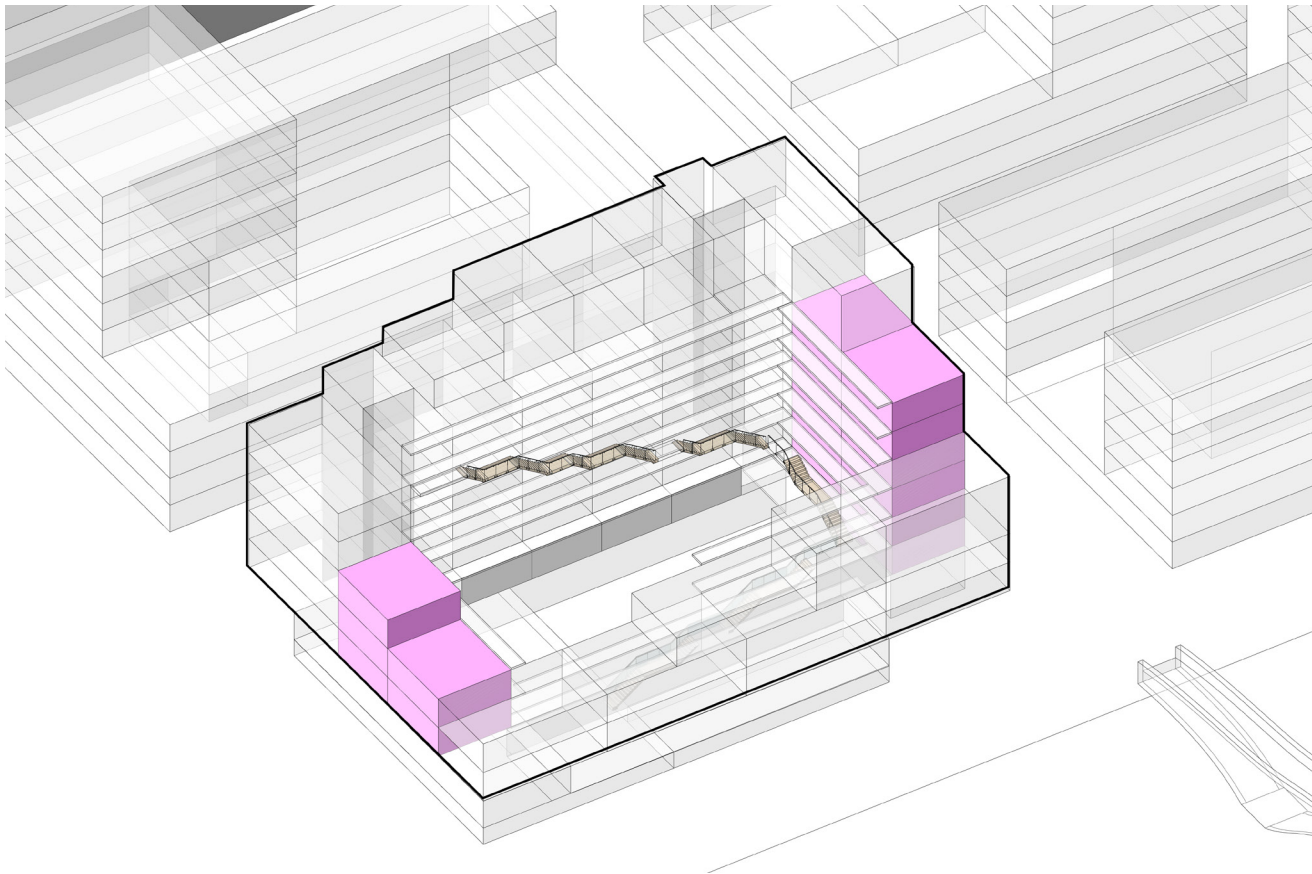
DWELLING 2

Dwelling size: 109,5 m²
Outside space: 10,6 m²
Number of bedrooms: 3
Suitable household: Family
Number of dwellings: 11 on Levels 1, 2,3,4,5,6



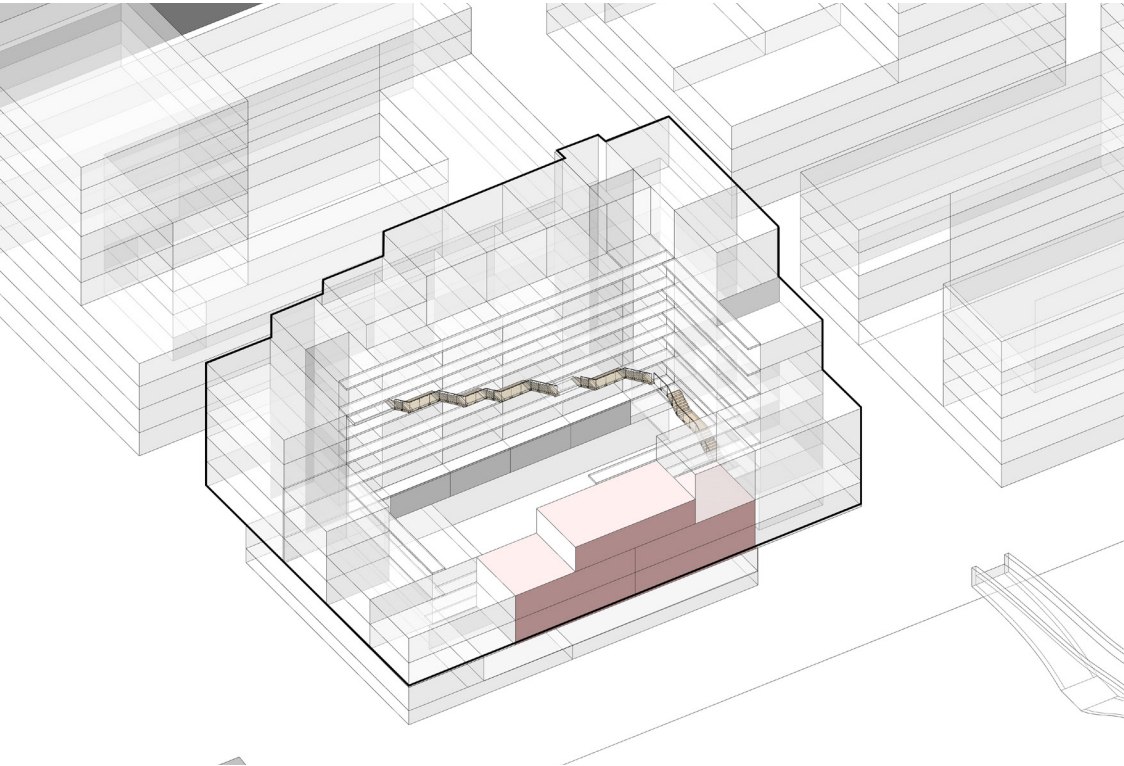
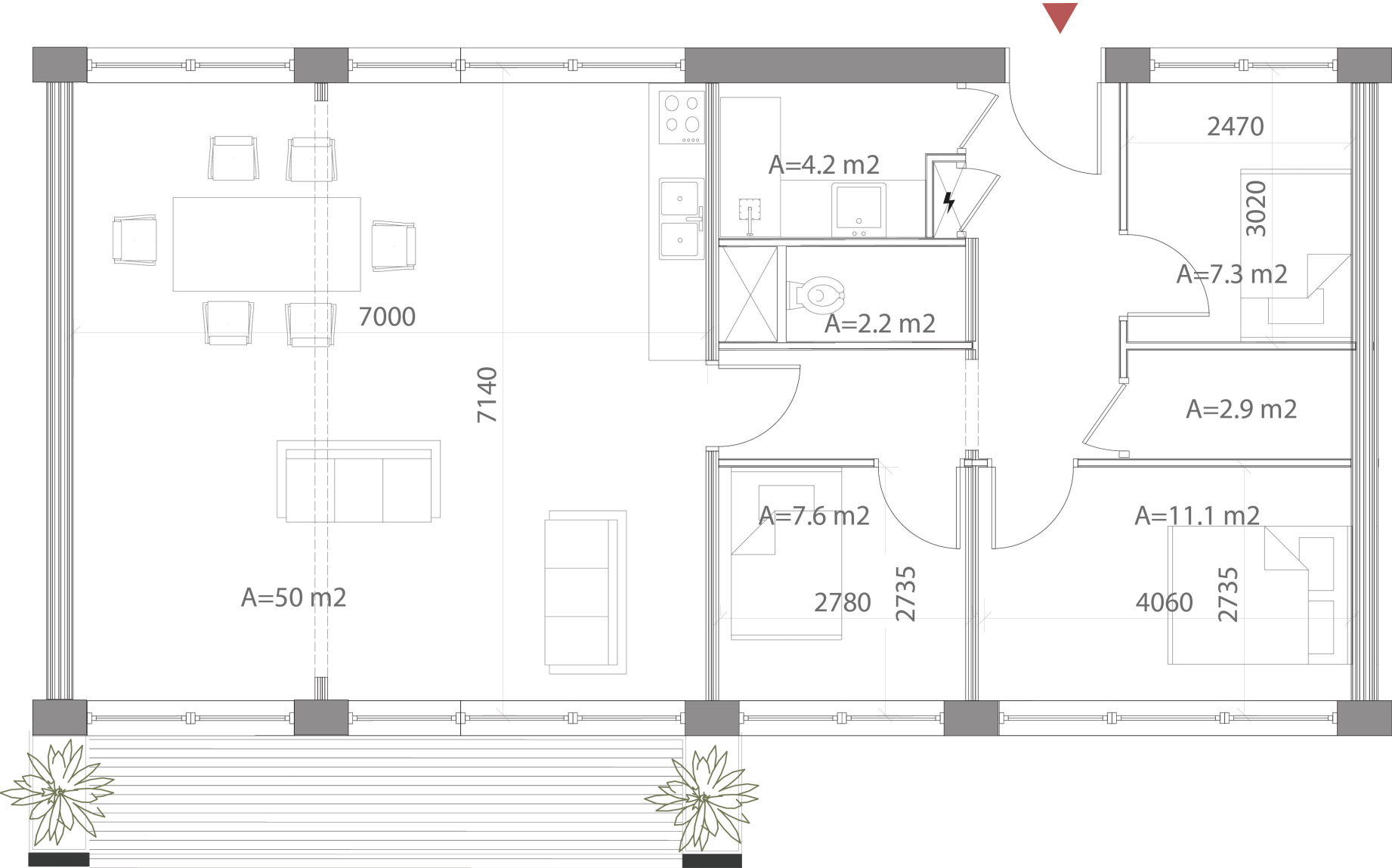
DWELLING 3

Dwelling size: 63,8 m²
Outside space: 10, 6 m²
Number of bedrooms: 2
Suitable household: Family/ Couple
Number of dwellings: 17 on Levels 1,2,3,4,5,6



DWELLING 4

Dwelling size: 101,8 m²
Outside space: 10,5 m²
Number of bedrooms: 3
Suitable household: Family
Number of dwellings: 5 on Levels 1,2,3

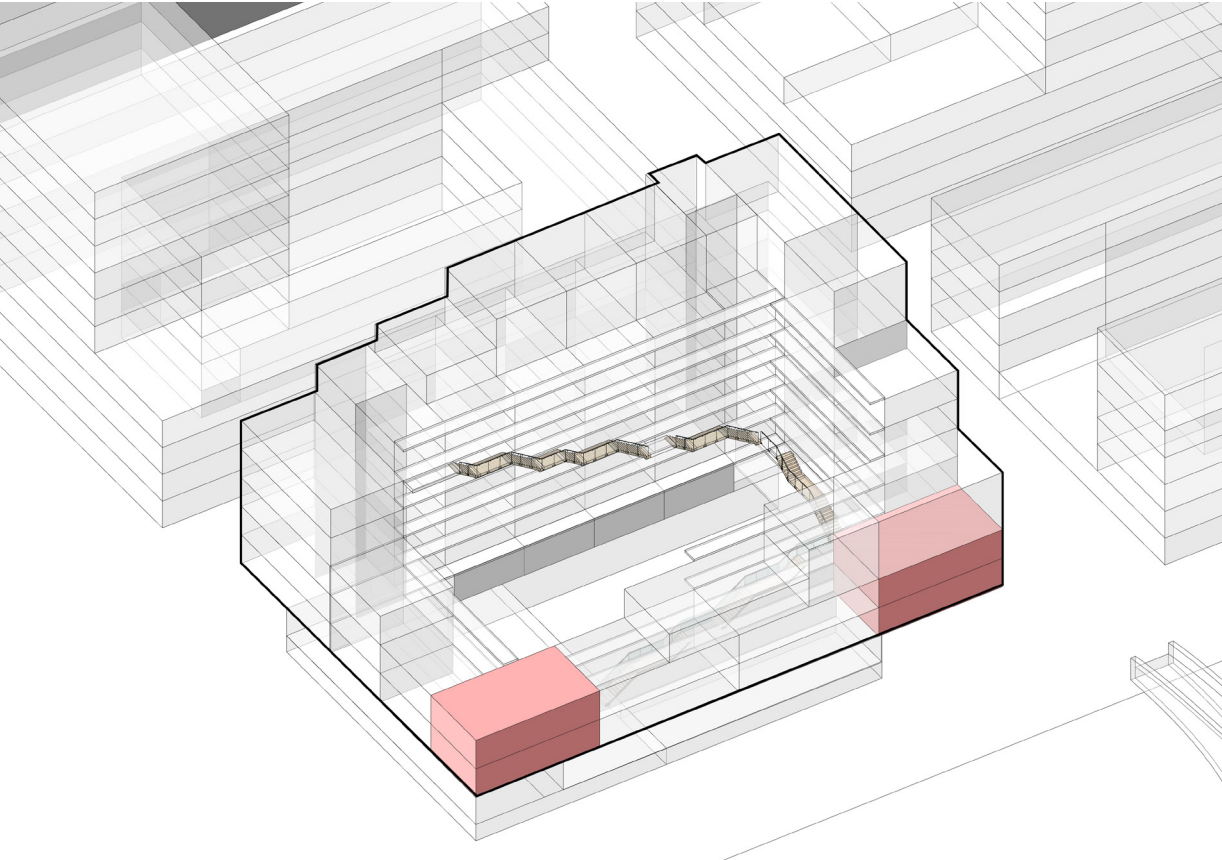
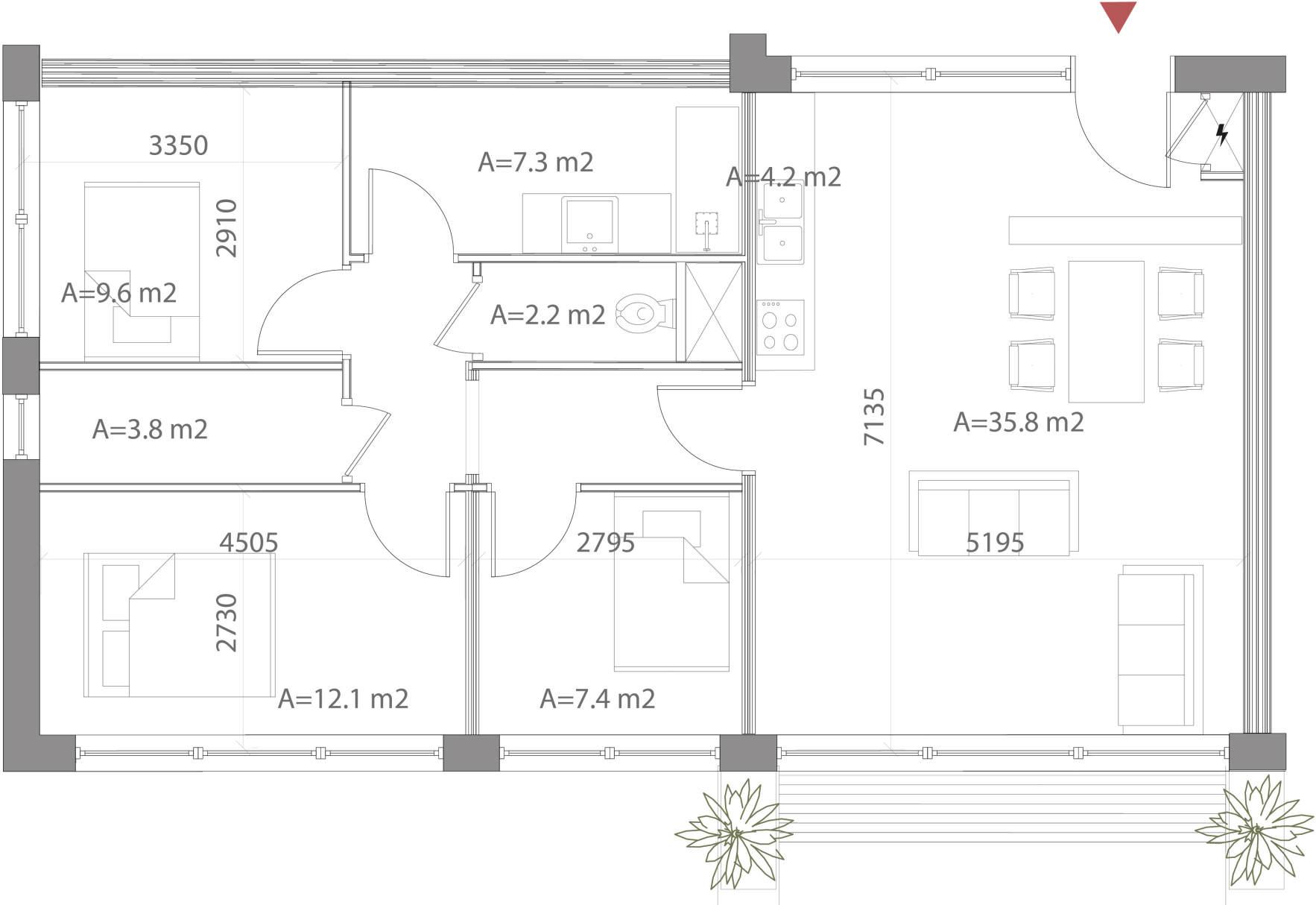


Living room



DWELLING 5

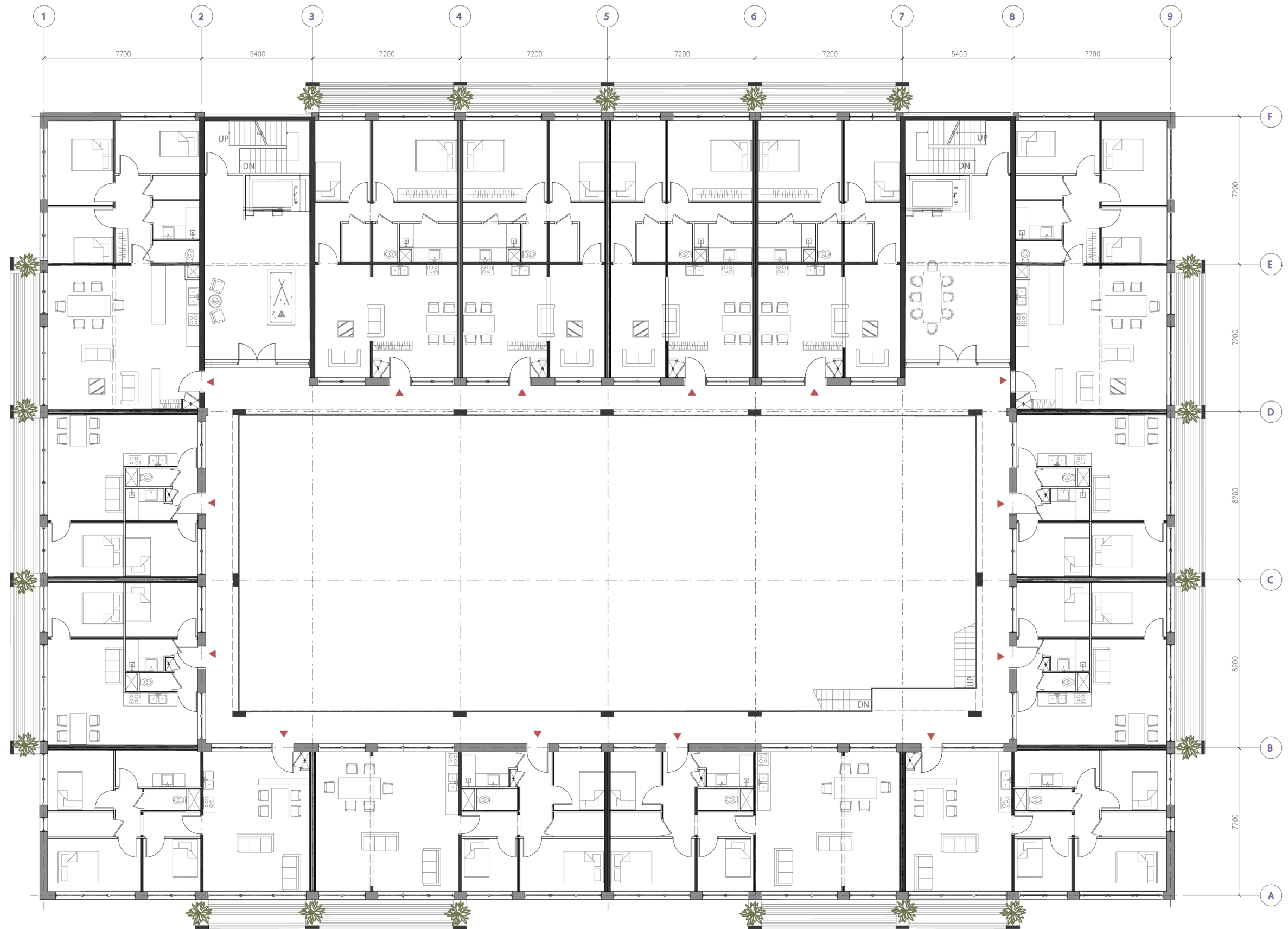
Dwelling size: 92 m²
Outside space: 7,6 m²
Number of bedrooms: 3
Suitable household: Family
Number of dwellings: 4 on Levels 1 and 2



Views



Level 2



DWELLING 6

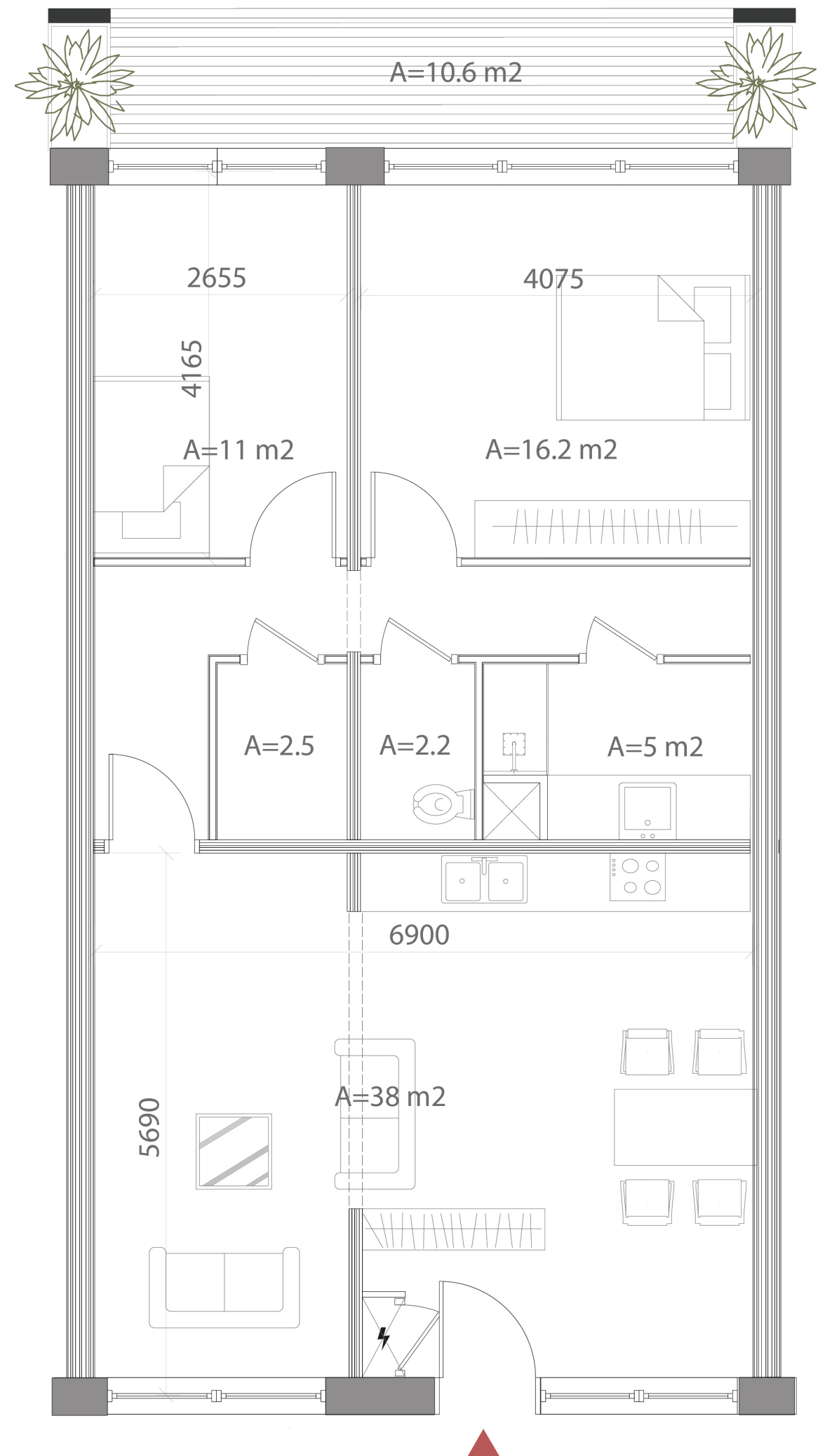
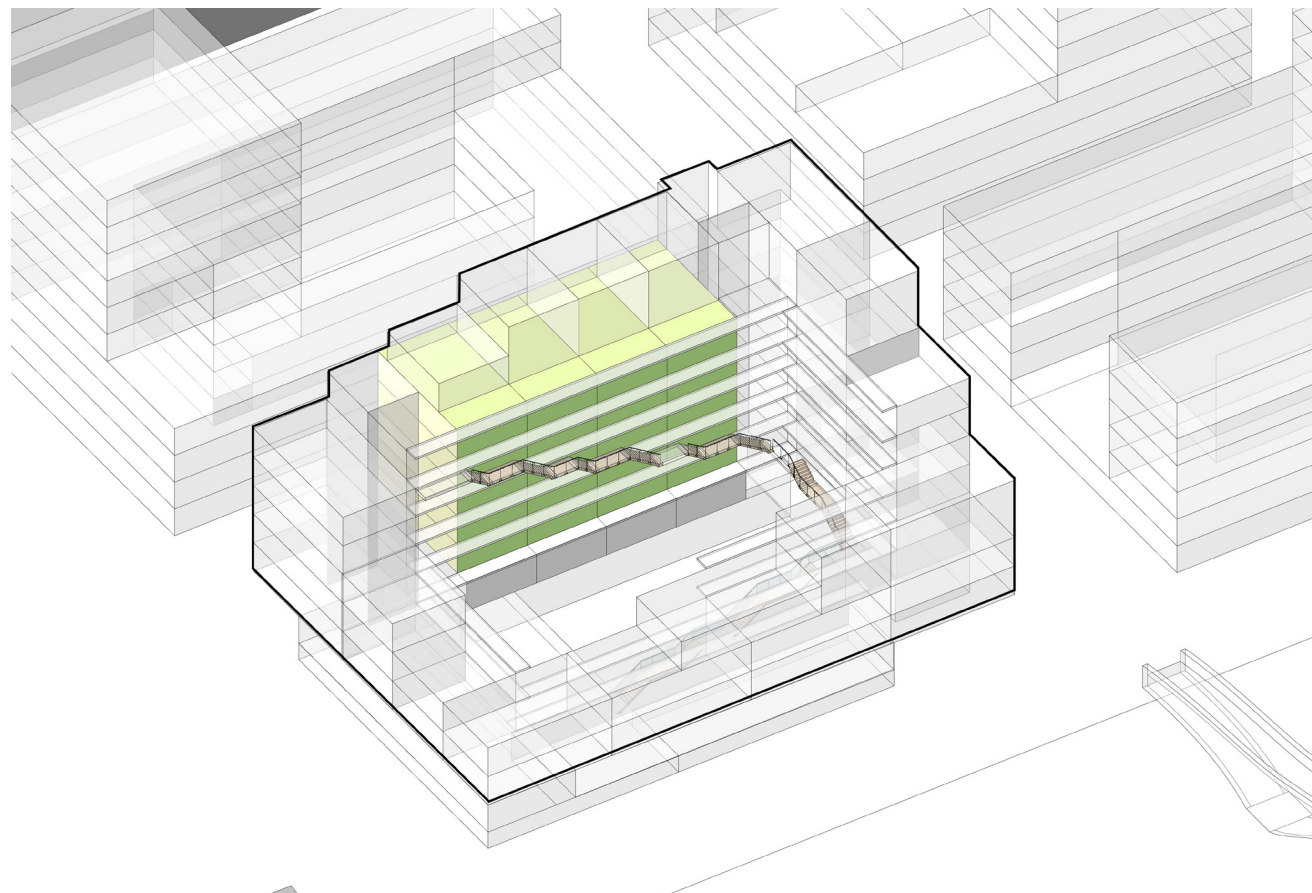
Dwelling size: 94 m²

Outside space: 10,6 m²

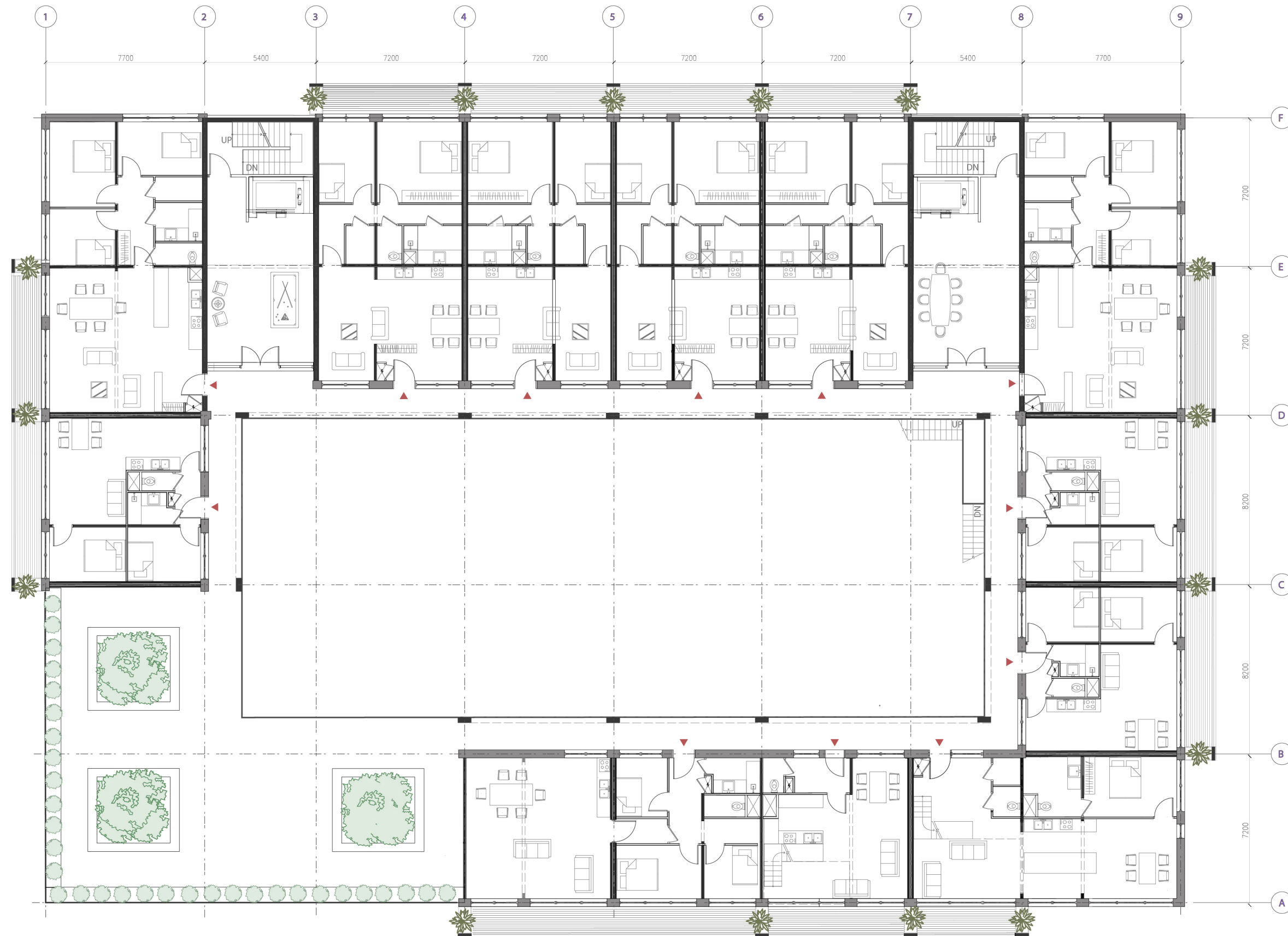
Number of bedrooms: 2

Suitable household: Family

Number of dwellings: 20 on Levels 1,2,3 and 4



Level 3

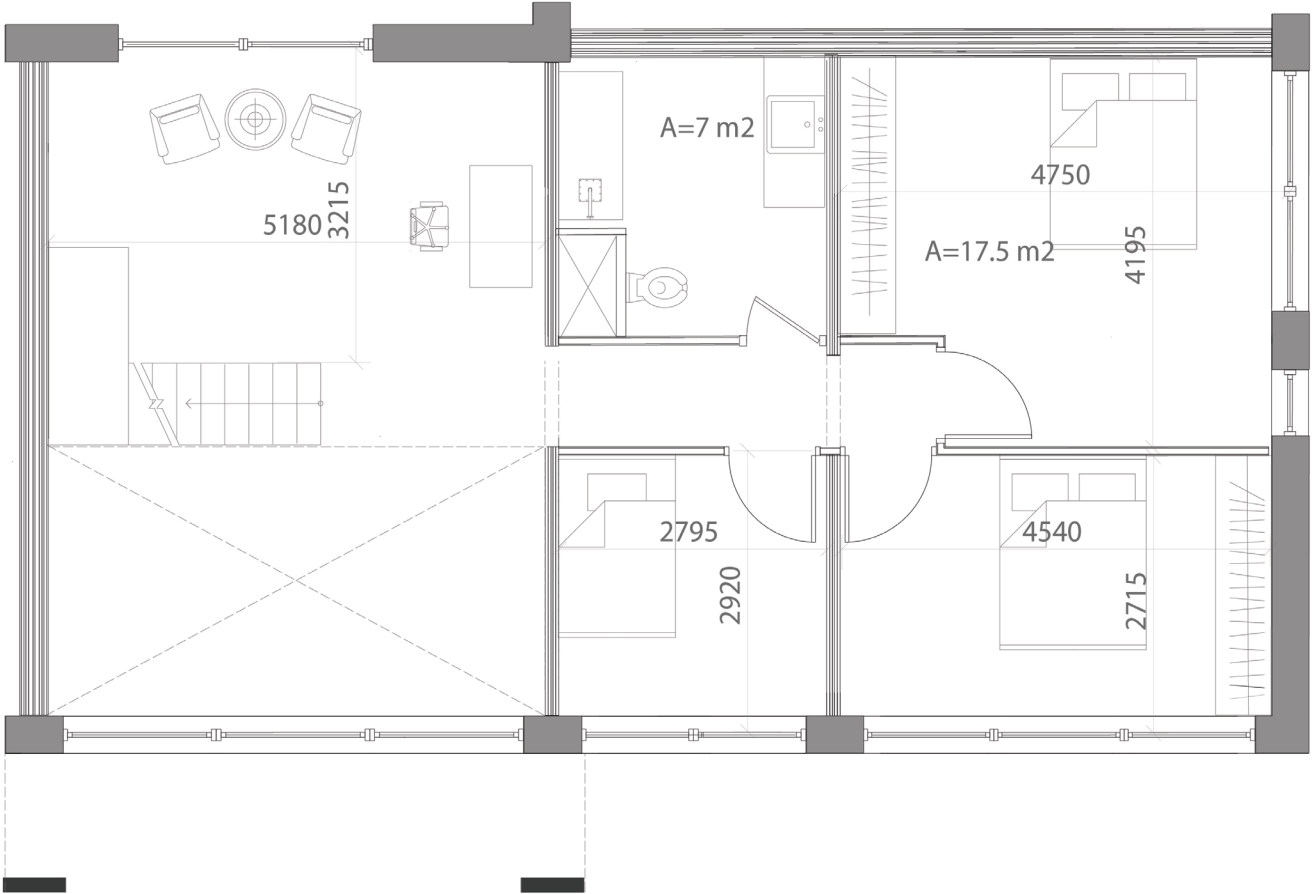
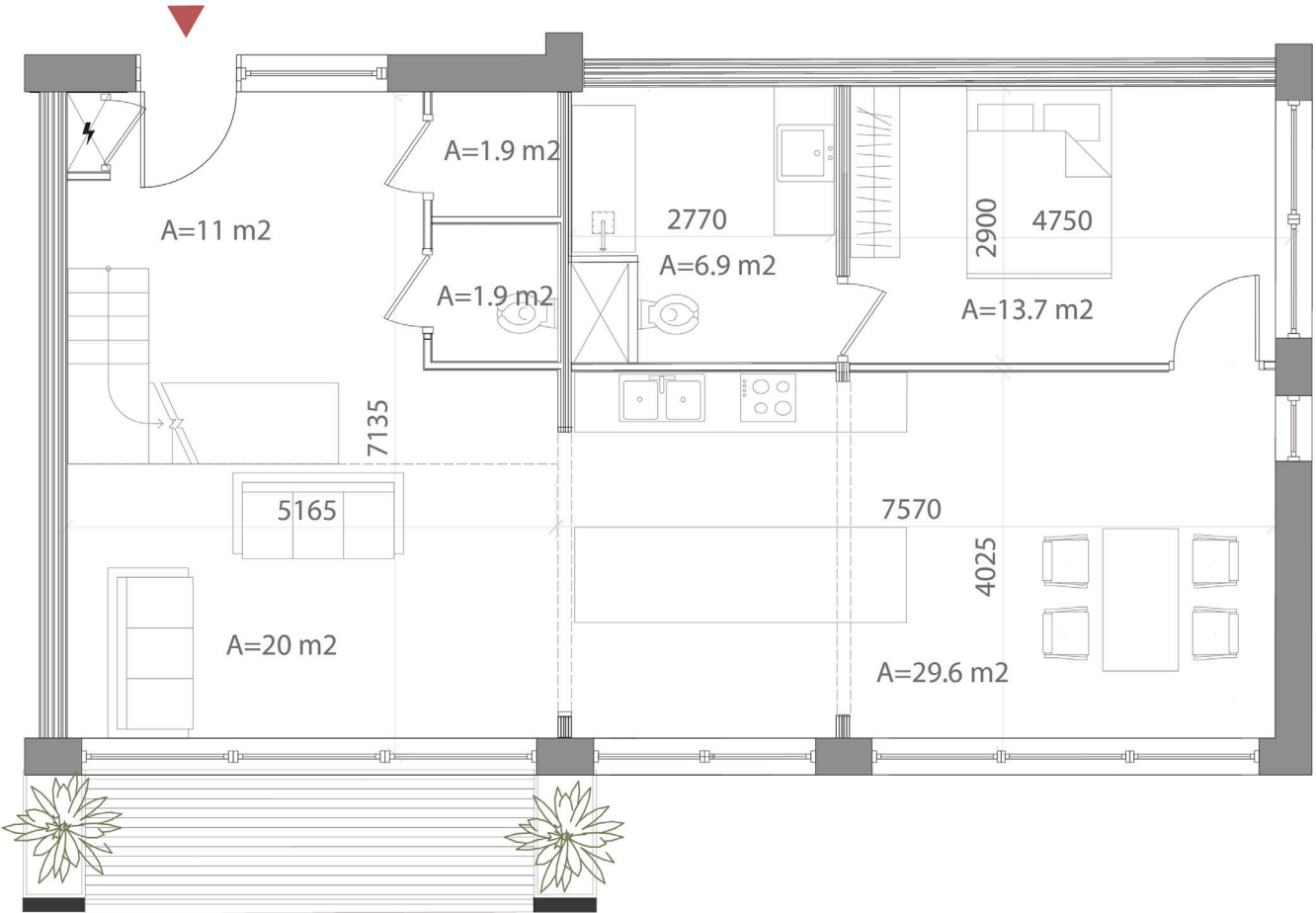
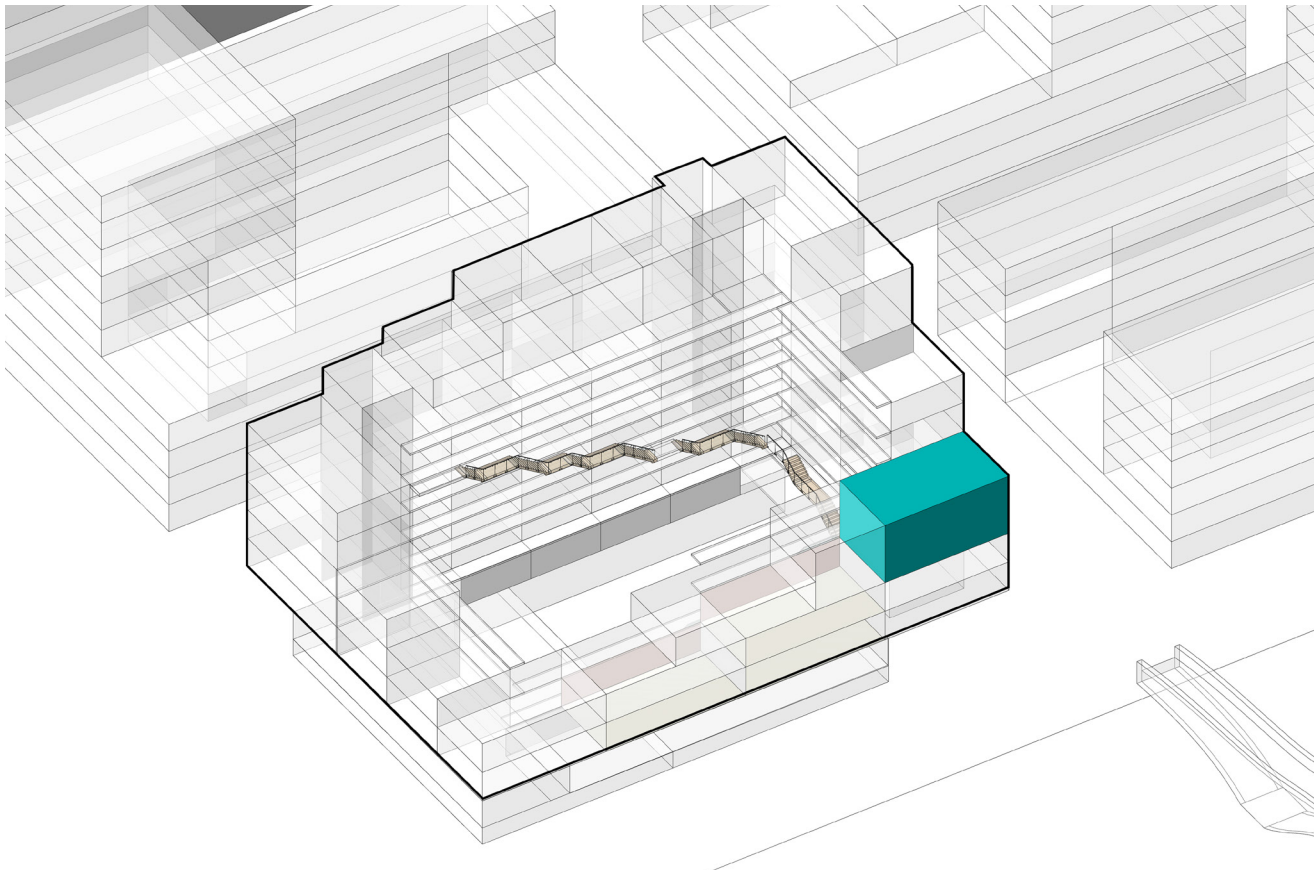


Level 4



DWELLING 7

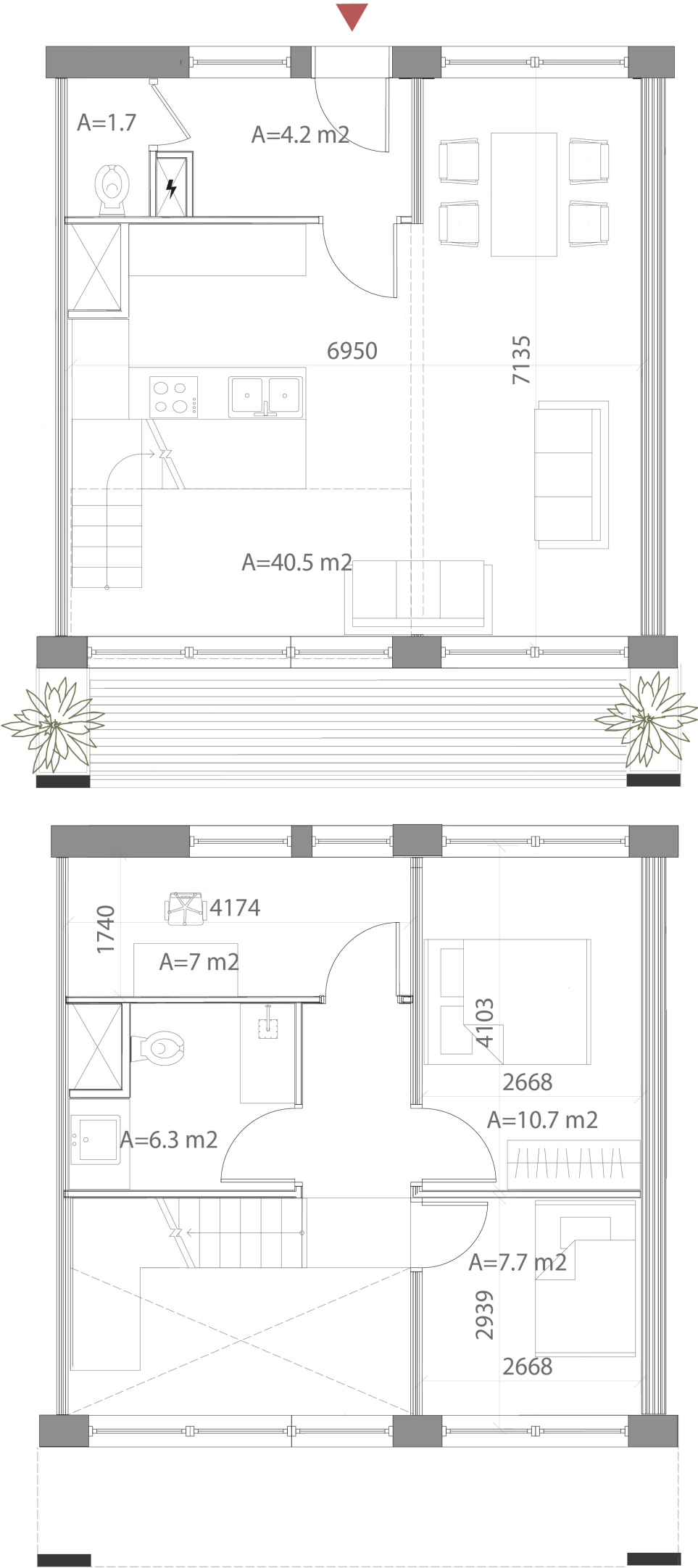
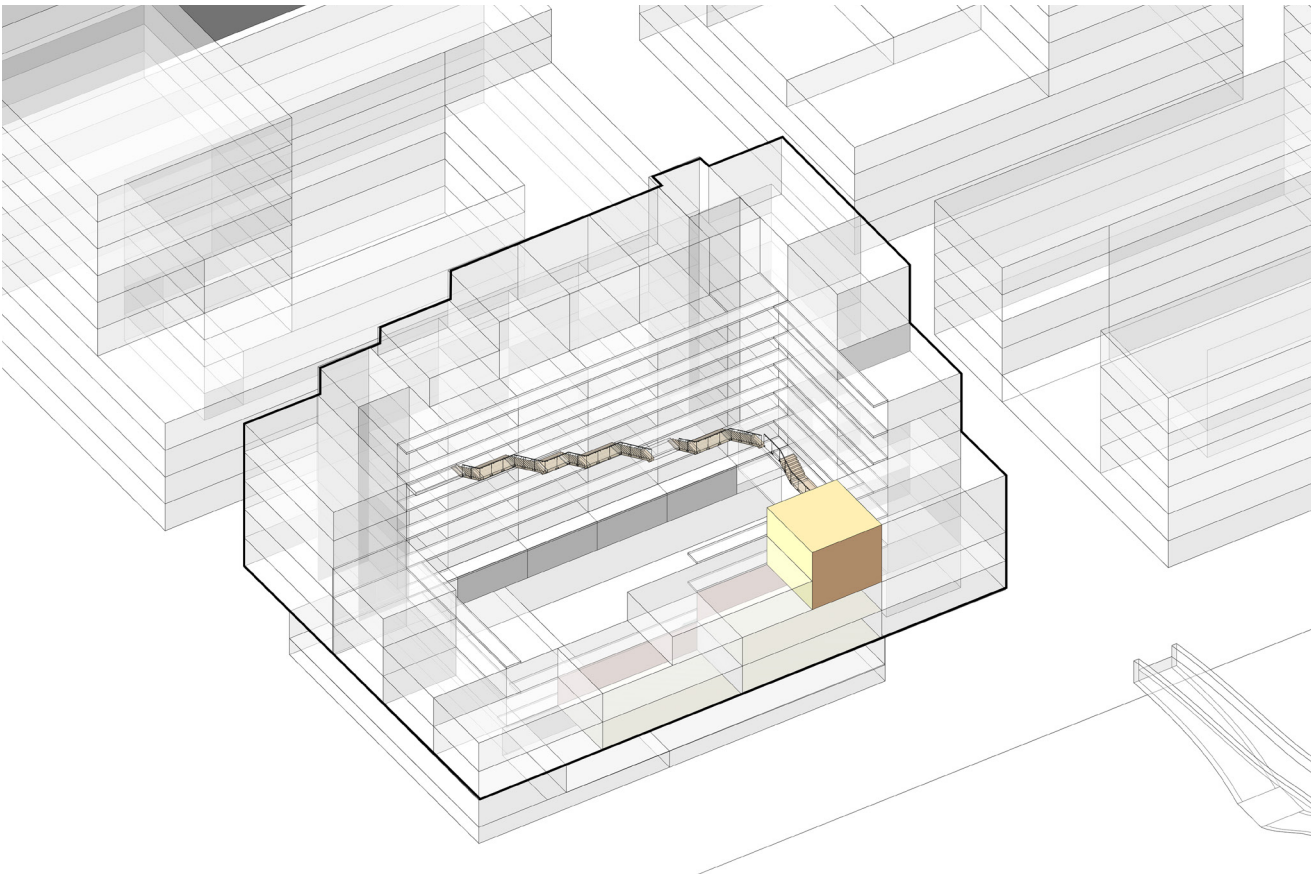
Dwelling size: 161,3 m²
Outside space: 10,5 m²
Number of bedrooms: 4 + 1
Suitable household: Family
Number of dwellings: 1 on Level 3-4



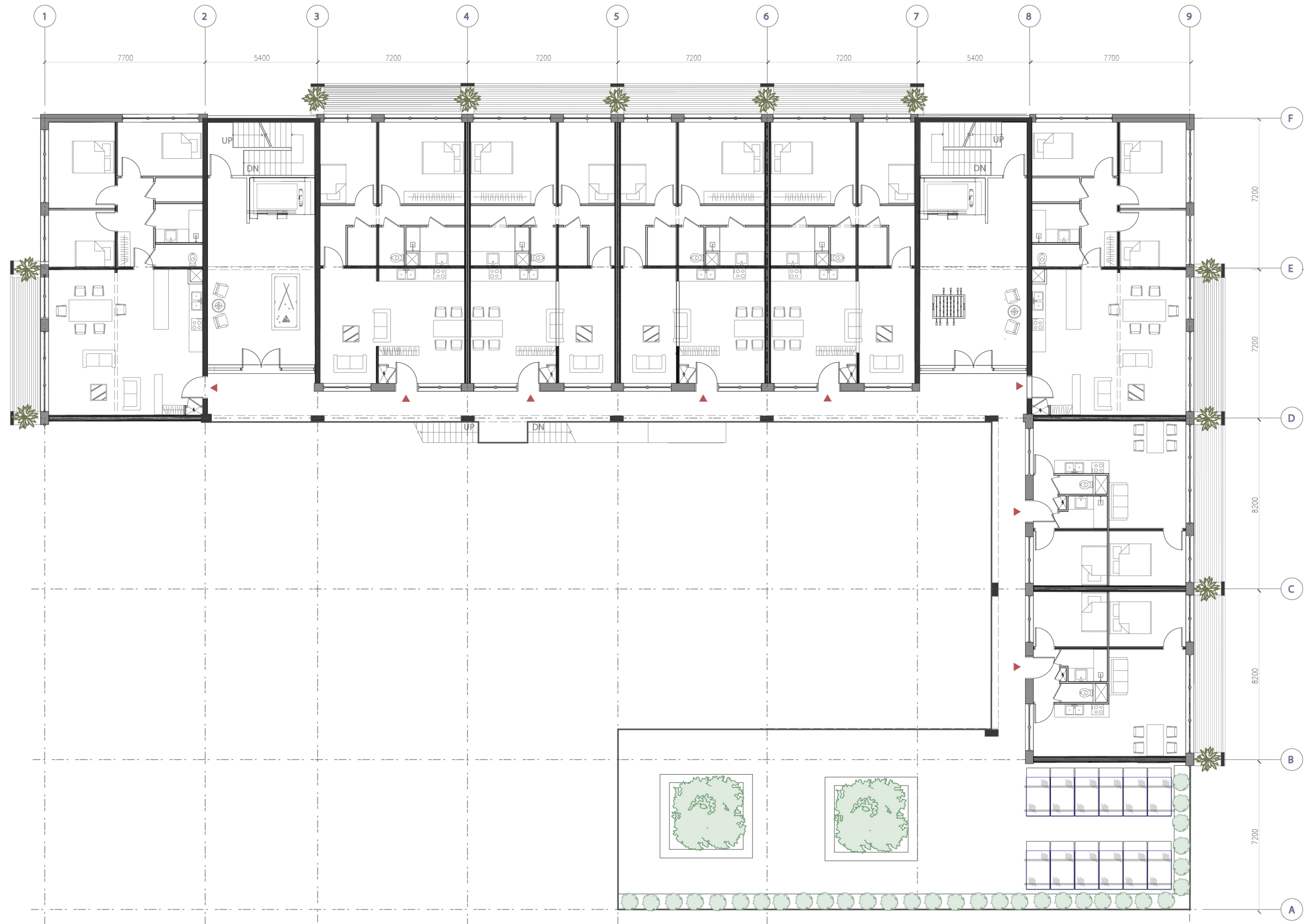


DWELLING 8

Dwelling size: 89,6 m²
Outside space: 10,5 m²
Number of bedrooms: 2+1
Suitable household: Family/Couple
Number of dwellings: 1 on Level 3-4



Level 5



Level 6

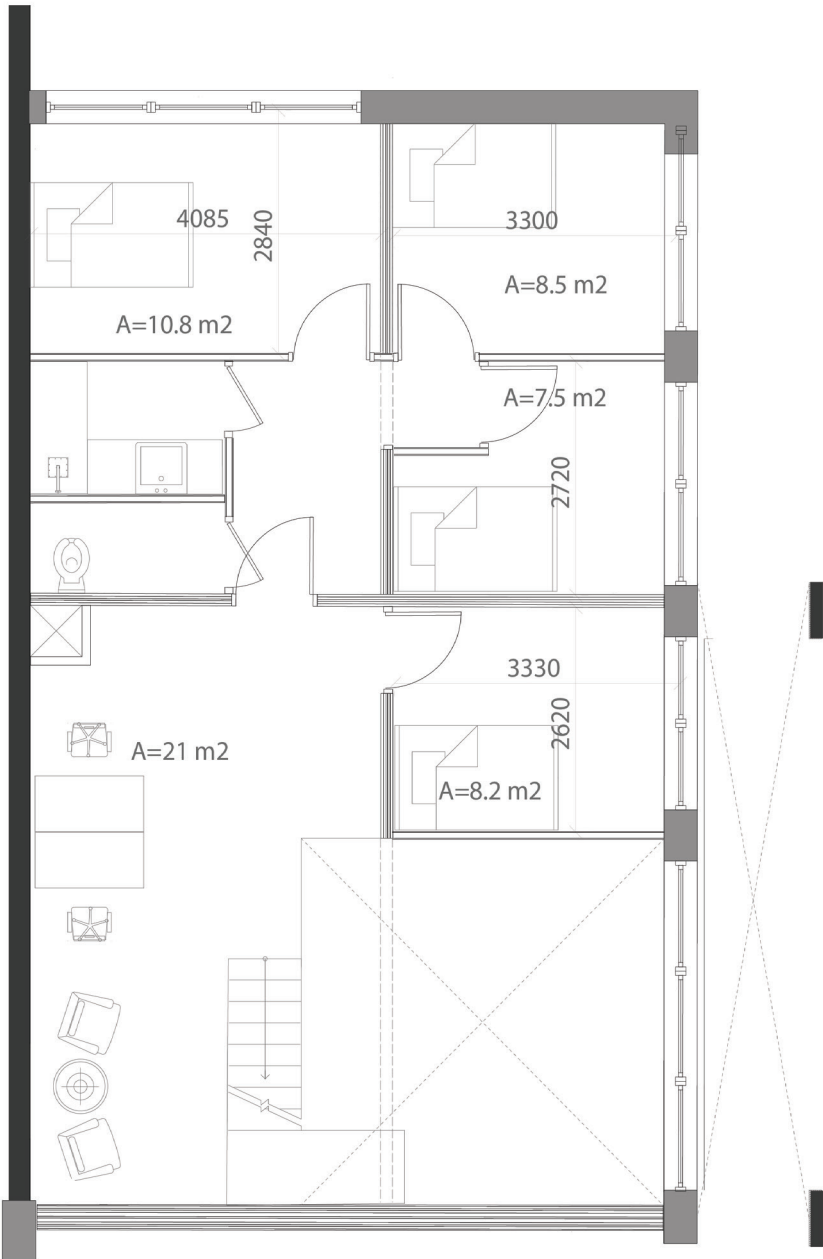
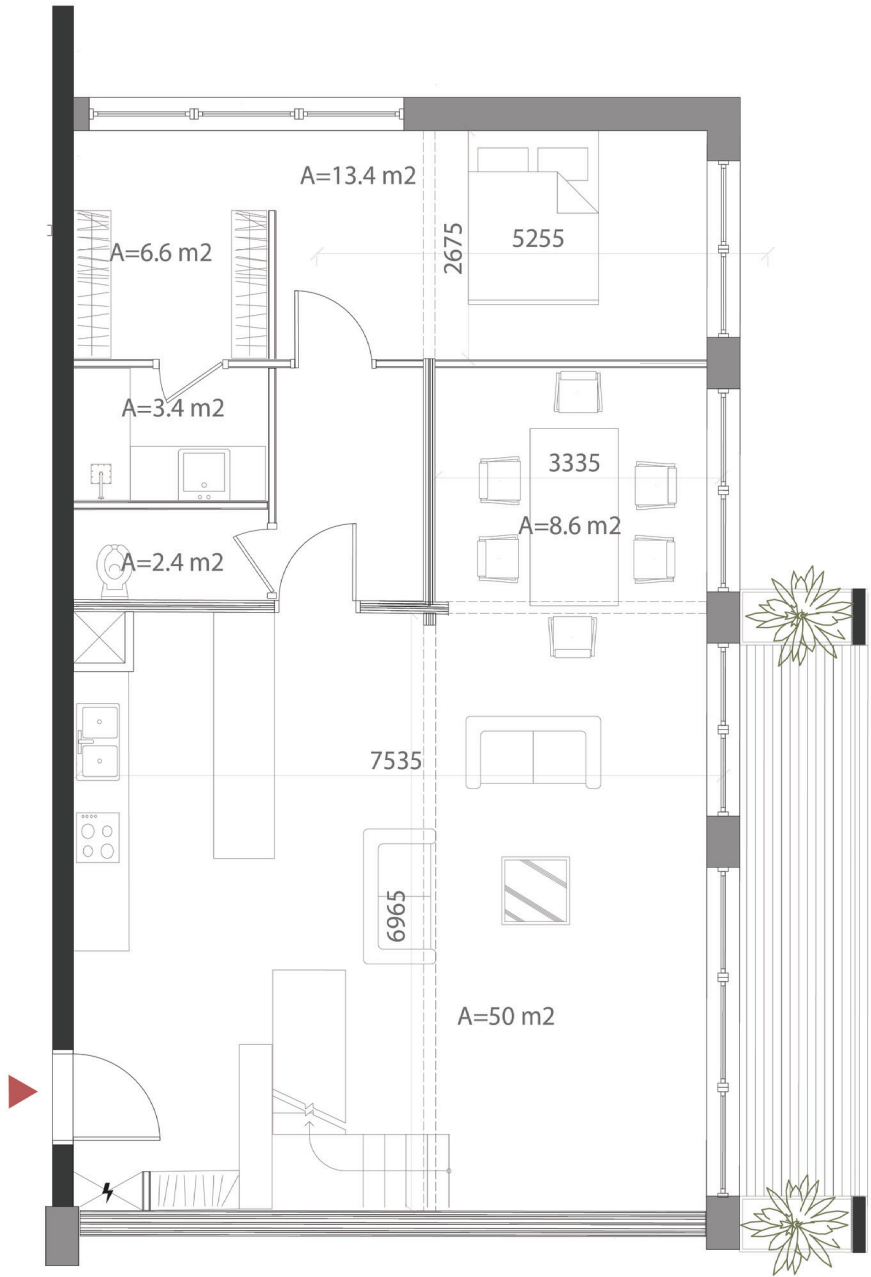
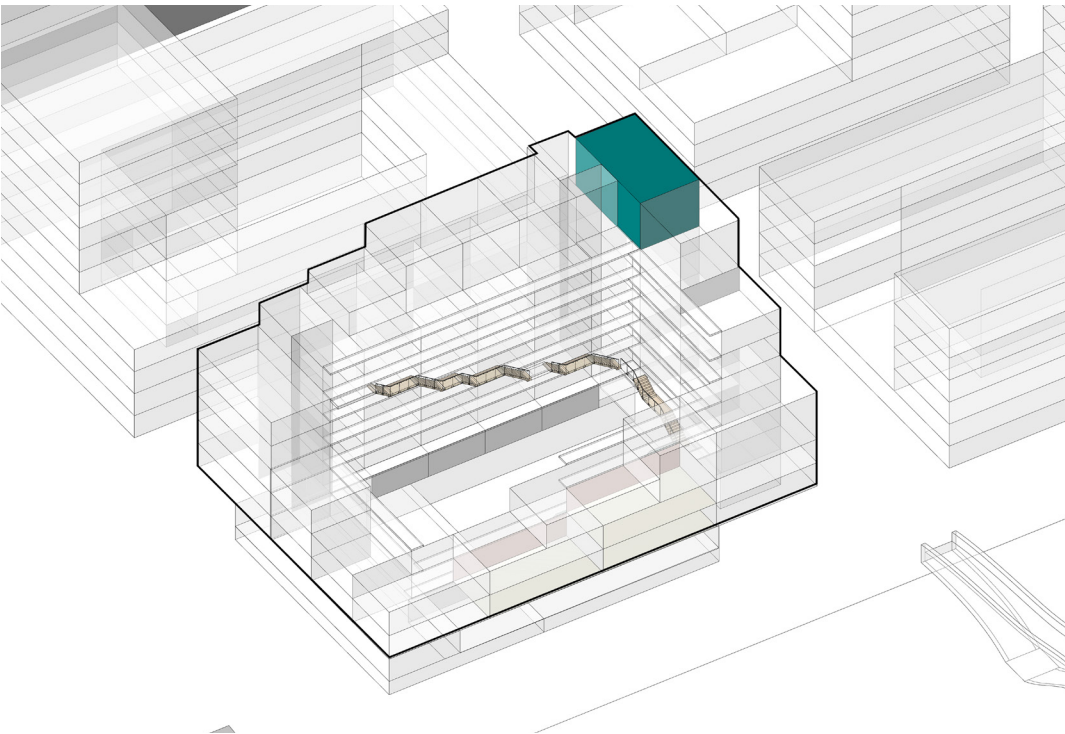


Level 7 and 7+



DWELLING 9

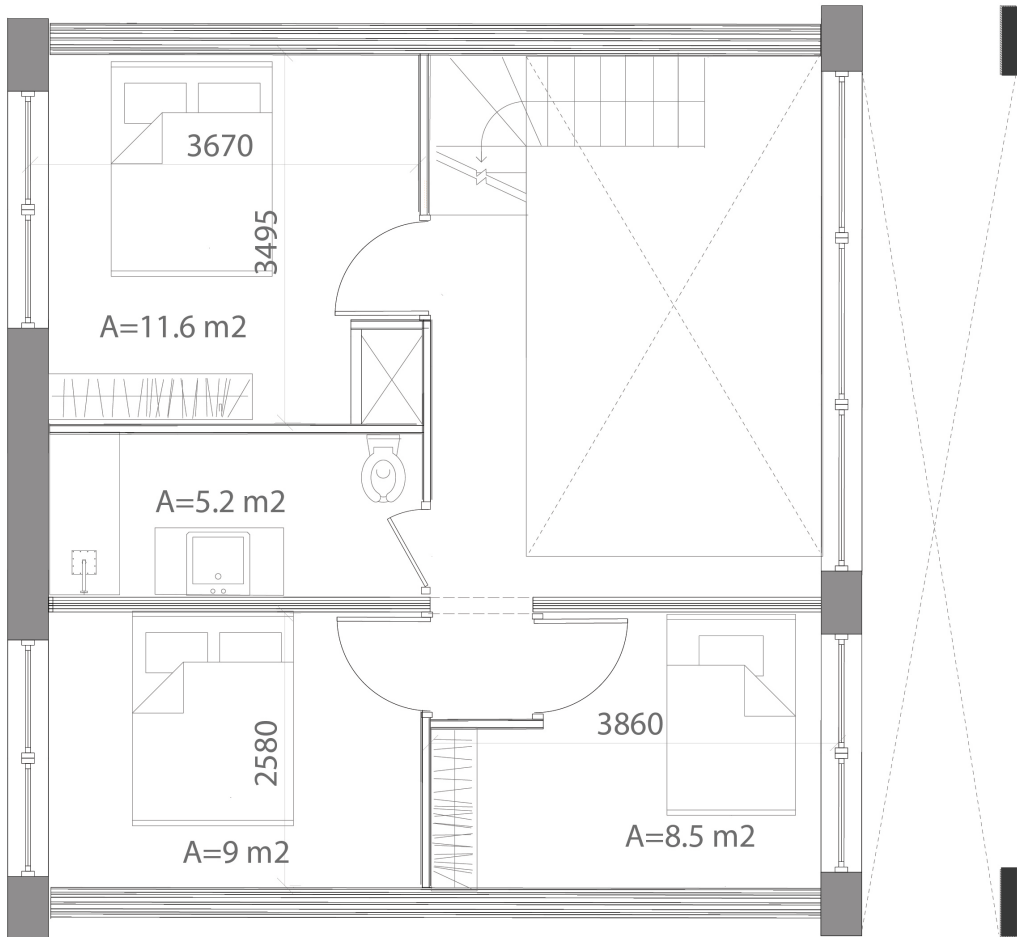
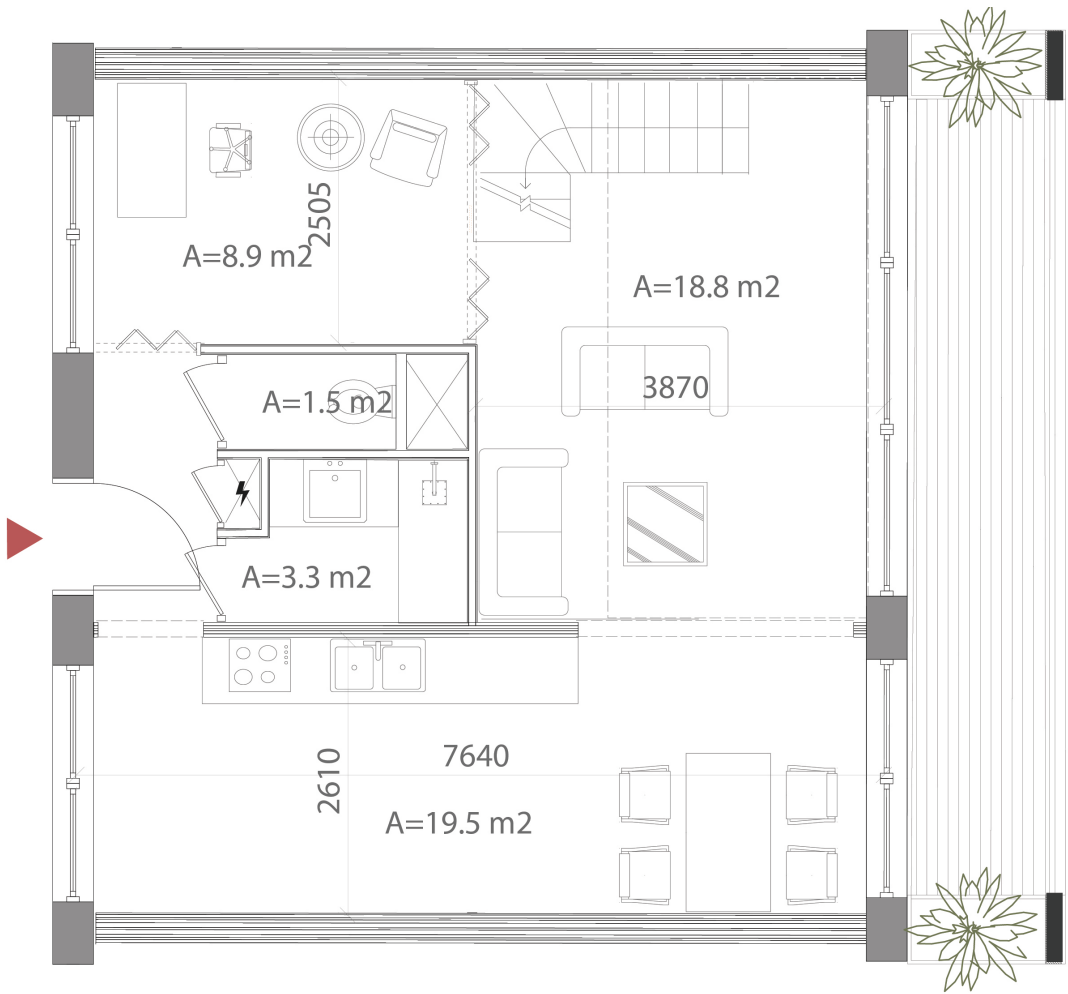
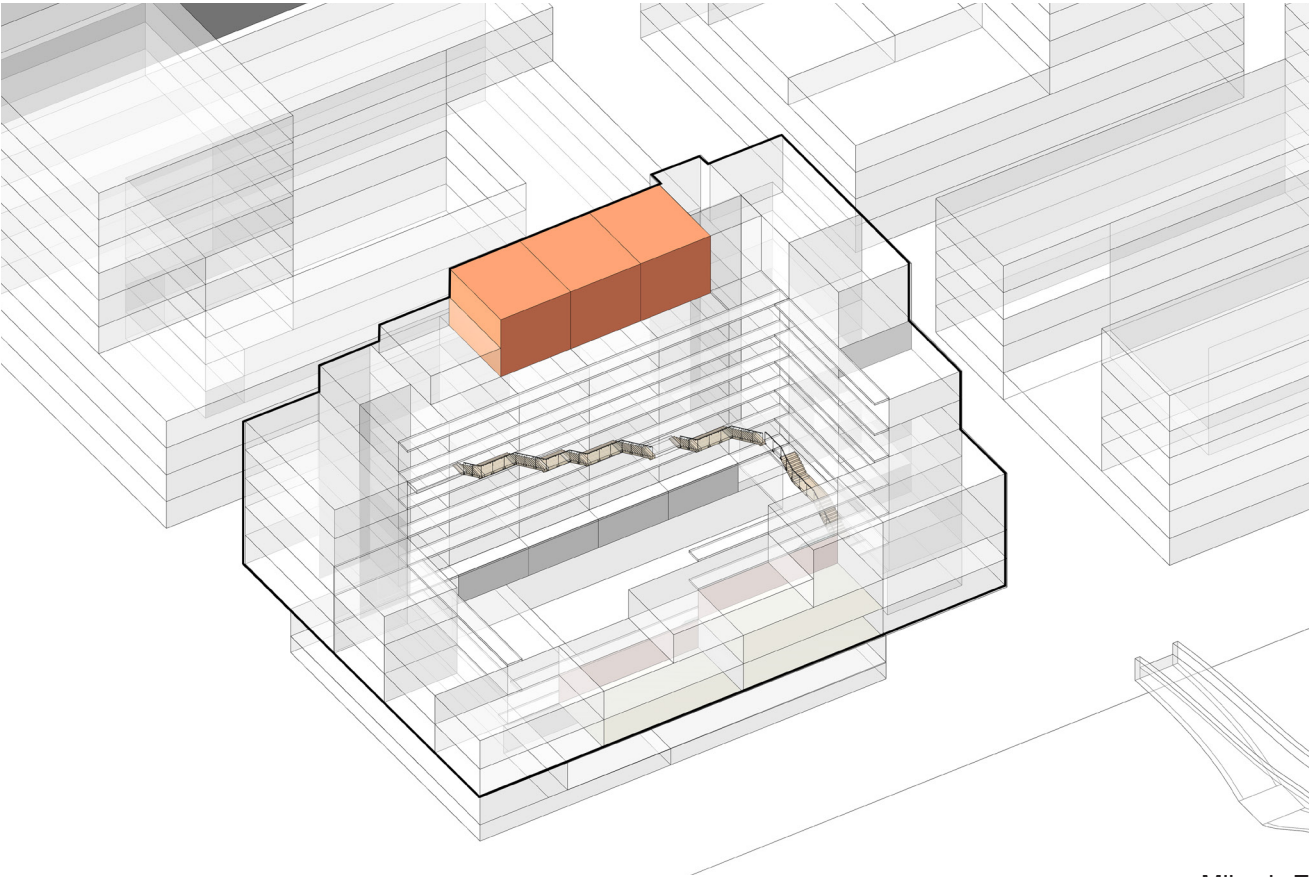
Dwelling size: 177,8 m²
Outside space: 10,6 m²
Number of bedrooms: 5
Suitable household: Family
Number of dwellings: 1 on Levels 7 and 7+





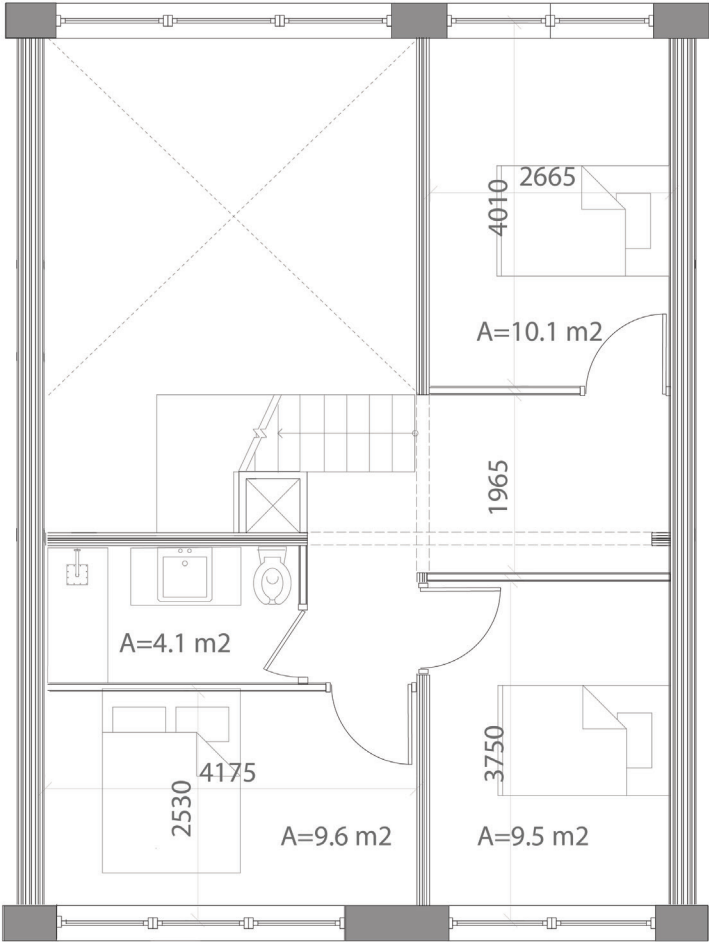
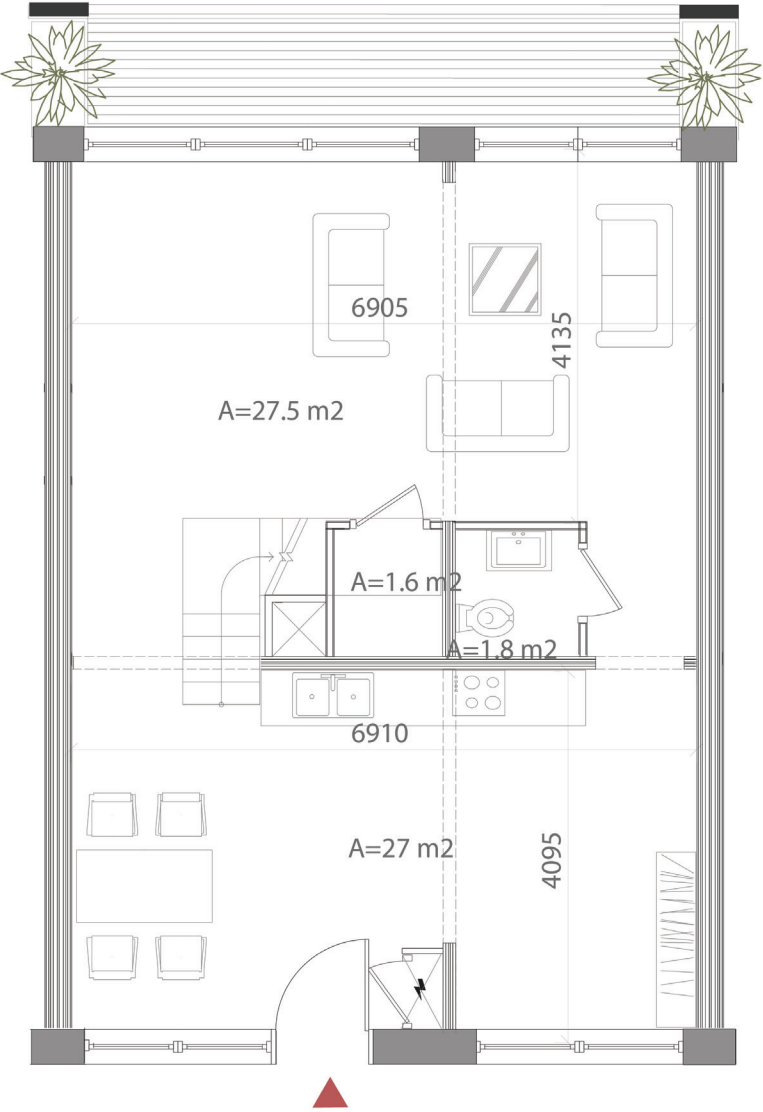
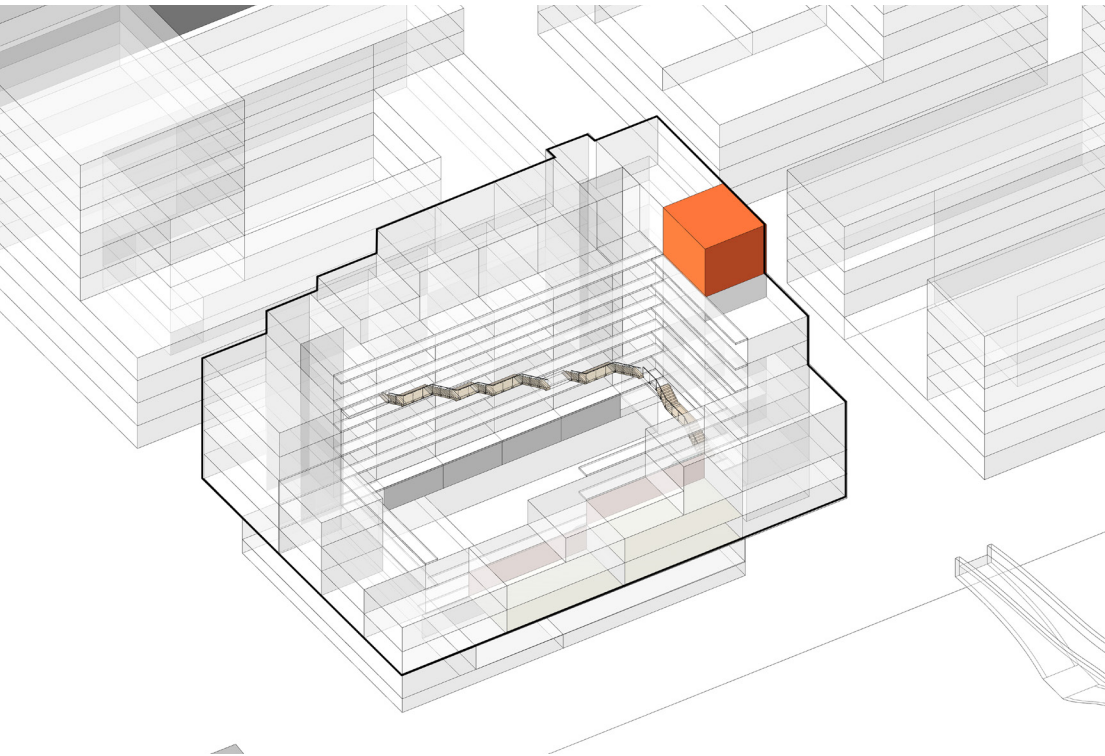
DWELLING 10

Dwelling size: 114 m²
Outside space: 10,5 m²
Number of bedrooms: 3 +1
Suitable household: Family
Number of dwellings: 1 on Levels 7, 7+



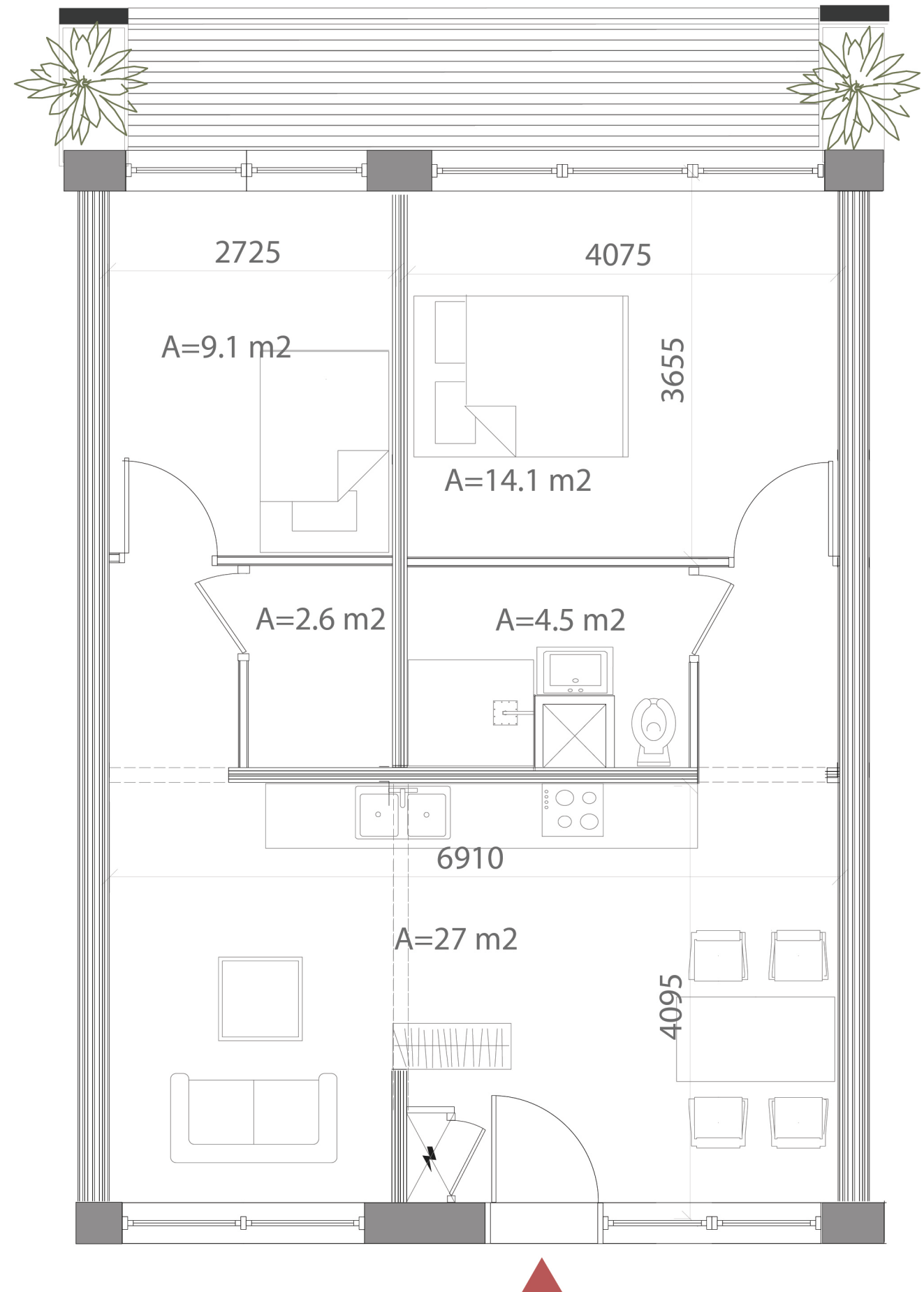
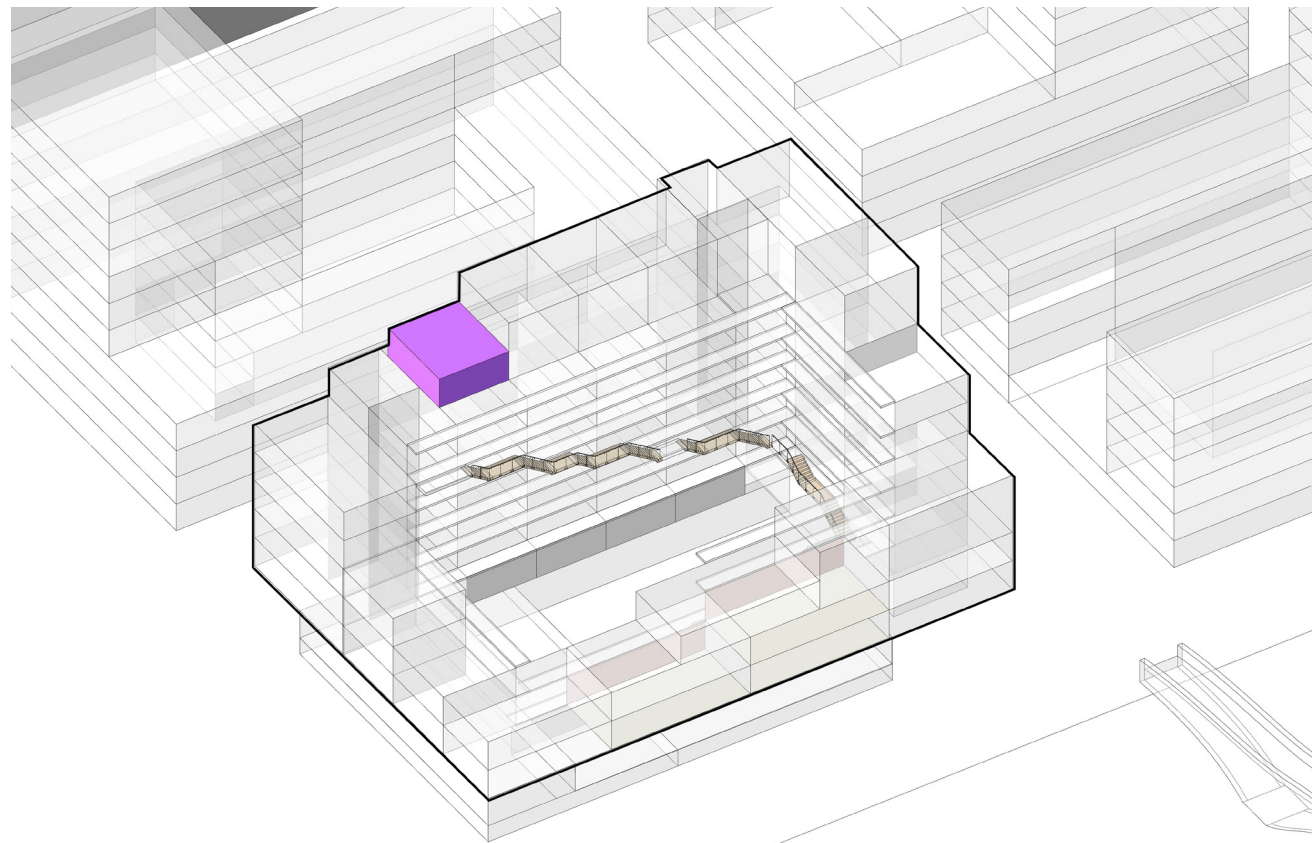
DWELLING 11

Dwelling size: 120 m²
Outside space: 10,5 m²
Number of bedrooms: 3
Suitable household: Family
Number of dwellings: 3 on Levels 7, 7+



DWELLING 12

Dwelling size: 70.8 m²
Outside space: 10,5 m²
Number of bedrooms: 2
Suitable household: Family
Number of dwellings: 1 on Level 7



THANK YOU FOR YOUR ATTENTION!

