



KEILEWIJK

growing up in an inclusive city
gaining distance from the front door, step by step

P5 | Graduation Presentation

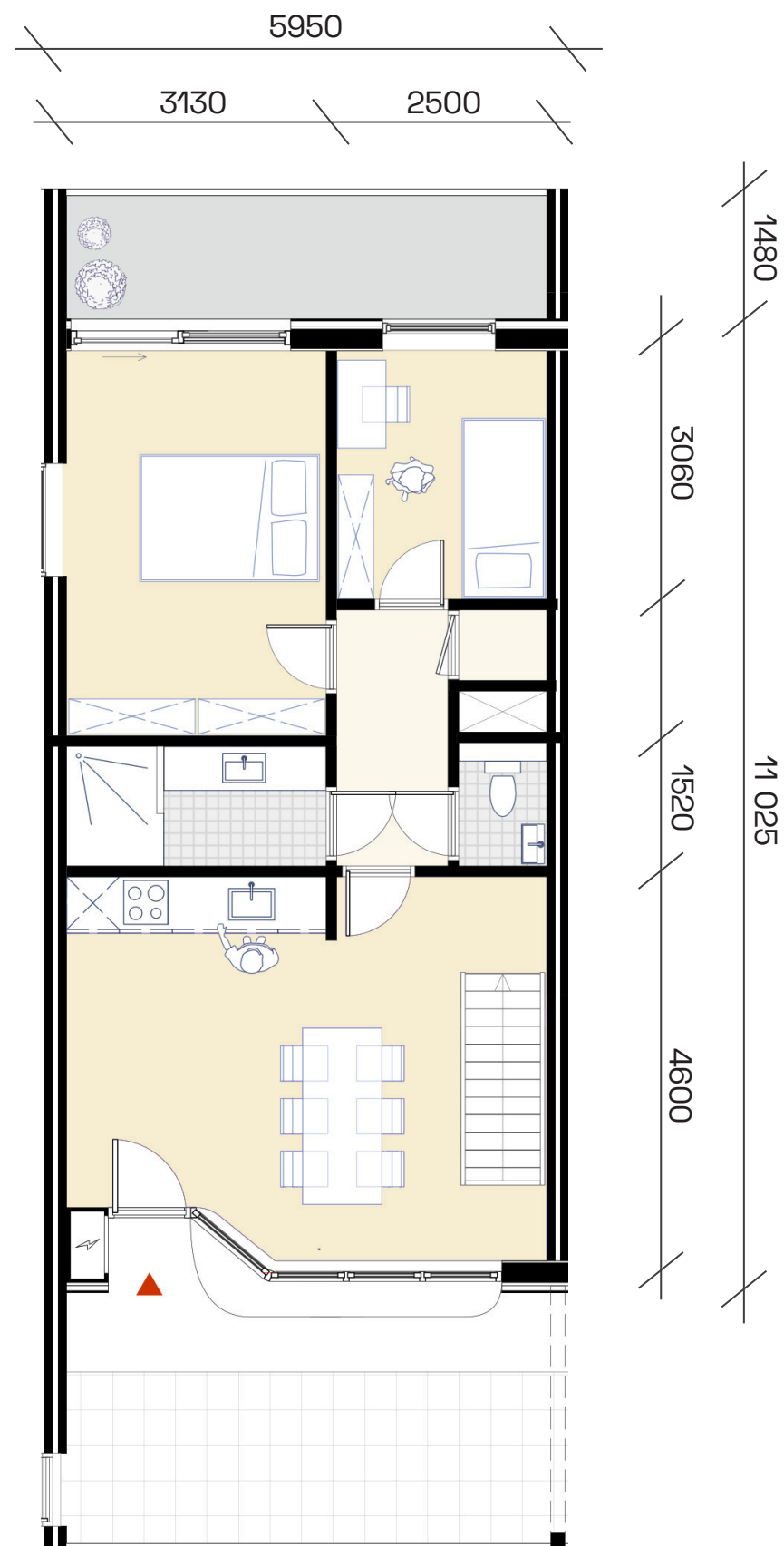
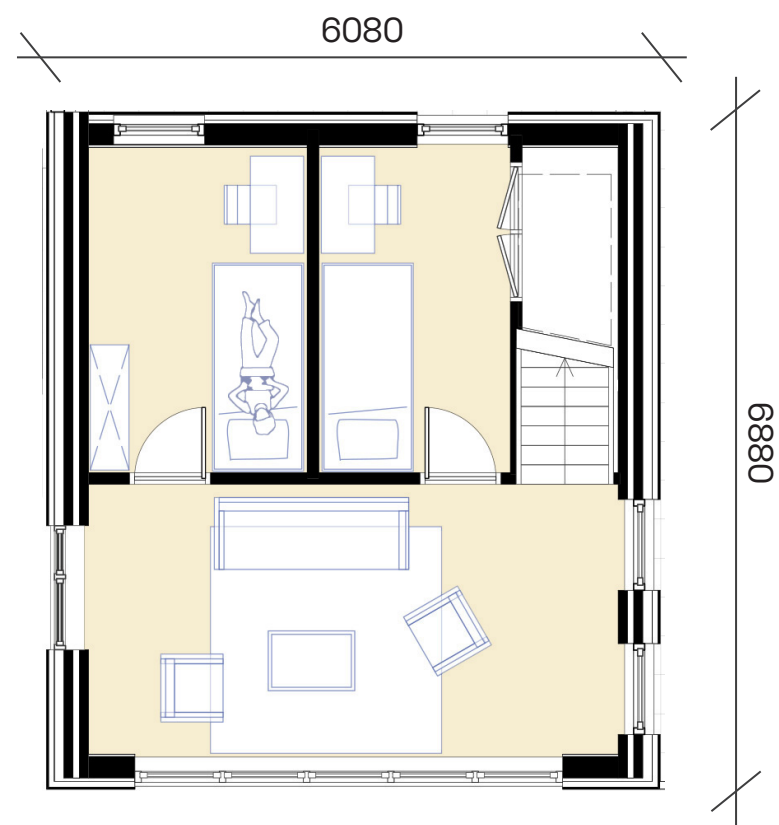
a housing design for one-parent
families in Merwevierhaven, Rotterdam

Fija van der Laan

Studio Dwelling | Dutch Housing

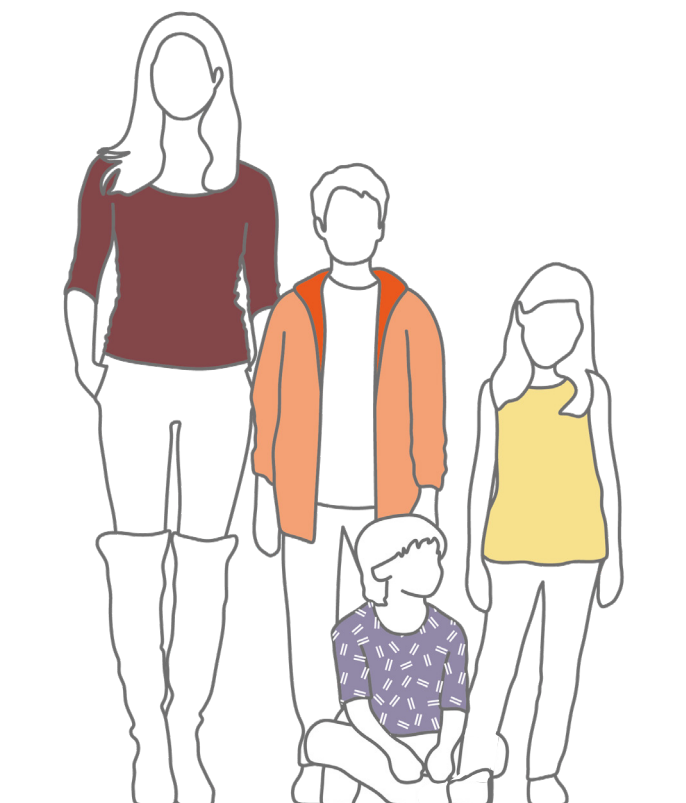
16.04.21





type C1
four bedroom appartement

94m²
6th floor
-
outdoor typology:
the sidewalk



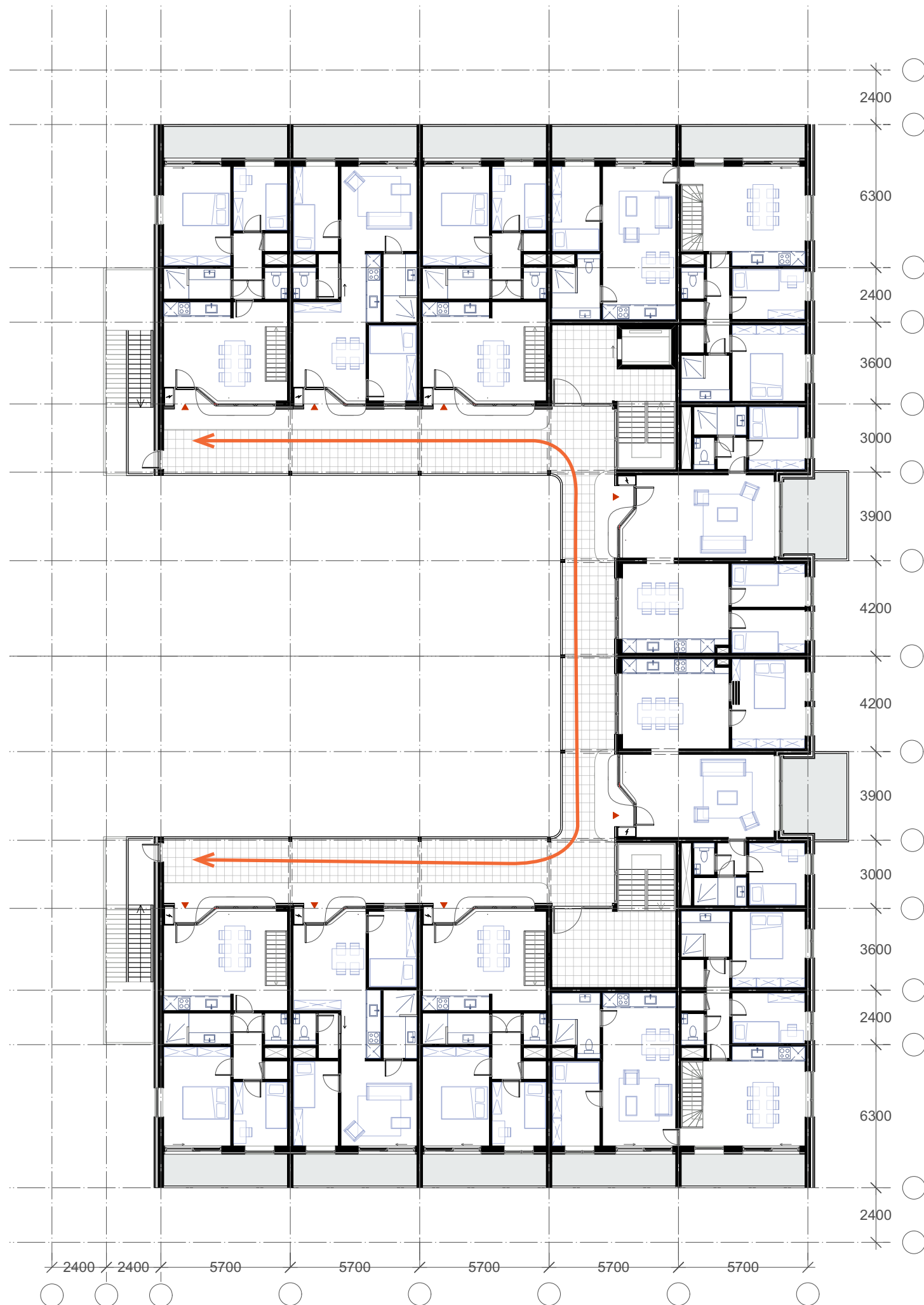




drawing scale
1:200



drawing scale
1:200



drawing
scale

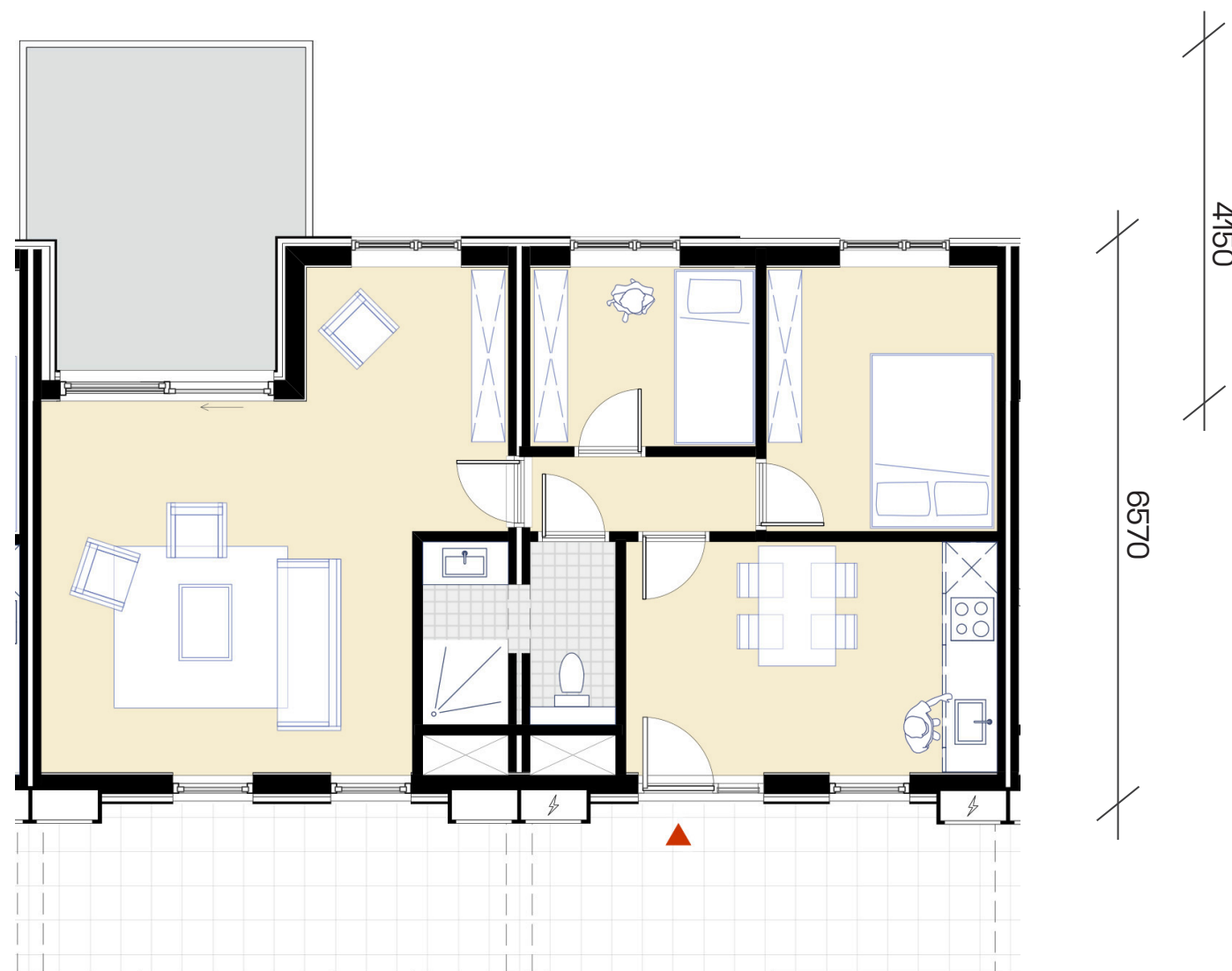
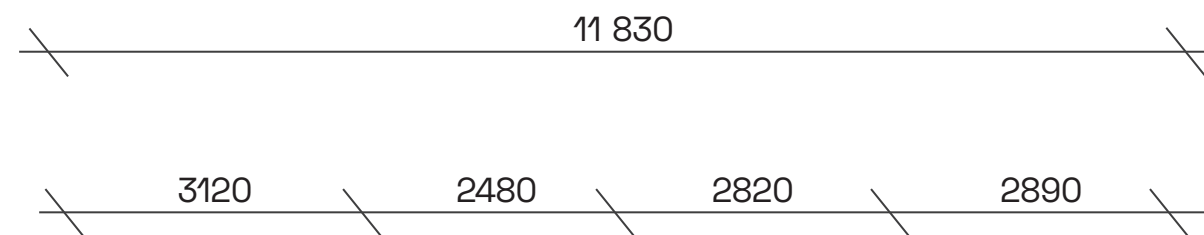
fifth floor
1:200



drawing
scale

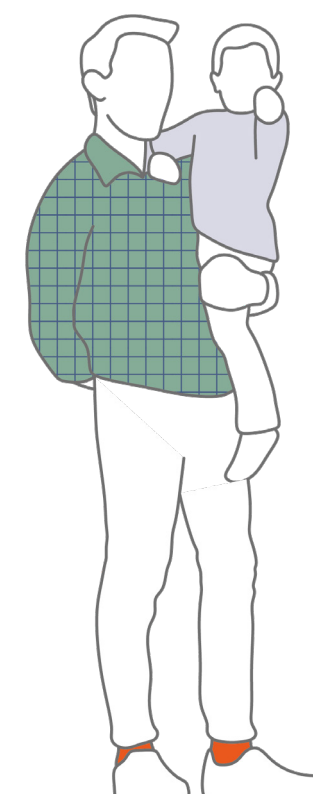
fifth floor
1:200





type A6
two bedroom appartement

60m2
5th floor
-
outdoor typology:
the alley







drawing
scale

fourth floor
1:200



drawing
scale

fourth floor
1:200

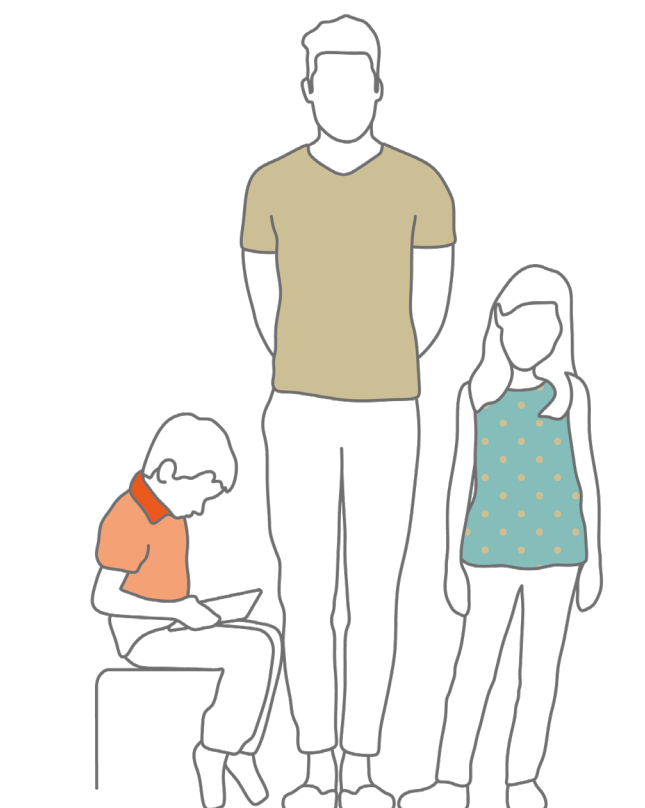




type C1
temporary housing in a collective
dwelling with individual studio's

192m2
incl. **3x30 m2** studio's
4th floor

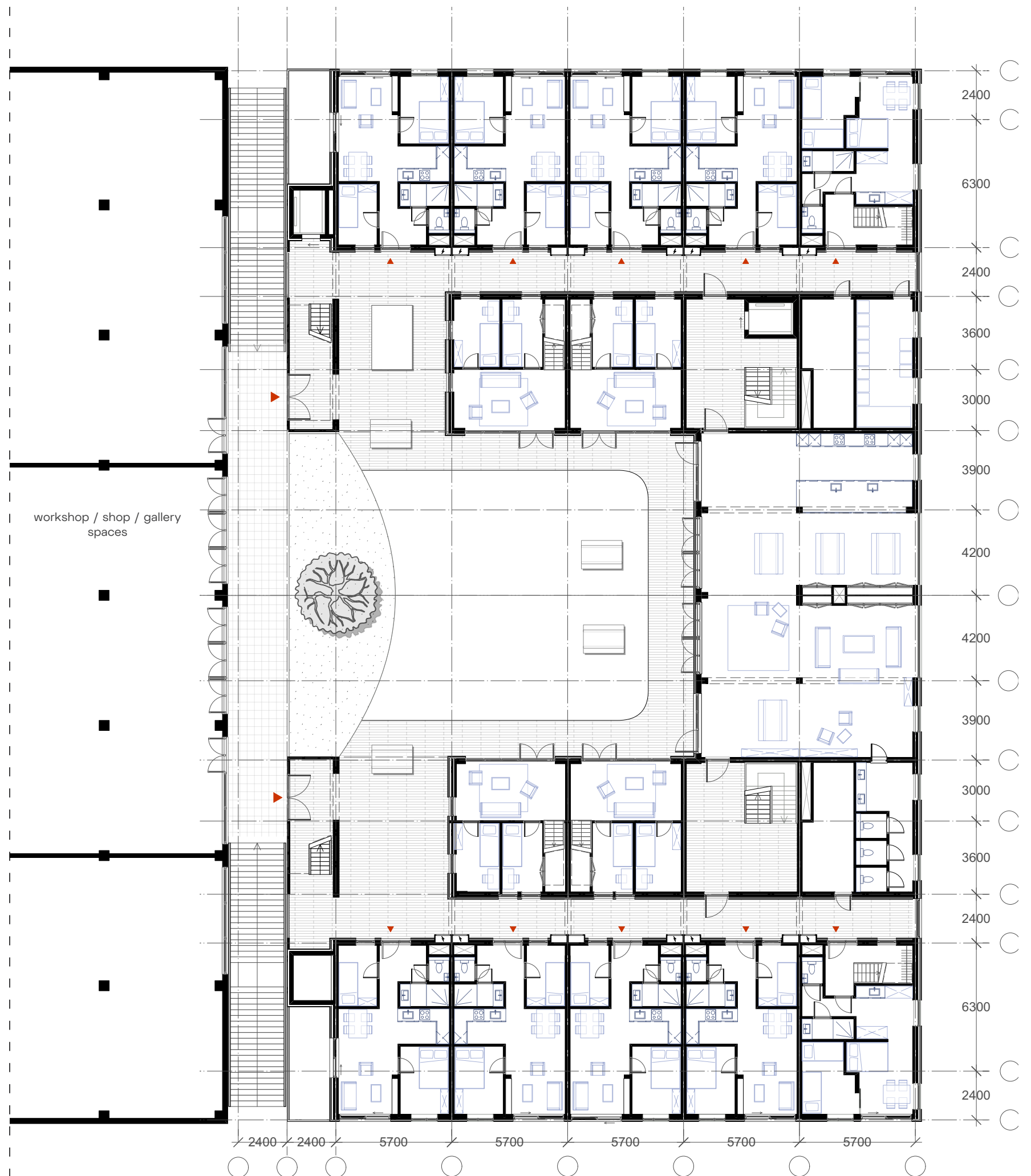
-
outdoor typology:
the sidewalk



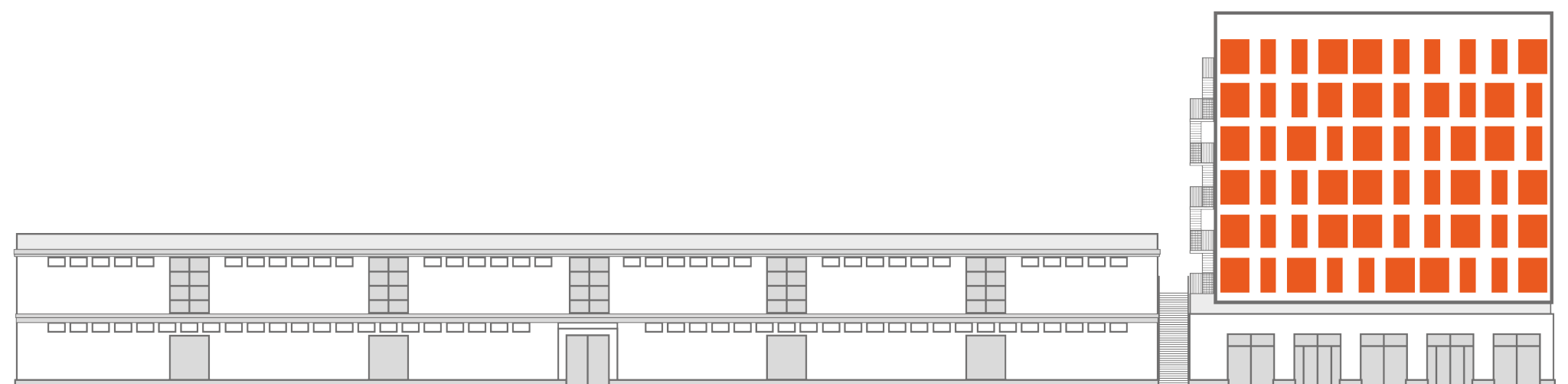


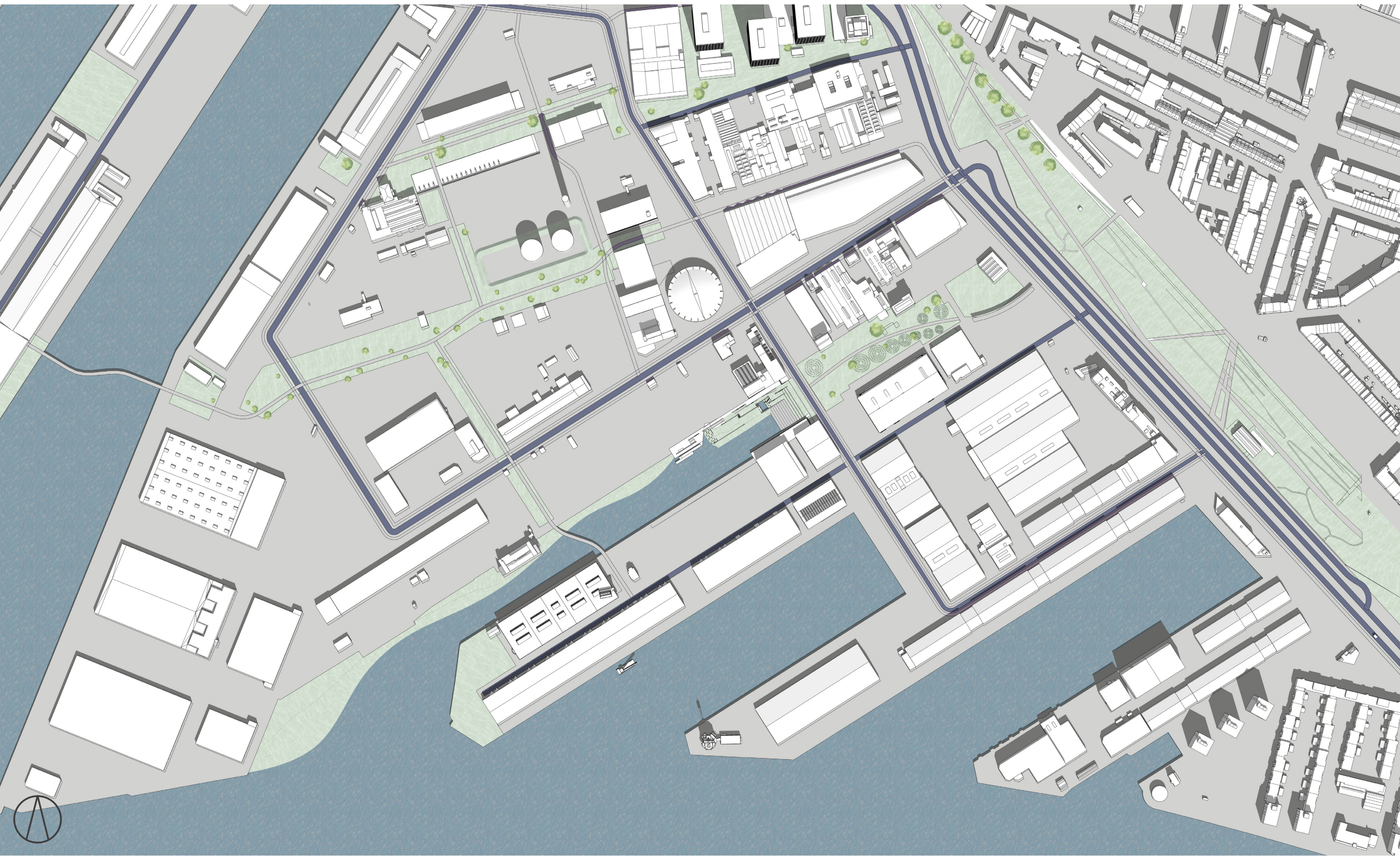
drawing
scale

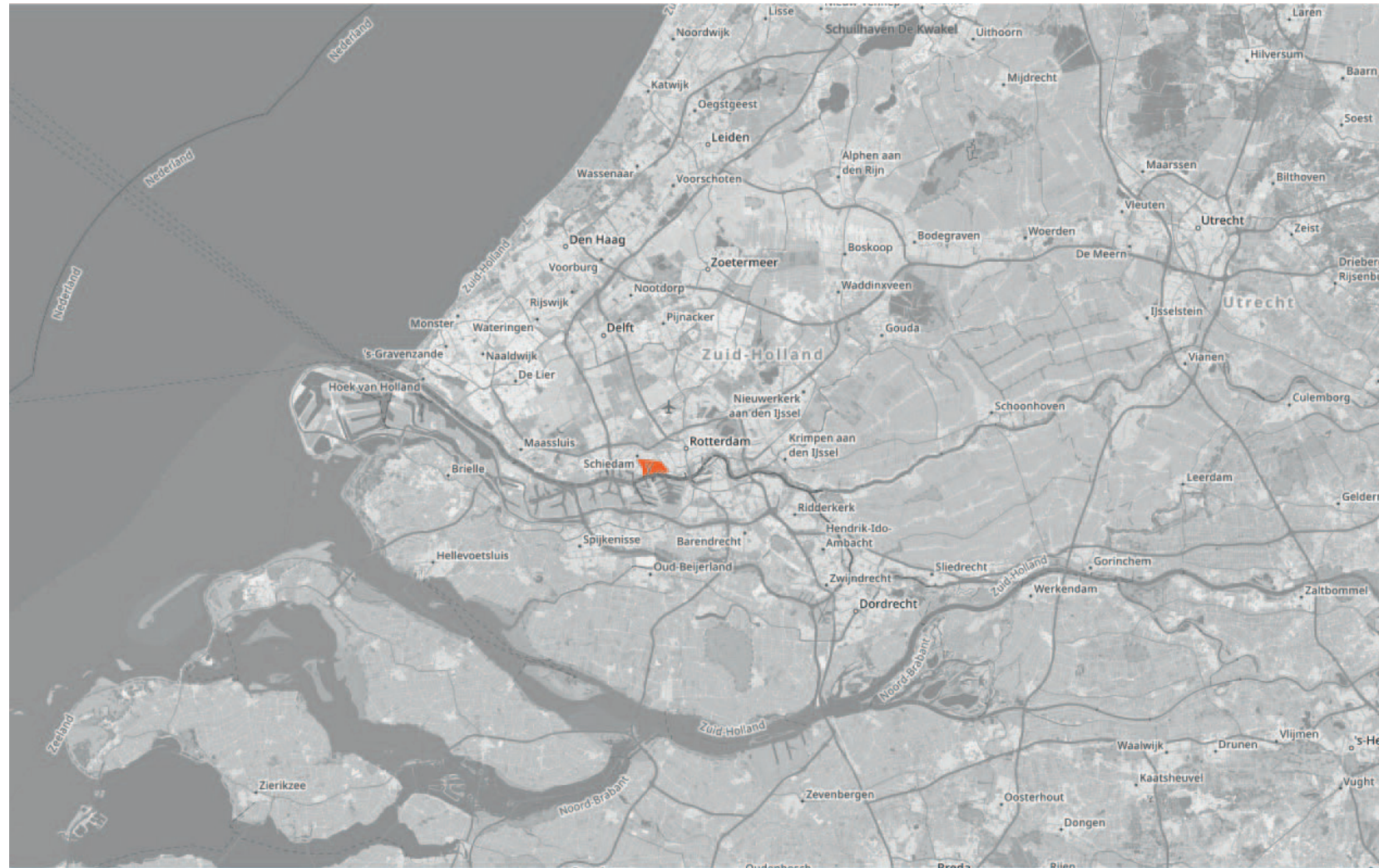
first floor
1:200









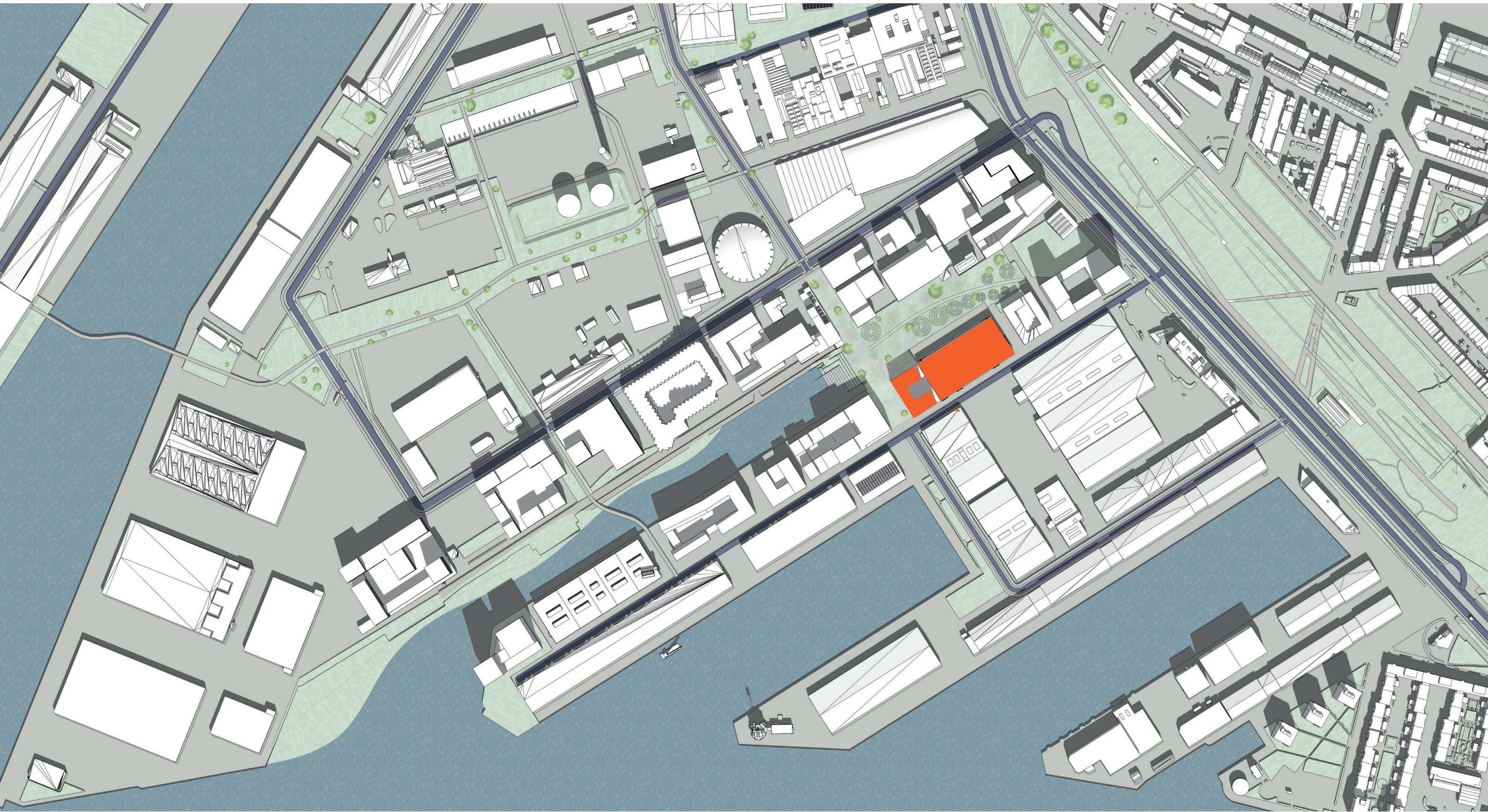




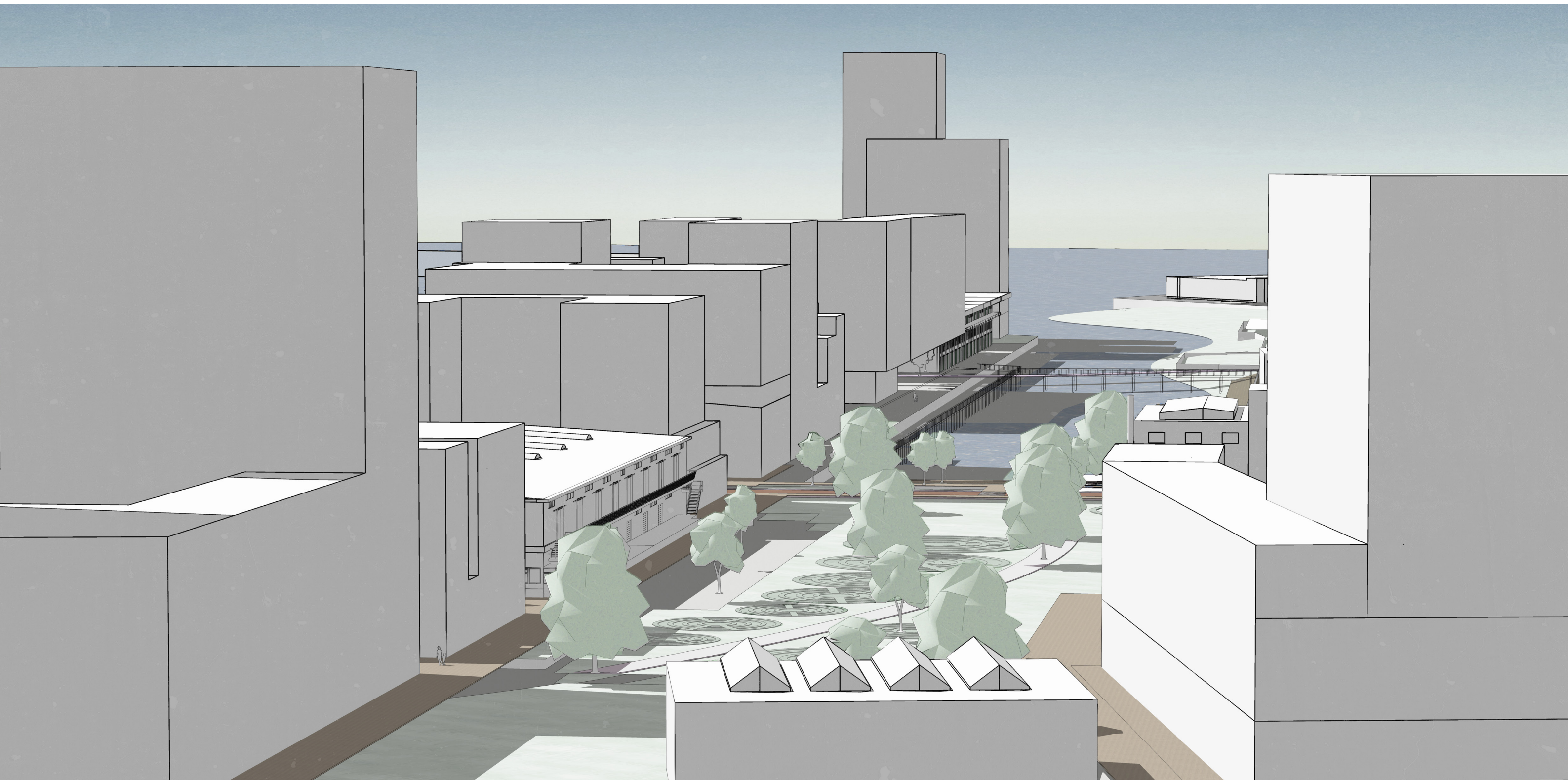


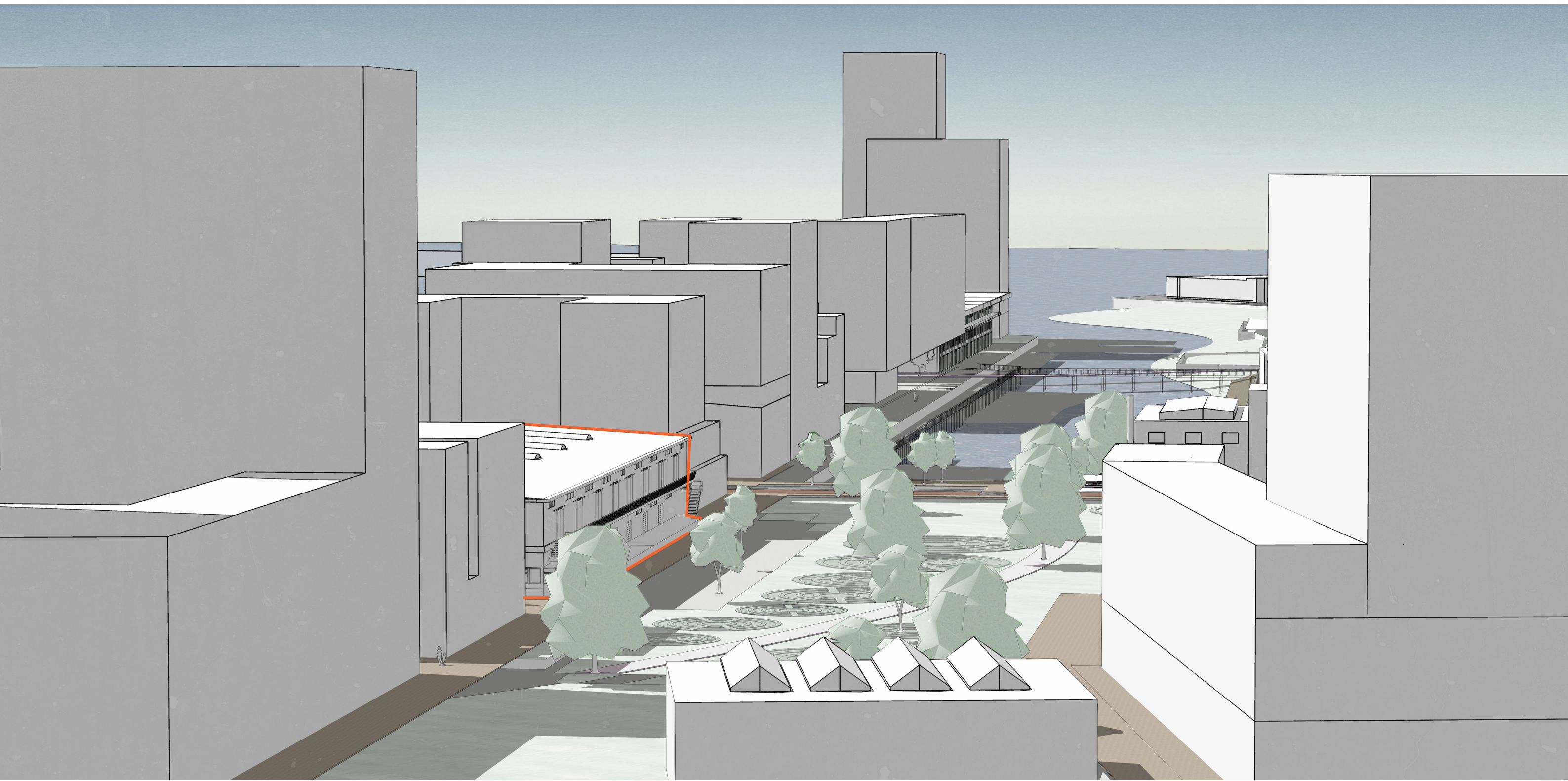


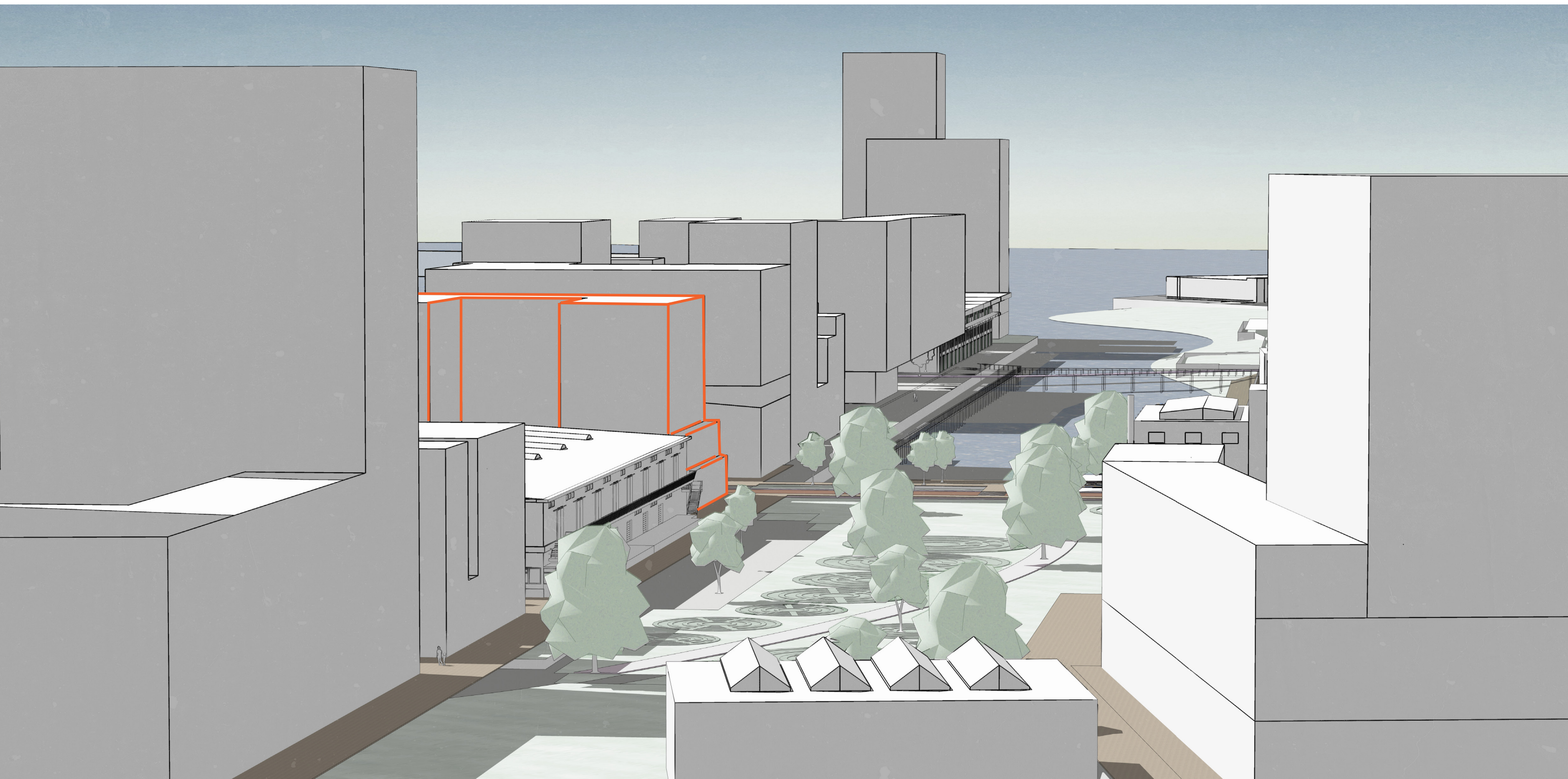








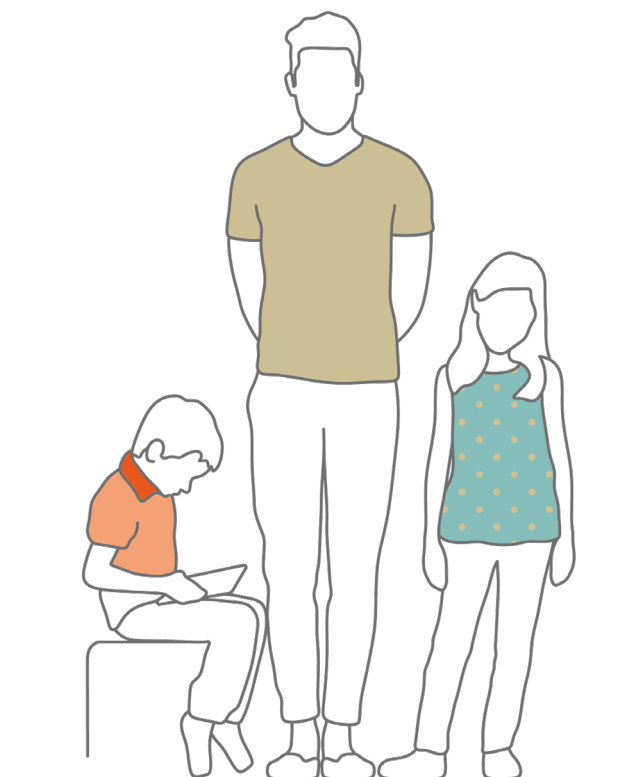
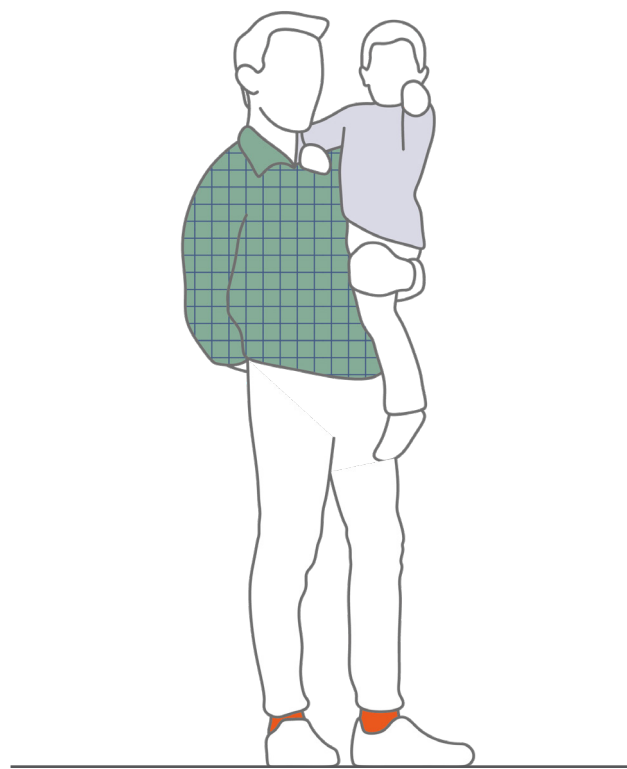
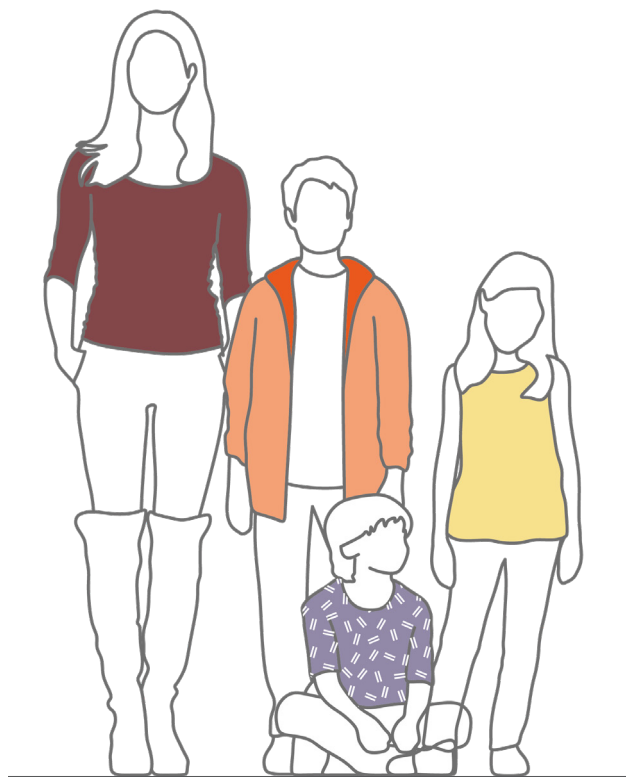




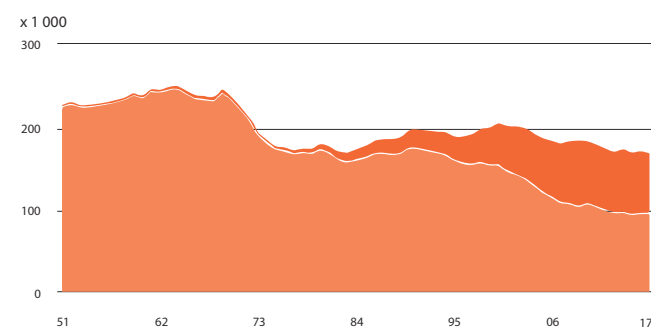
Hoe ziet wonen in de haven er uit?

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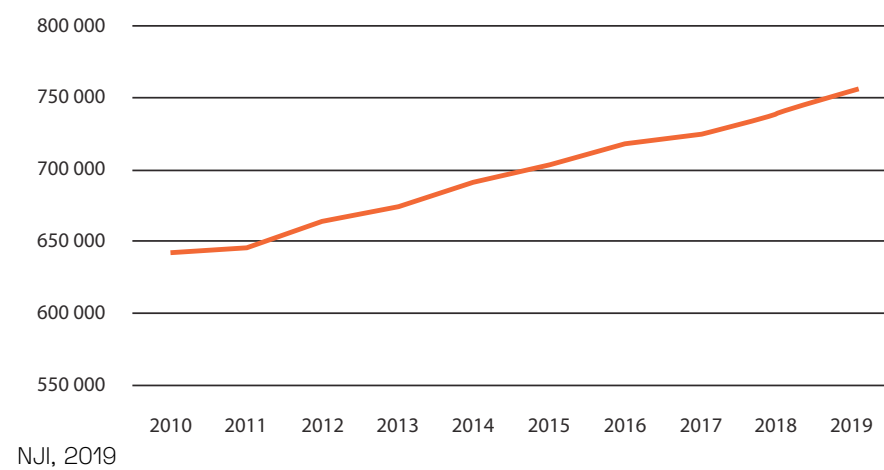






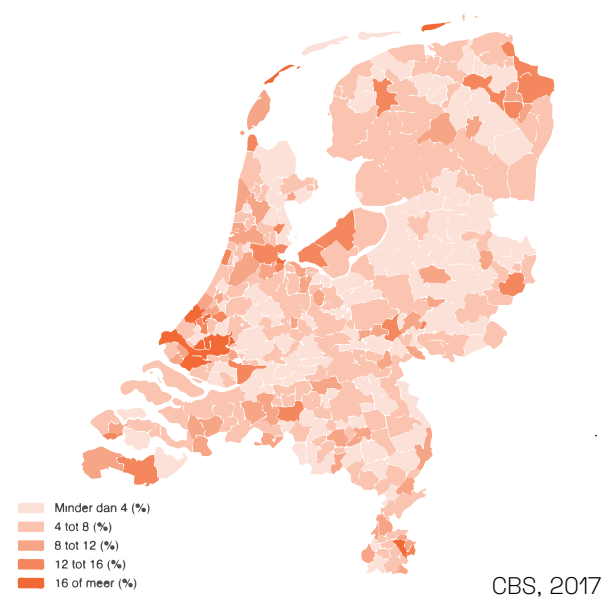
the martial
status of
mothers of
newborns
in the
Netherlands

source: CBS, 2019



the amount
of Dutch
children
raising up in
one-parent
families

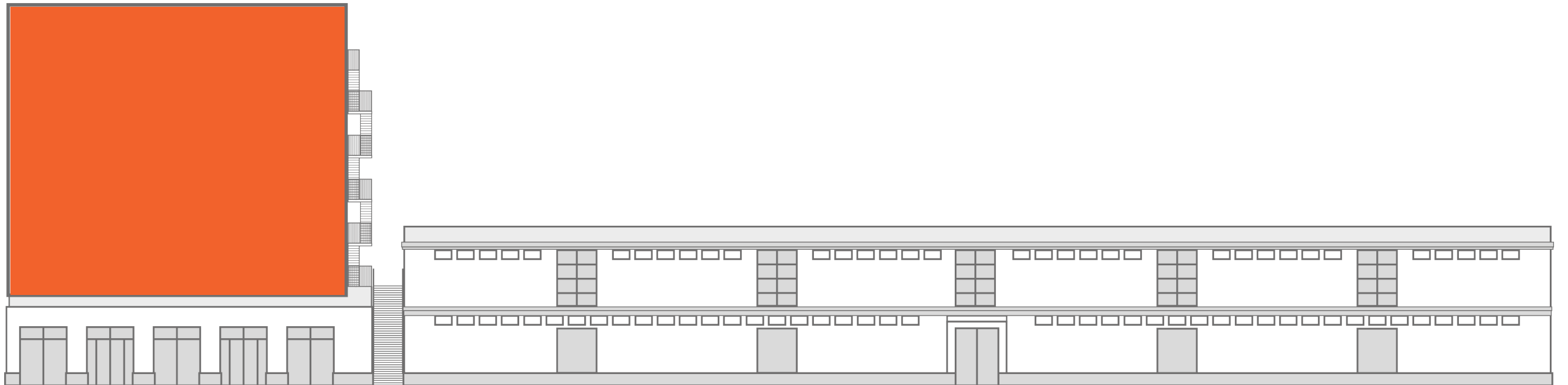




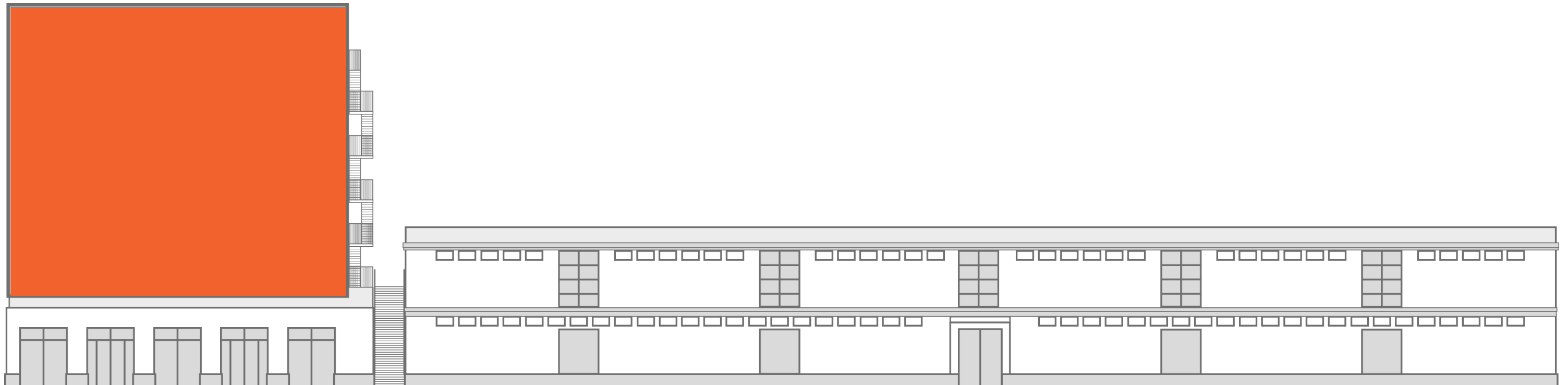
the division
of children
raising up in
one-parent
throughout
the
Netherlands



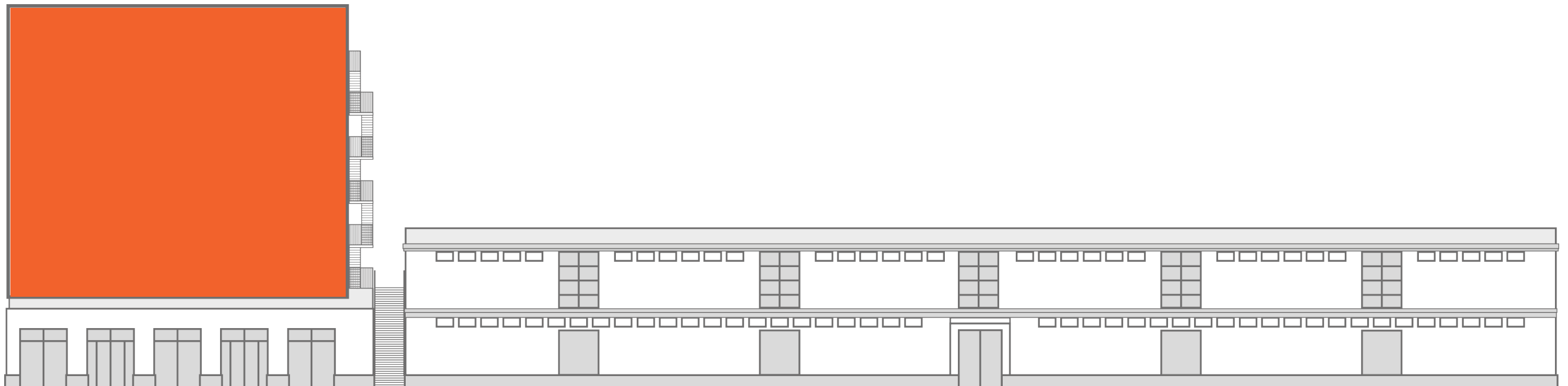




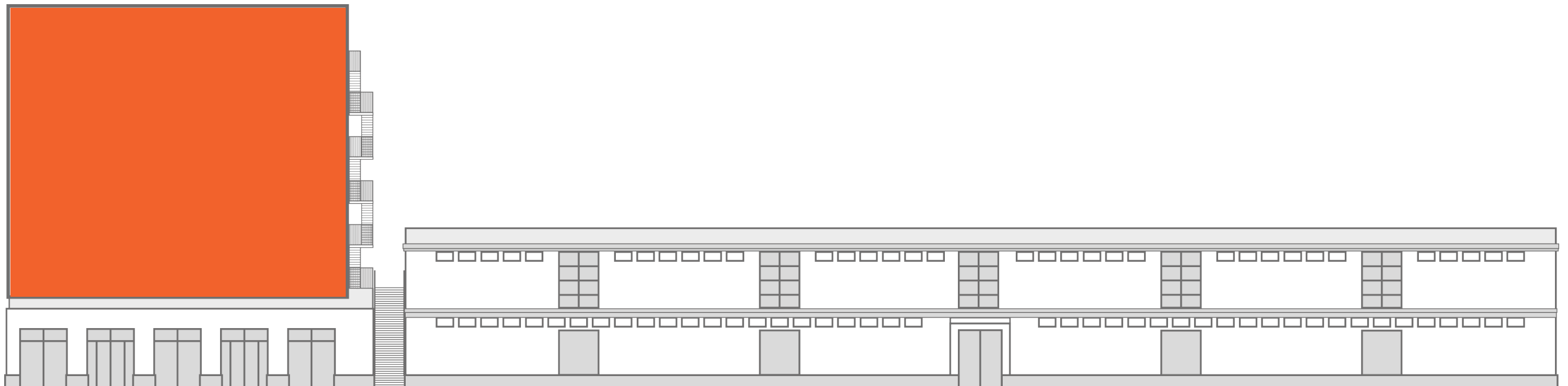
- het bieden van betaalbare woningen door
een compact woningontwerp en het delen van ruimtes en functies



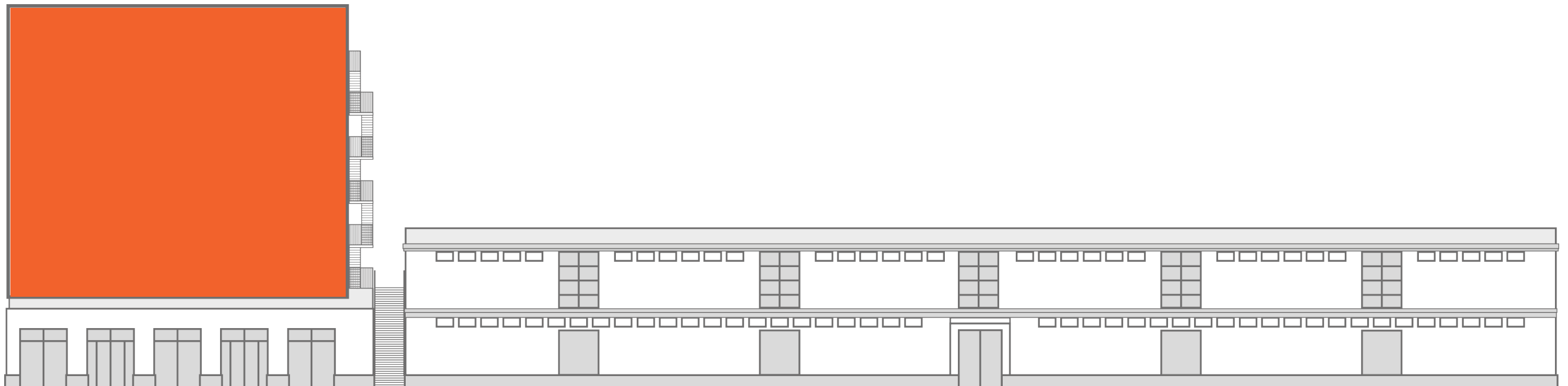
- het bieden van betaalbare woningen door
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- geschikte woningen voor verschillende eenoudergezinnen door
het creëren van een grote variëteit aan woningtypen



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een compact woningontwerp en het delen van ruimtes en functies
- geschikte woningen voor verschillende eenoudergezinnen door
het creëren van een grote varieteit aan woningtypen
- een gebouw- en woningconfiguratie welke
sociale controle en een sterke band met de burens stimuleert

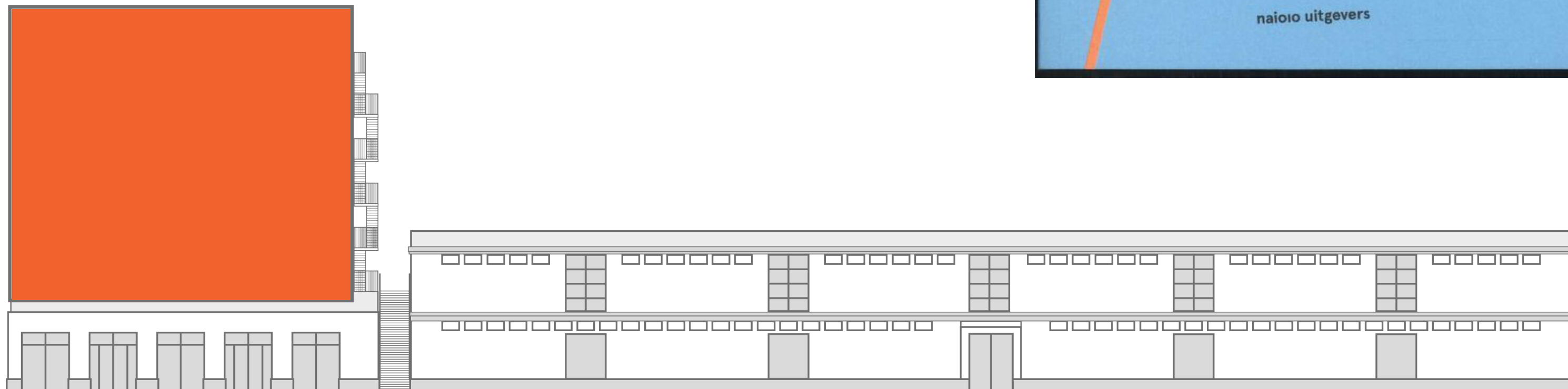


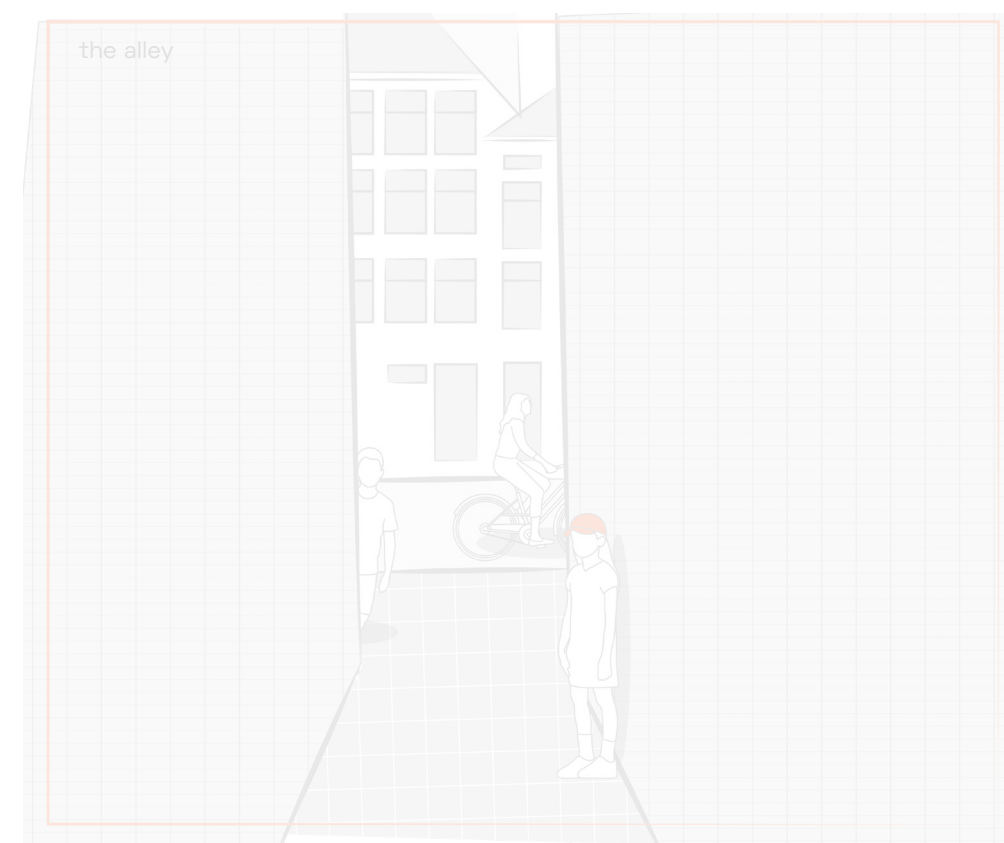
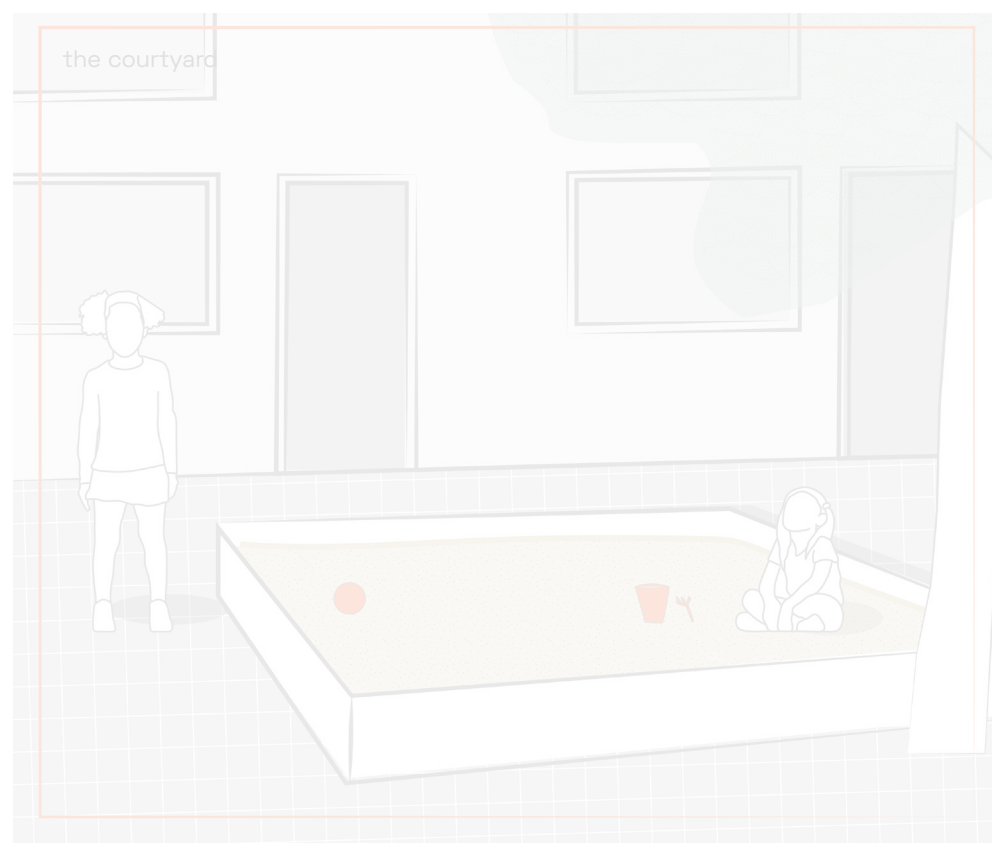
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- een gebouw- en woningconfiguratie welke
sociale controle en een sterke band met de buren stimuleert
- het bieden mogelijkheden om zich terug te kunnen trekken
door een duidelijke verdeling van collectieve-, gezins- en individuele domeinen

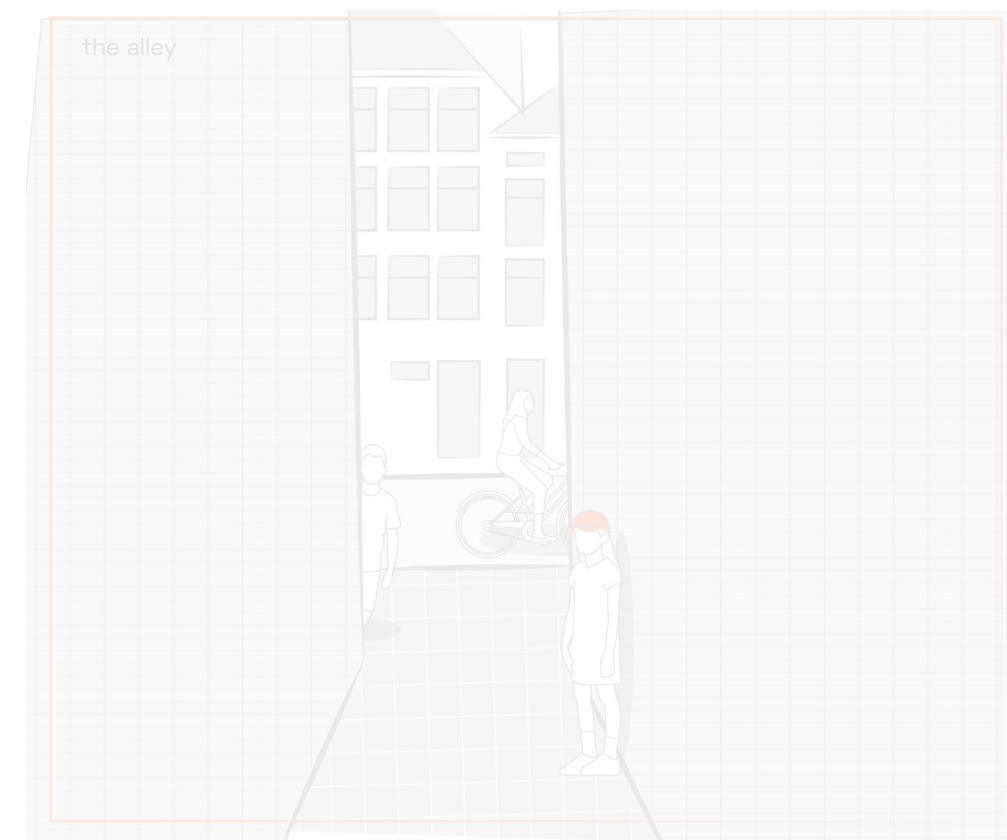
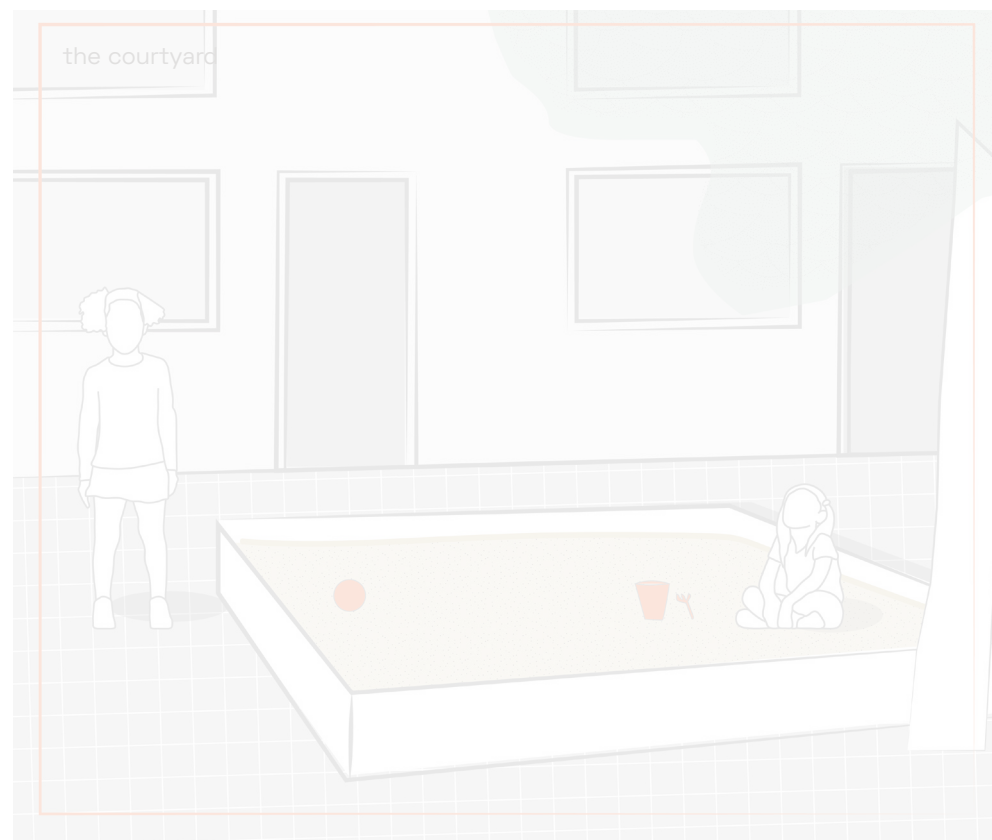
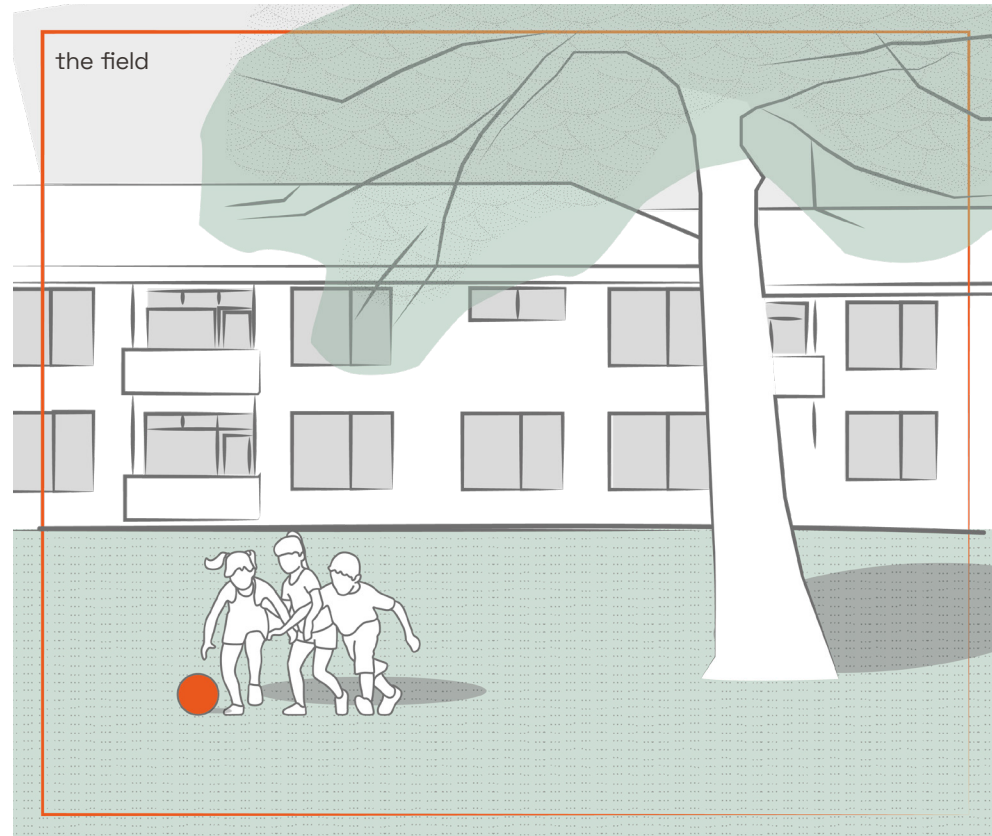


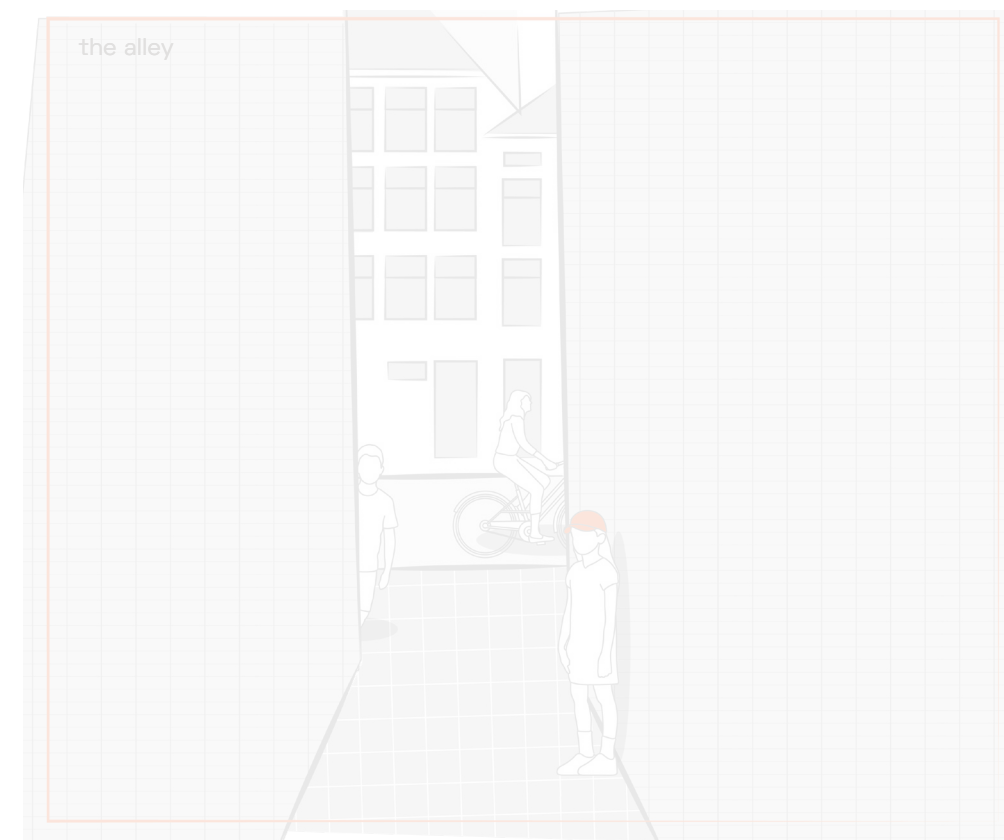
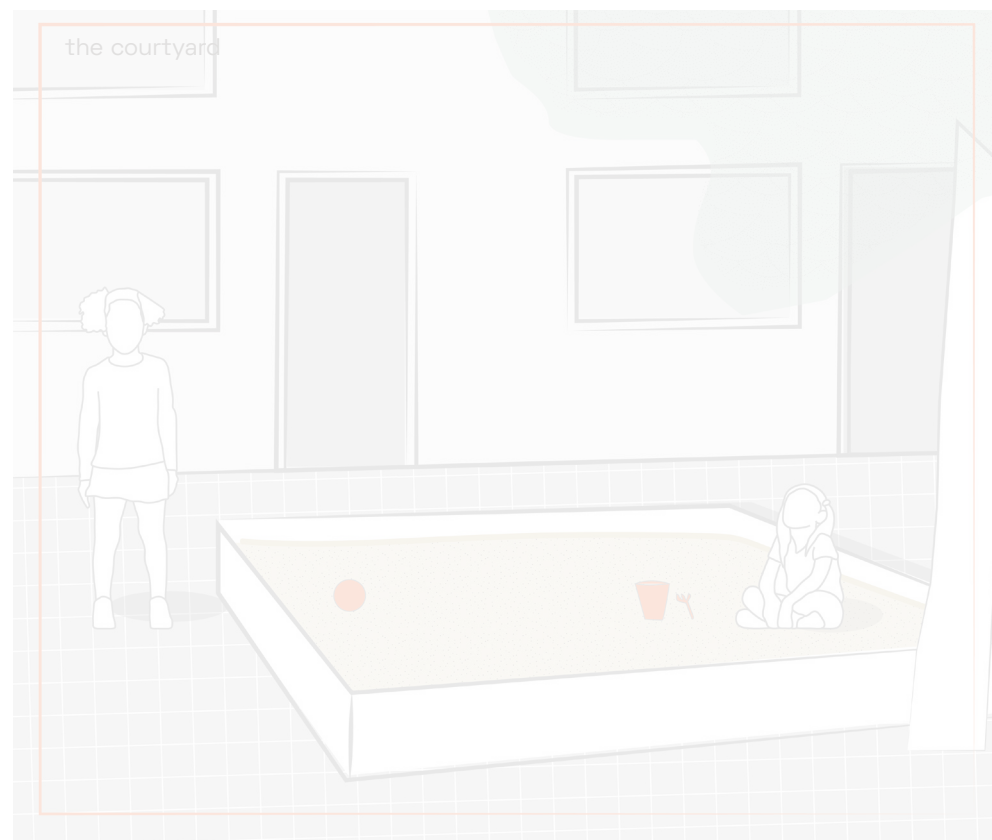
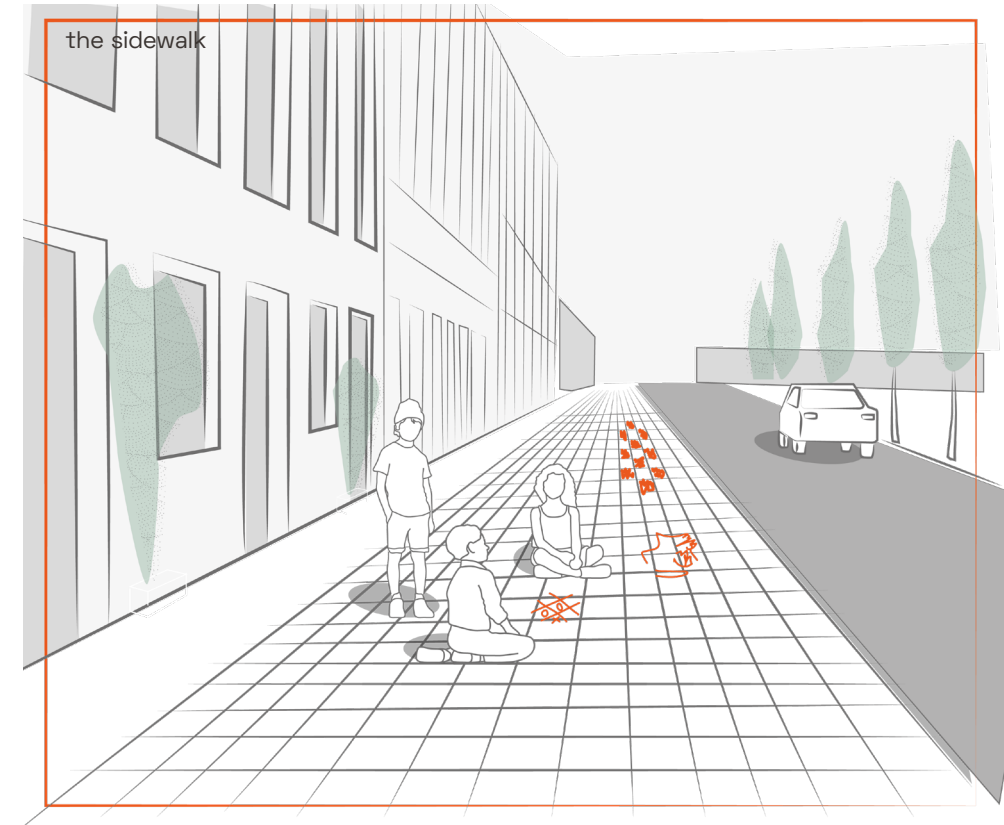
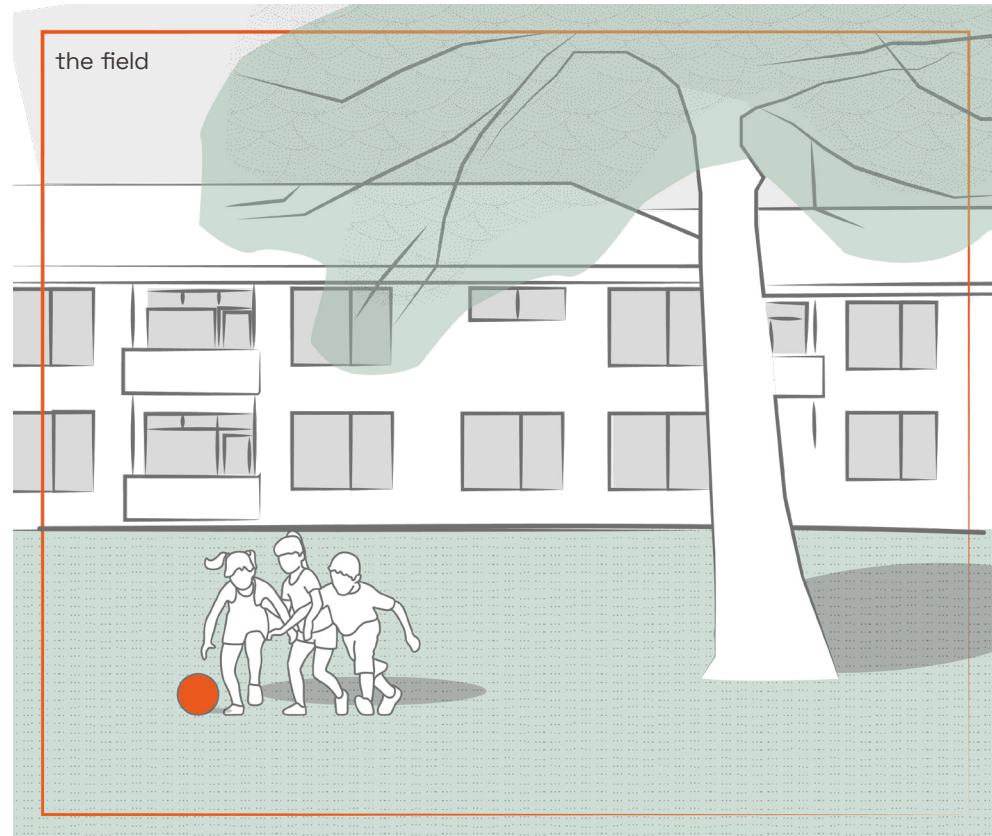
- | het bieden van betaalbare woningen door
een compact woningontwerp en het delen van ruimtes en functies
- | geschikte woningen voor verschillende eenoudergezinnen door
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sociale controle en een sterke band met de burens stimuleert
- | het bieden van mogelijkheden om terug te kunnen trekken
door een duidelijke verdeling van het collectieve-, gezins- en individuele domein
- | een gebouwopzet waarin kinderen hun eigen omgeving leren kennen in fases;
van de voordeur, naar de stoep, naar het veld, naar het park, naar de stad

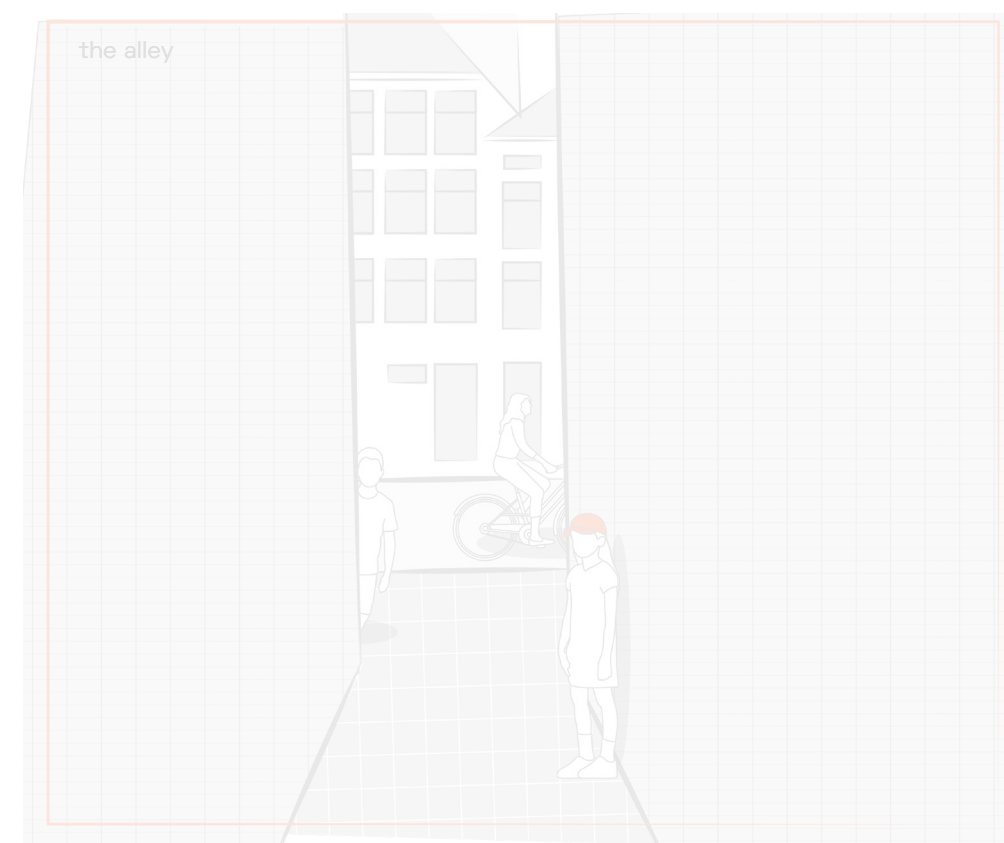
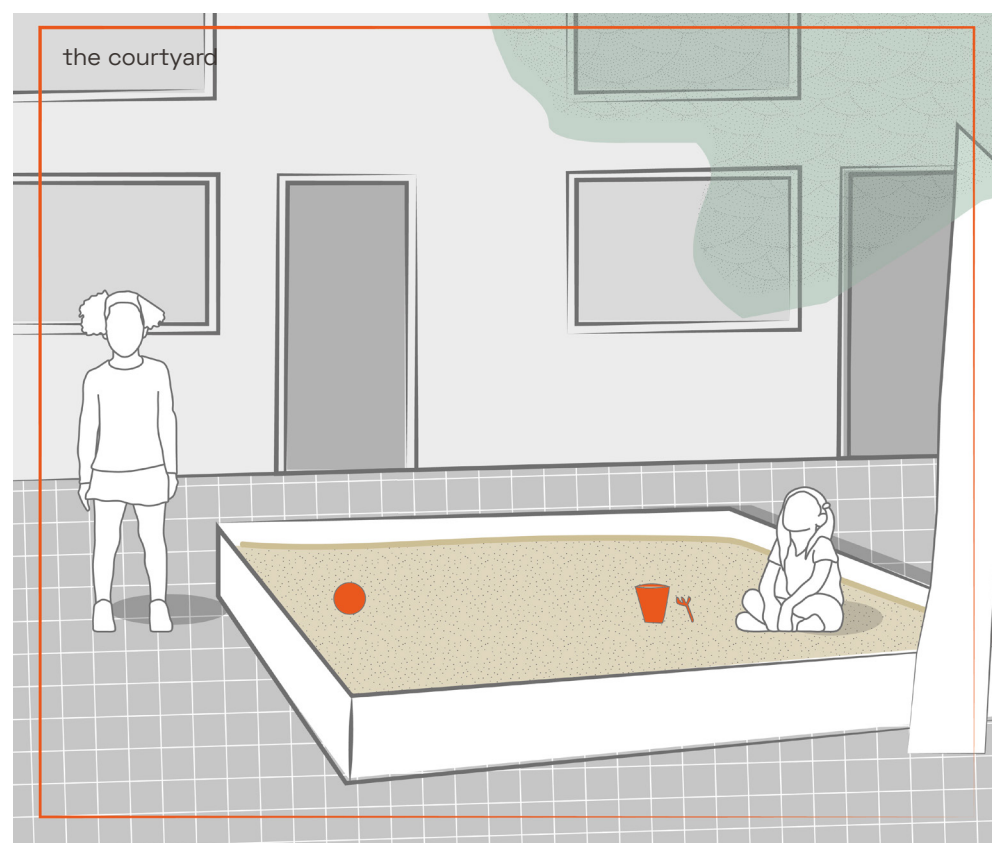
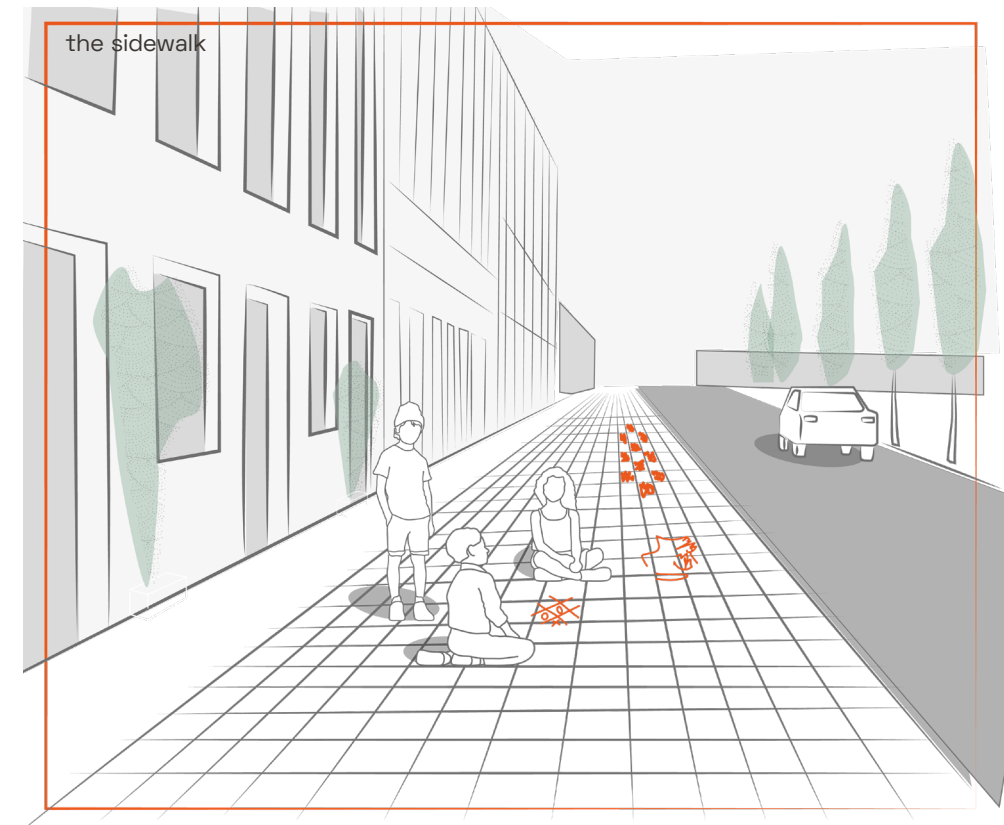
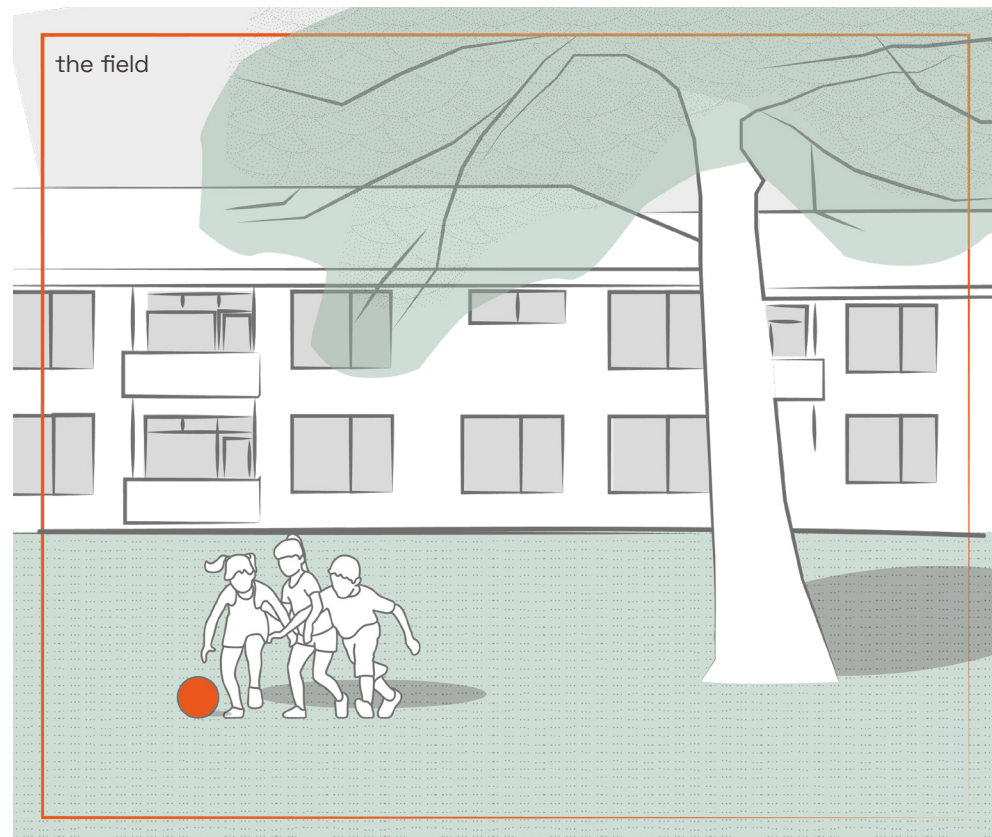


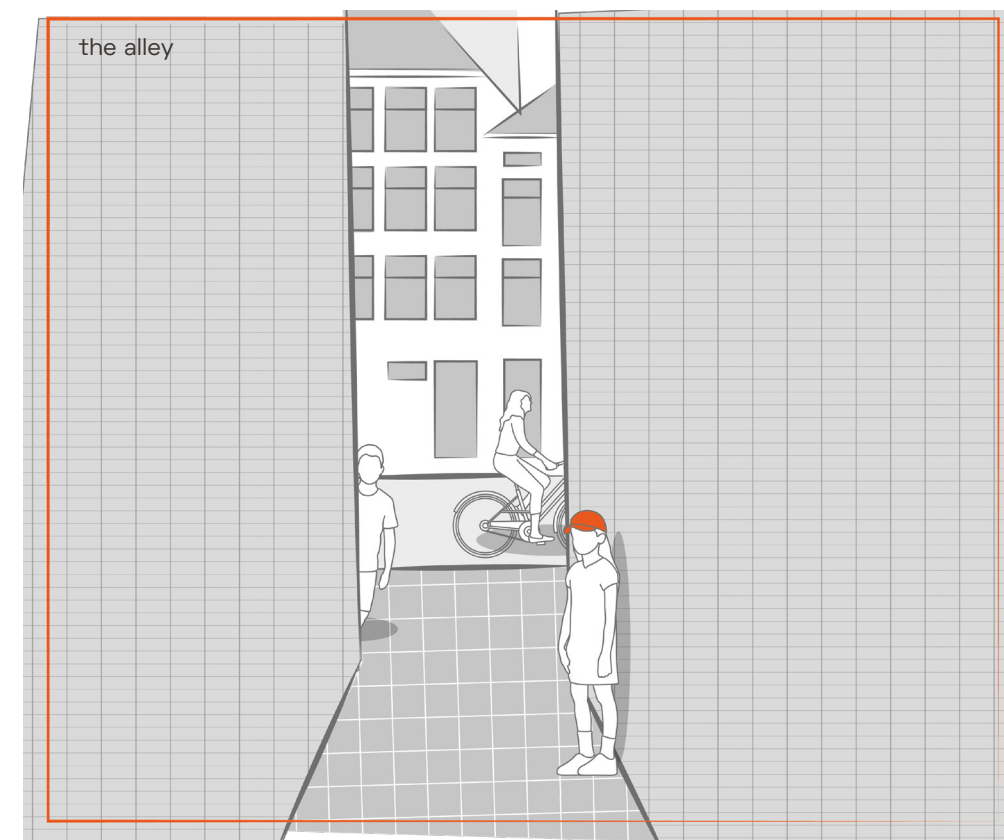
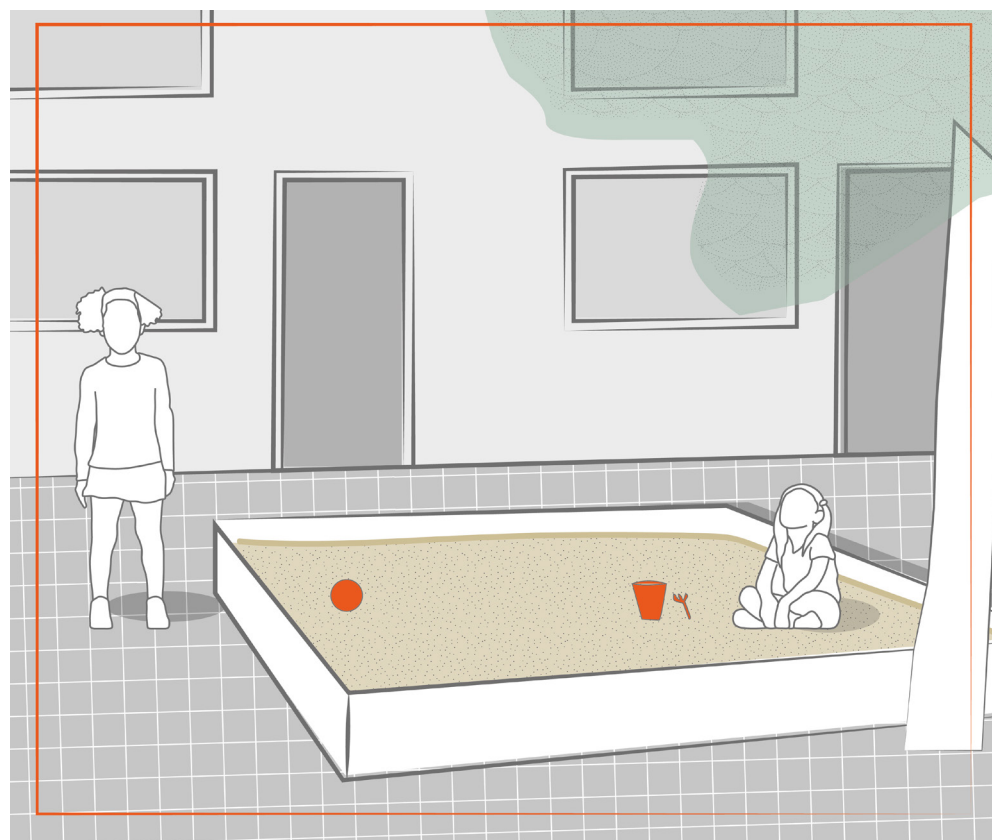
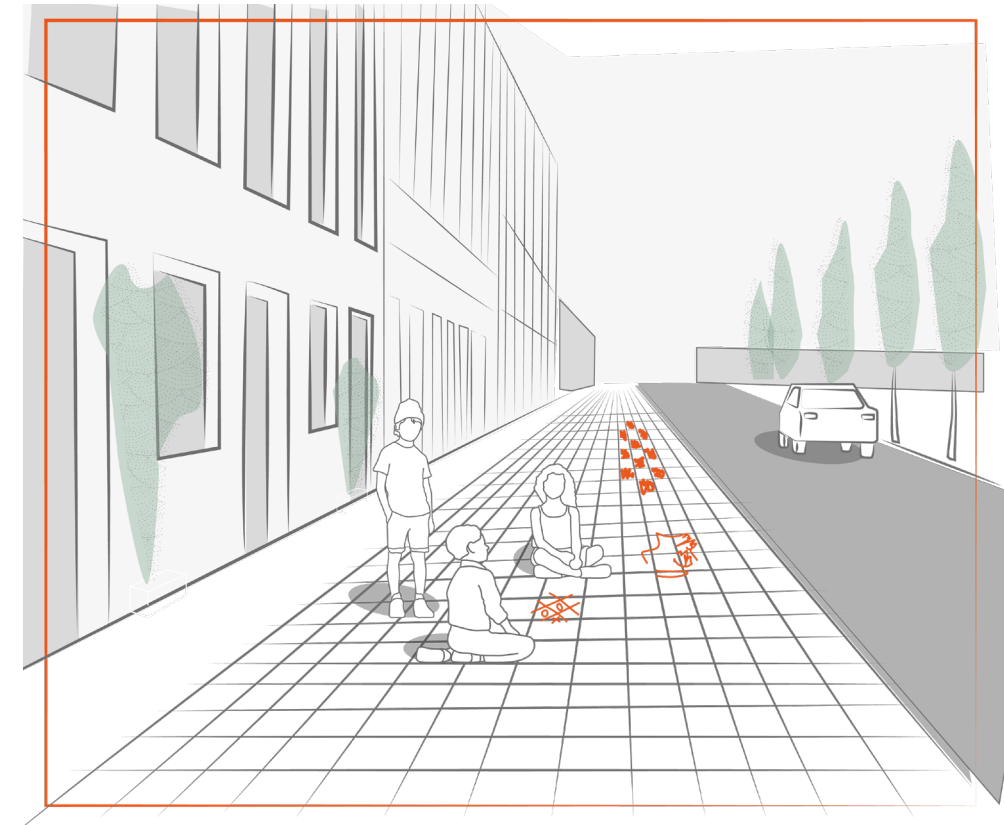






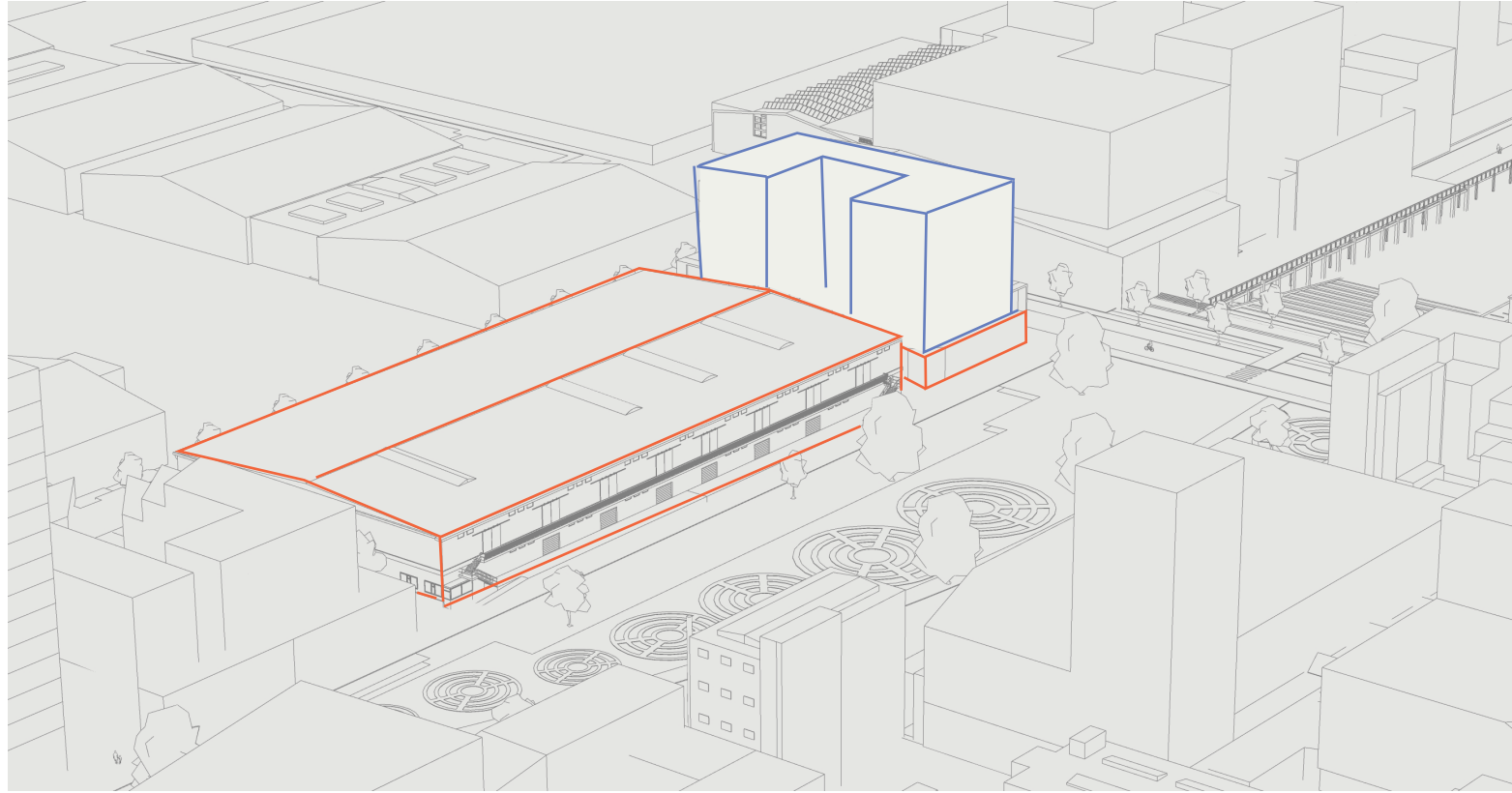


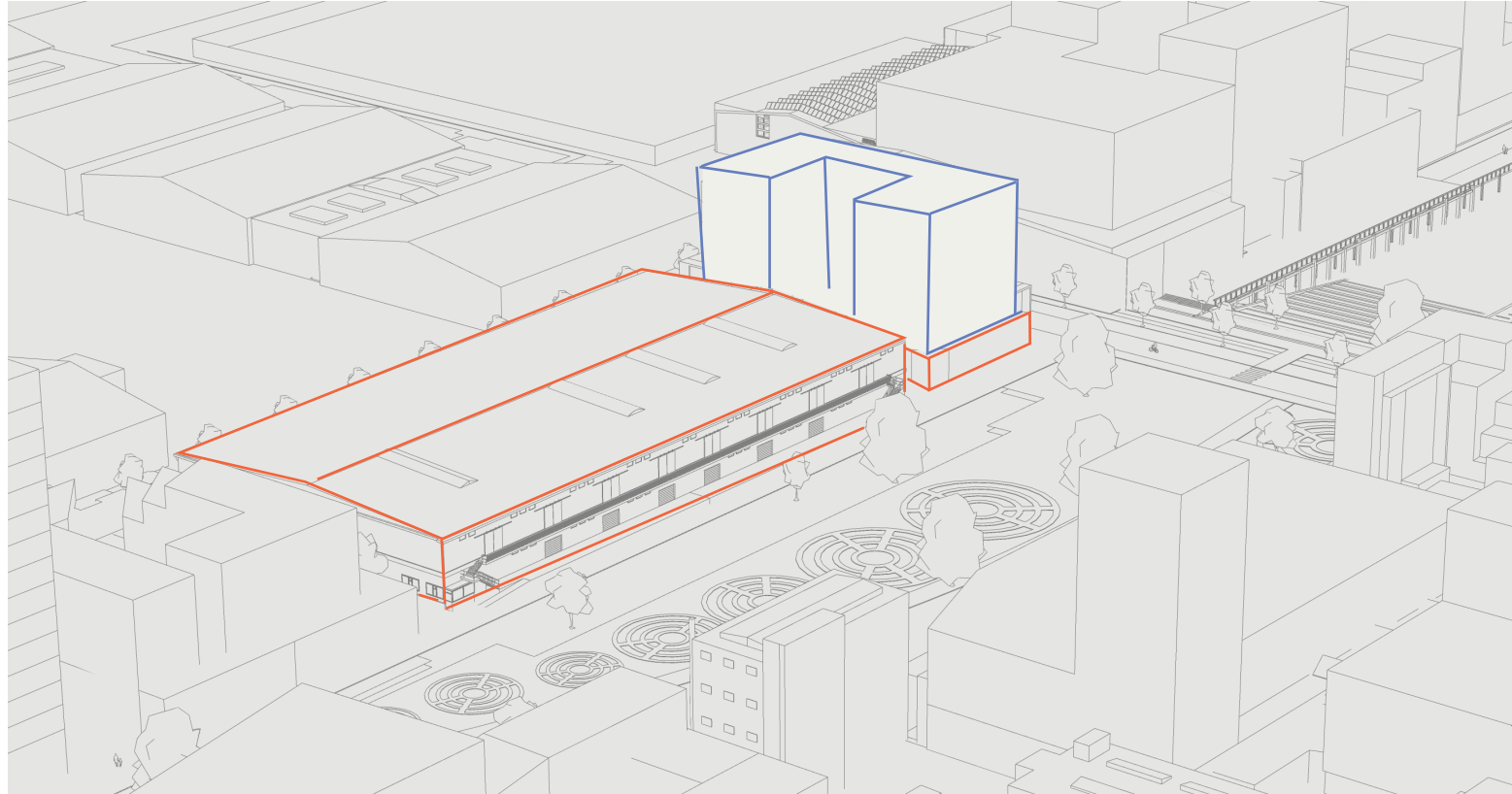




De stad van de toekomst; de inclusieve stad

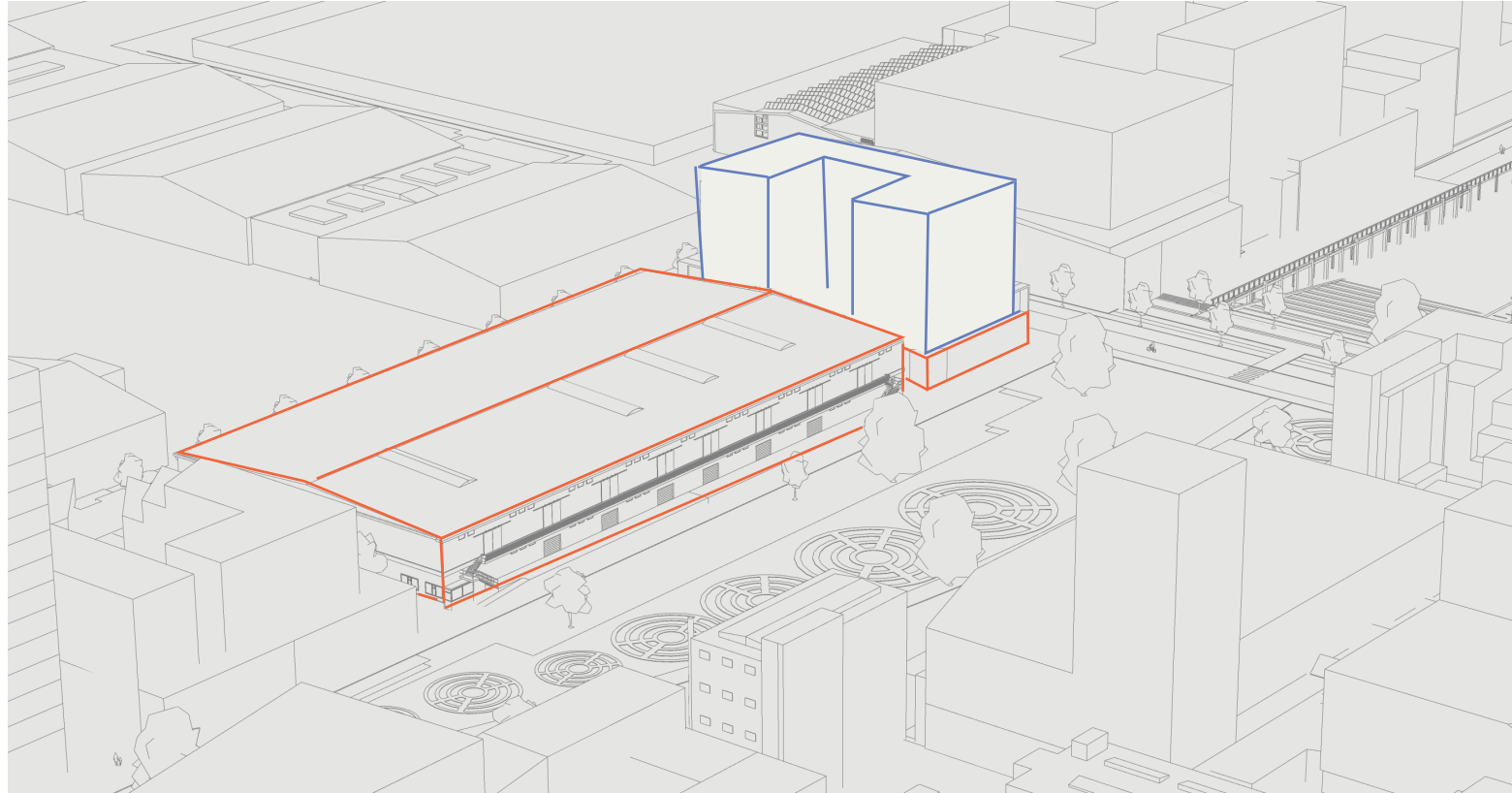






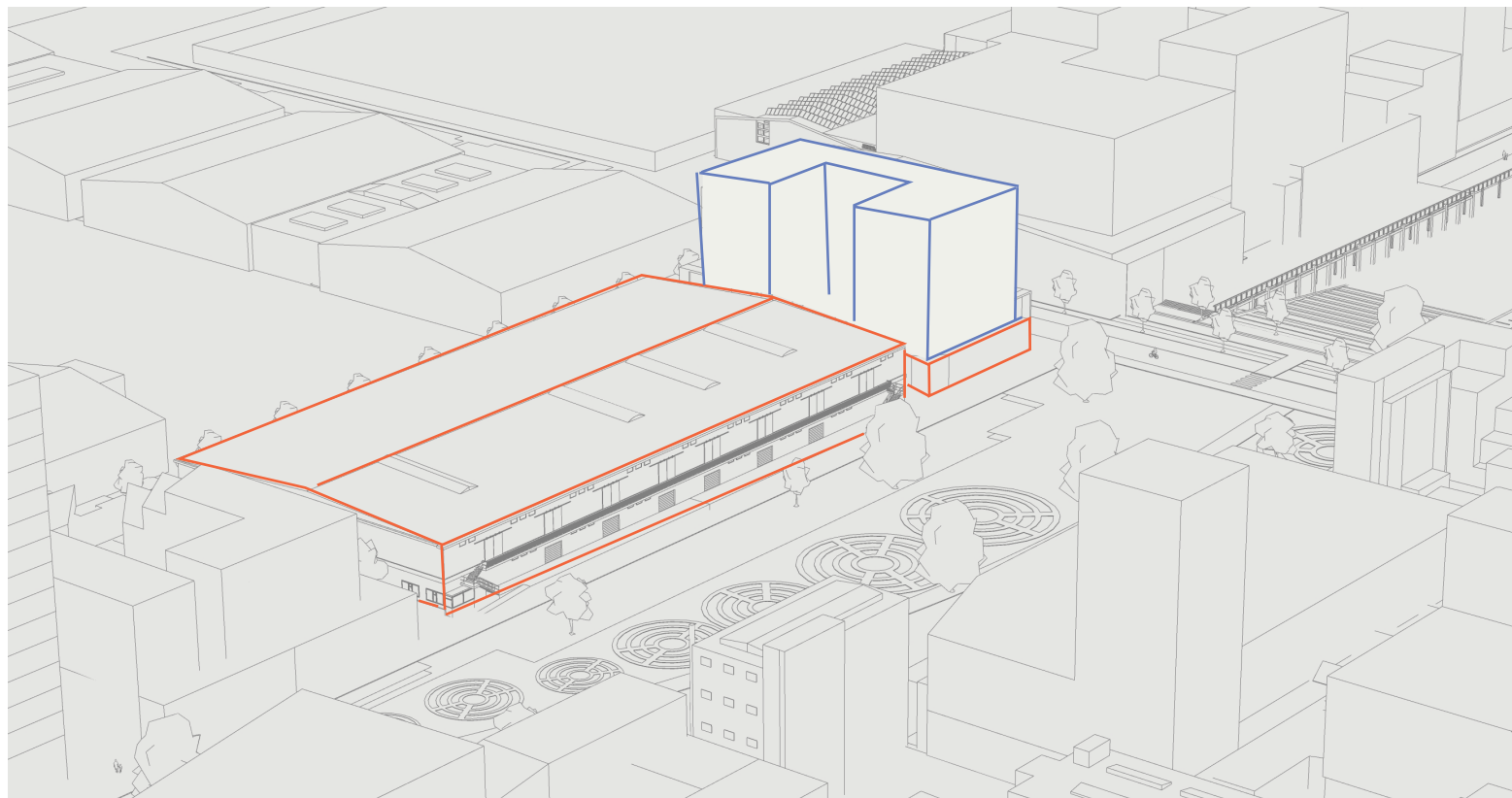
Richard's Five Open forms

porous borders & punctuated places



the existing building
the Keilepand



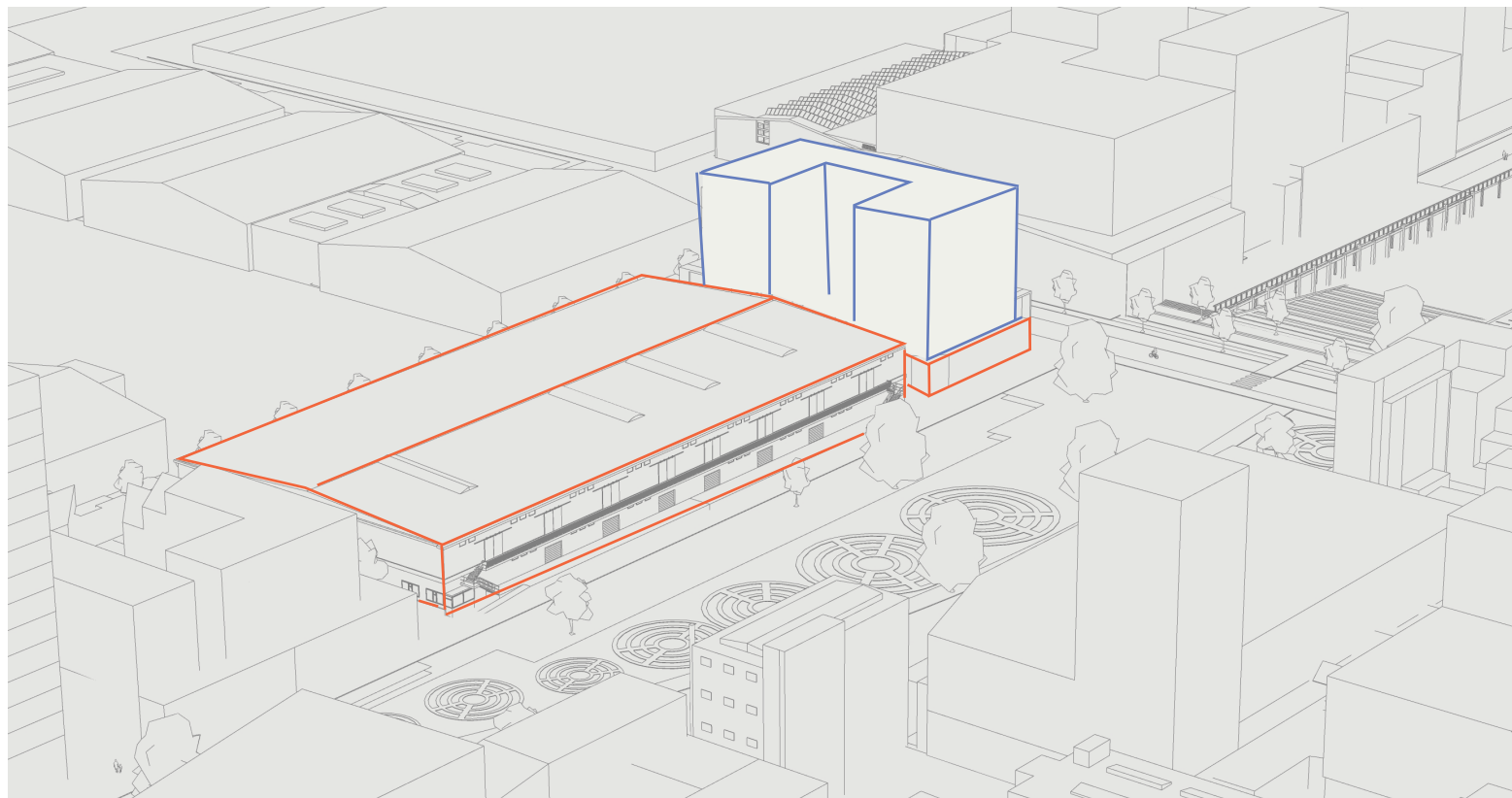


the existing building
the Keilepand



an extension that connects
functionally and aesthetically





the existing building
the Keilepand

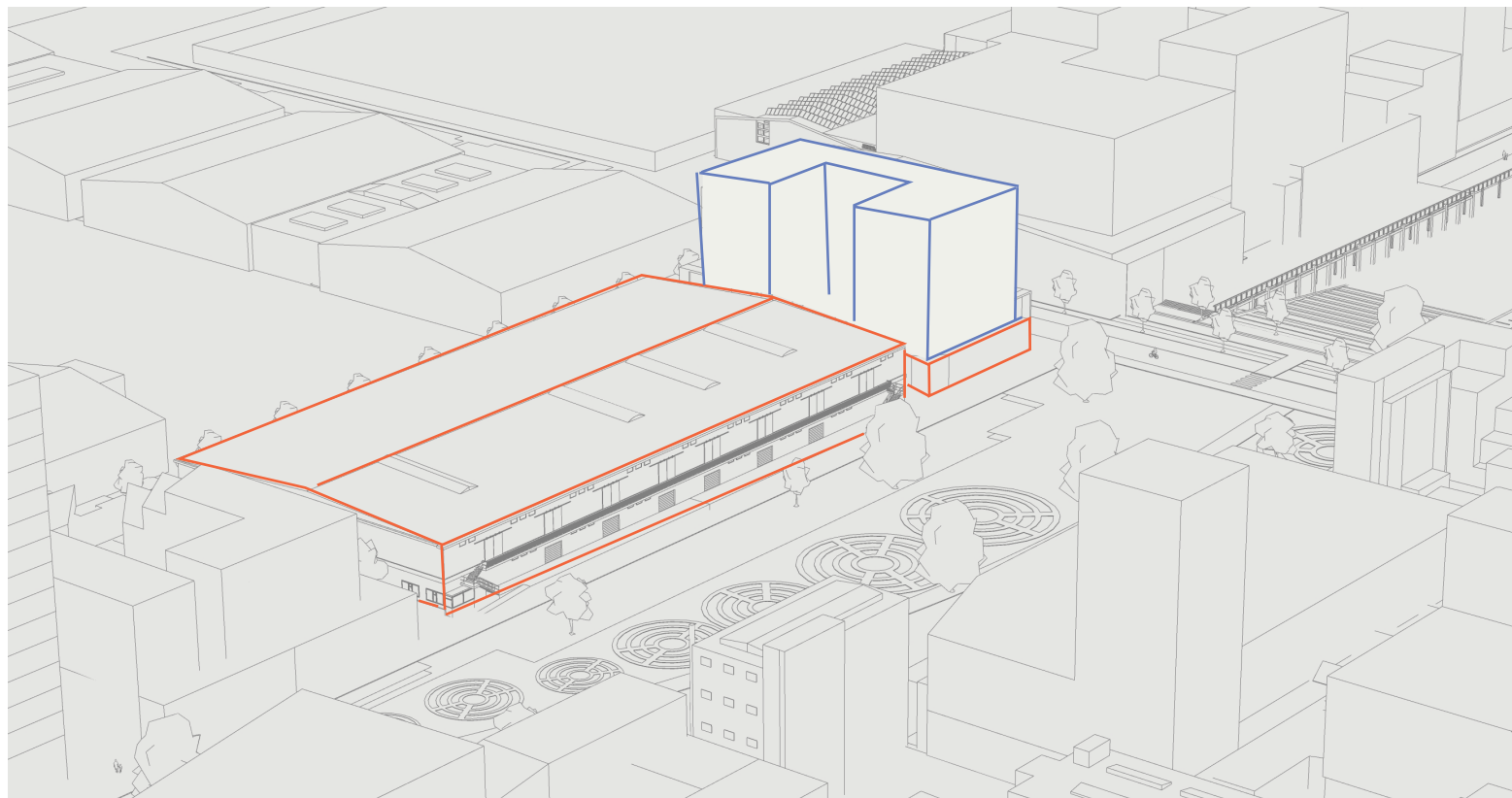


an extension that connects
functionally and aesthetically



a contrasting addition
with dwellings on top





the existing building
the Keilepand



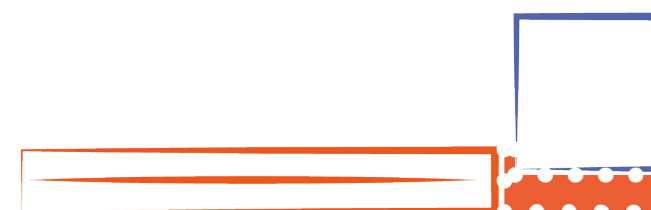
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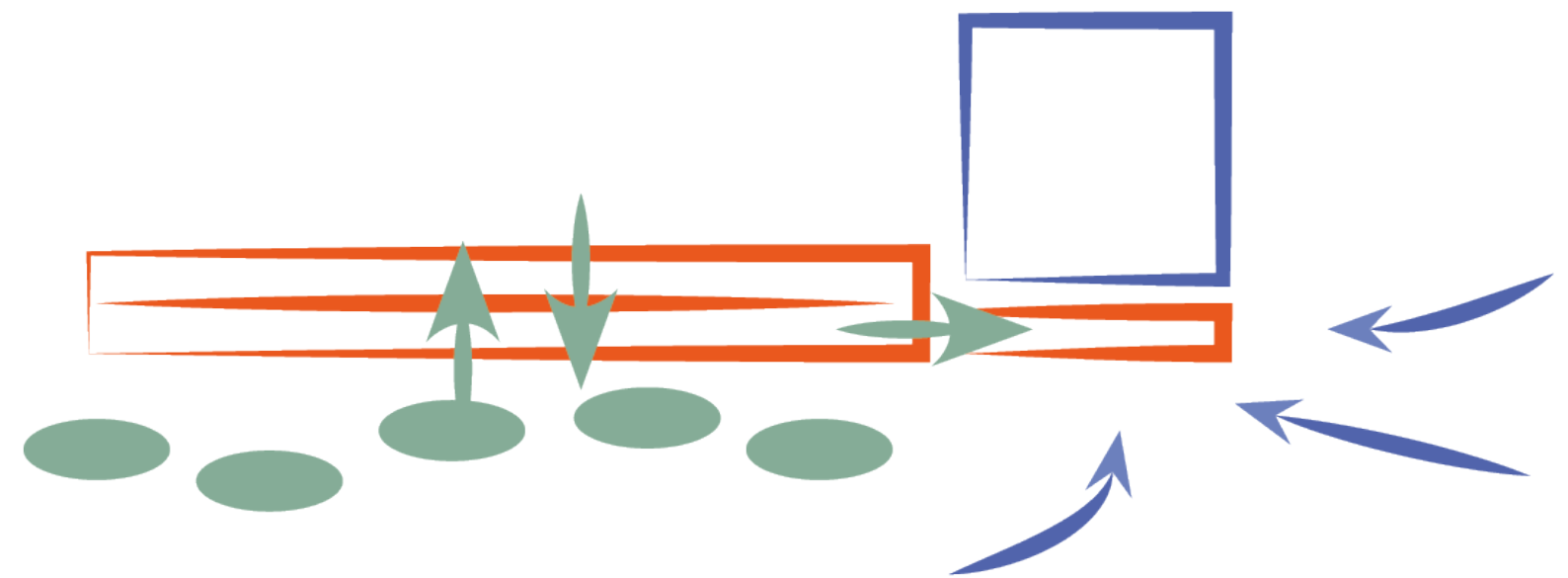


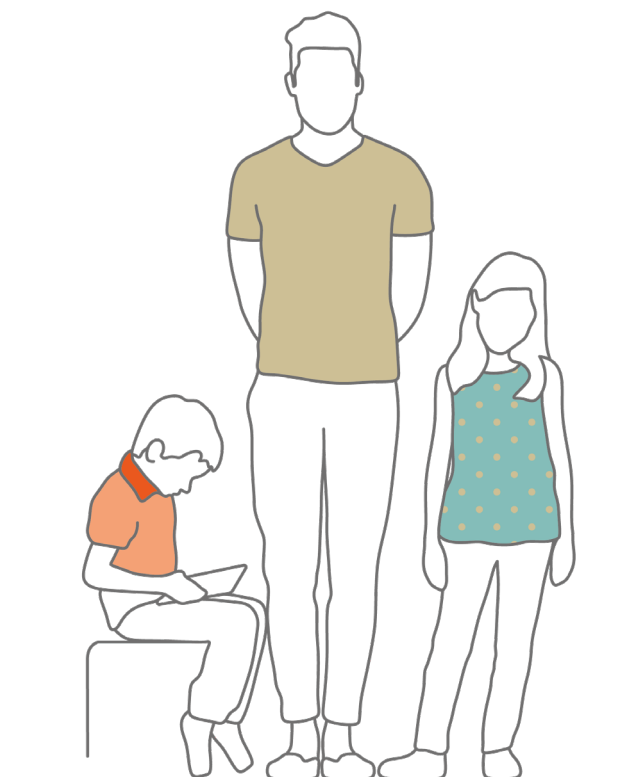
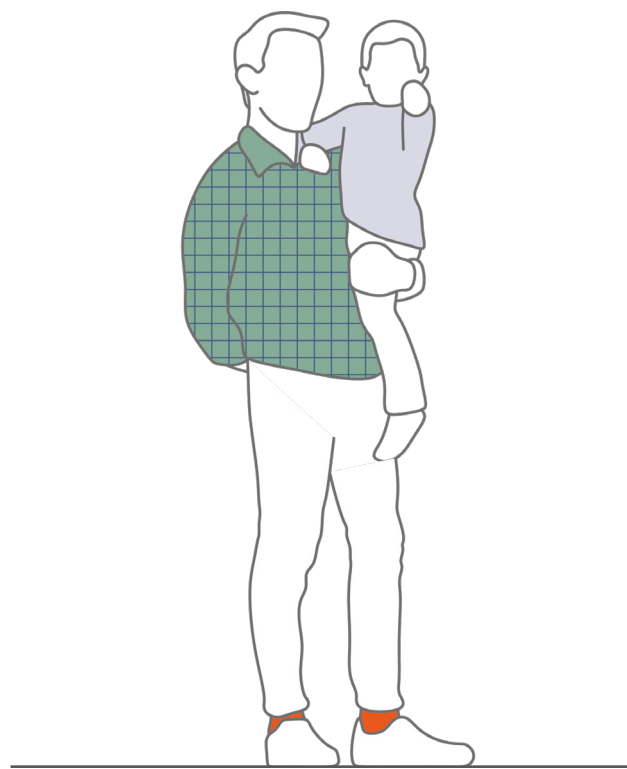
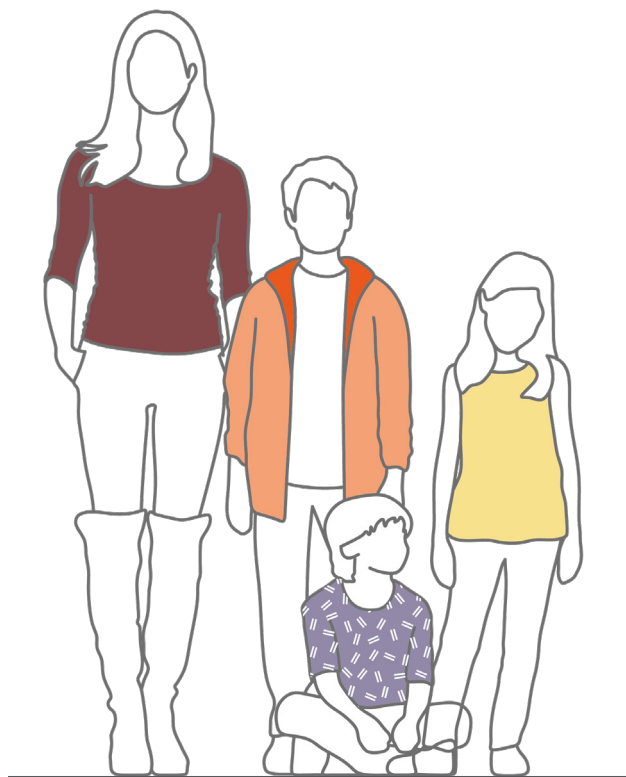
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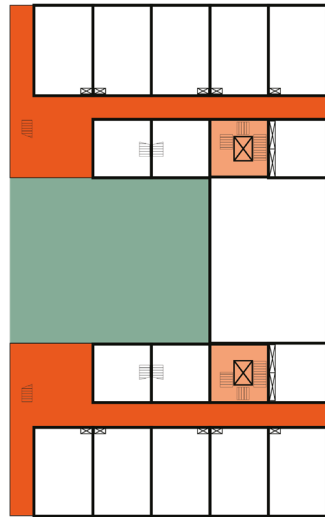
a porous and punctuated
zone



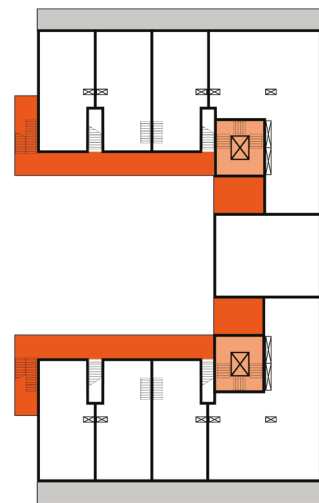




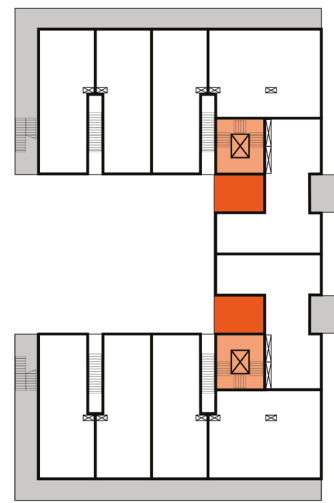
1e verdieping



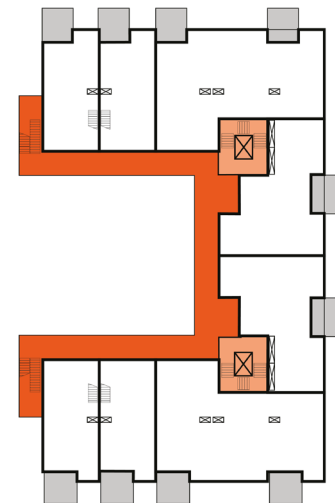
2e verdieping



3e verdieping



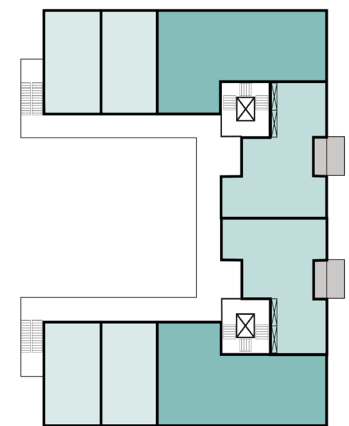
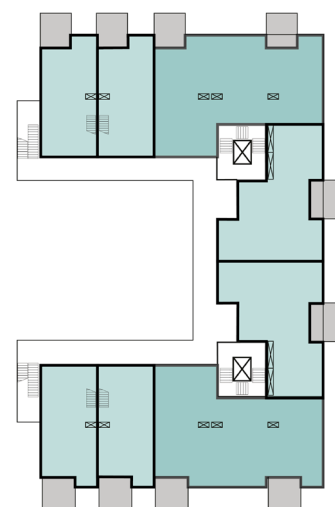
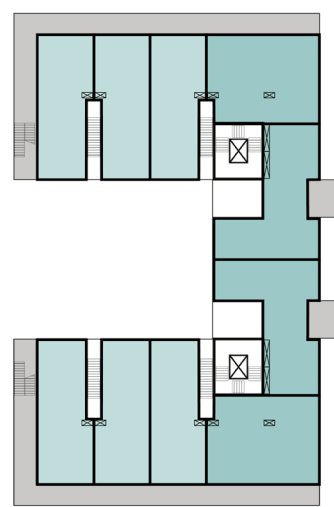
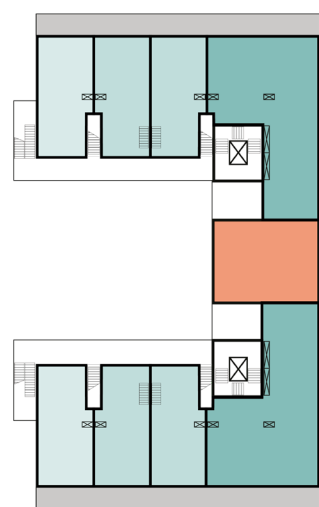
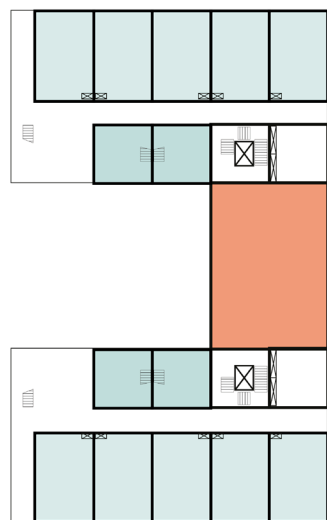
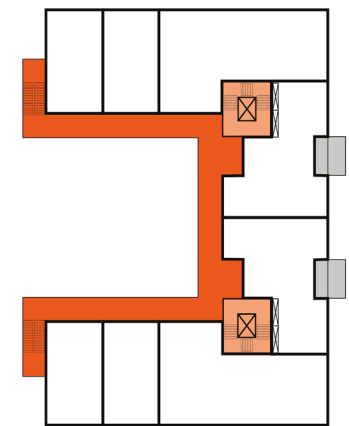
4e verdieping

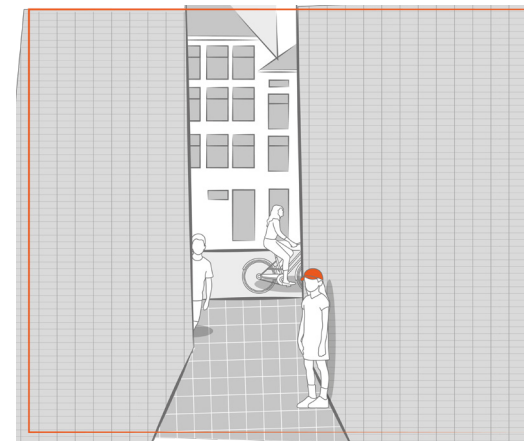
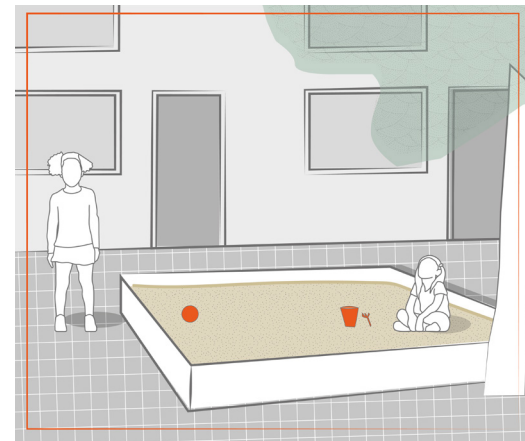
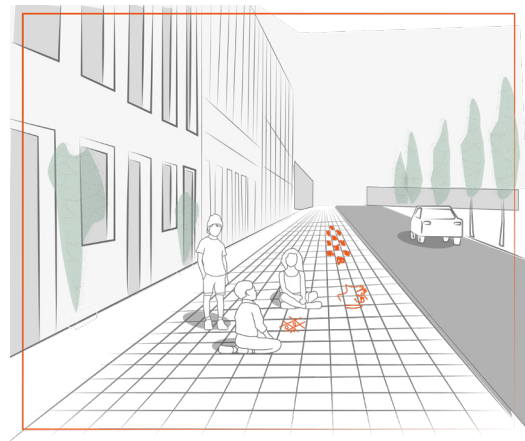


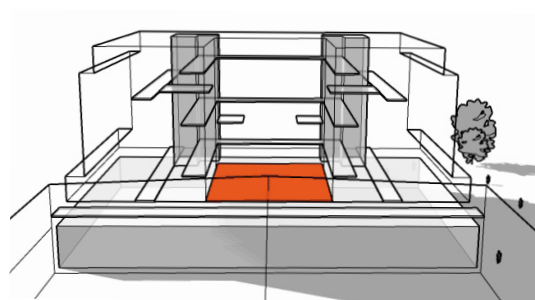
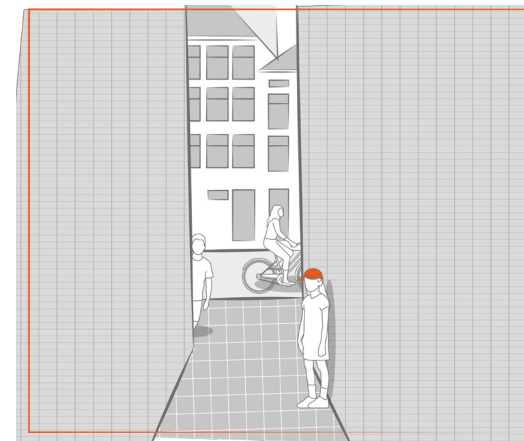
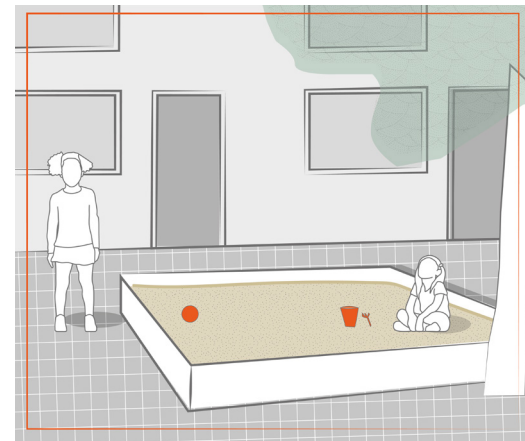
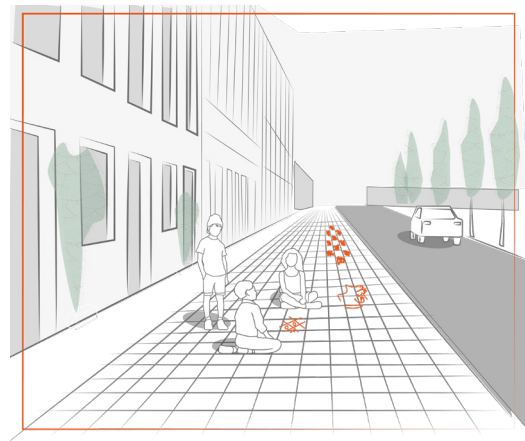
5e verdieping



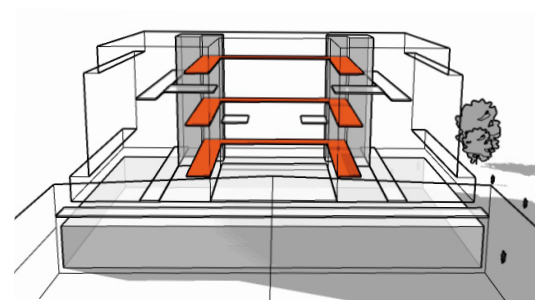
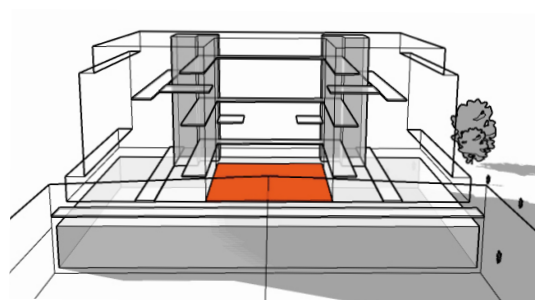
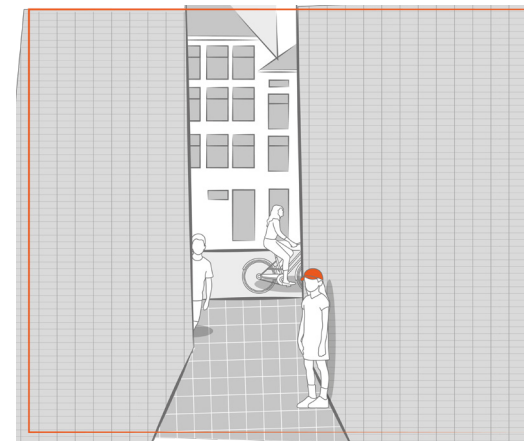
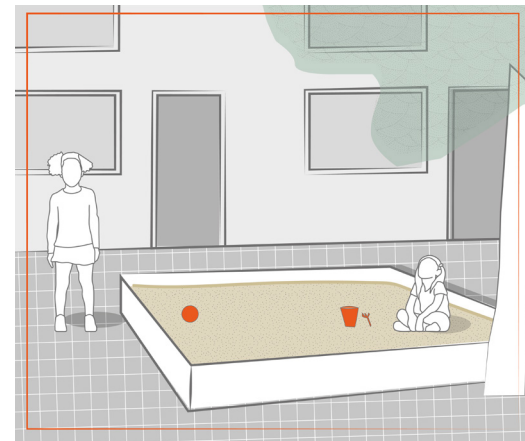
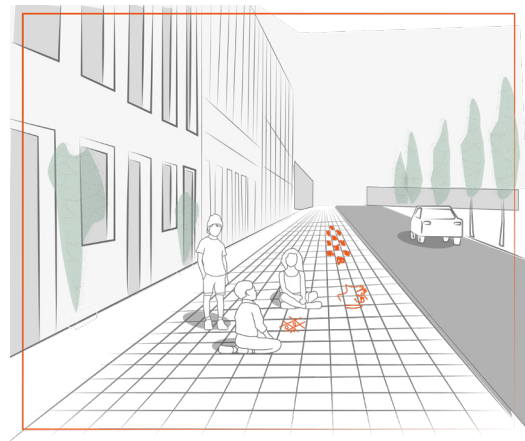
6e verdieping





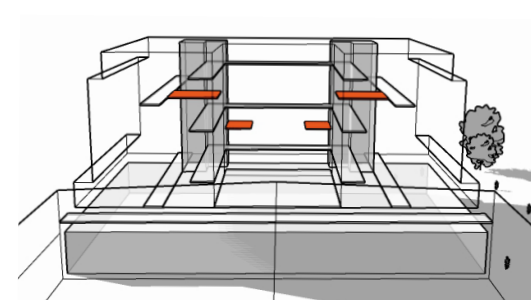
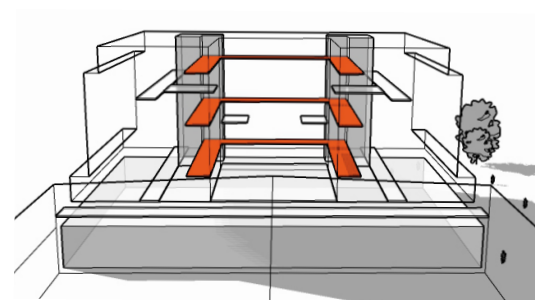
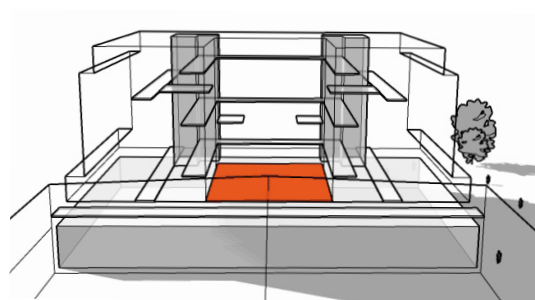
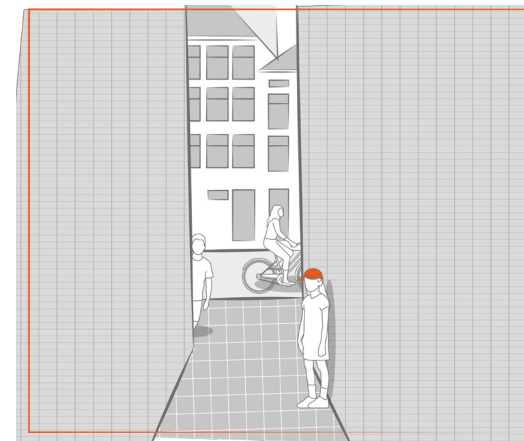
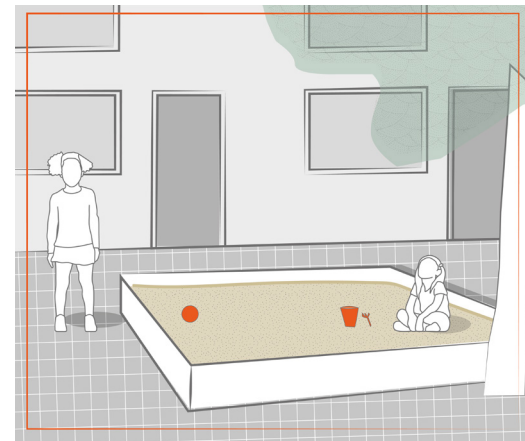
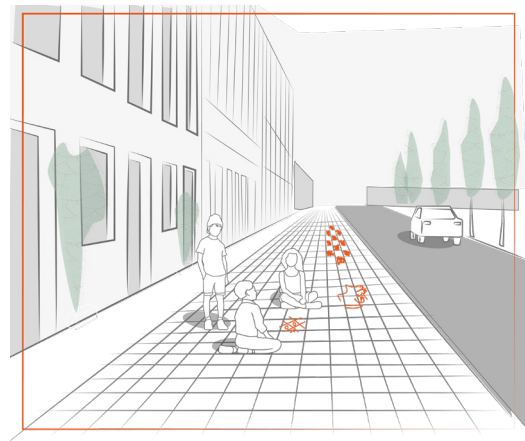


first floor



first floor

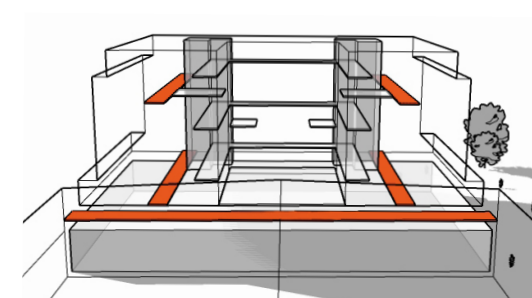
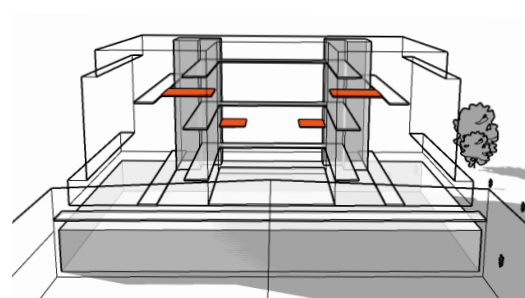
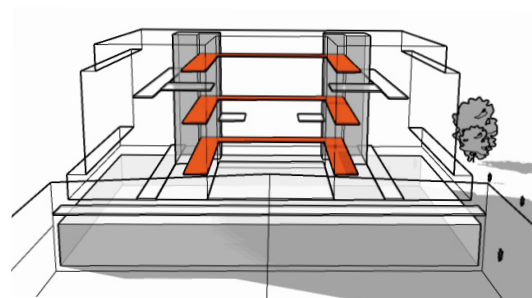
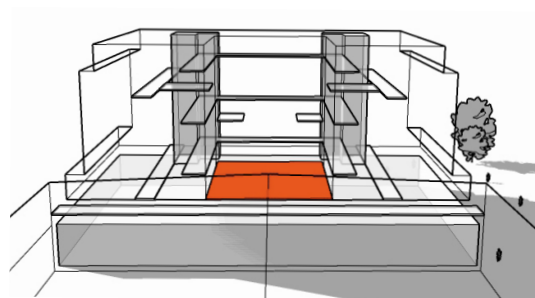
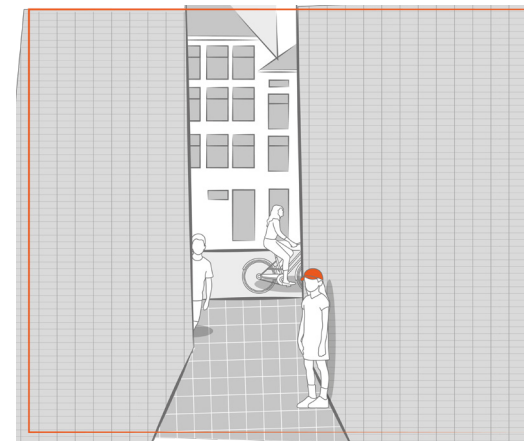
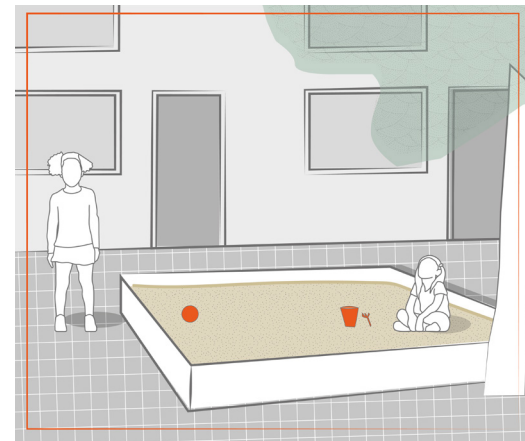
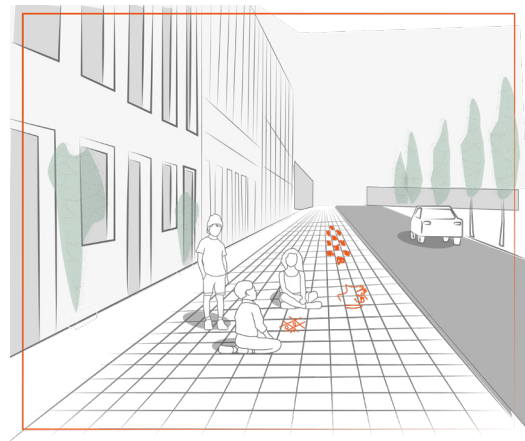
second, fourth, sixth floor



first floor

second, fourth, sixth floor

third, fifth floor



first floor

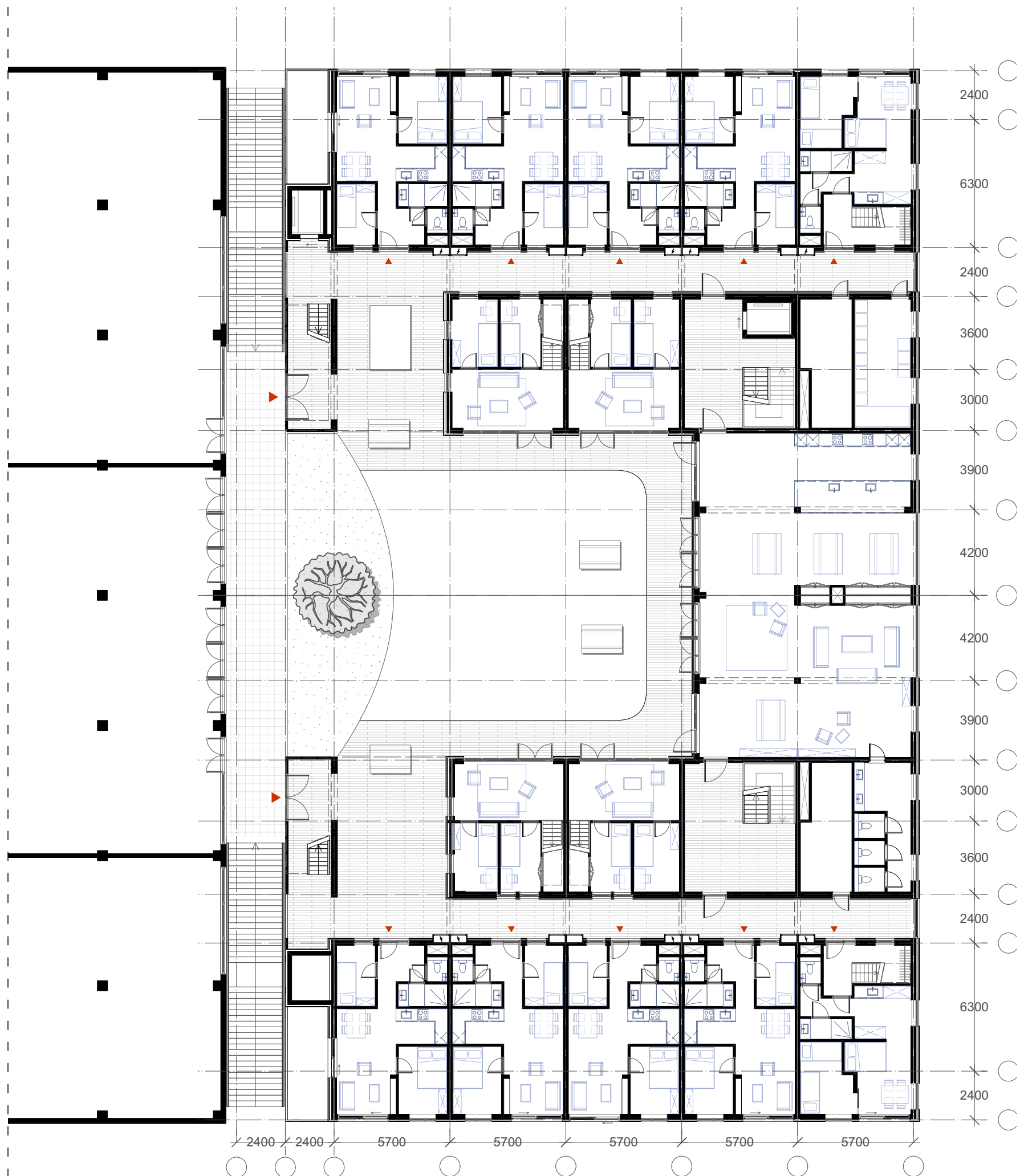
second, fourth, sixth floor

third, fifth floor

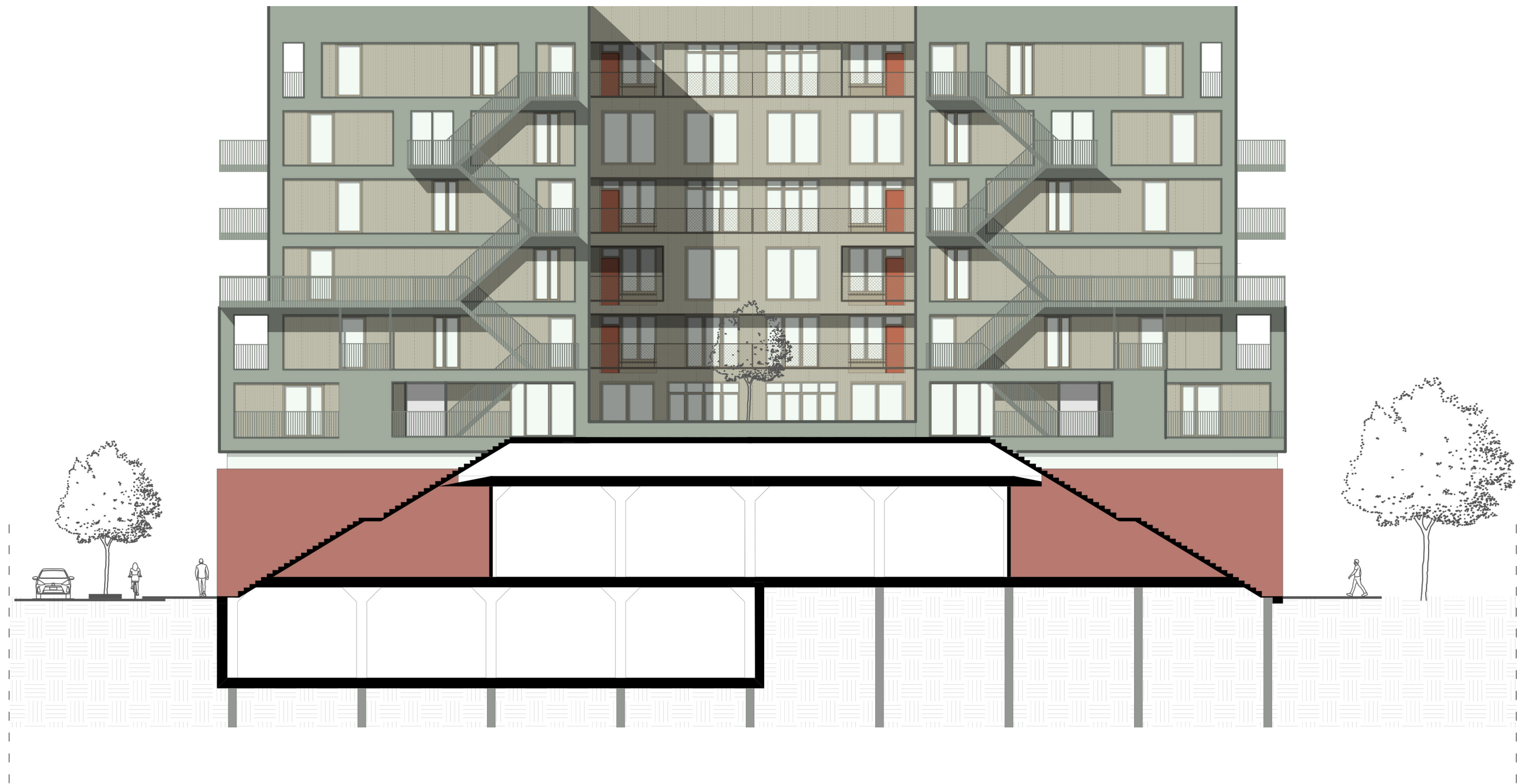
first, fifth floor

drawing
scale

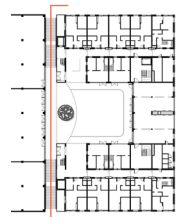
first floor
1:200

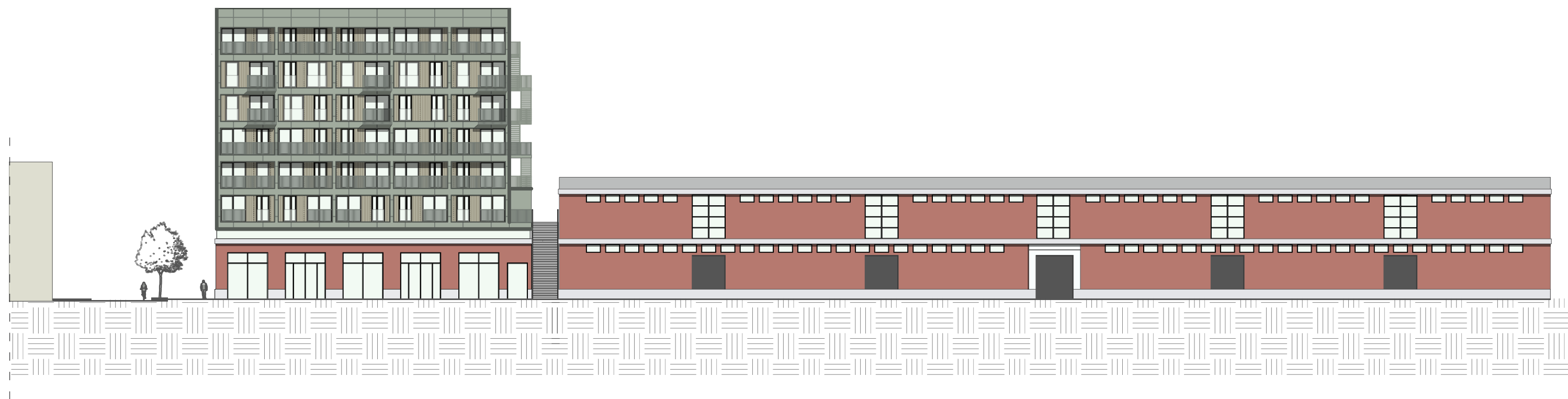






drawing north east facade
scale 1:200







drawing north east facade
scale 1:200



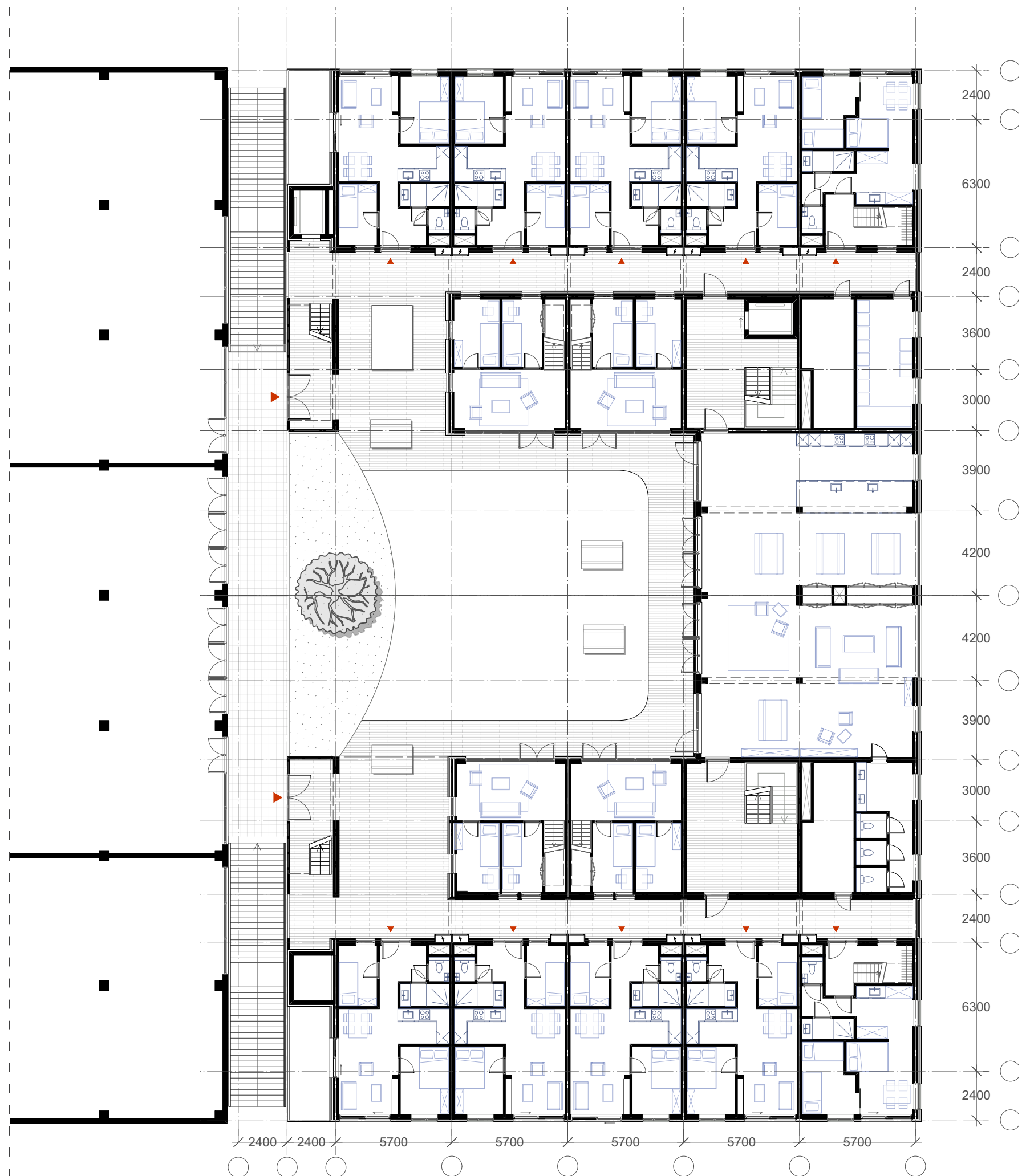


drawing
scale

south west facade
1:200



drawing scale first floor
1:200



drawing
scale

first floor
1:200



drawing
scale

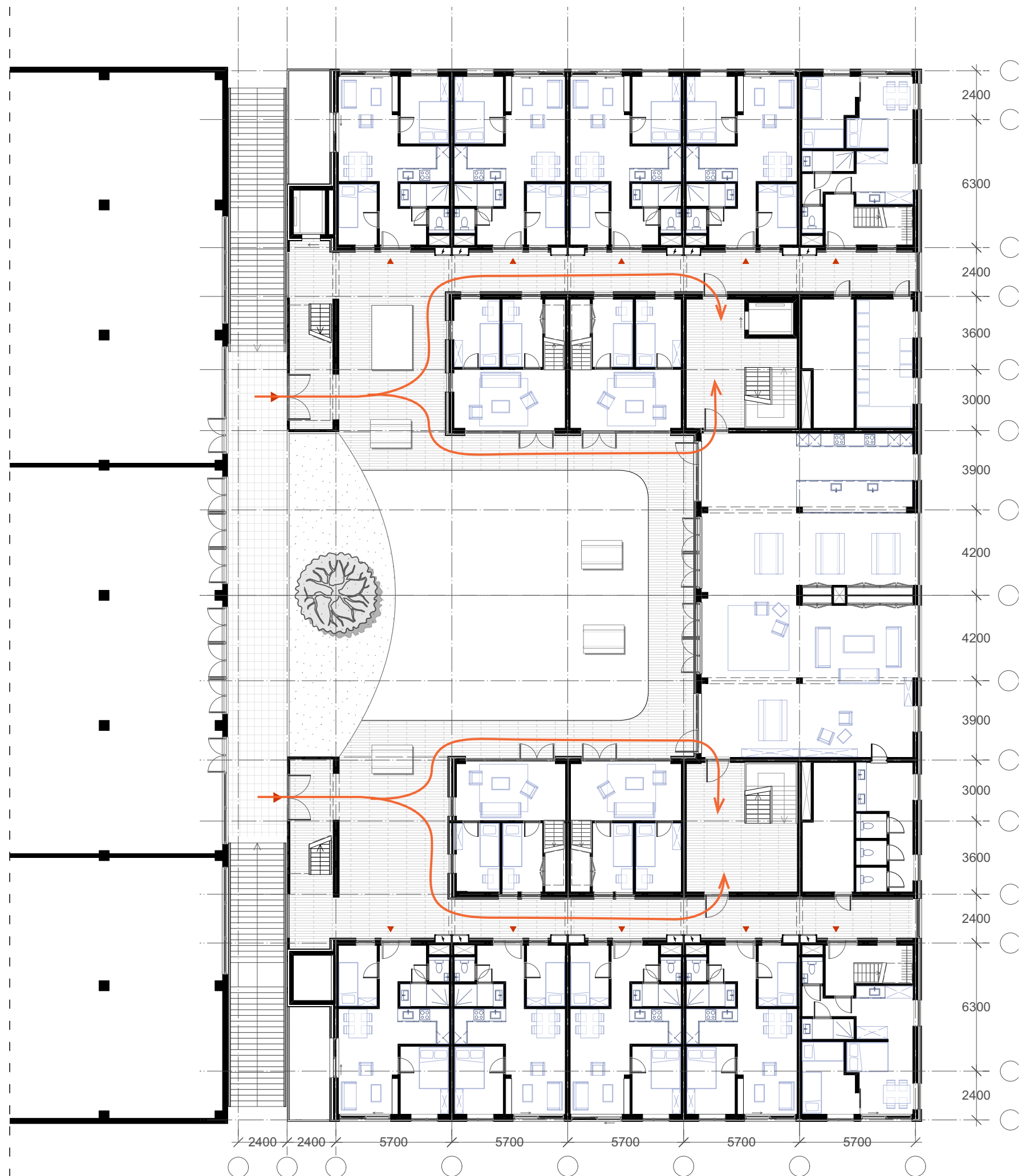
first floor
1:200



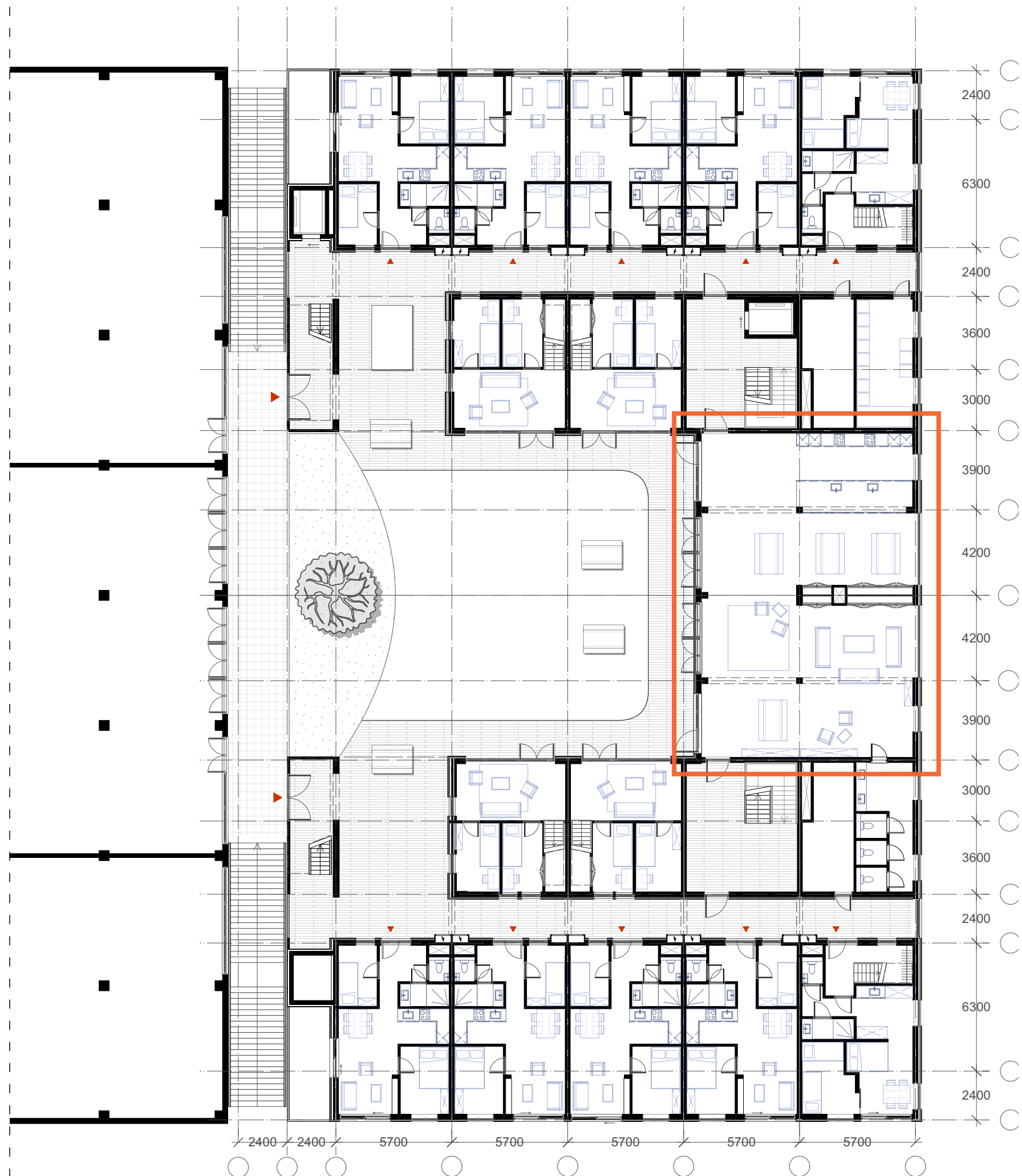
drawing scale first floor
1:200



drawing scale
first floor
1:200



drawing scale first floor
1:200



drawing
scale

first floor
1:200



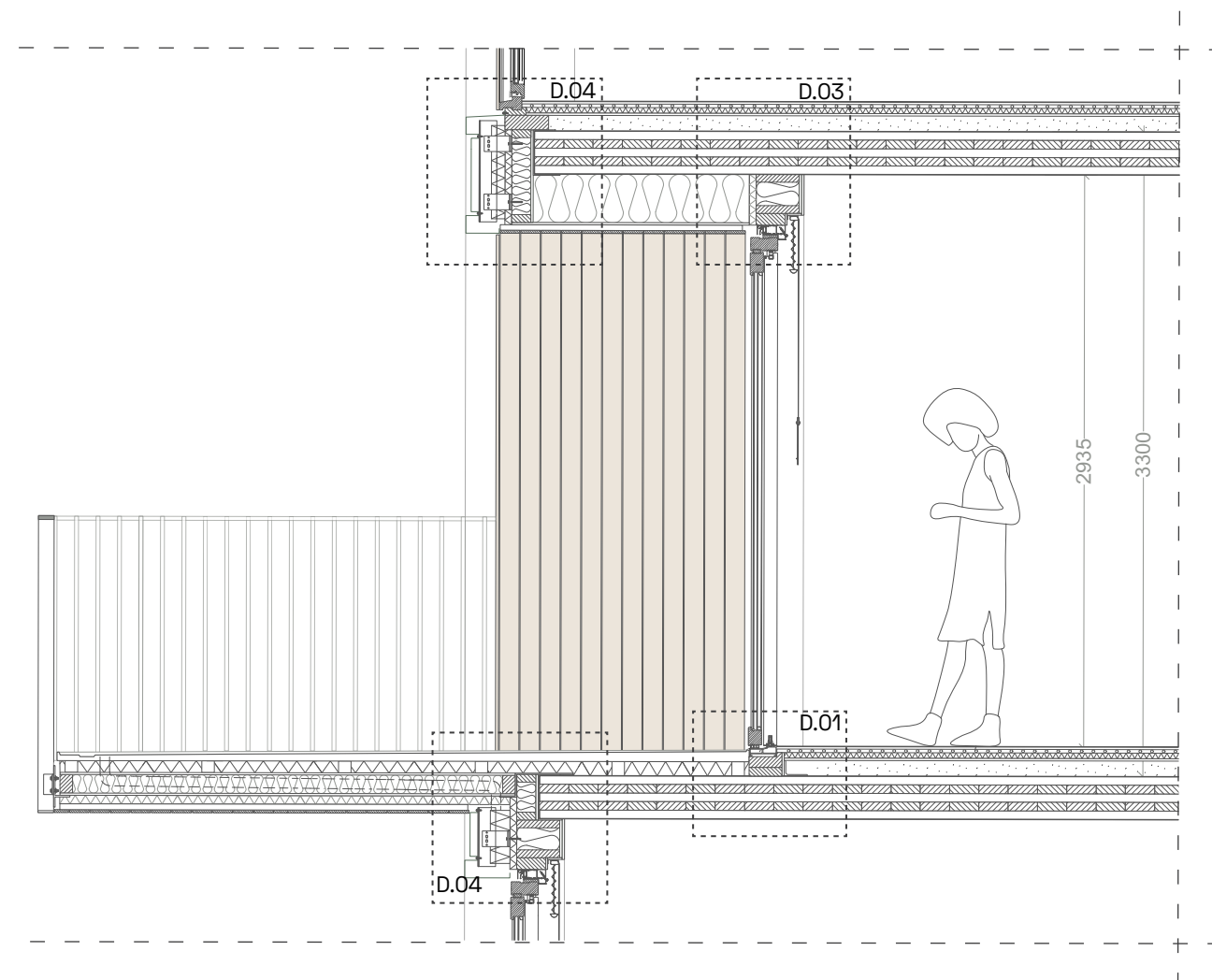
drawing scale
fifth floor
1:200





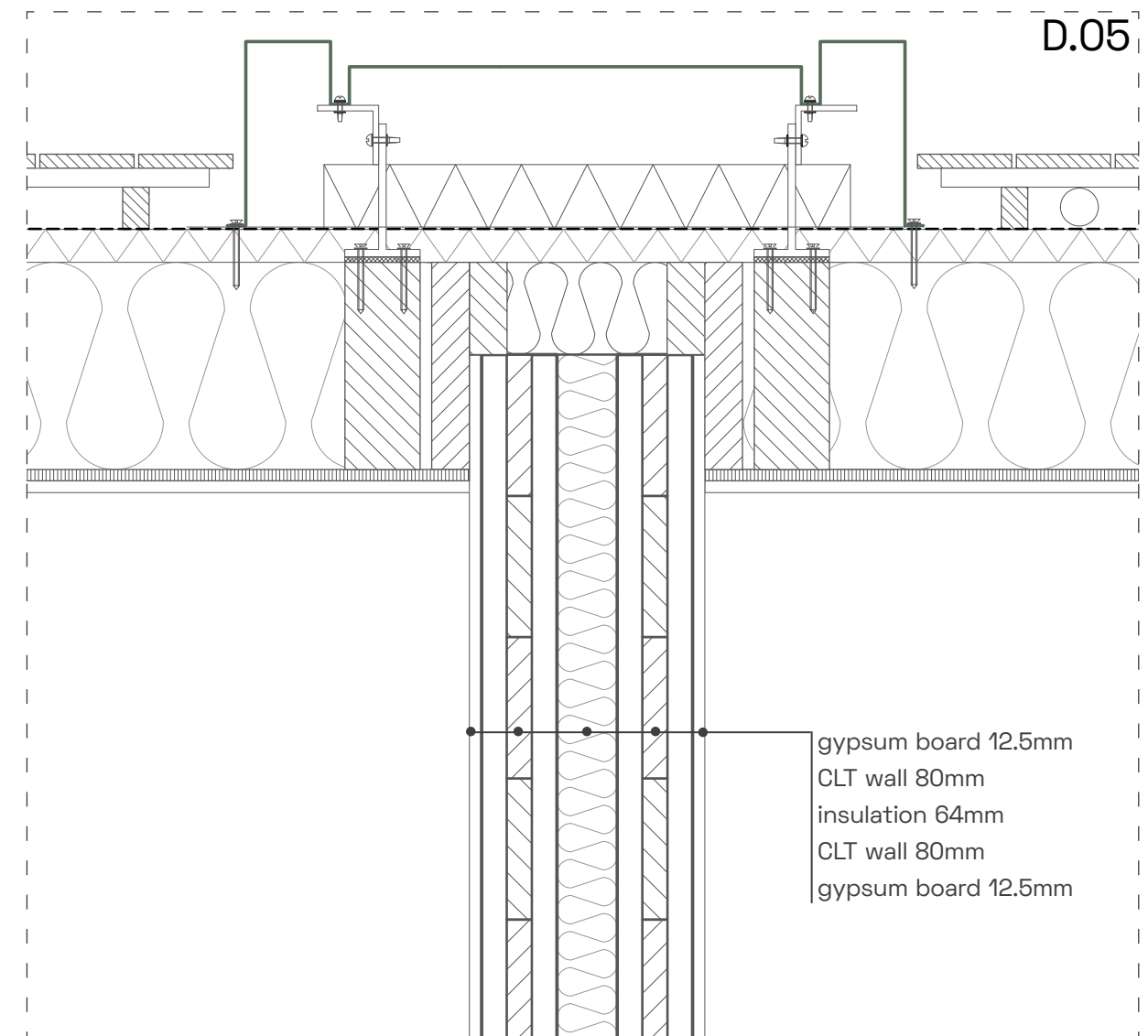
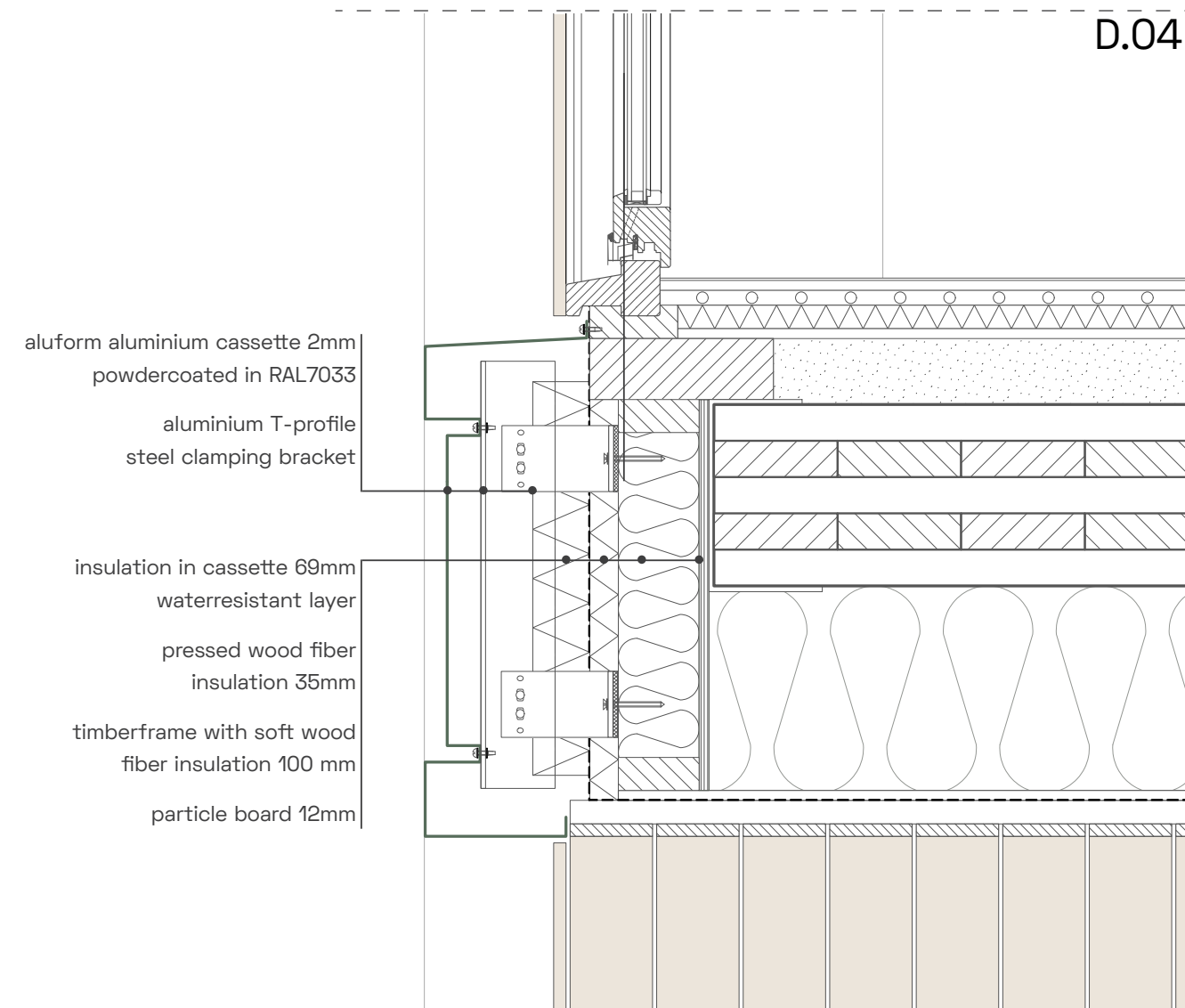
drawing **facade fragments**
 scale 1:20
 floor fourth



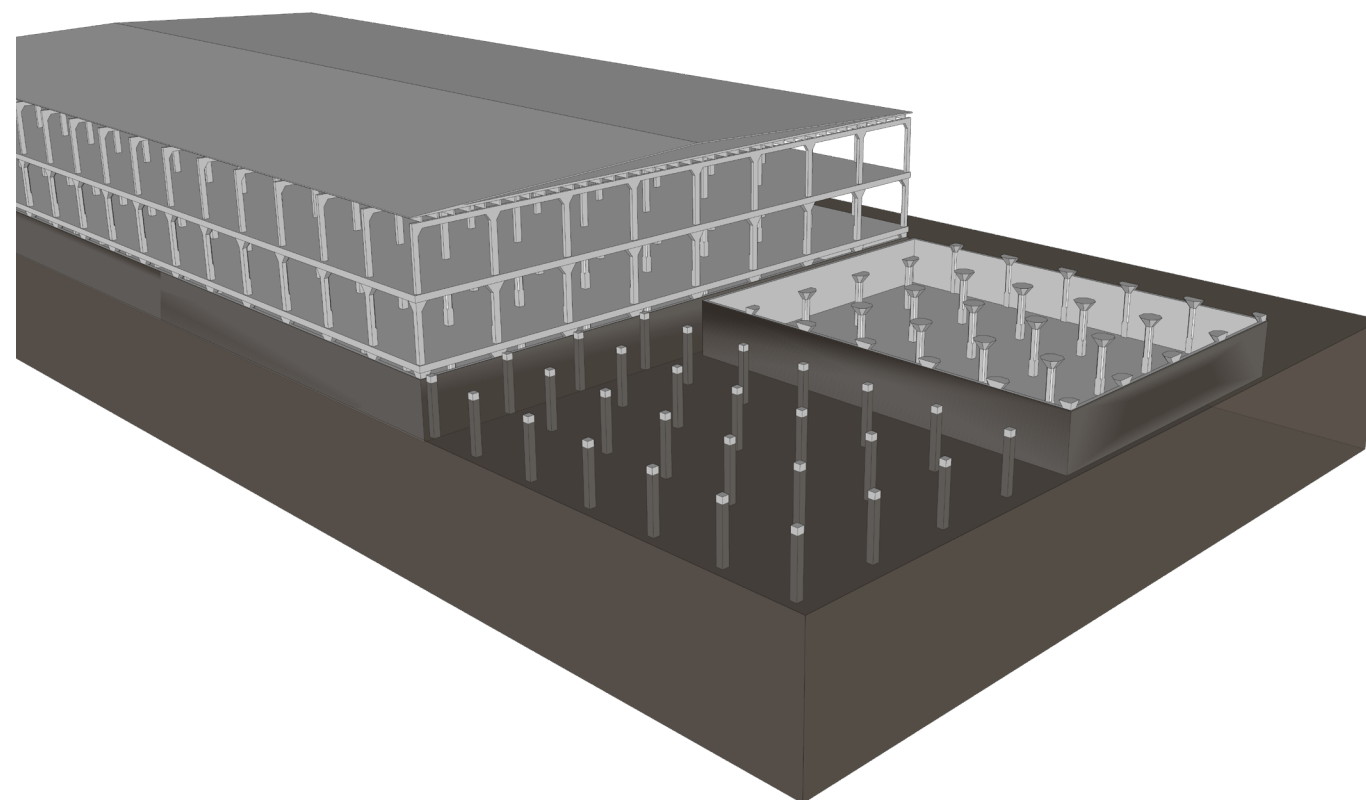


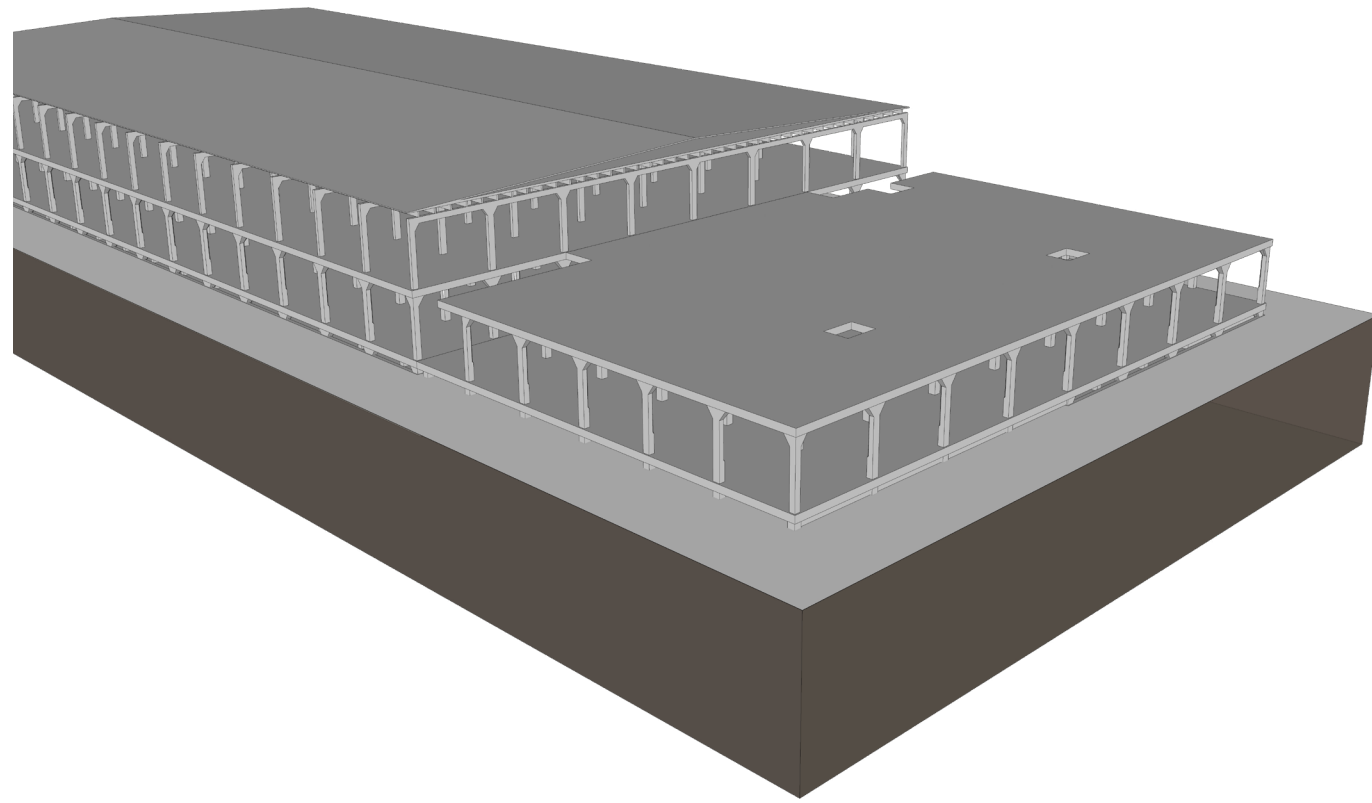
drawing **facade fragments**
 scale 1:20
 floor fourth

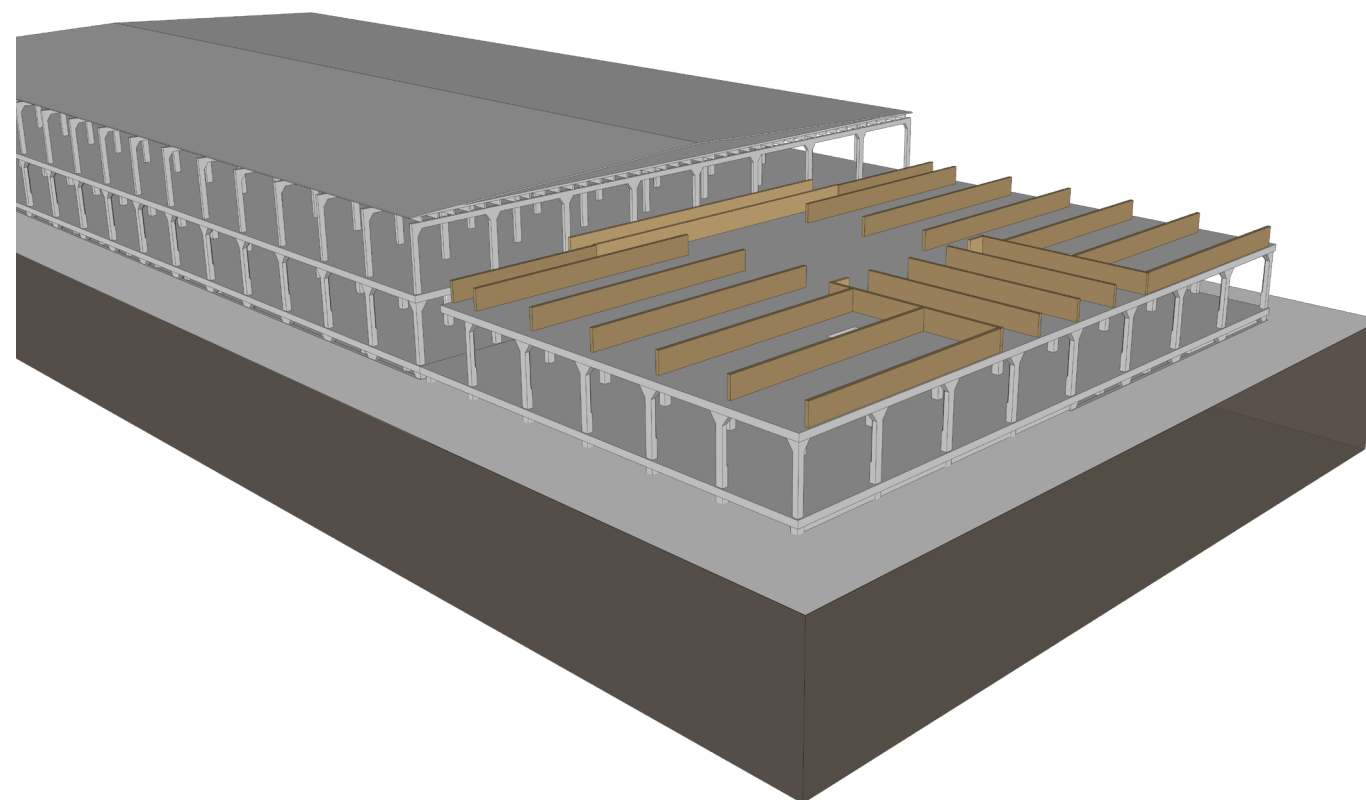


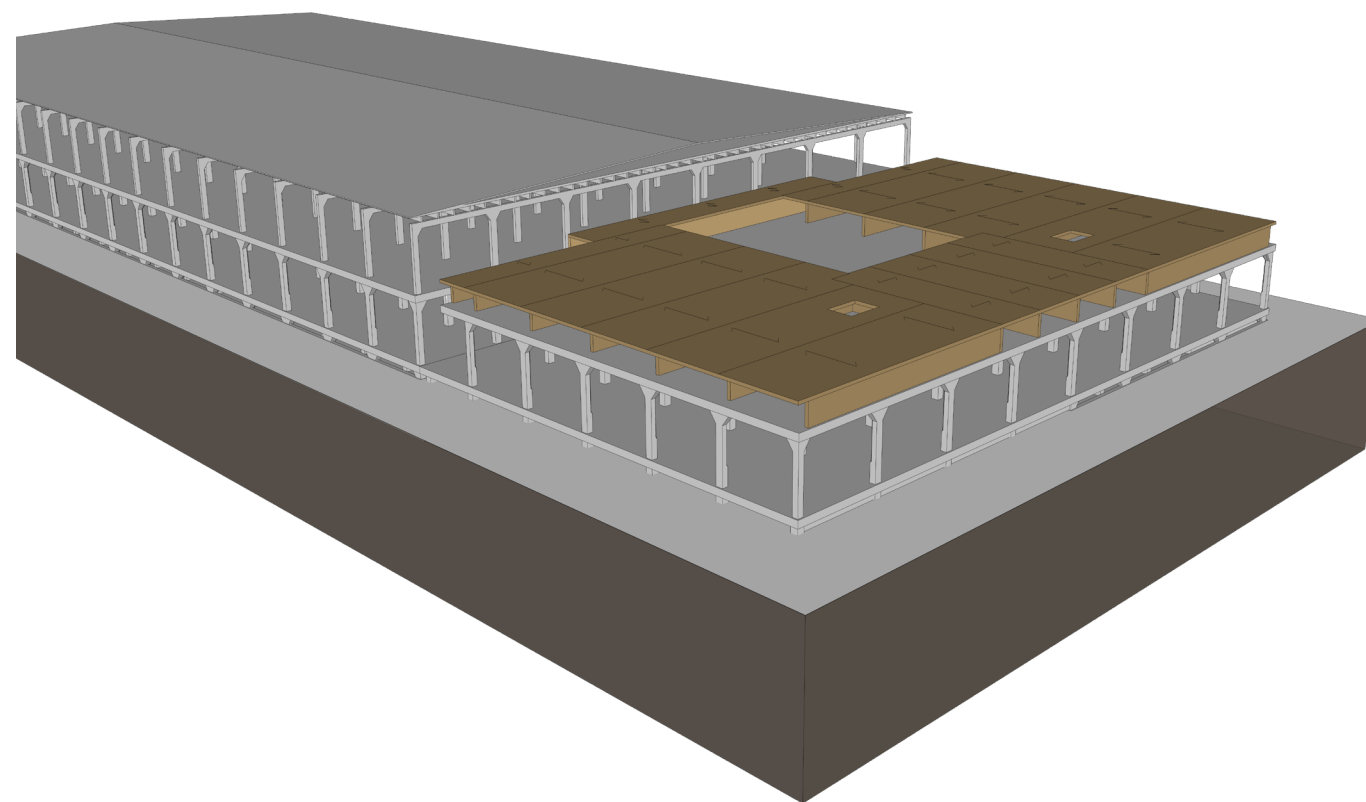


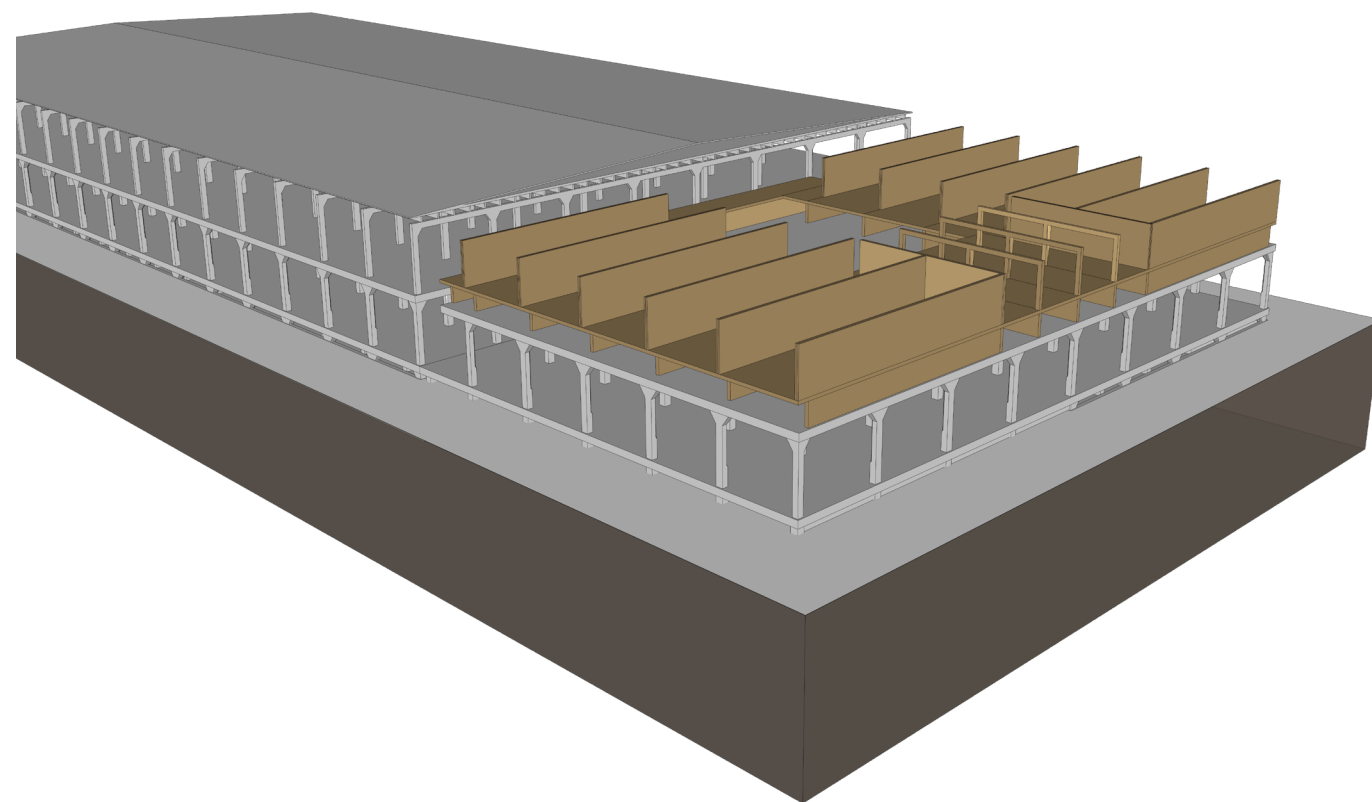


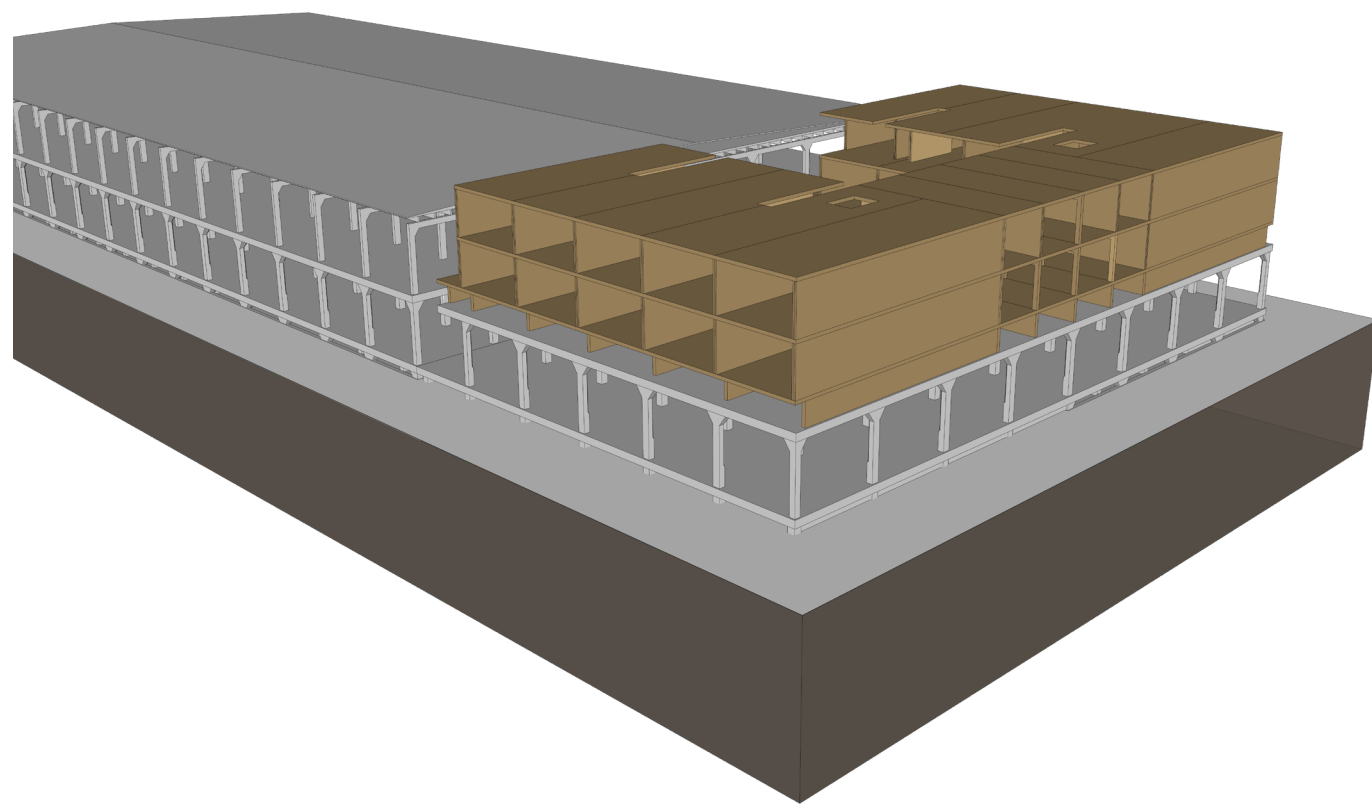


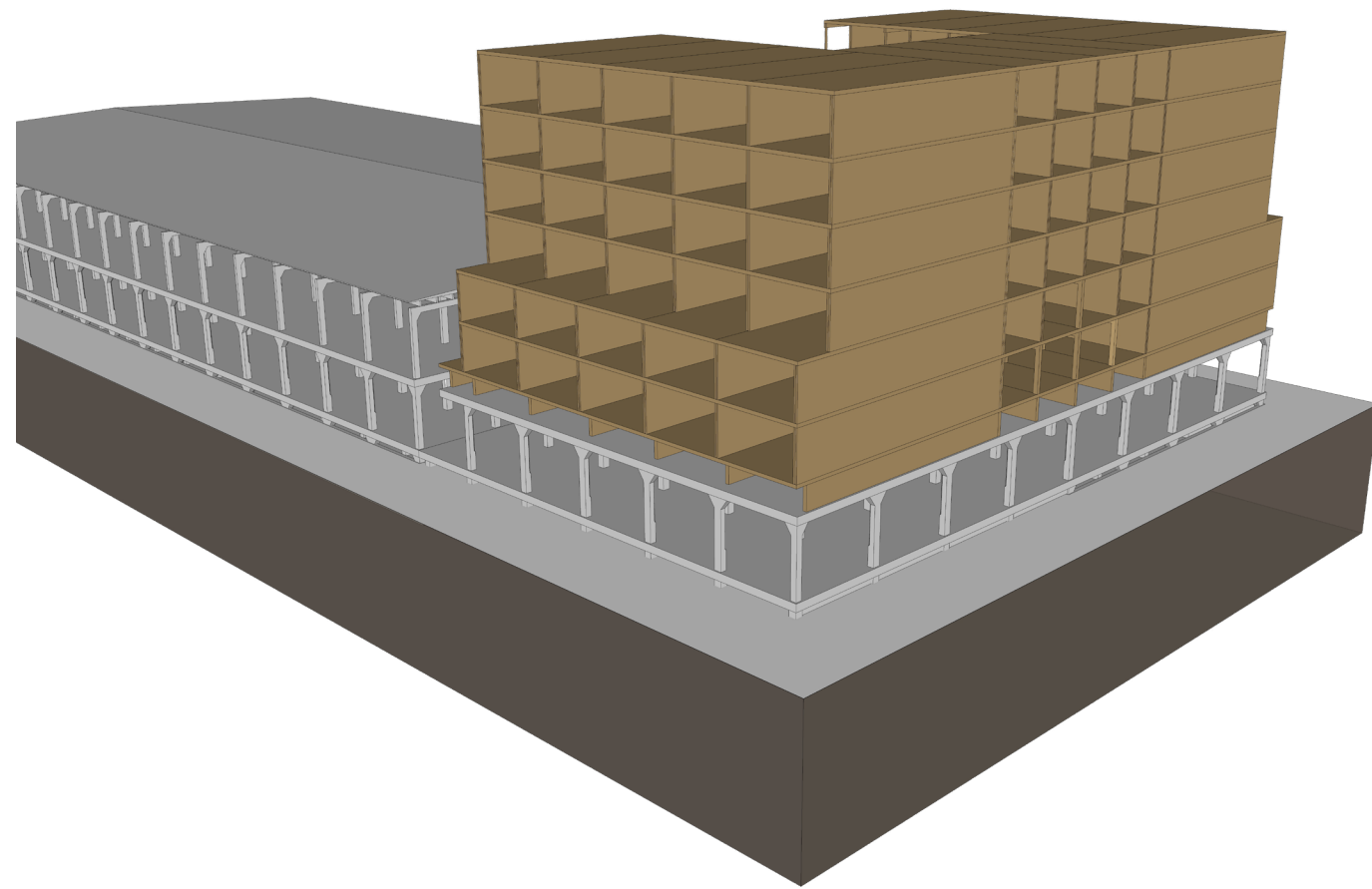


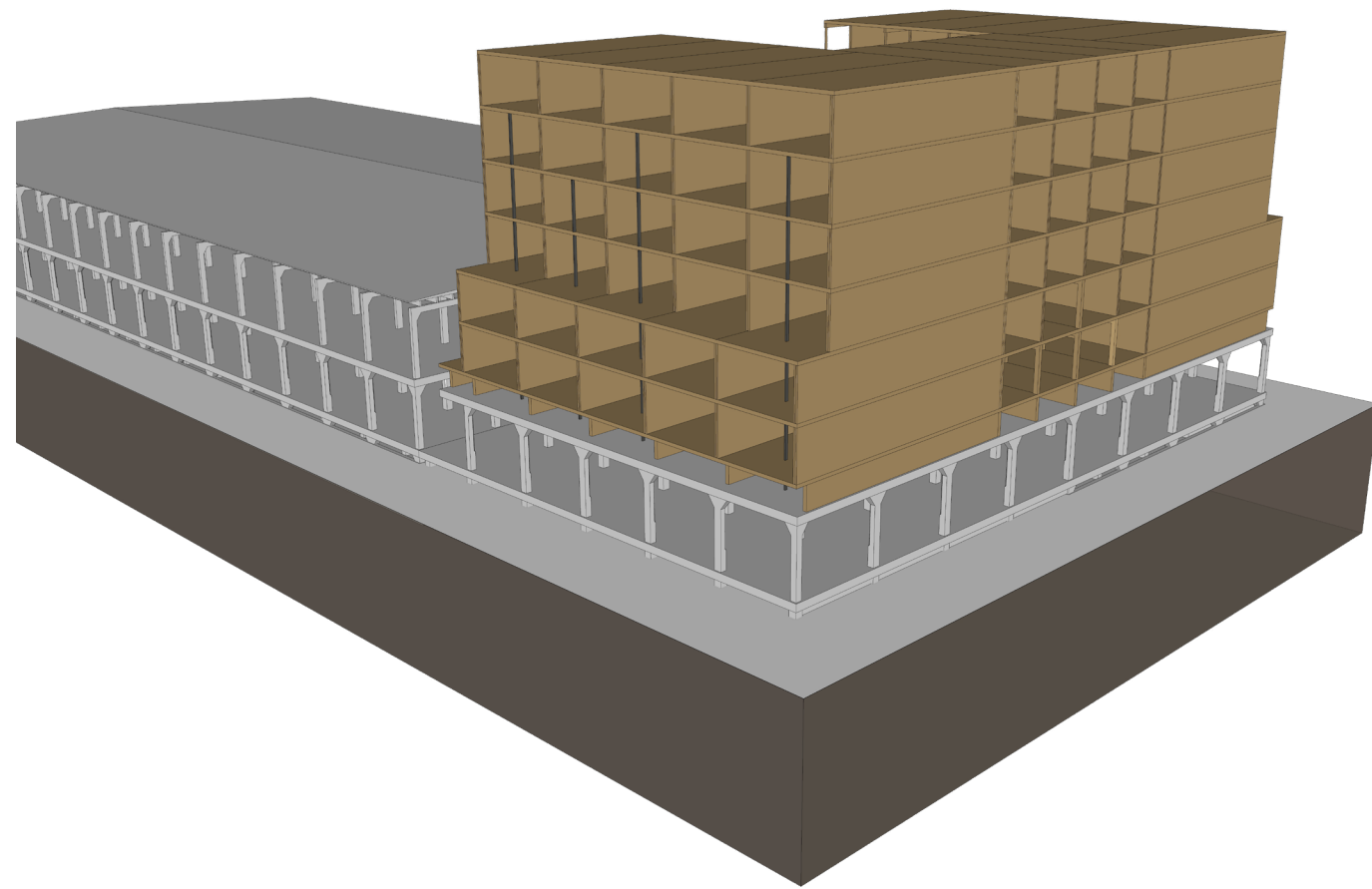


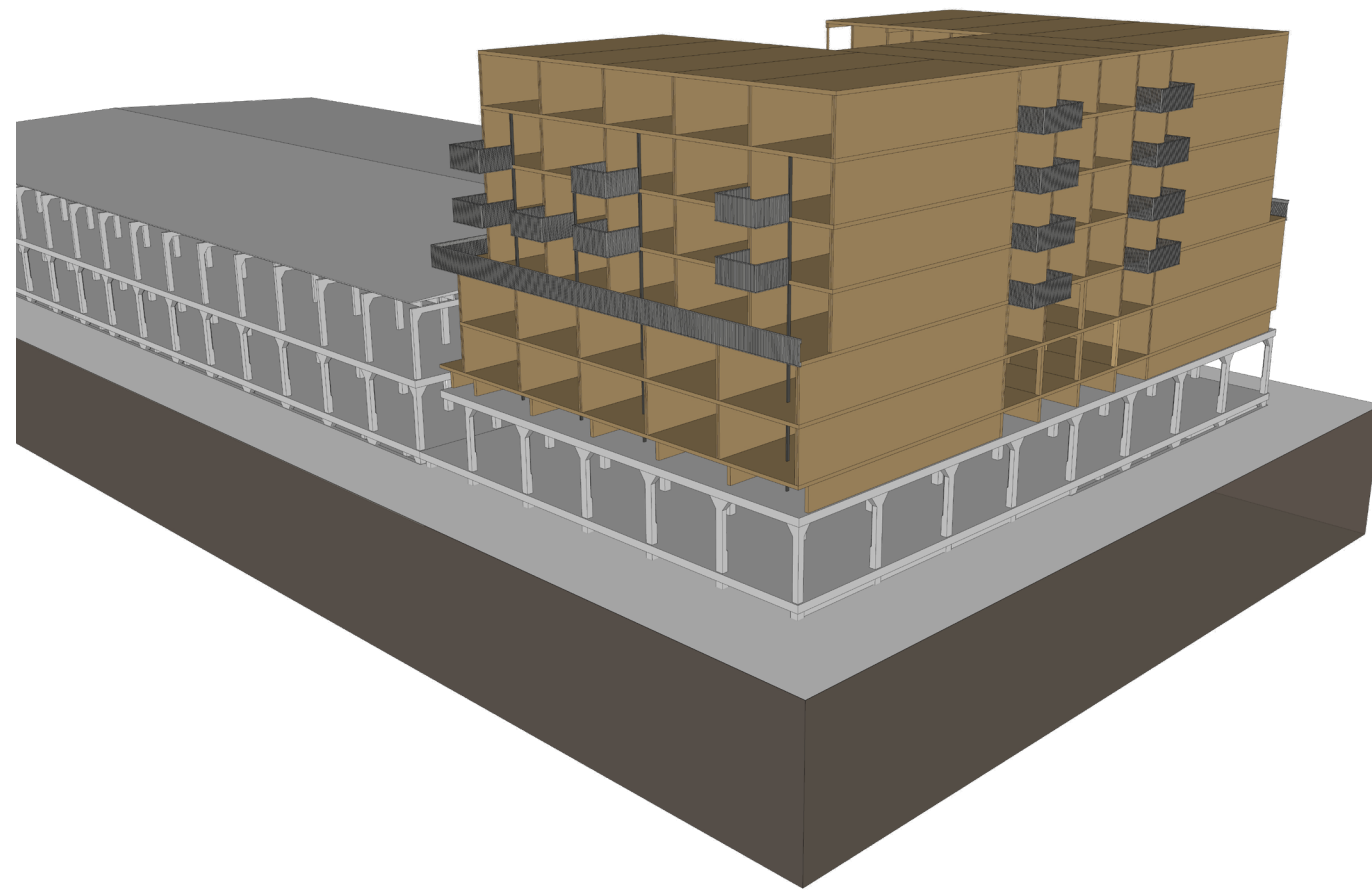


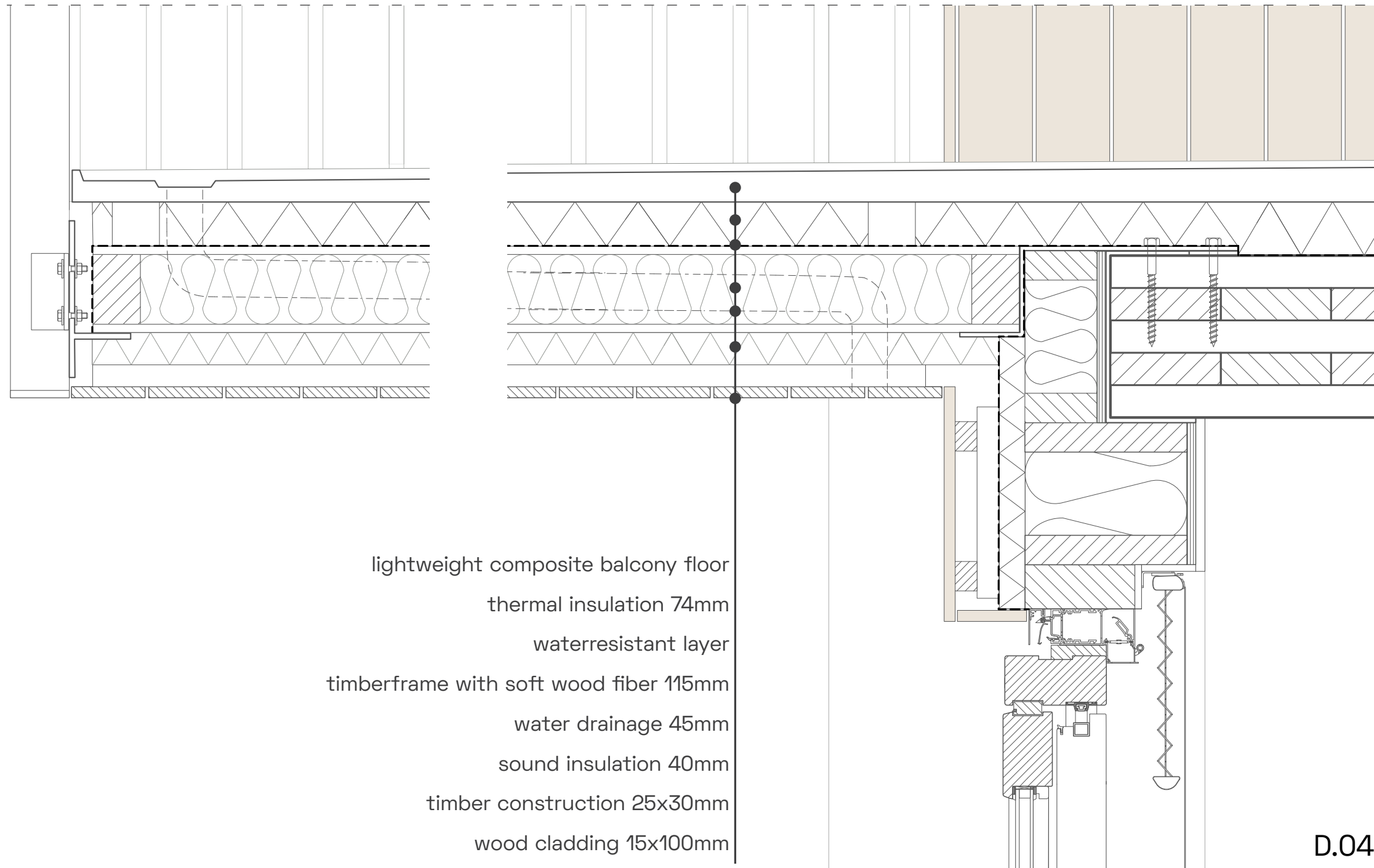


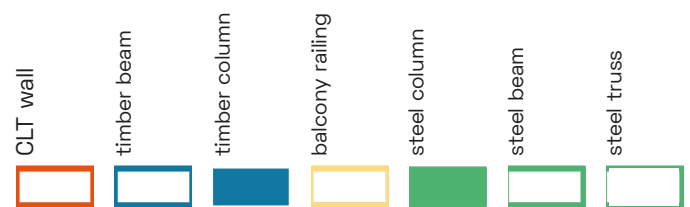
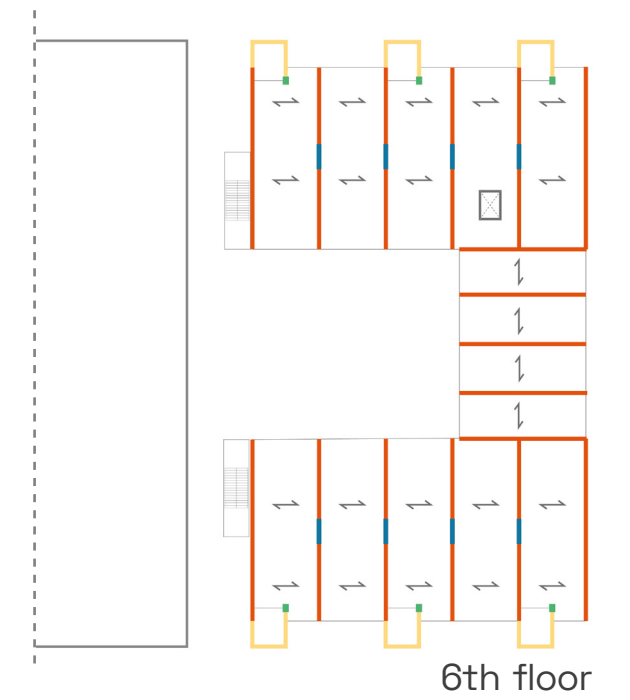
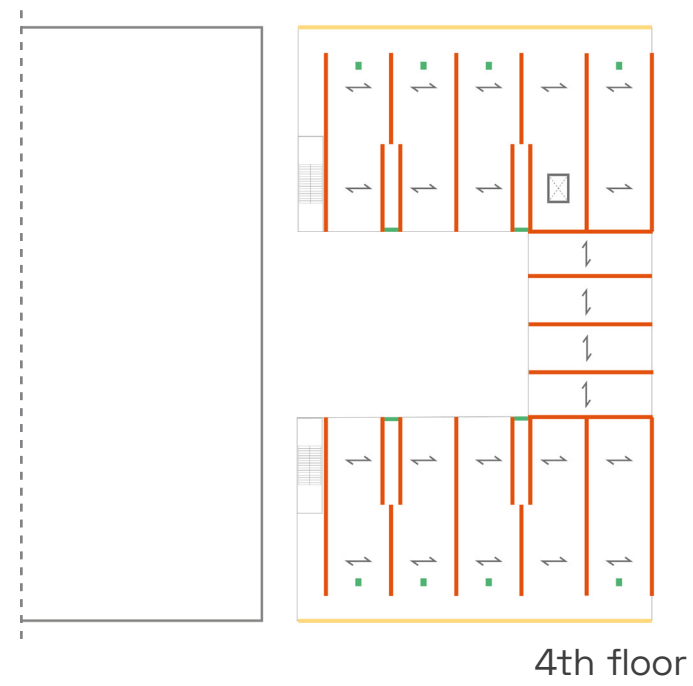
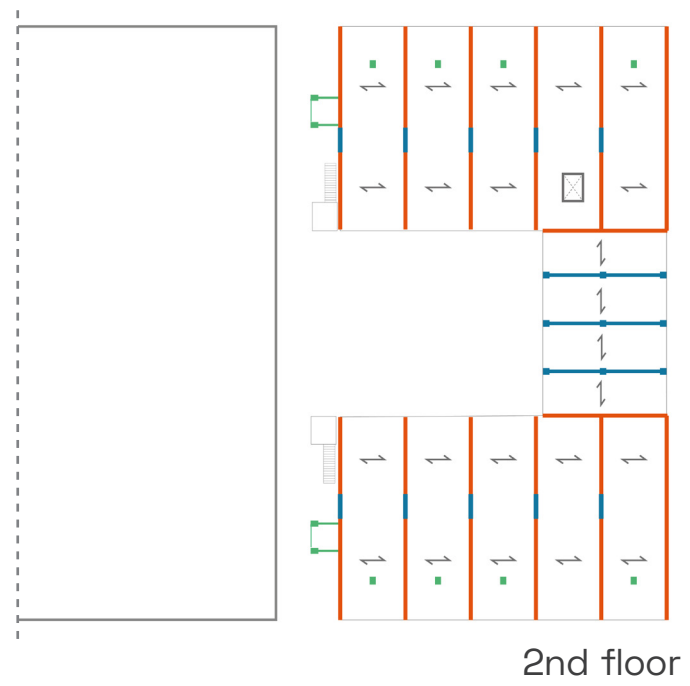
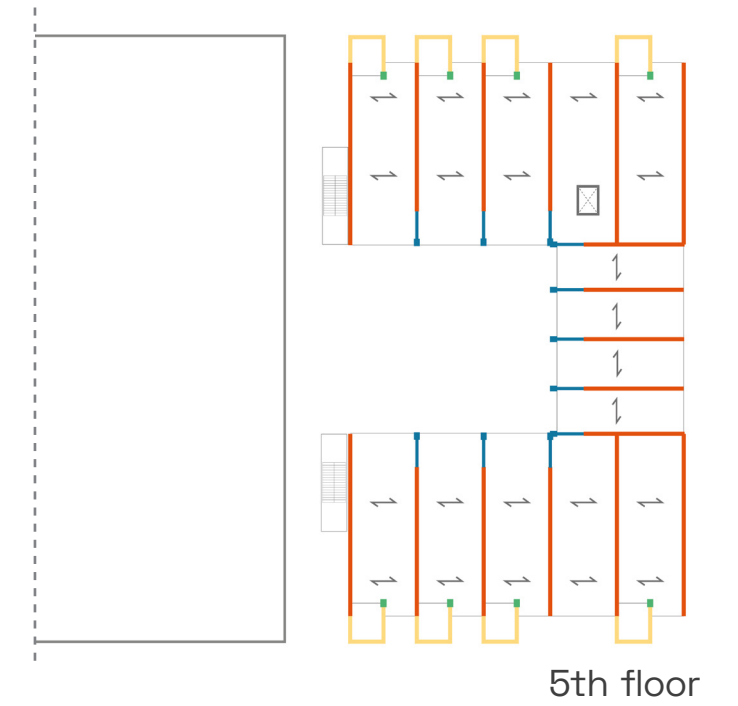
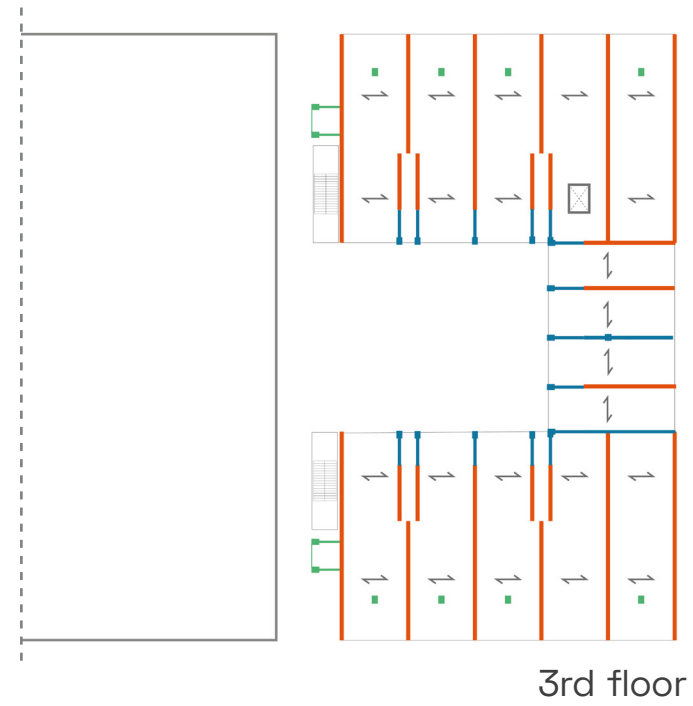
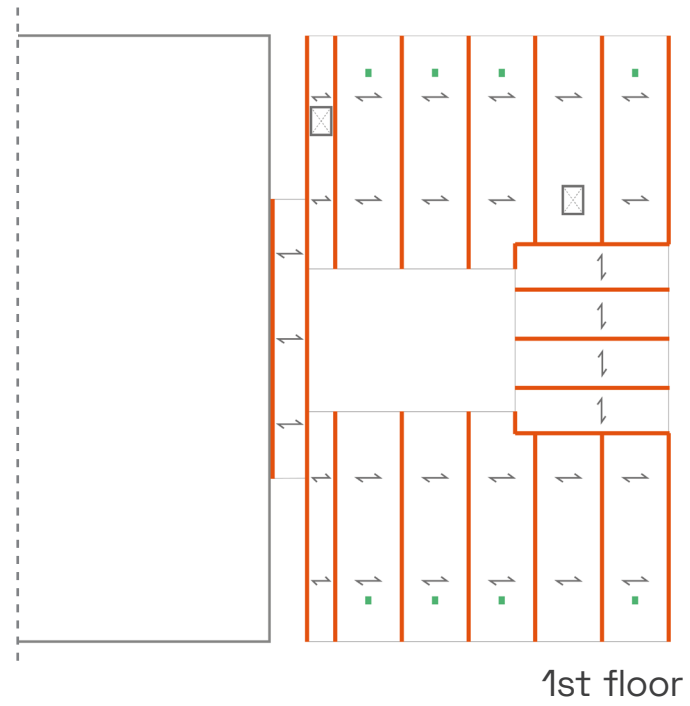


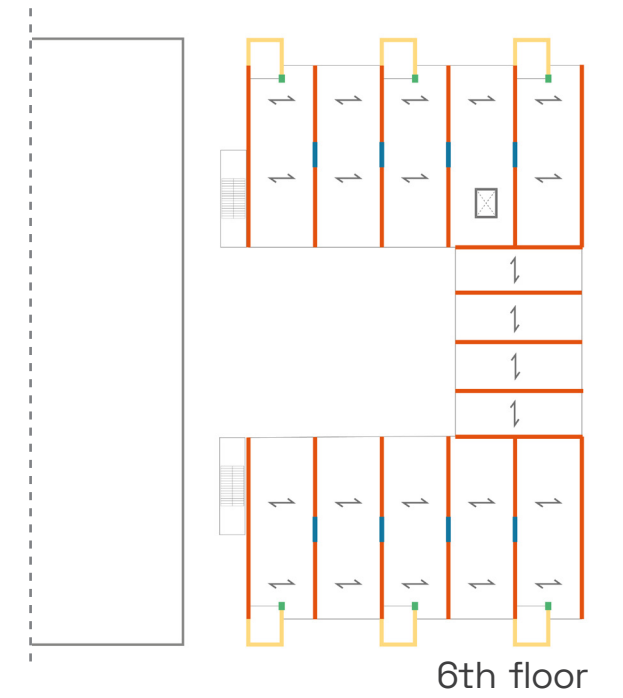
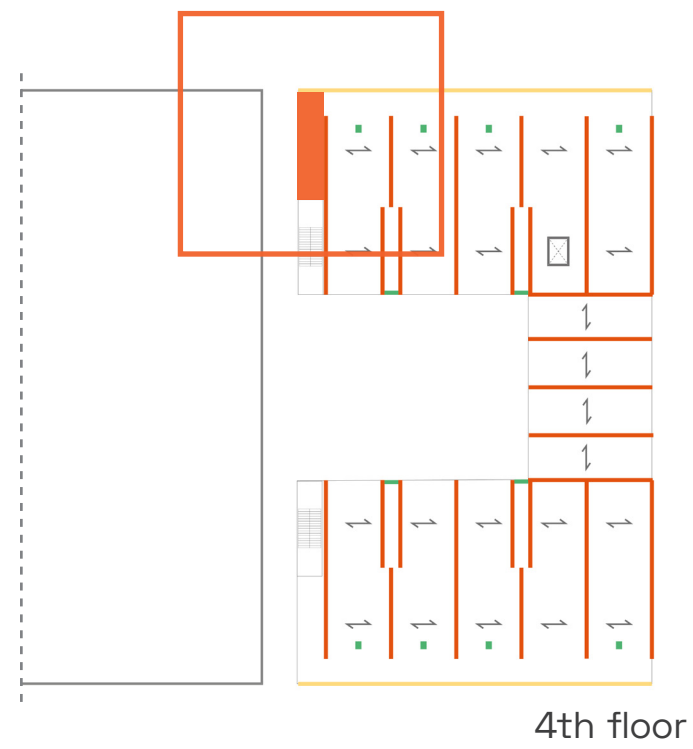
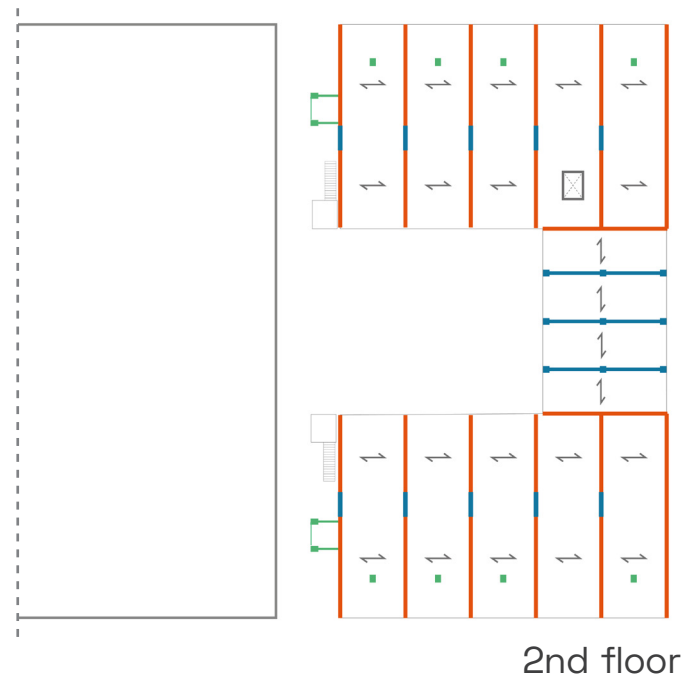
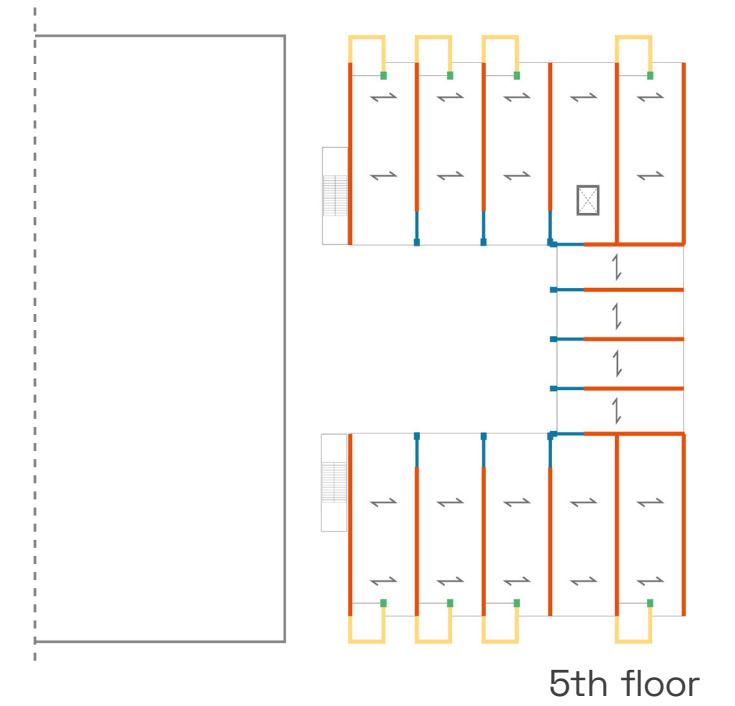
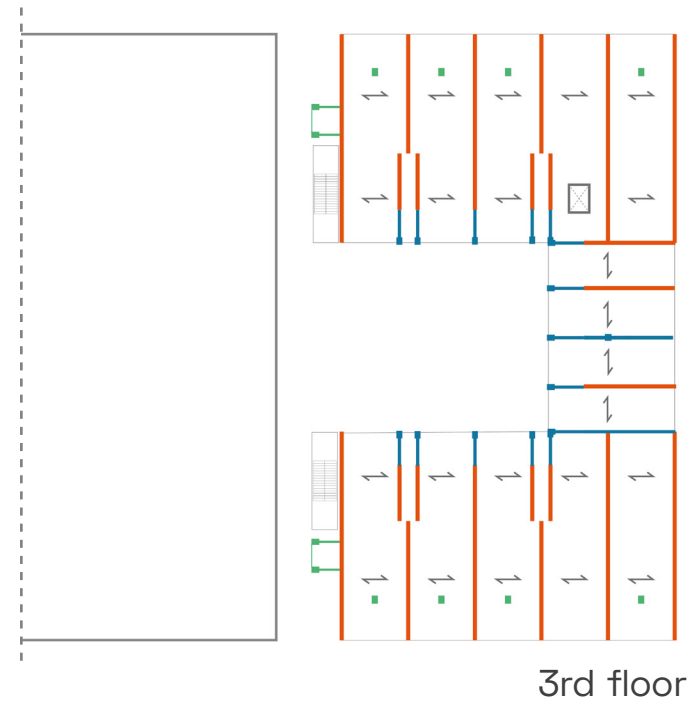
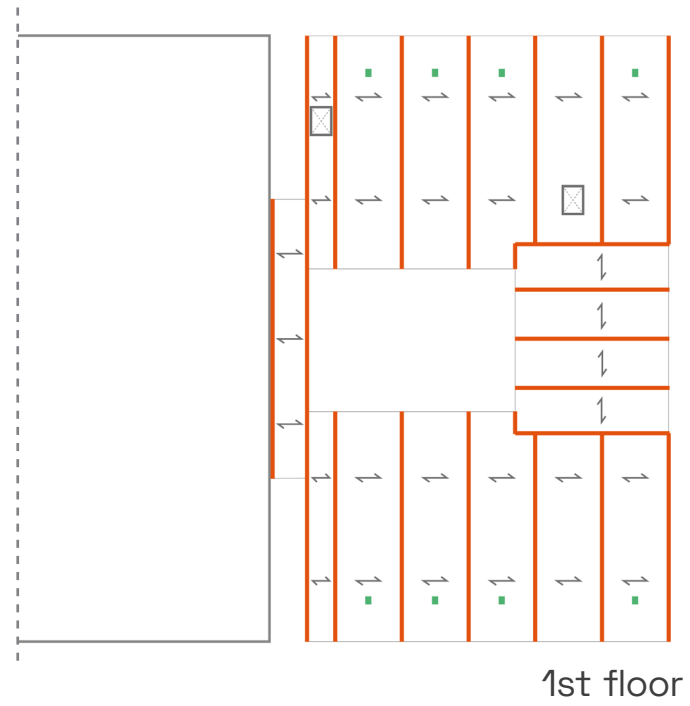


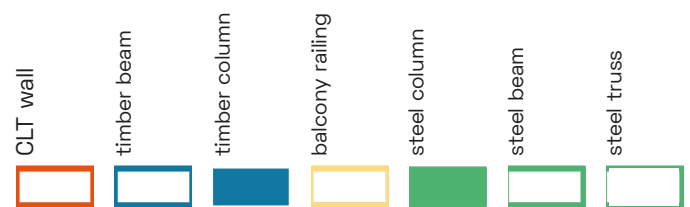
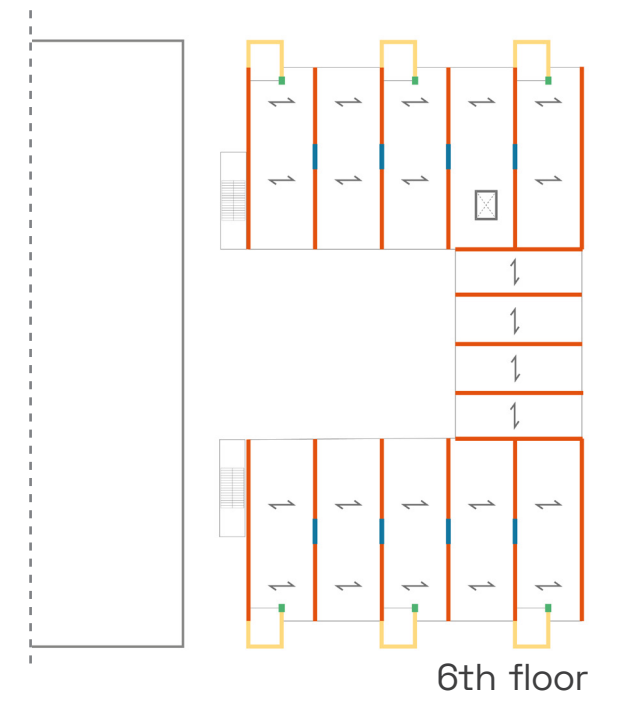
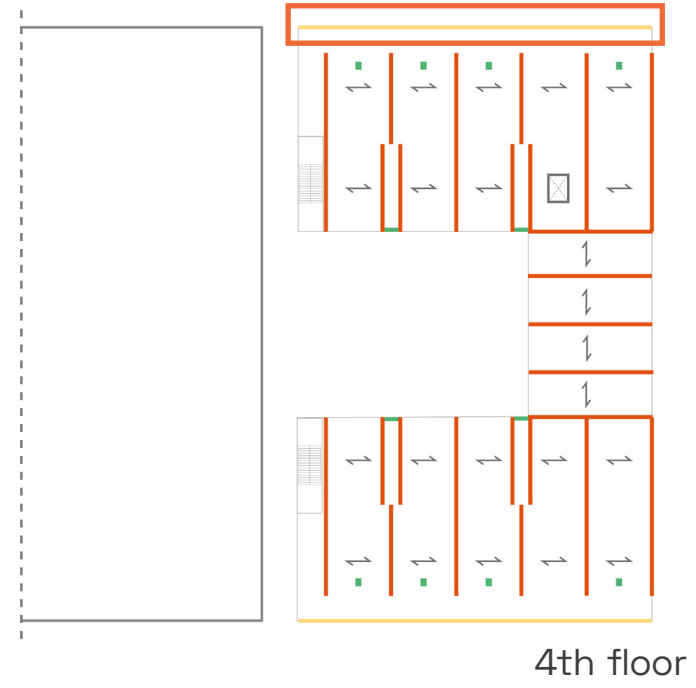
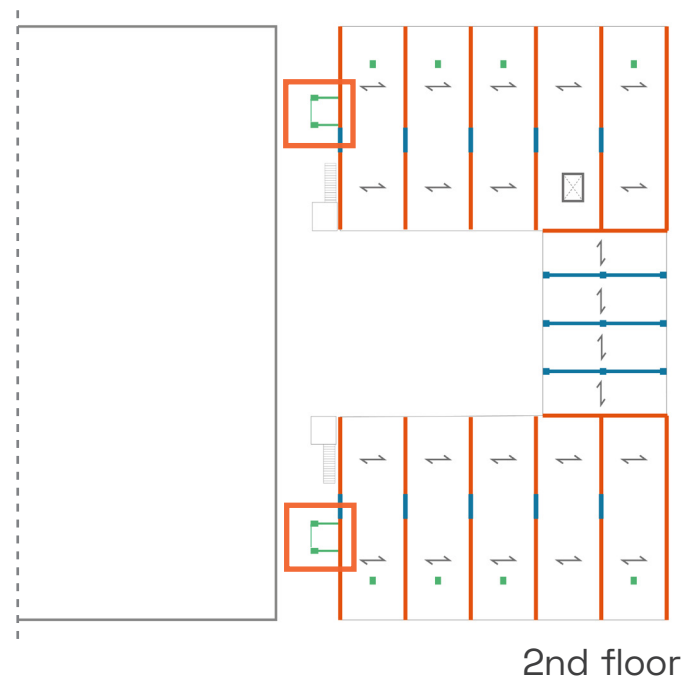
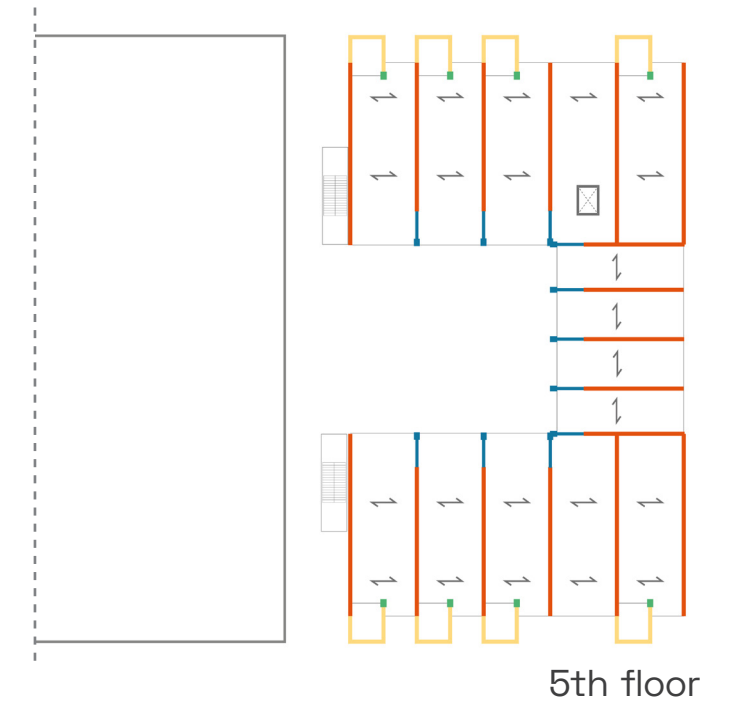
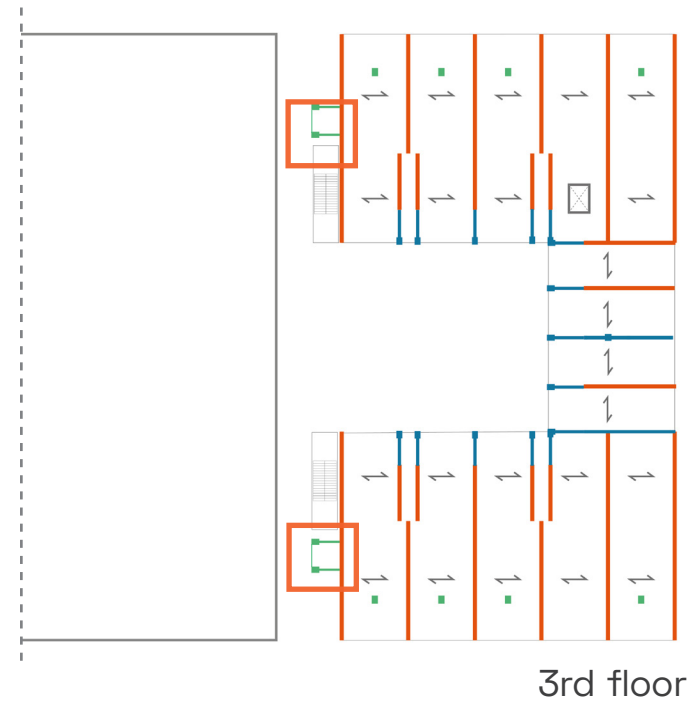
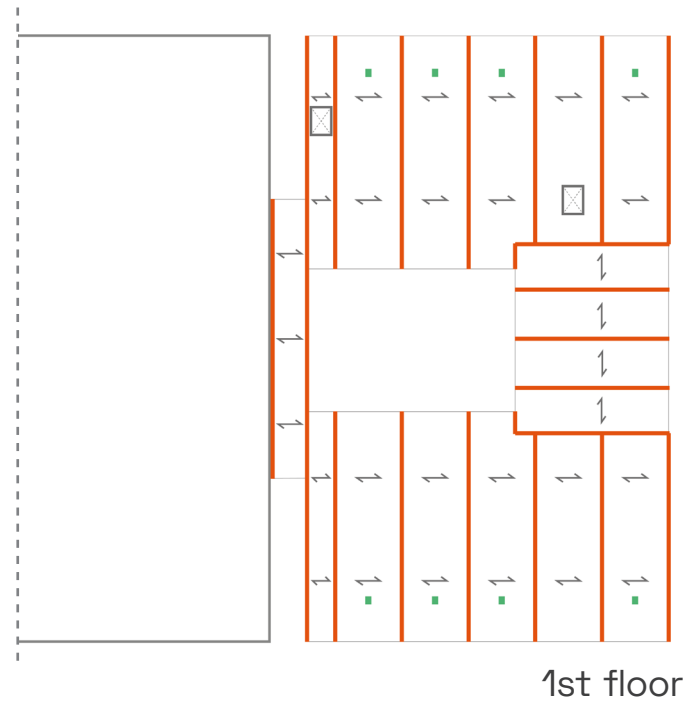


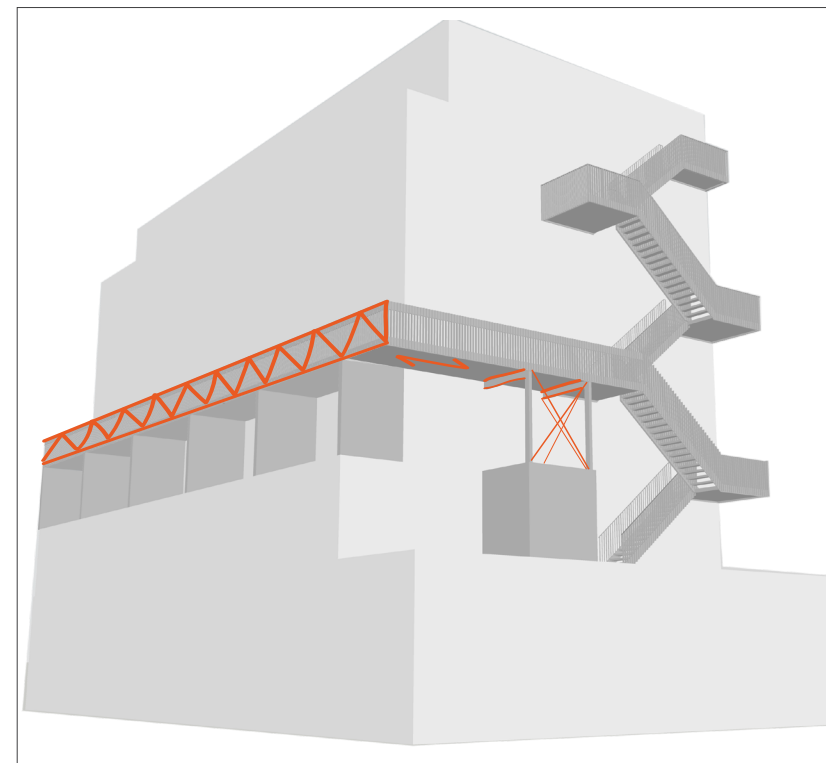
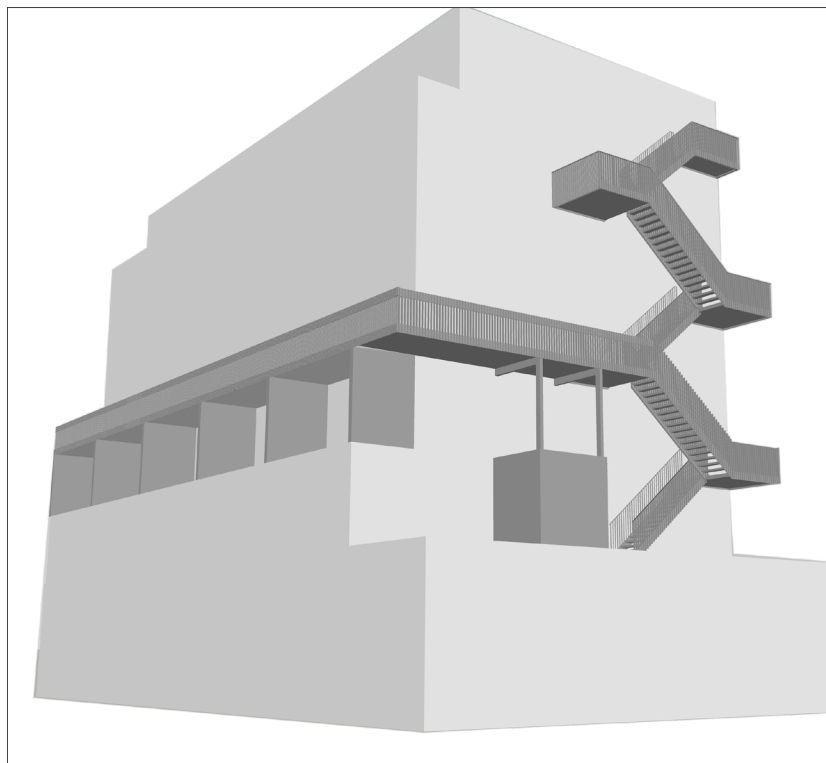


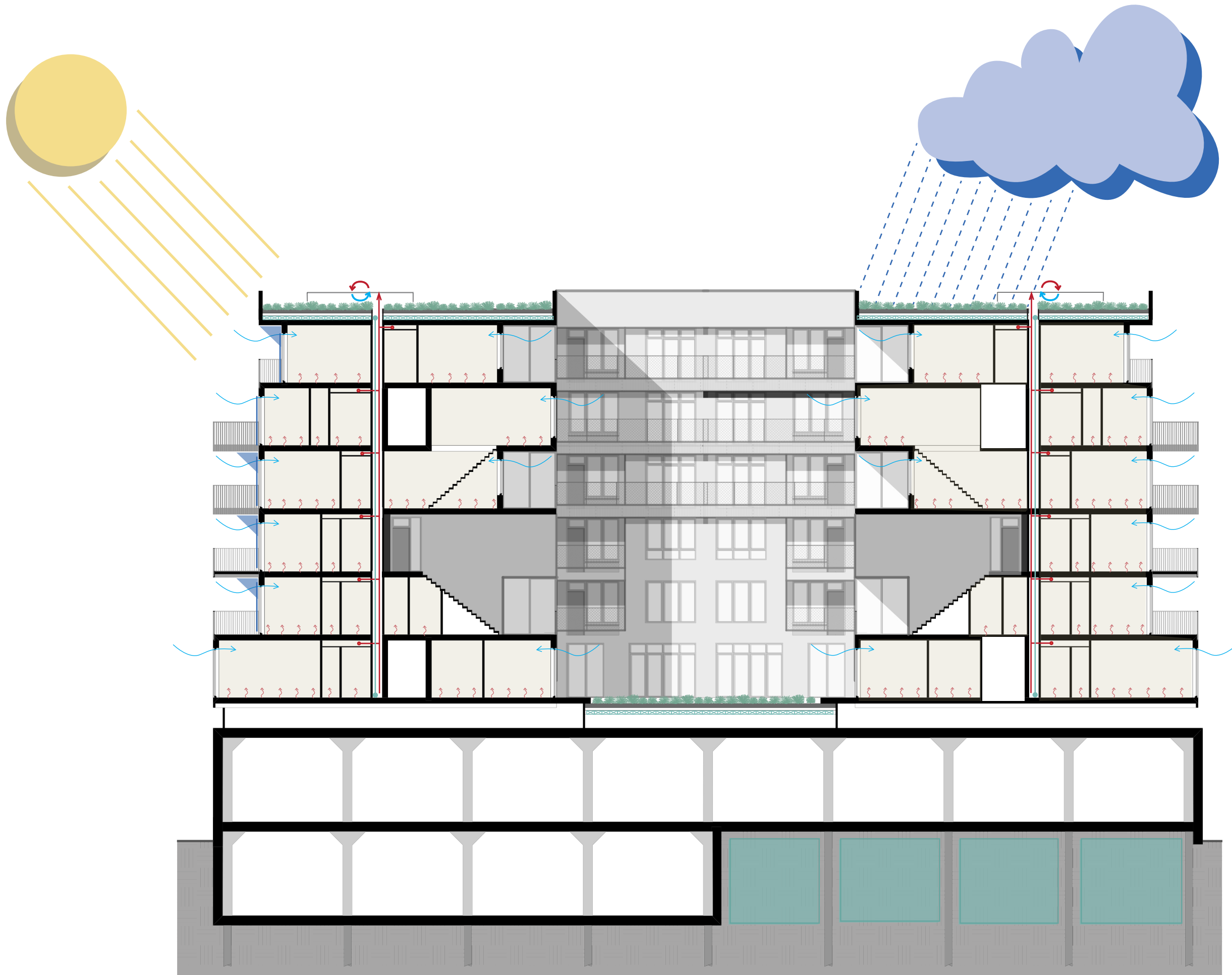




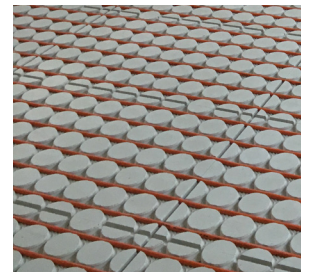
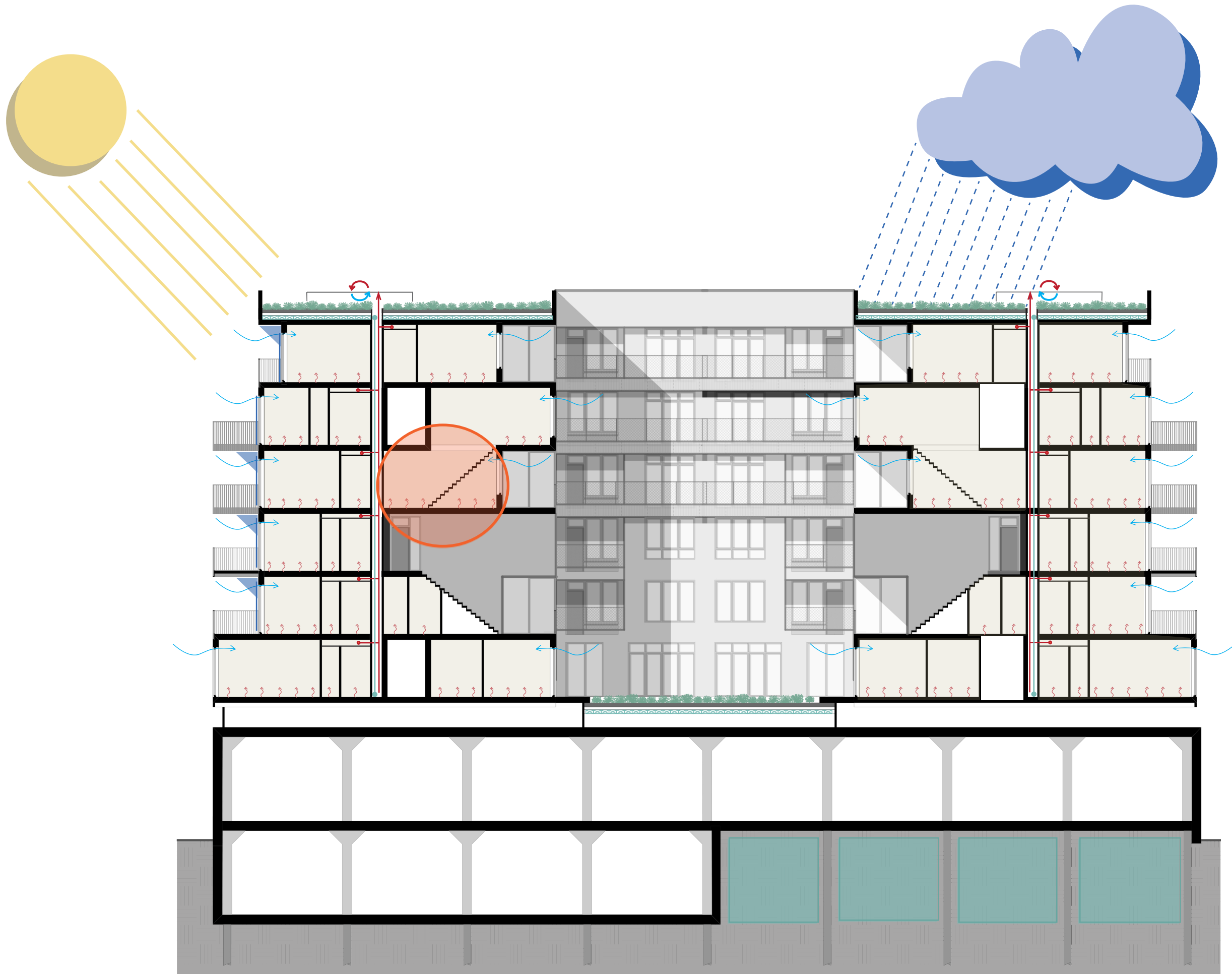


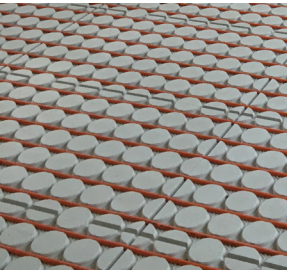
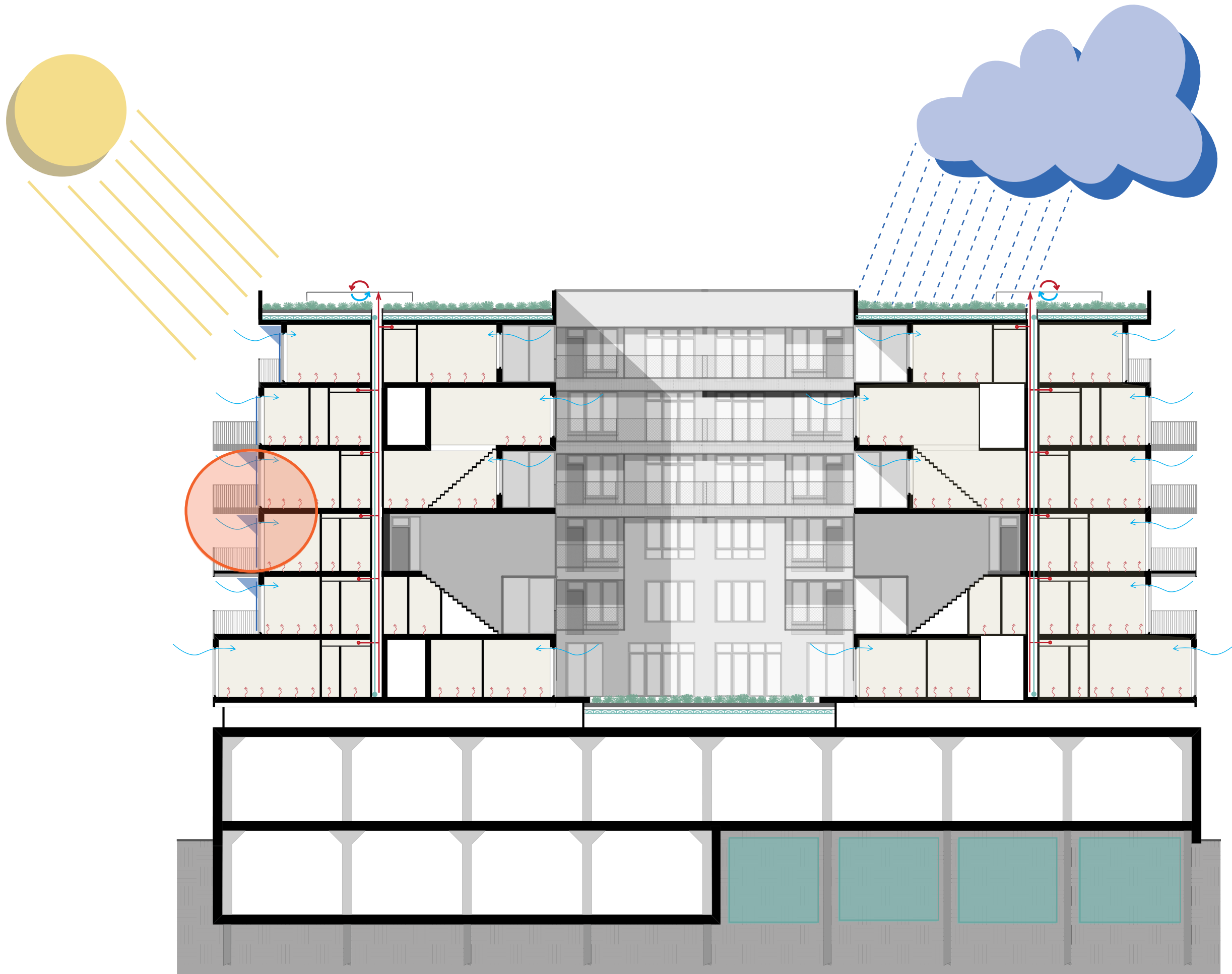




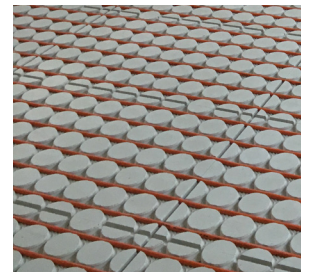
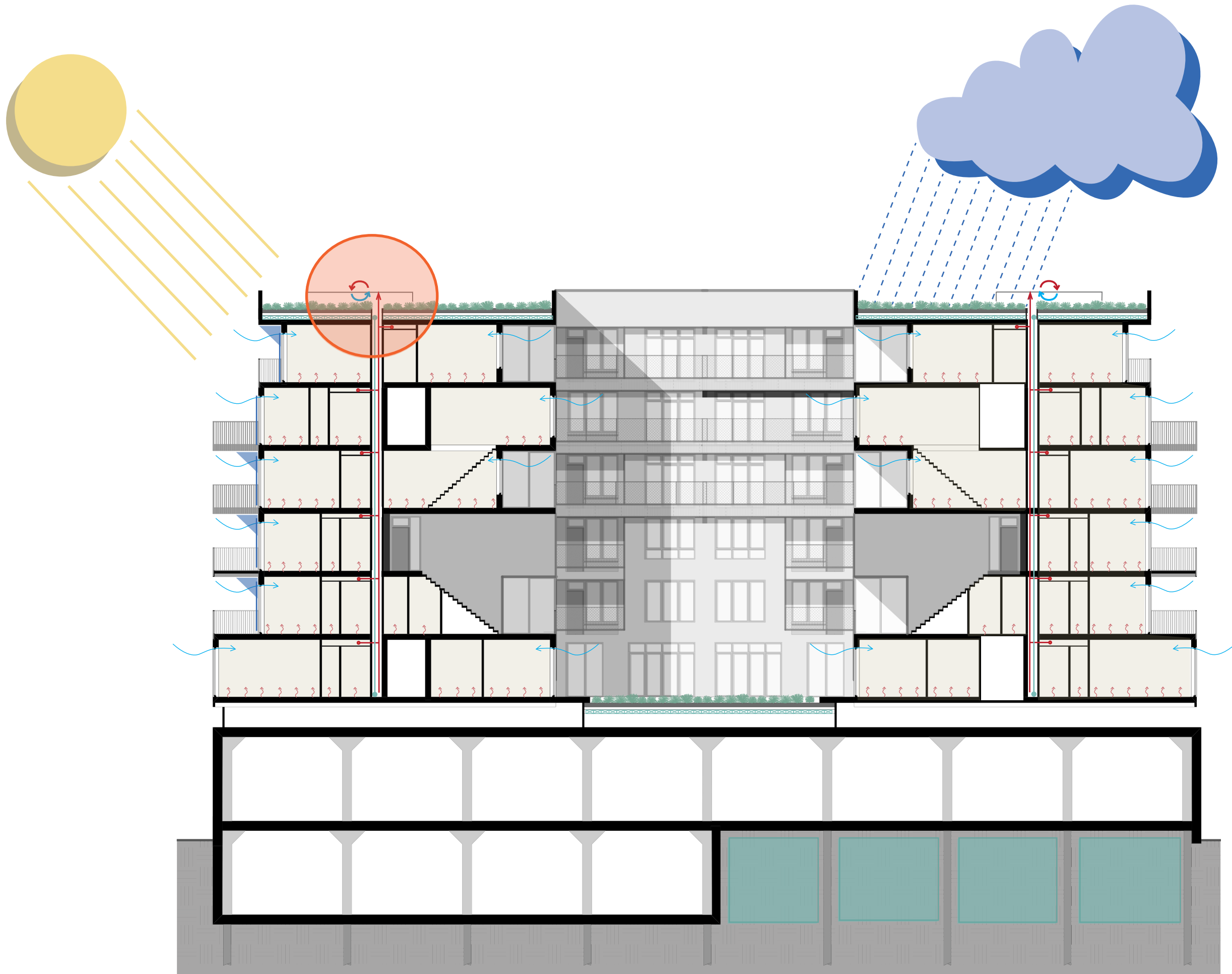


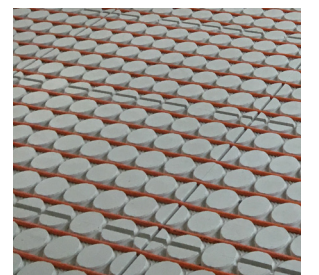
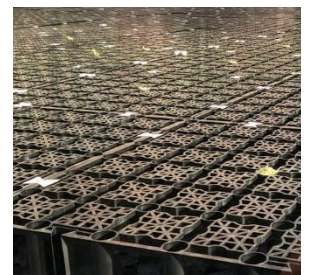
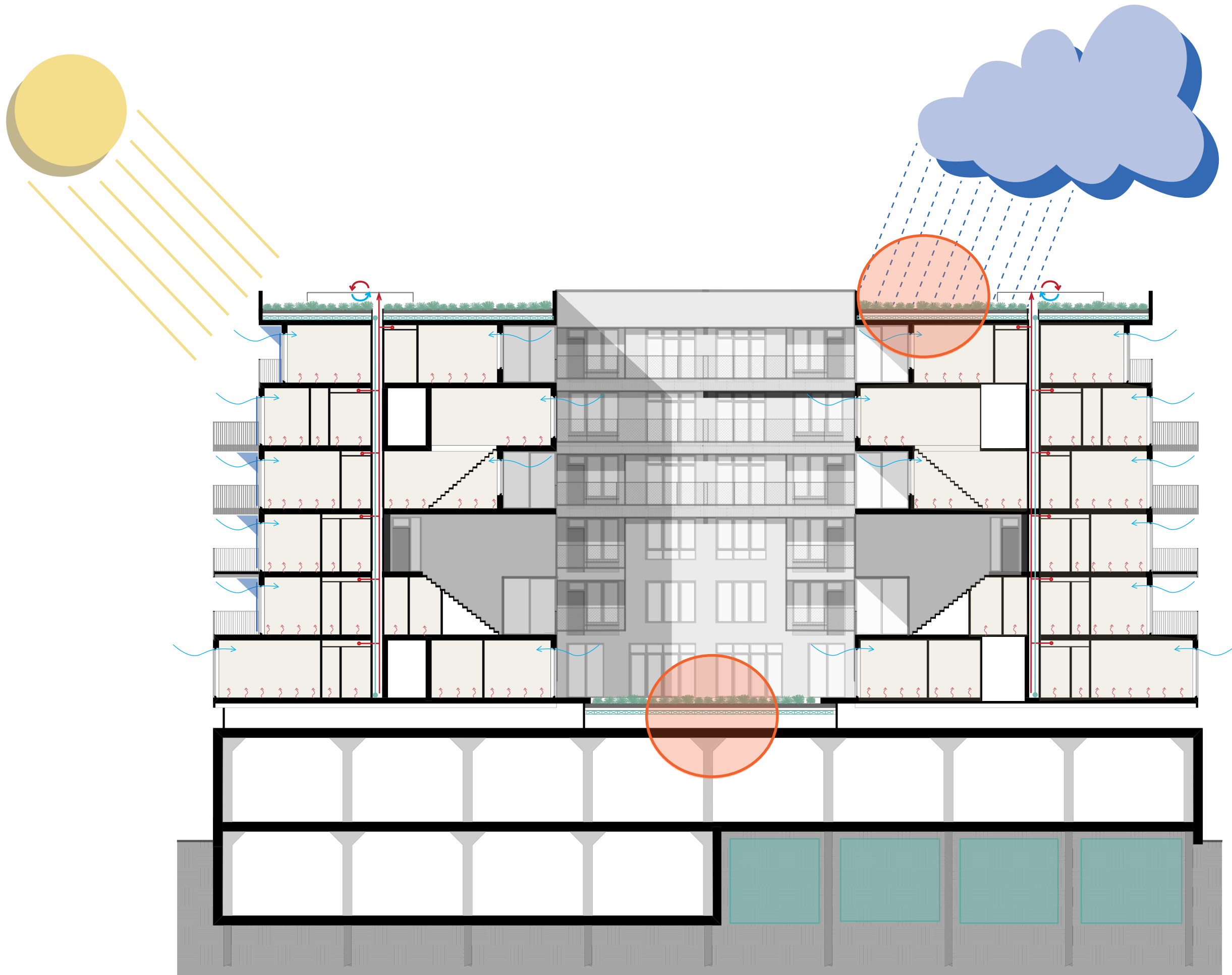
climate section

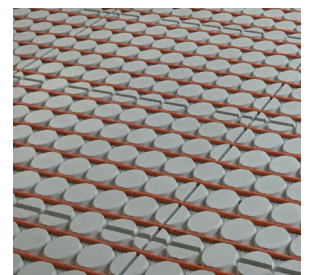
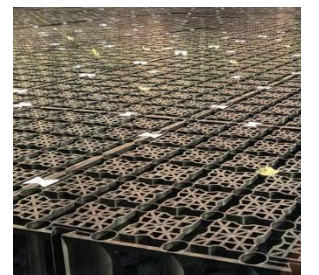
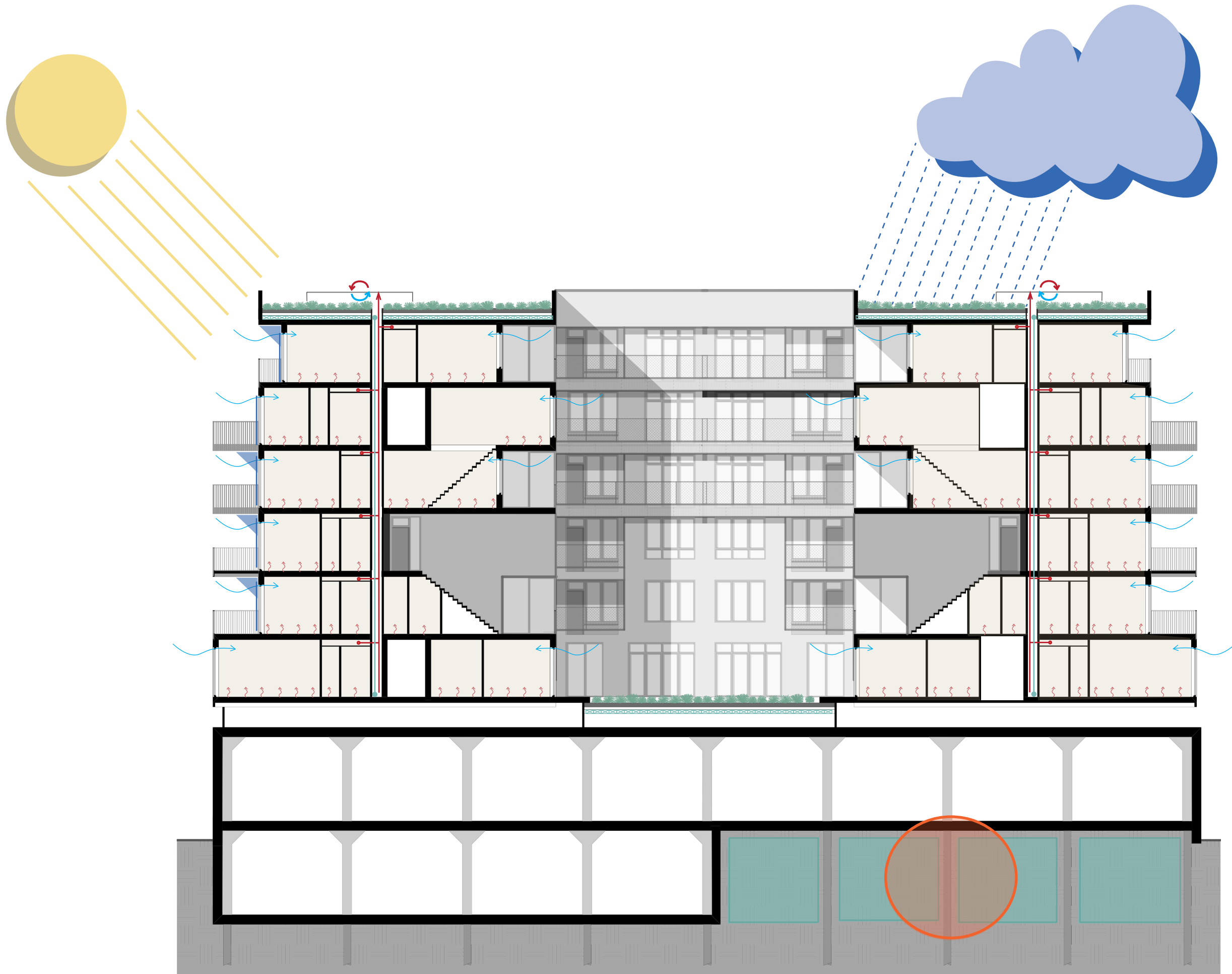




climate section









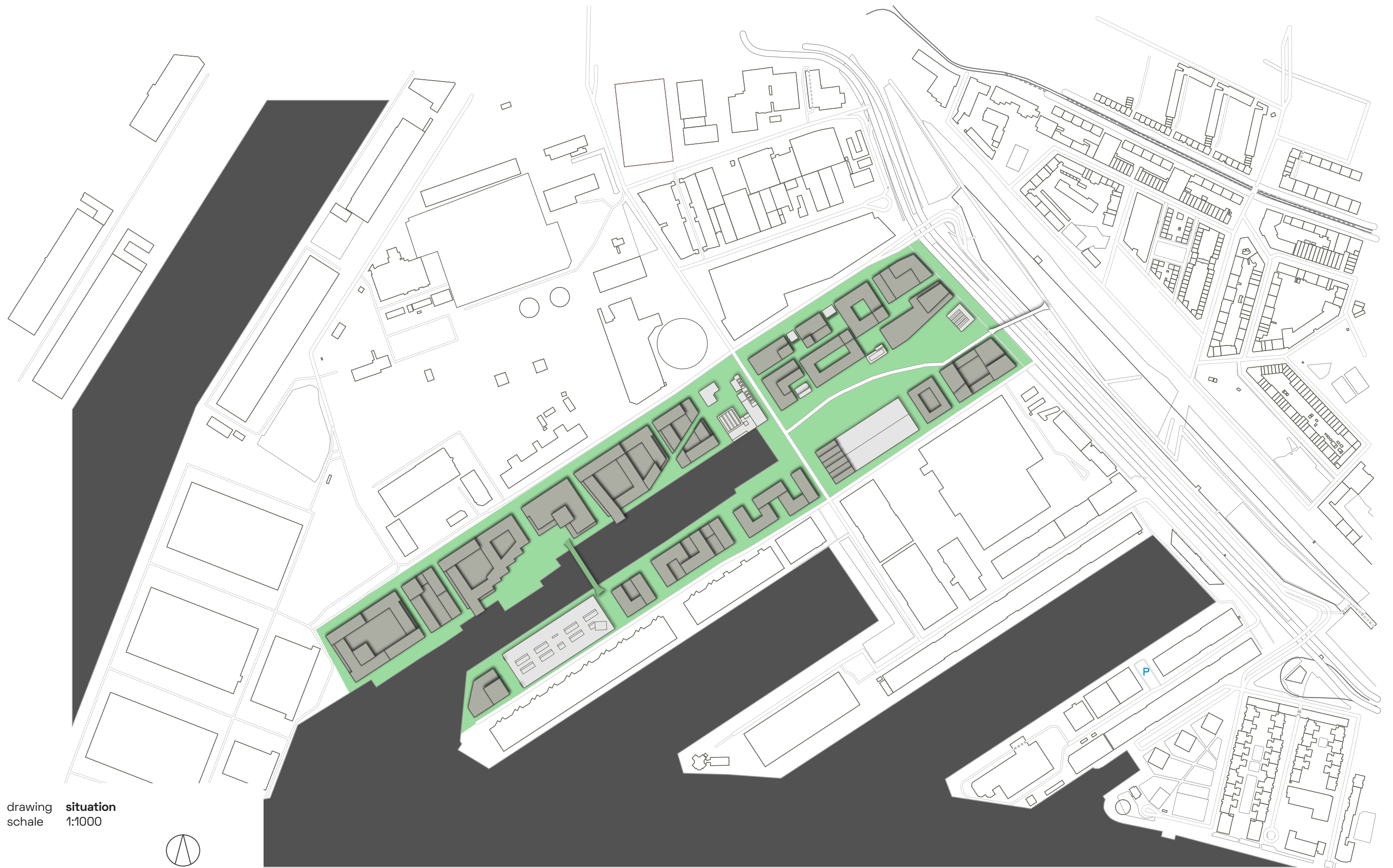


drawing section A-B
scale 1:200









drawing
schale

situation
1:1000



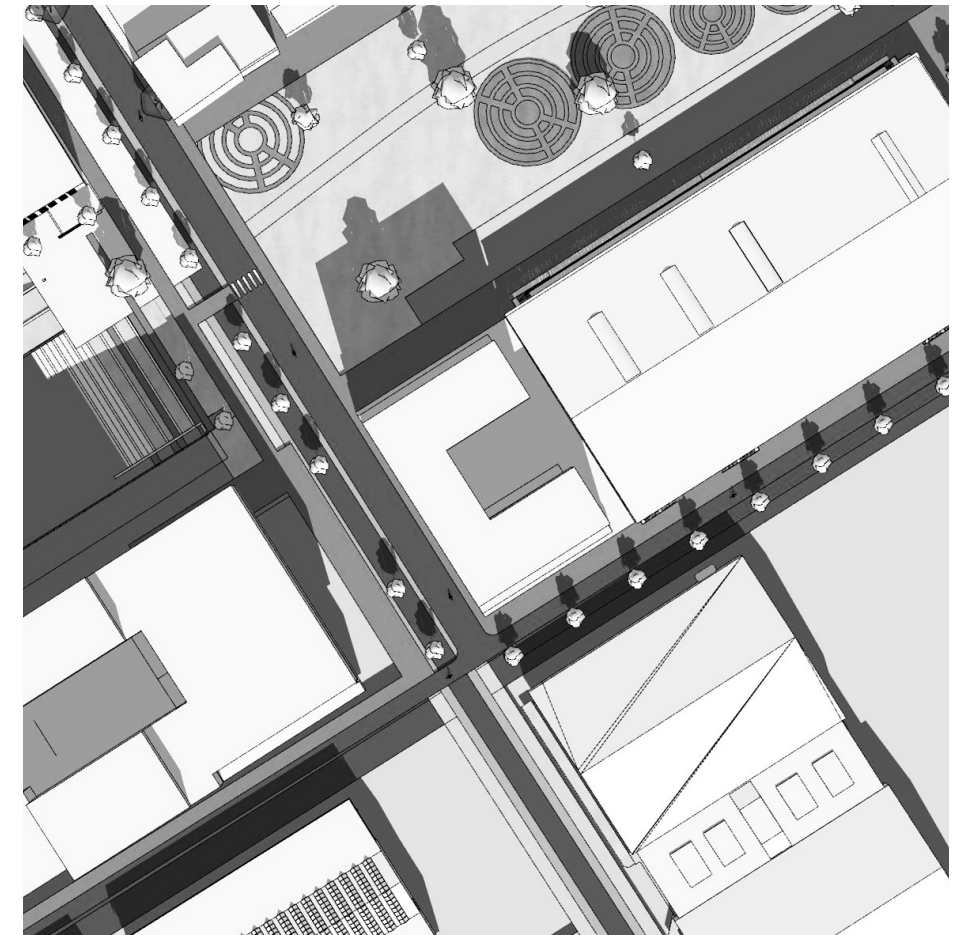
drawing **ground floor**
schale 1:500



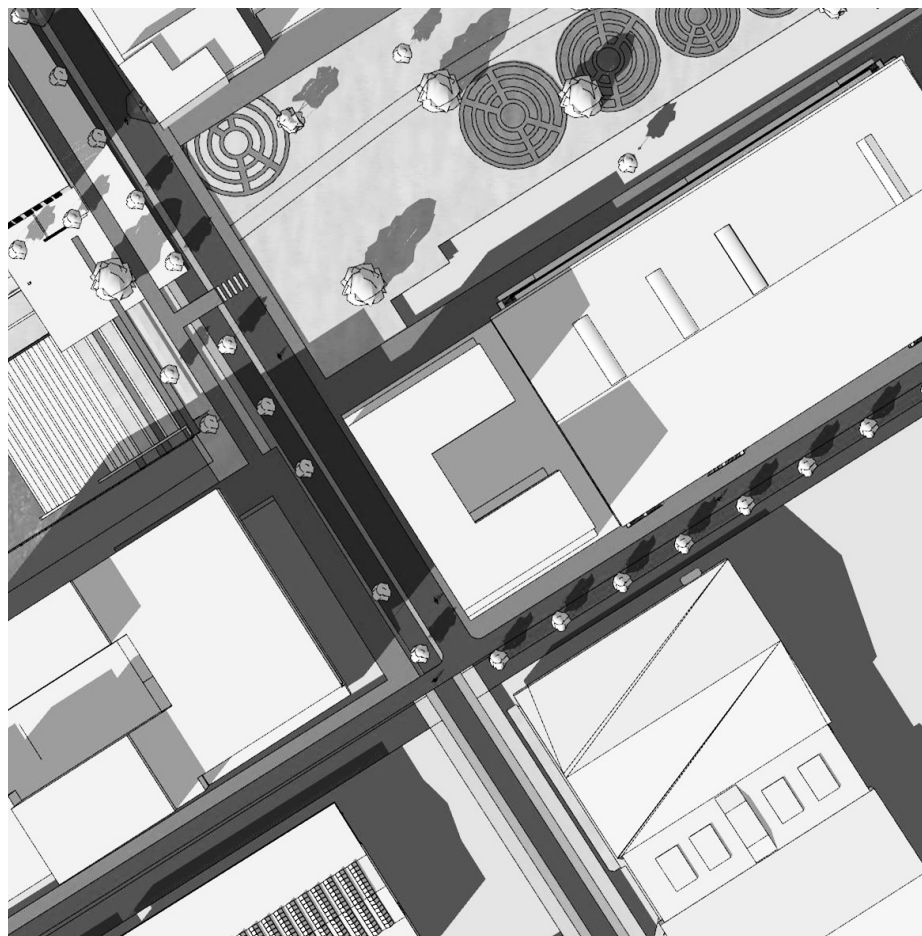
sunpath analysis



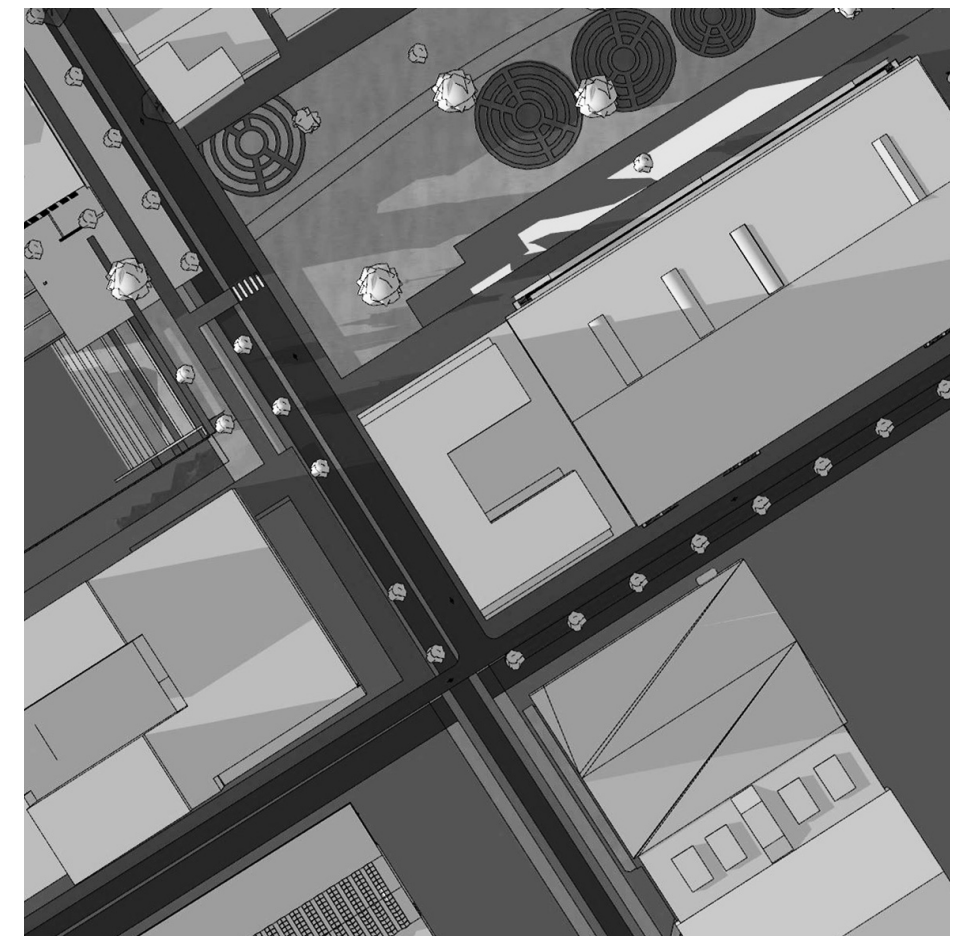
21/03 9:00u



21/03 12:00u

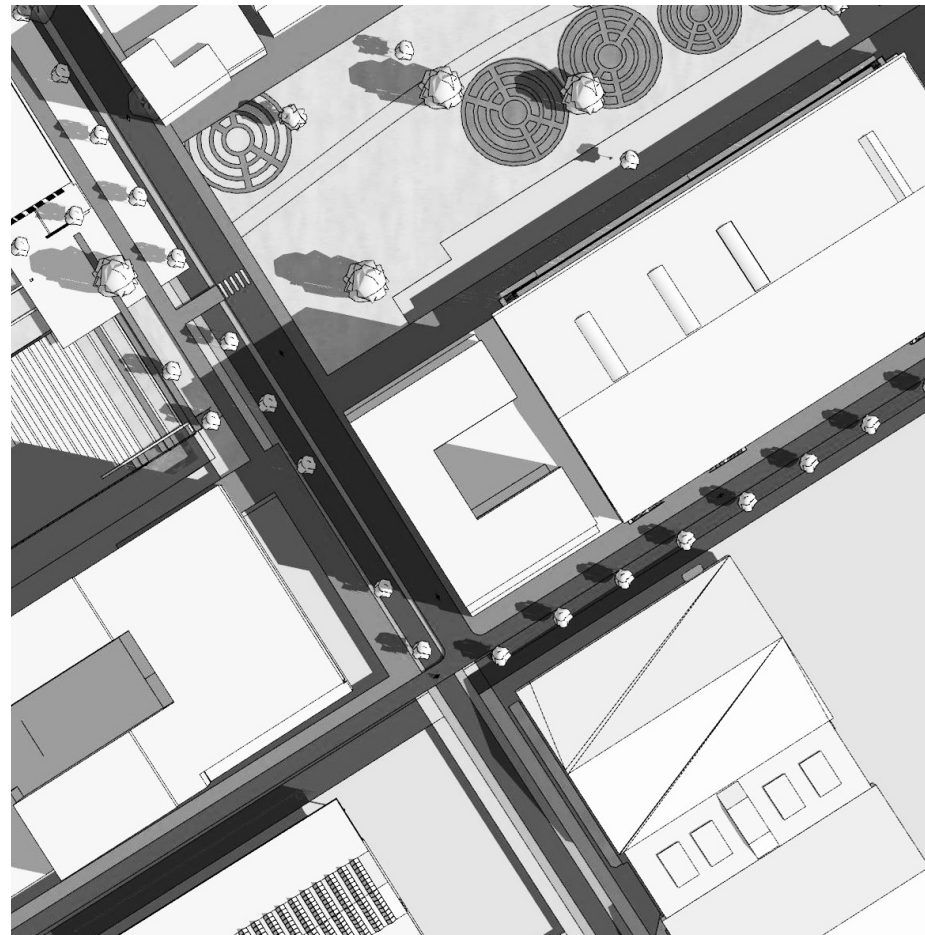


21/03 15:00u

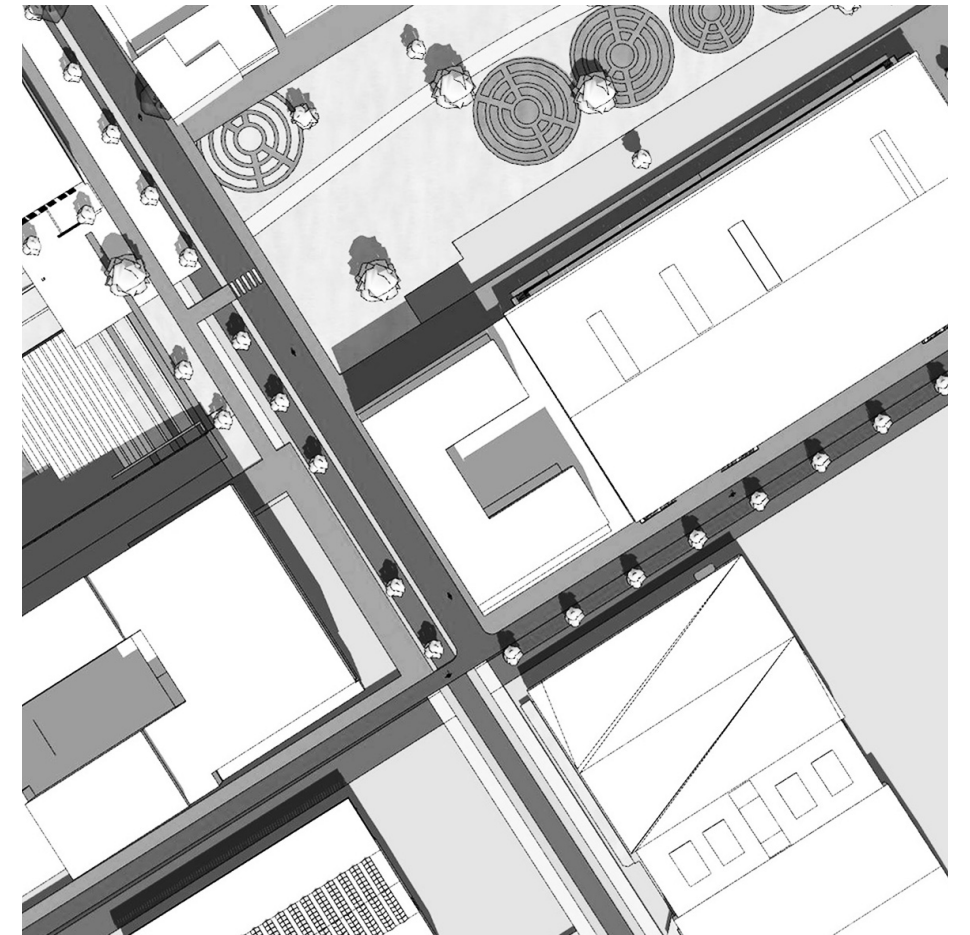


21/03 18:00u

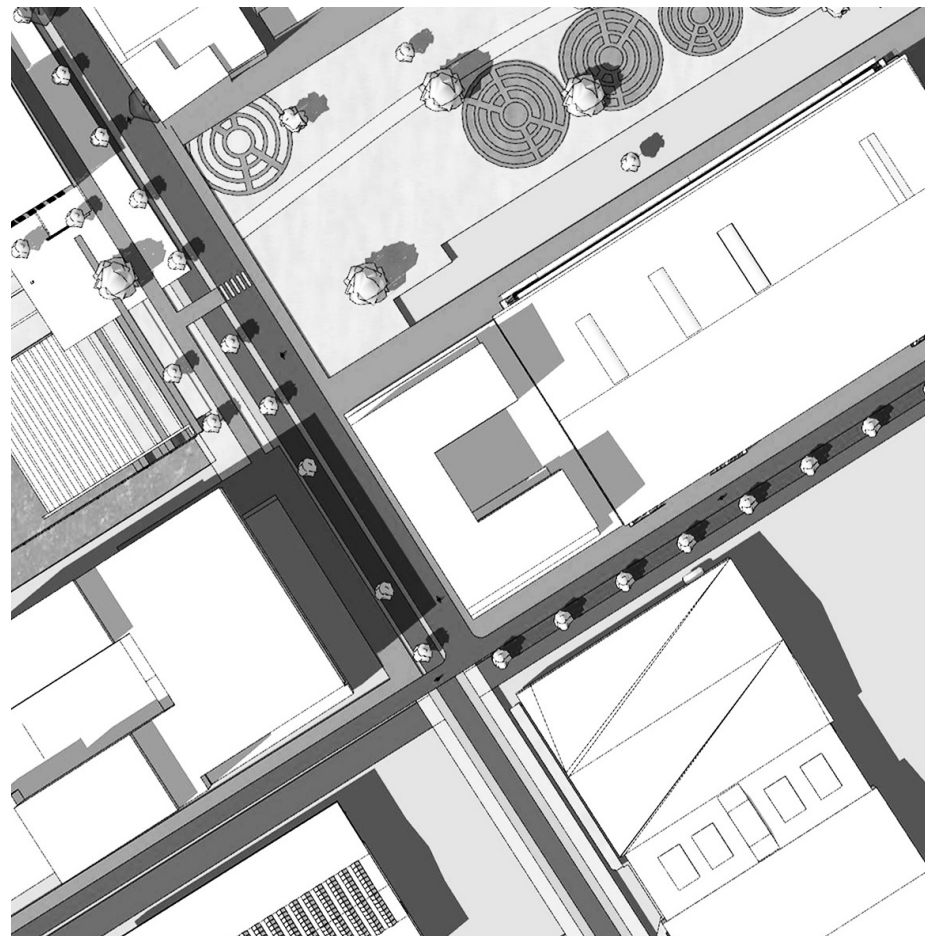
sunpath analysis



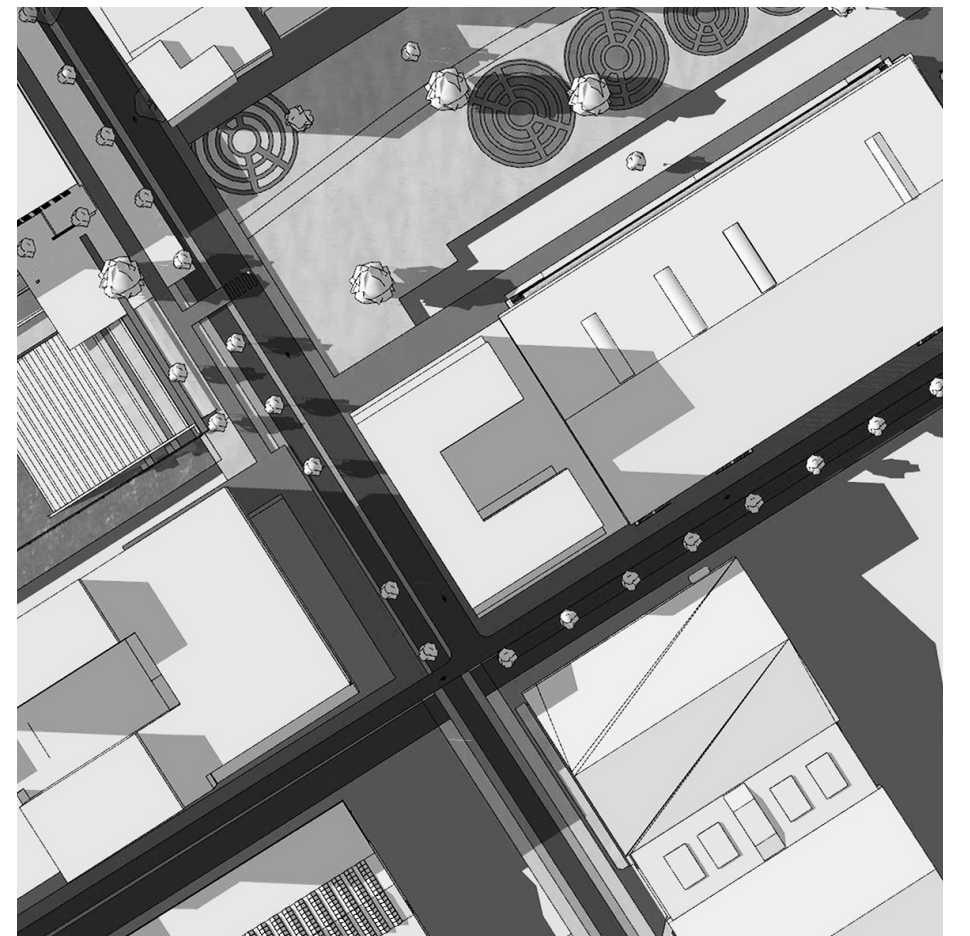
21/07 9:00u



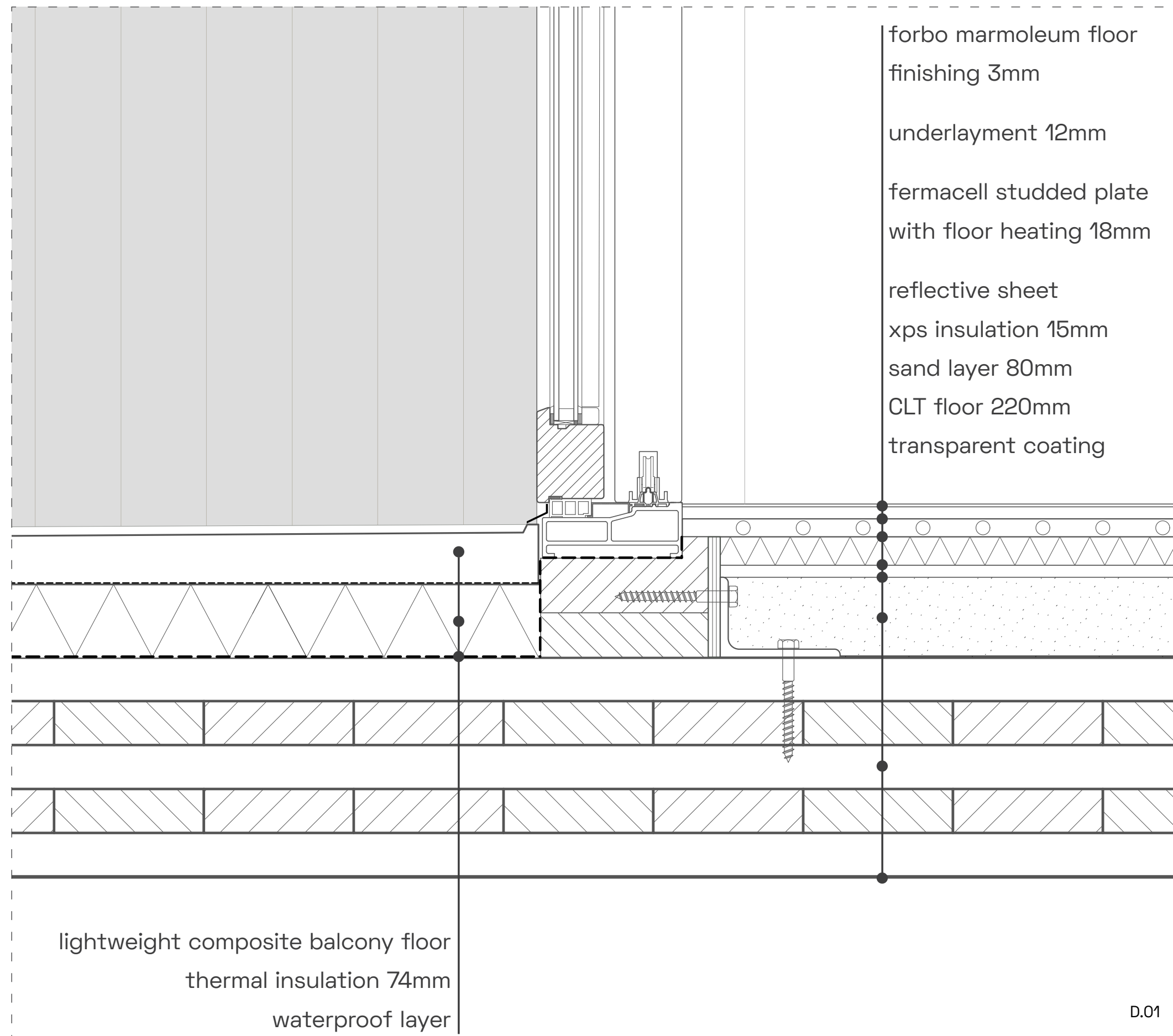
21/07 12:00u



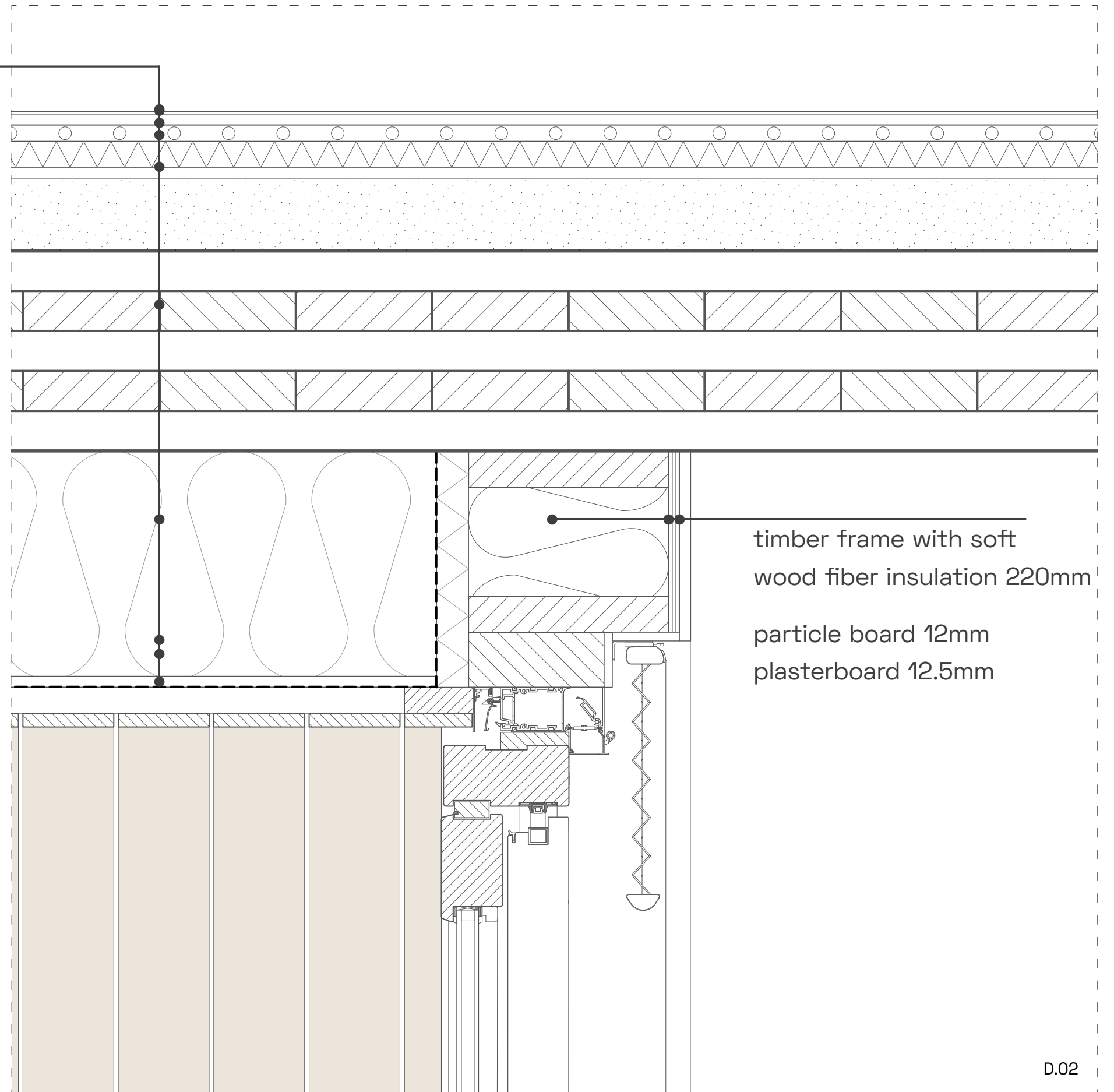
21/07 15:00u



21/07 18:00u



forbo marmoleum floor finishing 3mm
 underlayment 12mm
 fermacell studded plate with floor
 heating 18mm
 reflective sheeting
 xps insulation 15mm
 sand layer 80mm
 CLT floor 220mm
 wood fibre insulation 248mm
 waterproof layer
 timber construction 20x20mm
 wood cladding 15x100mm



timber frame with soft
 wood fiber insulation 220mm
 particle board 12mm
 plasterboard 12.5mm

D.02

aluform aluminium cassette 2mm
powdercoated in RAL7033

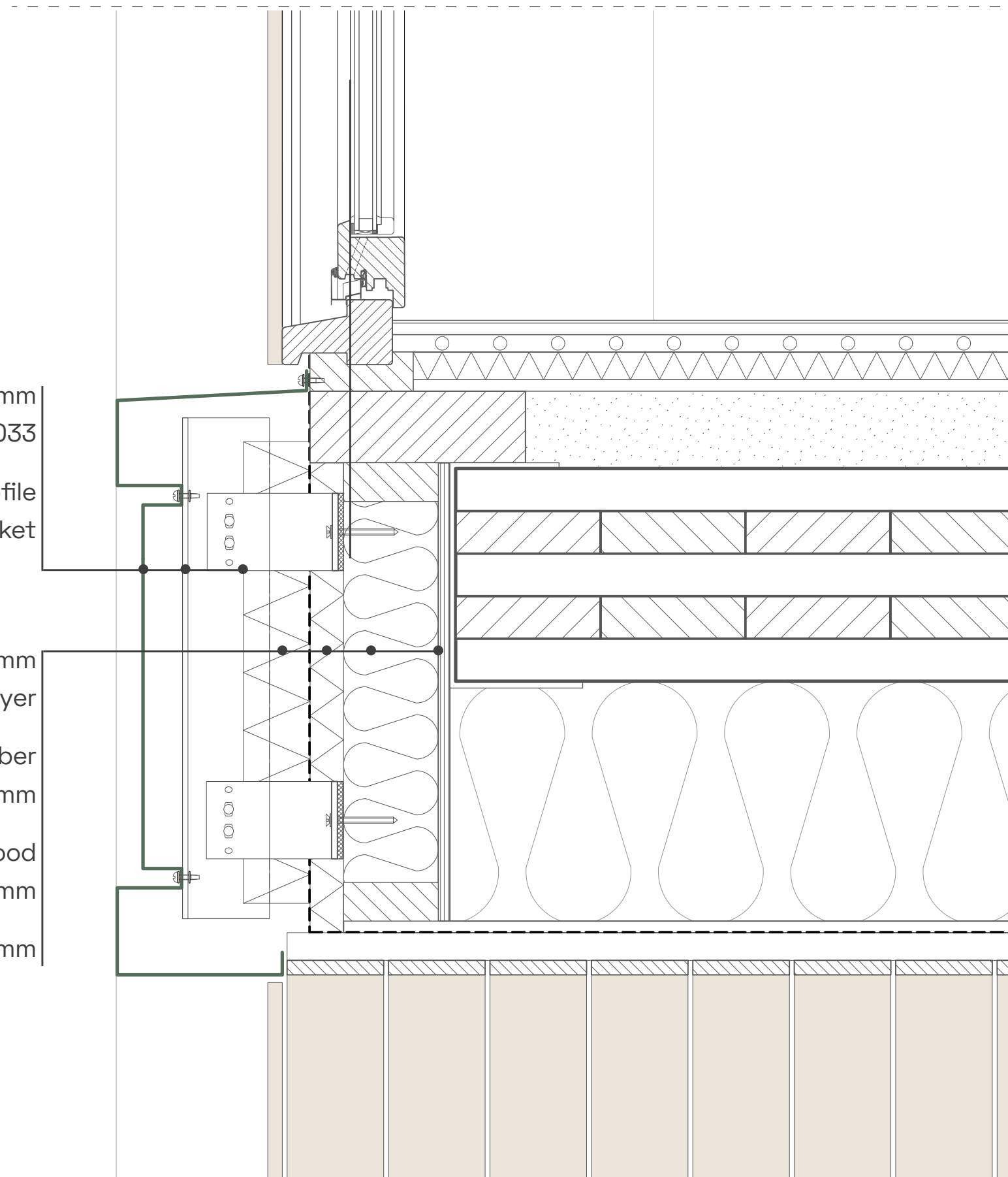
aluminium T-profile
steel clamping bracket

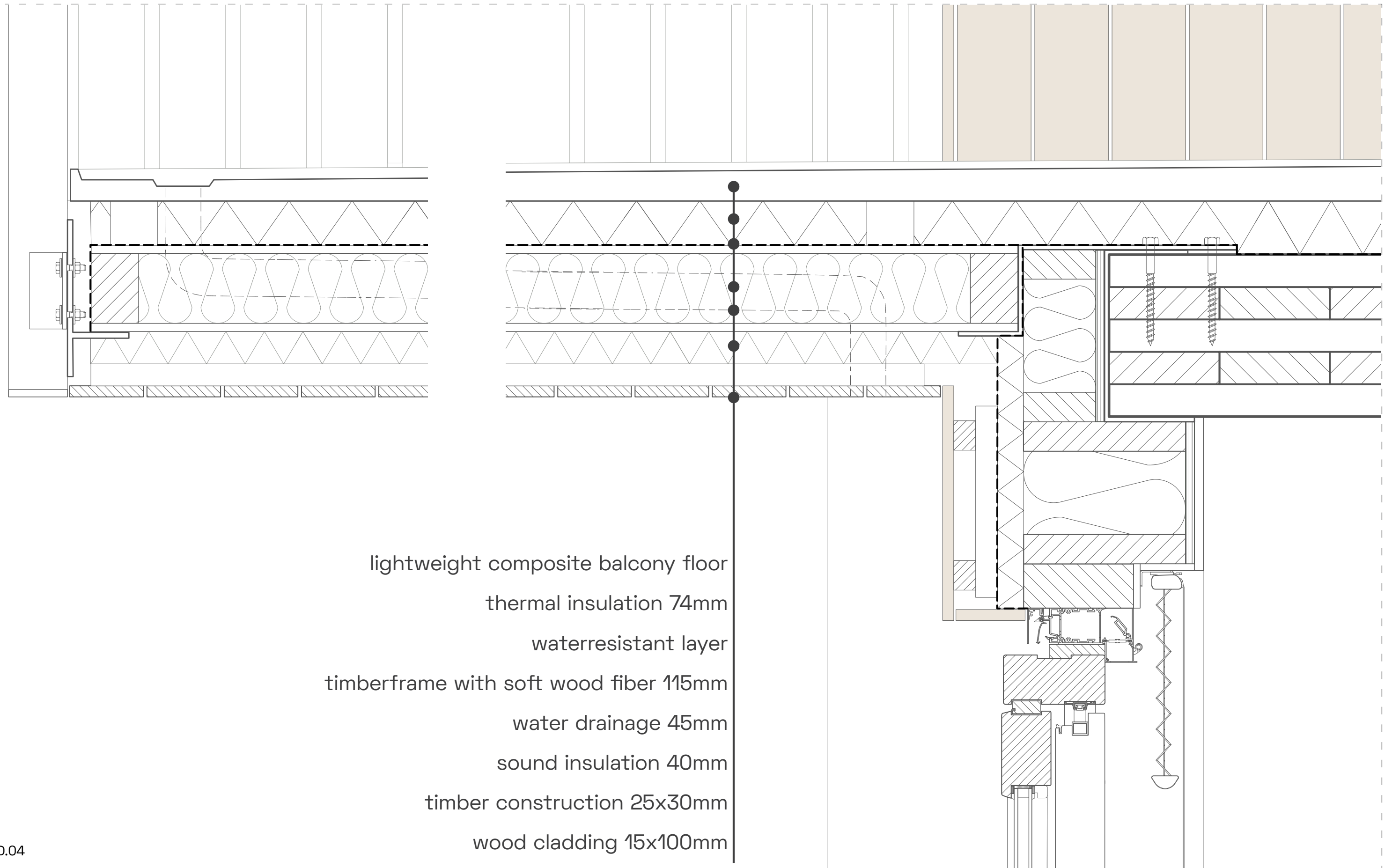
insulation in cassette 69mm
waterresistant layer

pressed wood fiber
insulation 35mm

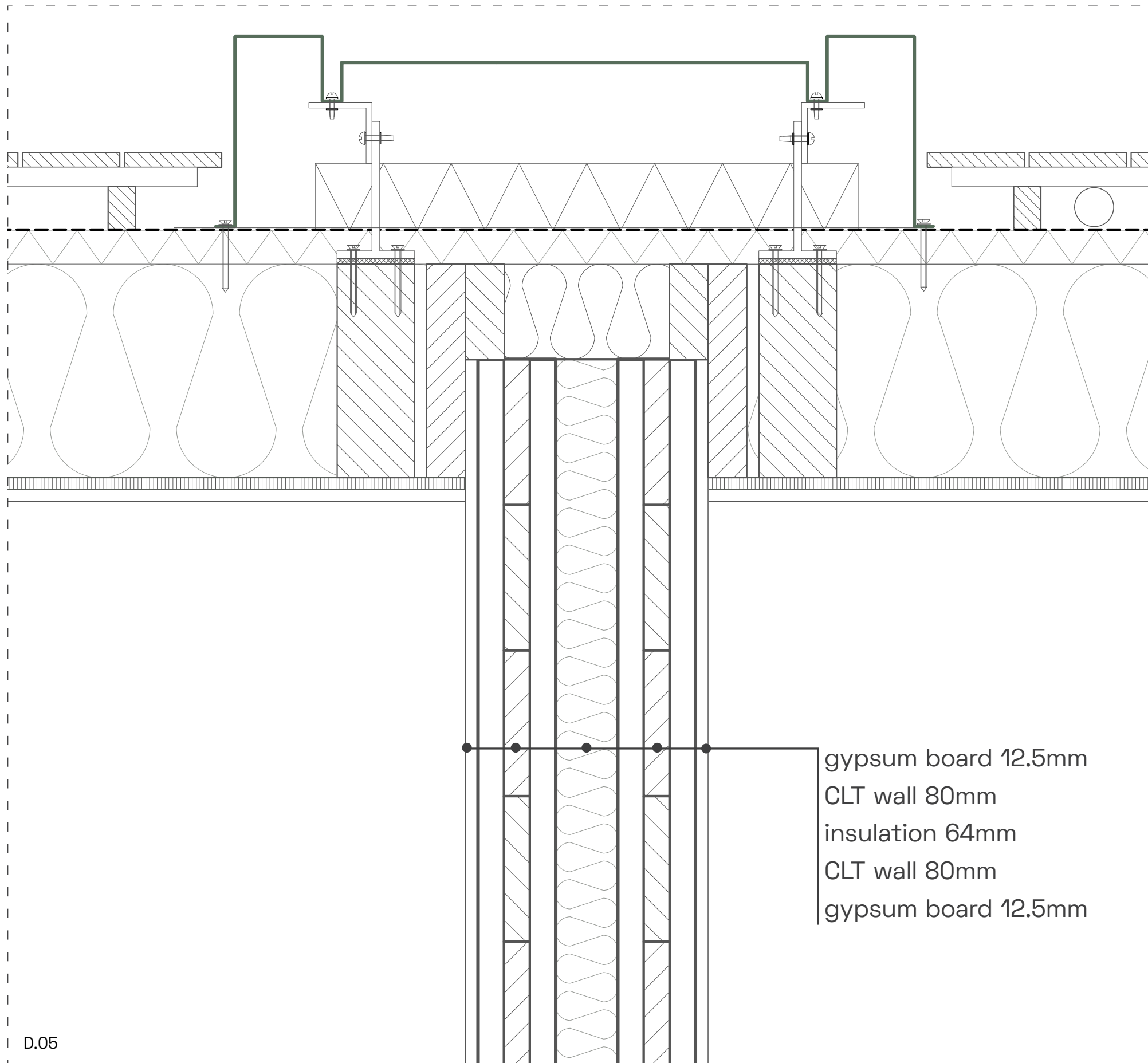
timberframe with soft wood
fiber insulation 100 mm

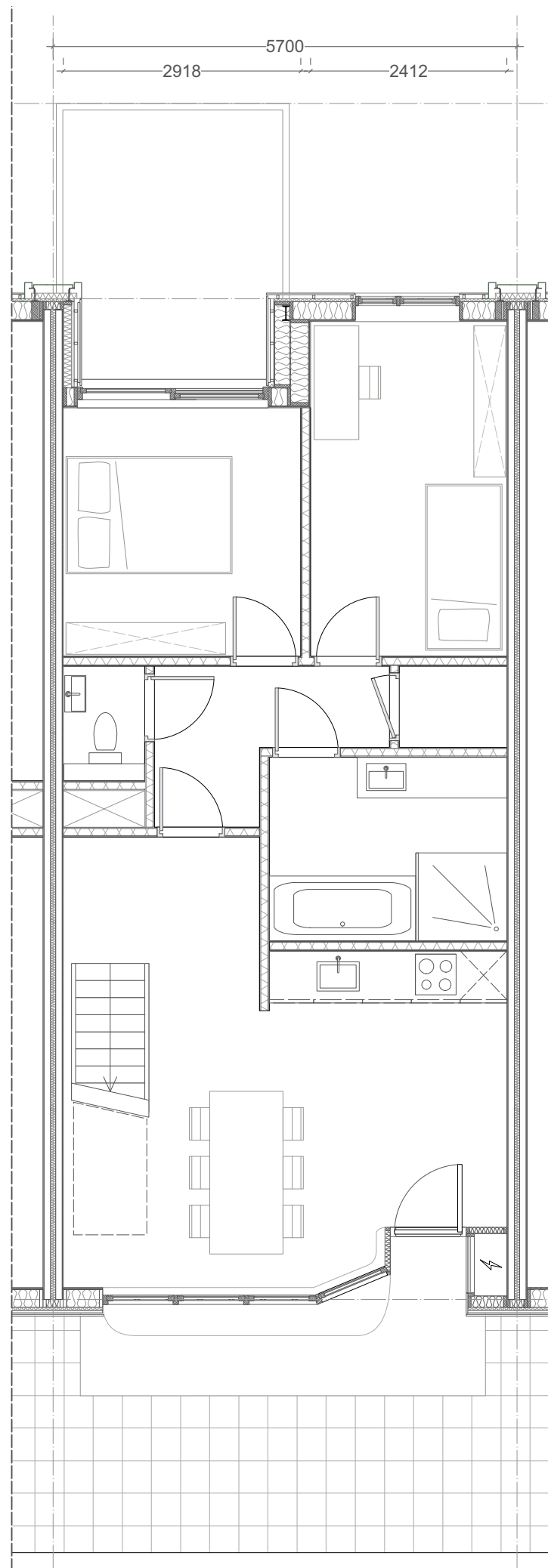
particle board 12mm



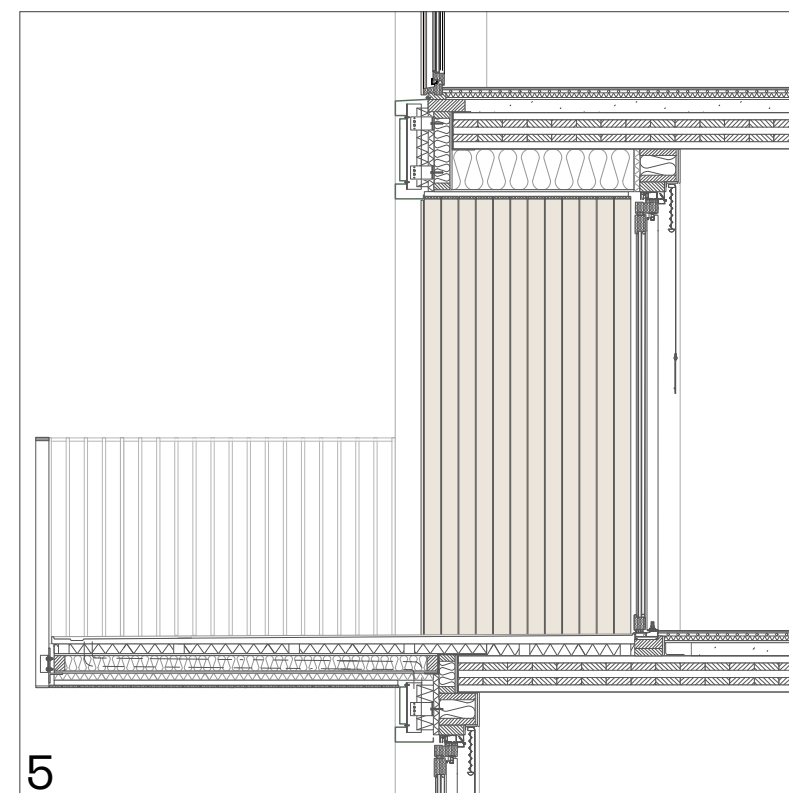
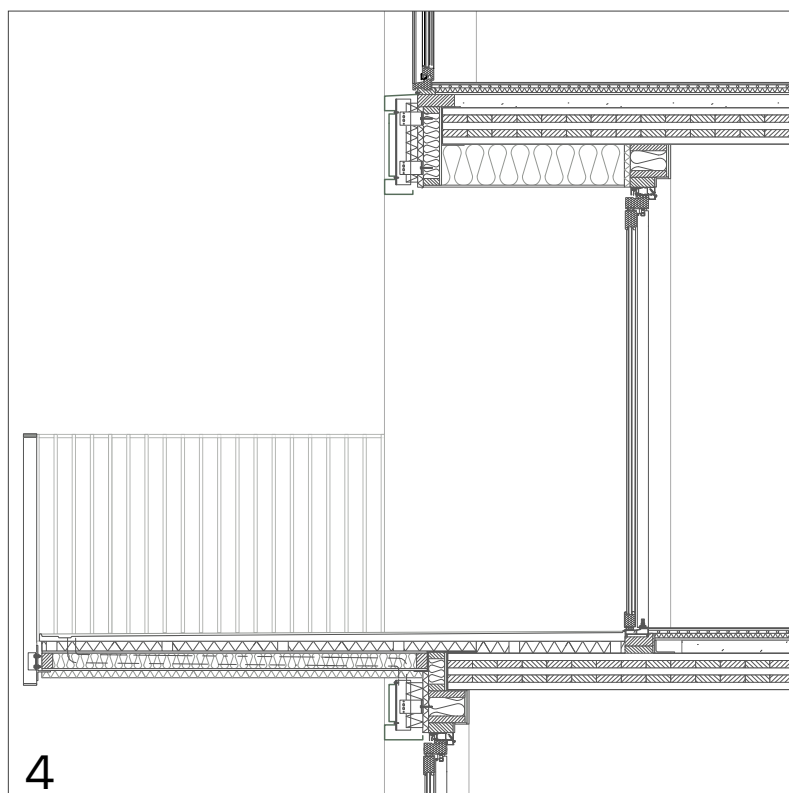
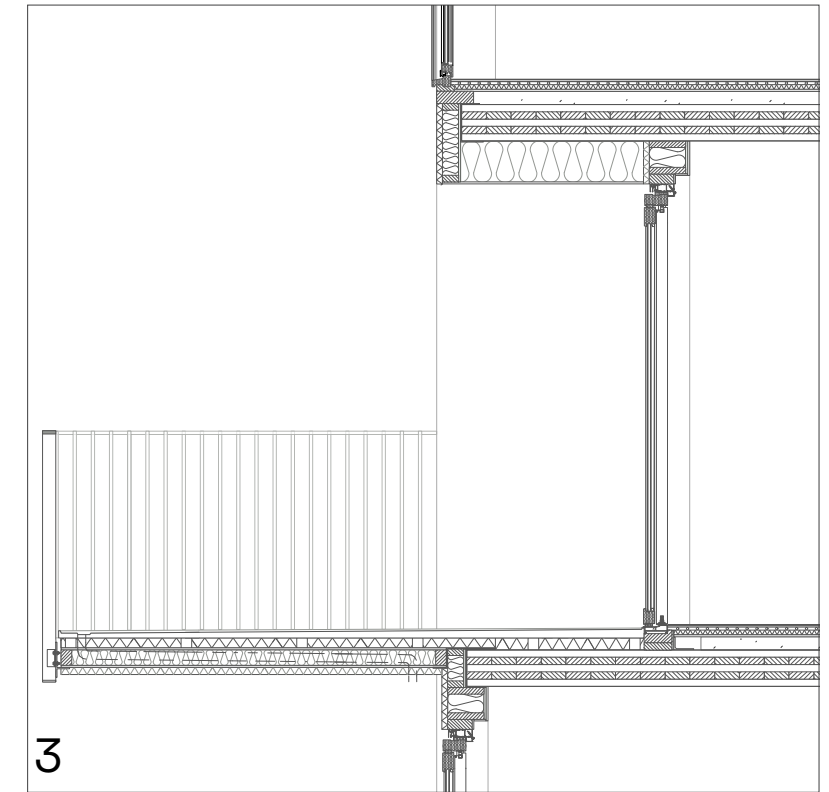
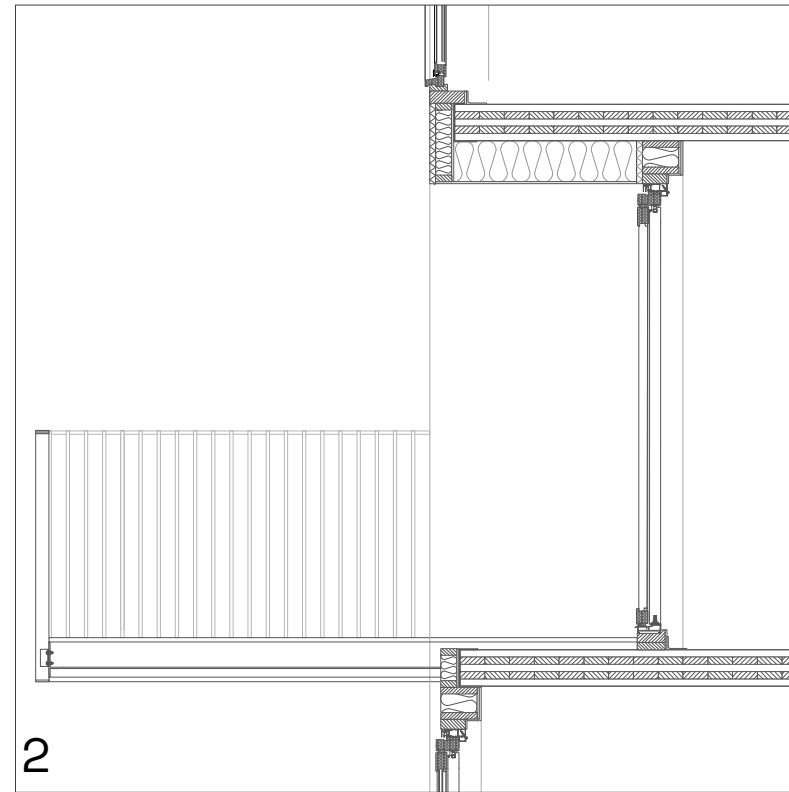
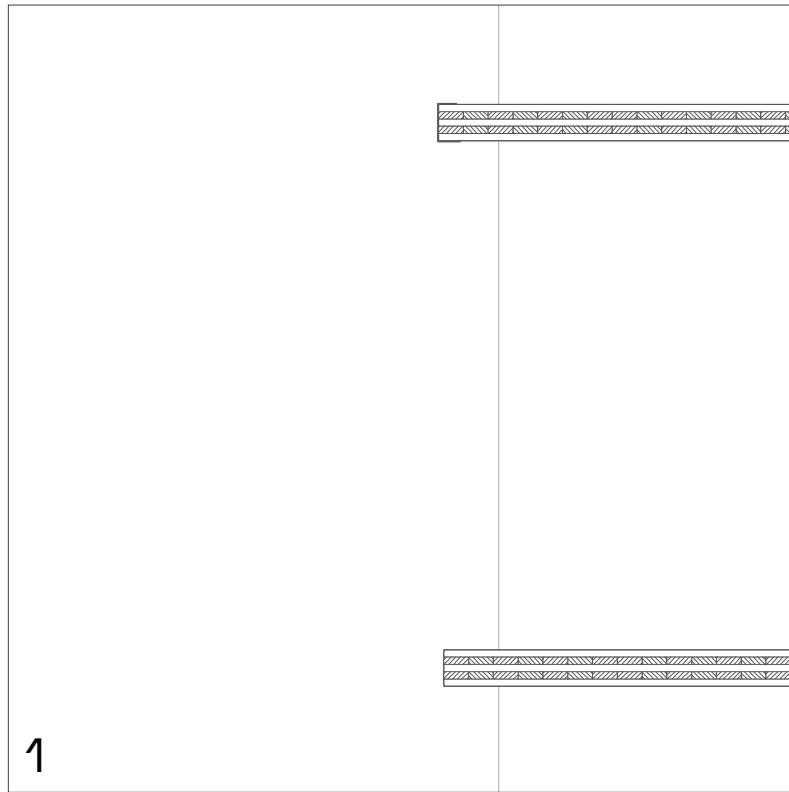


lightweight composite balcony floor
thermal insulation 74mm
waterresistant layer
timberframe with soft wood fiber 115mm
water drainage 45mm
sound insulation 40mm
timber construction 25x30mm
wood cladding 15x100mm





construction sequence

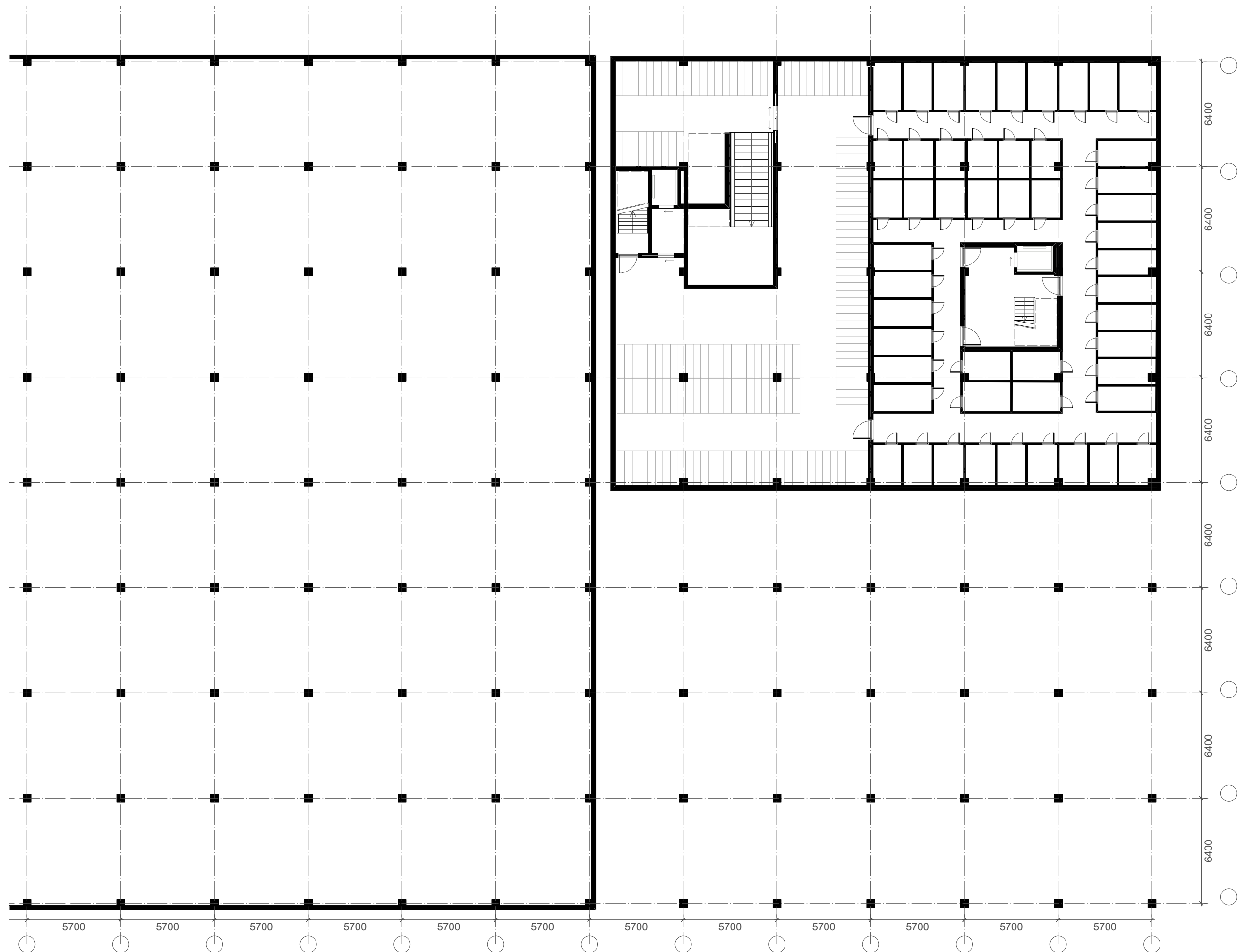


1. structural floors and walls (CLT)
- 2.1 balcony railing
- 2.2 timber frame facade
- 2.3 window frames
- 3.1 floor construction
- 3.2 balcony floor
- 4.1 facade finish: aluminium cassette
- 5.1 facade finish: wooden battens
- 5.2 interior wall and floor finish



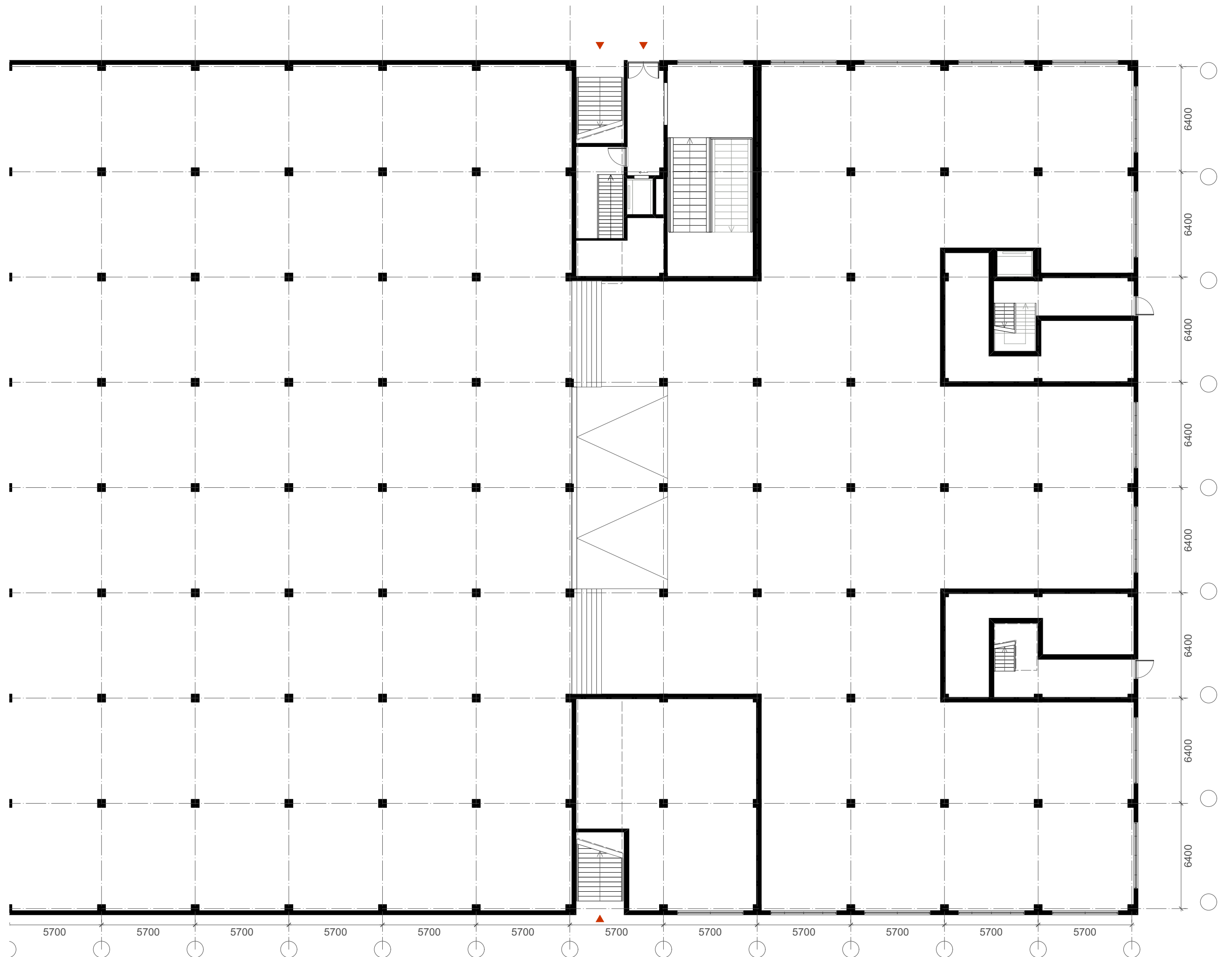
drawing
schale

basement
1:200



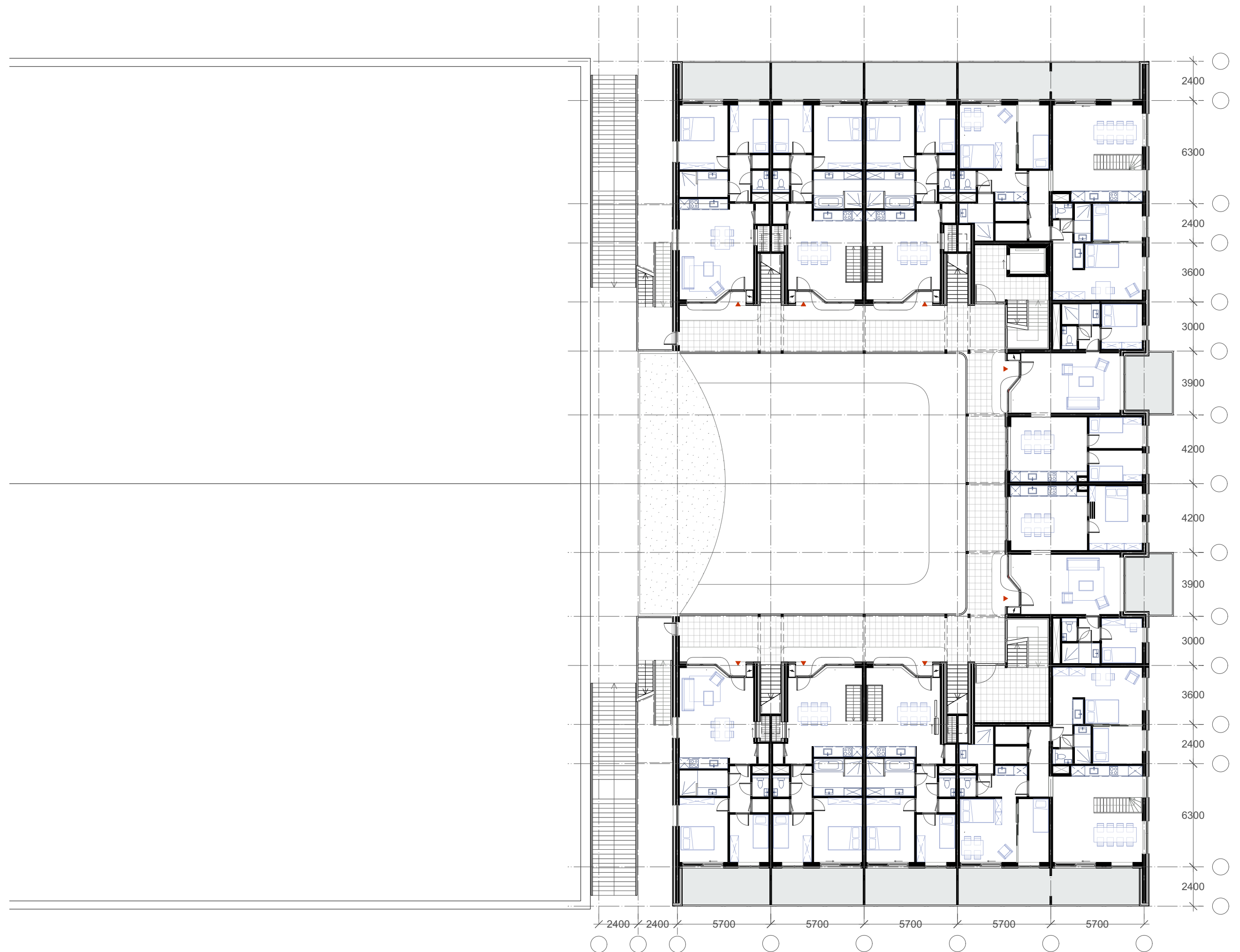
drawing
schale

ground floor
1:200



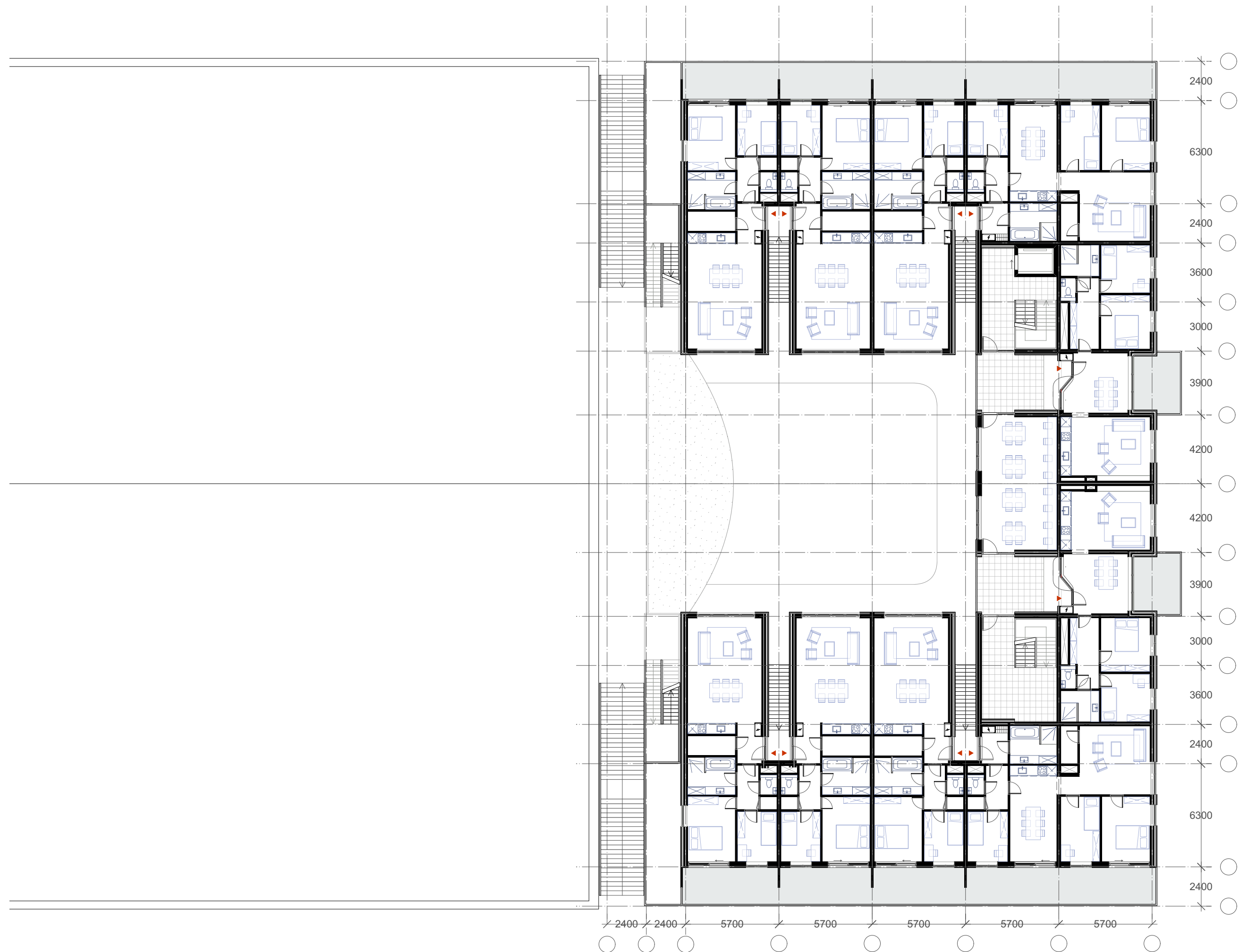
drawing
schale

second floor
1:200

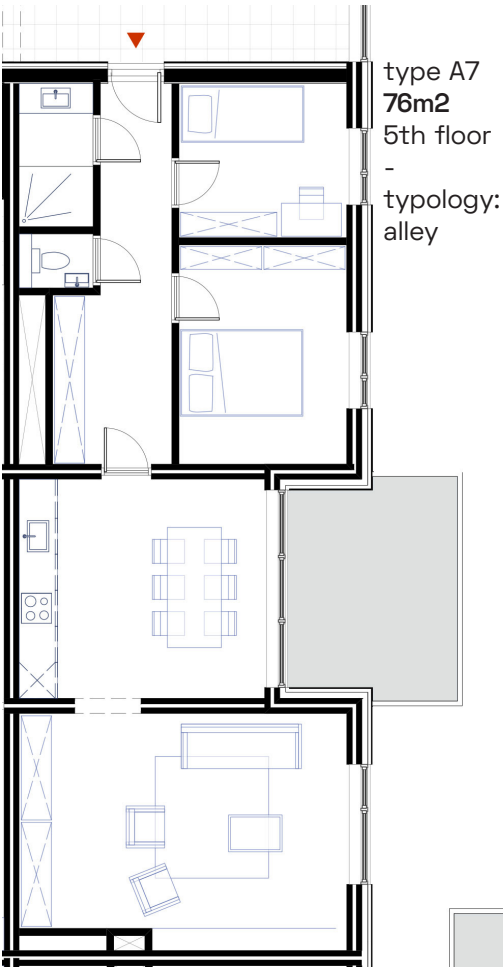
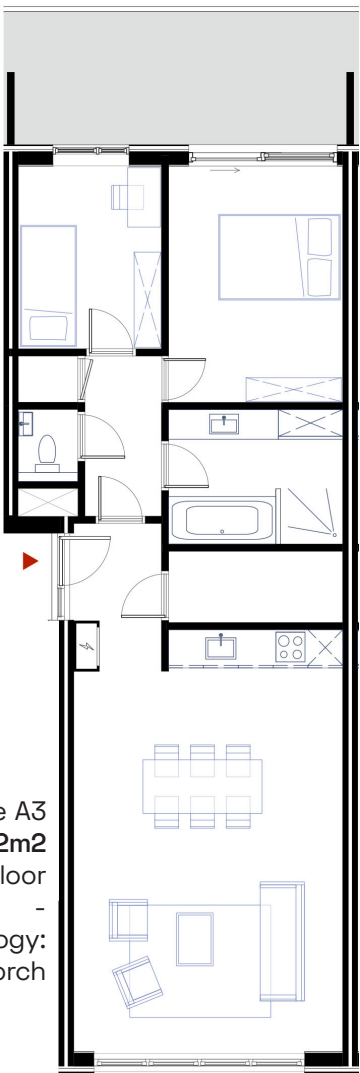
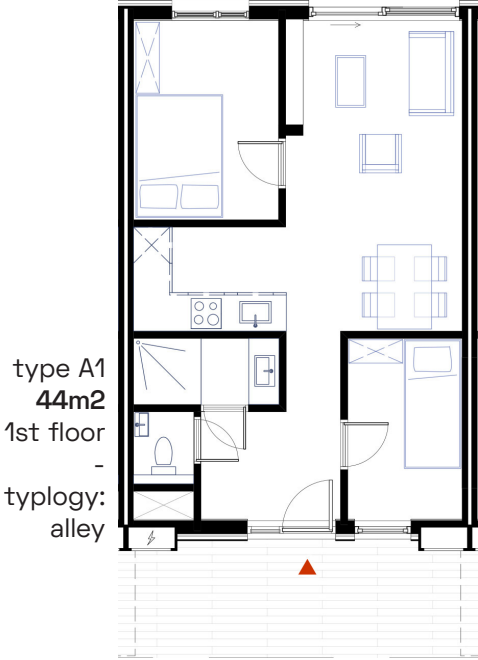


drawing
schale

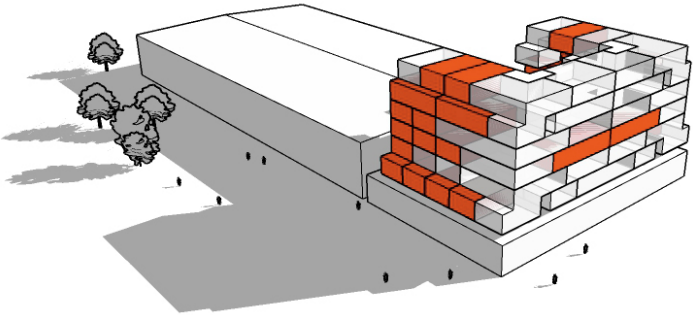
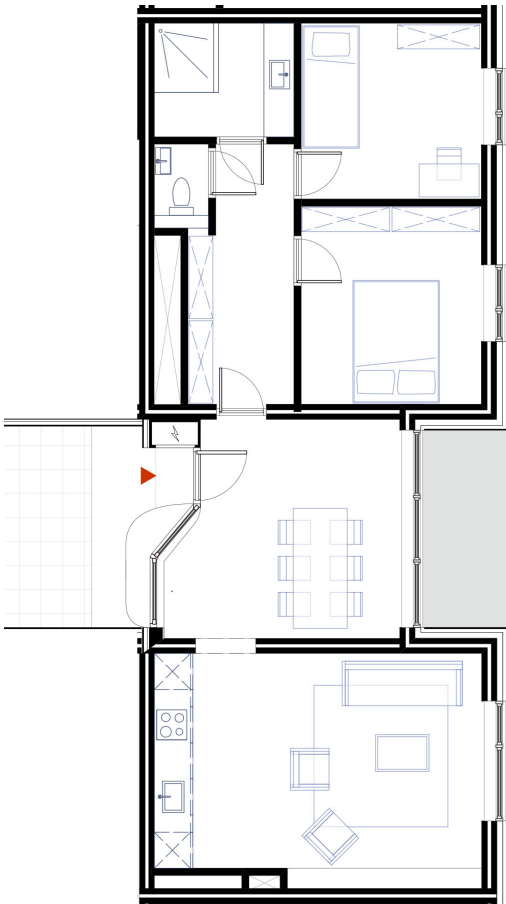
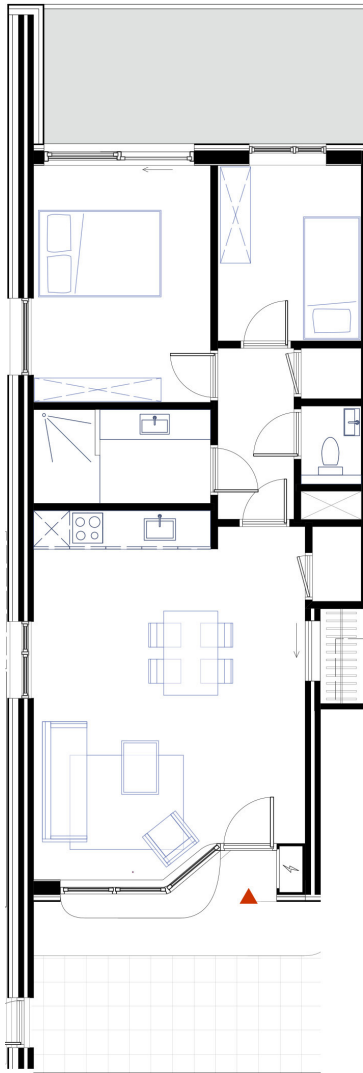
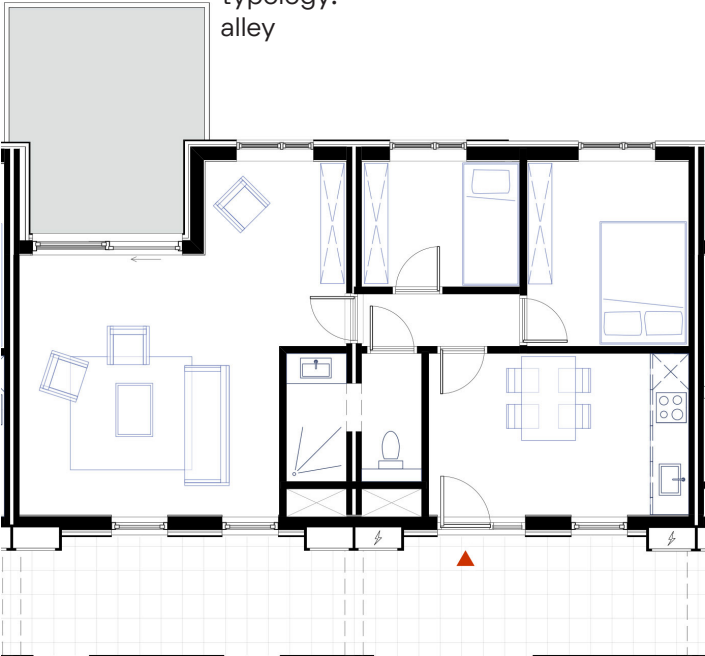
third floor
1:200



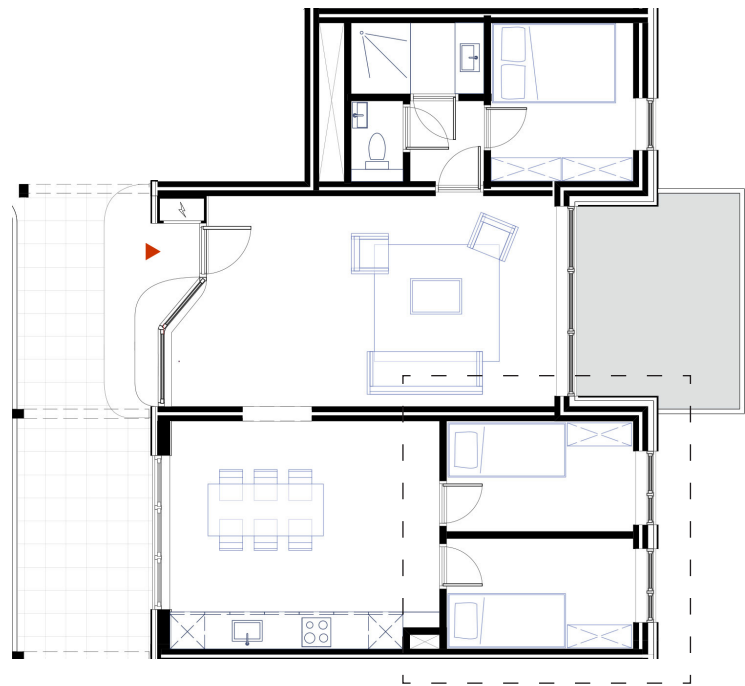
Category A
two bedrooms



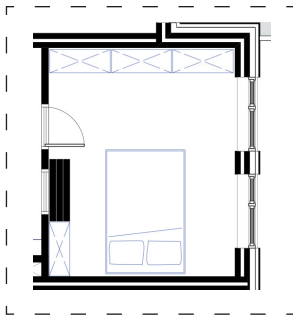
type A6
60m2
5th floor
-
typology: alley



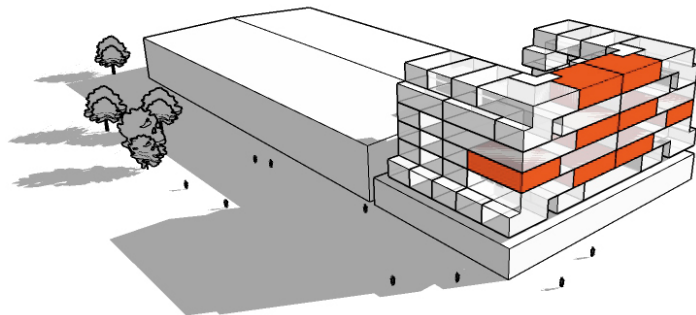
Category B
three bedrooms



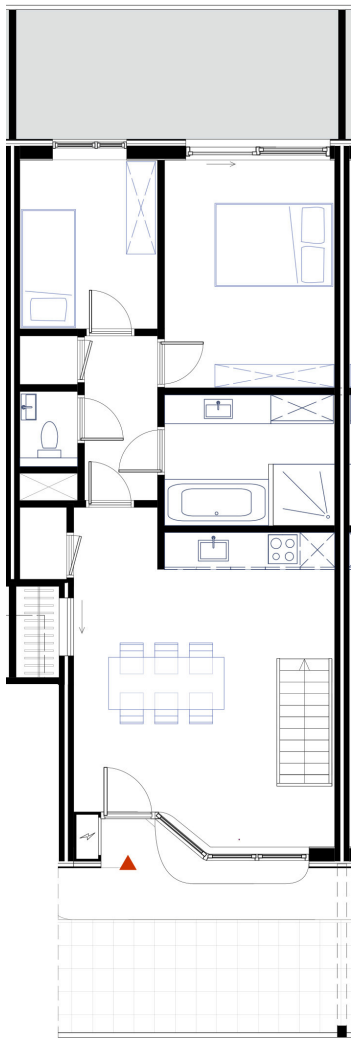
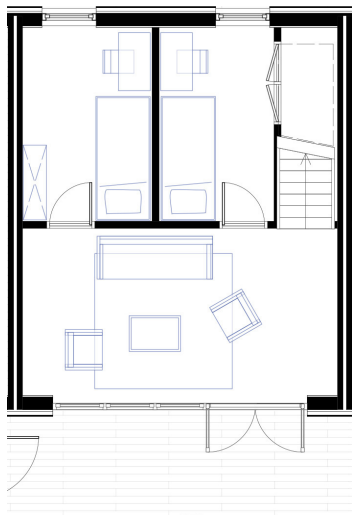
type B1
71m²
2nd, 4th, 6th floor
-
typology:
sidewalk



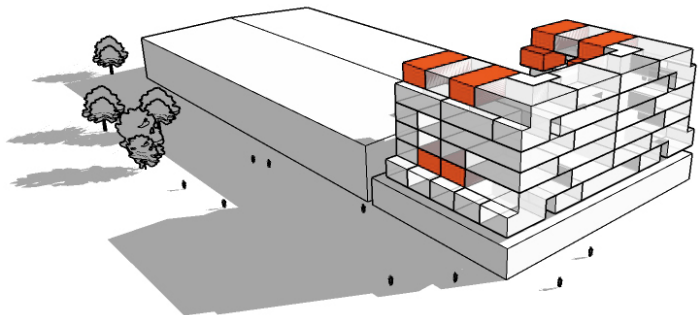
type B2
90m²
3rd floor
-
typology:
porch



Category C
four bedrooms



type C1
94m²
2nd, 6th floor
-
typology:
sidewalk



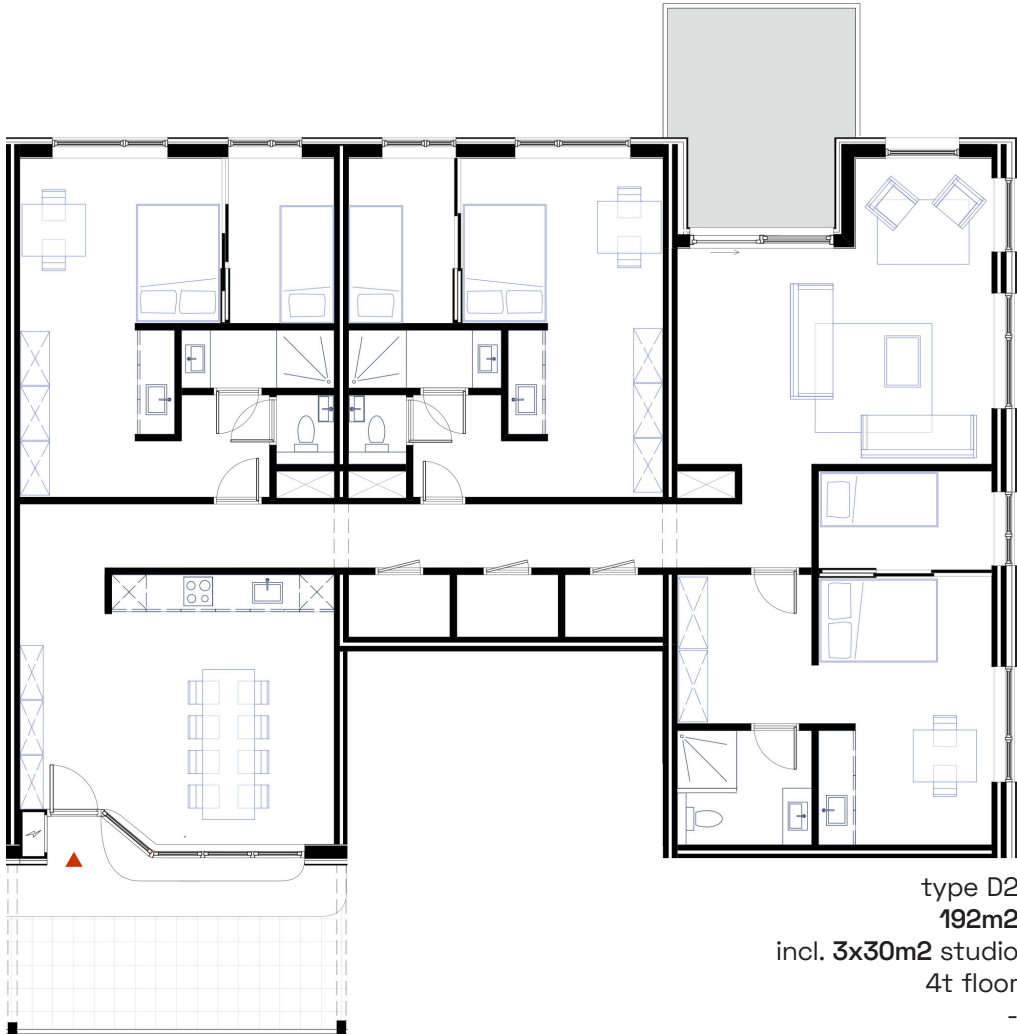
Category D
temporary housing

shared living room and kitchen

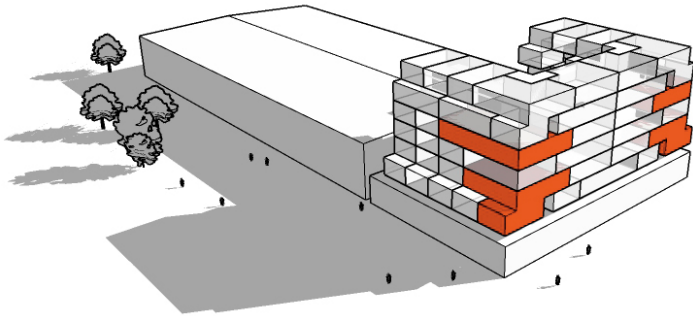
individual studios with bathrooms and
counter



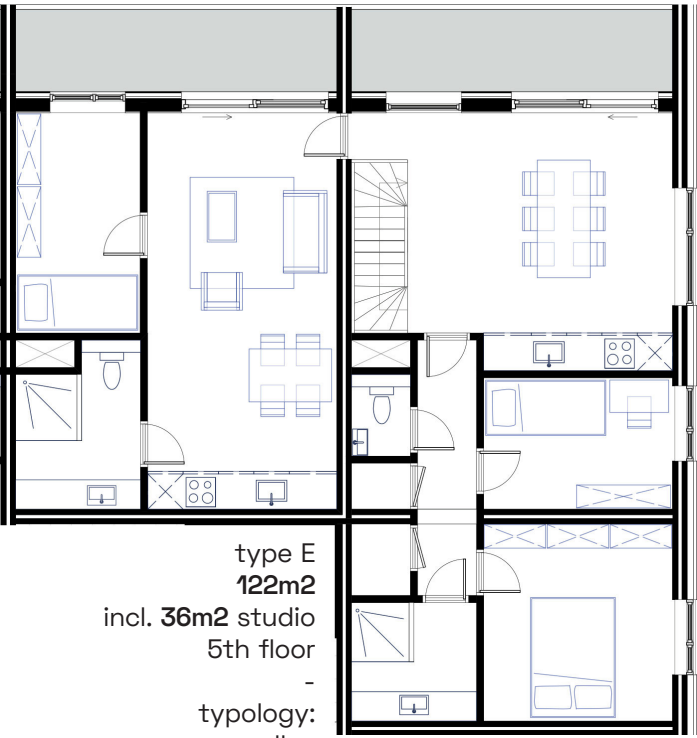
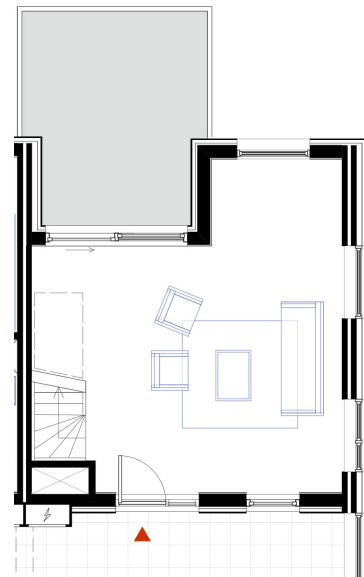
type D1
159m²
incl. 3x32m² studio
1st floor
-
typology:
alley



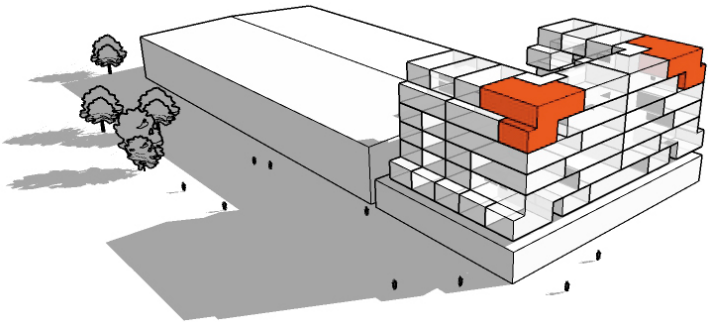
type D2
192m²
incl. 3x30m² studio
4th floor
-
typology:
sidewalk



Category E
two bedrooms
+ internal studio



type E
122m2
incl. 36m2 studio
5th floor
-
typology:
alley





type B2
three bedroom appartement

90m2
3rd floor
-
outdoor typology:
porch

