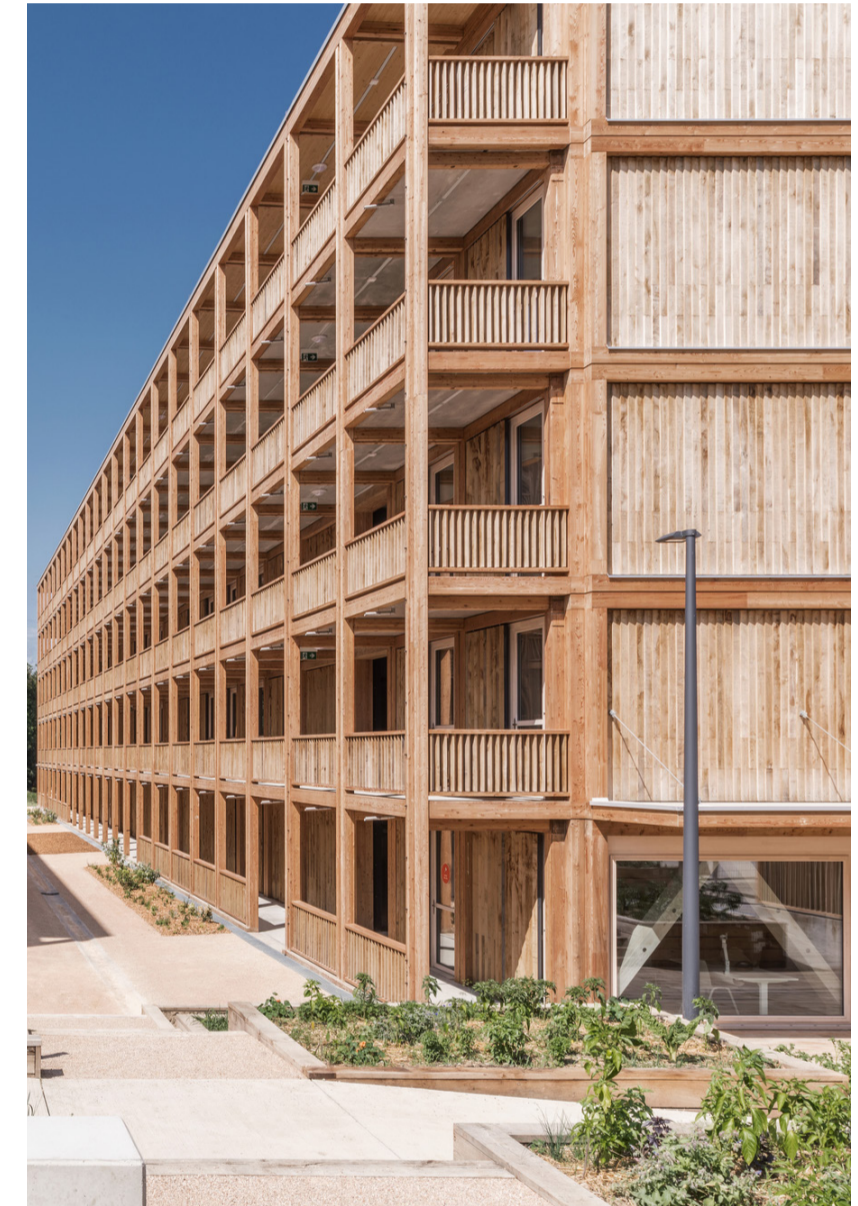


DESIGN FOR DURABILITY

P5 Graduation Presentation

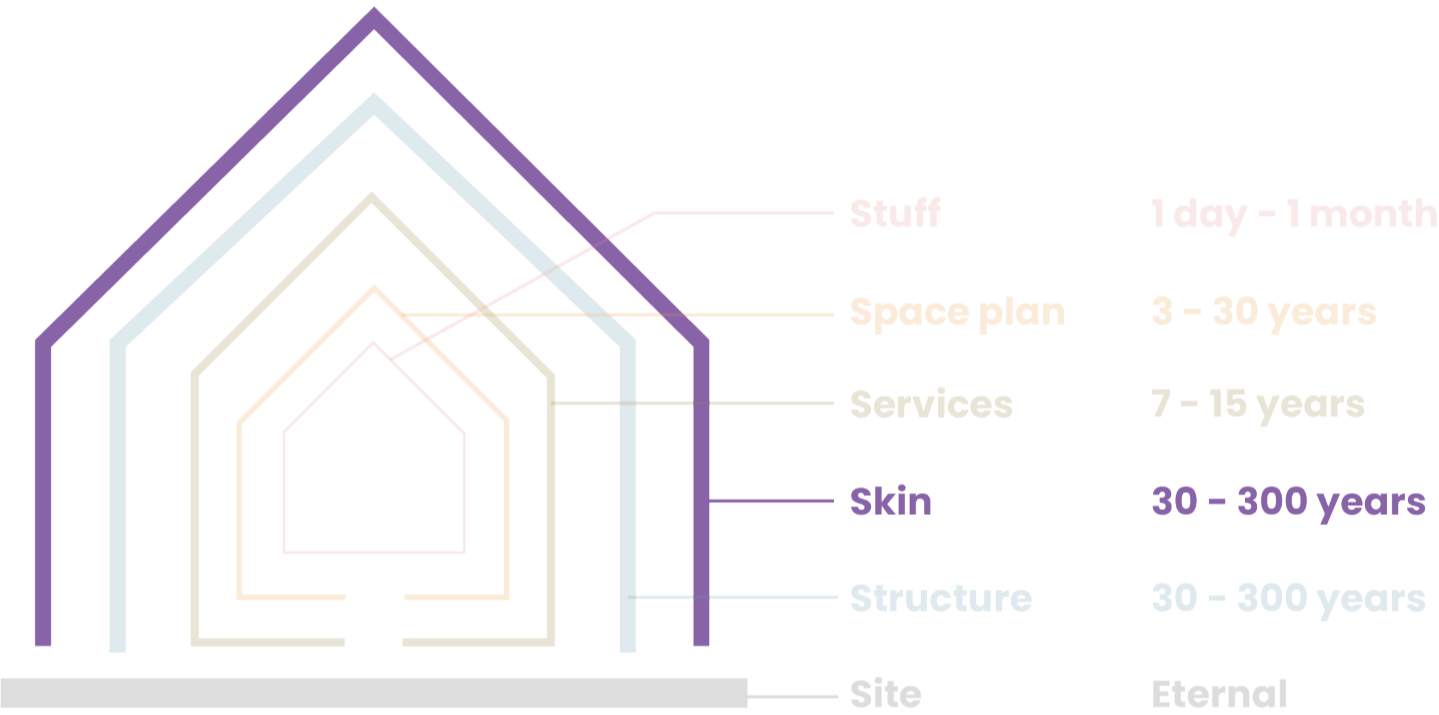
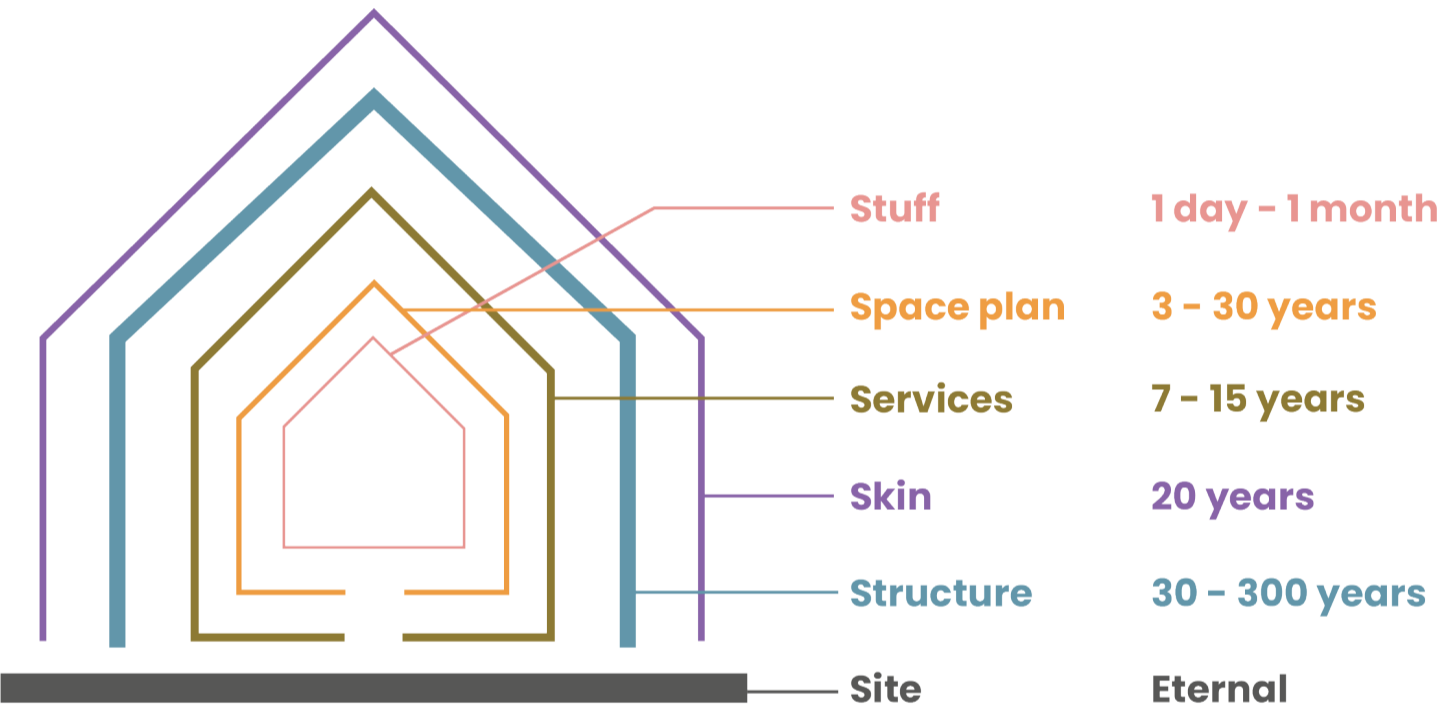
MINERVAHAVEN AMSTERDAM







LAYERS OF BRAND

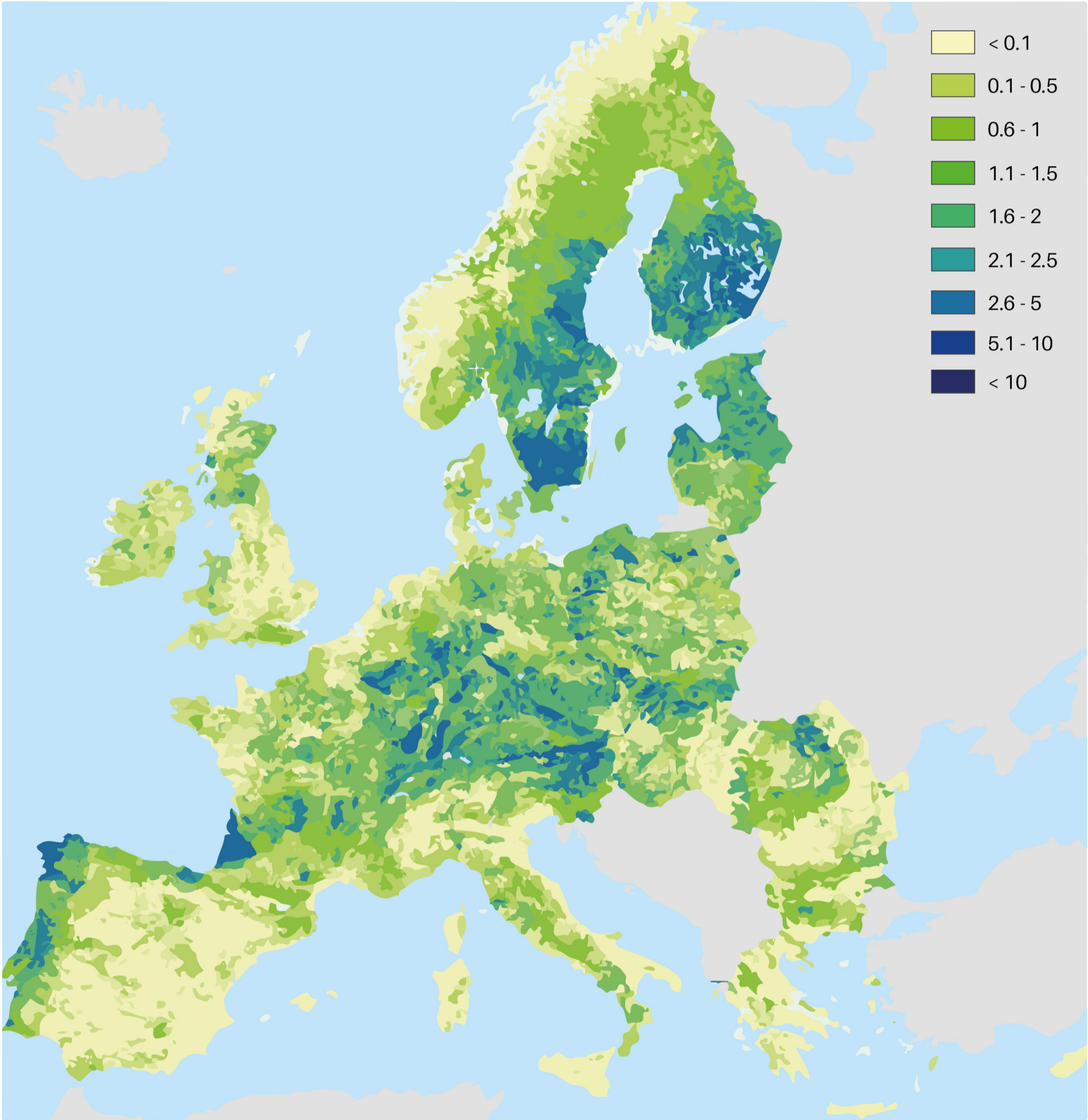


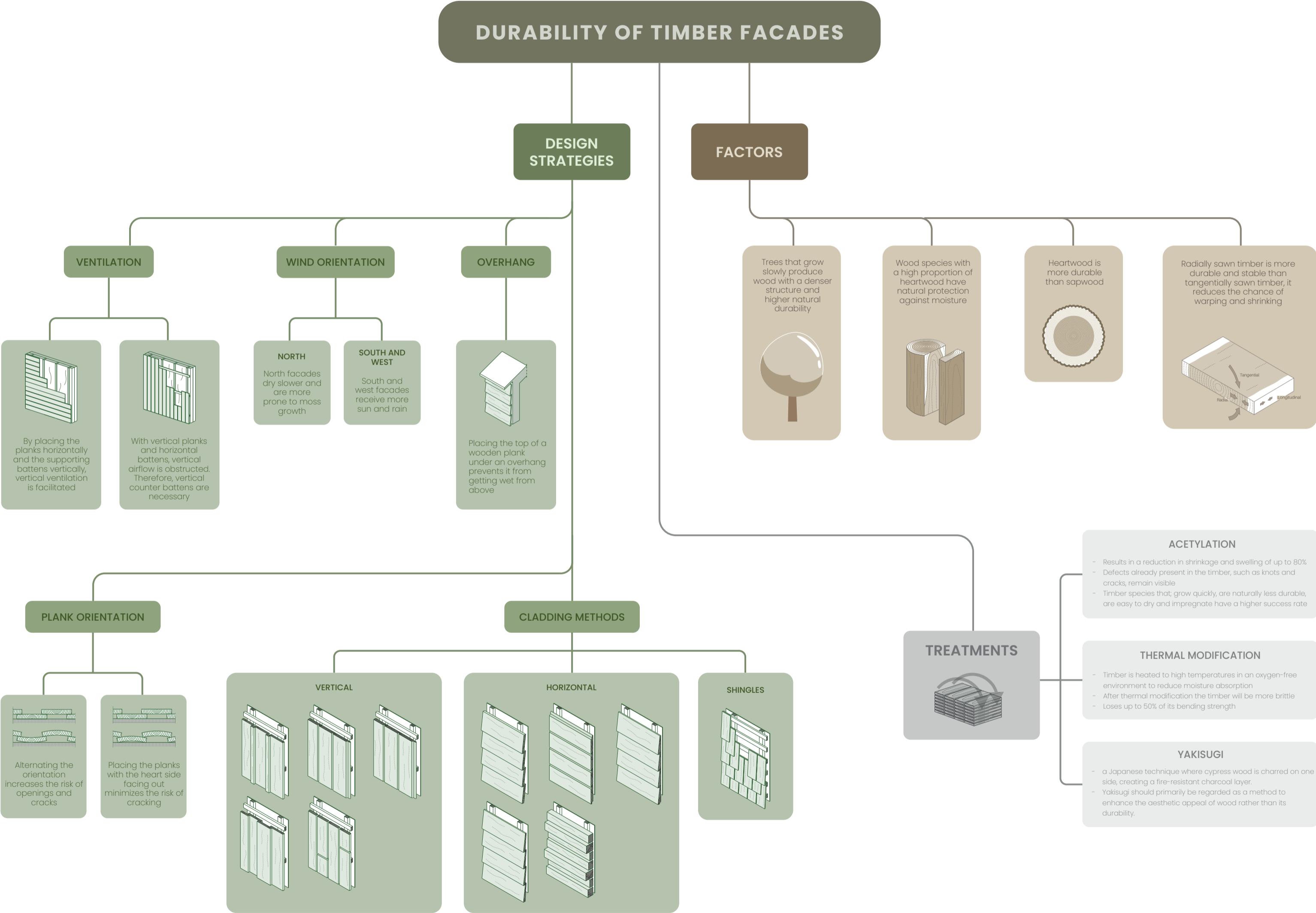
*How can specific design and technical factors extend the
lifespan of timber in exterior applications while maintaining
environmental sustainability?*

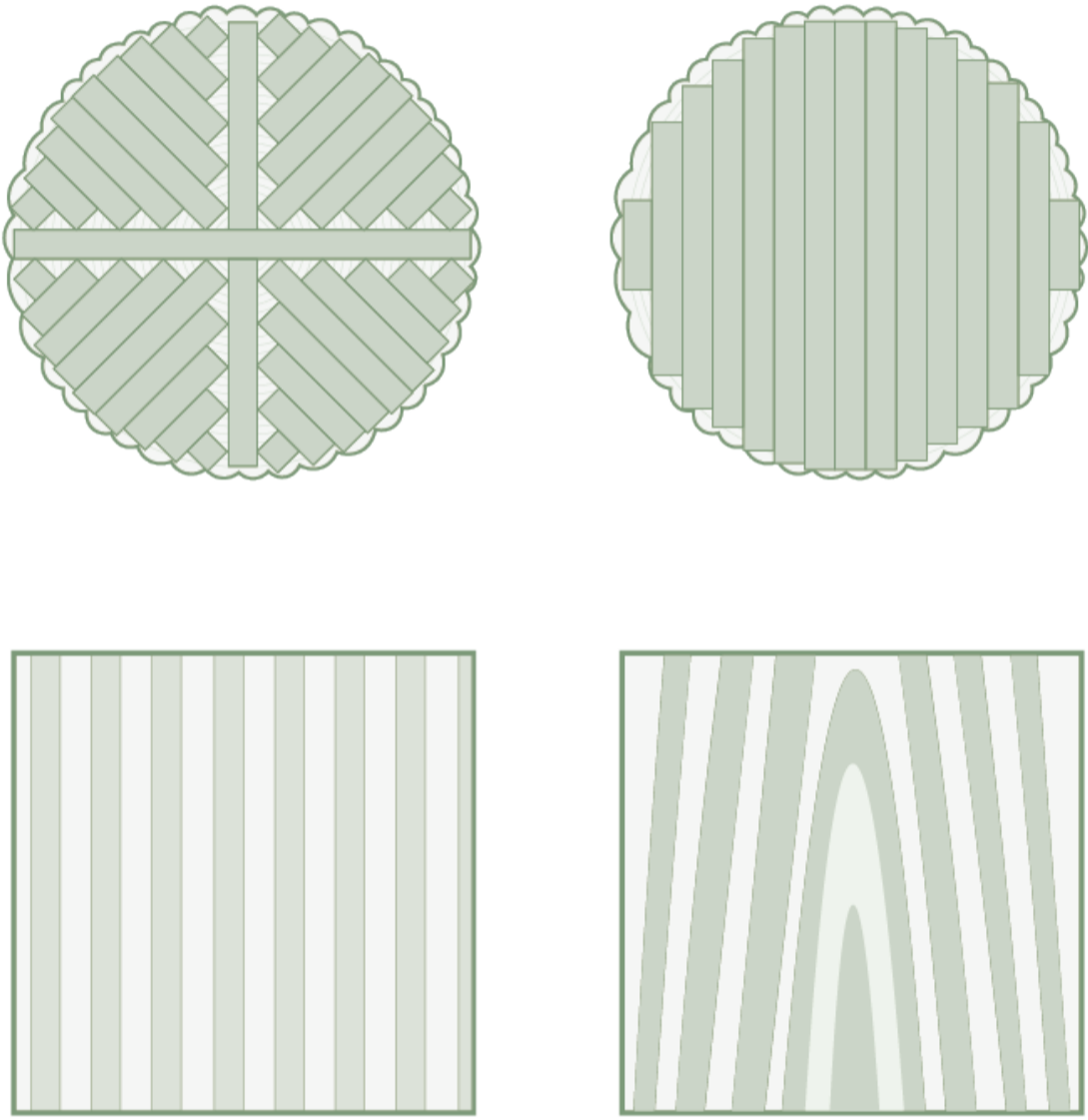
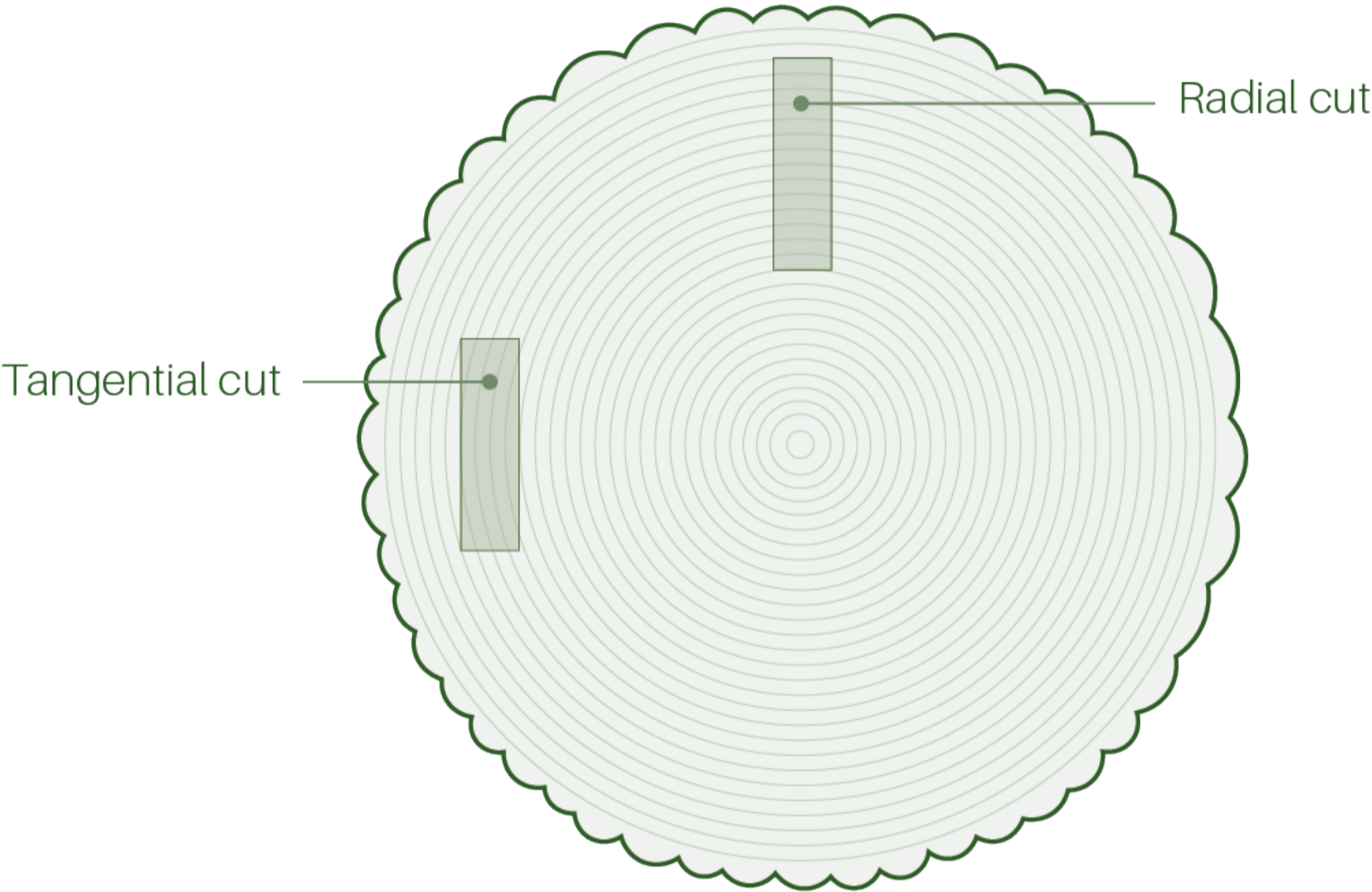
DURABILITY CLASSES

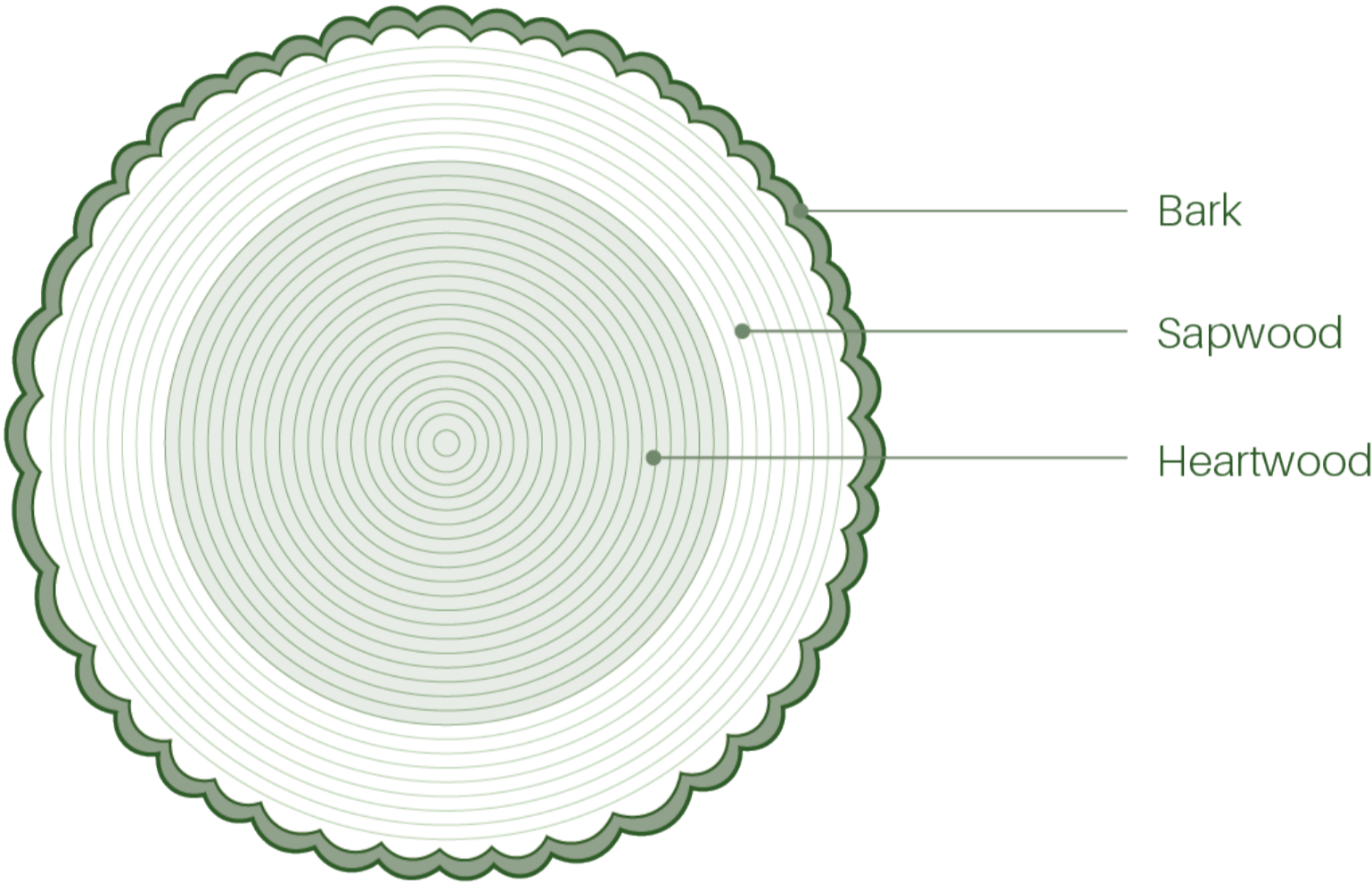
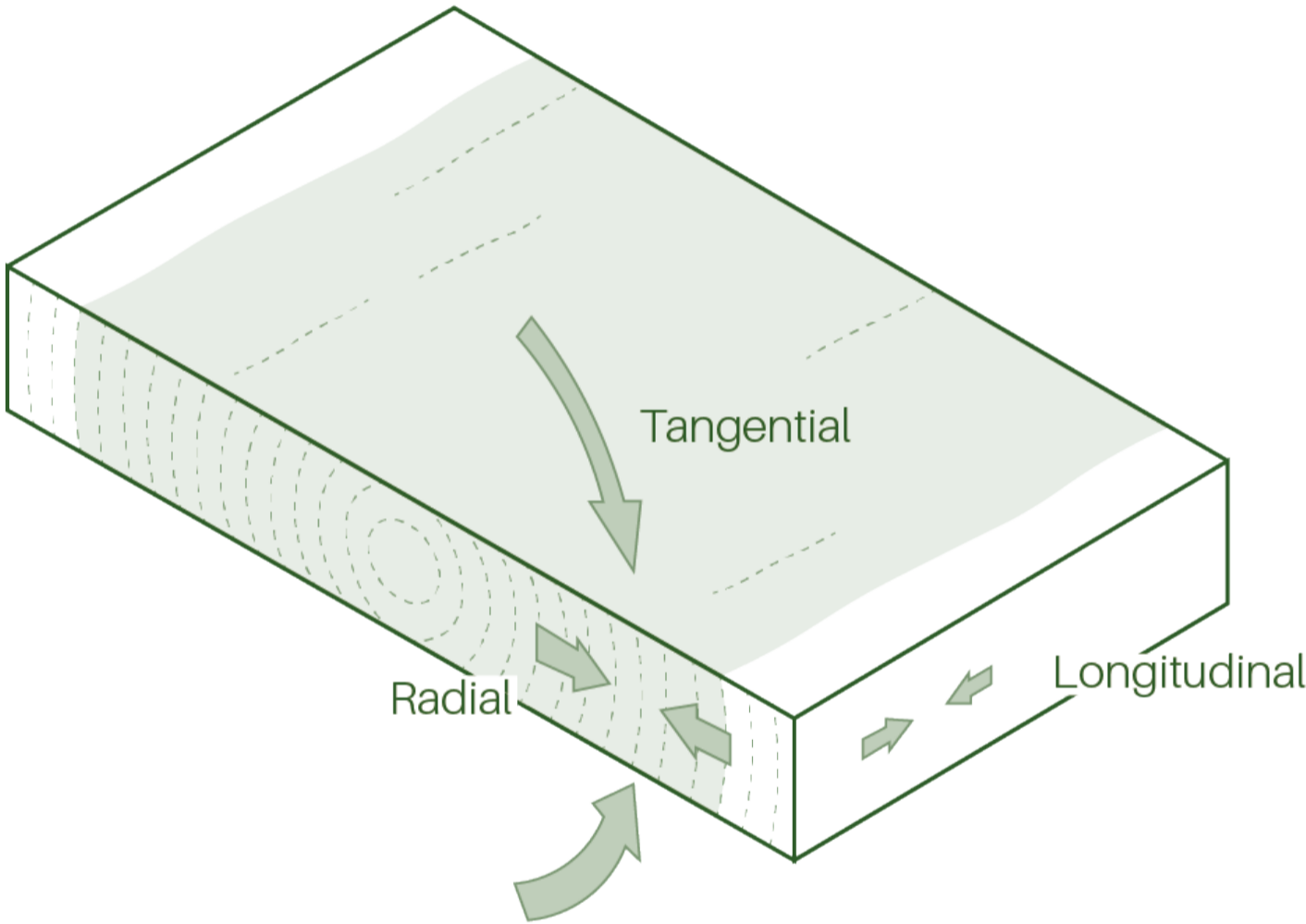
Durability class	Designation	Timber life
1	Very durable	25+ years
2	Durable	15-25 years
3	Moderately durable	10-15 years
4	Slightly durable	5-10 years
5	Not durable	1-5 years

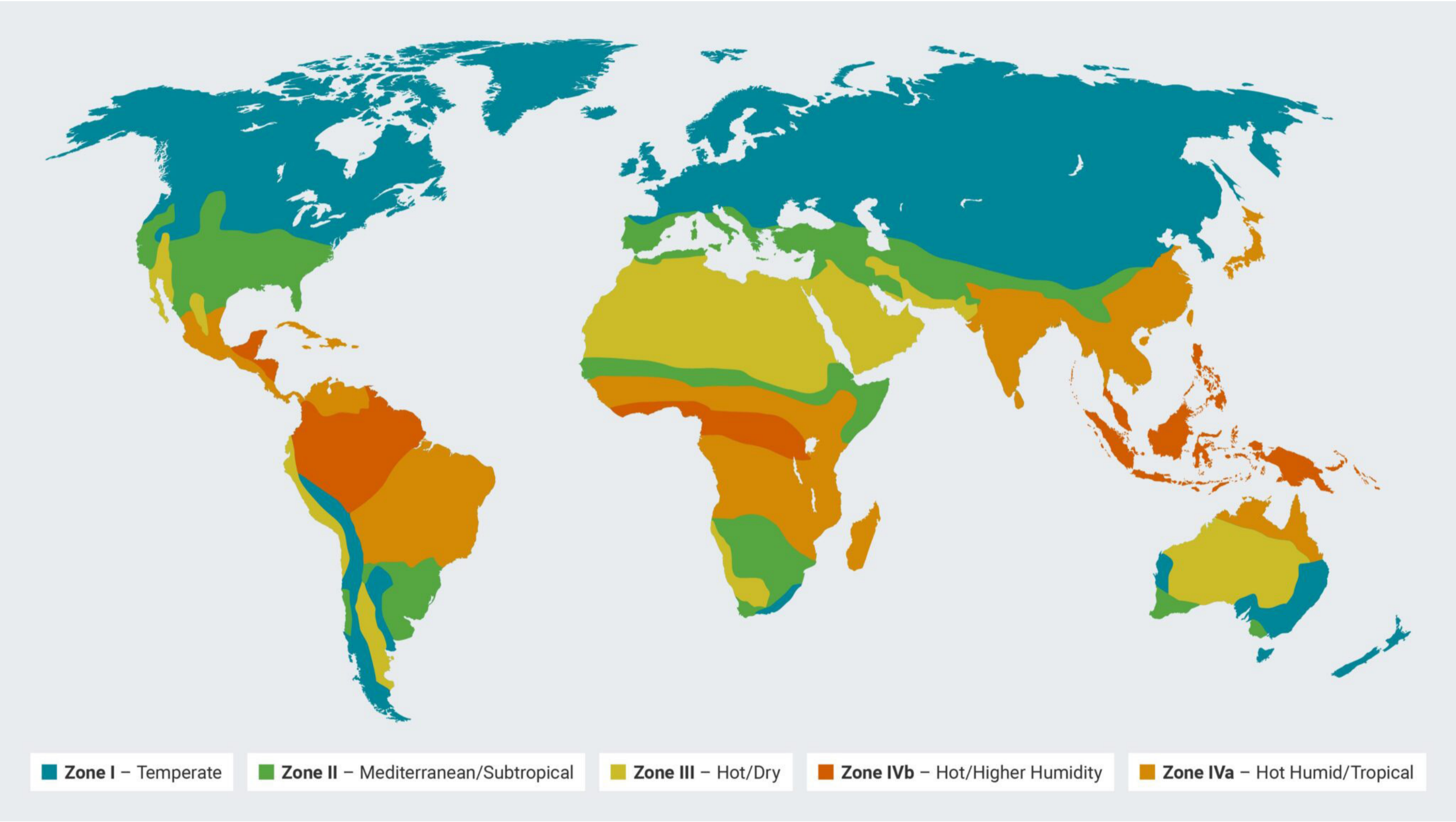
PRODUCTION FORESTS IN EUROPE

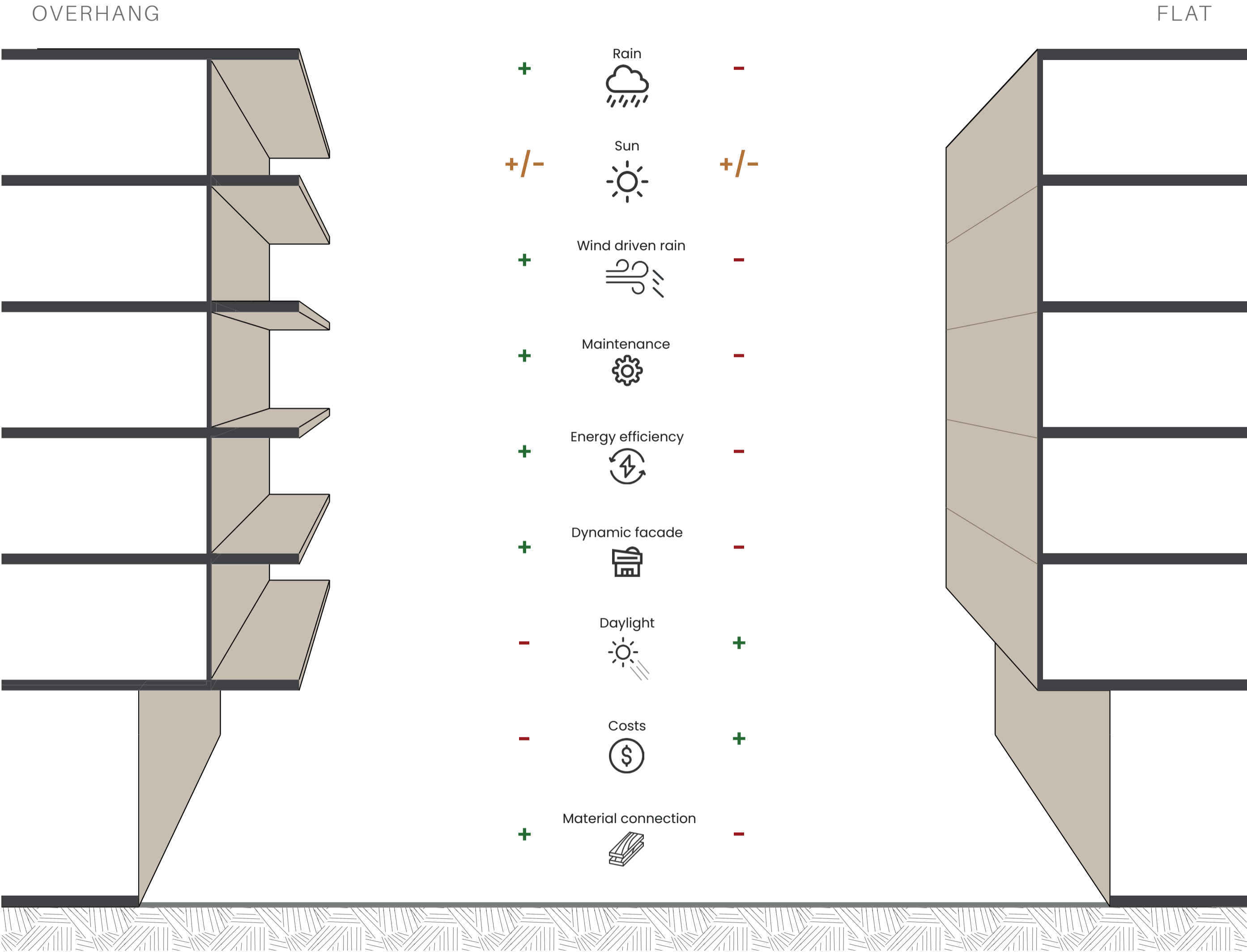












Bürohaus Küng Seiler Linhart Architekten

Alpnach, Switzerland



Het bosbad GAAGA

Eindhoven, The netherlands



Rigot Collective Dwelling Centre Acau Architecture

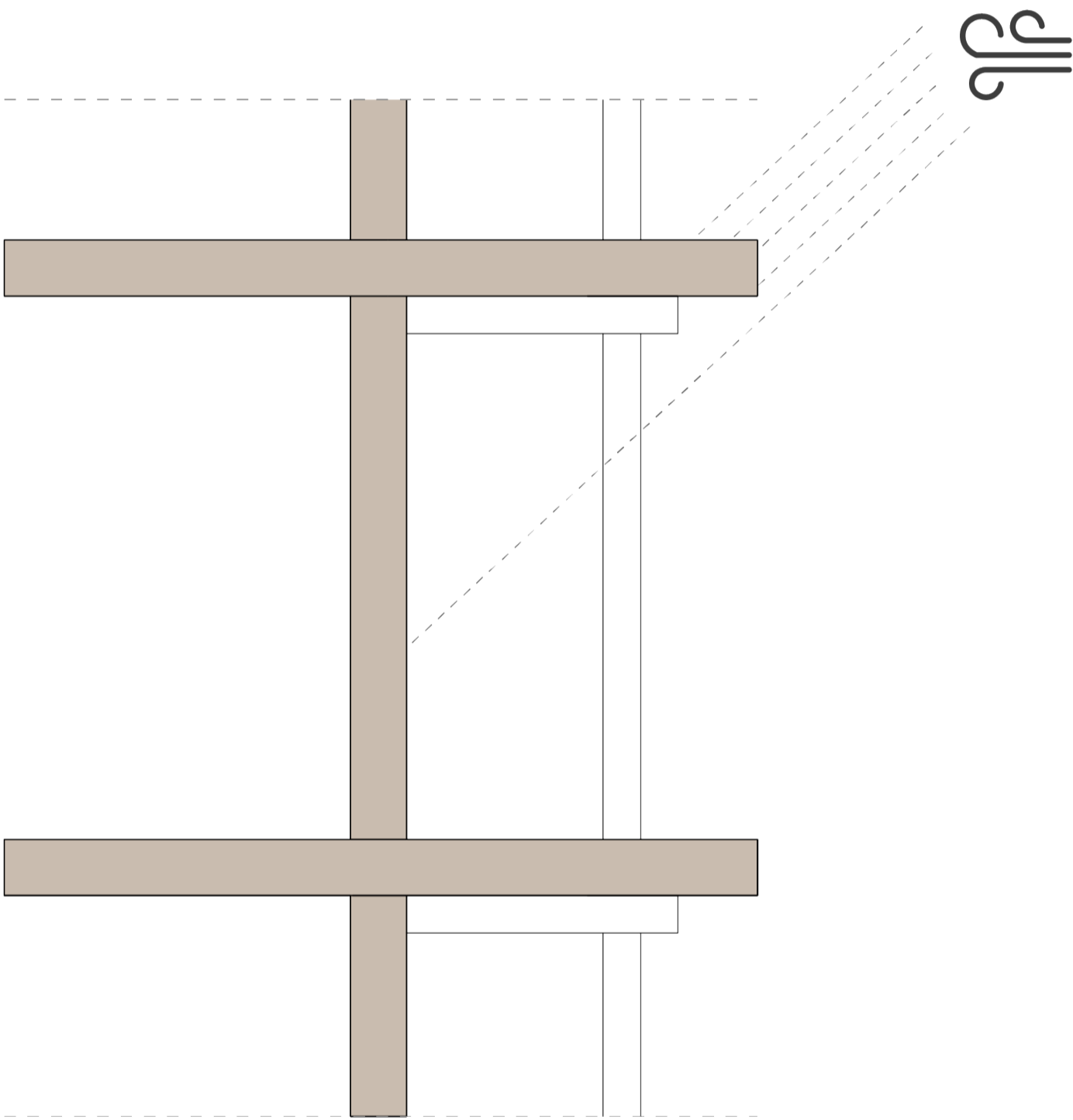
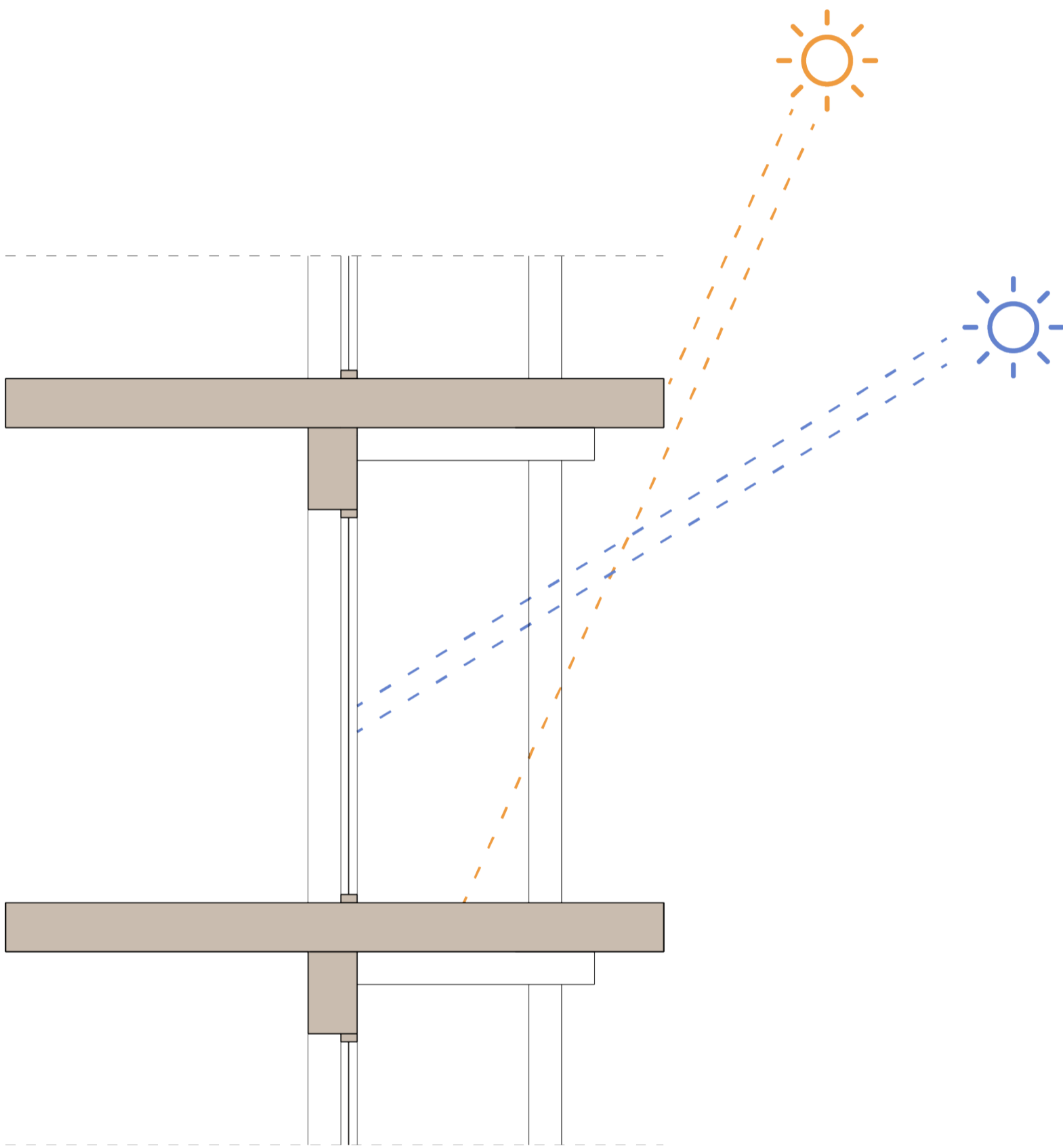
Geneva, Switzerland



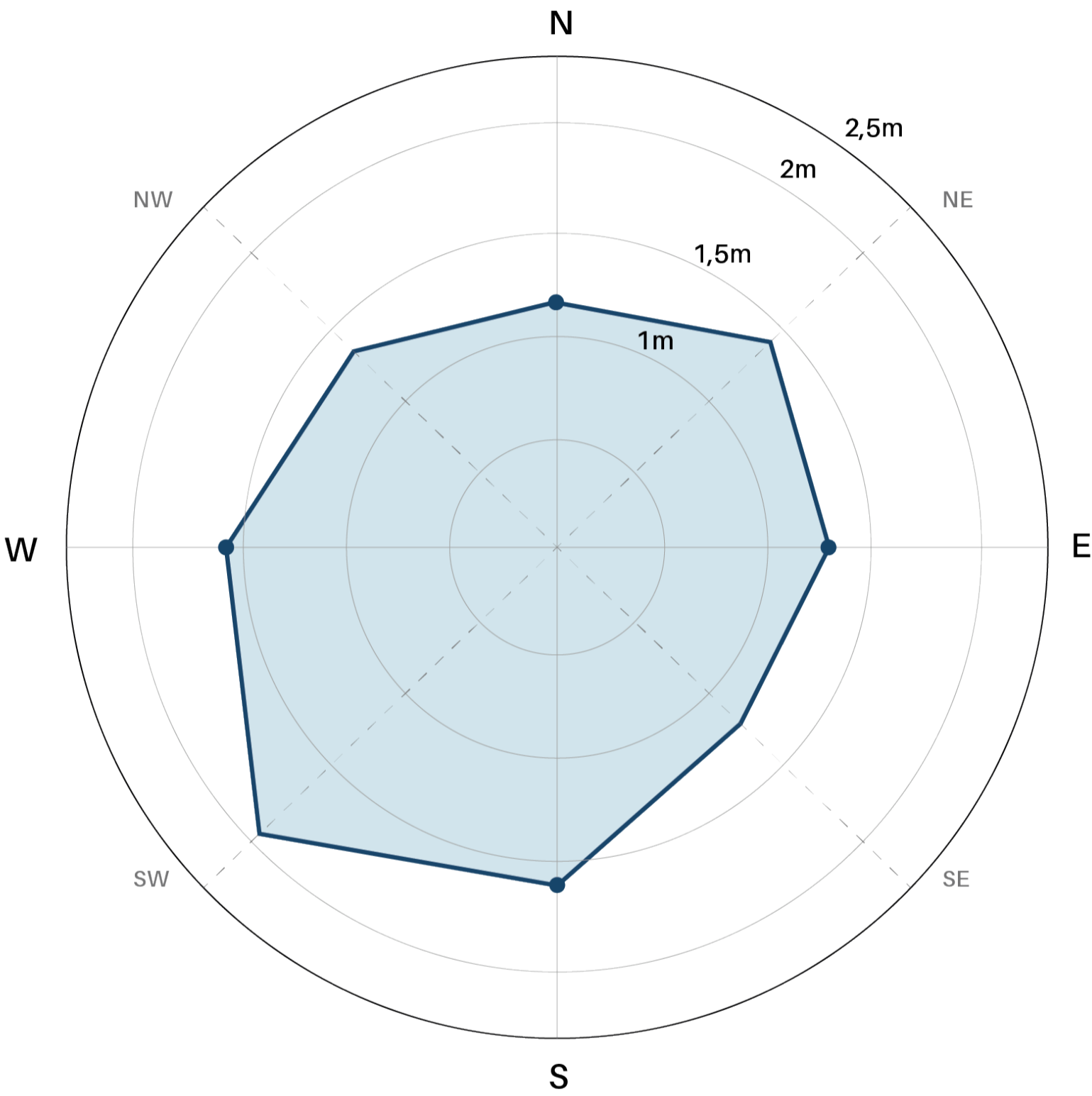
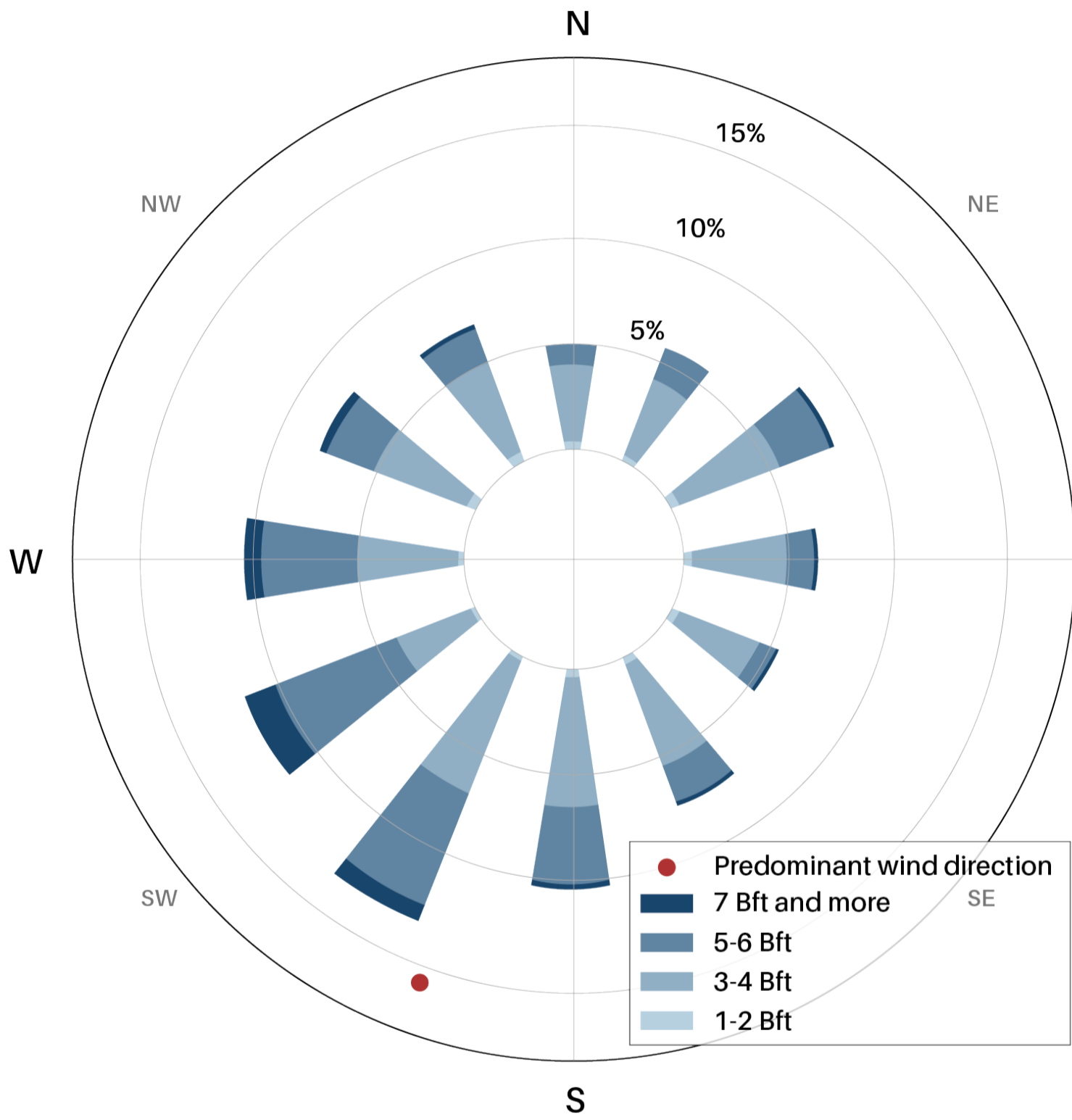
Rigot Collective Dwelling Centre
Acau Architecture

Geneva, Switzerland

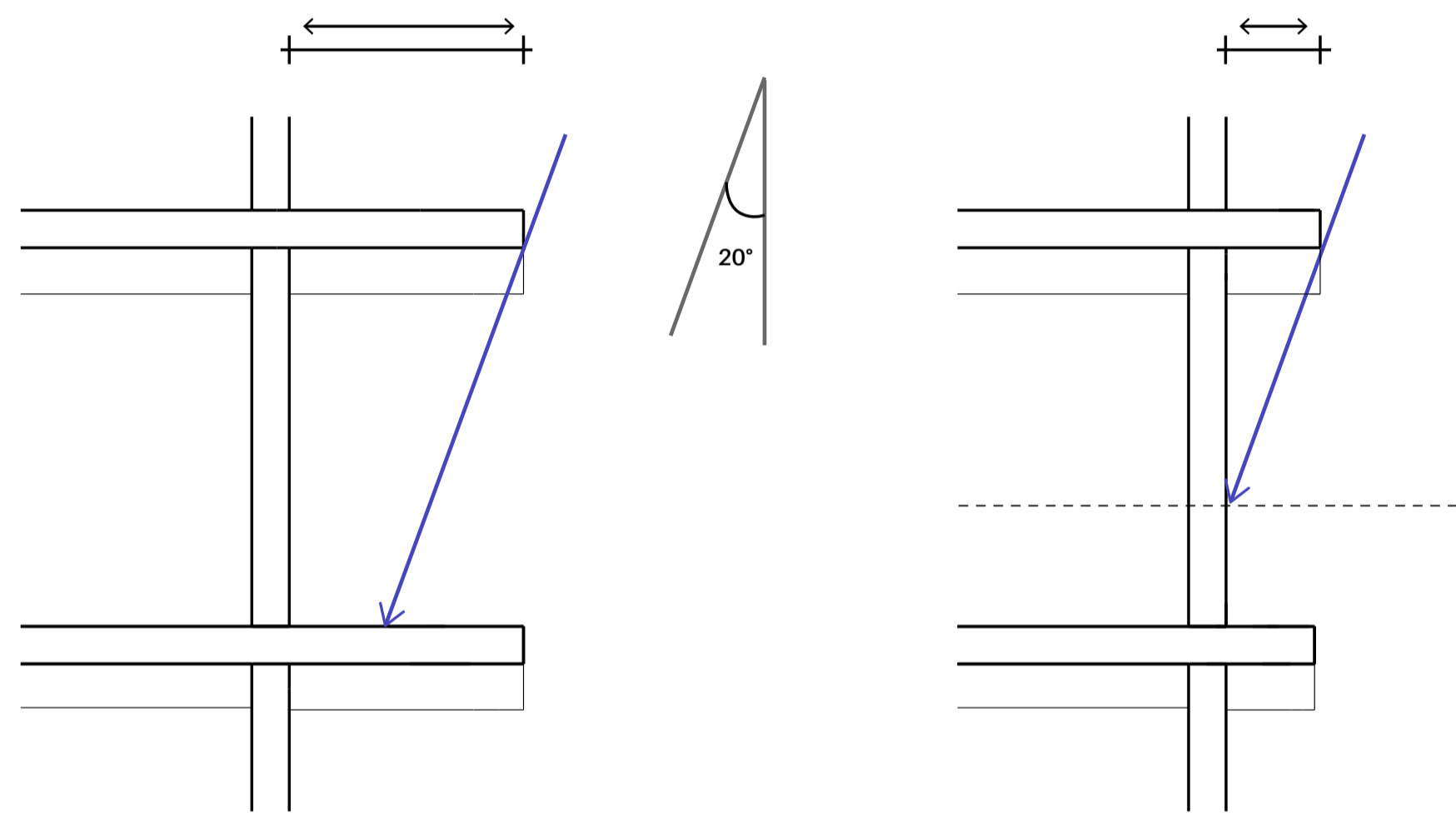




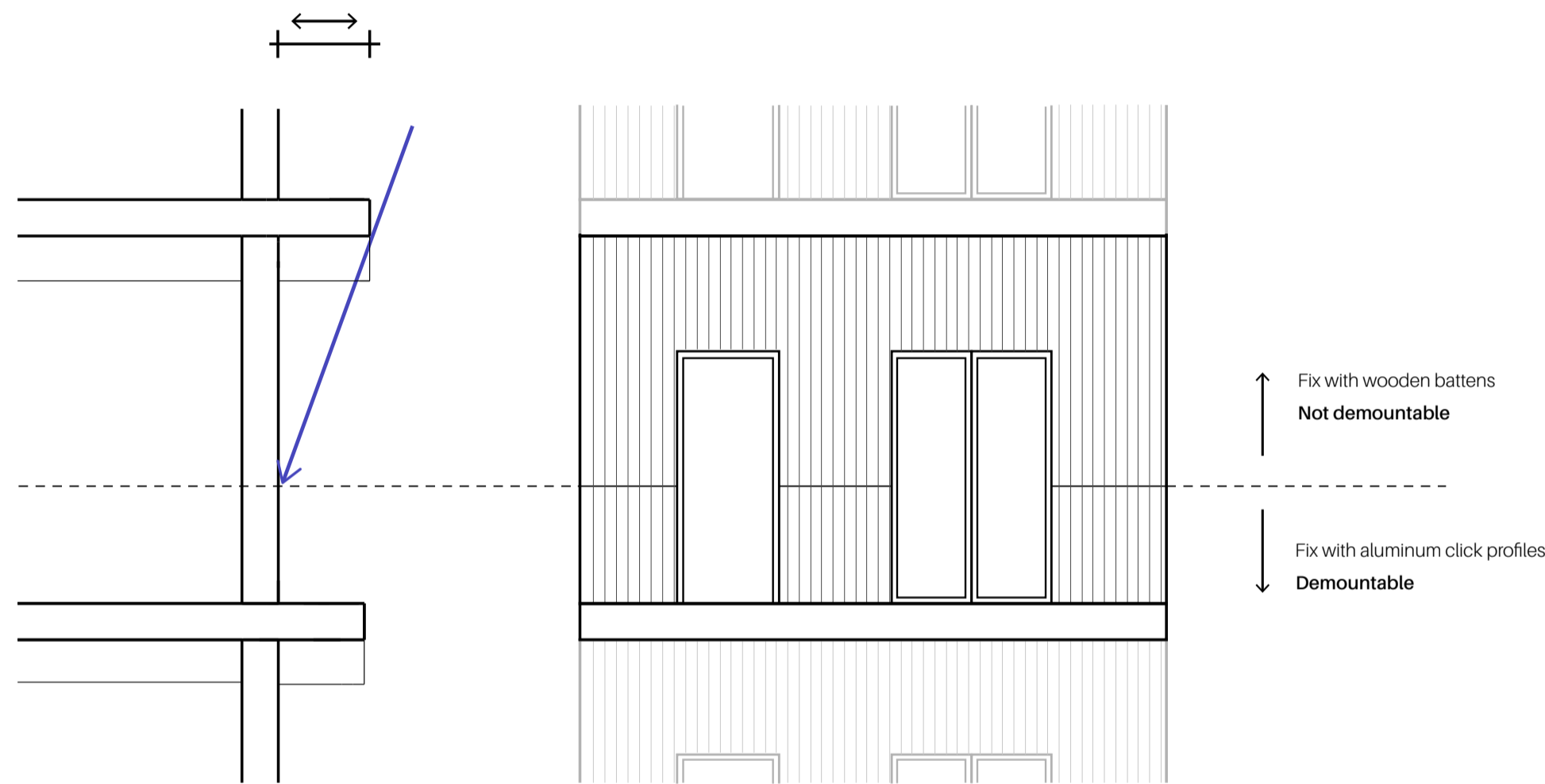
WIND DRIVEN RAIN

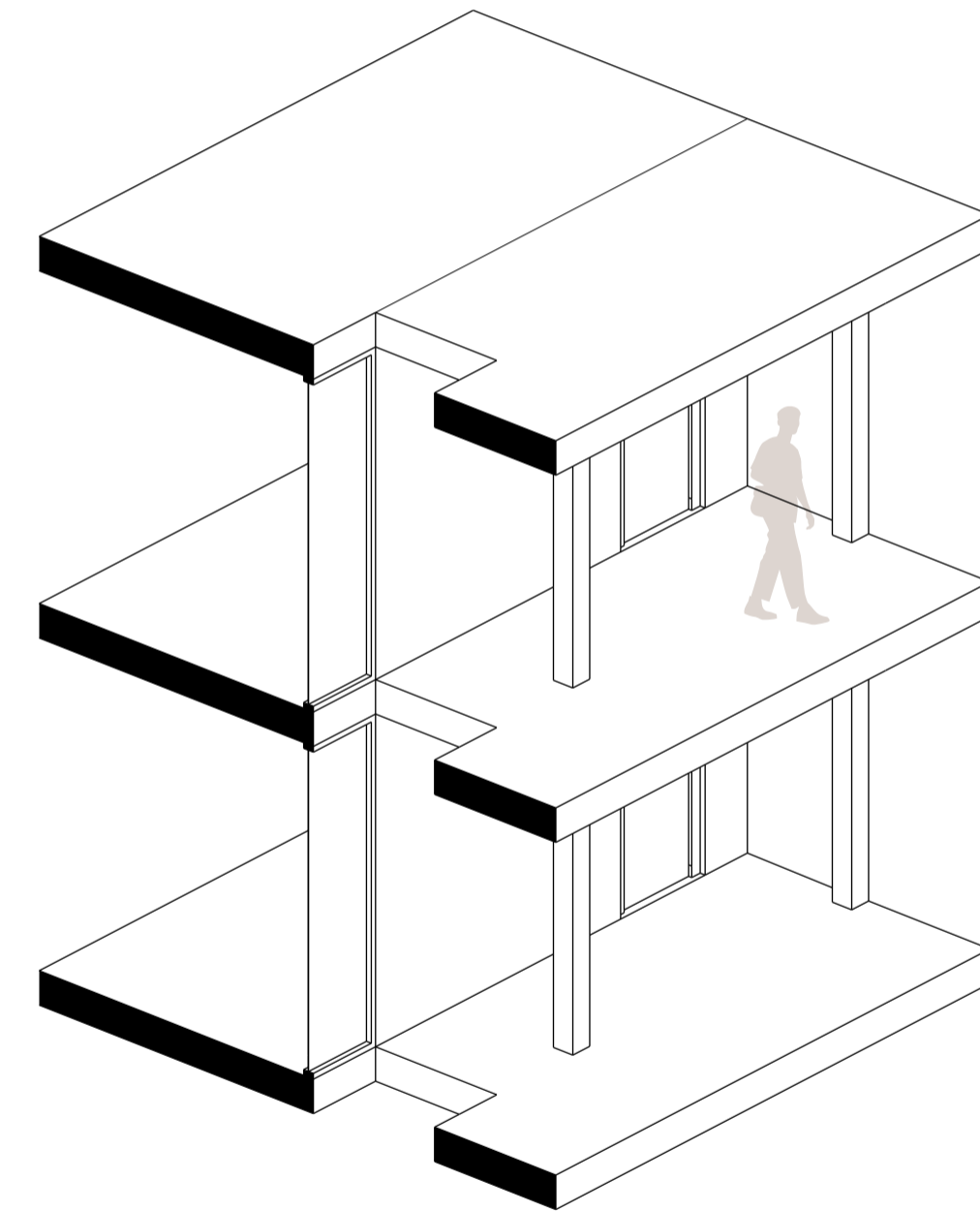
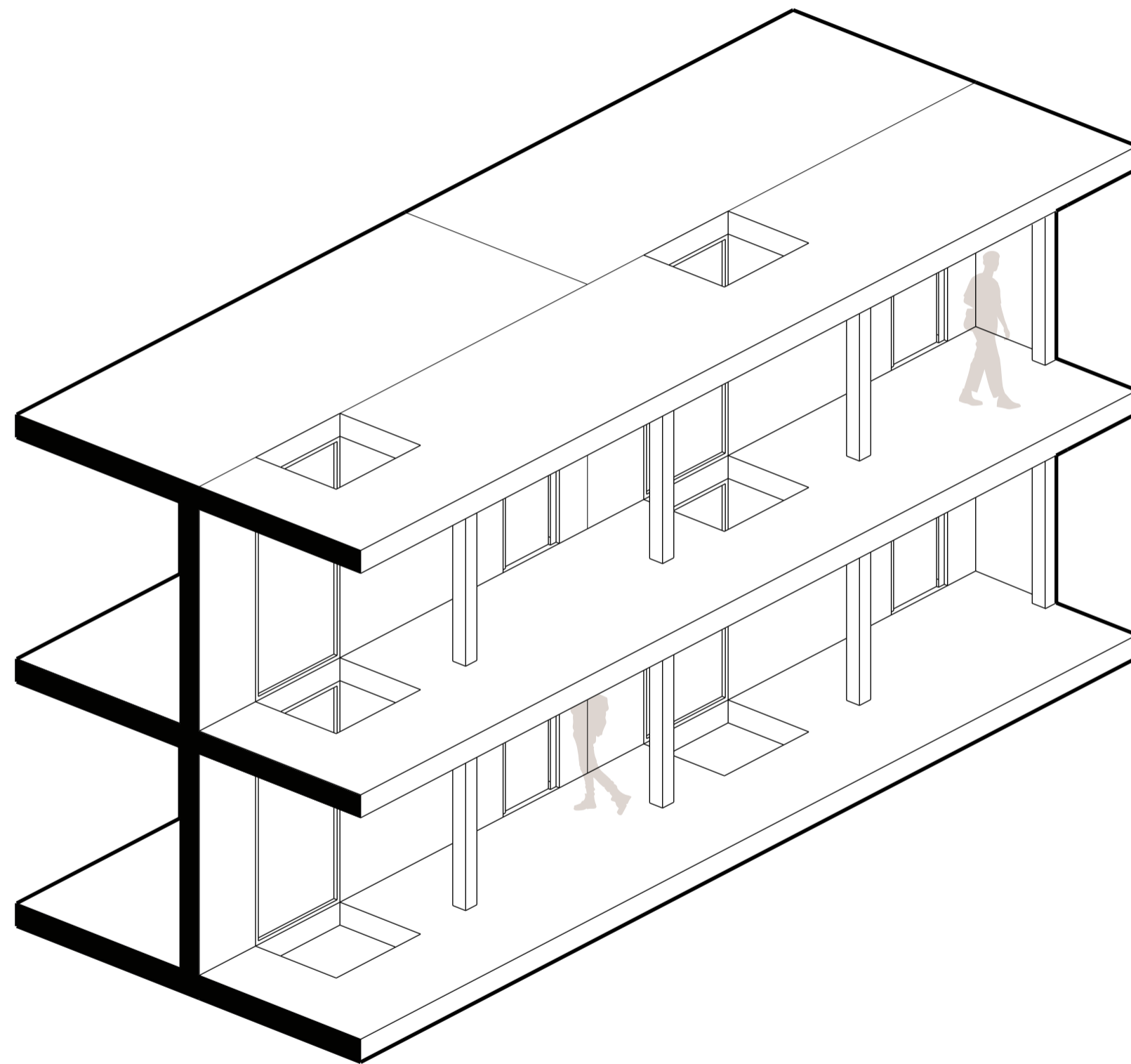


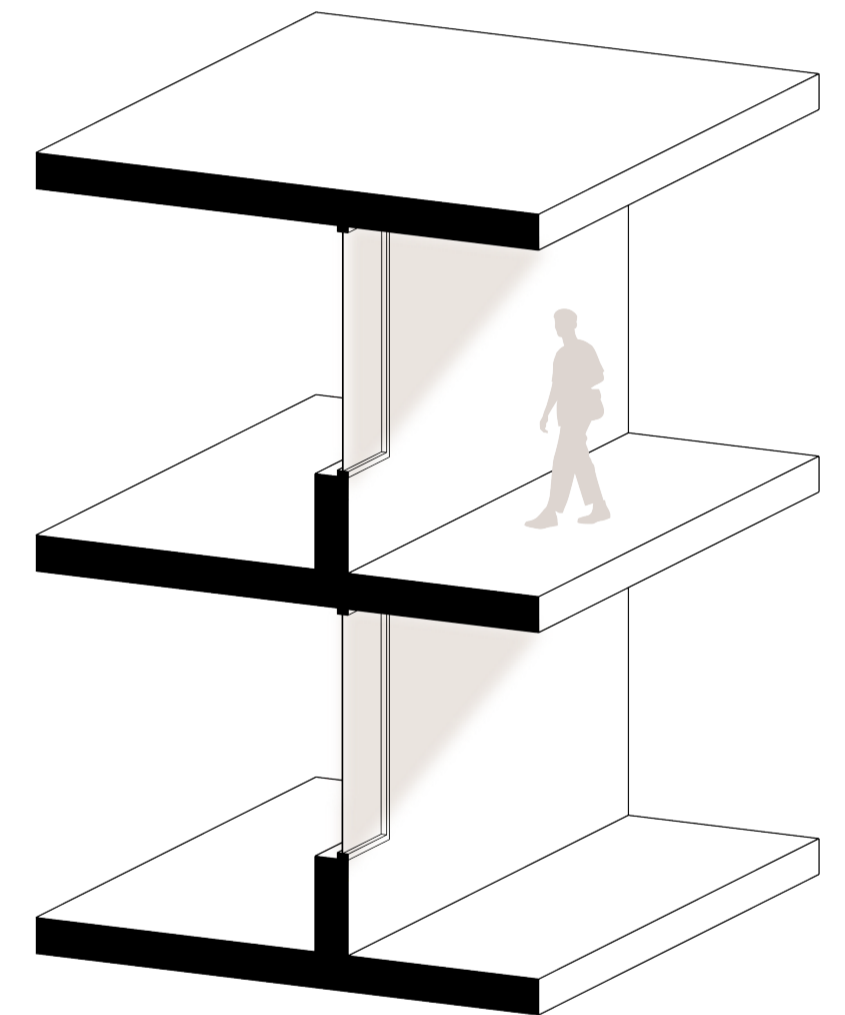
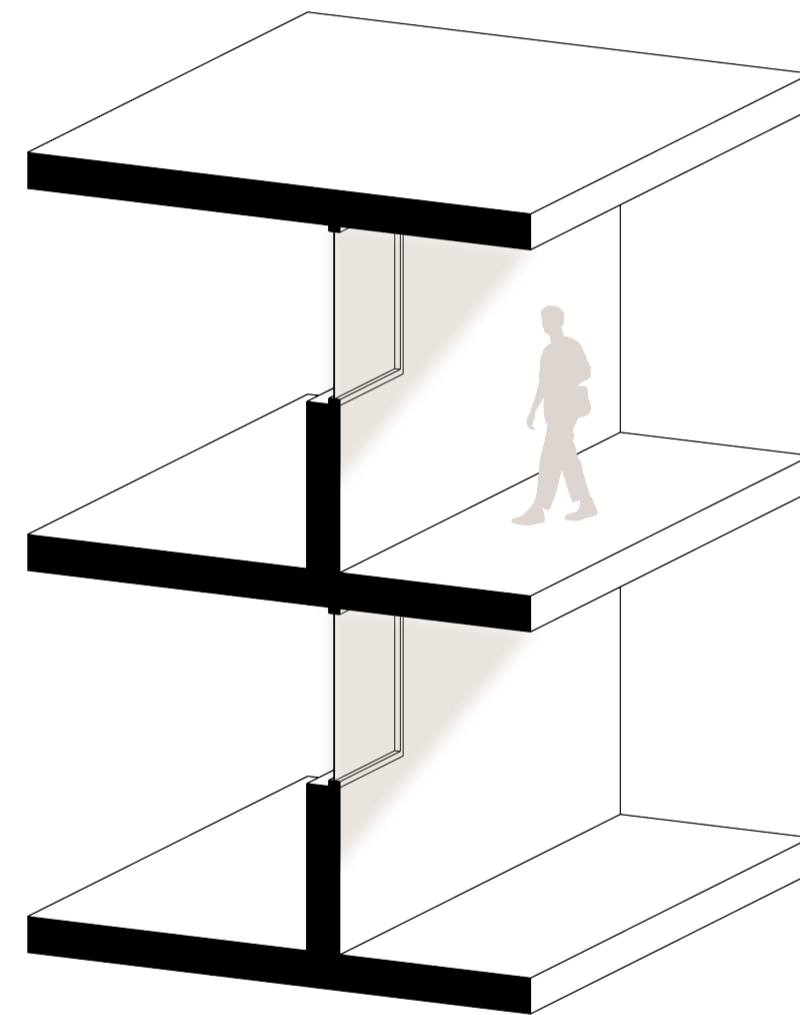
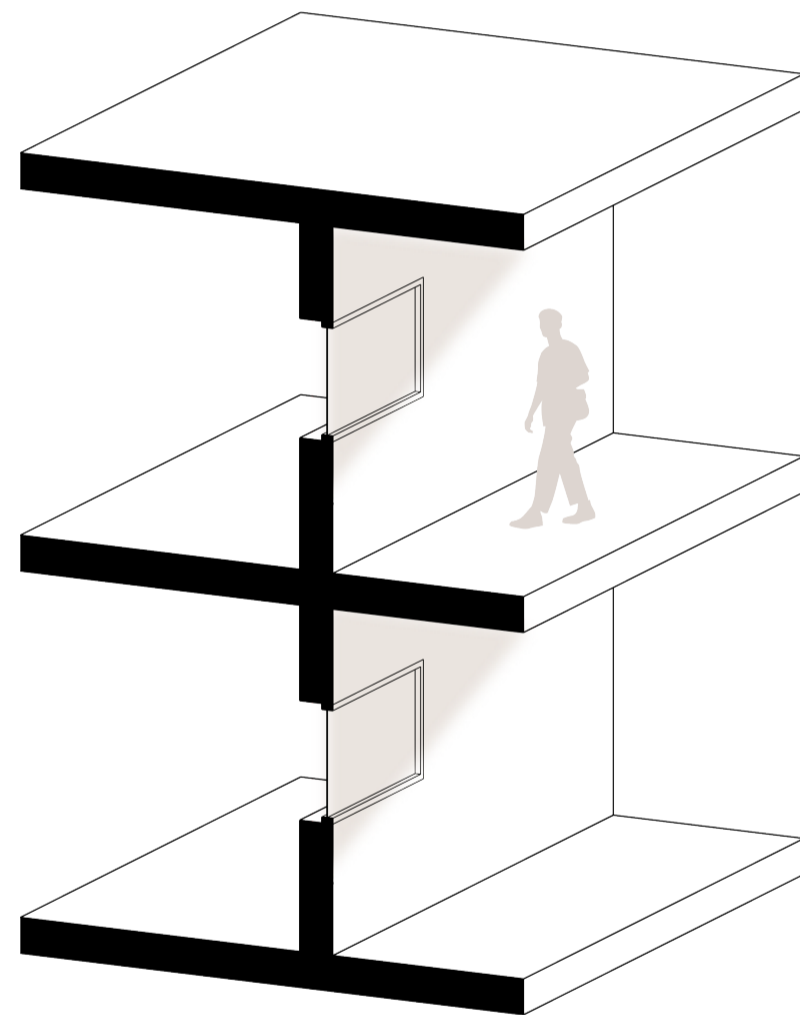
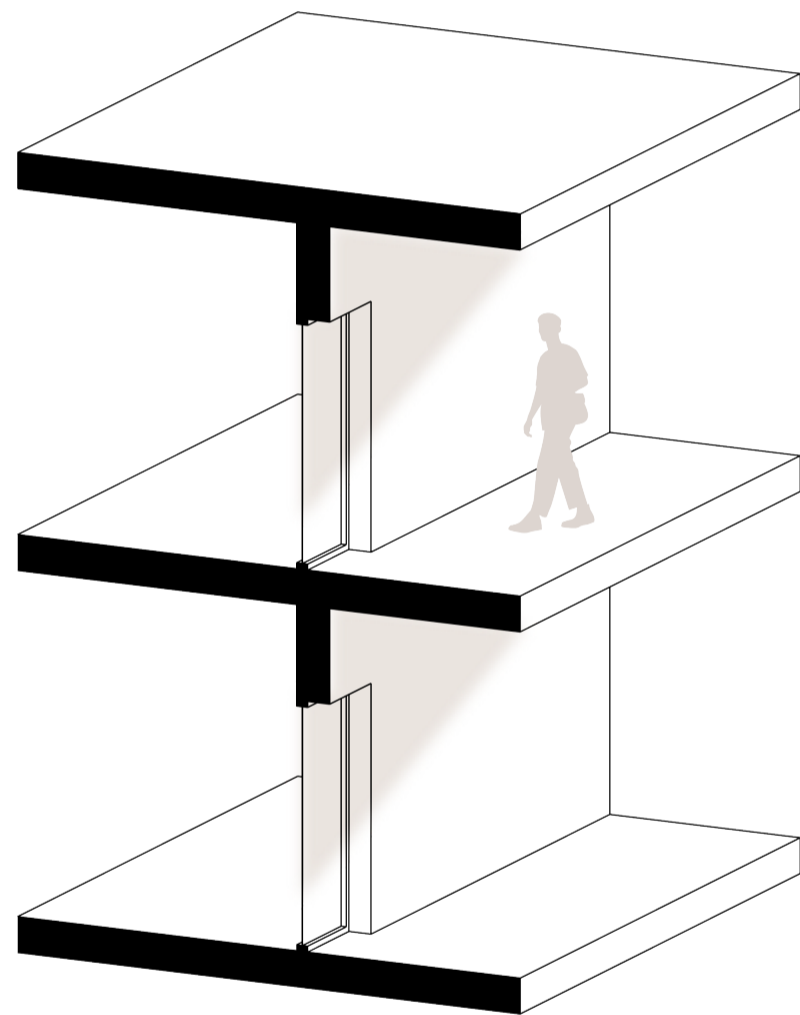
AVERAGE RAIN ANGLE



DEMOUNTABLE FACADE

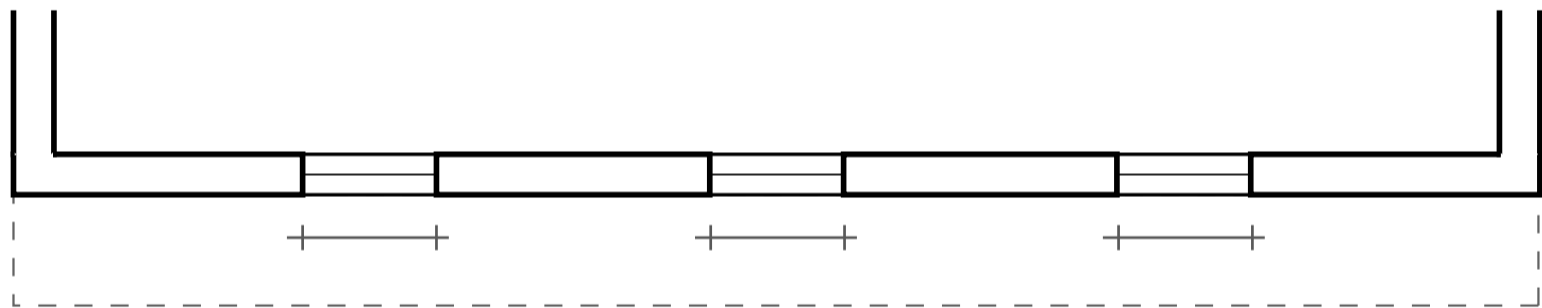




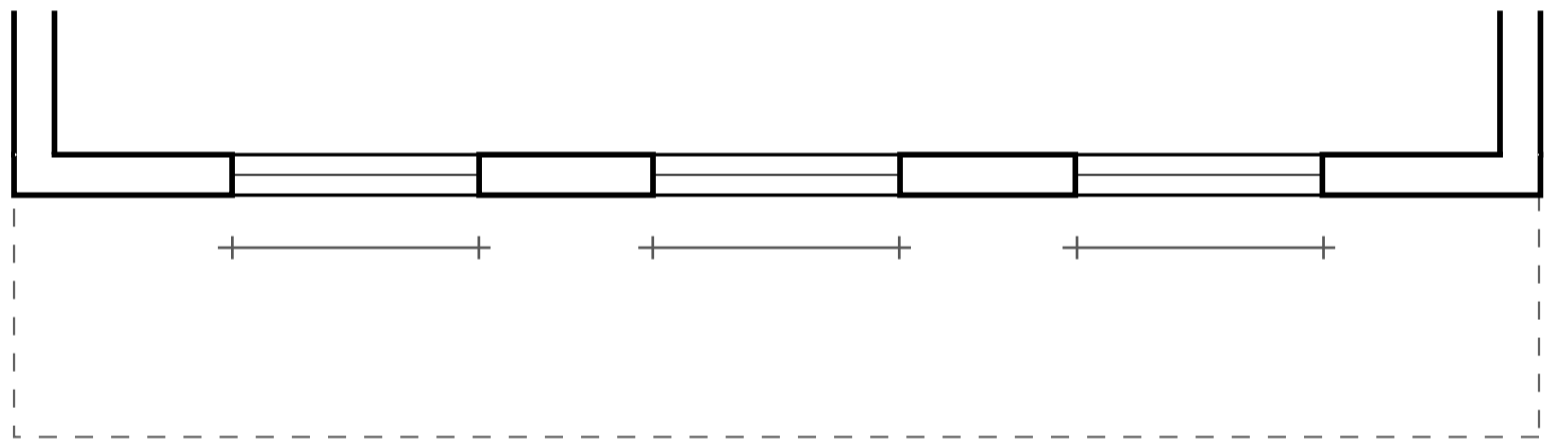


DAYLIGHT

EAST



SOUTHWEST



WOOD SPECIES



LARCH



ROBINIA



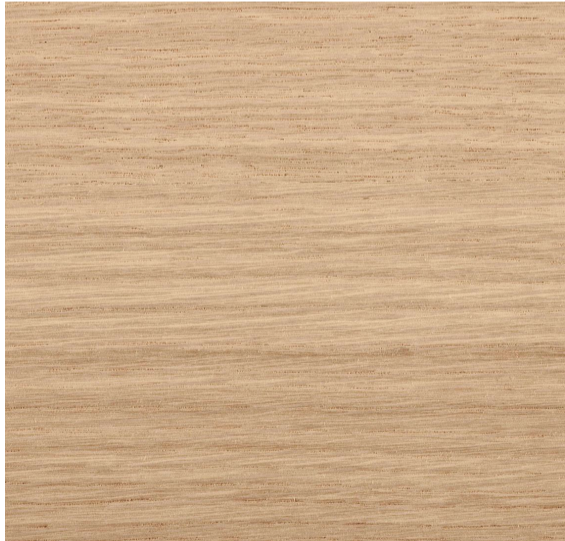
SWEET CHESTNUT



SPRUCE



DOUGLAS FIR



OAK



BIRCH



PINE



YEW



BEECH



MAPLE



ROBINIA



YEW



OAK



PINE



SWEET CHESTNUT



LIMEWOOD



DOUGLAS



SPRUCE



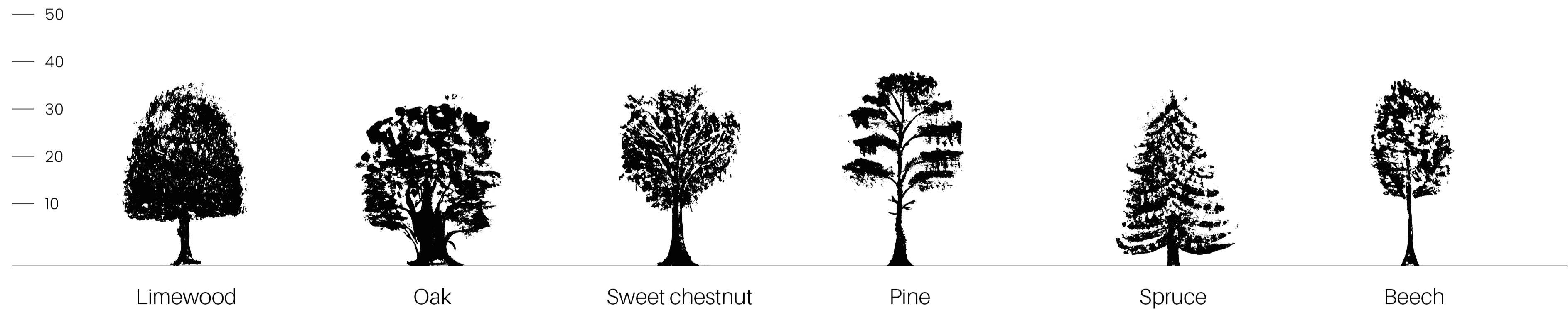
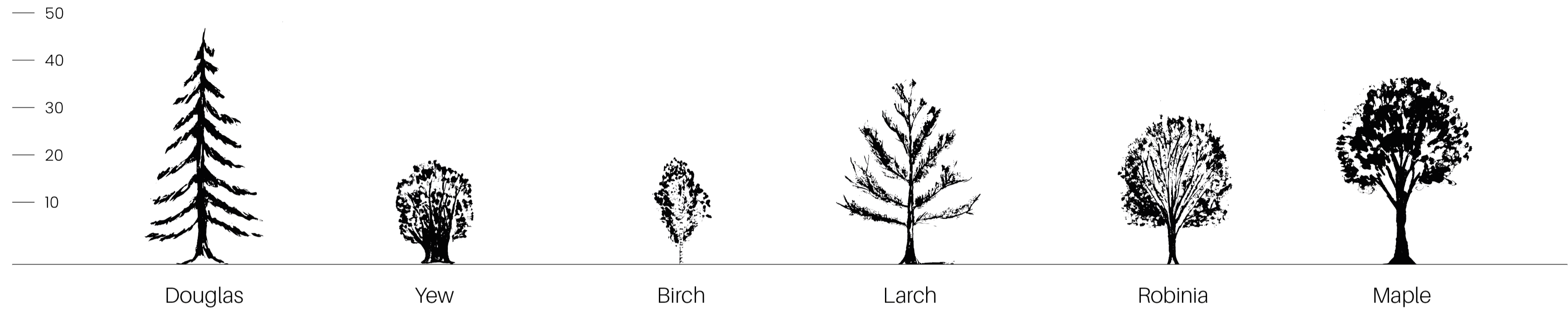
BEECH



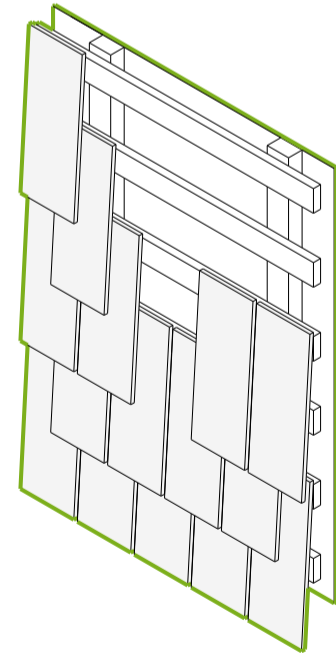
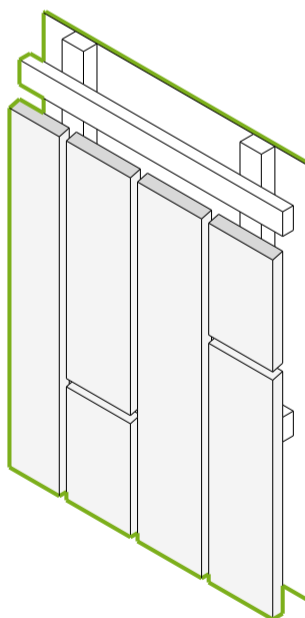
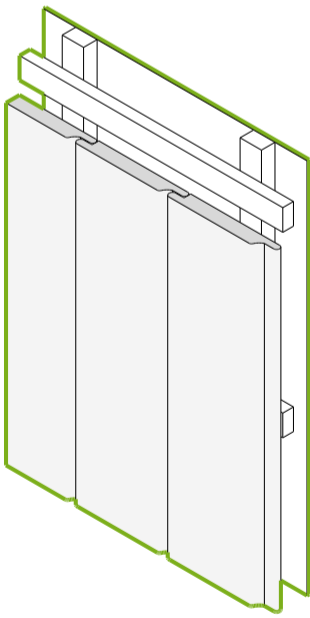
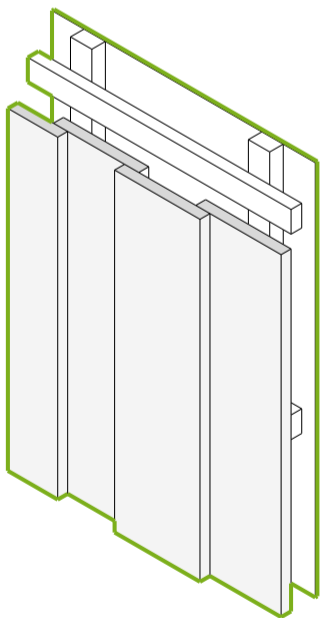
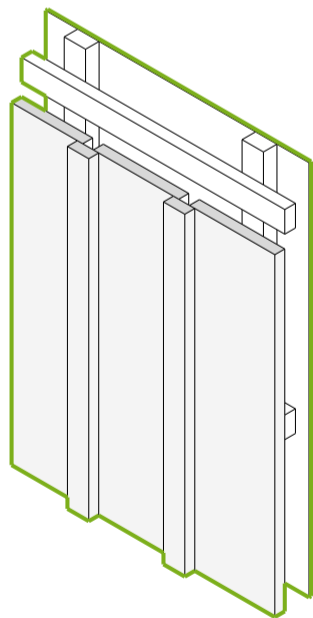
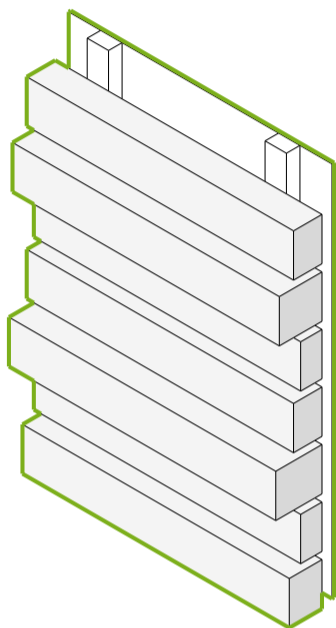
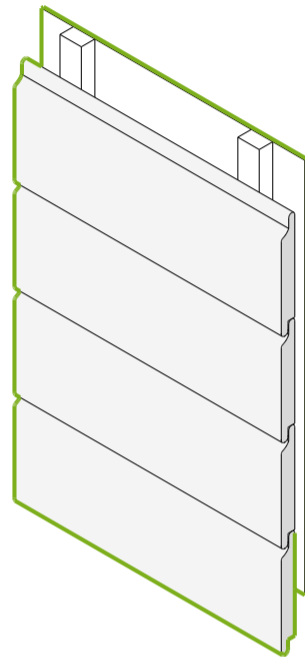
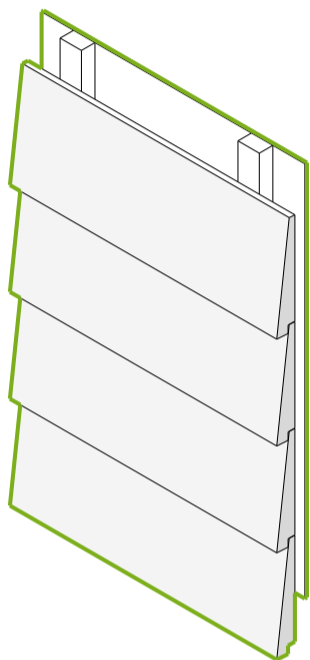
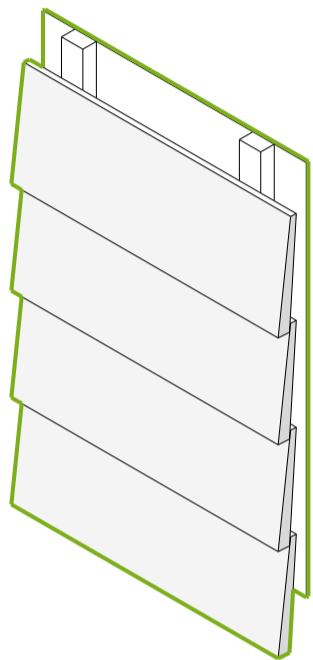
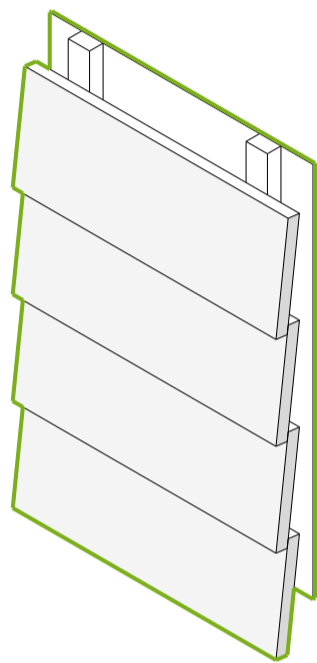
BIRCH



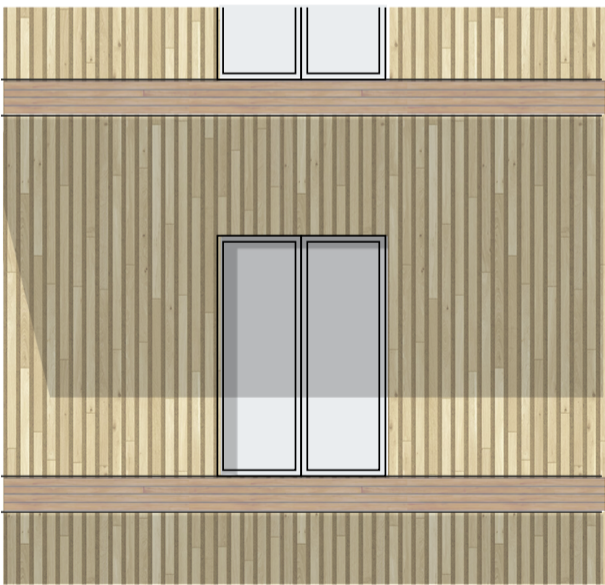
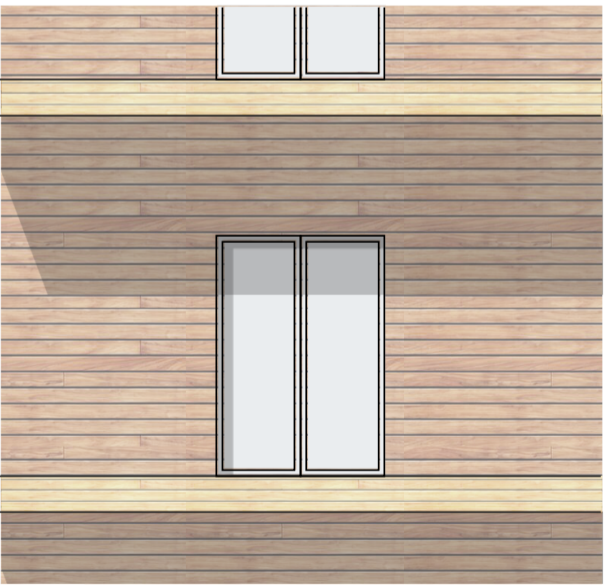
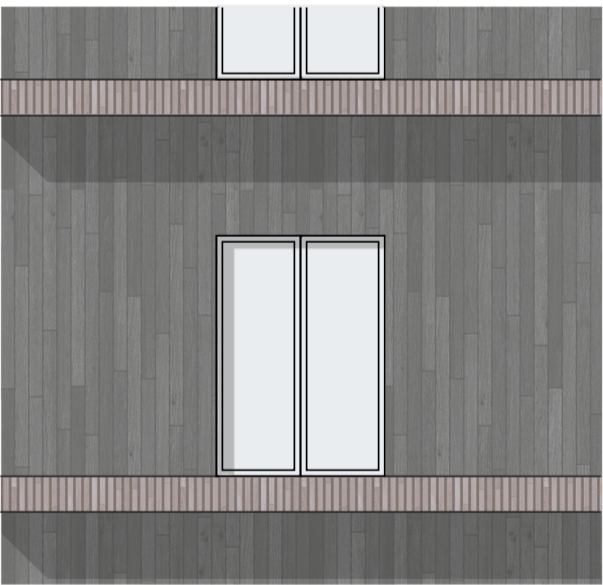
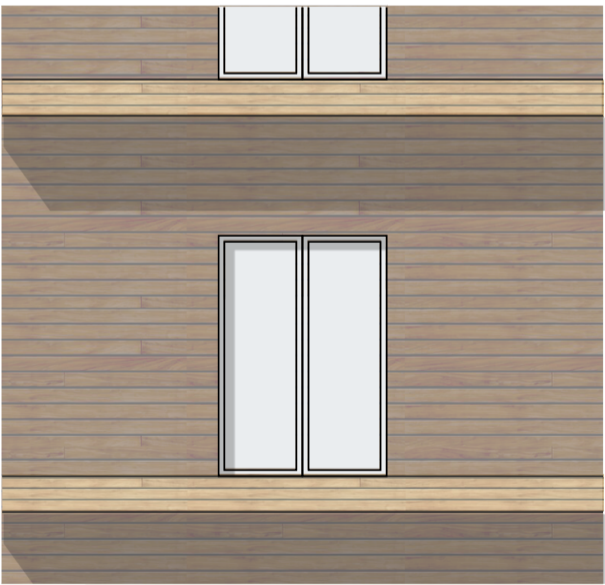
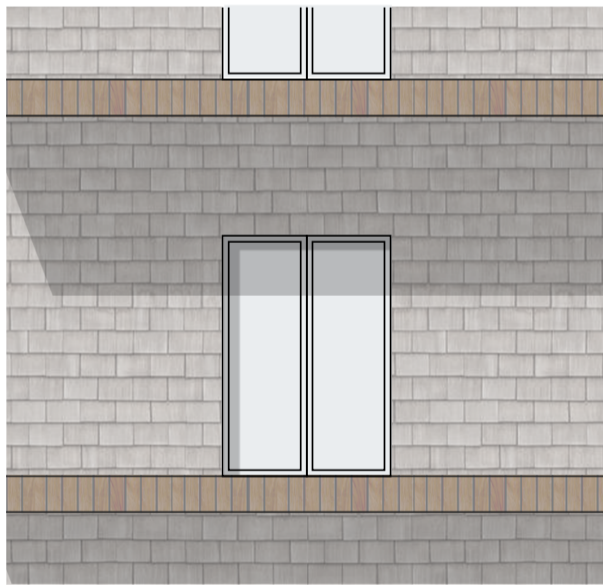
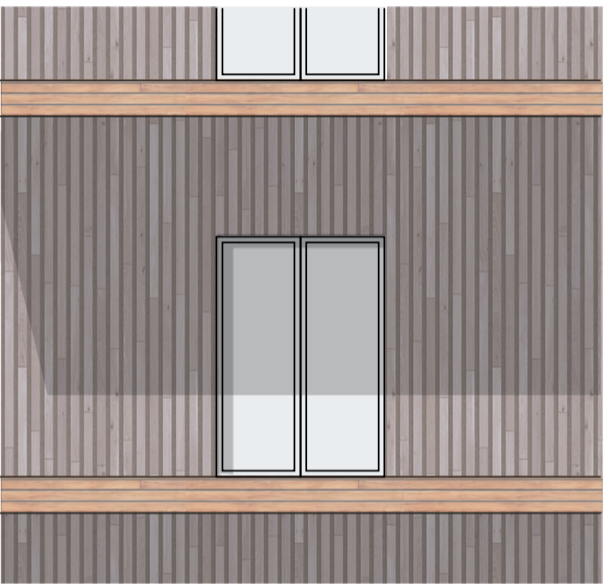
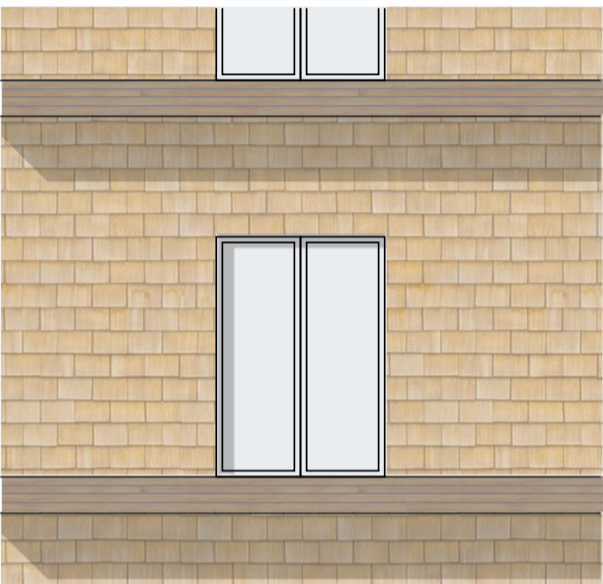
LARCH

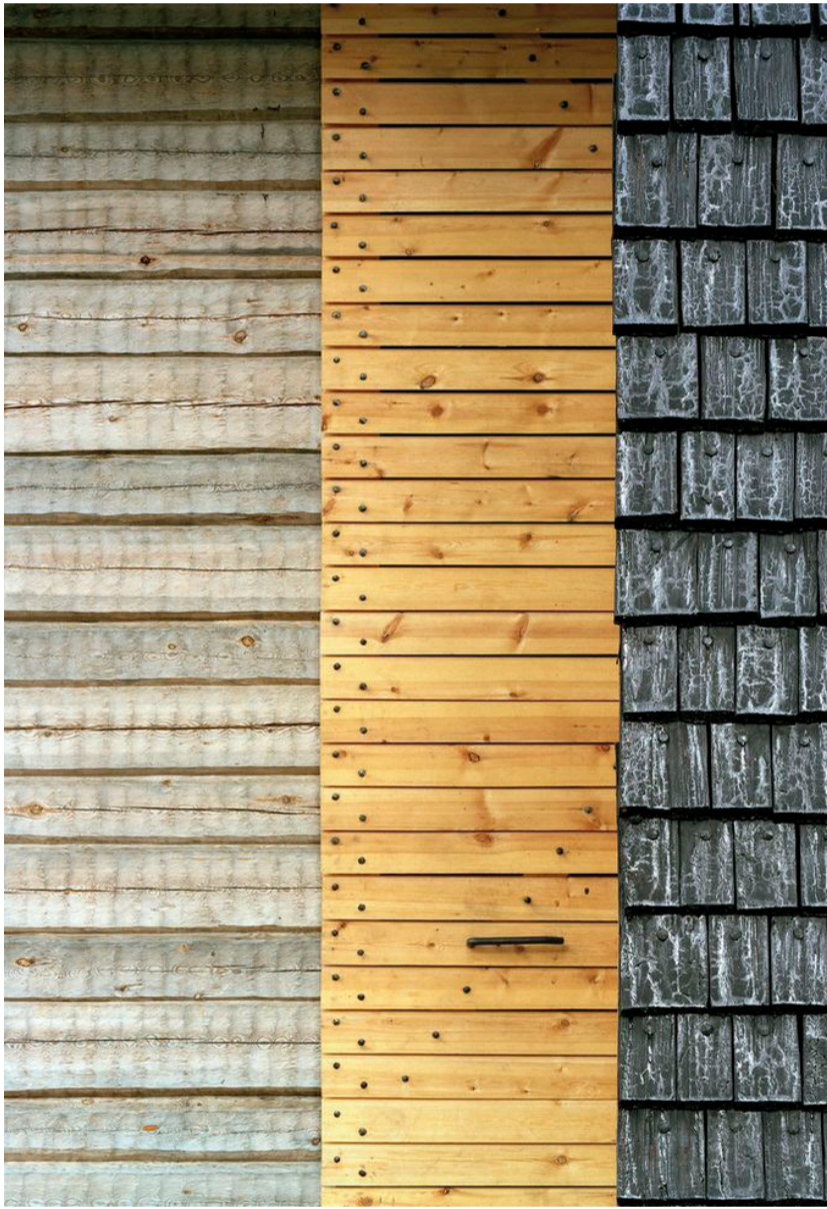


FACADE OPTIONS

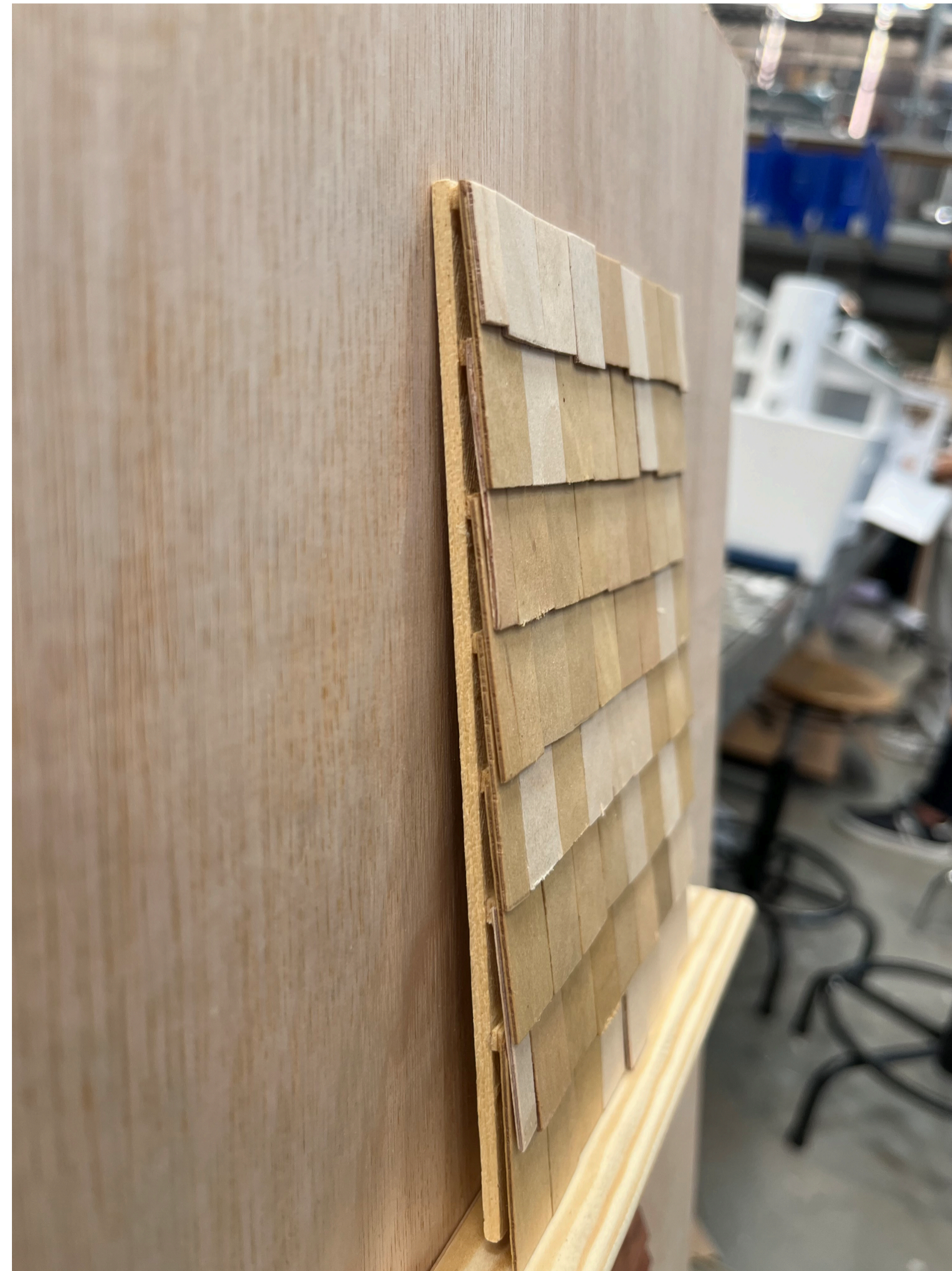


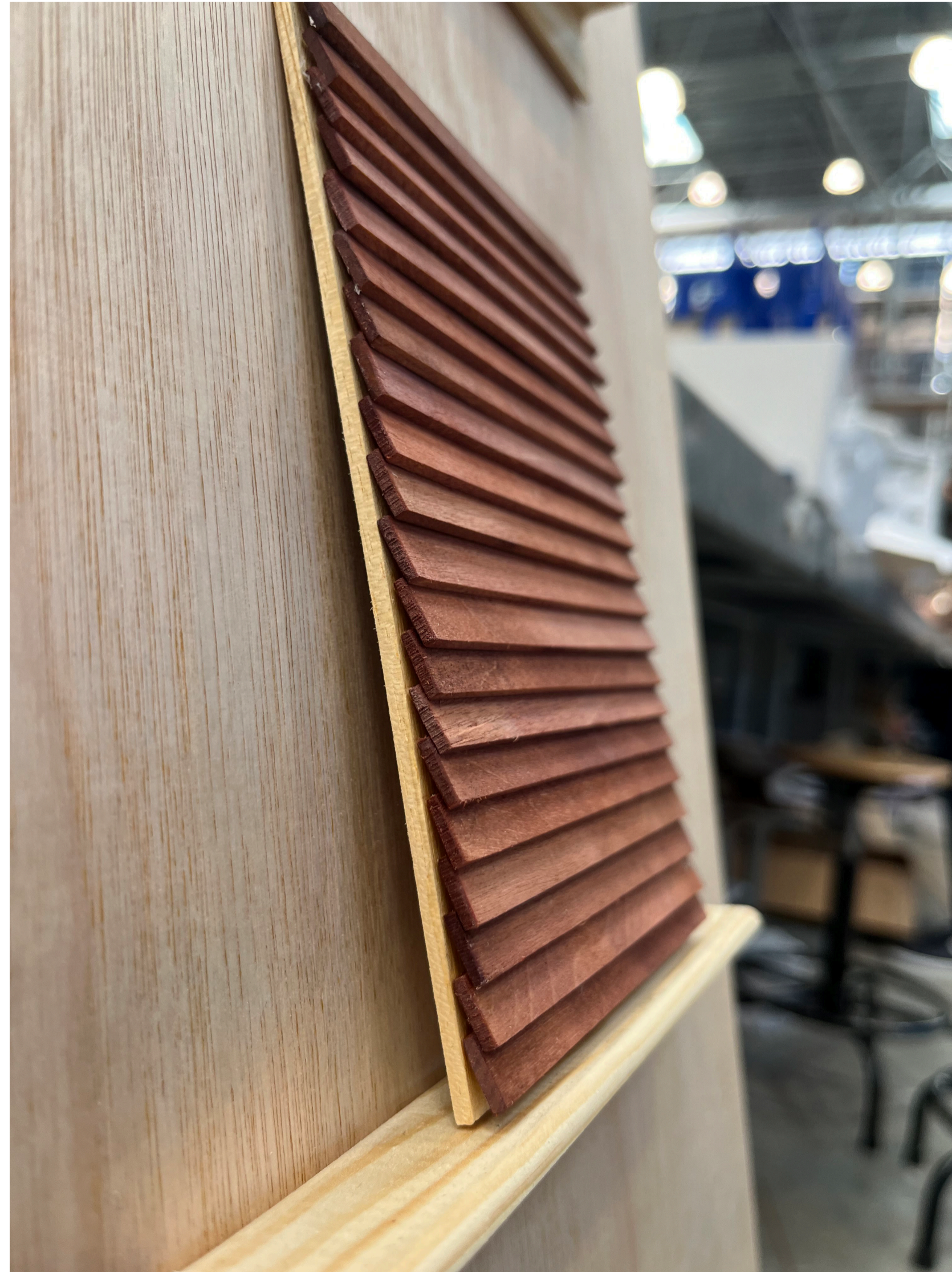
VARIATIONS







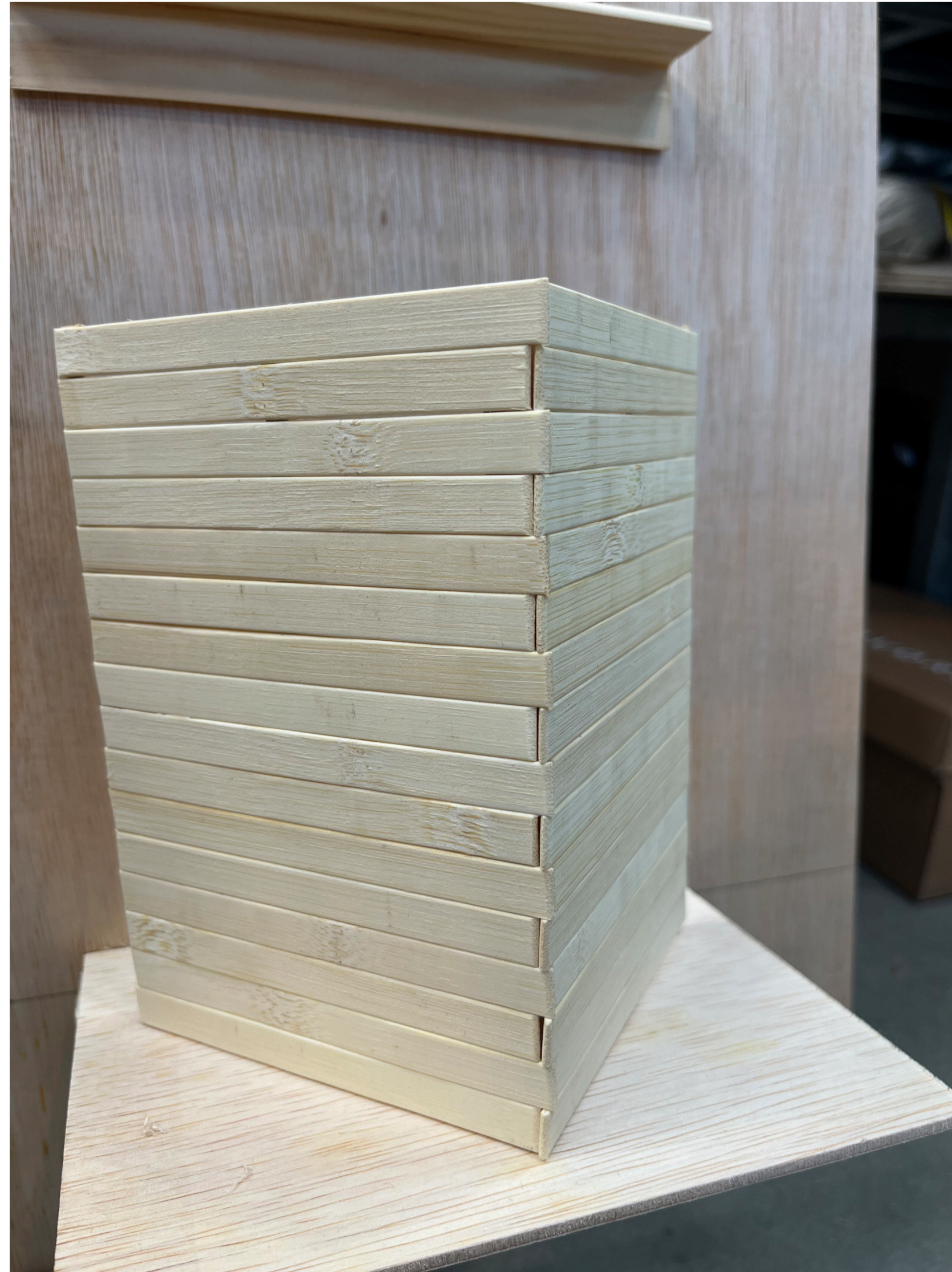






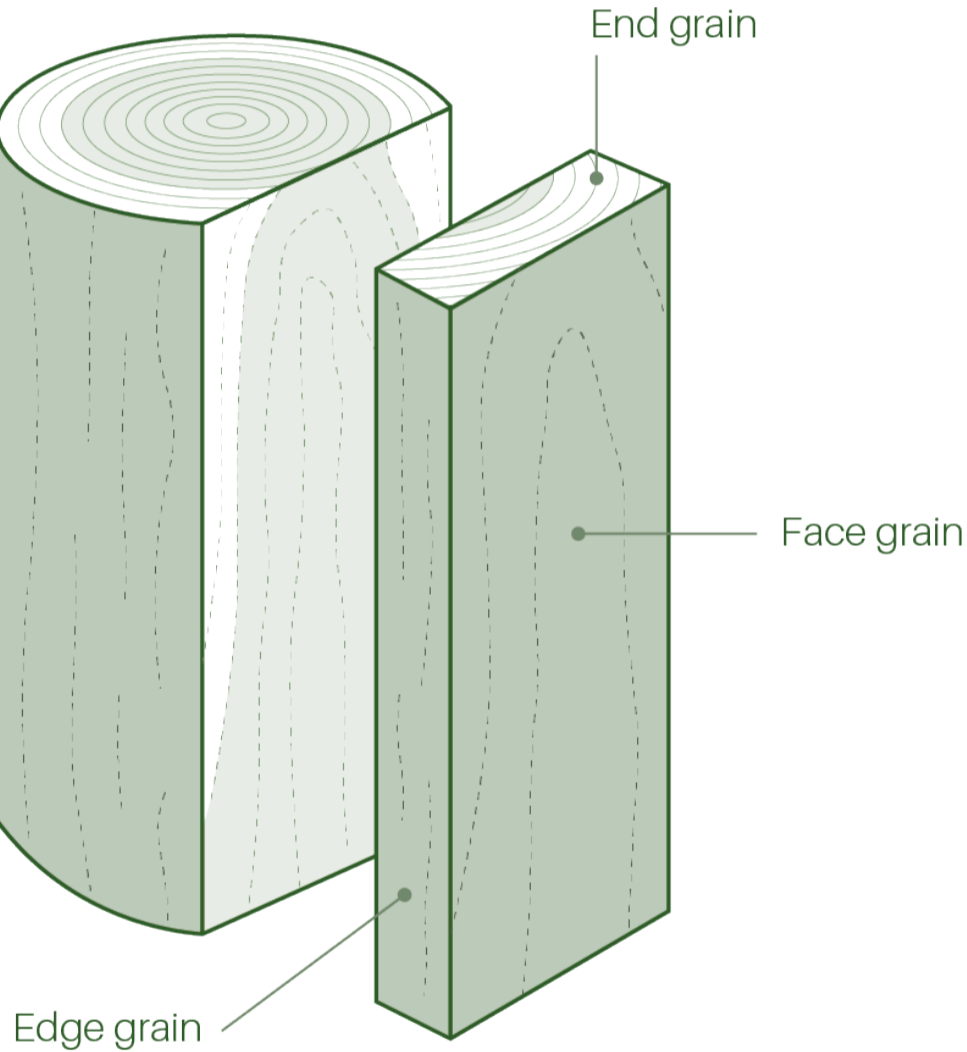
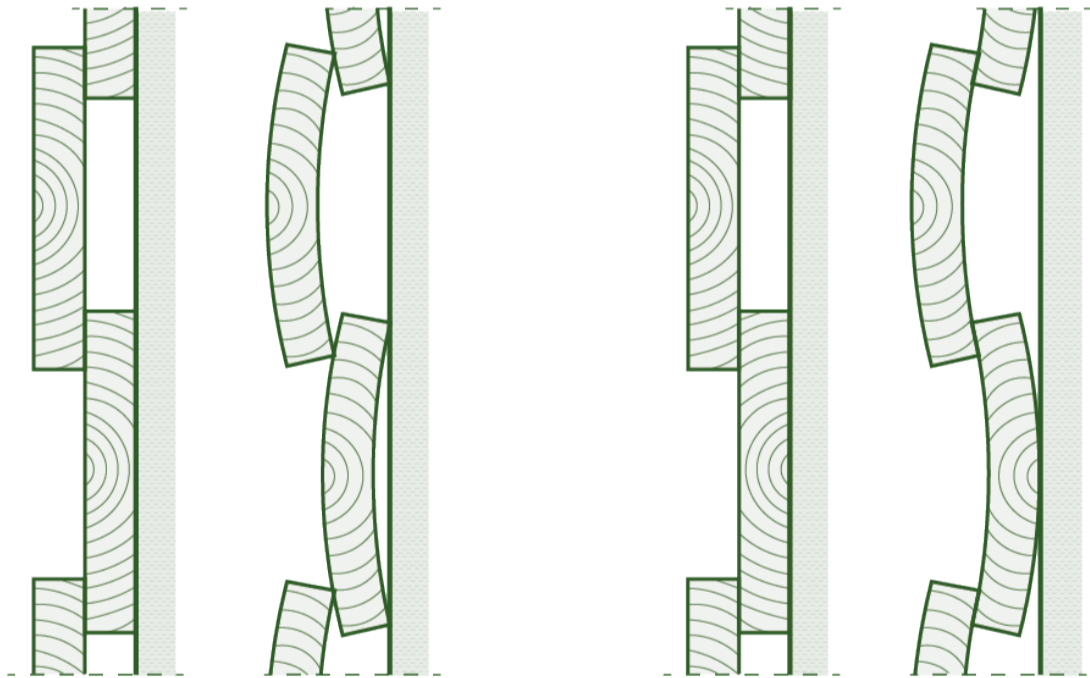
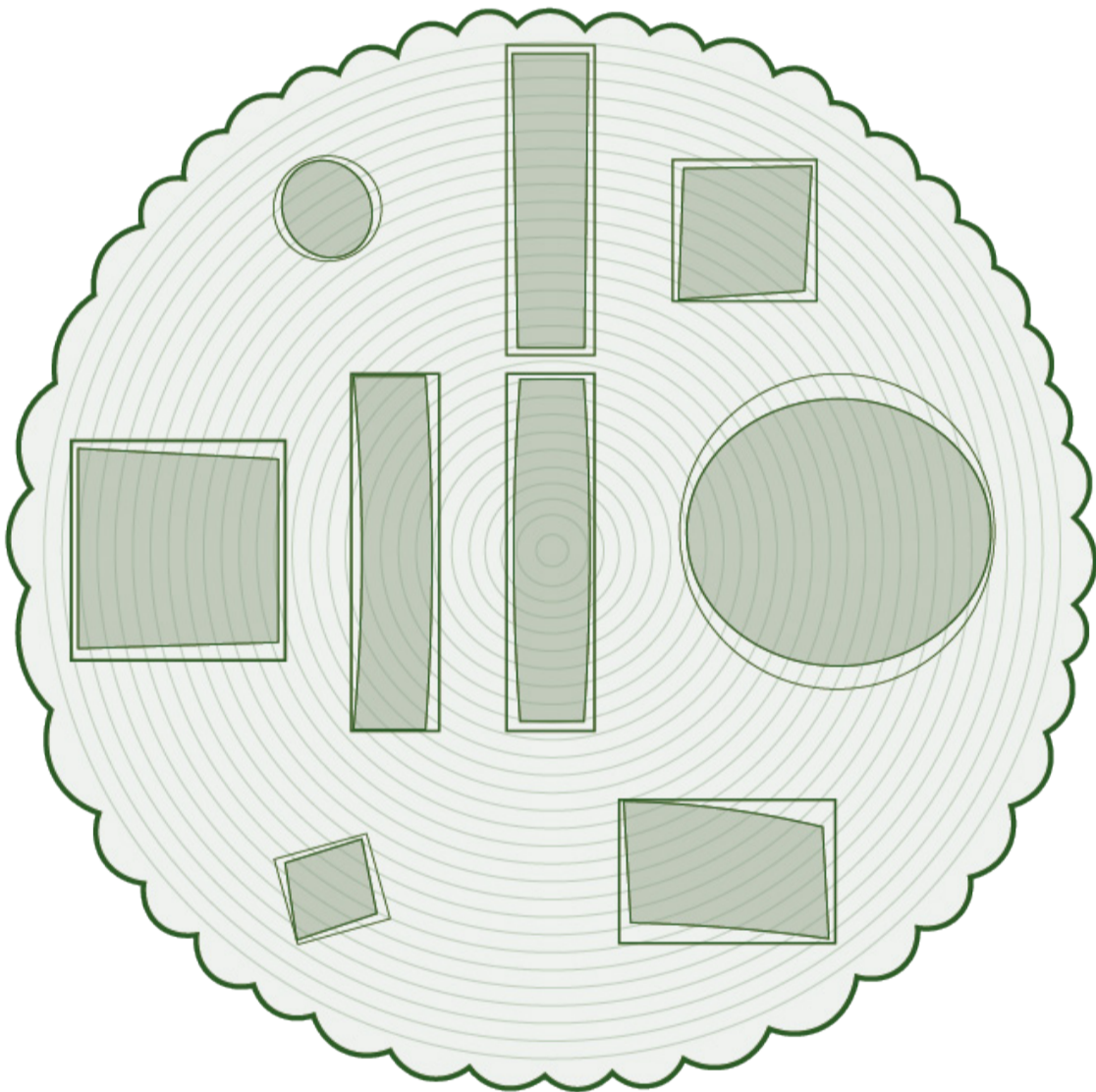


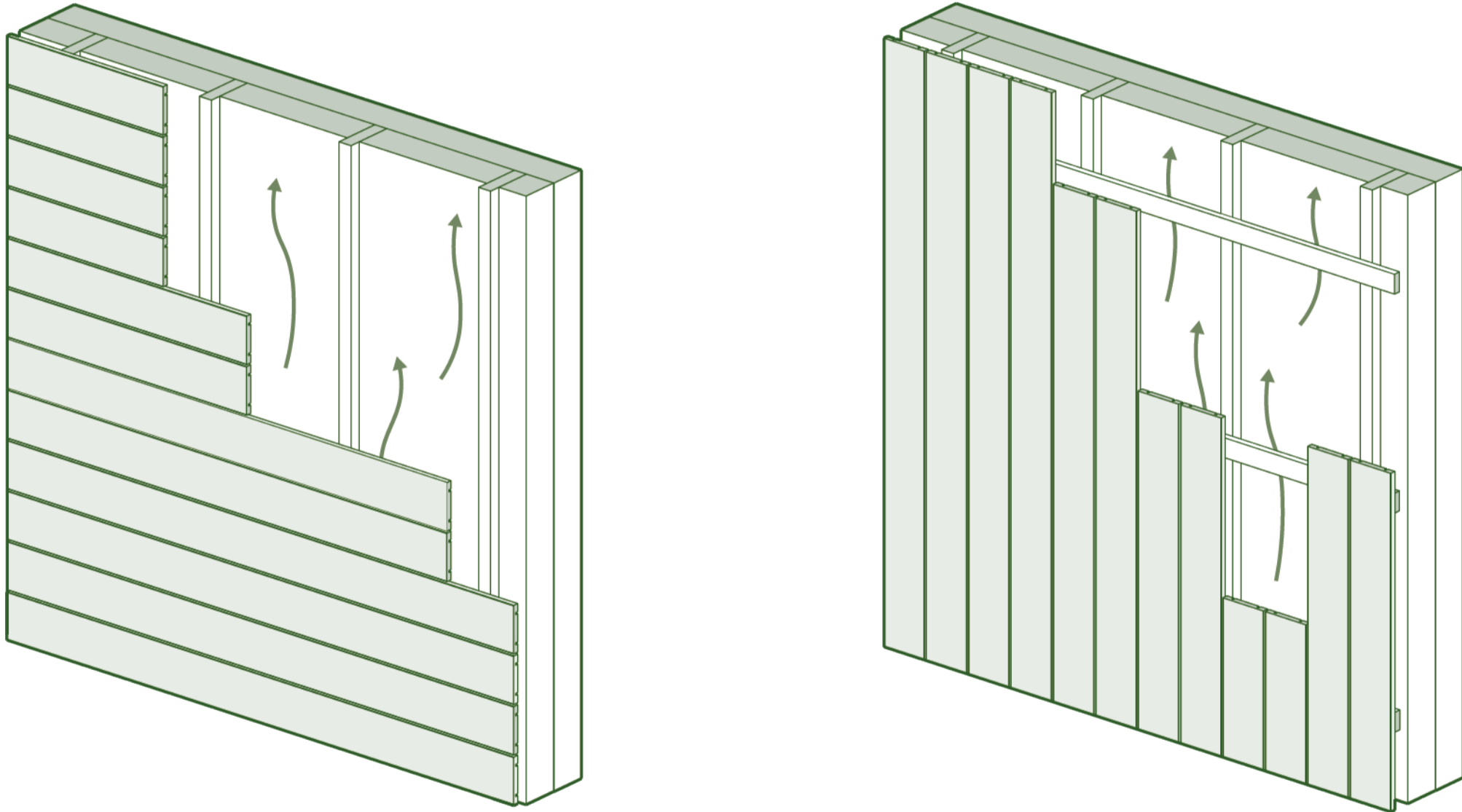








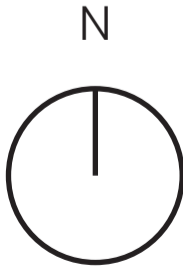
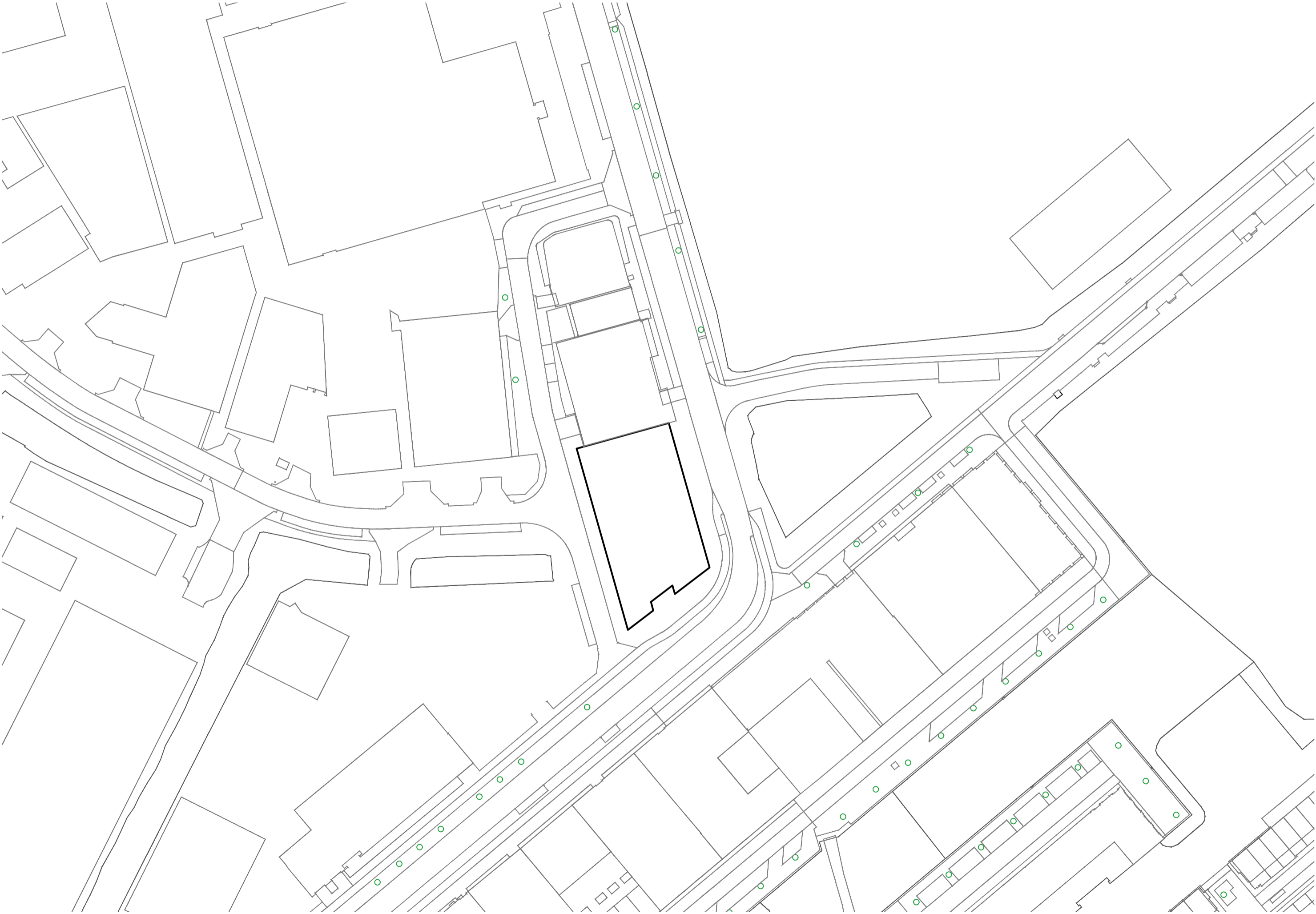


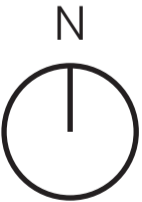
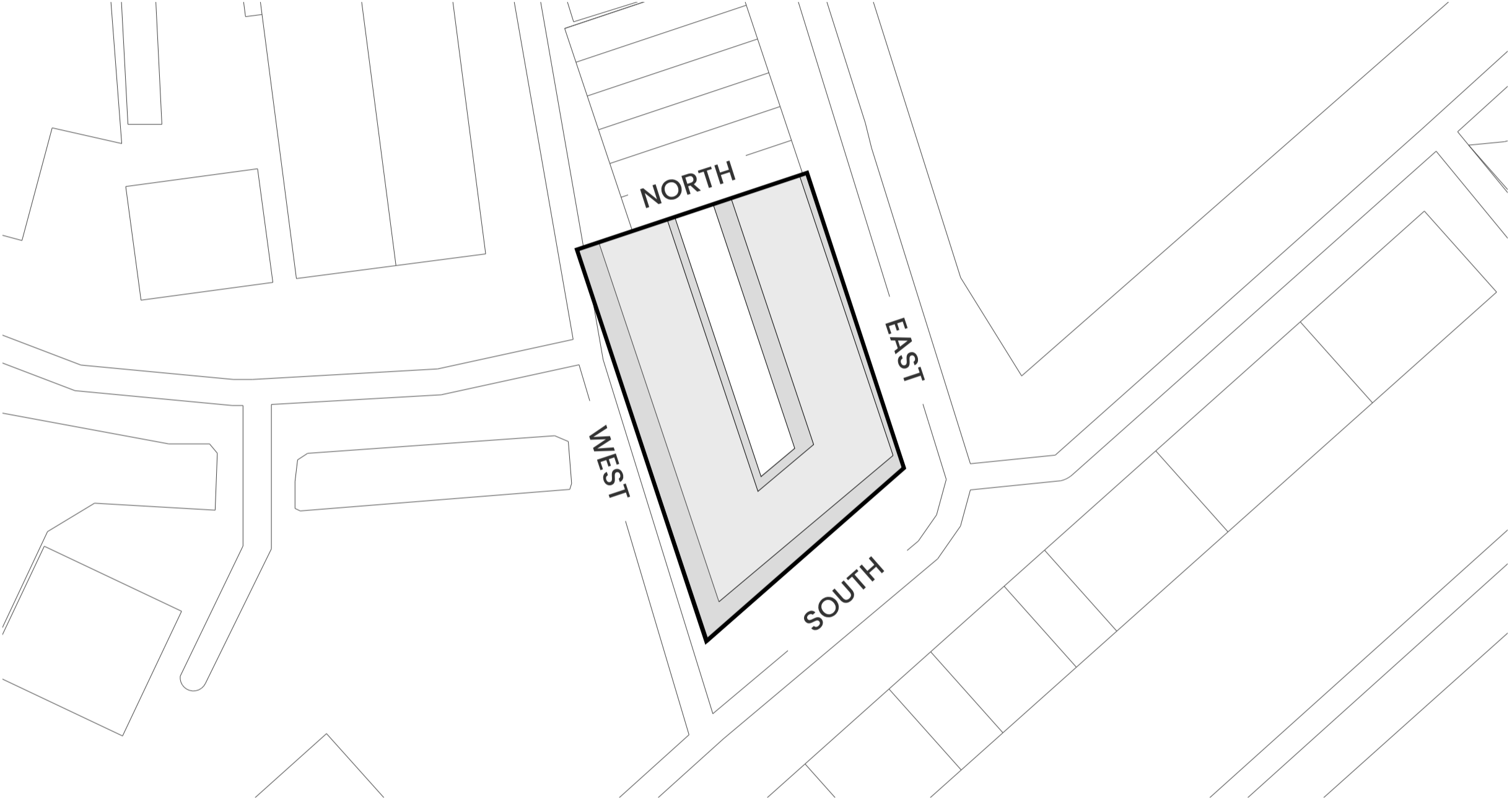
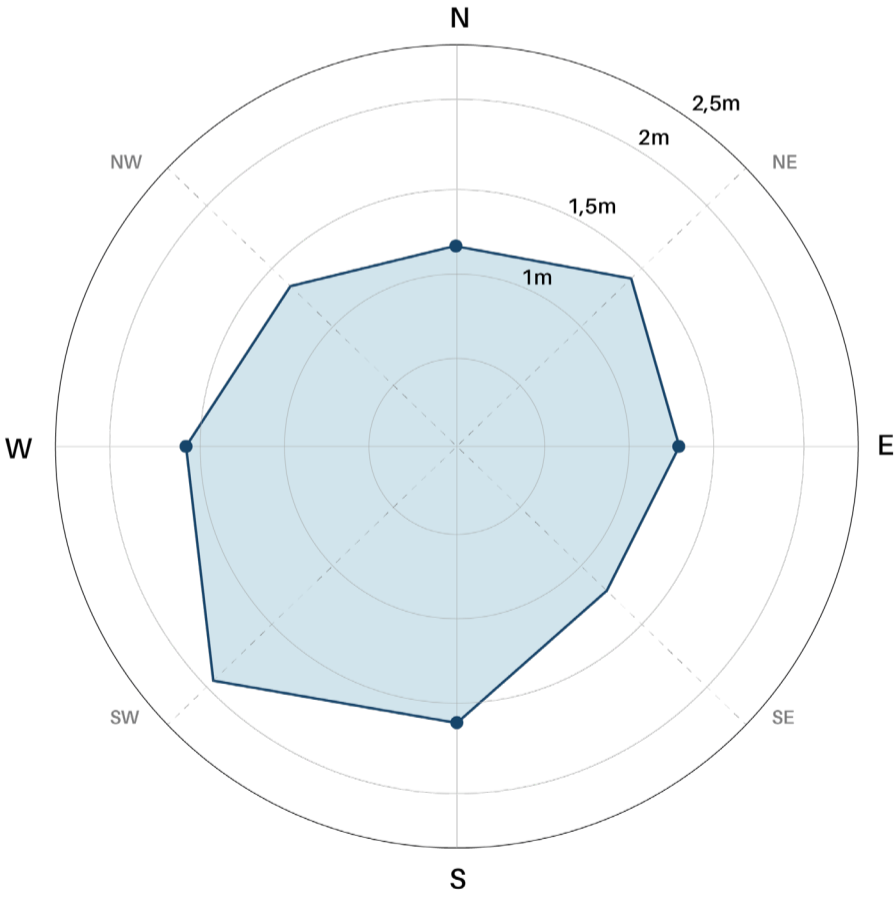
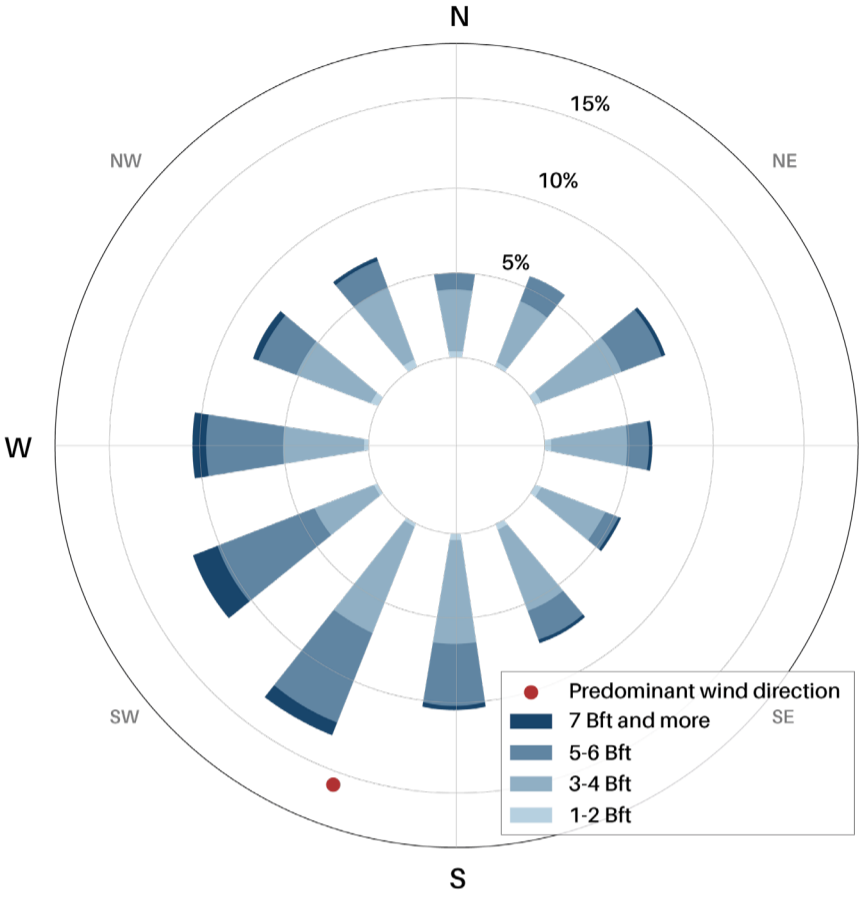


EXISTING BUILDING

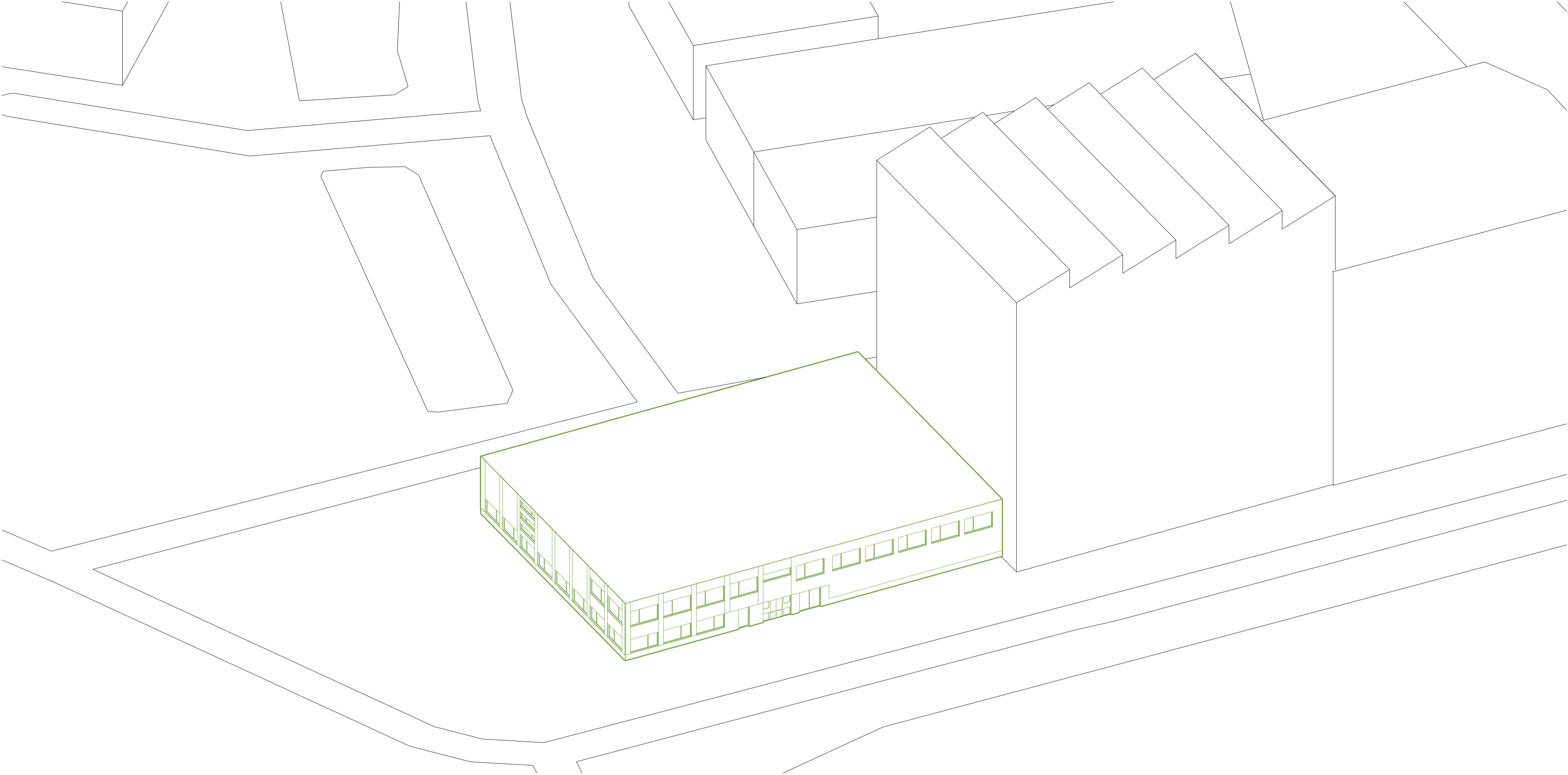


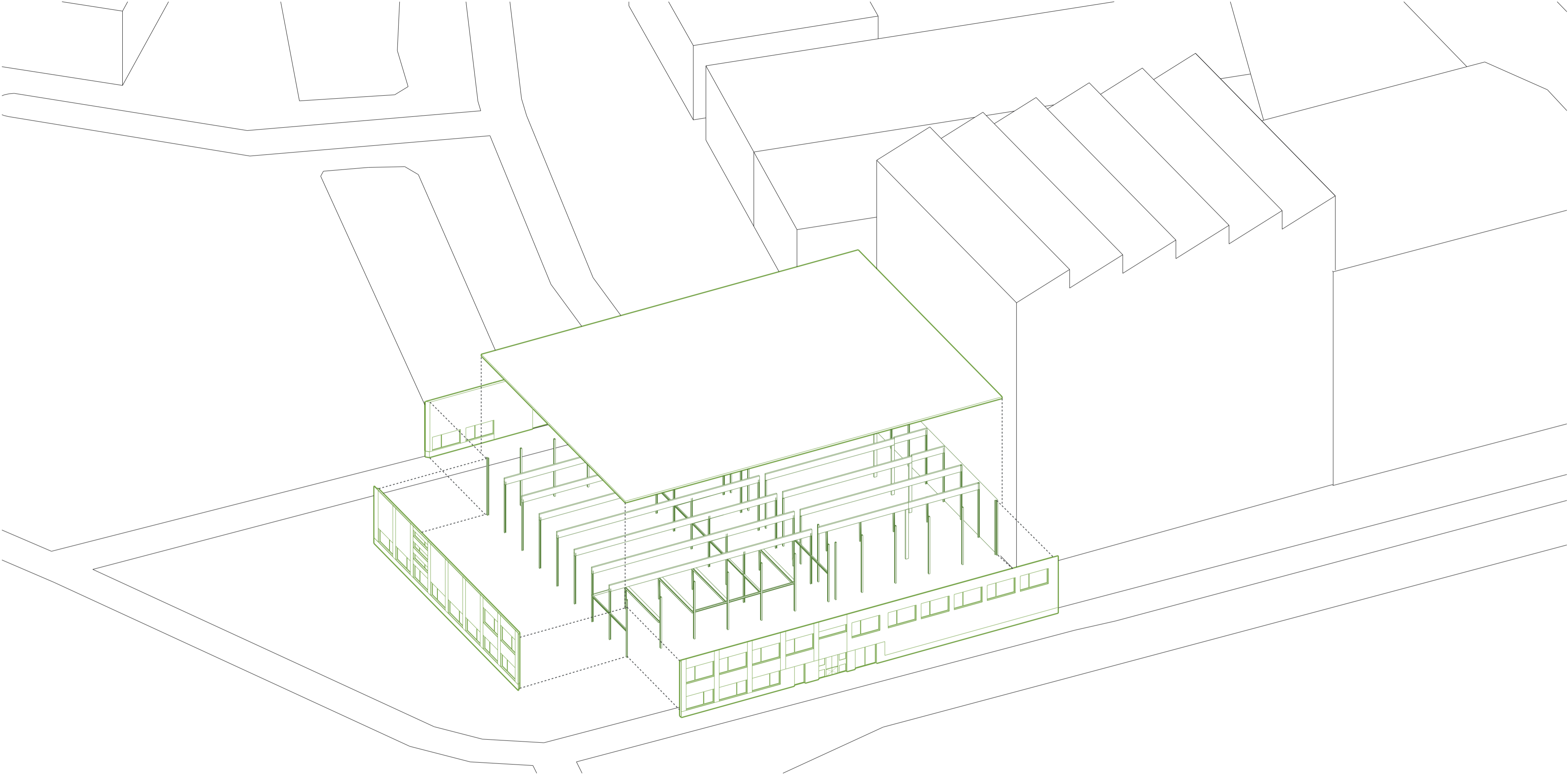
NEW BUILDING

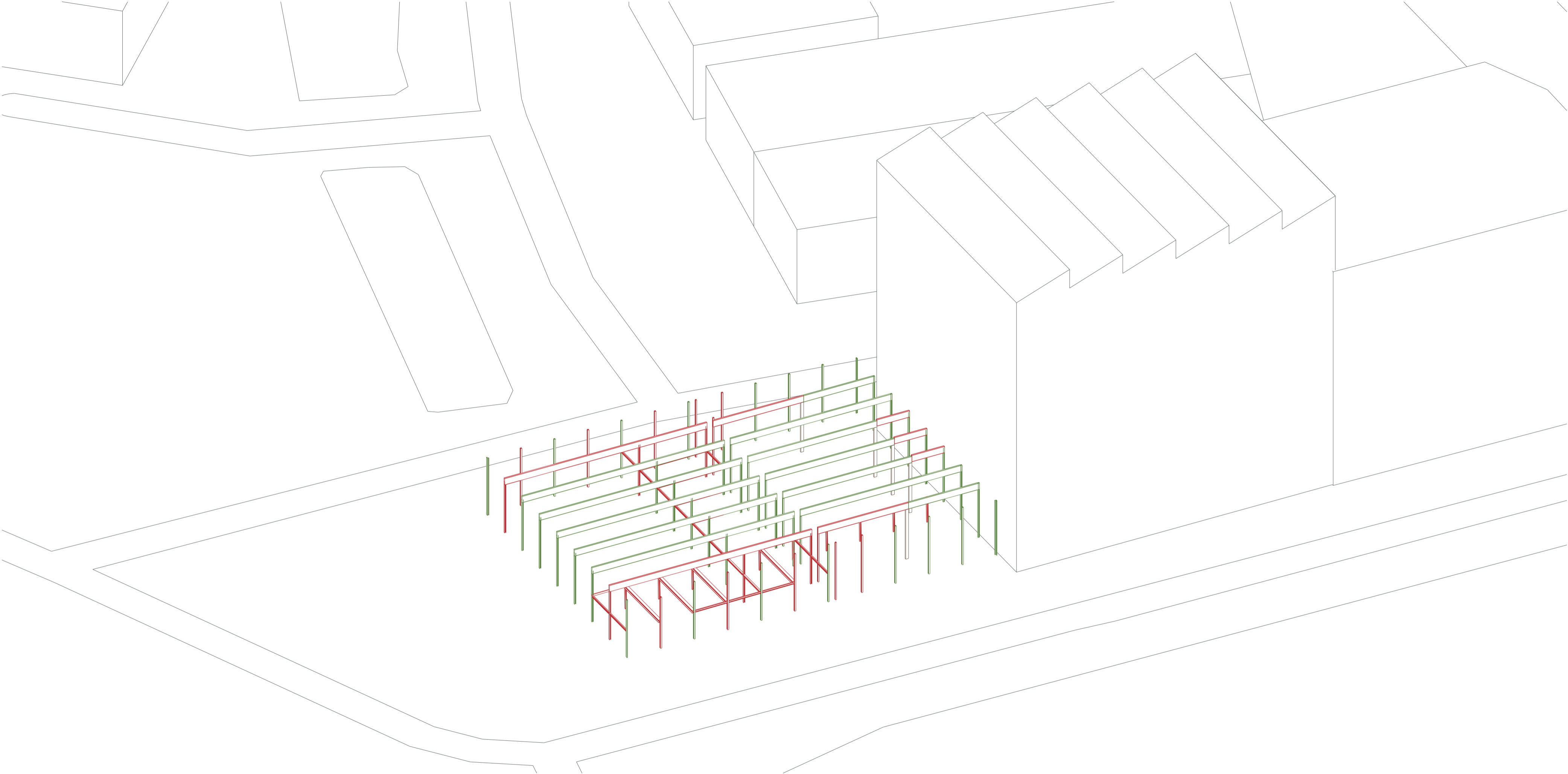


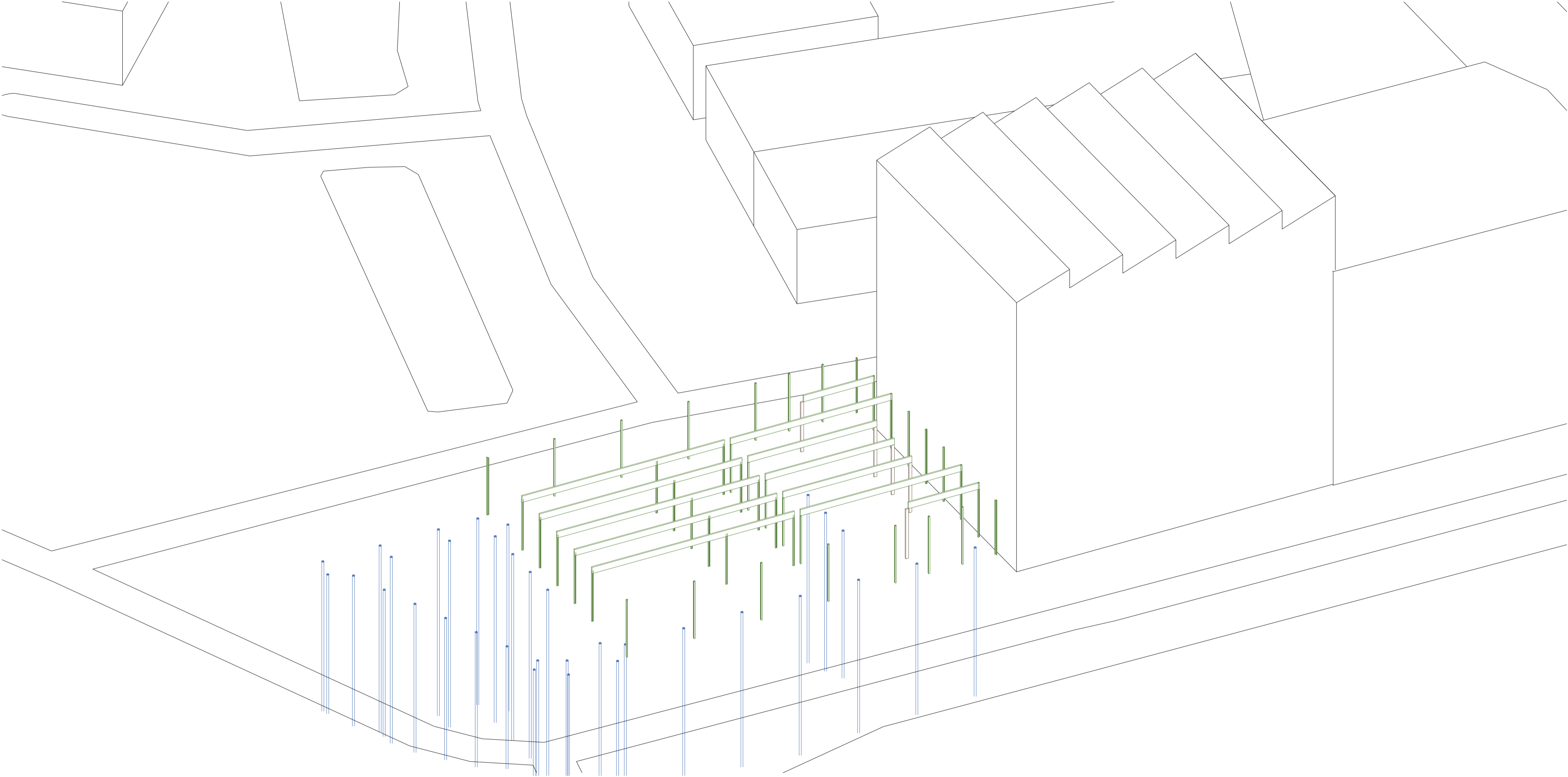


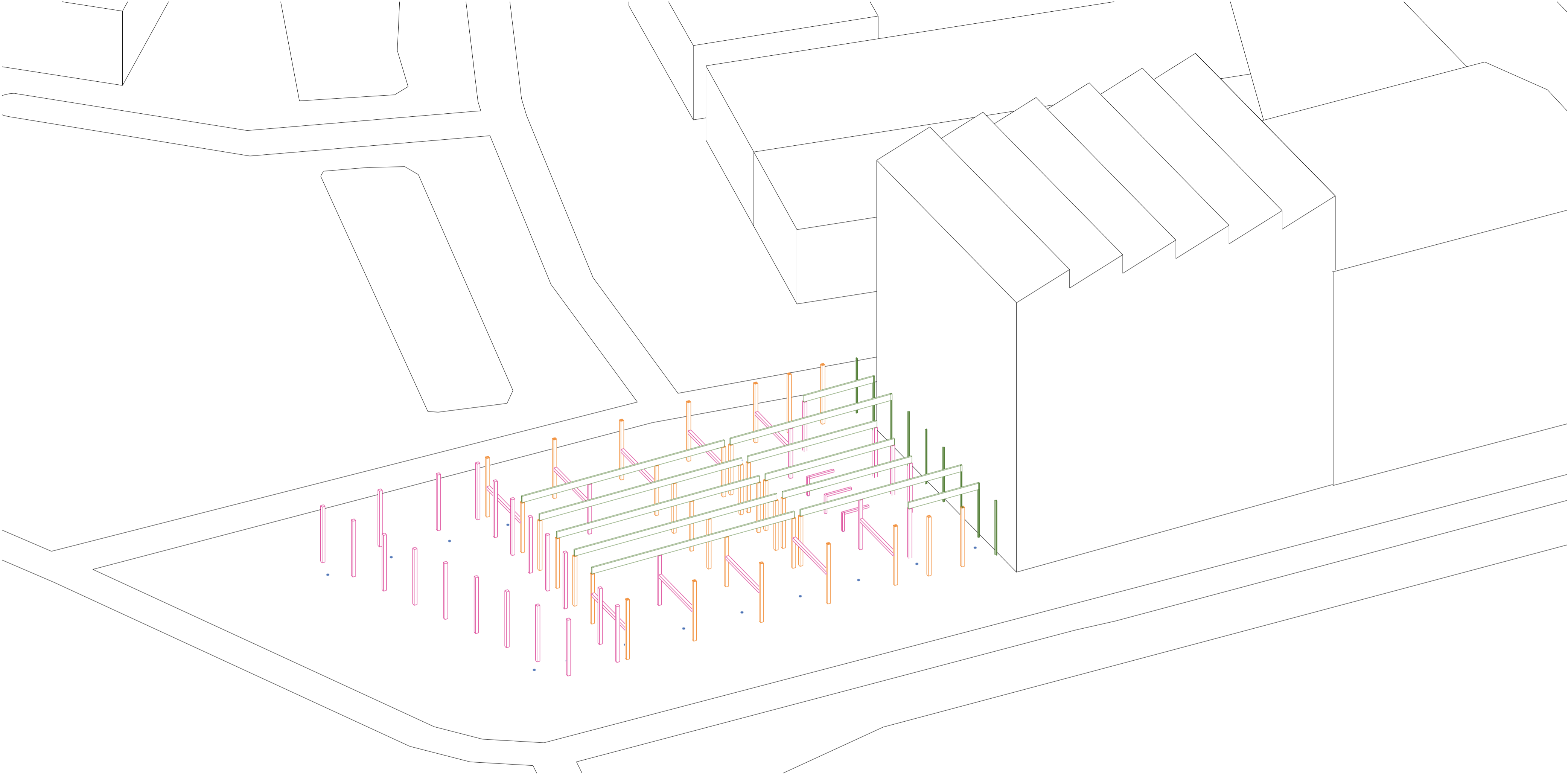
PROCESS

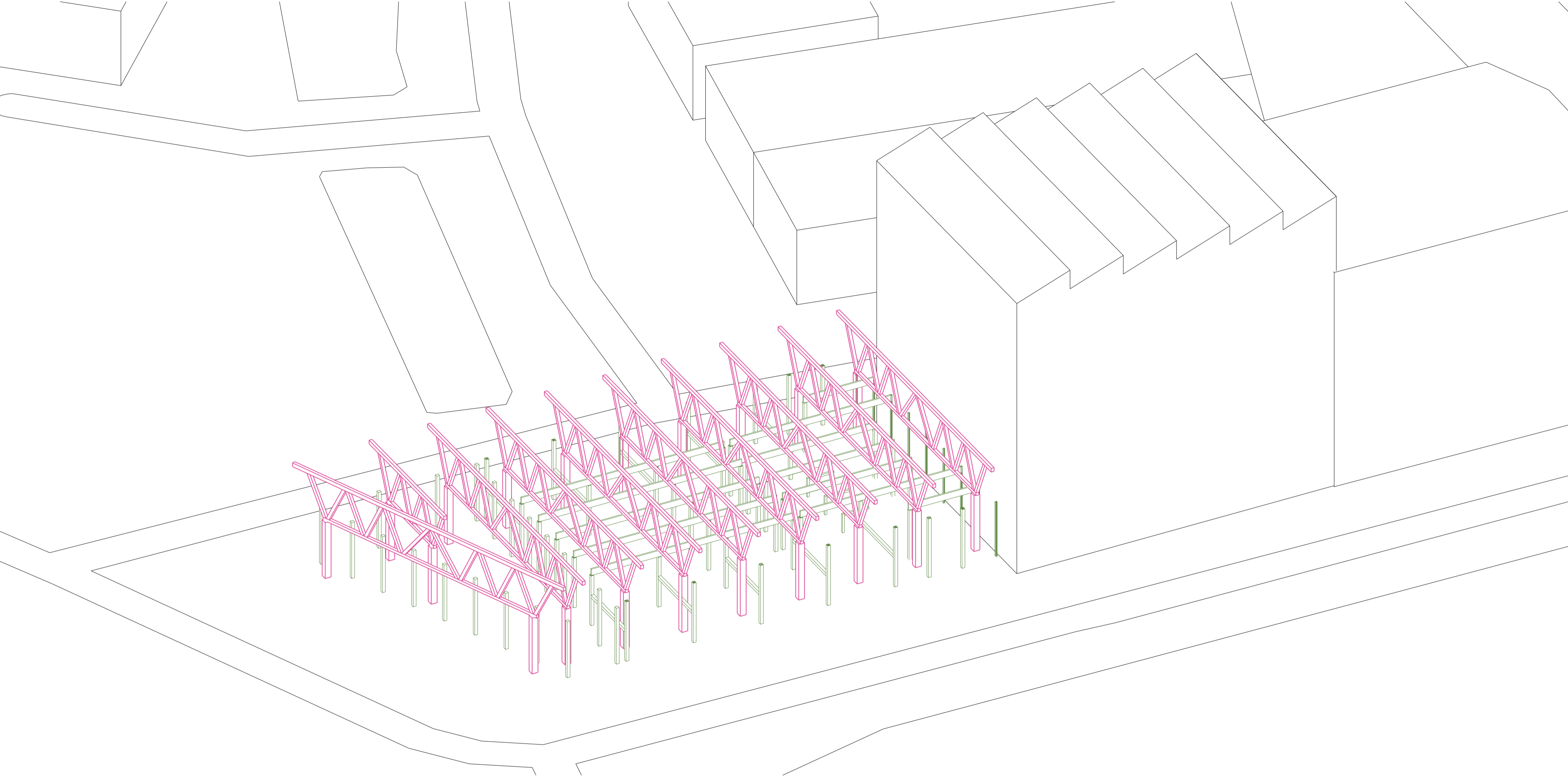


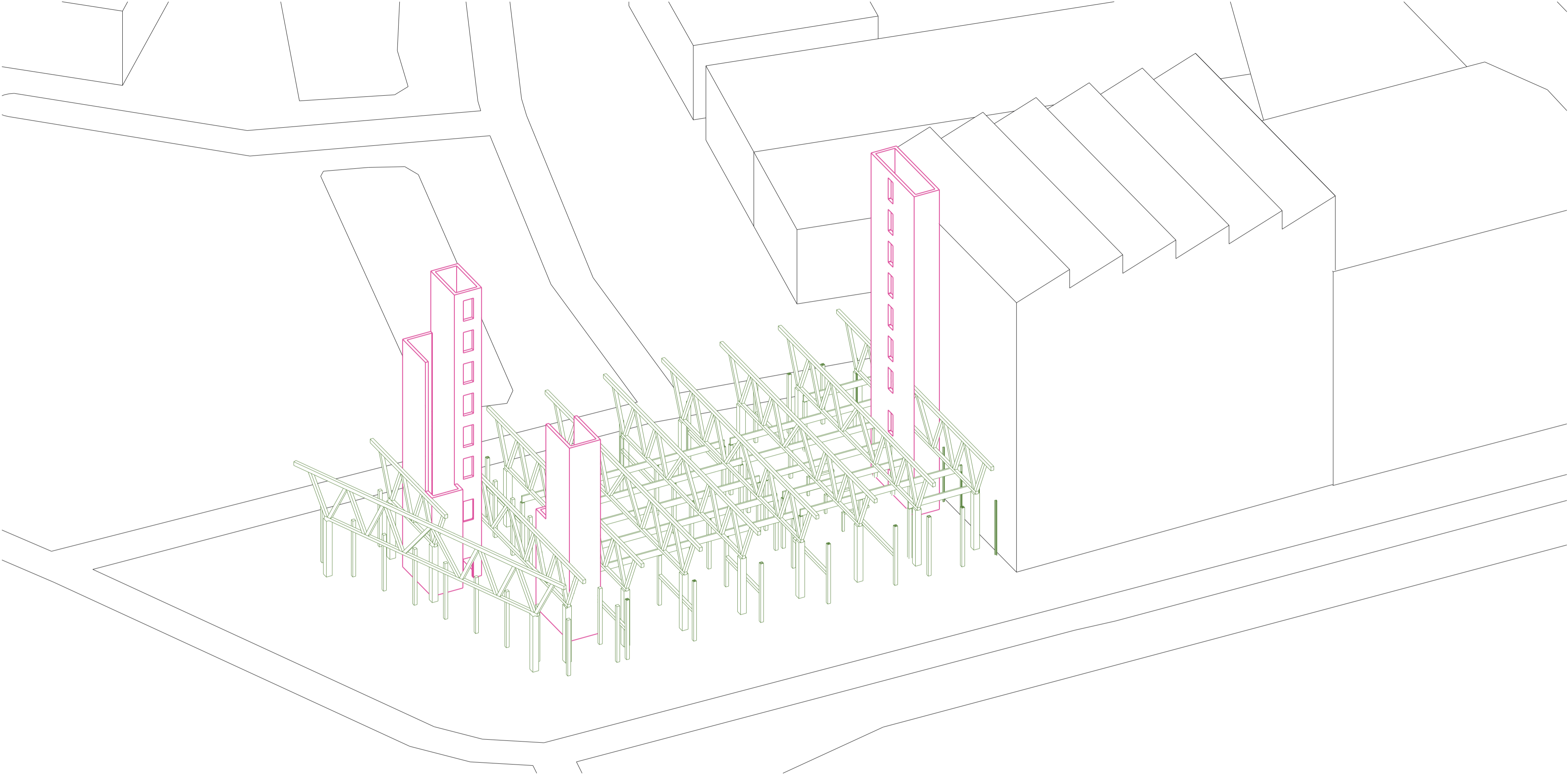








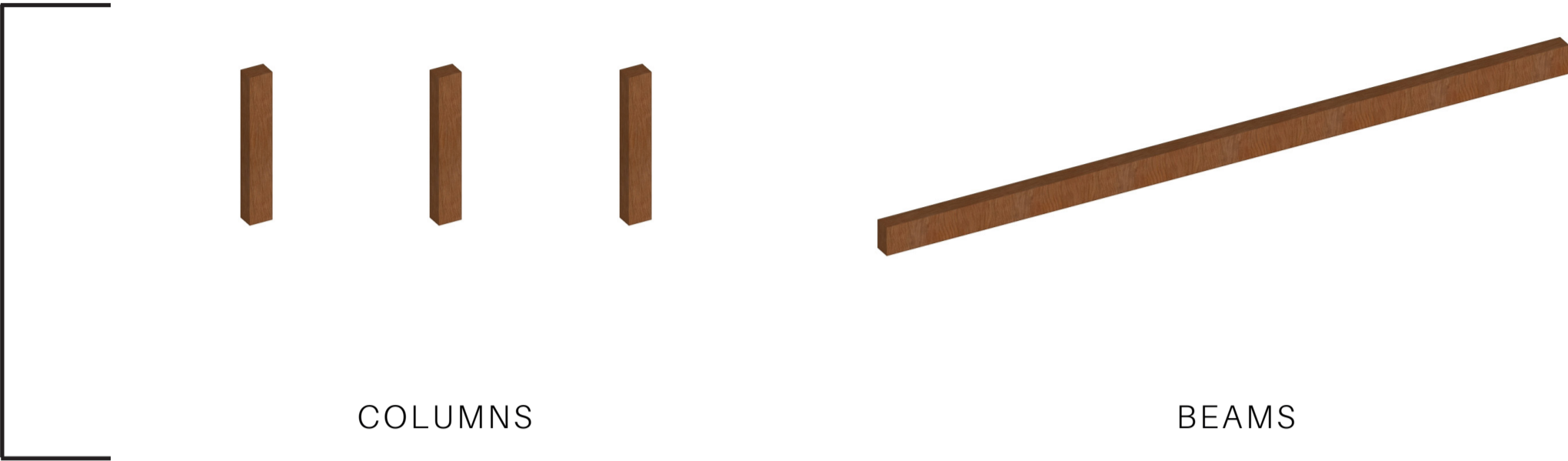








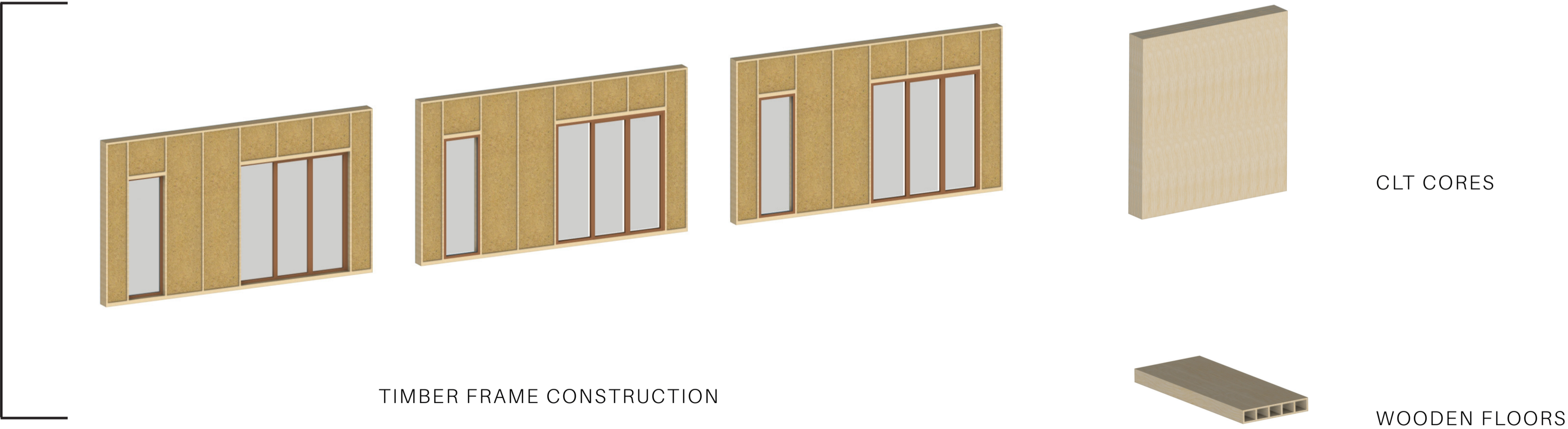
LINEAR ELEMENTS



COLUMNS

BEAMS

PLANAR ELEMENTS

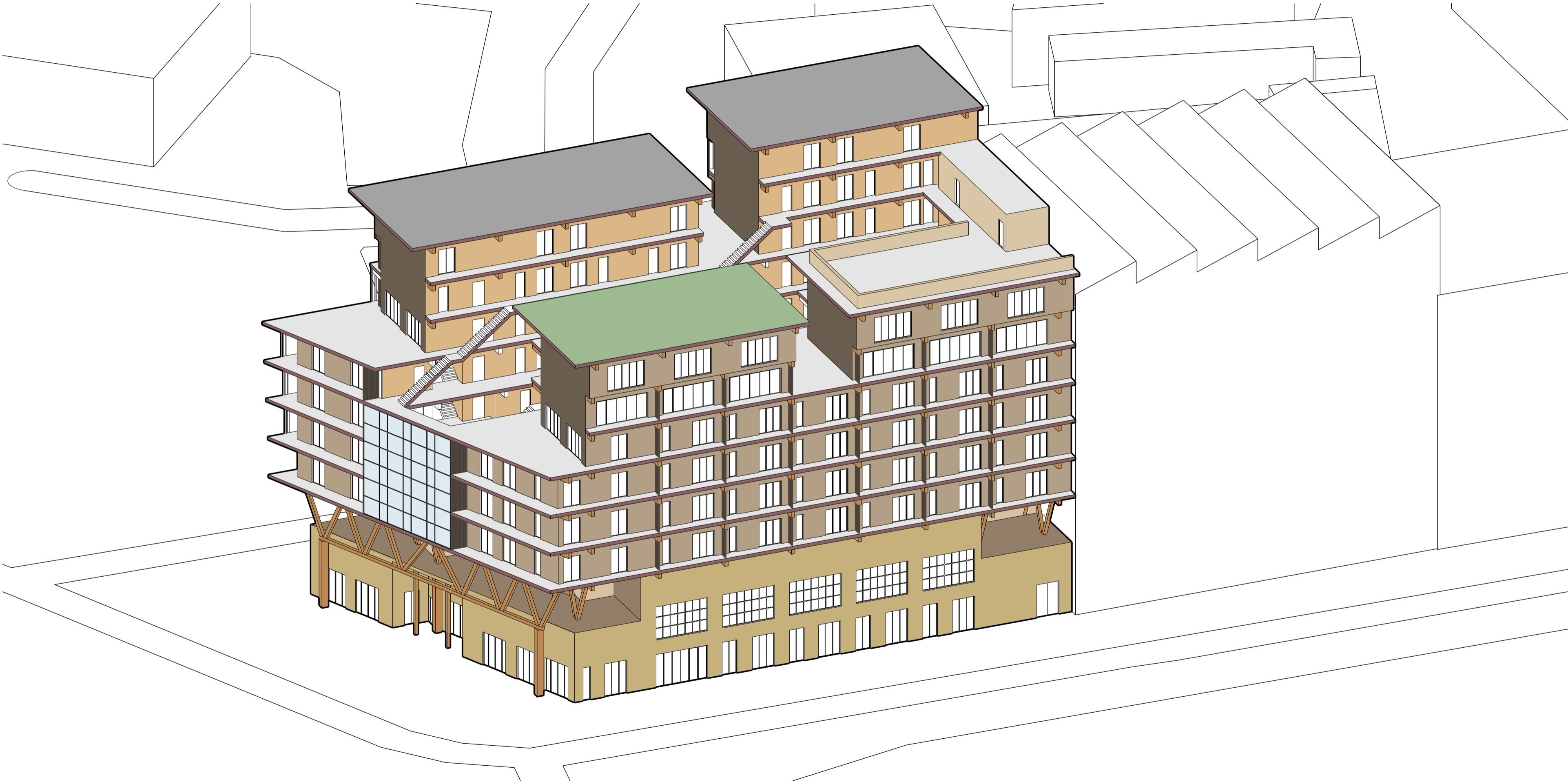


TIMBER FRAME CONSTRUCTION

CLT CORES

WOODEN FLOORS

MATERIALITY









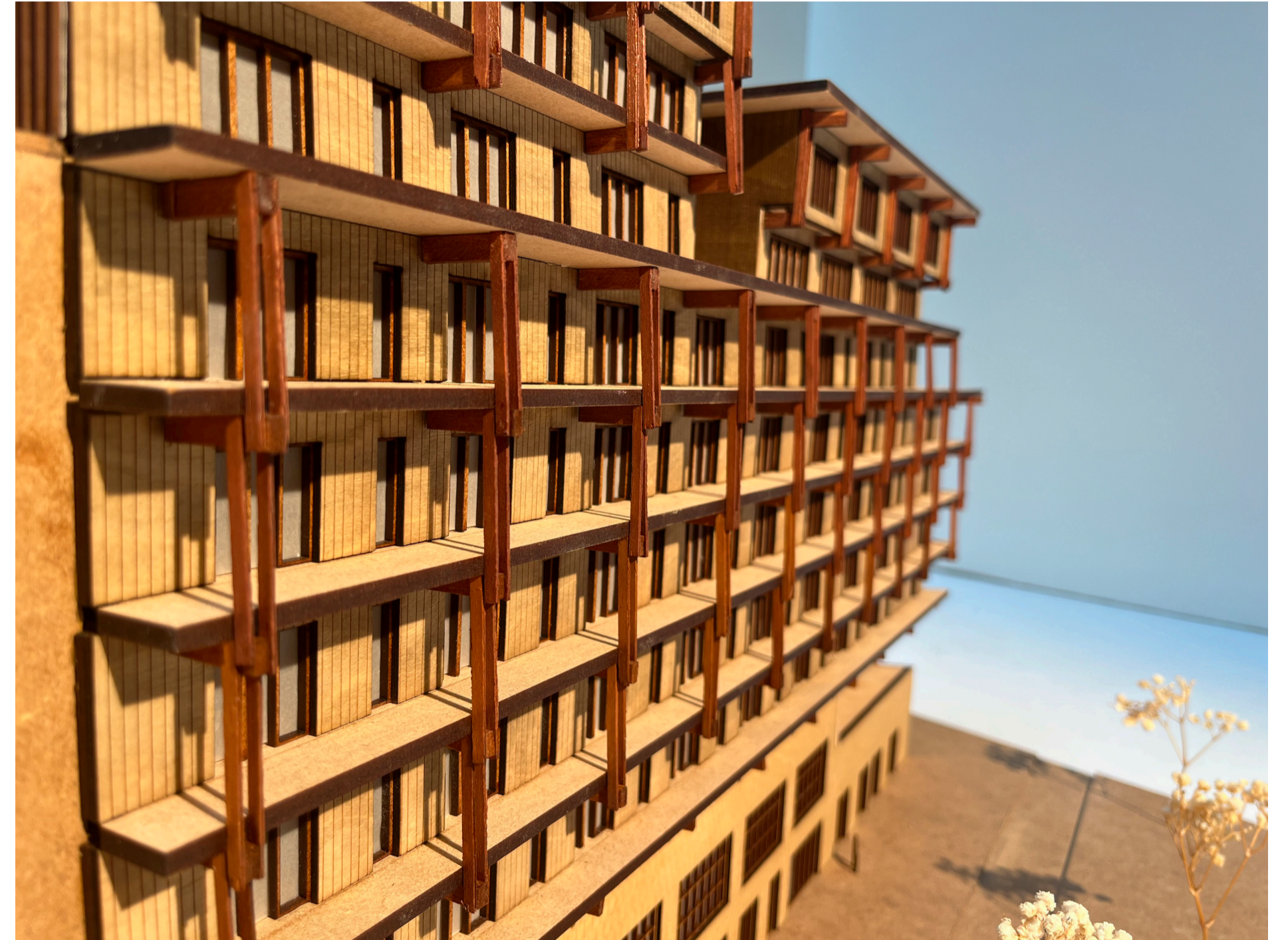
SOUTHWEST



EAST

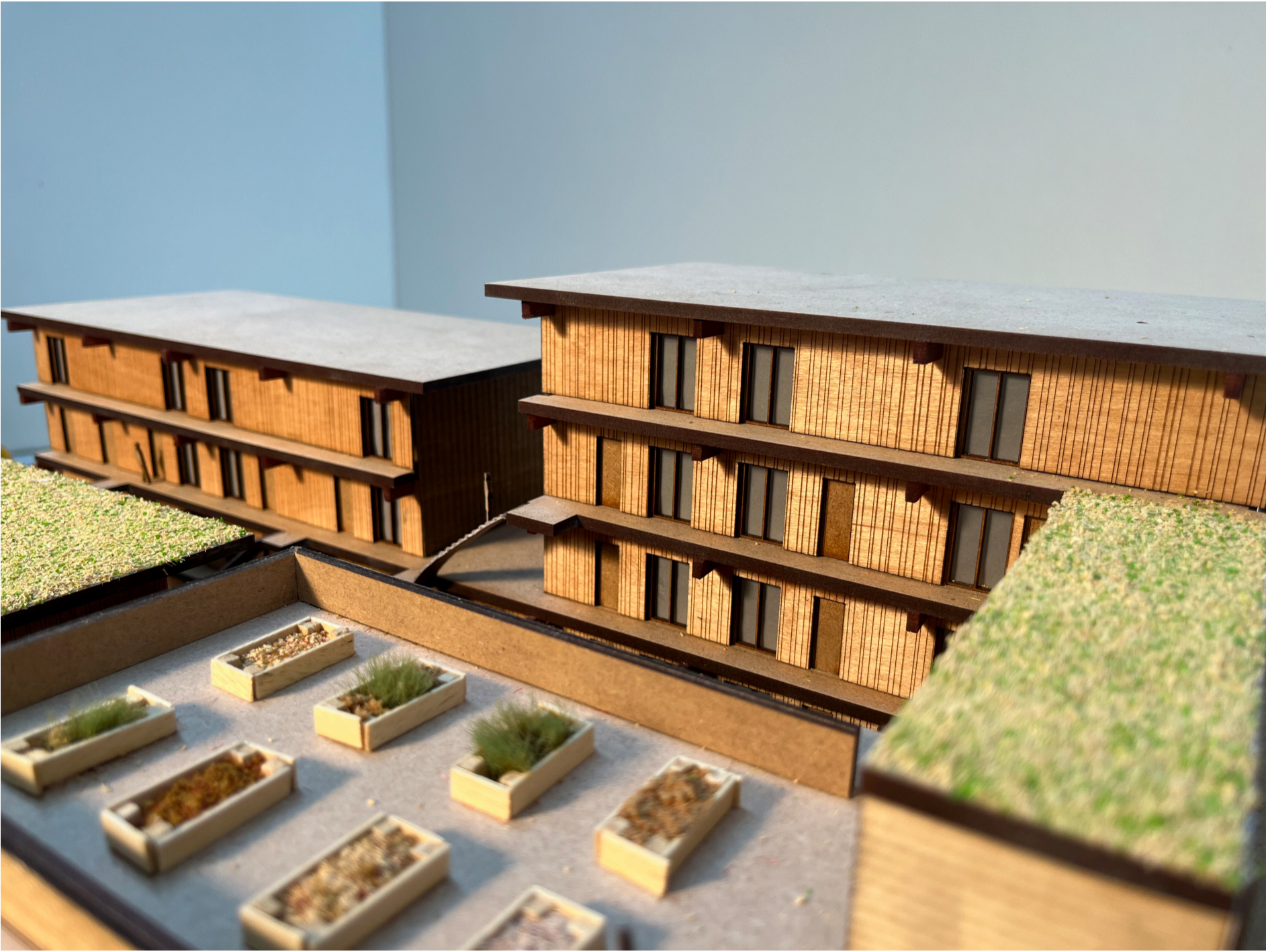


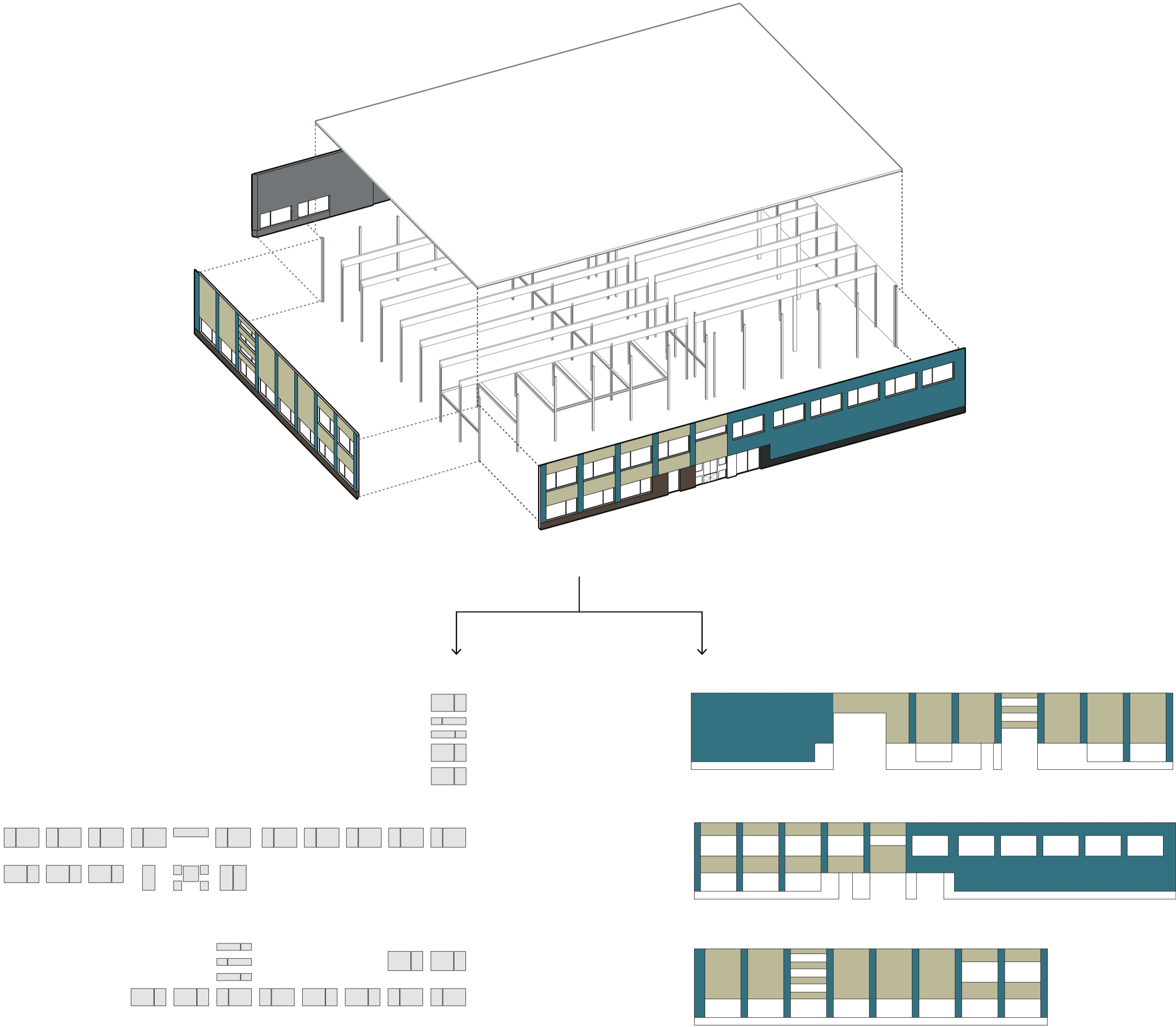


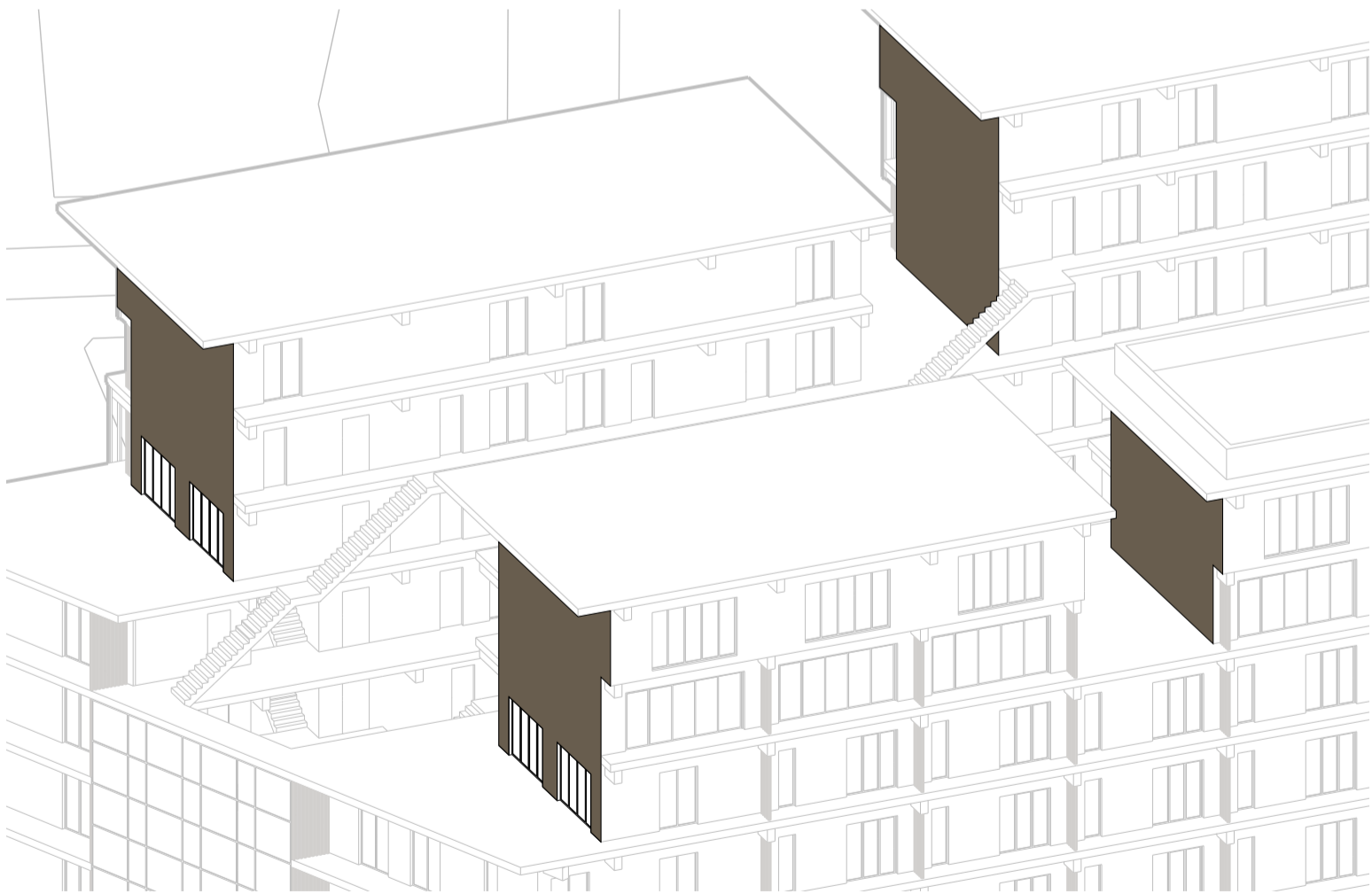
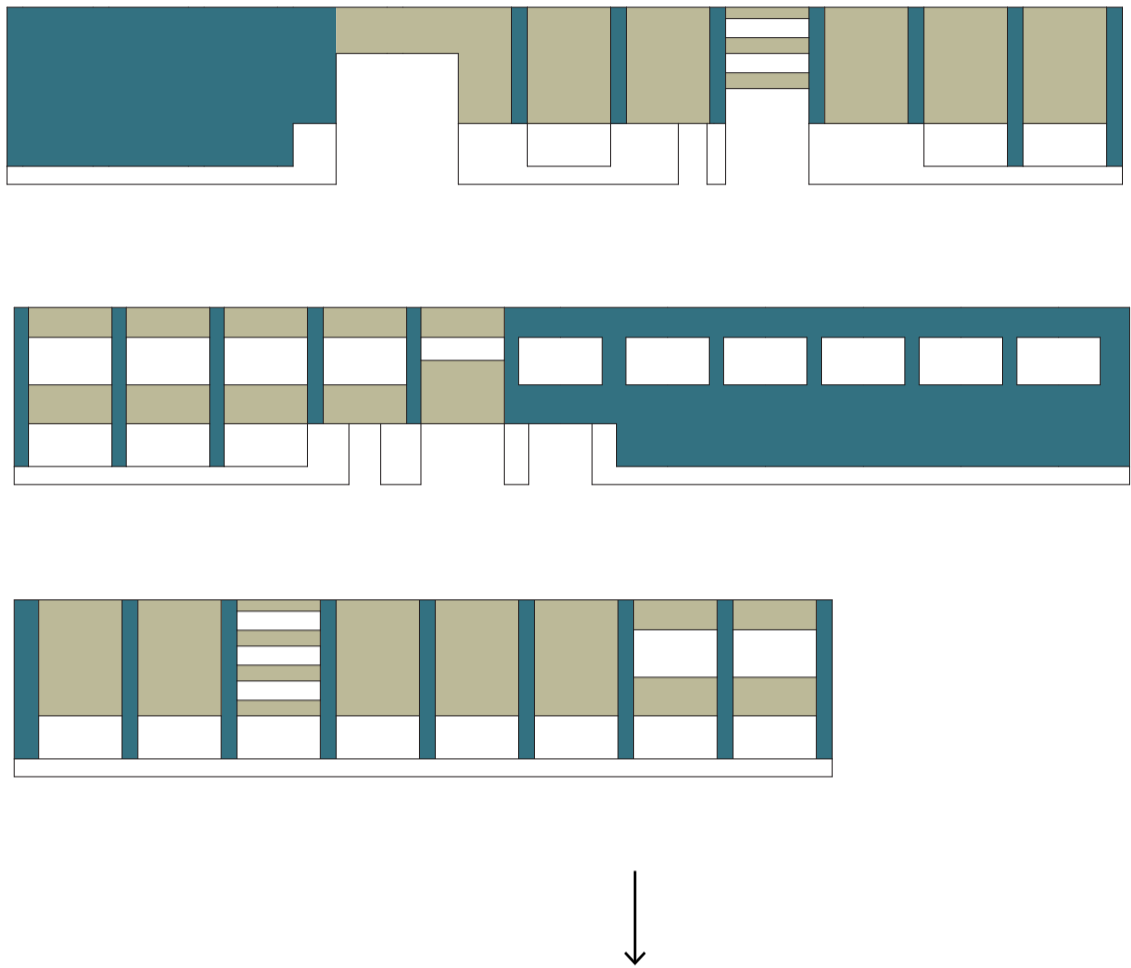
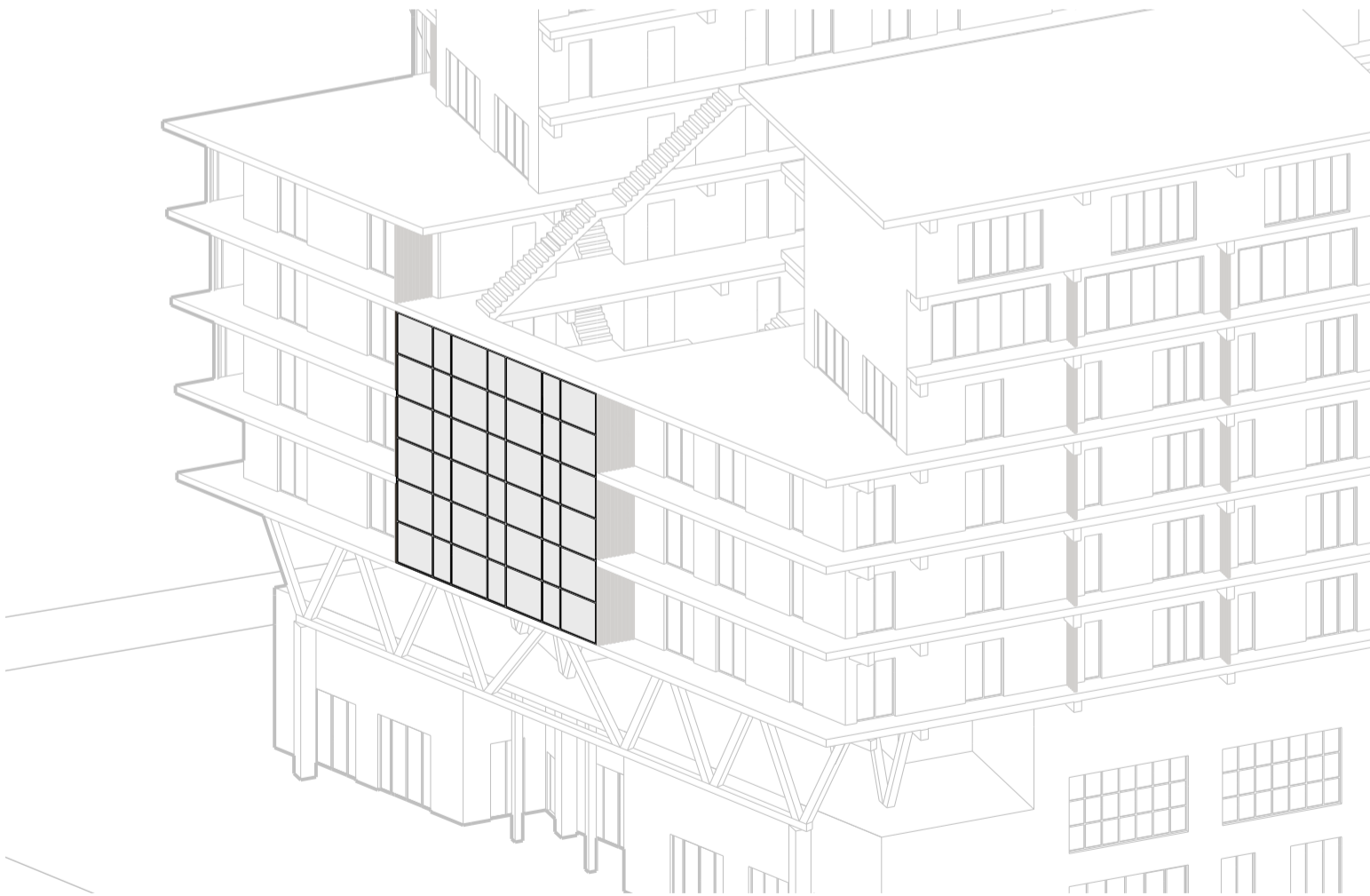
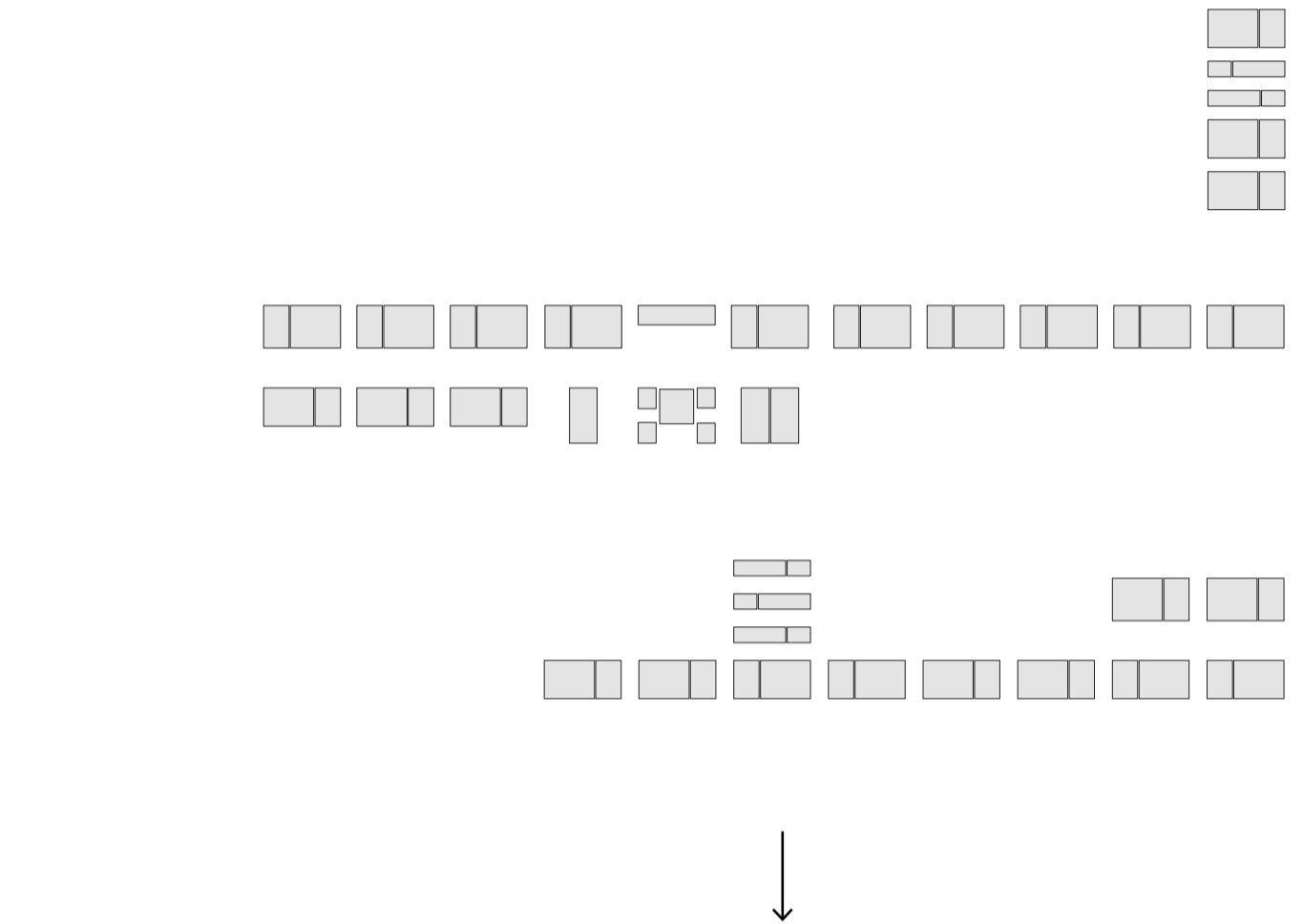


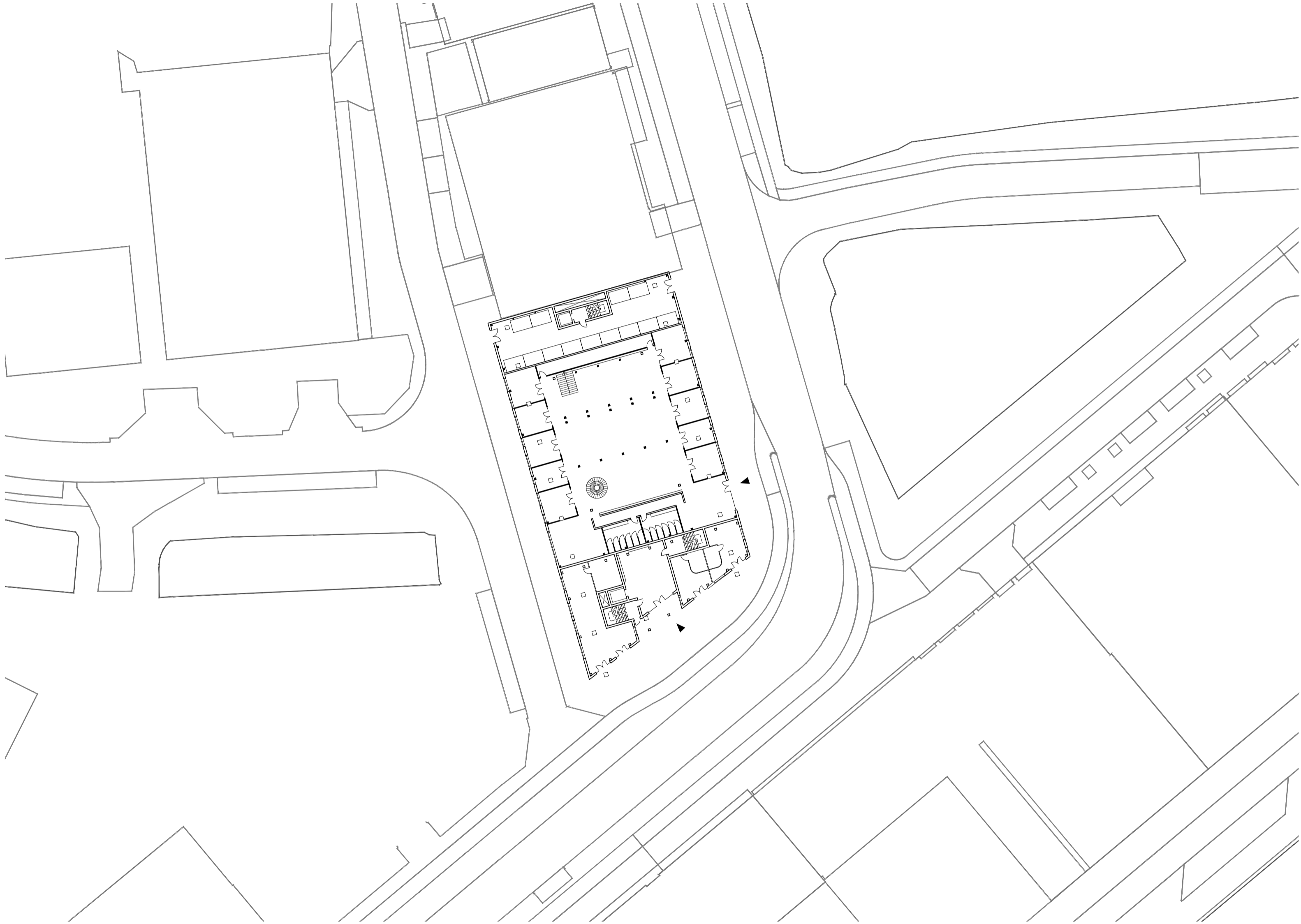


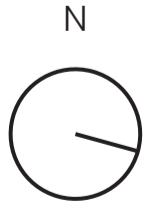
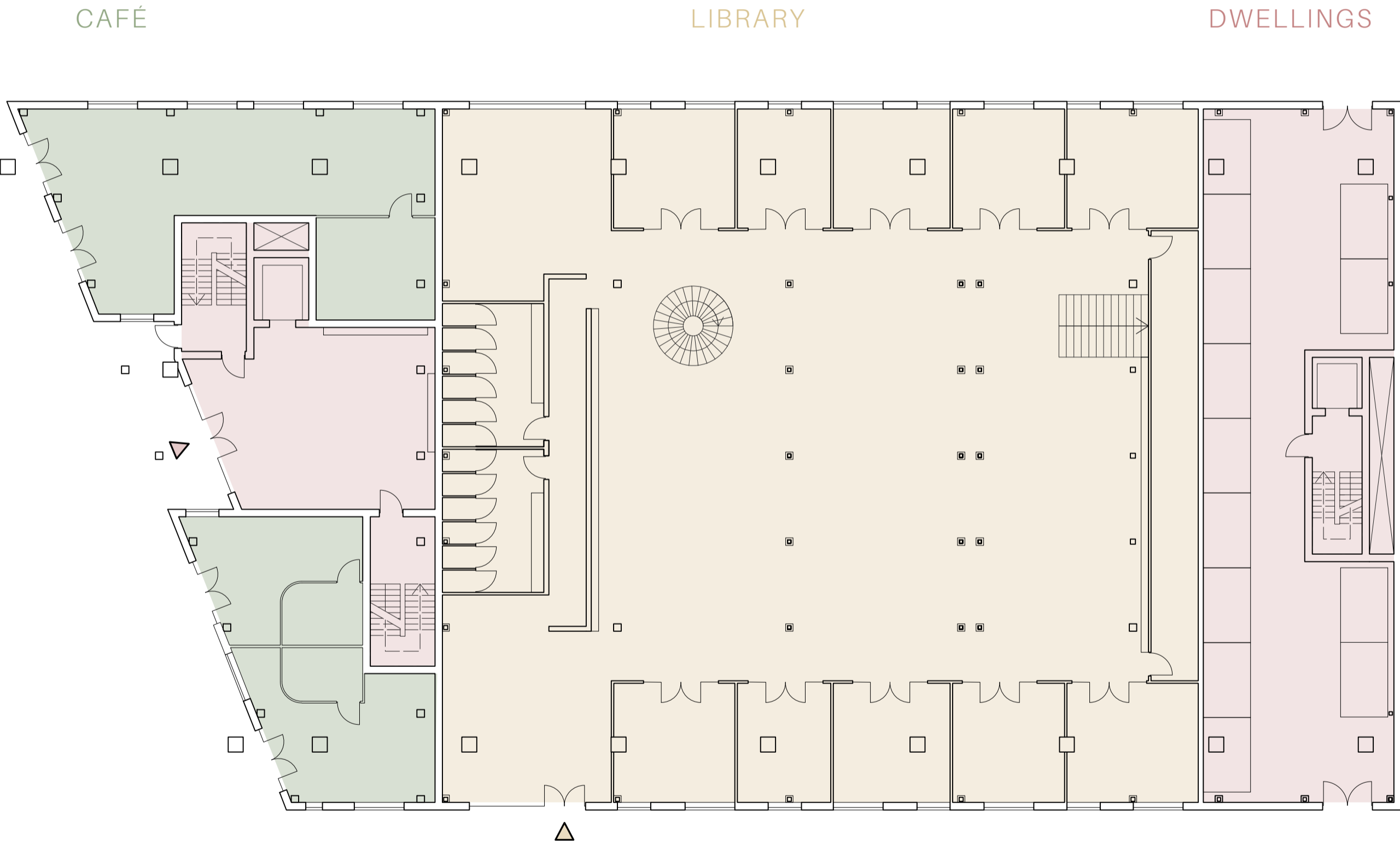


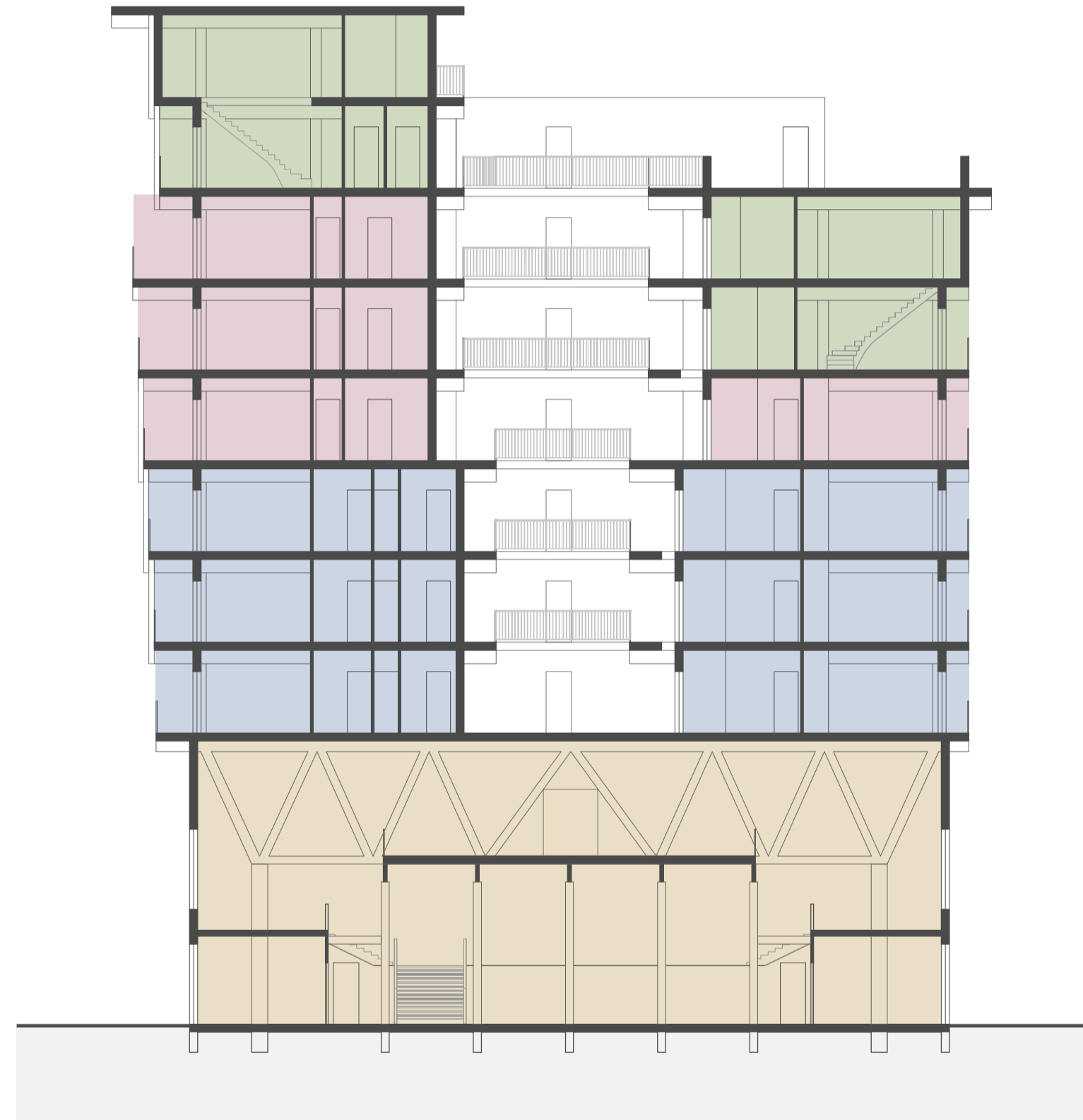






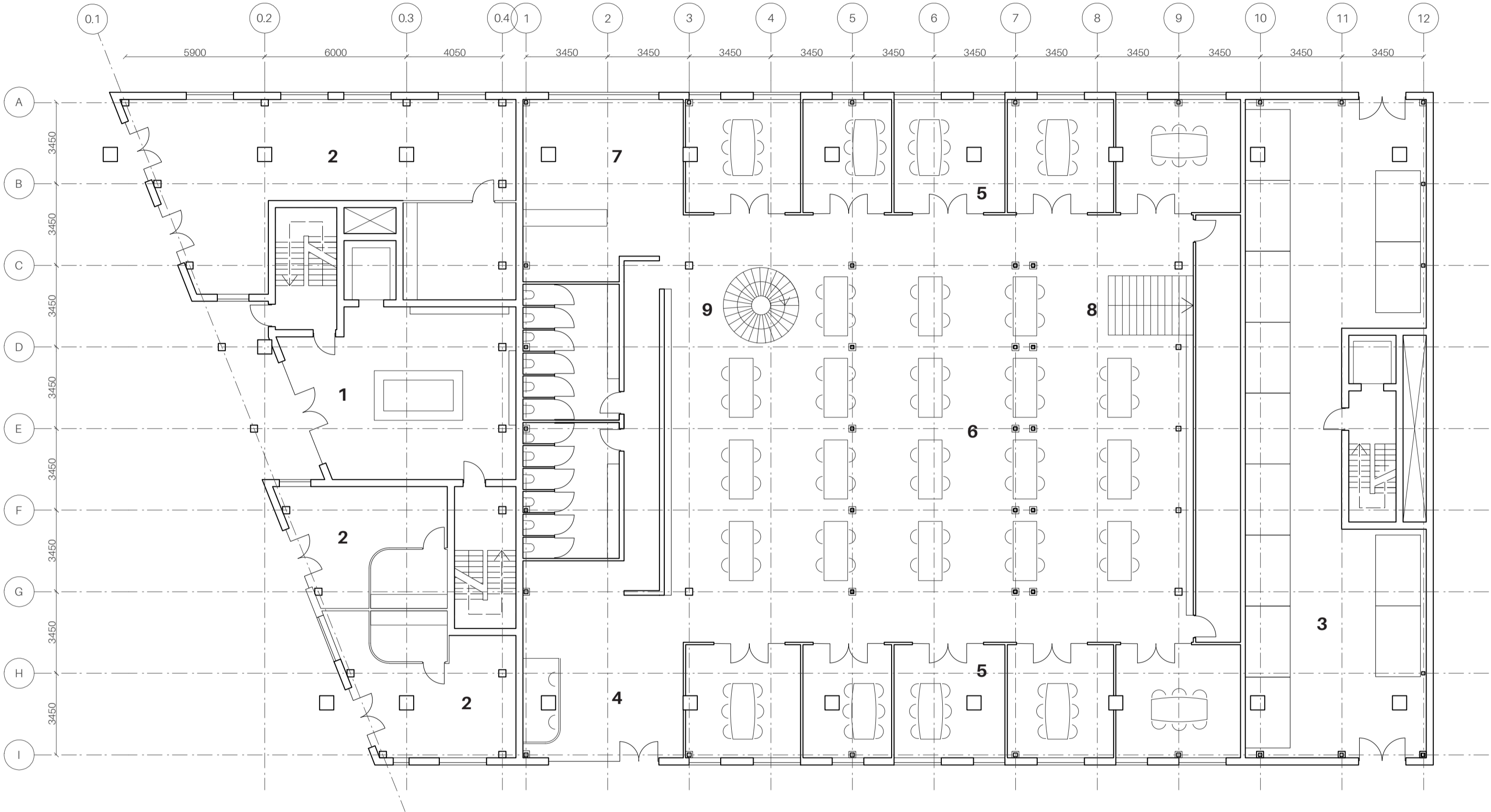


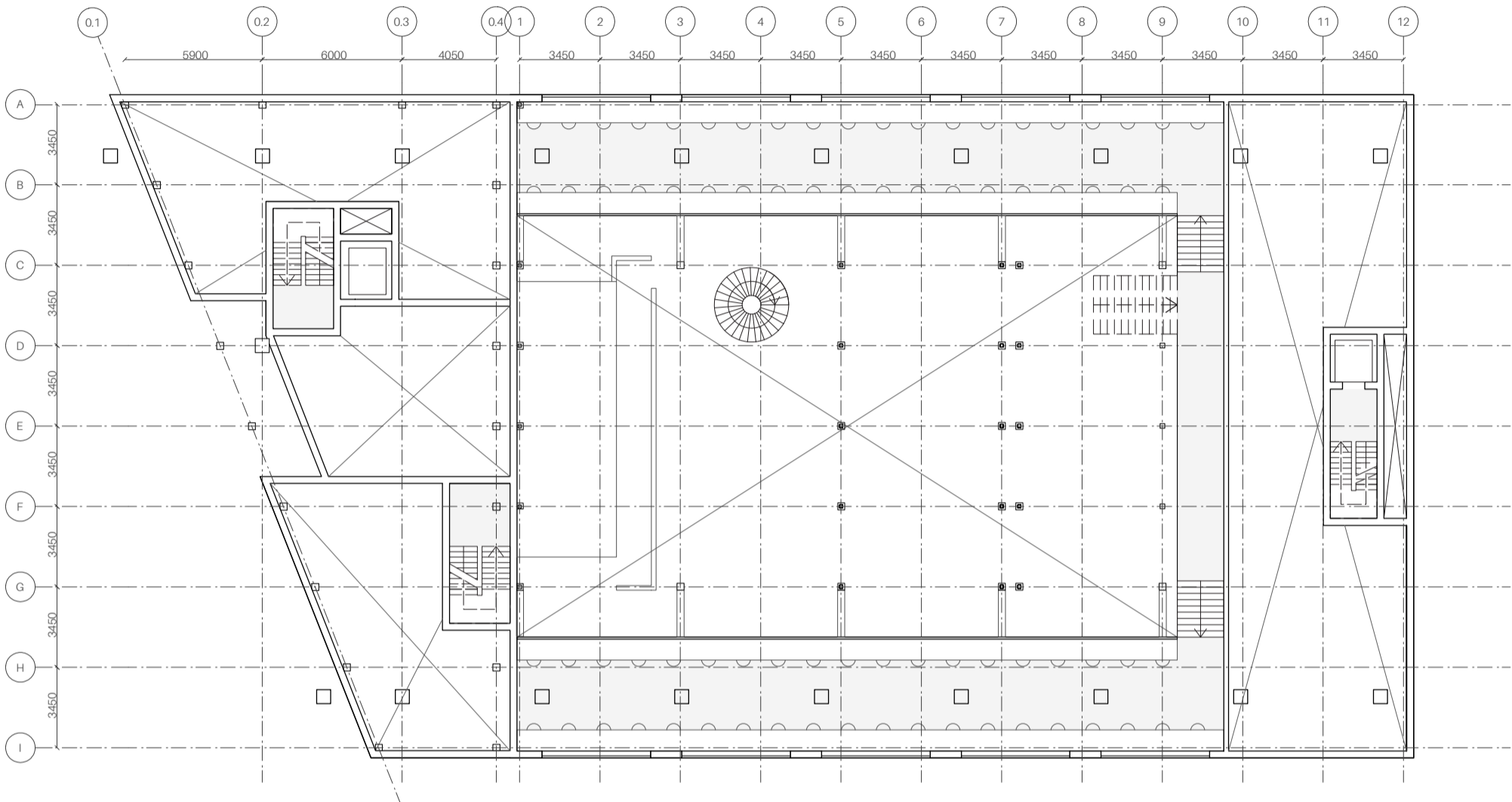




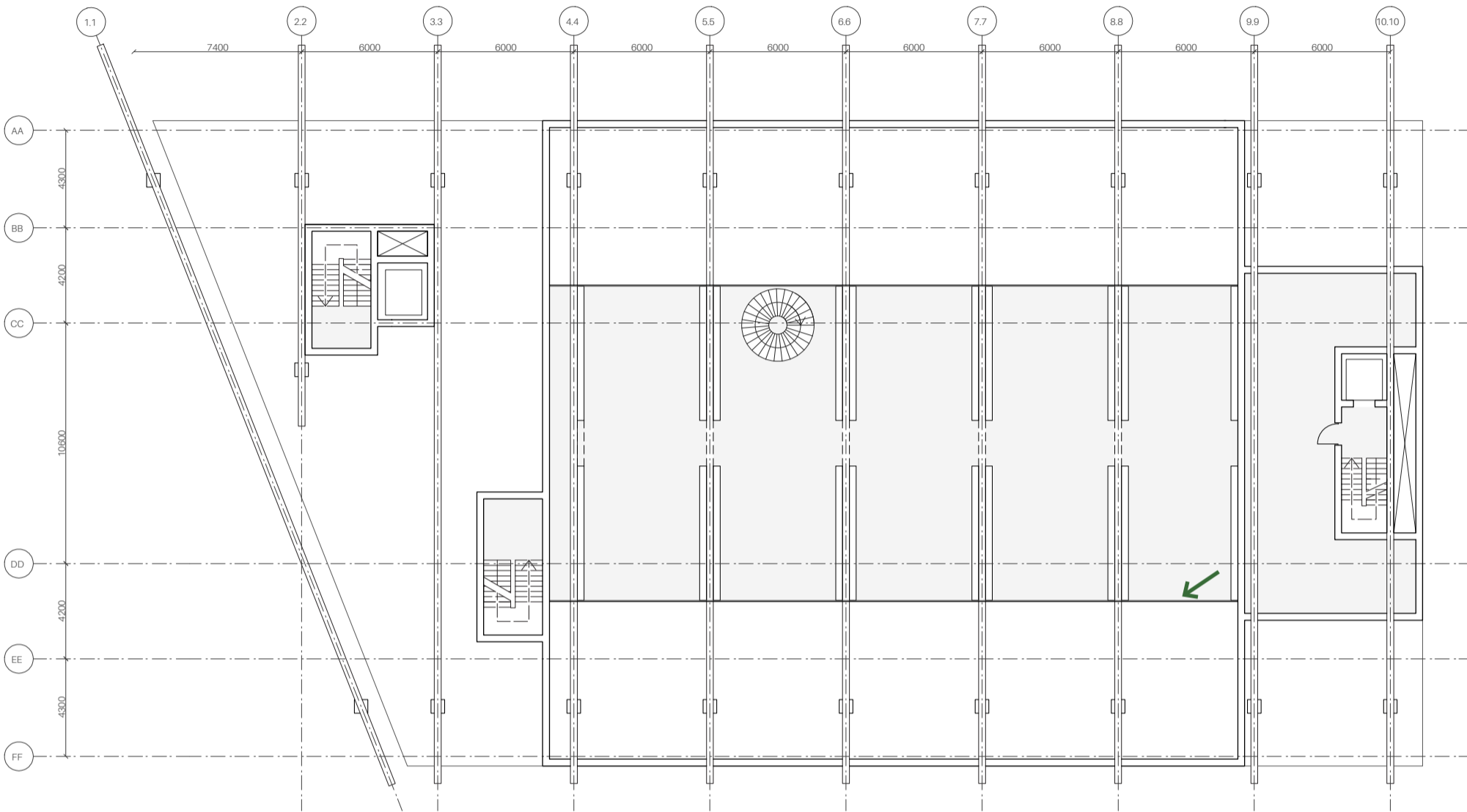
LIBRARY

- 1. Main entrance dwellings
- 2. Café
- 3. Bike storage dwellings
- 4. Entrance library
- 5. Rentable working rooms
- 6. Working spaces
- 7. Coffee bar
- 8. Stairs to first floor
- 9. Stairs to second floor



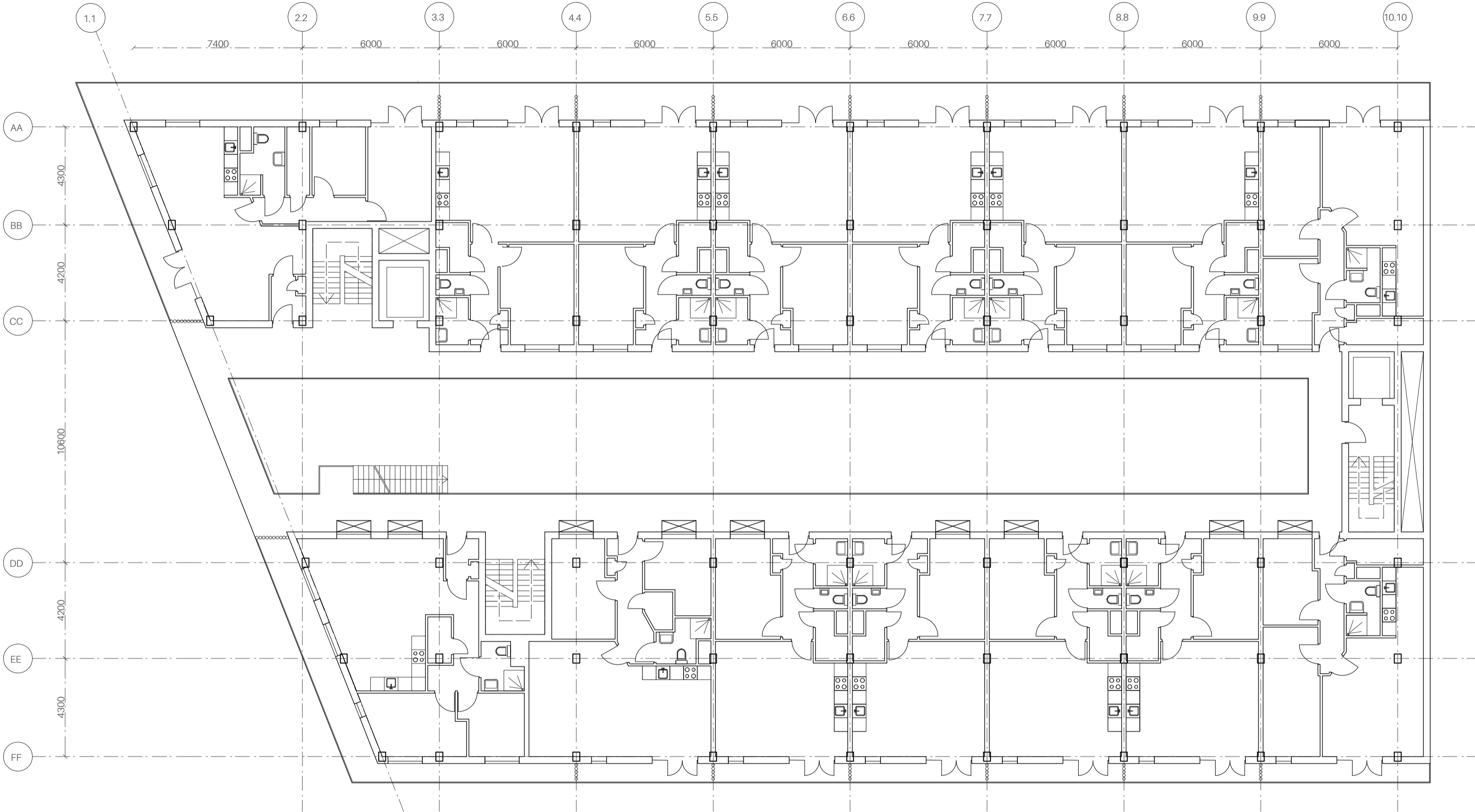


FIRST FLOOR

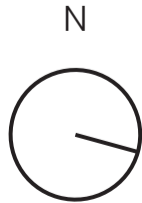


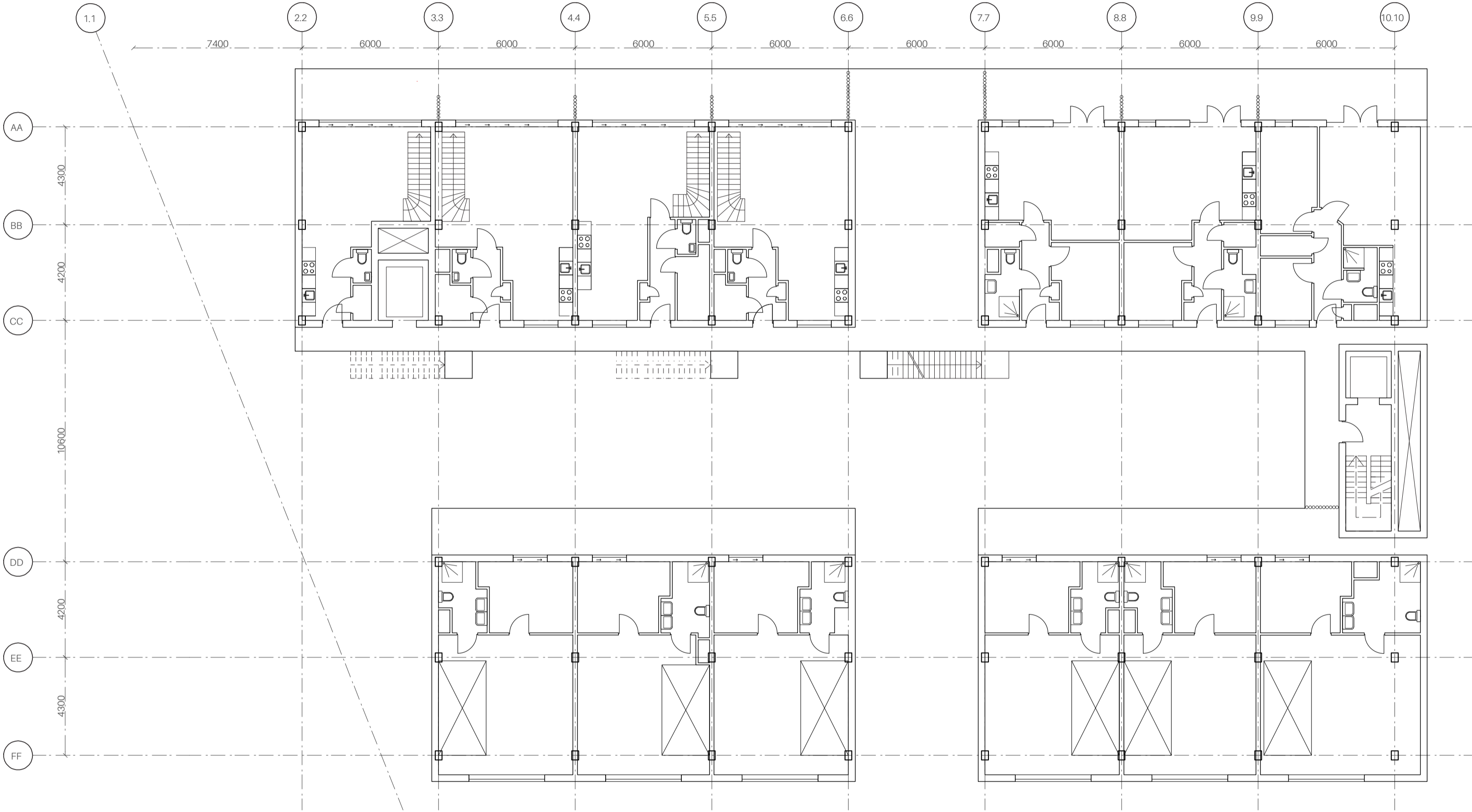
SECOND FLOOR



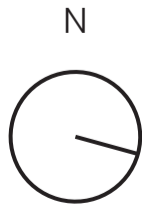


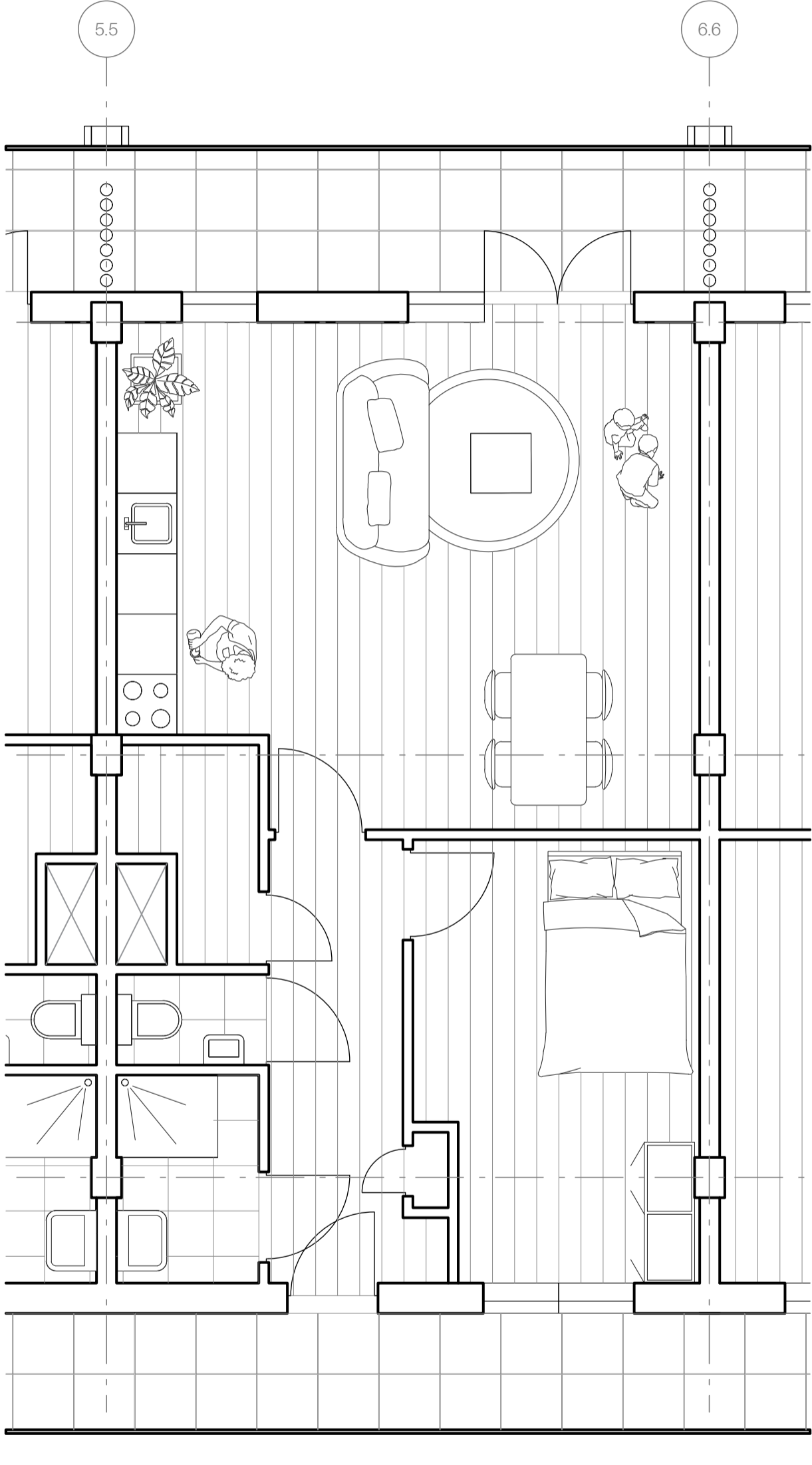
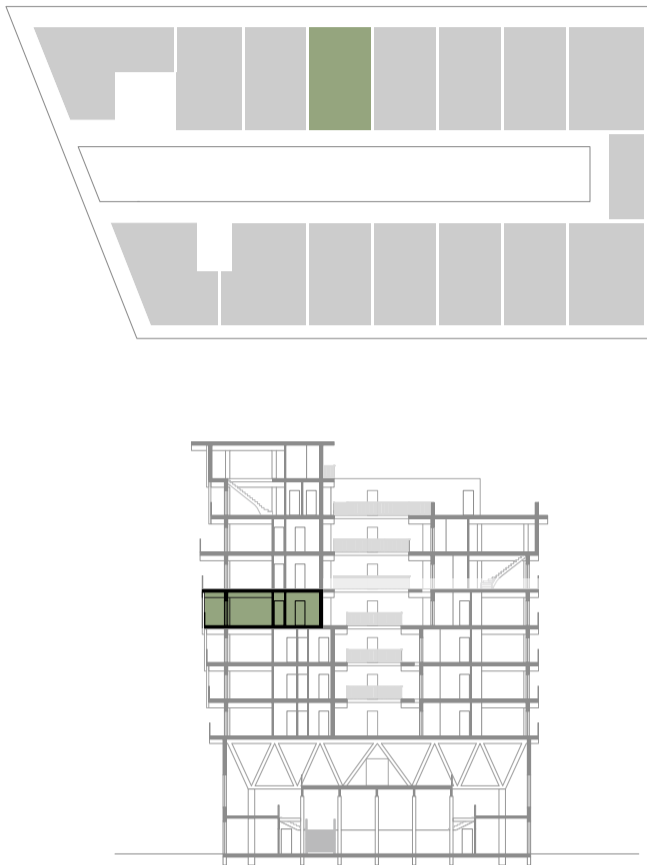
FLOOR 1 DWELLING

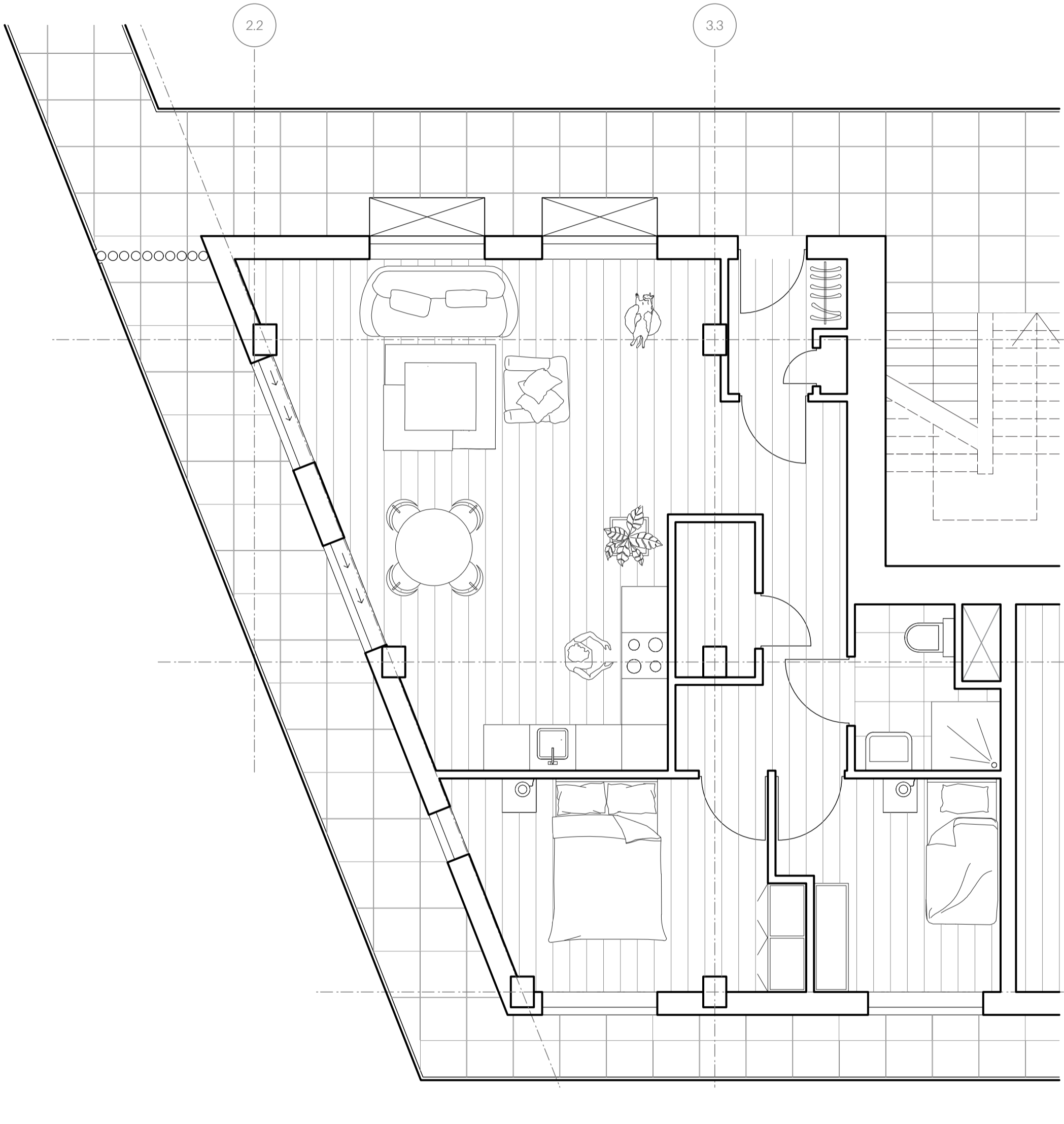
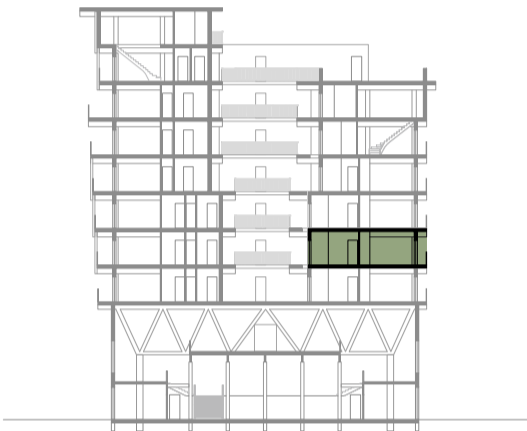
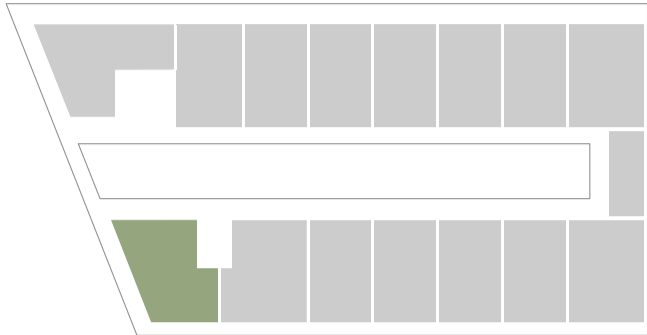


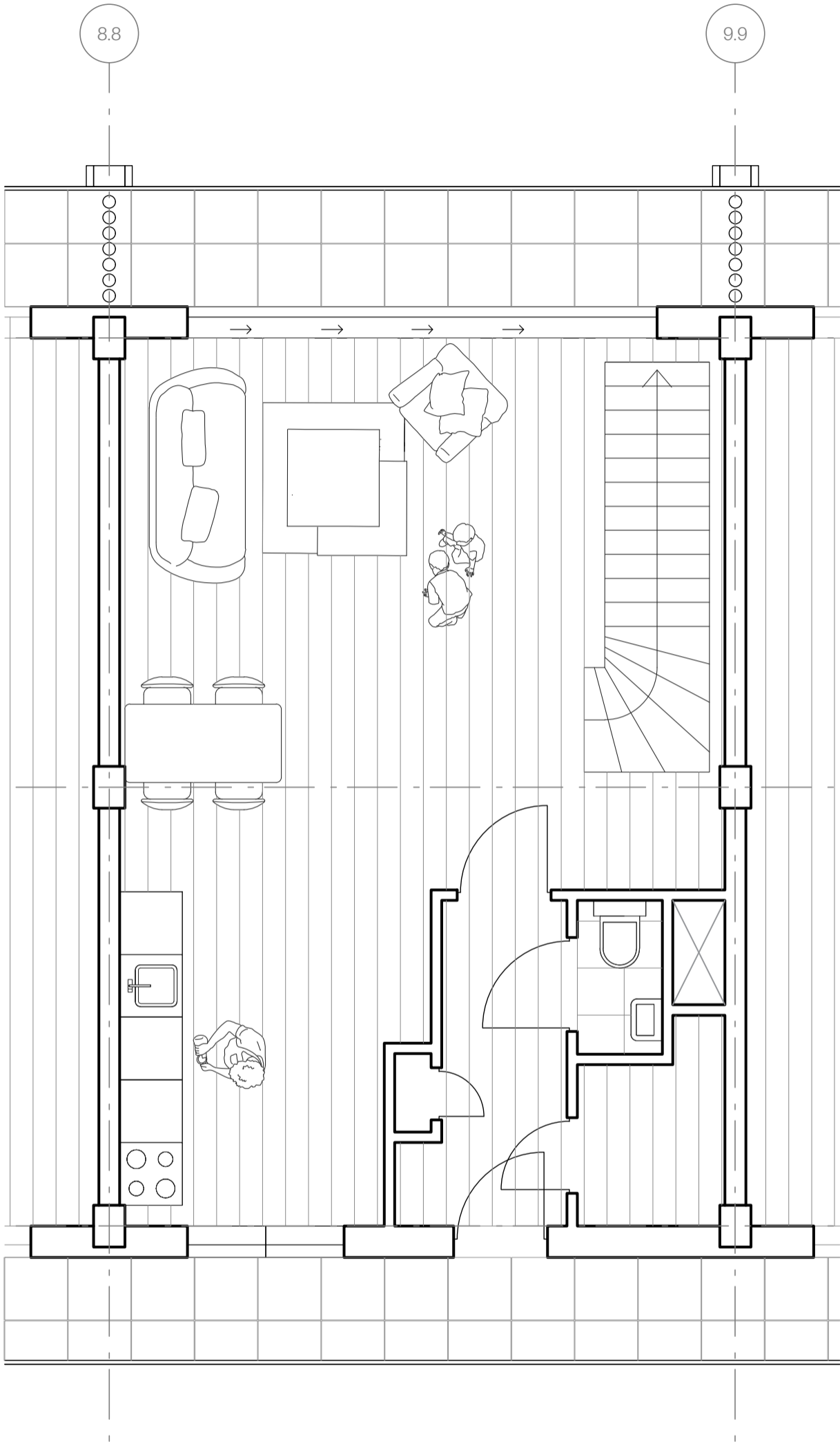
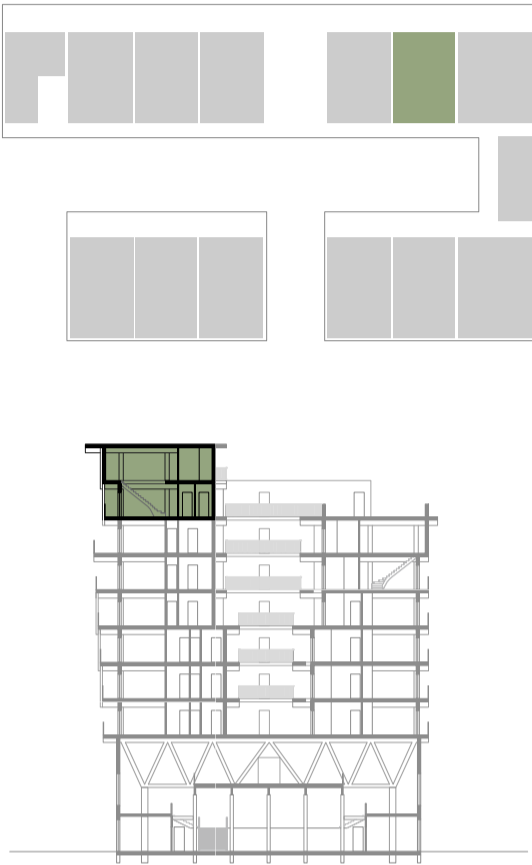


FLOOR 5 DWELLING

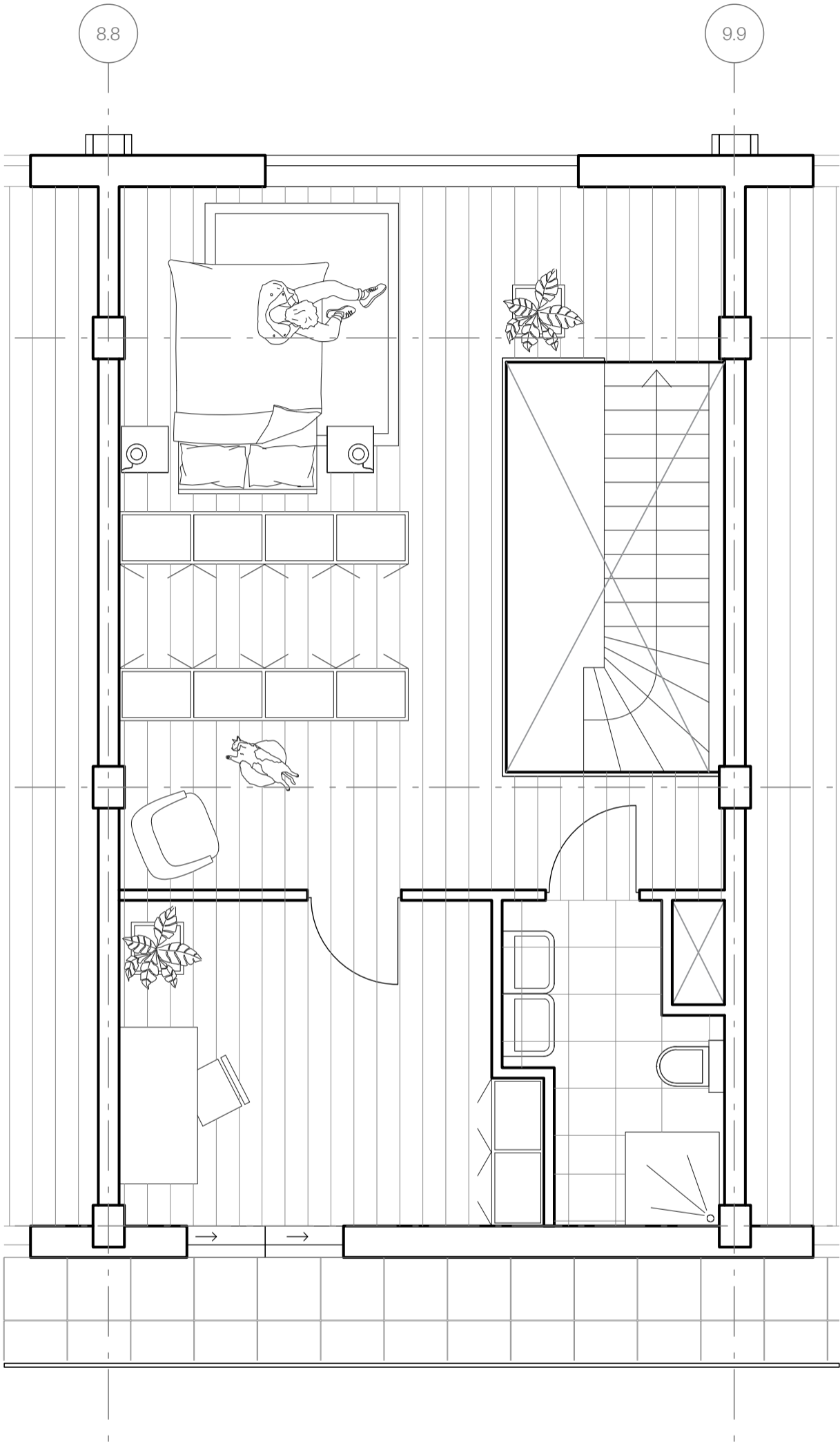






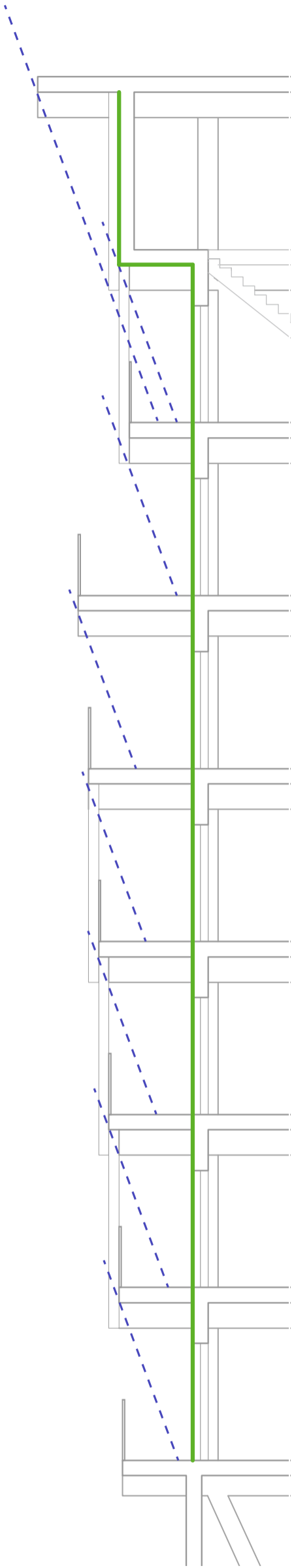
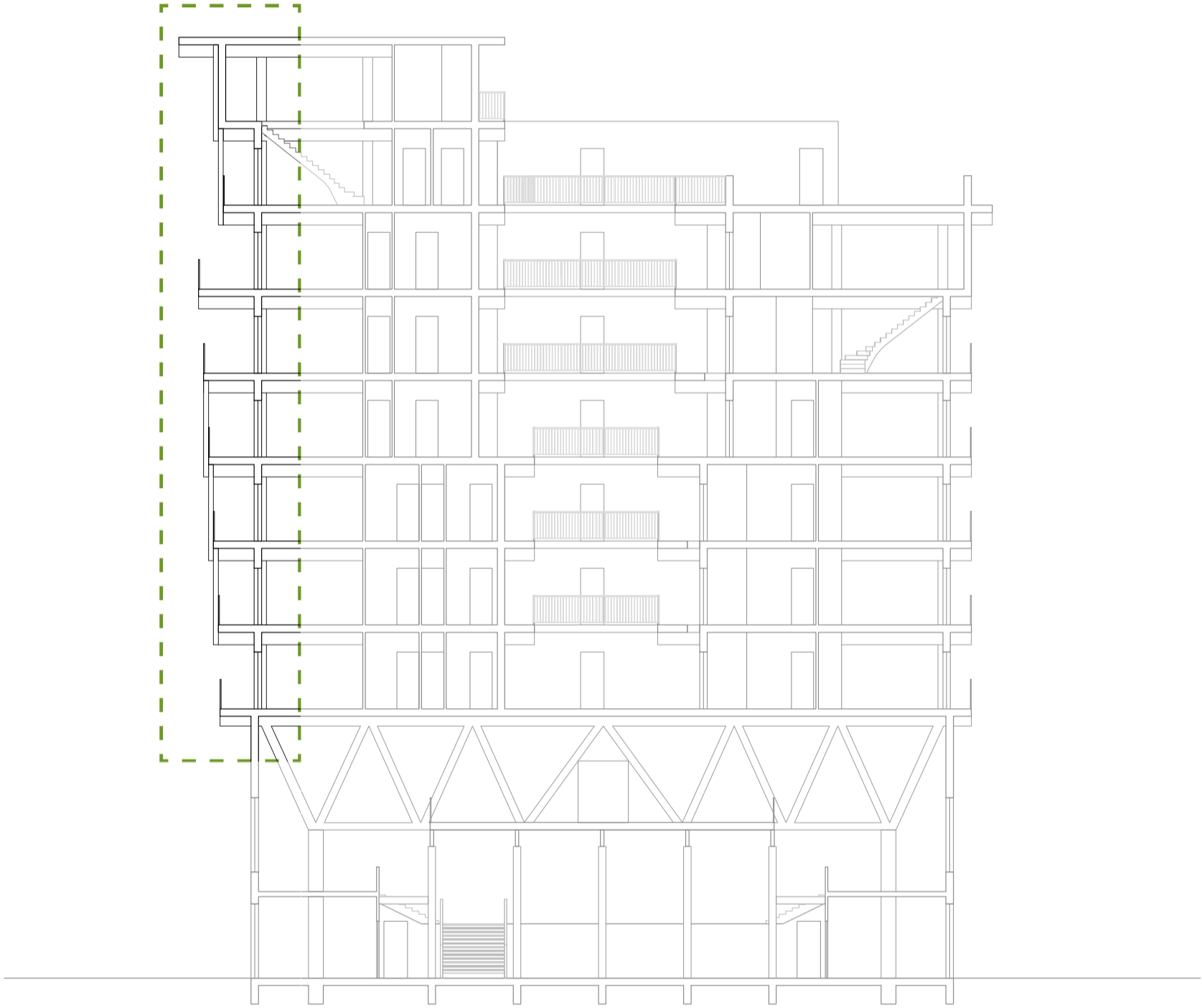
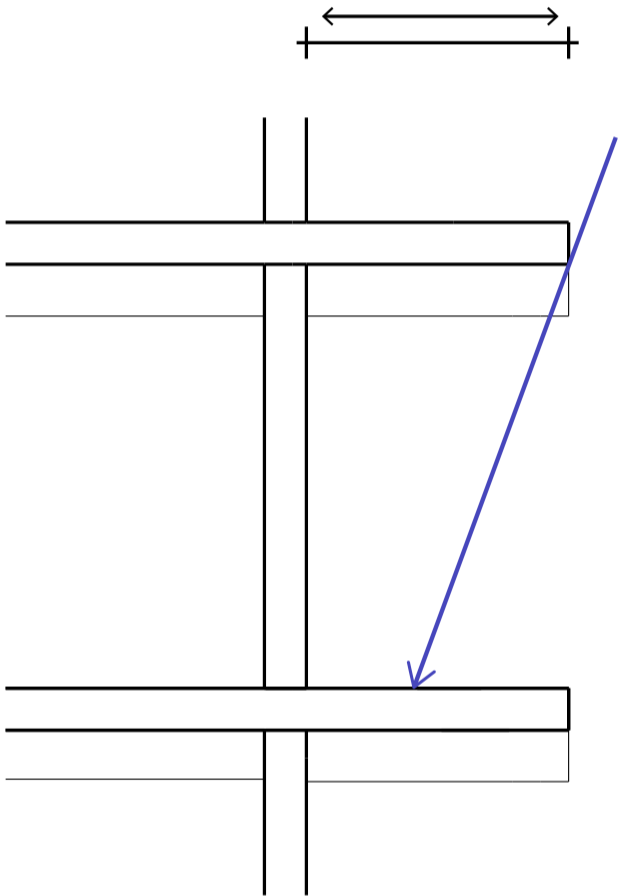


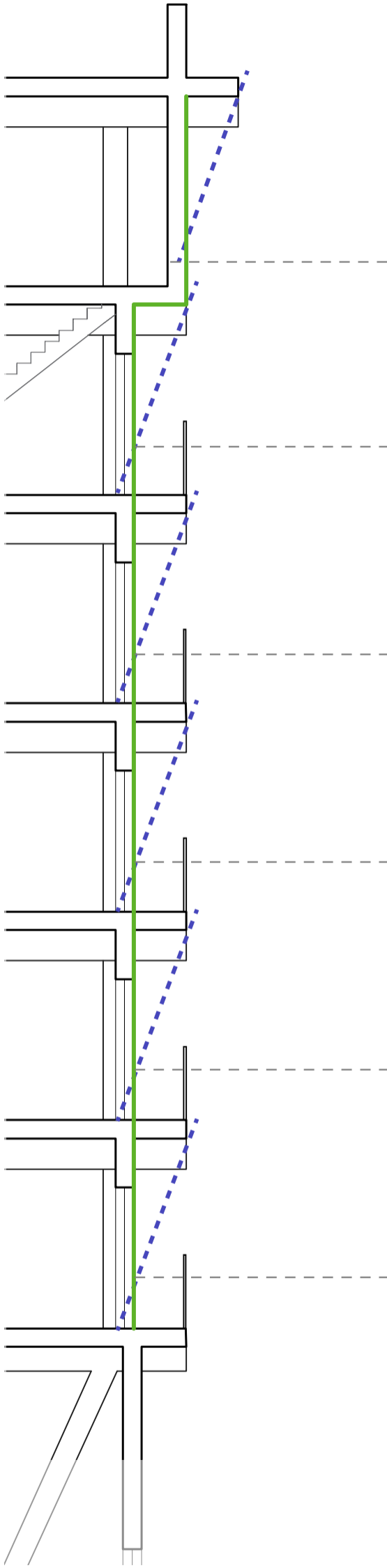
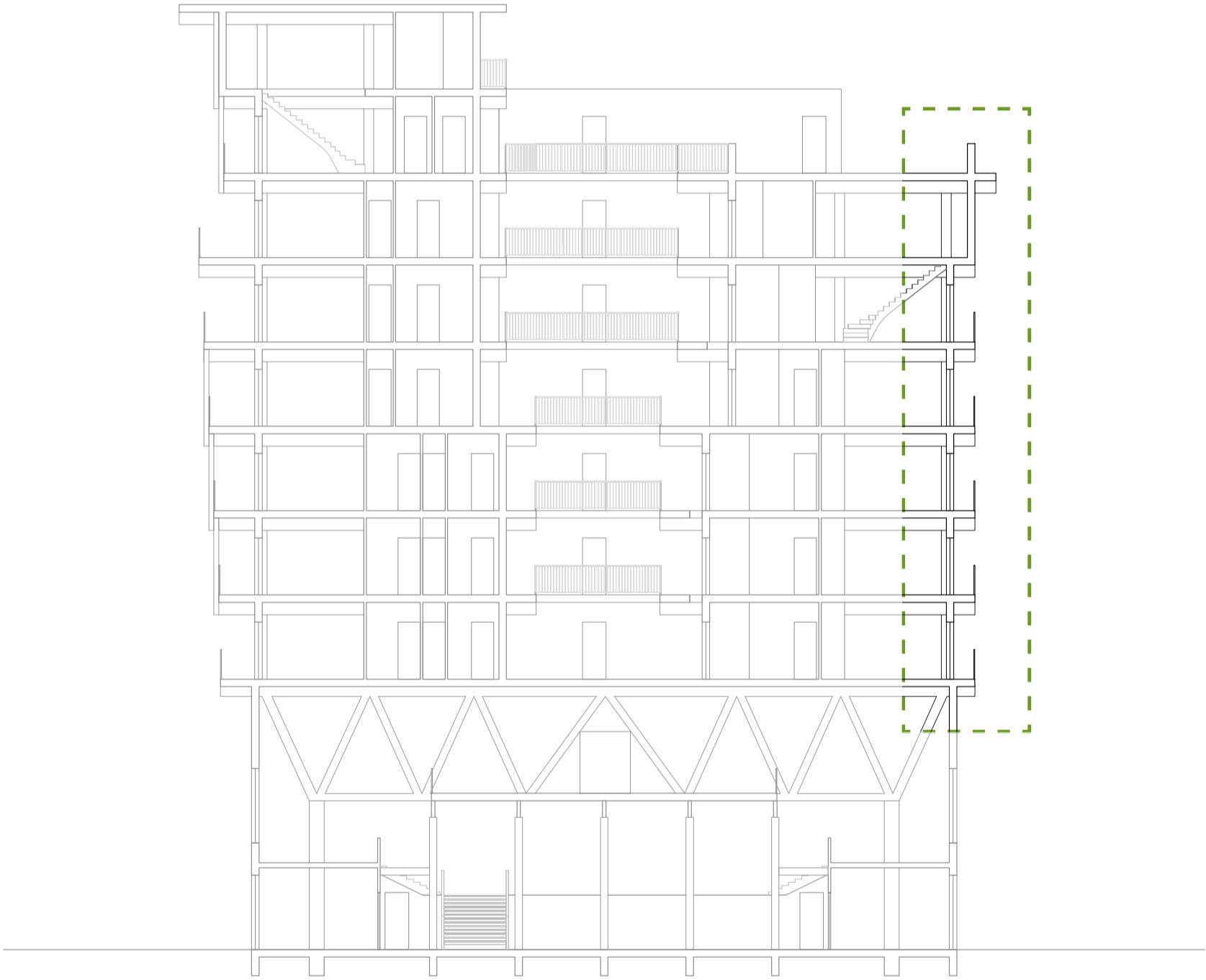
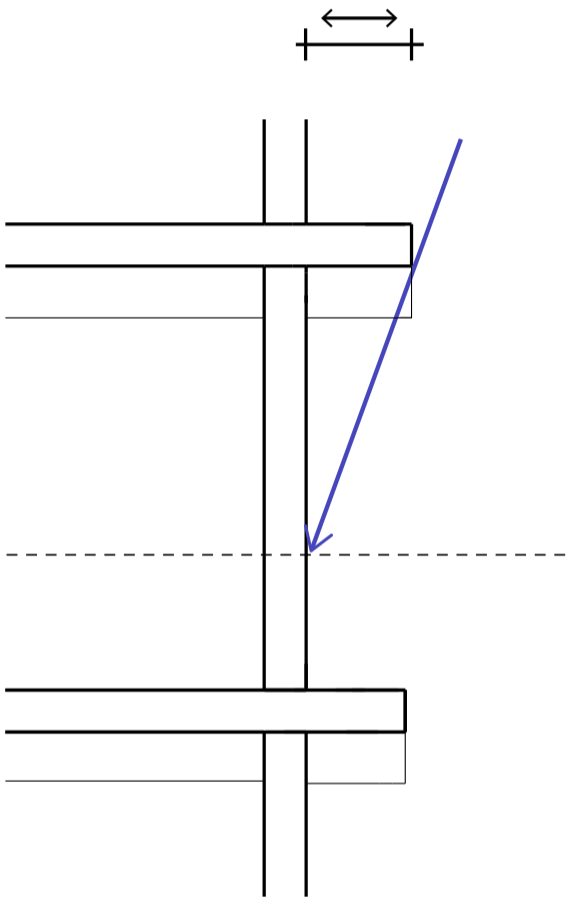
GROUND FLOOR



FIRST FLOOR









EAST FACADE



WEST FACADE

