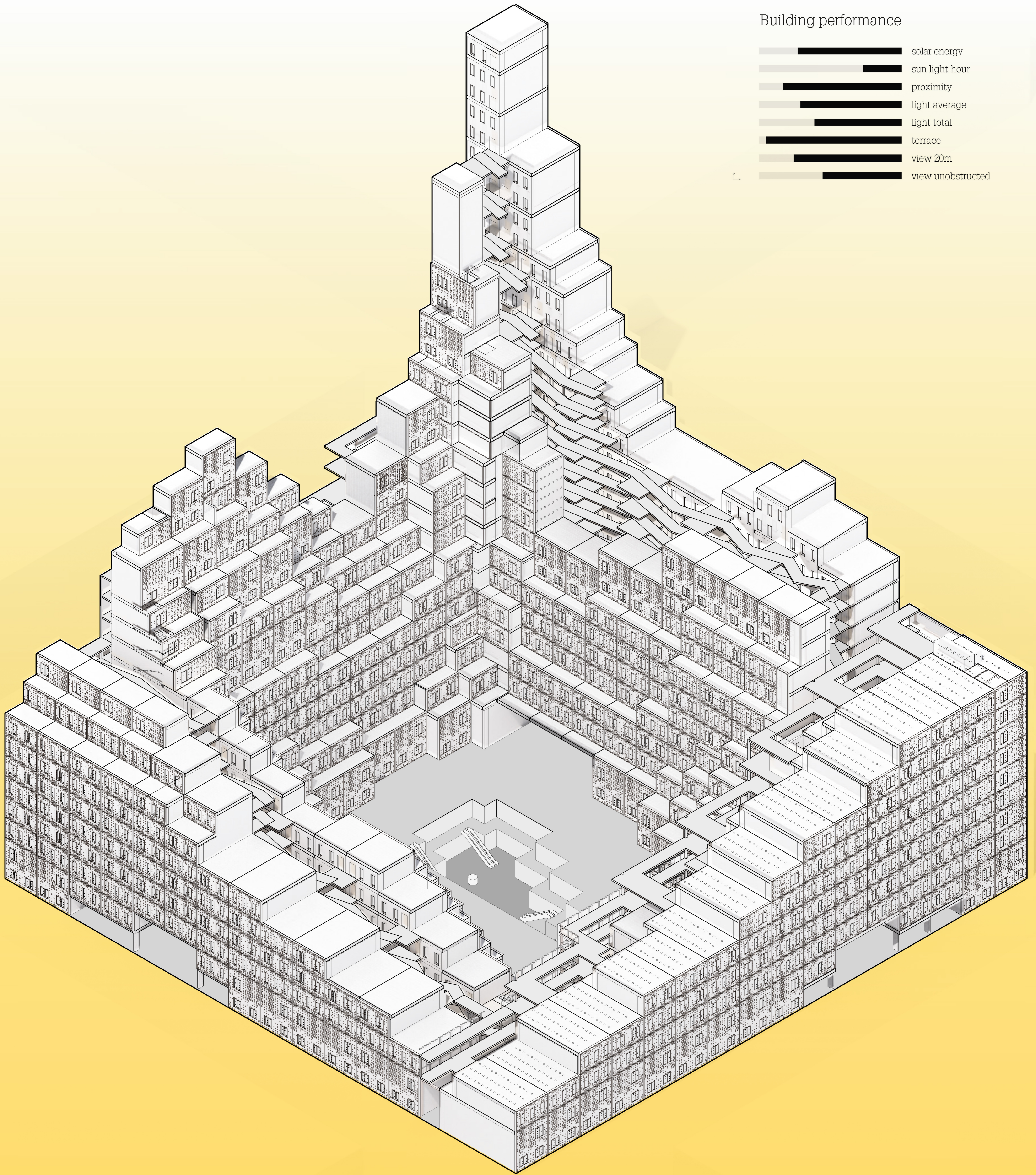
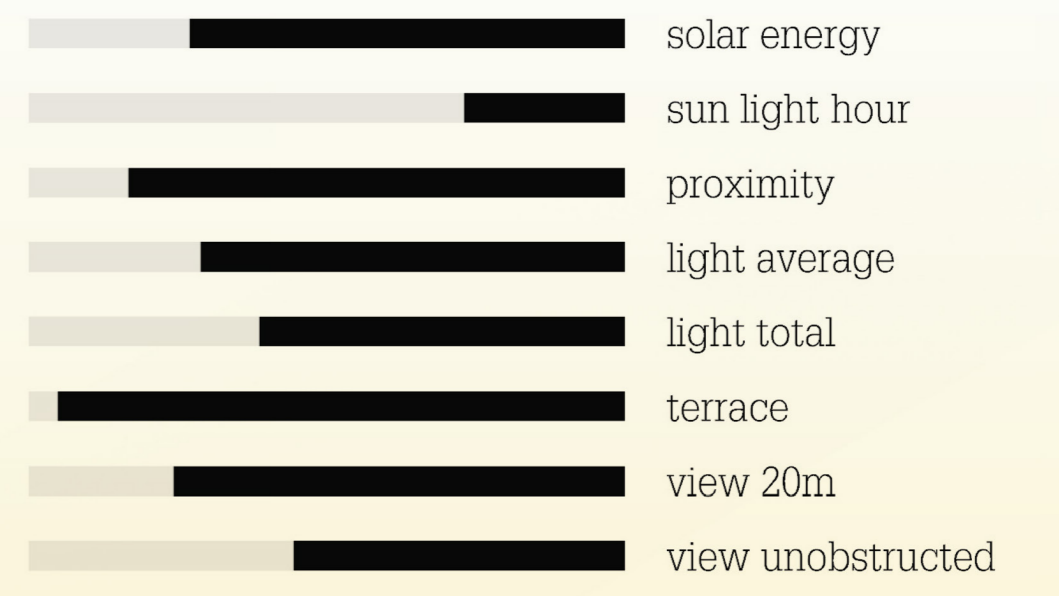


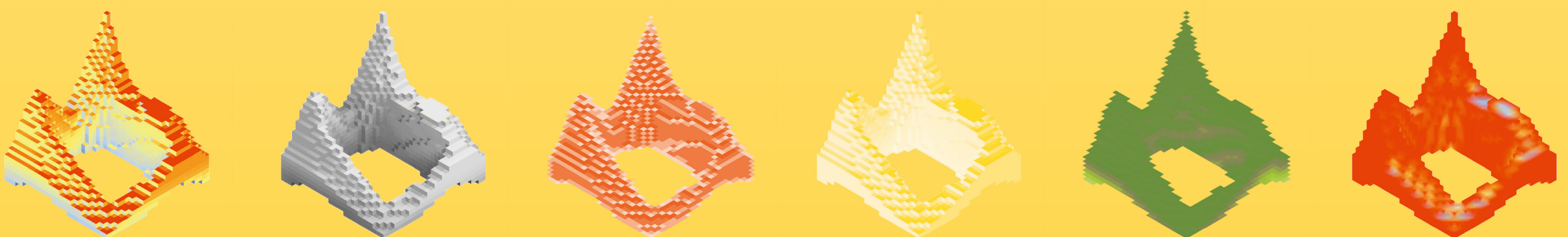
**THE SOLAR MOUNTAIN**  
MASS TRANSFORMATION AND ITS PERFORMANCE



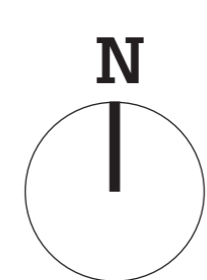
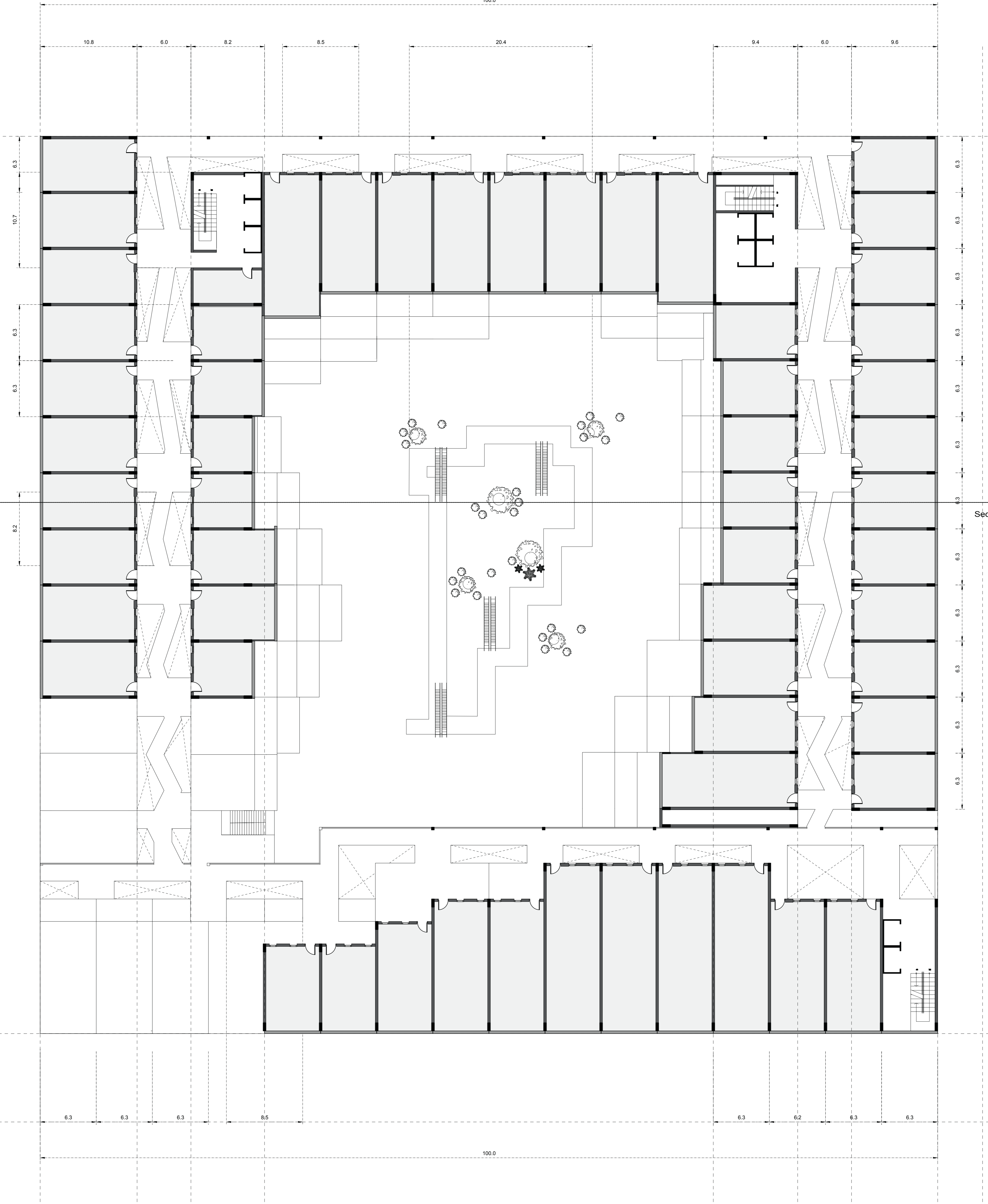
Building performance



**THE SOLAR MOUNTAIN**  
SOLAR ENERGY SELF-SUFFICIENT HOUSING BLOCK



% Unobstructed view	Distant to terrace (m)	% Daylight	Average proximity	% Sunlight hour	Solar Energy (MWh)
77.5	1.14	57	5.1	25	4223



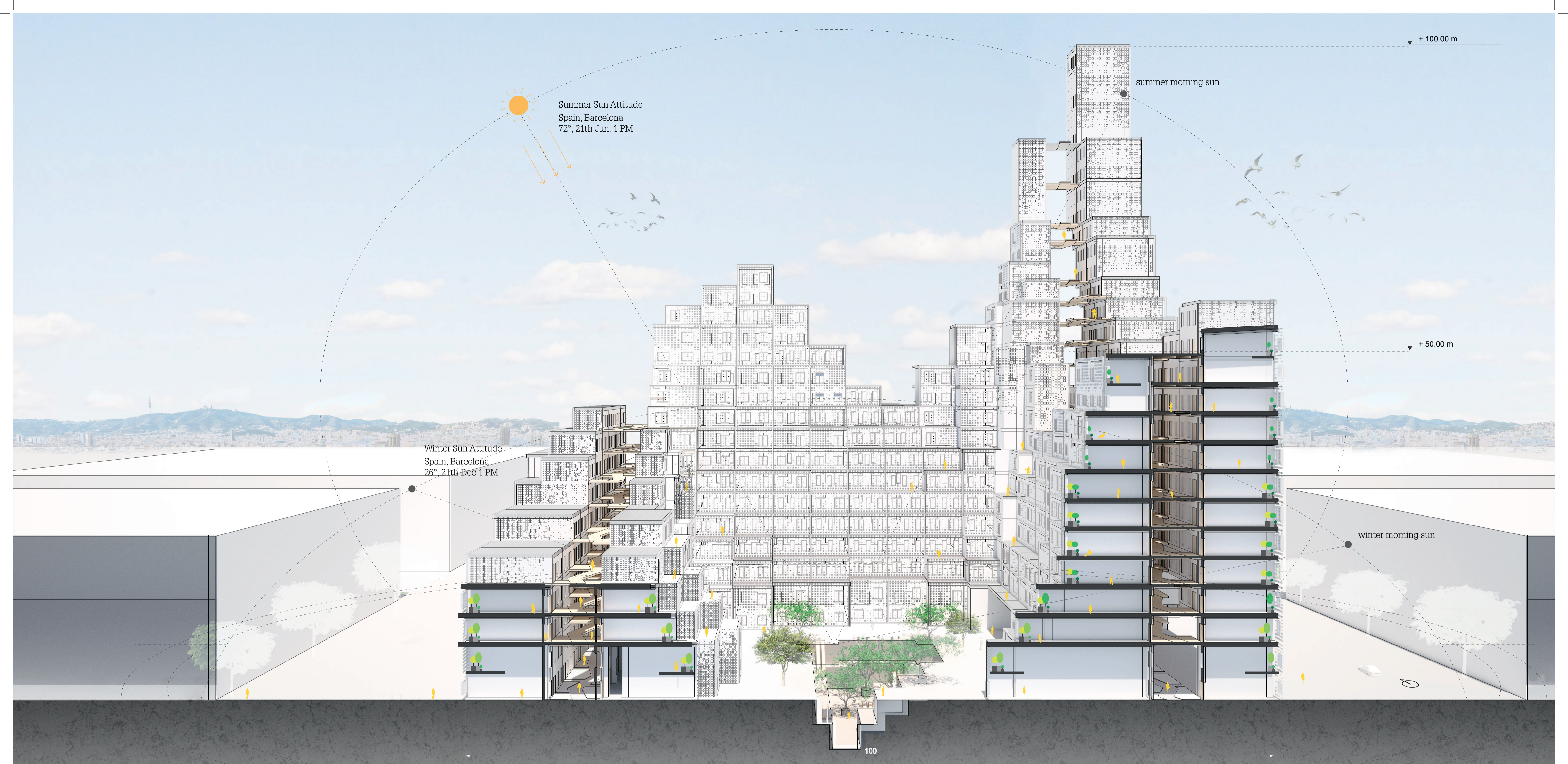
# Fourth Floor Plan 1:200

The Solar Mountain, Barcelona, Spain

Building Information:

Plot Area: 10,000 m<sup>2</sup>  
 Floor Area: 530,34 m<sup>2</sup>  
 Coverage: 0.67  
 Floor Area Ratio: 5.3

Dwellings: 344 houses  
 Parking spaces: 379 cars  
 Housing: 100%



Summer Sun Attitude  
Spain, Barcelona  
72°, 21th Jun, 1 PM

Winter Sun Attitude  
Spain, Barcelona  
26°, 21th-Dec 1 PM

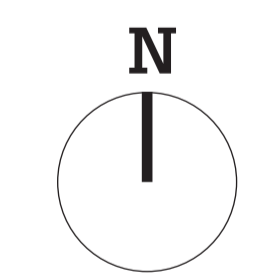
summer morning sun

winter morning sun

+ 100.00 m

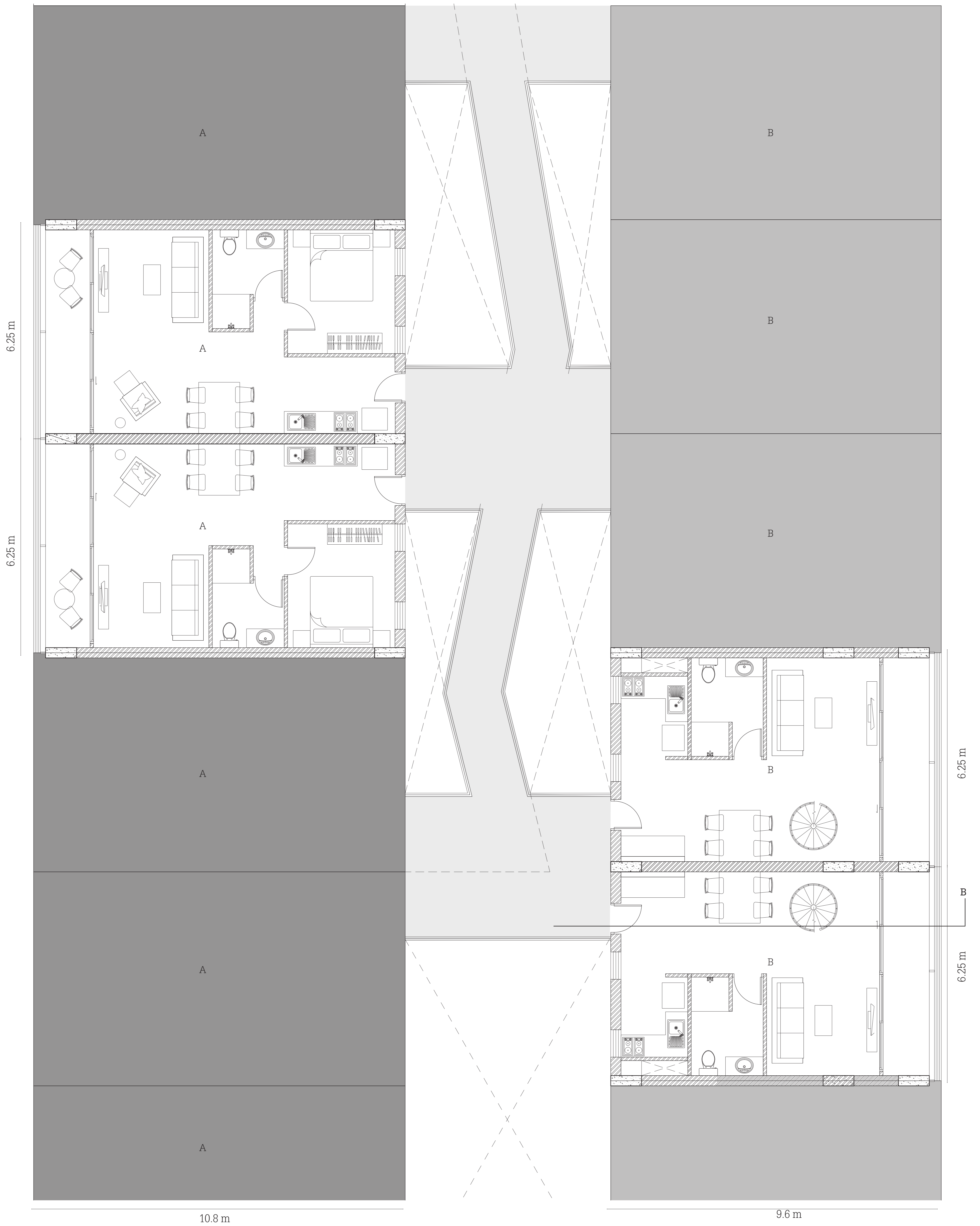
+ 50.00 m

100



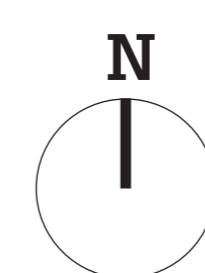
### Section A: 1:200

Daylight condition on 21st June, 1 pm Spain Barcelona



10.8 m

9.6 m

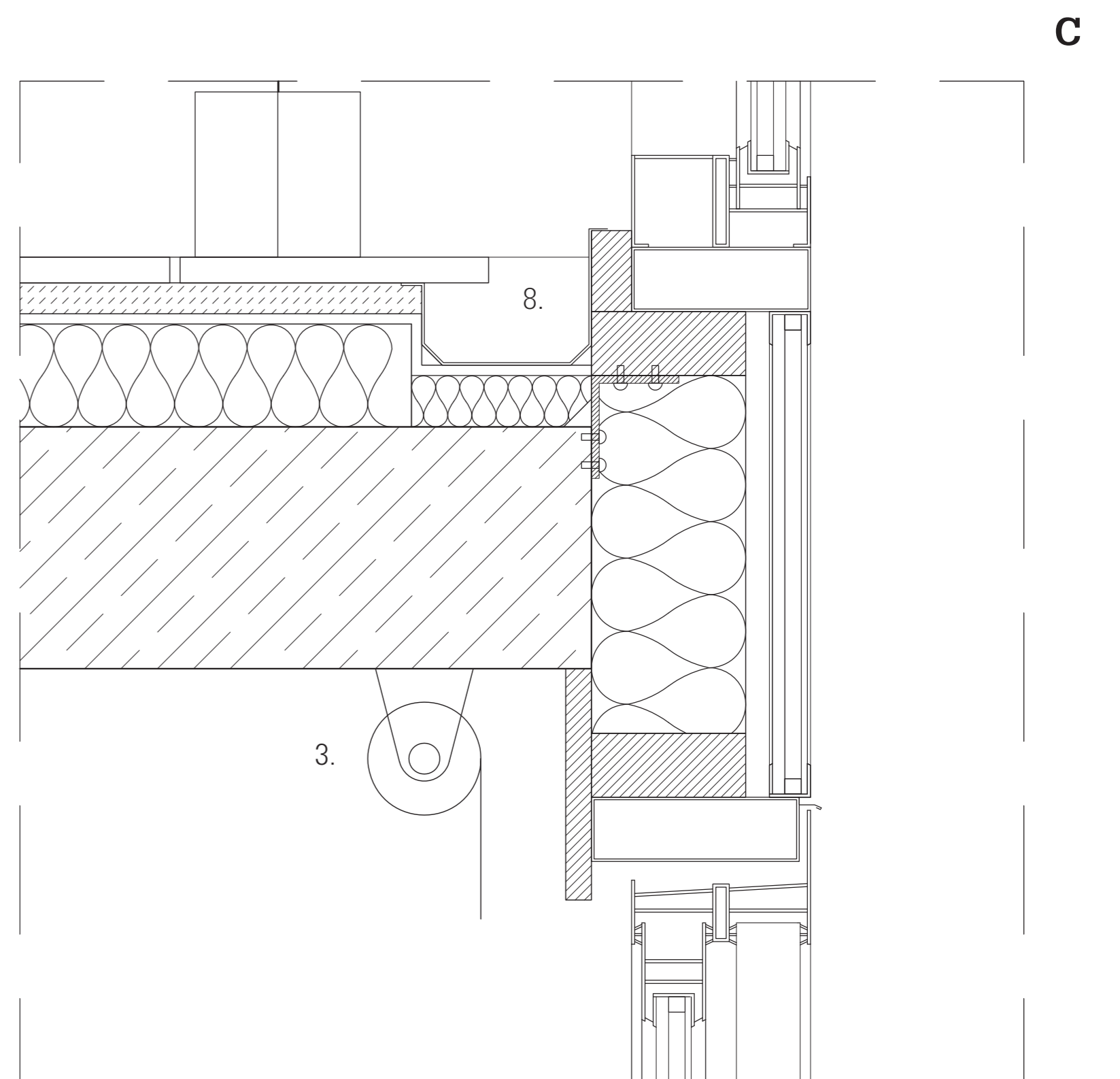
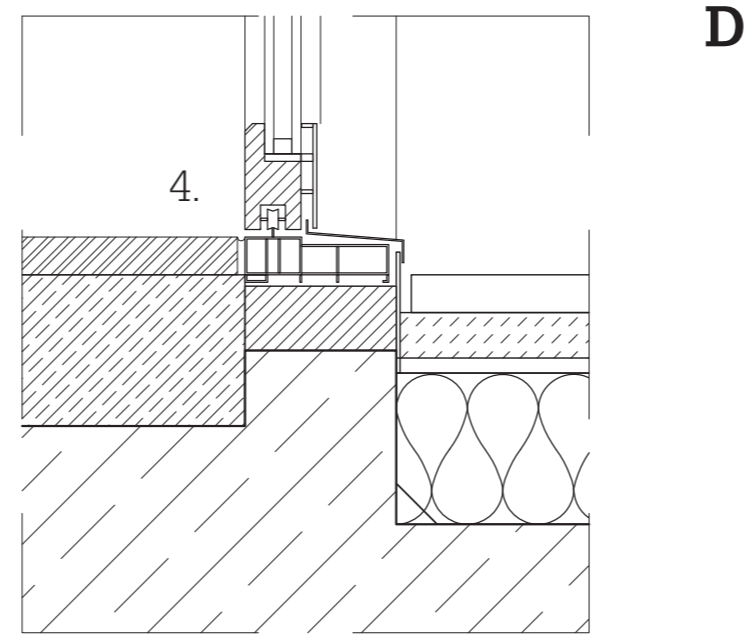
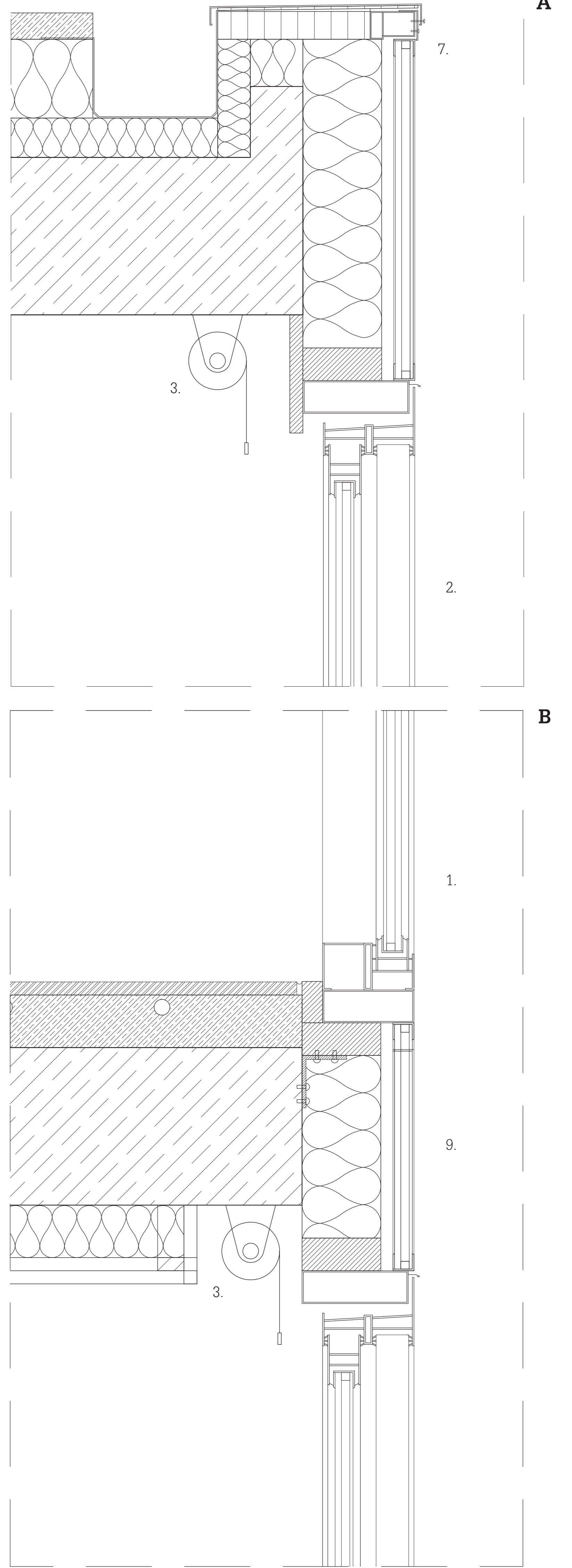
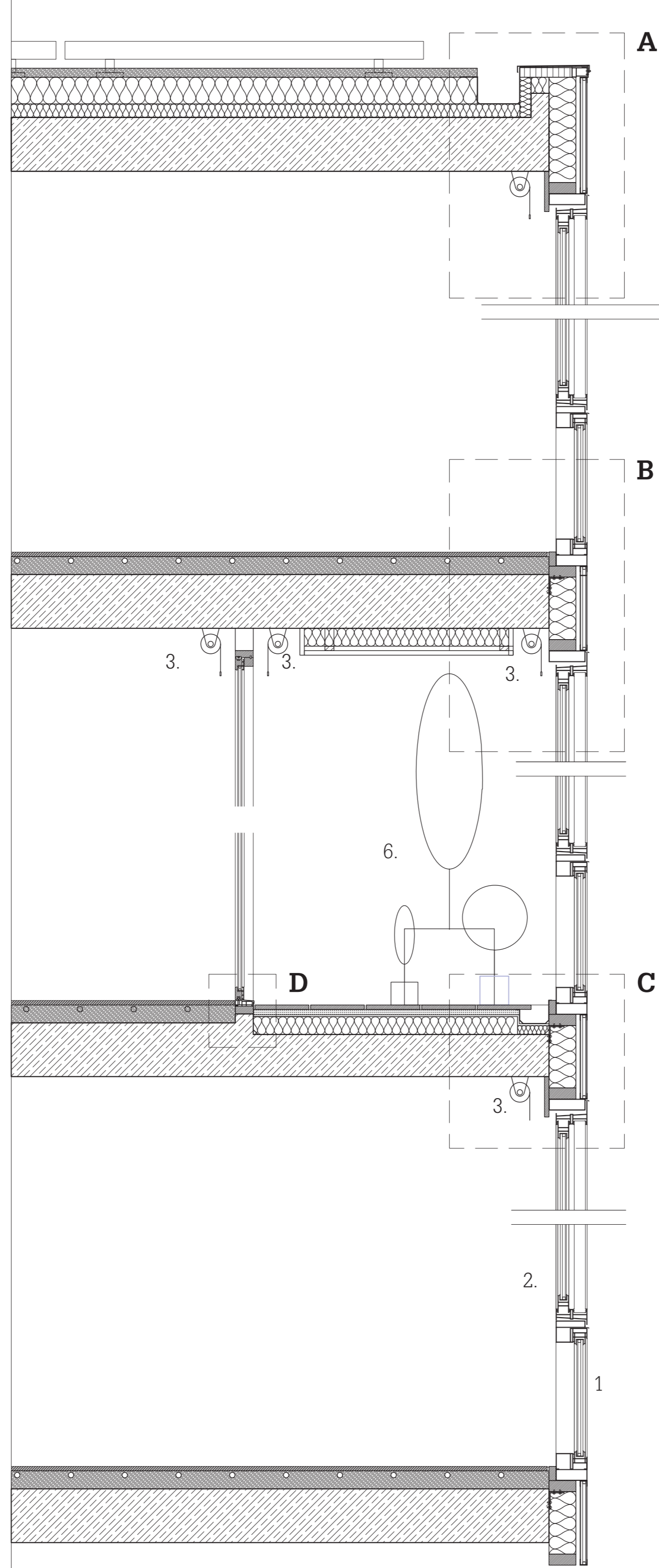
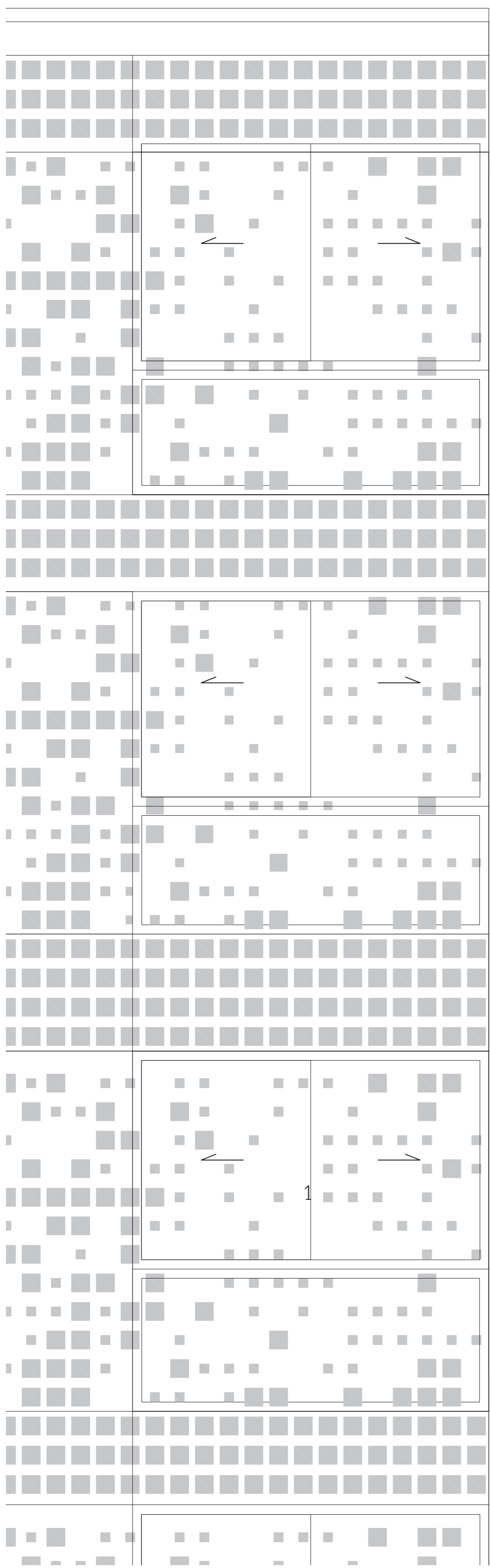


# West Housing Plan 1:50

West -House Information

Type A(West): 55.8 m<sup>2</sup>, Room Depth 10.8 m

TypeB (East): 72 m<sup>2</sup>, Room Depth 9.6 m



## Section B: Housing Facade 1:50

- A: Roof Connection and Sun Shield
- B: Winter Garden:
- C: Housing Insulation separated with the winter garden.
- D: Floor Connection between winter garden and living room

- 1. Laminated safety glass with integrated solar panels pattern
- 2. Sliding window act as climate window
- 3. Sun Screen
- 4. Reinforced Concrete Floor
- 5. Floor heating
- 6. Winter Garden
- 7. Roof Flashing
- 8. Water Drainage
- 9. Solar Panel Cladding