



# DRAWINGS

P5 PRESENTATION  
“GROWING UP  
IN THE CITY”

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### BUILDINGS



The site used to house mostly industrial buildings, but is now redeveloped with high-end office buildings. Adjacent to Minervahaven is the Spaarndammerbuurt

### ROADS



Minervahaven is located nearby the ring road A10. However, the plot is only connected to the south, and therefore the traffic is currently relatively low.

### WATER



One of the major aspects of this site is the presence of the water ('t IJ), connecting the site to the canals of Amsterdam. The tides do not influence the water levels.

### GREEN



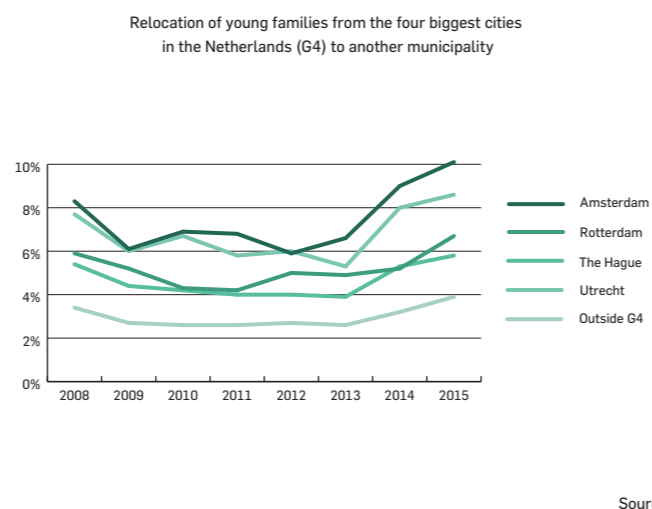
The site is in close proximity to the Westerpark. In the future, a park is planned on the east side of the plot alongside the pier.

## LOCATION MINERVAHAVEN, AMSTERDAM

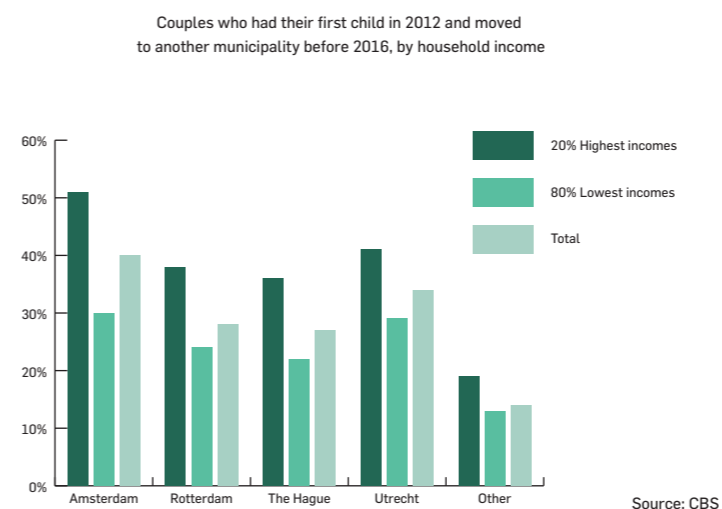




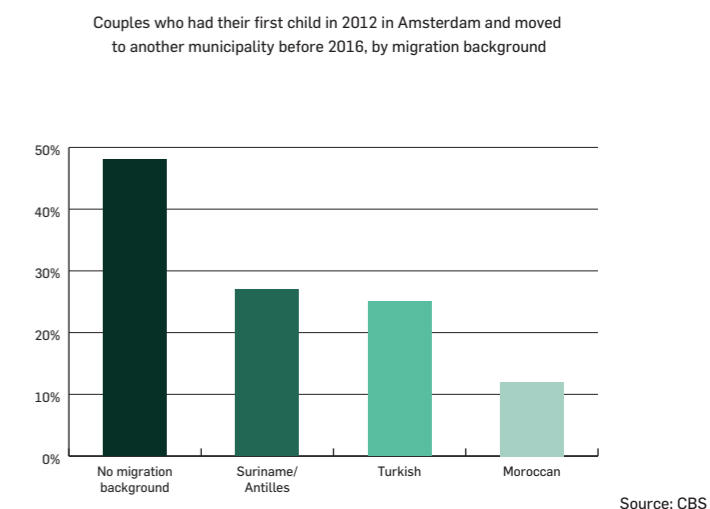
The target group consists of **different types of families**, with 1 to 4+ children. Both nuclear families and modern families (single-parent and blended families) are included



Percentage of young families in cities who move to another municipality is rising, Amsterdam has the **highest percentage of relocating young families**

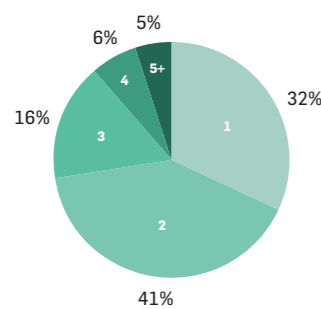


Relatively **more households with high incomes** moved to another municipality within four years after heaving their first child



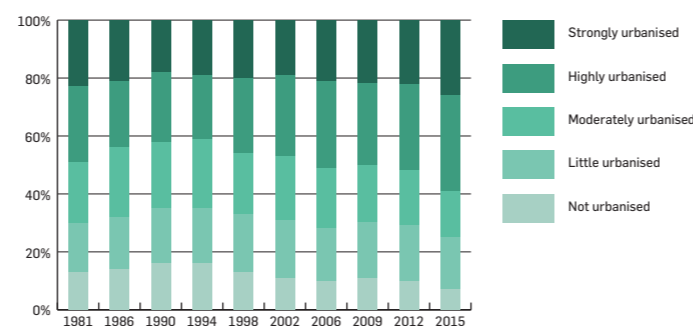
Of the households which moved to another municipality within four years after heaving their first child, **half has a migration background and half has no migration background**

Amount of children for each mother in Amsterdam (2017)



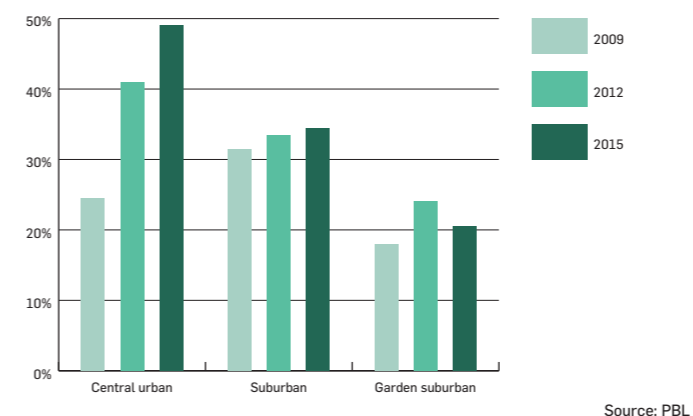
Circa 90% of the mothers in Amsterdam have **one, two or three children**. Most mothers have 2 children (41%), followed by 1 child (32%) and 3 children (16%). 11% has 4 children or more

Desired urbanity of families (30-54)



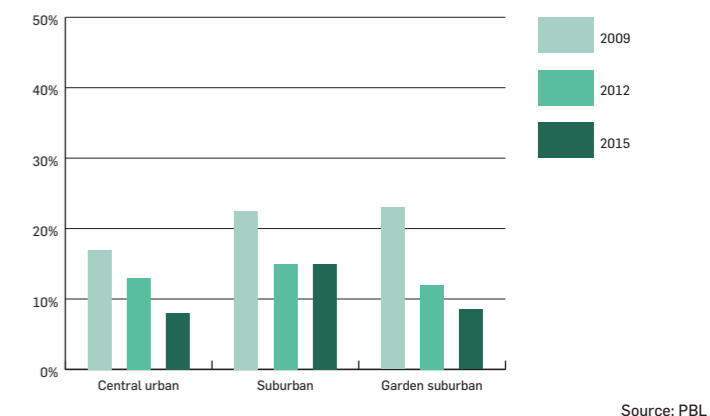
The amount of families who desire a **strongly or highly urbanised environment** is rising. Less urbanised environments become less desired

Percentage of families in the four biggest cities in the Netherlands (G4) with a desire to move because of their home



The amount of families in central urban environments who **want to move because of their home is rising**, to almost 50% in 2015

Percentage of families in the four biggest cities in the Netherlands (G4) with a desire to move because of their living environment



The amount of families in central urban environments who **want to move because of their living environment is declining**, to less than 10% in 2015

## TARGET GROUP URBAN FAMILIES



# 'VERTICAL NEIGHBOURHOOD'



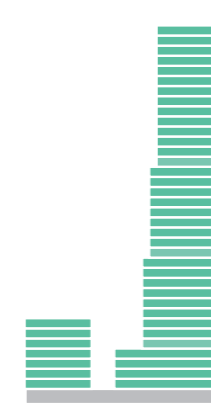
**DWELLING**



**STREET**



**BLOCK**



**NEIGHBOURHOOD**







### HIGH DENSITY

In the design a balance should be found between quantity (the amount of dwellings) and quality (views, sunlight, privacy etc.). The aim is to accommodate at least 150 dwellings. These will have a large variety in size (60-200 m<sup>2</sup>), with most of them having at least 3 bedrooms.



### TYOLOGY FOR FAMILIES

The building has to consist of typologies suitable for families. Optimal floor plans should be designed to find a balance between affordability and desired sizes of spaces. The dwellings should contain enough bedrooms to accommodate parents and their children.



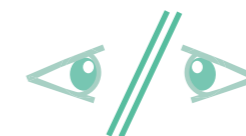
### VARIETY IN FLOOR PLANS

To cater for different household sizes and income groups, a range of floor plans should be offered, varying in size. These should be mixed to subsequently create mixed smaller "neighbourhoods" inside the building block. A portion will be dedicated to single parents.



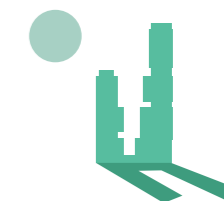
### VIEWS

The situation of the plot and the high-rise typology allow for desirable views. The water on two sides allow for wide views, even on the lower floors. As much dwellings as possible should get a view towards the water and the city, preferably from the living room.



### PRIVACY

With the high density typology, a high amount of dwellings are situated in close proximity to each other. Therefore attention need to be paid the placement and orientation of the dwellings to ensure enough privacy for the residents.



### NATURAL (SUN)LIGHT

The high density high-rise environment will cause high amounts of shadows. The dwellings should be designed to allow for enough natural (sun)light. Communal outdoor spaces should receive direct sunlight at certain moments of the day, preferably in the afternoon and evening.



### ADAPTABLE & FLEXIBLE

The future of the city is unknown, therefore the building should be able to adapt to an unknown future. Especially commercial spaces should be able to accommodate diverse functions.



### MULTIFUNCTIONAL

The space is scarce and valuable in this part of the city. If possible, spaces should be transformable or multifunctional. Different functions could share a space according to the time of the day or week. This applies to the dwelling, as well as for public space in the building block.



### CONNECTION TO CITY

In most high rise buildings the transition between the private dwelling and the public city is relatively abrupt. To create a building suitable for children, the connection from the dwelling and the city should be more gradual, with child-friendly spaces



### OUTDOOR SPACE

Children should be able to gradually explore the environment, according to the action radius in different life stages. Therefore outdoor spaces in different distances from the dwelling have to be present. Space should be allocated to wide pavements for children to play on.



### (SEMI)PUBLIC FUNCTIONS

The building should allow for a diversity in functions other than housing, which fits the desired lively urban environment. Proposed functions inside the building are a primary school to bring more social cohesion and commercial spaces to allow for small family-oriented businesses.

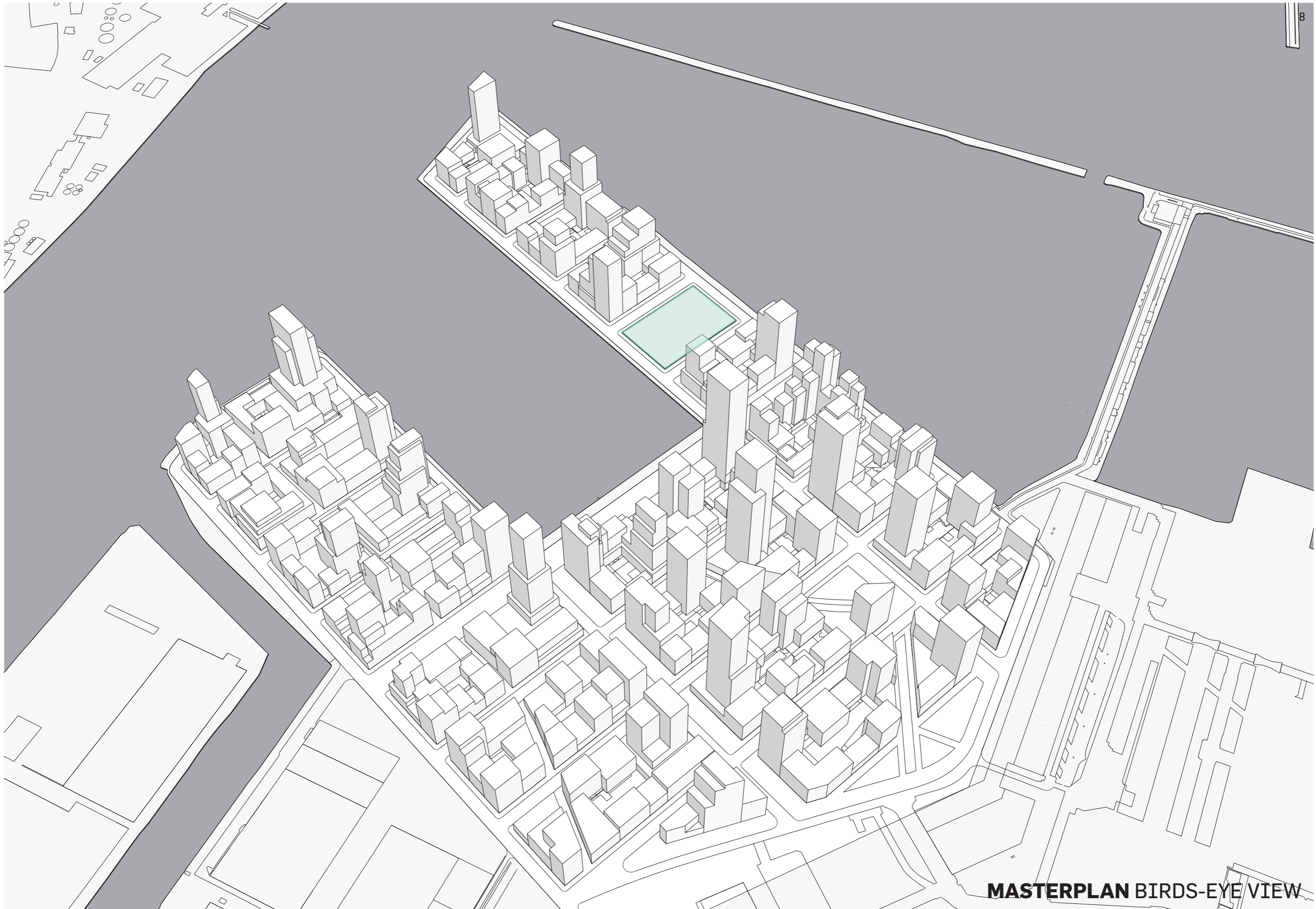


### SAFETY

All spaces should be safe for children. Children need to play in a safe environment without busy traffic. The fire safety, an important factor influencing the design of high-rise, should comply with regulations.

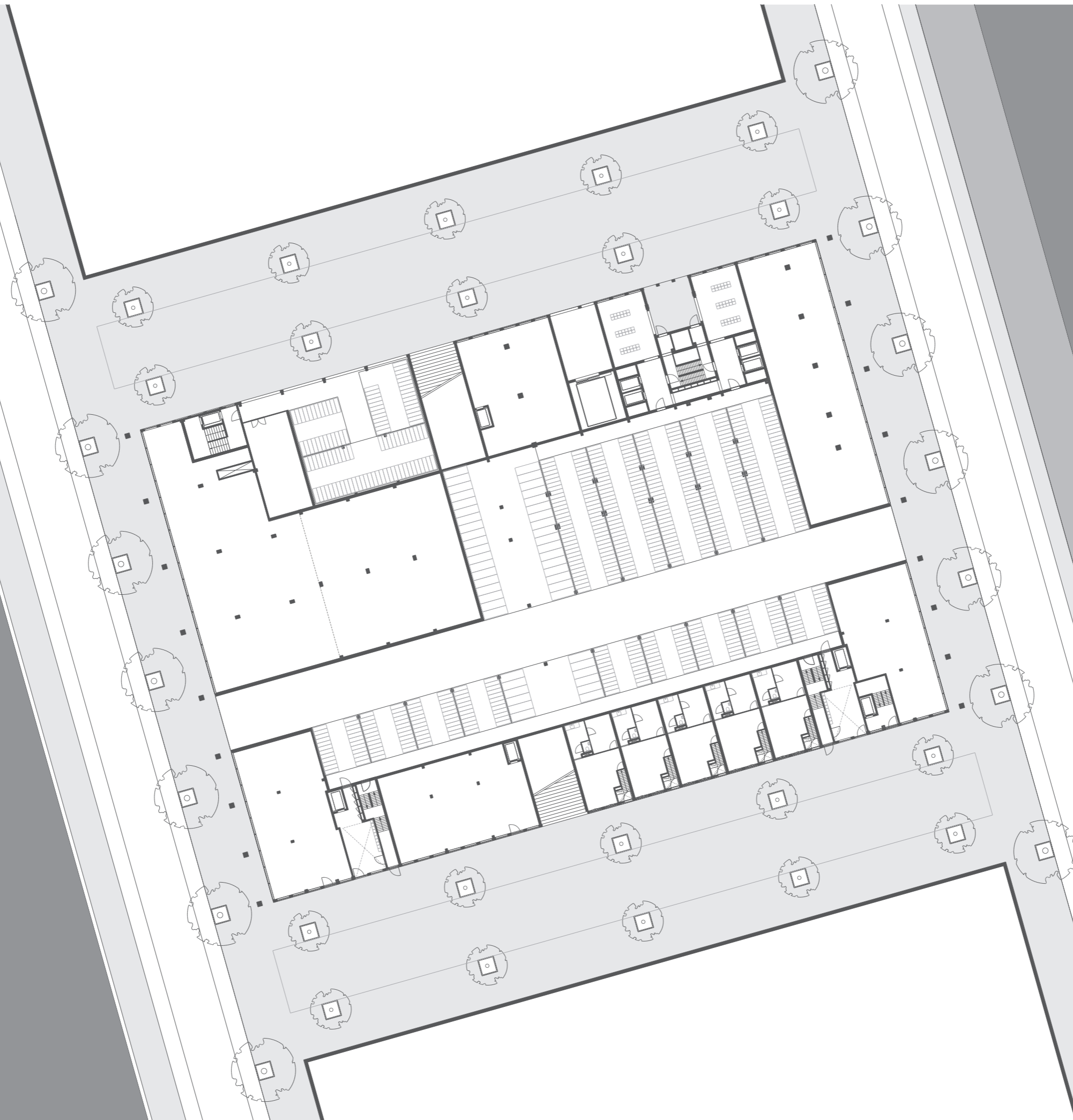
## MAIN PRINCIPLES

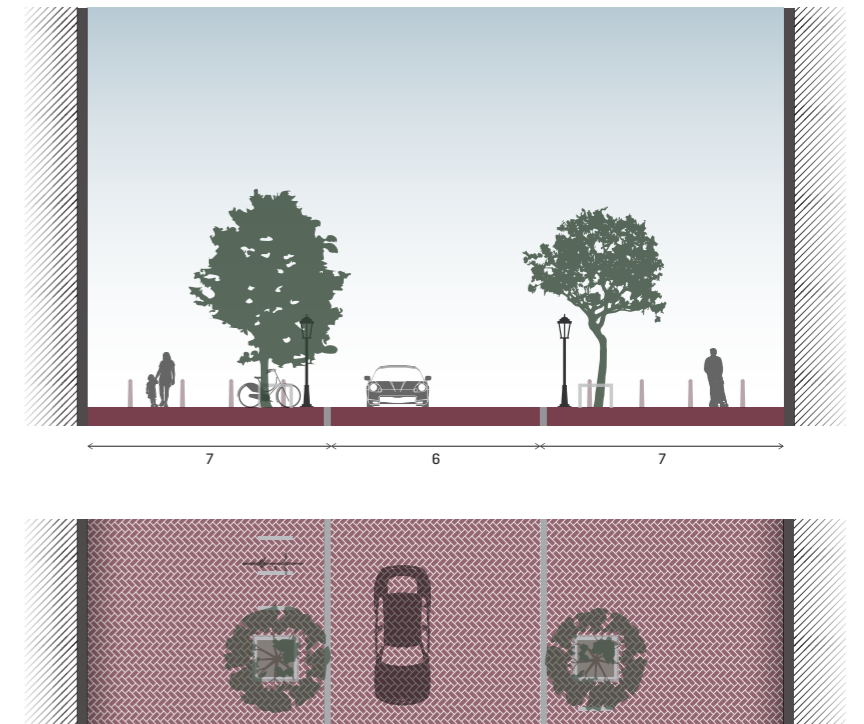
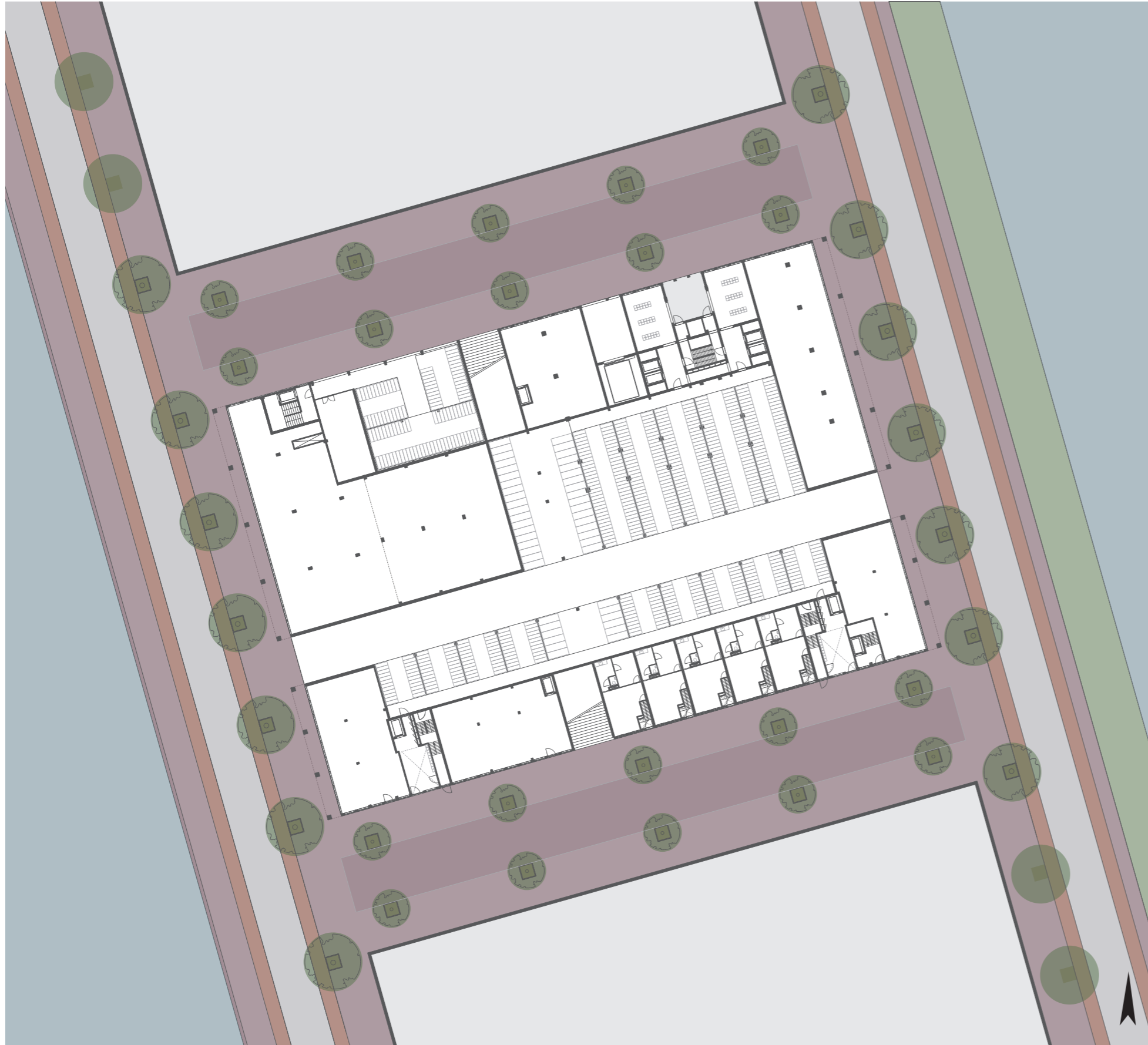




**MASTERPLAN BIRDS-EYE VIEW**

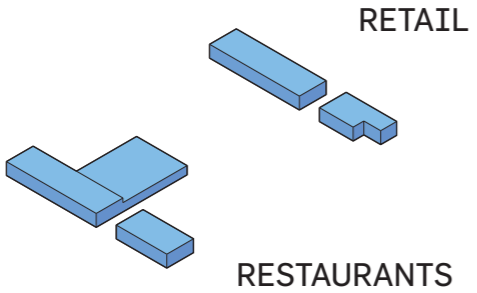




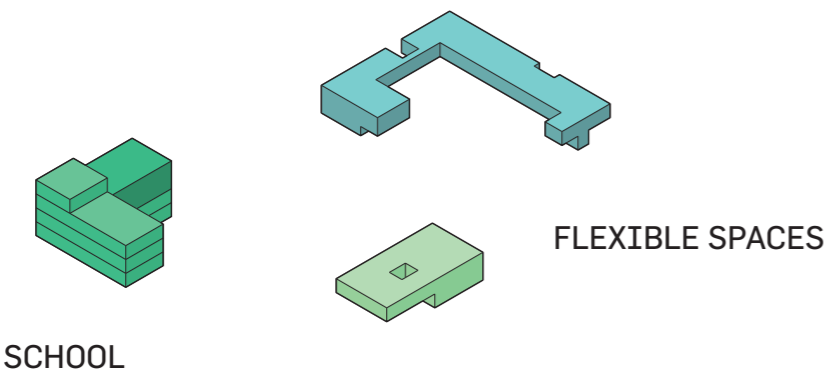


**SITUATION** SURROUNDING STREETS

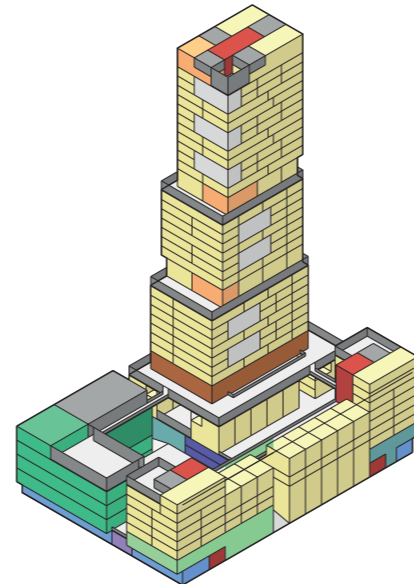
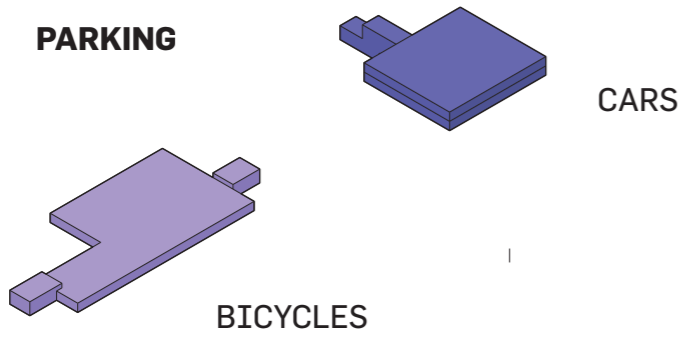
**COMMERCIAL**



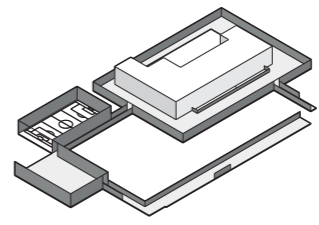
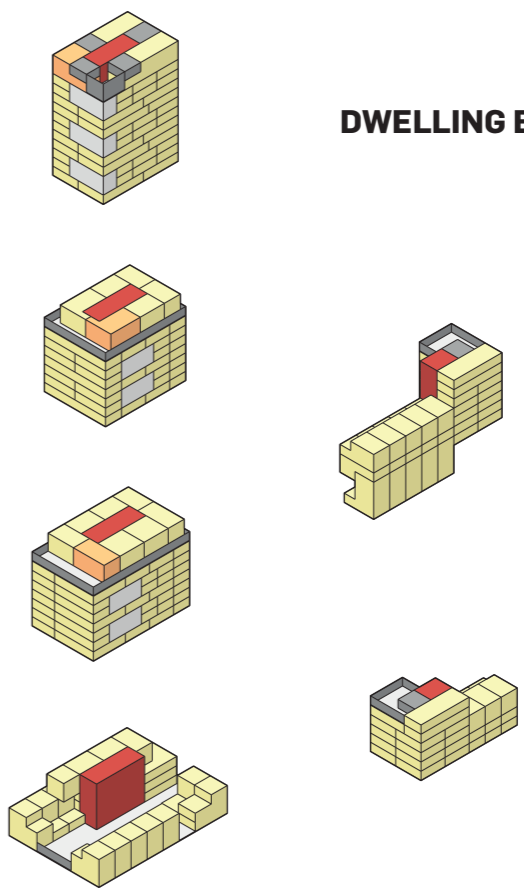
**SEMIPUBLIC SPACES**



**PARKING**

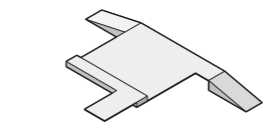


**DWELLING BLOCKS**

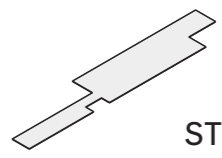


SQUARES + STREETS

**COLLECTIVE LAYERS**



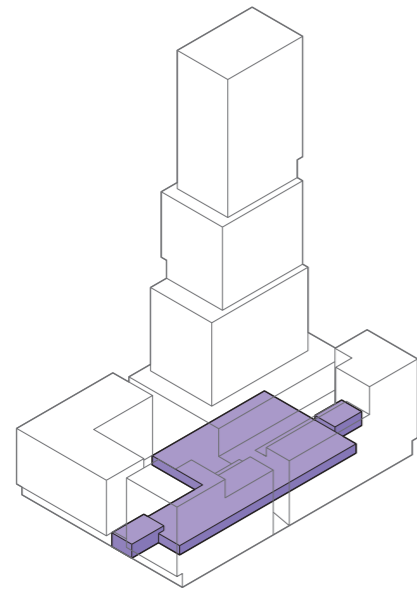
SQUARE



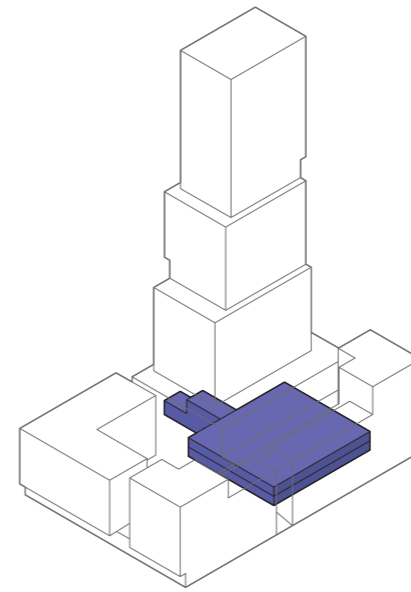
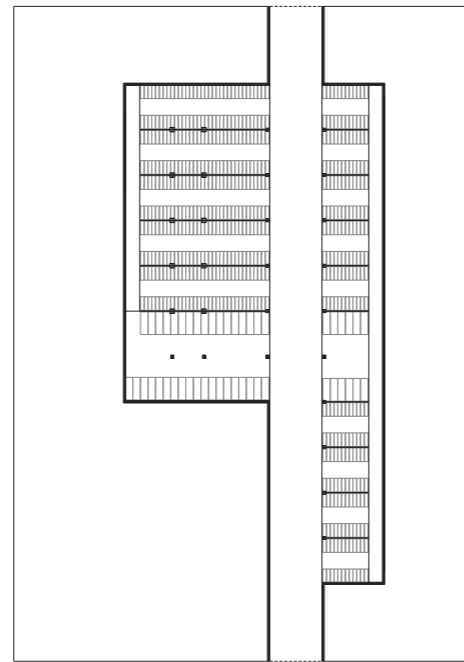
STREET

**PROGRAM OVERVIEW**

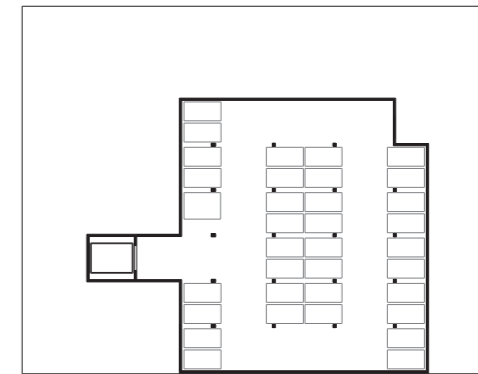
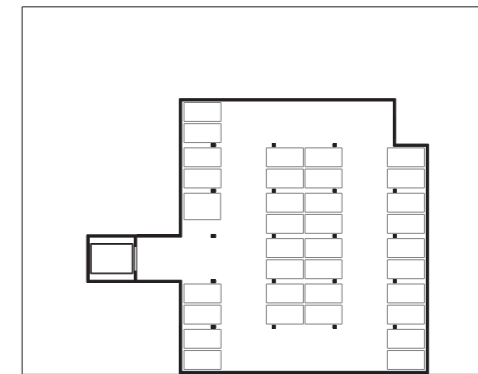


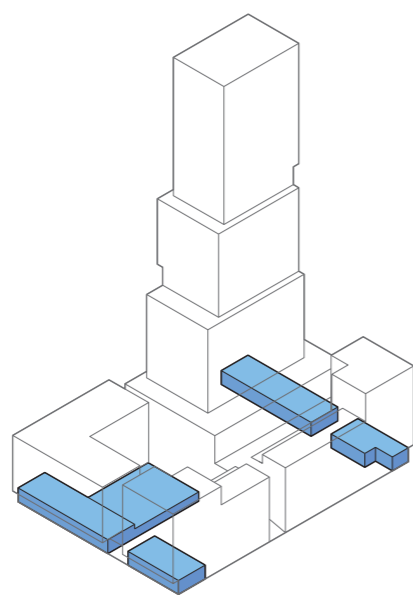


**BICYCLE STORAGE**  
 500-1000 BICYCLES  
 1 LAYER (GROUND FLOOR LEVEL)  
 DIRECT CONNECTION TO STREET

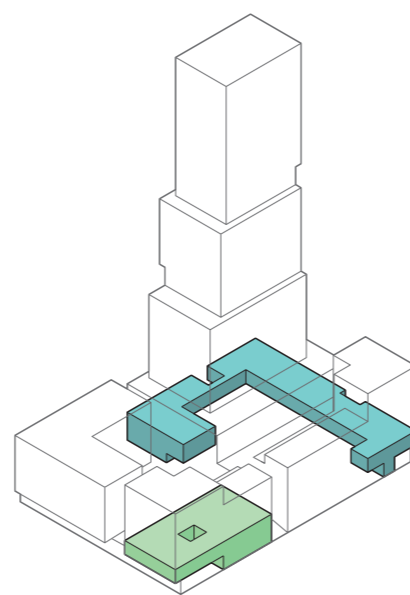


**PARKING GARAGE**  
 70 (SHARED) CARS  
 2 LAYERS (1st +2nd FLOOR)  
 ACCESSIBLE WITH CAR LIFT

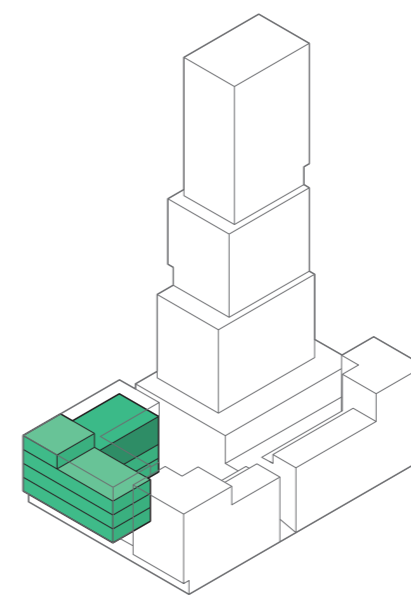




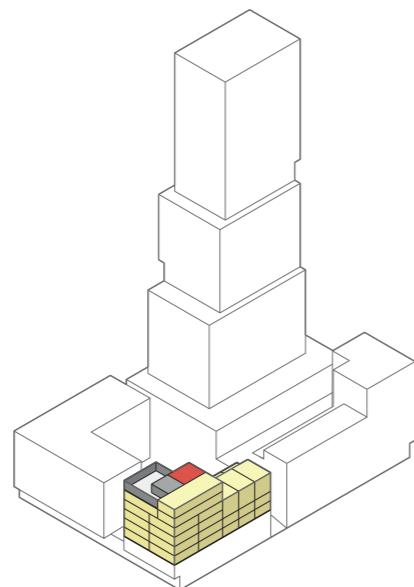
**COMMERCIAL SPACES**  
 GROUND FLOOR  
 RETAIL OR RESTAURANTS  
 4.5 M CEILING HEIGHT



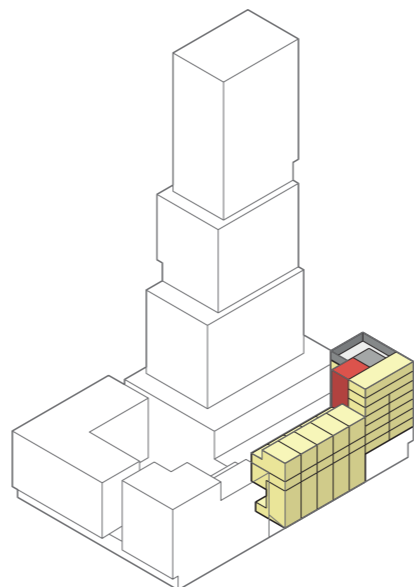
**MULTIFUNCTIONAL SPACES**  
 FIRST + SECOND FLOOR  
 4.5 M CEILING HEIGHT  
 ENTRANCE STREET + SQUARE



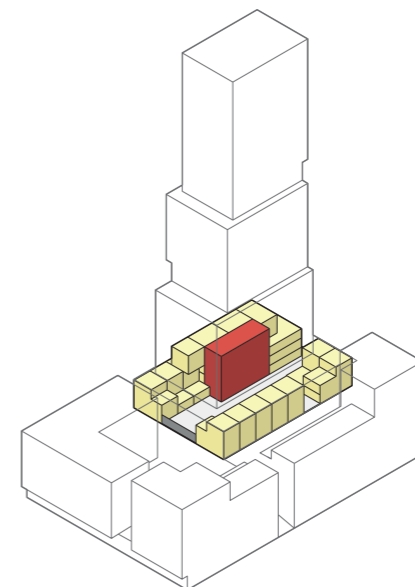
**SCHOOL**  
 12 CLASSROOMS  
 SPORTS HALL (RENTABLE)  
 ENTRANCE STREET + SQUARE  
 CLASS ROOMS VIEWS + SUNLIGHT  
 OUTDOOR SPACE ON ROOF



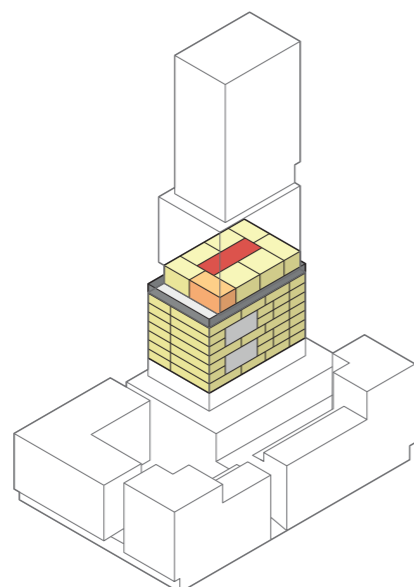
**BLOCK**  
 24 DWELLINGS  
 TWO-SIDED ORIENTATION  
 COLLECTIVE SPACE ON TOP OF BLOCK



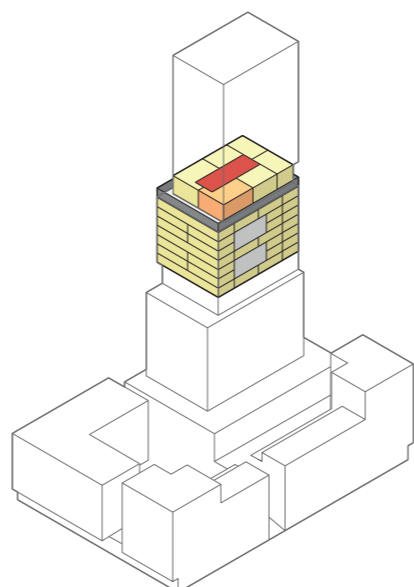
**BLOCK**  
 33 DWELLINGS  
 TWO-SIDED ORIENTATION  
 COLLECTIVE SPACE ON TOP OF BLOCK



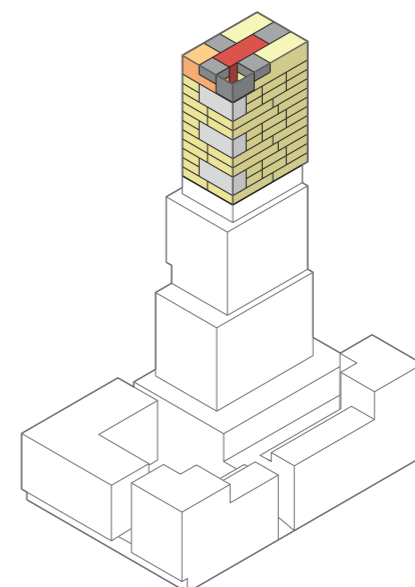
**BLOCK**  
 23 DWELLINGS  
 COLLECTIVE INNER STREET  
 COLLECTIVE SPACE ON TOP OF BLOCK



**BLOCK**  
 63 DWELLINGS  
 COLLECTIVE OUTDOOR SPACE 3 LAYERS  
 COLLECTIVE SPACE ON TOP OF BLOCK



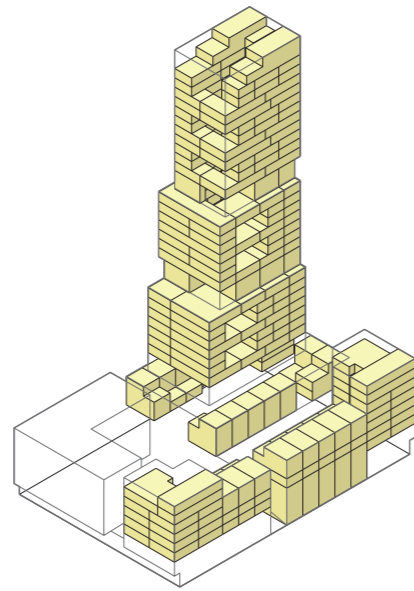
**BLOCK**  
 54 DWELLINGS  
 COLLECTIVE OUTDOOR SPACE 3 LAYERS  
 COLLECTIVE SPACE ON TOP OF BLOCK



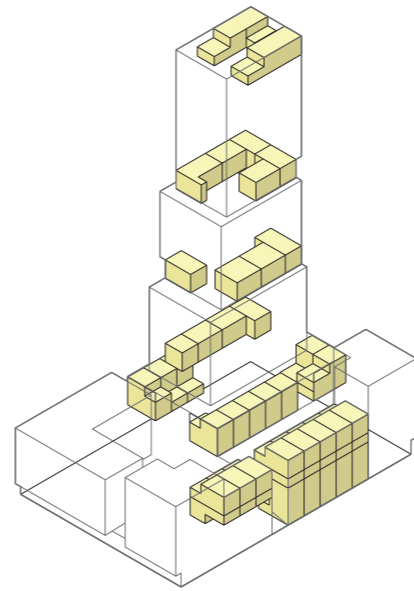
**BLOCK**  
 58 DWELLINGS  
 COLLECTIVE OUTDOOR SPACE 4 LAYERS  
 COLLECTIVE SPACE ON TOP OF BLOCK

**PROGRAM DWELLING BLOCKS**

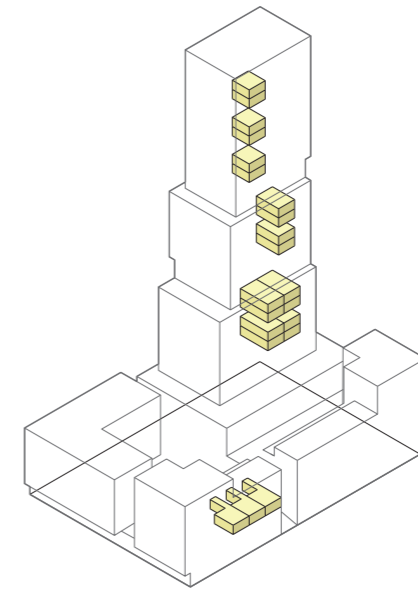




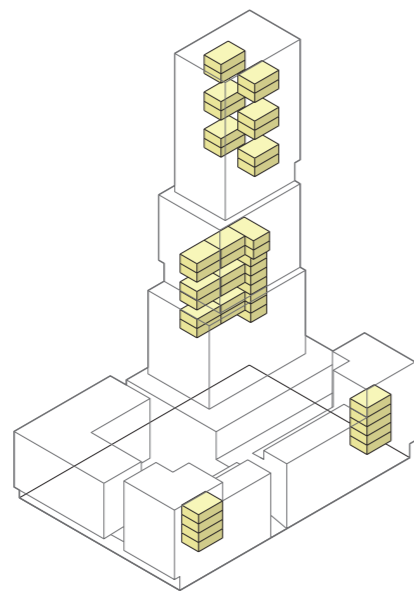
**ALL DWELLINGS**  
255 DWELLINGS



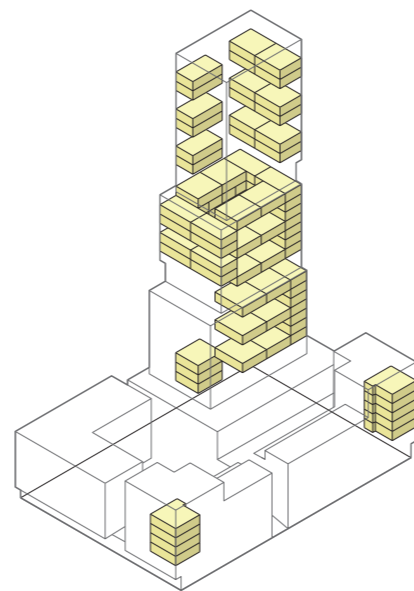
**MULTILAYER**  
90-180 M<sup>2</sup>  
46 DWELLINGS  
SHARED OUTDOOR SPACE



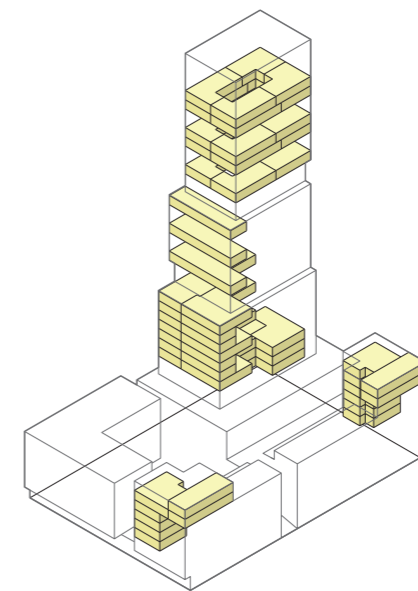
**STUDIOS**  
35-50 M<sup>2</sup>  
21 DWELLINGS  
SHARED OUTDOOR SPACE ON LEVEL



**SMALL APARTMENTS**  
CA. 50 M<sup>2</sup>  
42 DWELLINGS  
SHARED OUTDOOR SPACE ON LEVEL



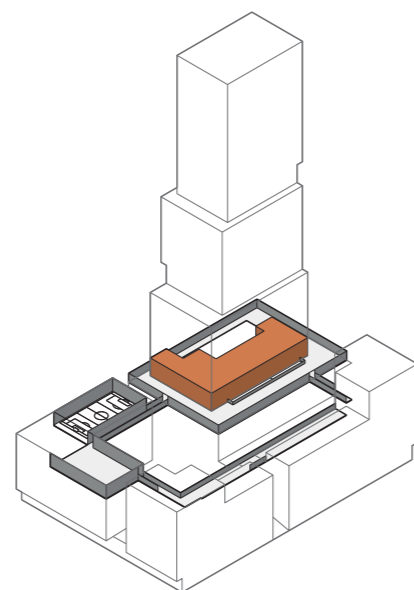
**MEDIUM APARTMENTS**  
50-80 M<sup>2</sup>  
85 DWELLINGS  
PRIVATE OUTDOOR SPACE



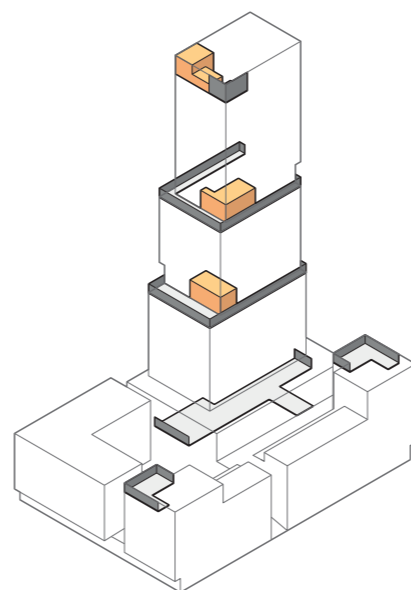
**LARGE APARTMENTS**  
80+ M<sup>2</sup>  
61 DWELLINGS  
PRIVATE OUTDOOR SPACE

**PROGRAM DWELLING TYPES**

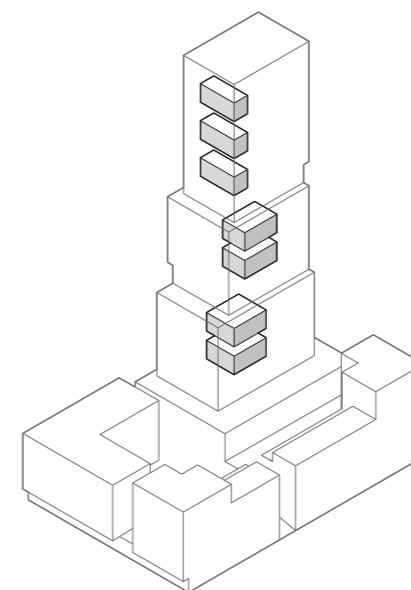




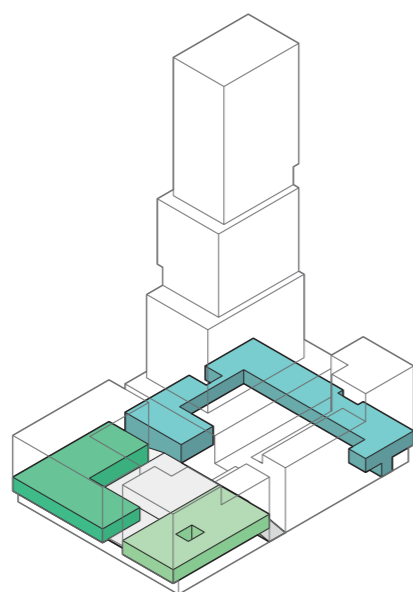
**'NEIGHBOURHOOD'**  
 FOR ALL RESIDENTS OF BUILDING  
 (CA. 250 DWELLINGS)  
 INDOOR + OUTDOOR  
 DWELLING ENTRANCES  
 SHARED OUTDOOR SPACE SCHOOL  
 SUNLIGHT + VIEWS



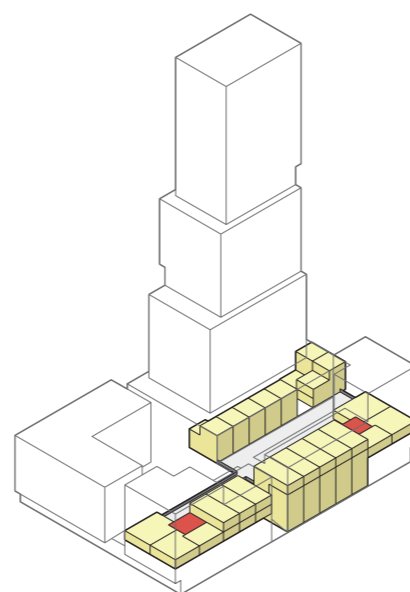
**'BLOCK'**  
 FOR RESIDENTS BLOCK  
 (CA. 50 DWELLINGS)  
 INDOOR + OUTDOOR  
 DOUBLE HEIGHT  
 ON TOP OF EACH BLOCK  
 SUNLIGHT + VIEWS



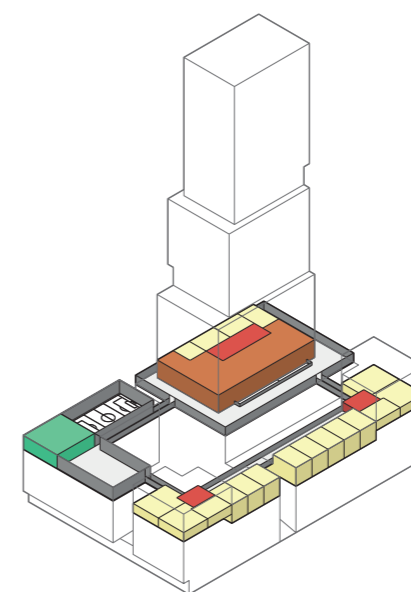
**'STREET'**  
 FOR RESIDENTS ADJACENT LEVELS  
 (CA. 15 DWELLINGS)  
 OUTDOOR  
 DOUBLE HEIGHT  
 NEARBY DWELLINGS WITHOUT BALCONY  
 SUNLIGHT + VIEWS



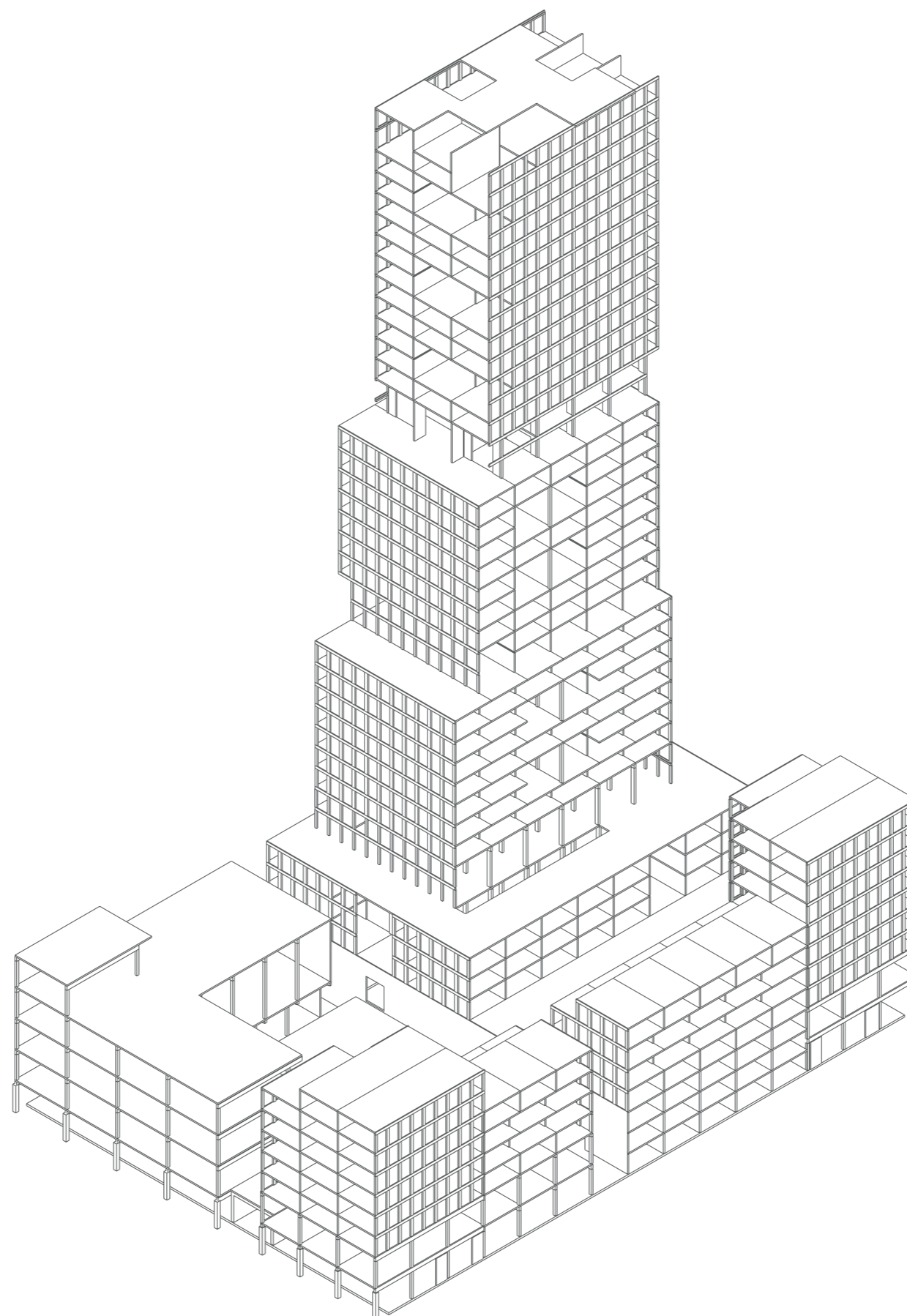
**1TH FLOOR +3M**  
 ELEVATED SCHOOLYARD  
 ENTRANCE SCHOOL  
 ENTRANCE MULTIFUNCTIONAL SPACES  
 ENCLOSUREMENT + PROTECTION



**4TH FLOOR +9M**  
 ELEVATED STREET  
 ENTRANCE 21 DWELLINGS  
 VIEWS TOWARDS WATER



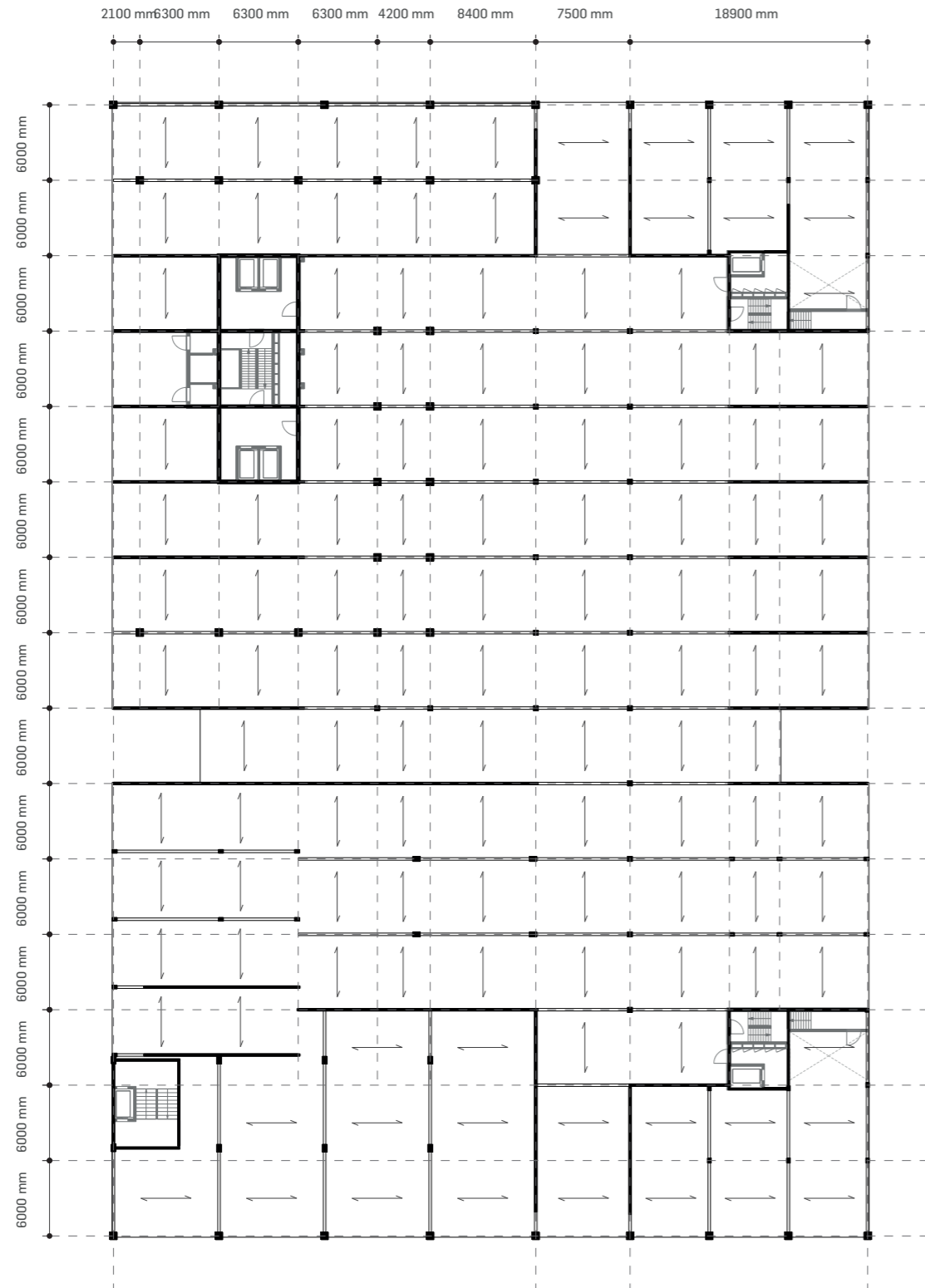
**7TH FLOOR +18M**  
 AROUND INDOOR SHARED SPACE  
 SCHOOLYARD + SPORTS CAGE (SHARED)  
 ENTRANCE 12 DUPLEX DWELLINGS  
 VIEWS TOWARDS WATER + SUNLIGHT



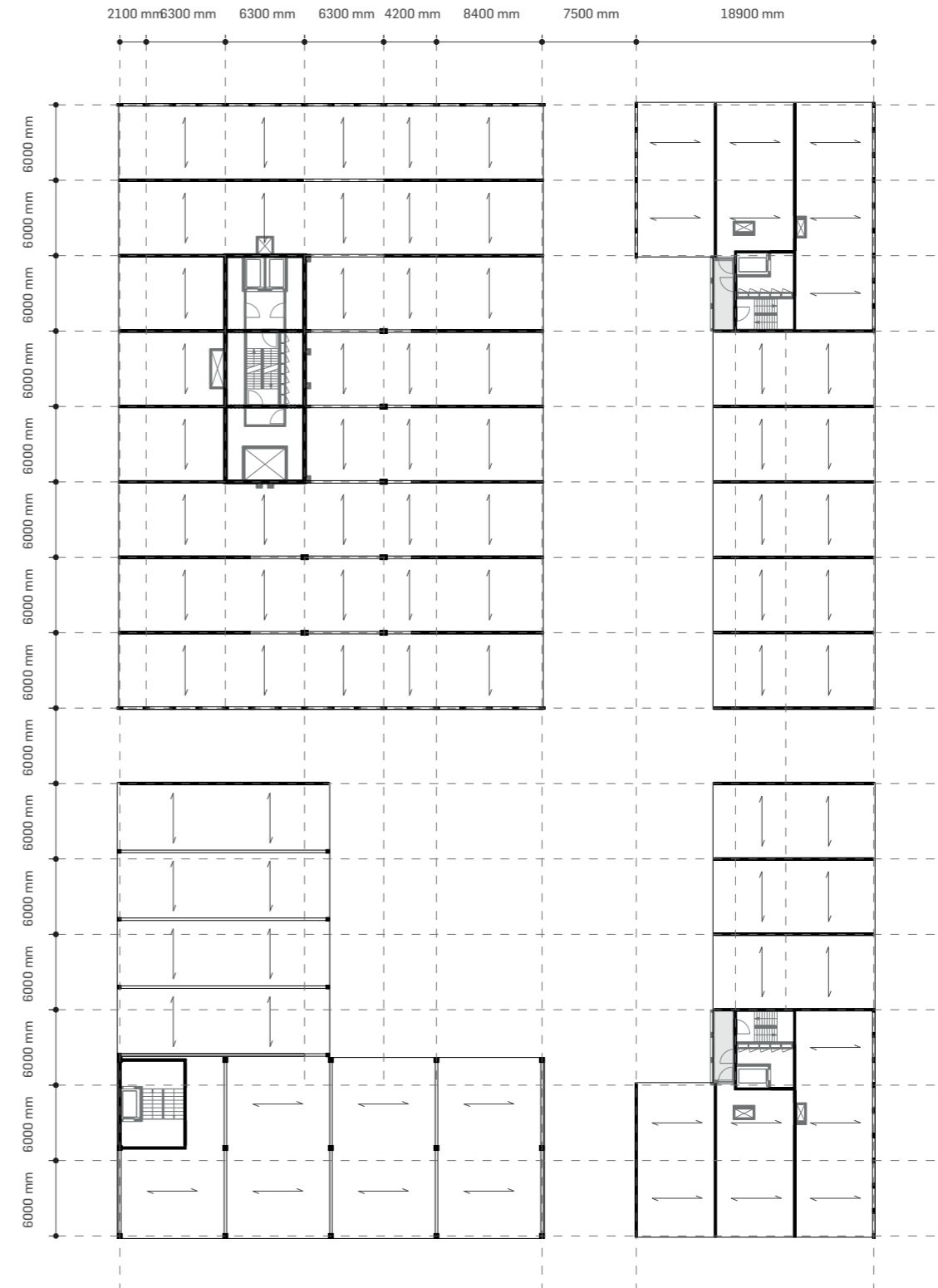
0-9 METRES + CORE **CONCRETE**  
9+ METRES **CROSS-LAMINATED TIMBER**

**CONSTRUCTION OVERVIEW**

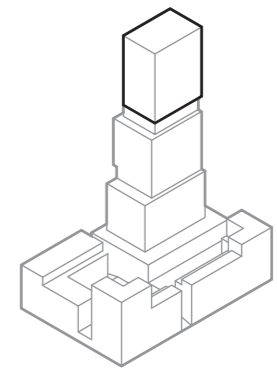
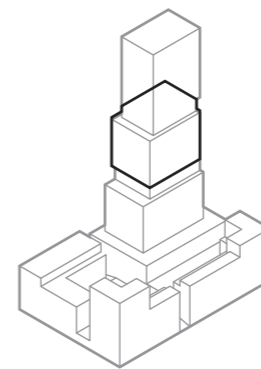
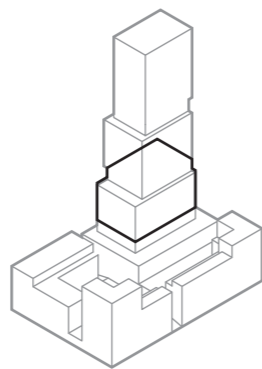
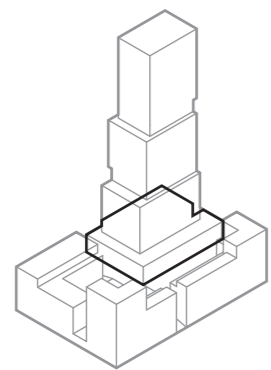
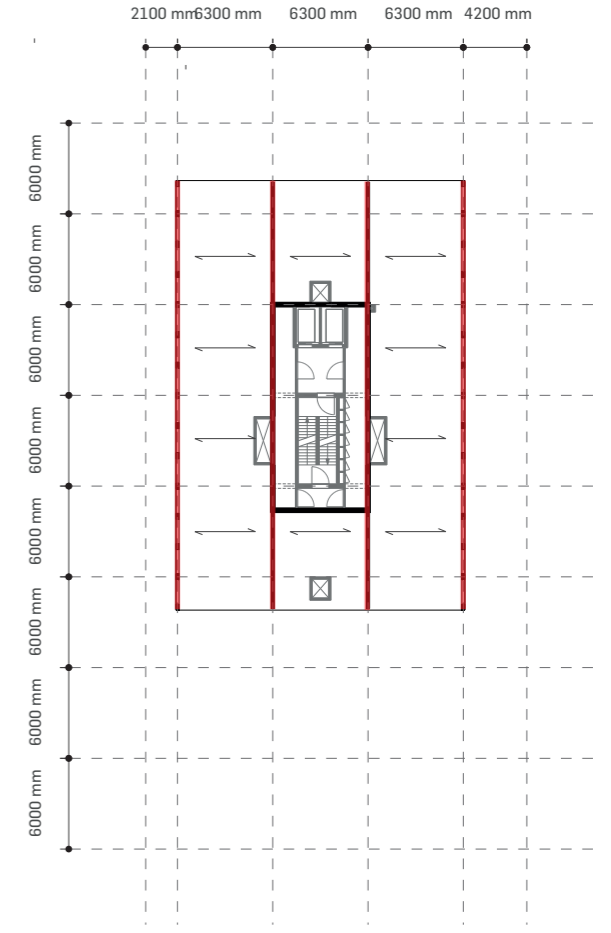
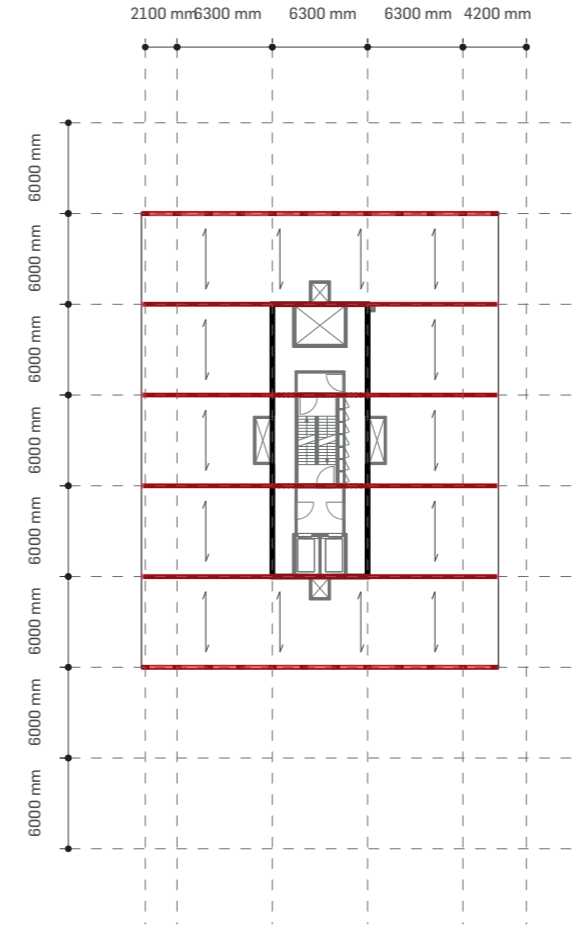
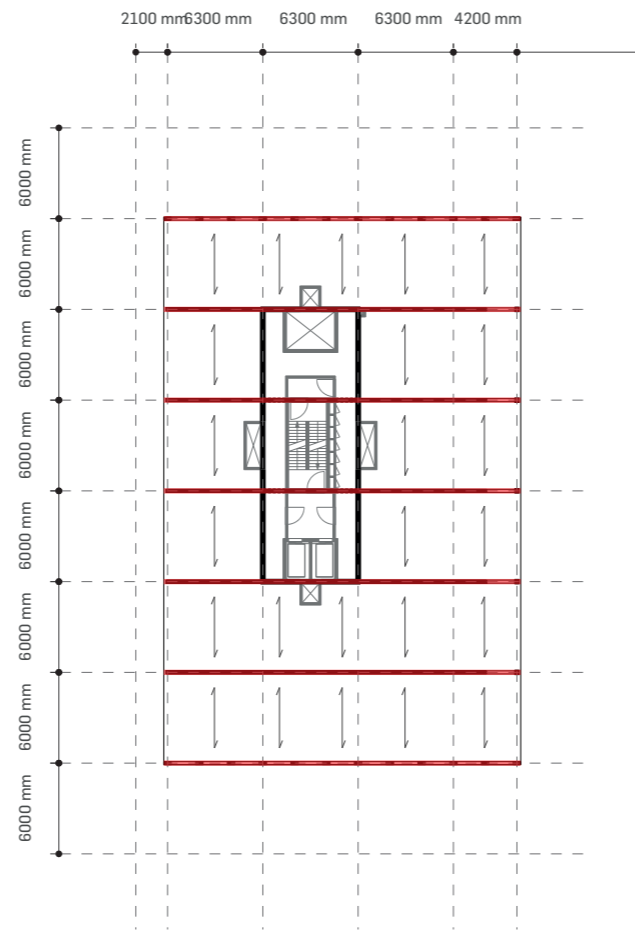
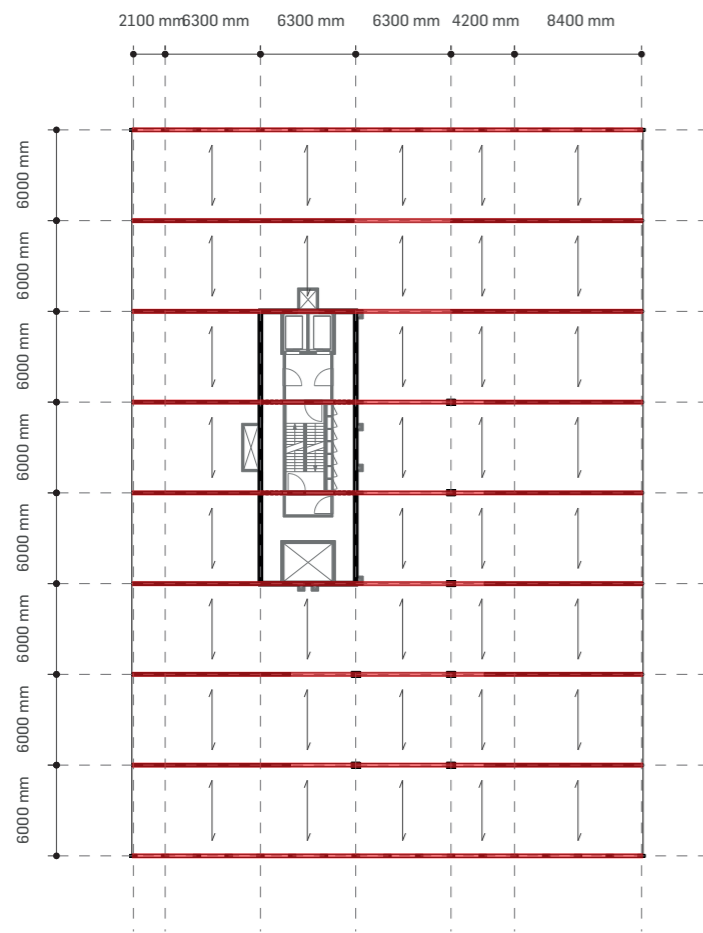




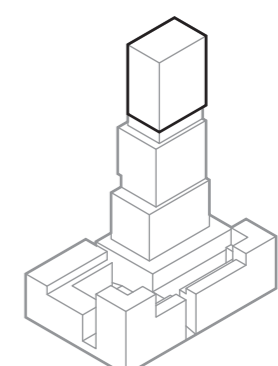
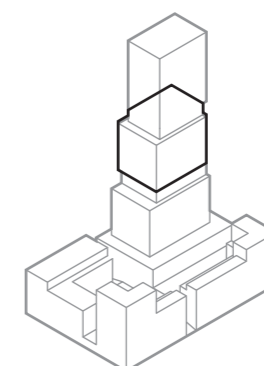
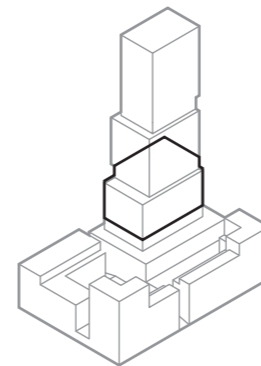
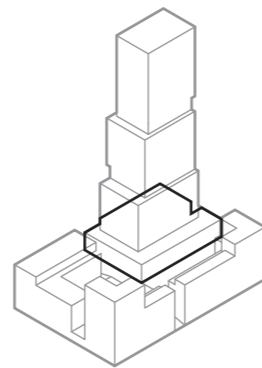
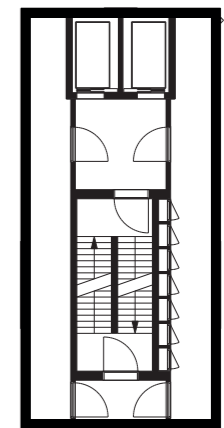
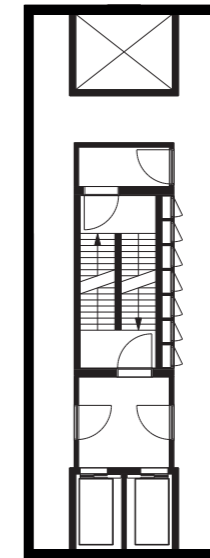
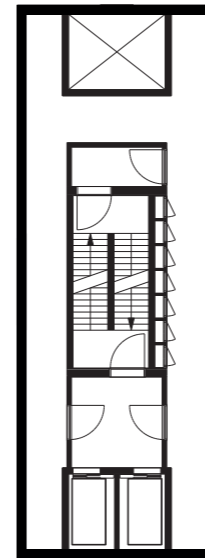
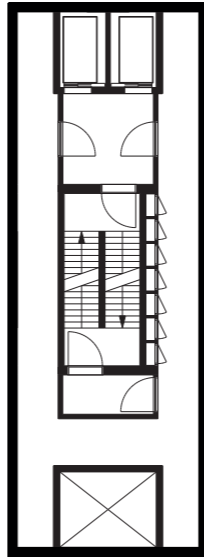
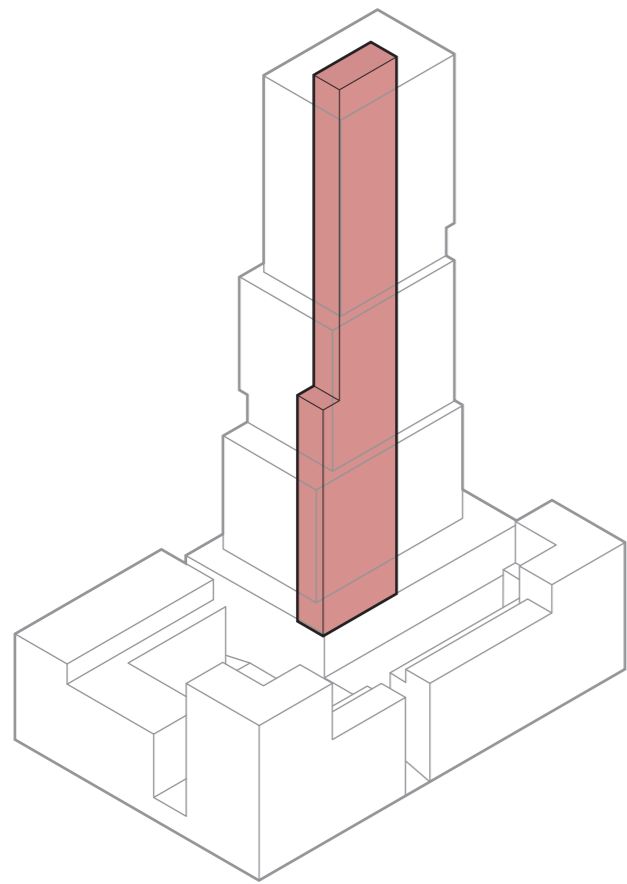
**GROUND FLOOR**



**THIRD FLOOR**

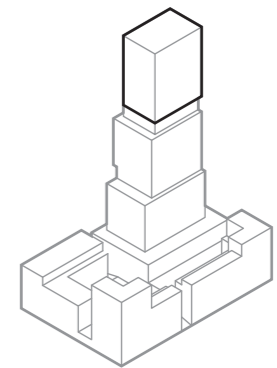
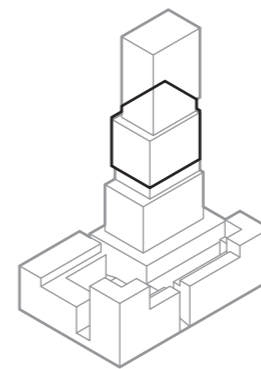
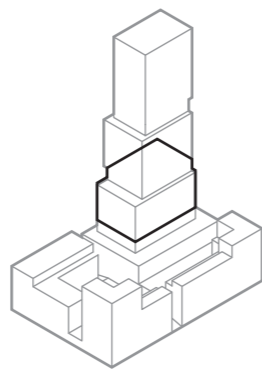
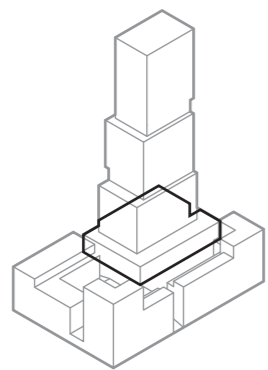
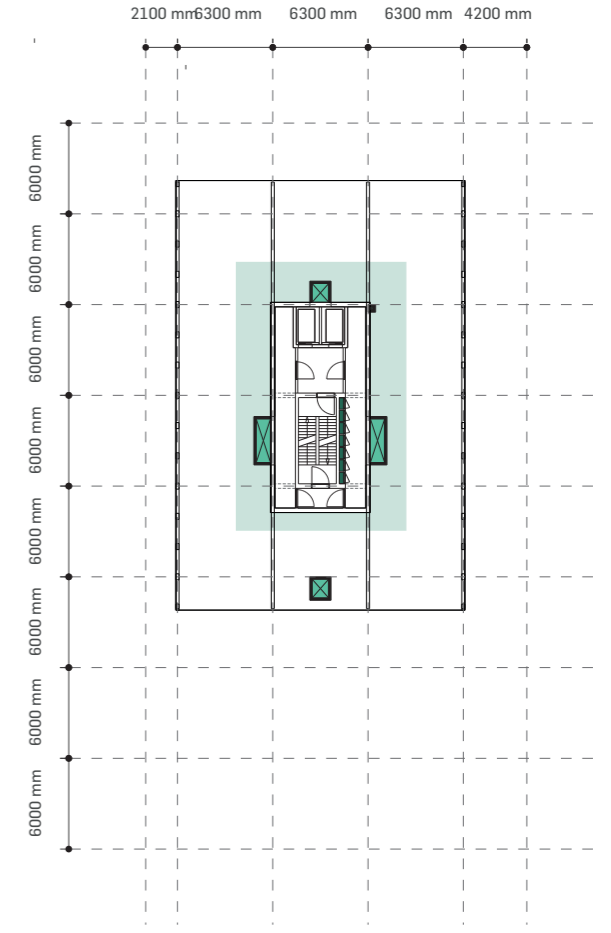
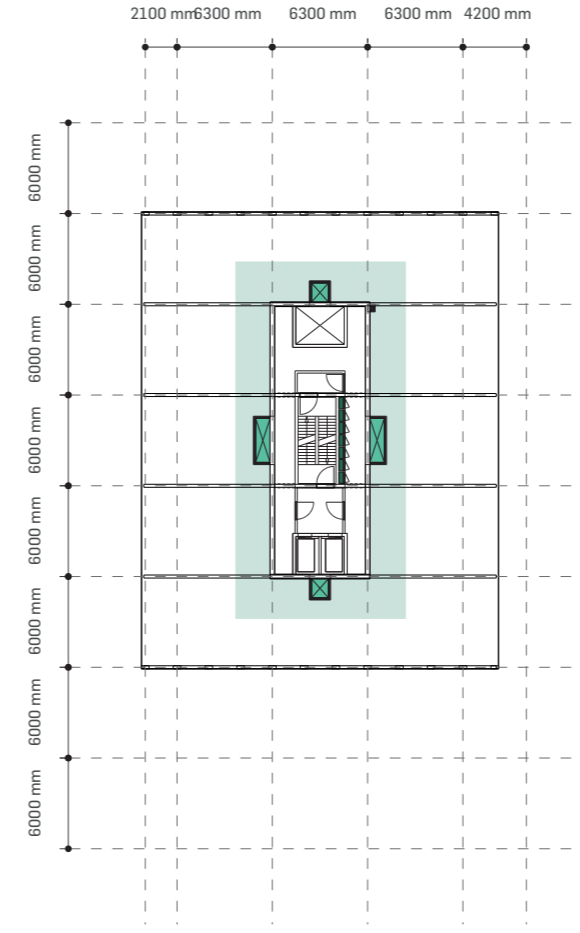
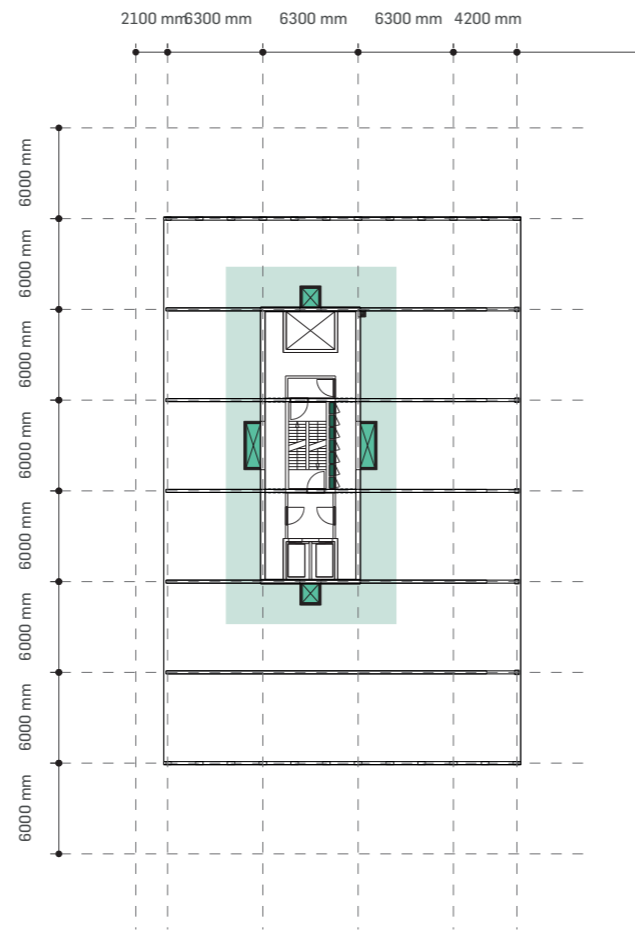
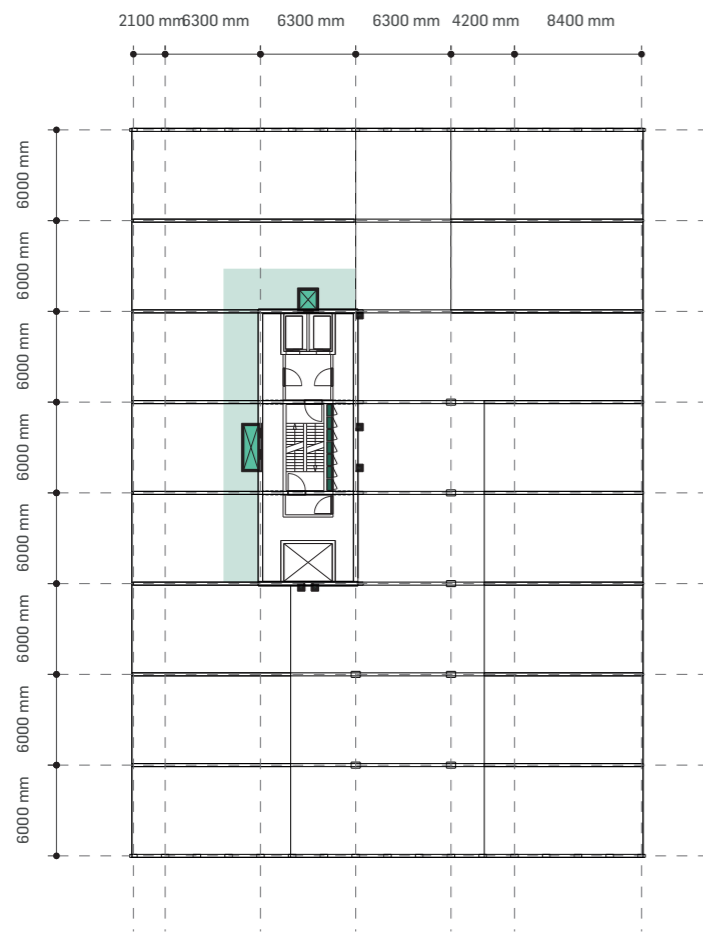


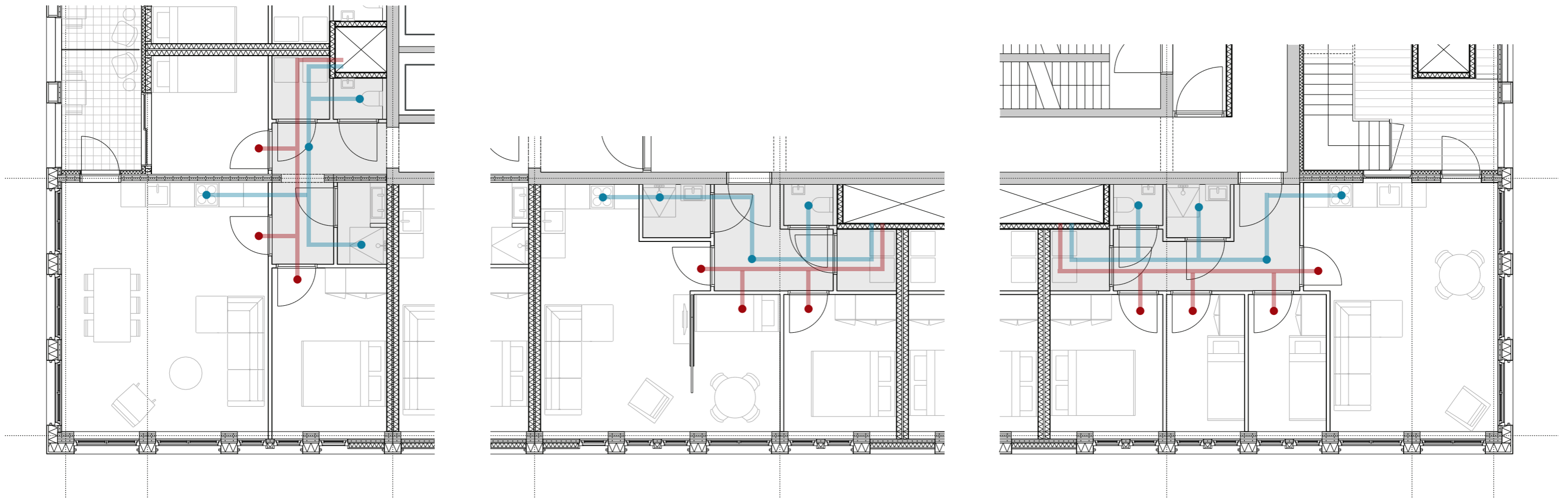
**CONSTRUCTION GRID**



**CONSTRUCTION CORE**

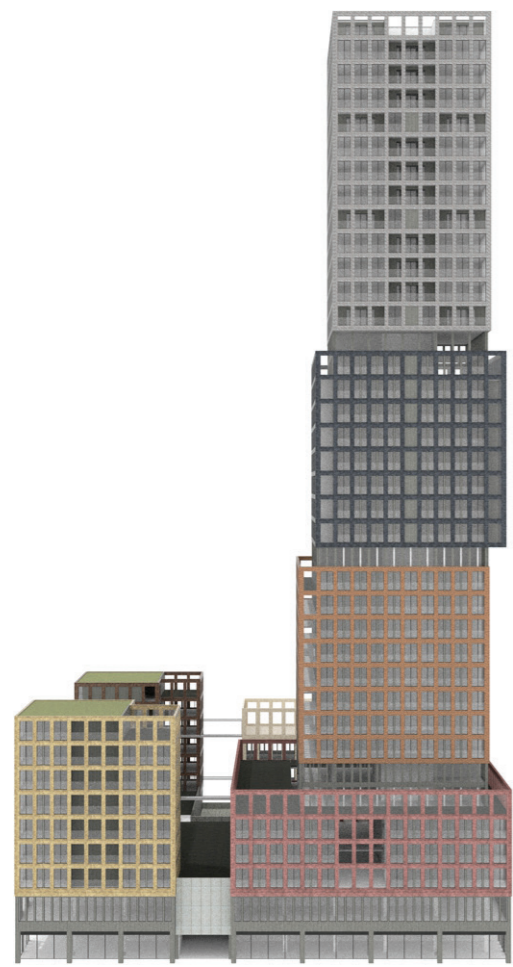




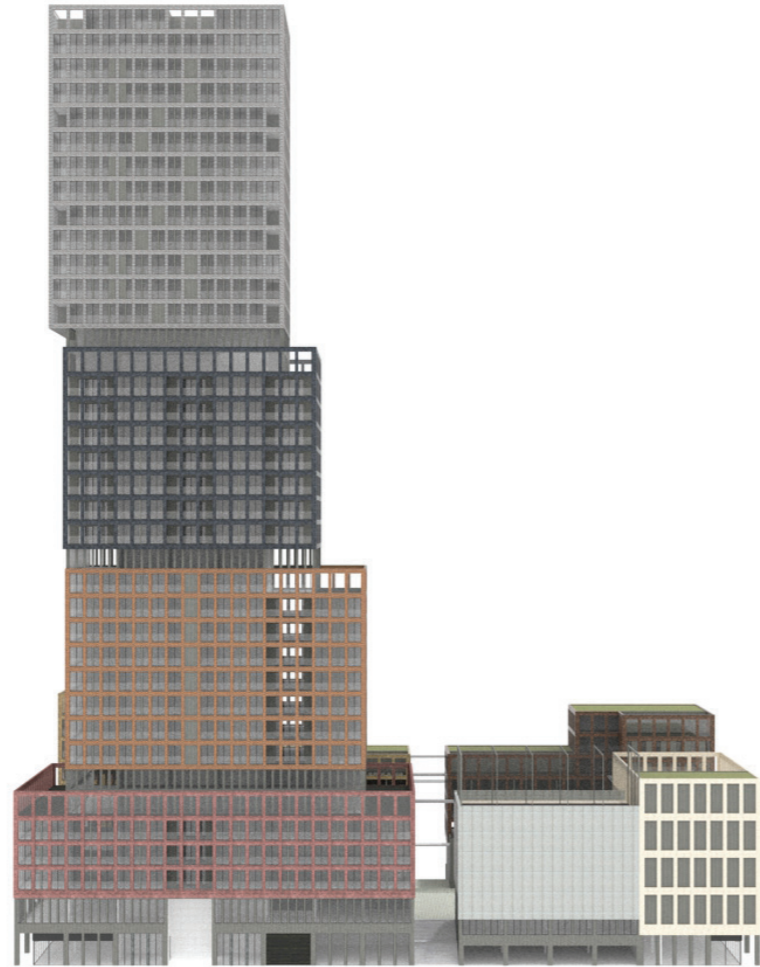


BALANCED VENTILATION WITH HEATH RECOVERY  
LOWERED CEILING IN HALLWAY FOR VENTILATION SHAFTS

**CLIMATE SYSTEM**



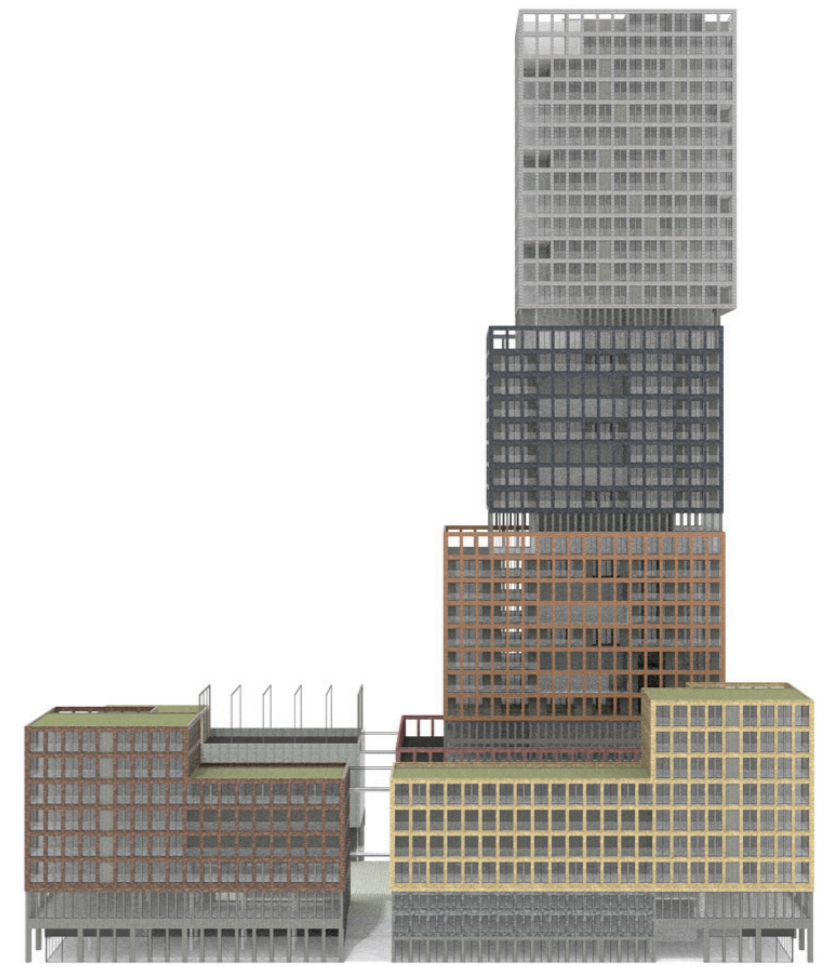
**NORTH EAST**



**NORTH WEST**

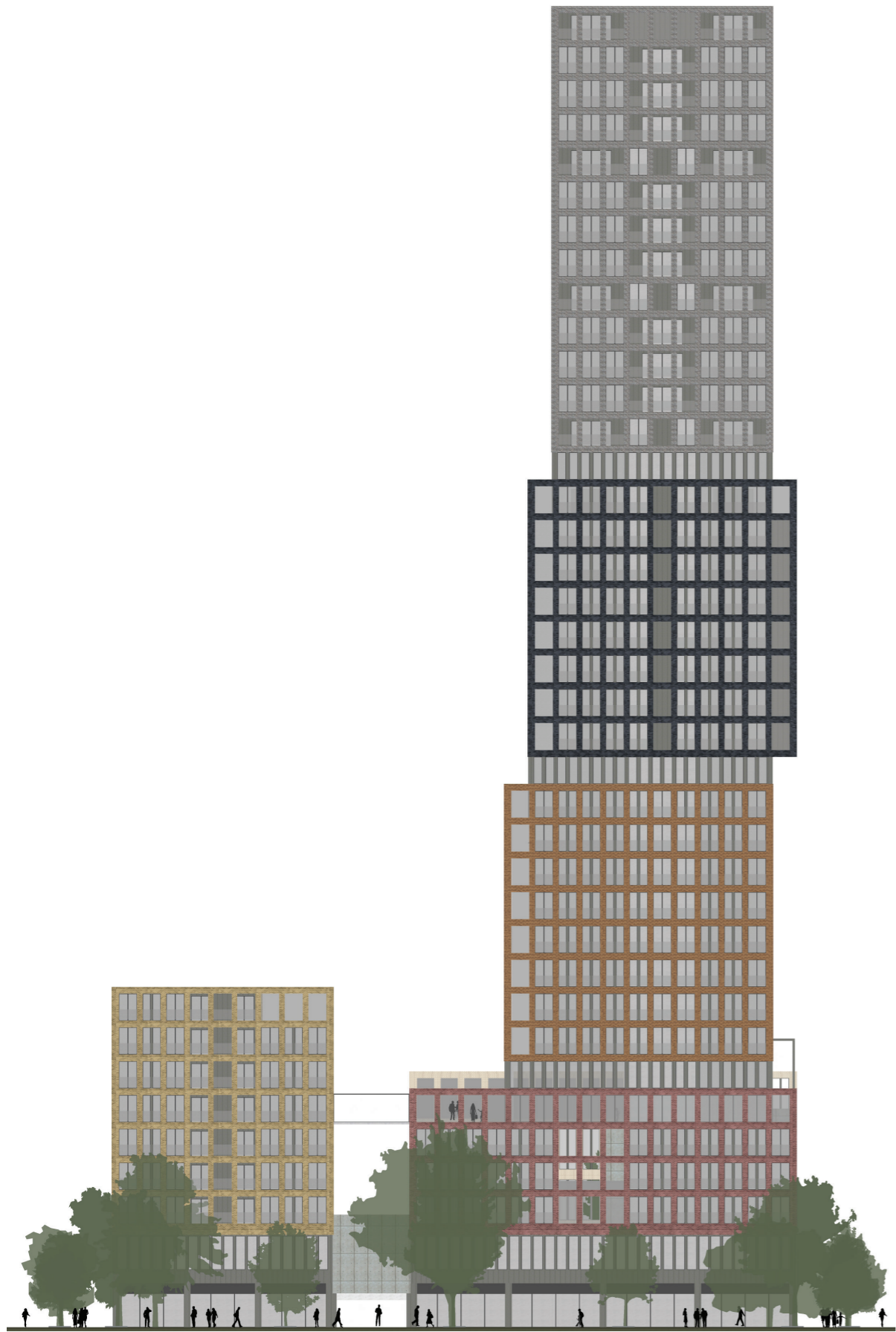


**SOUTH WEST**



**SOUTH EAST**





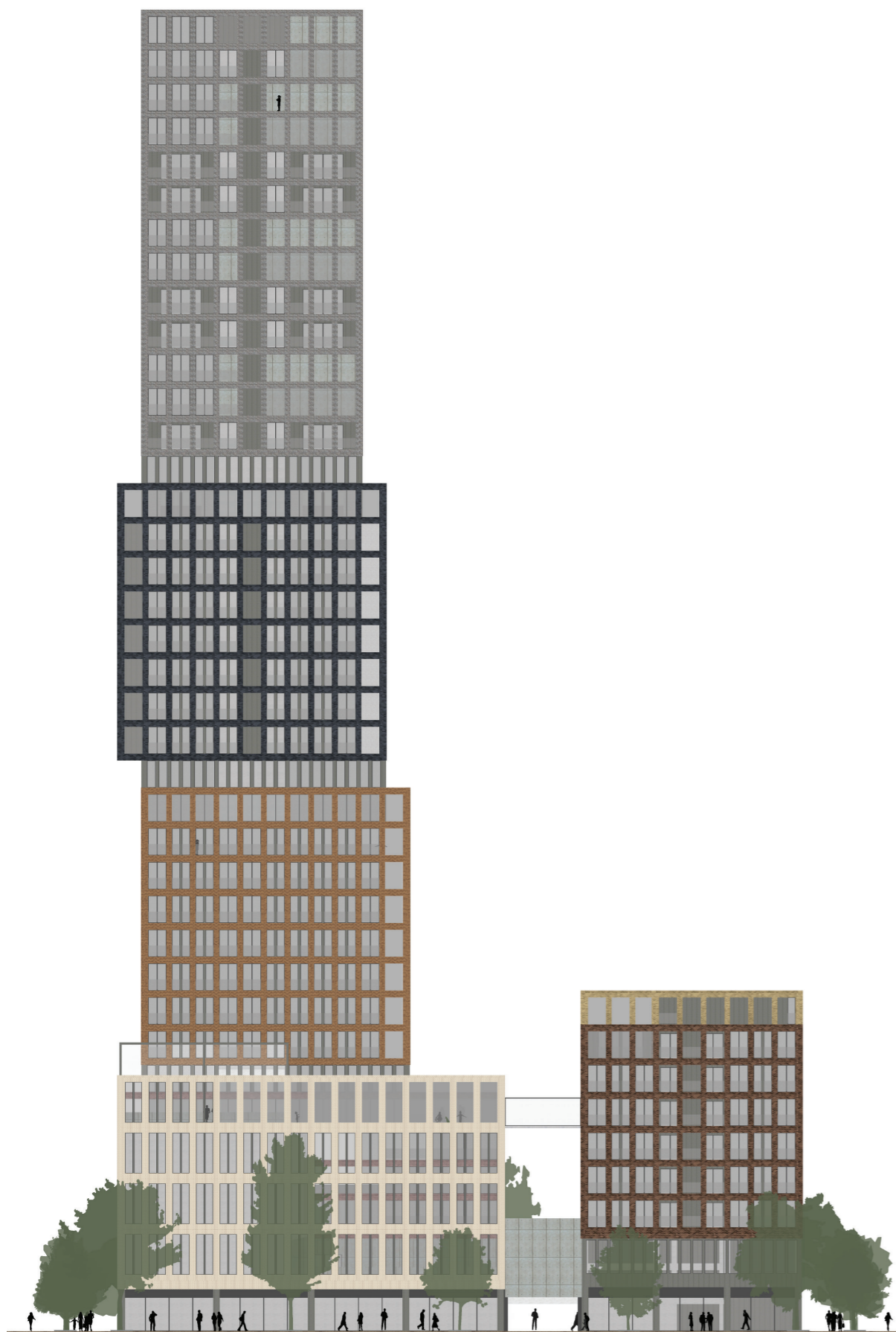
**NORTH EAST**



**NORTH WEST**

**FACADE 1:500**



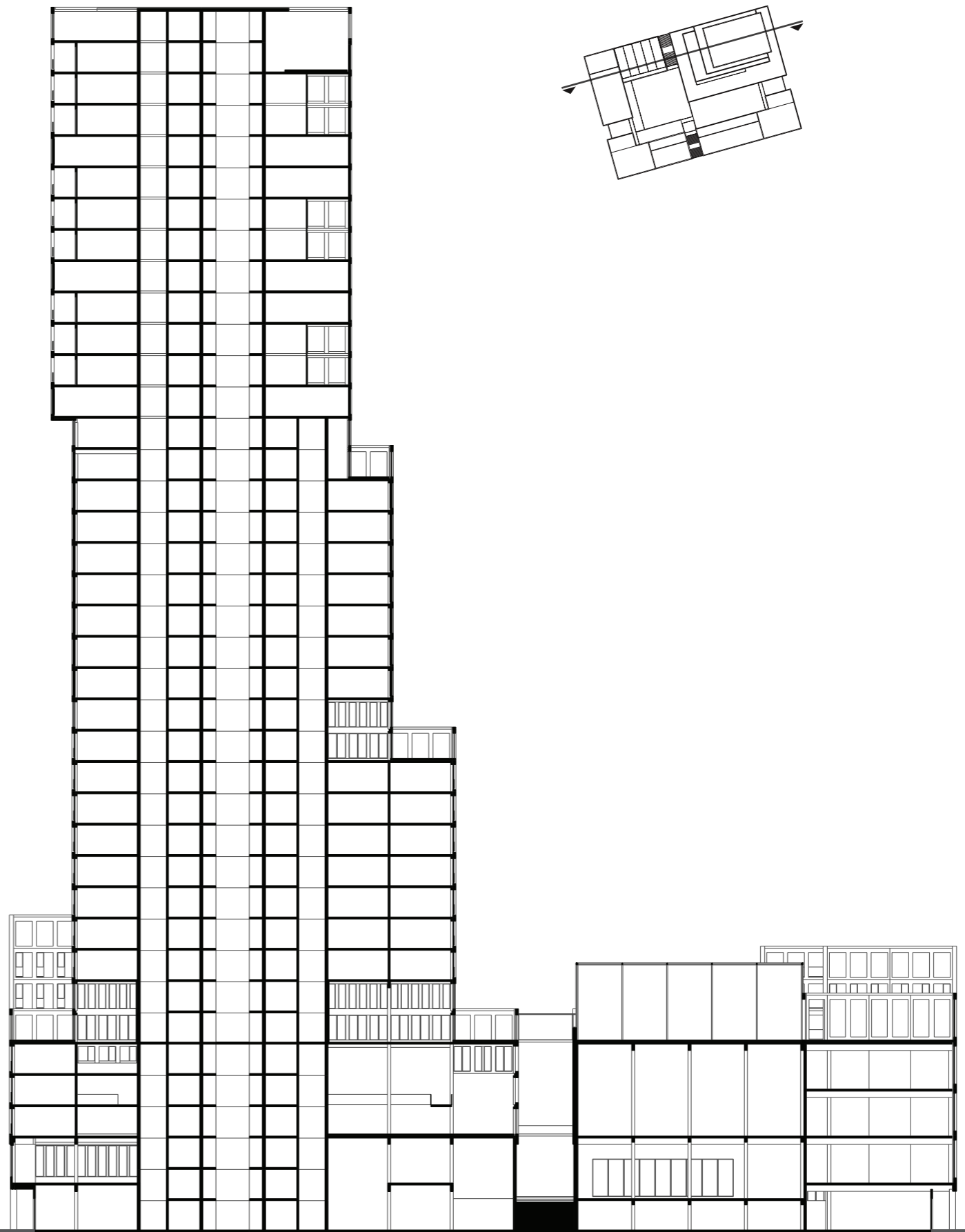
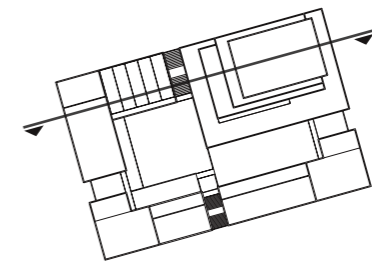
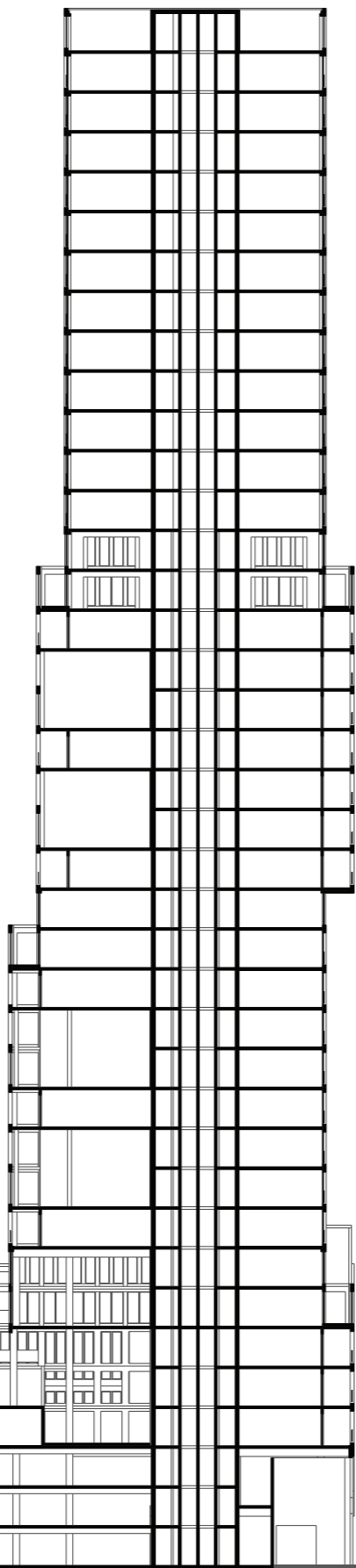
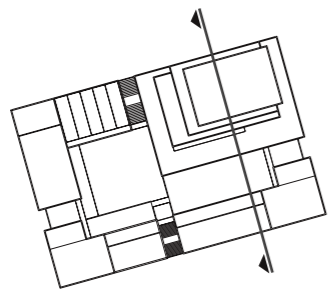


SOUTH WEST



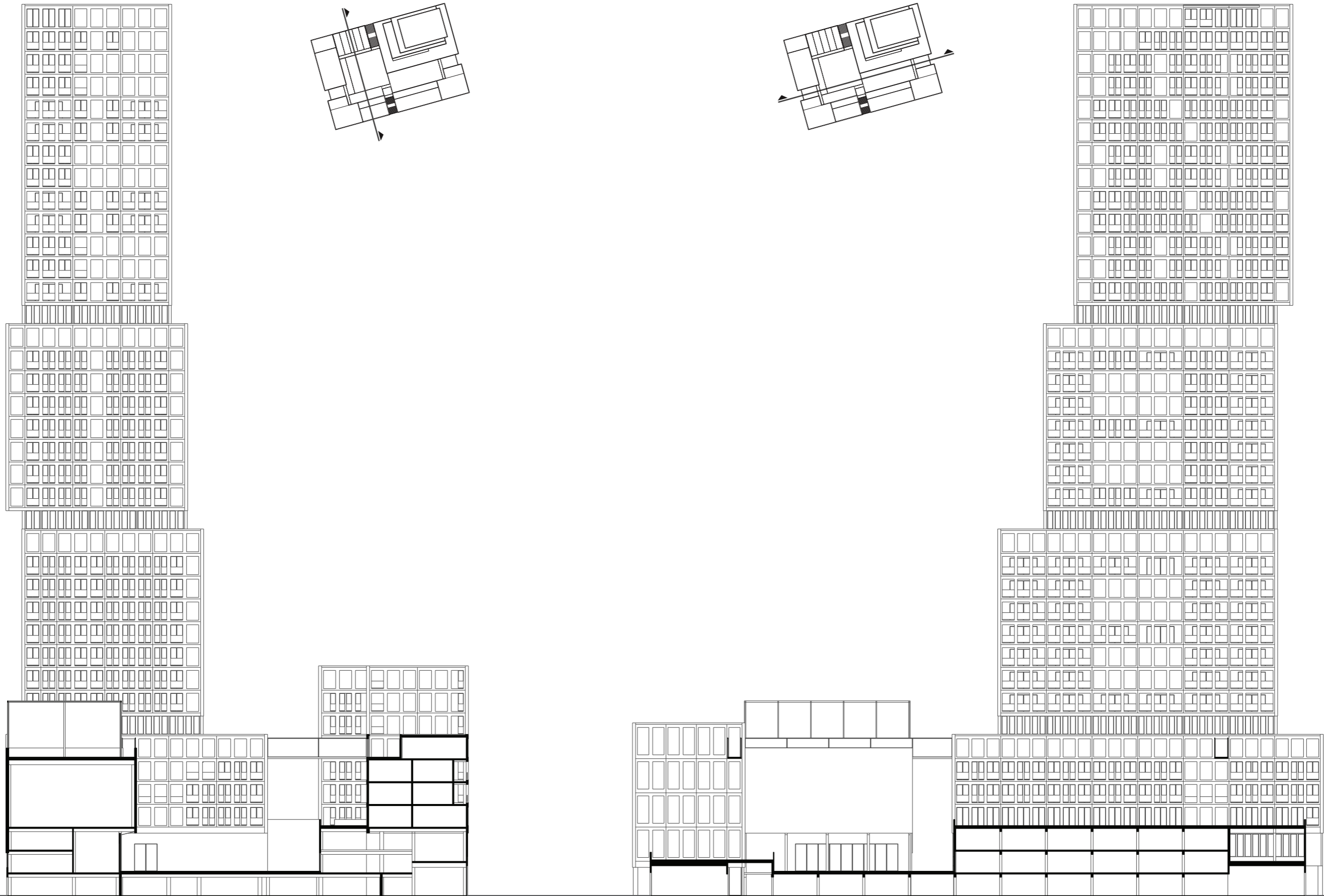
SOUTH EAST

**FACADE 1:500**

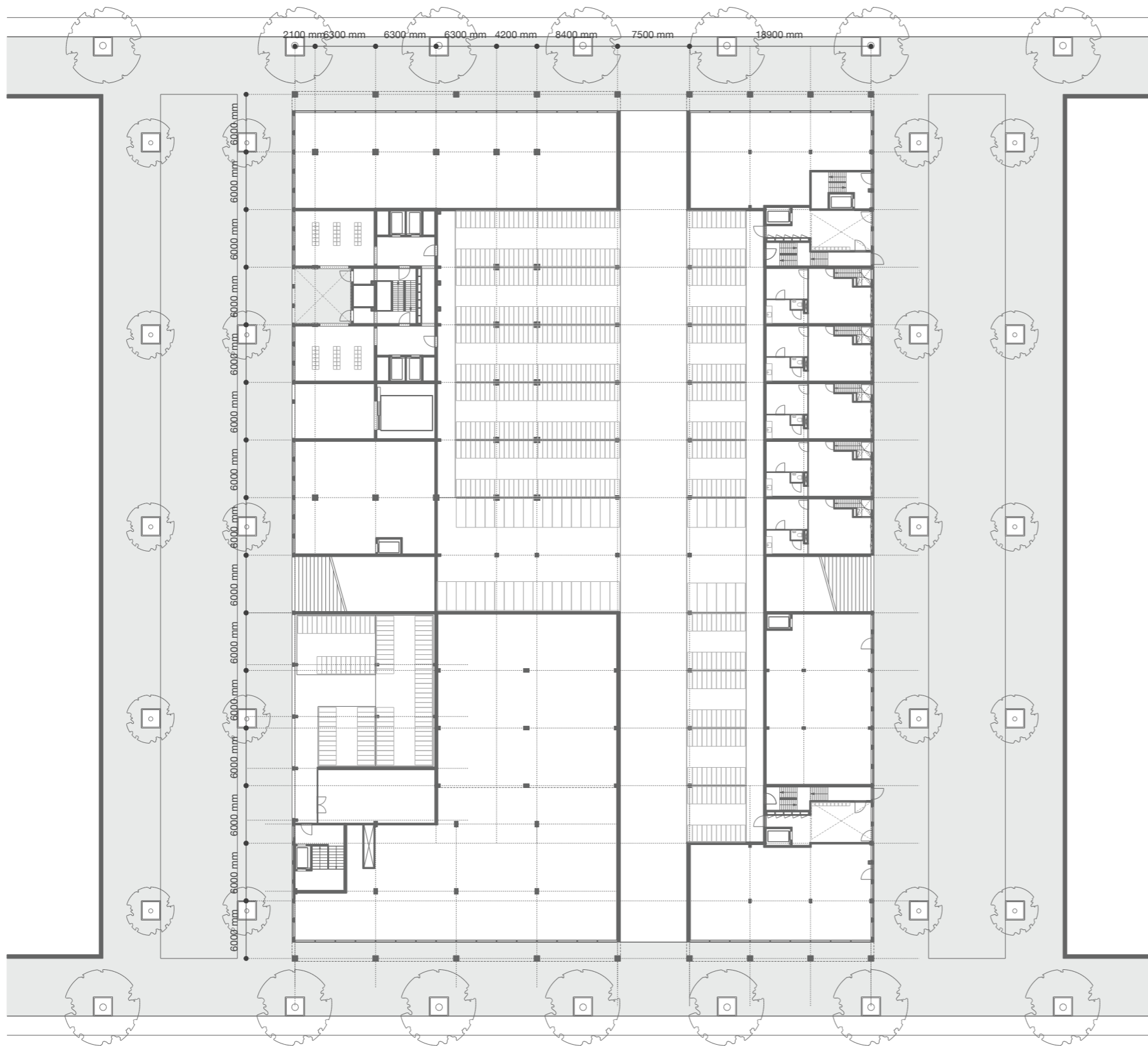


**SECTIONS 1:500**

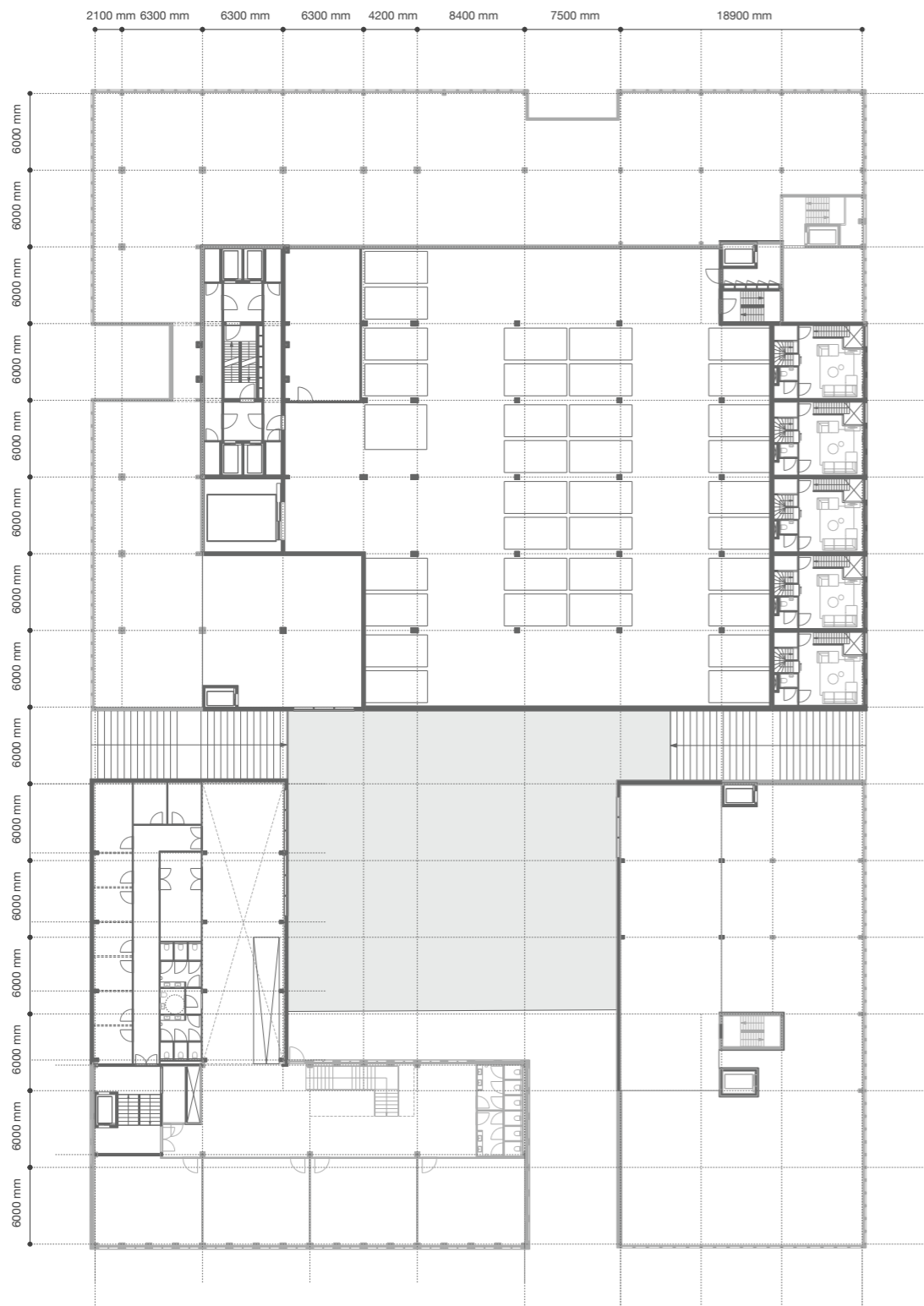




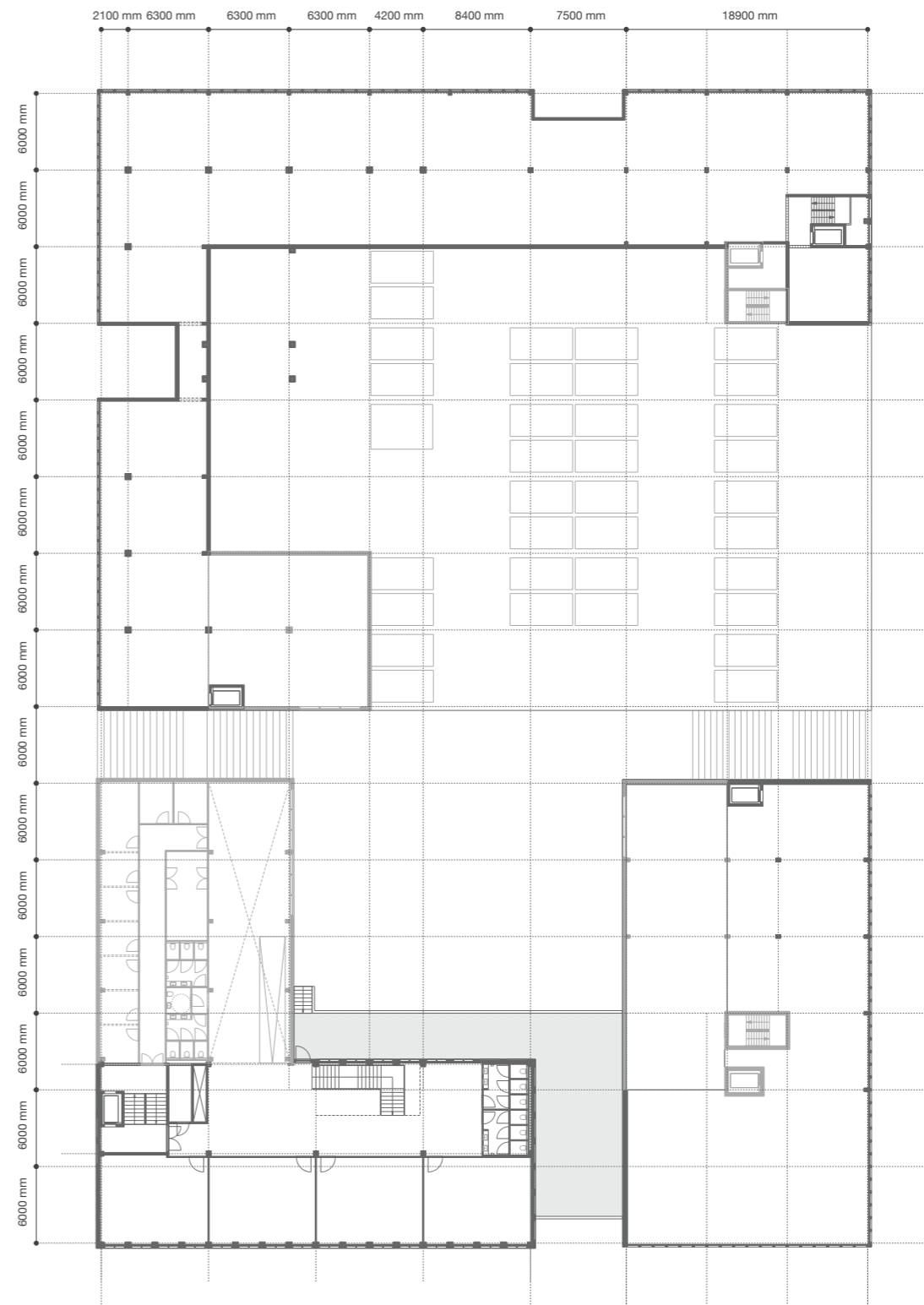
**SECTIONS** 1:500



**PLANS 1:500**



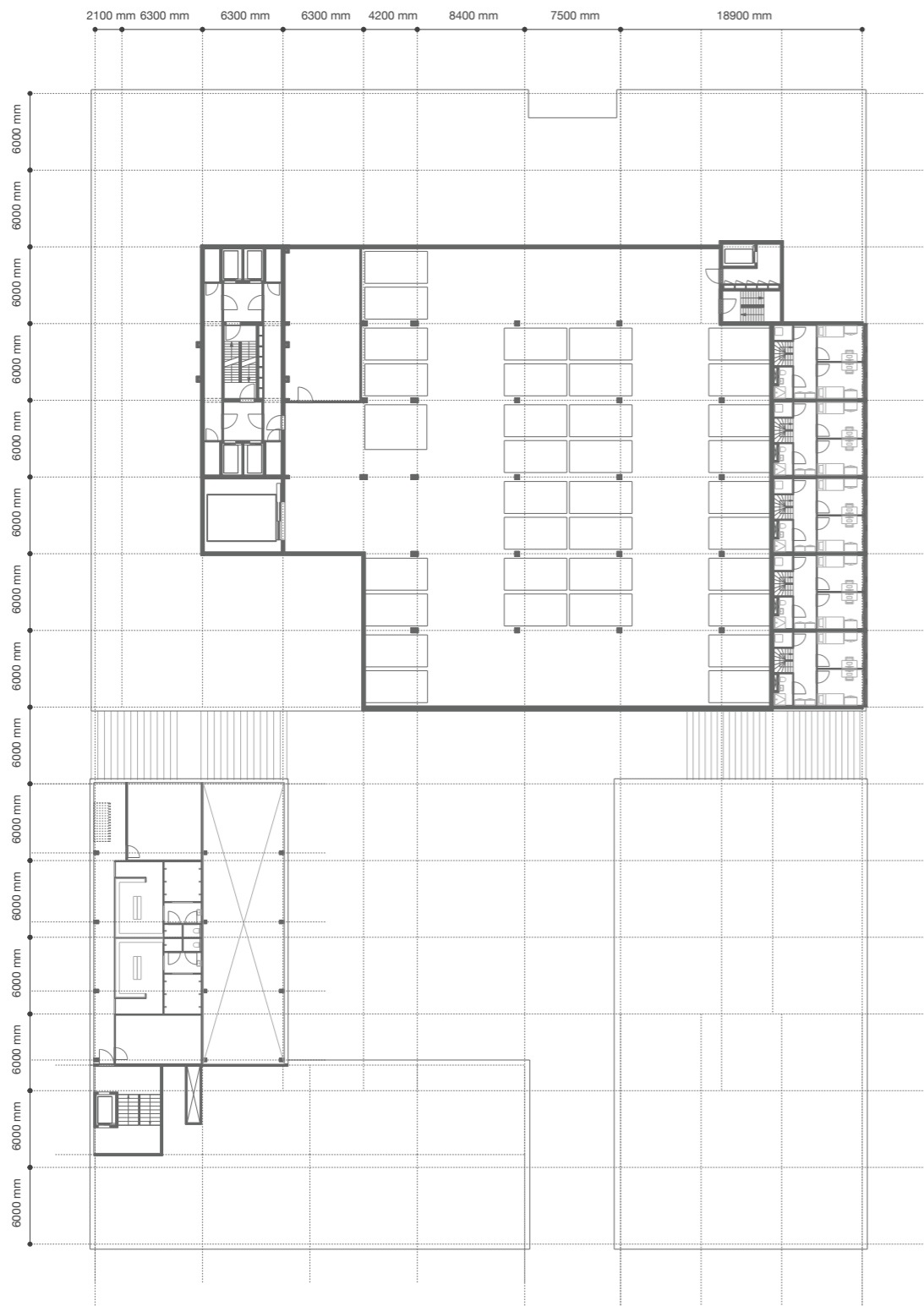
1 +3000



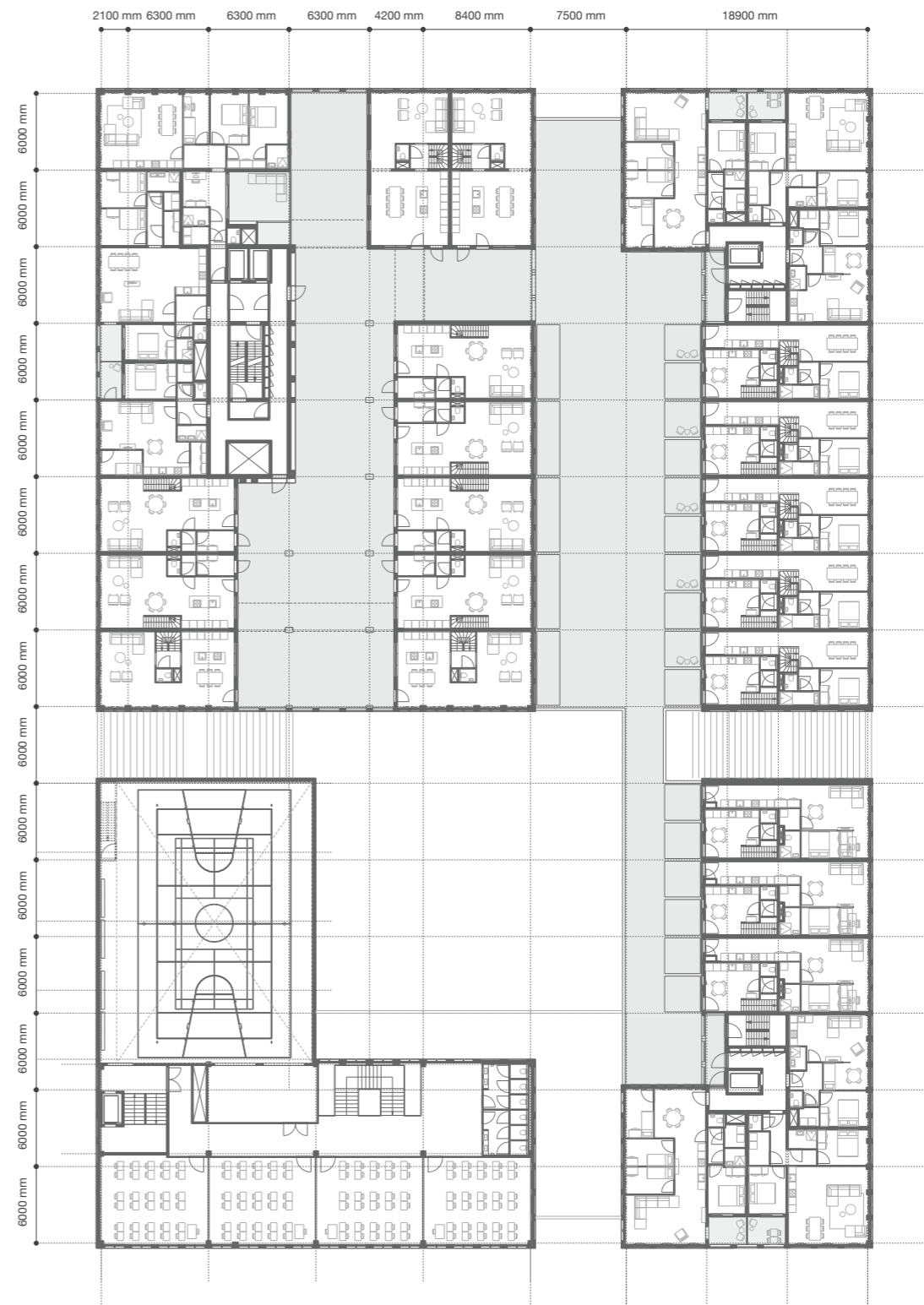
1,5 +4500





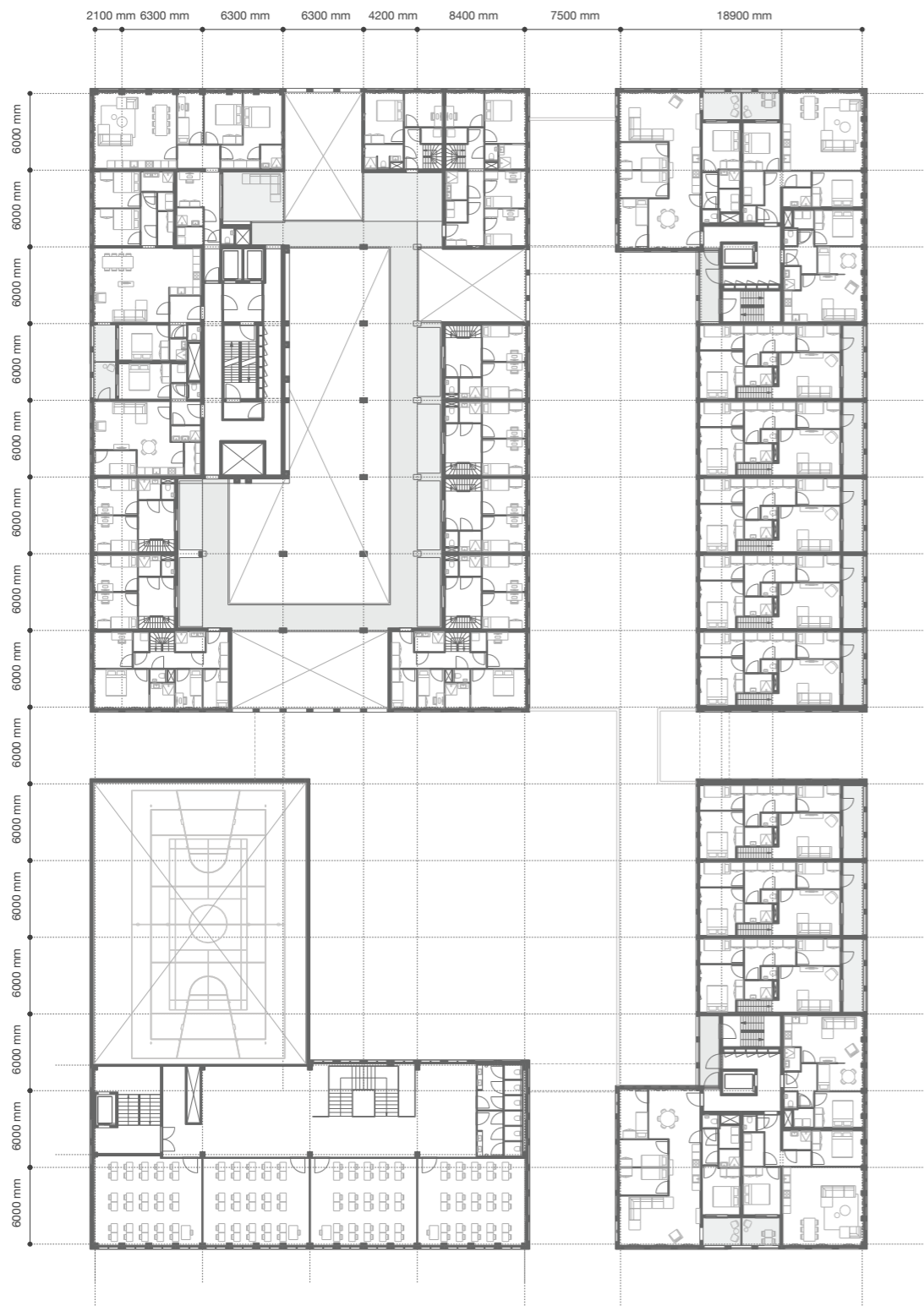


2 +6000

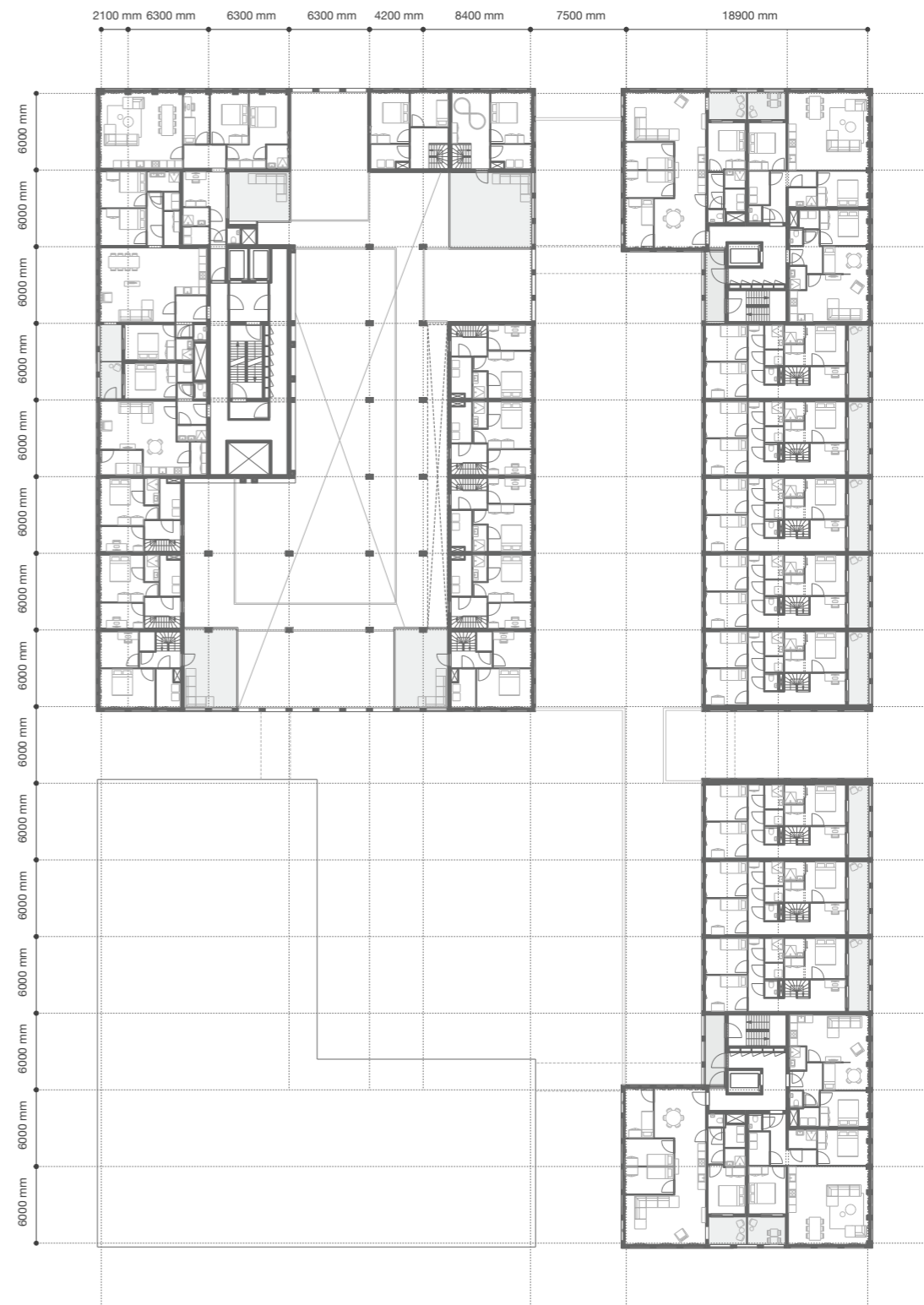


3 +9000



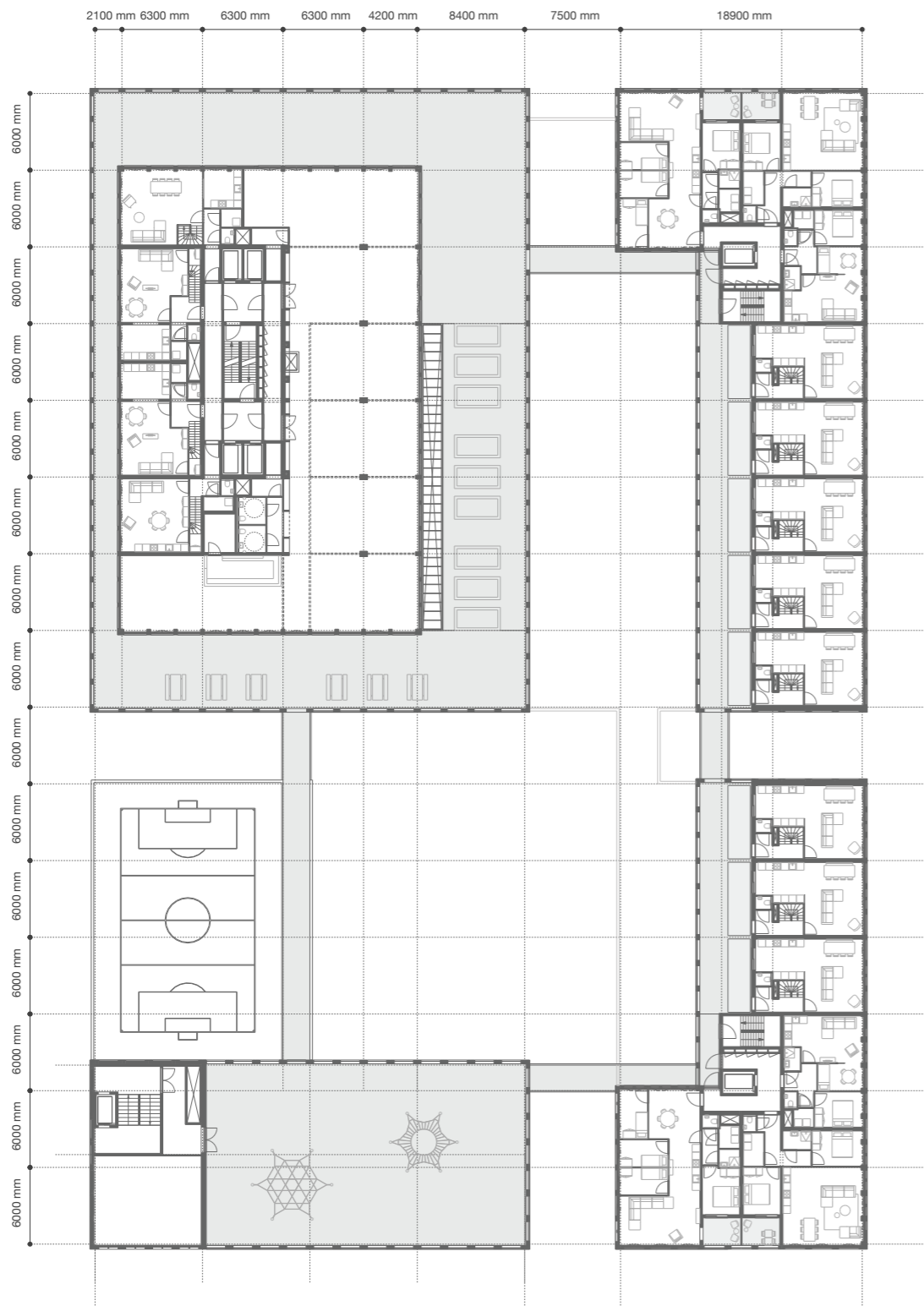


**4/4.5** +12000/13500 (SCHOOL 0.5M HIGHER)

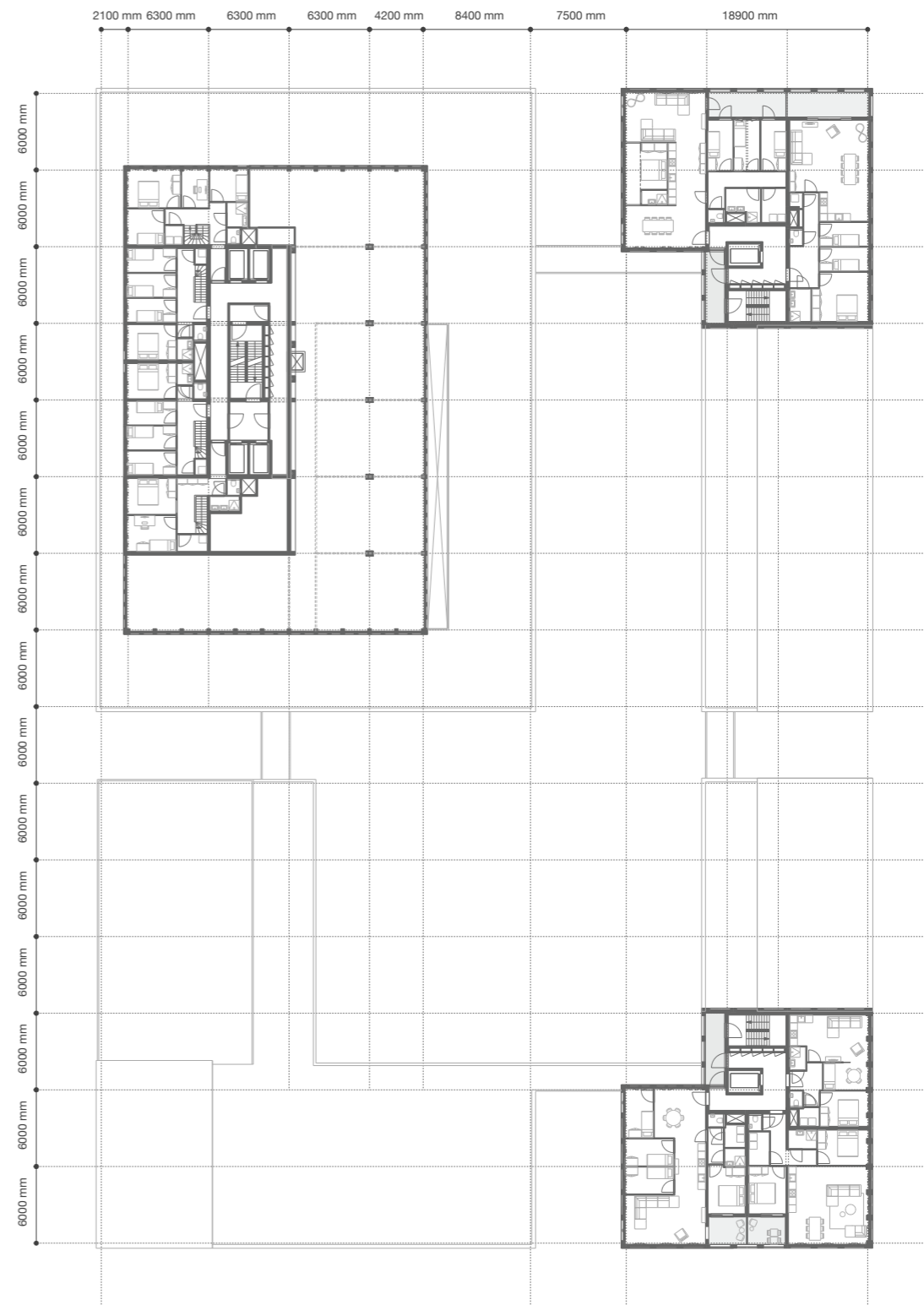


**5** +15000





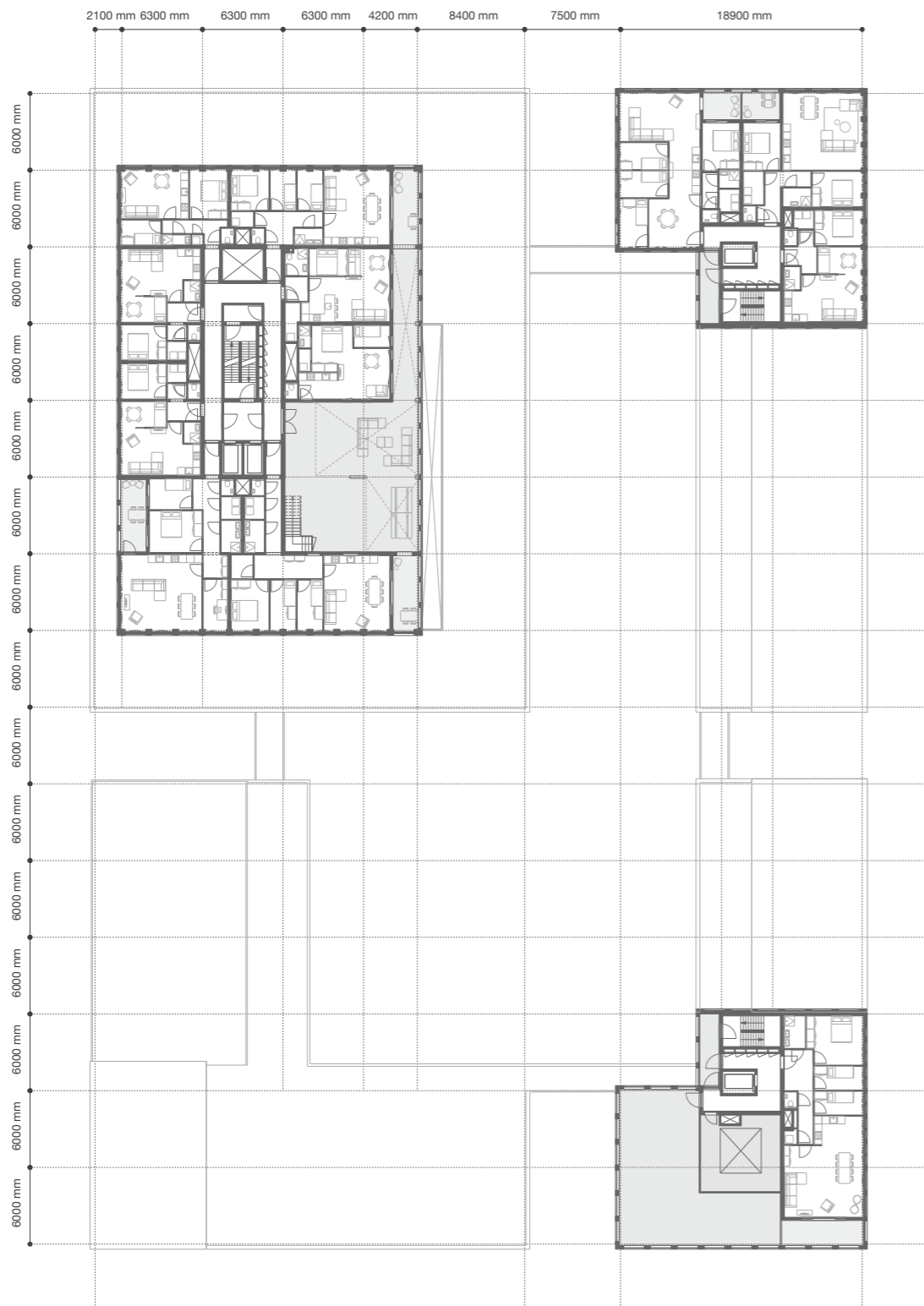
6 +18000




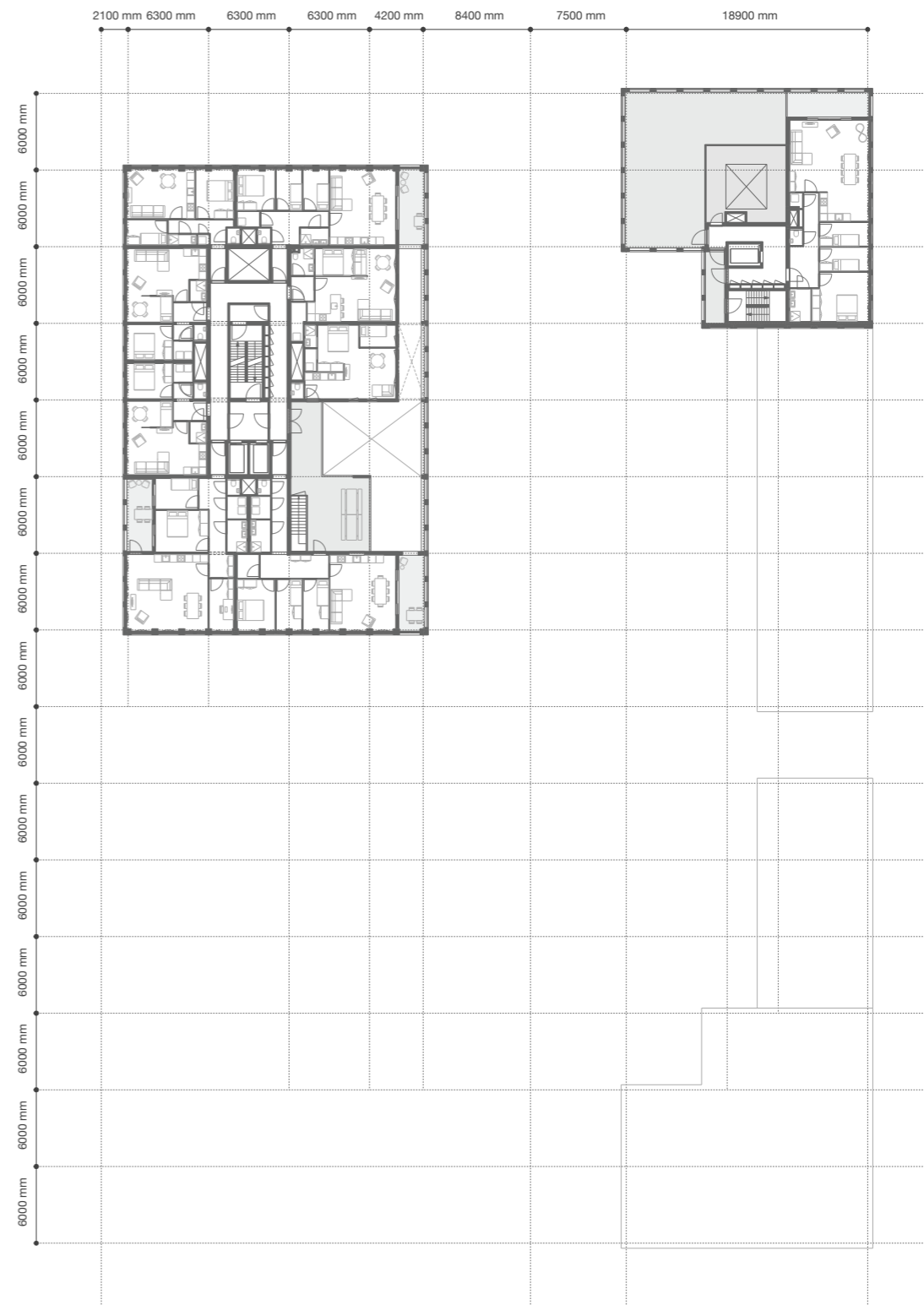
7 +21000






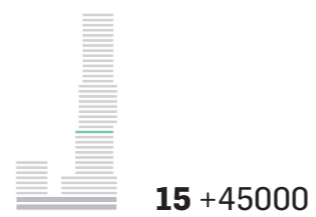
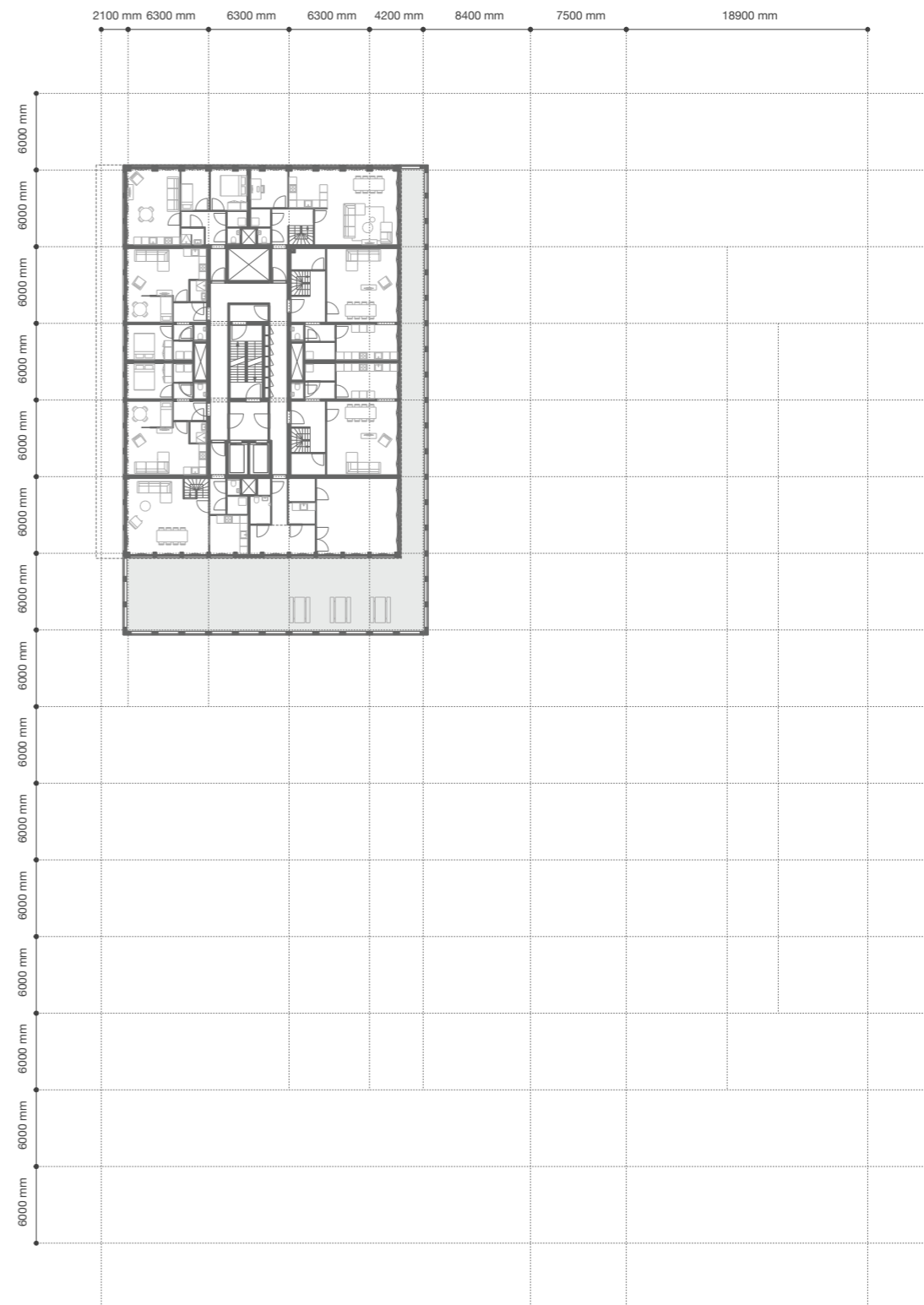
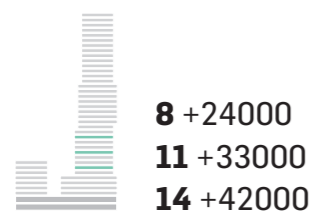
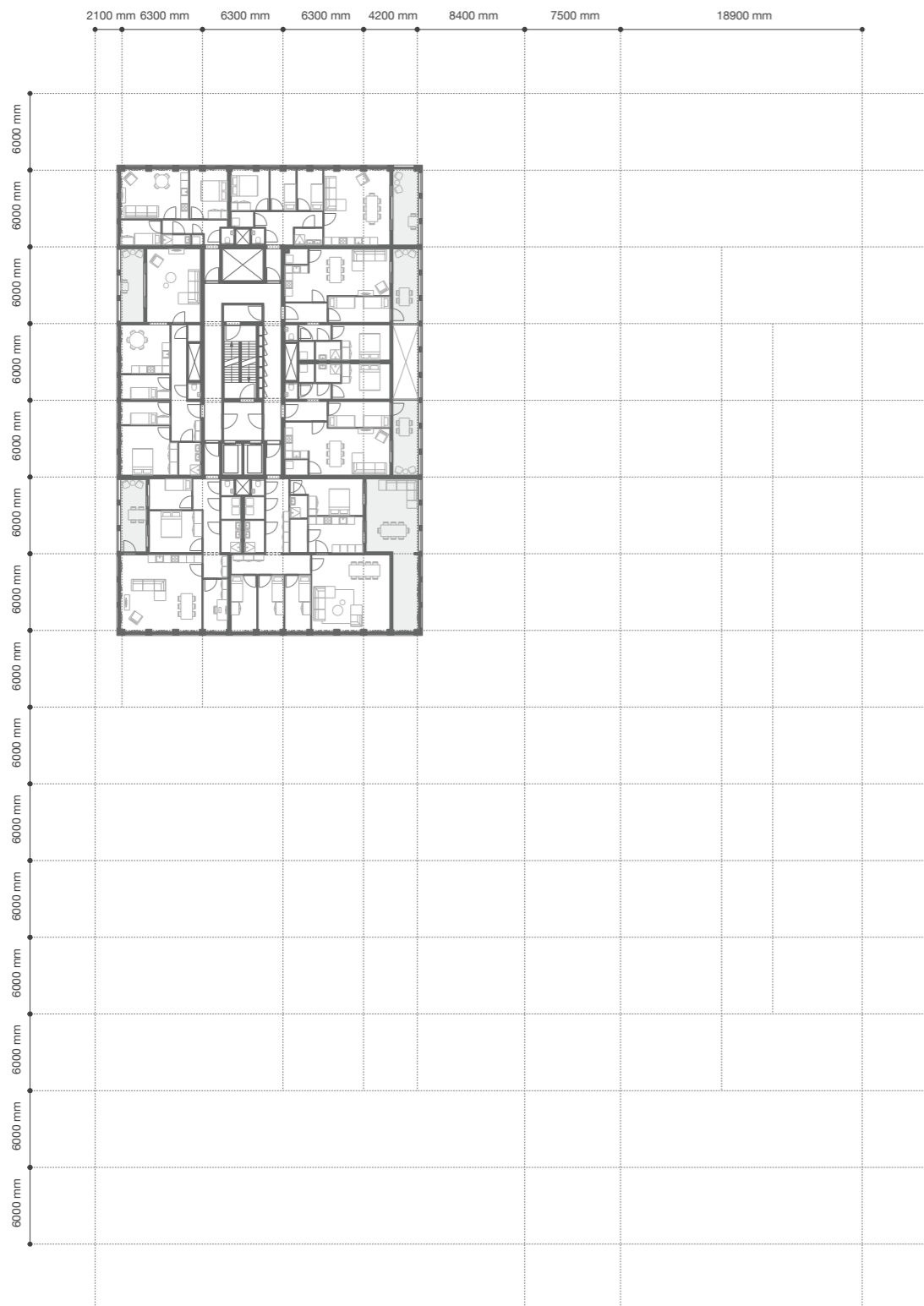



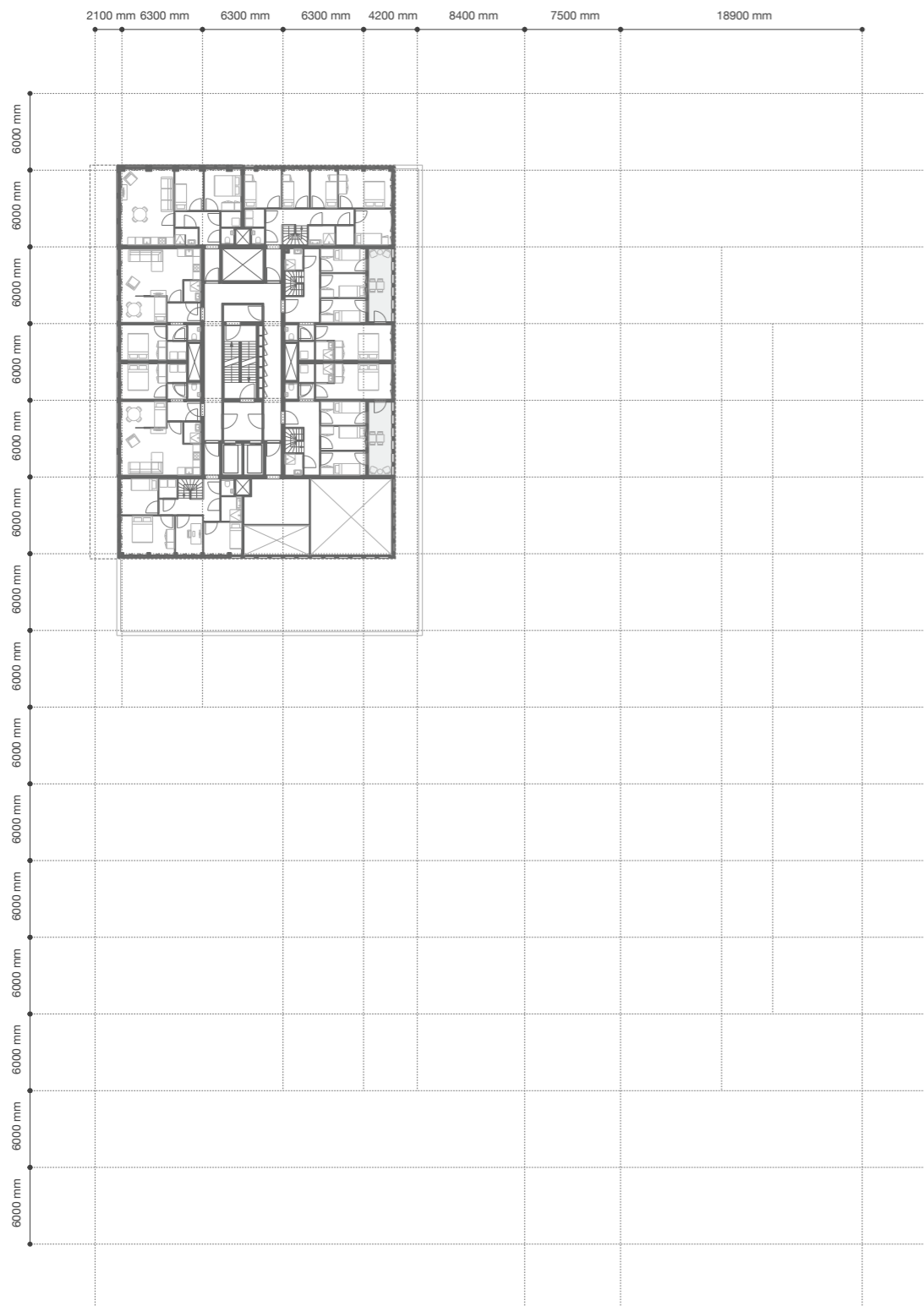
  
**9 +27000**  
**12 +36000**




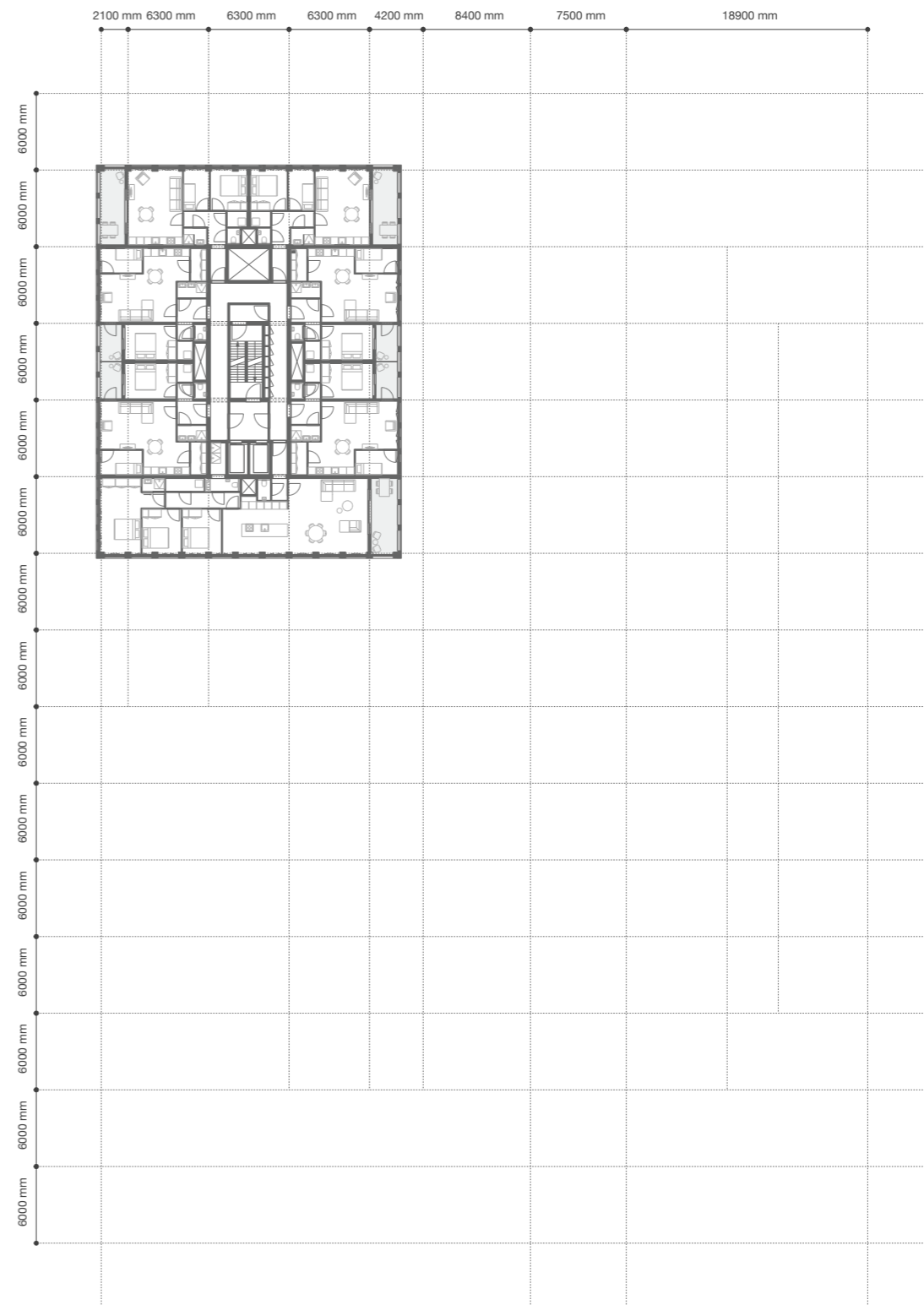
  
**10 +30000**  
**13 +39000**







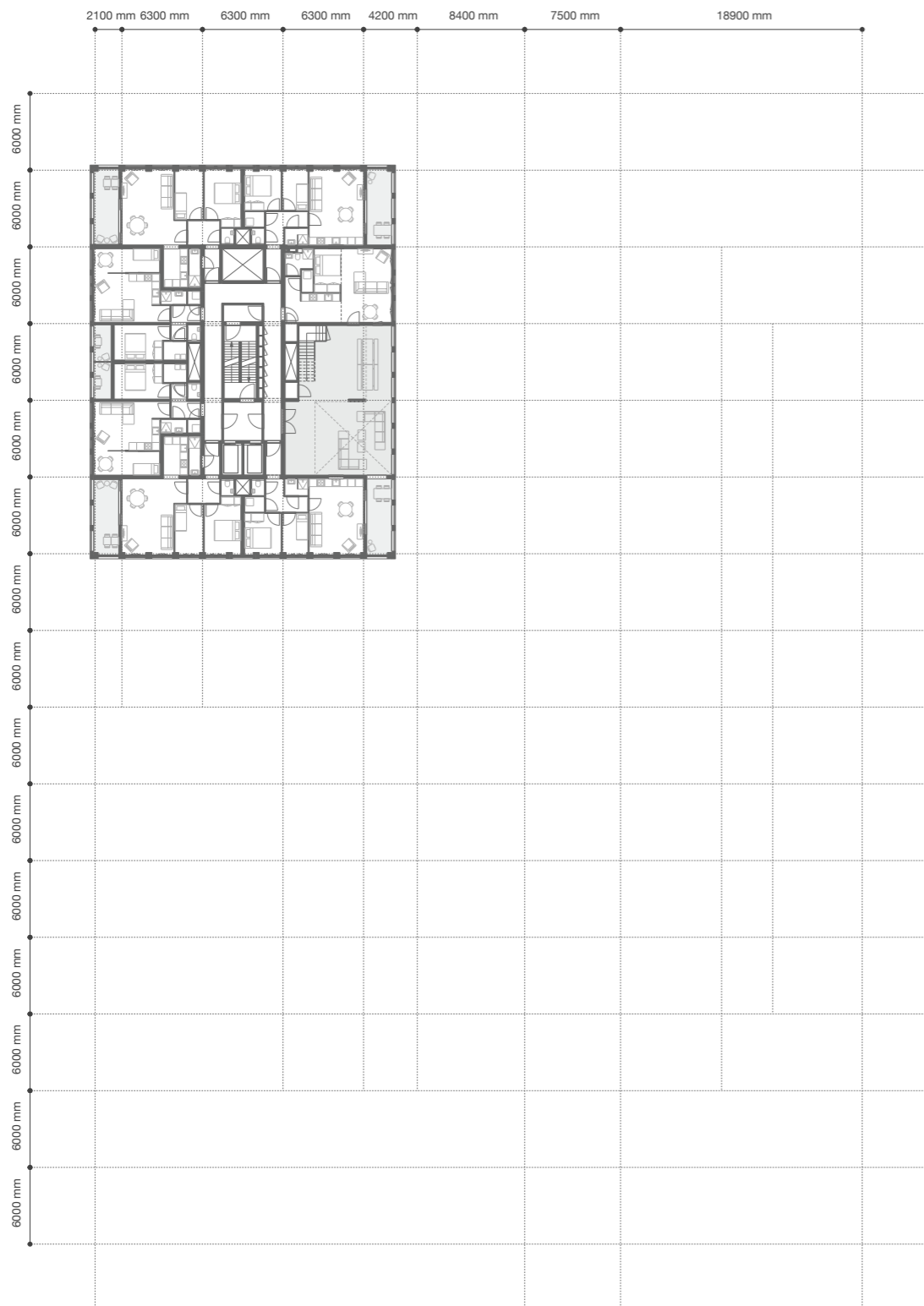
**16** +48000



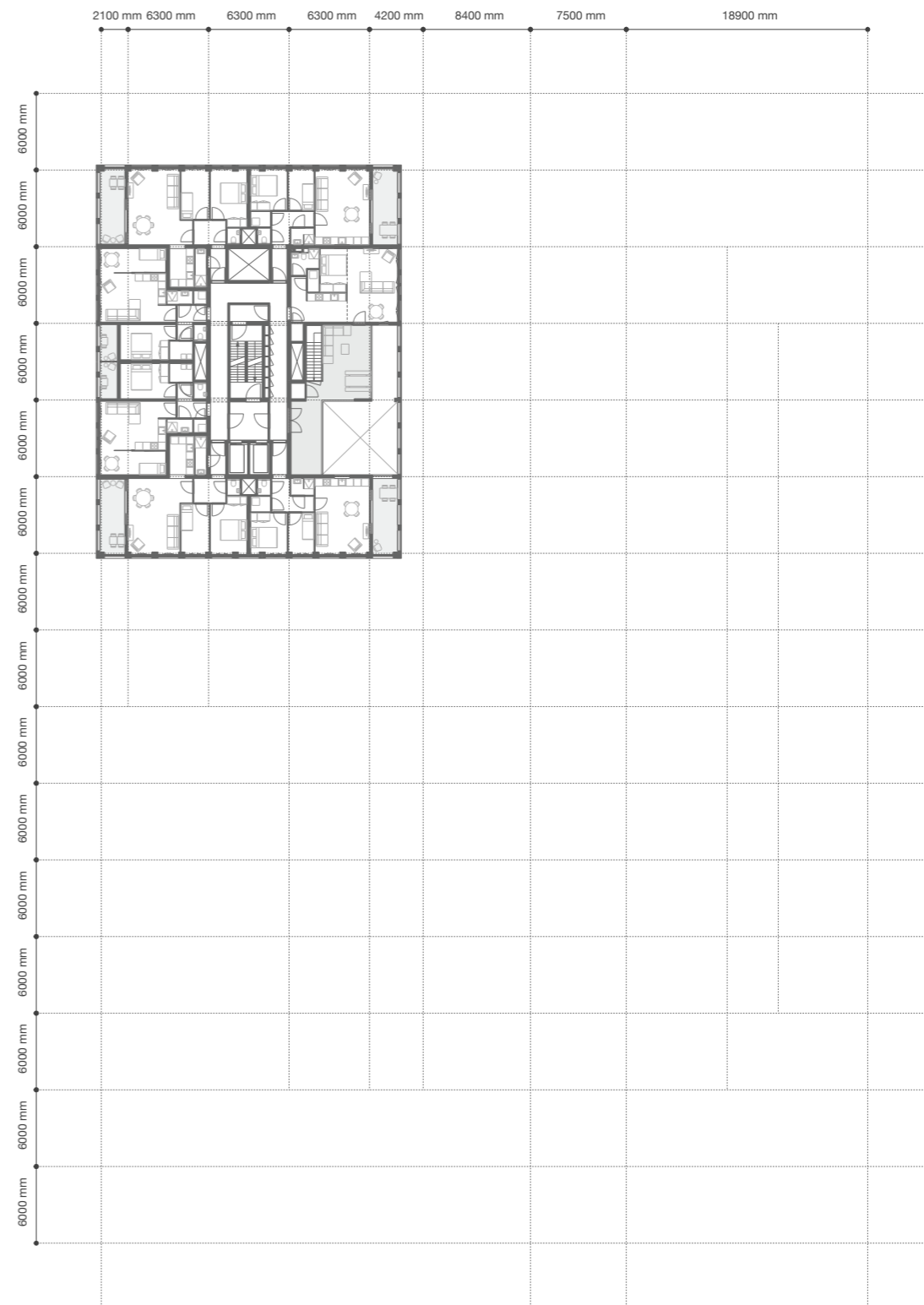
**17** +51000  
**20** +60000  
**23** +69000





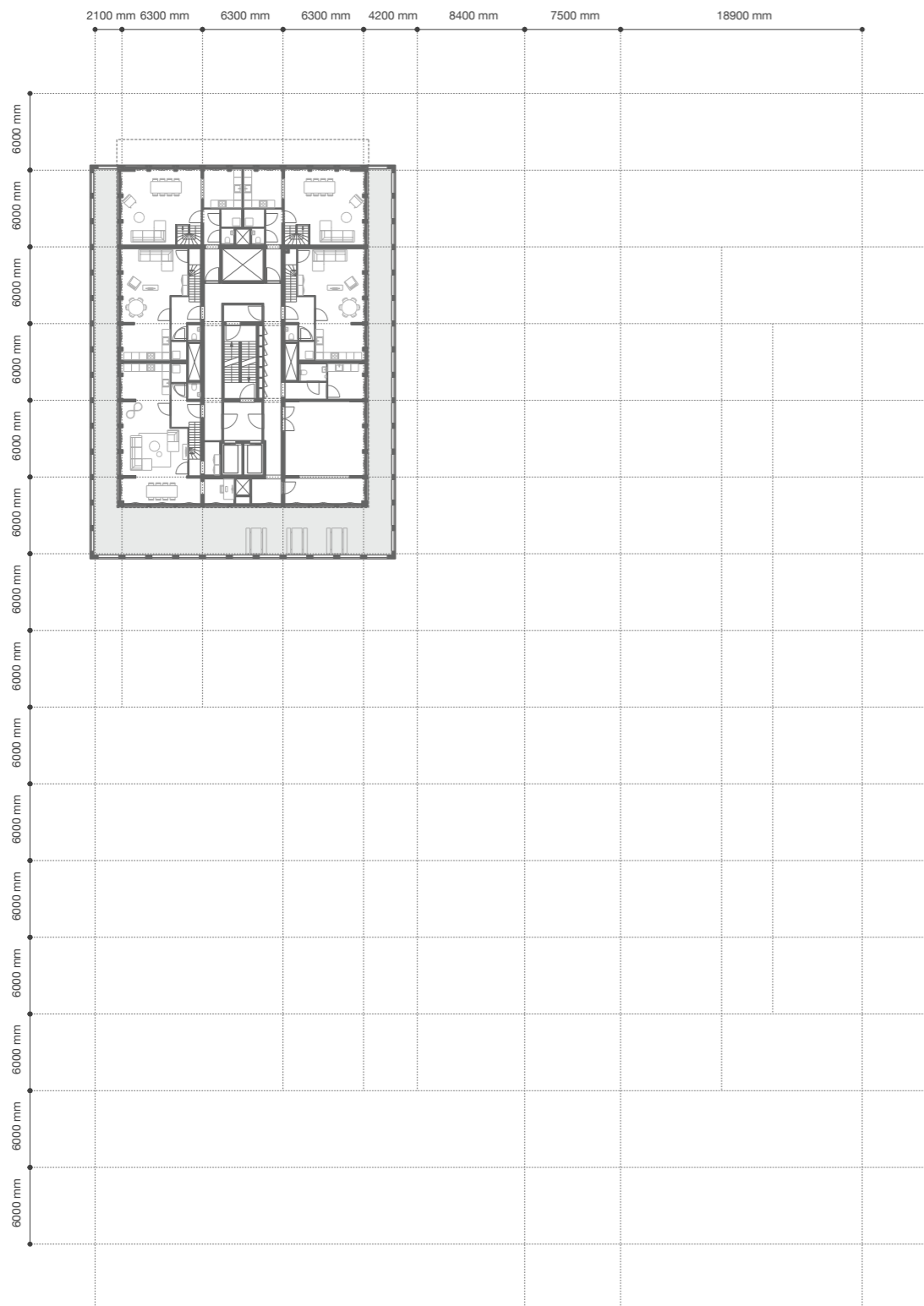


**18 +54000**  
**21 +63000**

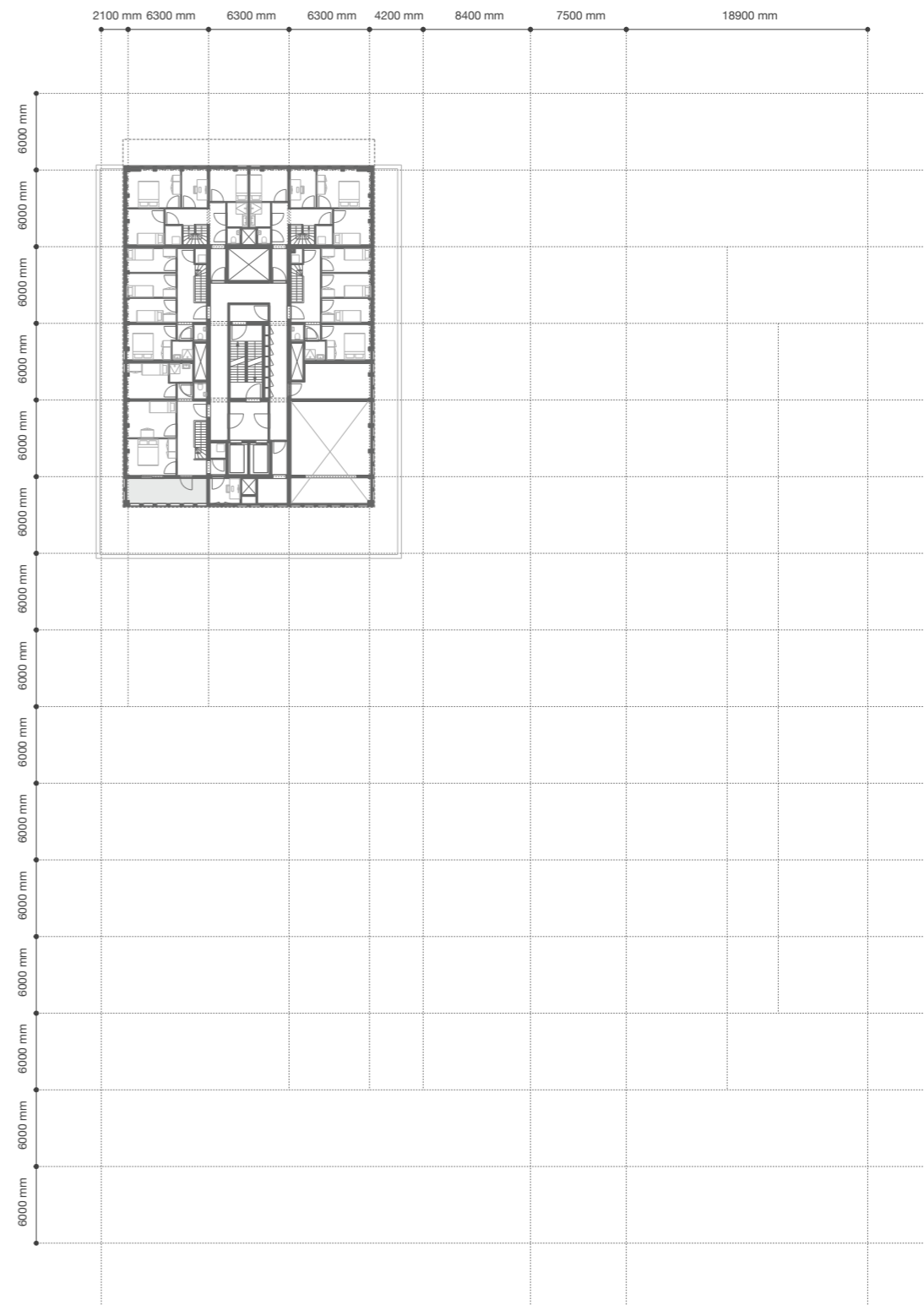


**19 +57000**  
**22 +66000**



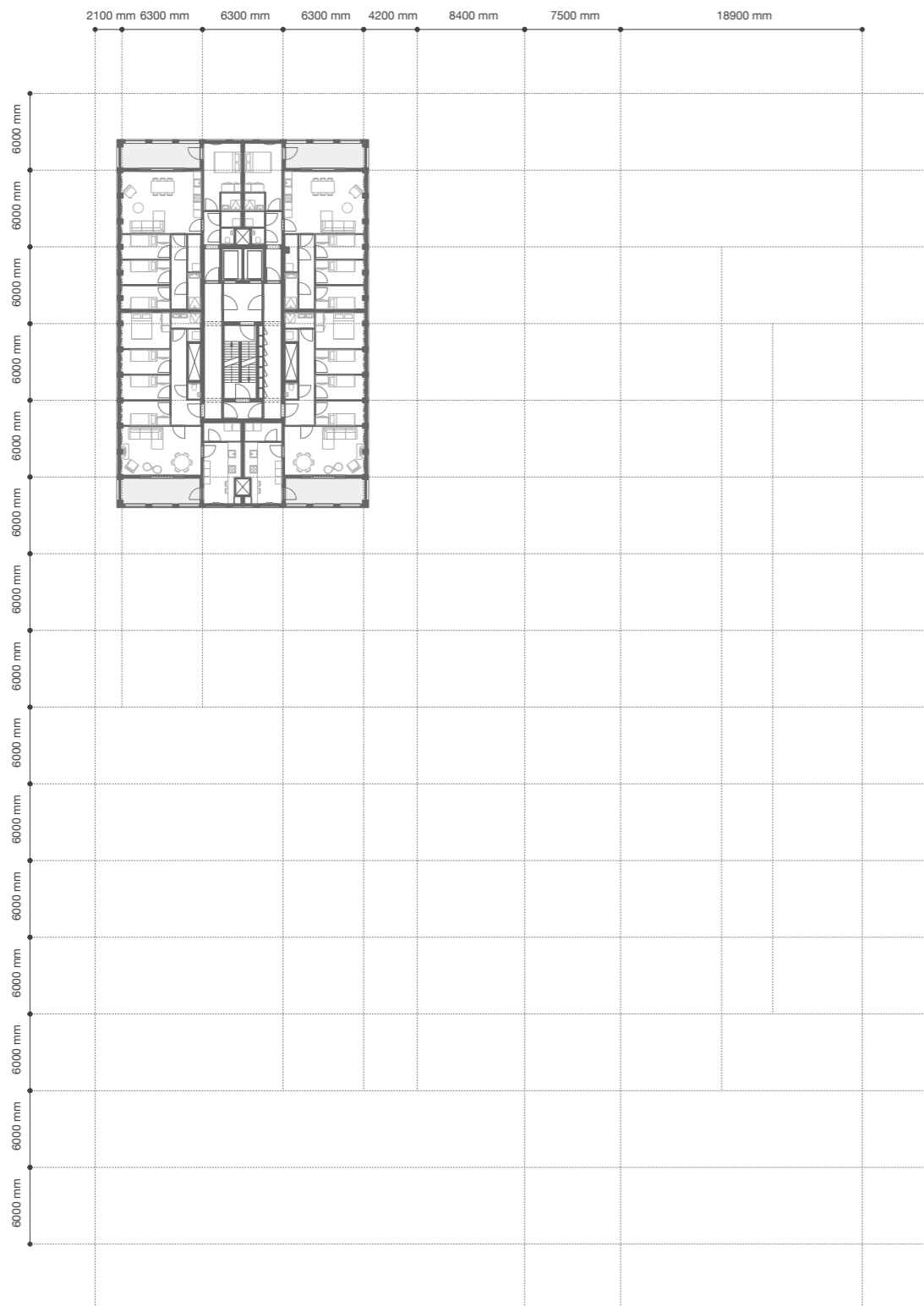



**24 +72000**

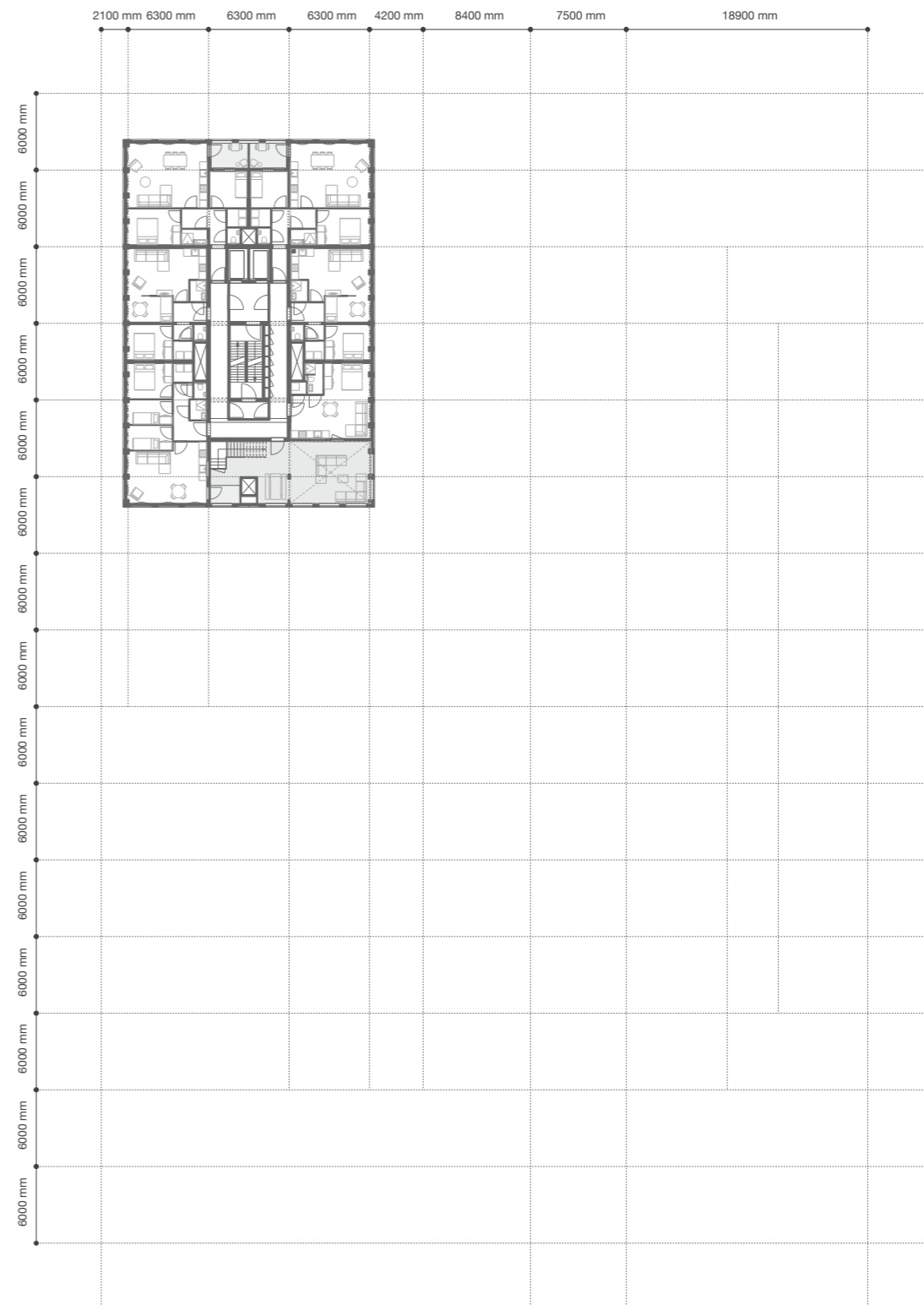



**25 +75000**





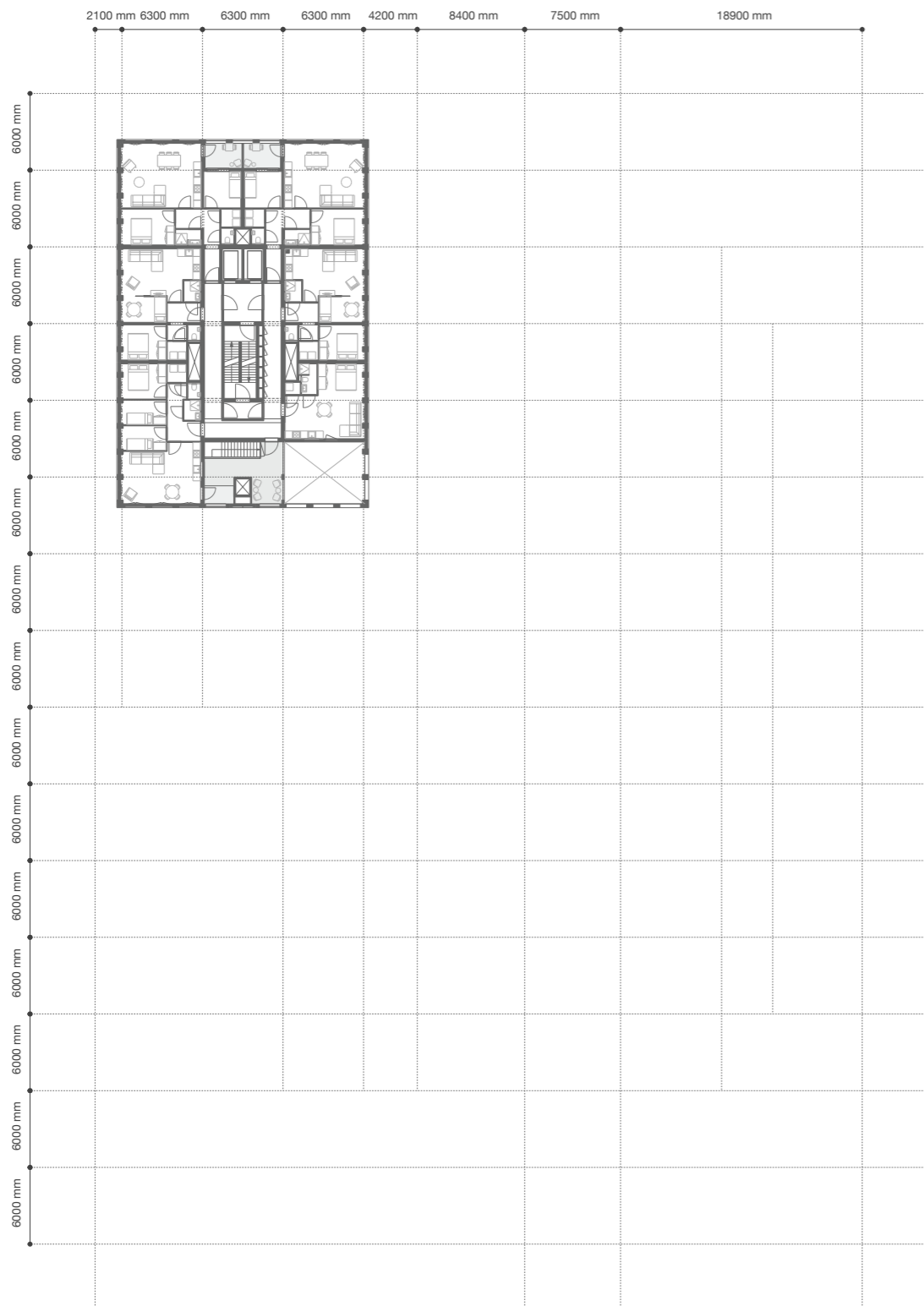
  
**26 +78000**  
**30 +90000**  
**34 +102000**




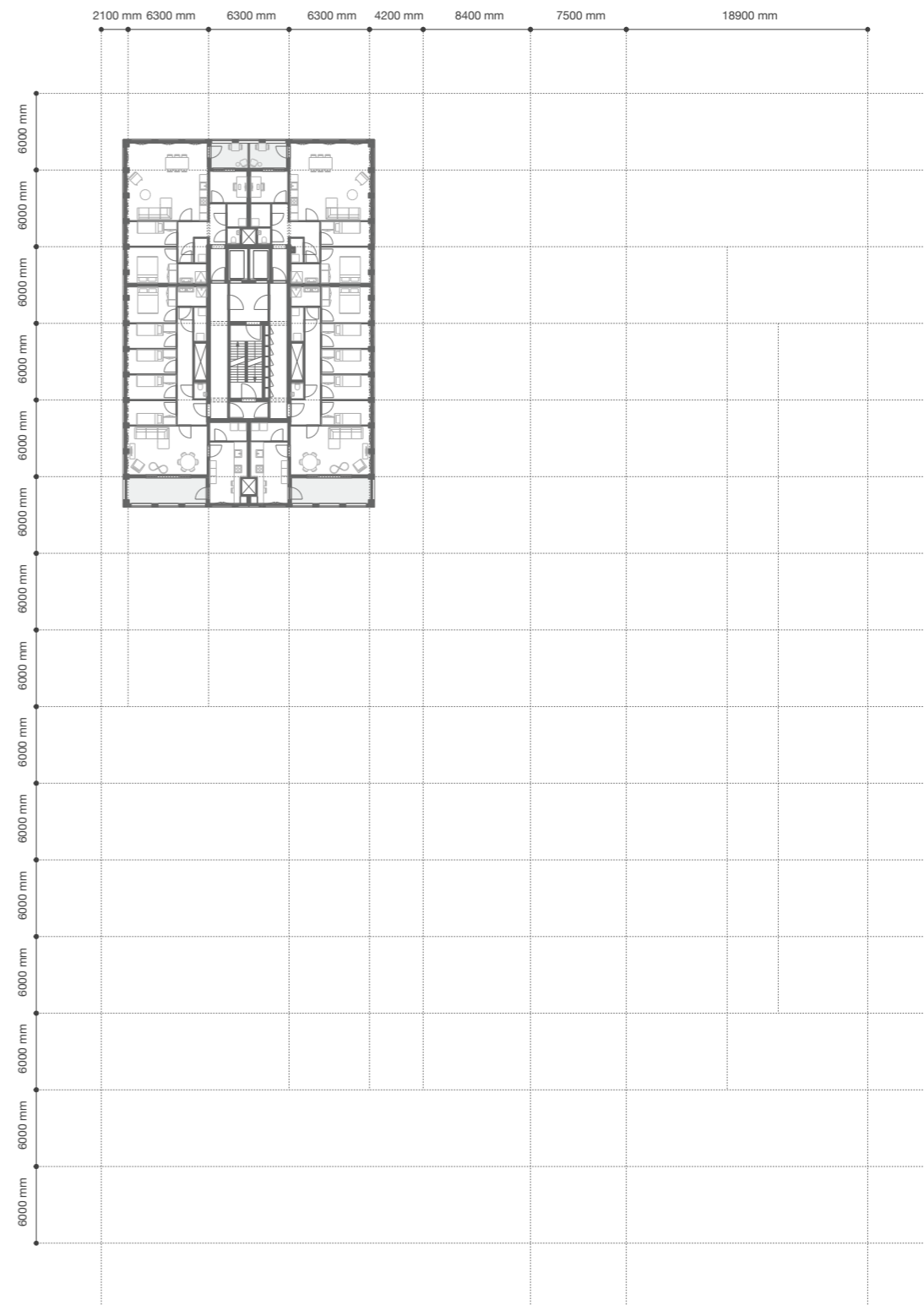
  
**27 +81000**  
**31 +93000**  
**35 +15000**






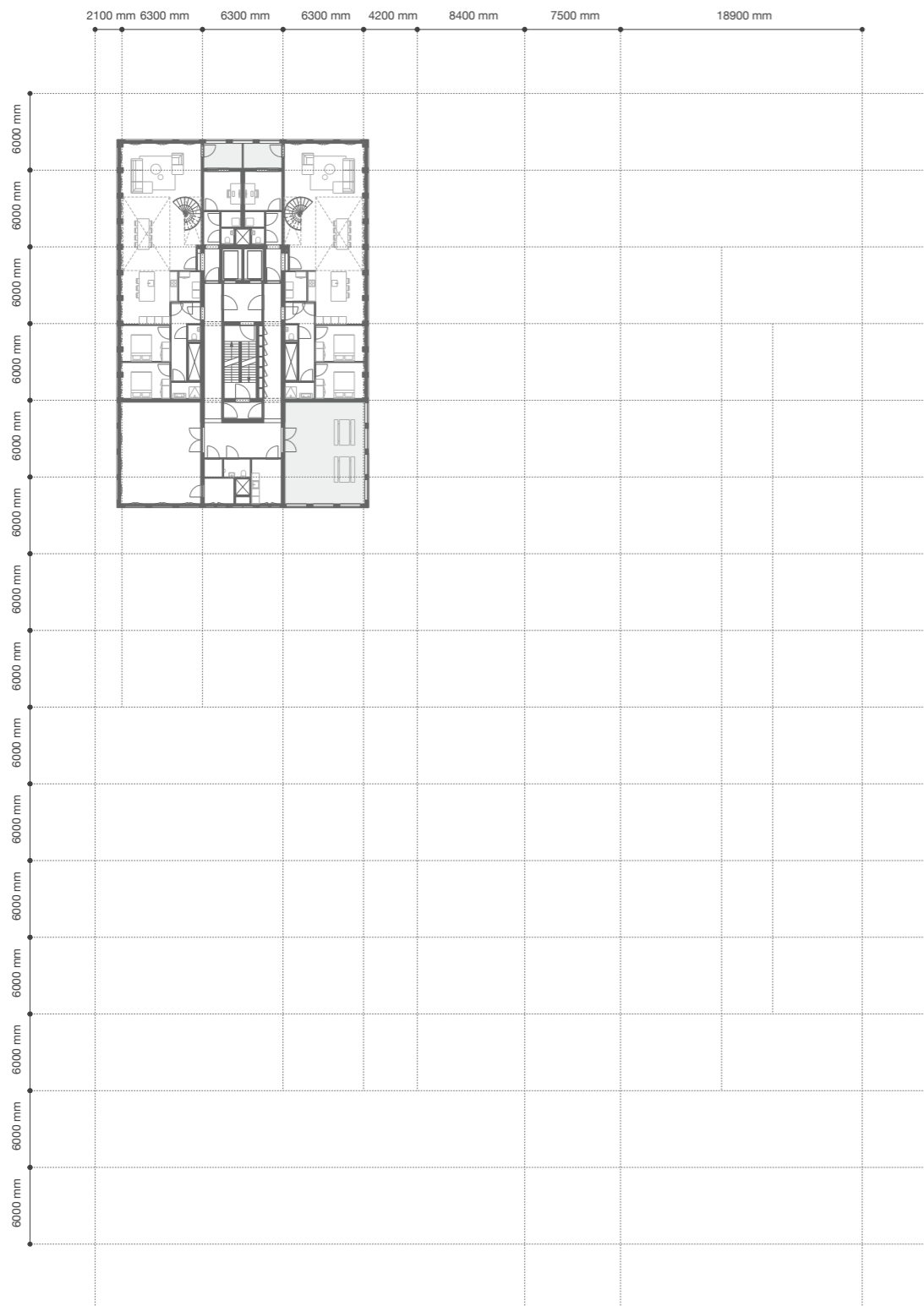



**28** +84000  
**32** +96000  
**36** +108000

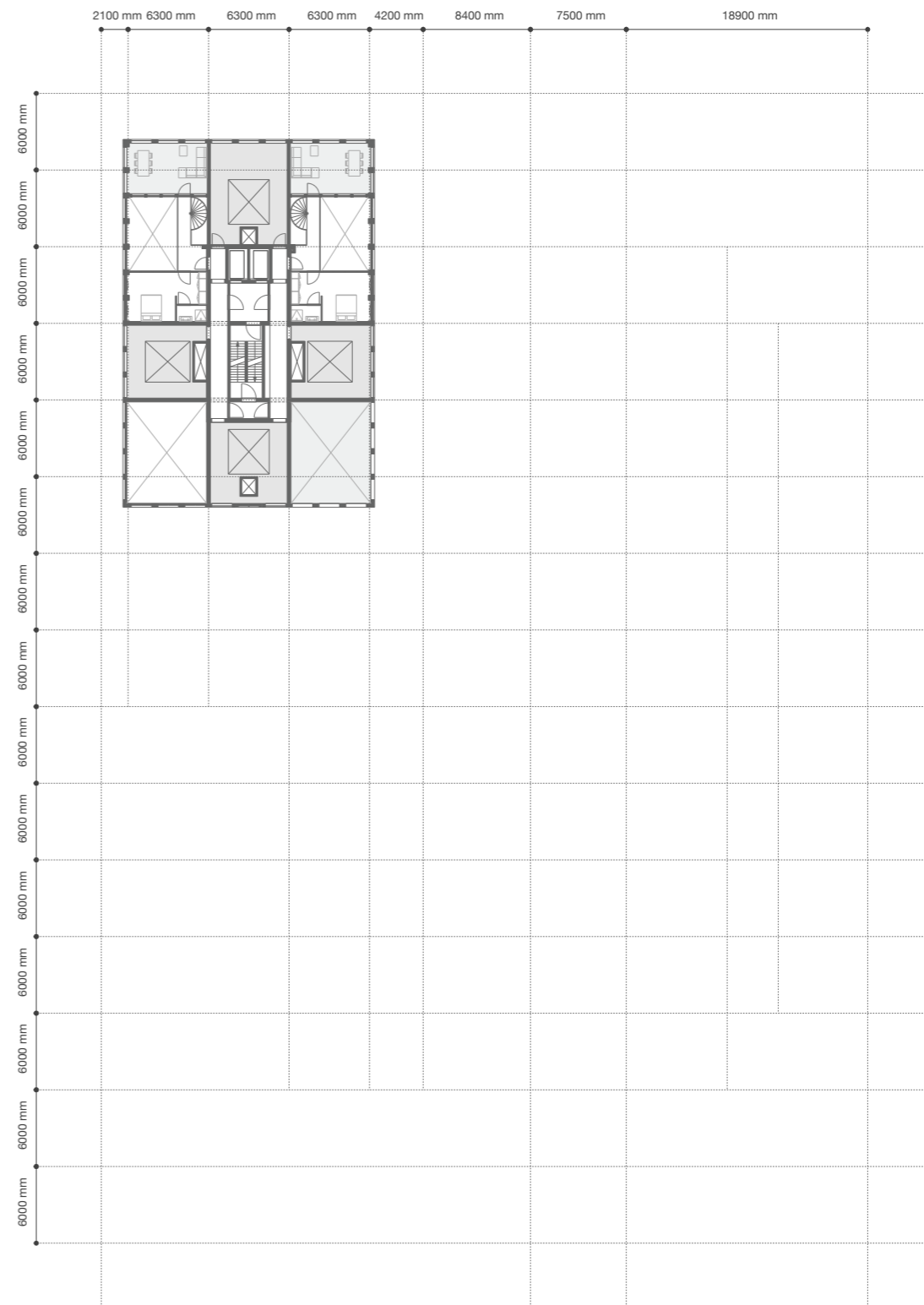



**29** +87000  
**33** +99000



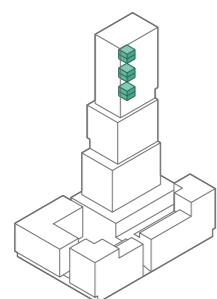
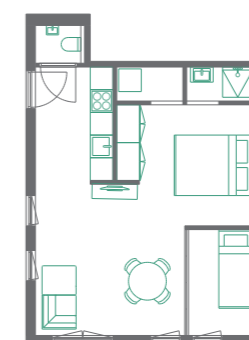


**37 +111000**

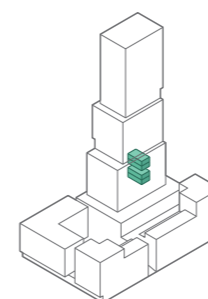


**38 +114000**



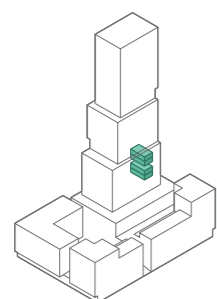
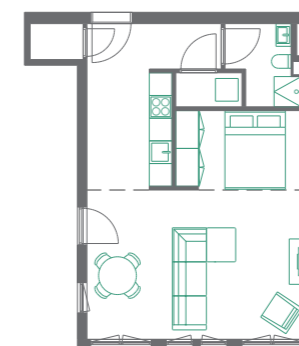
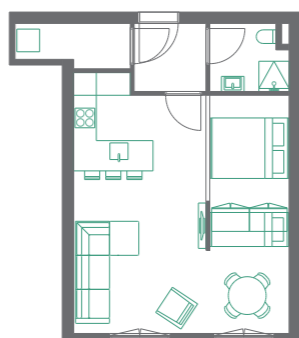


**STUDIO**  
**6 DWELLINGS**  
**34,8 M<sup>2</sup> INDOOR SPACE**  
**1 BEDROOM**

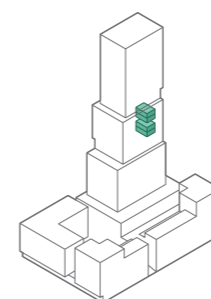


**STUDIO**  
**4 DWELLINGS**  
**42,2 M<sup>2</sup> INDOOR SPACE**  
**1-2 BEDROOMS**





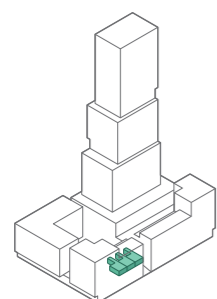
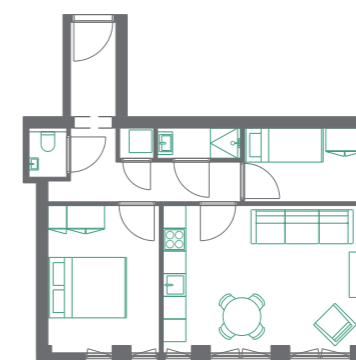
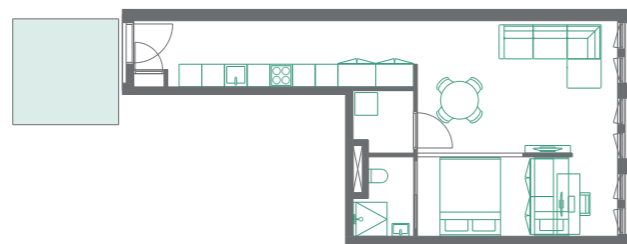
**STUDIO**  
**4 DWELLINGS**  
**48,0 M<sup>2</sup> INDOOR SPACE**  
**1-2 BEDROOMS**



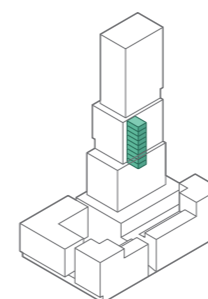
**STUDIO**  
**4 DWELLINGS**  
**49,0 M<sup>2</sup> INDOOR SPACE**  
**1 BEDROOM**





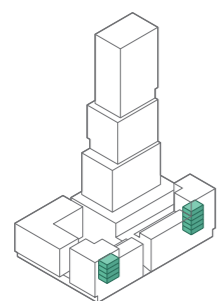
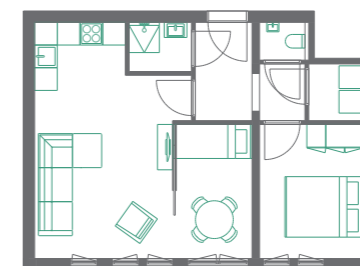
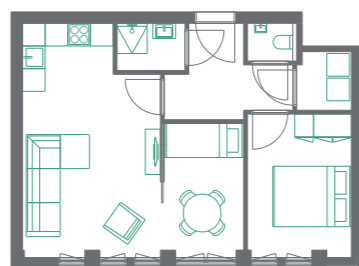


**STUDIO**  
**3 DWELLINGS**  
**49,4 M<sup>2</sup> INDOOR SPACE**  
**7,9 M<sup>2</sup> OUTDOOR SPACE**  
**1-2 BEDROOMS**

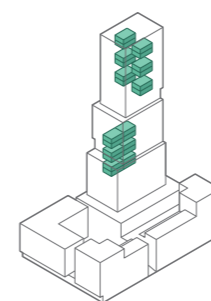


**APARTMENT**  
**4 DWELLINGS**  
**49,6 M<sup>2</sup> INDOOR SPACE**  
**1-2 BEDROOMS**



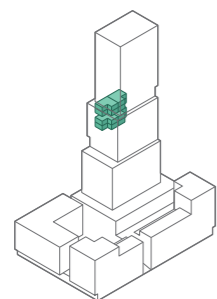
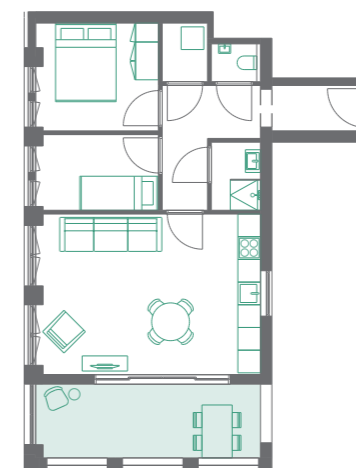


**APARTMENT**  
**9 DWELLINGS**  
**49,7 M<sup>2</sup> INDOOR SPACE**  
**1-2 BEDROOMS**

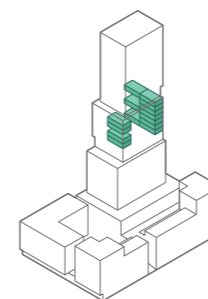


**APARTMENT**  
**24 DWELLINGS**  
**50,0 M<sup>2</sup> INDOOR SPACE**  
**1-2 BEDROOMS**



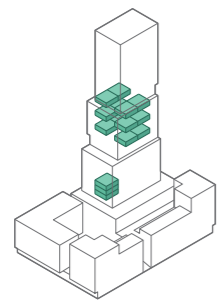
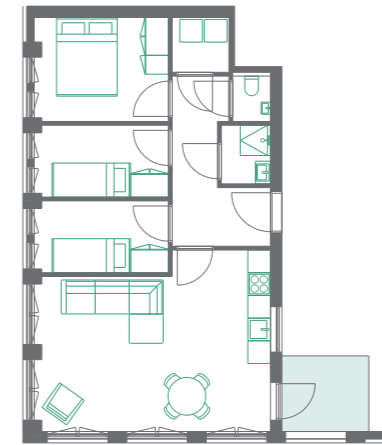
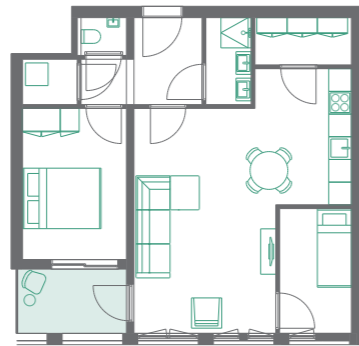


**APARTMENT**  
**8 DWELLINGS**  
**54,7 M<sup>2</sup> INDOOR SPACE**  
**4,0 M<sup>2</sup> OUTDOOR SPACE**  
**1-2 BEDROOMS**

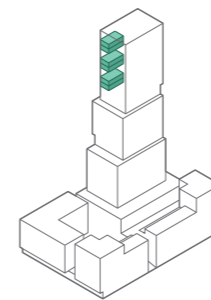


**APARTMENT**  
**14 DWELLINGS**  
**57,9 M<sup>2</sup> INDOOR SPACE**  
**11,5 M<sup>2</sup> OUTDOOR SPACE**  
**1-2 BEDROOMS**





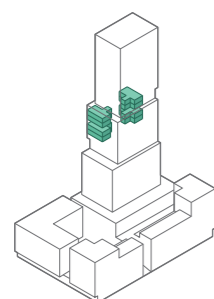
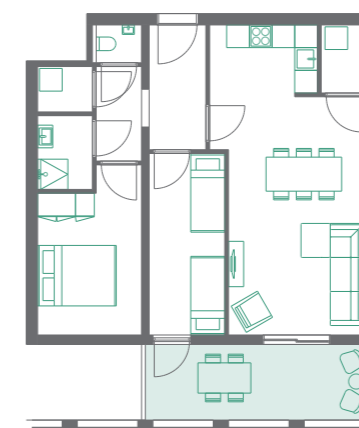
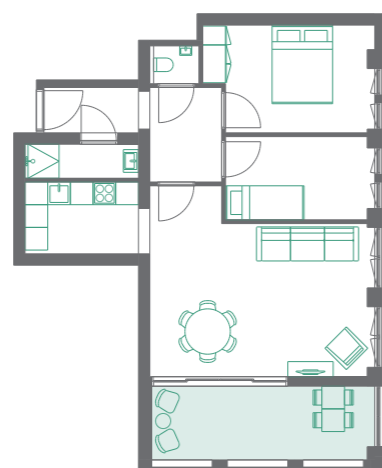
**APARTMENT**  
**15 DWELLINGS**  
**64,3 M<sup>2</sup> INDOOR SPACE**  
**4,9 M<sup>2</sup> OUTDOOR SPACE**  
**1-2 BEDROOMS**



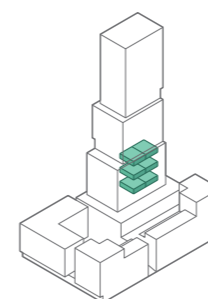
**APARTMENT**  
**6 DWELLINGS**  
**66,8 M<sup>2</sup> INDOOR SPACE**  
**4,0 M<sup>2</sup> OUTDOOR SPACE**  
**1-3 BEDROOMS**





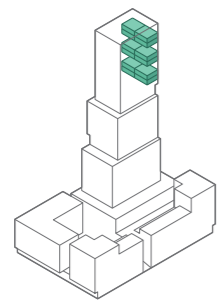
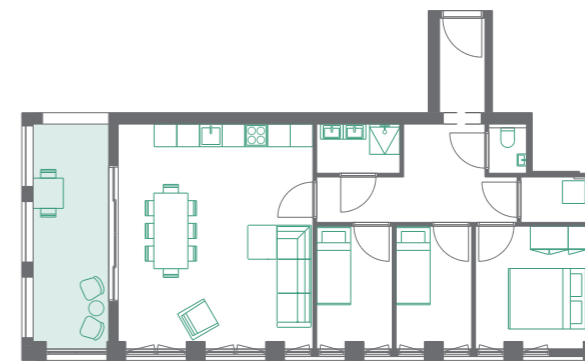
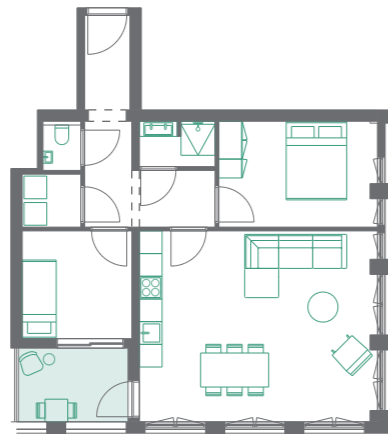


**APARTMENT**  
**8 DWELLINGS**  
**66,9 M<sup>2</sup> INDOOR SPACE**  
**11,4 M<sup>2</sup> OUTDOOR SPACE**  
**1-2 BEDROOMS**

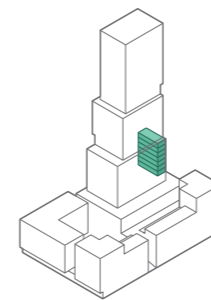


**APARTMENT**  
**6 DWELLINGS**  
**68,3 M<sup>2</sup> INDOOR SPACE**  
**11,7 M<sup>2</sup> OUTDOOR SPACE**  
**1-2 BEDROOMS**



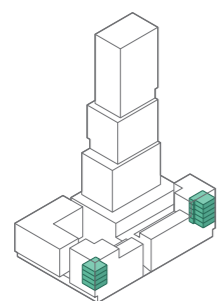
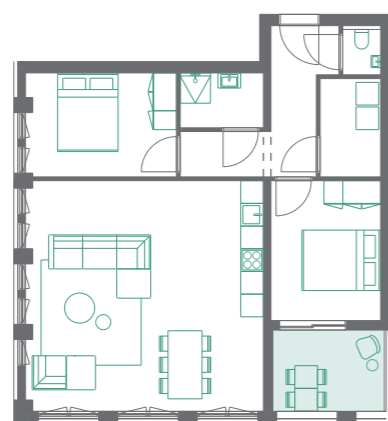


**APARTMENT**  
**12 DWELLINGS**  
**69,6 M<sup>2</sup> INDOOR SPACE**  
**5,7 M<sup>2</sup> OUTDOOR SPACE**  
**1-2 BEDROOMS**

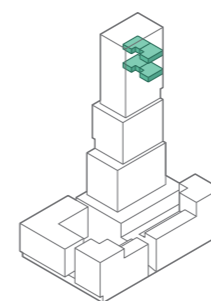


**APARTMENT**  
**7 DWELLINGS**  
**74,8 M<sup>2</sup> INDOOR SPACE**  
**11,8 M<sup>2</sup> OUTDOOR SPACE**  
**1-3 BEDROOMS**



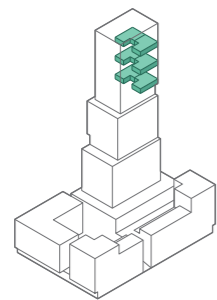
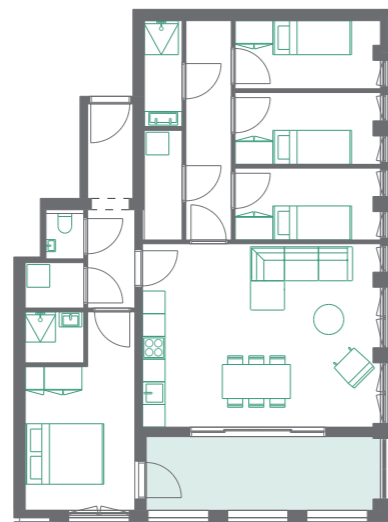


**APARTMENT**  
**9 DWELLINGS**  
**79,2 M<sup>2</sup> INDOOR SPACE**  
**6,3 M<sup>2</sup> OUTDOOR SPACE**  
**1-3 BEDROOMS**

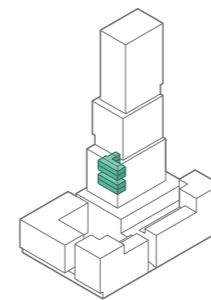


**APARTMENT**  
**4 DWELLINGS**  
**88,3 M<sup>2</sup> INDOOR SPACE**  
**5,7 M<sup>2</sup> OUTDOOR SPACE**  
**1-3 BEDROOMS**





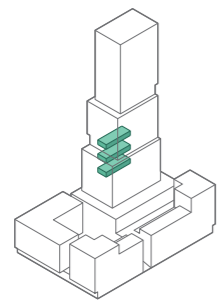
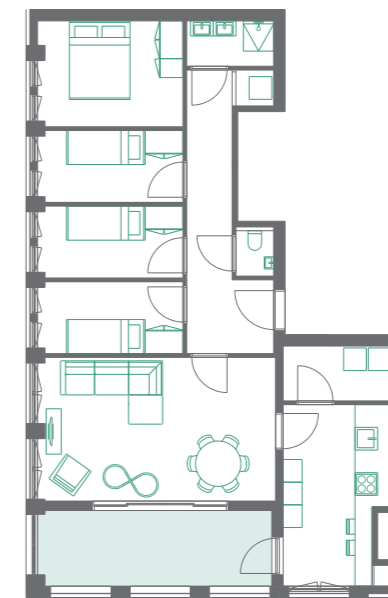
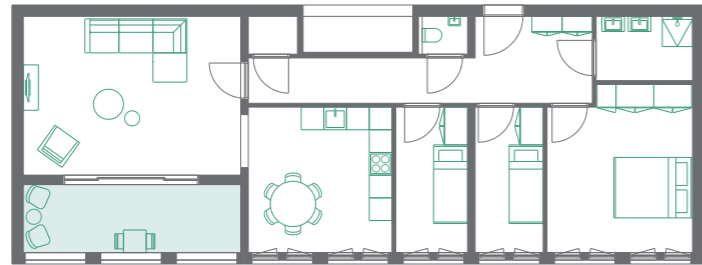
**APARTMENT**  
**6 DWELLINGS**  
**93,2 M<sup>2</sup> INDOOR SPACE**  
**12,0 M<sup>2</sup> OUTDOOR SPACE**  
**2-4 BEDROOMS**



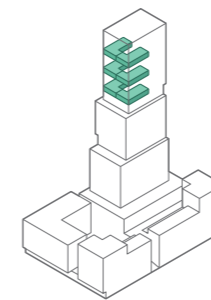
**APARTMENT**  
**4 DWELLINGS**  
**93,5 M<sup>2</sup> INDOOR SPACE**  
**11,8 M<sup>2</sup> OUTDOOR SPACE**  
**1-3 BEDROOMS**





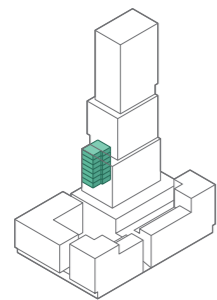
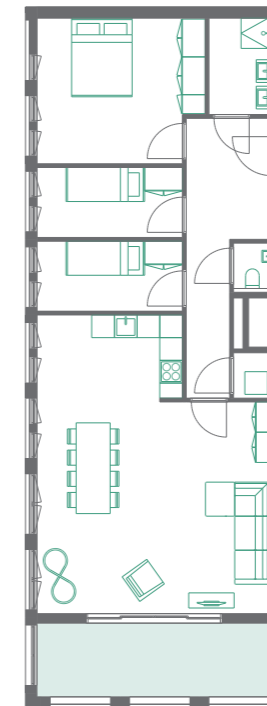


**APARTMENT**  
**3 DWELLINGS**  
**93,5 M<sup>2</sup> INDOOR SPACE**  
**10,3 M<sup>2</sup> OUTDOOR SPACE**  
**1-3 BEDROOMS**

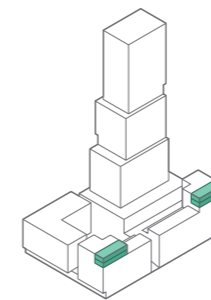


**APARTMENT**  
**6 DWELLINGS**  
**93,8 M<sup>2</sup> INDOOR SPACE**  
**12,3 M<sup>2</sup> OUTDOOR SPACE**  
**1-4 BEDROOMS**



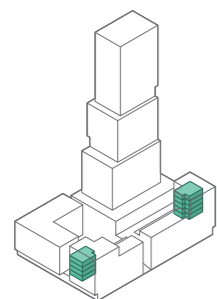
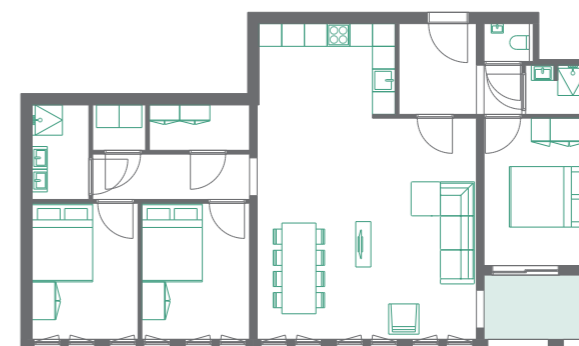
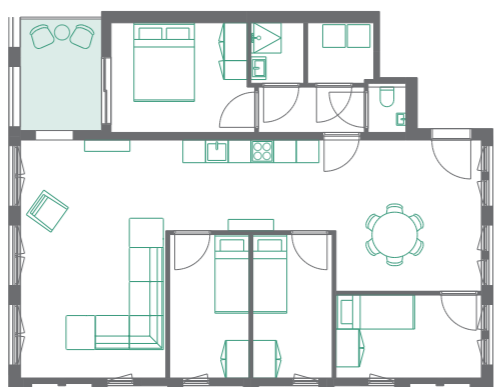


**APARTMENT**  
7 DWELLINGS  
94,0 M<sup>2</sup> INDOOR SPACE  
11,3 M<sup>2</sup> OUTDOOR SPACE  
2-3 BEDROOMS

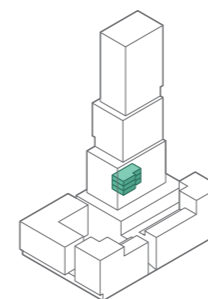


**APARTMENT**  
9 DWELLINGS  
96,5 M<sup>2</sup> INDOOR SPACE  
12,5 M<sup>2</sup> OUTDOOR SPACE  
1-4 BEDROOMS



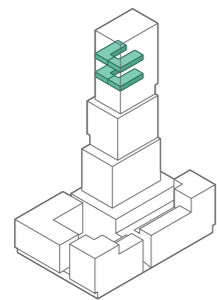
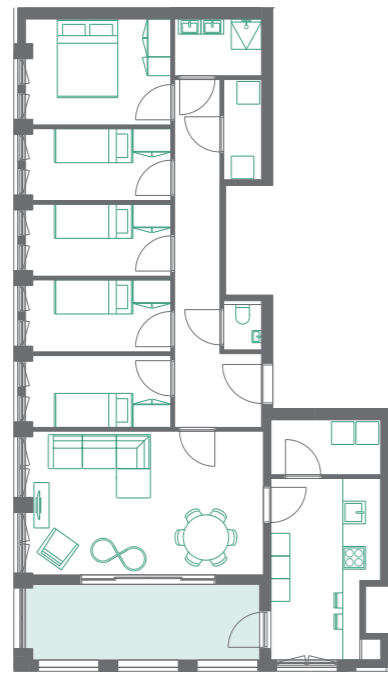


**APARTMENT**  
**9 DWELLINGS**  
**98,6 M<sup>2</sup> INDOOR SPACE**  
**6,3 M<sup>2</sup> OUTDOOR SPACE**  
**1-5 BEDROOMS**

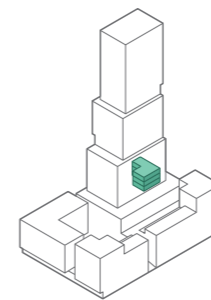


**APARTMENT**  
**3 DWELLINGS**  
**100,4 M<sup>2</sup> INDOOR SPACE**  
**4,9 M<sup>2</sup> OUTDOOR SPACE**  
**3 BEDROOMS**





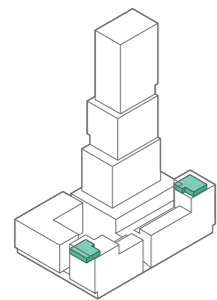
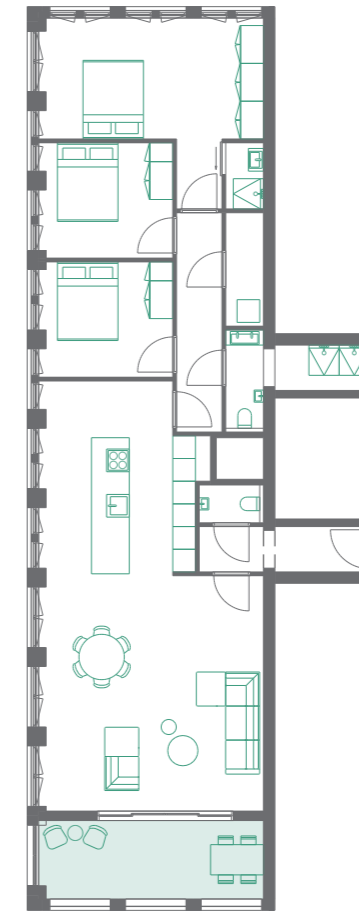
**APARTMENT**  
**4 DWELLINGS**  
**107,2 M<sup>2</sup> INDOOR SPACE**  
**12,3 M<sup>2</sup> OUTDOOR SPACE**  
**1-5 BEDROOMS**



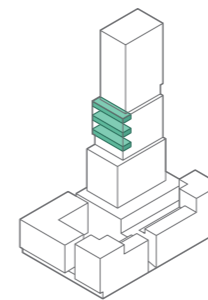
**APARTMENT**  
**3 DWELLINGS**  
**111,7 M<sup>2</sup> INDOOR SPACE**  
**18,3 M<sup>2</sup> OUTDOOR SPACE**  
**1-4 BEDROOMS**





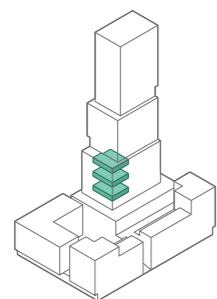
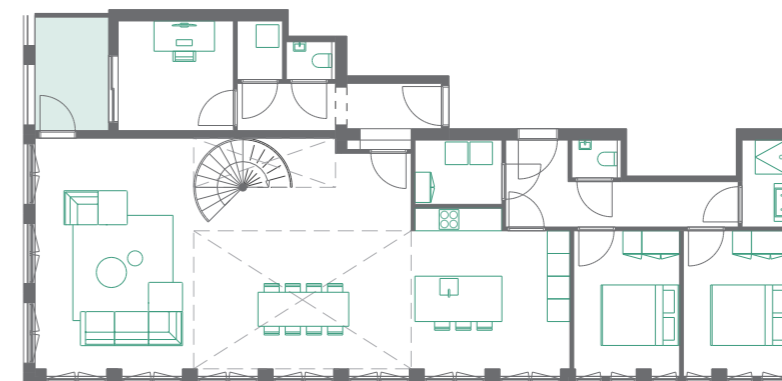
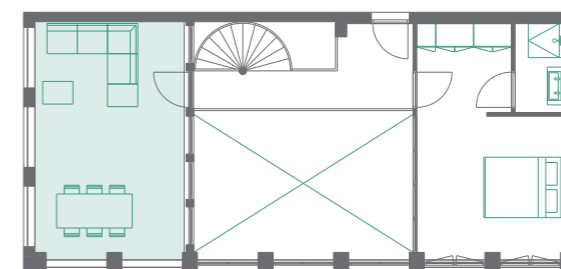


**APARTMENT**  
**2 DWELLINGS**  
**124,4 M<sup>2</sup> INDOOR SPACE**  
**11,8 M<sup>2</sup> OUTDOOR SPACE**  
**2-4 BEDROOMS**

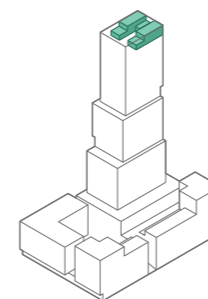


**APARTMENT**  
**3 DWELLINGS**  
**129,4 M<sup>2</sup> INDOOR SPACE**  
**12,3 M<sup>2</sup> OUTDOOR SPACE**  
**1-4 BEDROOMS**

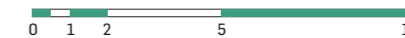


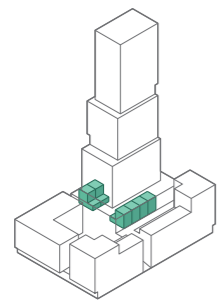
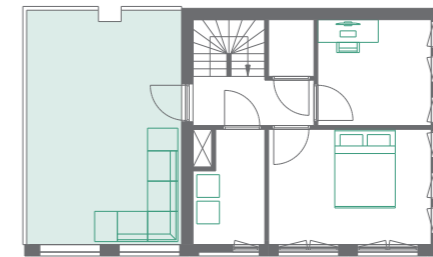
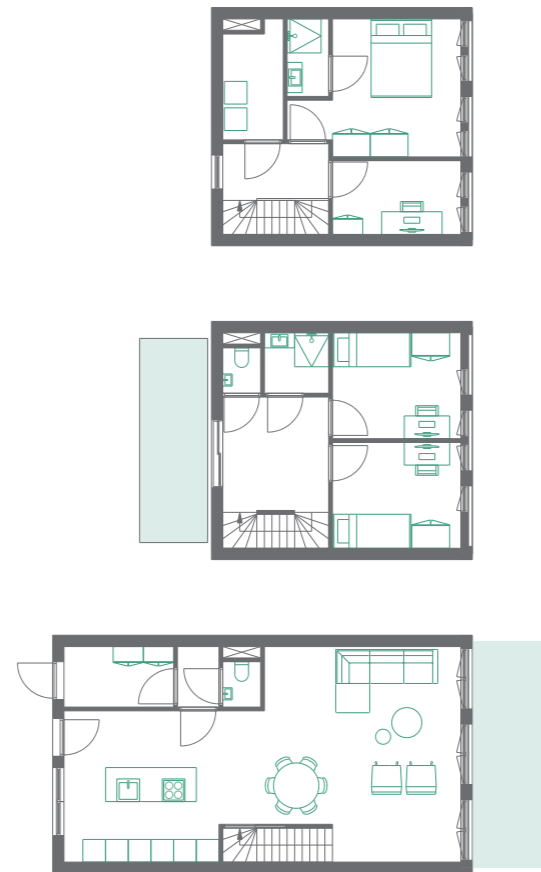


**APARTMENT**  
3 DWELLINGS  
130,4 M<sup>2</sup> INDOOR SPACE  
35,7 M<sup>2</sup> OUTDOOR SPACE  
1-4 BEDROOMS

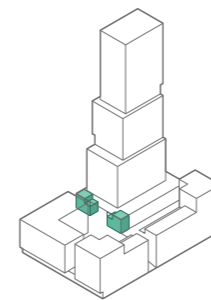


**PENTHOUSE**  
2 DWELLINGS  
179,1 M<sup>2</sup> INDOOR SPACE  
30,6 M<sup>2</sup> OUTDOOR SPACE  
1-4 BEDROOMS



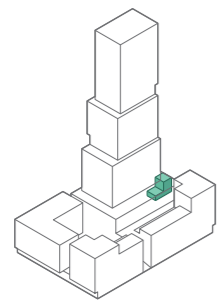
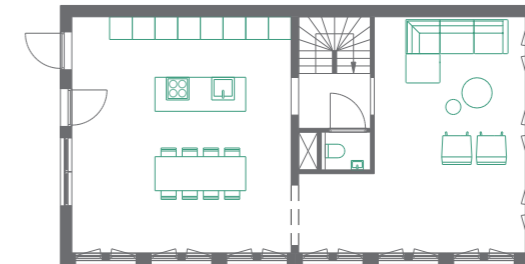
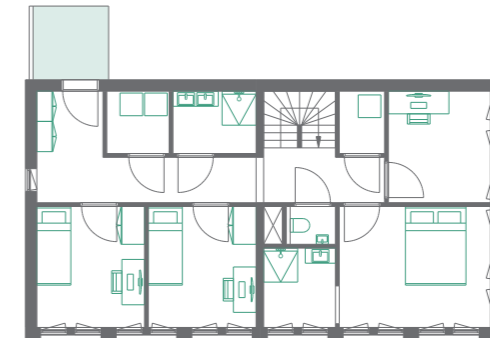
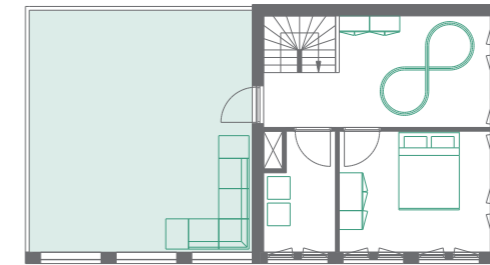


**TRIPLEX**  
**6 DWELLINGS**  
**130,3 M<sup>2</sup> INDOOR SPACE**  
**10-20 M<sup>2</sup> OUTDOOR SPACE**  
**4-5 BEDROOMS**

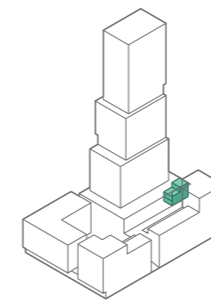


**TRIPLEX**  
**2 DWELLINGS**  
**158,8 M<sup>2</sup> INDOOR SPACE**  
**25-35 M<sup>2</sup> OUTDOOR SPACE**  
**5-7 BEDROOMS**



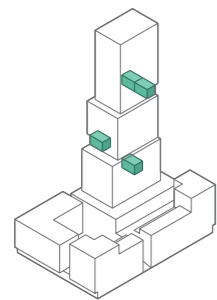
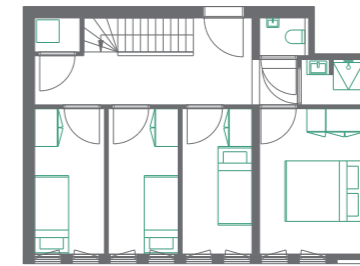
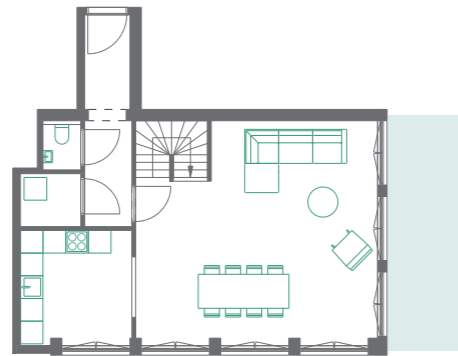
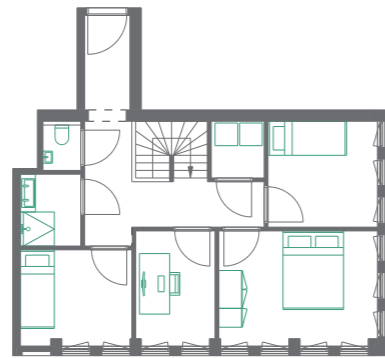


**TRIPLEX**  
**1 DWELLING**  
**142,4 M<sup>2</sup> INDOOR SPACE**  
**23,4 M<sup>2</sup> OUTDOOR SPACE**  
**4-6 BEDROOMS**

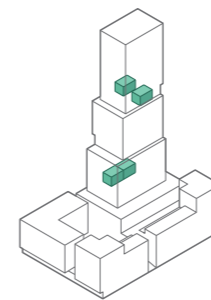


**TRIPLEX**  
**1 DWELLING**  
**183,6 M<sup>2</sup> INDOOR SPACE**  
**37,8 M<sup>2</sup> OUTDOOR SPACE**  
**5-8 BEDROOMS**





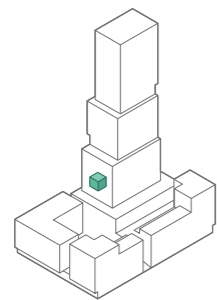
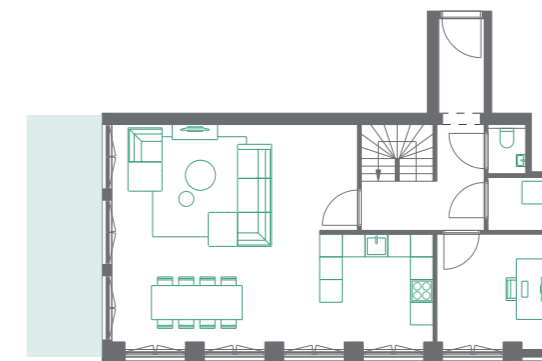
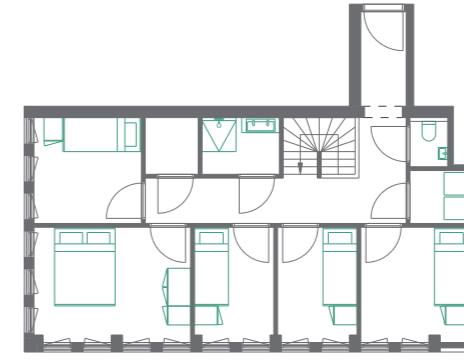
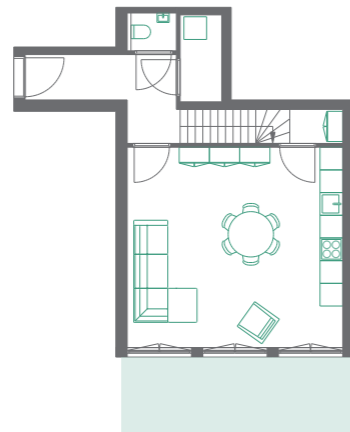
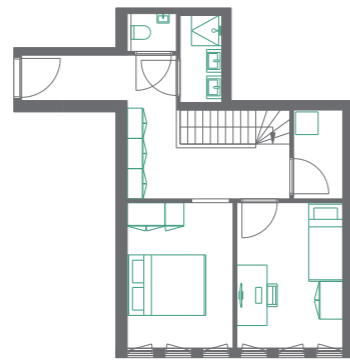
**DUPLEX**  
4 DWELLINGS  
117,4 M<sup>2</sup> INDOOR SPACE  
12 M<sup>2</sup> SEMI PRIVATE OUTDOOR SPACE  
3-4 BEDROOMS



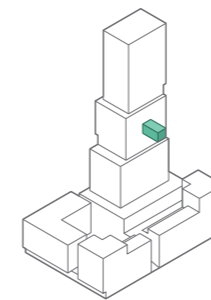
**DUPLEX**  
4 DWELLINGS  
104,3 M<sup>2</sup> INDOOR SPACE  
20 M<sup>2</sup> SEMI PRIVATE OUTDOOR SPACE  
3-4 BEDROOMS





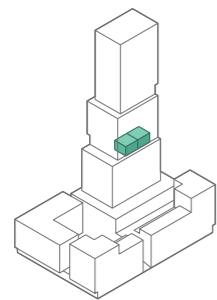
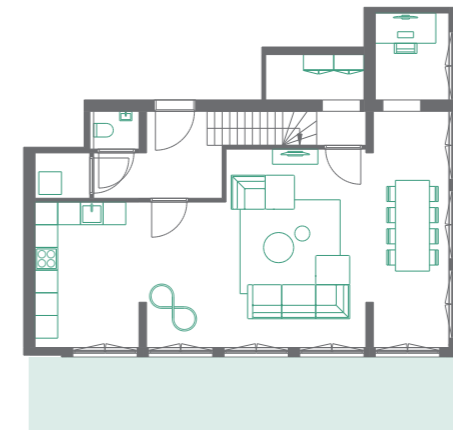
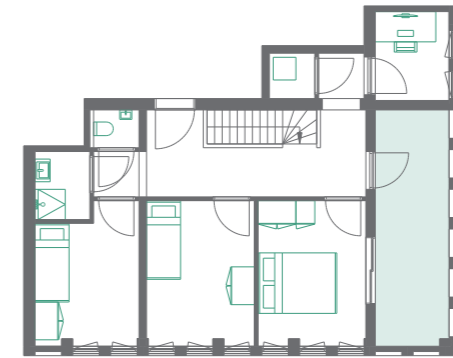
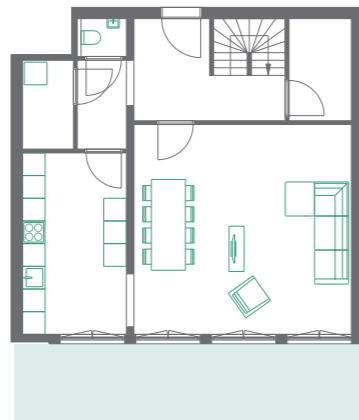


**DUPLEX**  
**1 DWELLING**  
**90,4 M<sup>2</sup> INDOOR SPACE**  
**12 M<sup>2</sup> SEMI PRIVATE OUTDOOR SPACE**  
**2 BEDROOMS**

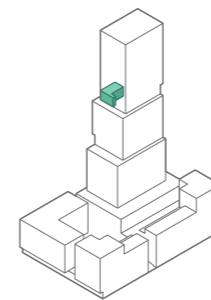


**DUPLEX**  
**1 DWELLING**  
**141,9 M<sup>2</sup> INDOOR SPACE**  
**12 M<sup>2</sup> SEMI PRIVATE OUTDOOR SPACE**  
**3-6 BEDROOMS**



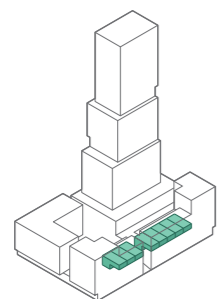


**DUPLEX**  
**2 DWELLINGS**  
**127,7 M<sup>2</sup> INDOOR SPACE**  
**10,3 M<sup>2</sup> OUTDOOR SPACE**  
**20 M<sup>2</sup> SEMI PRIVATE OUTDOOR SPACE**  
**3-4 BEDROOMS**

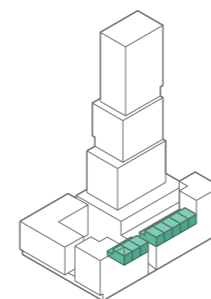


**DUPLEX**  
**1 DWELLING**  
**130,5 M<sup>2</sup> INDOOR SPACE**  
**12,2 M<sup>2</sup> OUTDOOR SPACE**  
**24 M<sup>2</sup> SEMI PRIVATE OUTDOOR SPACE**  
**3-5 BEDROOMS**



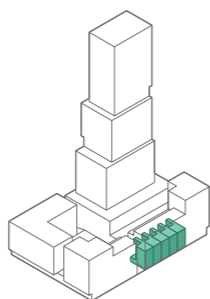
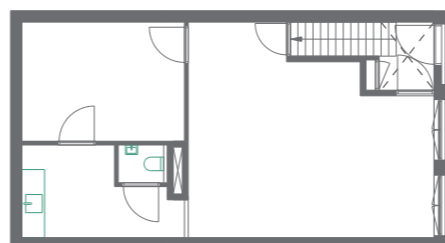
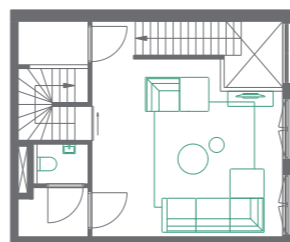
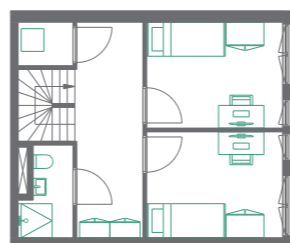
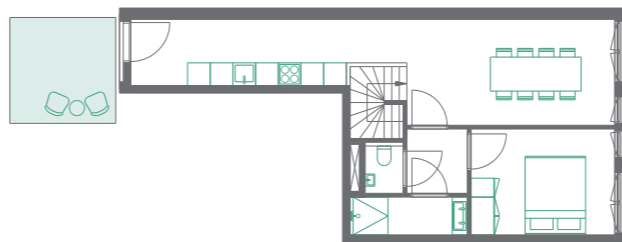


**DUPLEX**  
**8 DWELLINGS**  
**82,6 M<sup>2</sup> INDOOR SPACE**  
**9,1 M<sup>2</sup> OUTDOOR SPACE**  
**3 BEDROOMS**



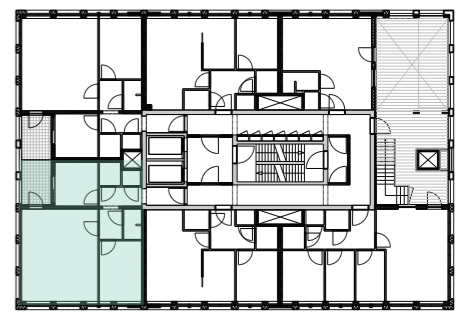
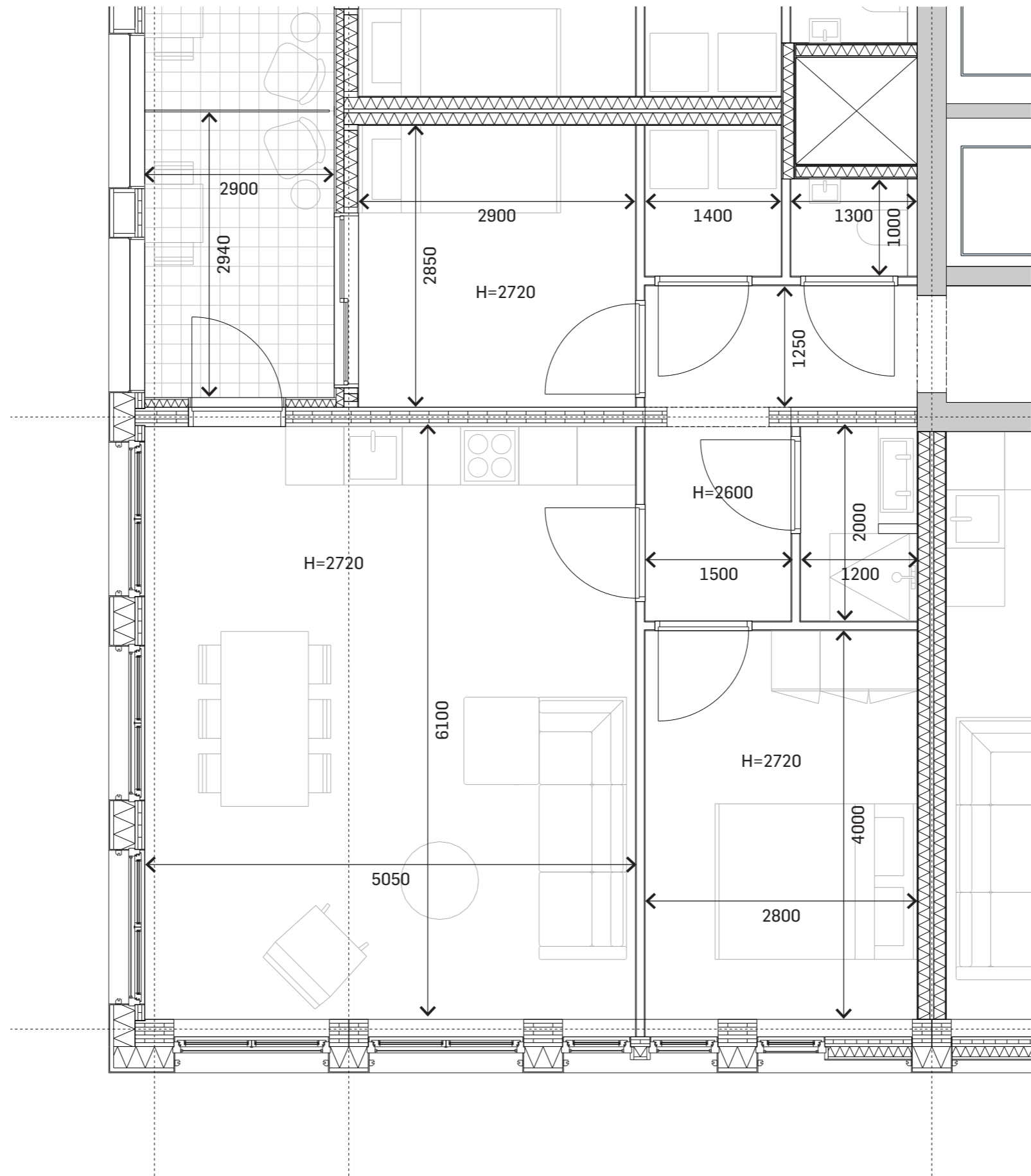
**DUPLEX**  
**8 DWELLINGS**  
**108,9 M<sup>2</sup> INDOOR SPACE**  
**9,1 M<sup>2</sup> OUTDOOR SPACE**  
**3-4 BEDROOMS**





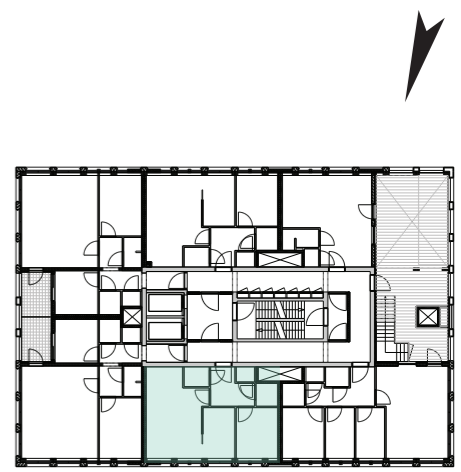
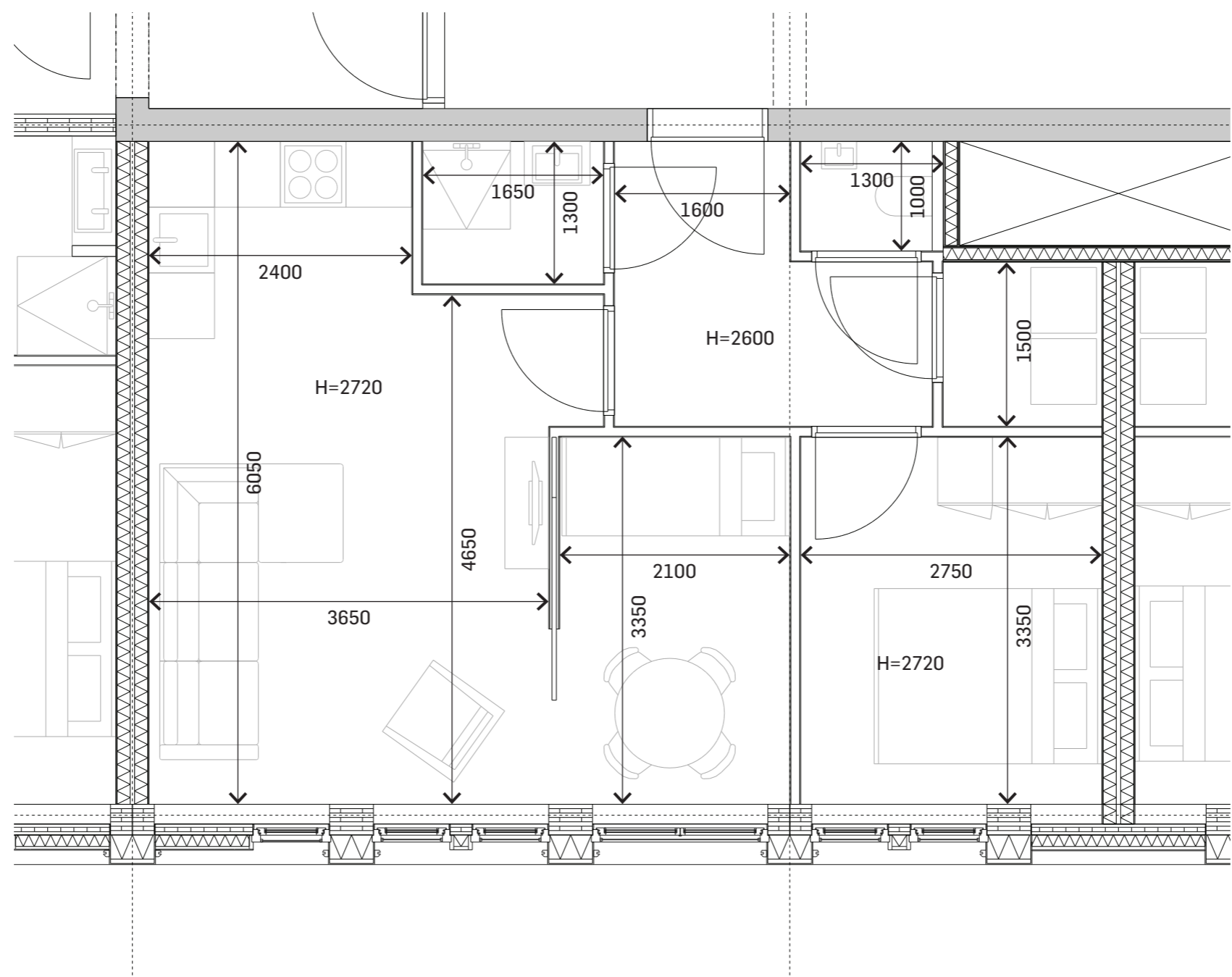
**MIXED-USE**  
**5 DWELLINGS**  
**131,4 M<sup>2</sup> INDOOR SPACE**  
**57,8 M<sup>2</sup> COMMERCIAL SPACE**  
**7,9 M<sup>2</sup> OUTDOOR SPACE**  
**3-4 BEDROOMS**



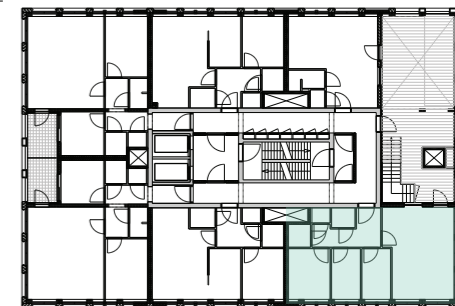
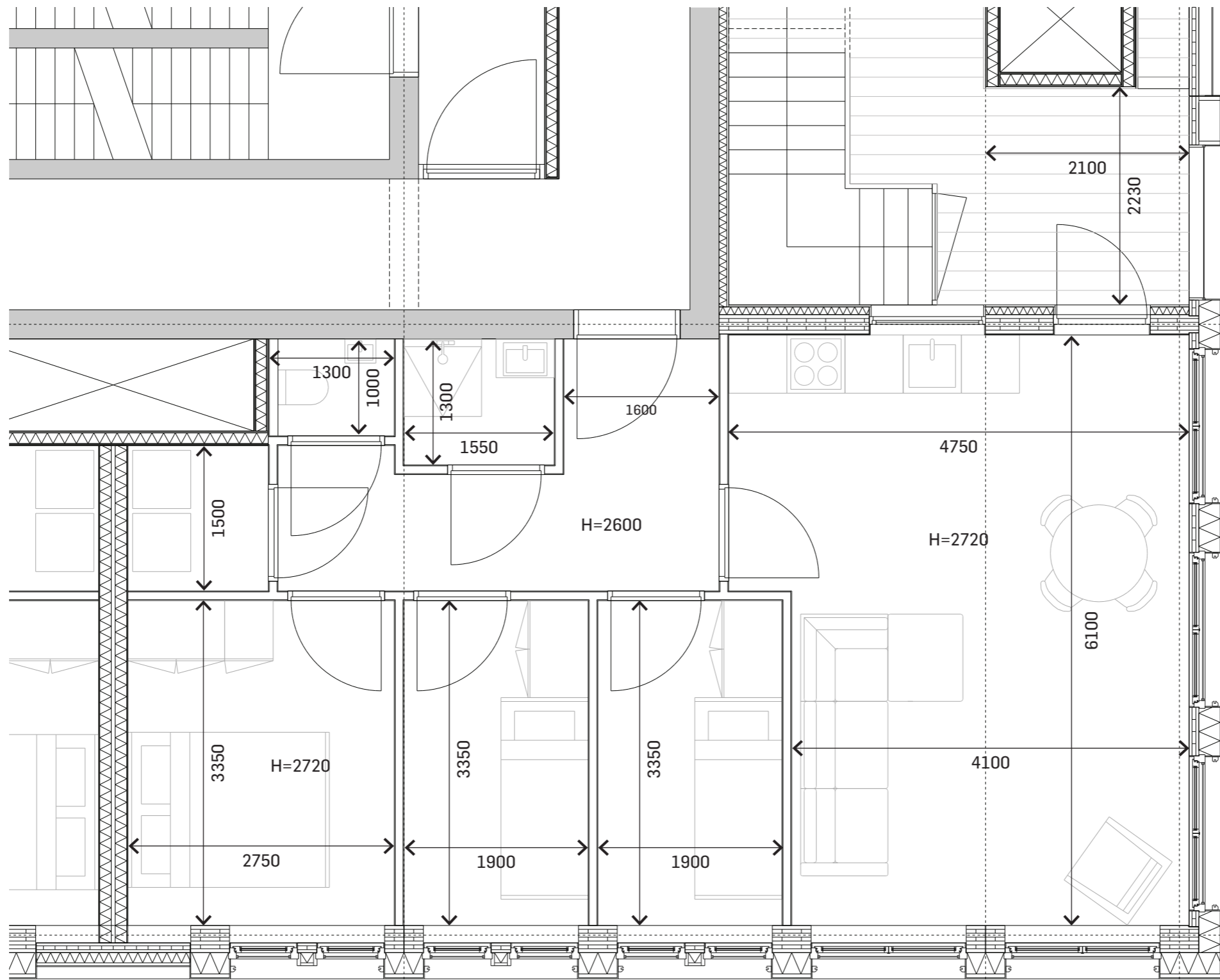


**DWELLING 1:50**

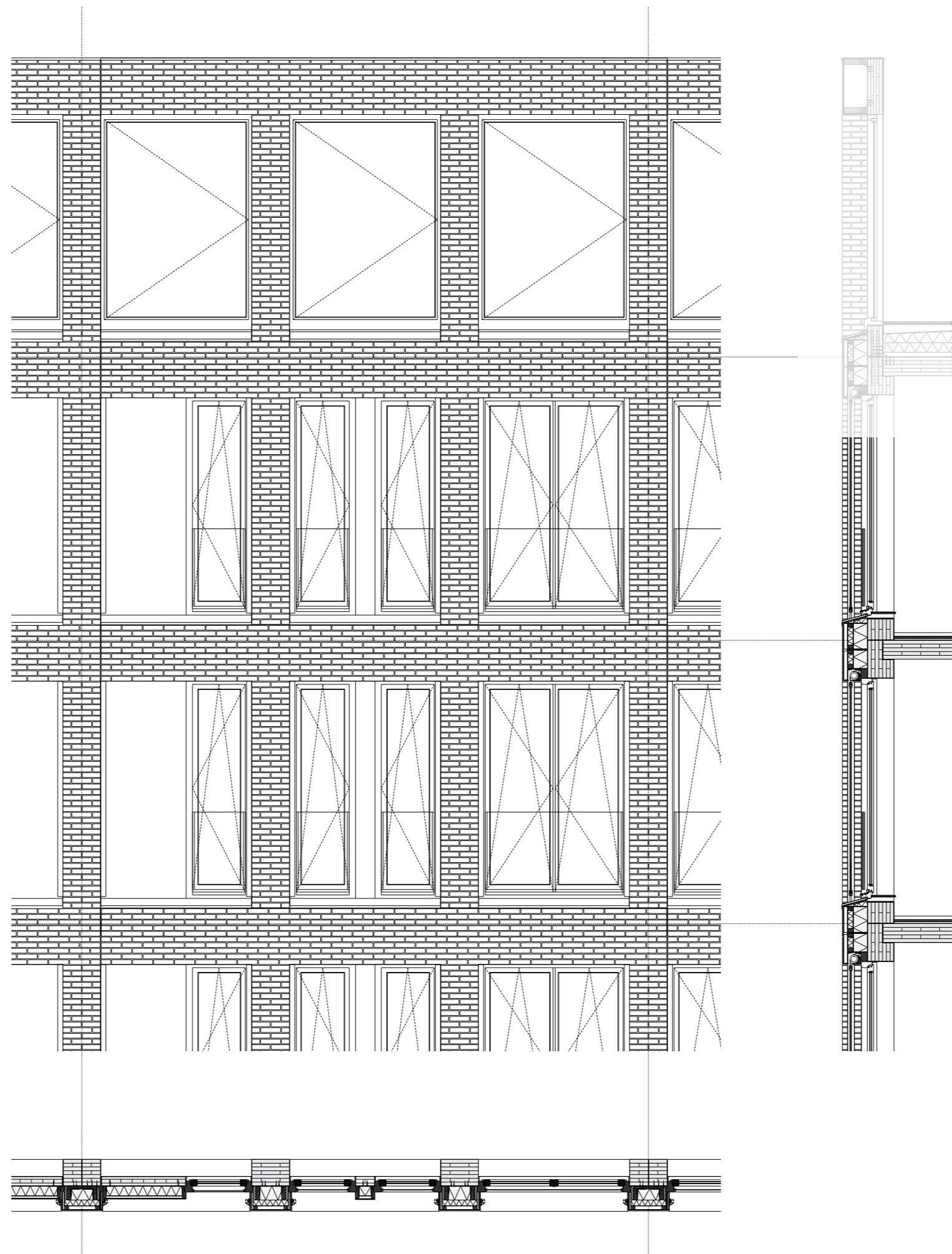




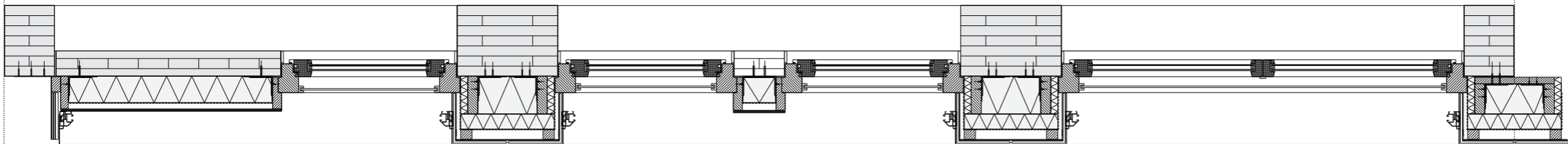
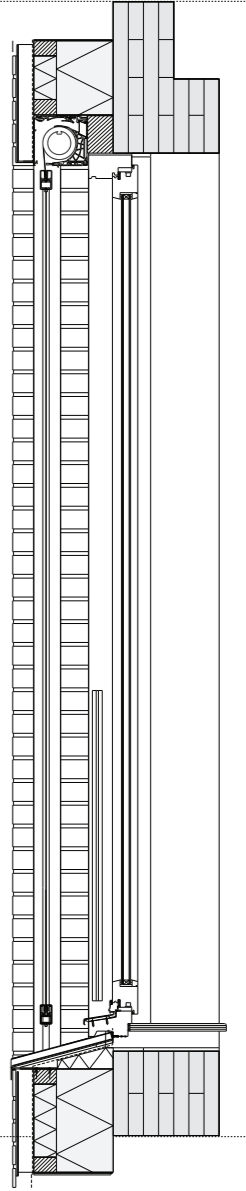
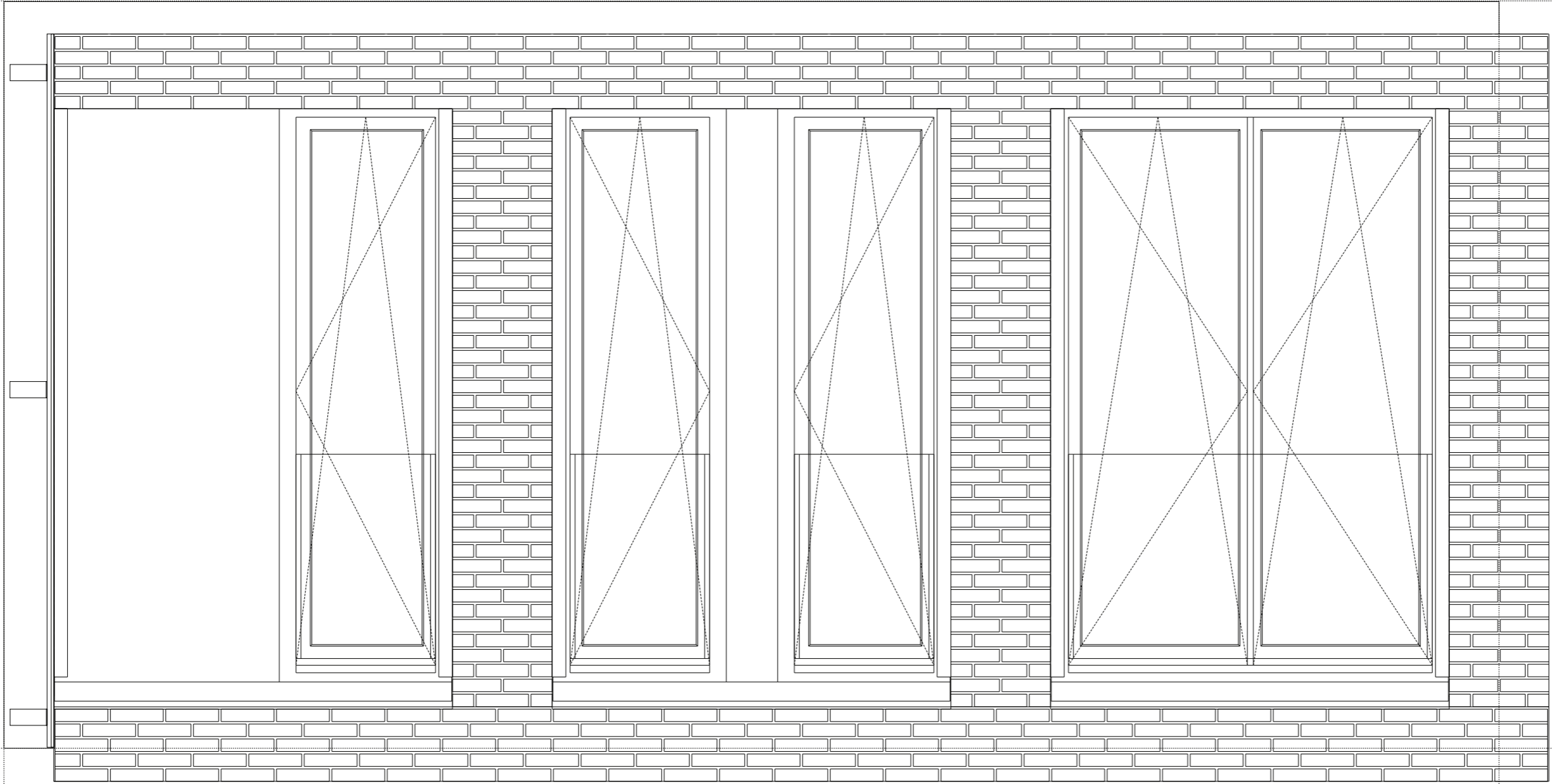
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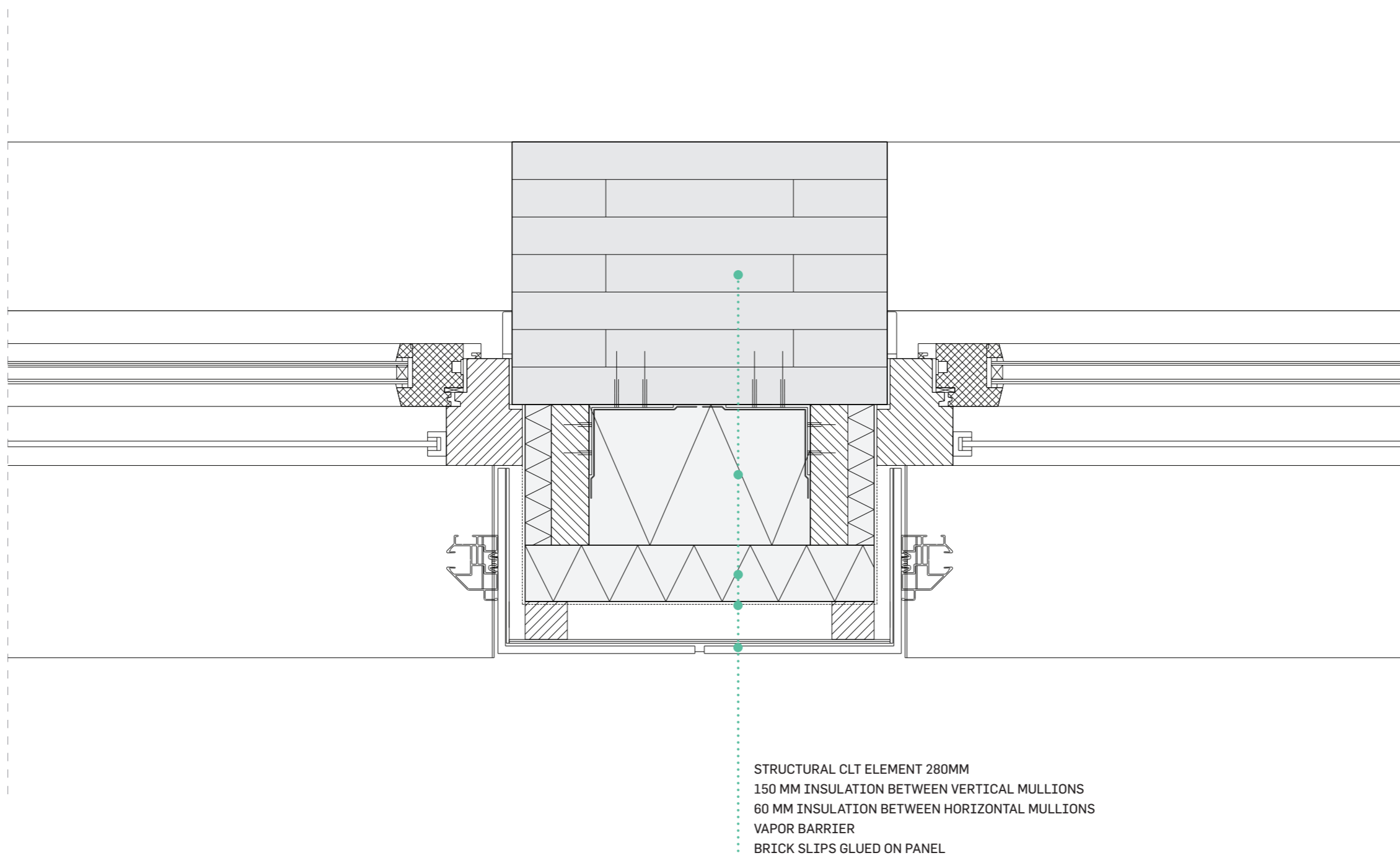


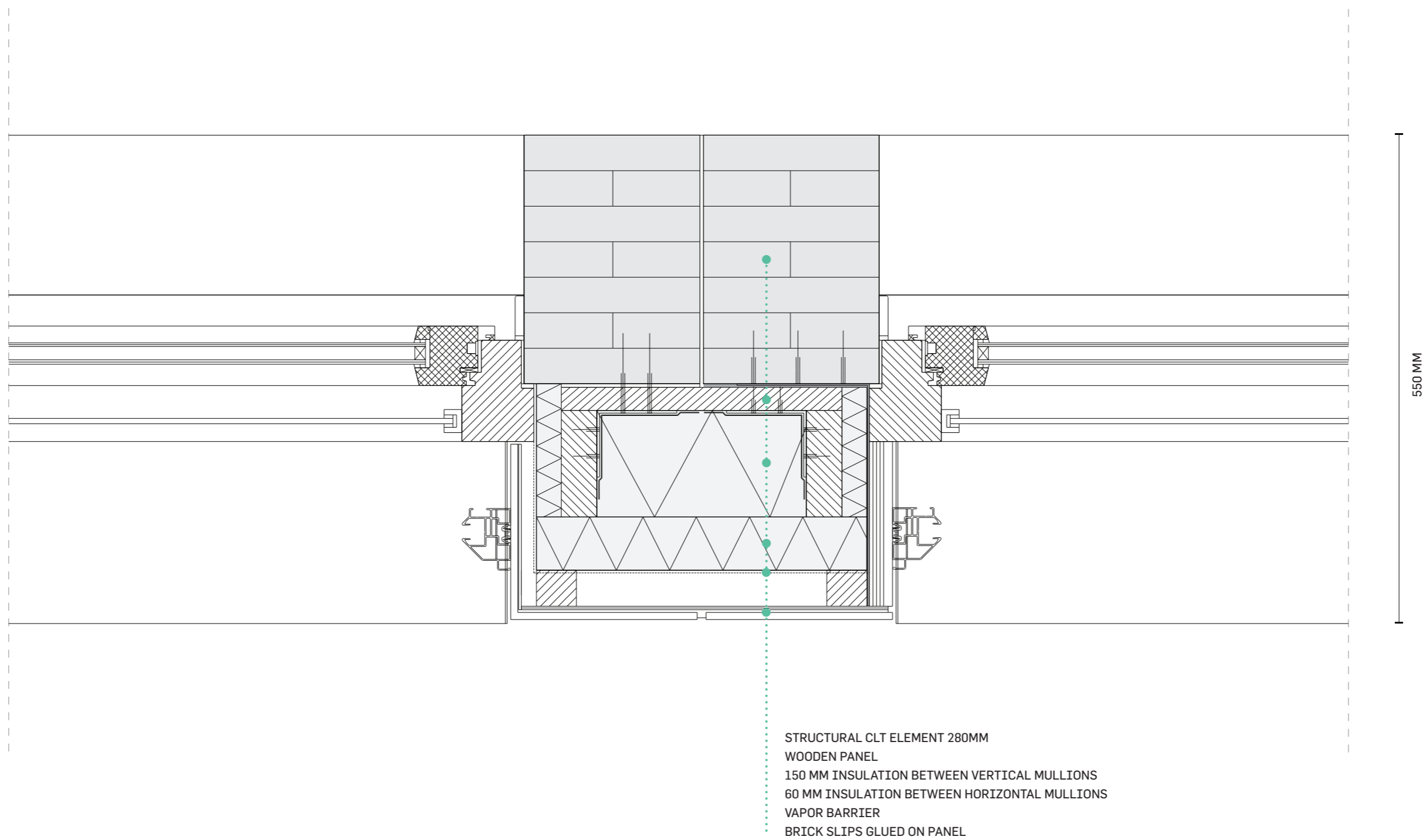
DWELLING 1:50



**FRAGMENT 1:50**

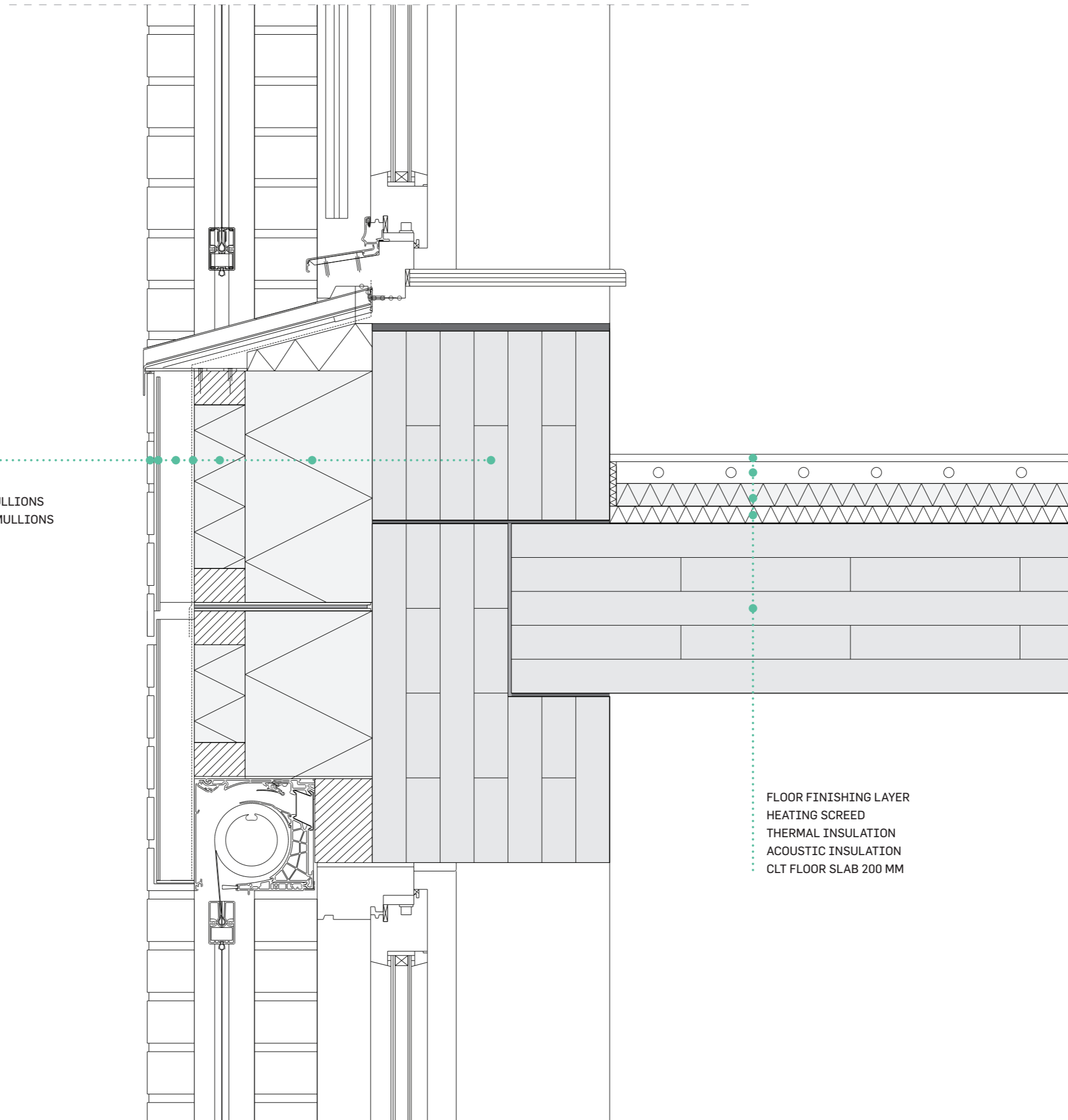






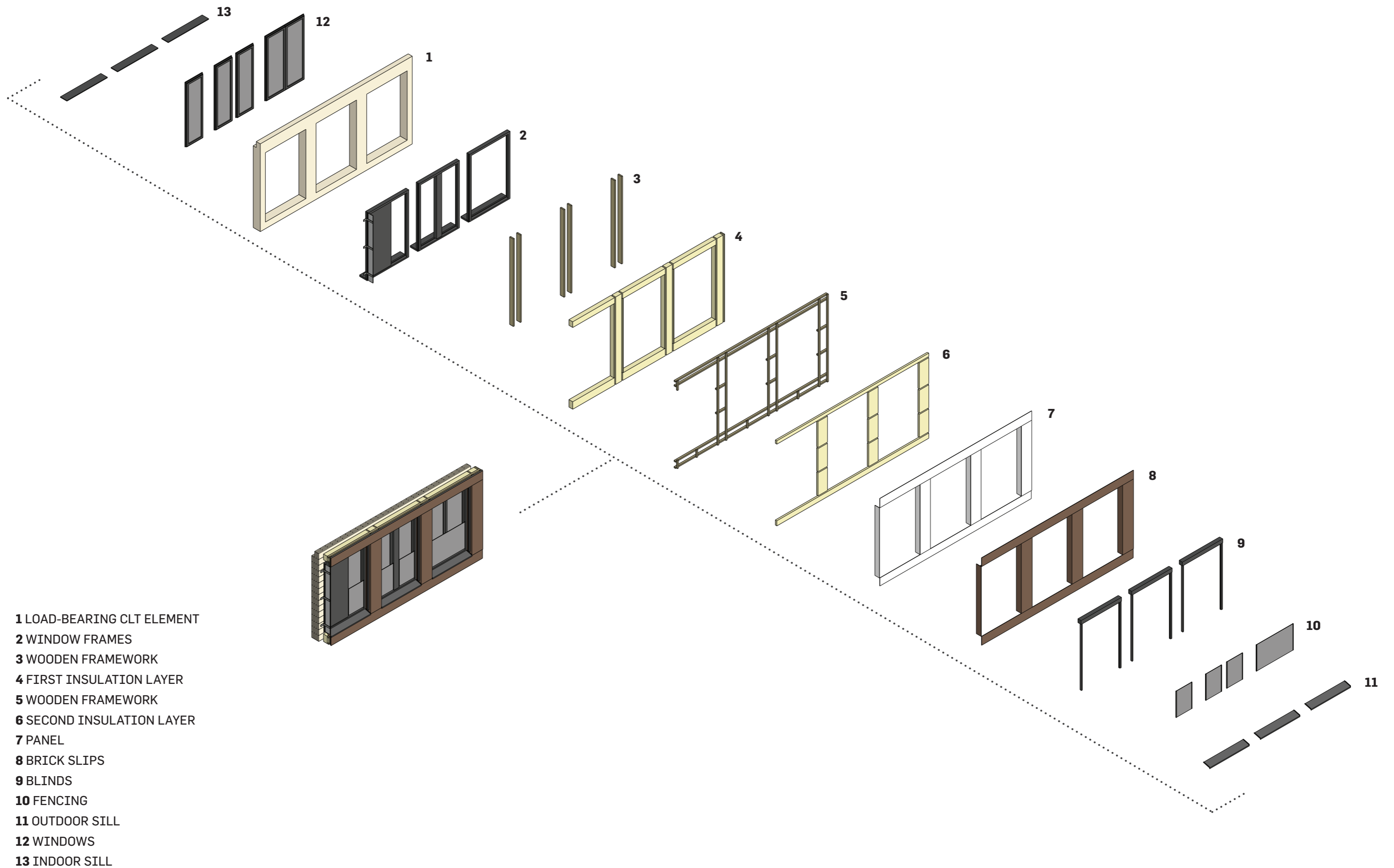


STRUCTURAL CLT ELEMENT 280 MM  
150 MM INSULATION BETWEEN VERTICAL MULLIONS  
60 MM INSULATION BETWEEN HORIZONTAL MULLIONS  
VAPOR BARRIER  
VERTICAL SLATS  
BRICK SLIPS GLUED ON PANEL



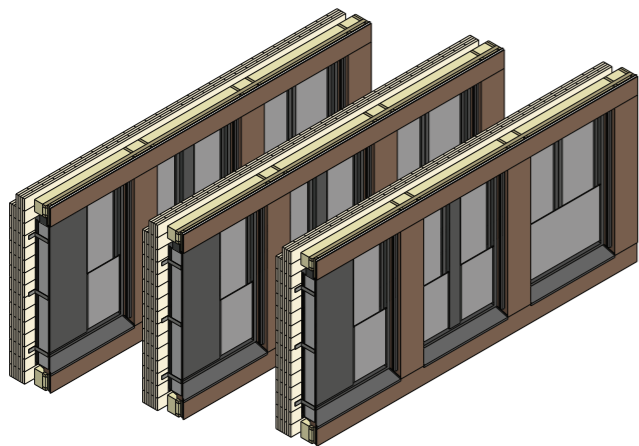
280 MM

FLOOR FINISHING LAYER  
HEATING SCREED  
THERMAL INSULATION  
ACOUSTIC INSULATION  
CLT FLOOR SLAB 200 MM

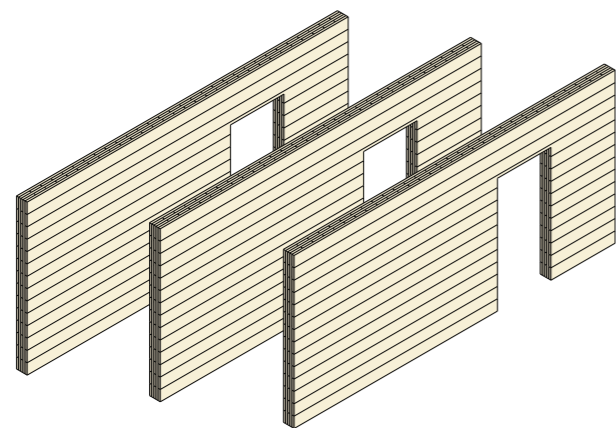


- 1 LOAD-BEARING CLT ELEMENT
- 2 WINDOW FRAMES
- 3 WOODEN FRAMEWORK
- 4 FIRST INSULATION LAYER
- 5 WOODEN FRAMEWORK
- 6 SECOND INSULATION LAYER
- 7 PANEL
- 8 BRICK SLIPS
- 9 BLINDS
- 10 FENCING
- 11 OUTDOOR SILL
- 12 WINDOWS
- 13 INDOOR SILL

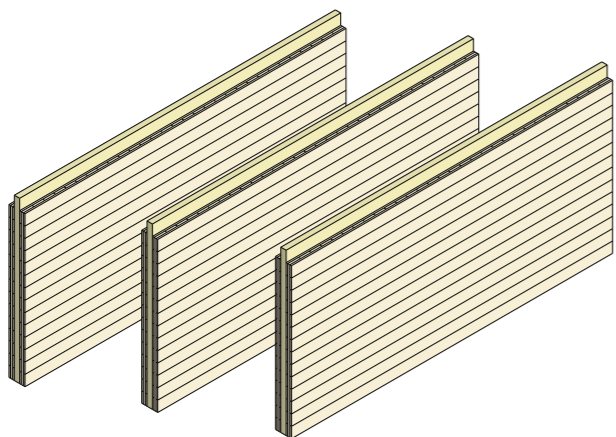
**ASSEMBLY FACADE ELEMENT**



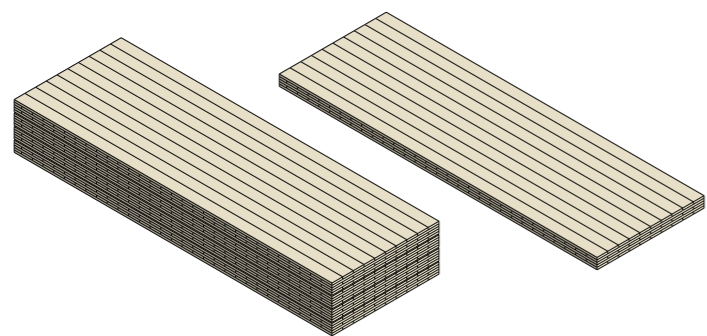
PREFABRICATED LOAD-BEARING  
FACADE ELEMENTS



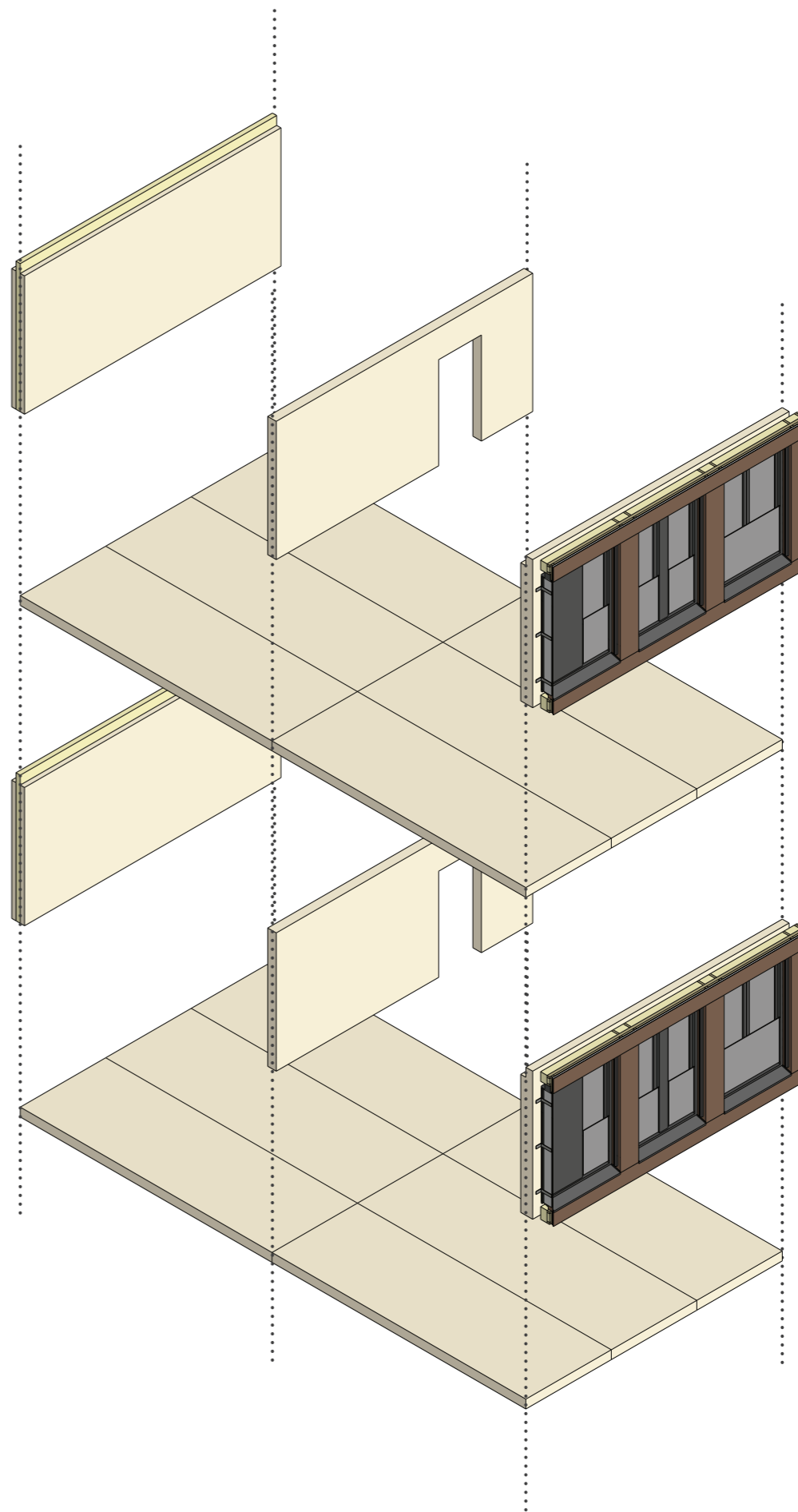
CLT WALL ELEMENTS  
WITH OPENINGS



CLT WALL ELEMENTS  
WITH INSULATION



CLT FLOOR ELEMENTS



**ASSEMBLY CONSTRUCTION**





**IMPRESSIONS**







