



ARCHITECTURE STUDENT CONTEST
20th INTERNATIONAL EDITION, NORD ISÈRE 2025



Ralfs Edvards Ašaks
Latvia



Emīlija Bumbule
Latvia

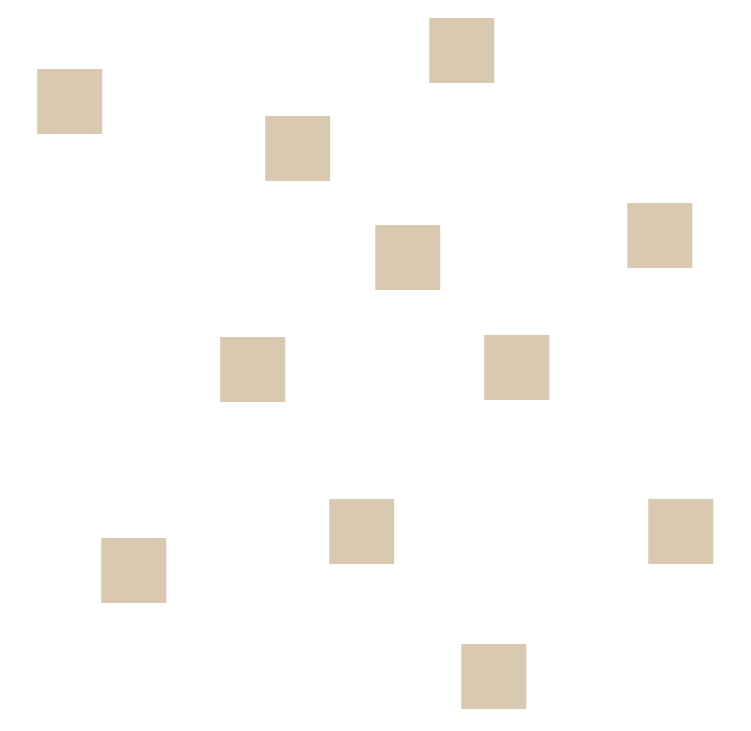


Lauma Freimane
Latvia

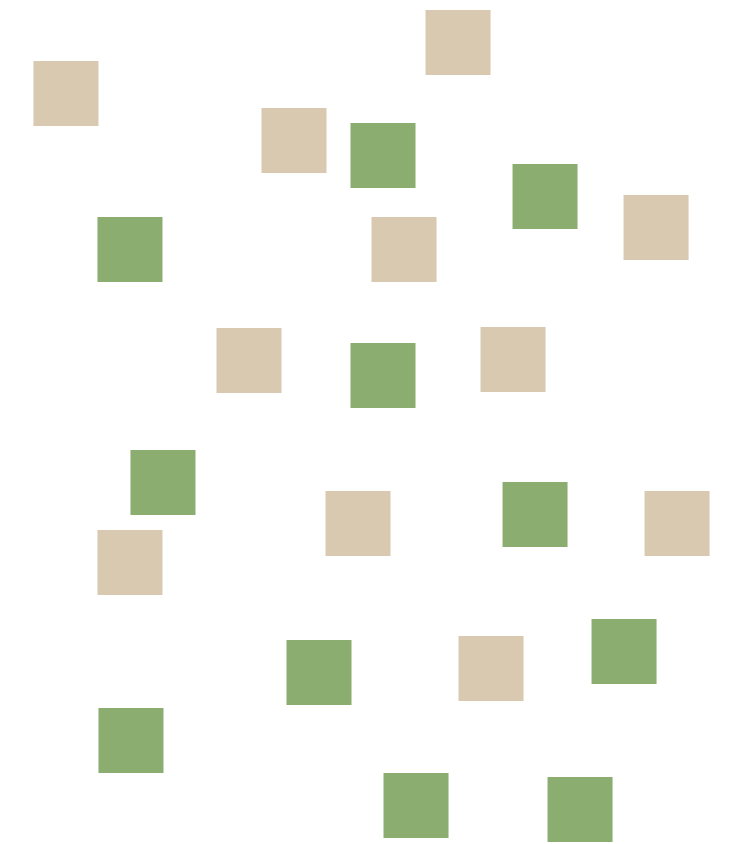


ZONE B new construction

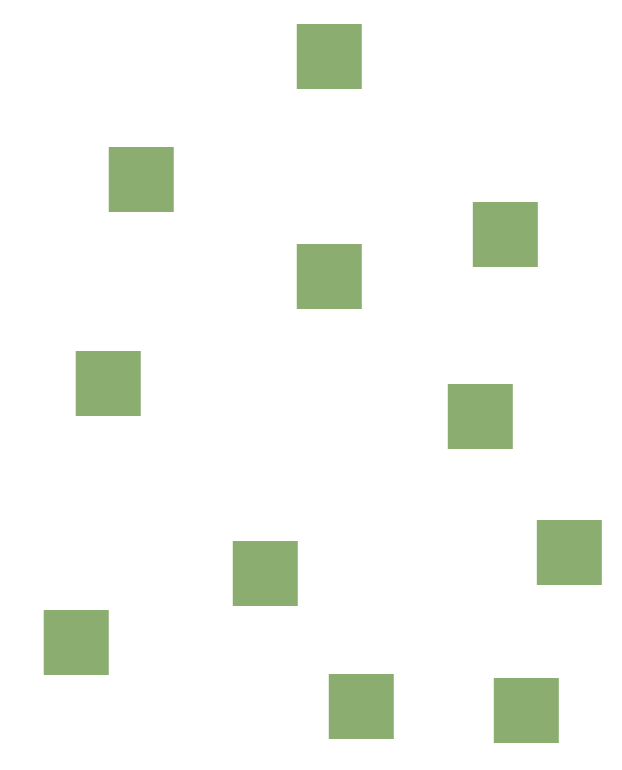
concept



Les Grand Atelier prototypes

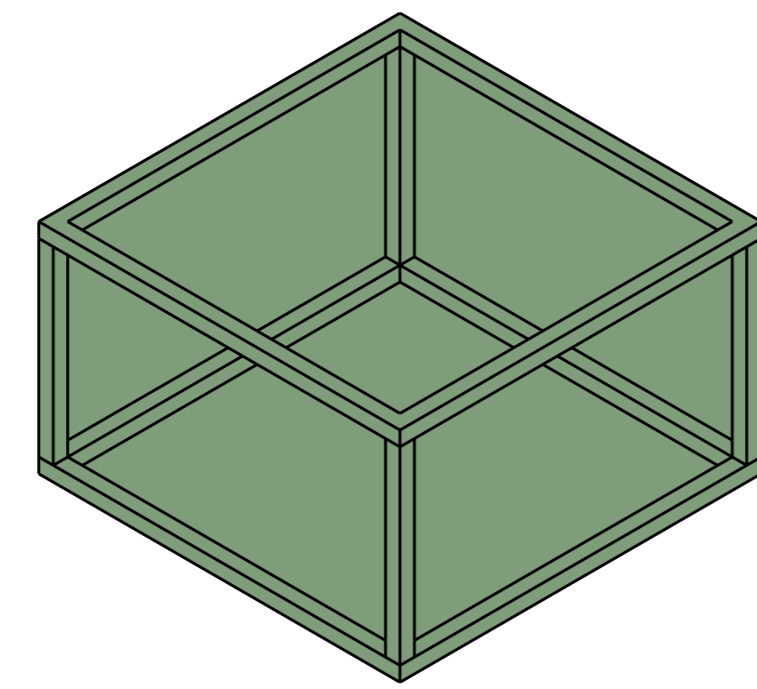


jardin



Program for Campus

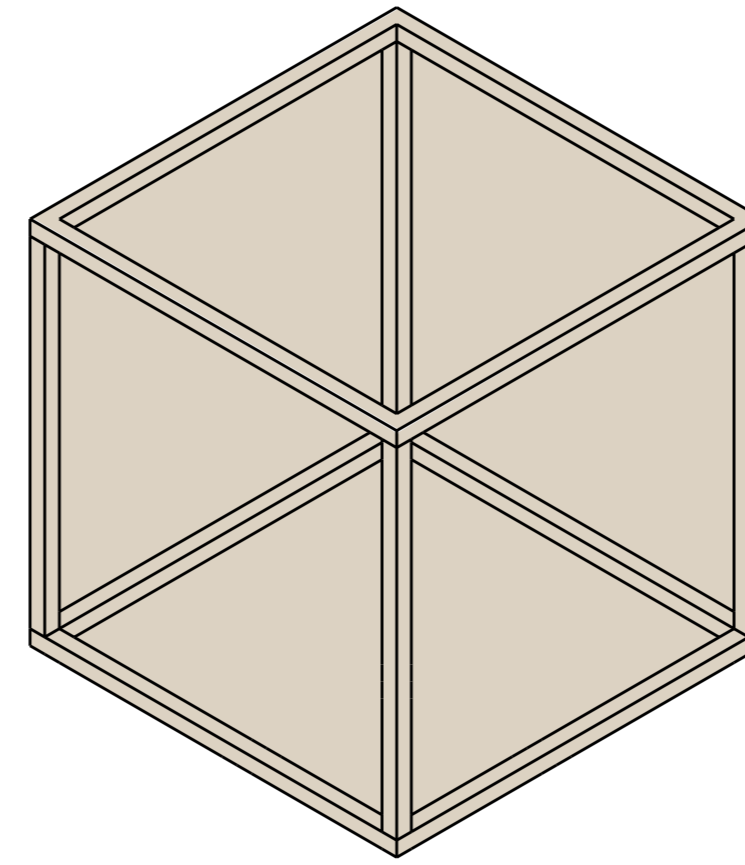
configuration



5 x 5 x 3

Lounge area
Flexible space
Utility rooms

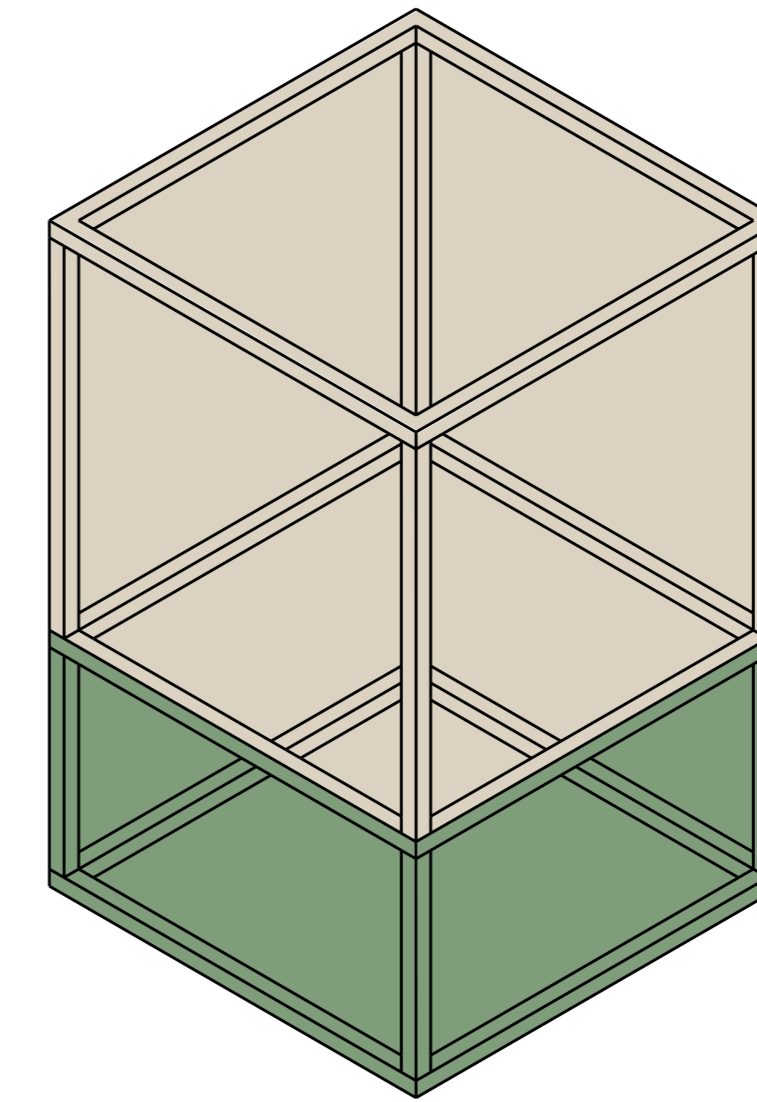
+



5 x 5 x 5

Sleeping area
Lounge area
Storage

=



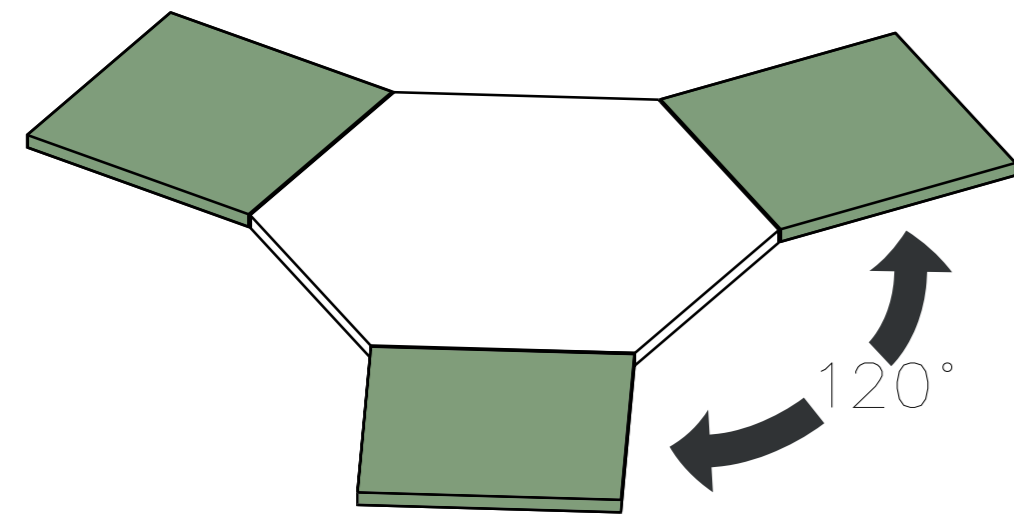
5 x 5 x 8

Up to

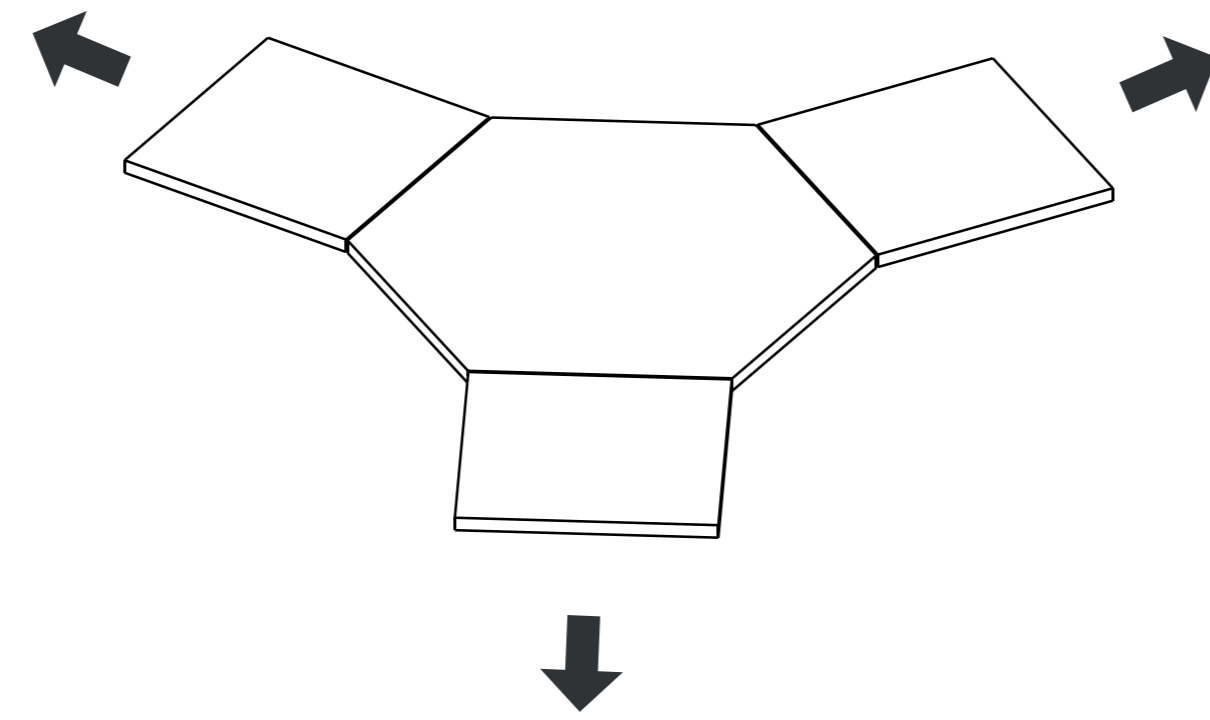
9

Configurations

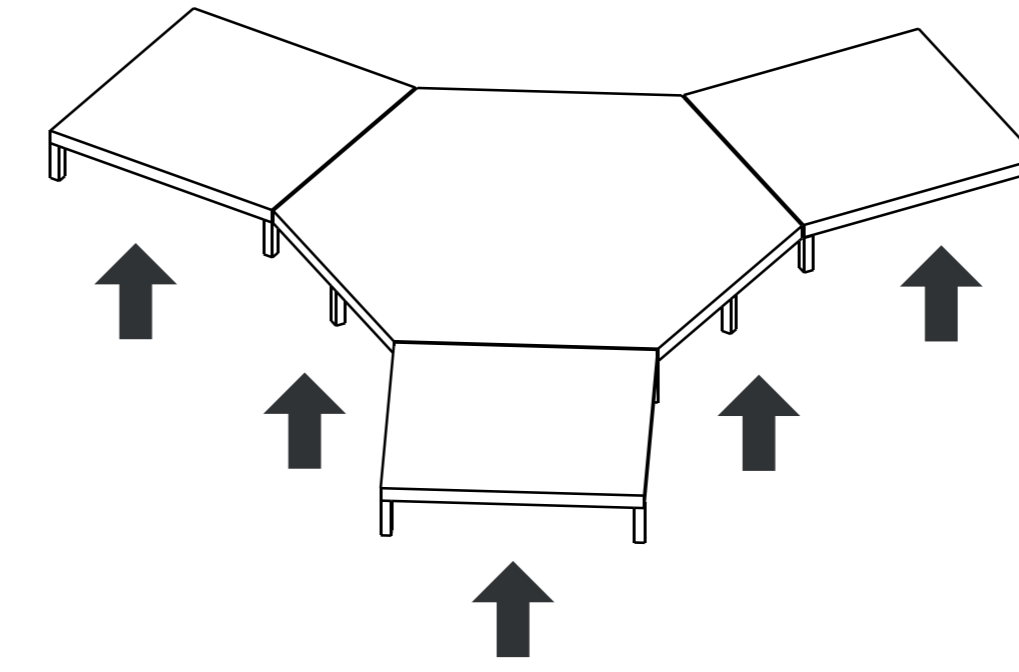
form development



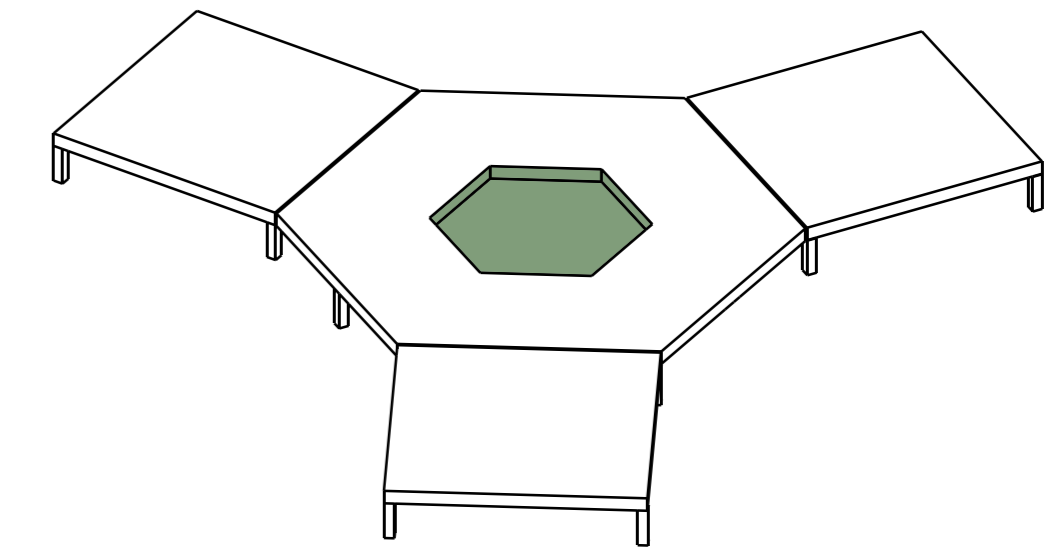
distribution



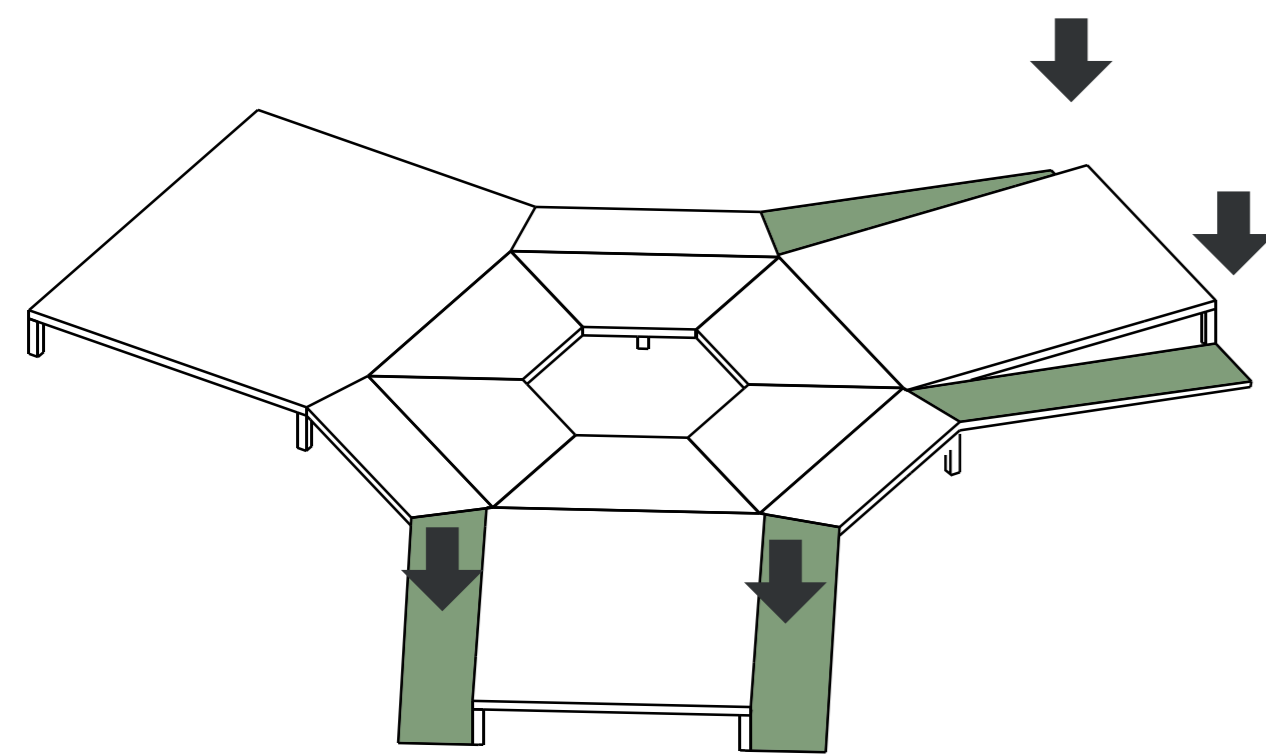
privacy-function



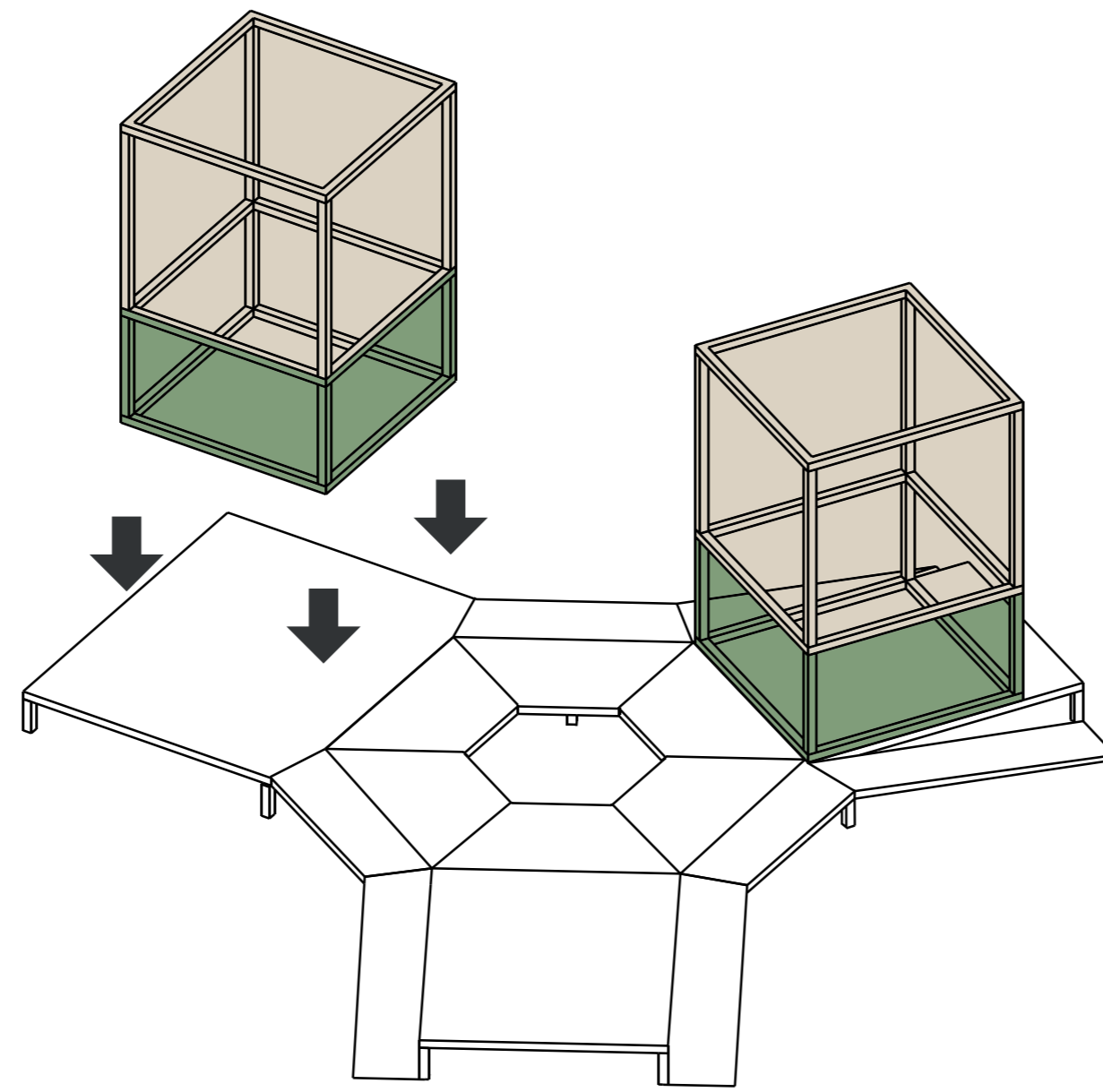
elevated terrain



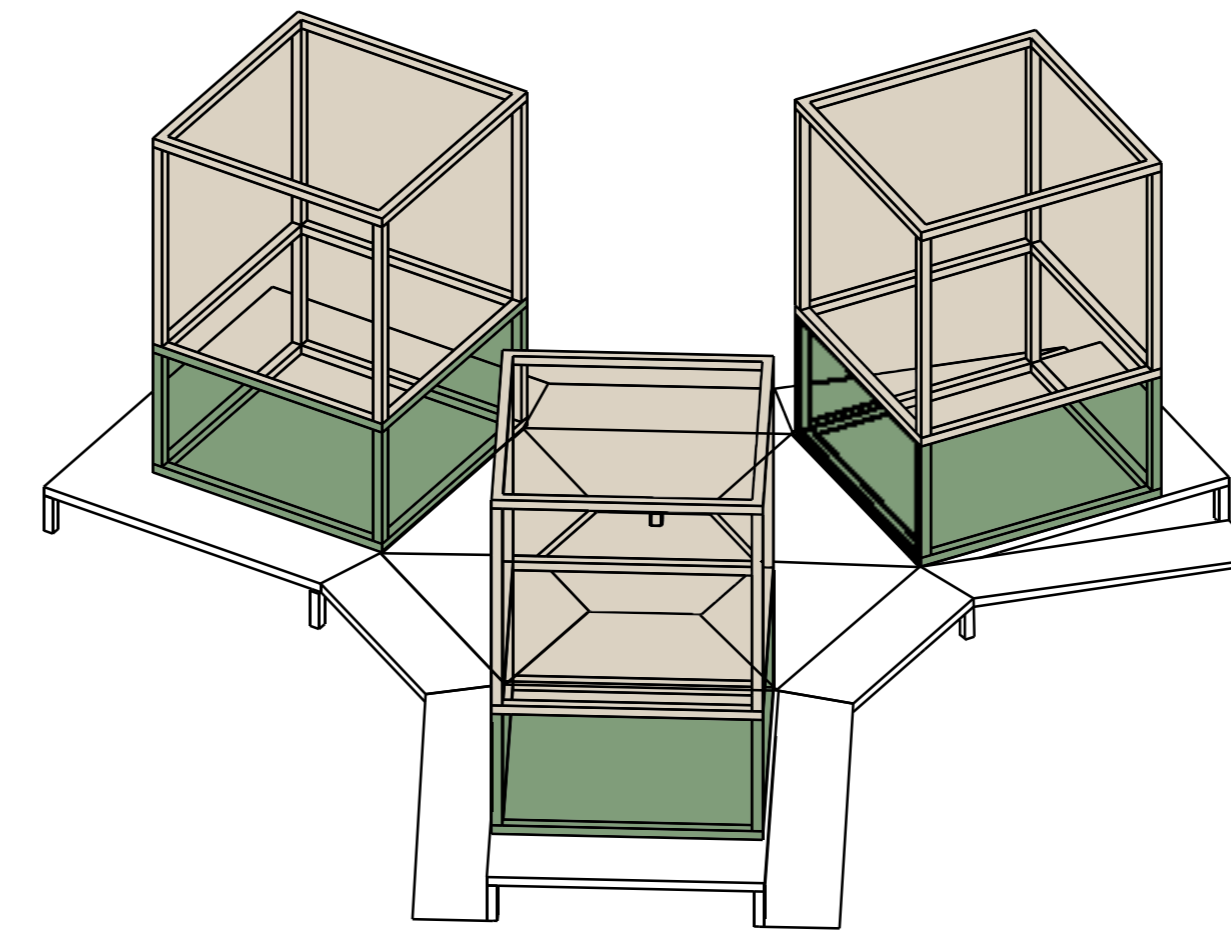
community focal point



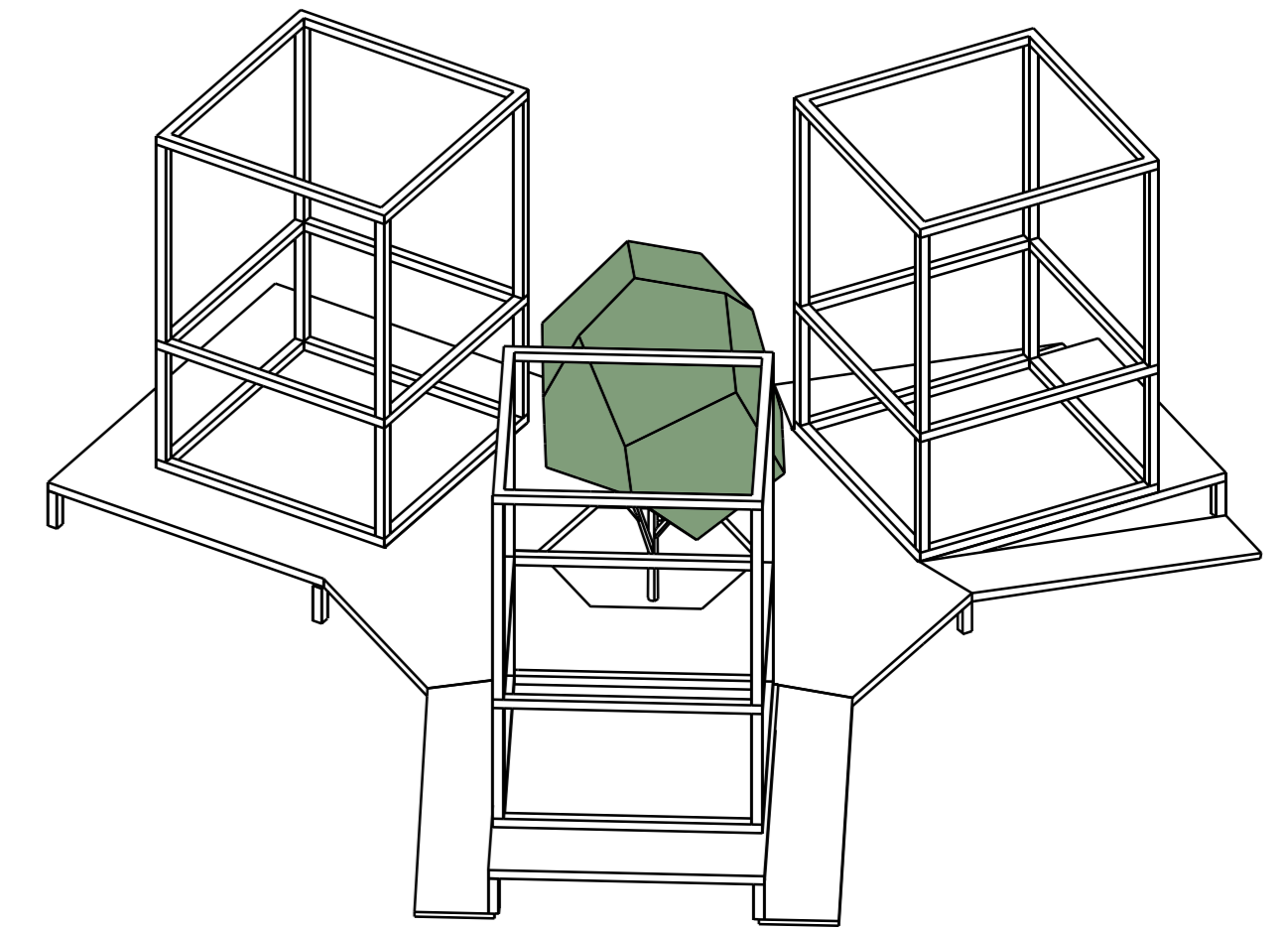
connection with terrain



assembly

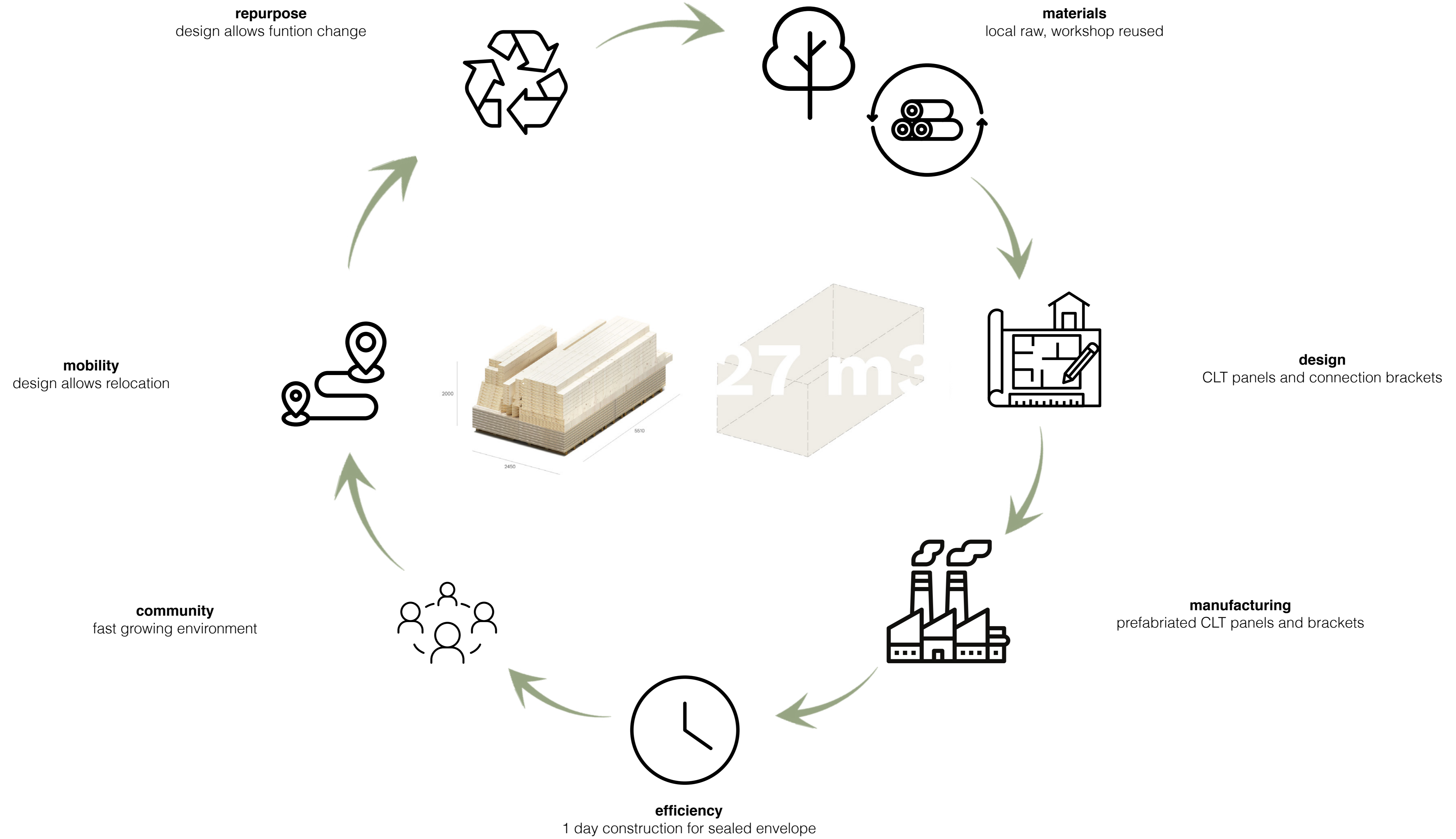


program



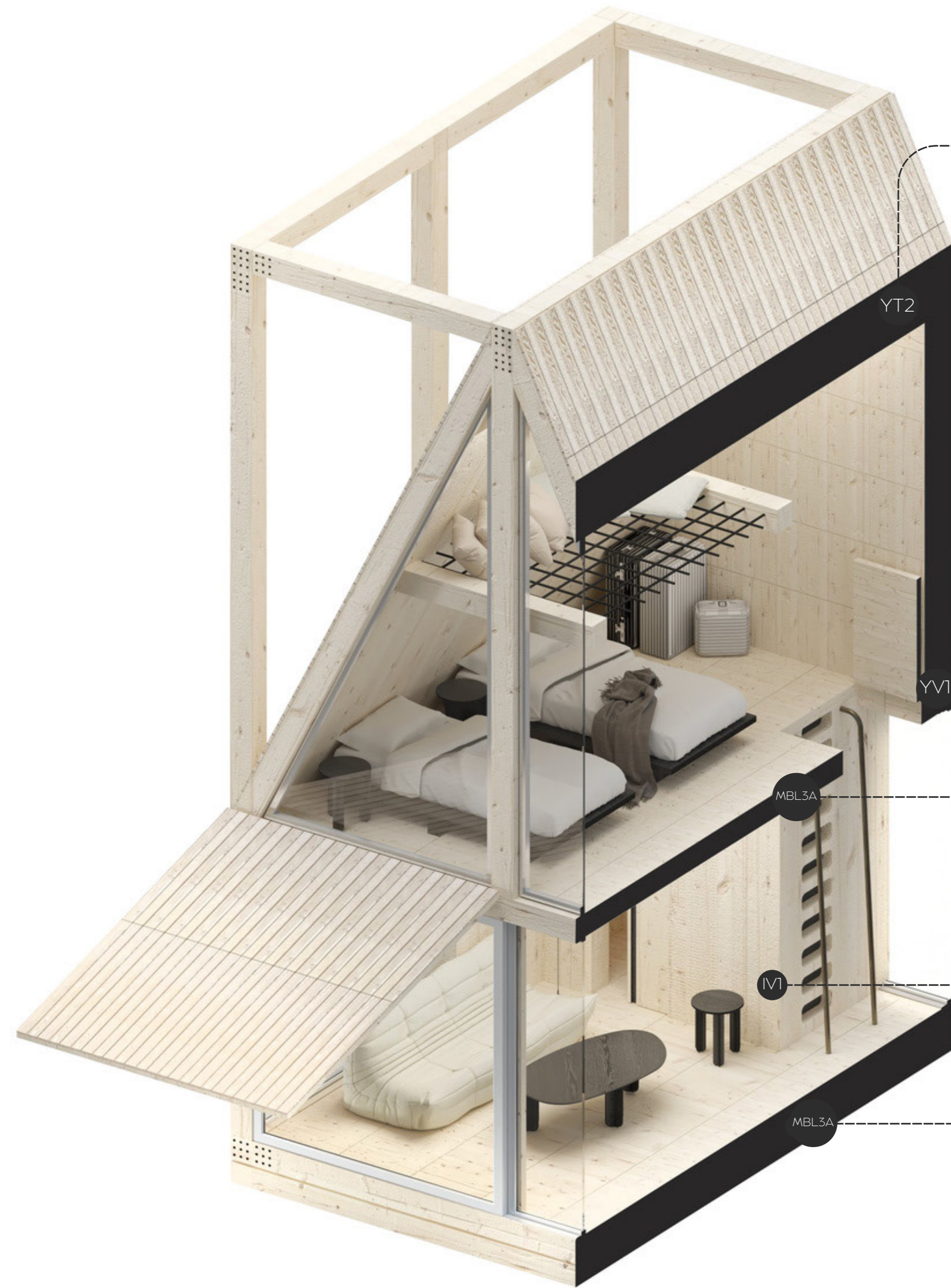
nature

life cycle analysis



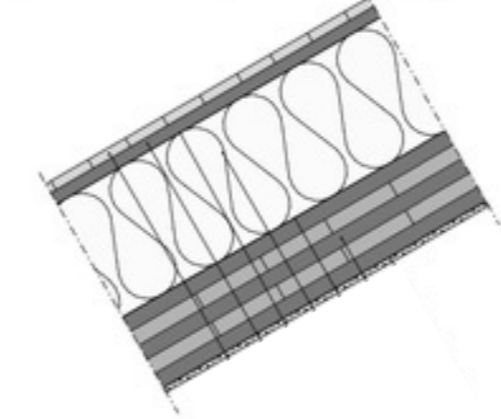
COMFORT

materials and specification



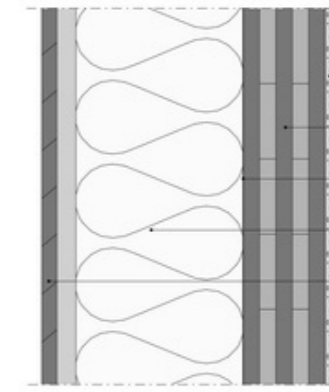
YT2

Fire resistance (inside and out) REI CLT180 (5 layers) REI 90 Load 6 kN/m² at a span width of 5 metres



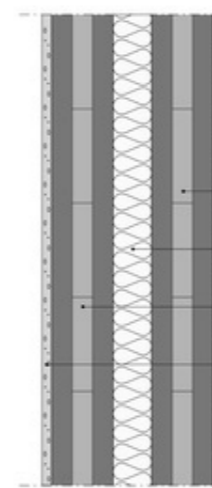
YV1

Fire resistance² (inside and out) Façade fire REI SP Fire 105 REI 60 (μfi=60%) REI 90 (μfi=40%) Approved¹



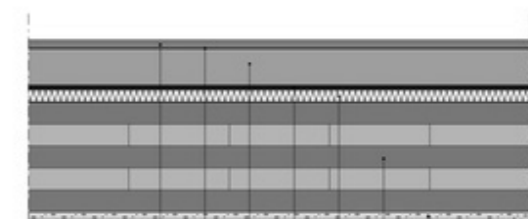
IV1

Fire resistance & load utilisation REI / μfi (%) (3 layers) REI 60 / μfi 10%²



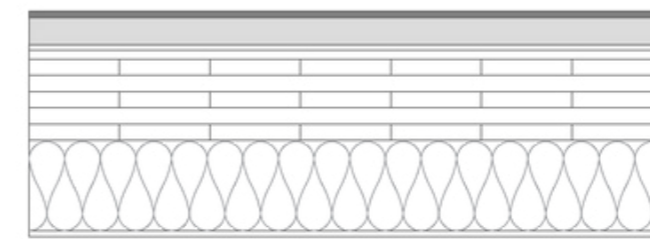
MBL3A

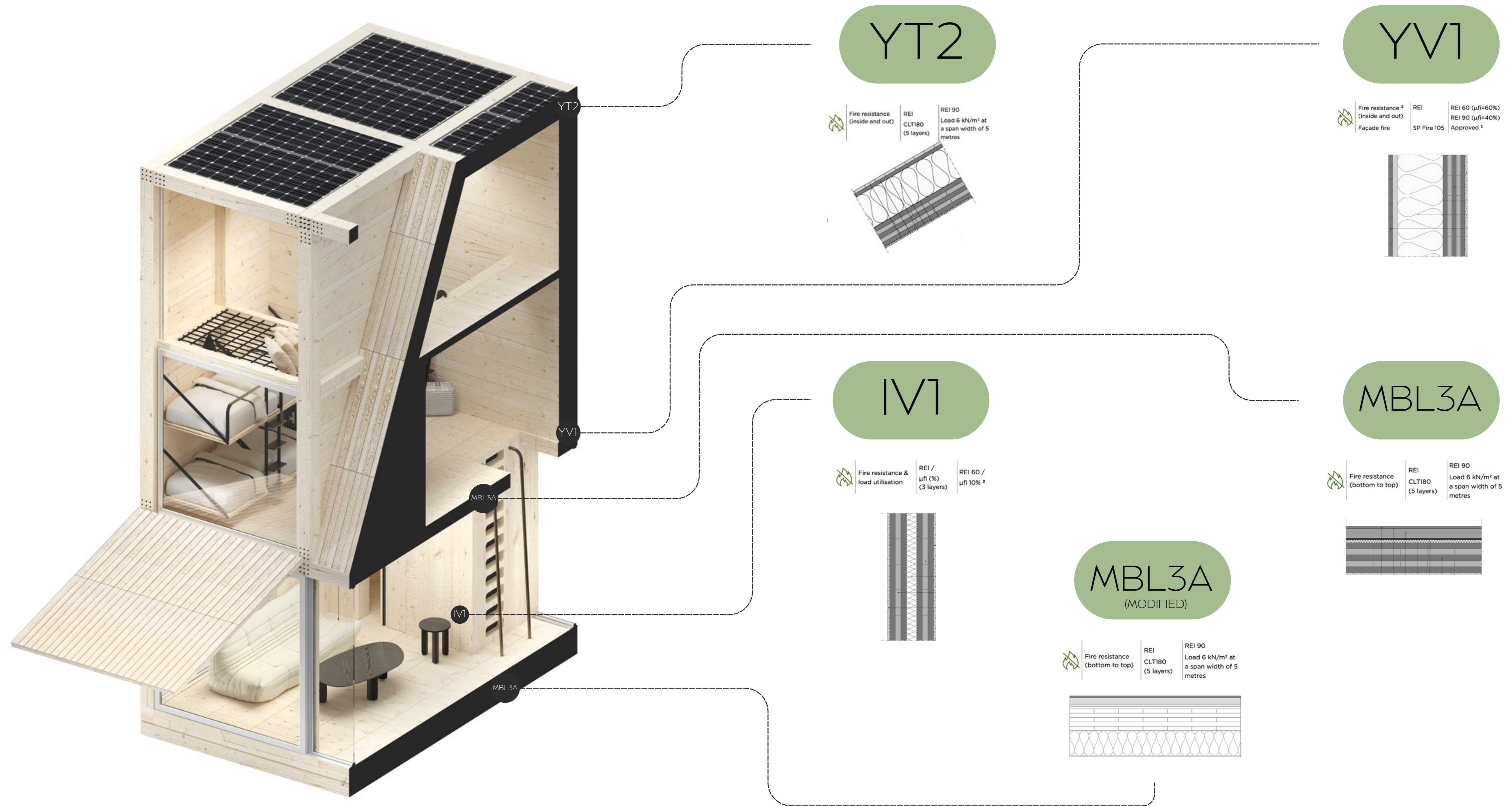
Fire resistance (bottom to top) REI CLT180 (5 layers) REI 90 Load 6 kN/m² at a span width of 5 metres



MBL3A (MODIFIED)

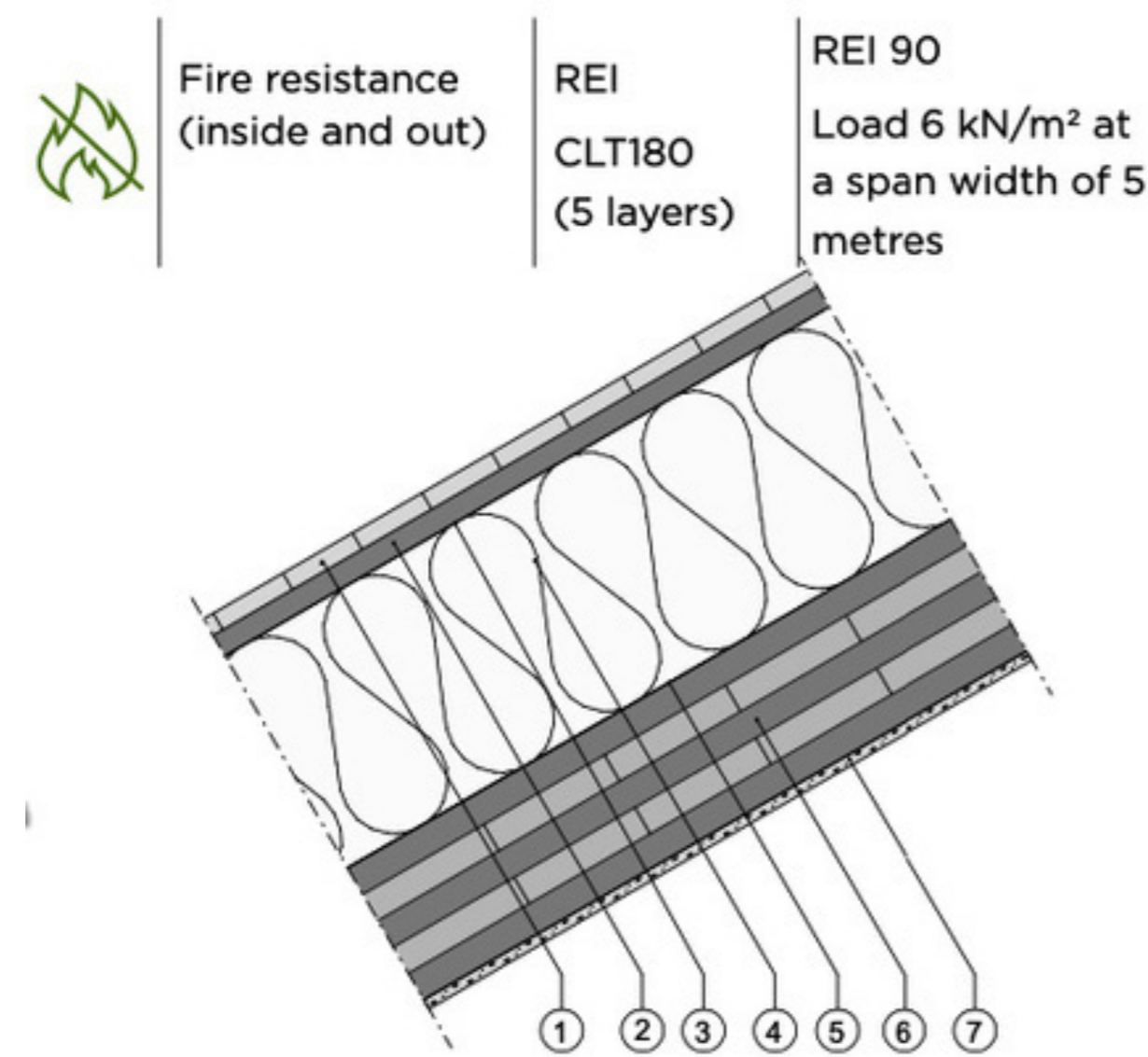
Fire resistance (bottom to top) REI CLT180 (5 layers) REI 90 Load 6 kN/m² at a span width of 5 metres





YT2

SLOPING ROOF



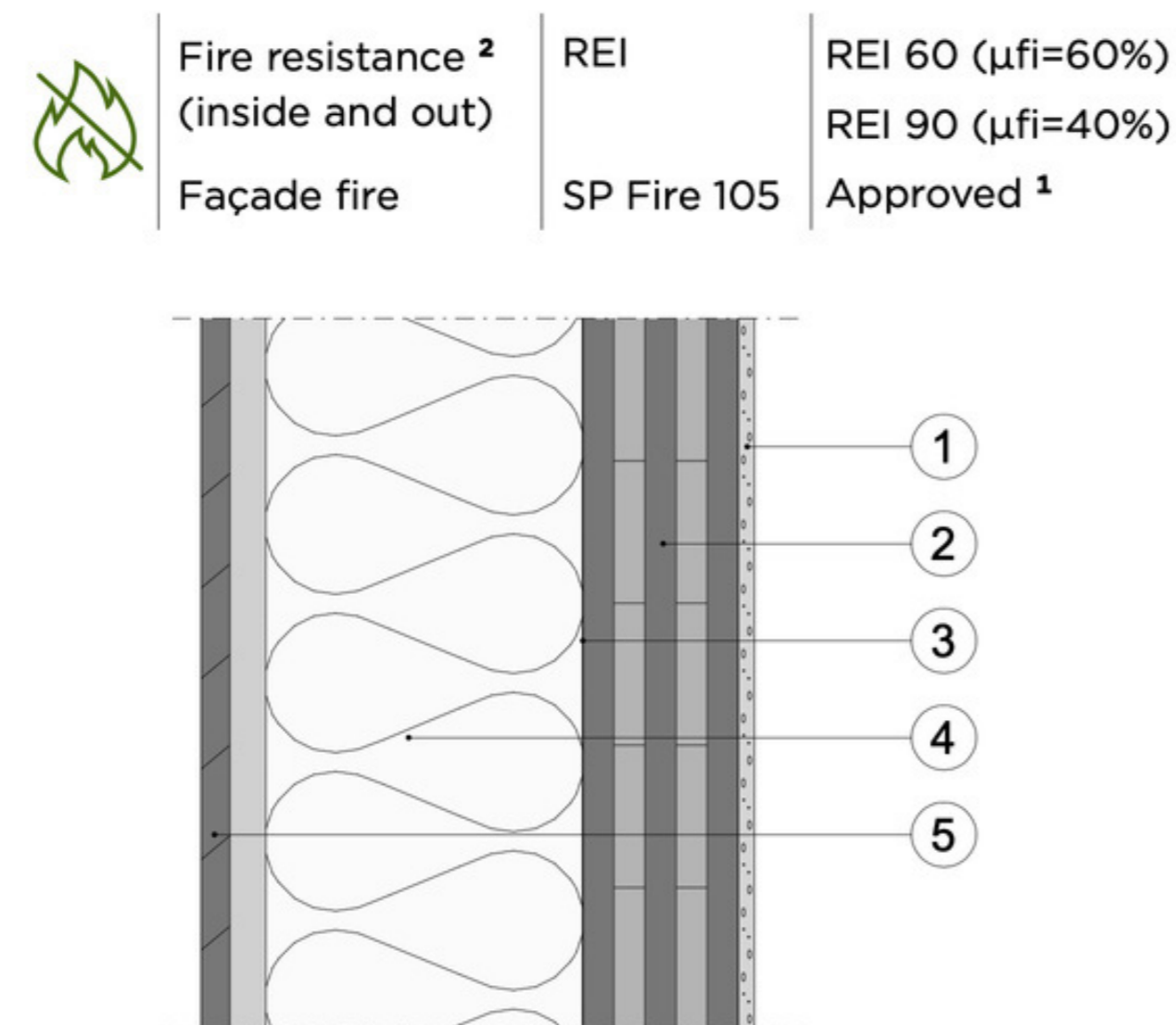
1. 20 mm Tongue-in-groove board
2. 28 mm Ventilated air gap built on wooden lath
3. 0.4 mm ISOVER Vempro® underlay
4. 290 mm ISOVER PLUS+ Board 32 between 290 mm ISOVER PLUS+ Stud 1 (centre distance 1000)
5. 0.1 mm ISOVER Vario® Xtra
6. 180 mm CLT element
7. 12.5 mm Gyproc GNE 13 Normal

PERFORMANCE BASED ON THE SELECTED THICKNESS

Properties and definitions			245/245
	U-value	W/m²K	0.12 ¹
	Carbon footprint	kg CO ₂ per m ²	22.1 ²
	Weight	kg/m ²	109
	Structural thickness	mm	486

YV1

EXTERIOR WALLS



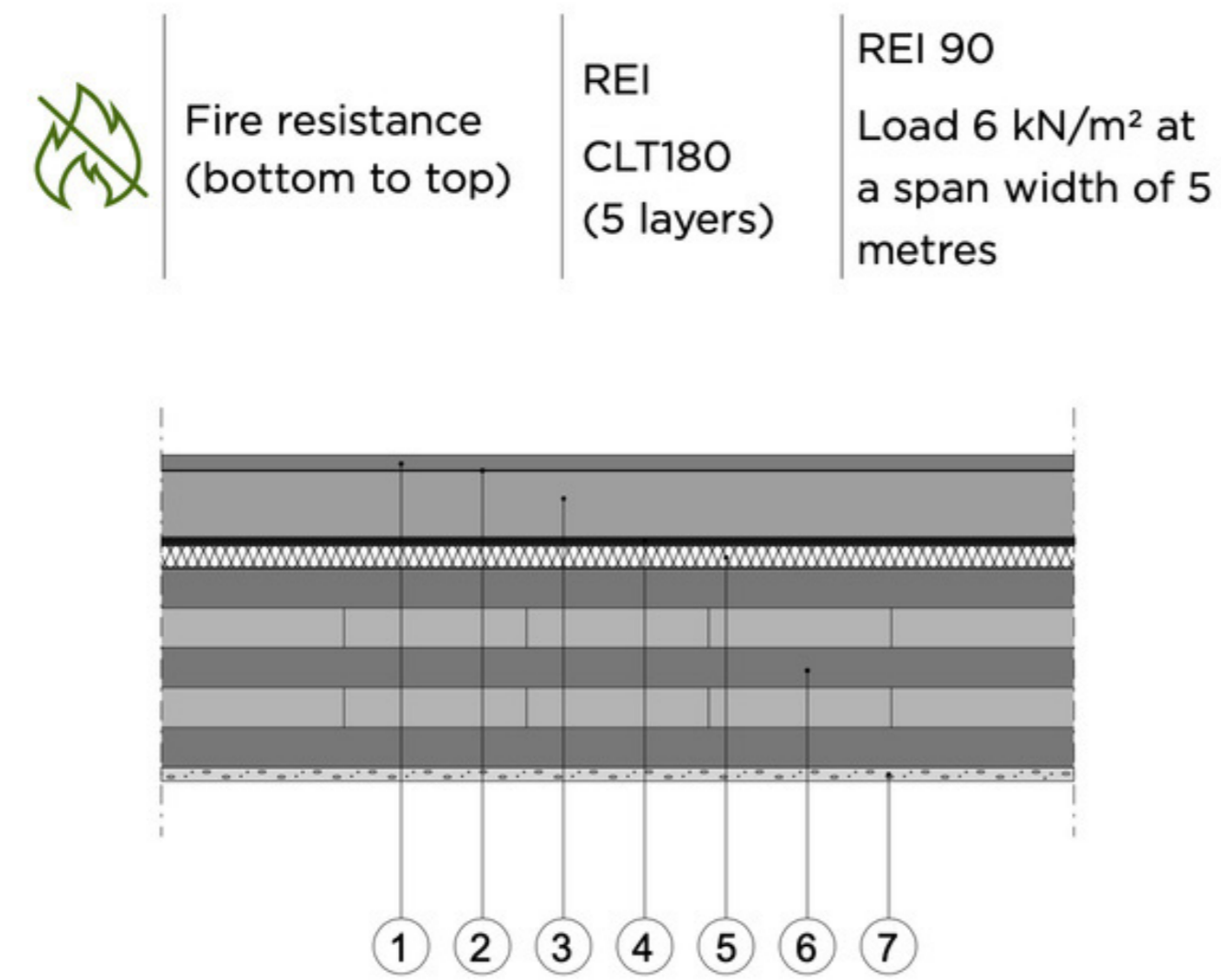
1. 12.5 mm Gyproc GNE 13 Normal
2. 120 mm CLT element
3. 0.2 mm ISOVER Vario® Xtra
4. 220 mm ISOVER PLUS+ Board 32 between 245 mm ISOVER PLUS+ Stud 1
5. 22 mm Wooden façade Moelven Thermowood

PERFORMANCE BASED ON THE SELECTED THICKNESS

Properties and definitions			245/245 ⁶
	Sound reduction	R _w	46 ³
		R _w C	41 ³
		R _w +C _{tr}	36 ³
	U-value	W/m²K	0.12 ⁴ 0.12 ⁵
	Carbon footprint	kg CO ₂ per m ²	19.5 ⁴ 18.5 ⁵
		Weight	kg/m ²
	Structural thickness	mm	425

MBL3A

INTERMEDIATE JOISTS

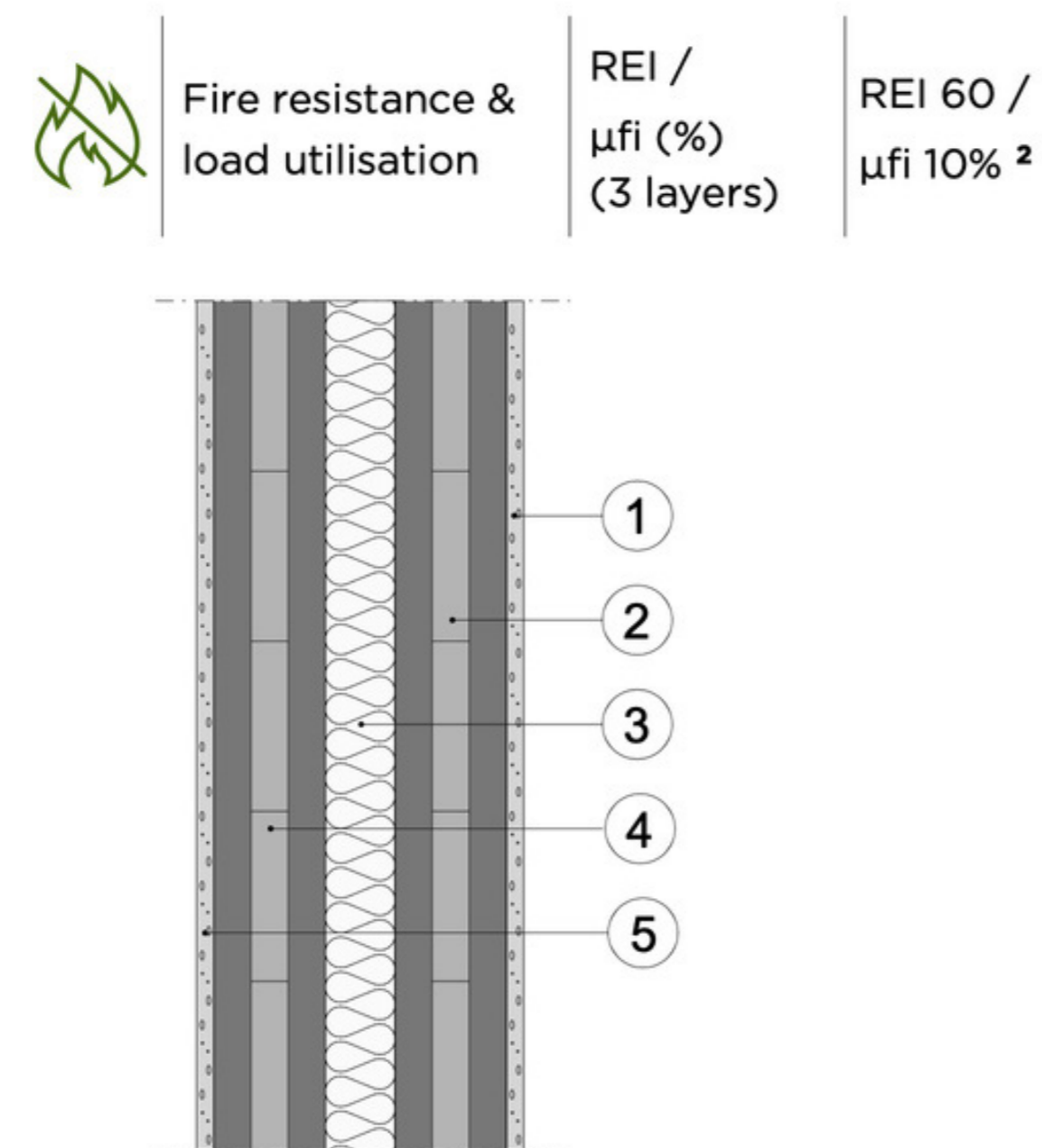


1. 14 mm Parquet
2. 2 mm Foam
3. 60 mm weberfloor 150 dura
4. 12 mm Aprobo Decibel 4
5. 20 mm Glava footstep impact sound board
6. 180 mm CLT element
7. 12.5 mm Gyproc GNE 13 Normal

Properties and definitions			
🎧	Sound reduction	$L_{n,w}$ (dB)	54 ¹
		$L_{n,w} + C_{1,50-2500}$ (dB)	58 ¹
🌐	Airborne sound	R_w (dB)	54 ¹
		$R_w + C_{50-3150}$ (dB)	52 ¹
🌍	Carbon footprint	kg CO ₂ per m ²	34
🌿	Weight	kg/m ²	234
↔	Structural thickness	mm	301

IM1

PARTITION WALLS

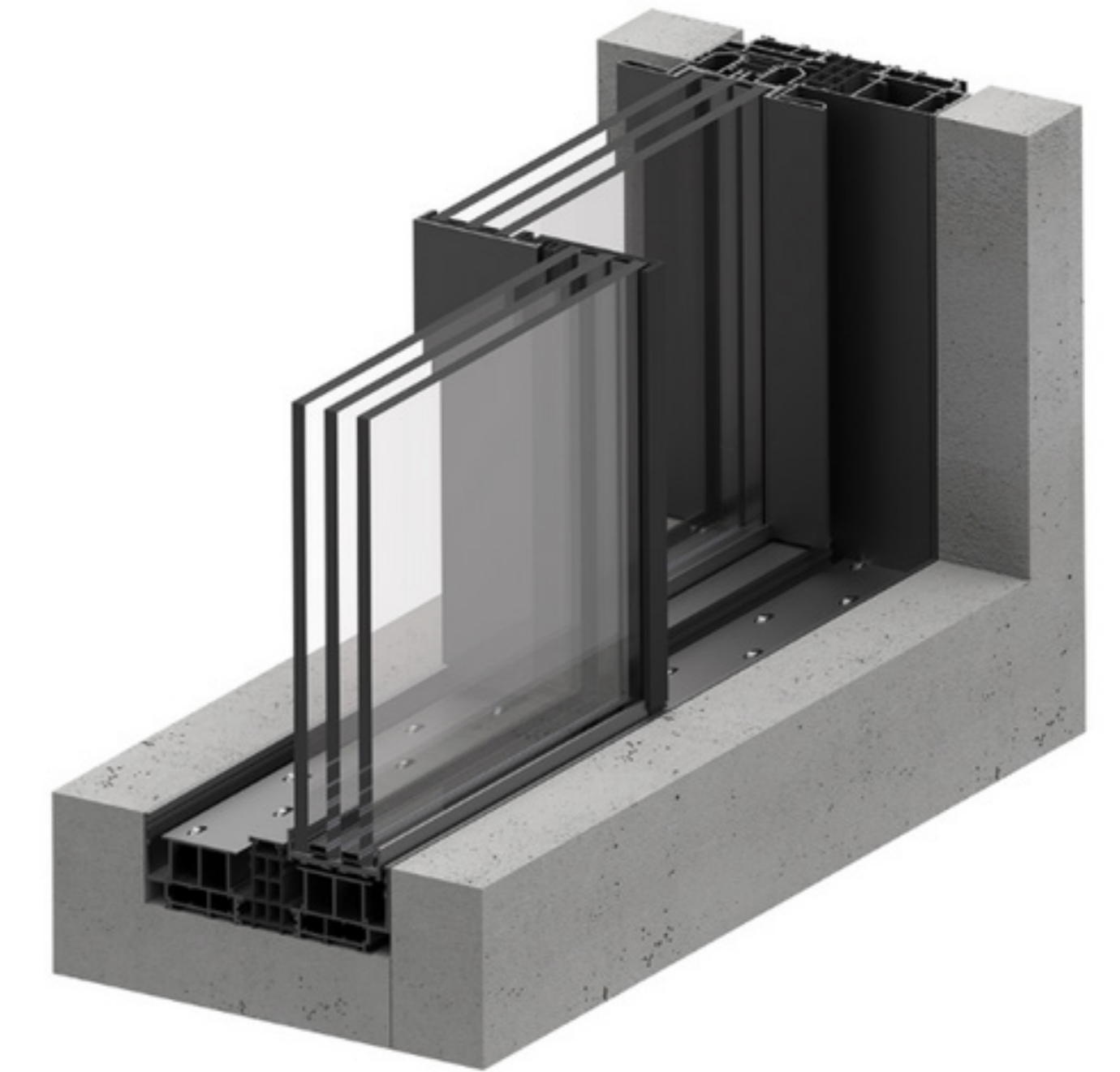
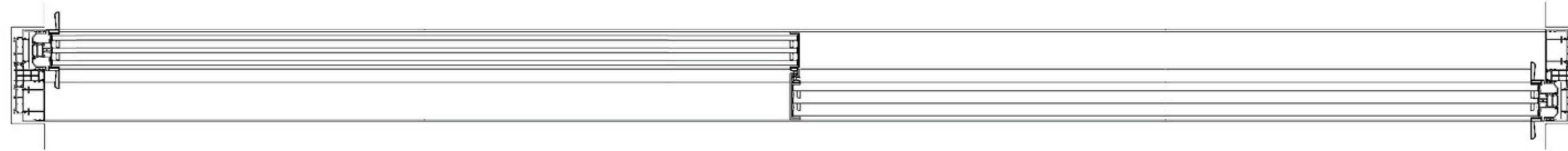


1. 12.5 mm Gyproc GNE 13 Normal
2. 80 mm CLT element
3. 50 mm ISOVER Cavity Wall Board 32
4. 80 mm CLT element
5. 12.5 mm Gyproc GNE 13 Normal

Properties and definitions			
🎧	Sound reduction	R_w (dB)	64 ¹
		$R_w + C_{50-3150}$ (dB)	57 ¹
🌍	Carbon footprint	kg CO ₂ per m ²	15
🌿	Weight	kg/m ²	91
↔	Structural thickness	mm	235

materials and specification

ah!60
WINDOWS

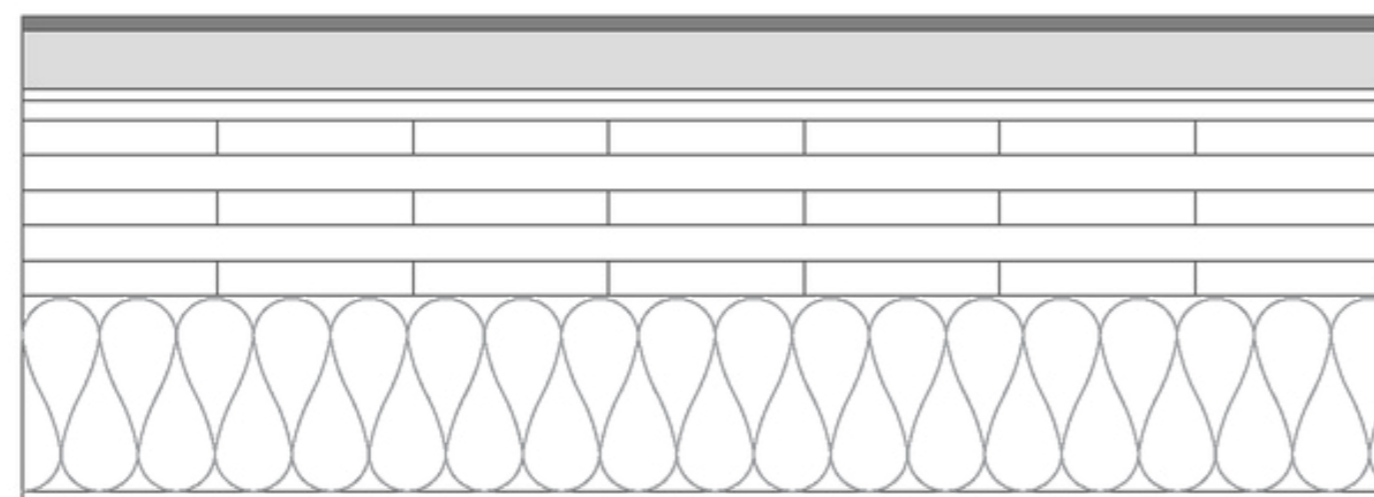


1. Thermal coefficient - $U_w = 0,708/m^2.K$ ($U_g = 0.41 W/m^2.K$)
2. Air tightness - Class 4
3. Wind resistance - Class C5
4. Water tightness - E900
5. Sound insulation - 44db
6. Security - RC4

MBL3A
(MODIFIED)
FOUNDATIONS

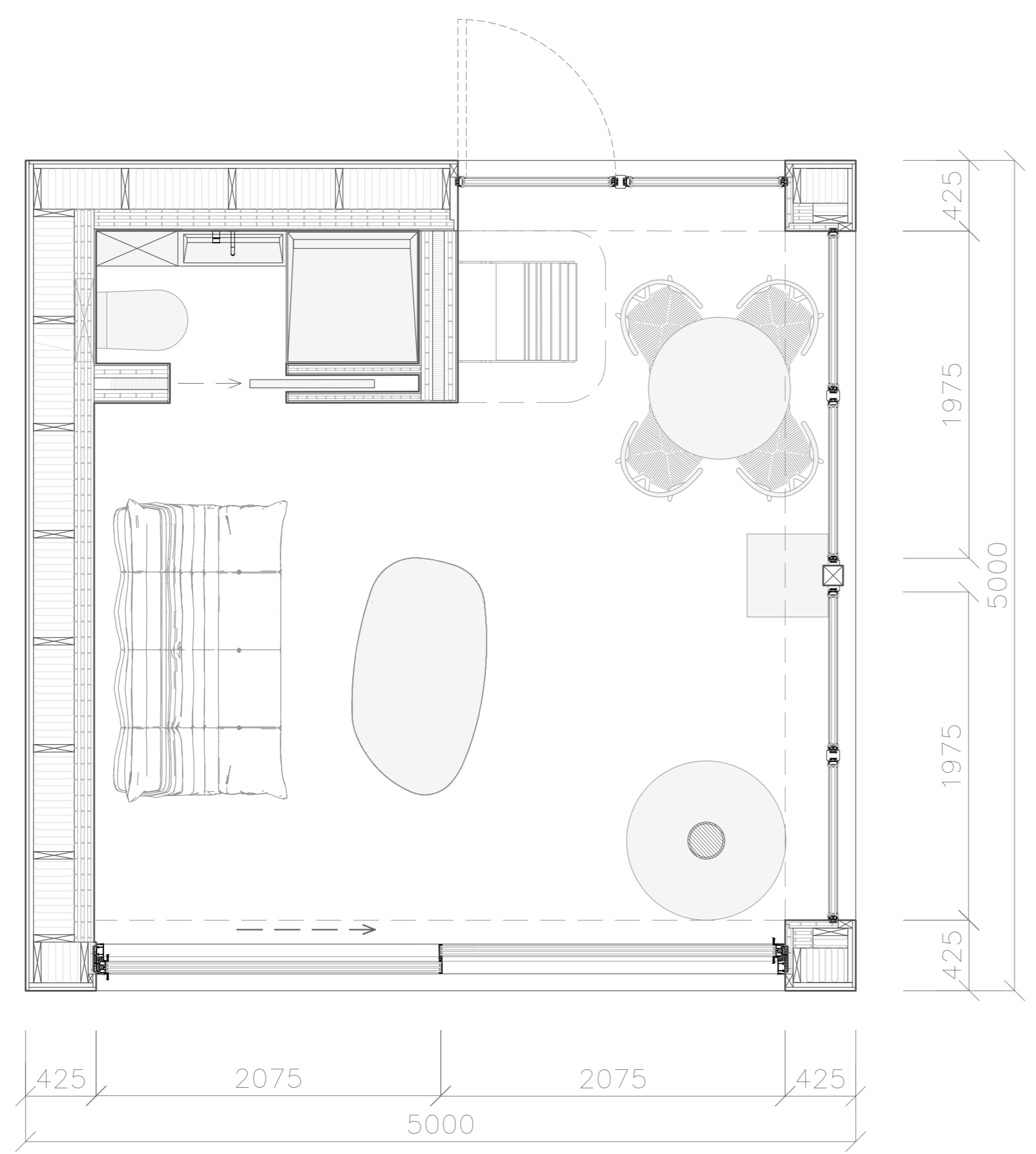
Fire resistance (bottom to top)

REI	REI 90
CLT180 (5 layers)	Load 6 kN/m ² at a span width of 5 metres

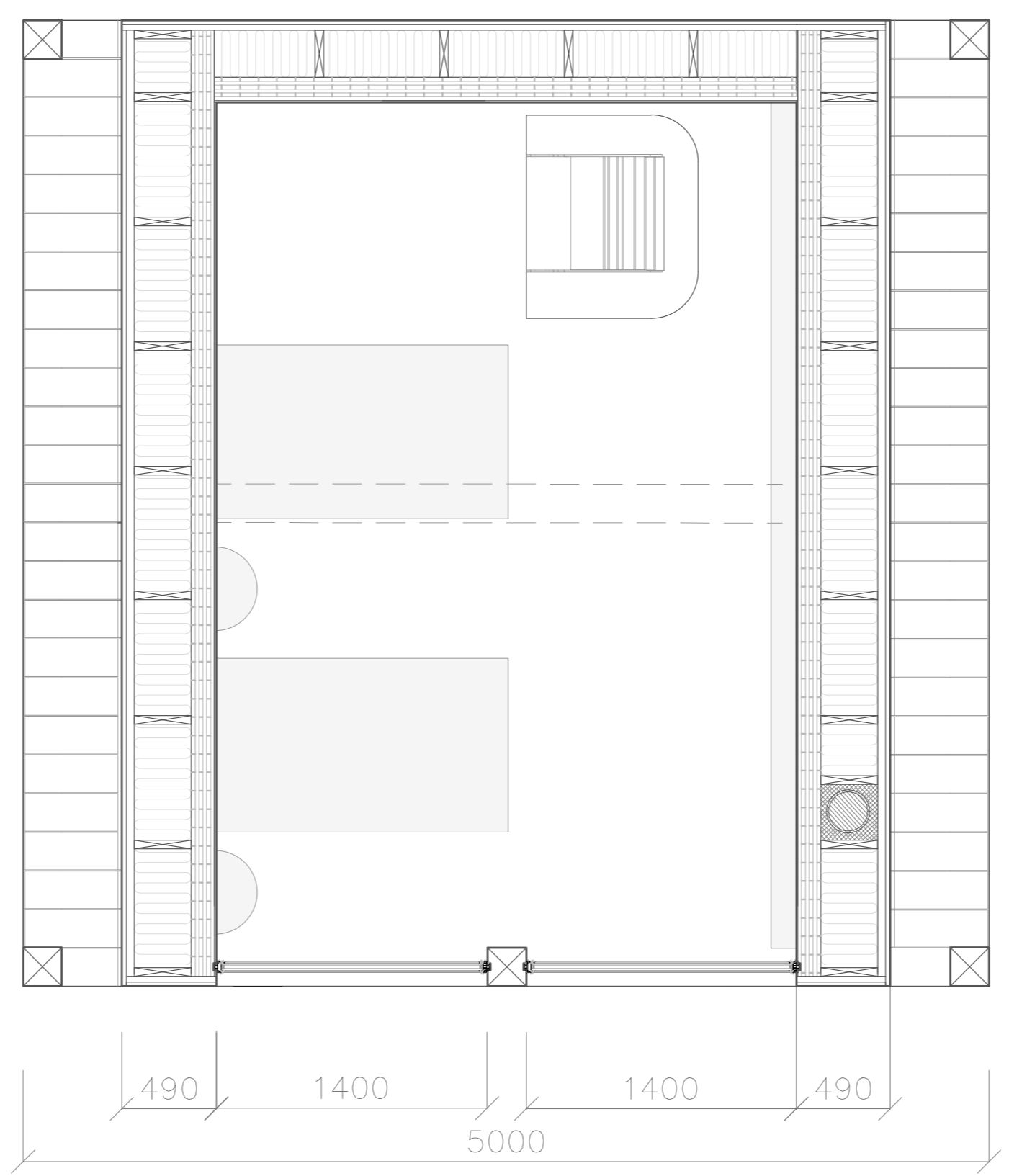


1. 14 mm Parquet
2. 2 mm Foam
3. 60 mm weberfloor 150 dura
4. 12 mm Aprobo Decibel 4
5. 20 mm Glava footstep impact sound board
6. 180 mm CLT element
7. 12.5 mm Gyproc GNE 13 Normal
8. 200mm Insulation
9. 13mm Cladding

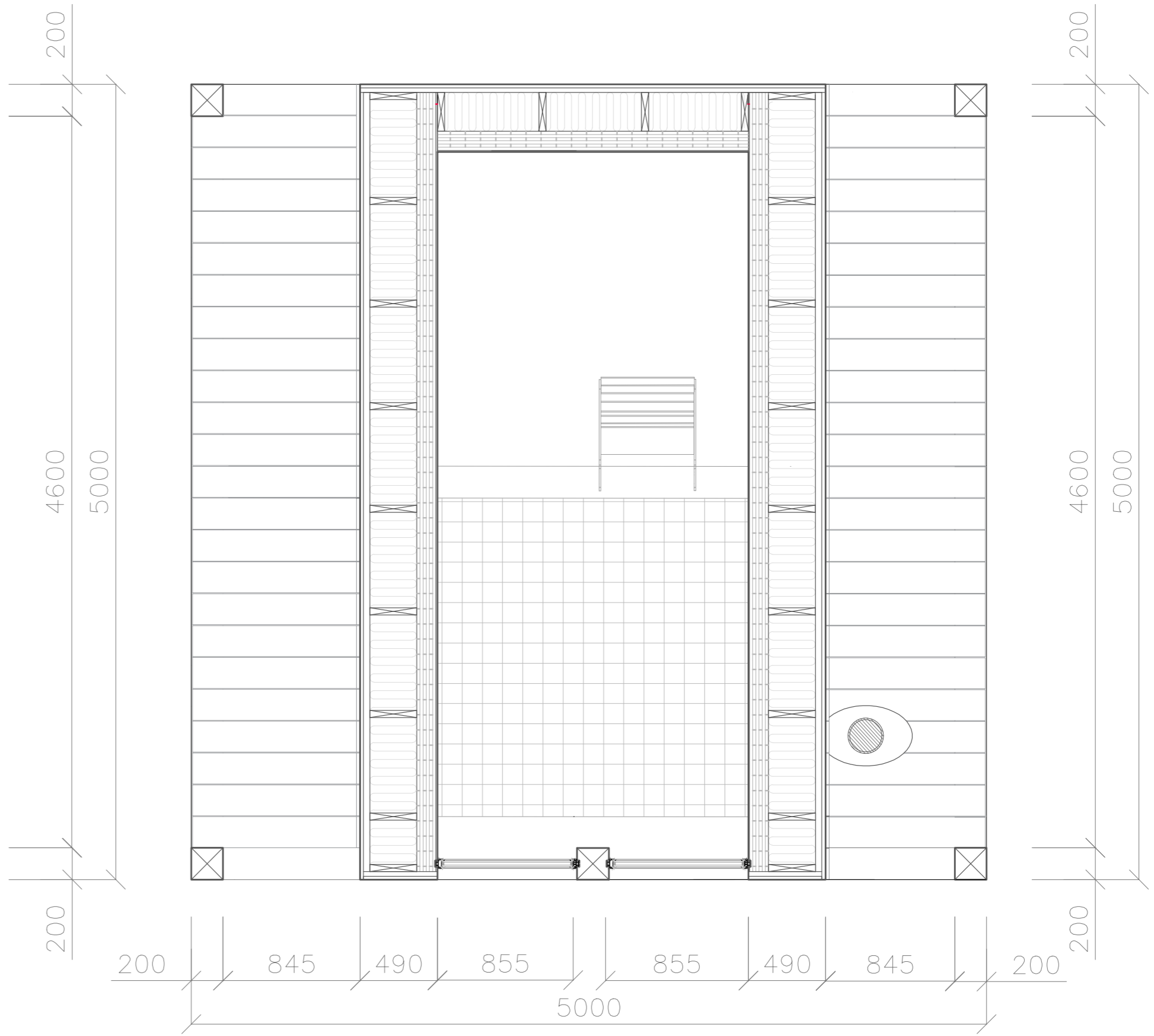
Properties and definitions			
	Sound reduction		
Footstep impact sound	$L_{n,w}$ (dB)		54 ¹
	$L_{n,w} + C_{L,50-2500}$ (dB)		58 ¹
Airborne sound	R_w (dB)		54 ¹
	$R_w + C_{50-3150}$ (dB)		52 ¹
Carbon footprint	kg CO ₂ per m ²		34
Weight	kg/m ²		234
Structural thickness	mm		301



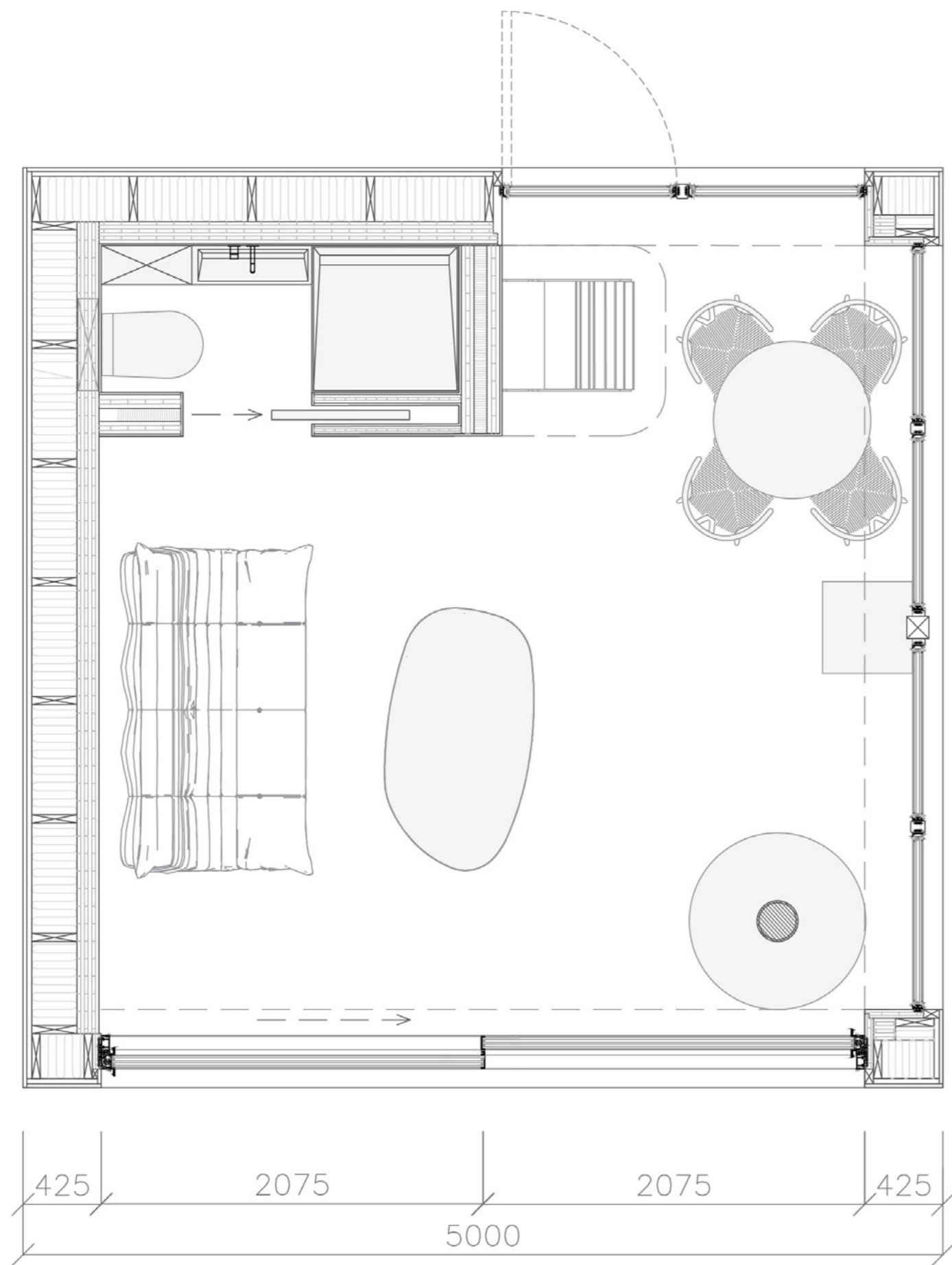
1ST LEVEL



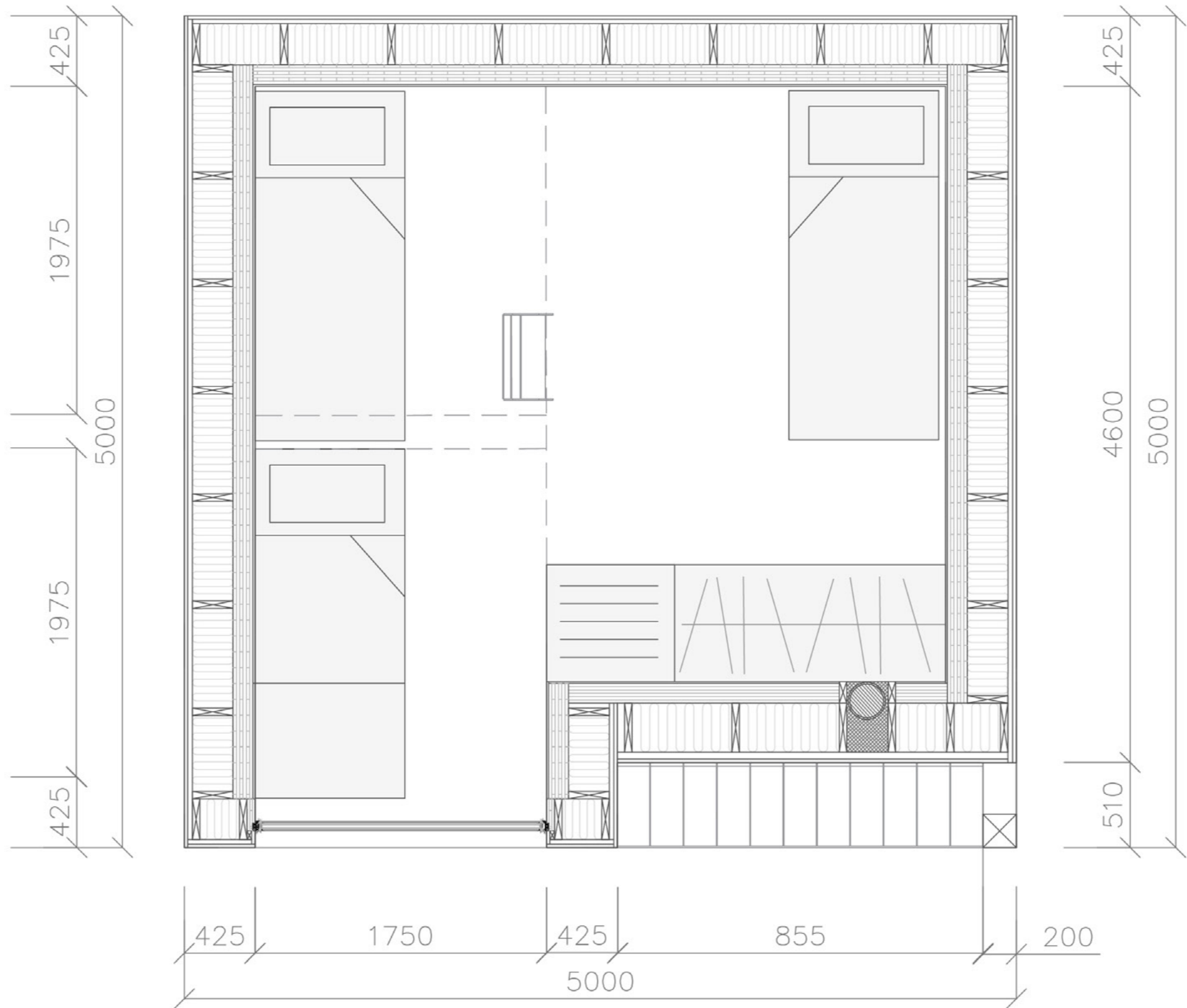
2ND LEVEL



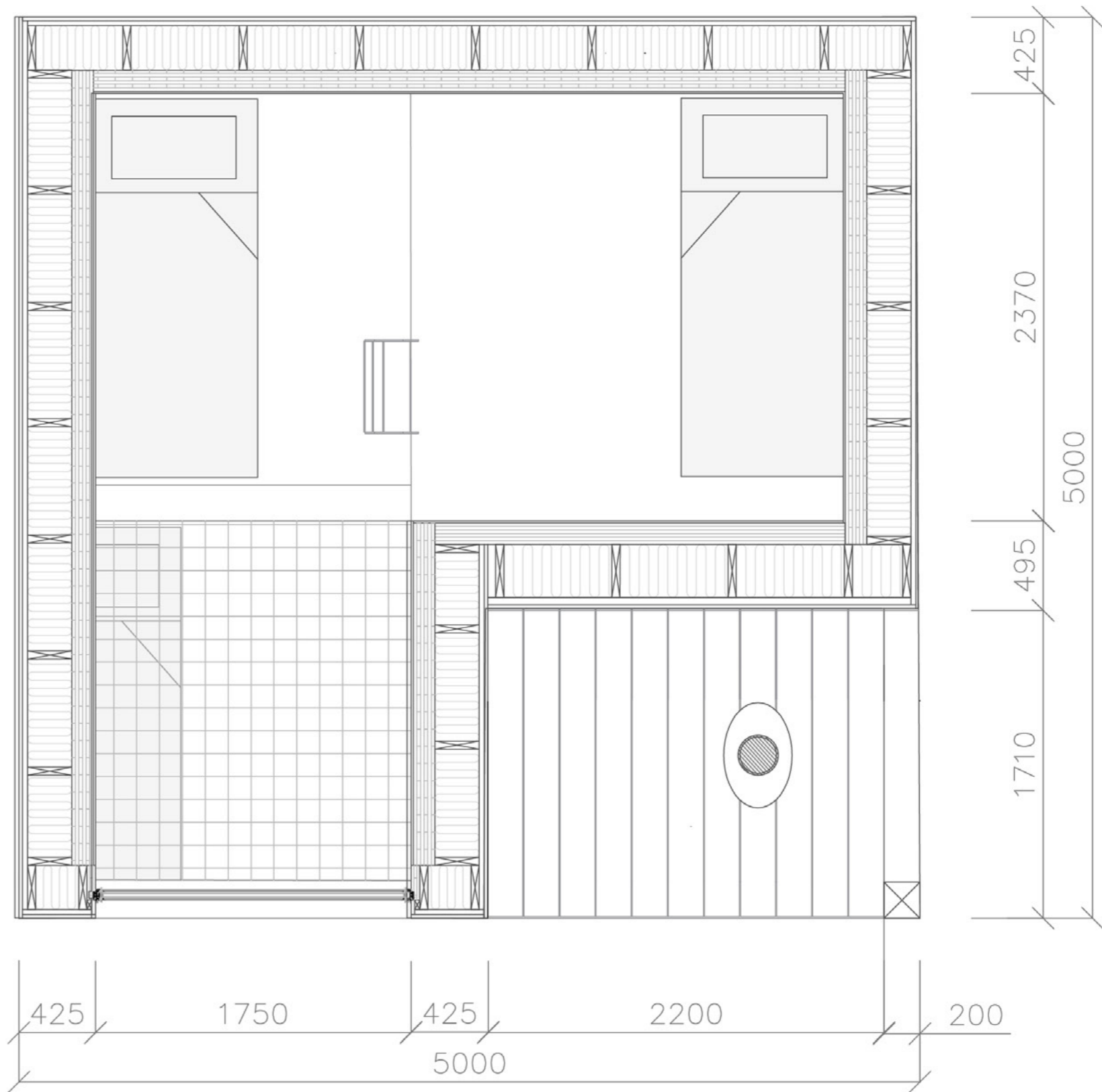
3RD LEVEL



1ST LEVEL

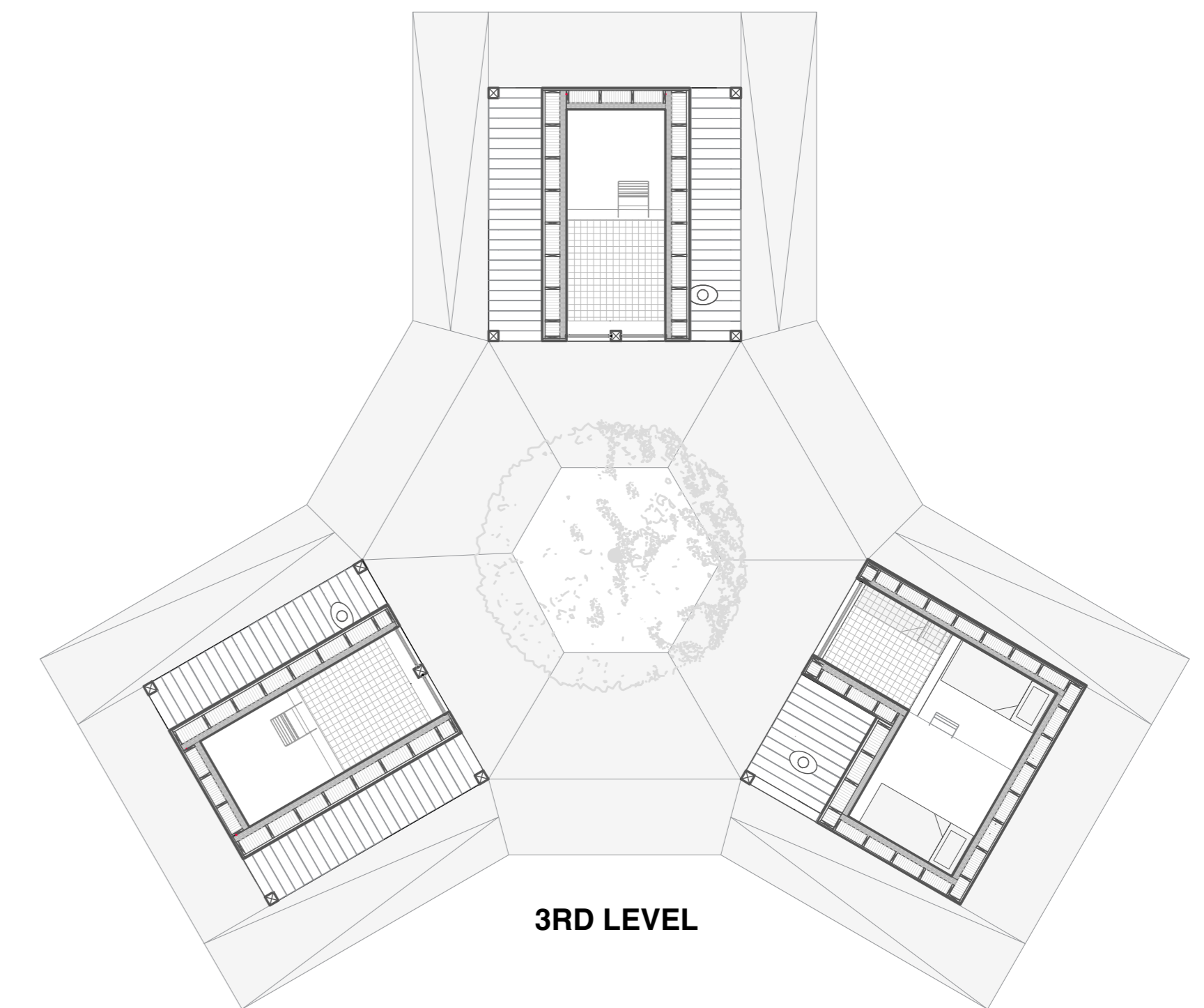
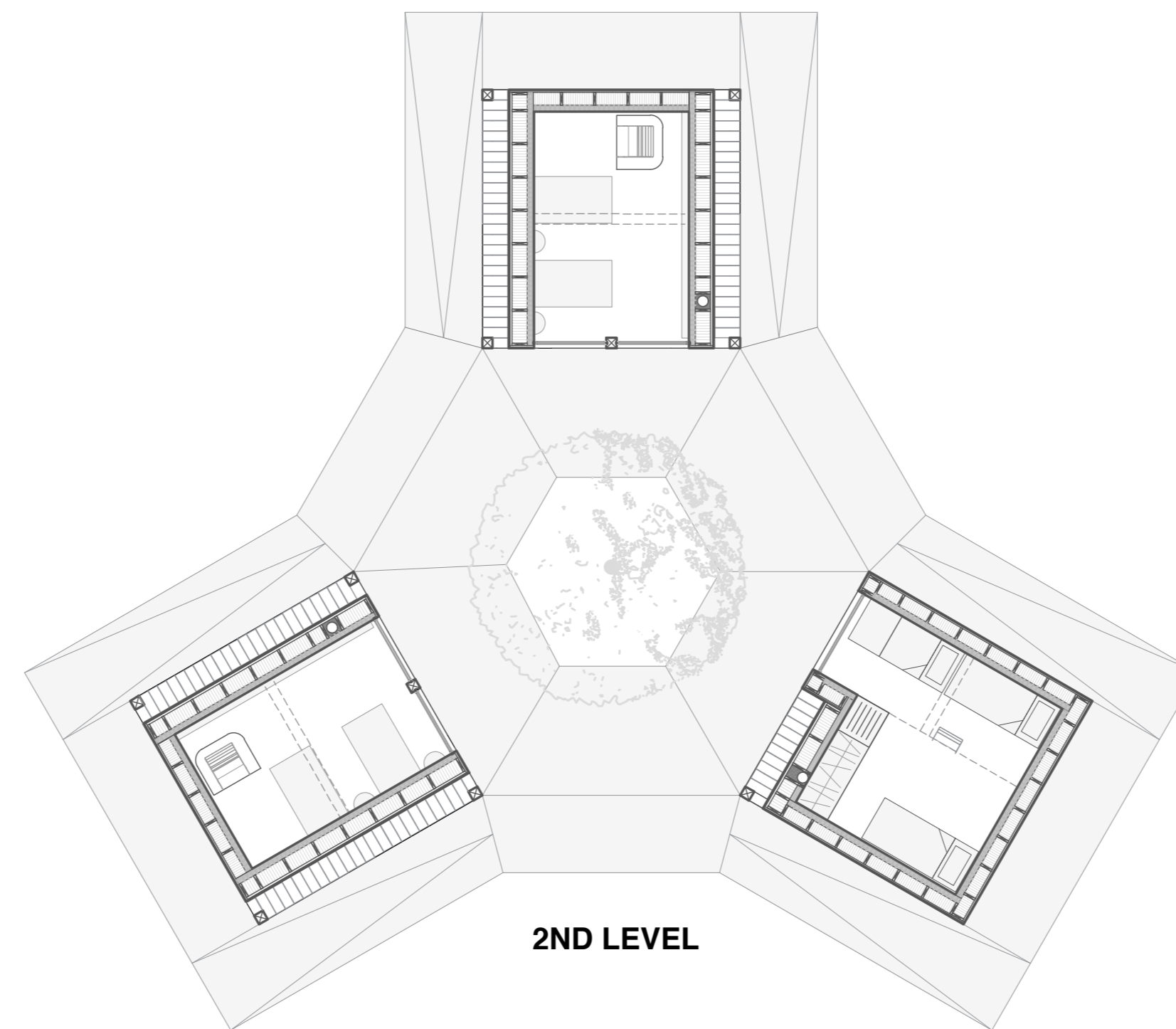
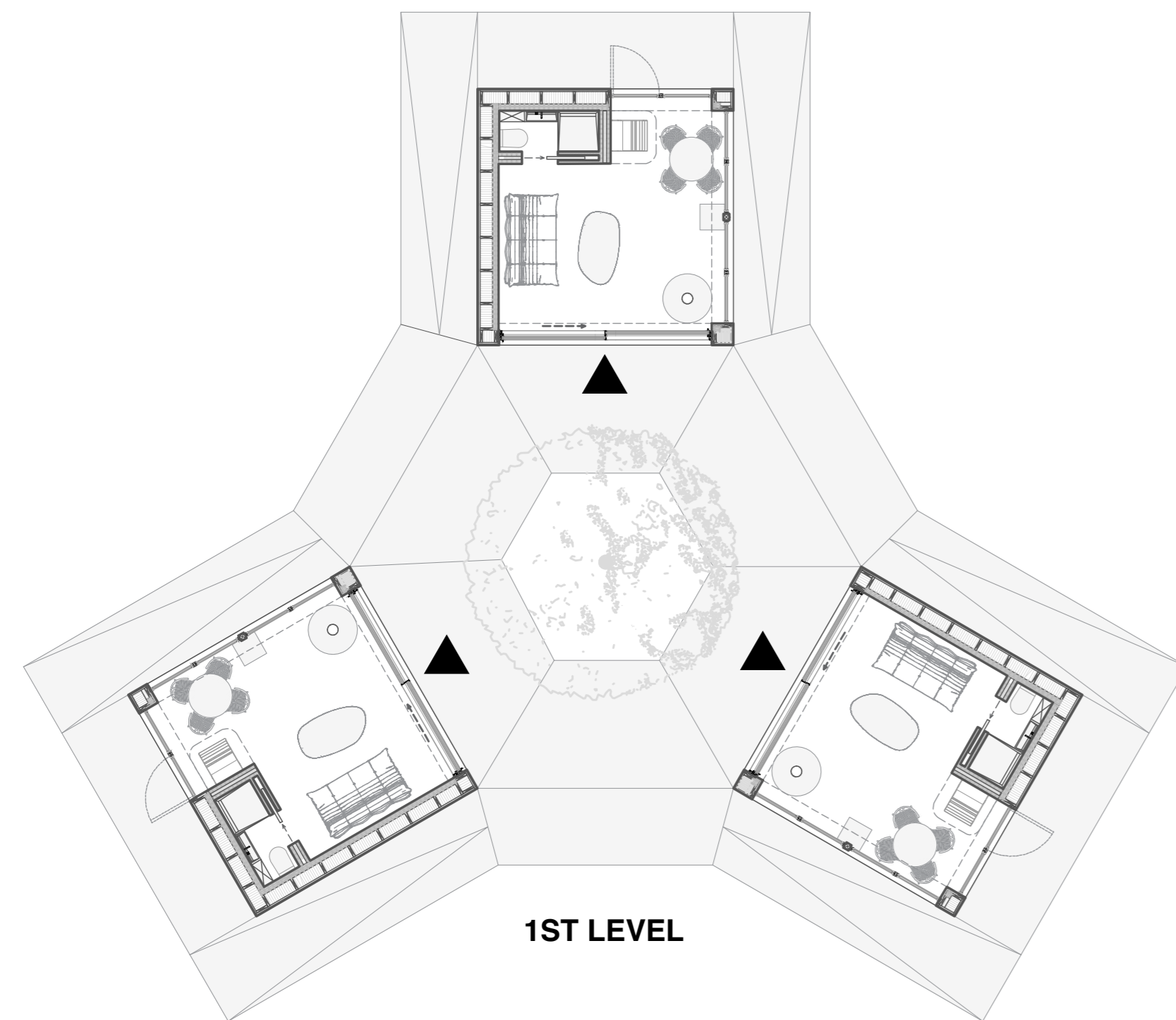


2ND LEVEL

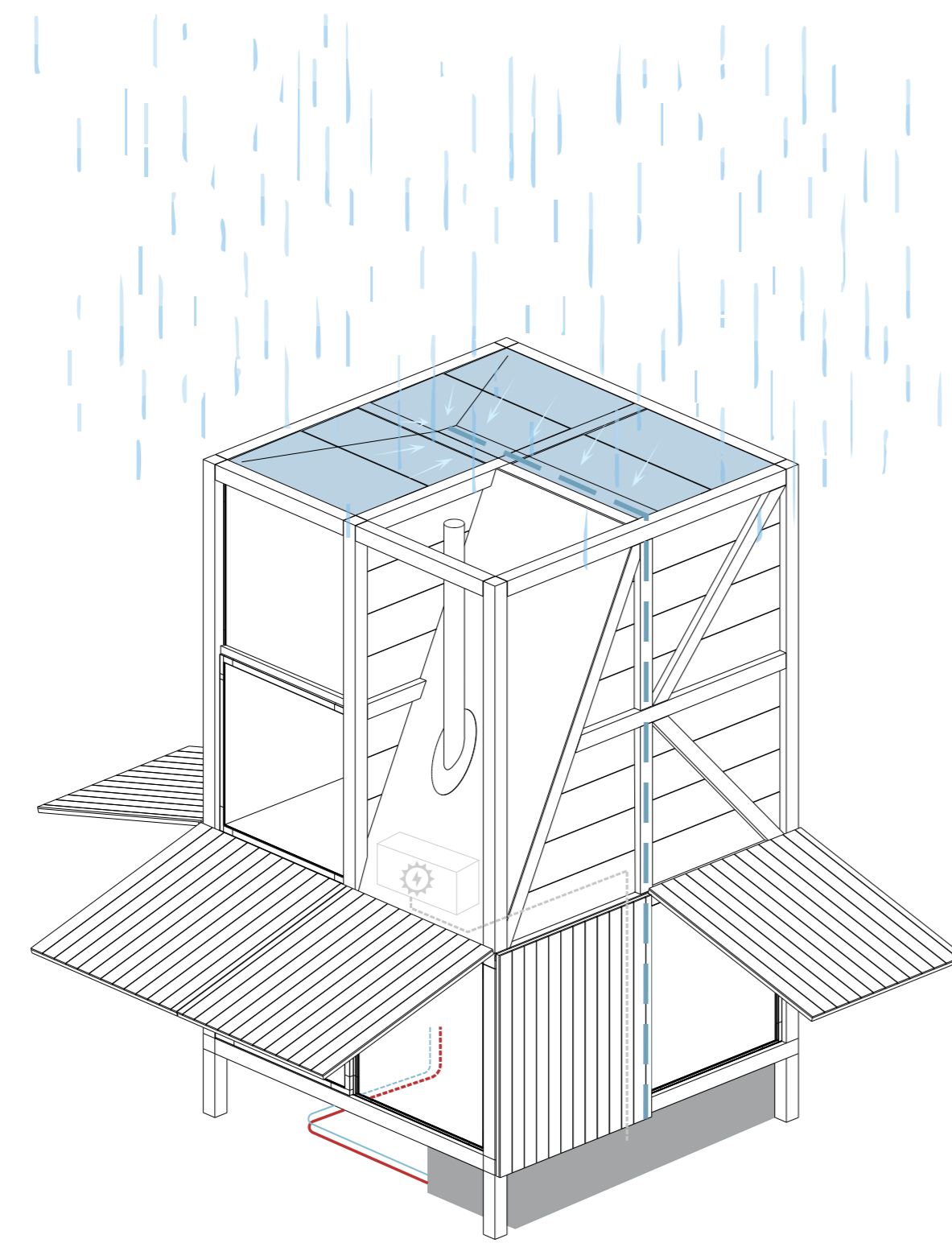


3RD LEVEL

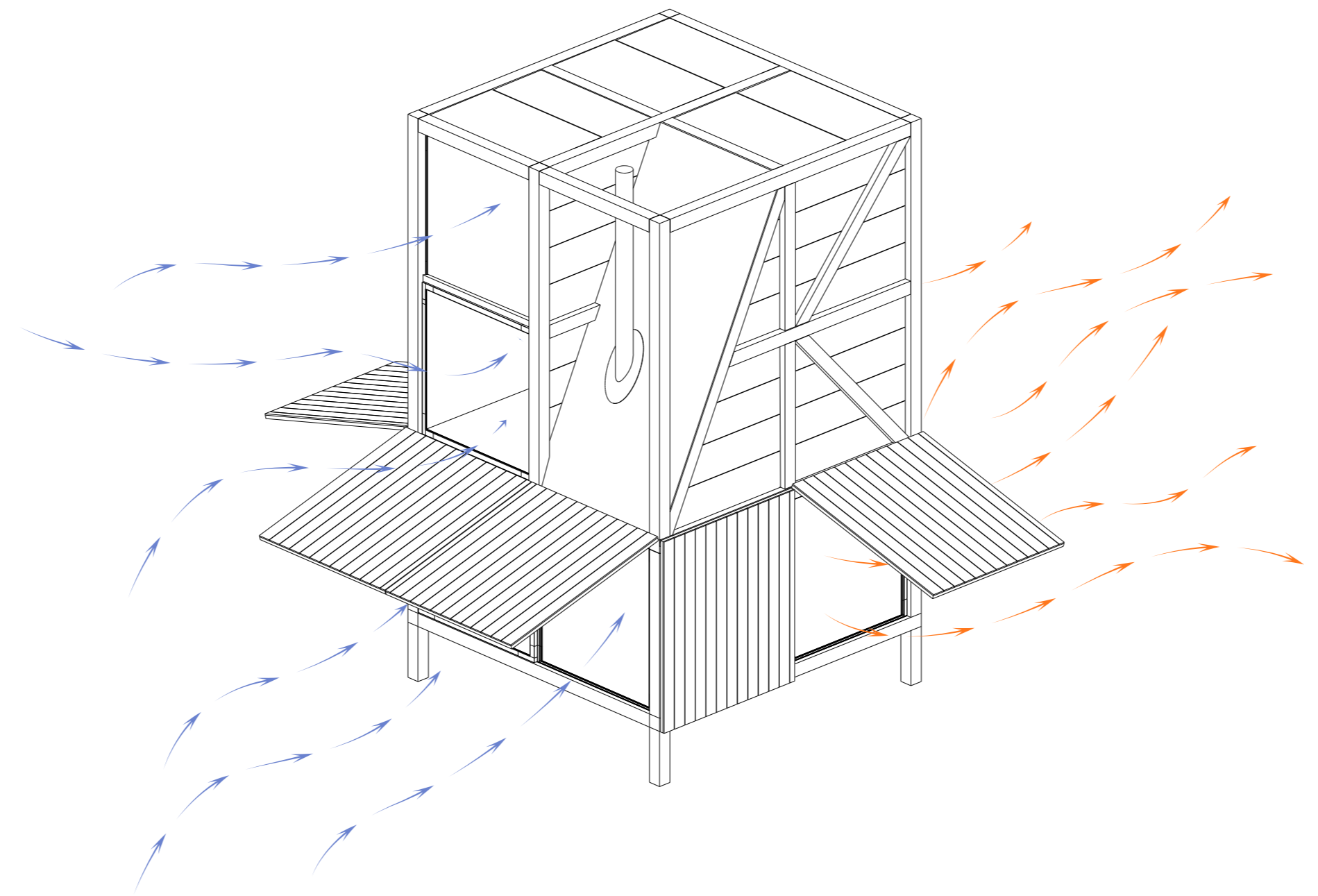
platform plans



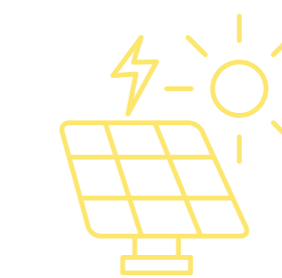
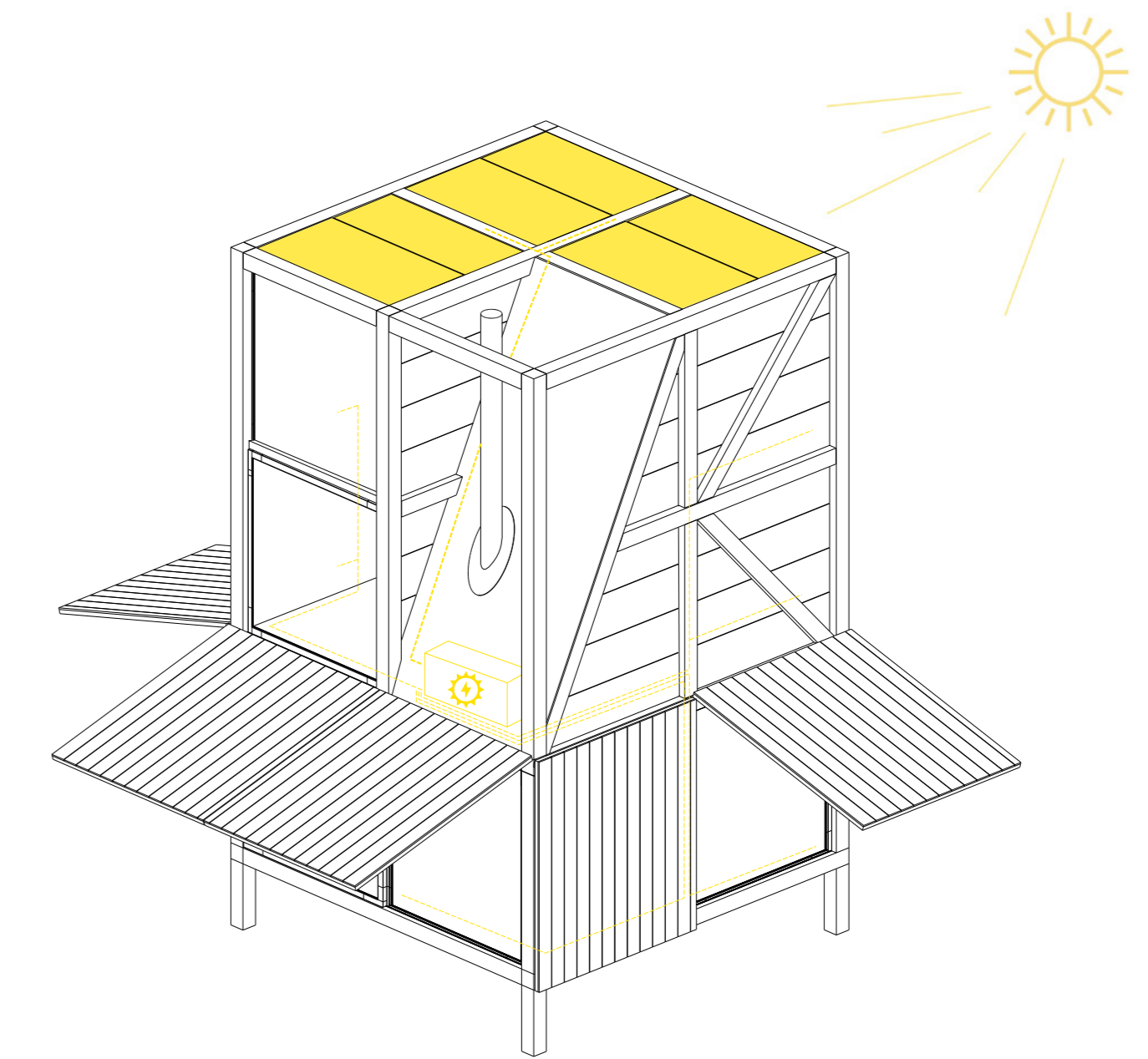
sustainability strategy



The water retention system collects rainwater from the rooftop, channeling it to storage tanks located under the platform. Equipped with a pump system, this setup efficiently delivers either hot or cold water directly to place needed. Storage and pump location allows it to be easily accessible and maintained.

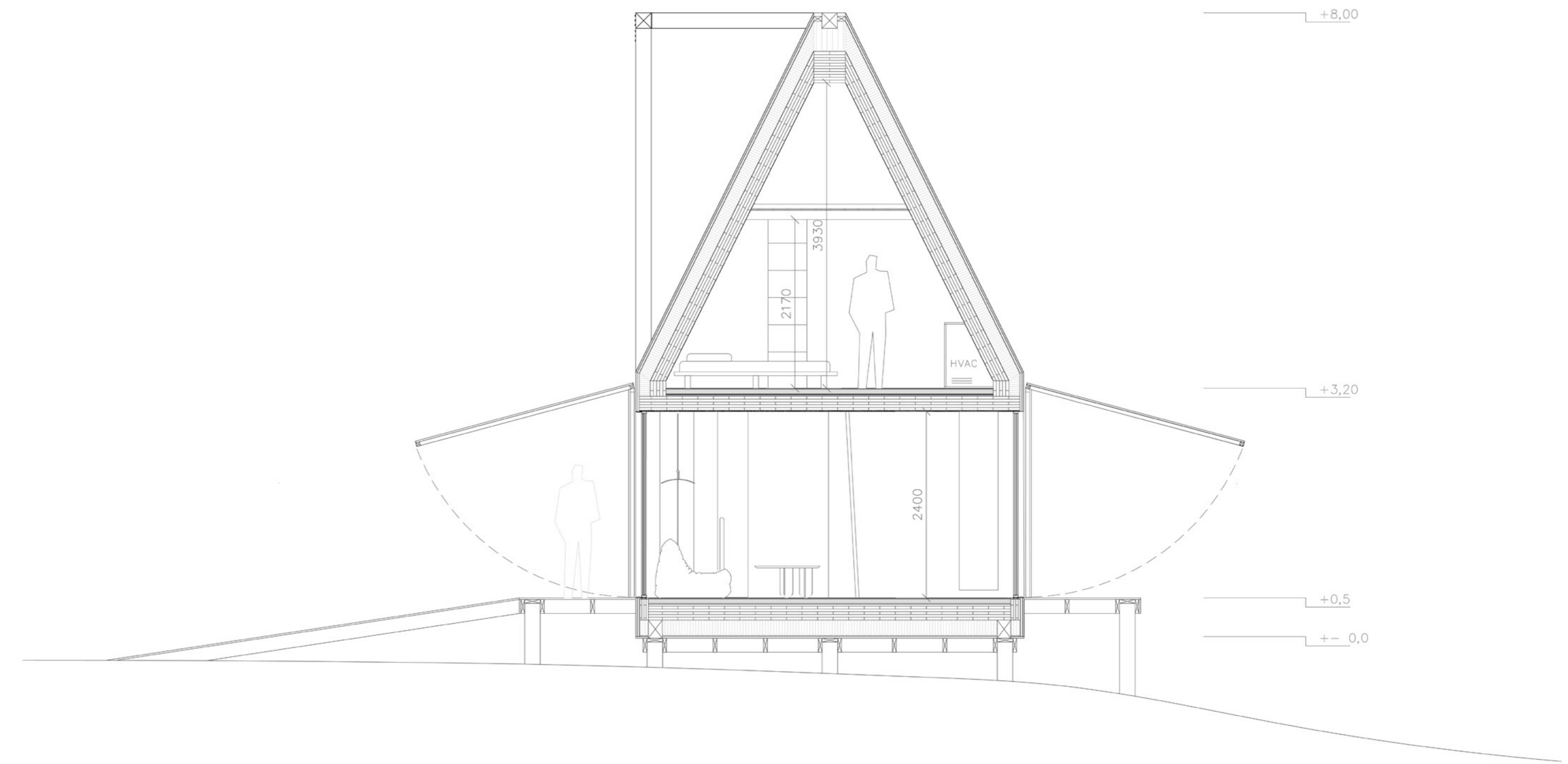
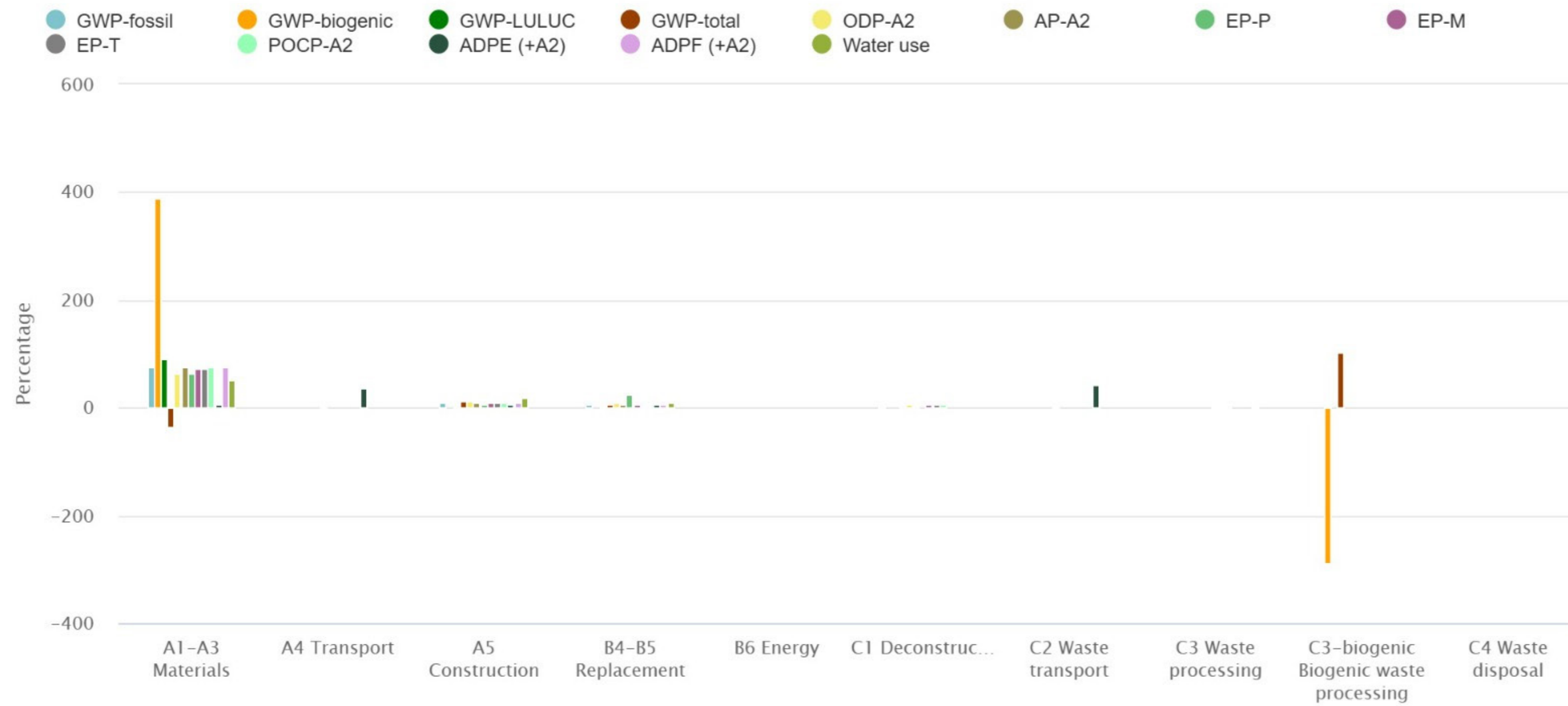


The building's rooftop is filled with solar panels, capturing sunlight to generate more energy than the building consumes. These panels not only cut costs but also reduce reliance on fossil fuels, aligning with the building's green initiatives.

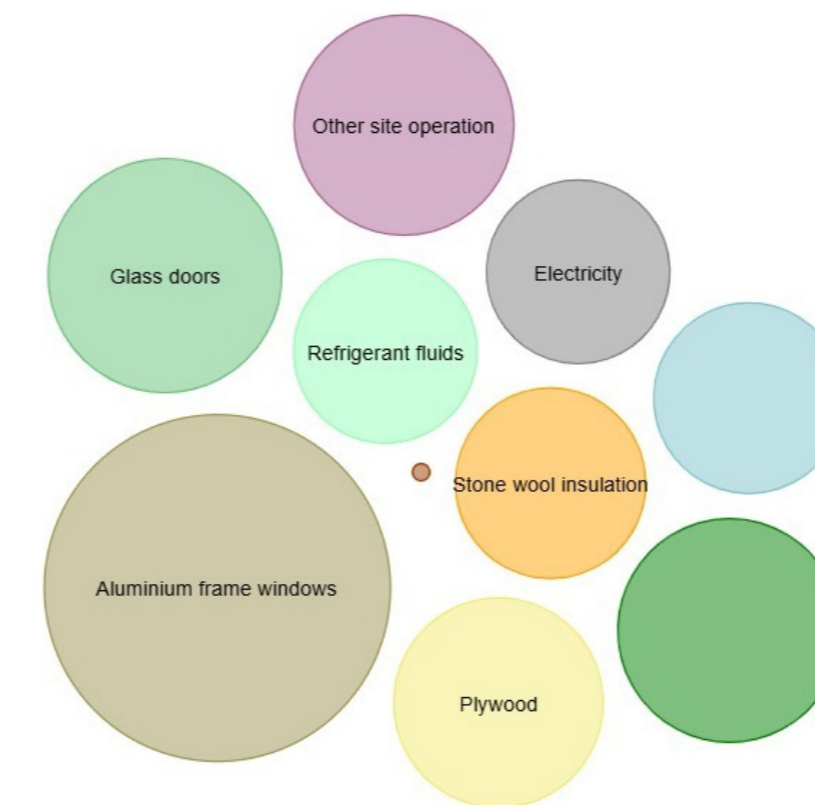


Small building's volume and strategically placed windows allow indoor space to be cooled and provides fresh air throughout the day. This is crucial for seasons when outdoor temperatures reach +20°C regularly. This play significant role into energy efficiency and using natural resources for inhabitant wellbeing. This system minimizes reliance on mechanical cooling.

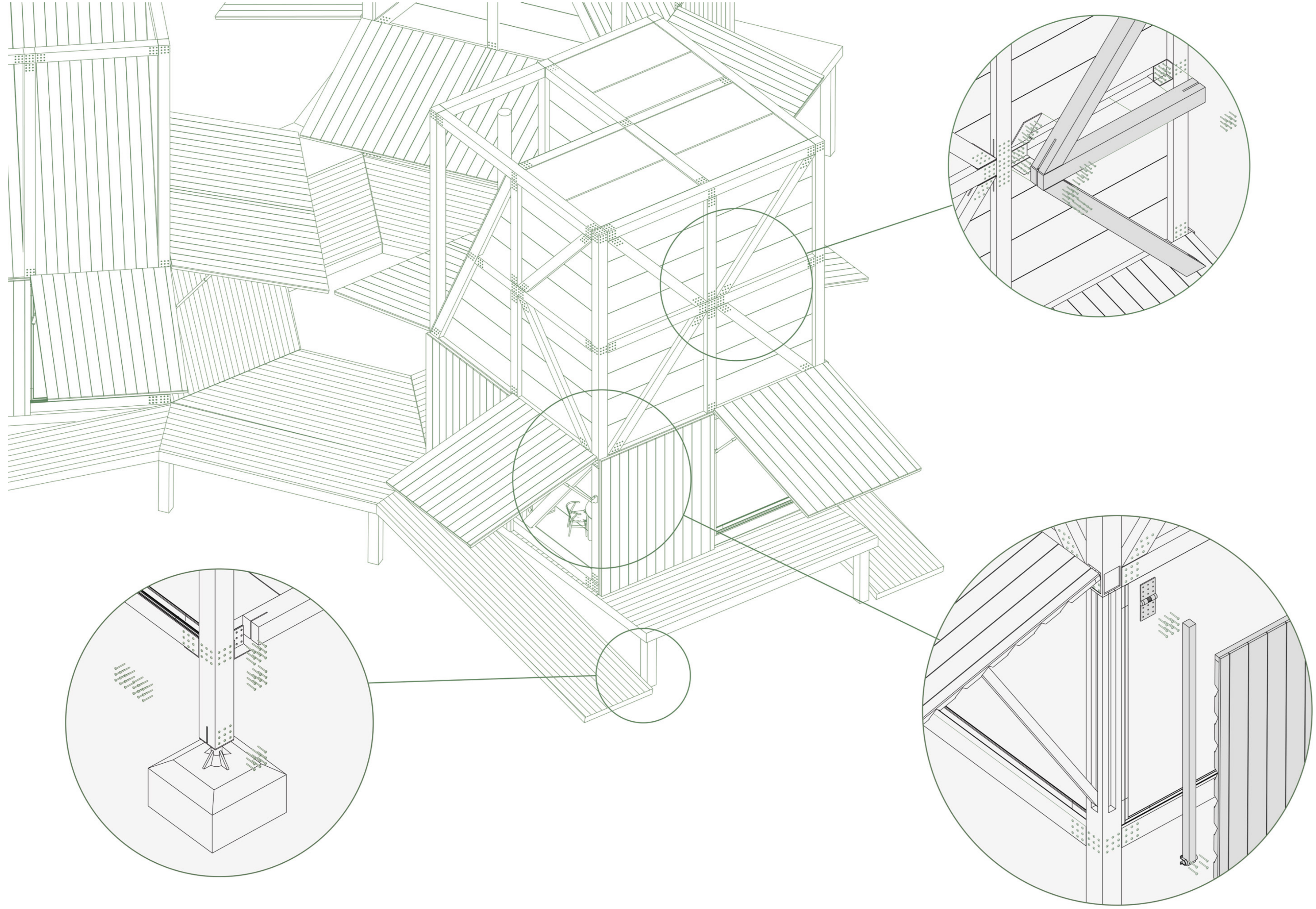
Results by life-cycle stage



Cradle to grave (A1-A4, B4-B5, C1-C4)		kg CO ₂ e/m ²
(< 350)	A	128
(350-530)	B	
(530-710)	C	
(710-890)	D	
(890-1070)	E	
(1070-1250)	F	
(> 1250)	G	



assembly solutions







Masterplan density - 54%

The site is introduced by the Laboratory of Co-Creation, a central facility designed to provide all essential functions necessary to support students in their academic work as well as in their everyday lives. From this central point, individual cabins are evenly distributed across the site, ensuring a balance between privacy and community interaction. This base development phase hosts up to 86 inhabitants.

masterplan



Masterplan density - 100% (Development plan)

The proposal includes a masterplan aimed at guiding the future development of Les Grands Ateliers. By increasing the density of residential units, we are able to significantly expand the site's capacity - from accommodating 84 residents to hosting up to 156. This densification is achieved without compromising spatial quality or environmental integration, ensuring that the site remains adaptable, sustainable, and conducive to the evolving needs of its users.

masterplan

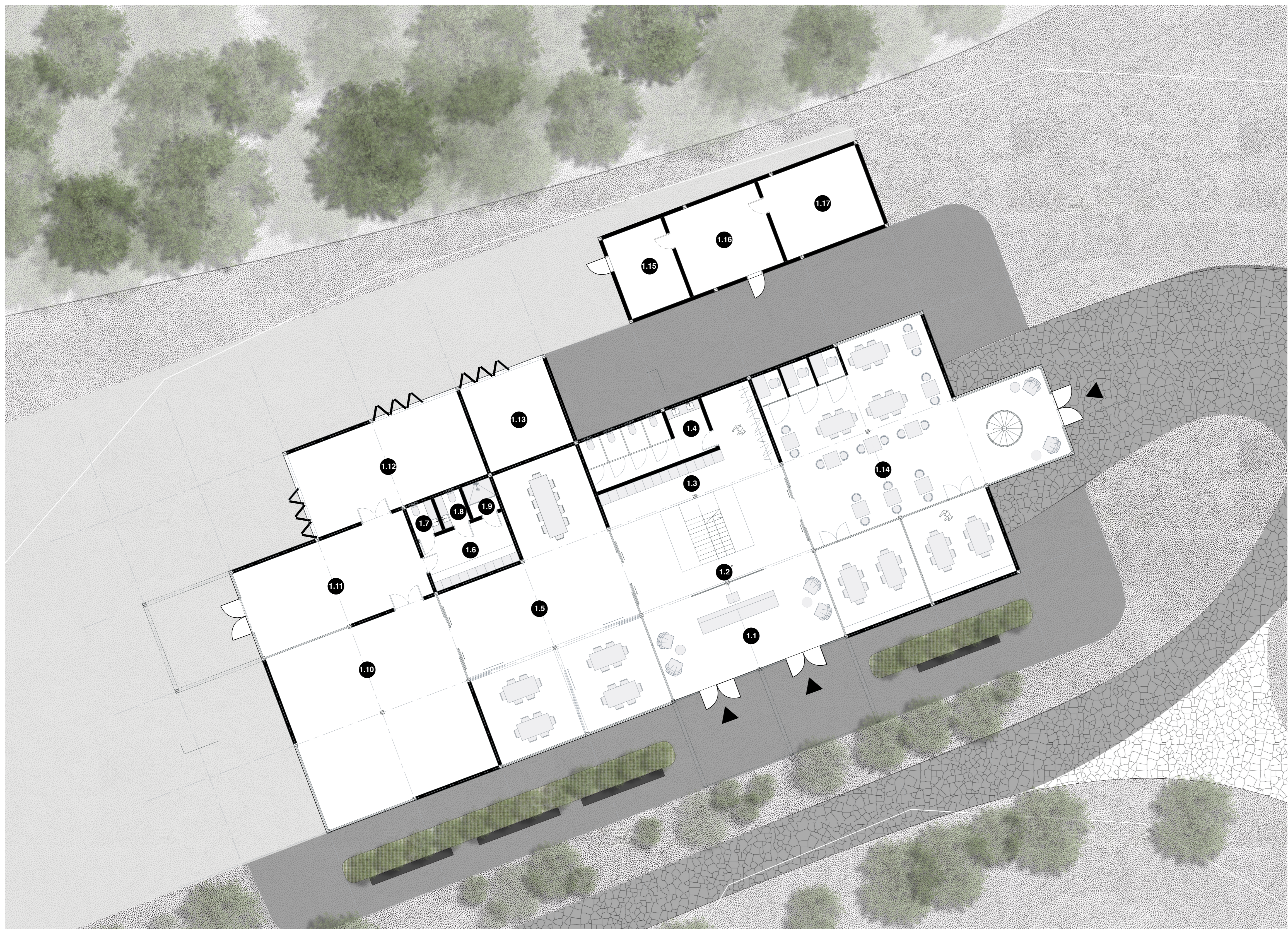


Masterplan density - 54%

The student made architectural prototypes are positioned along the main circulation path, establishing a dynamic and engaging garden - like landscape. This arrangement not only showcases ongoing innovation and experimentation but also encourages informal learning and spontaneous encounters among users. The interplay between built forms and green spaces creates a unique environment that blends living, working, and learning in a cohesive and inspiring way.

Designing multiple smaller buildings for accommodation enhances the human experience by creating a walkable, village - like layout that fosters spontaneous encounters, collaboration, and a stronger sense of community. Students benefit from more intimate, human-scaled spaces that feel welcoming and personal. This setup encourages outdoor movement, interaction with nature, and a healthy balance between privacy and shared life - key elements for creativity, wellbeing, and learning. This typological approach is a cornerstone of resource-efficient and sustainable living, ensuring that cabins consume electricity, heating, and water only when occupied. This minimizes resource use and maximizes operational efficiency."

masterplan axo

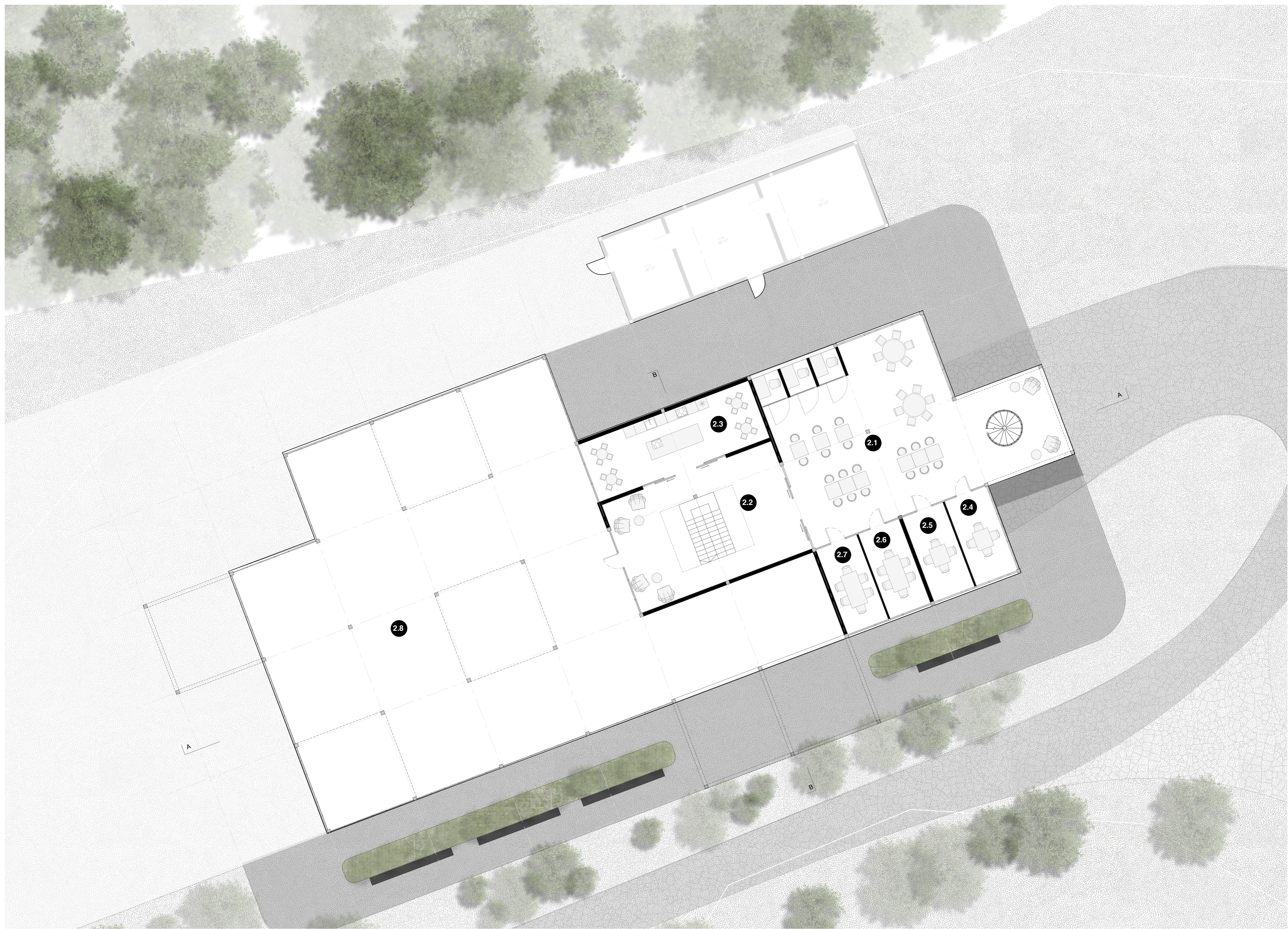


Laboratory of co-creation | 1st floor plan



- 1.1 reception
- 1.2 hall
- 1.3 cloakroom
- 1.4 wc
- 1.5 multi-purpose room
- 1.6 wardrobe
- 1.7 wc
- 1.8 wc

- 1.9 shower
- 1.10 laboratory
- 1.11 prototyping room
- 1.12 machine room
- 1.13 storage
- 1.14 office
- 1.15 shredder space
- 1.16 boiler room



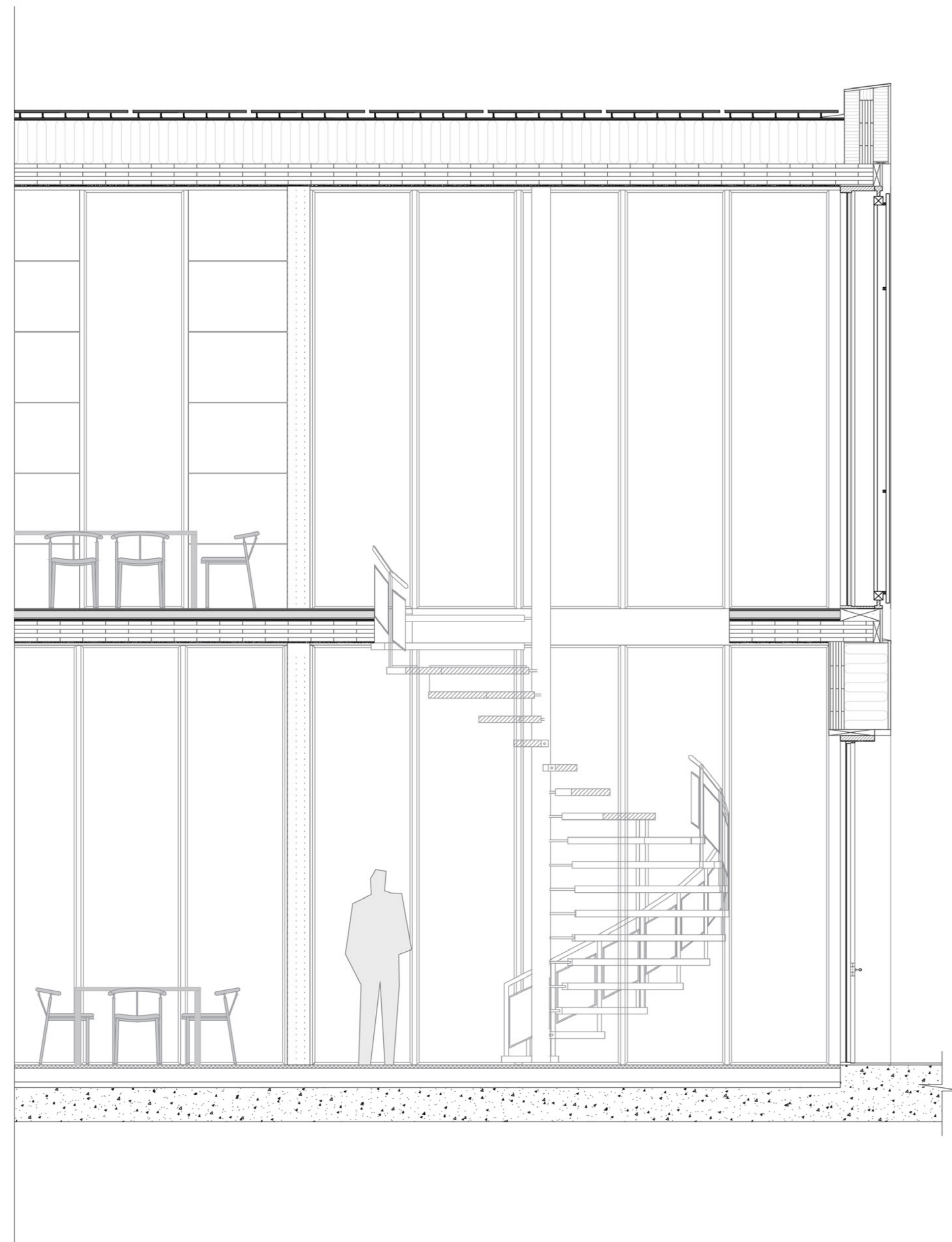
- 2.1 office
- 2.2 hall
- 2.3 kitchen
- 2.4 meeting room
- 2.5 meeting room
- 2.6 meeting room
- 2.7 meeting room
- 2.8 roof terrace

Laboratory of co-creation | 2nd floor plan

elevation section



detailed section

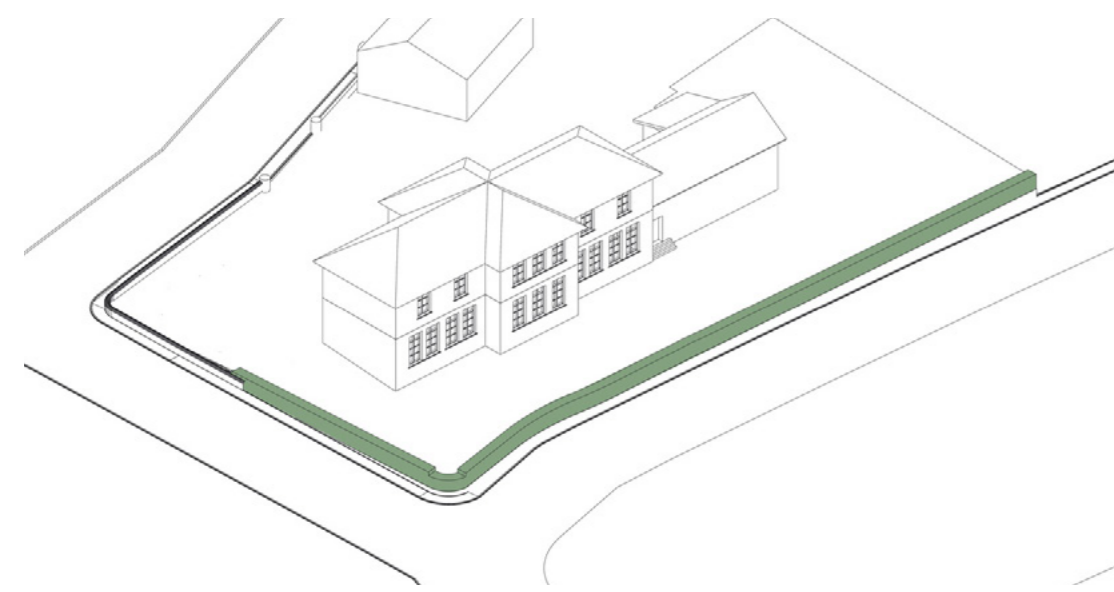




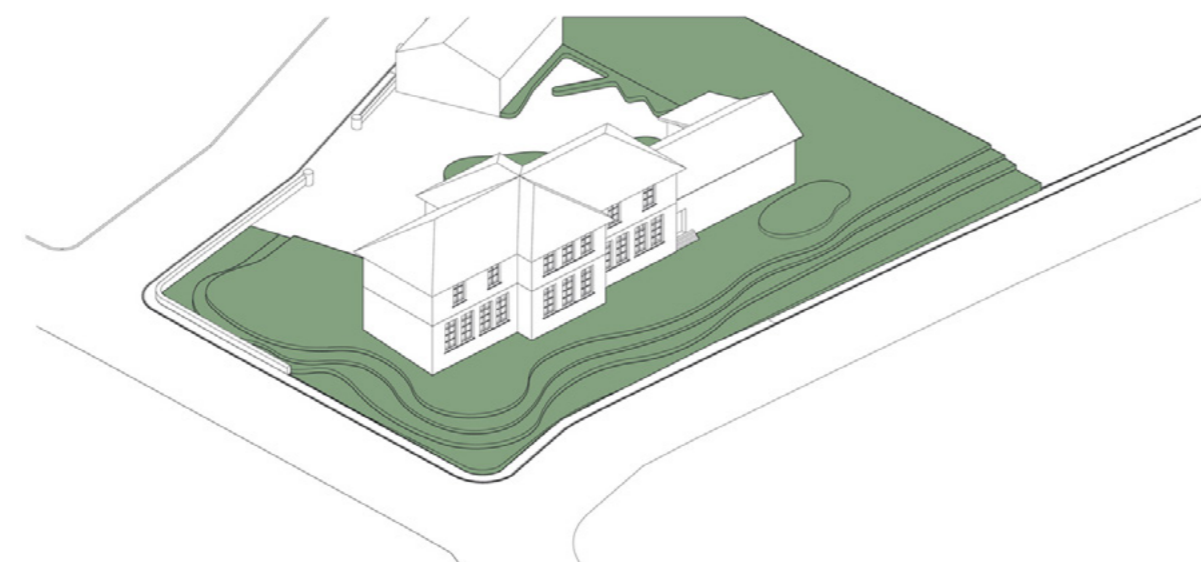
ZONE A renovation



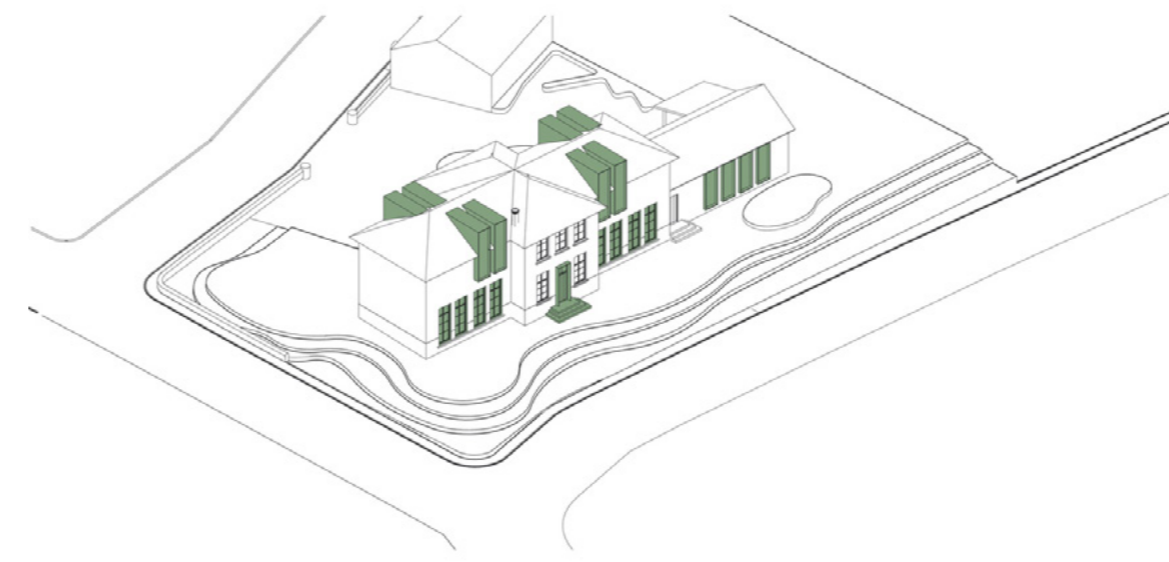
concept



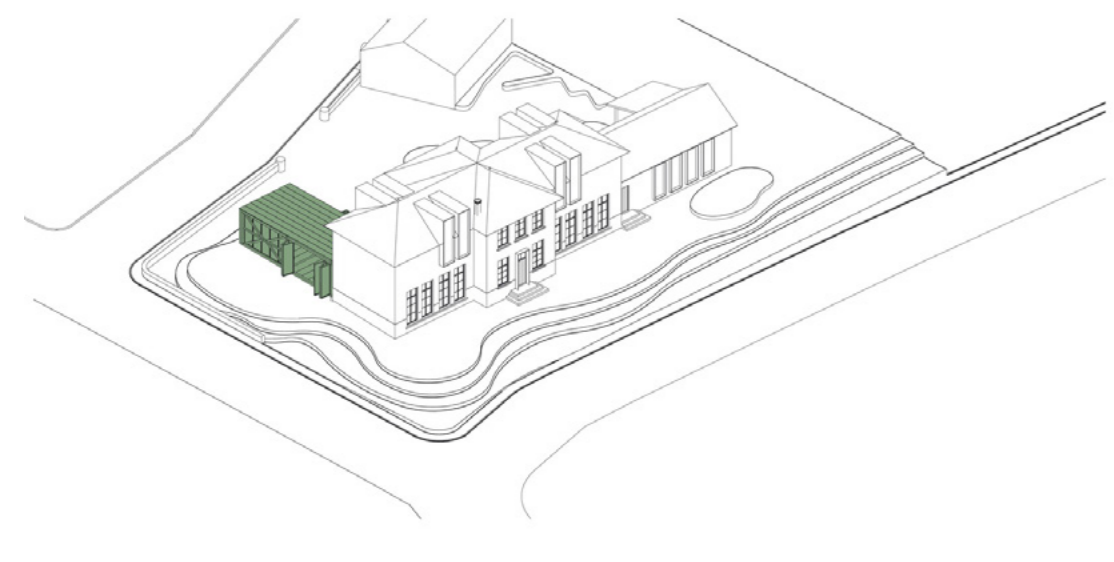
existing situation - wall



improved landscape



renovation



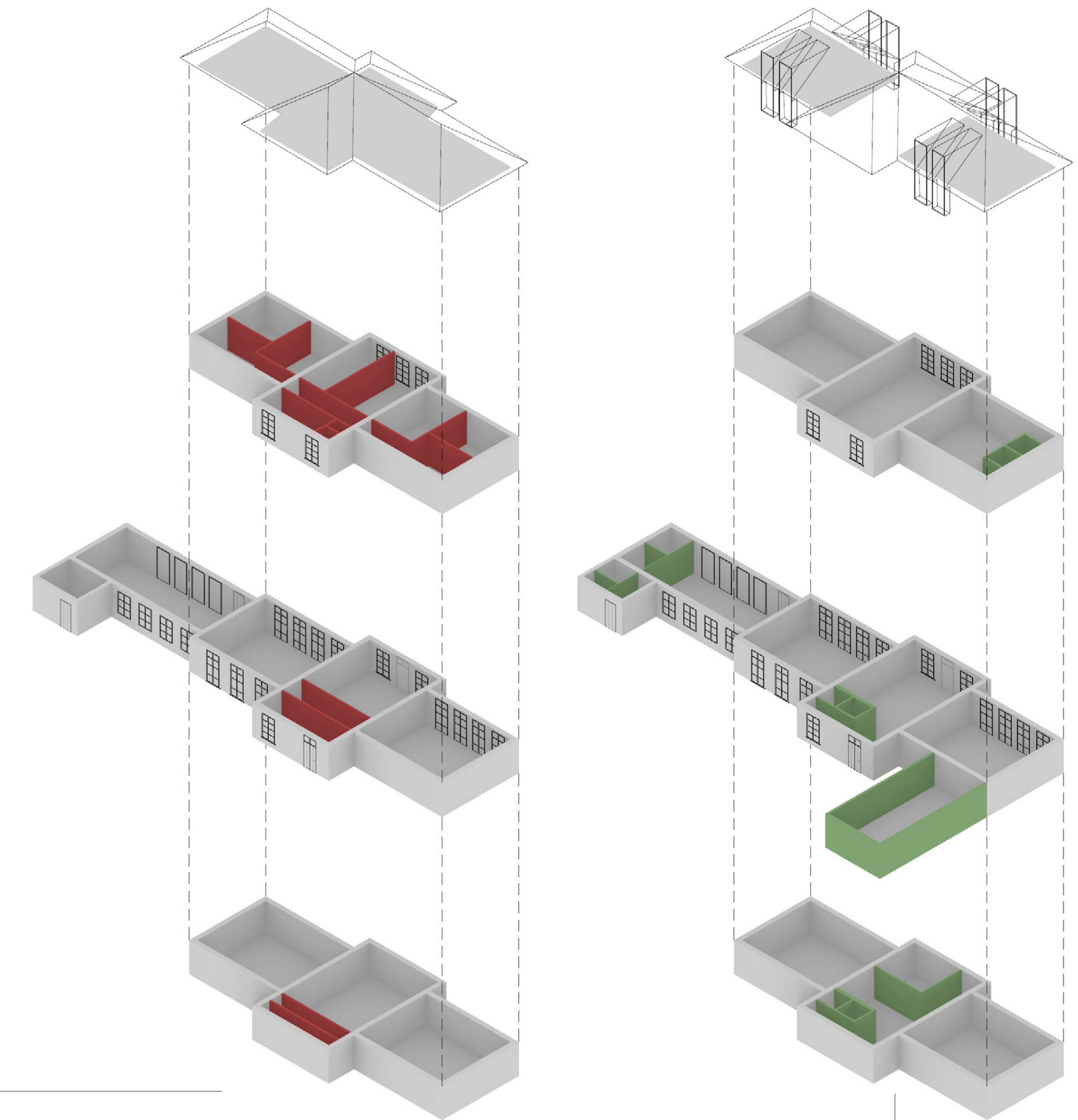
added structure - outdoor cafe



elevated paths for access



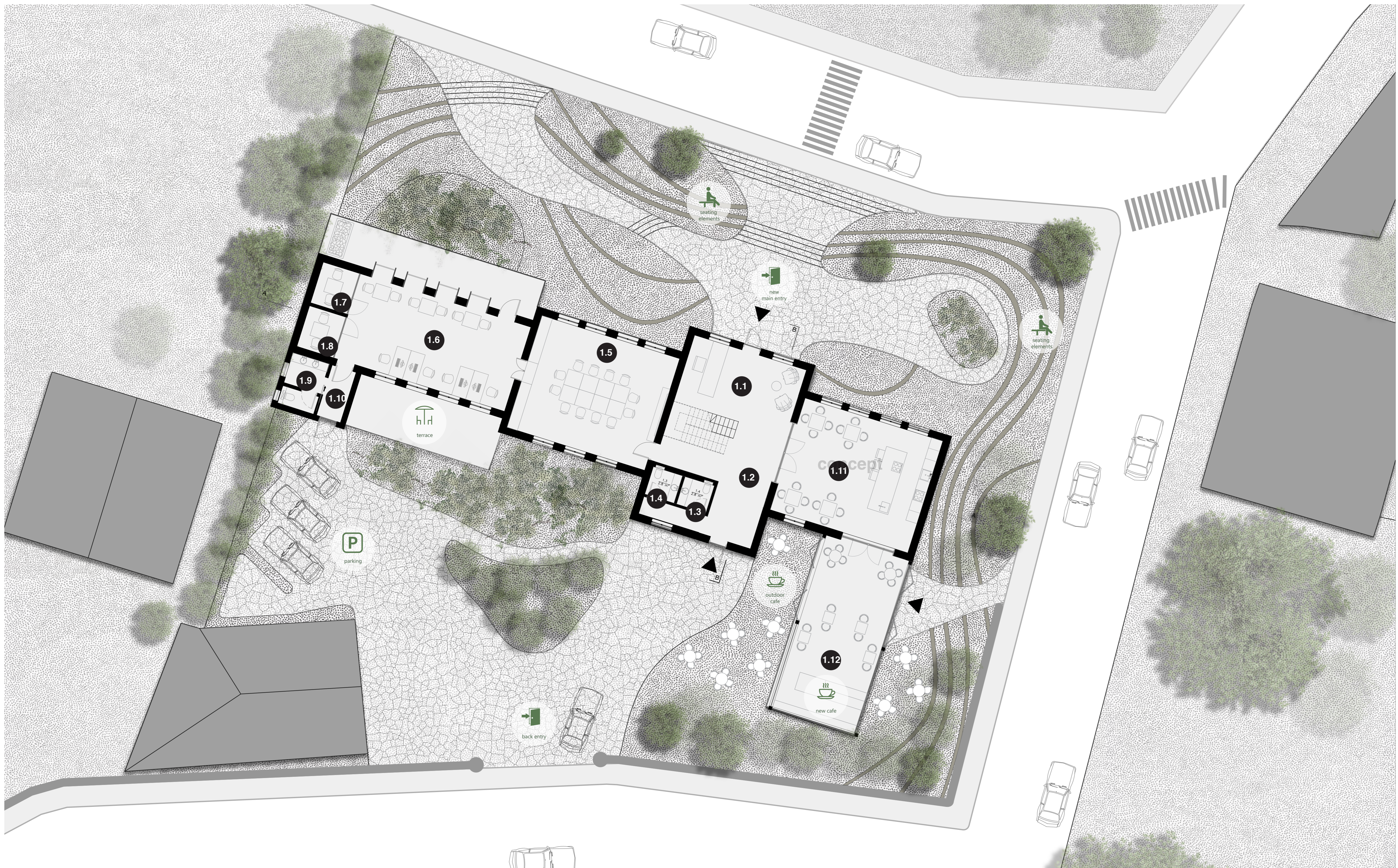
seating area



Demolated walls

New walls

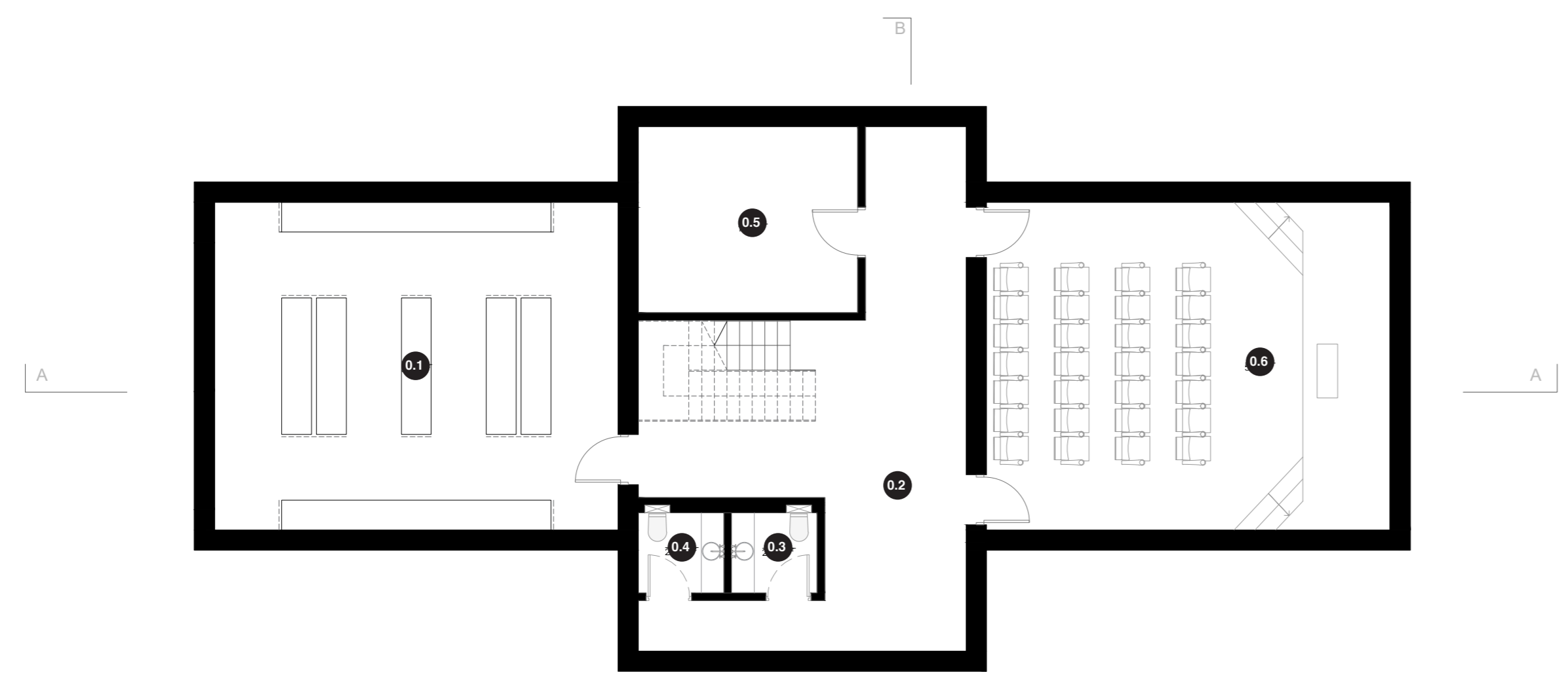
We introduced new access points and a main entrance to better connect the building with surrounding pedestrian pathways, creating a more inviting and accessible environment. A newly constructed café, built using the same 5x5 modular system as Les Grands Ateliers, serves as a vibrant entry point for the community of Chimilin.



MASTERPLAN

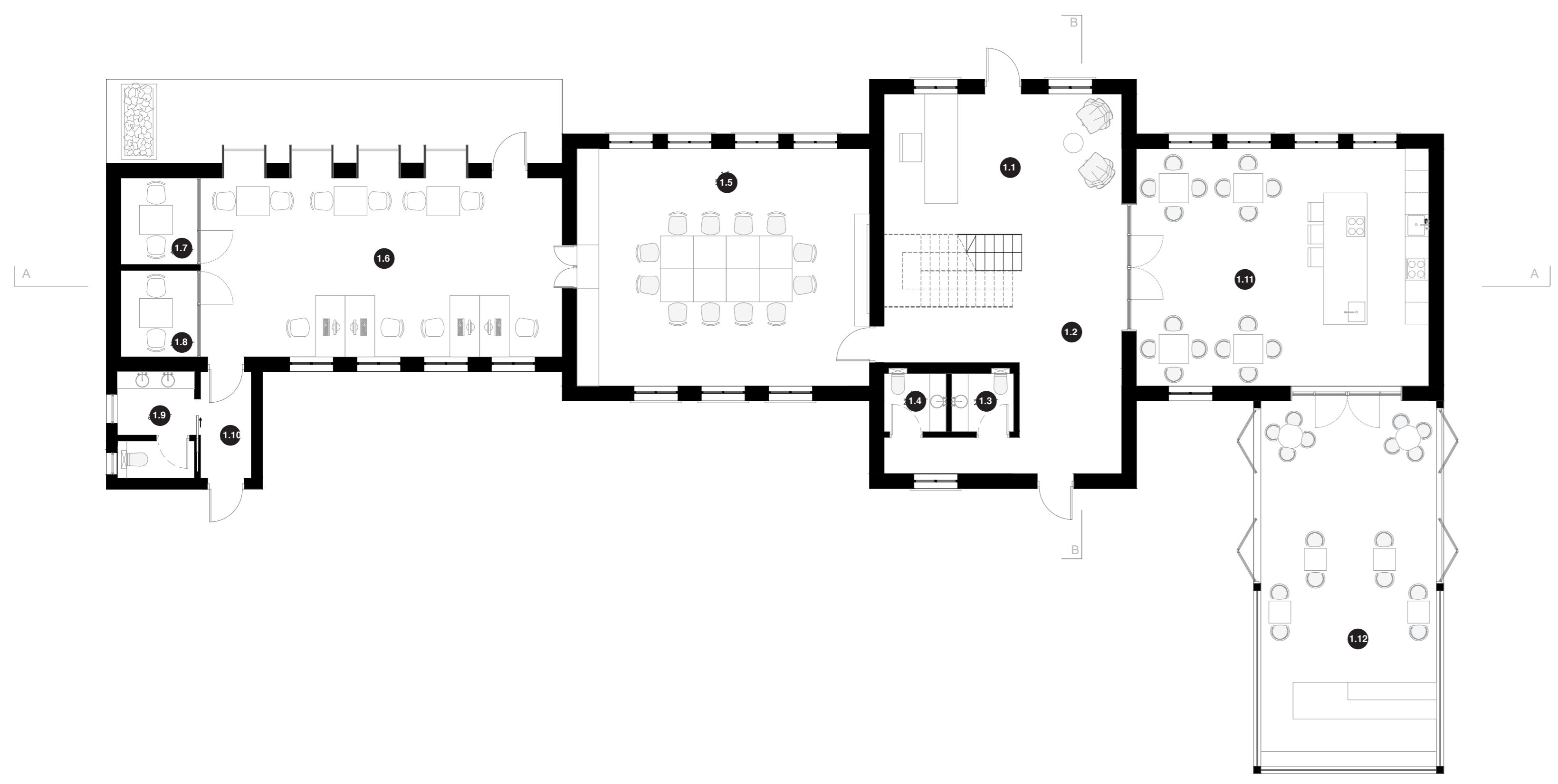
1.1	reception
1.2	hall
1.3	wc
1.4	wc
1.5	meeting room
1.6	co-working
1.7	silent pod
1.8	silent pod
1.9	hall
1.10	wc
1.11	kitchen
1.12	coffee shop

master plan



BASEMENT LEVEL PLAN

0.1	storage
0.2	hall
0.3	wc
0.4	wc
0.5	craft room
0.6	conference hall



1ST FLOOR PLAN

1.1	reception
1.2	hall
1.3	wc
1.4	wc
1.5	meeting room
1.6	co-working
1.7	silent pod
1.8	silent pod
1.9	hall
1.10	wc
1.11	kitchen
1.12	coffee shop

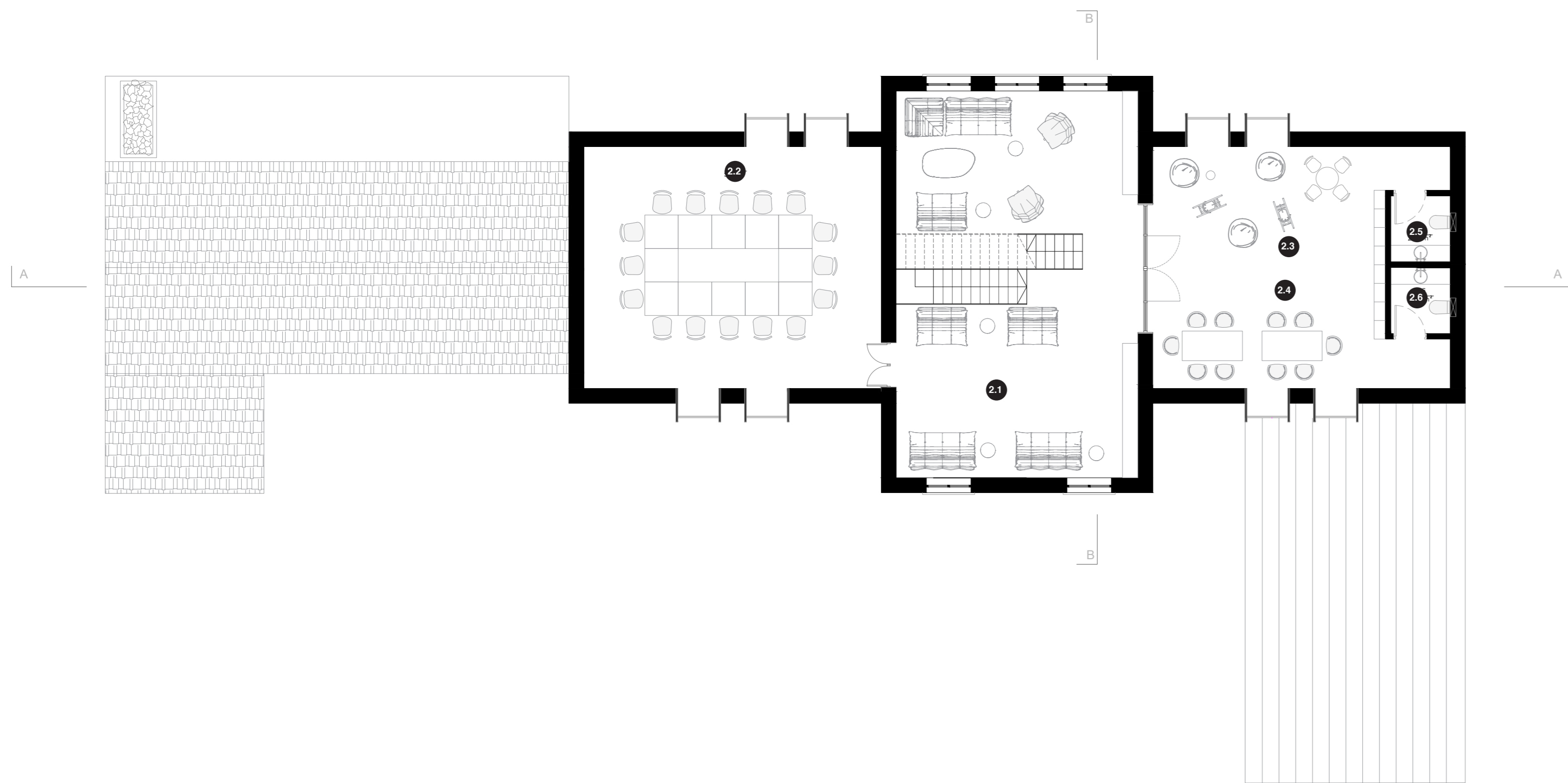


view from the 2nd floor atrium, leisure space

functional plan

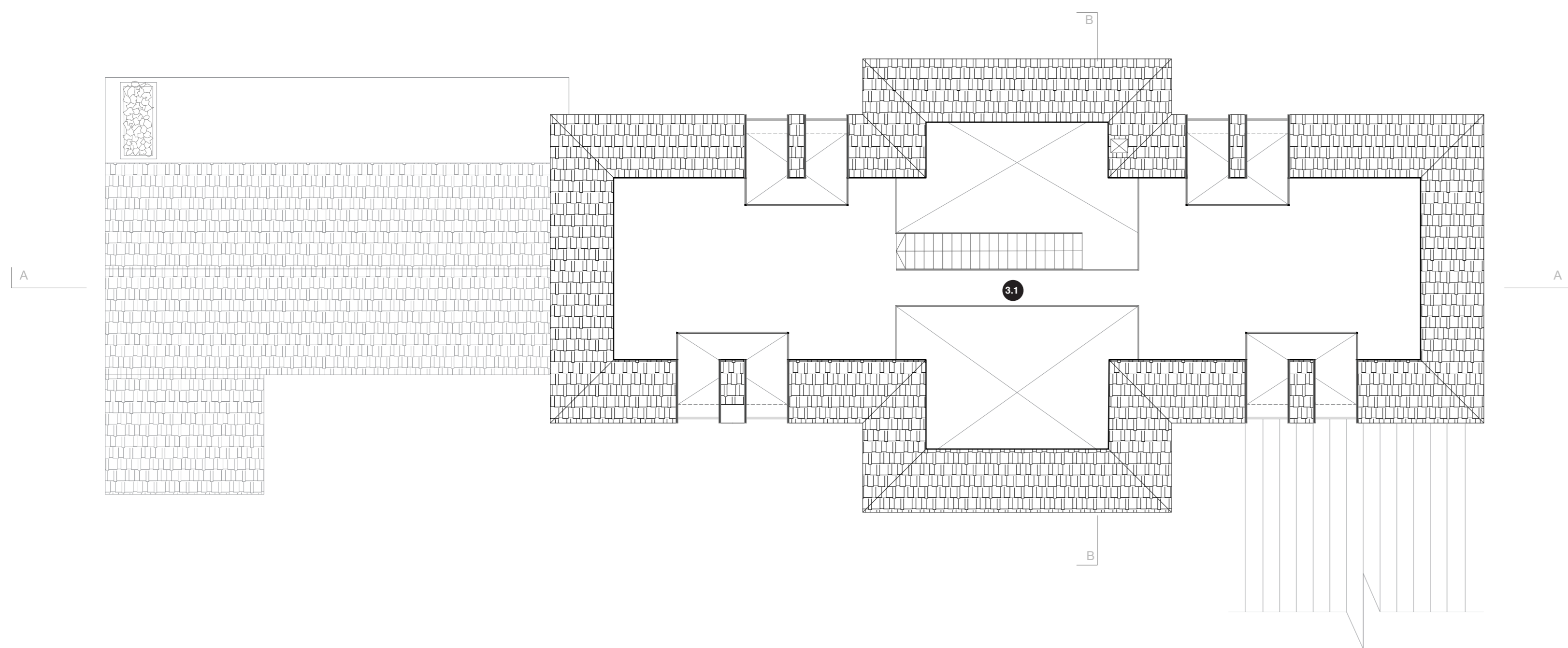
Architecture Student Contest
Jardin. The sculpture garden | Team nr.6. | 20th International edition in Lyon. France. 2025





2ND FLOOR PLAN

- 2.1 leisure room
- 2.2 meeting room
- 2.3 playroom
- 2.4 game room
- 2.5 wc
- 2.6 wc



3RD FLOOR PLAN

- 3.1 gallery



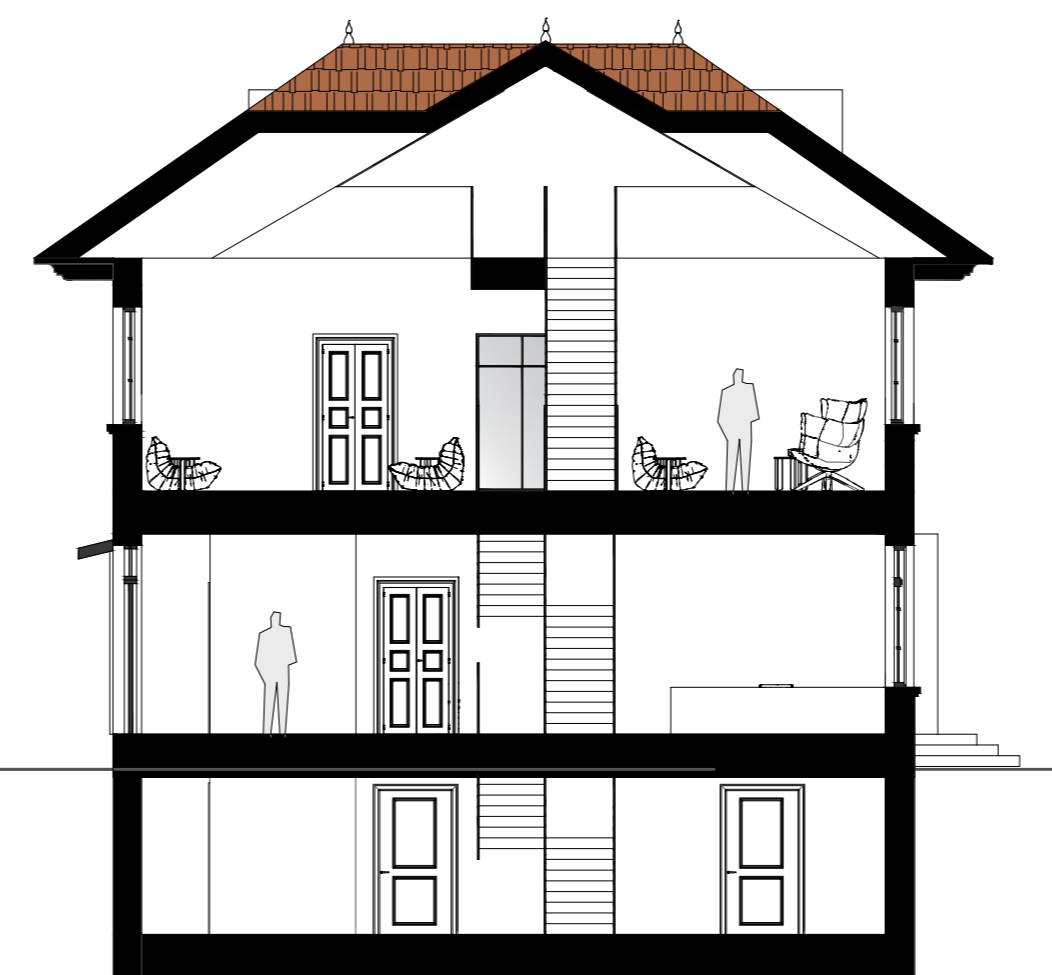
view from the 3rd floor gallery

functional plan

section cut



SECTION A-A



SECTION B-B



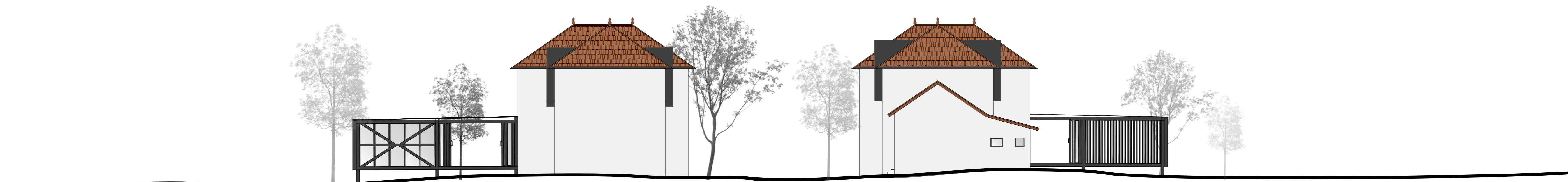
view from the 2nd floor multi-purpose room

elevation



SOUTH-WEST ELEVATION

NORTH EAST ELEVATION



NORTH-WEST ELEVATION

SOUTH-EAST ELEVATION

