

THE NATURE INCLUSIVE CITY

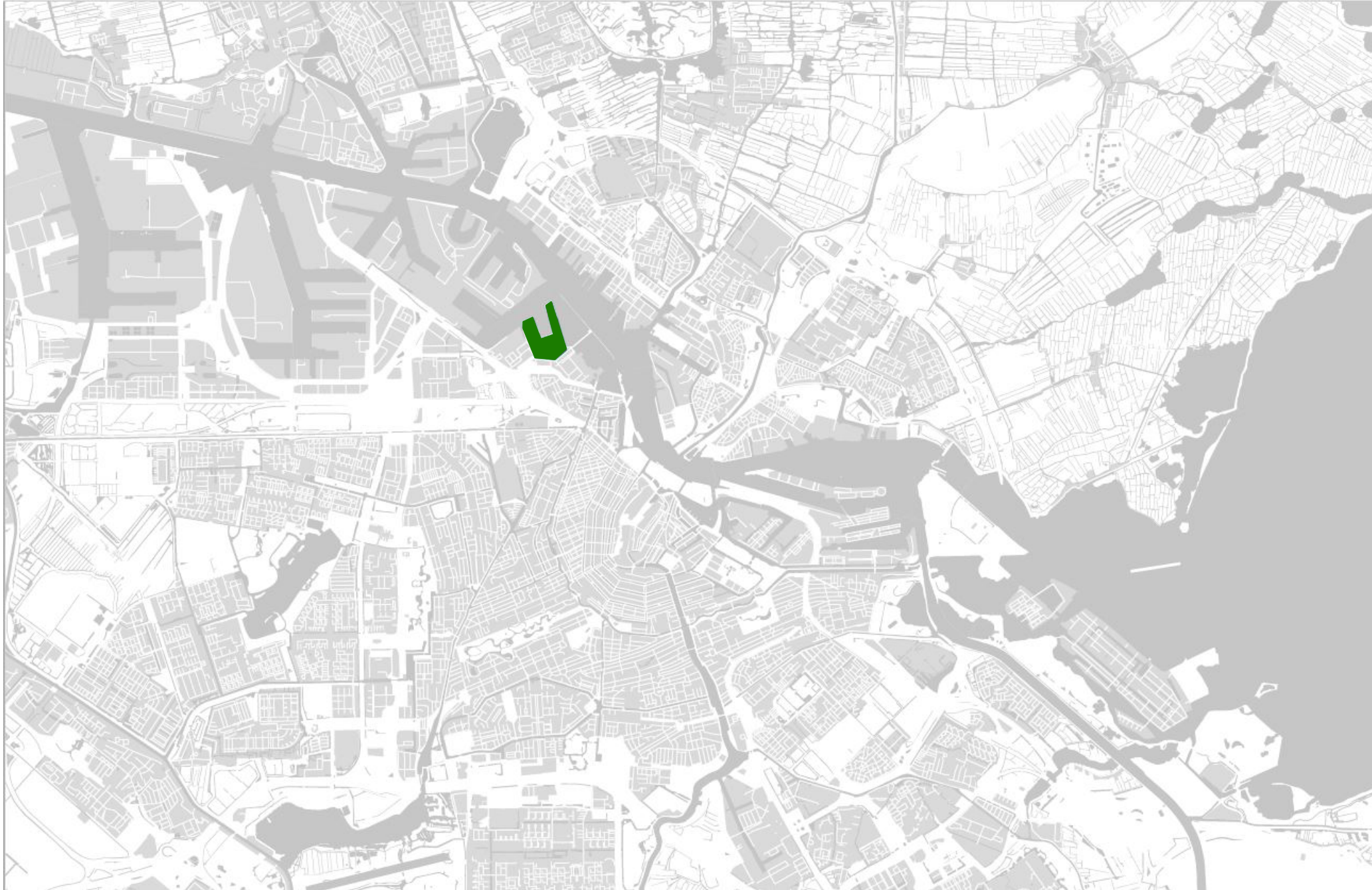
P5 DRAWING SET



COEN ABEL 04-03-2022

LLNR 4622073

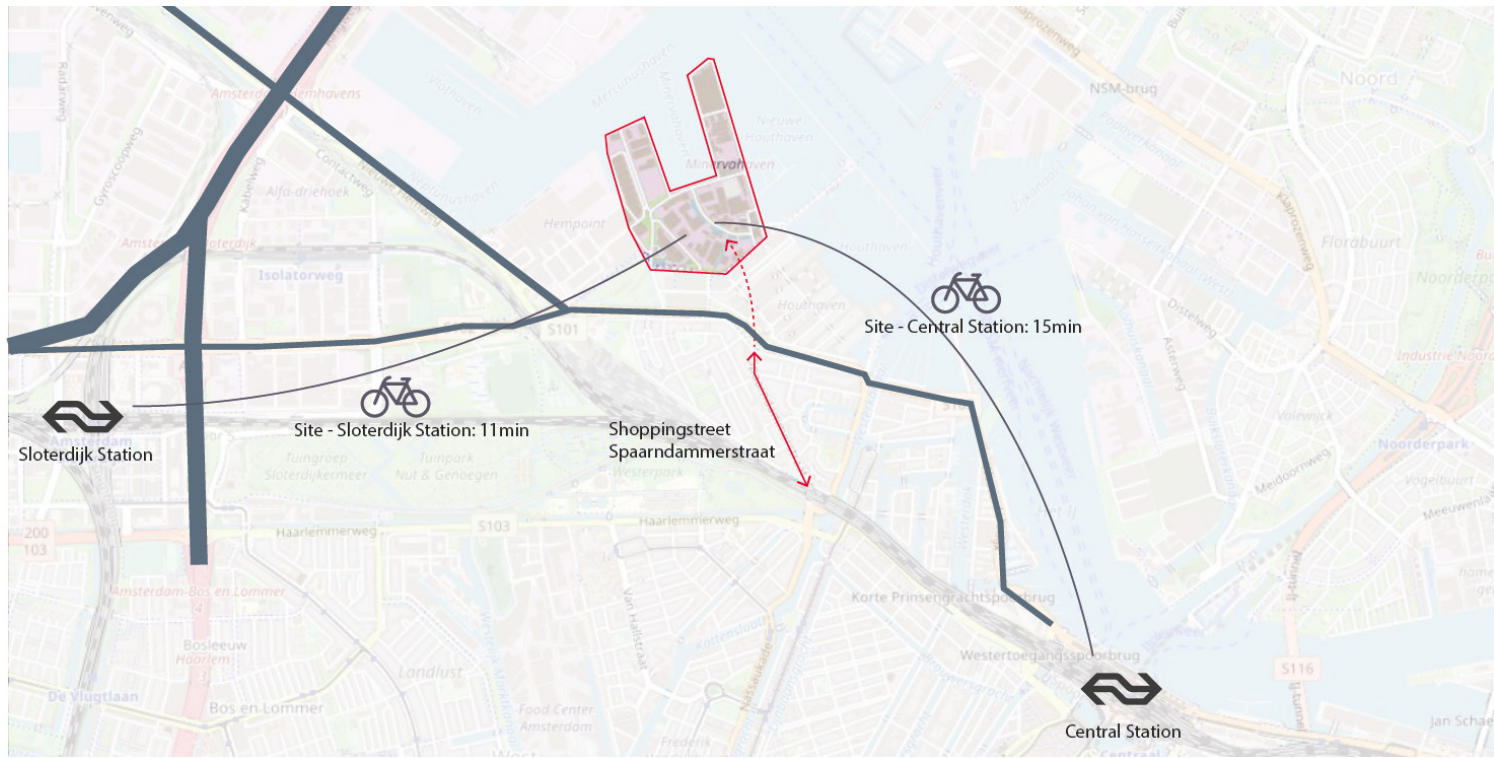
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Amsterdam
Minerva Harbour

Location

Former industrial area Amsterdam Minerva Harbour



From former industrial area to the density of Manhattan New York

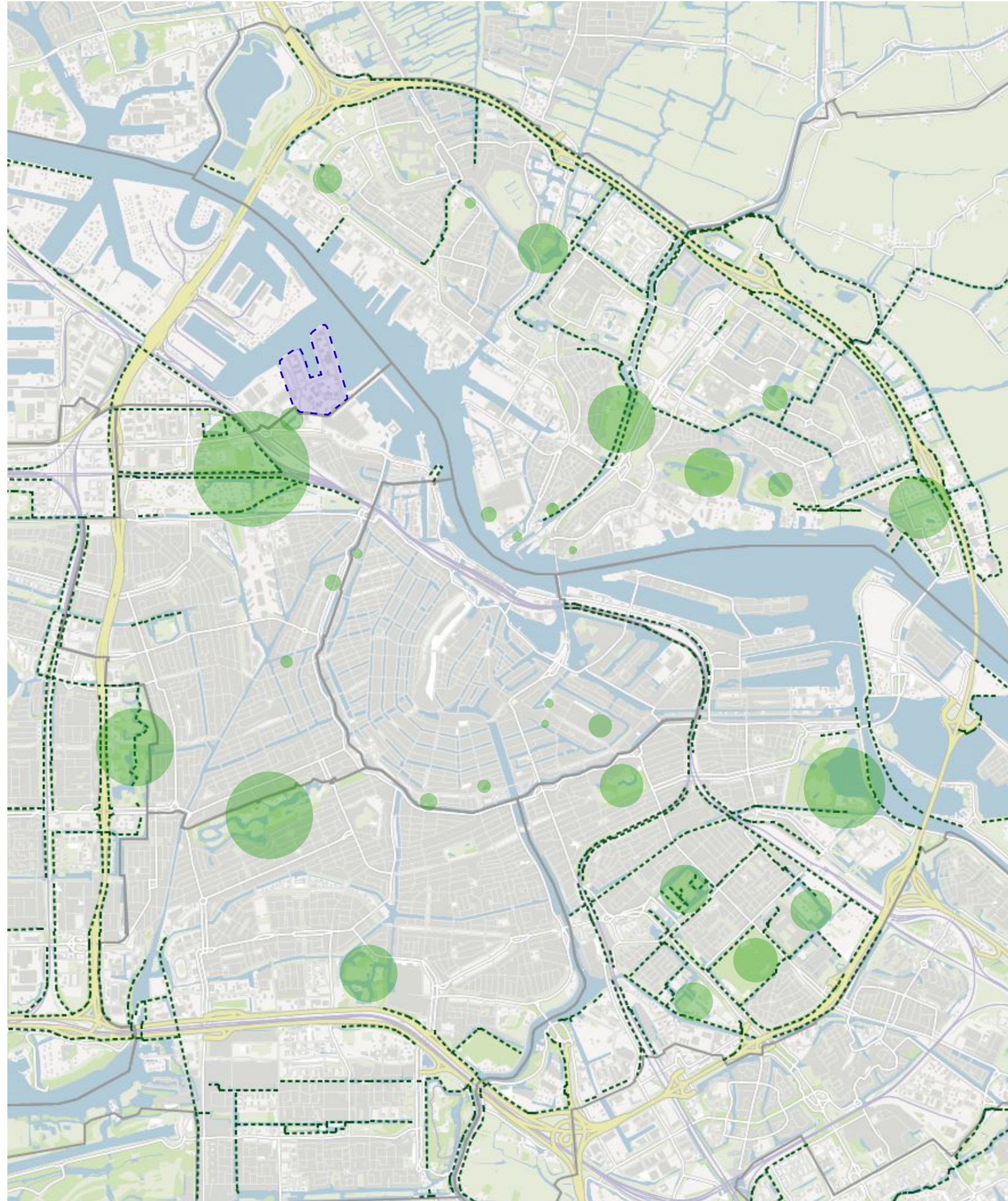


Building Plot

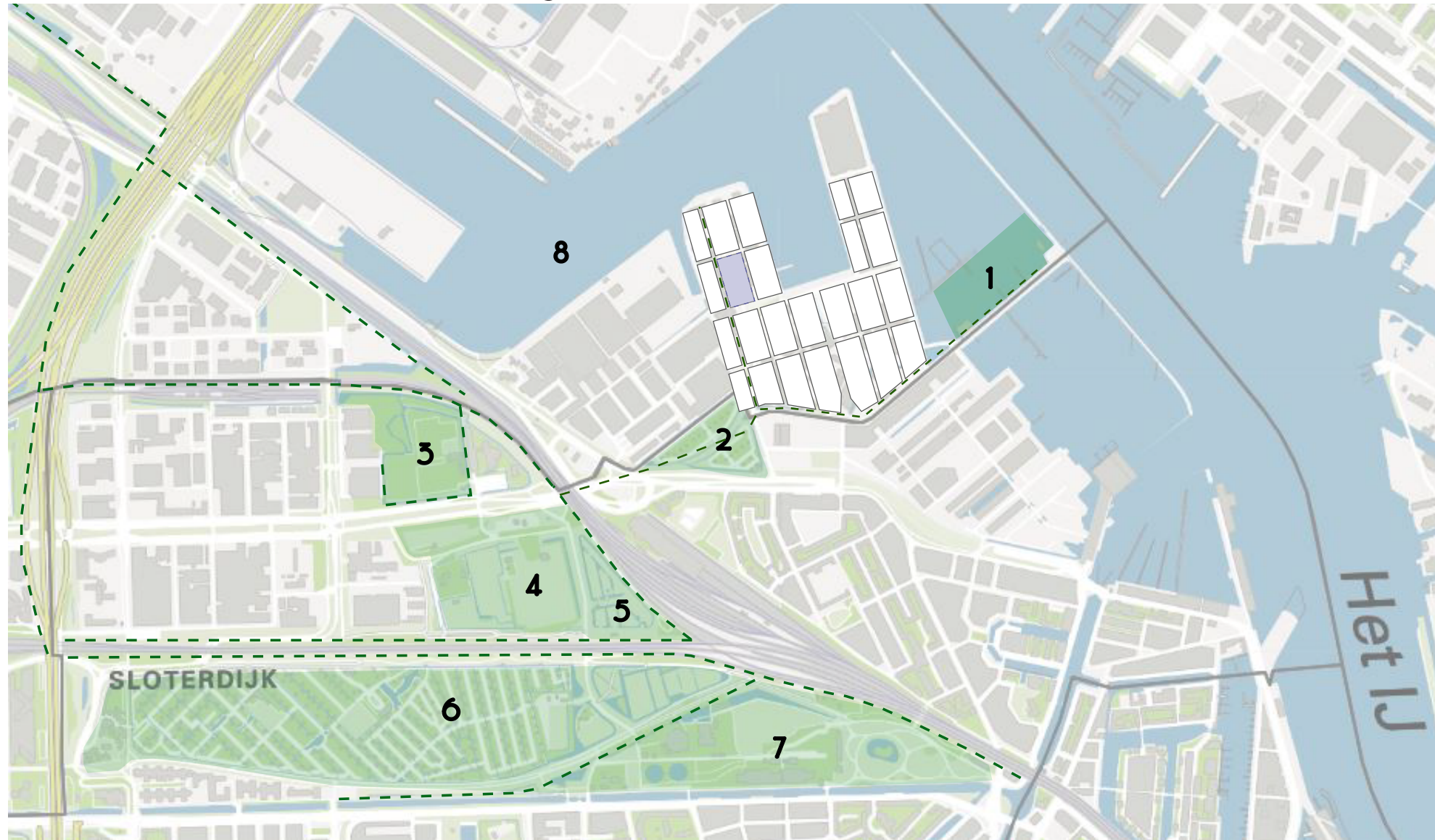


- Hight Density
- Surrounded by buildings
- No easy acces to flora and fauna

Biodiversity hotspots

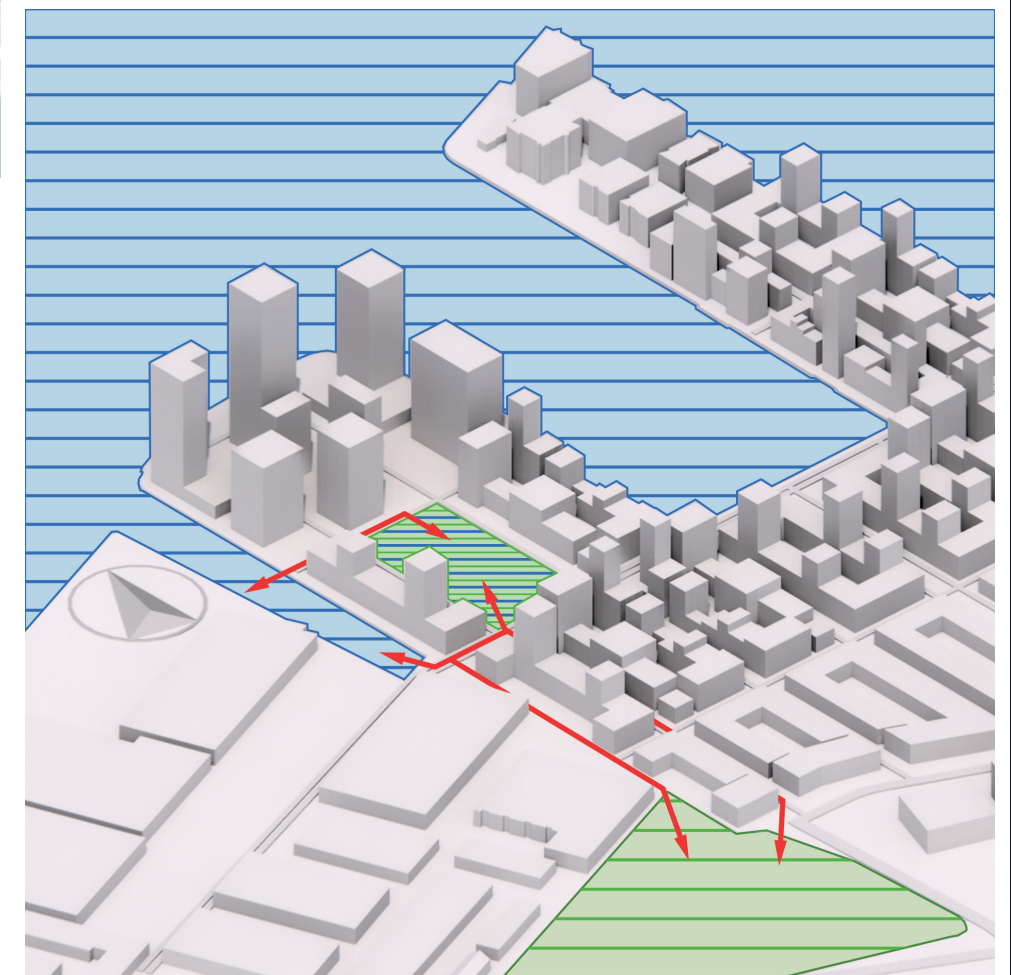
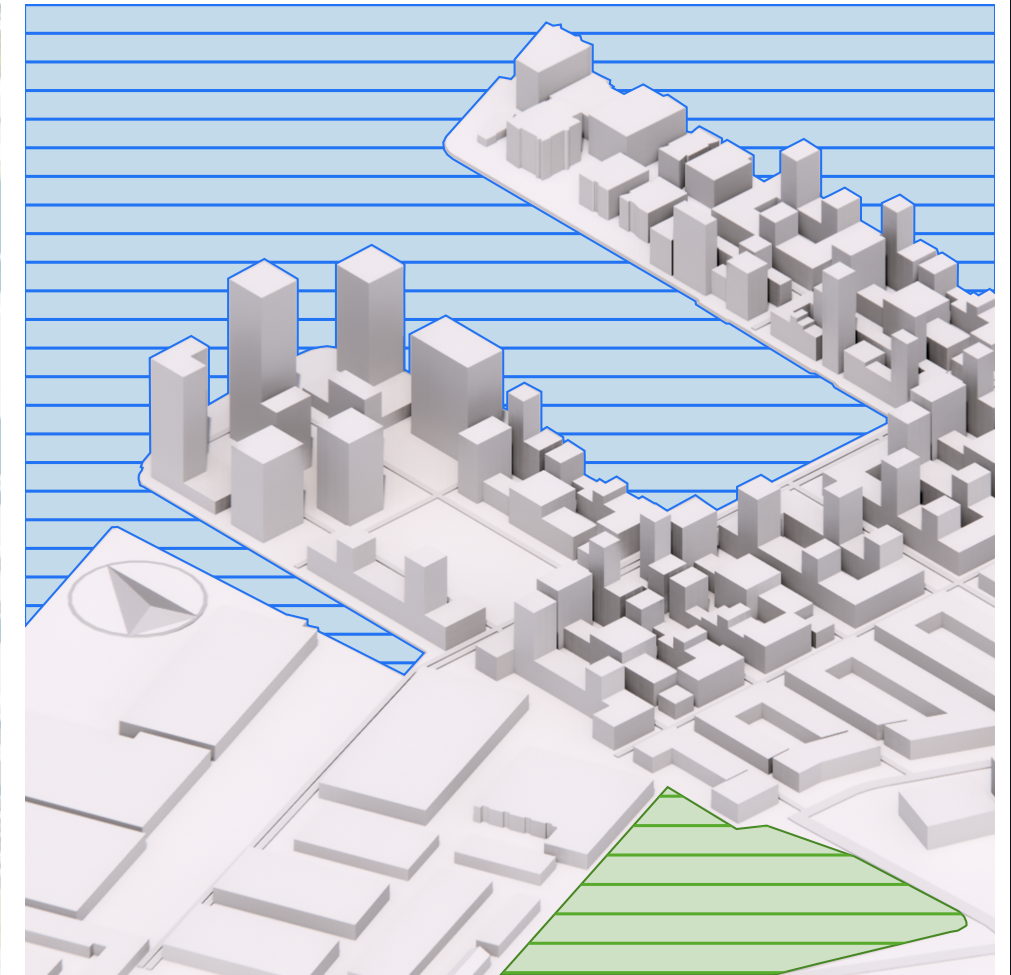


Flora and Fauna to Building Block

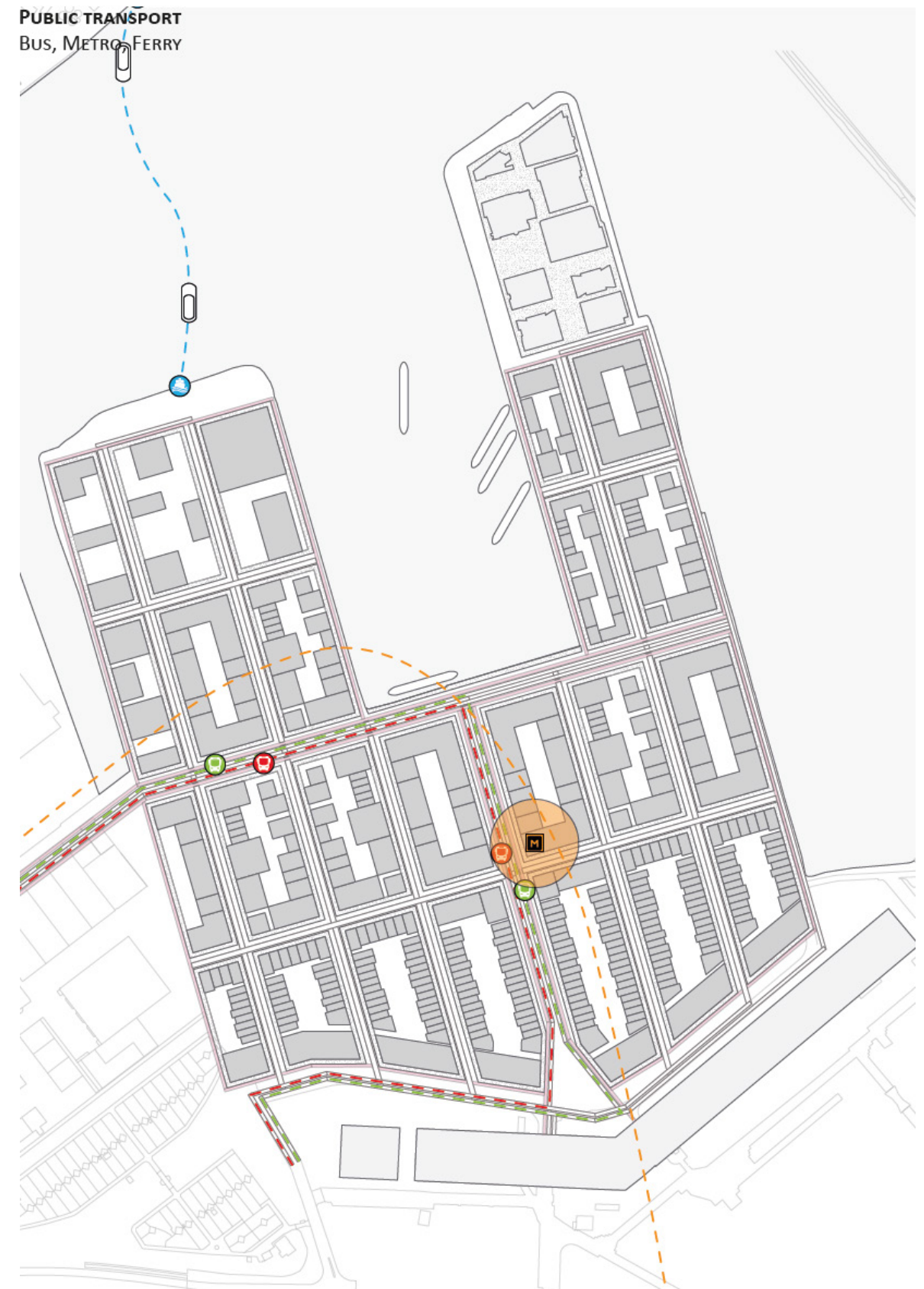


GREEN AND BLUE AREAS

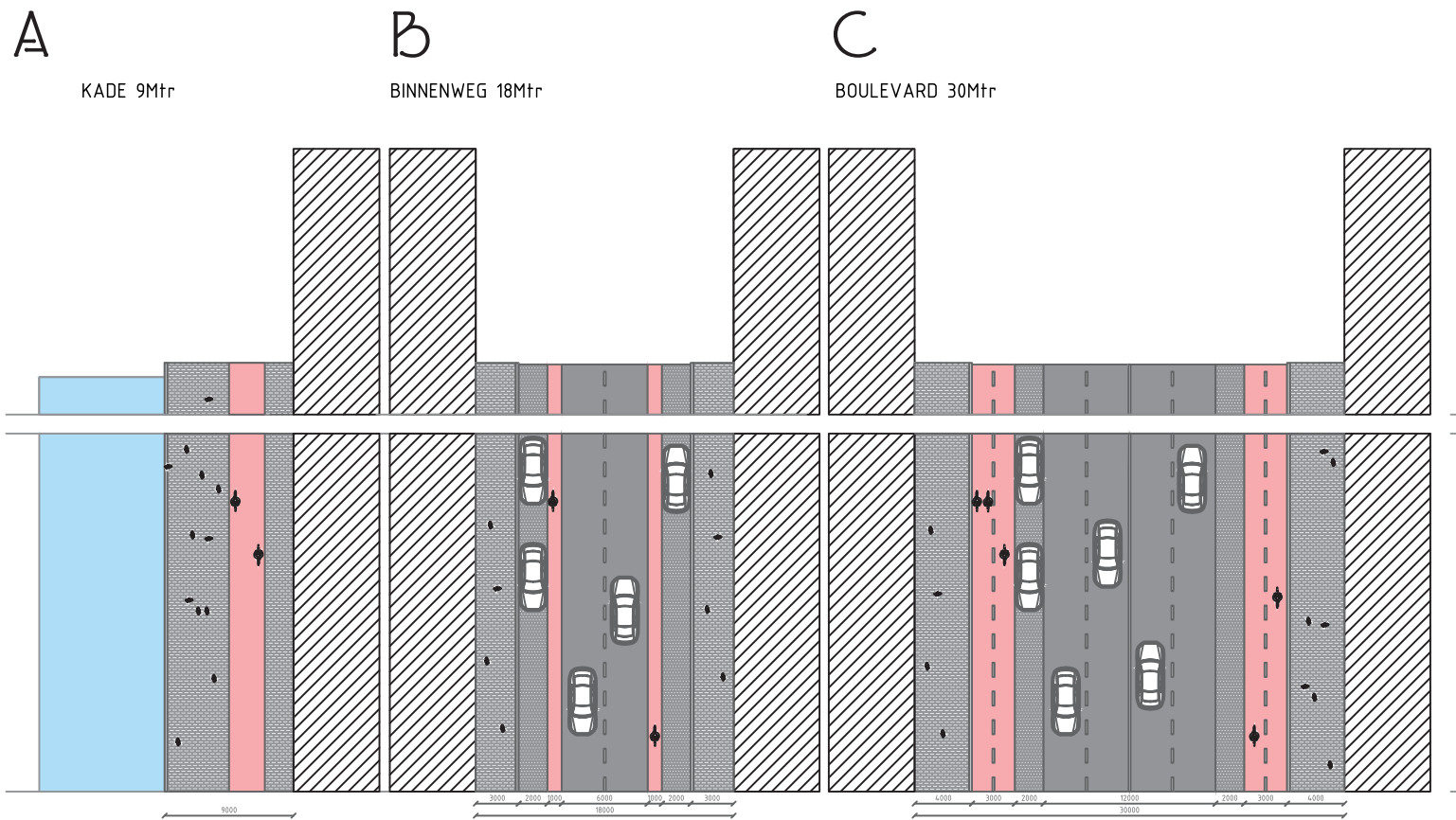
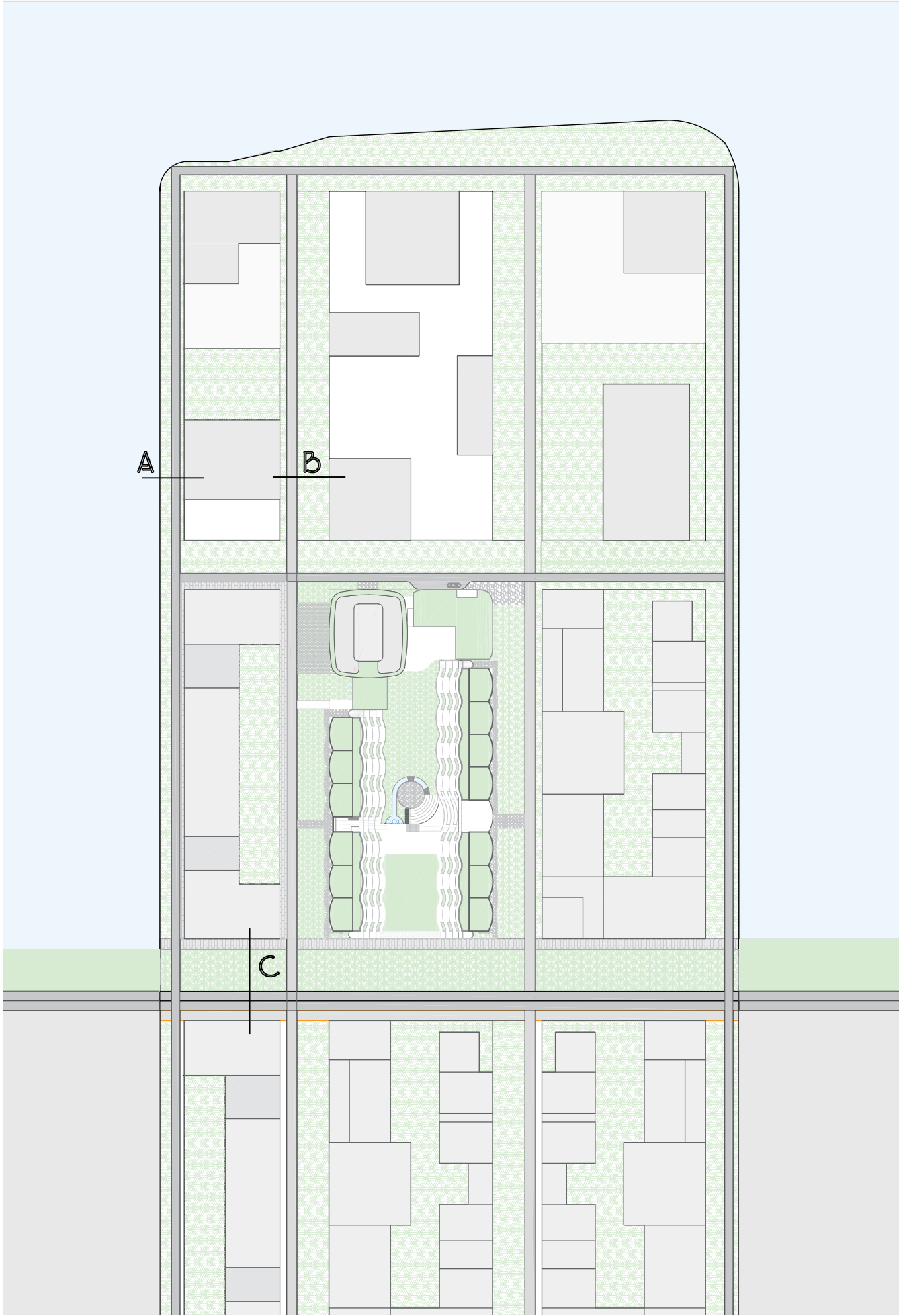
- 1) Planned Parc
- 2) Allotment Gardens - Zonnehoeck
- 3) Sports parc
- 4) St. Barbara Cemetery
- 5) Woeste Westen - natural playground
- 6) Allotment Gardens Sloterdijk Harbour
- 7) Westerpark
- 8) Harbour



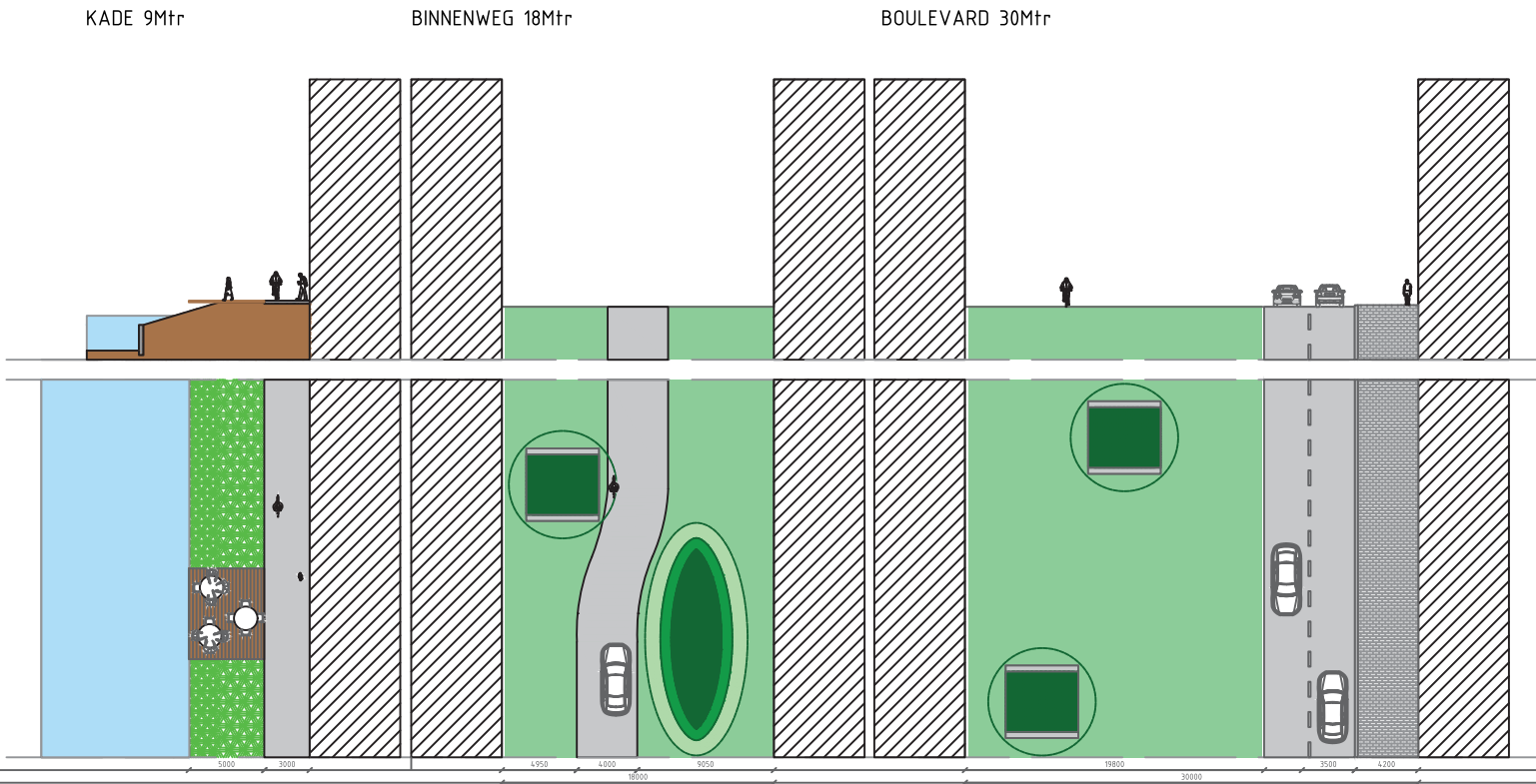
“Car Free” City



Car Free City - Green Infrastructure

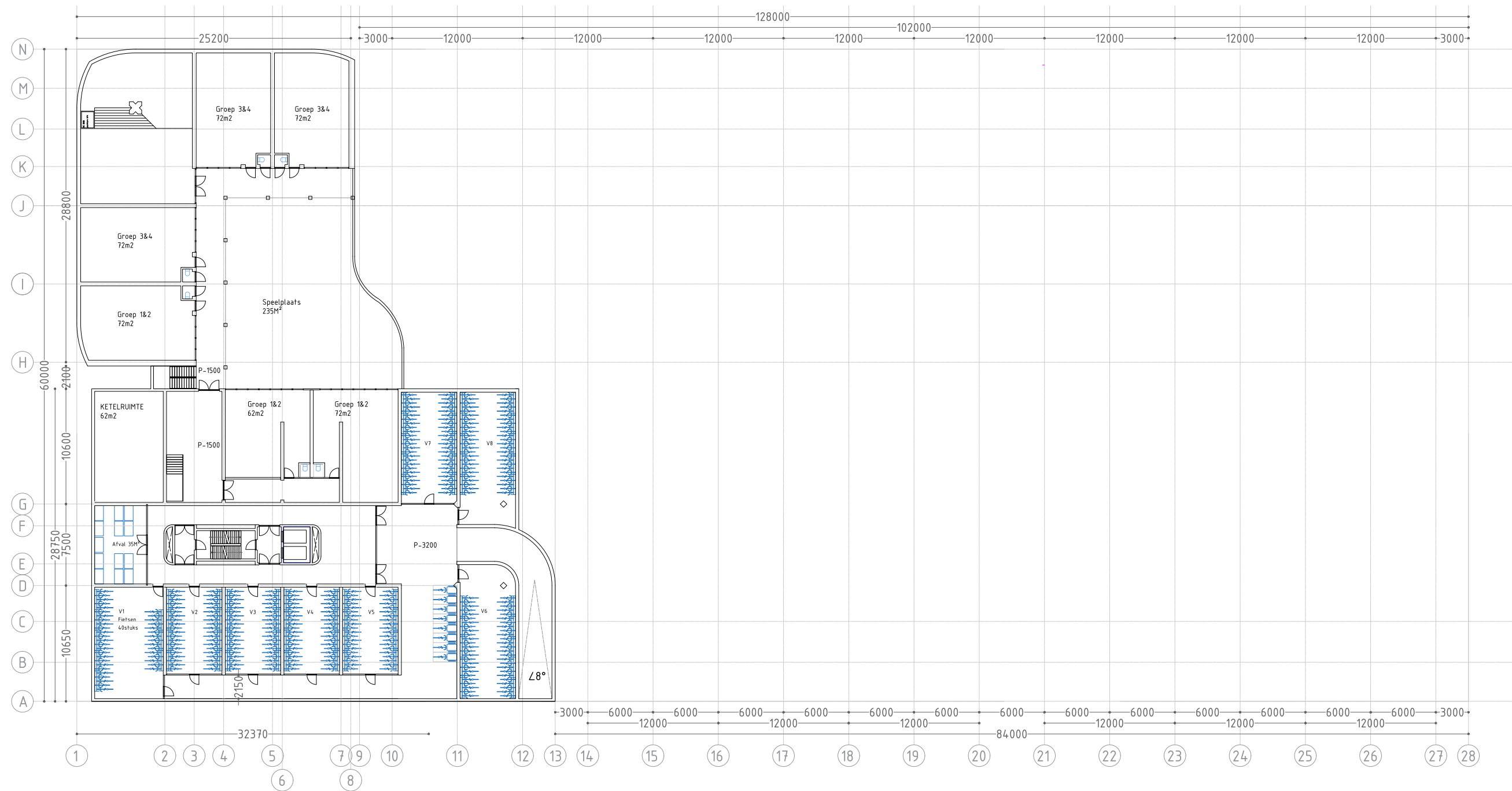


STRAAT PROFIELEN NIEUW

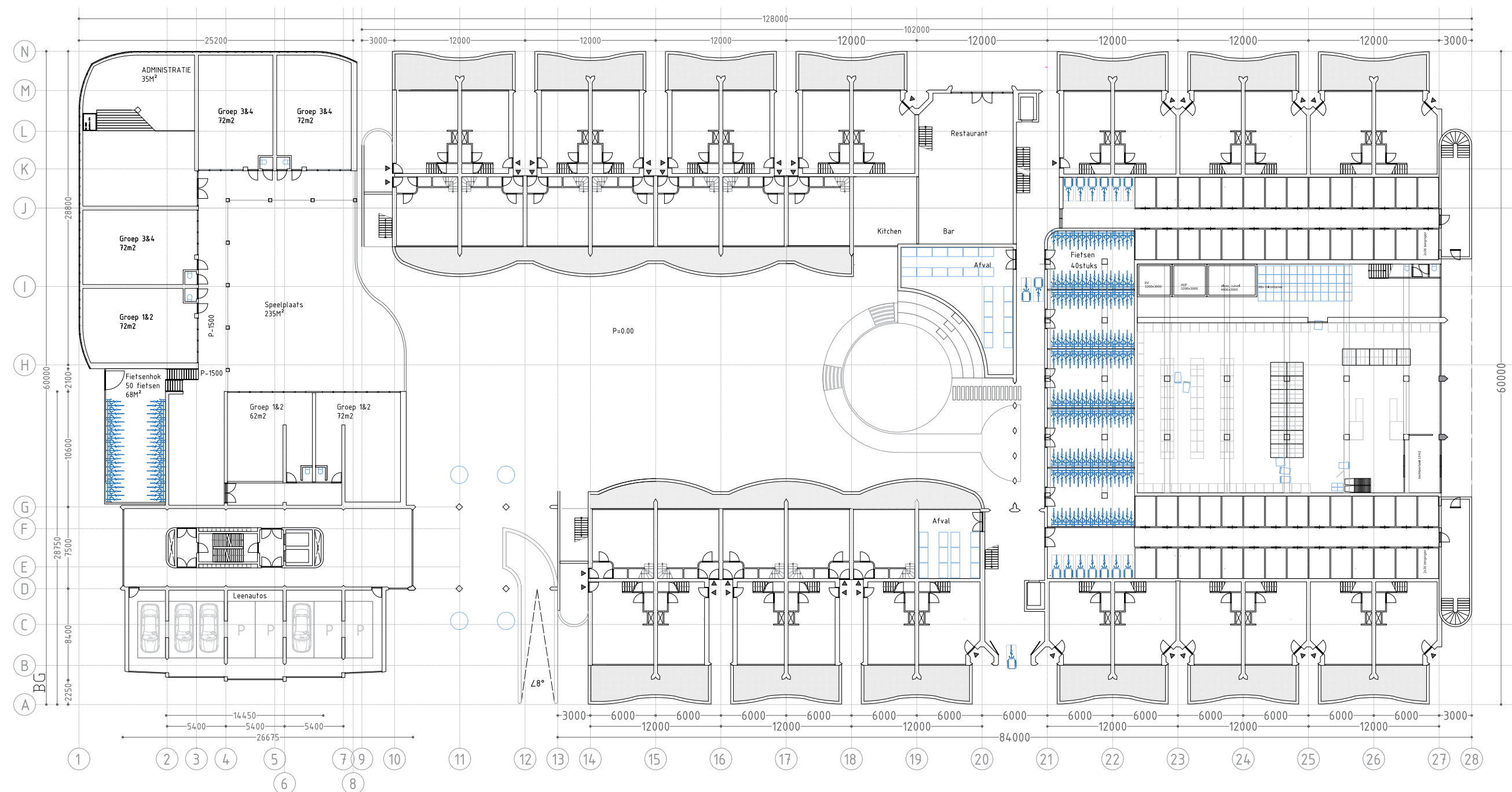


Floorplans Building Block

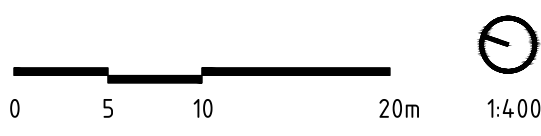
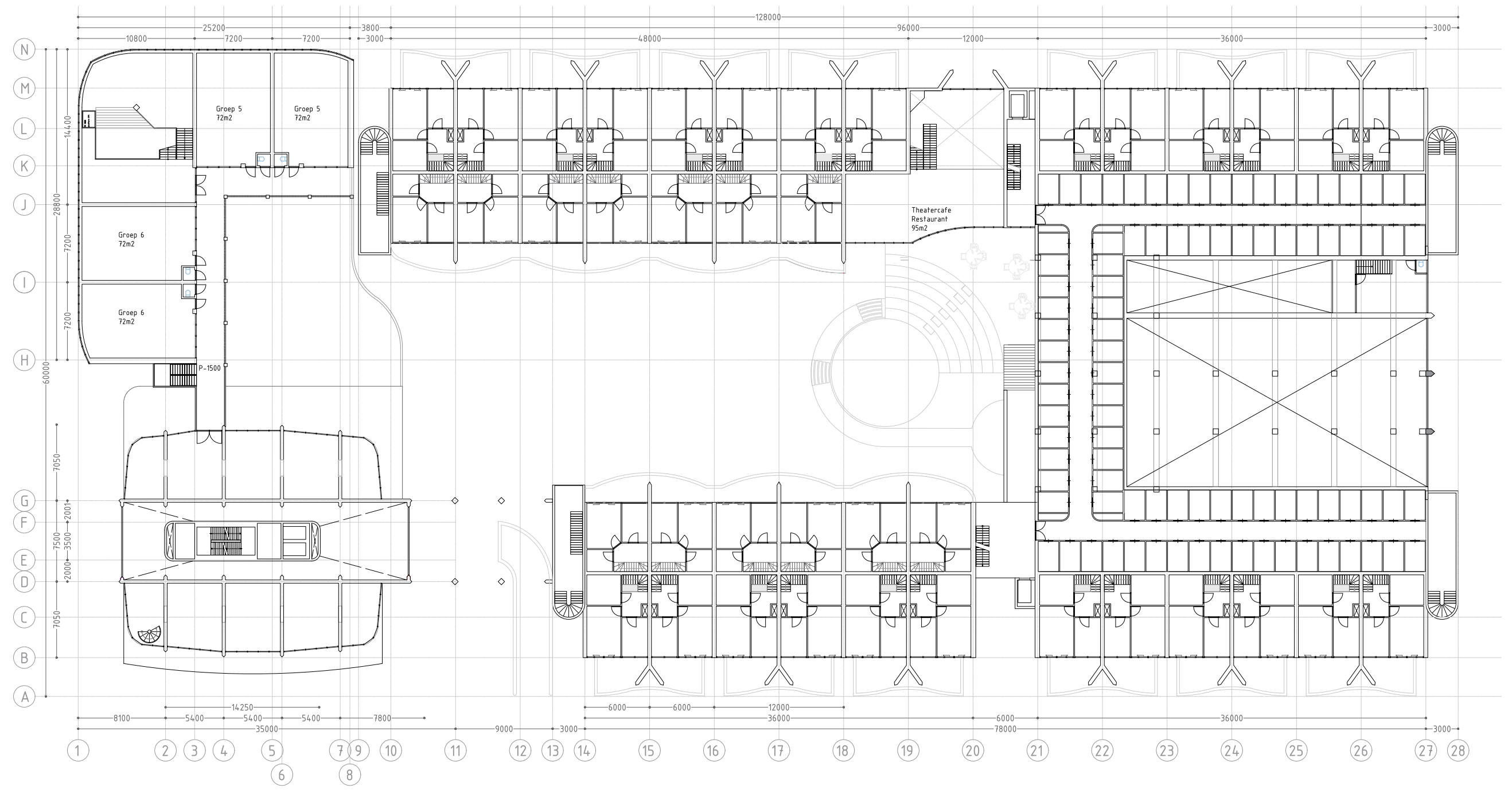
Floorplan Underground Parking



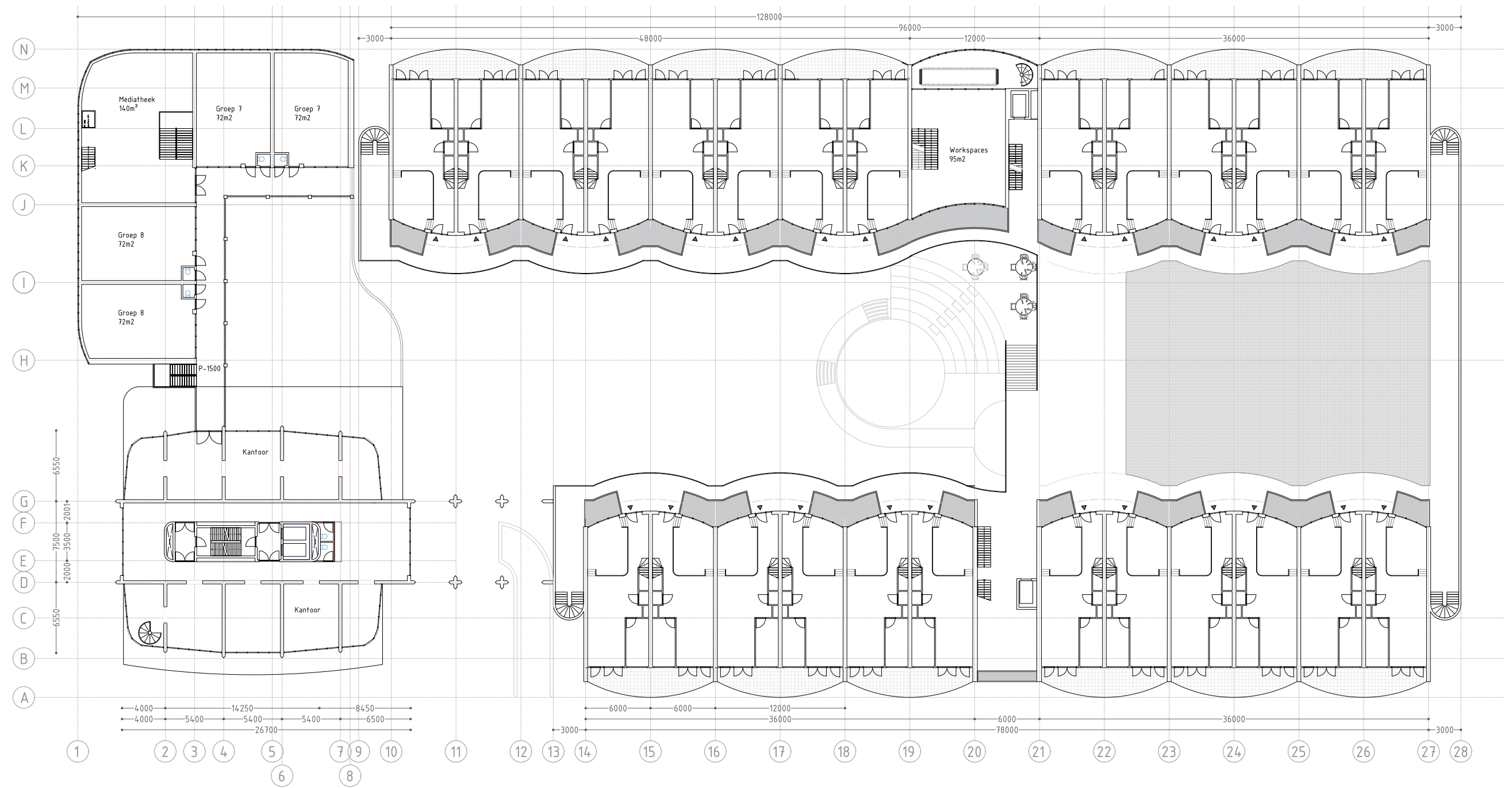
Floorplan Ground Floor



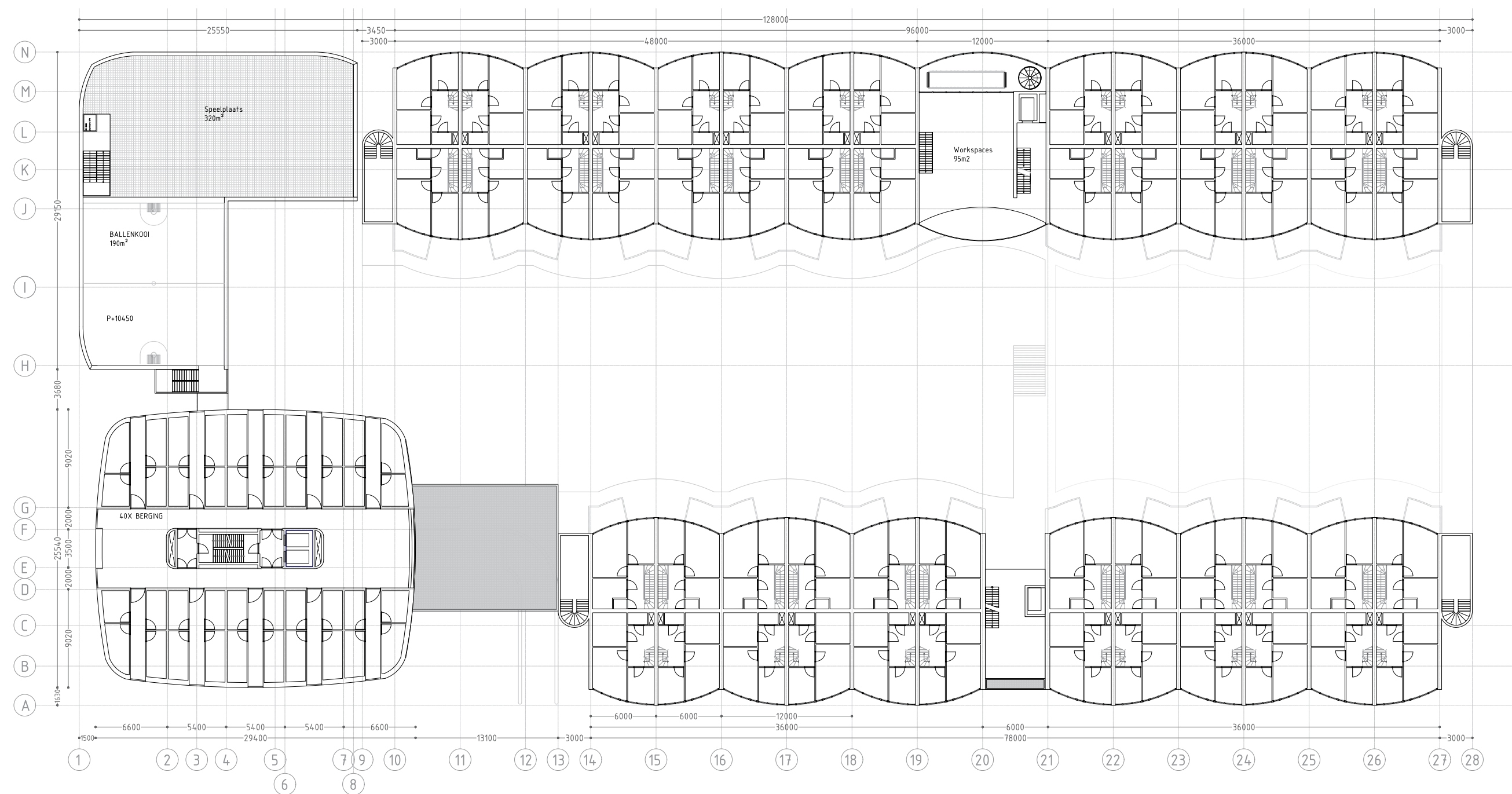
Floorplan First Floor



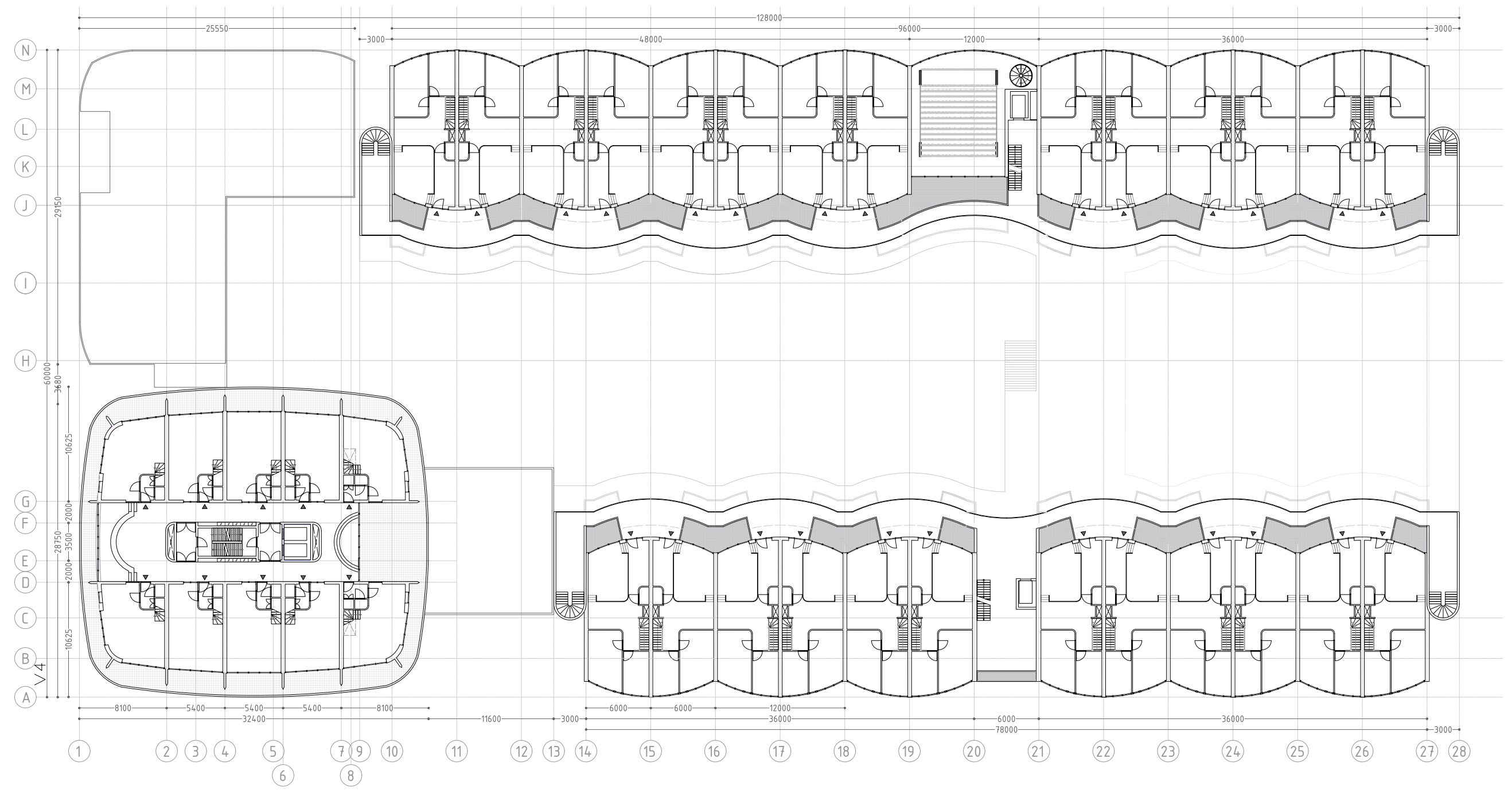
Floorplan Second Floor



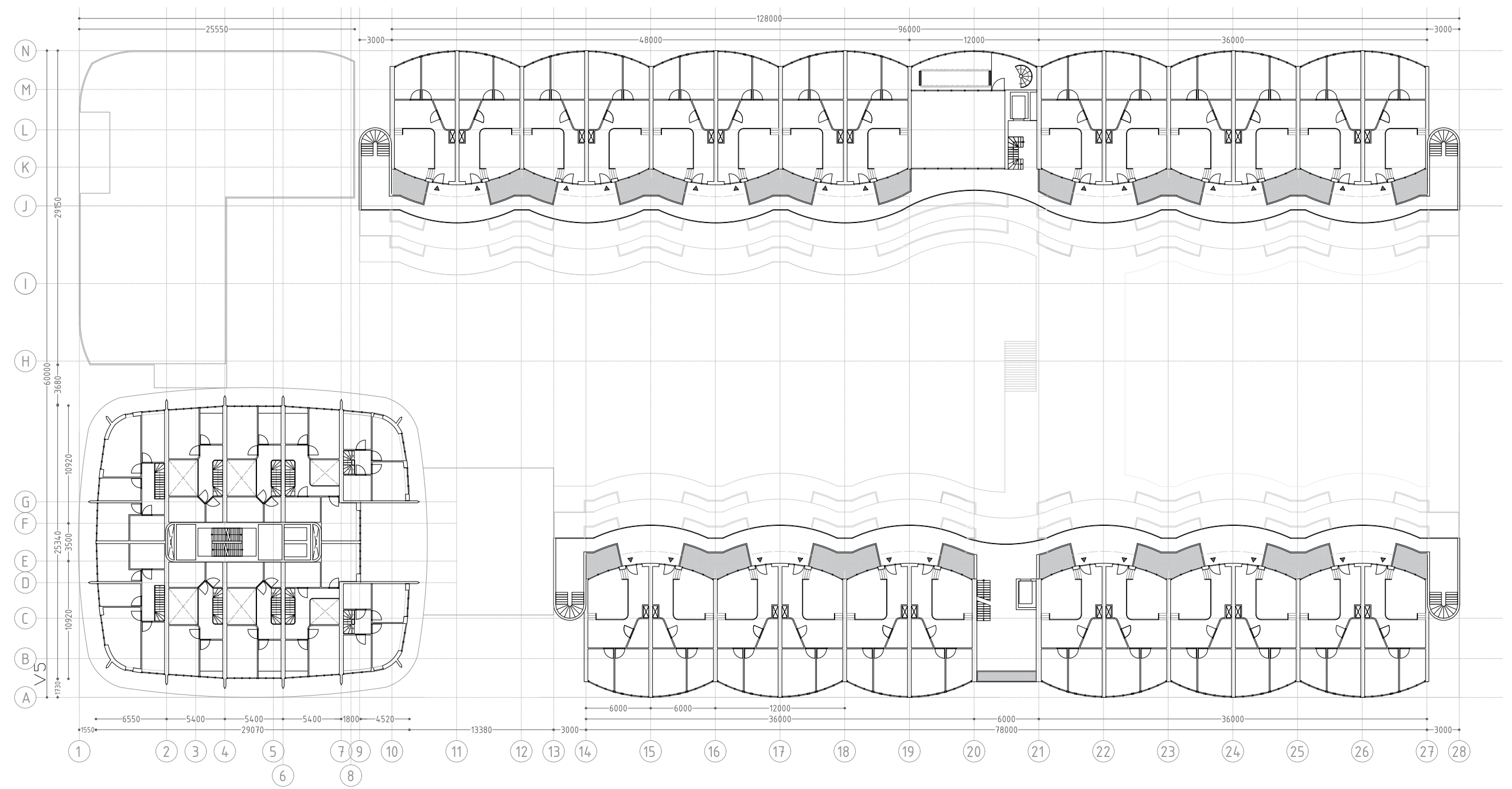
Floorplan Third Floor



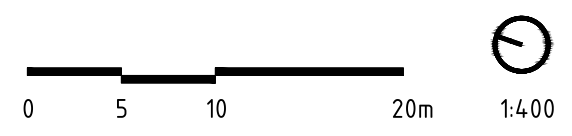
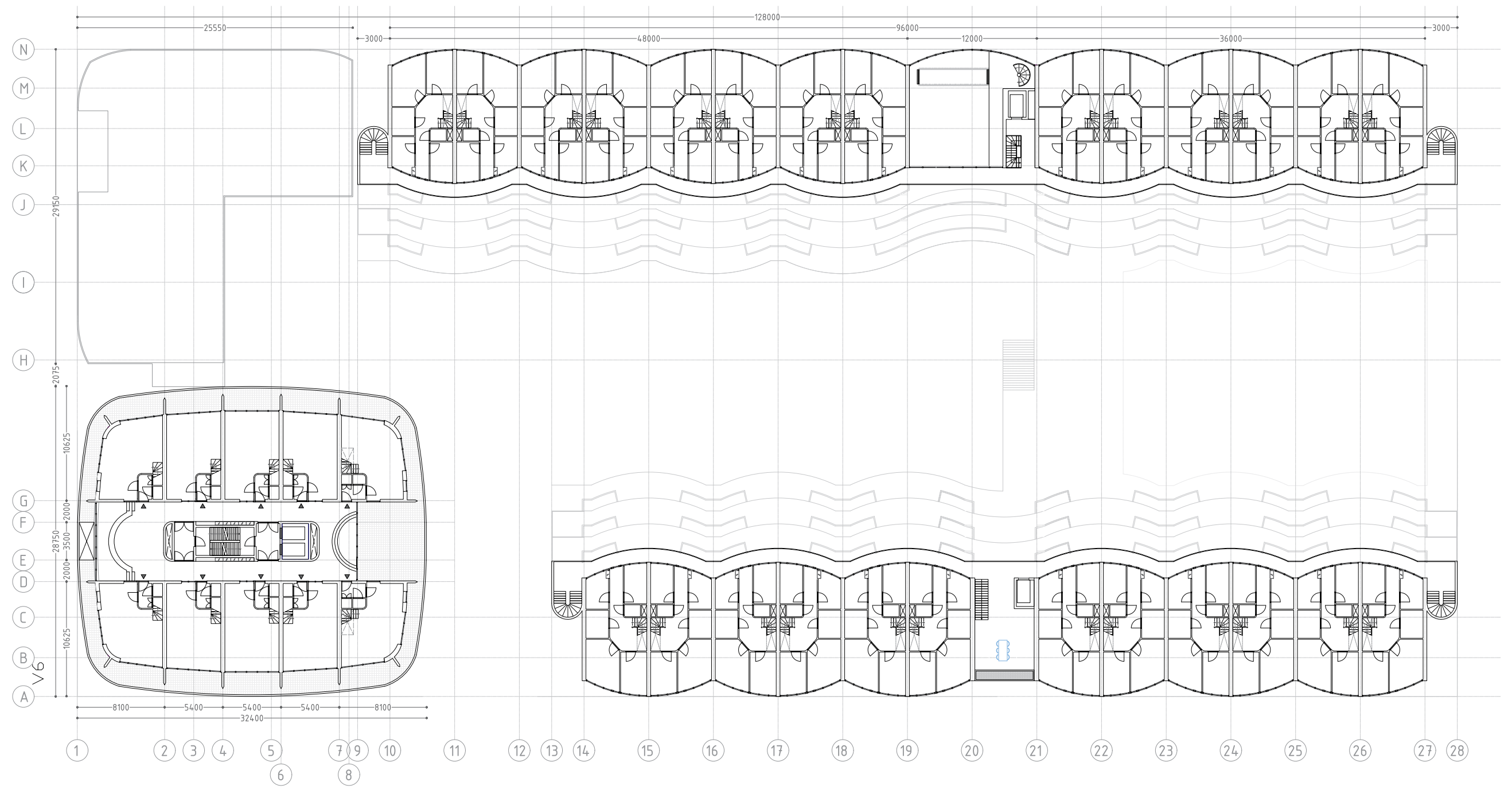
Floorplan Fourth Floor



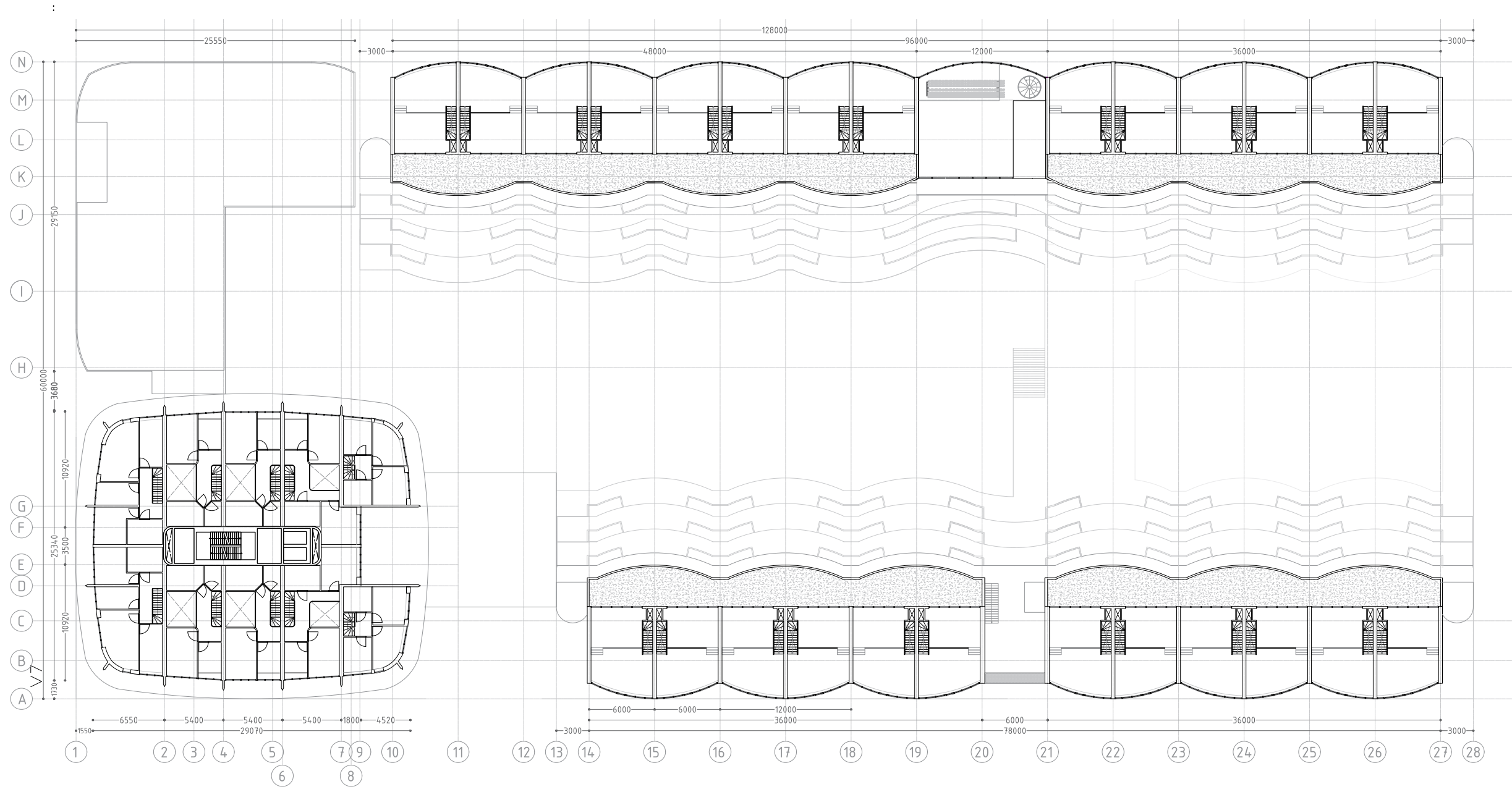
Floorplan Fifth Floor



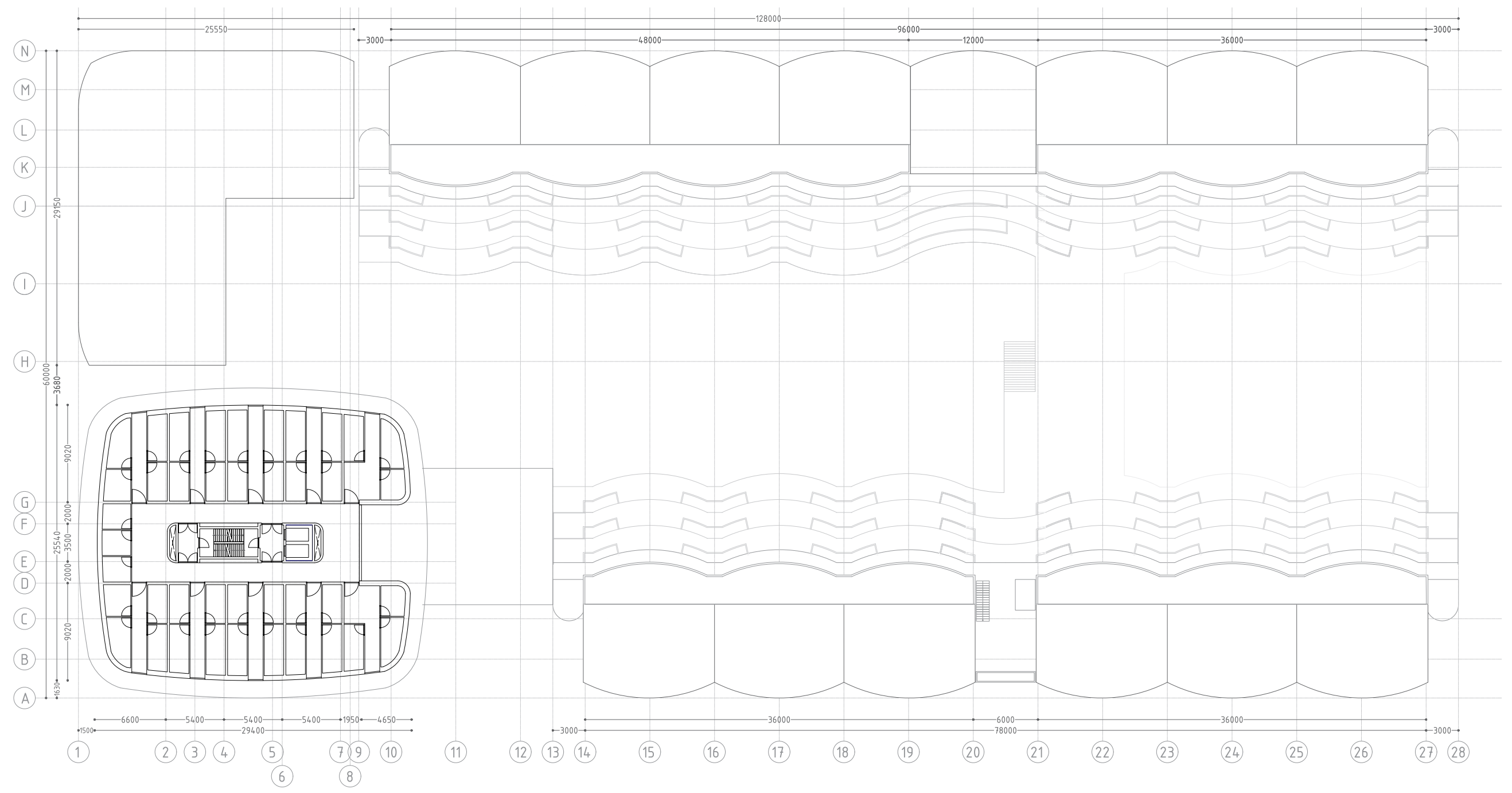
Floorplan Sixth Floor



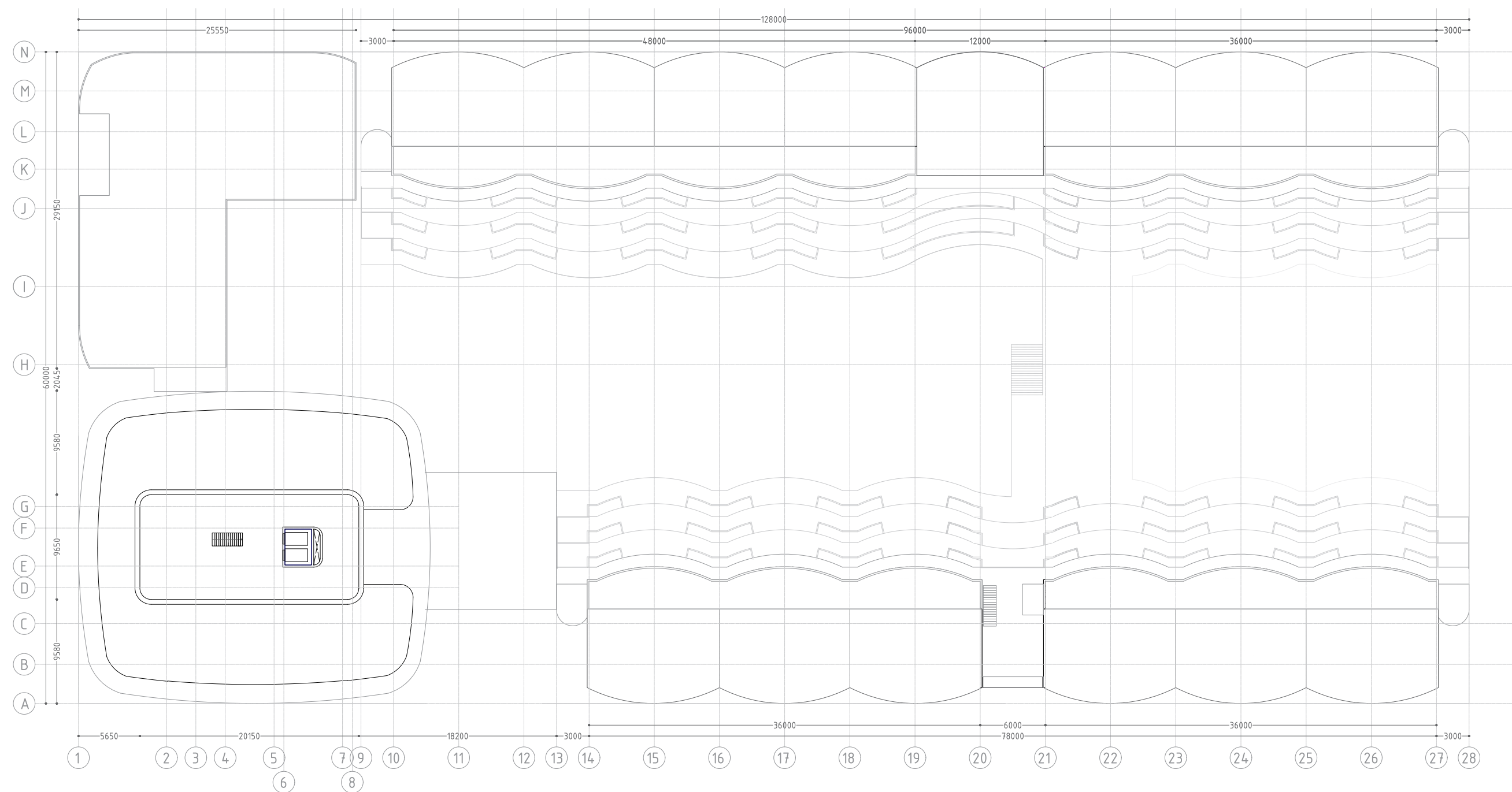
Floorplan Seventh Floor



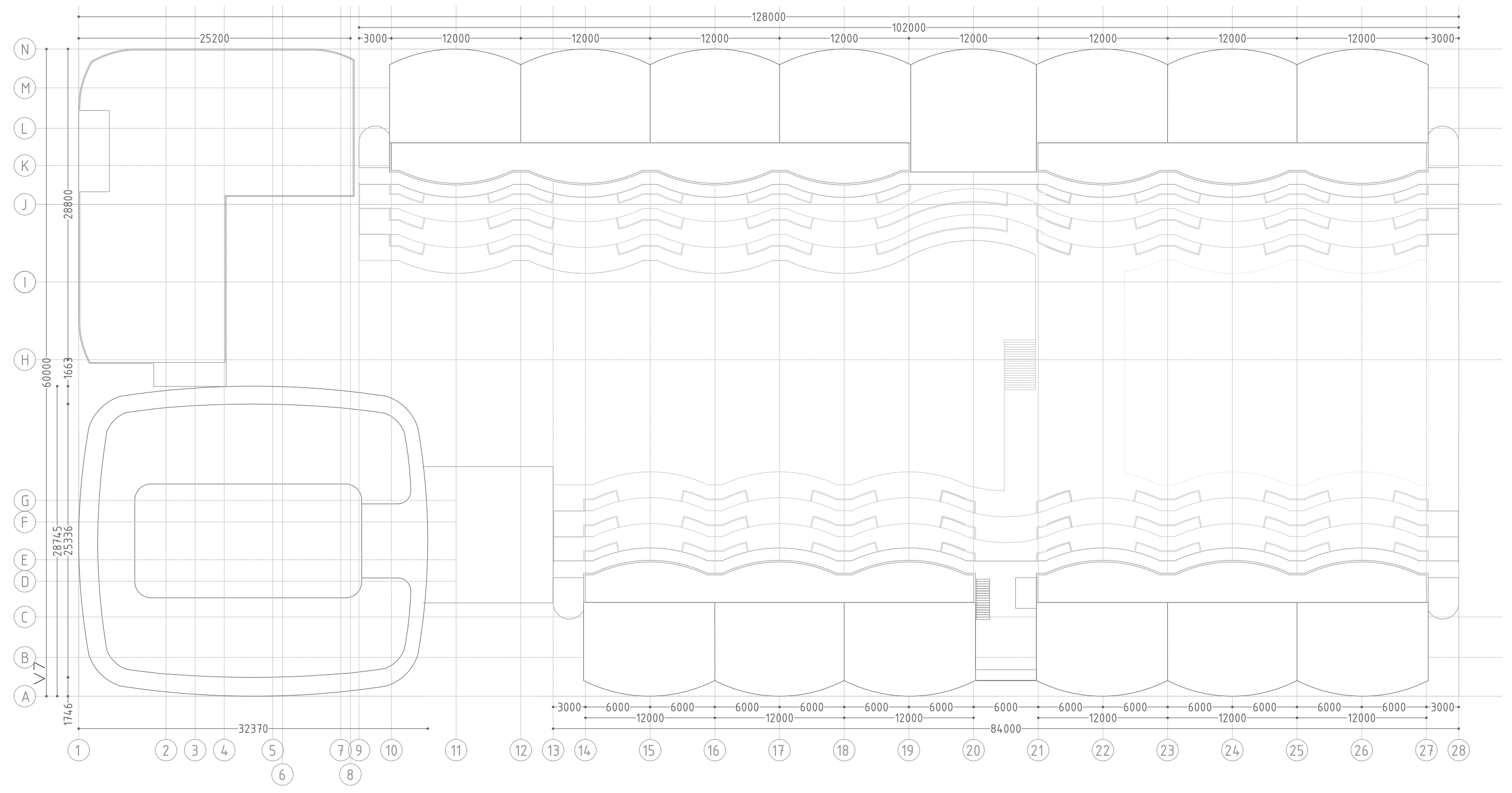
Floorplan Twentieth Floor



Floorplan Twentyfirst Floor

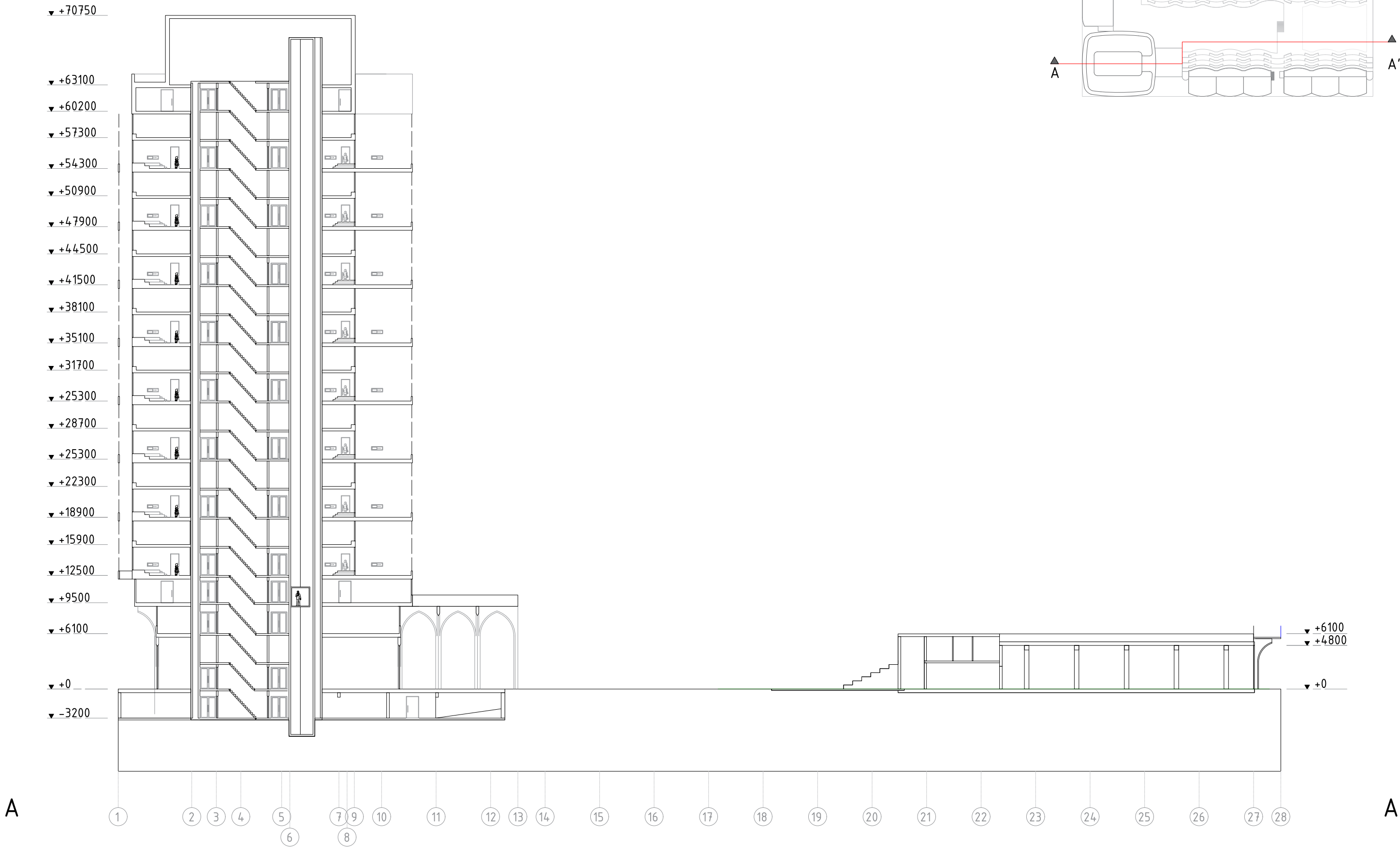


Floorplan Roof



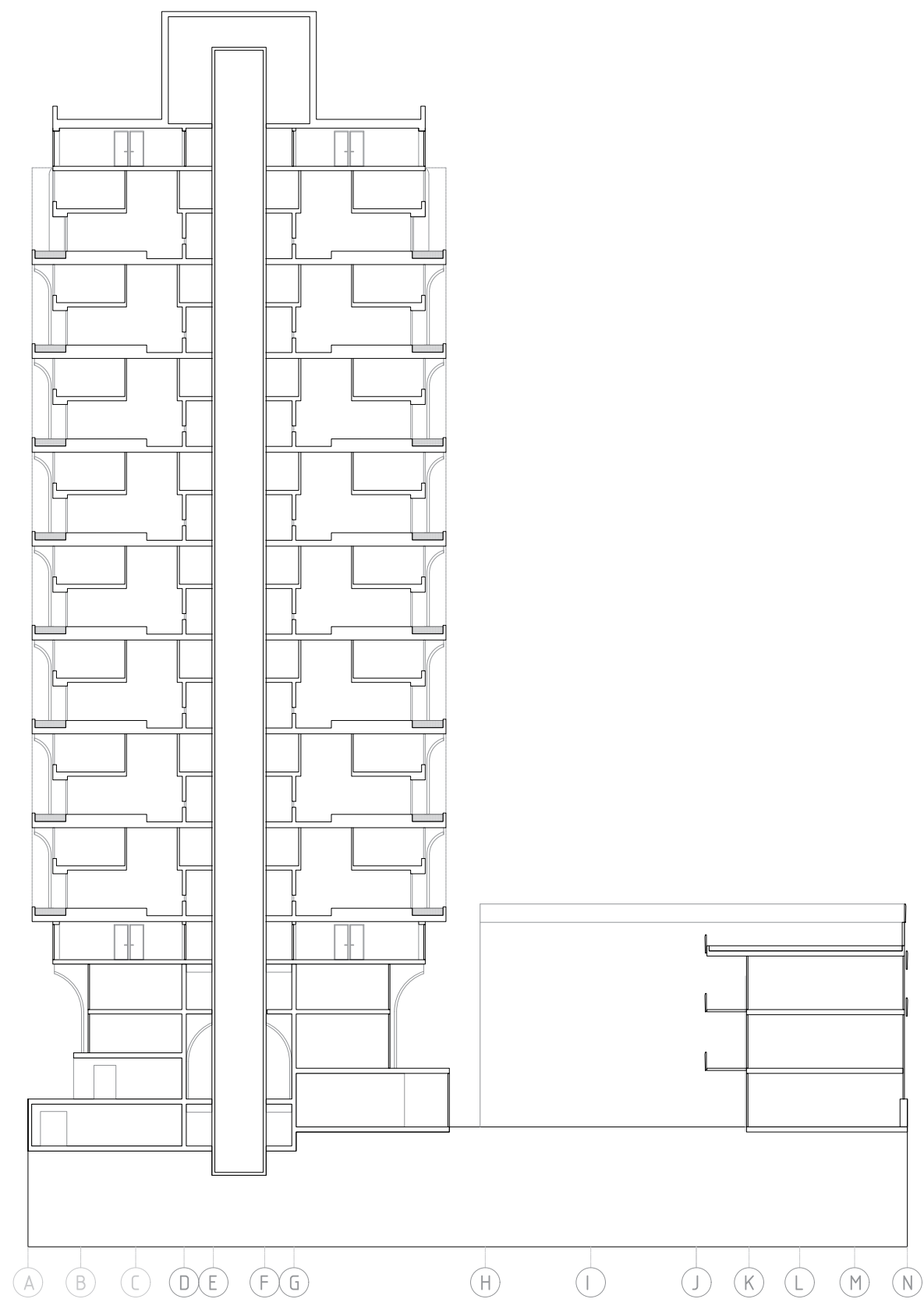
\int ections

Section A-A'

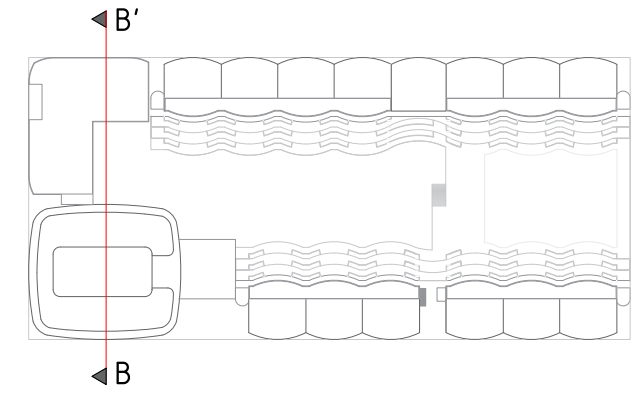


Section B-B'

- ▼ +70750
- ▼ +63100
- ▼ +60200
- ▼ +57300
- ▼ +54300
- ▼ +50900
- ▼ +47900
- ▼ +44500
- ▼ +41500
- ▼ +38100
- ▼ +35100
- ▼ +31700
- ▼ +25300
- ▼ +28700
- ▼ +25300
- ▼ +22300
- ▼ +18900
- ▼ +15900
- ▼ +12500
- ▼ +9500
- ▼ +6100
- ▼ +3150
- ▼ +0
- ▼ -3200



- ▼ +13300
- ▼ +10450
- ▼ +6100
- ▼ +2100
- ▼ +0
- ▼ -1900

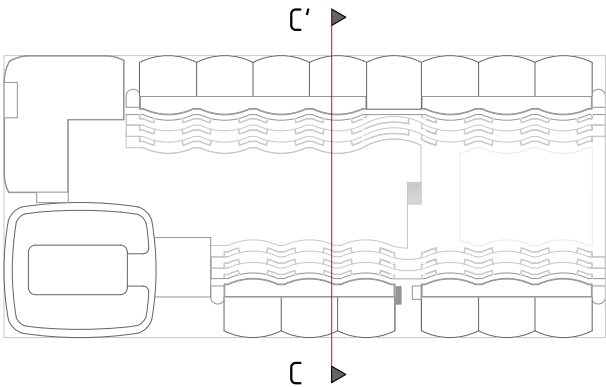


B

B'

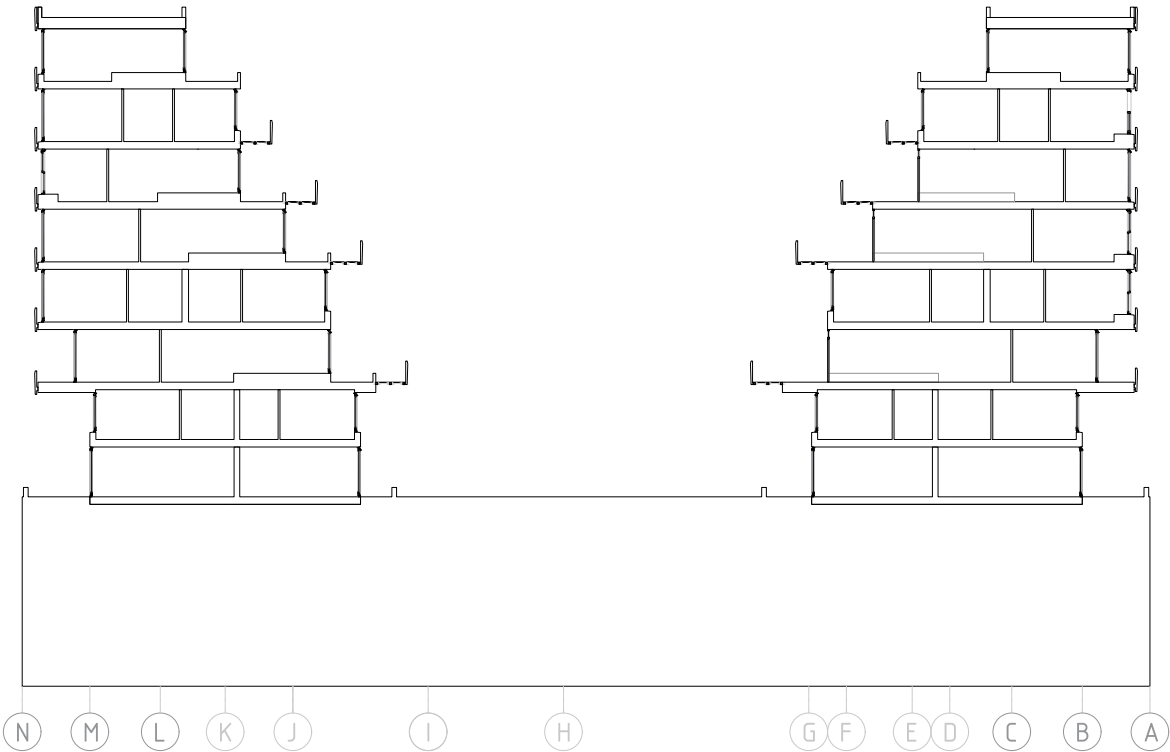


Section C-C'



- ▼ +26050
- ▼ +25500
- ▼ +22100
- ▼ +18900
- ▼ +15700
- ▼ +12500
- ▼ +9300
- ▼ +6100
- ▼ +3050
- ▼ +0

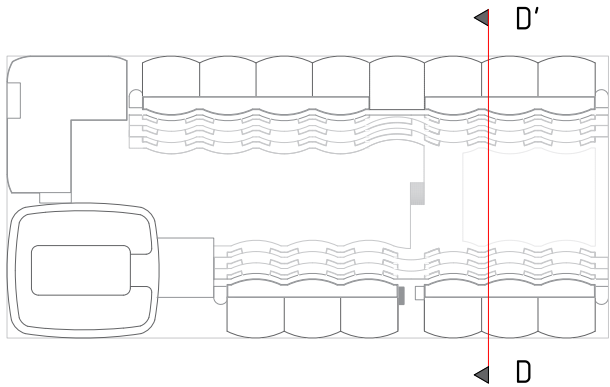
C



C'

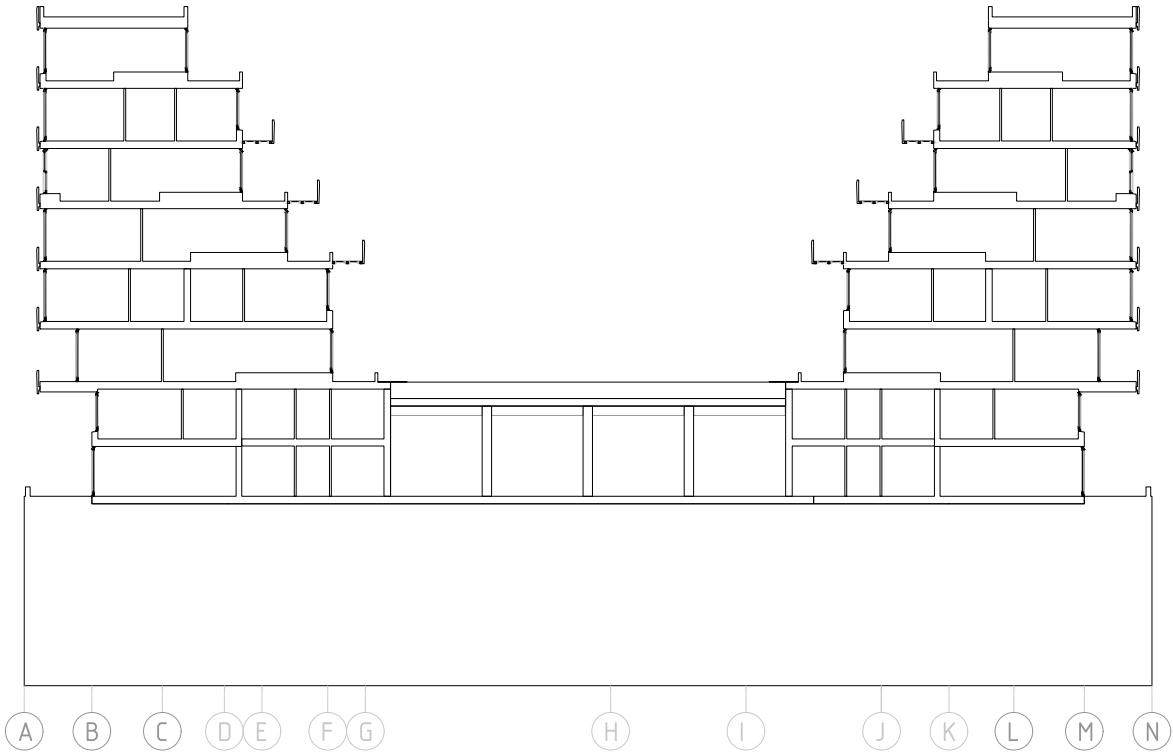


Section D-D'



▼ +26050
▼ +25500
▼ +22100
▼ +18900
▼ +15700
▼ +12500
▼ +9300
▼ +6100
▼ +3050
▼ +0

D

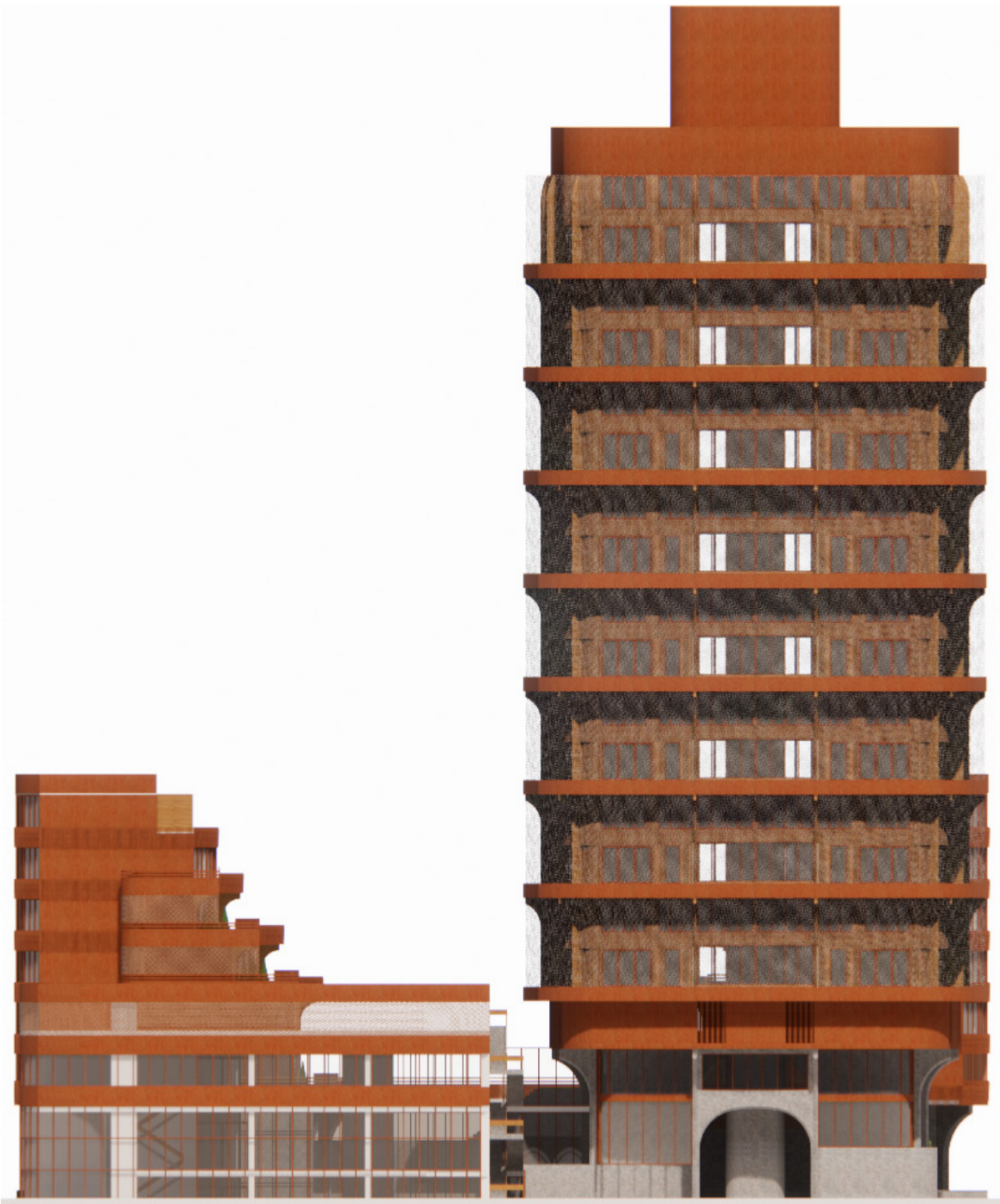


D'

0 5 10 20m 1:400

Facades

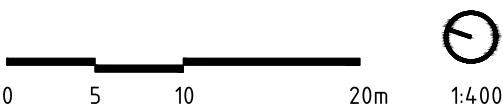
North Facade



East Facade



South Facade



West Facade

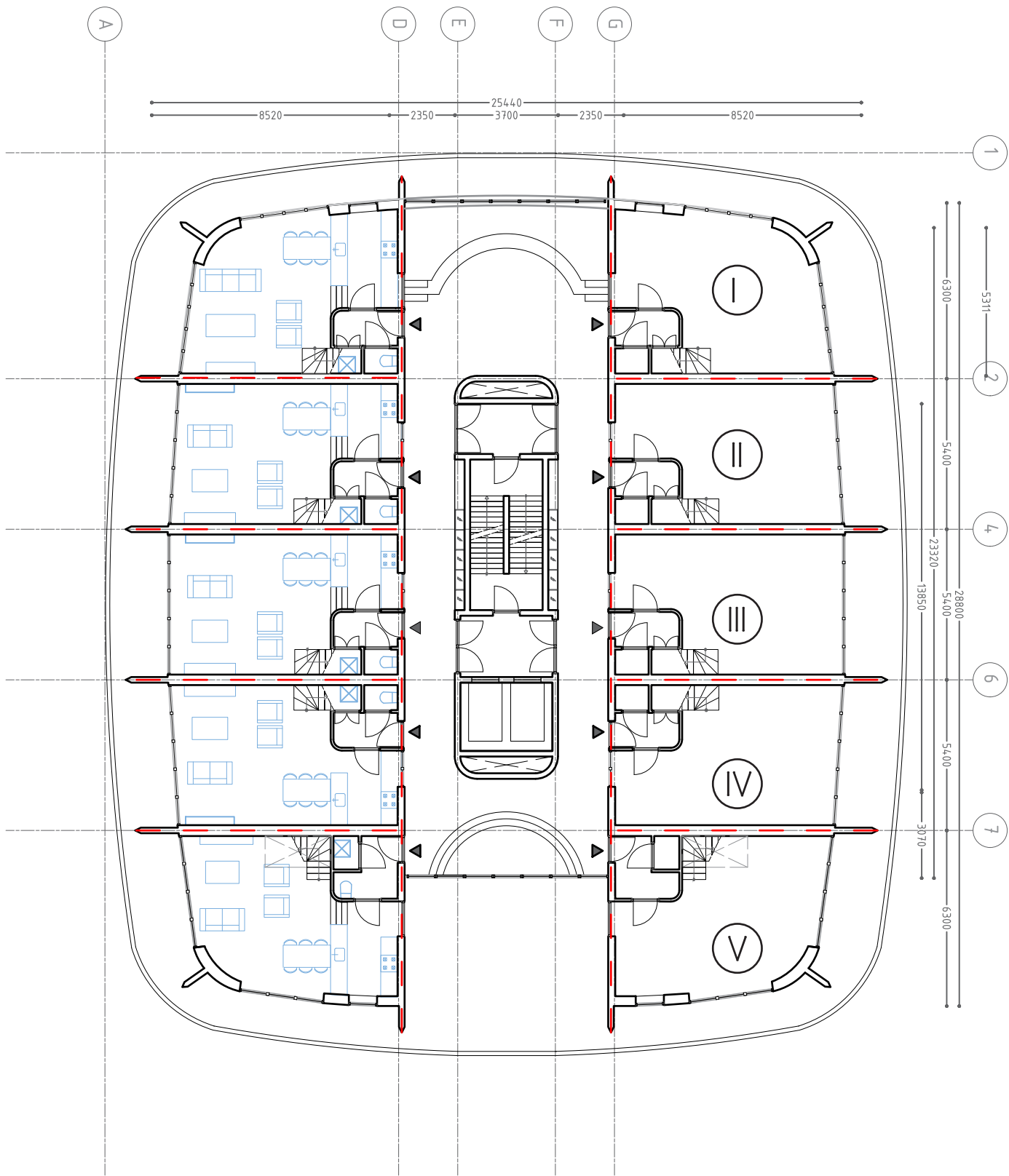


Floorplans Dwellings Residential Tower

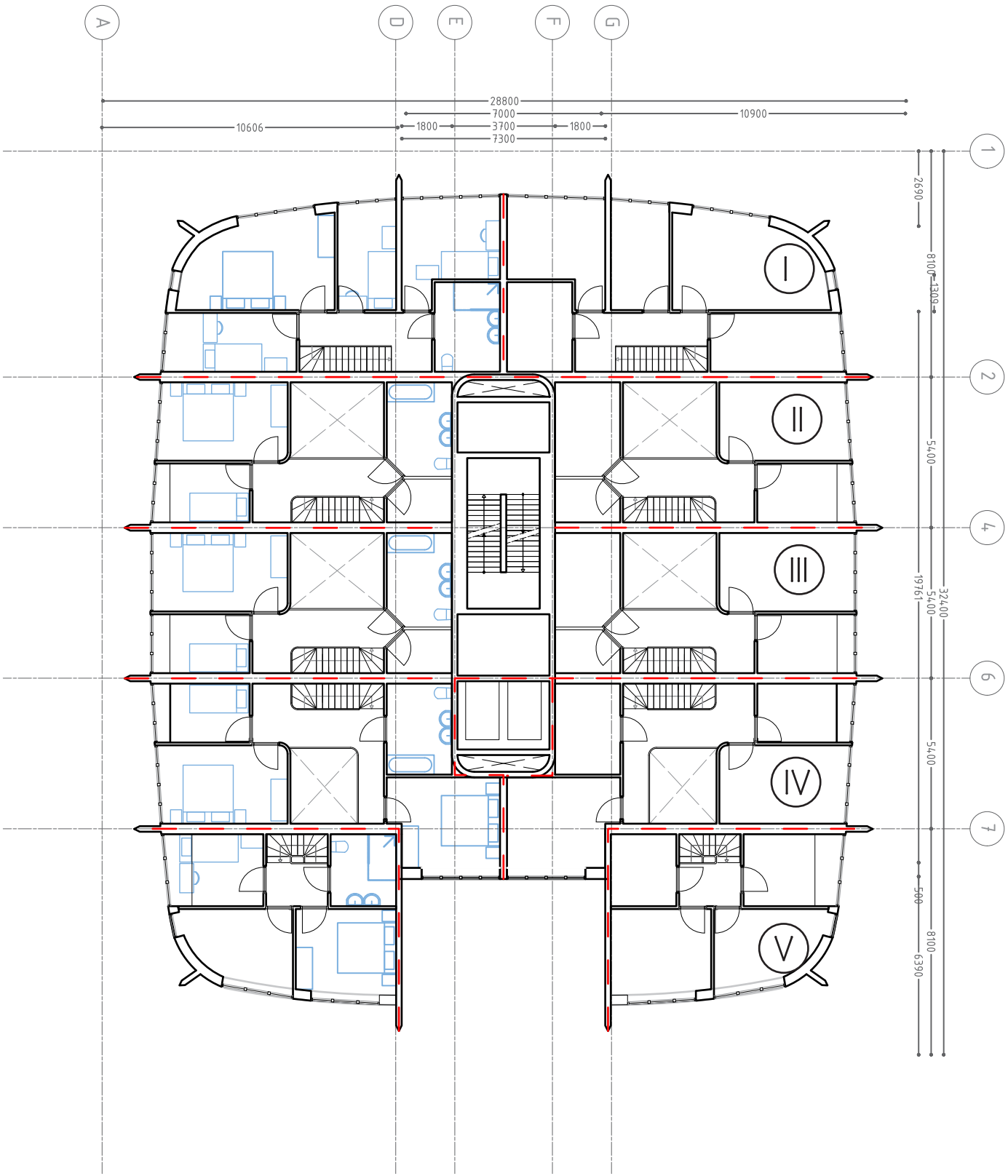


Floorplans Residential Tower 1:200

Fourth Floor

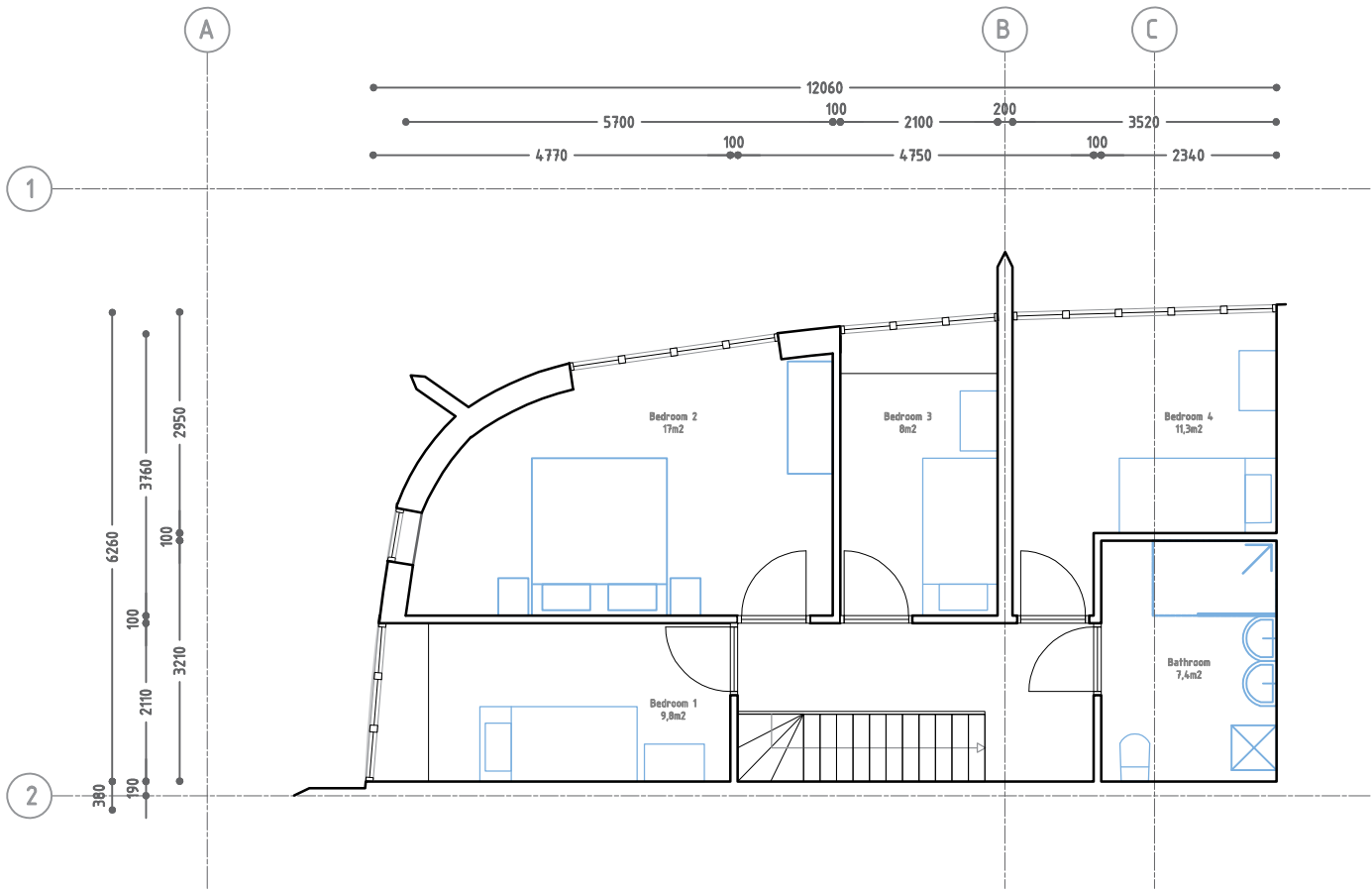


Fifth Floor

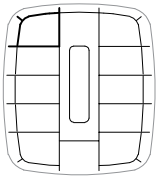
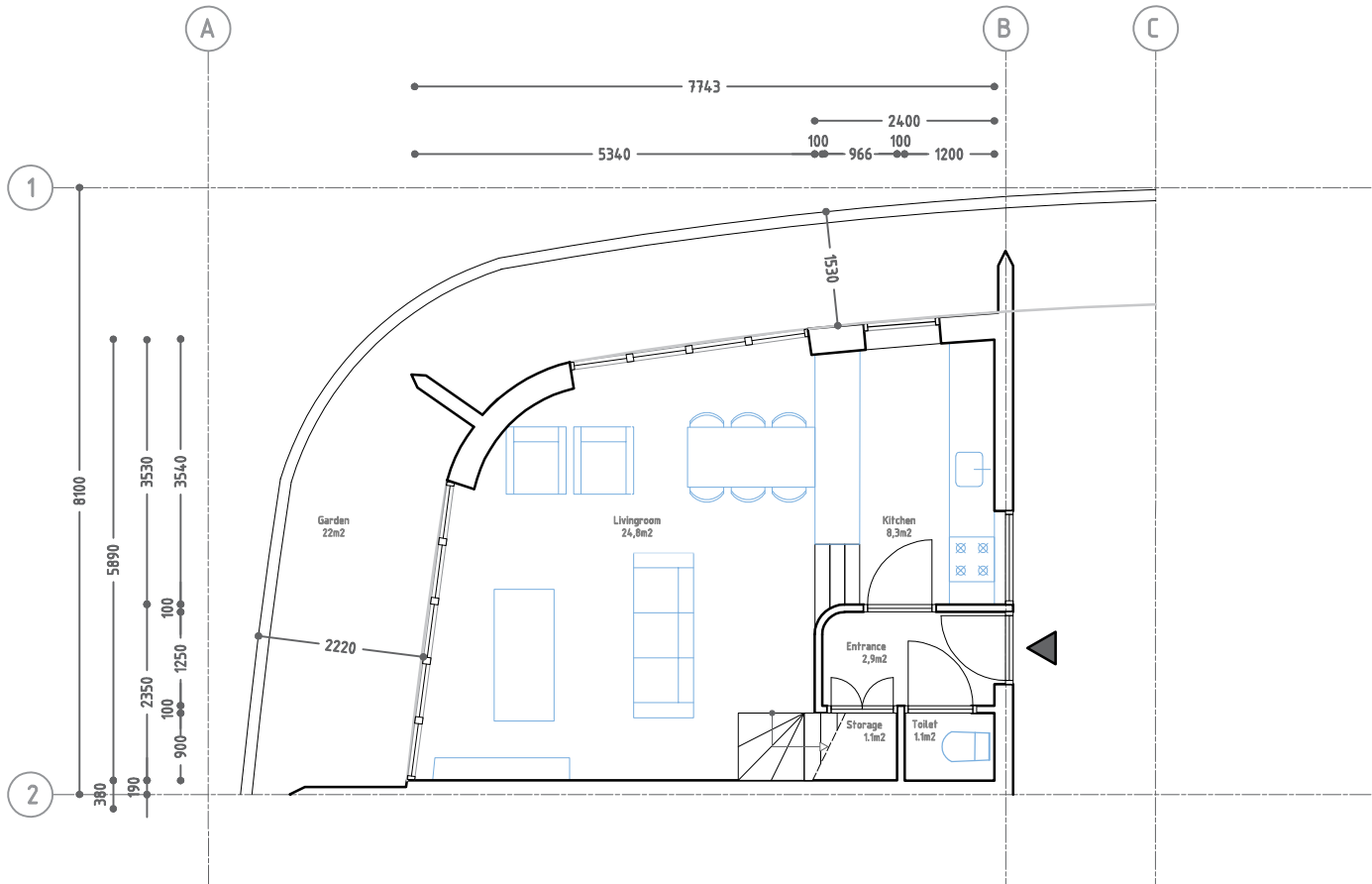


Dwelling Type I

First Floor



Ground Floor



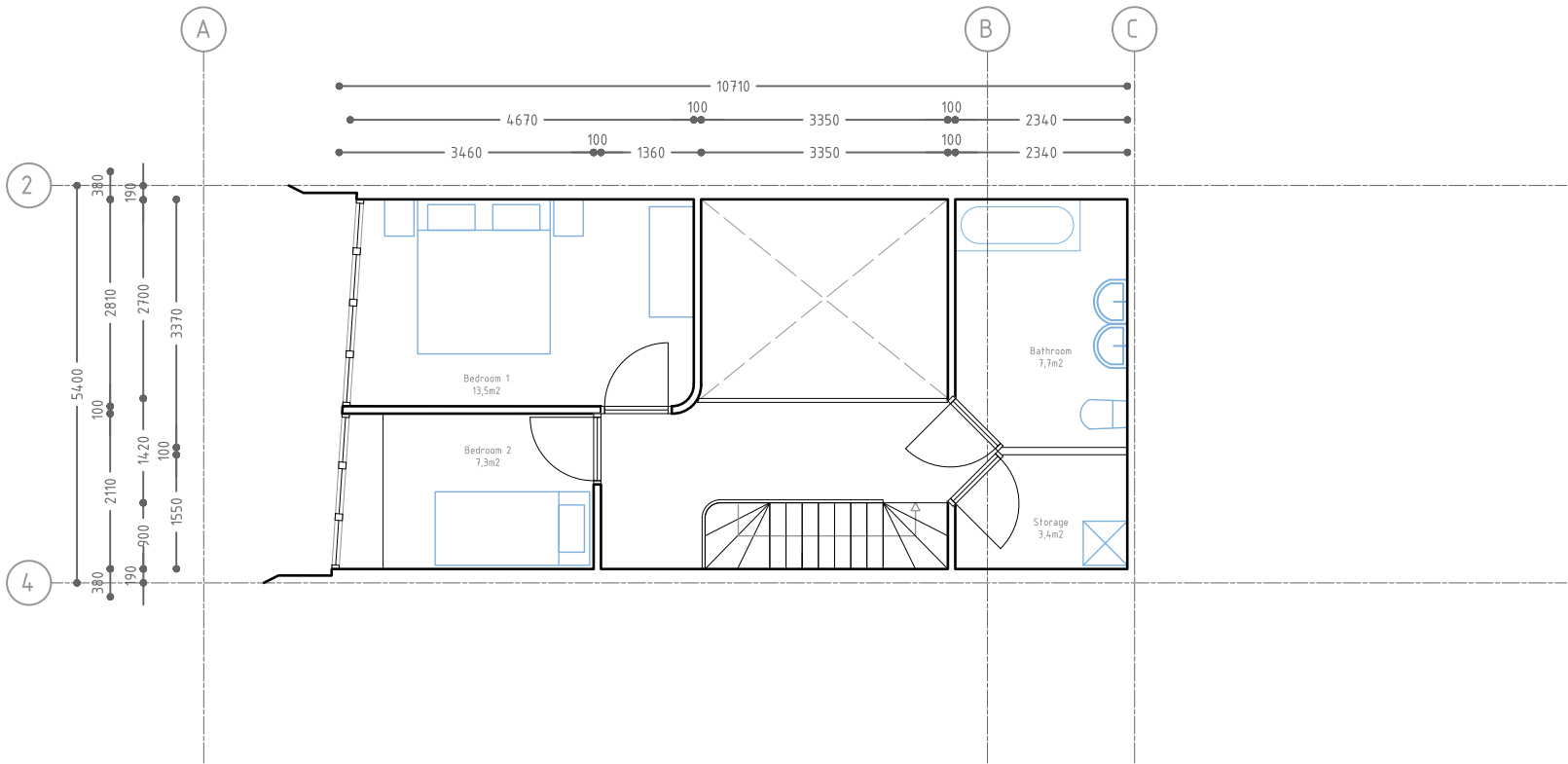
Type 1 105 sqm 4 bedroom



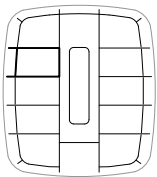
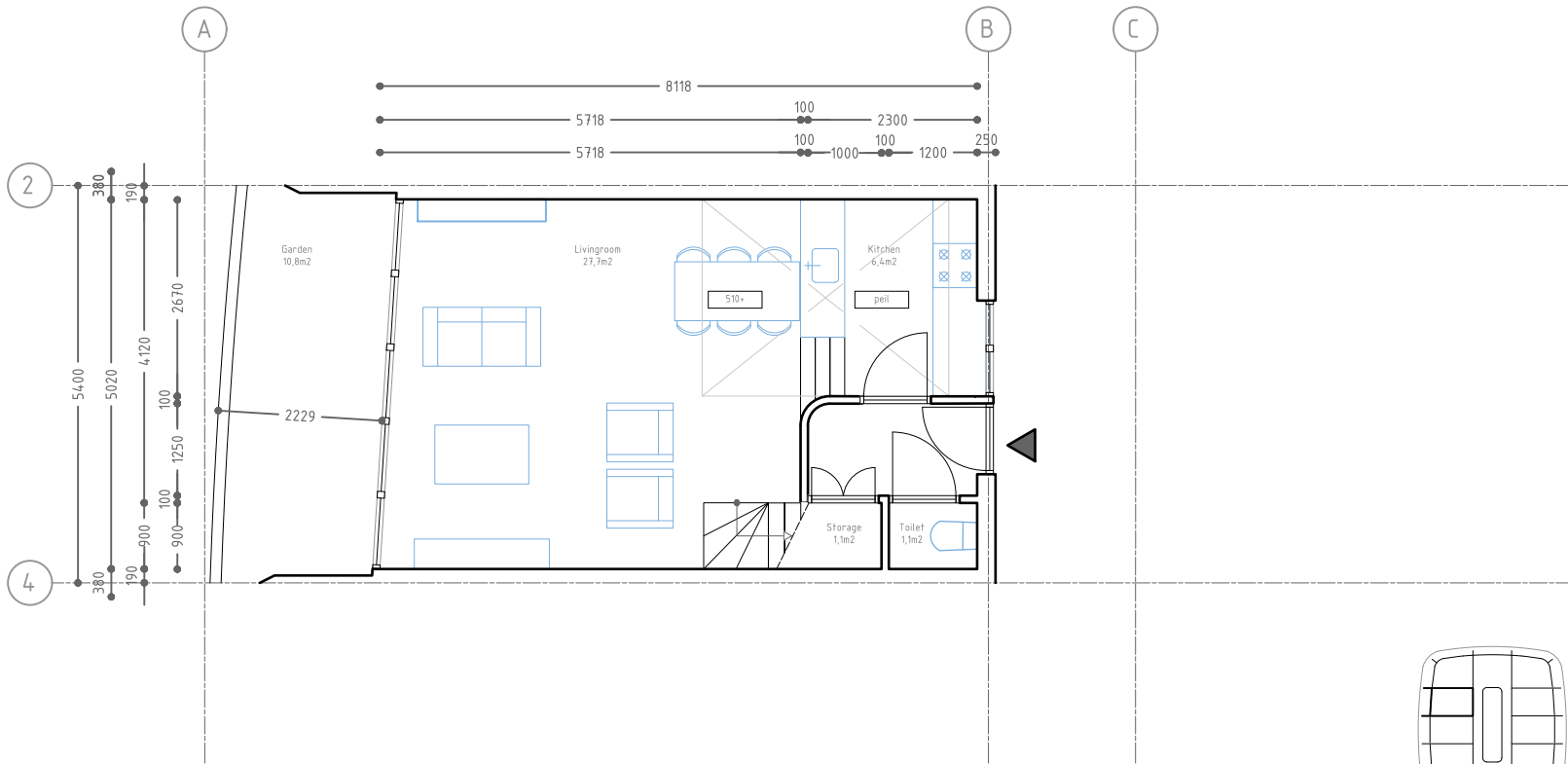
1:100

Dwelling Type II

First Floor



Ground Floor



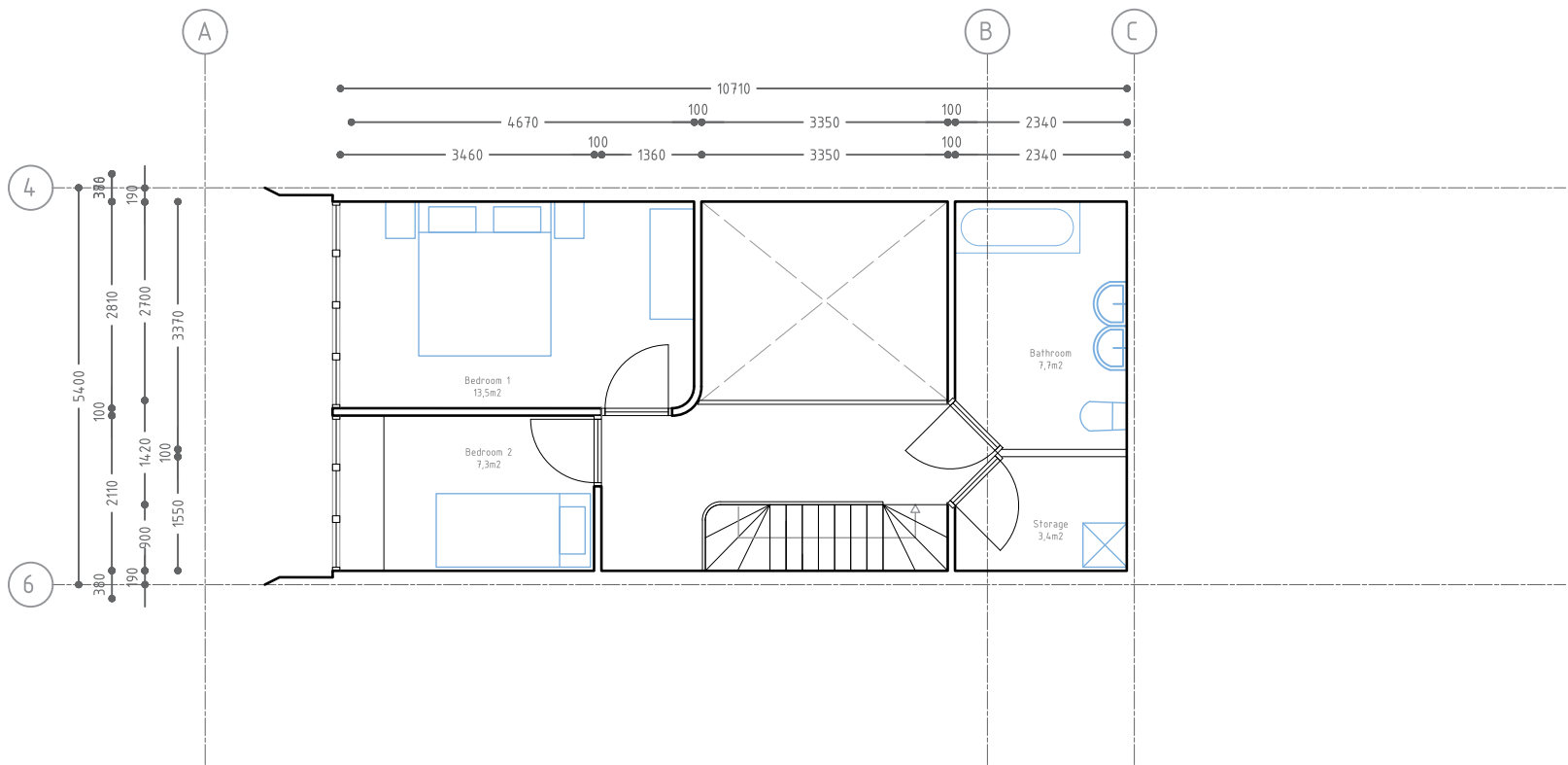
Type 2 84 sqm 2 bedroom



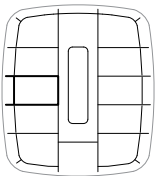
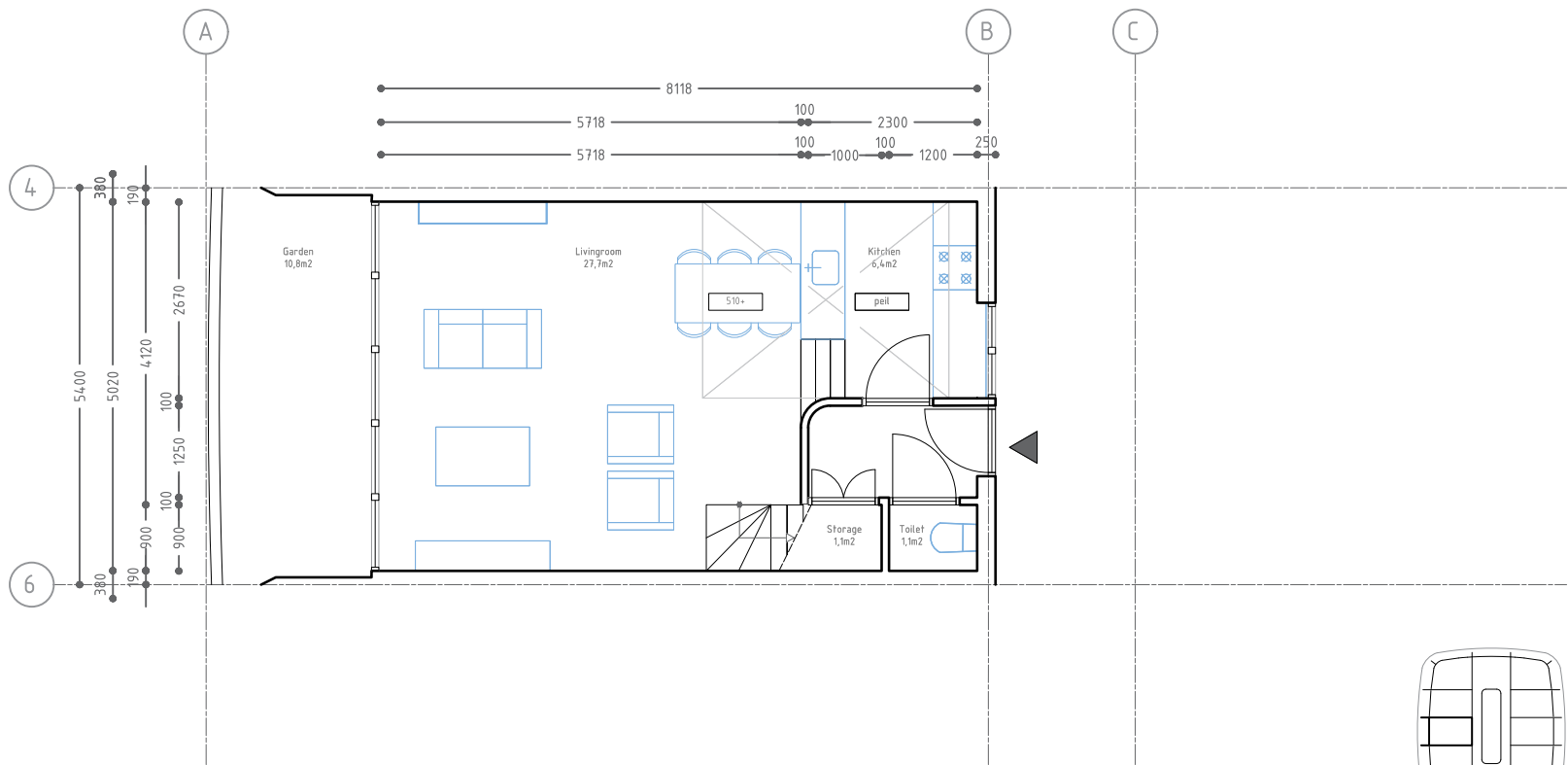
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Dwelling Type III

First Floor



Ground Floor

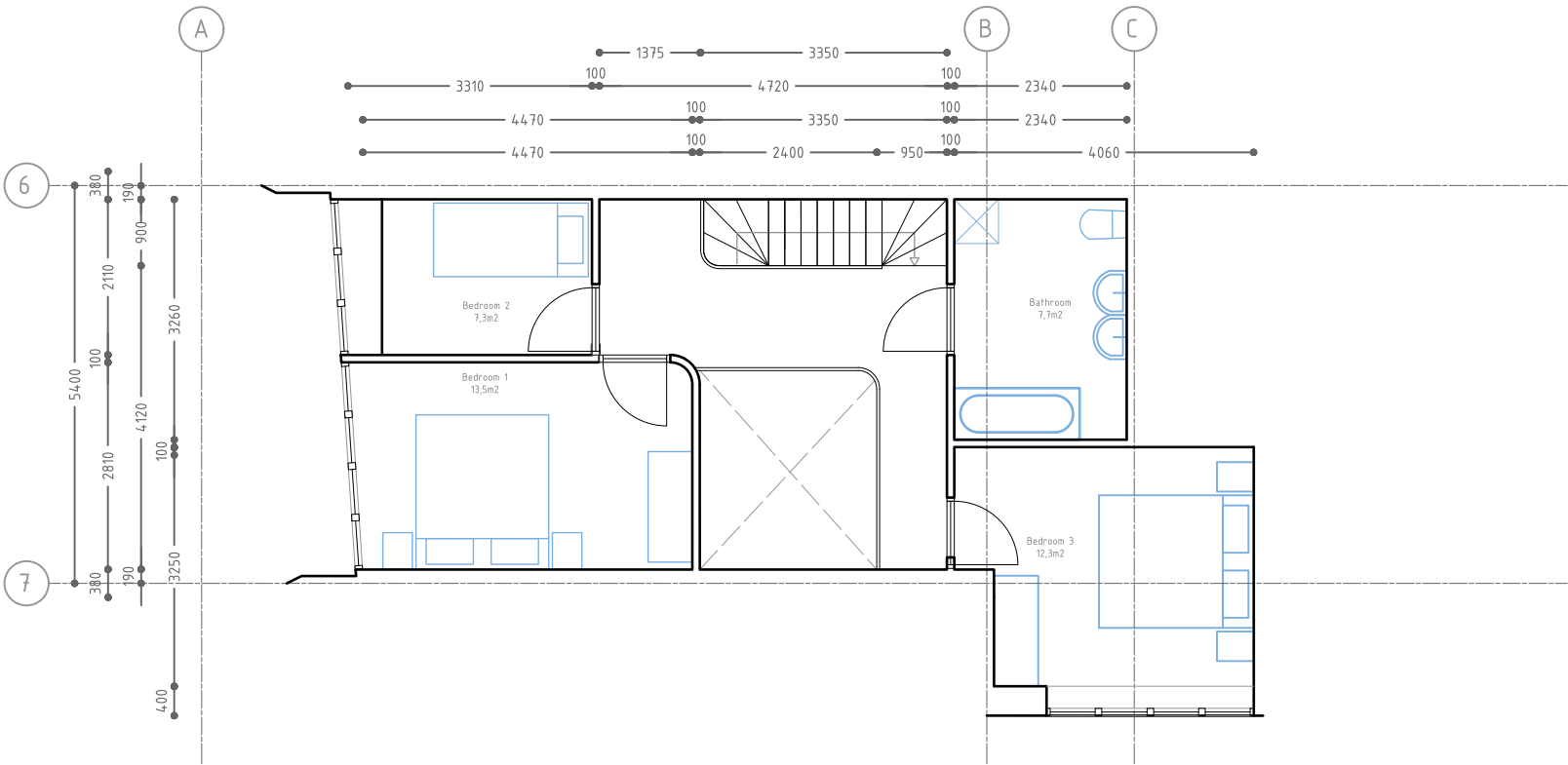


Type 3 86 sqm 2 bedroom

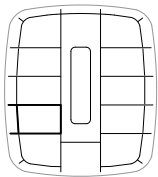
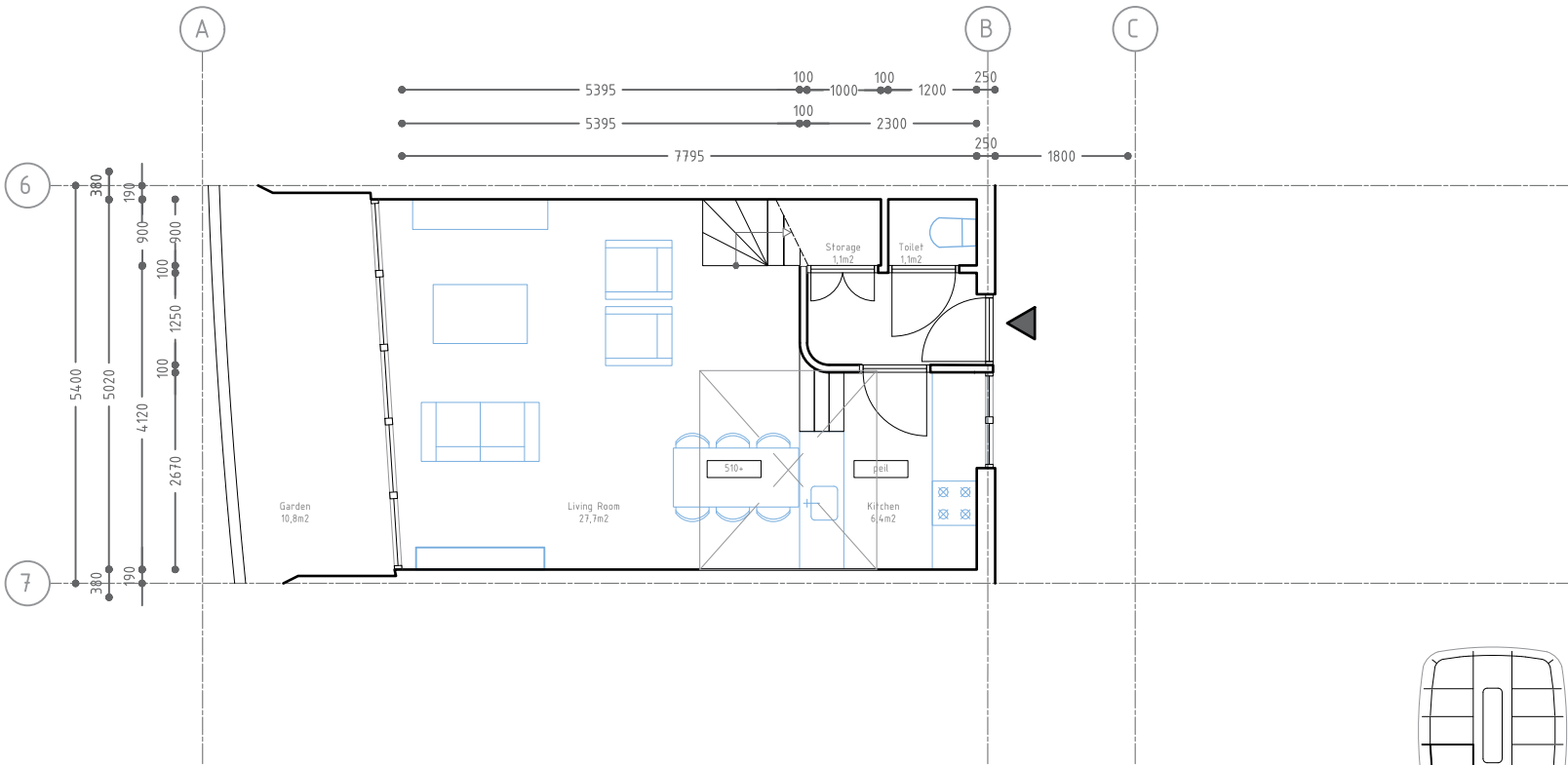


Dwelling Type IV

First Floor

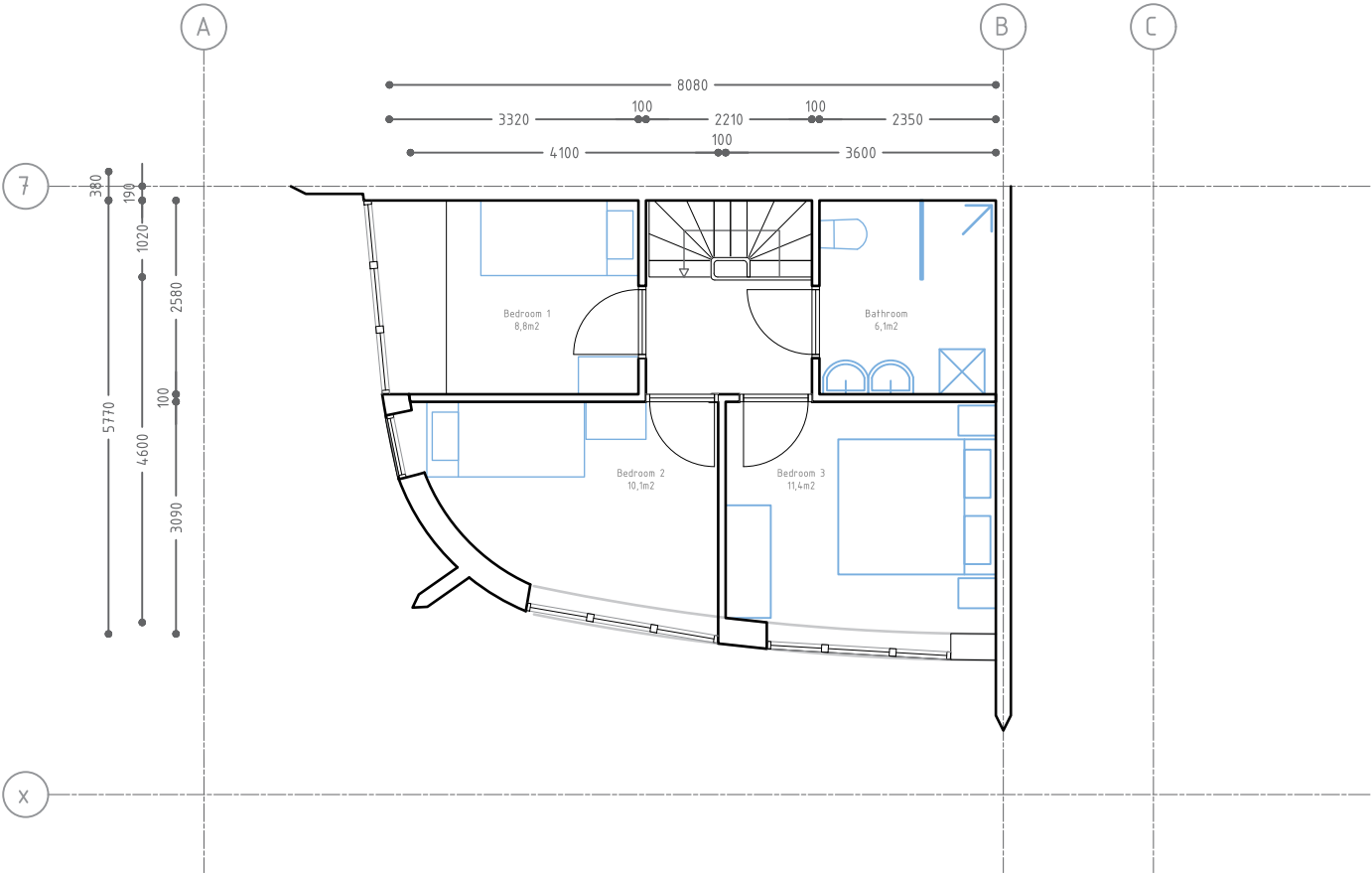


Ground Floor

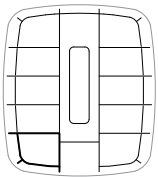
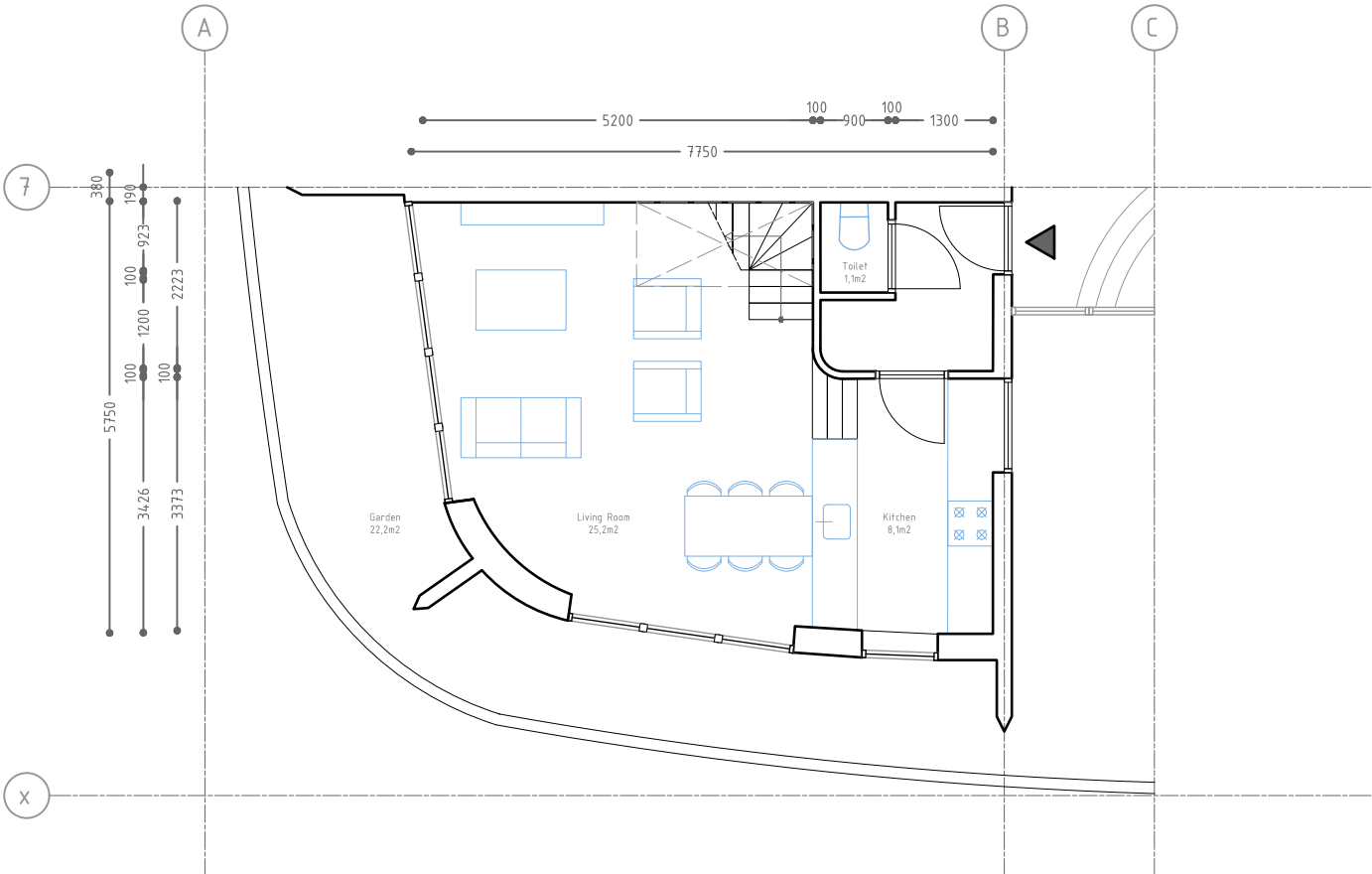


Dwelling Type V

First Floor



Ground Floor



Type 5 81 sqm 3 bedroom



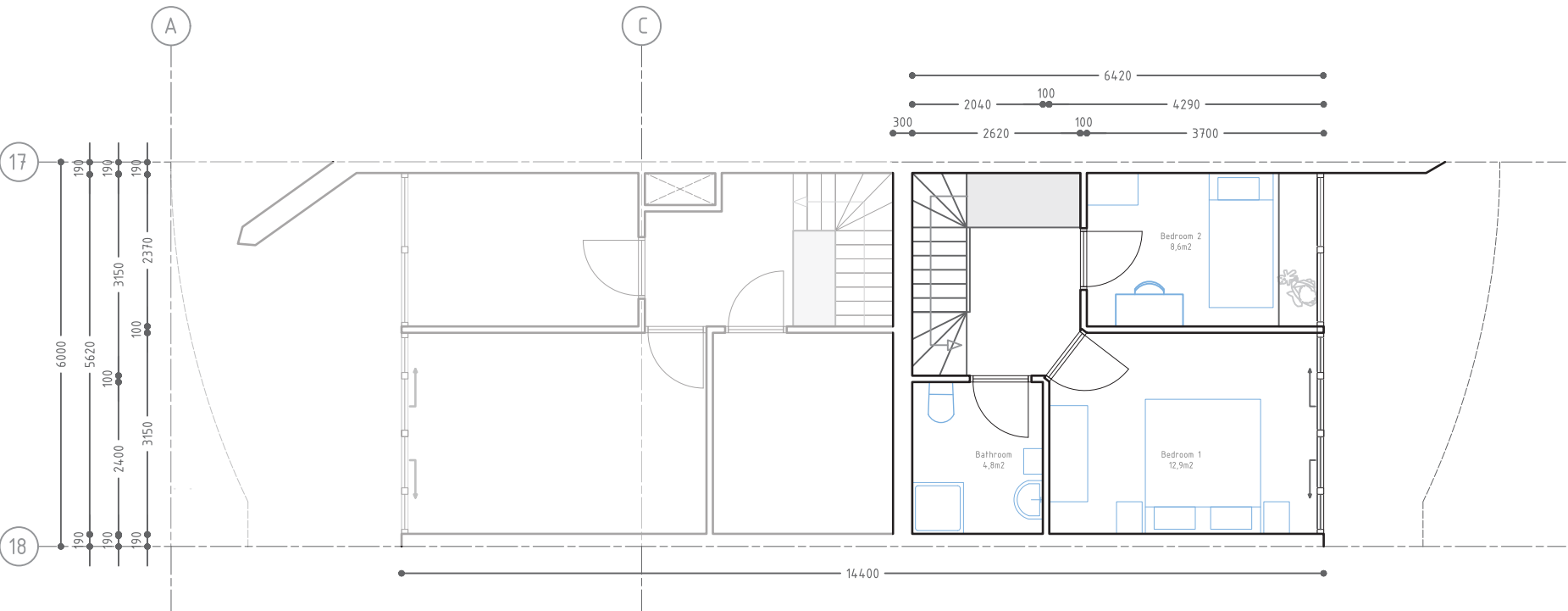
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Floorplans Dwellings Apartment building

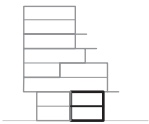
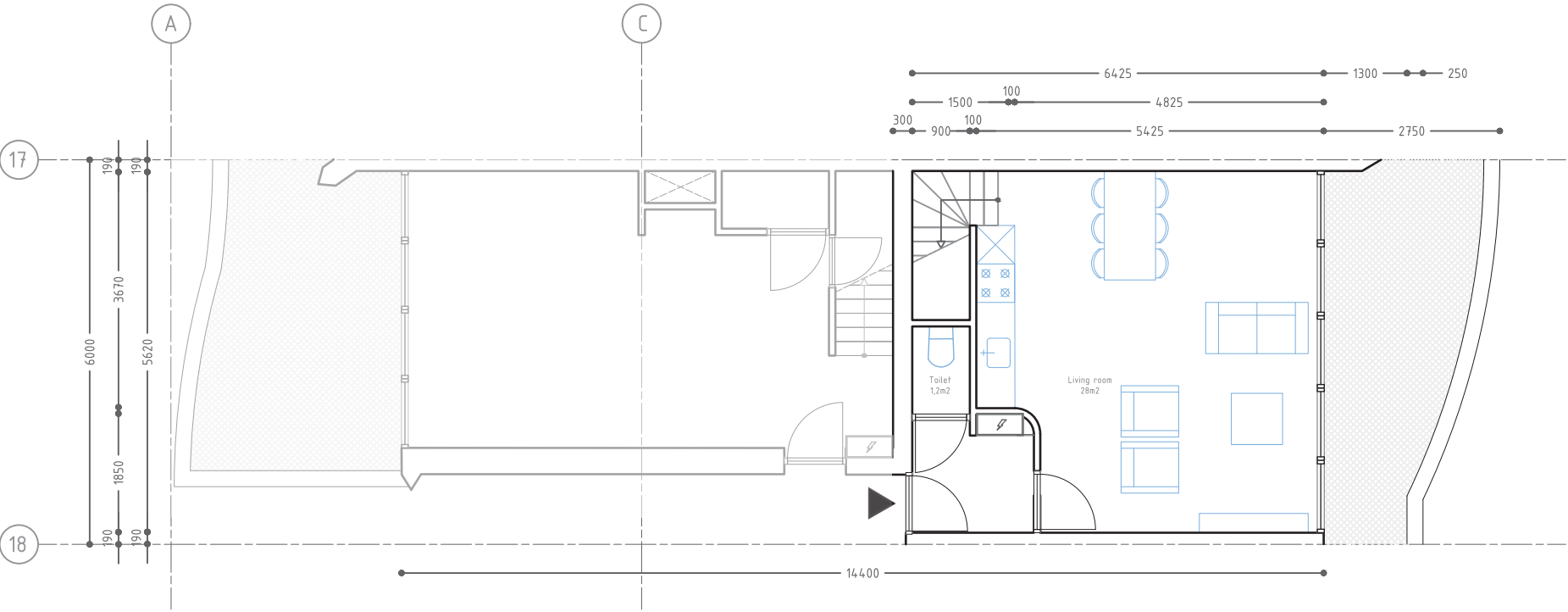


Dwelling Type VI

First Floor

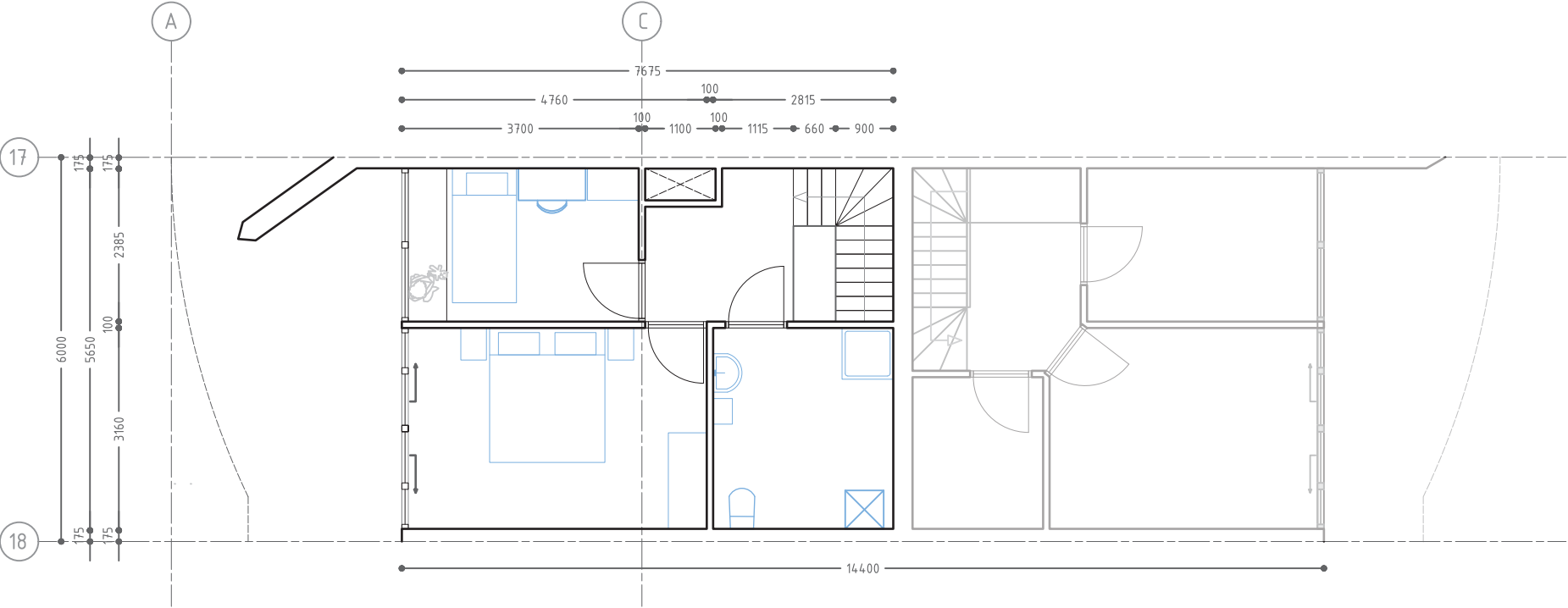


Ground Floor

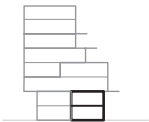
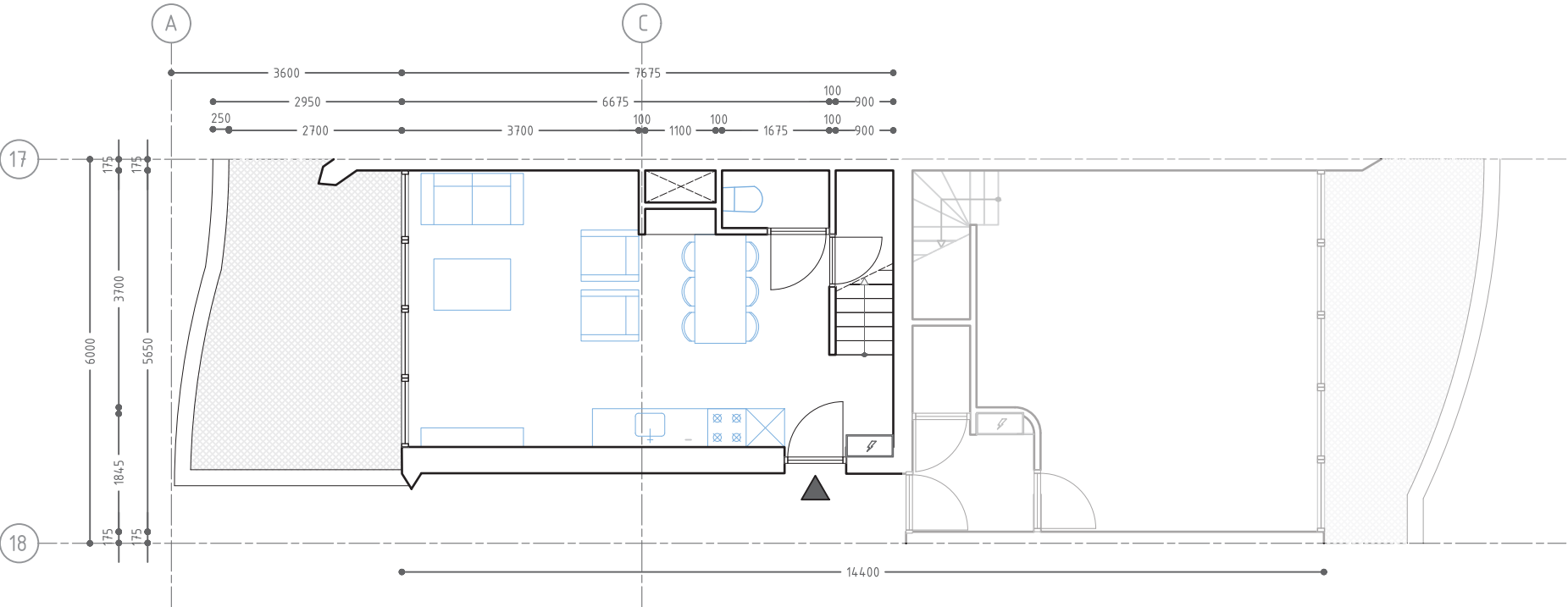


Dwelling Type VII

First Floor



Ground Floor



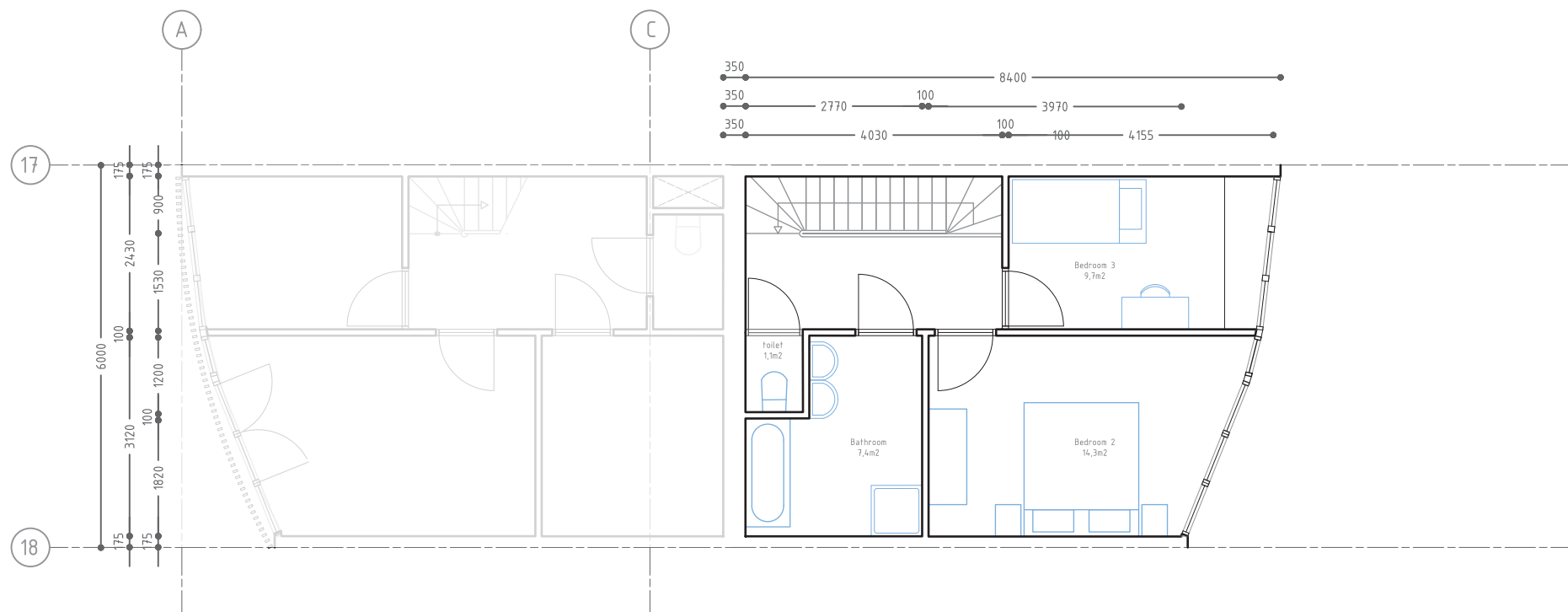
Type 7 74sqm 2 bedroom

0 1 5m

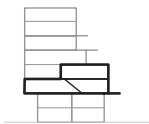
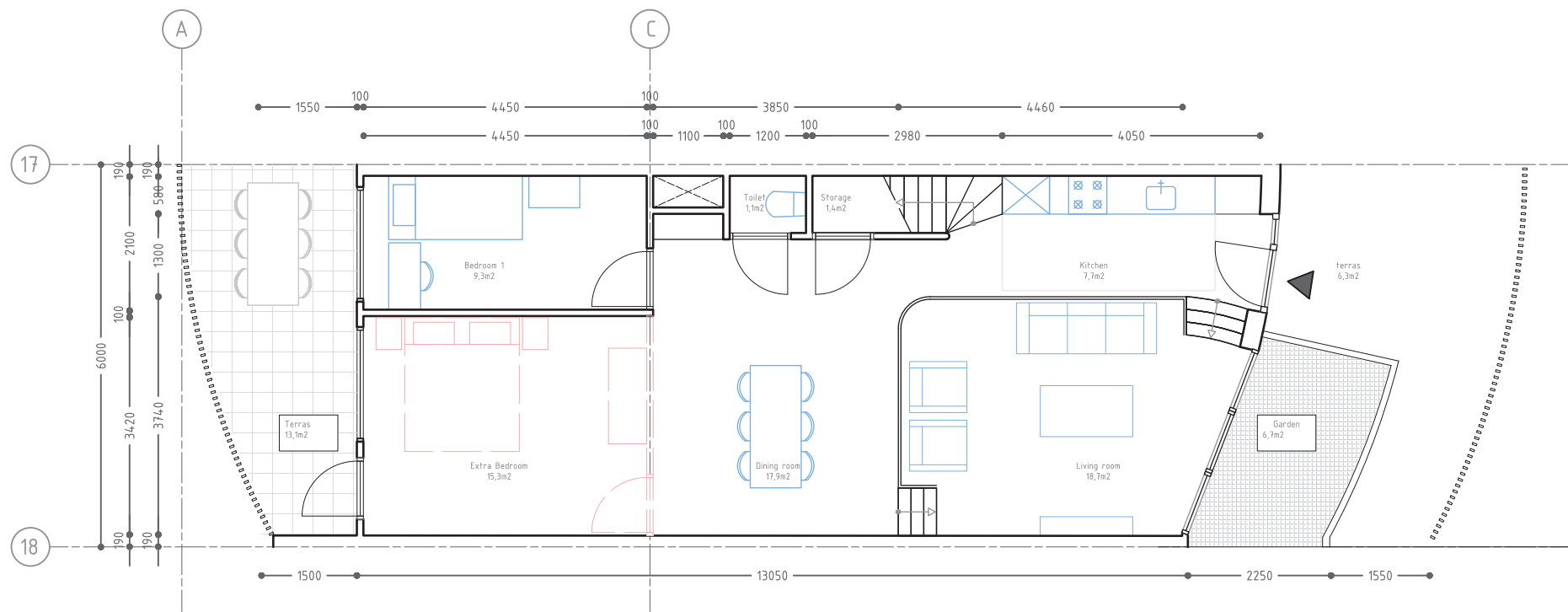


Dwelling Type VIII

Third Floor

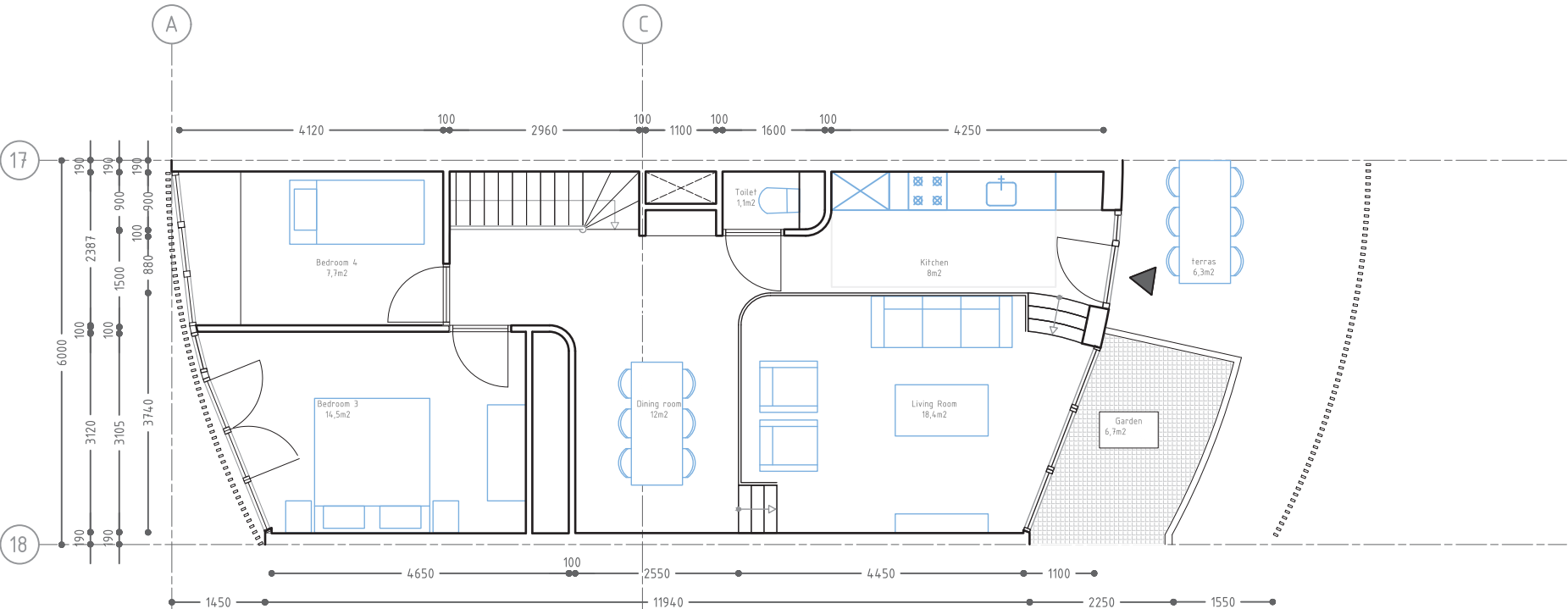


Second Floor

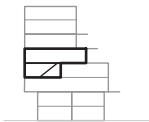
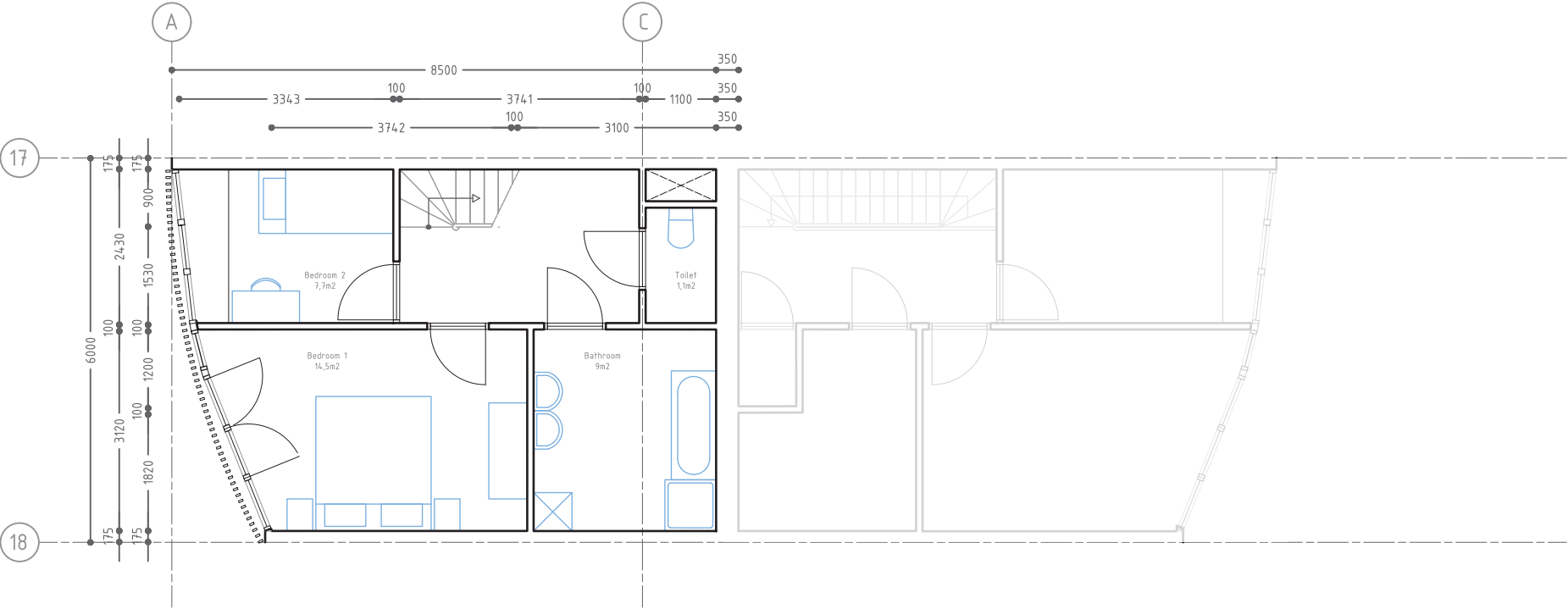


Dwelling Type IX

Fourth Floor

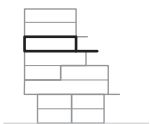
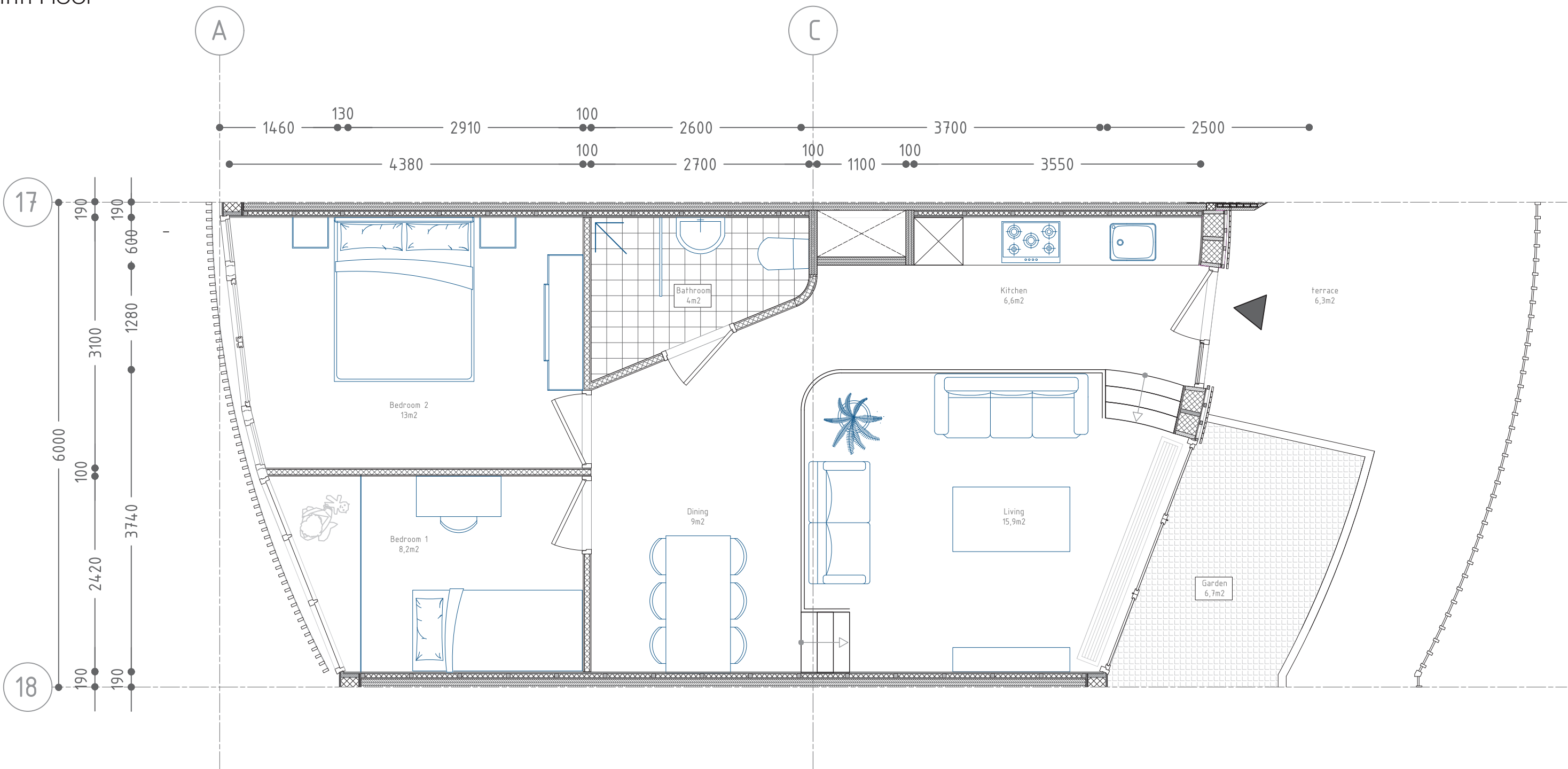


Third Floor



Dwelling Type X

Fifth Floor

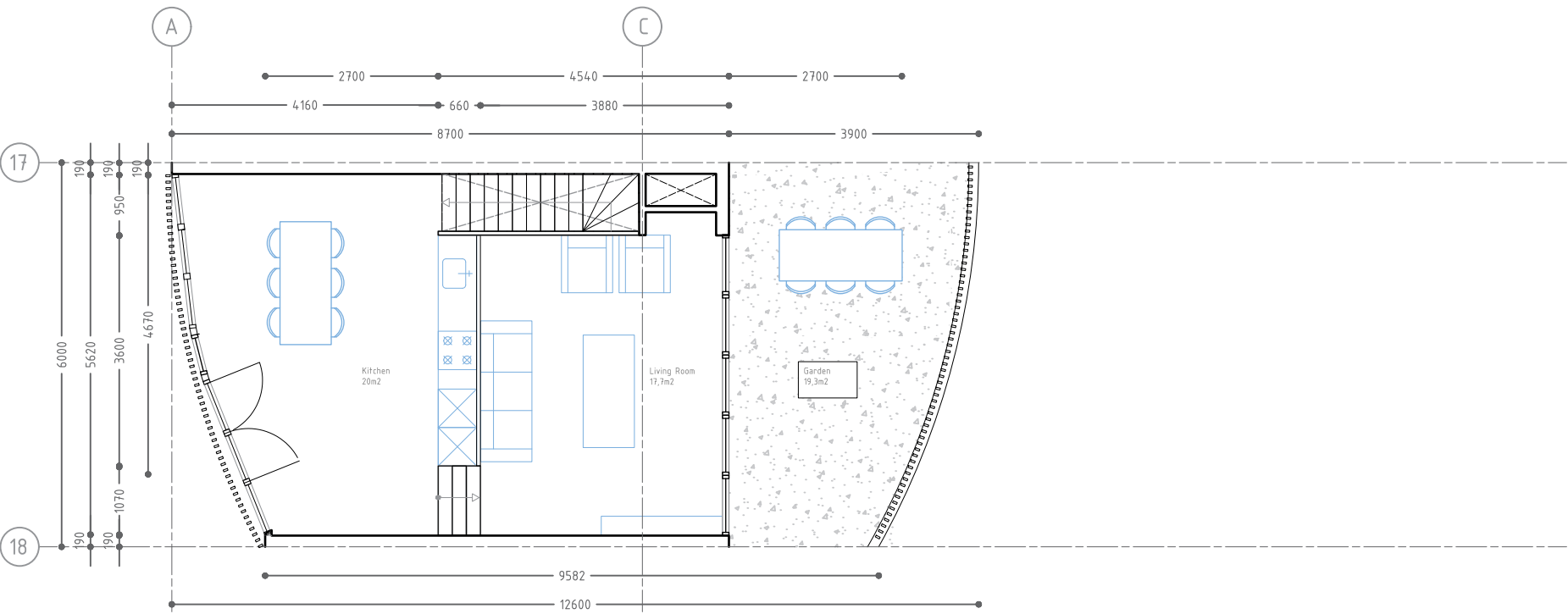


Type 5 62sqm 2 bedroom

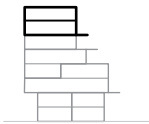
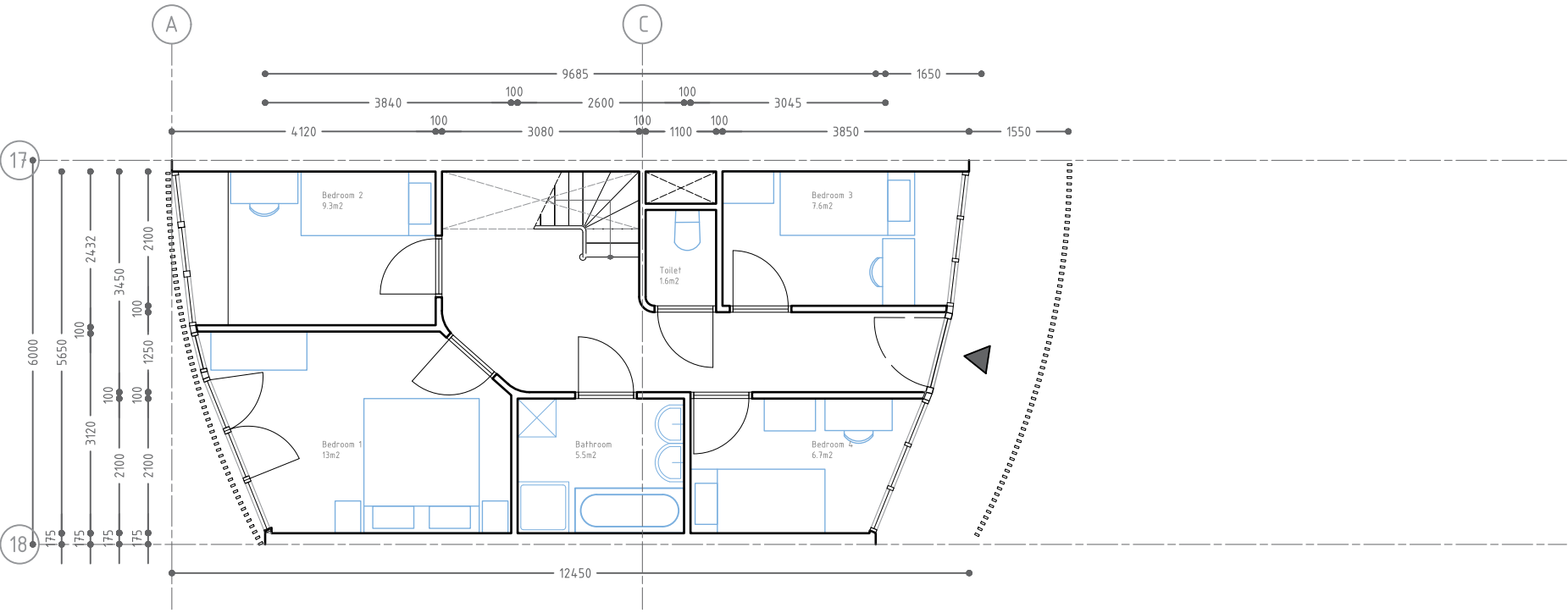


Dwelling Type XI

Seventh Floor

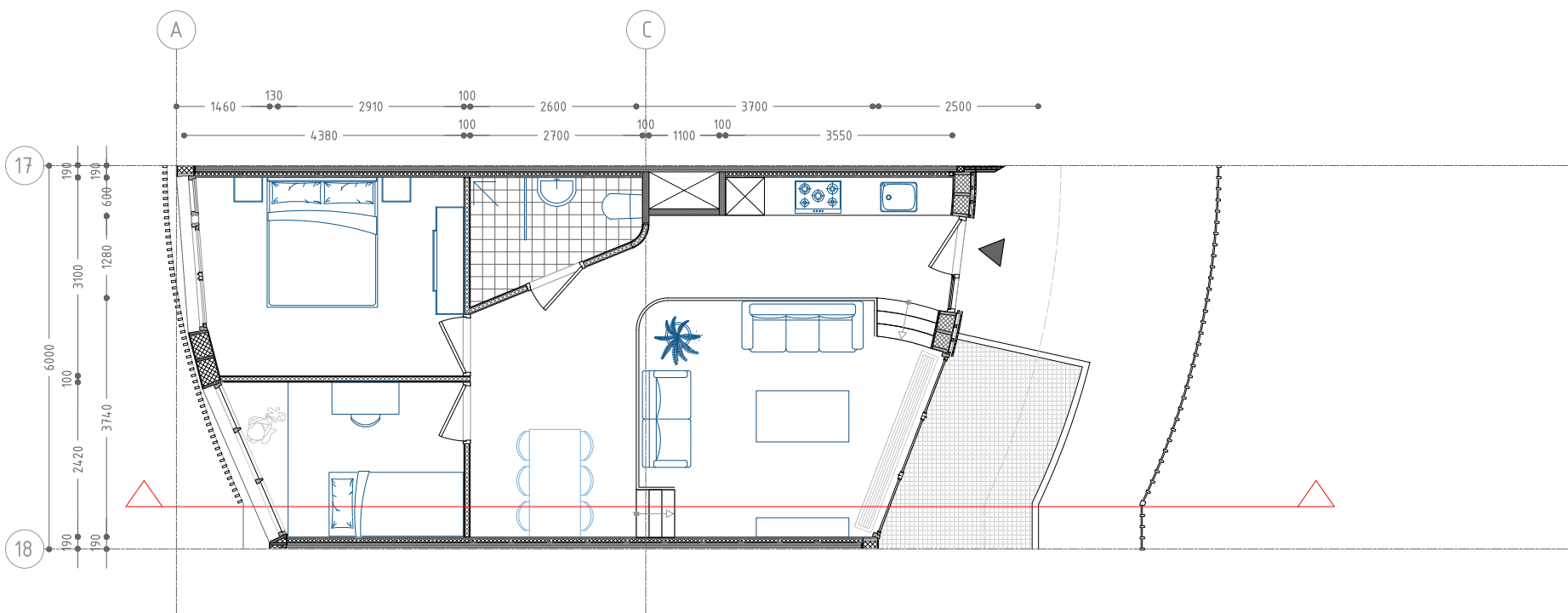
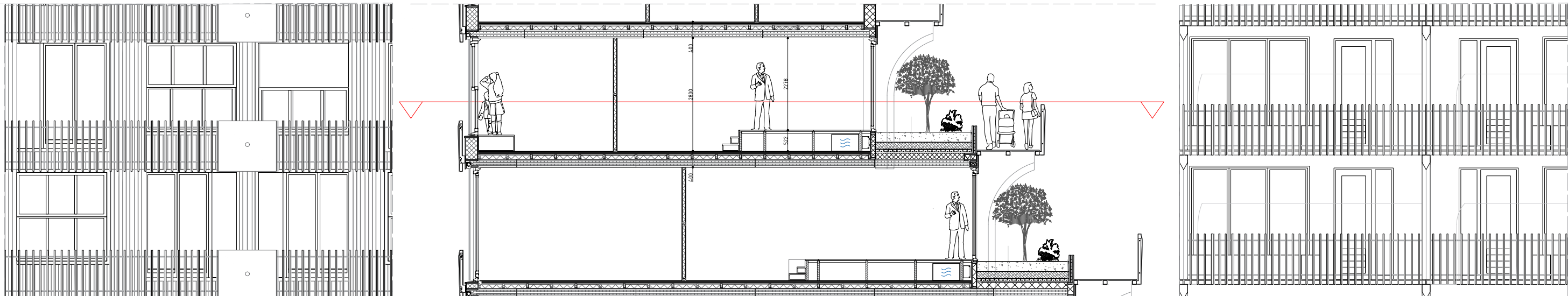


Sixth Floor

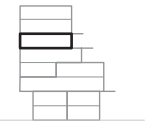
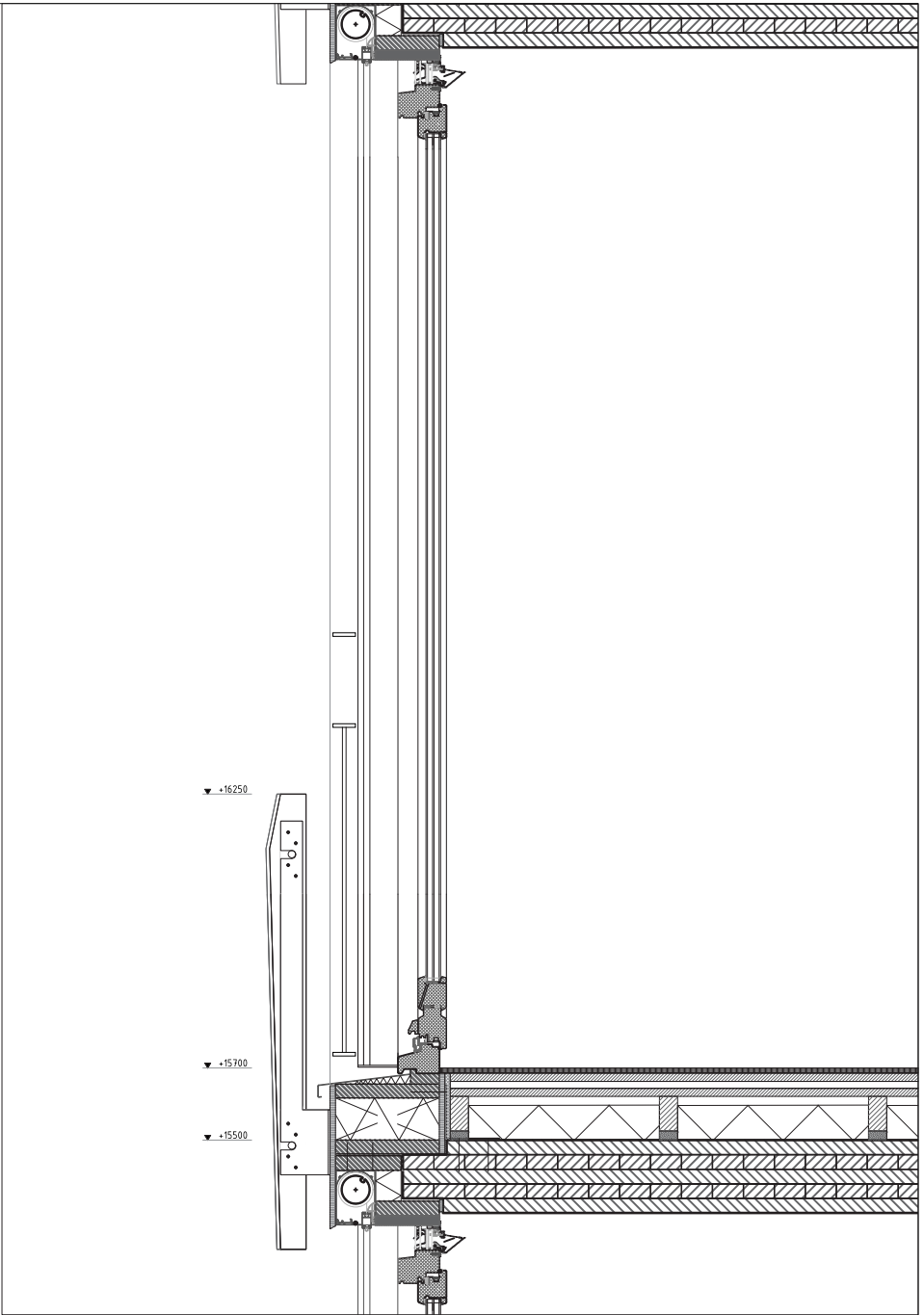
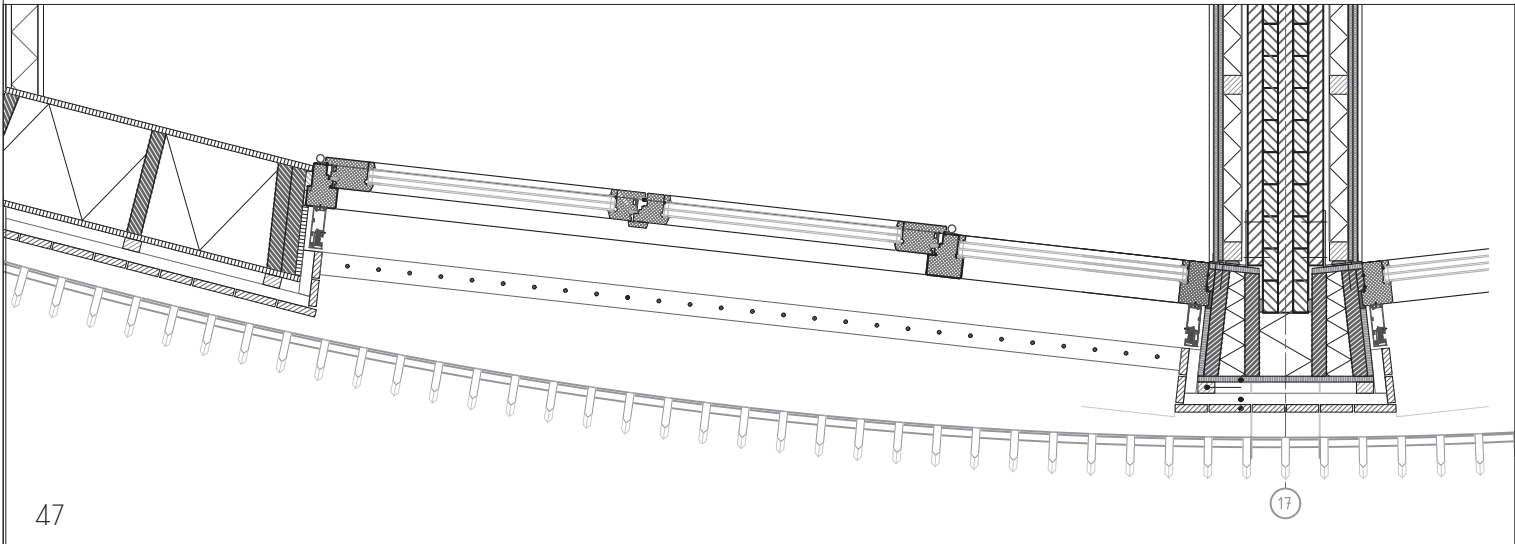
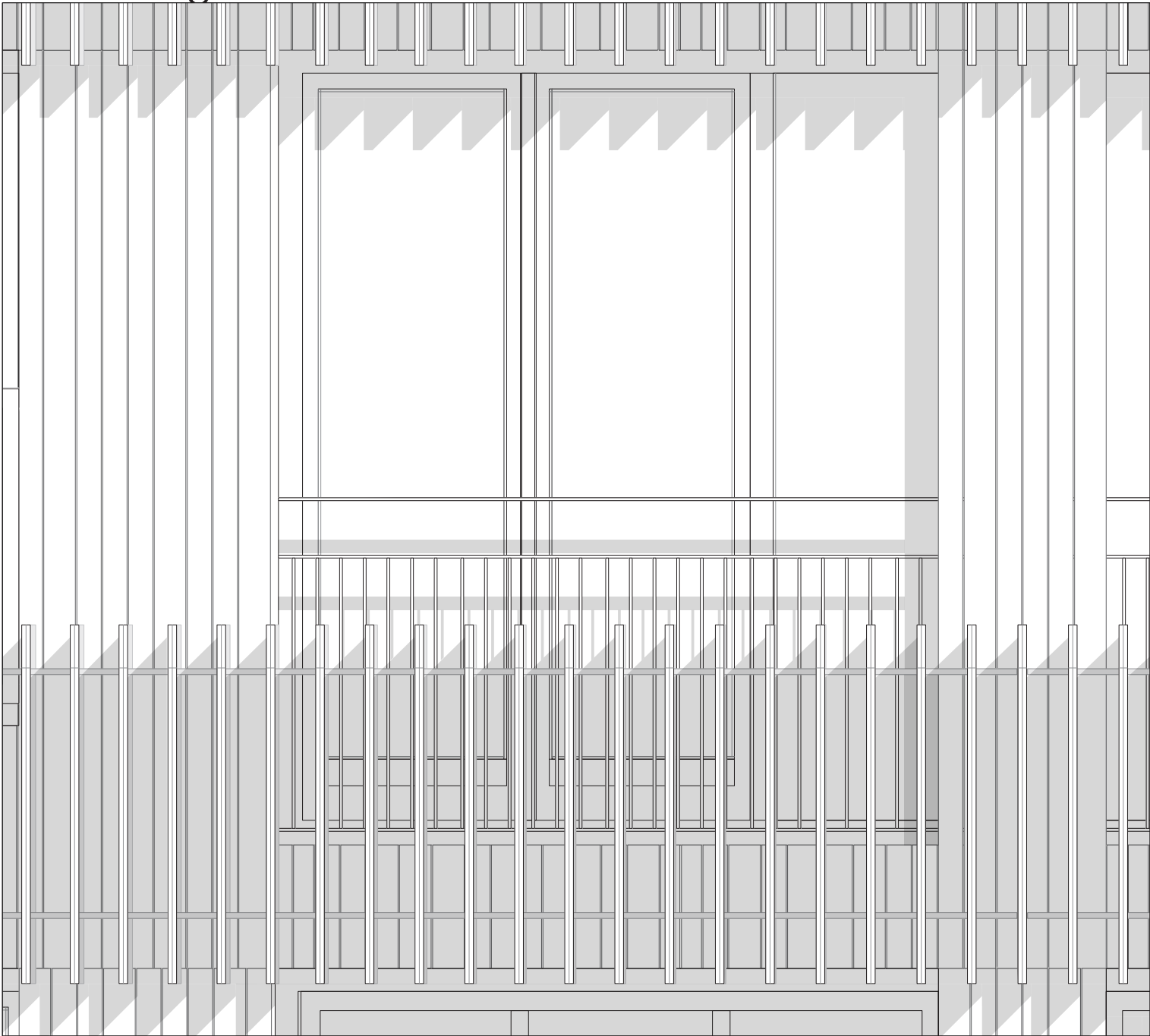


Facade Fragment

Facade Fragment

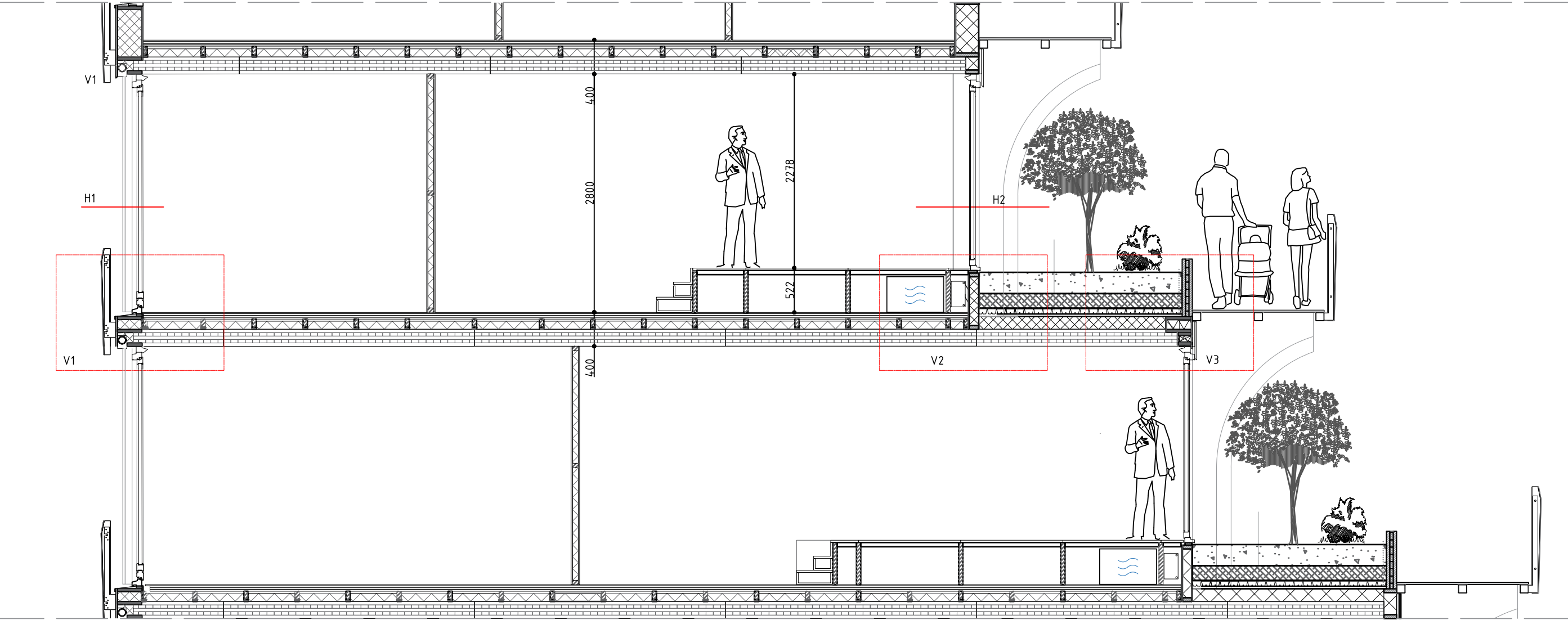


Facade Fragment

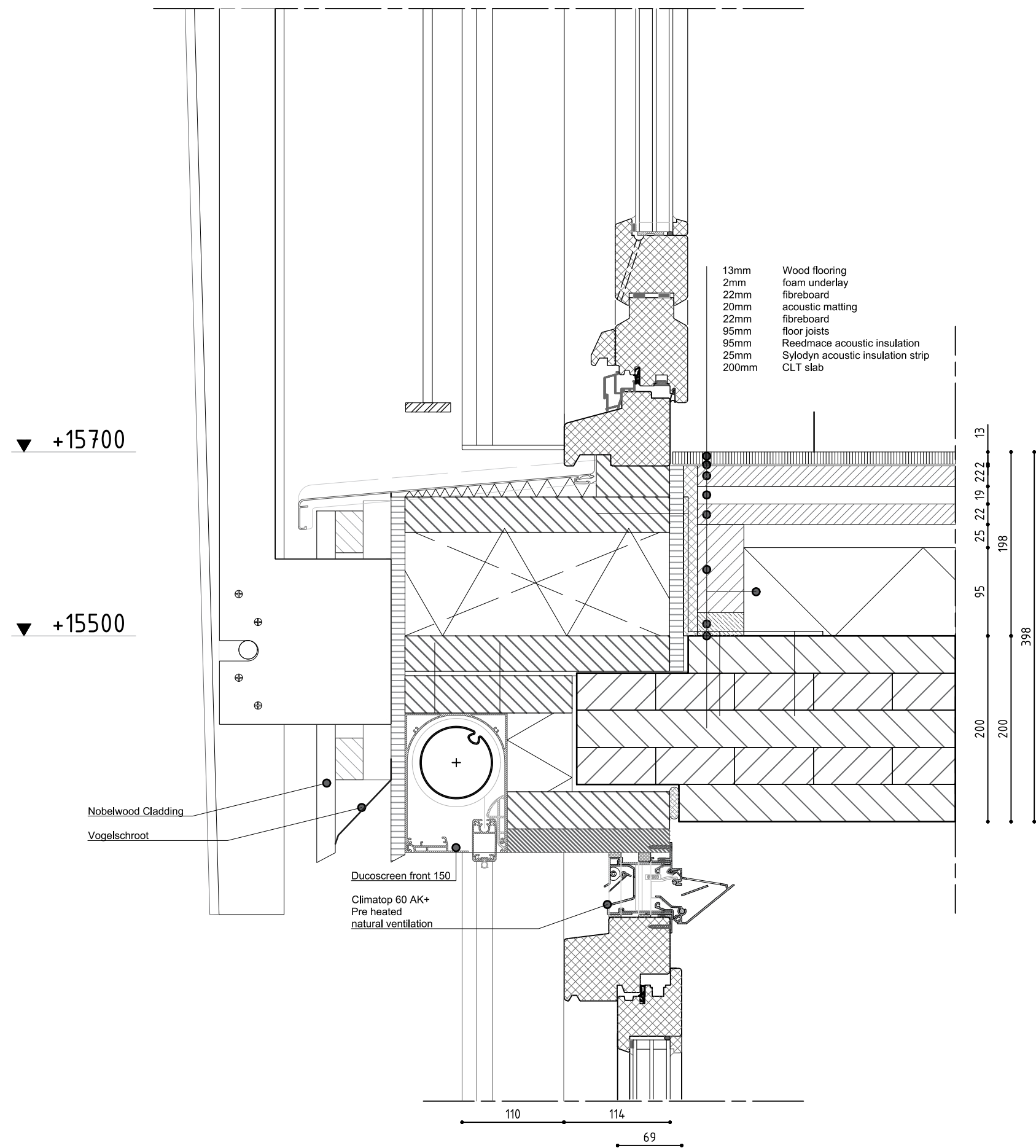


Building Details

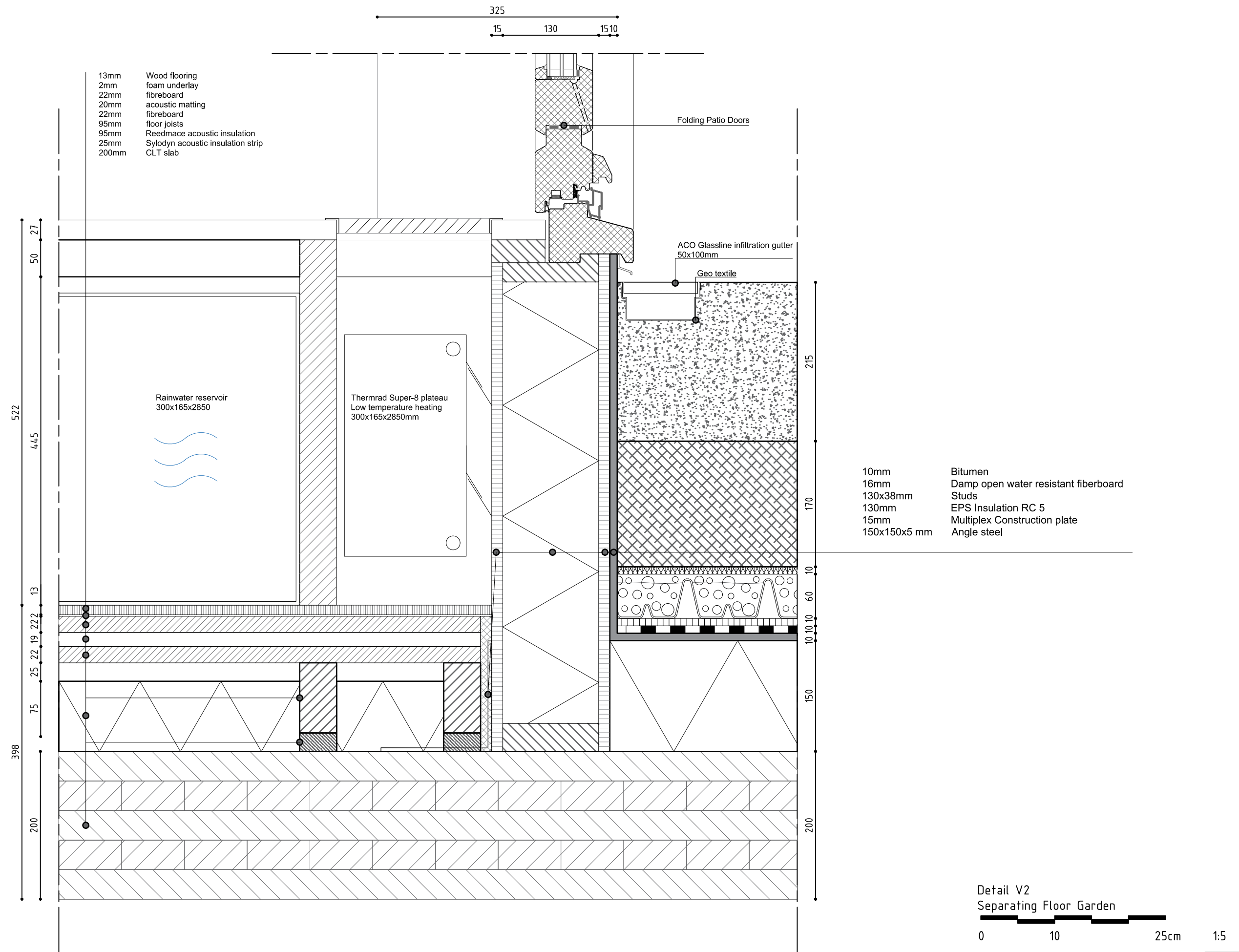
Building Details overview



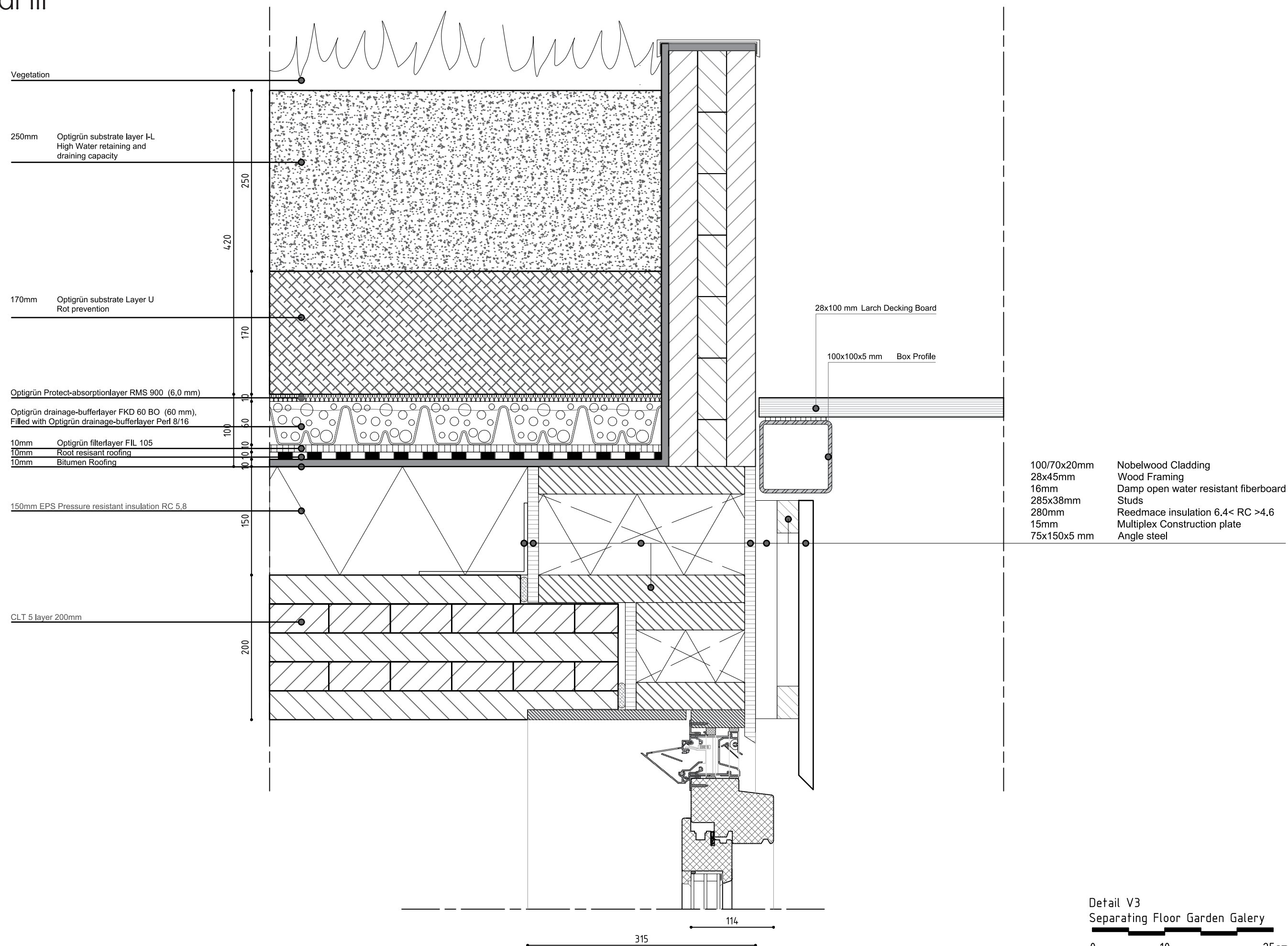
Vertical I



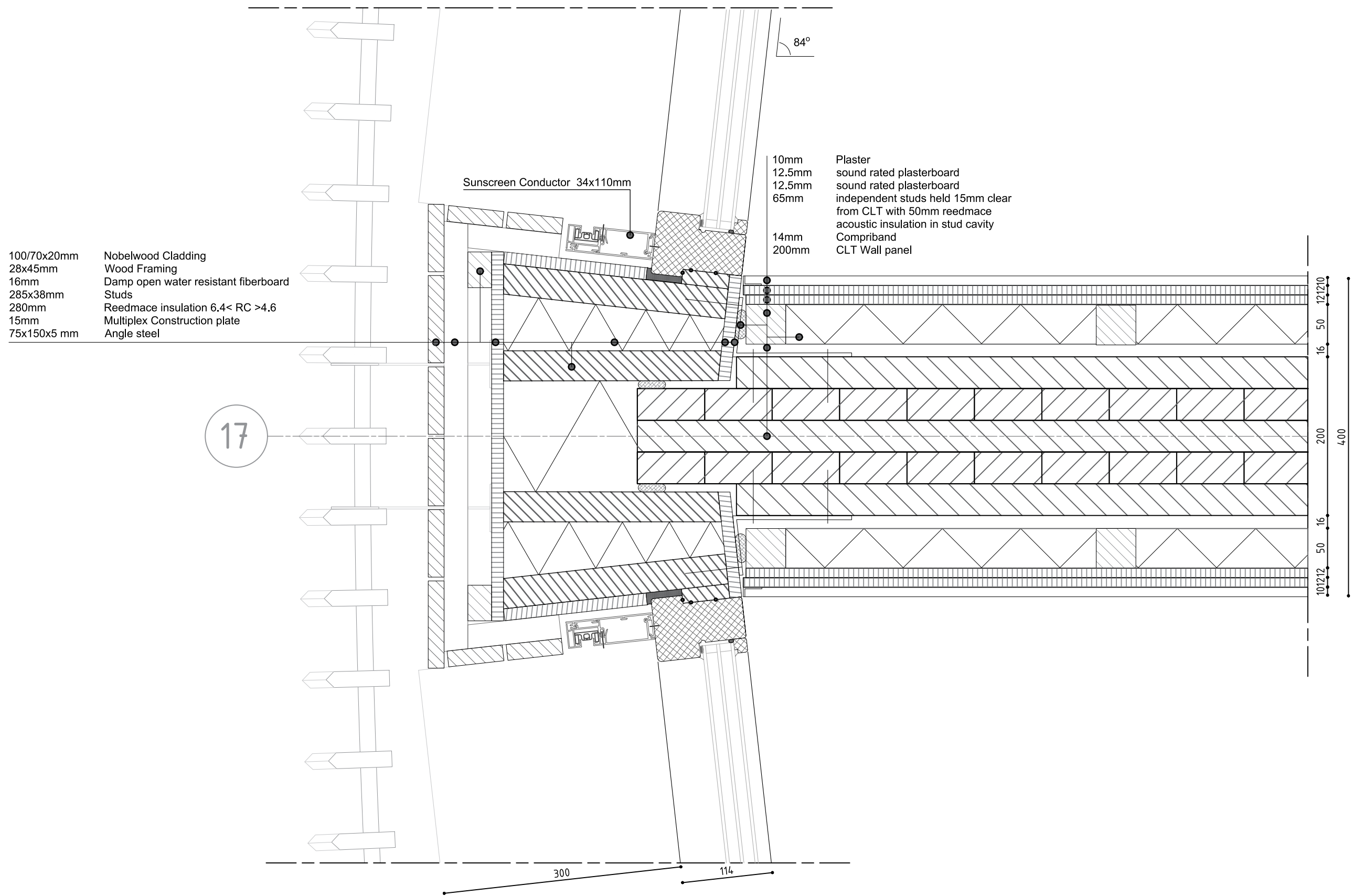
Vertical II



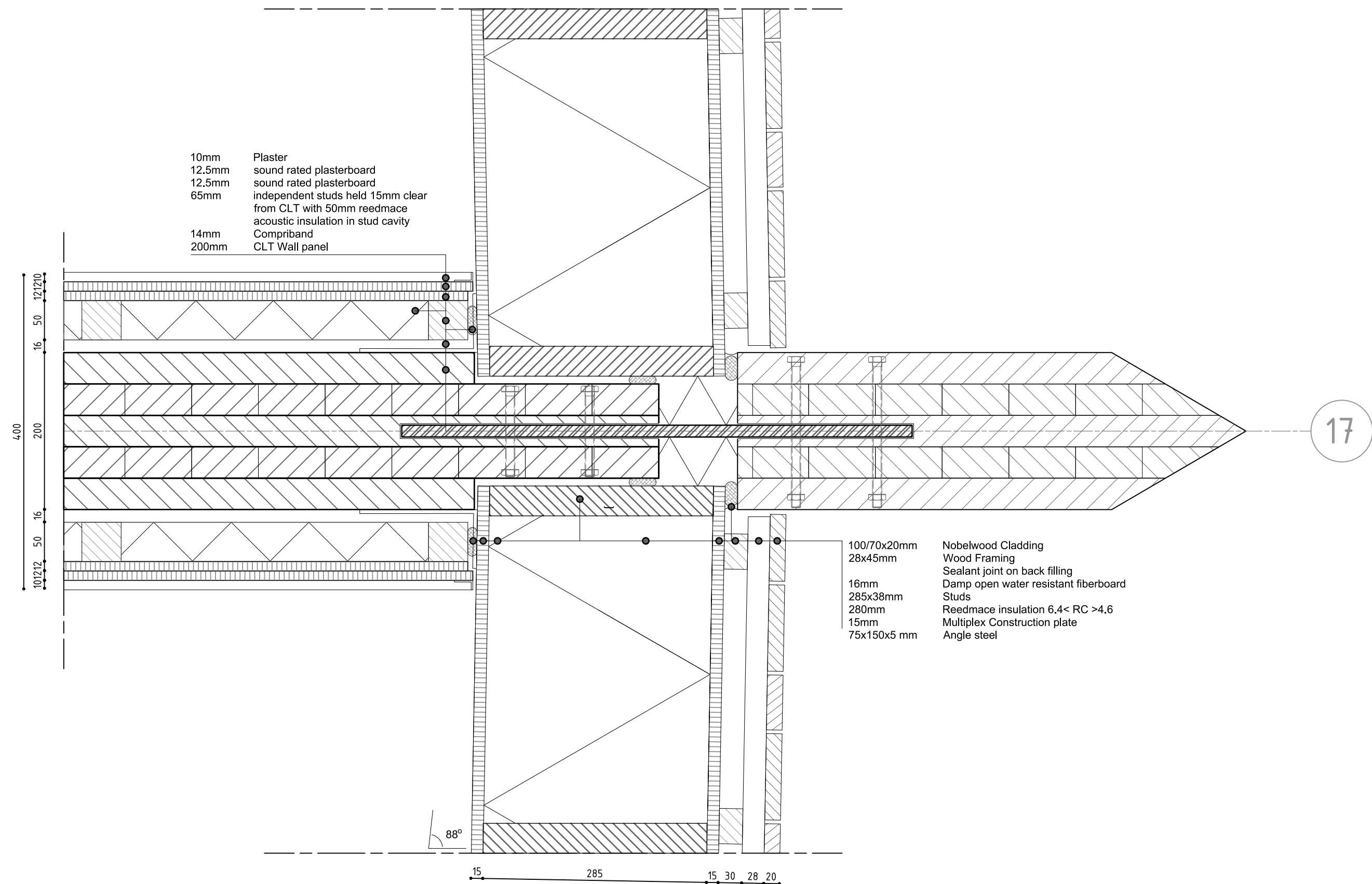
Vertical III



Horizontal I



Horizontal II



Facade Exploded View

Windowframe/ventilation

Multiplex interior finish

Timber frame

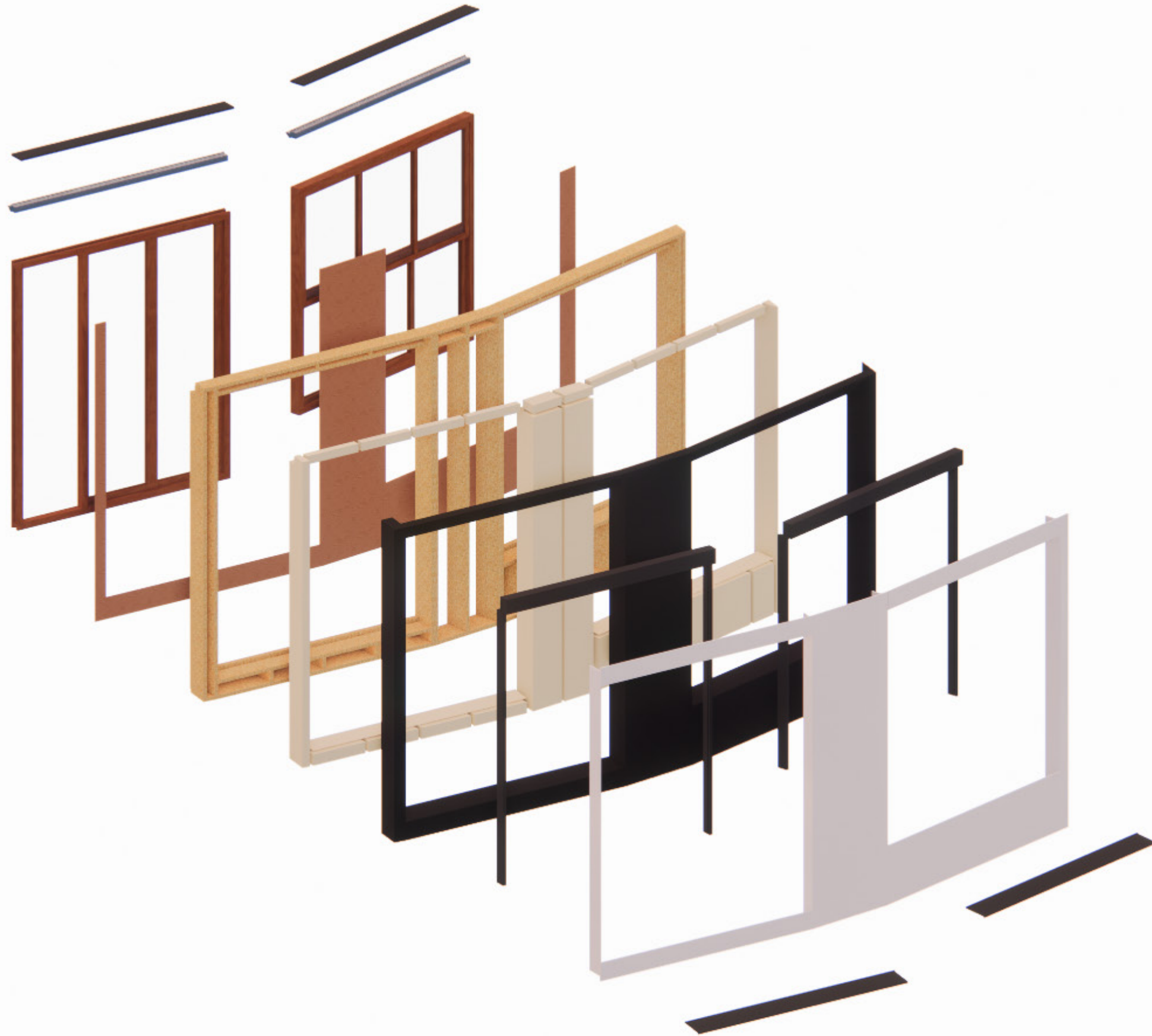
Reedmace insulation

Vapor open foil

Sunscreen

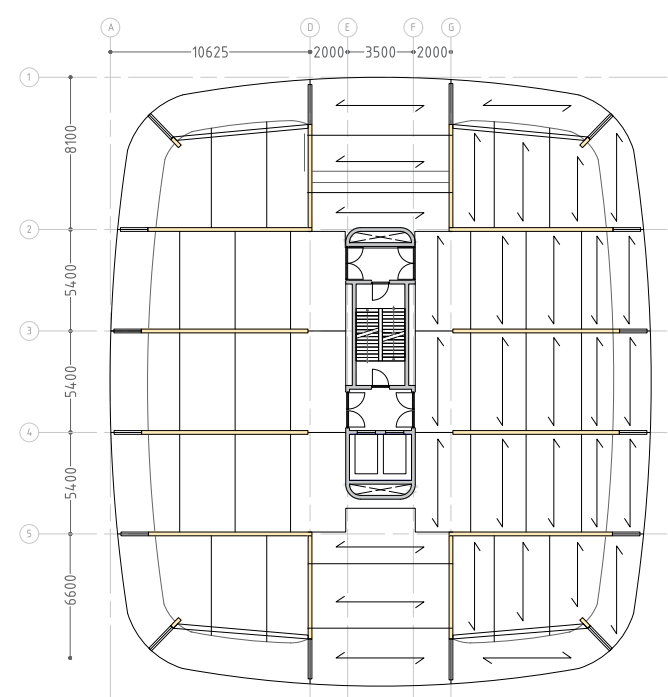
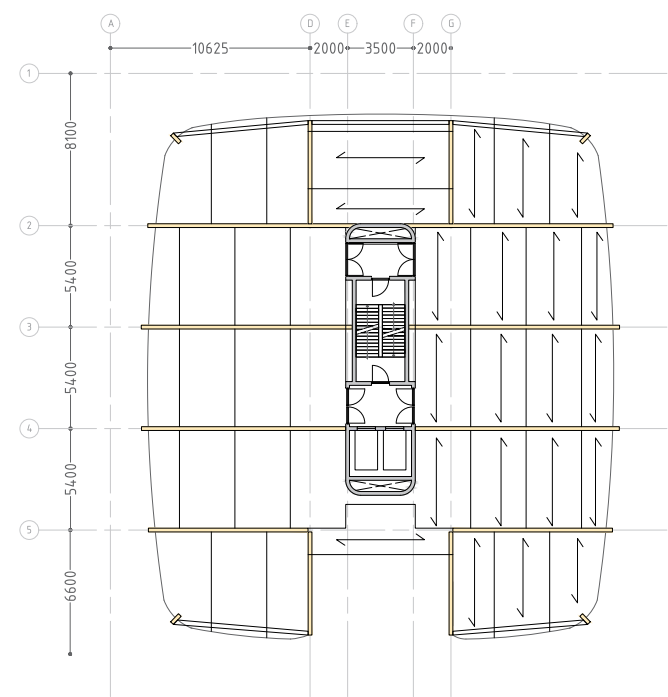
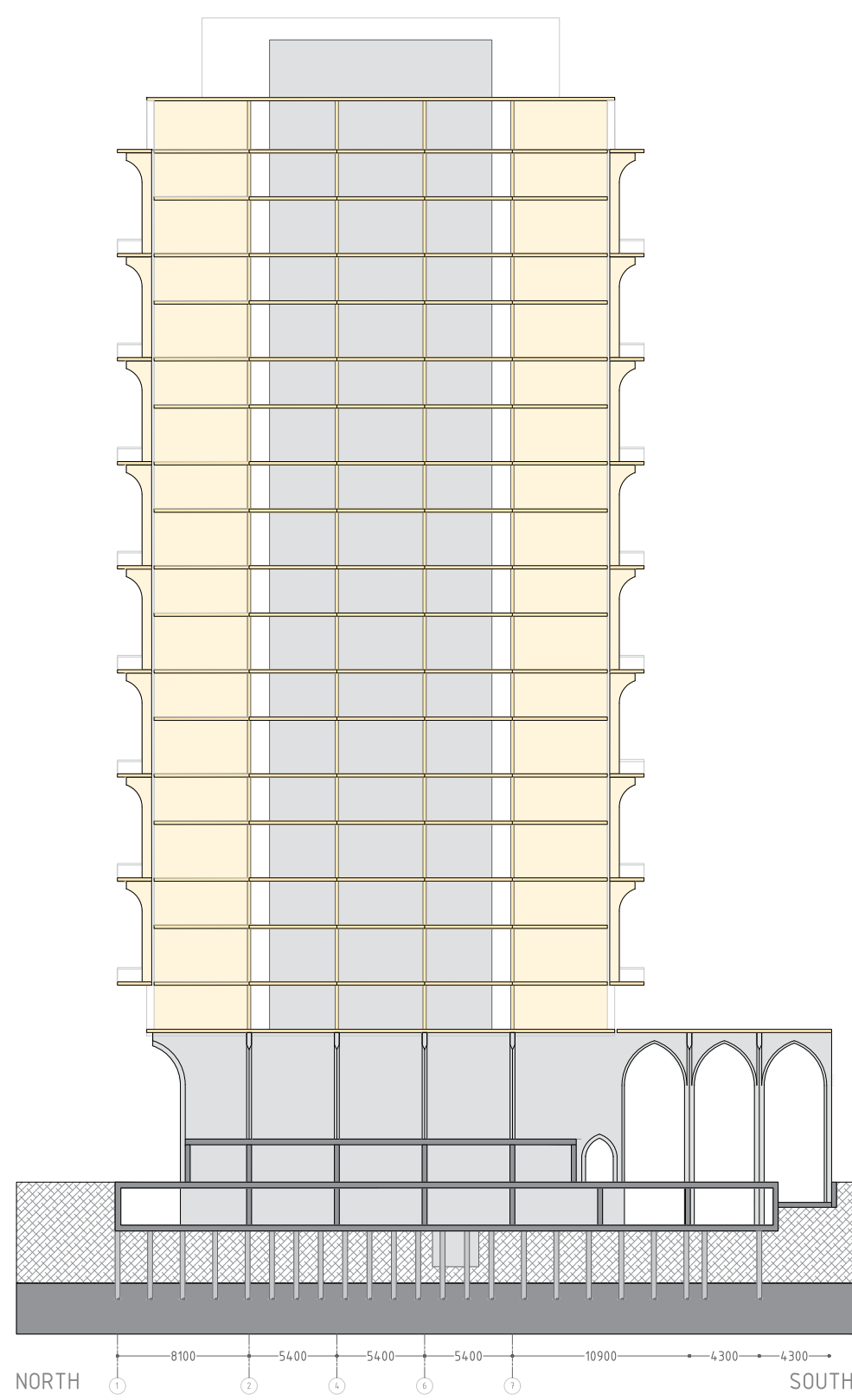
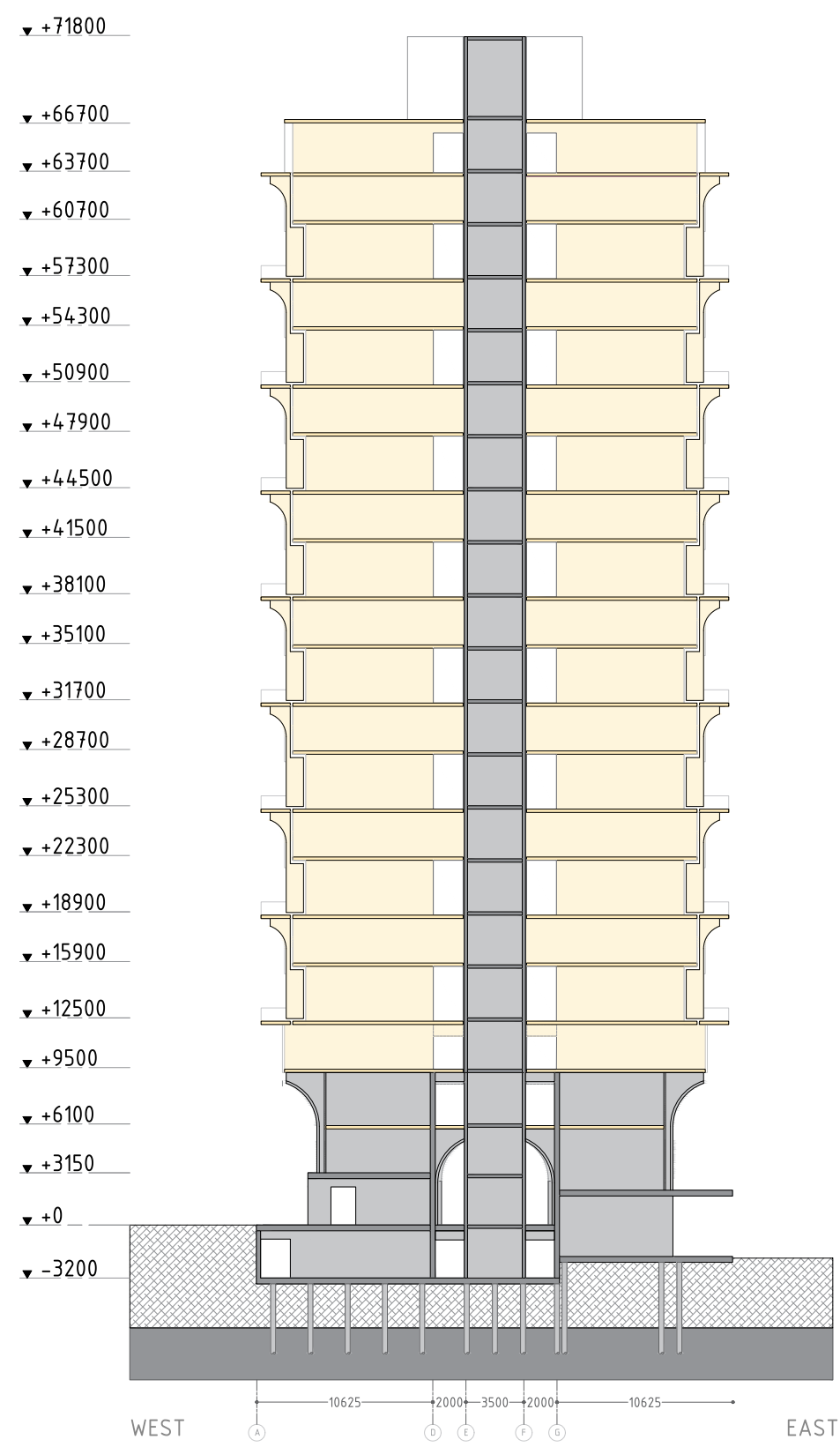
Boarding

Windowsill

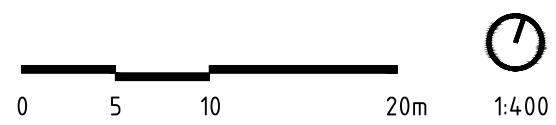


Construction

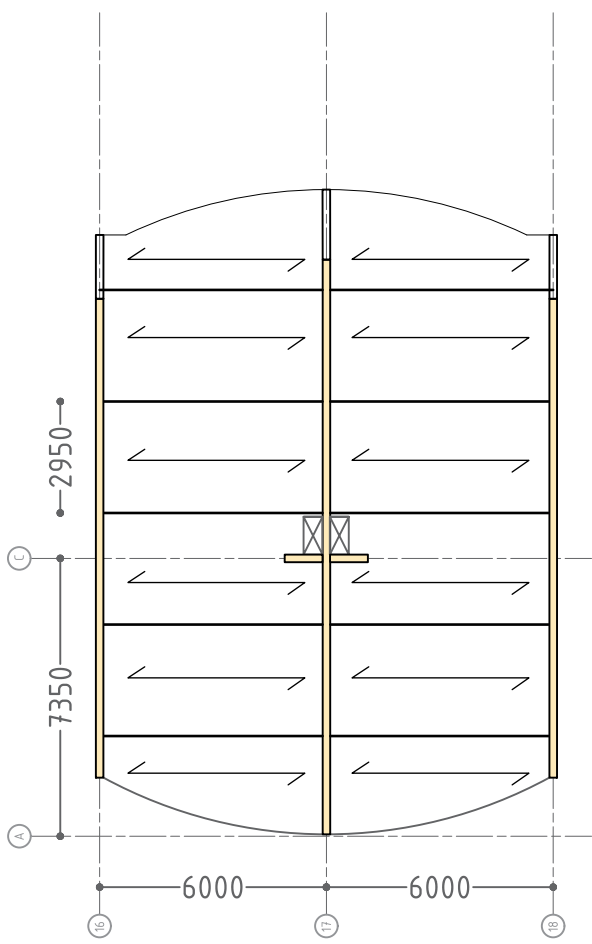
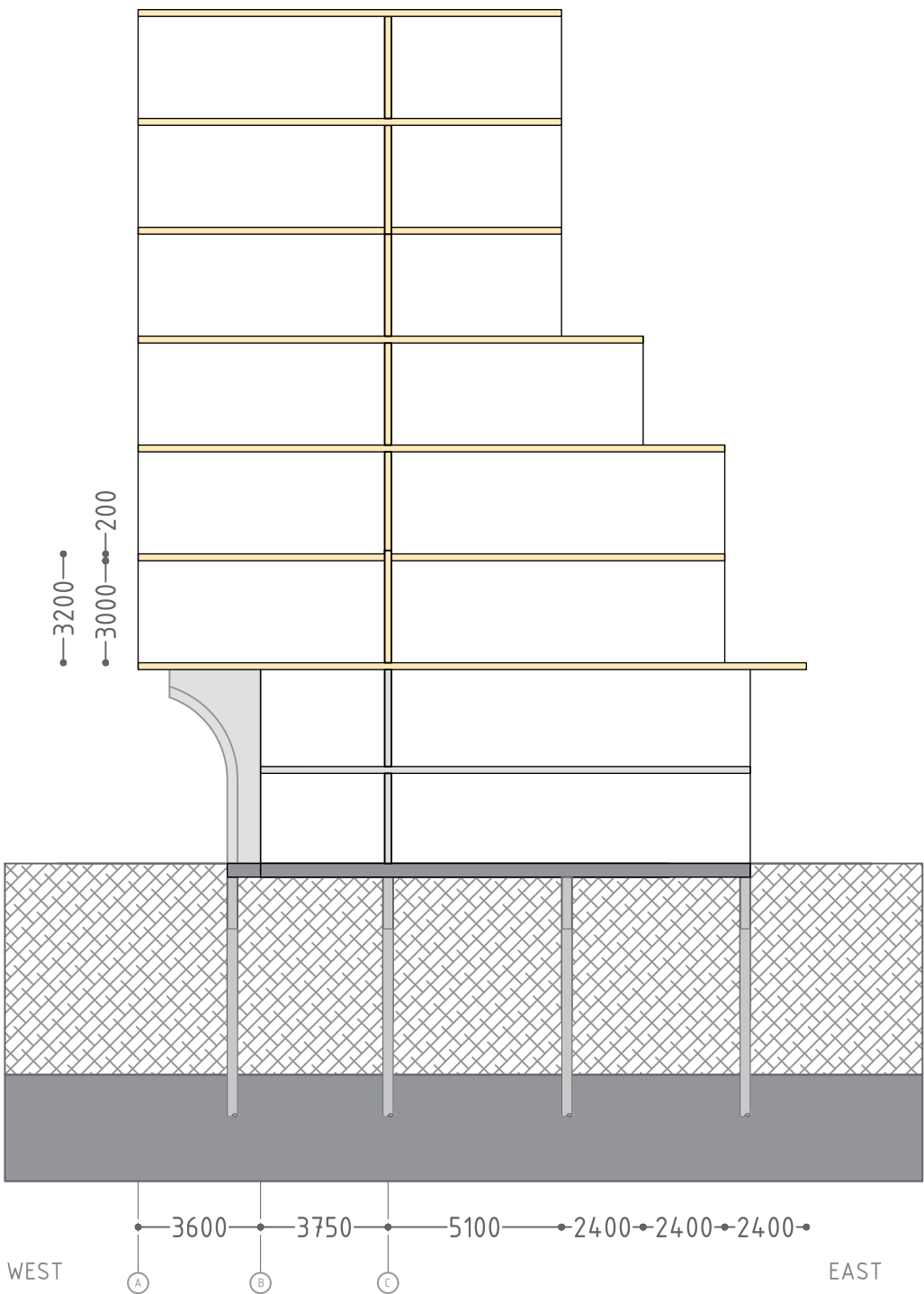
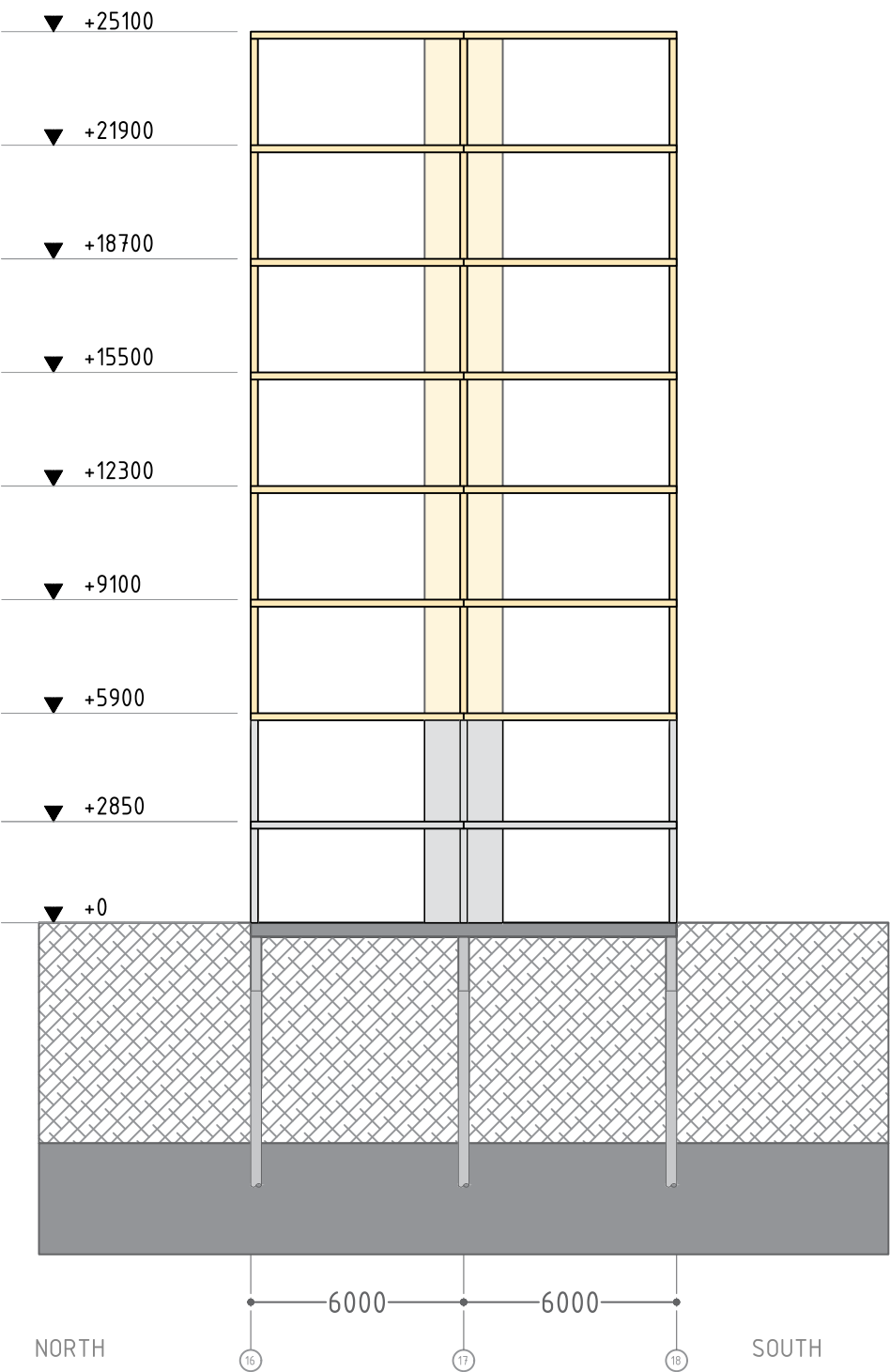
Structural principles residential tower



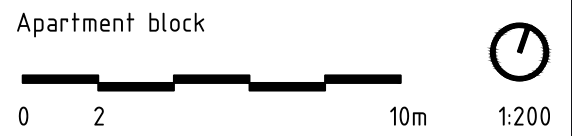
- CONSTRUCTIVE PRINCIPLES RESIDENTIAL TOWER
- CLT WALLS AND FLOORS = 200 MM
 - SPANN = 5000 MM
 - FLOOR HEIGHT = 3200 MM
 - CONCRETE CORE = 200 MM
 - MEASUREMENTS 3700X14450 MM
 - CONCRETE POLE FOUNDATION



Structural principles apartment block

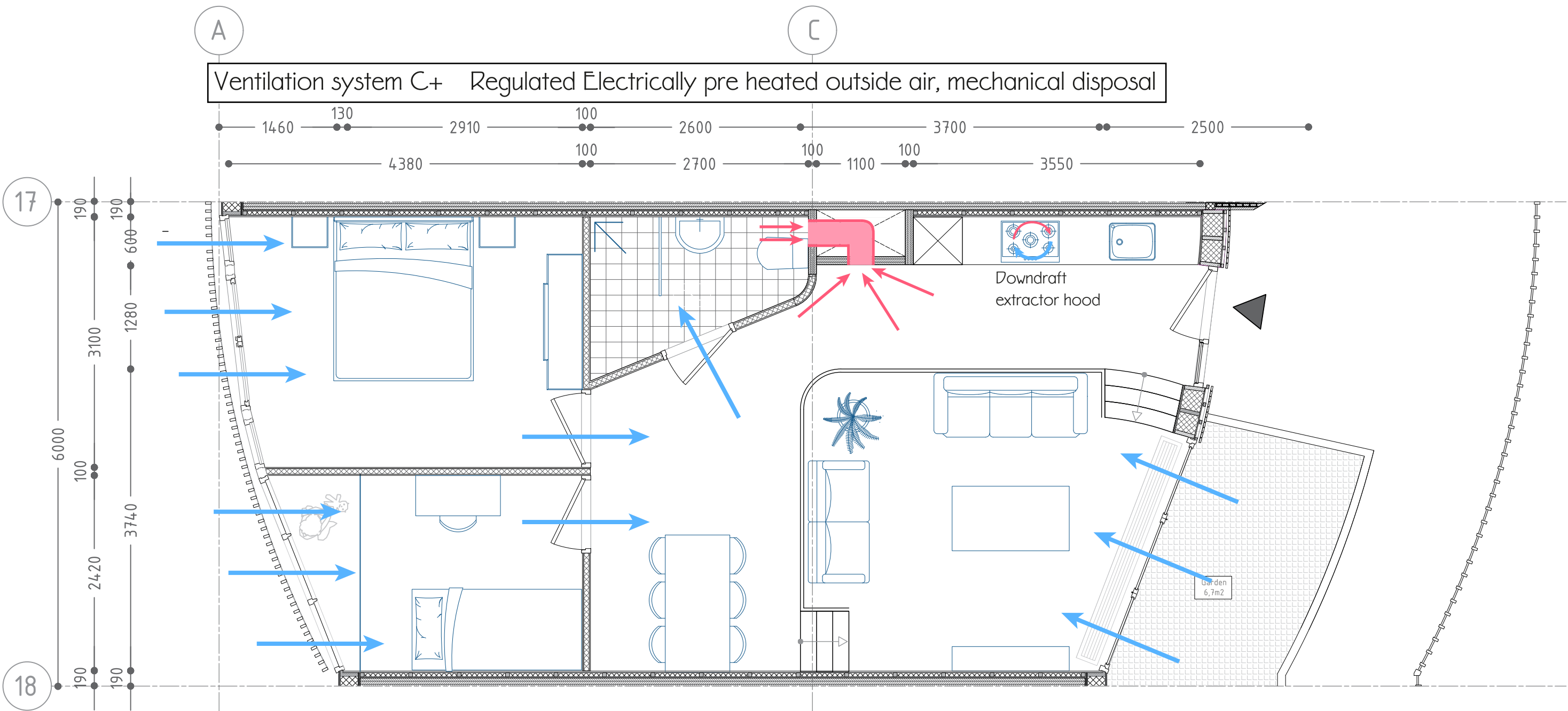


- CONSTRUCTIVE PRINCIPLES APARTMENT BLOCK
- CLT WALLS AND FLOORS = 200 MM
- SPANN = 5800 MM
- FLOOR HEIGHT = 3200 MM
- CLT STABILITY SLAB 200X1000 MM
- CONCRETE POLE FOUNDATION

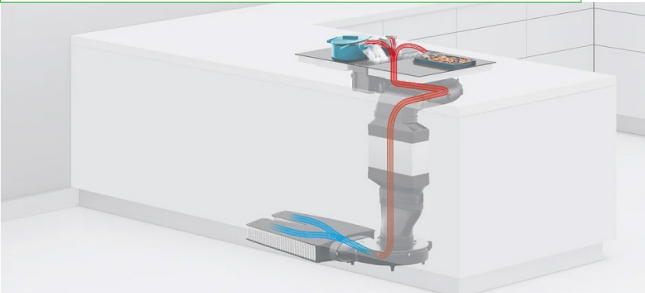


Climate Design

Ventilation scheme apartment block



BORA Recirculationsystem

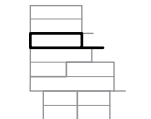


https://www.bora.com/fileadmin/_processed_/6/0/csm_2021_BORA_Grafiken_Classic_Umluft_Homepage_736bbec28e.jpg.webp

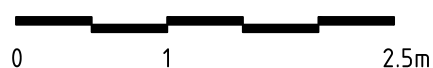
Duco Climatop 60 AK+



www.duco.eu

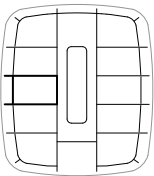
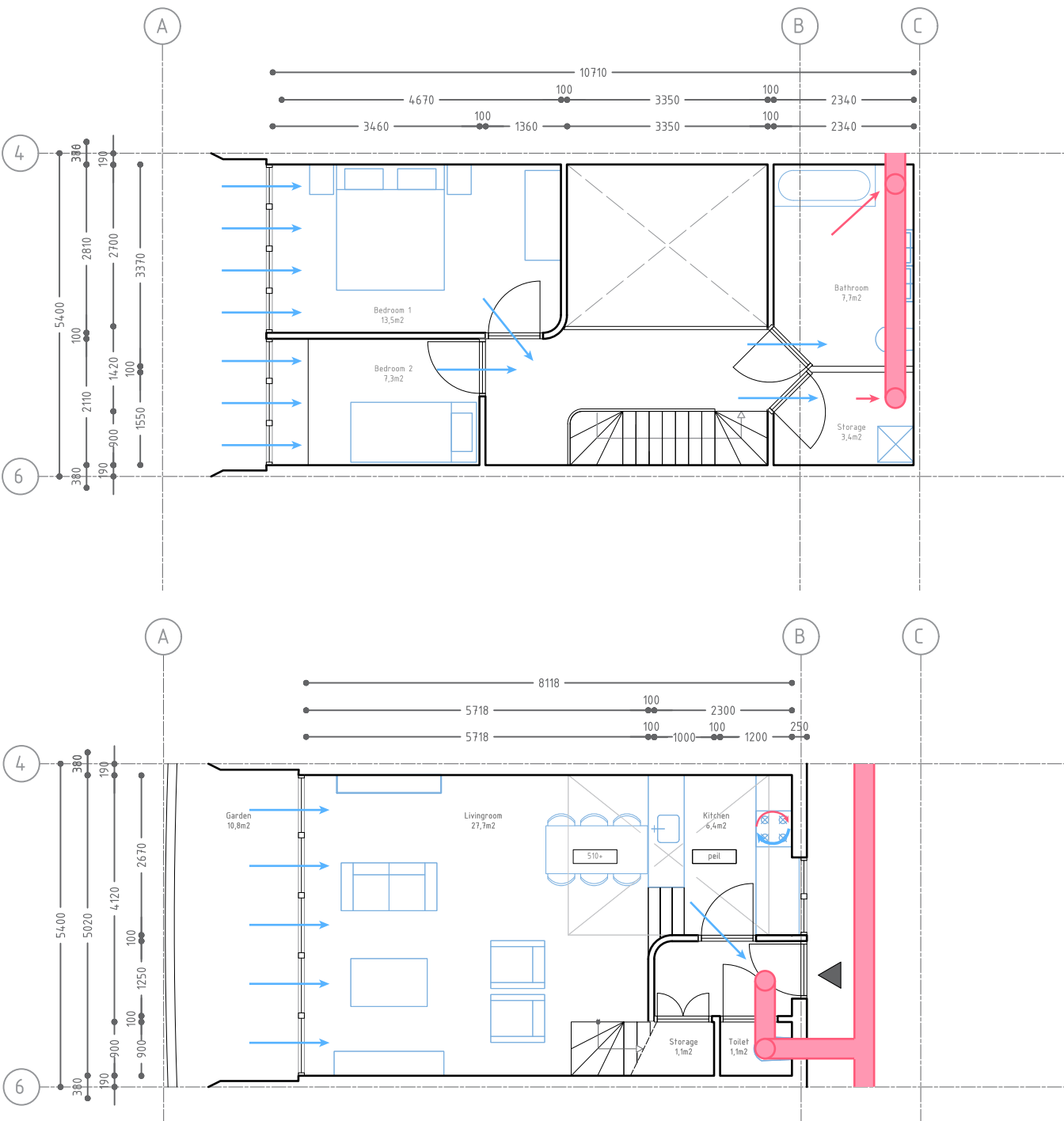
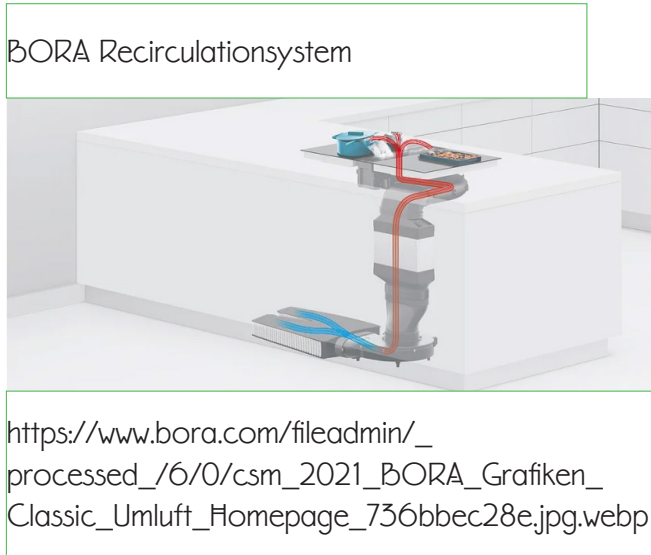


Type 5 62sqm 2 bedroom



Dwelling Type III Residential Tower - Ventilation

Ventilation system C+ Regulated Electrically pre heated outside air, mechanical disposal



Type 3 86 sqm 2 bedroom

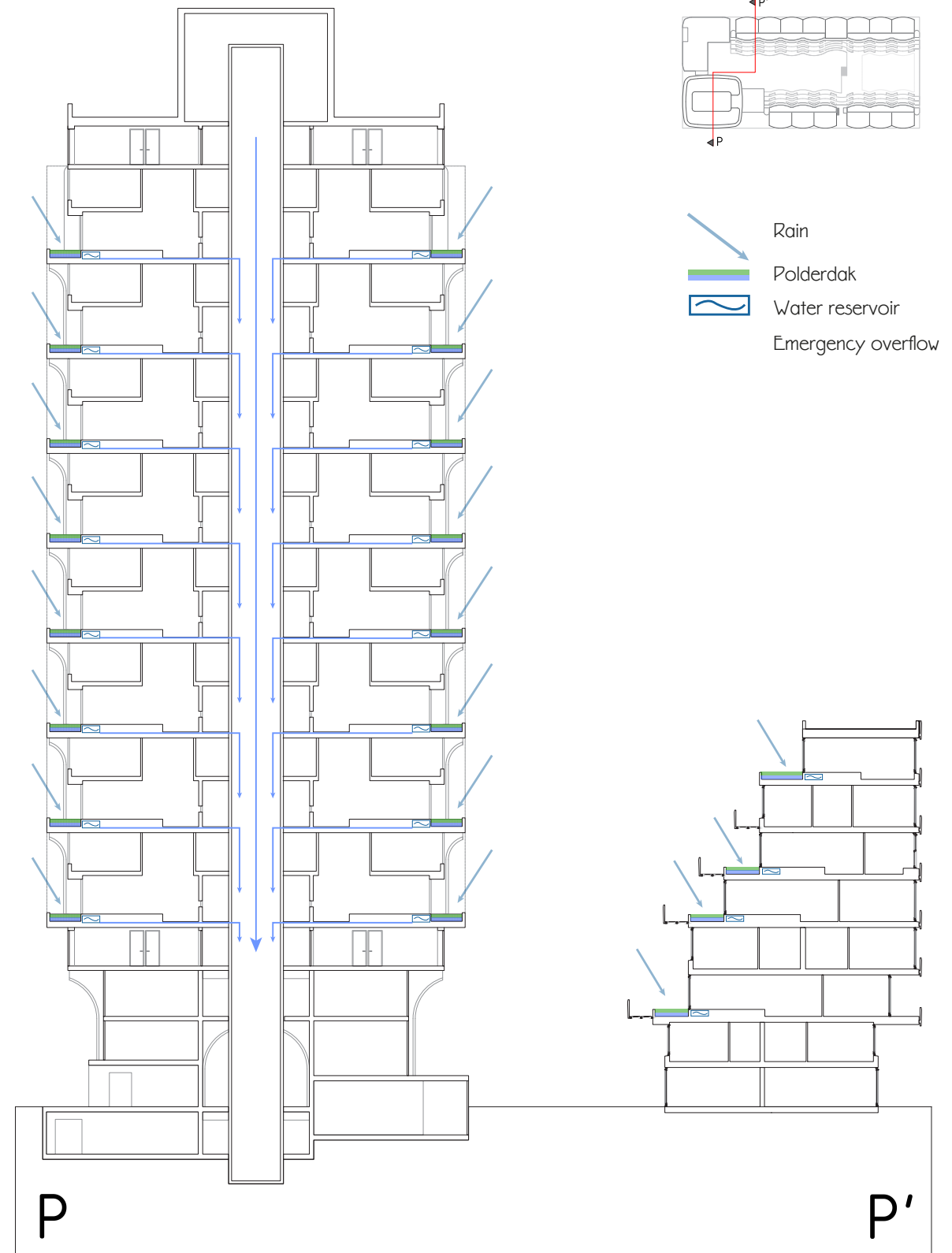


1:100

Water retention system

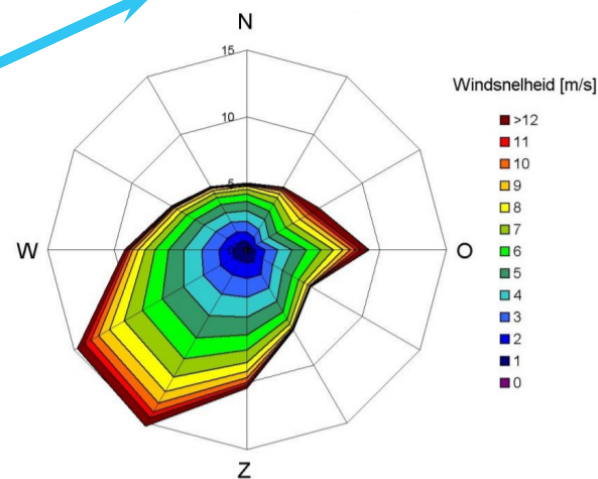
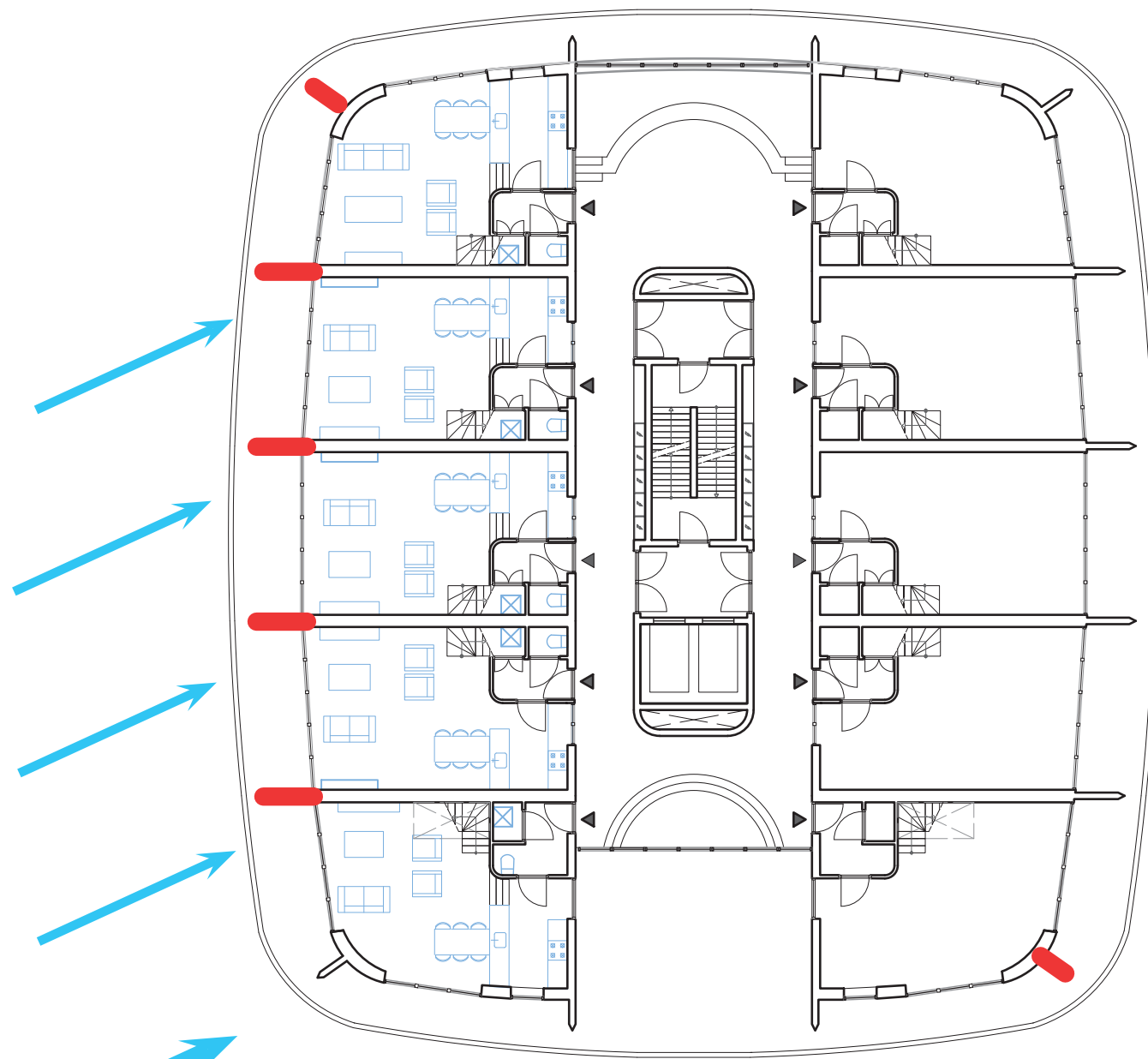
“Polderdak” Water retention system

Emergency Overflow



Air

Wind study residential tower



https://www.planviewer.nl/imro/files/NL.IMRO.0363.M1401B-PG/T-VG01/b_NL.IMRO.0363.M1401BPG/T-VG01_tb3.pdf

Earth

Geothermal Energy

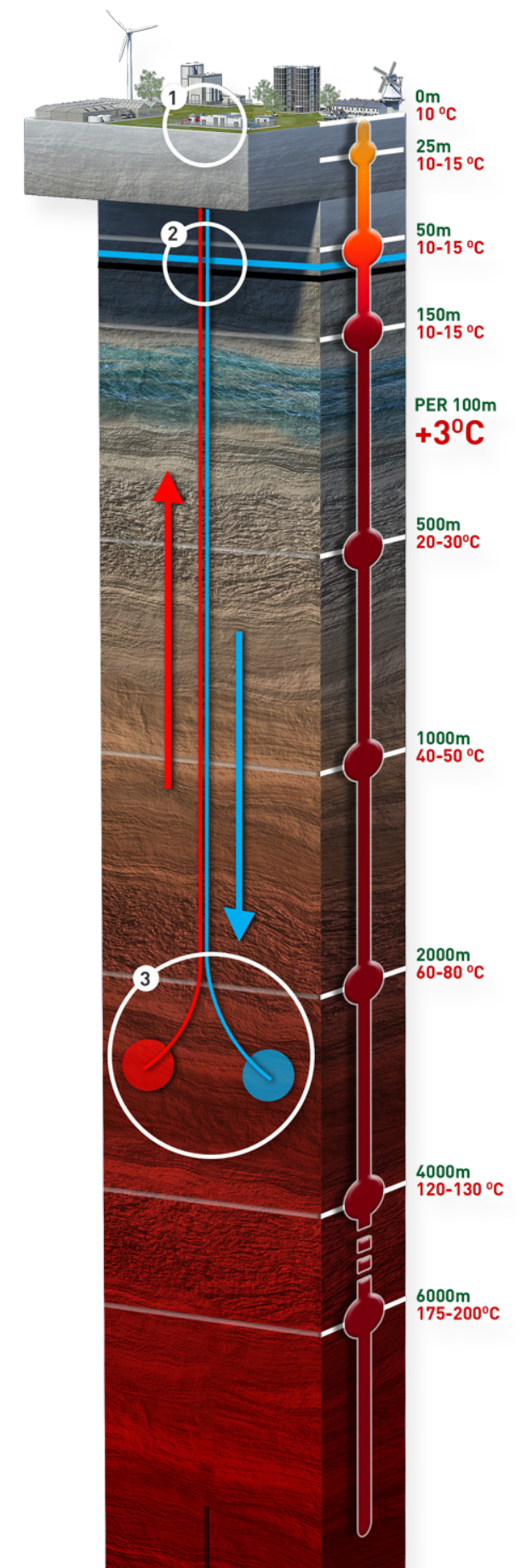
Energy for 4.000 to 10.000 homes

Low temperature heating

Amsterdam gaat stadsbreed boren naar een alternatief voor aardgas

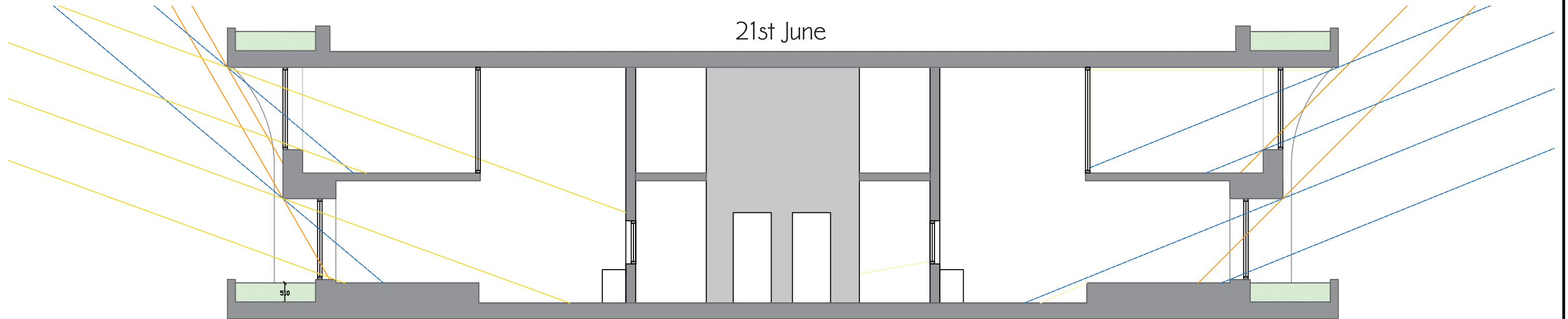
Parool 10-06-2021

<https://www.parool.nl/amsterdam/amsterdam-gaat-stadsbreed-boren-naar-een-alternatief-voor-aardgas~b1e619765/>



sun study residential tower 1:100

21st June



West facade

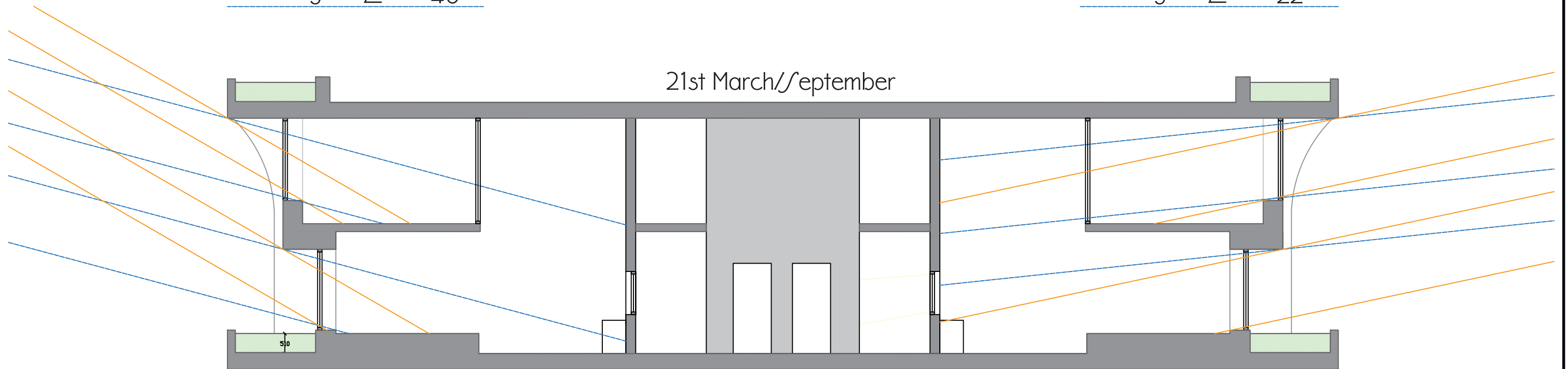
15:00u	∠	58
19:30u	∠	20
Average	∠	40

Little sun exposure
No need for blinds
Dwellings stay cool

East facade

5:00u	∠	0
10:00u	∠	45
Average	∠	22

21st March/september



West facade

15:30u	∠	30
19:30u	∠	0
Average	∠	15

sun exposure
Natural solar heating

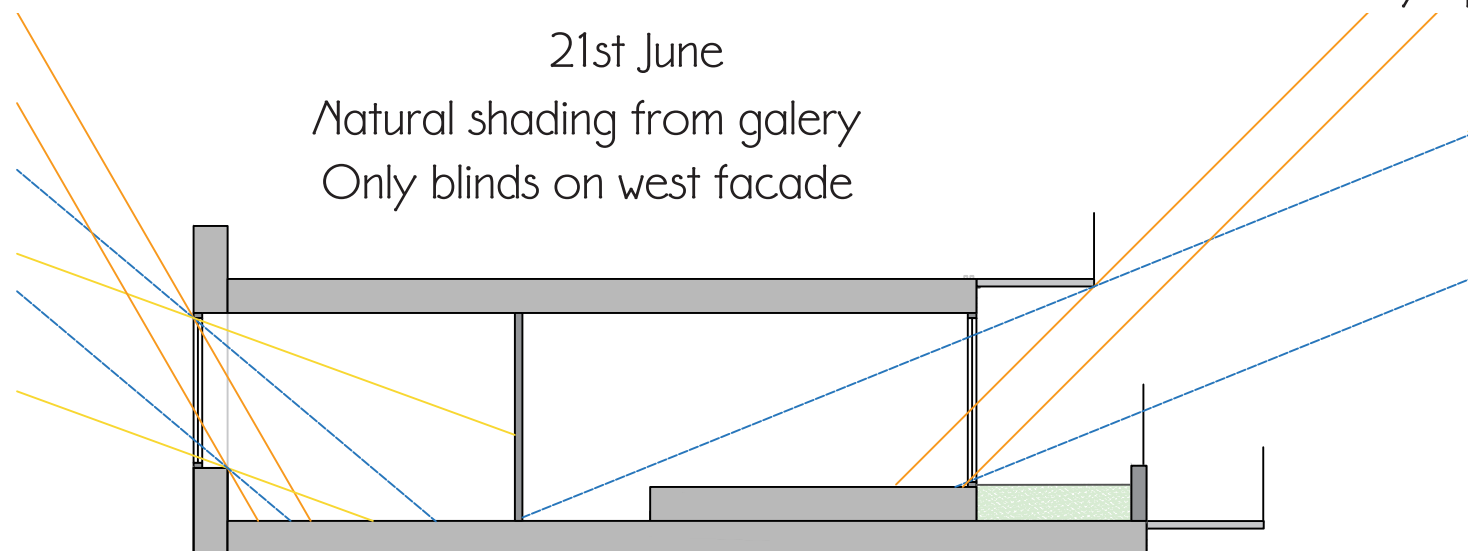
East facade

6:30u	∠	0
8:40u	∠	12
Average	∠	6

sun study apartments 1:100

21st June

Natural shading from gallery
Only blinds on west facade



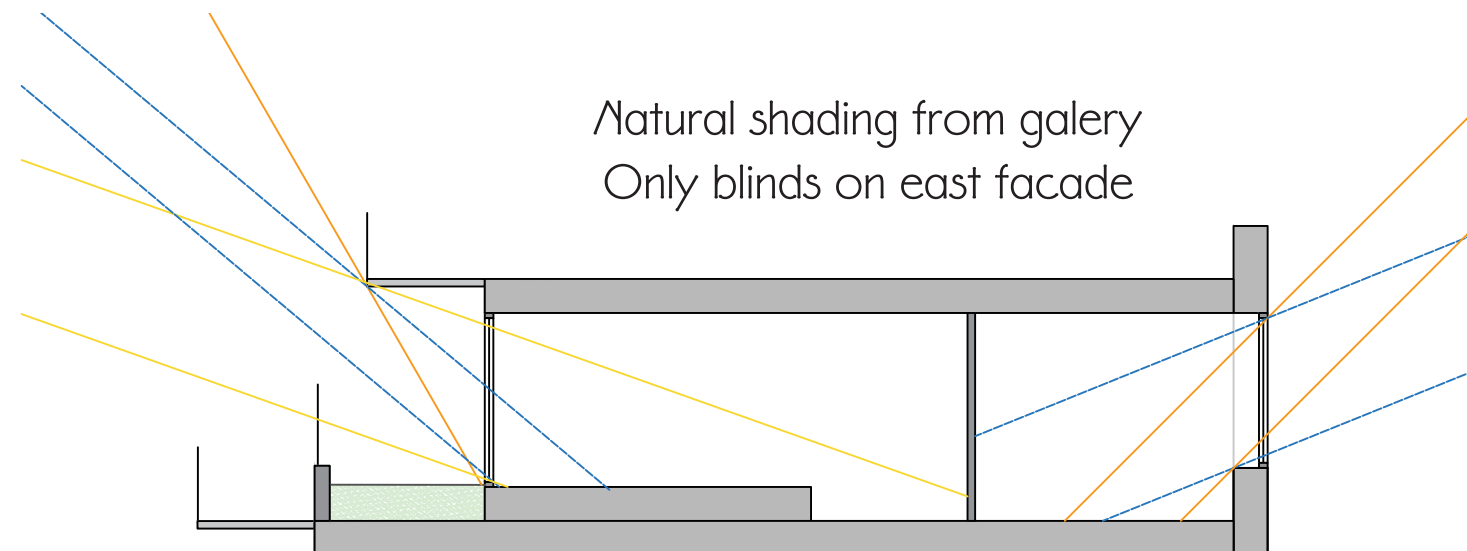
West facade

East facade

15:00u	∠	58
19:30u	∠	20
Average	∠	40

5:00u	∠	0
10:00u	∠	45
Average	∠	22

Natural shading from gallery
Only blinds on east facade



West facade

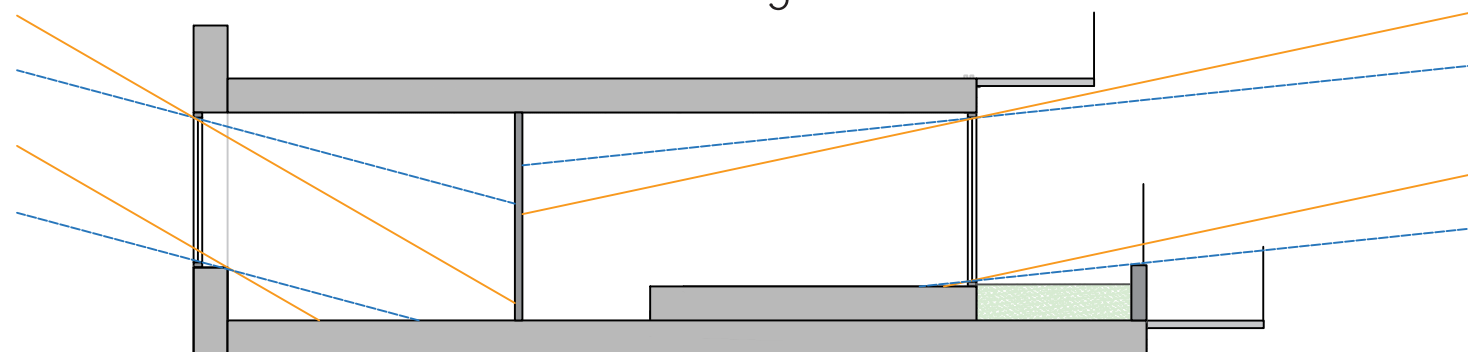
East facade

15:00u	∠	58
19:30u	∠	20
Average	∠	40

5:00u	∠	0
10:00u	∠	45
Average	∠	22

21st March/September

Natural solar heating



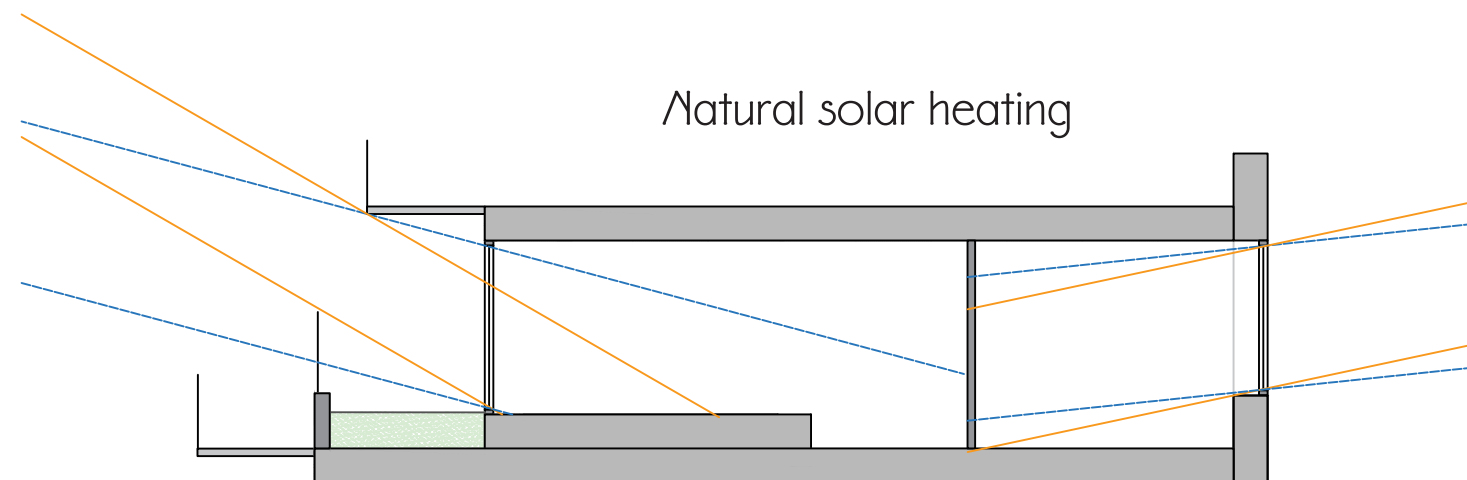
West facade

East facade

15:30u	∠	30
19:30u	∠	0
Average	∠	15

6:30u	∠	0
8:40u	∠	12
Average	∠	6

Natural solar heating



West facade

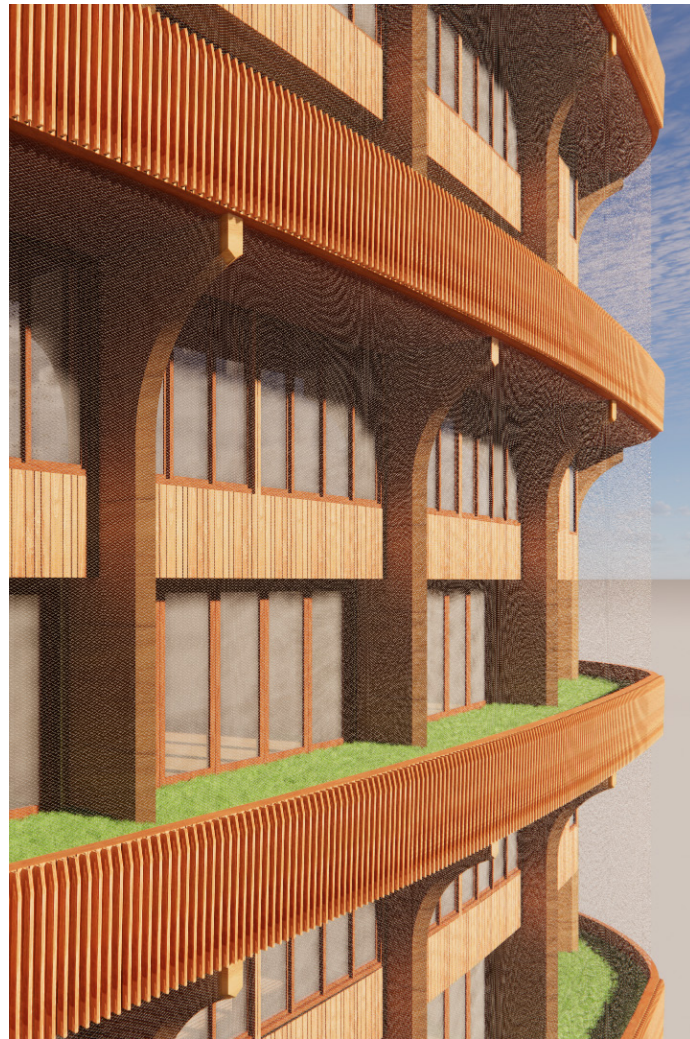
East facade

15:30u	∠	30
19:30u	∠	0
Average	∠	15

6:30u	∠	0
8:40u	∠	12
Average	∠	6

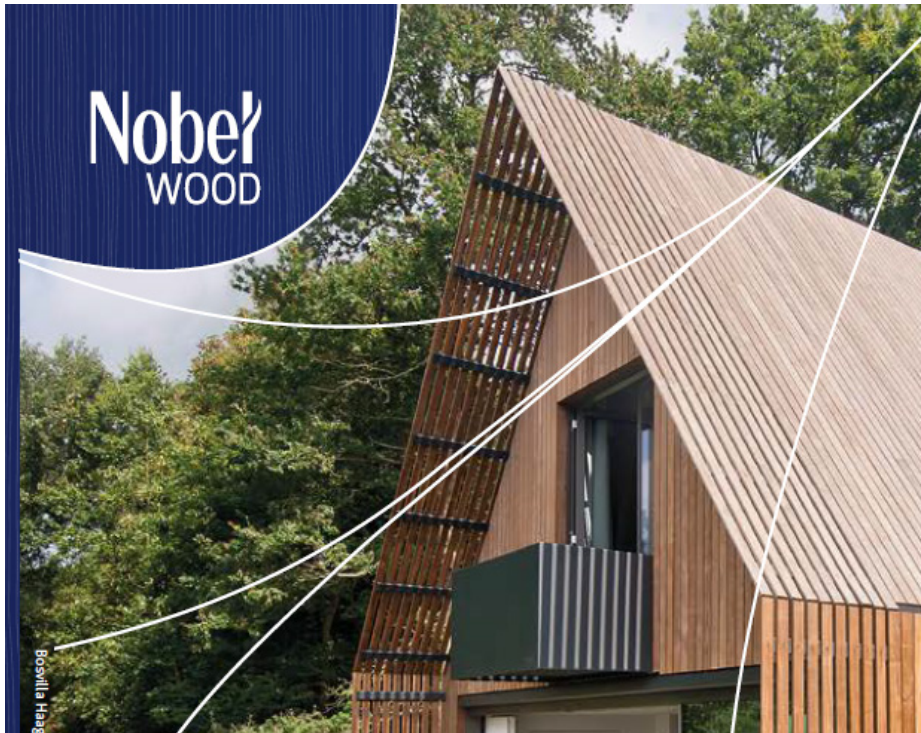
Materialisation

Materialisation residential tower



Carlstahl Xtend Colours Gold - Anti Climbing Floor to ceiling fall protection

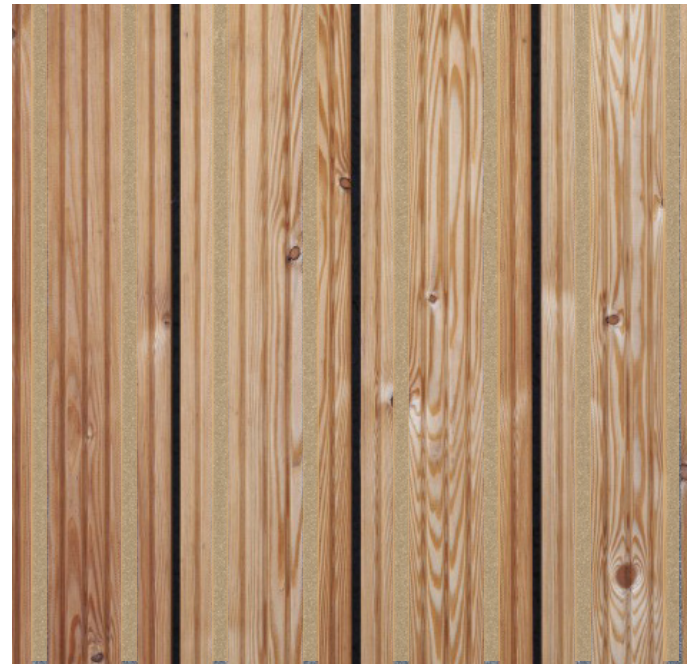
Natural Ageing Nobelwood



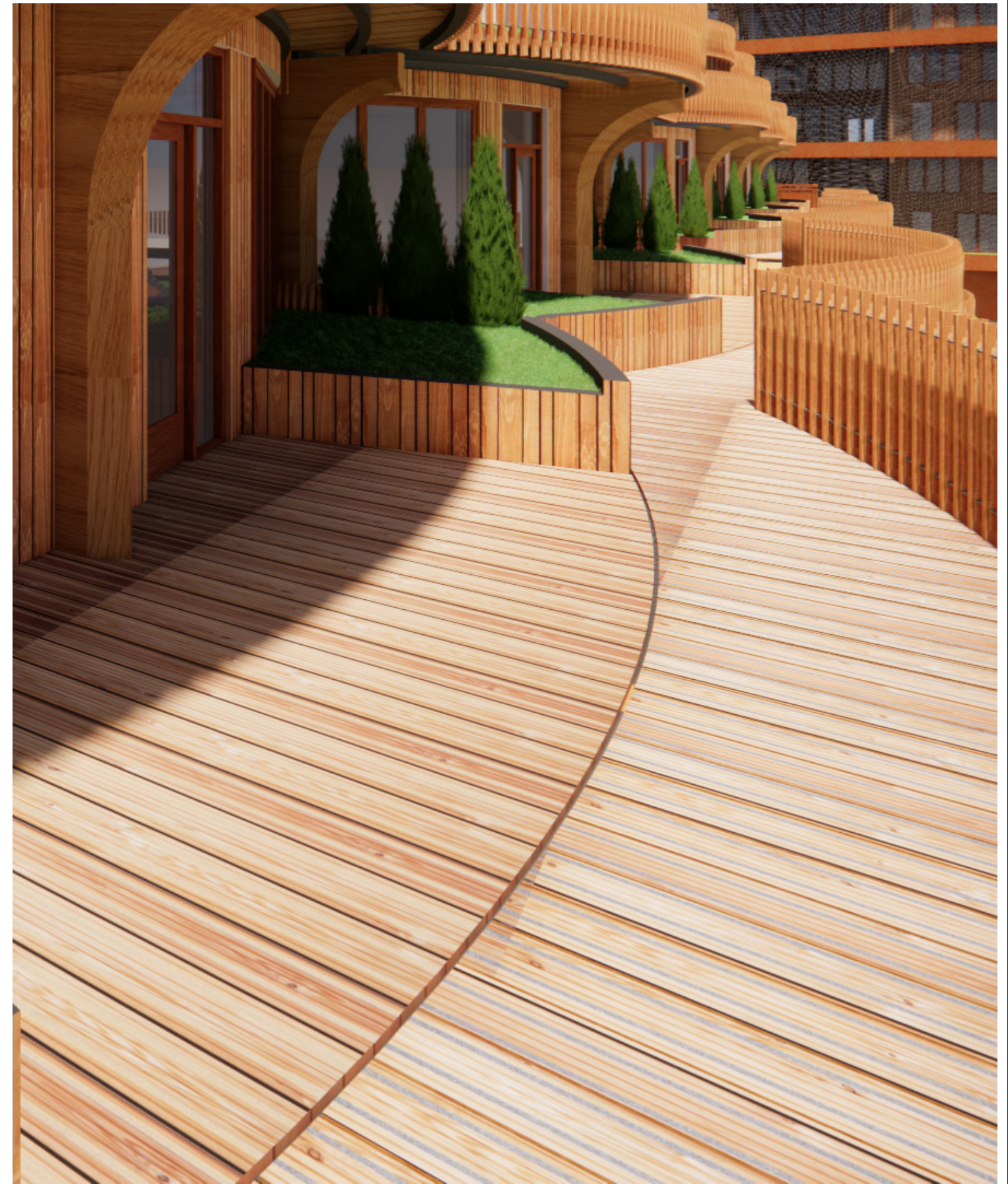
Materialisation apartment block



Natural Ageing Nobelwood



Larch Decking Antislip - Terrace



Impressions

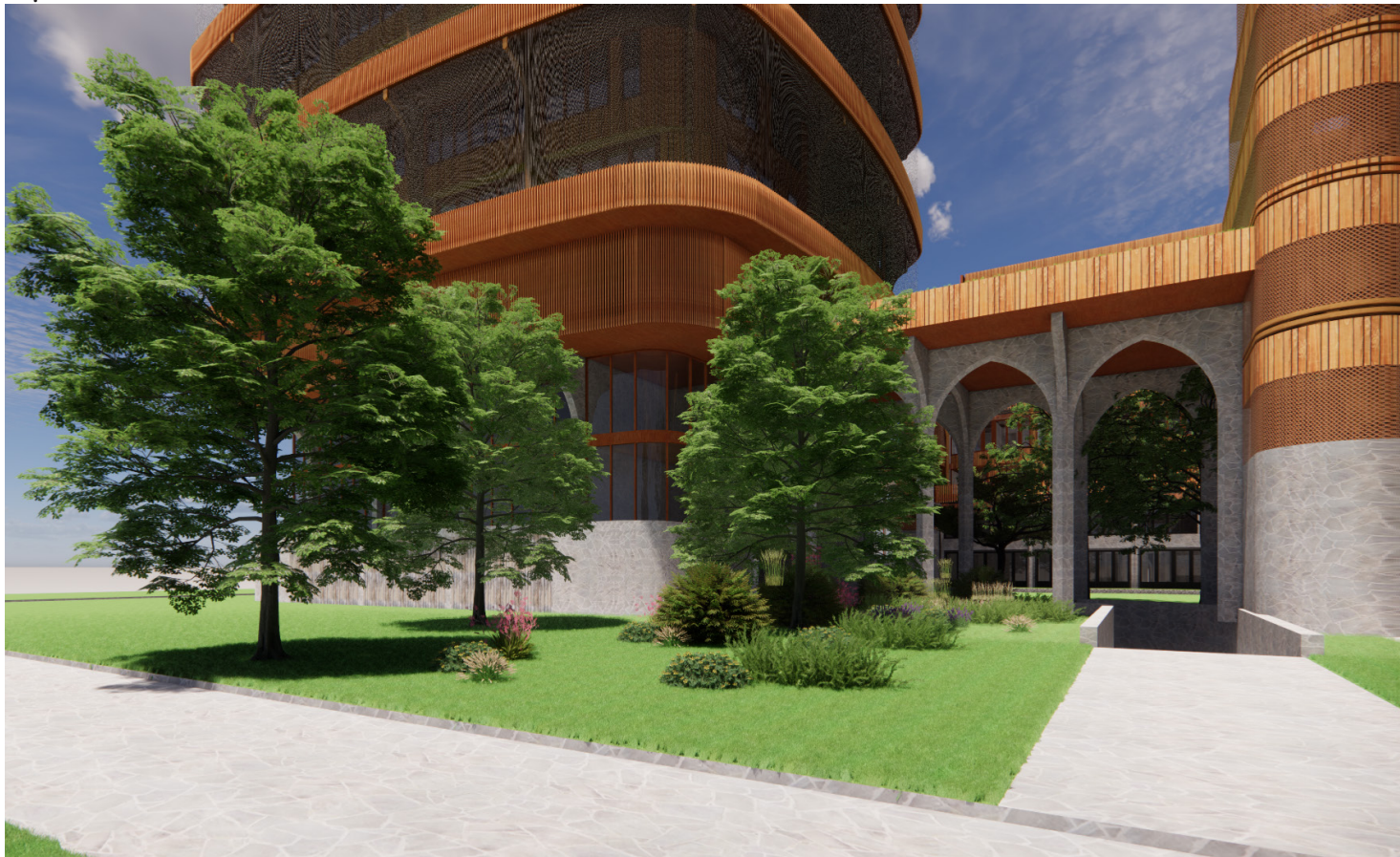
Impressions entrances



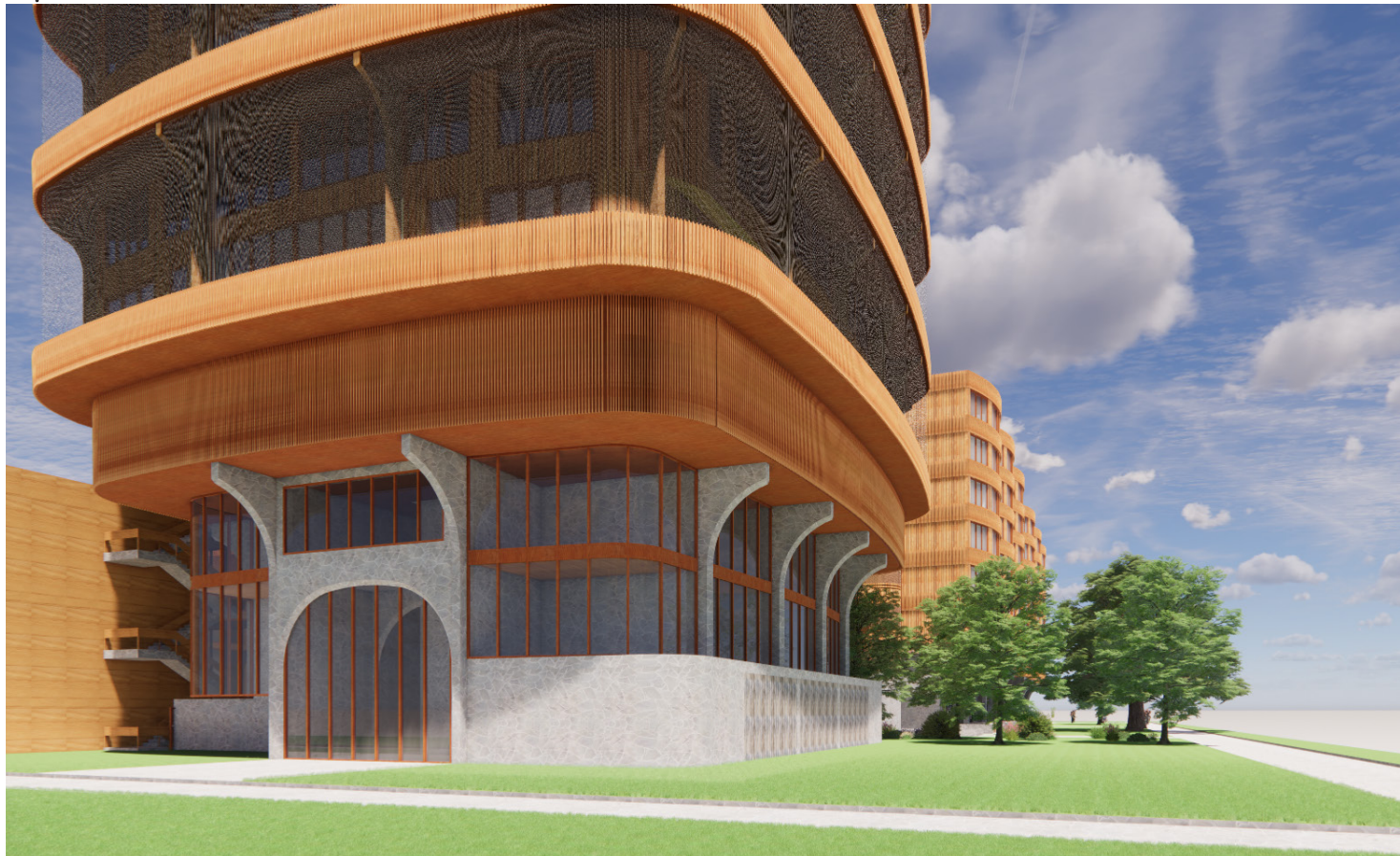
Apartment Block West Entrance



Apartment Block East Entrance

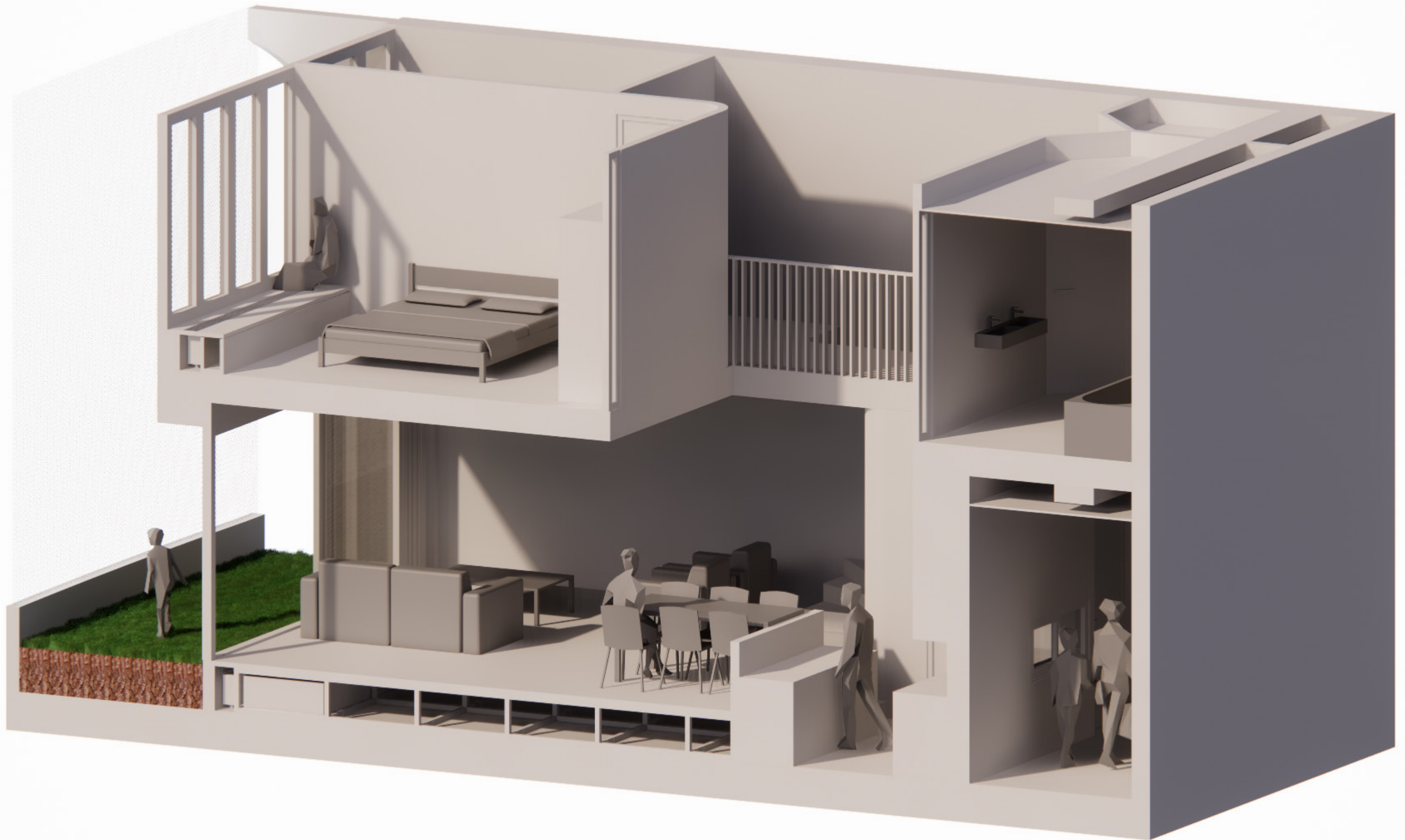


71 Residential Tower South Entrance/ Natural corridor



Residential Tower North Entrance

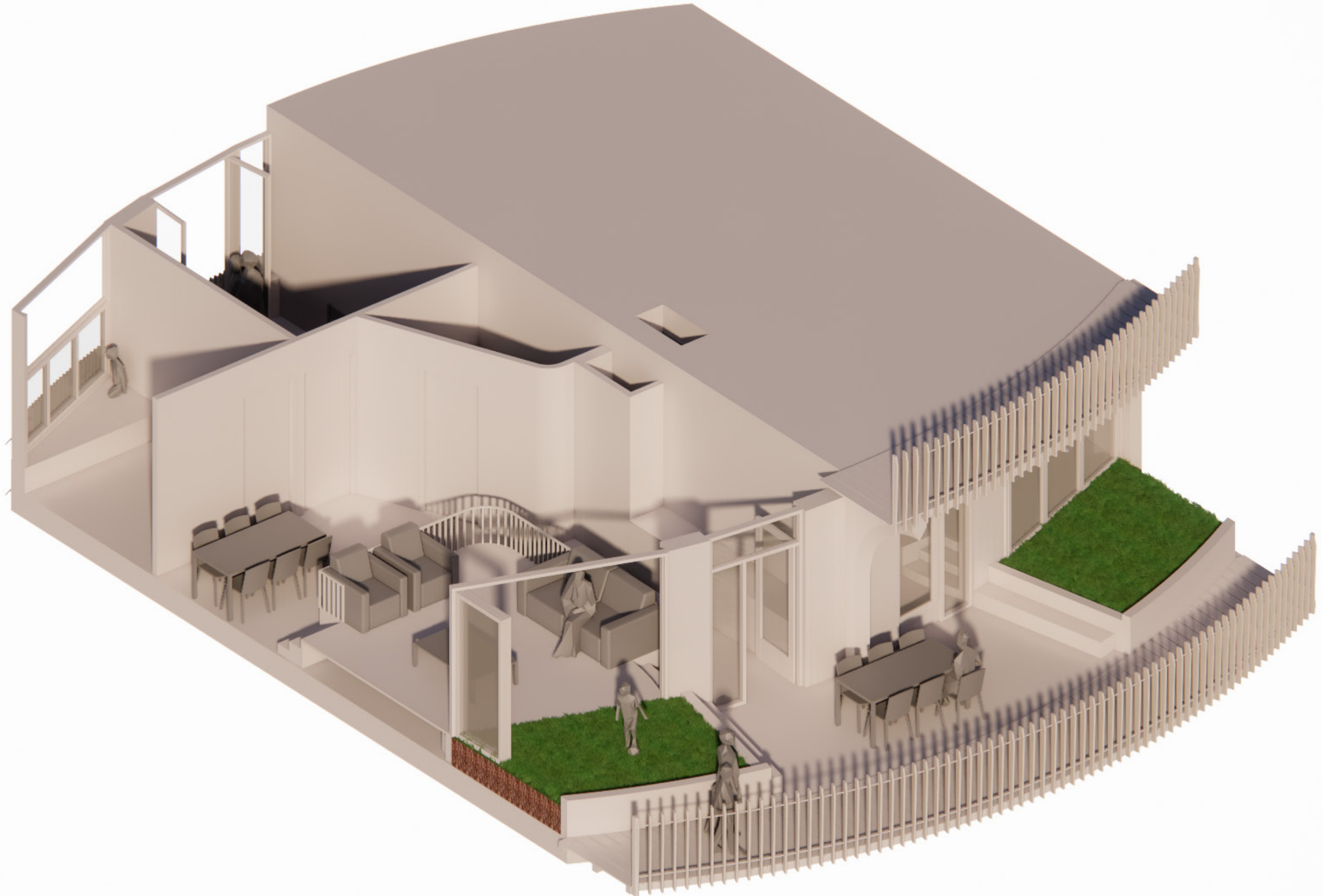
Apartment Type III



impression gardens residential tower



Impression Apartment Type X



impression garden and gallery apartment block

