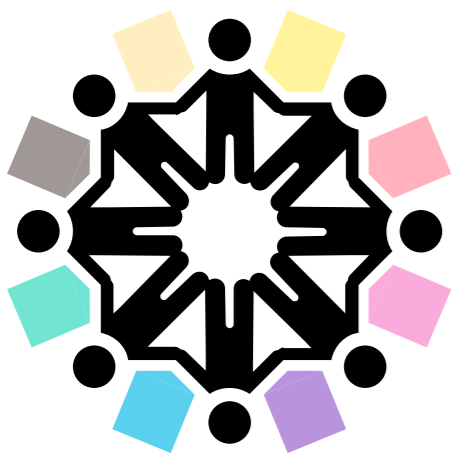
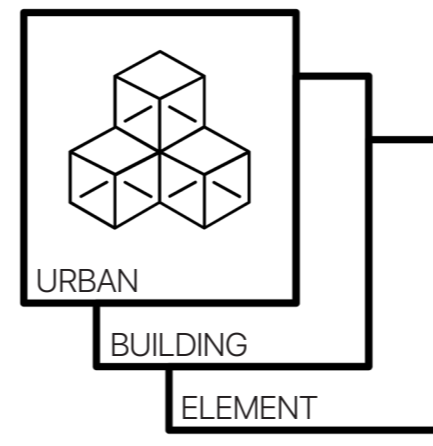
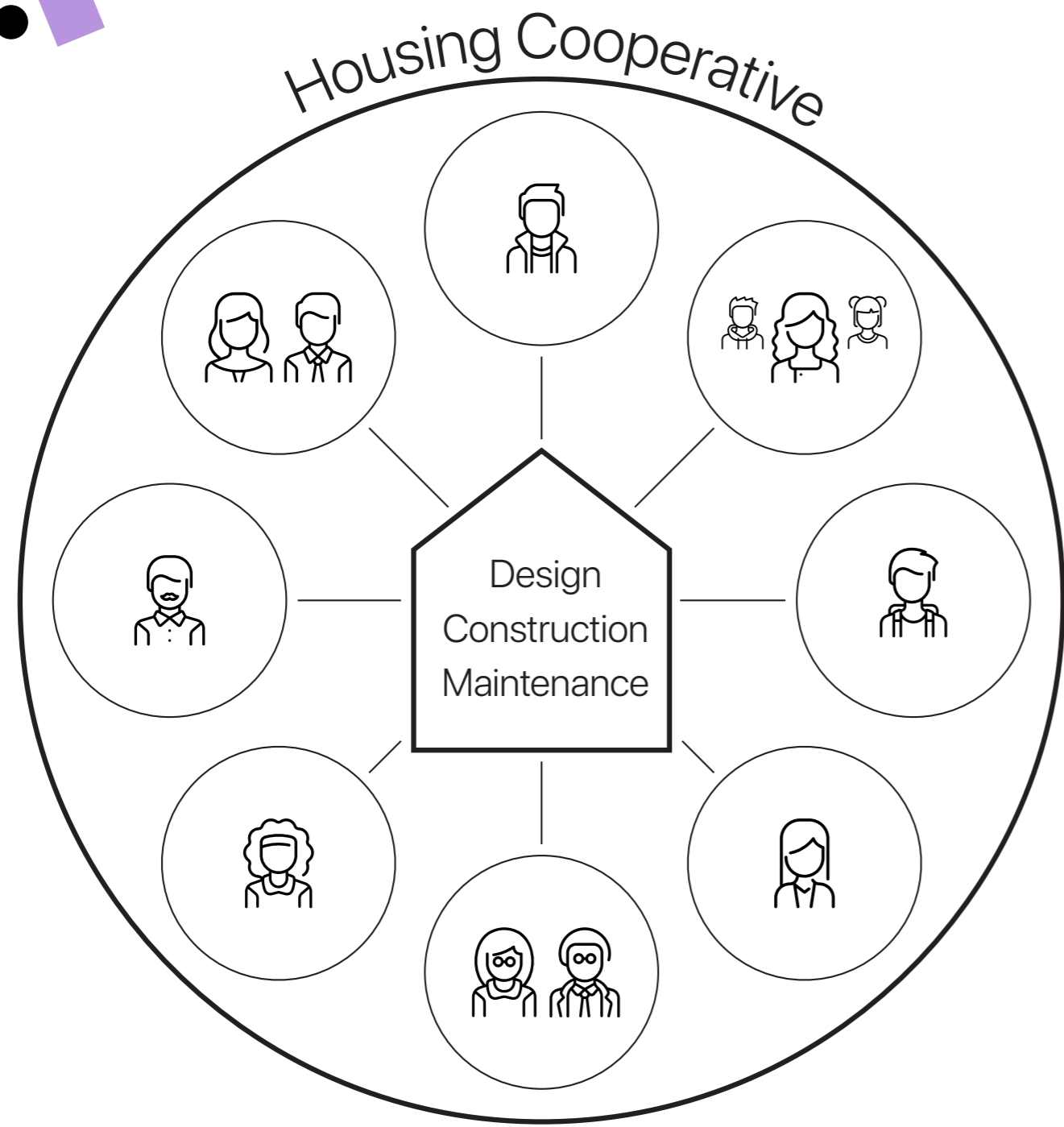


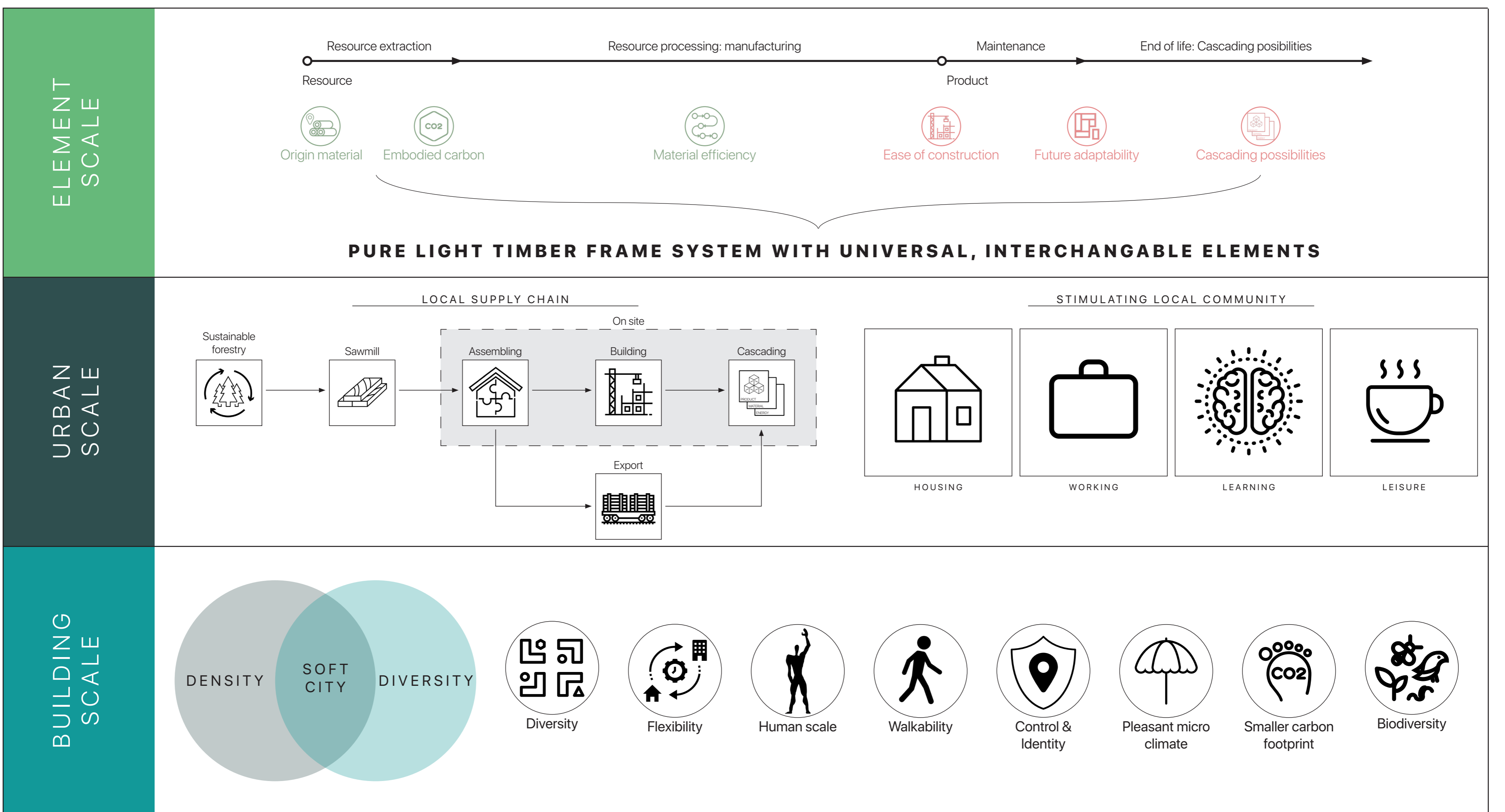
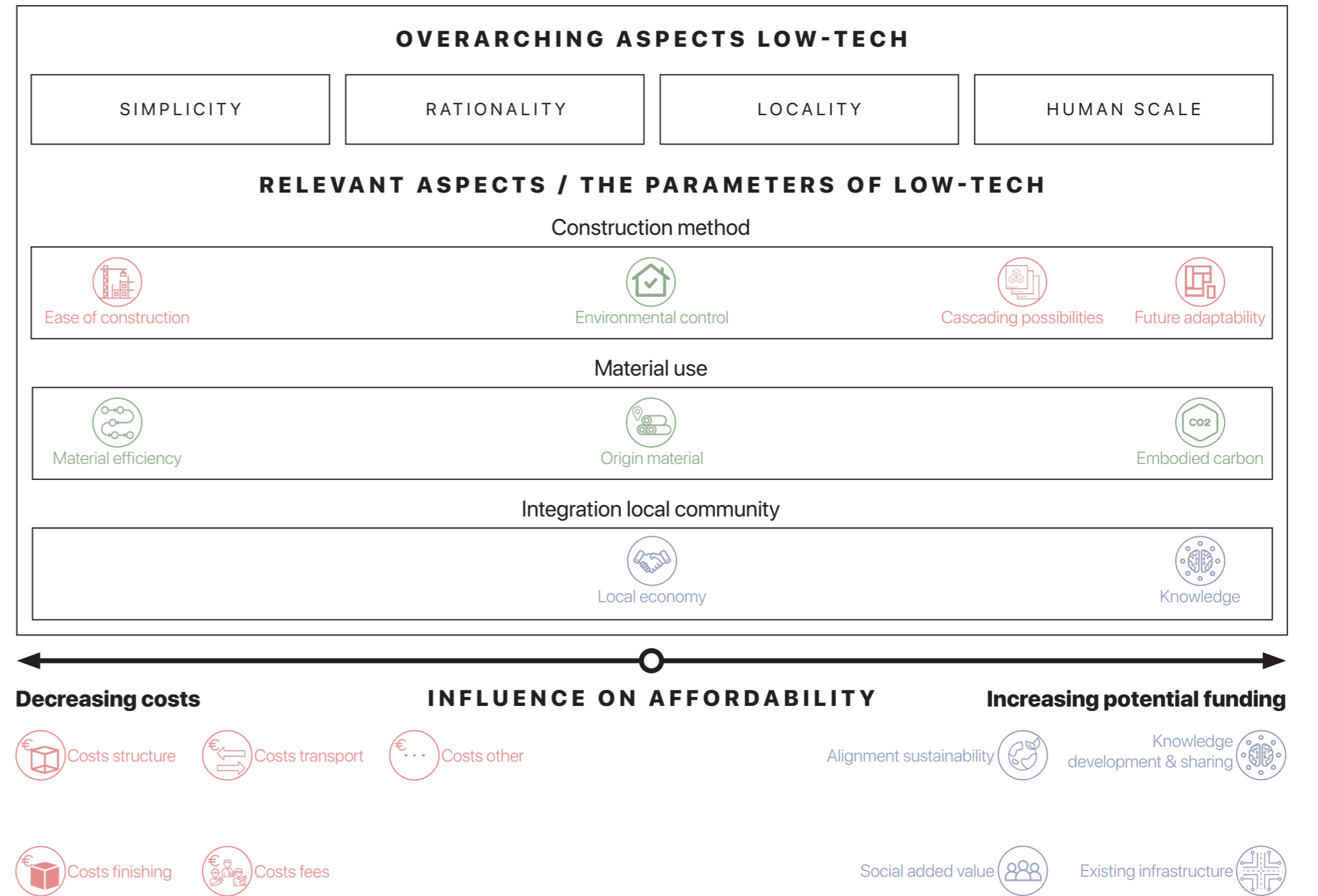
BRINGING AFFORDABLE HOUSING BACK TO THE PEOPLE SUSTAINABLY.



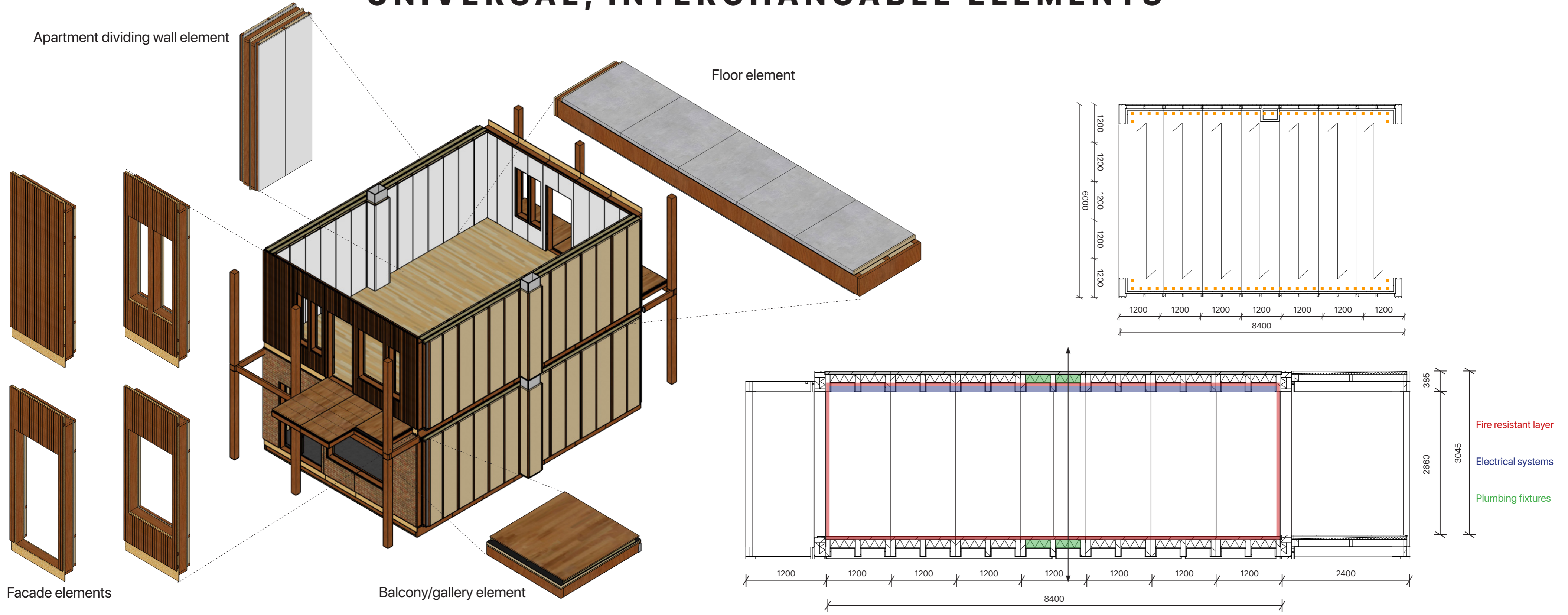
HOUSING COOPERATIVE



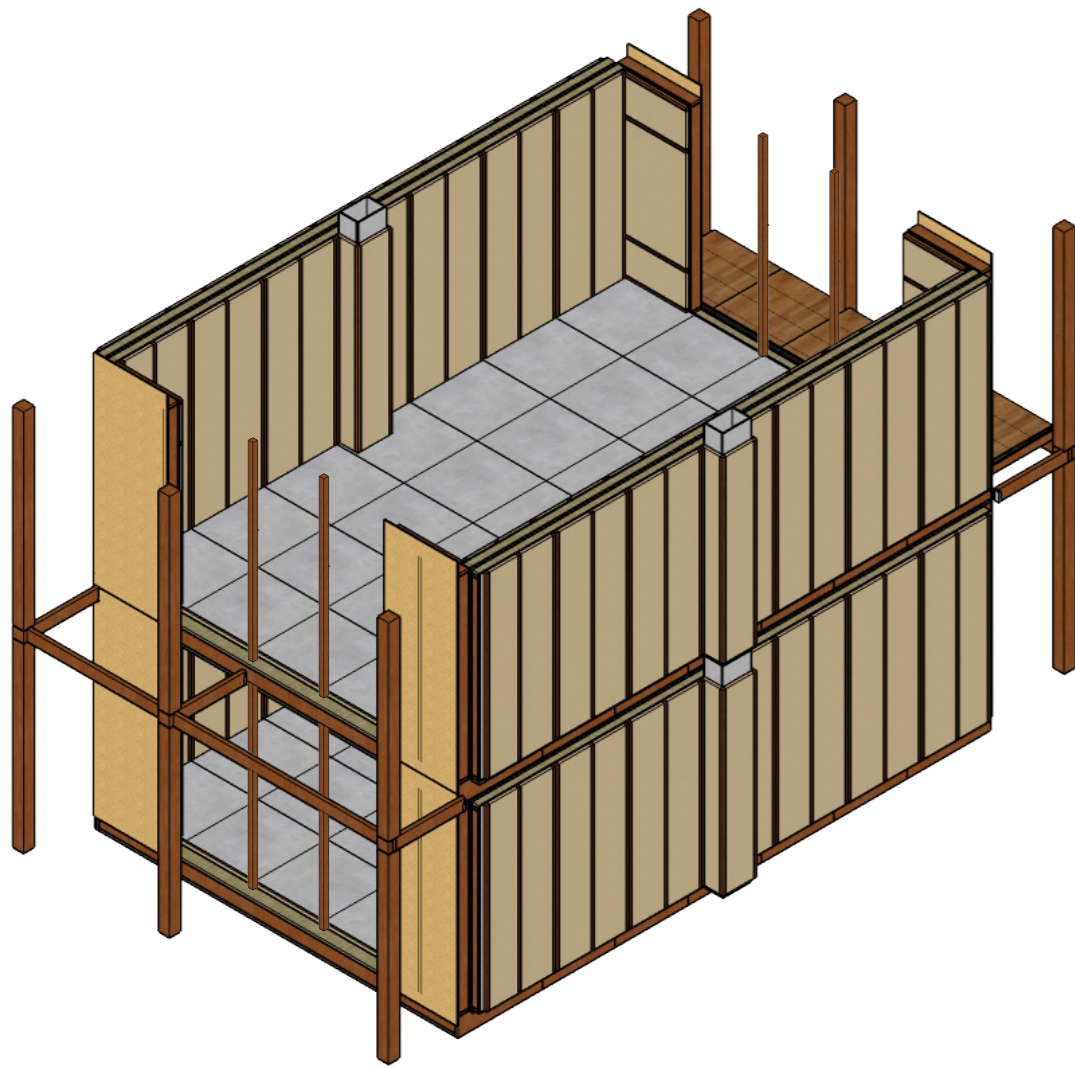
LOW-TECH PRINCIPLES



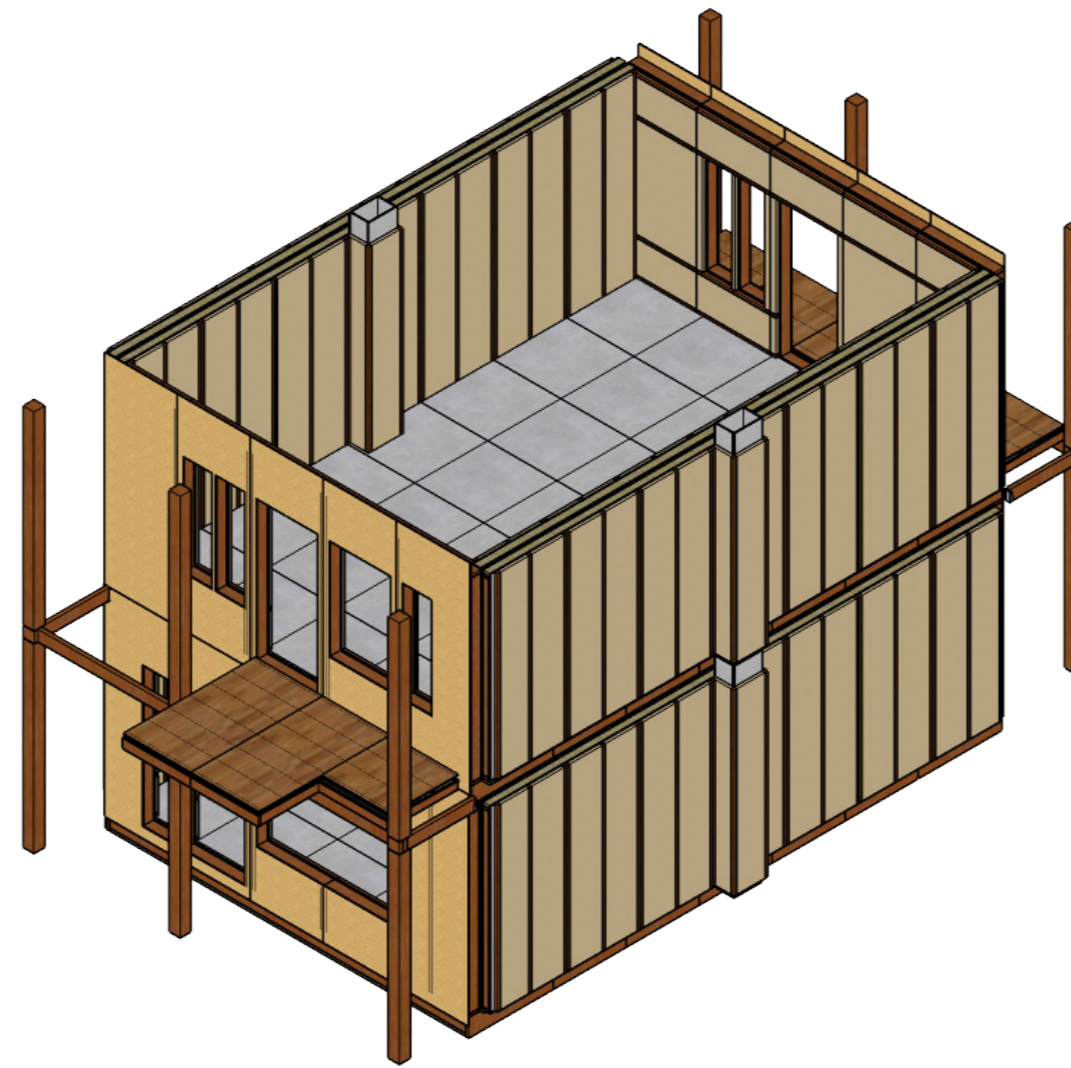
PURE LIGHT TIMBER FRAME SYSTEM WITH UNIVERSAL, INTERCHANGABLE ELEMENTS



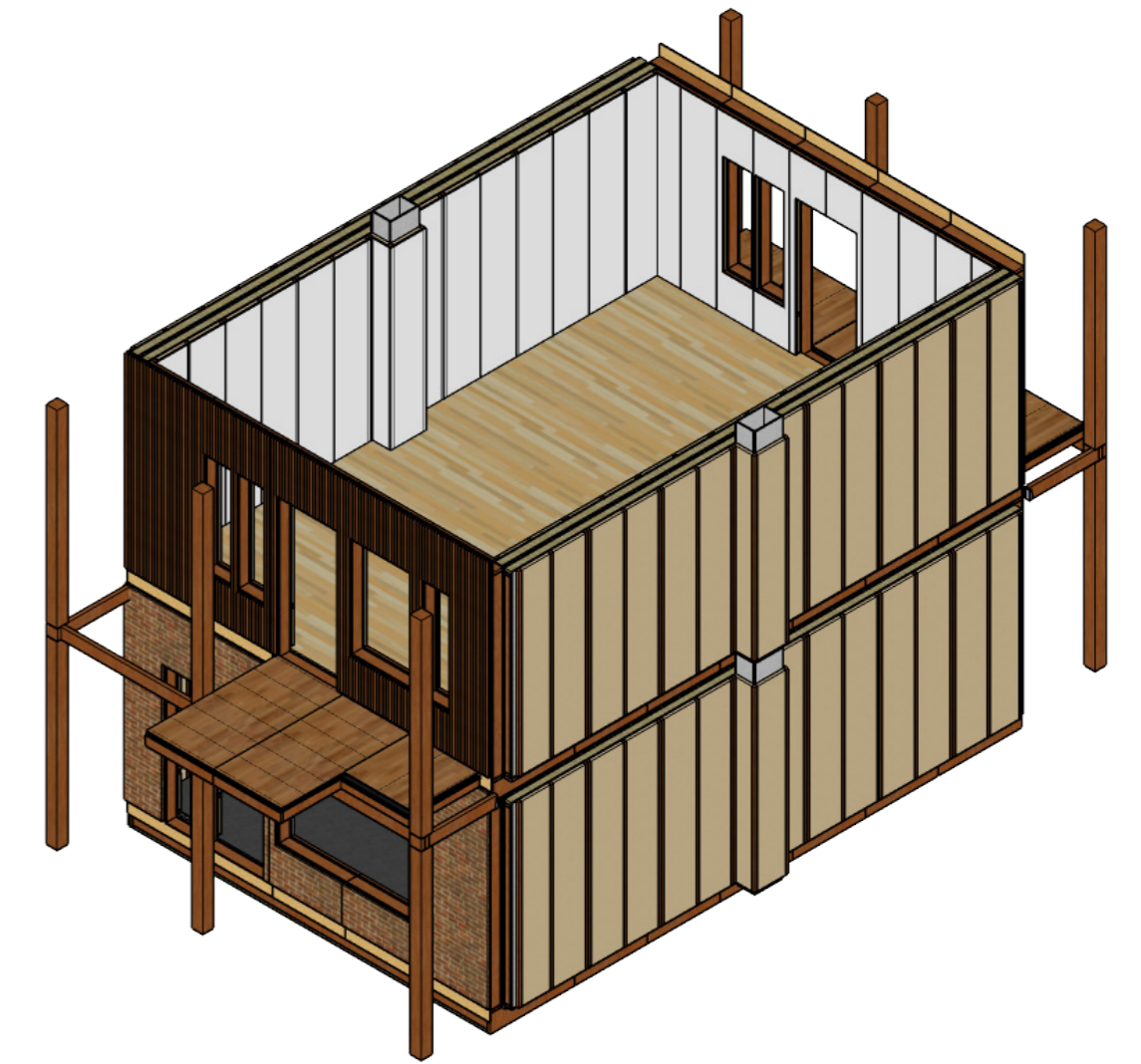
FIXED STRUCTURE



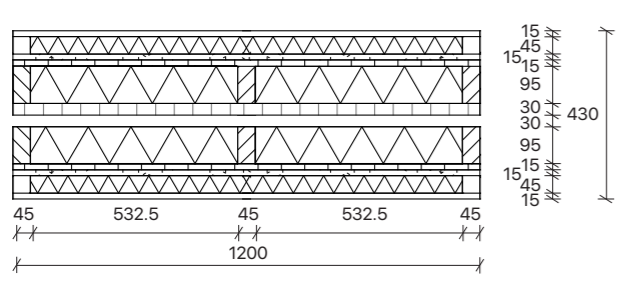
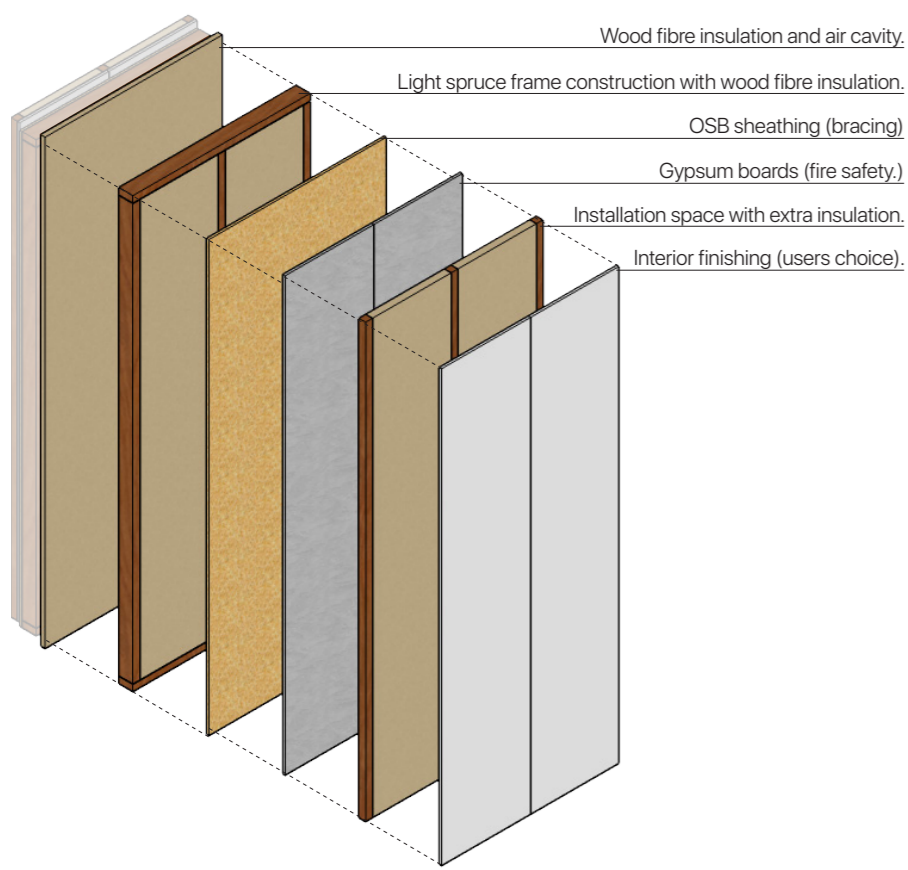
CHOICE IN BALCONY & FACADE OPENINGS



CHOICE IN FINISHING

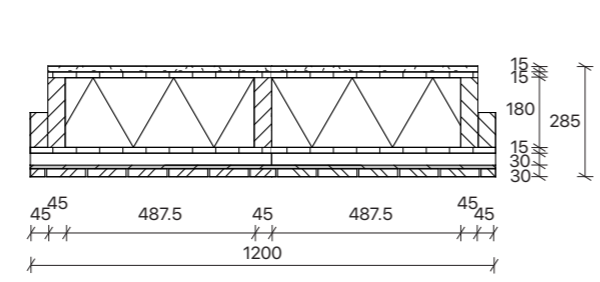
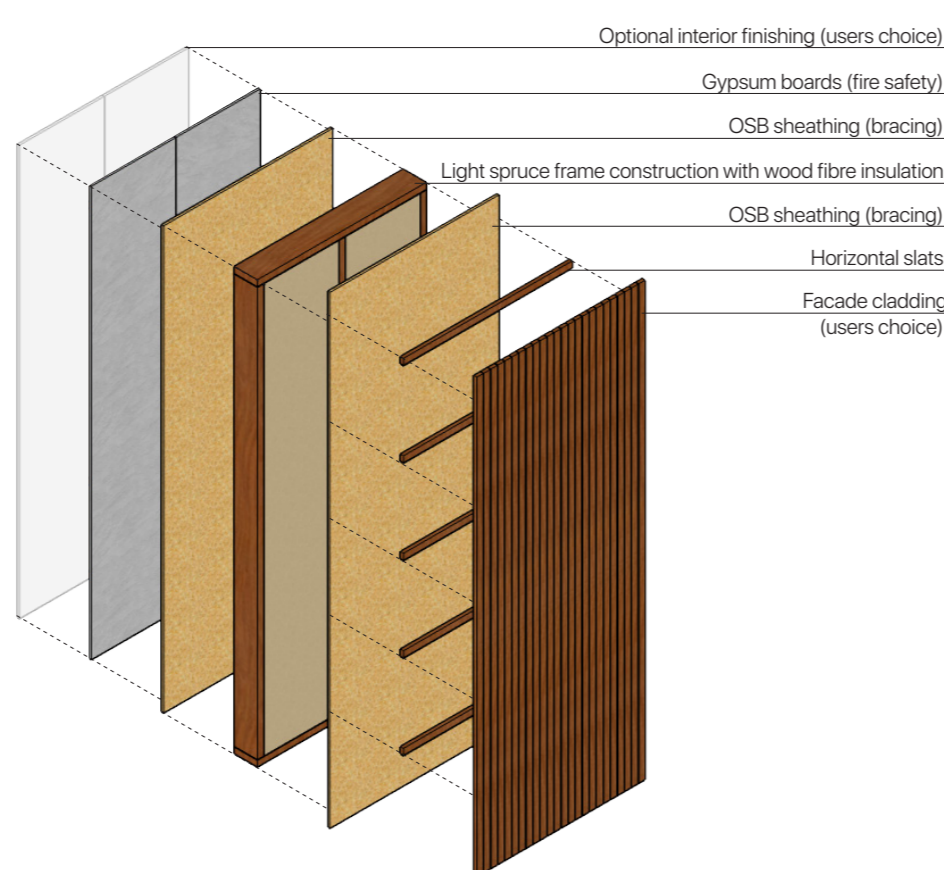


APARTMENT DIVIDING WALL ELEMENT



FLOOR ELEMENT

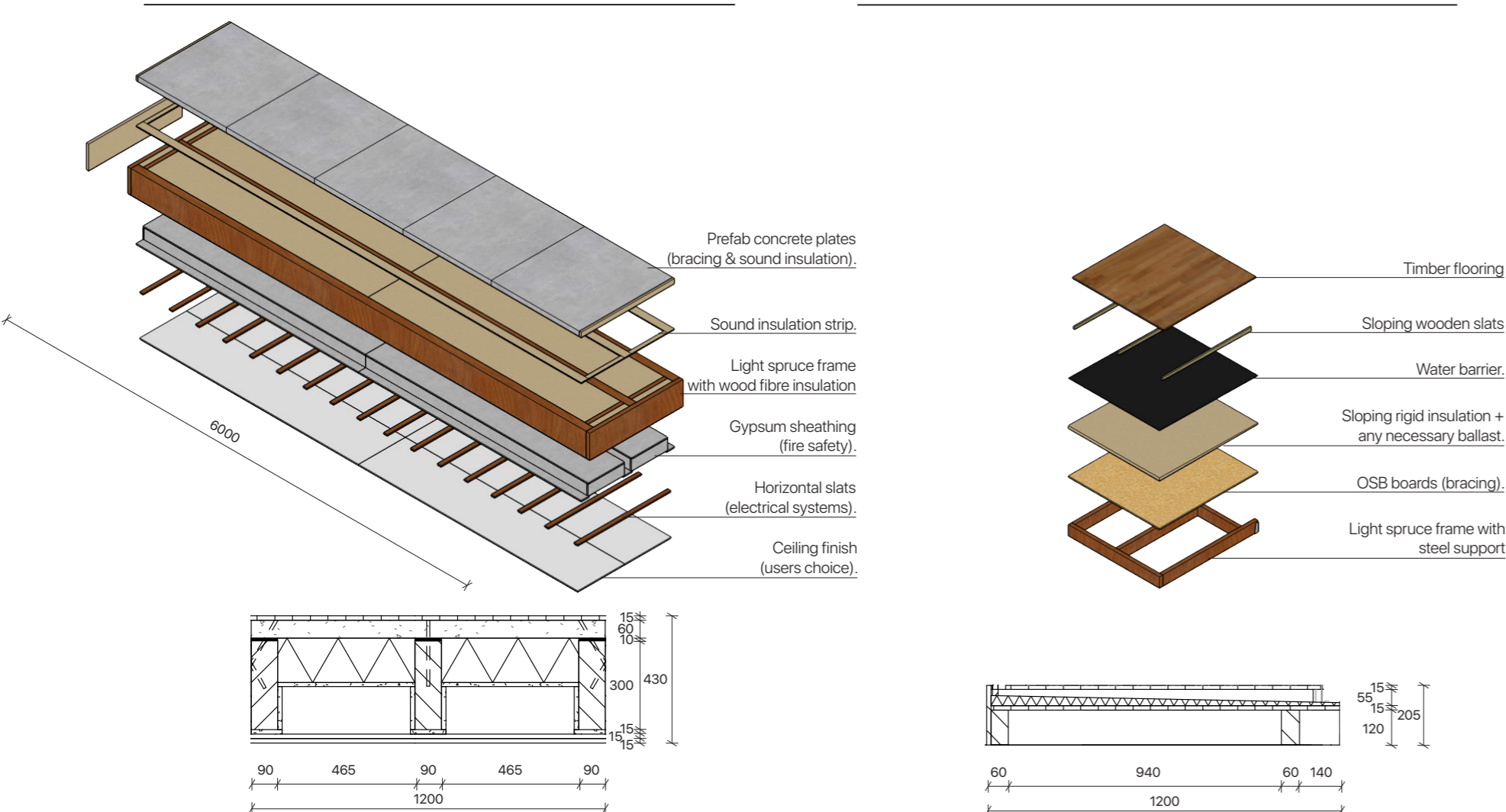
FACADE ELEMENT



BALCONY/GALLERY ELEMENT

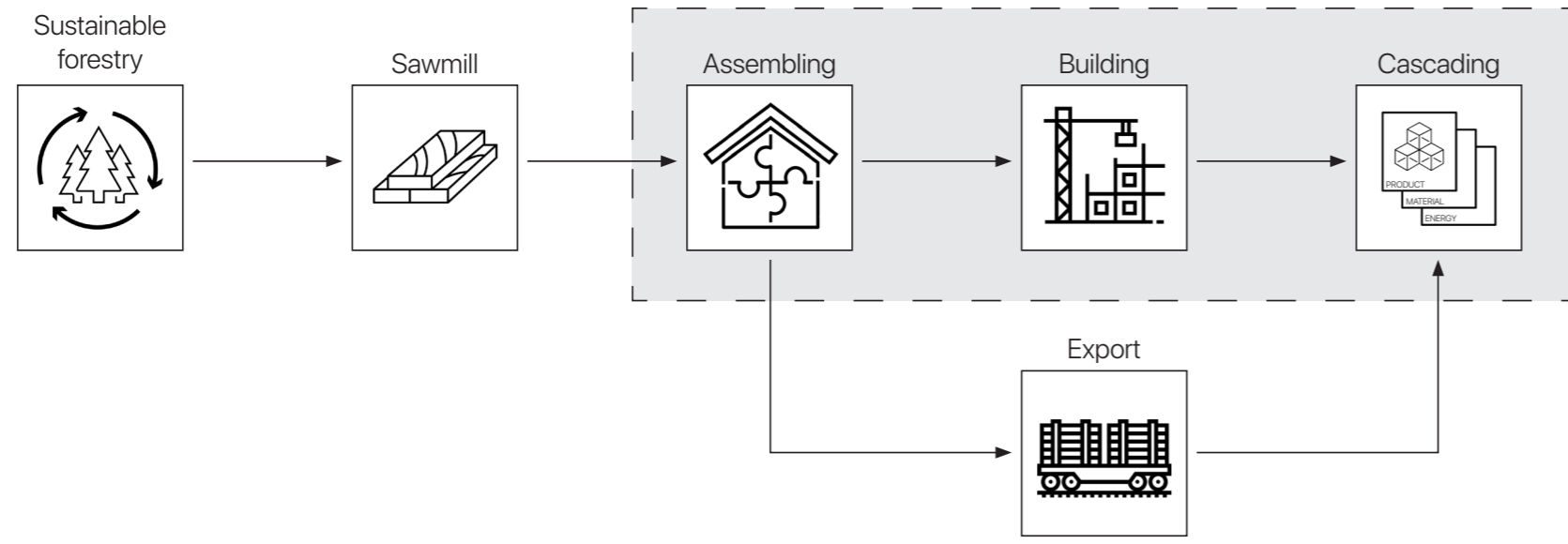
CATALOGUE FACADE ELEMENTS

	1 small	1 small tall	2 small	2 small tall	1 big	1 big tall / door	1 big double	1 big tall double / double door	Cross section	Costs	Sustainability
Wooden cladding										Thermo pine: ± €35,-/m ² ± 15-25 yr. Accoya: ± €75,-/m ² ± 50 yr. Hardwood: ± €50-150,-/m ² ± 15-25 yr.	<ul style="list-style-type: none"> Quick regrowth. Steam & heat for treatment. Longest lifespan. Chemical treatment. No treatment needed.
Brick strips										± €150-200,-/m ²	<ul style="list-style-type: none"> Used bricks on site can be recycled. Longest life span. Little to no maintenance.
Green facade										± €400-600,-/m ² ± 15-25 yr.	<ul style="list-style-type: none"> Siemensmaat® C2C Bronze 2.3kg CO₂ / 1kg m² / yr. Lowest temp. DPC Reduces ambient noise Positive health effects. Biodiversity (shrubs, perennials & ferns)

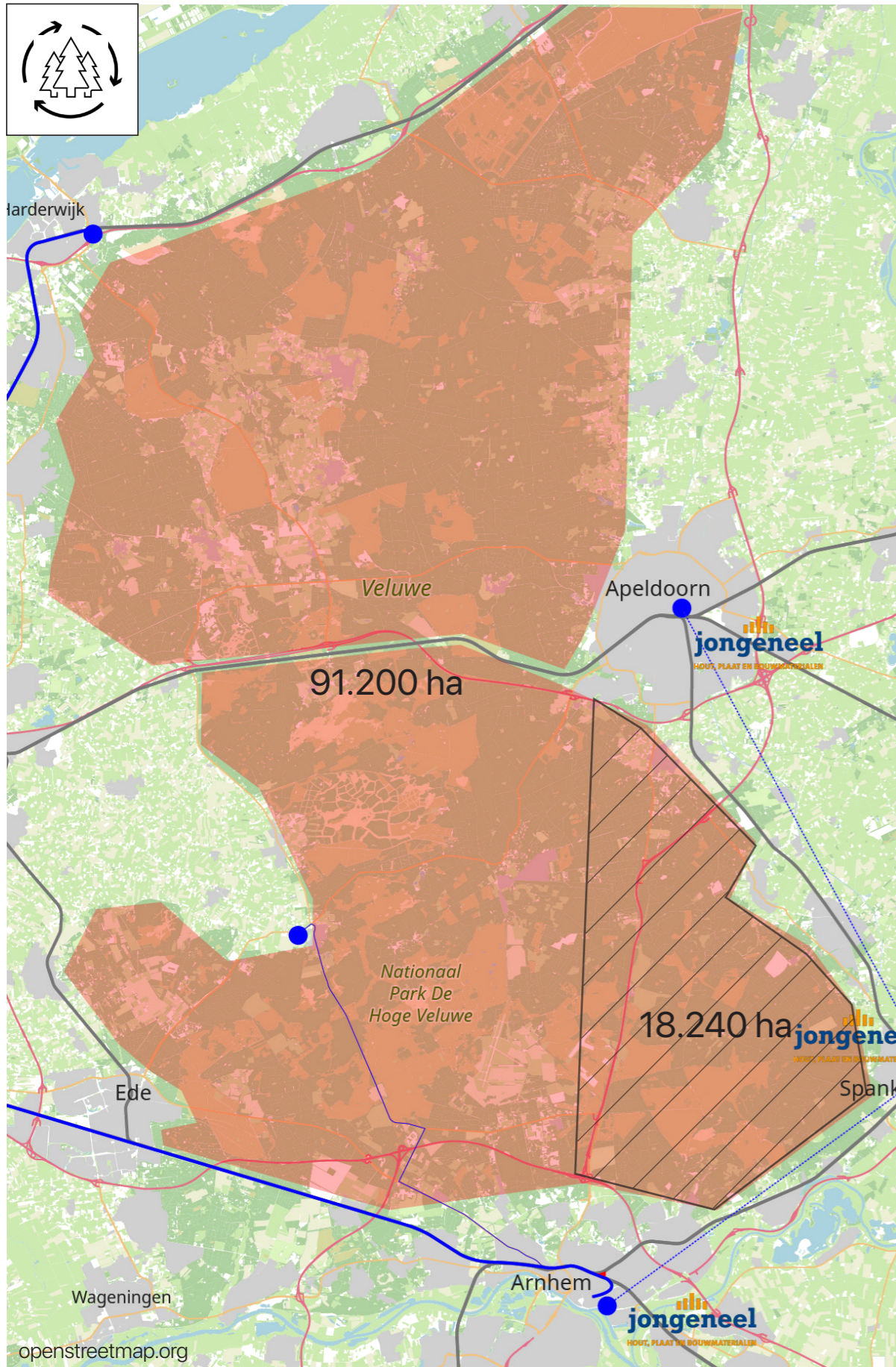
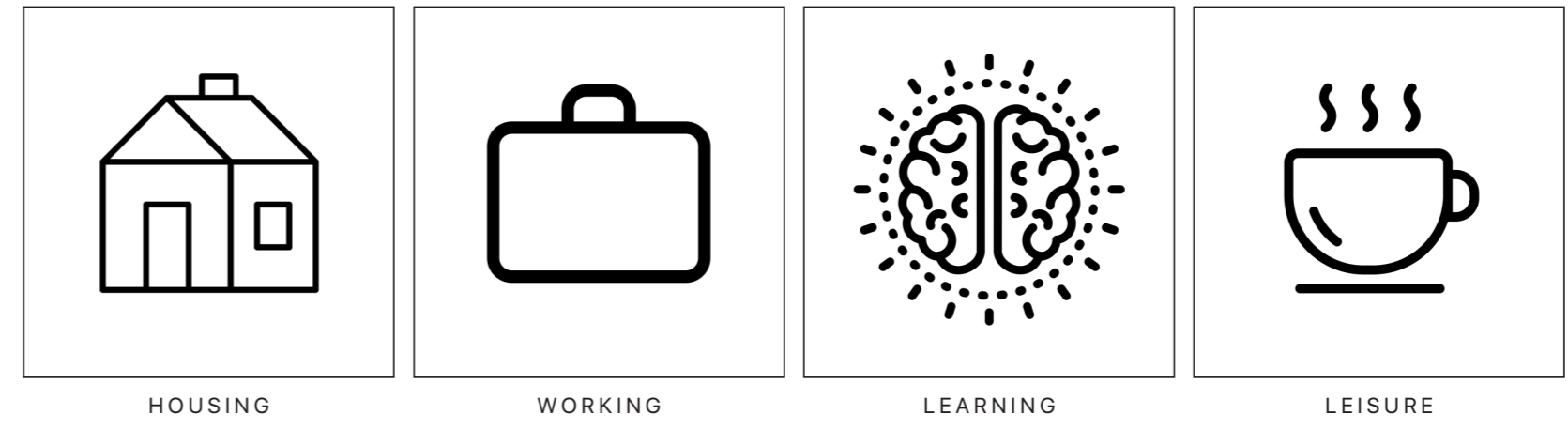


MERWEDETERREIN, ARNHEM, NETHERLANDS

LOCAL SUPPLY CHAIN



STIMULATING LOCAL COMMUNITY



1/5 for forestry:

- 18.240 ha.
- 5.6m³ construction timber p. year. } 102.144 m³ p. year.
- ~ 50 m³ timber per small dwelling.
- 102.144 m³ p. year. } 2042 small dwellings p. year.

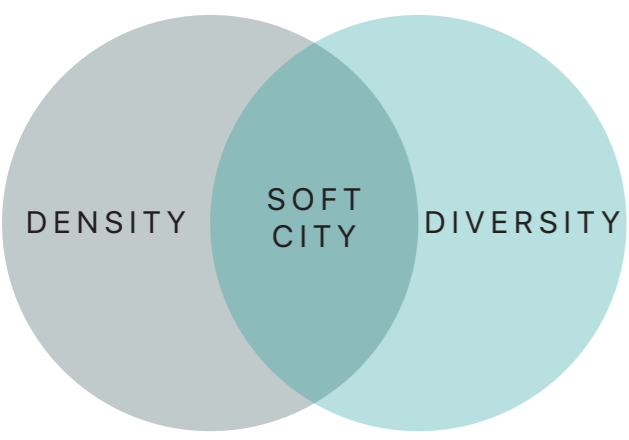


jongeneel
HOUD, PLAAT EN BOUWMATERIALEN

- Responsible forest management**: Striving for 100% responsible wood
- Certified wood**: Wood with FSC or PEFC quality mark
- recycling centers**: Sustainable disposal of construction waste to make it as easy as possible for you and the environment
- CO2 performance ladder**: How we reduce our CO2 footprint
- STIP supporter**: Jongeneel is a STIP supporter
- Social entrepreneurship**: We give colleagues the opportunity - with success
- Prefab wood**: Order prefab wood at Jongeneel
- Customized sheet material**: More efficiency, convenience and accuracy
- recycling centers**: Sustainable disposal of construction waste to make it as easy as possible for you and the environment
- Concrete delivery**: Concrete delivery to the construction site? From wheelbarrow to concrete truck

The site plan shows the layout of the Merwedeterrein area, including streets like Vosdijk, Vrij Nederlandstraat, and IJssellaan. It features architectural sketches of trees and a 'knowledge shack' structure. Annotations include 'extending Vrij Nederlandstraat' and 'Remains existing mosque (+new)'. A small-scale forestry sketch is also present.

HOUSING COOPERATIVE MERWEDE

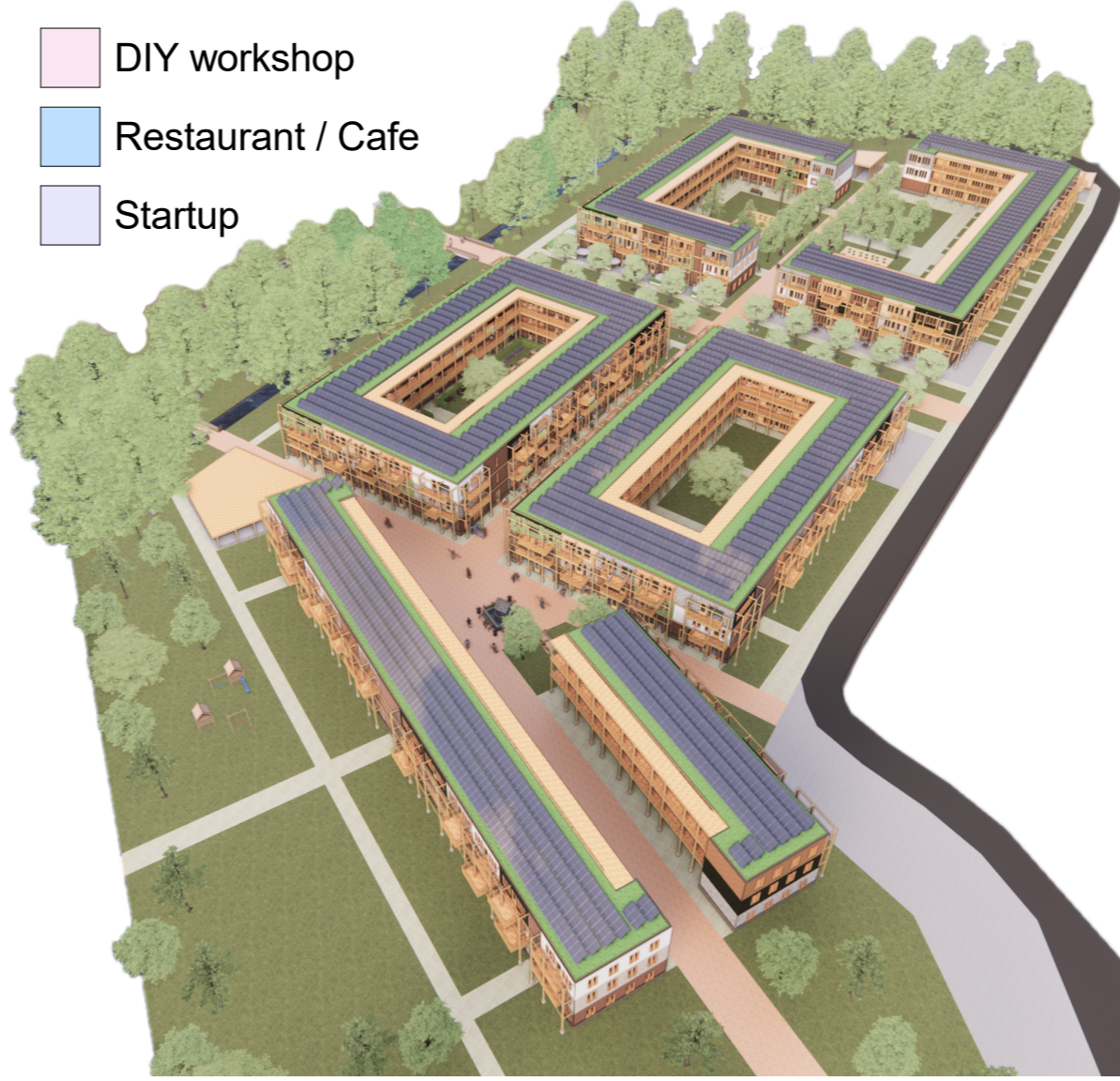


- Diversity
- Flexibility
- Human scale
- Walkability
- Control & Identity
- Pleasant micro climate
- Smaller carbon footprint
- Biodiversity

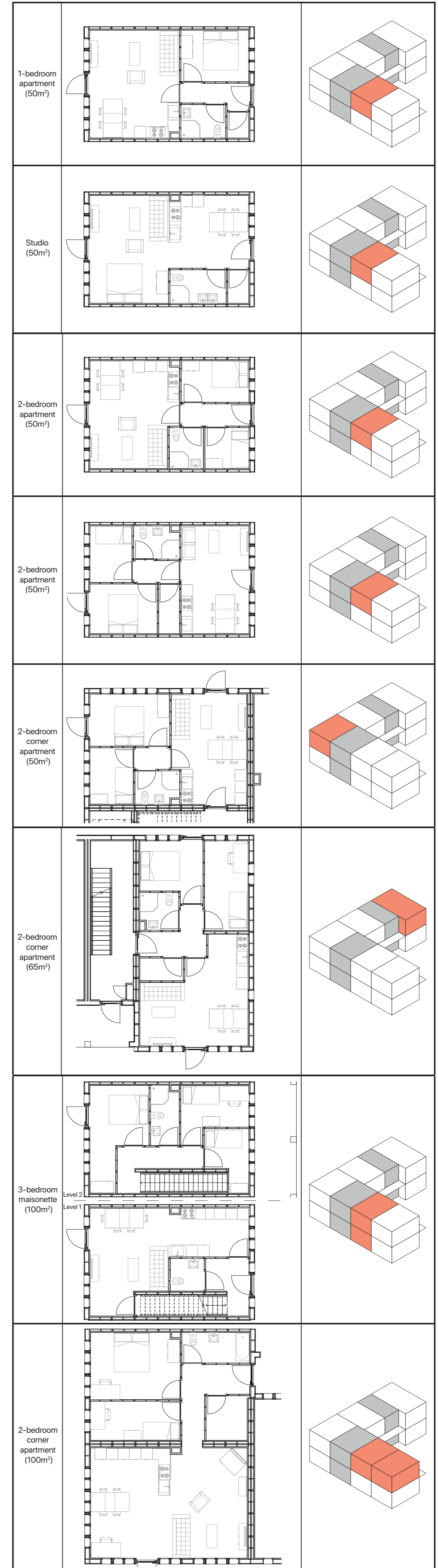
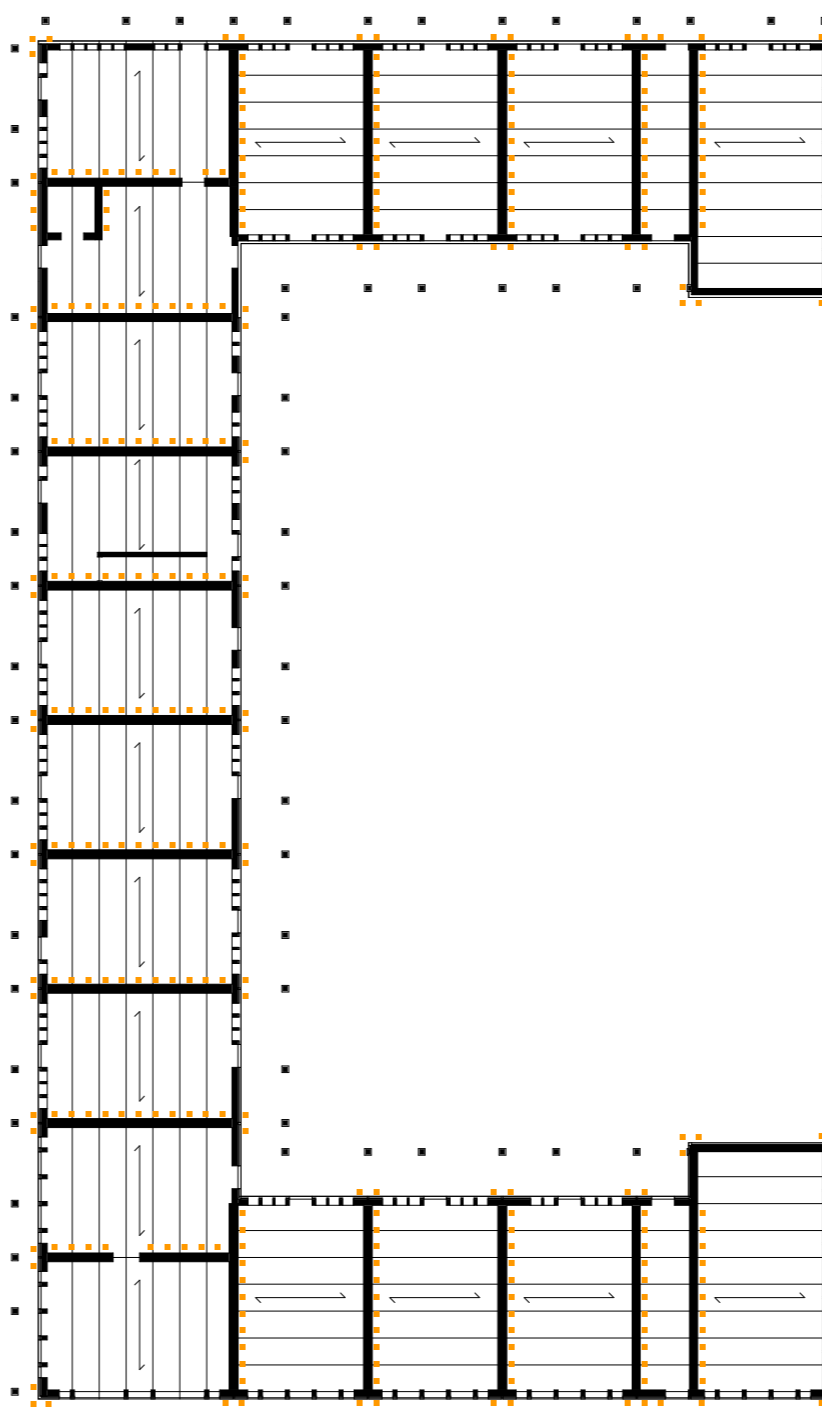


Room Legend

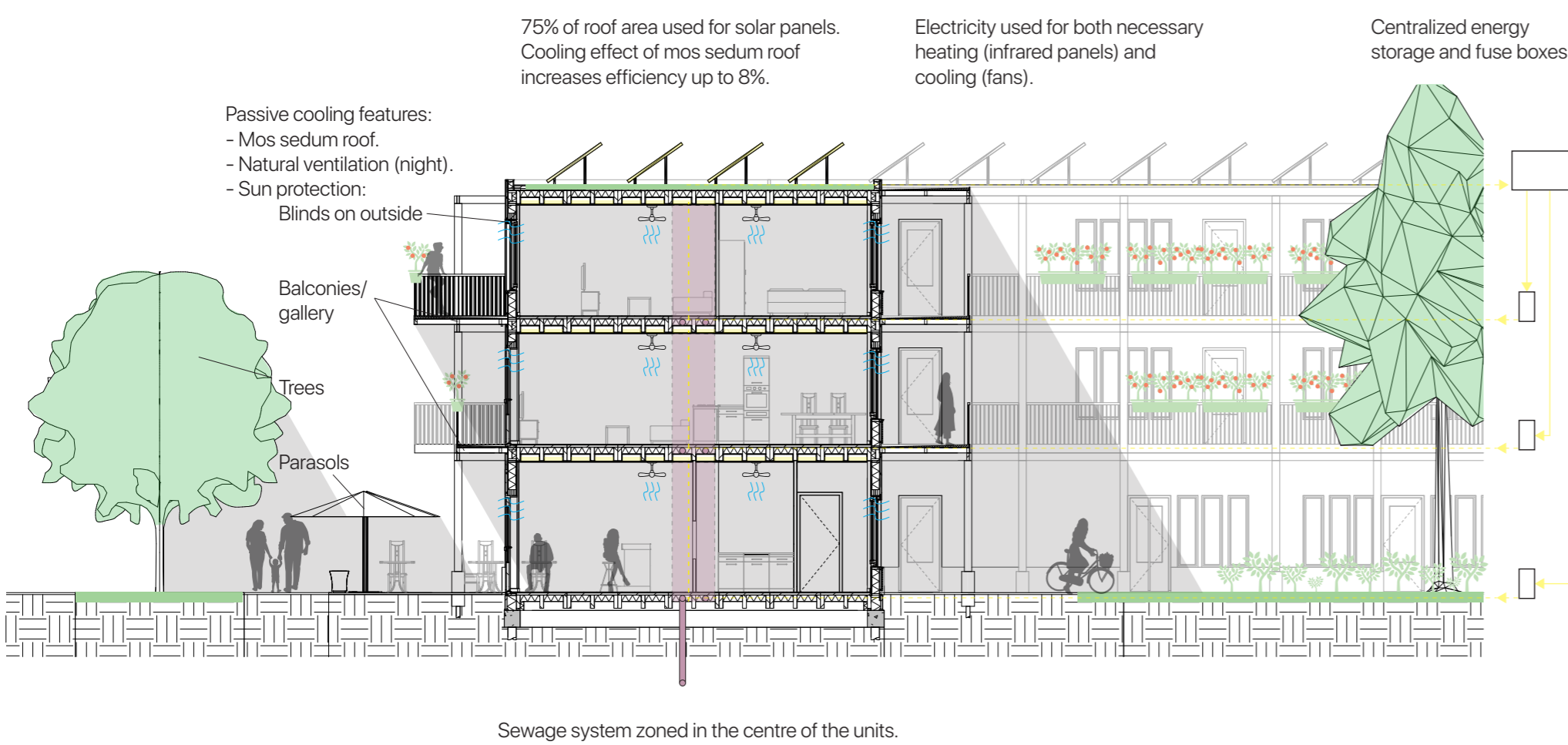
- DIY workshop
- Restaurant / Cafe
- Startup



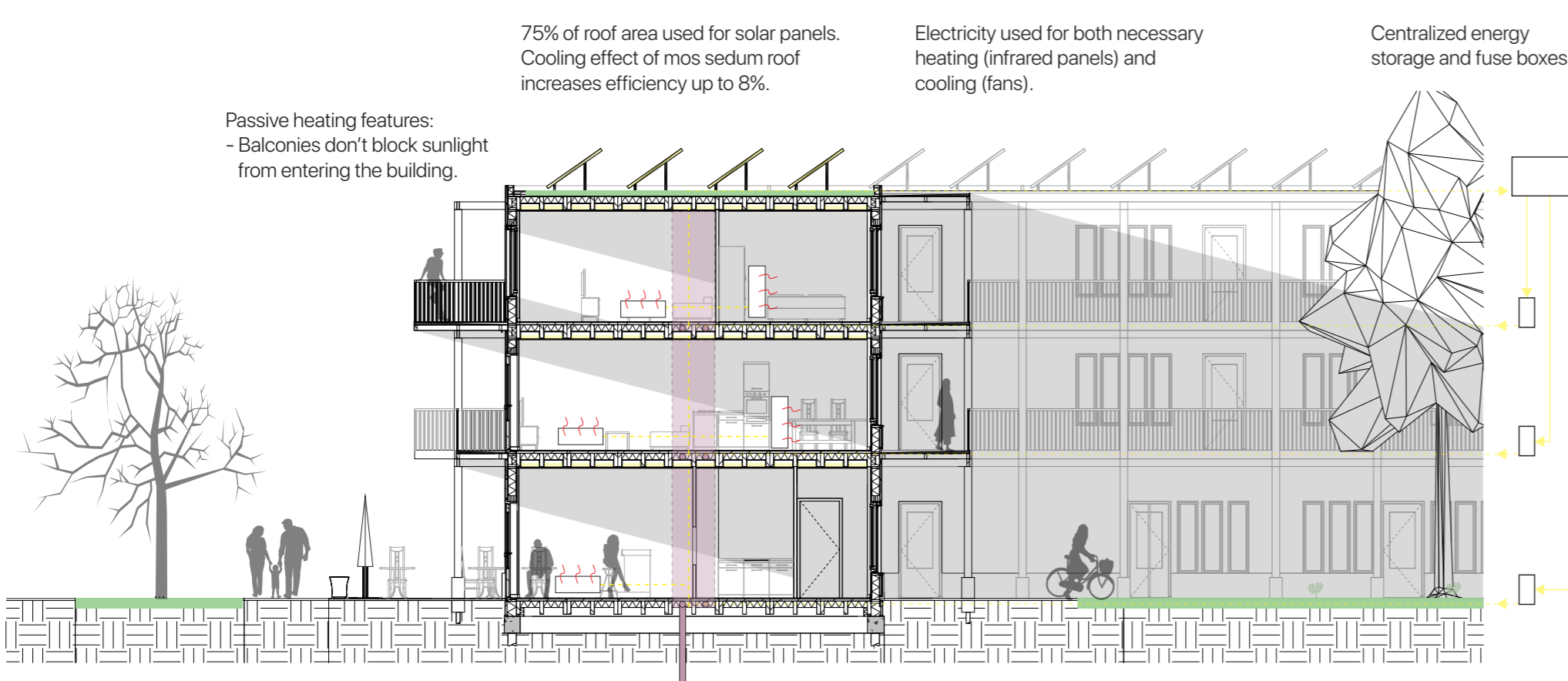
CONSTRUCTION PLAN



CLIMATE DESIGN SUMMER



CLIMATE DESIGN WINTER



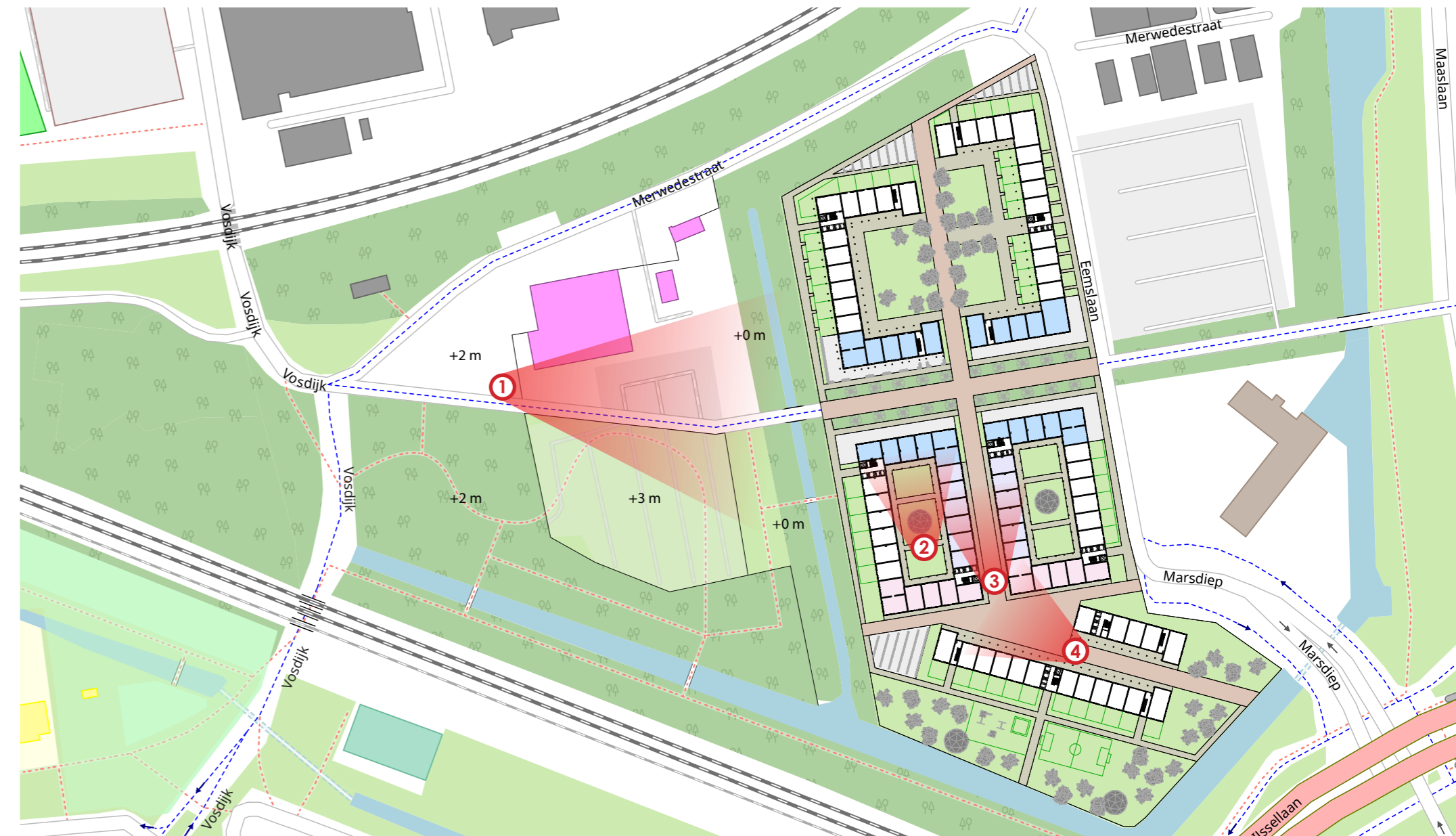
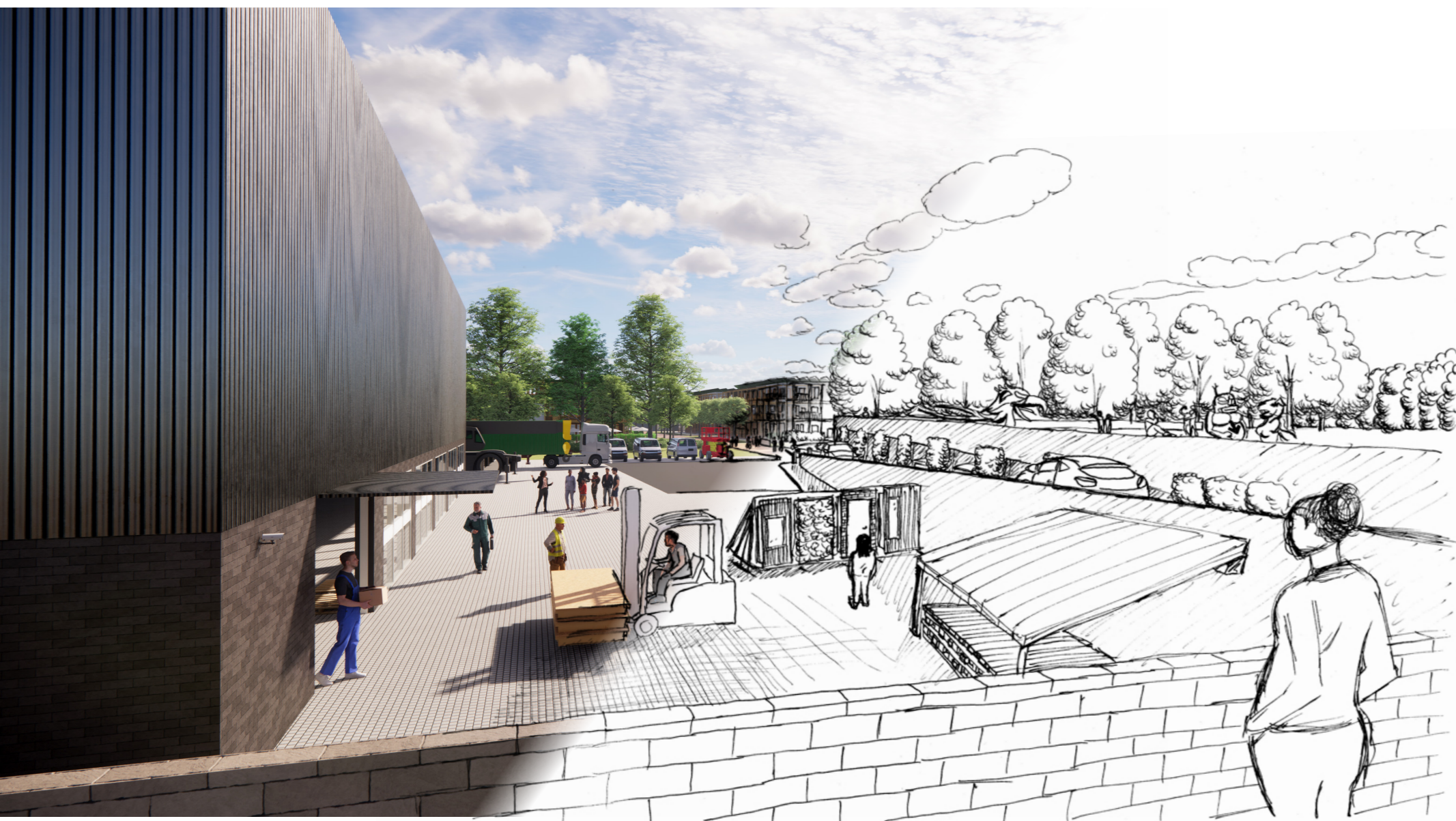
Indicatief BENG-label

Project		Housingcoop. Merwede	
KENTALEN			
Gebruiksoppervlakte Ag	m ²	2430	
Verliesoppervlakte/Volume	m ² /m ³	0.28	
Ugemiddeld	W/m ² K	0.543	
Glaspercentage*ZTA-zonwering	%	0.08709	
% Natuurlijke ventilatie	%	85.7	
% Daglicht	%	71.6	
Elektriciteitsproductie /Ag	kWh/m ²	48.2	
BENG indicatoren			
Energiebehoefte	< 90	38 kWh/m ²	
Primair fossiel energiegebruik	< 40	-1 kWh/m ²	
Aandeel hernieuwbare energie	> 30	101 %	

De energielabel geeft een indicatie van de energiezuinigheid van het ontwerp. Versie 3.06.2020/16. Alleen te gebruiken voor onderwijsdoeleinden. 5236851



① ASSEMBLY SITE / SCULPTURE GARDEN



② CLOSED COURTYARD



ROOFLANDSCAPE (INITIAL SITUATION)



③ START-UP STREET



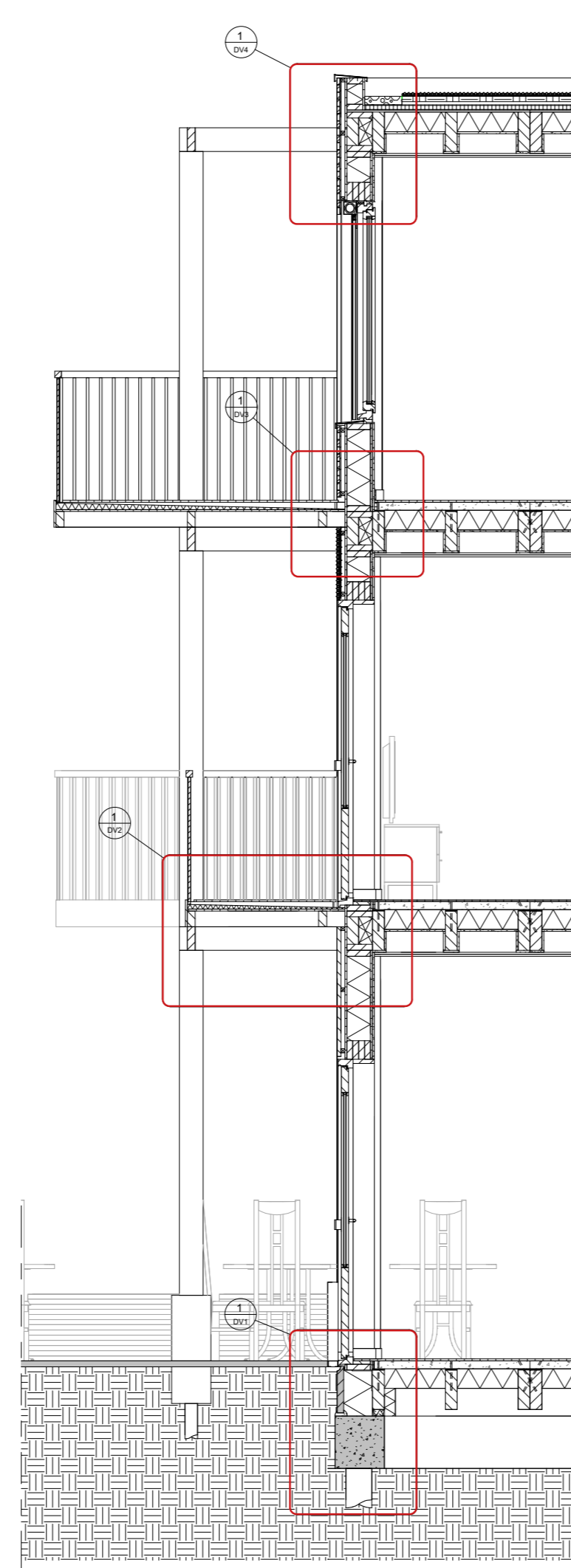
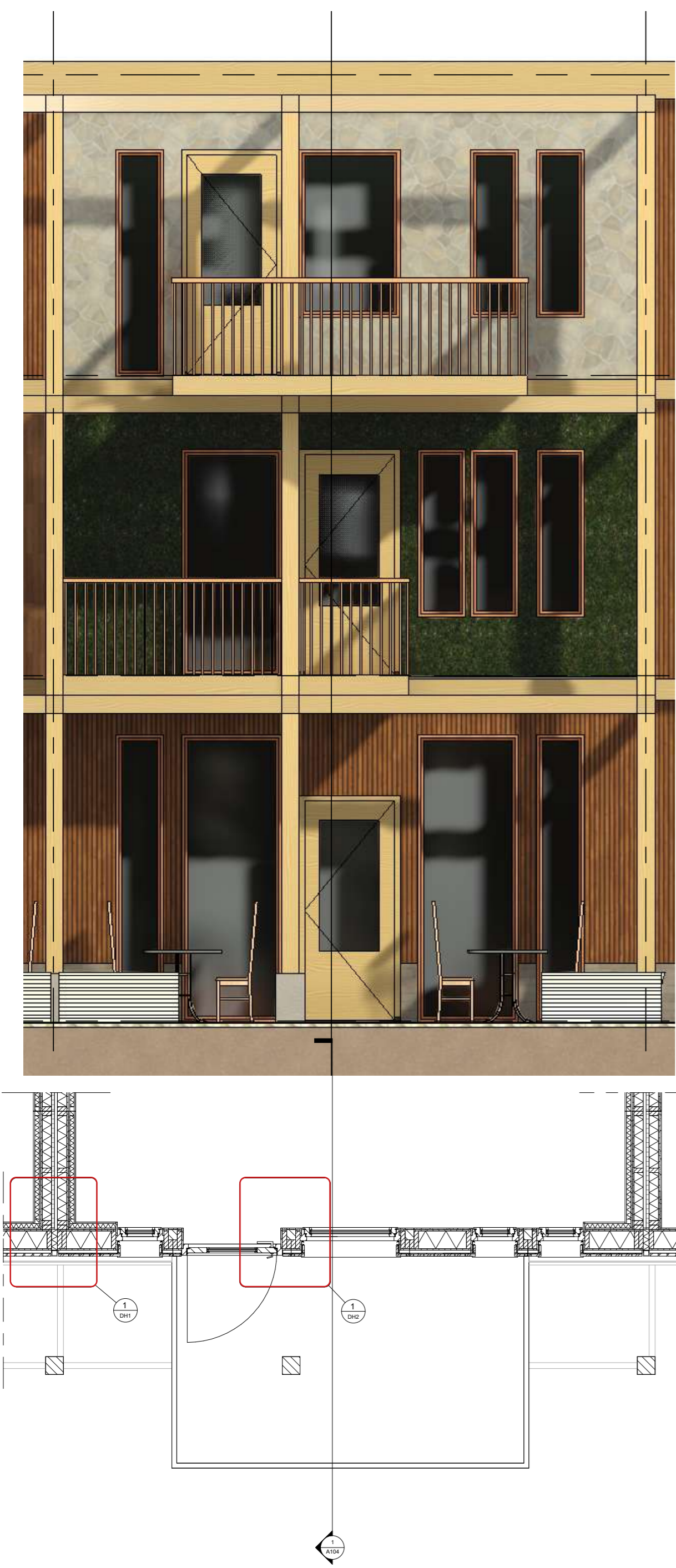
ROOFLANDSCAPE (ADDITIONAL LEVEL)



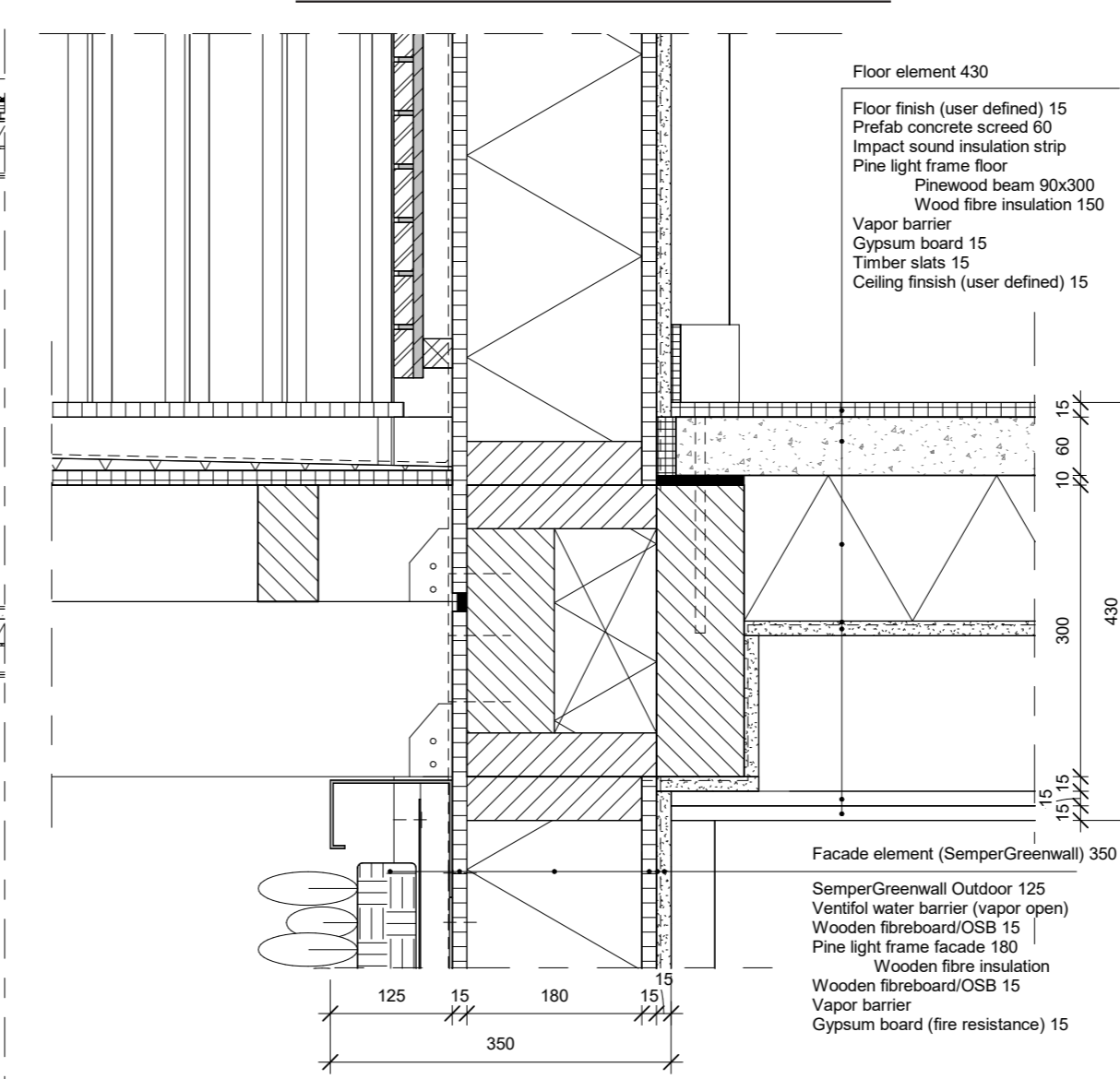
④ WORKSHOP SQUARE



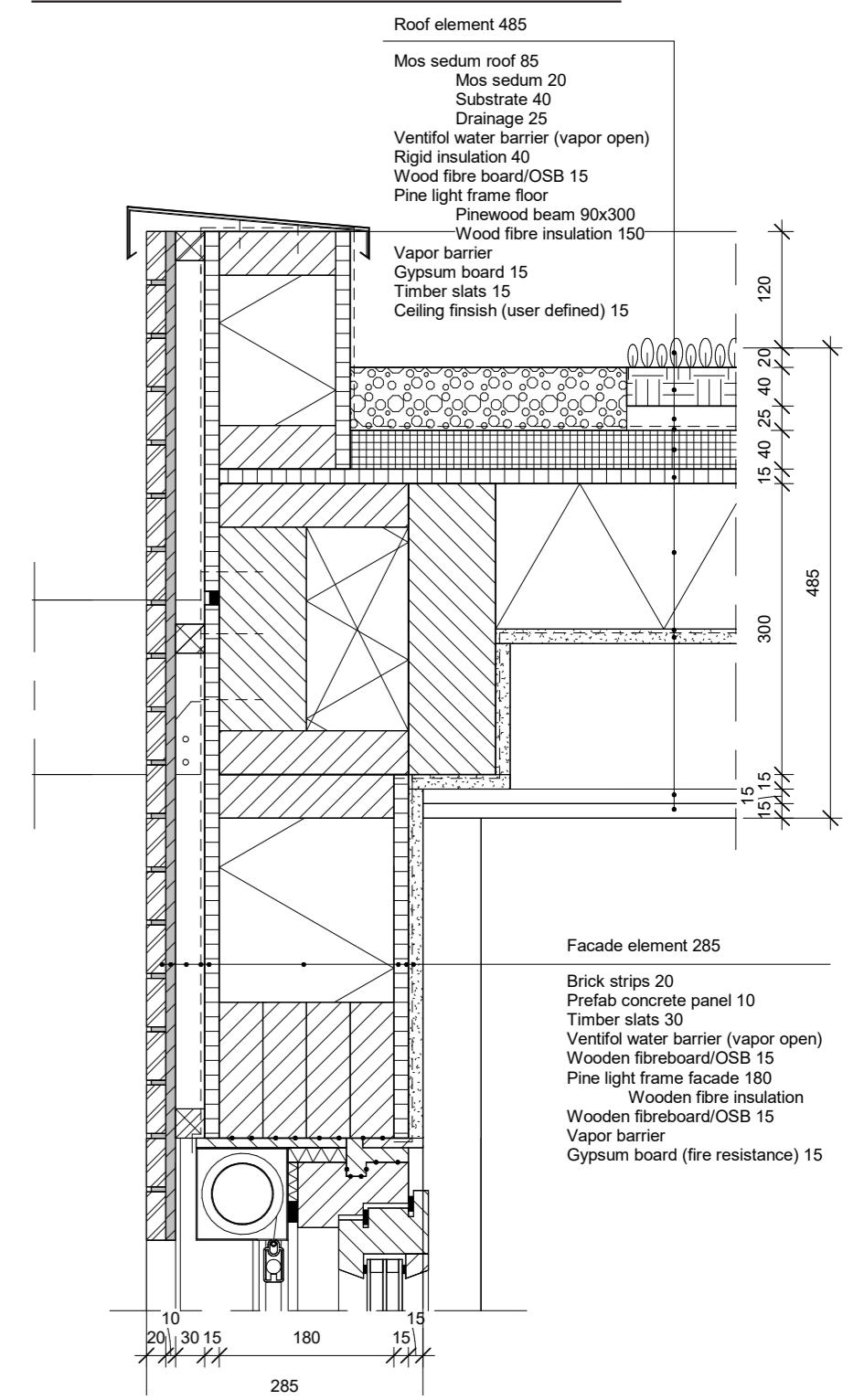
FACADE FRAGMENT



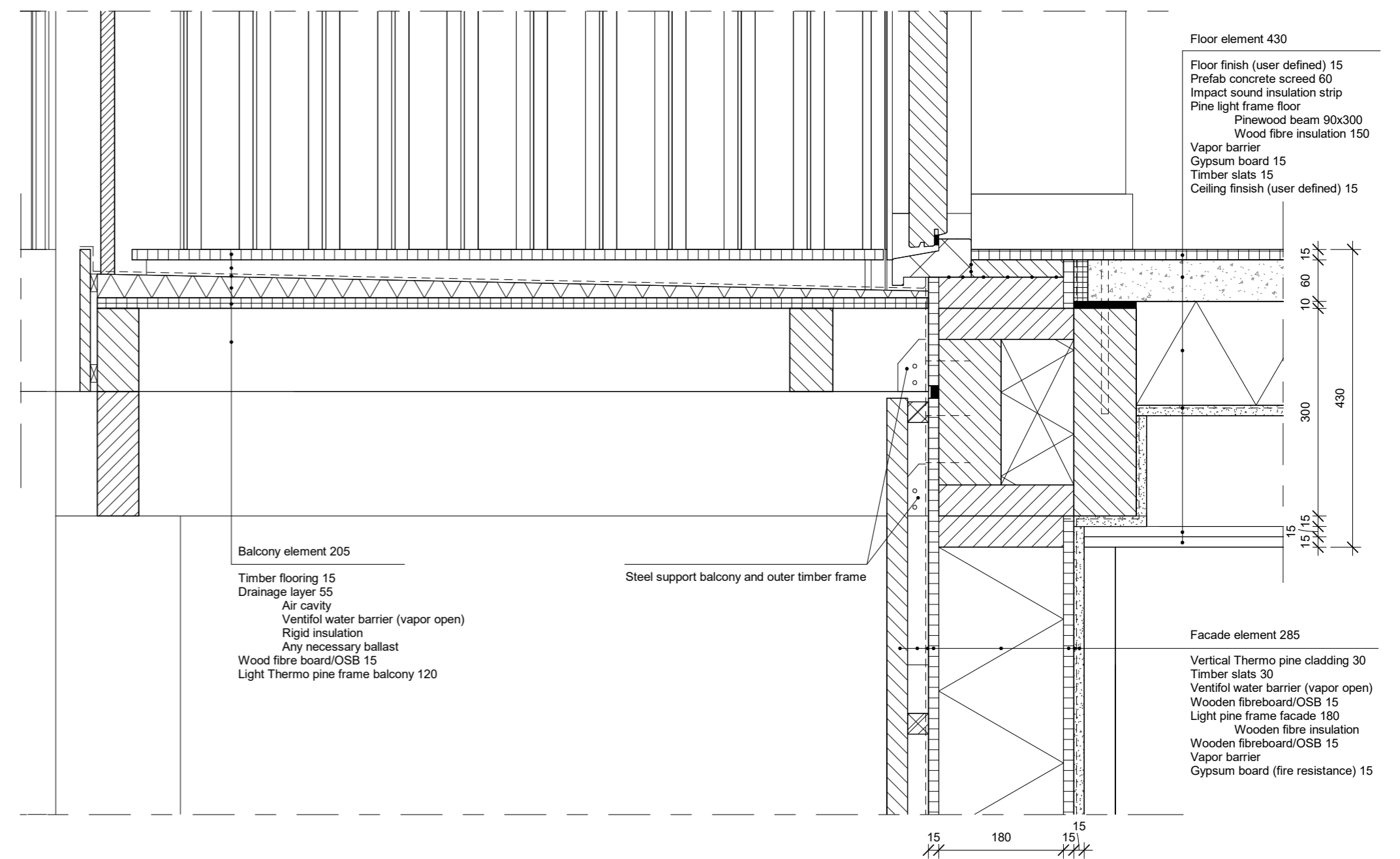
DV3: STANDARD FLOOR



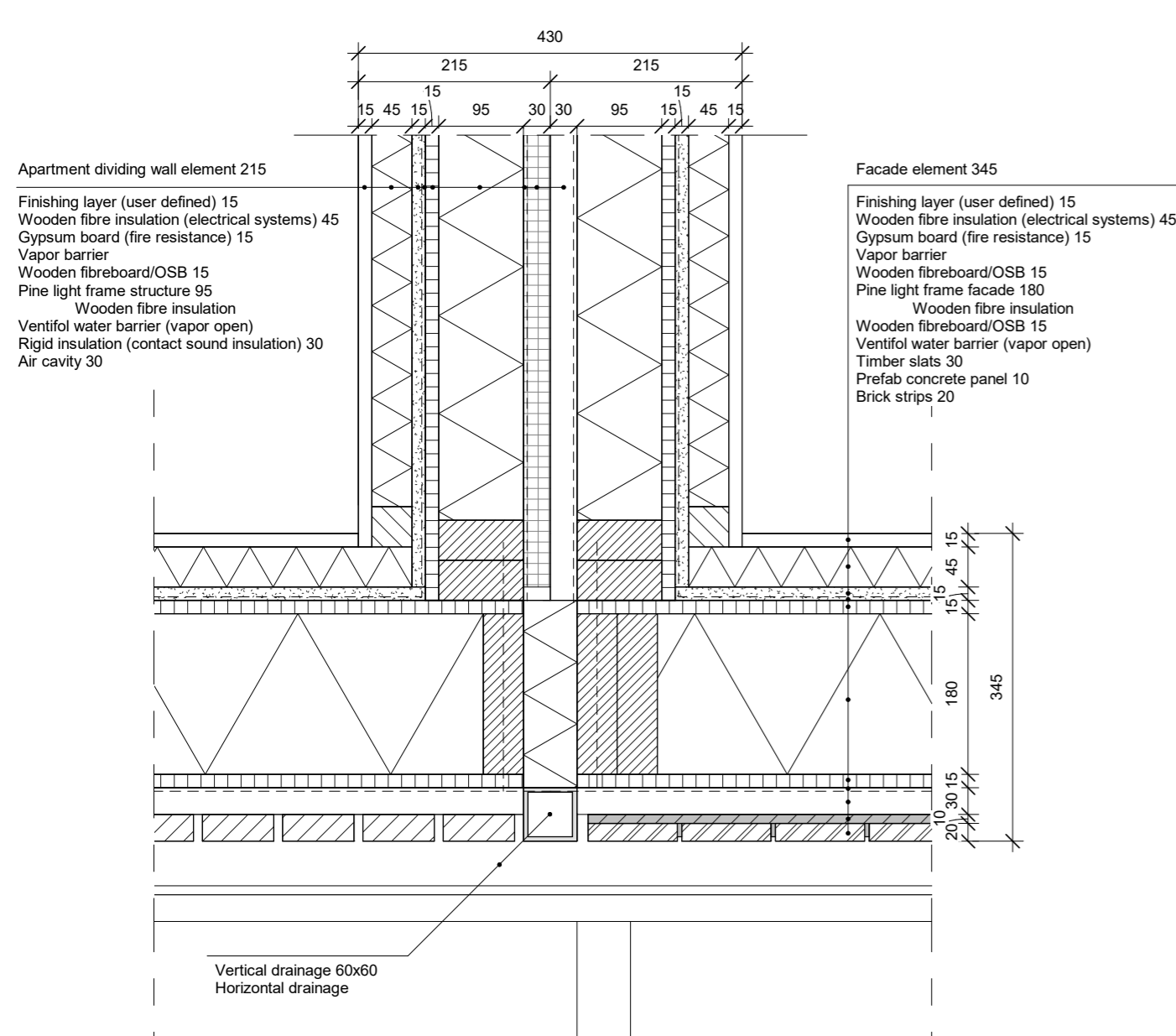
DV4: EDGE ROOF



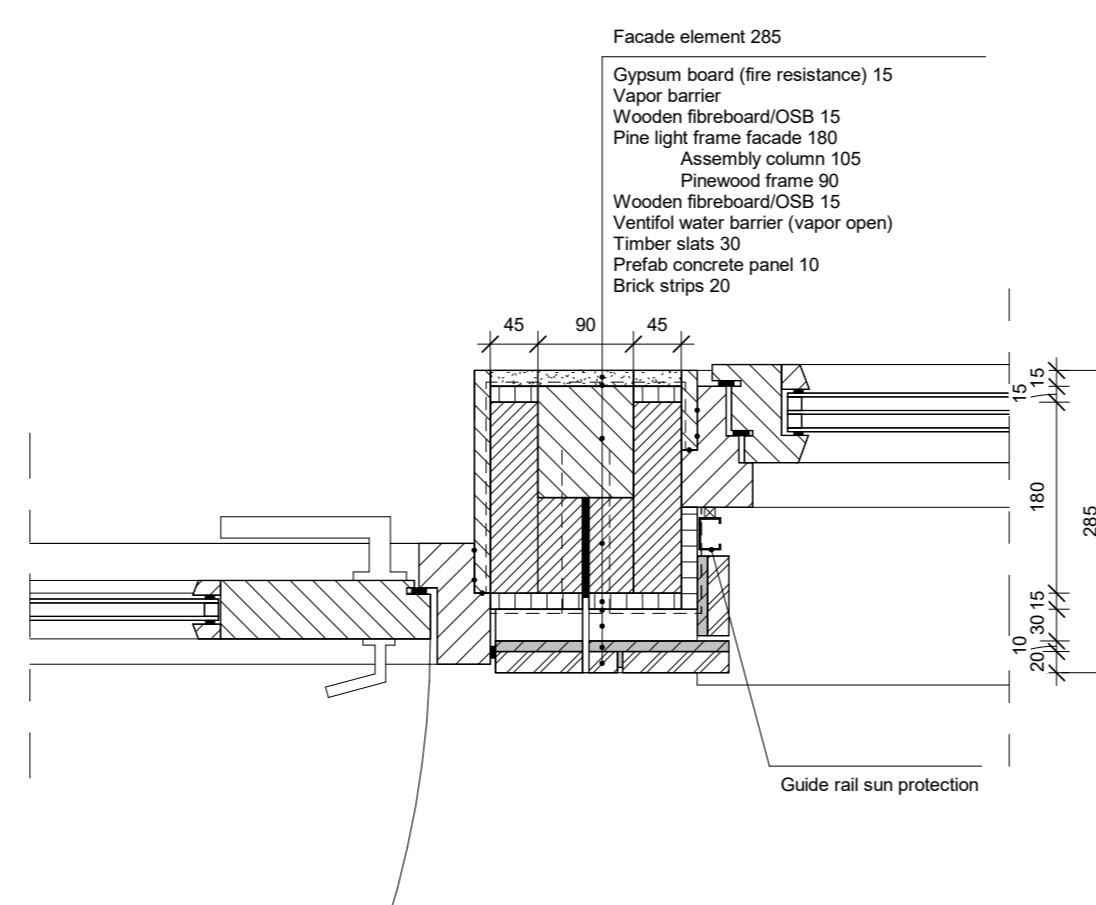
DV2: BALCONY



DH1: APARTMENT DIVIDING WALL



DH2: FACADE OPENING



DV1: FOUNDATION

