

**P5 Presentation Dutch Housing Studio**

Emelie Swart

**BETTER TOGETHER.**

A new residential program for the new middle income  
family in Amsterdam



## **Index**

Research & findings

Concept

Context & Masterplan

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Definitive design

Building technology

## **Challenge of the studio**

### **“Between standard and ideals”**

How do we want to live in the future  
and what kind of buildings do we need to make that  
possible?

## Research Question:

„How can affordable housing for the middle income family in the Minervahaven of Amsterdam be realized according to their specific needs?“



## Research Question:

What are the wishes of urban families with regard to the appearance of the building block in which they live?

How can different types of family households be housed in one building block?

How can social control on the communal outdoorspace be stimulated with architectural elements?



## **Design Challenge**

How to provide a highly urban residential building with suitable housing for different types of urban families, in which they could live independently and participate in the community life?

## Target Group: Urban Families

# Hoe de Amsterdamse middenklasse in de knel raakte

Terwijl Amsterdam floreert, zit de middenklasse in de knel. Op Prinsjesdag zal het kabinet financiële hulp bieden, maar dat is niet genoeg. 'Alle pilaren wankelen onder het bestaan van de middenklasse.'

**Jong gezin verruilt stad vaker voor goedkopere randgemeente - vooral Amsterdammers trekken weg**

# 'Tekort huizen in Amsterdam voor middeninkomens'

Amsterdam zit op slot voor mensen met middeninkomens. Dat zegt Willem Boterman, sociaal-geograaf aan de UvA, die onderzoek deed naar deze groep in de hoofdstad. Het tekort aan mensen in deze groep is volgens de sociaal-geograaf problematisch, meldt [Het Parool](#).



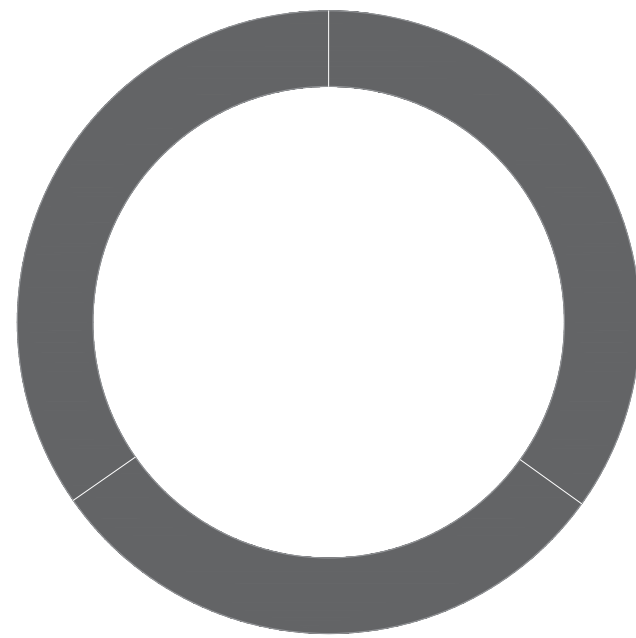
**Meer jonge gezinnen verlaten de stad**

## Research: rental price development



Housing stock: CBS



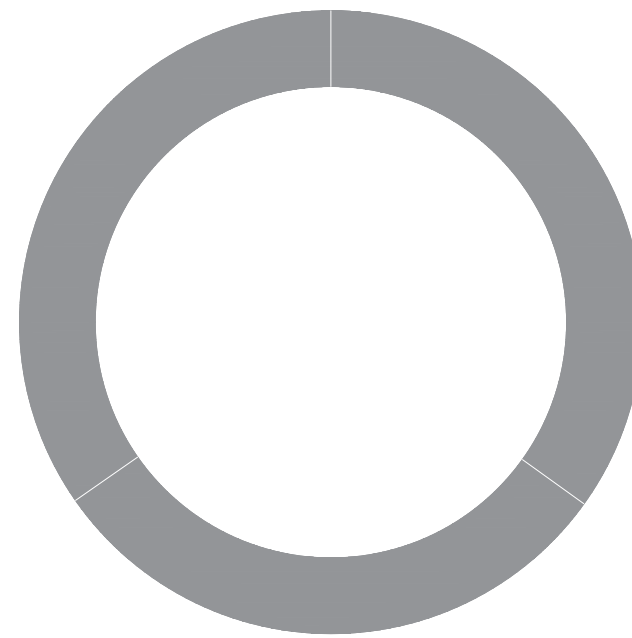


## **Social**

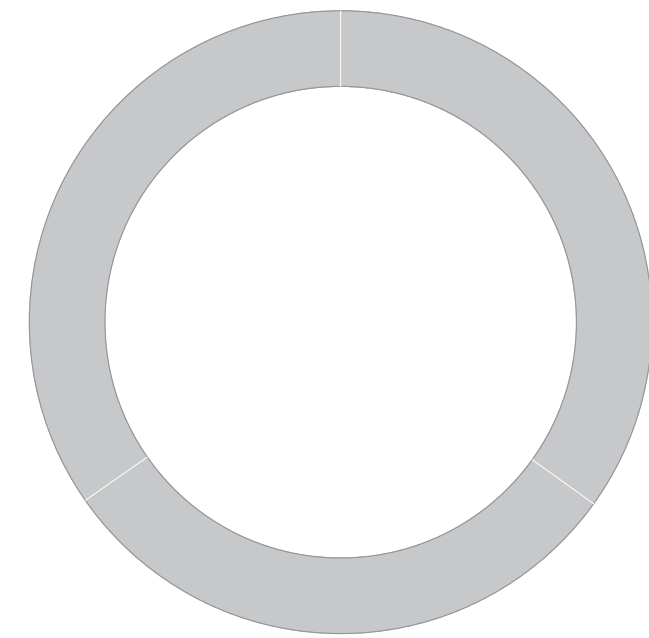
Life with like minded  
people

Have work-relations on  
close distance

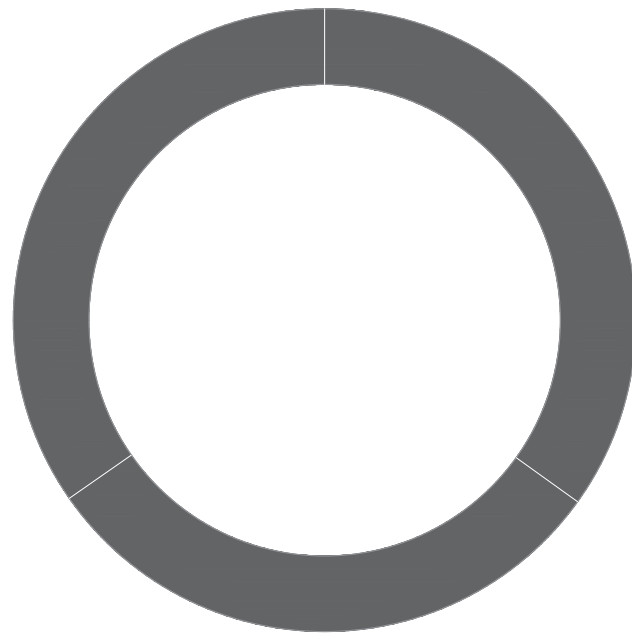
Need social relations for  
children



## **Economic**



## **Symbolic**

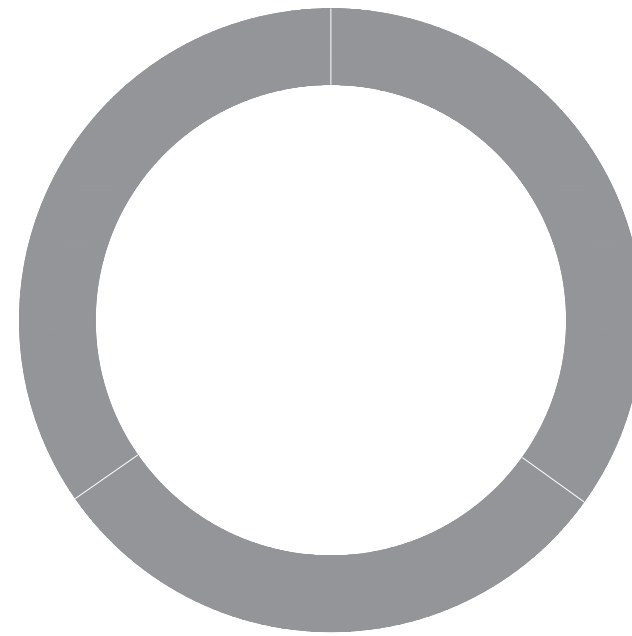


## **Social**

Life with like minded people

Have work-relations on close distance

Need social relations for children

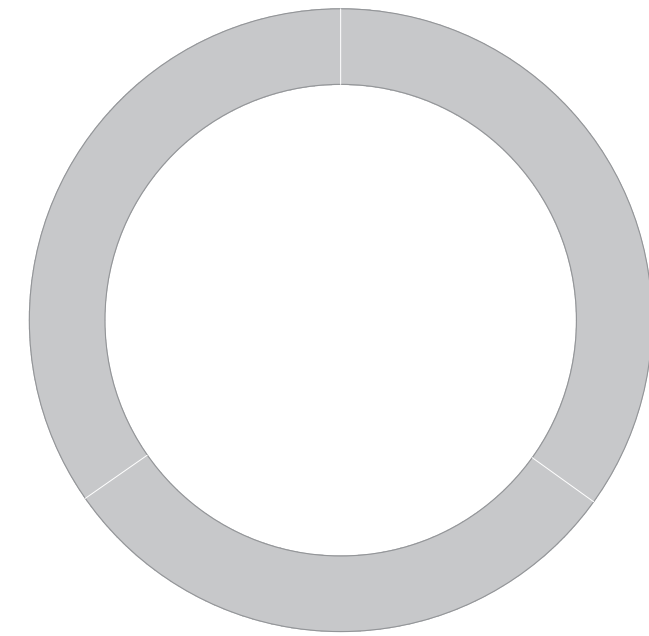


## **Economic**

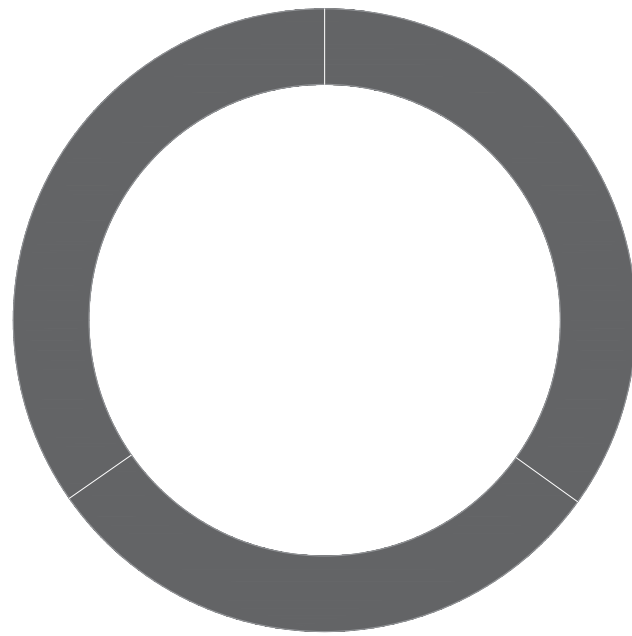
Proximity of functions in time and space

Cultural activities close by

Work on close distance



## **Symbolic**

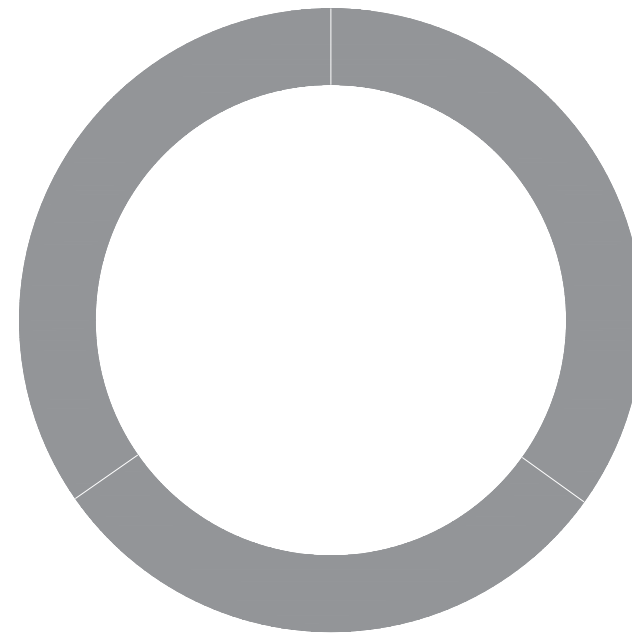


## **Social**

Life with like minded people

Have work-relations on close distance

Need social relations for children

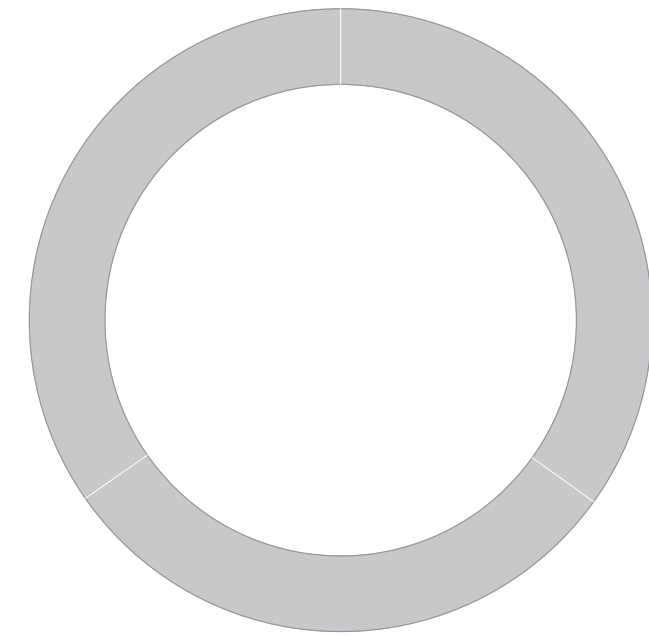


## **Economic**

Proximity of functions in time and space

Cultural activities close by

Work on close distance



## **Symbolic**

Personal identification with the location

Identifiability with the building itself

Distinguish in urban life

## Target Group

Nuclear Families

Single Households

Patchwork Families



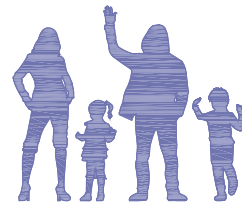
2-4 children that need  
suitable outdoor space

Work and living should  
be separated

Enough storage space

## Target Group

### Nuclear Families



2-4 children that need  
suitable outdoor space

Work and living should be  
separated

Enough storage space

### Single Parents



1 or two children who  
differ in residence

Low financial support

Low social support

### Patchwork Families

## Target Group

### Nuclear Families



2-4 children that need  
suitable outdoor space

Work and living should be  
separated

Enough storage space

### Single Parents



1 or two children who  
differ in residence

Low financial support

Low social support

### Patchwork Families



Need communal  
functions and the share of  
burdens (cooking- daycare  
for children etc)

Need enough space and  
privacy in the house

## Extra Aspects Families

### Support

Modern families need to be with **like-minded families** who are in the same situation

Modern families have often **different priorities** and **social needs**

Modern families want to create a **new stable environment** for their children

Modern families need more **flexible/private** space to organise the new social structure

## Summary

Focus on **flexible private** dwellings  
between 50 and 120 m<sup>2</sup>

Focus on communal dwellings between 90-  
180 m<sup>2</sup>

The **work-living balance** for parents is the  
starting point of the design

Provide the building with enough and  
suitable **outdoor space** for young children  
to play safely

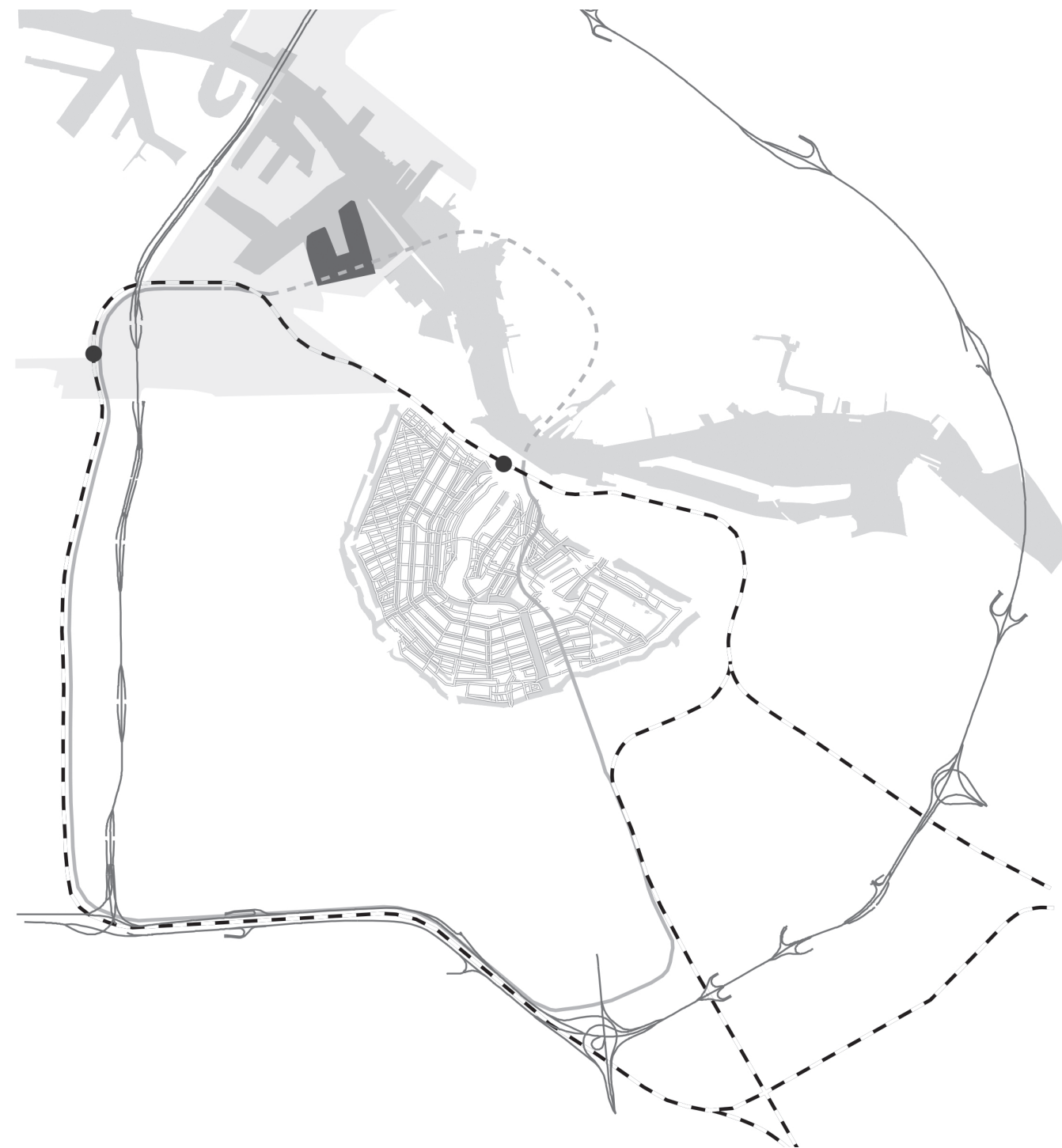
Provide support for modern (patchwork)  
families by introducing **communal units**,  
collective spaces and public functions in the  
building



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Overview

## Location: The Minervahaven



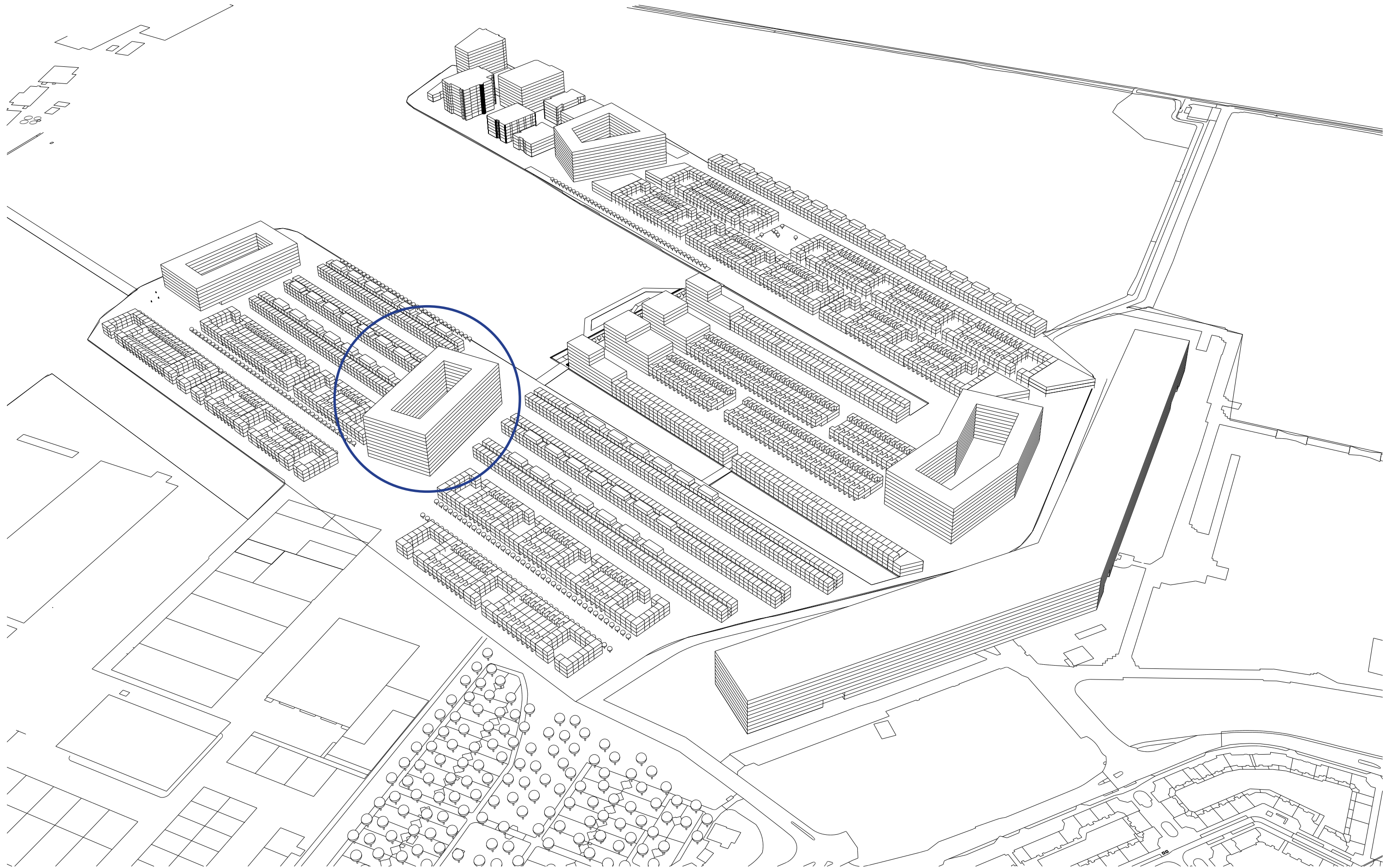


## Location: The Minervahaven

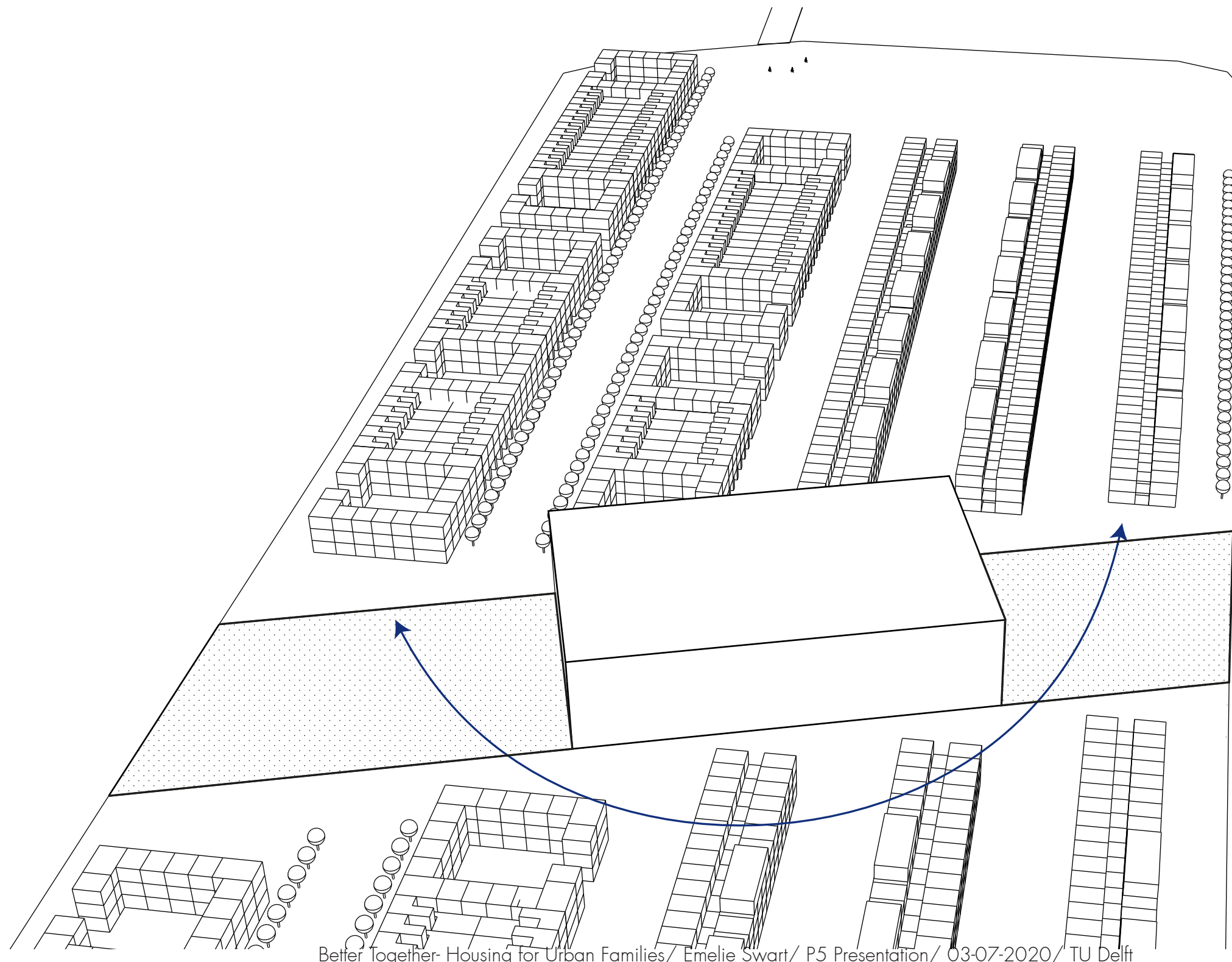




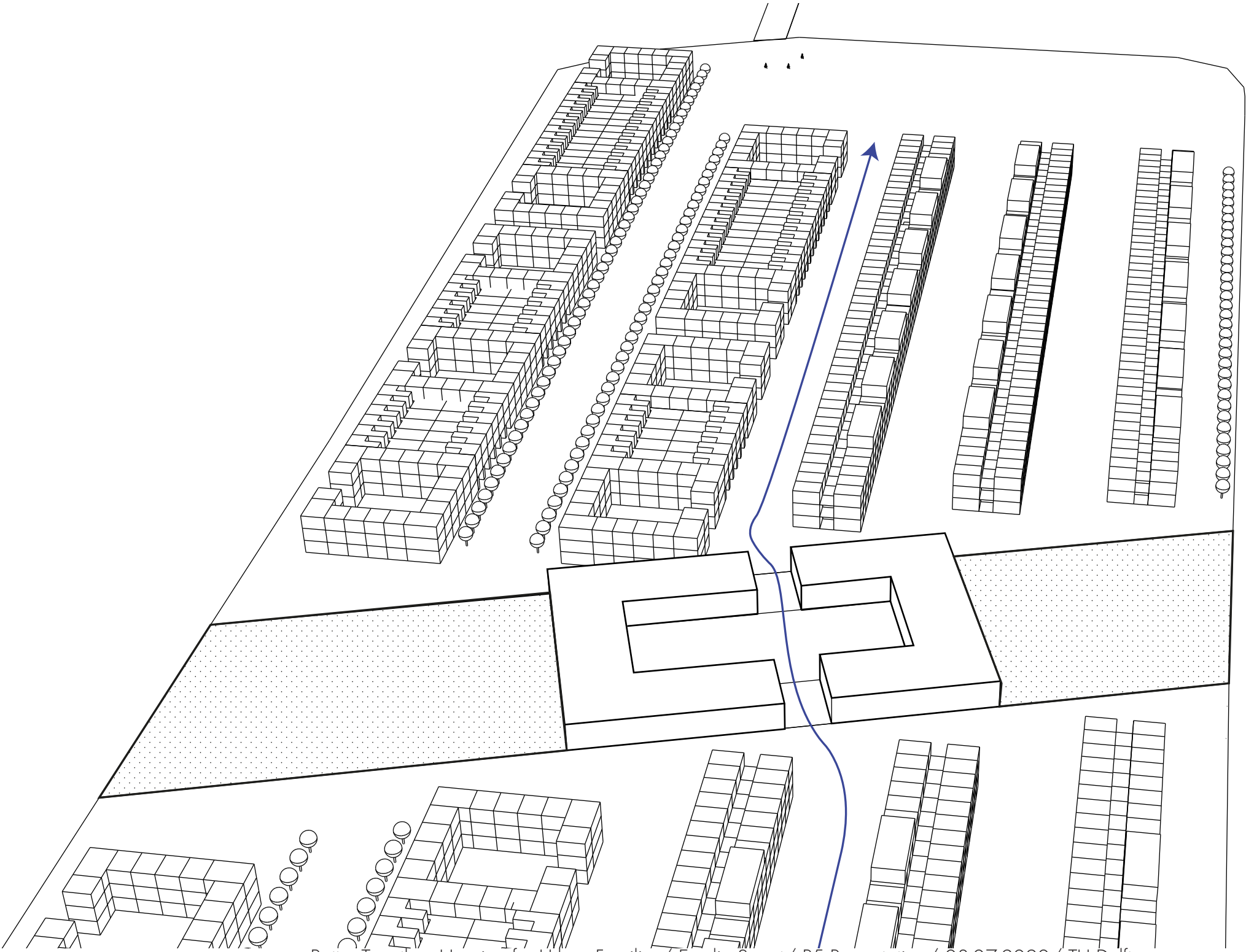
## Overview: Urban Plan



## Strategy: building block

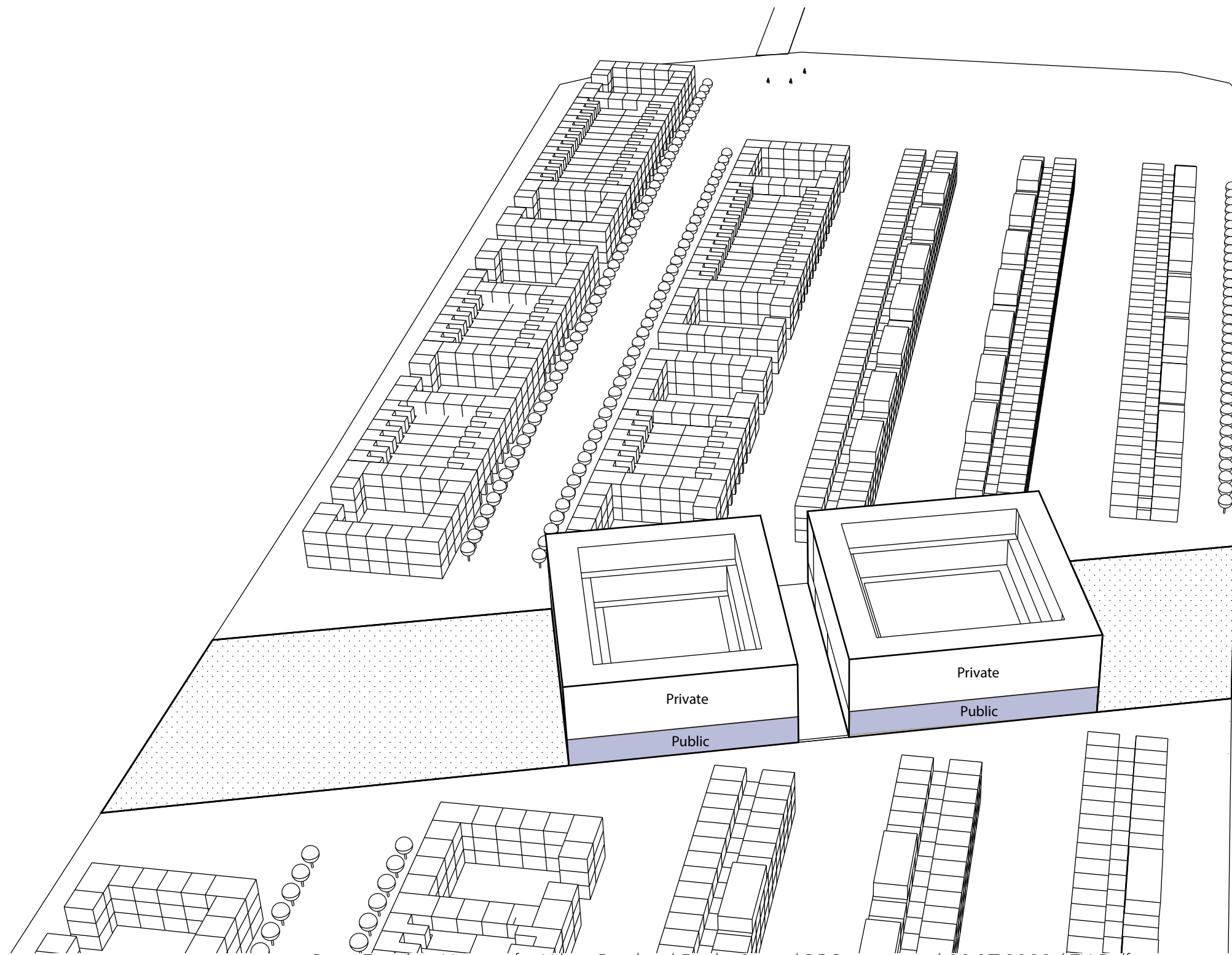


**Strategy:  
two open building blocks**



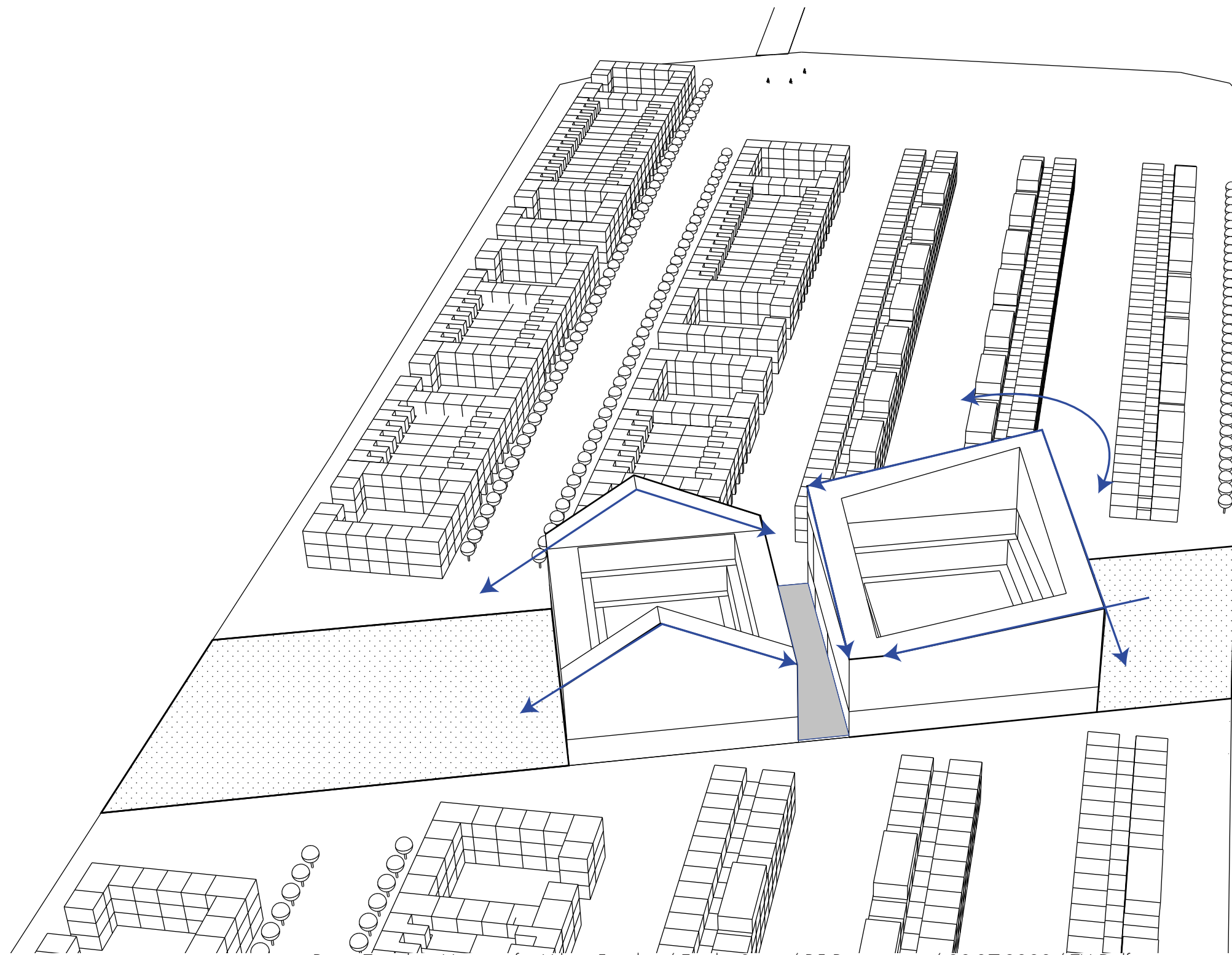


**Strategy:  
two closed off blocks  
terraced stacked**

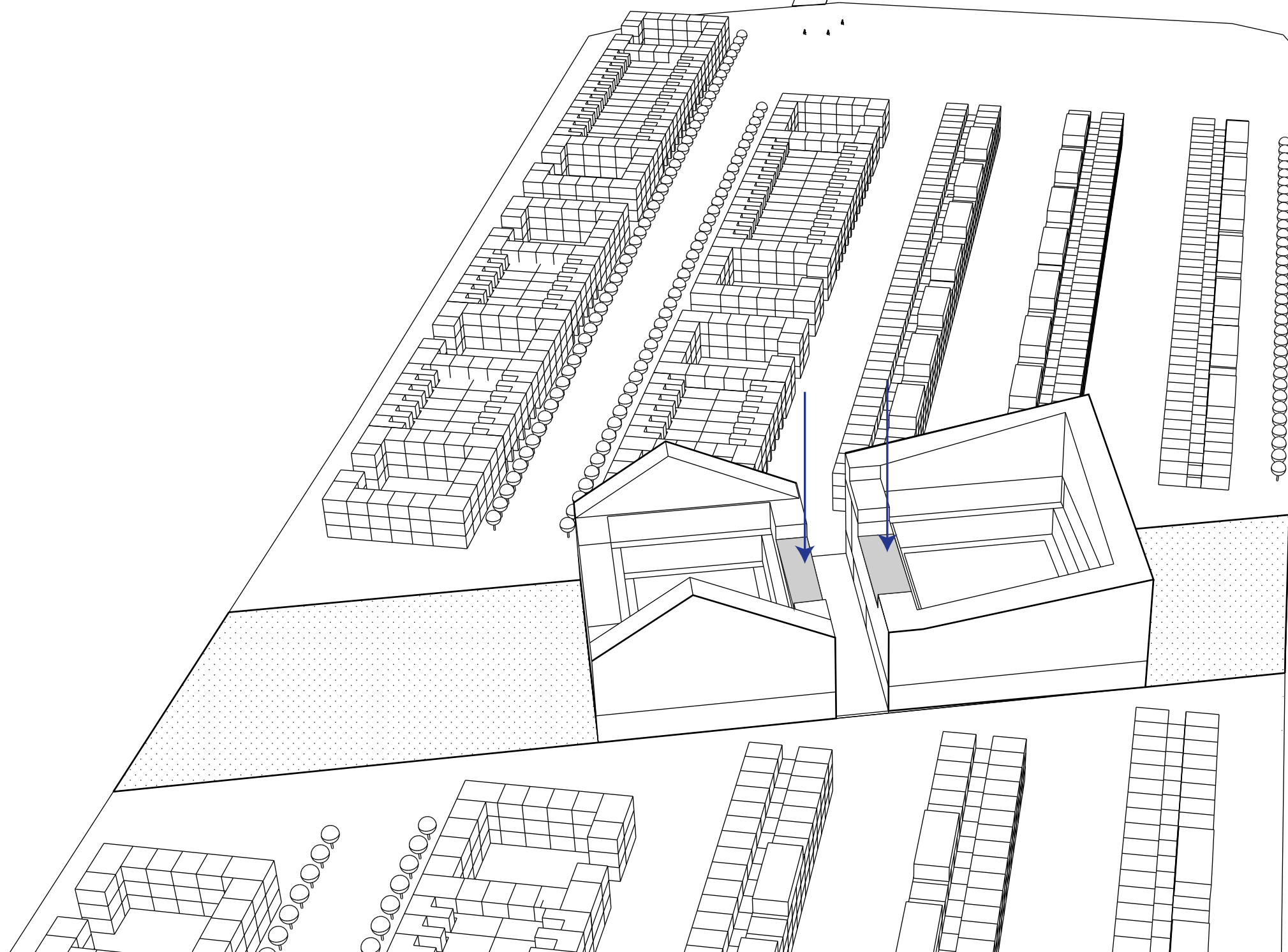




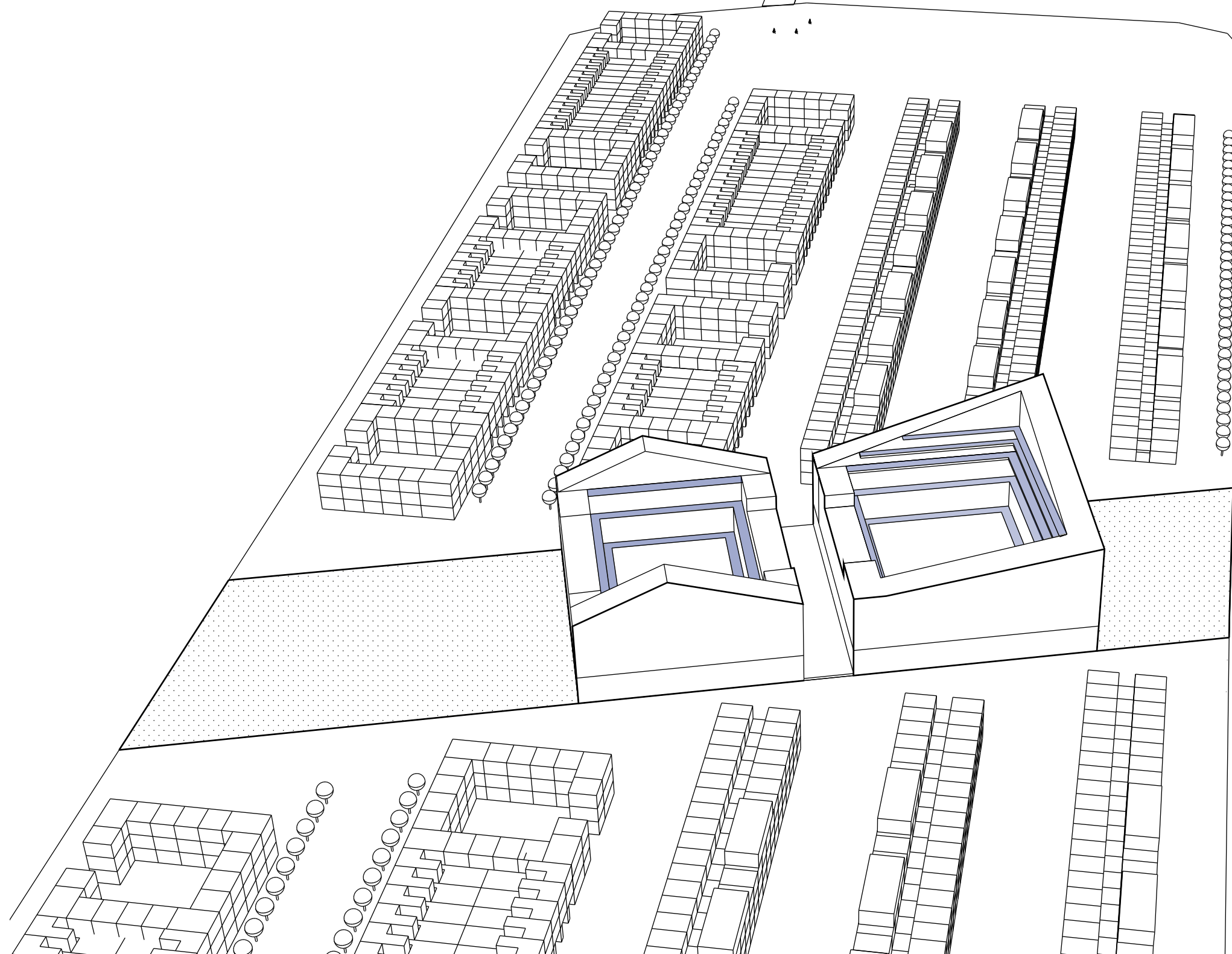
## Strategy: Roofshapes: sunstudy analysis



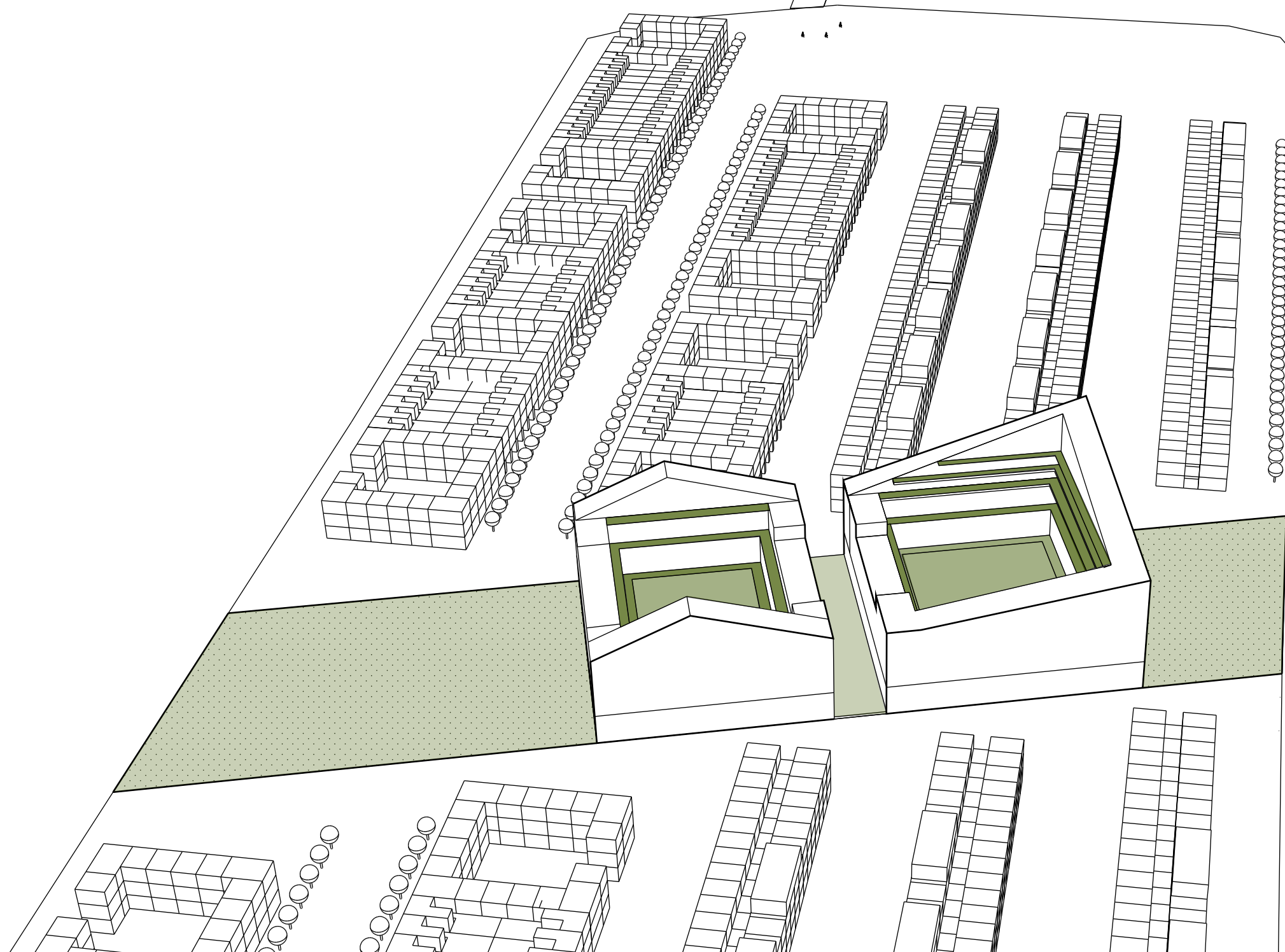
**Strategy:**  
**Create roof terraces**  
**because of shading**



## Strategy: Gallery system

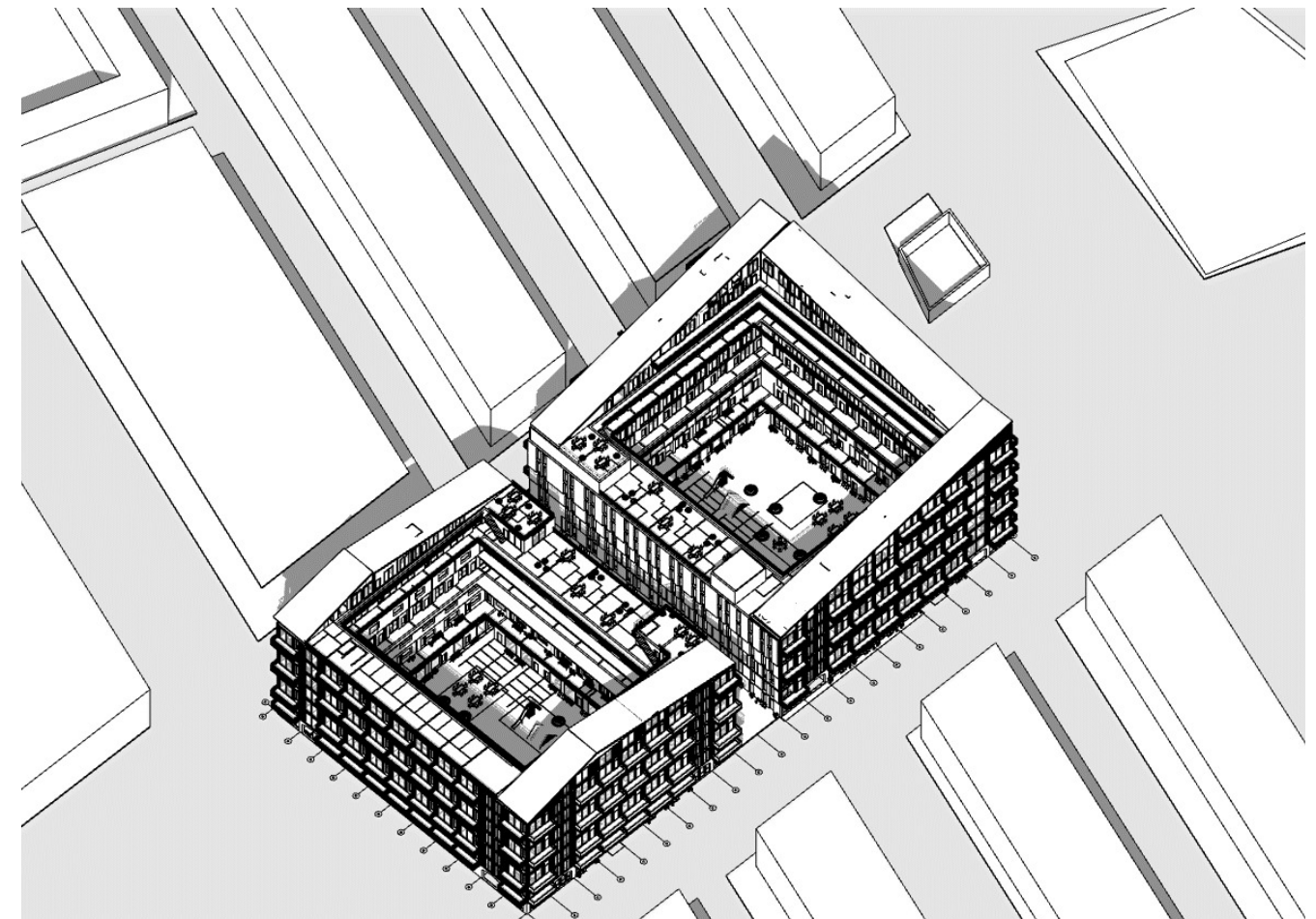
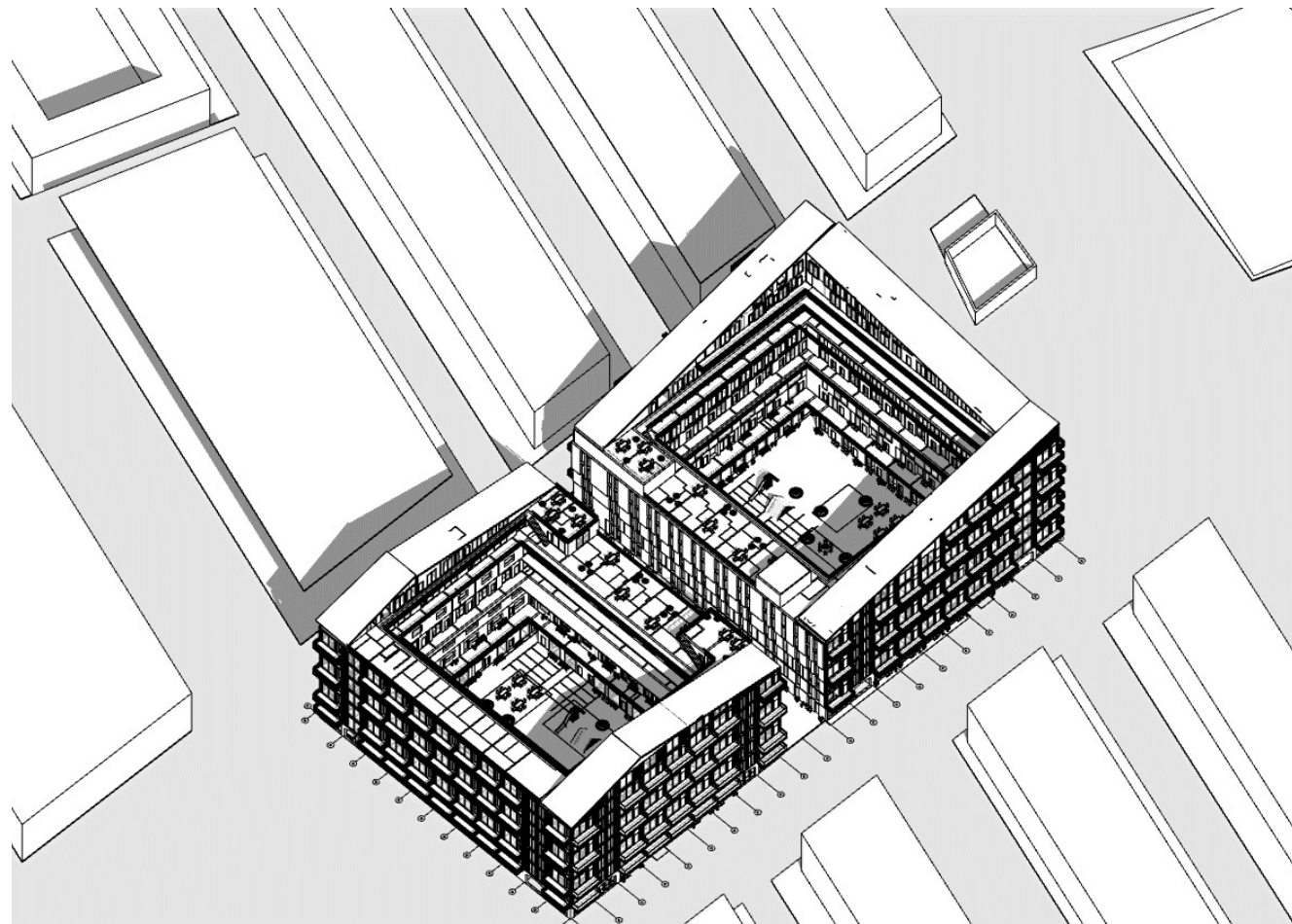


## Strategy: Playspaces children





## Strategy: Solar Studies



March 31 / oct 31

Diverse typologies

Dwelling types between 50-150 m<sup>2</sup>

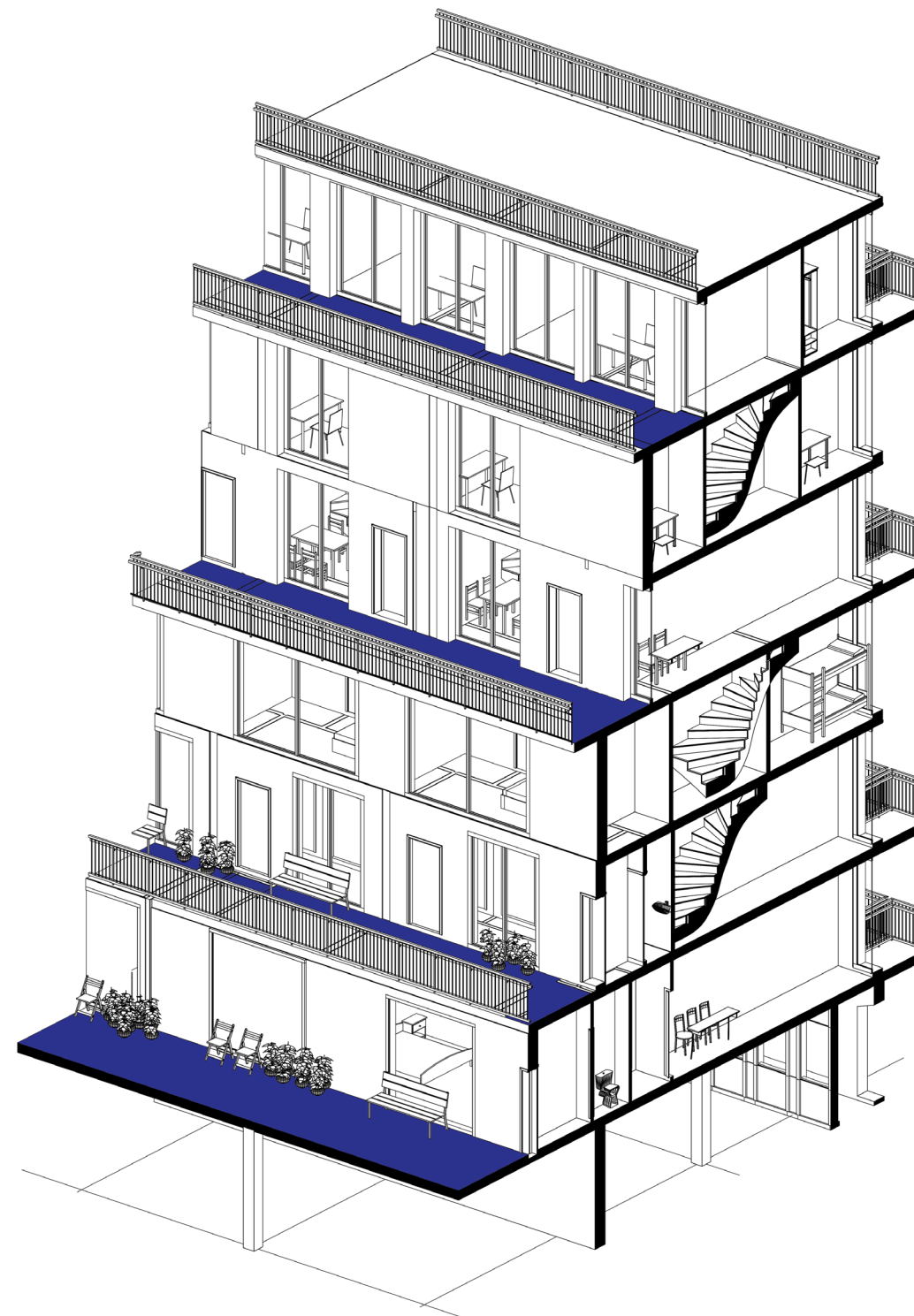
Light- Nature - Space

Close Relation with play spaces

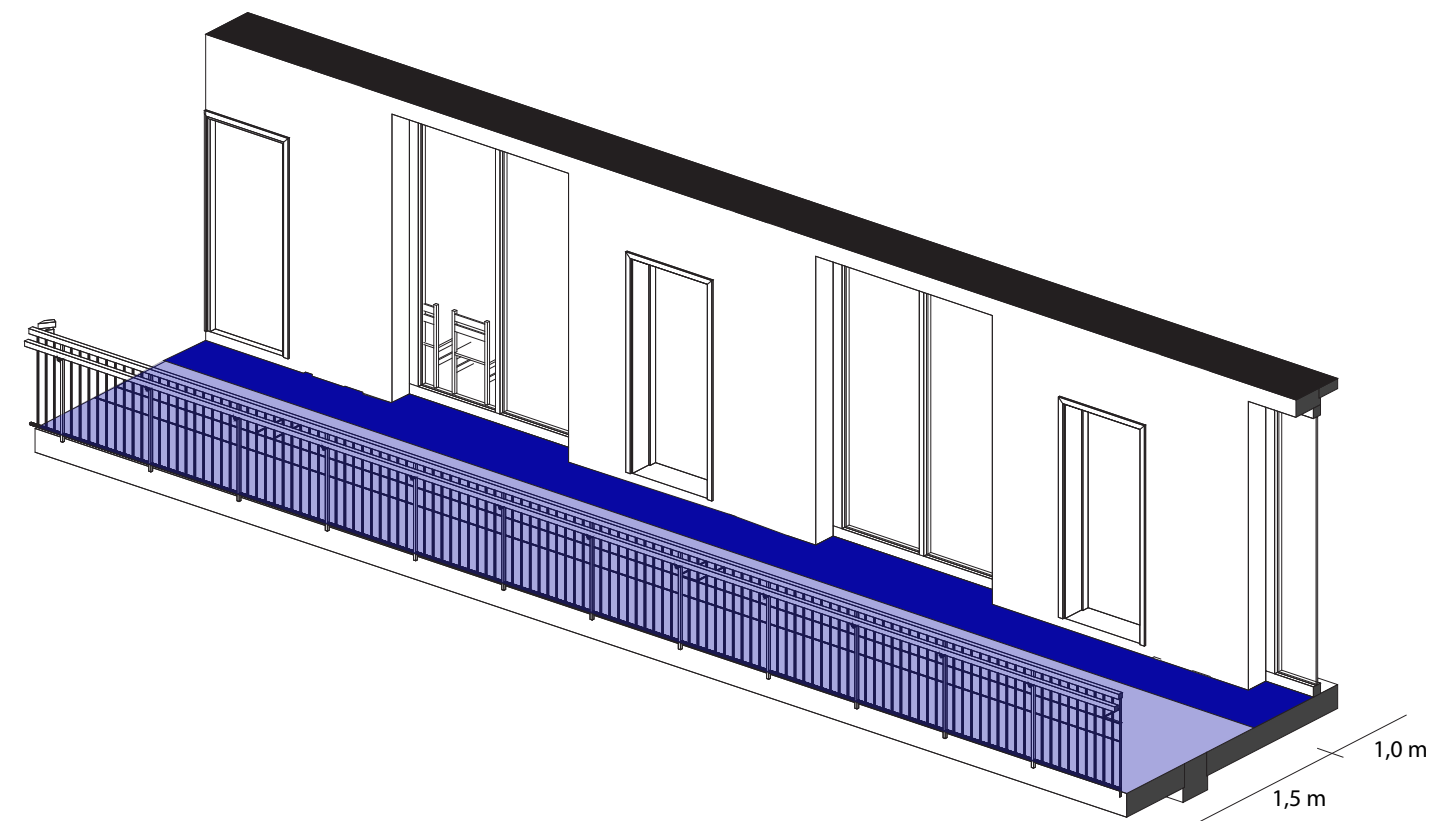
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Section

## Strategy: Street in the air: Building Section



## Strategy: Street in the air: Function Zones

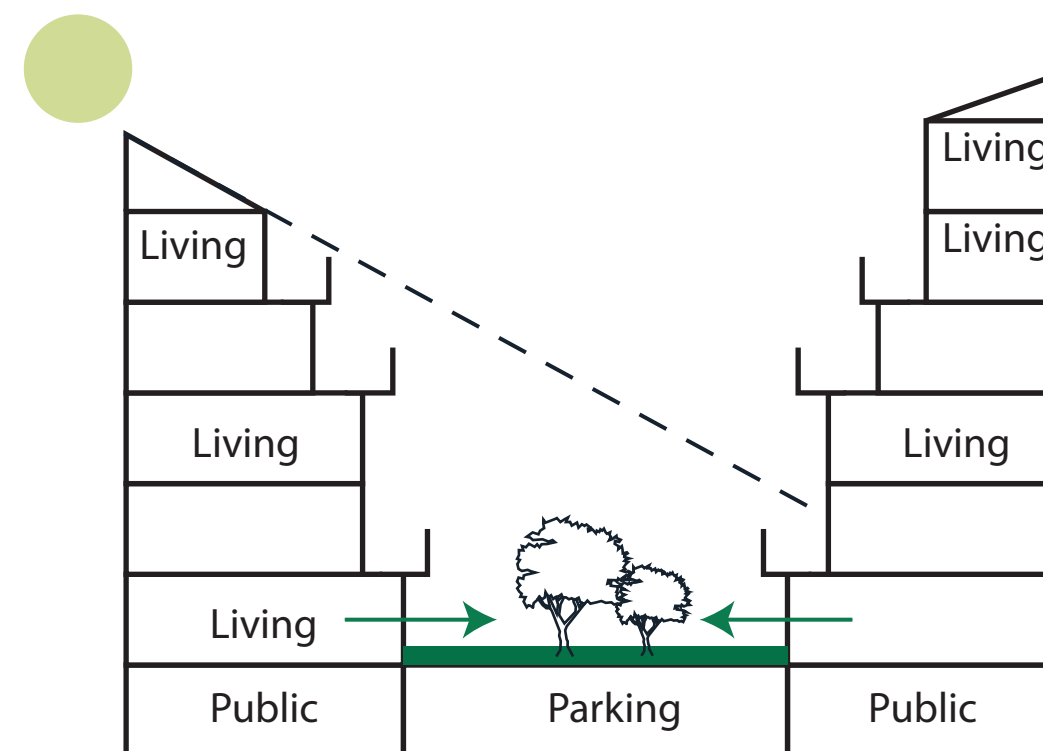




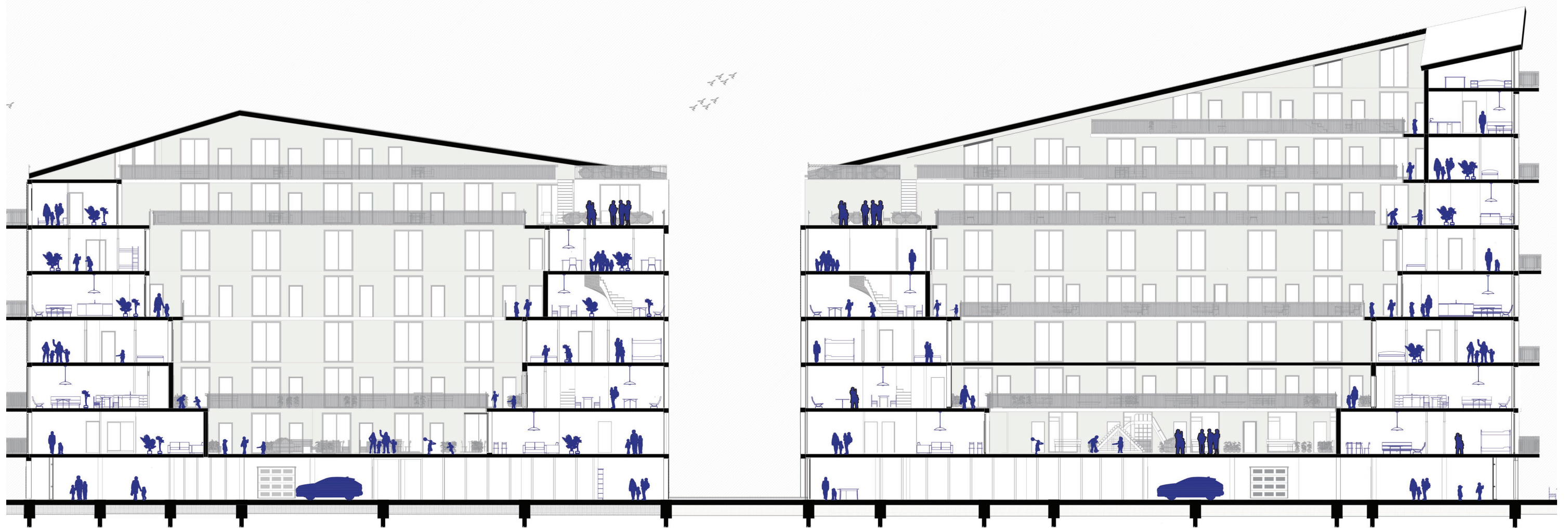




## Strategy: Sloped roof for more sun access



## Strategy: Section Longitudinal



Section Longitudinal 1:200



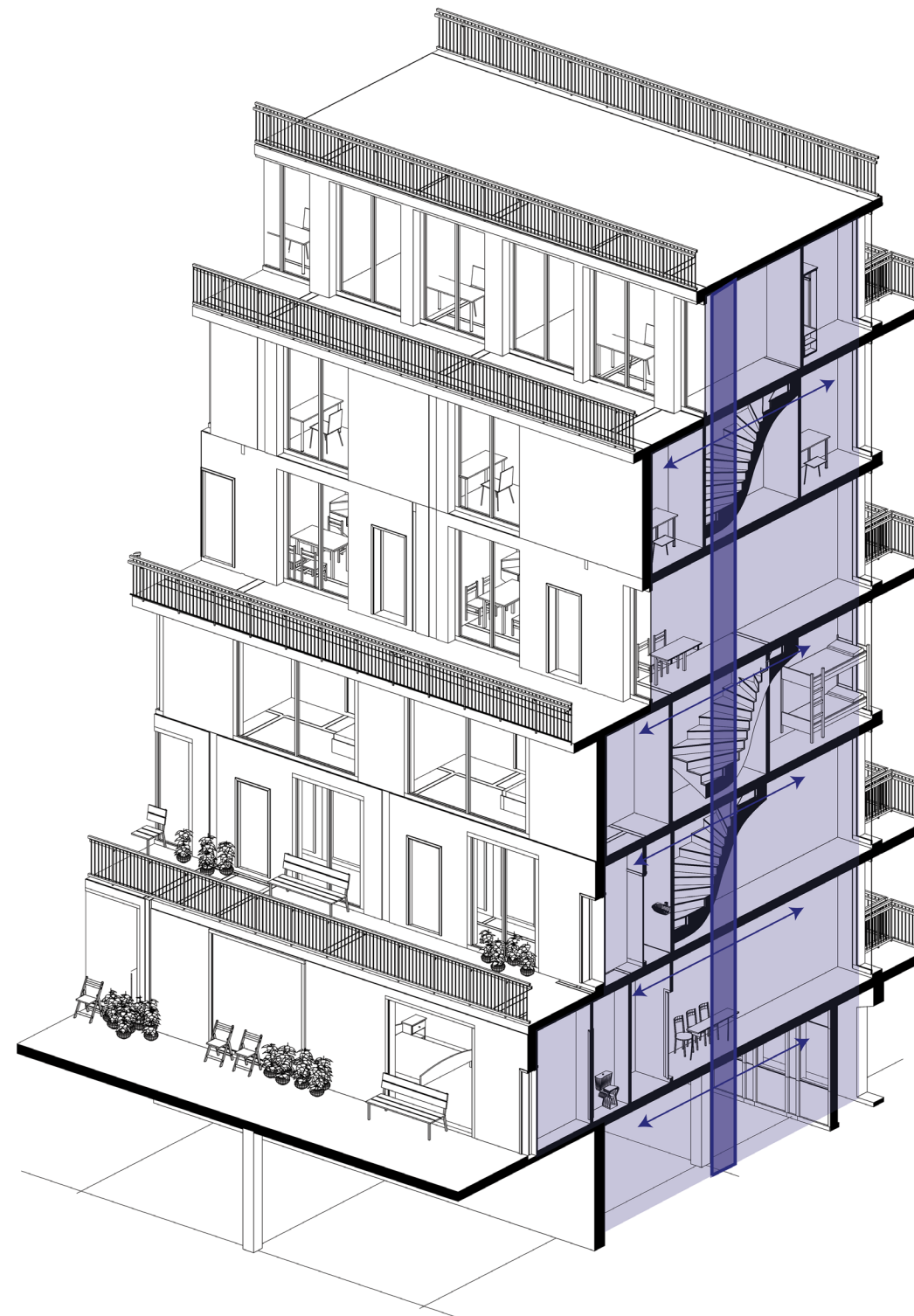
## Strategy: Section Cross



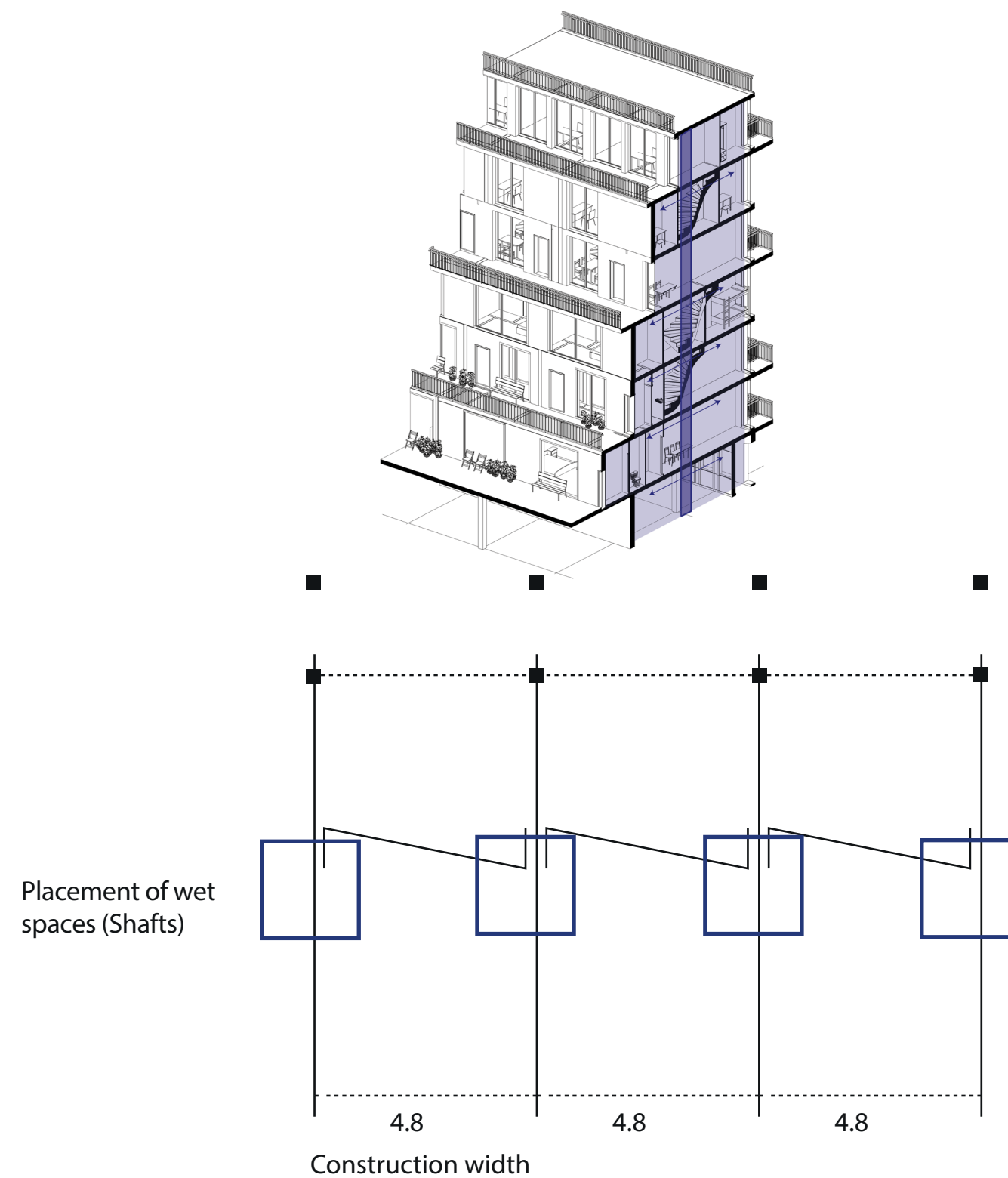
Section Cross 1:200



## Strategy: Section Shafts & Stacking



## Strategy: Section Shafts & Stacking



Flexible dwelling types between 50-150 m<sup>2</sup>

Work-Living balance for parents is starting point

Close Relation for children with play spaces

Provide support for modern families by communal dwelling units and collective spaces

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Block

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Dwelling





## Dwelling typologies

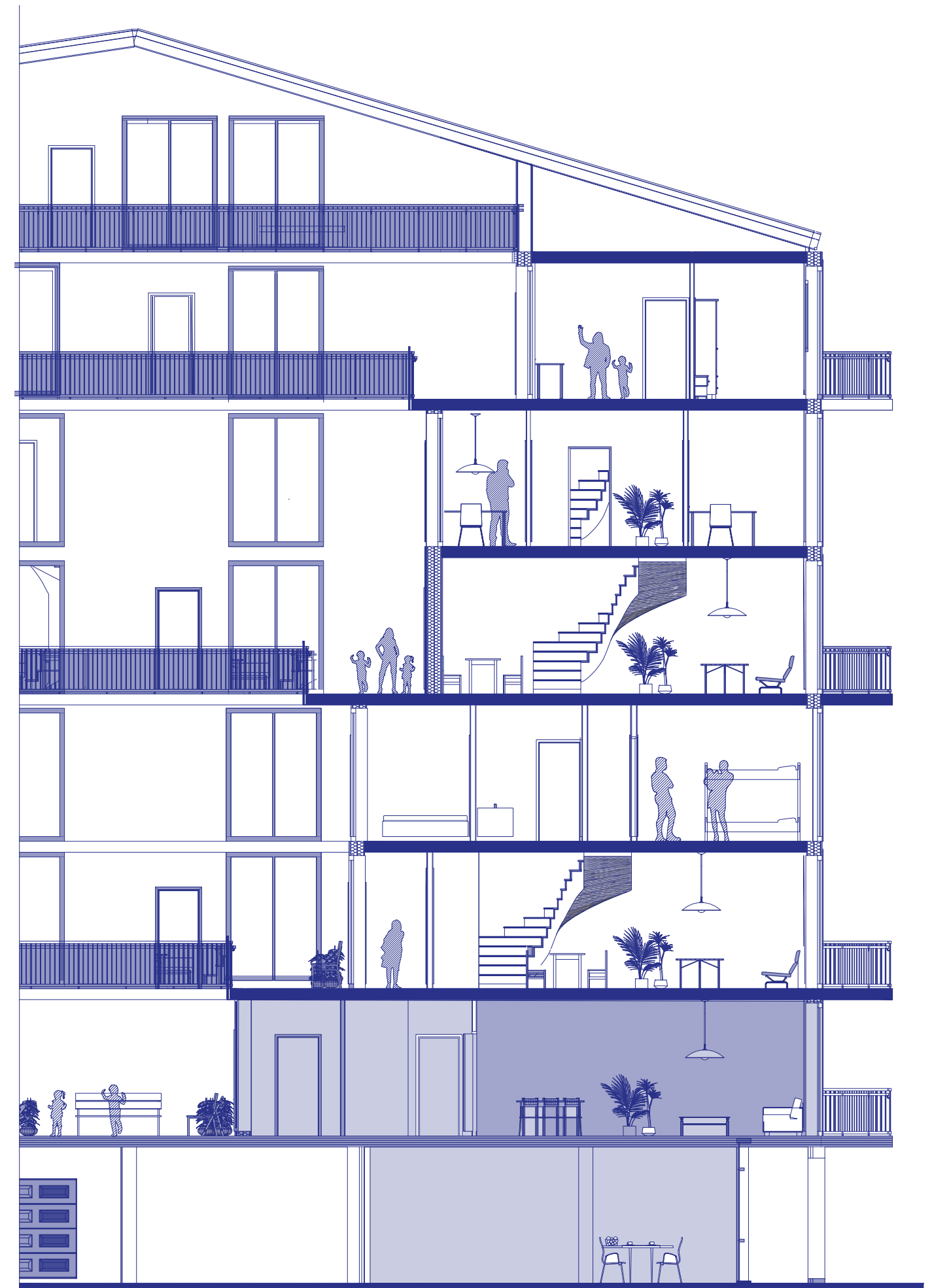
### Strategy: Buildings Program

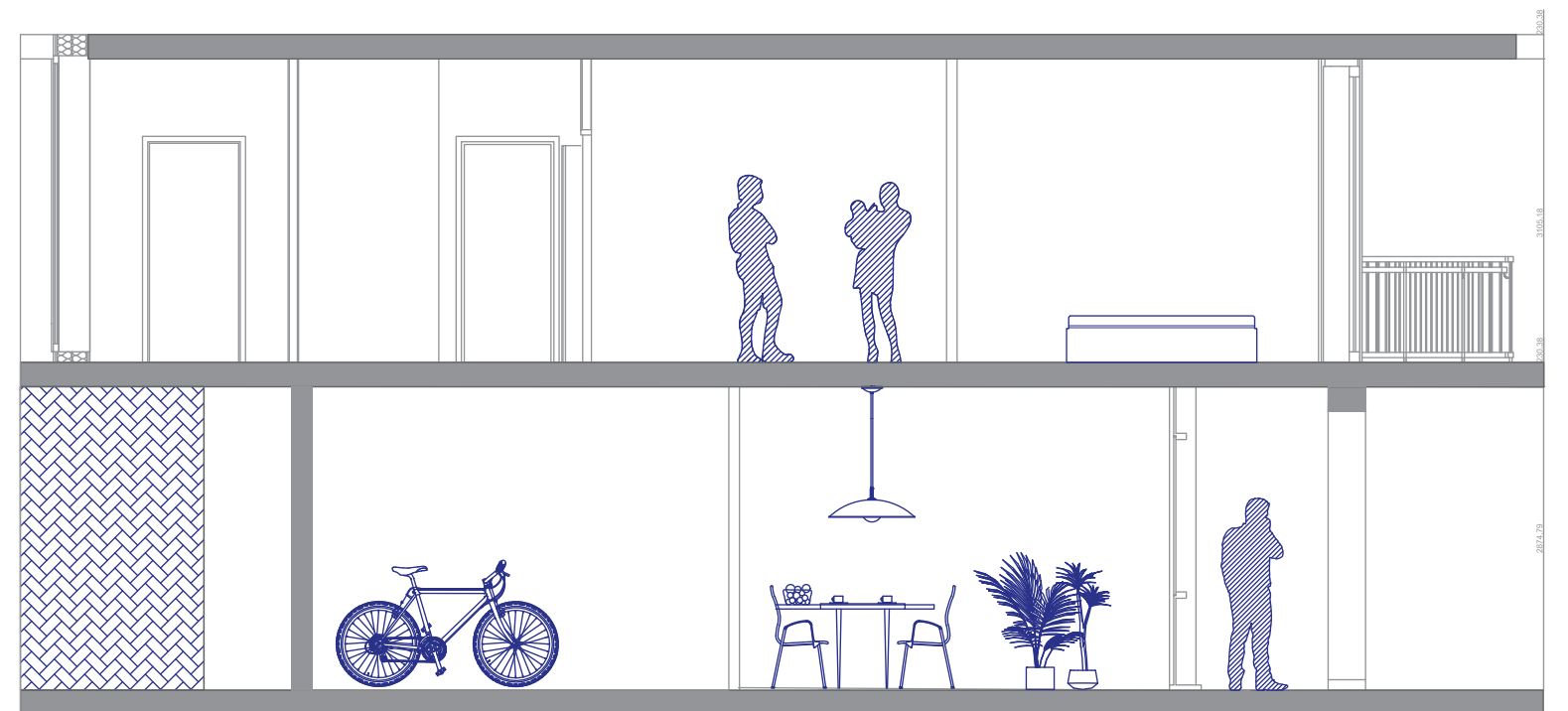
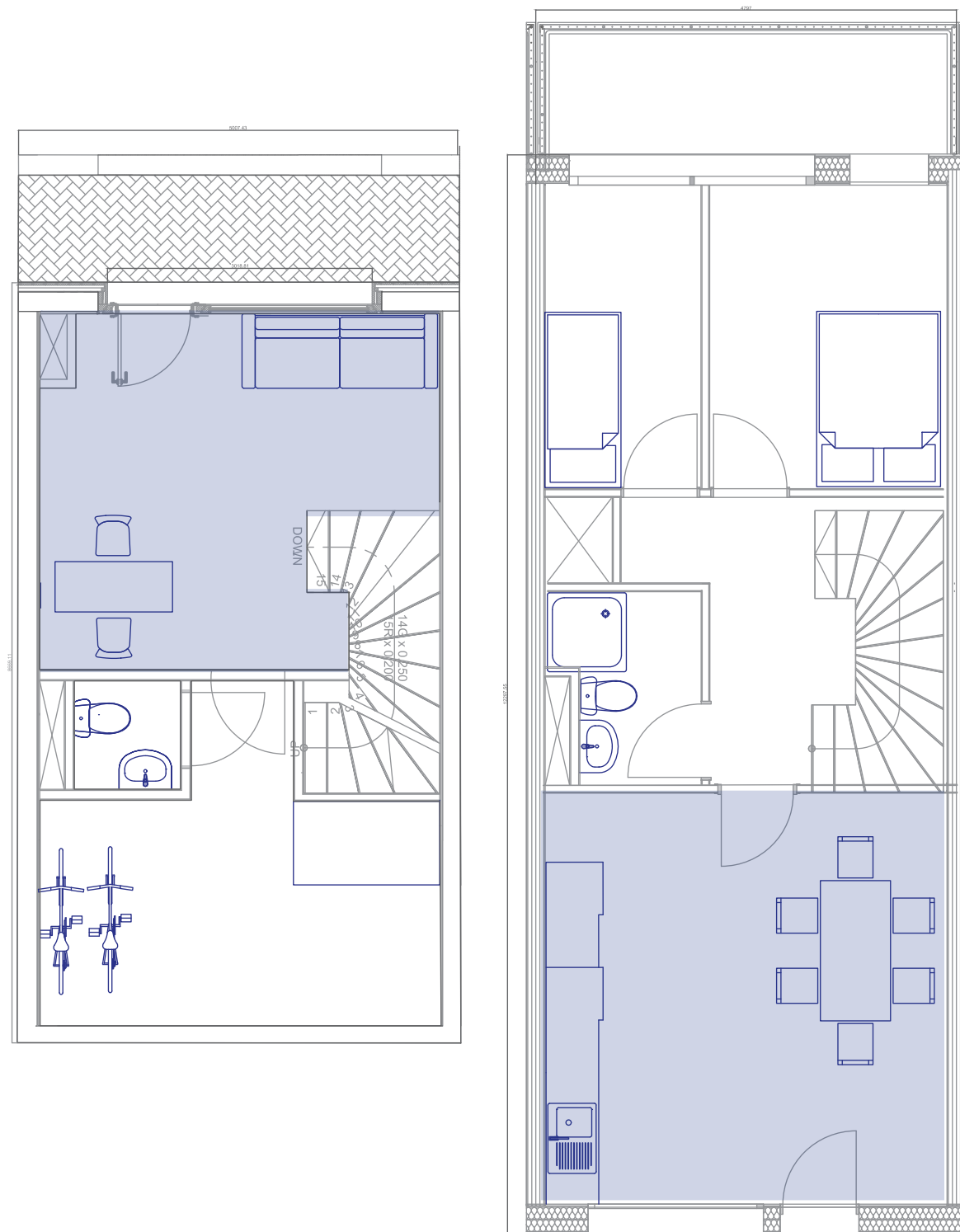
Private apartments	12 000 m2	80,1 %
Shared apartments	5566 m2	
Communal functions	680 m2	
Public functions	1084 m2	
Parking space	990 m2	
Storage	600 m2	
Bike storage	456 m2	
Technical rooms	46 m2	
Circulation	498 m2	
<b>Total:</b>	<b>21920 m2</b>	



# Dwelling Typologies

Type A The work unit

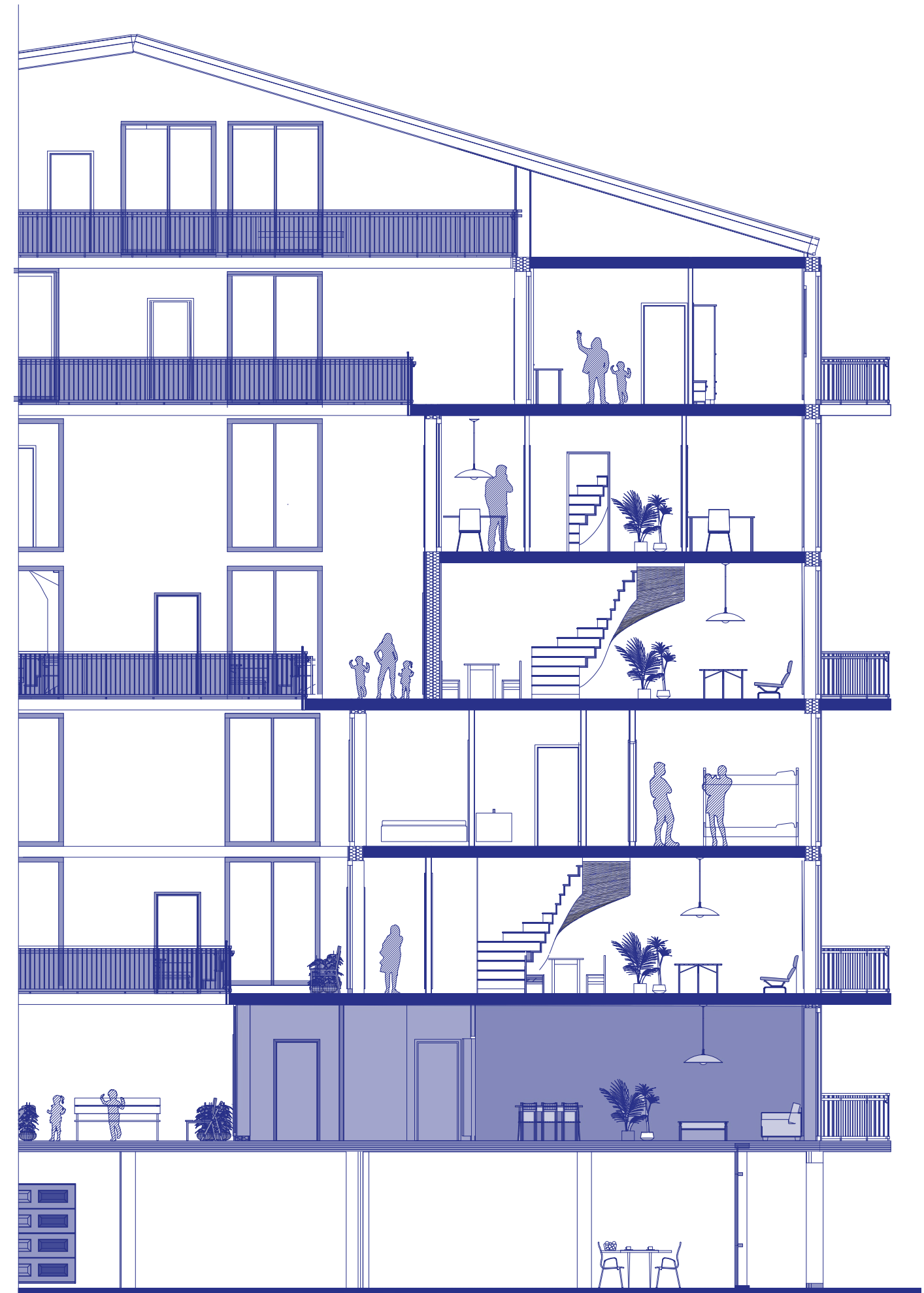


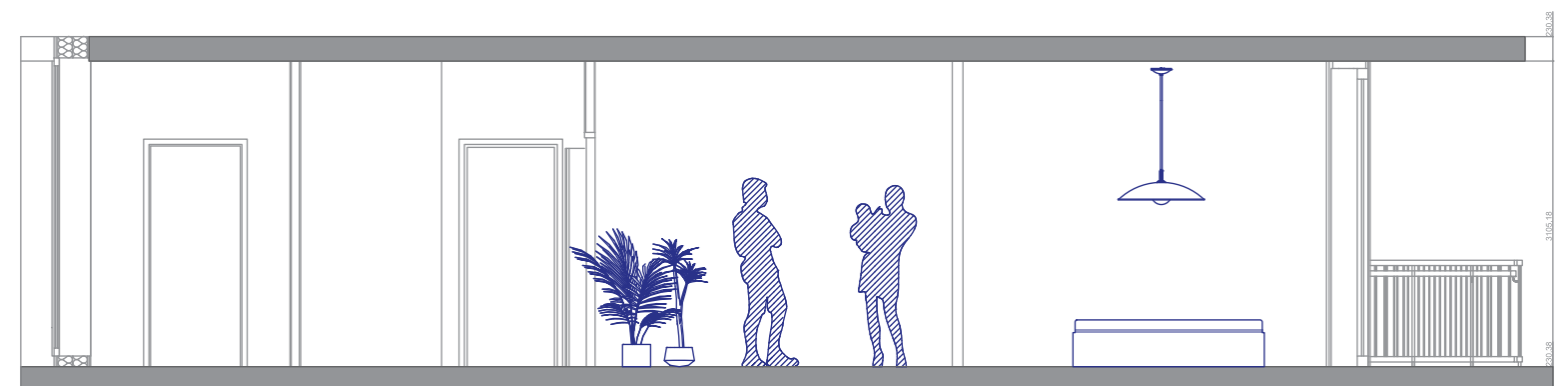
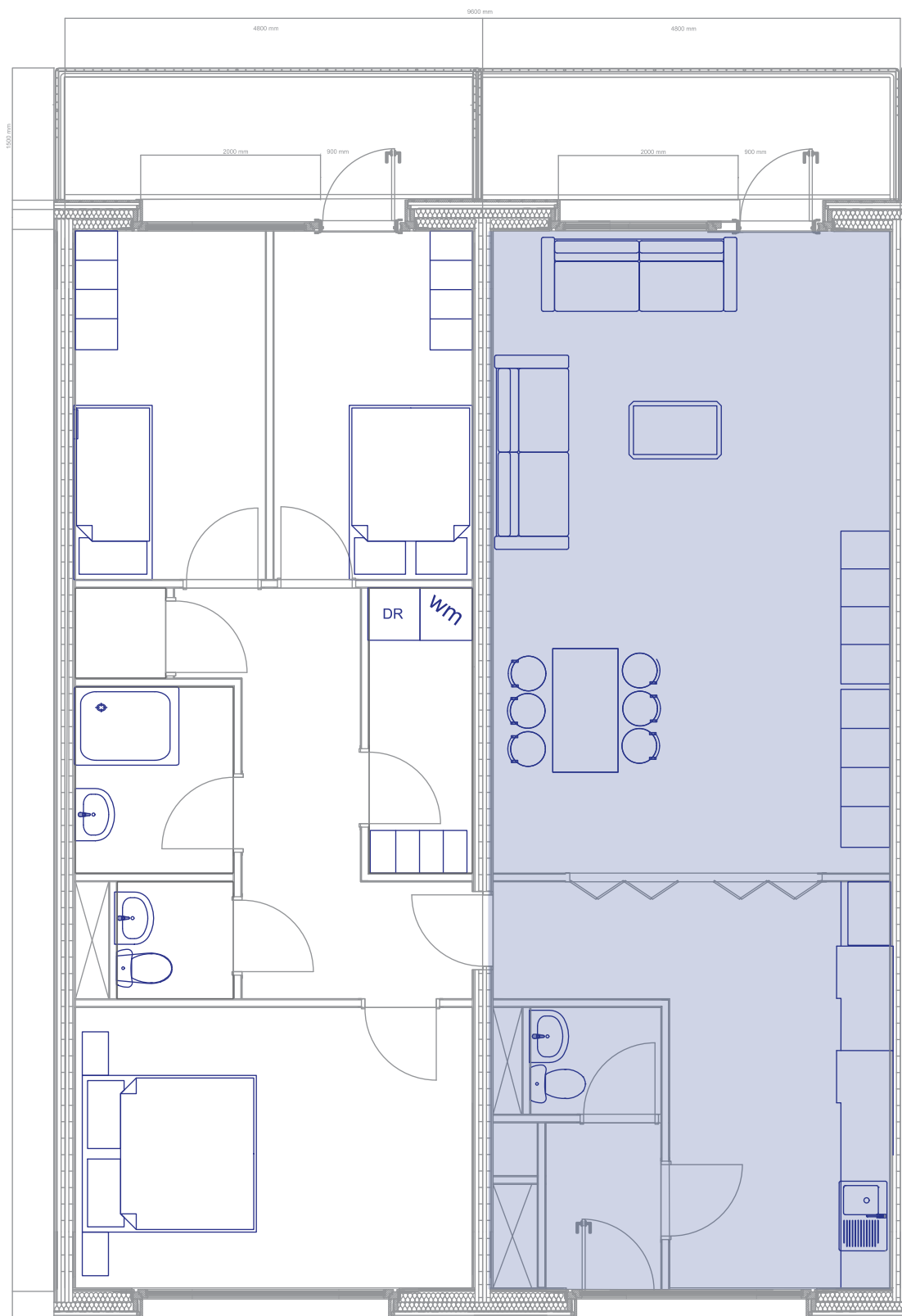




# Dwelling Typologies

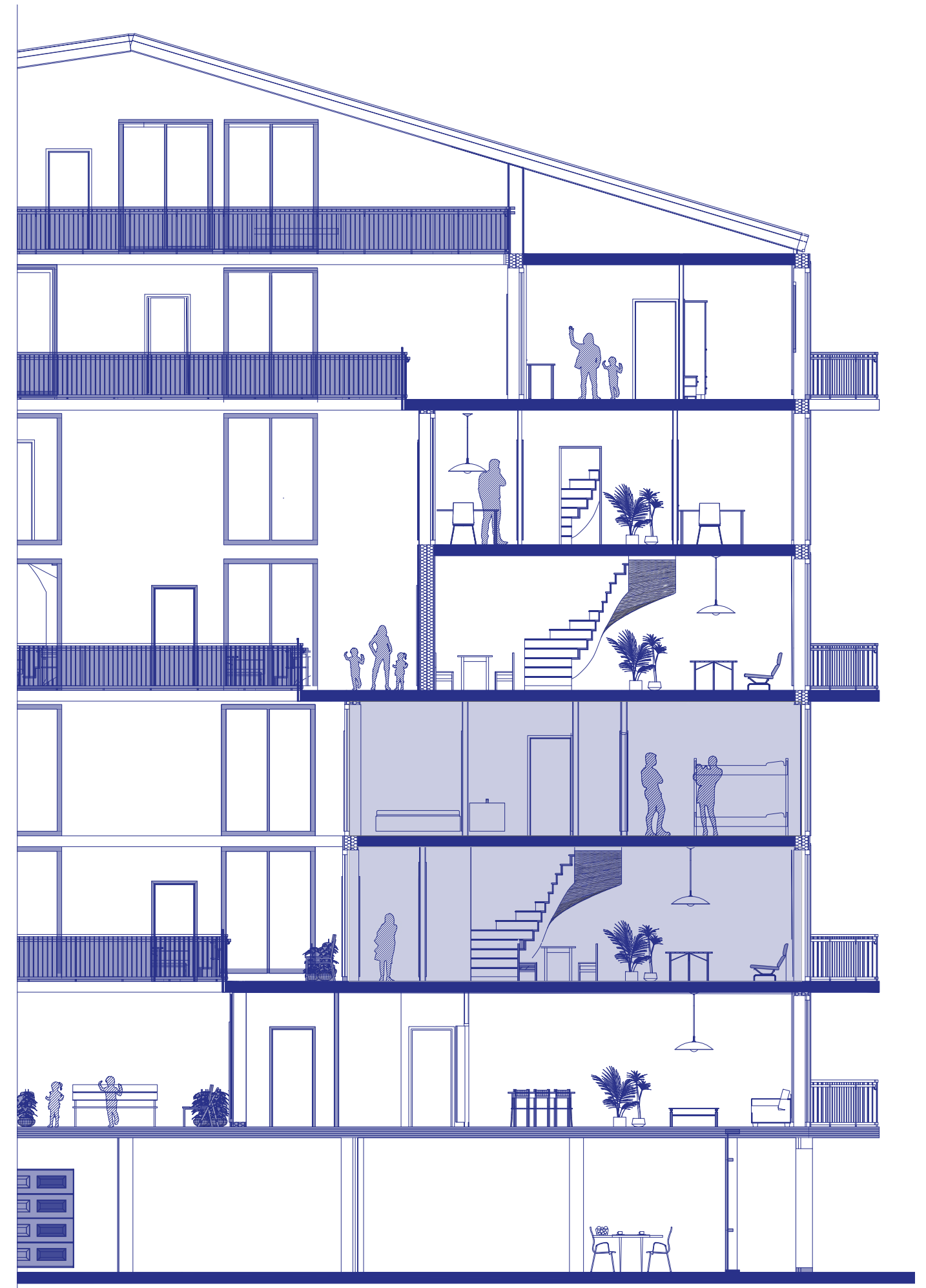
Type A1: The family apartment

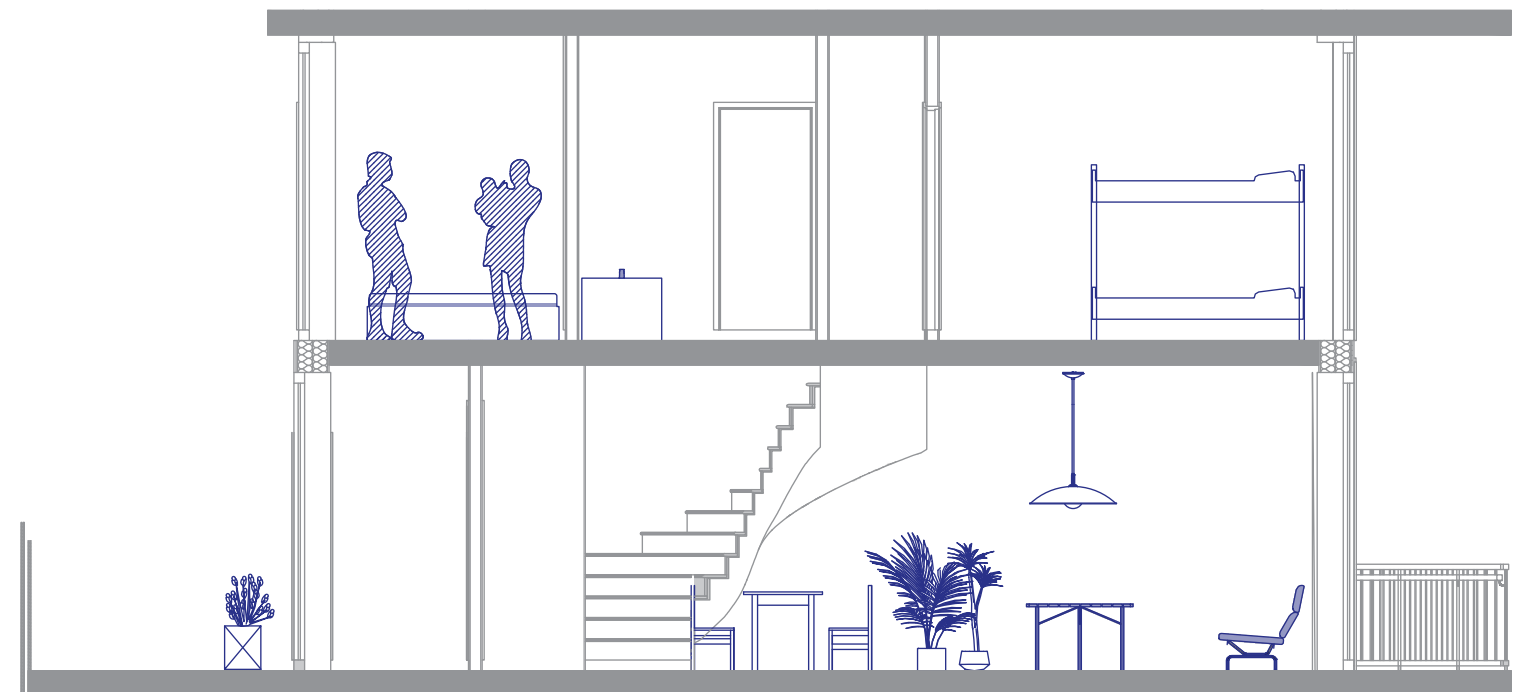
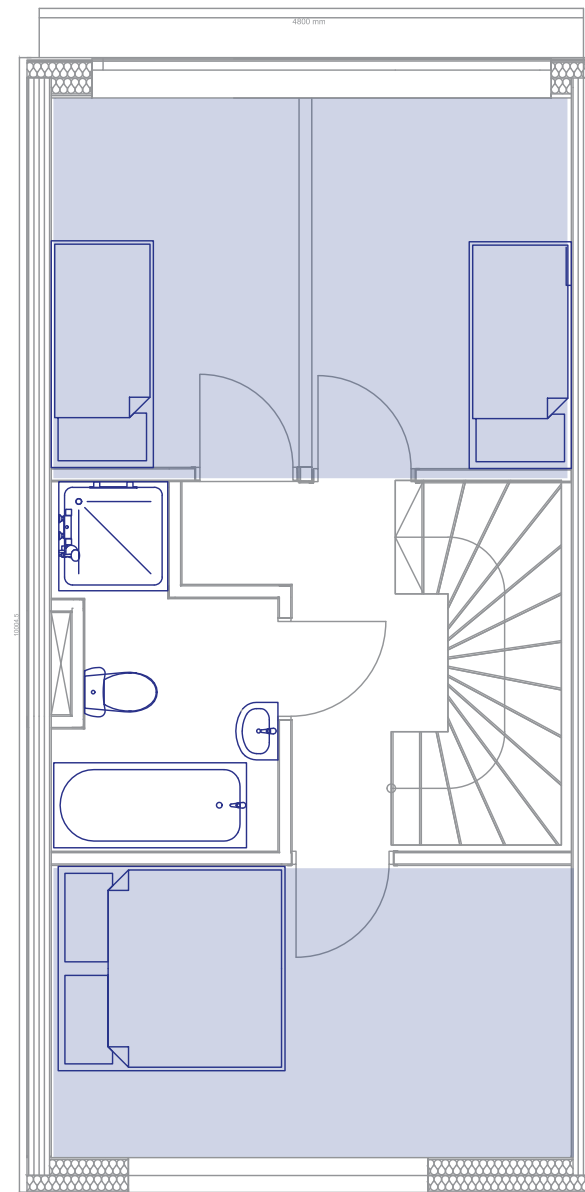
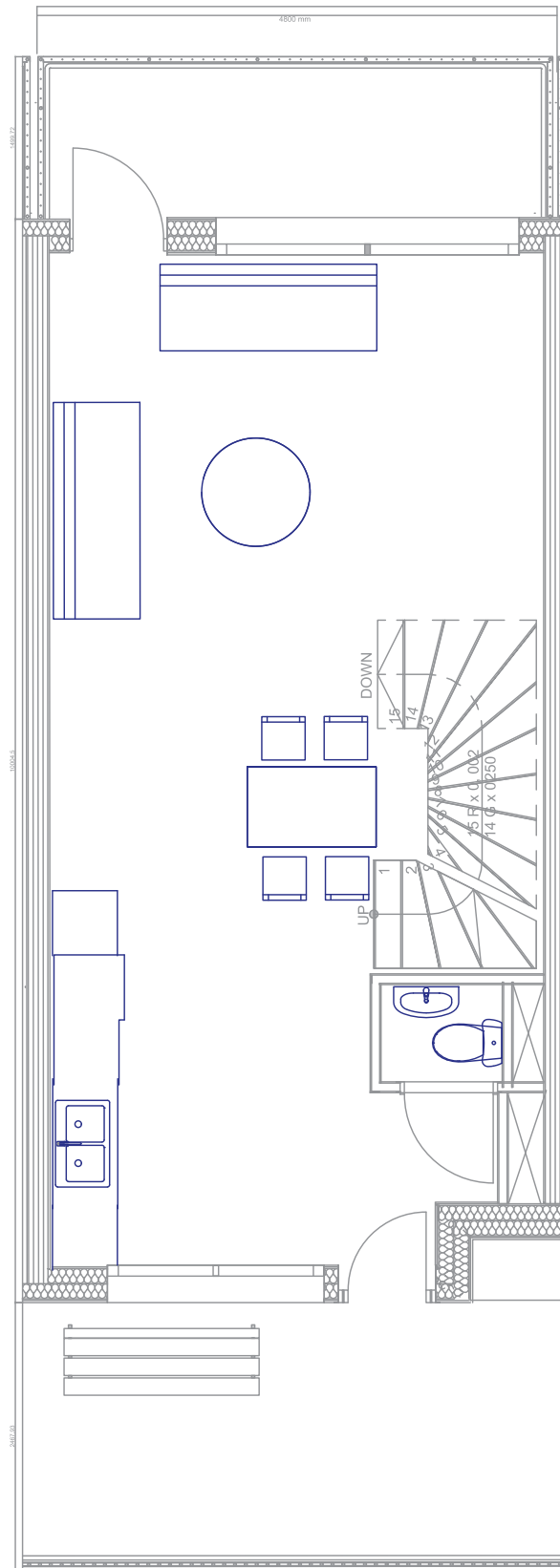




# Dwelling Typologies

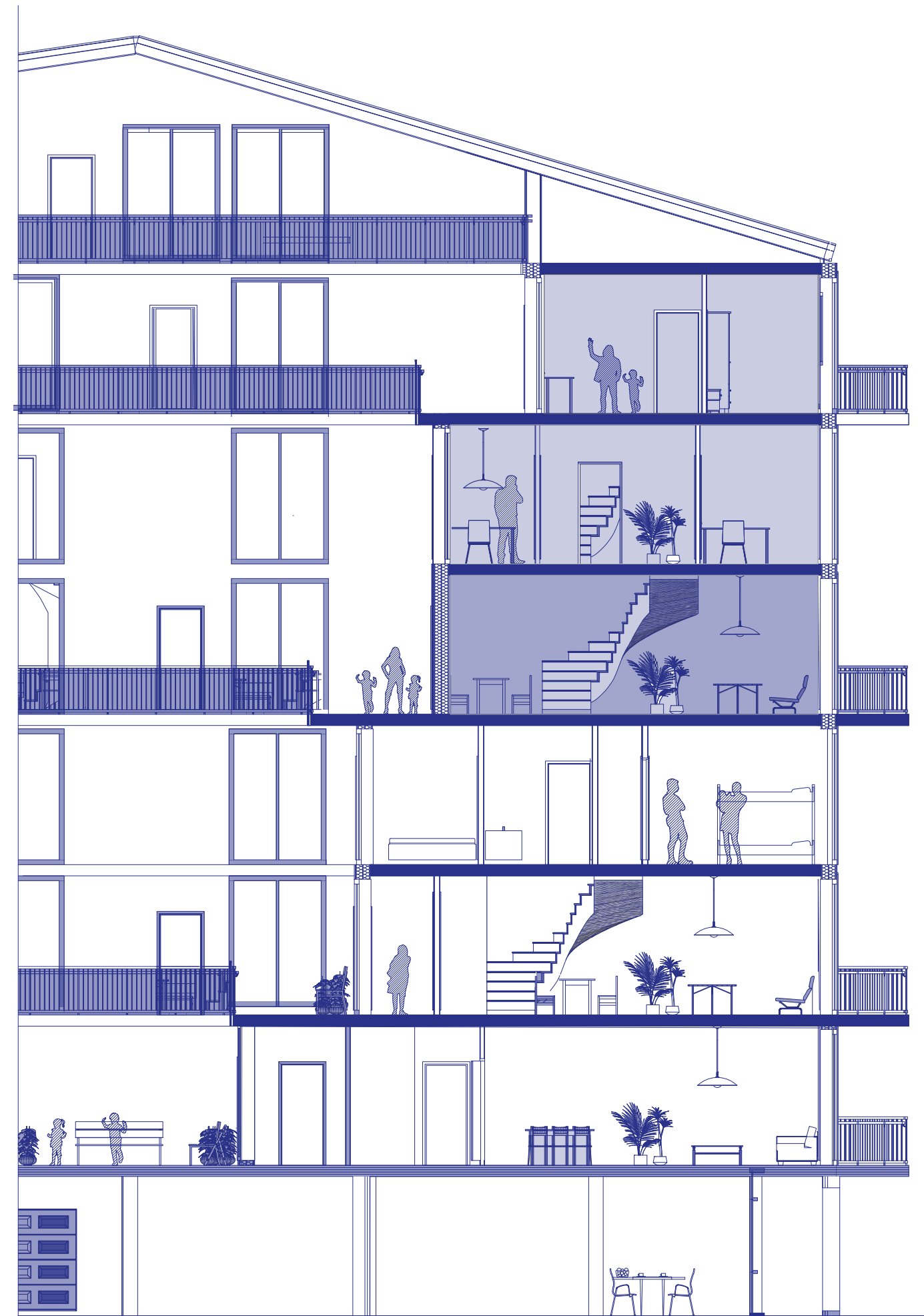
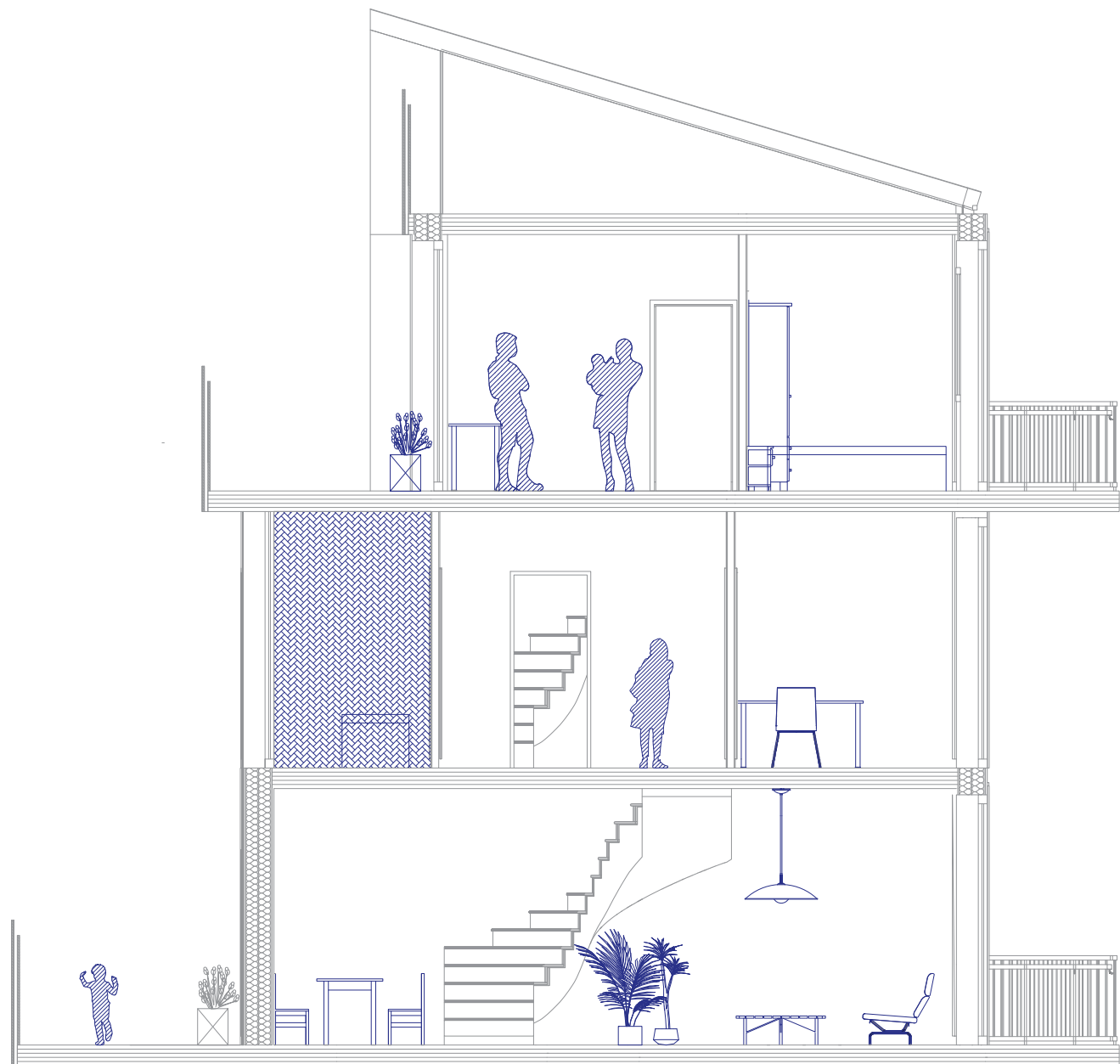
Type B The family maisonette



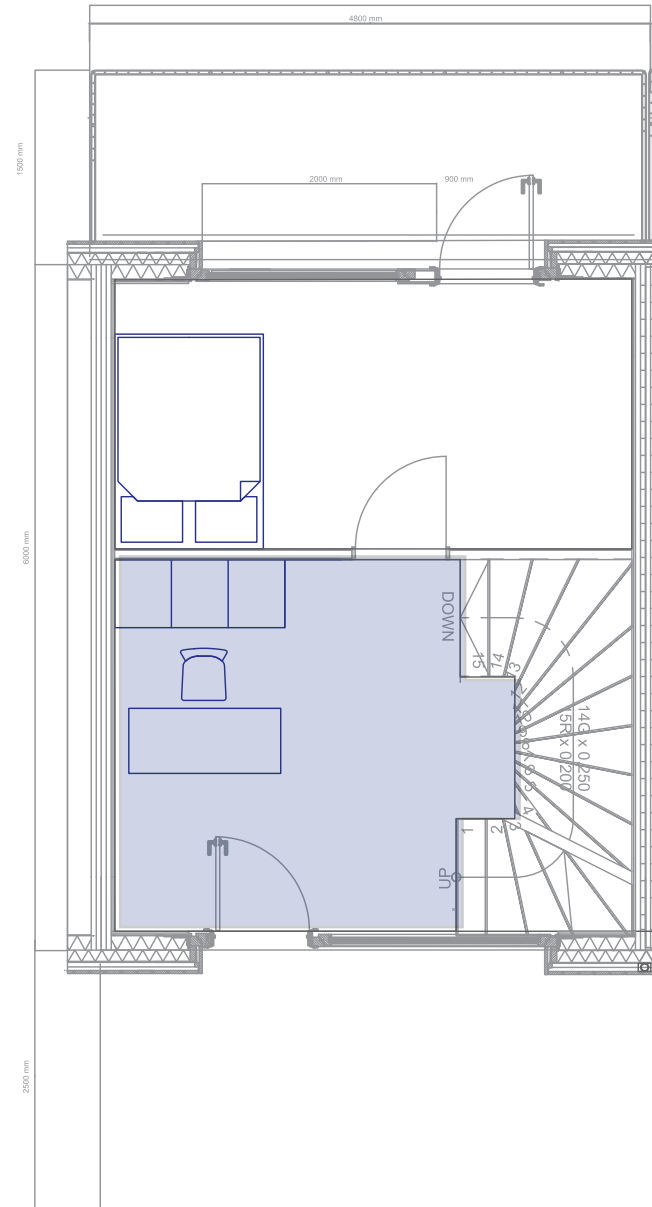
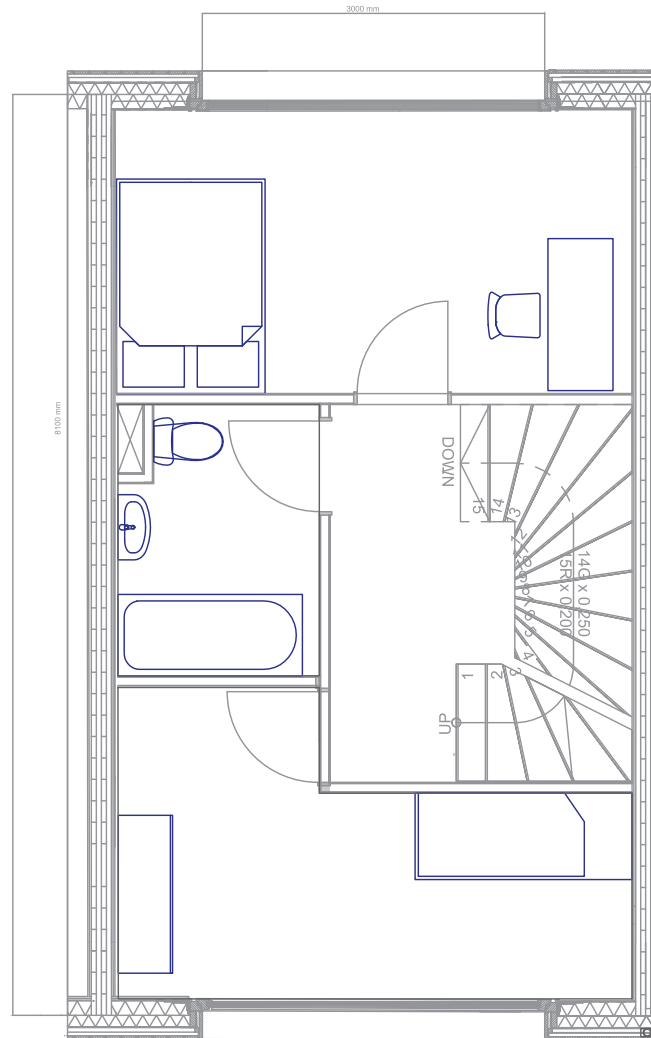
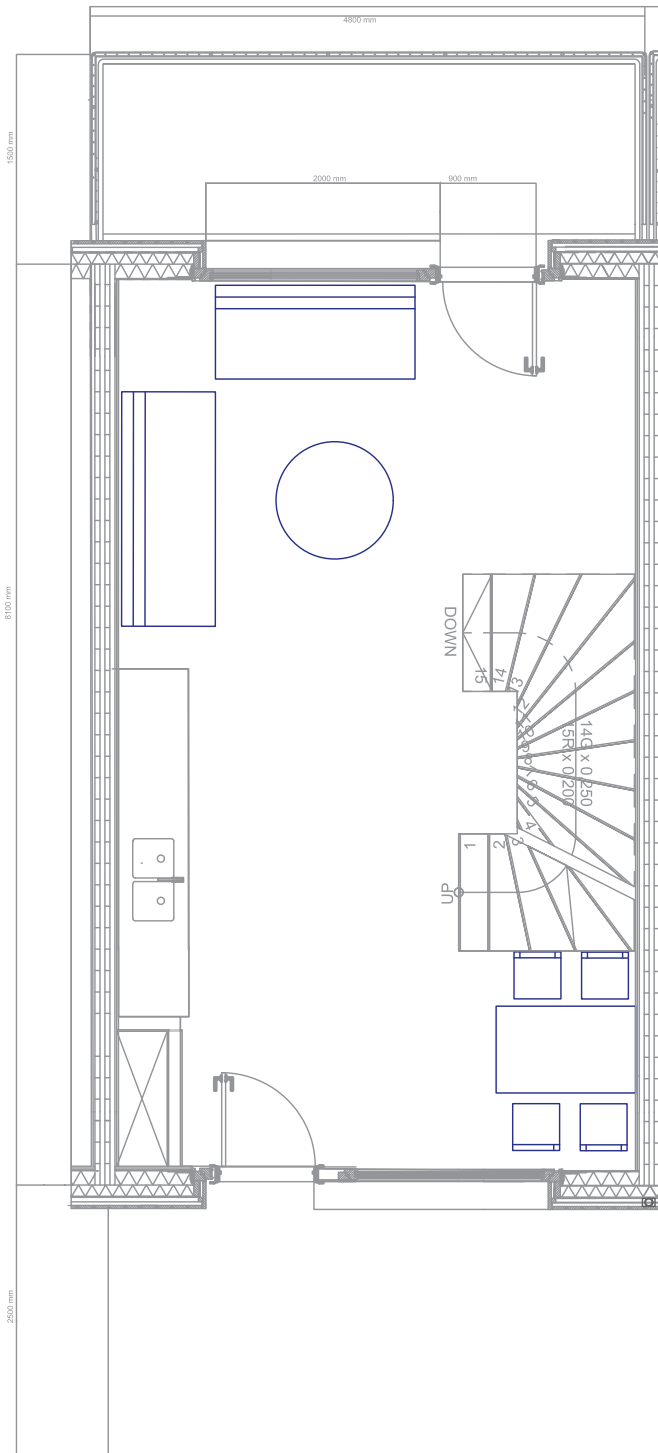


# Dwelling Typologies

Type C1: The work/ living maisonnette

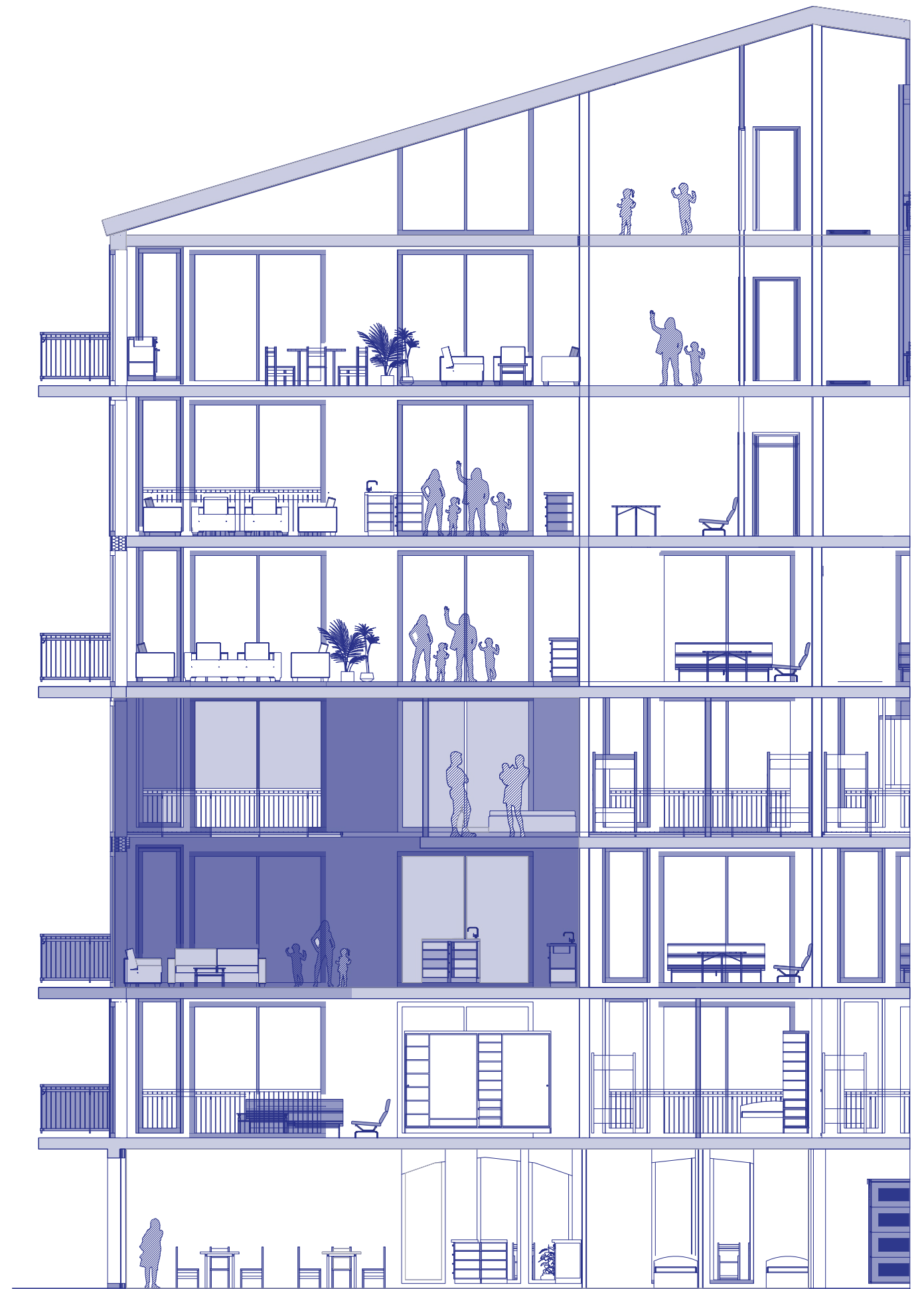
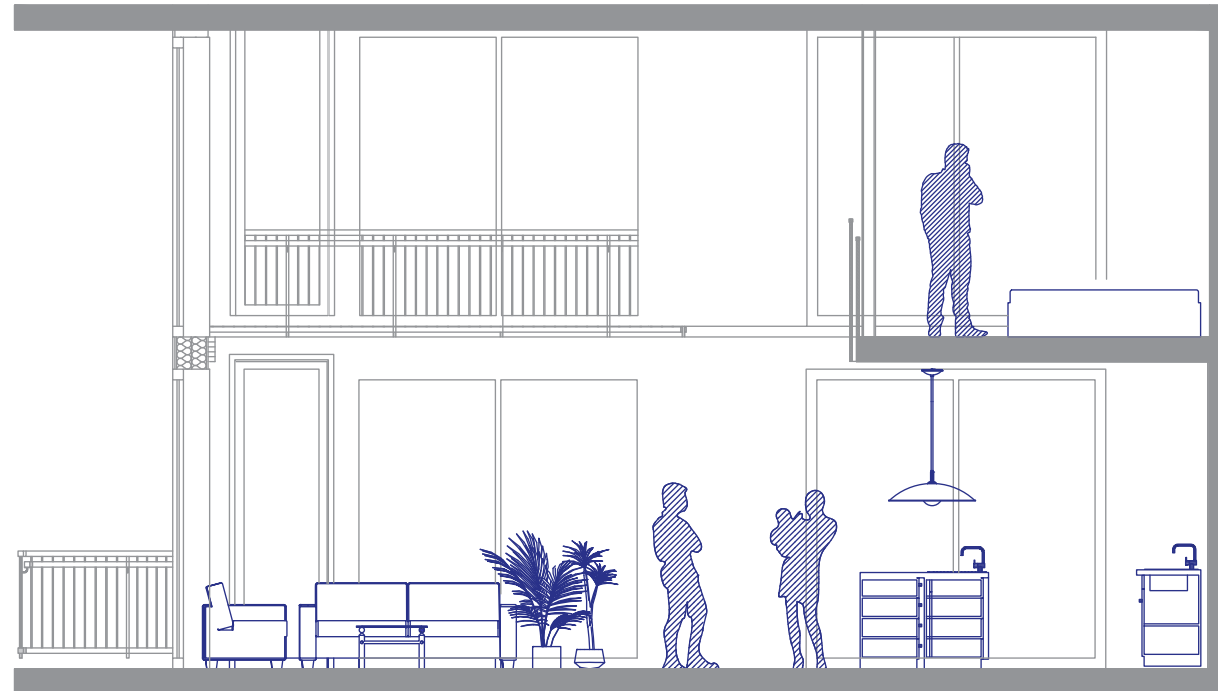


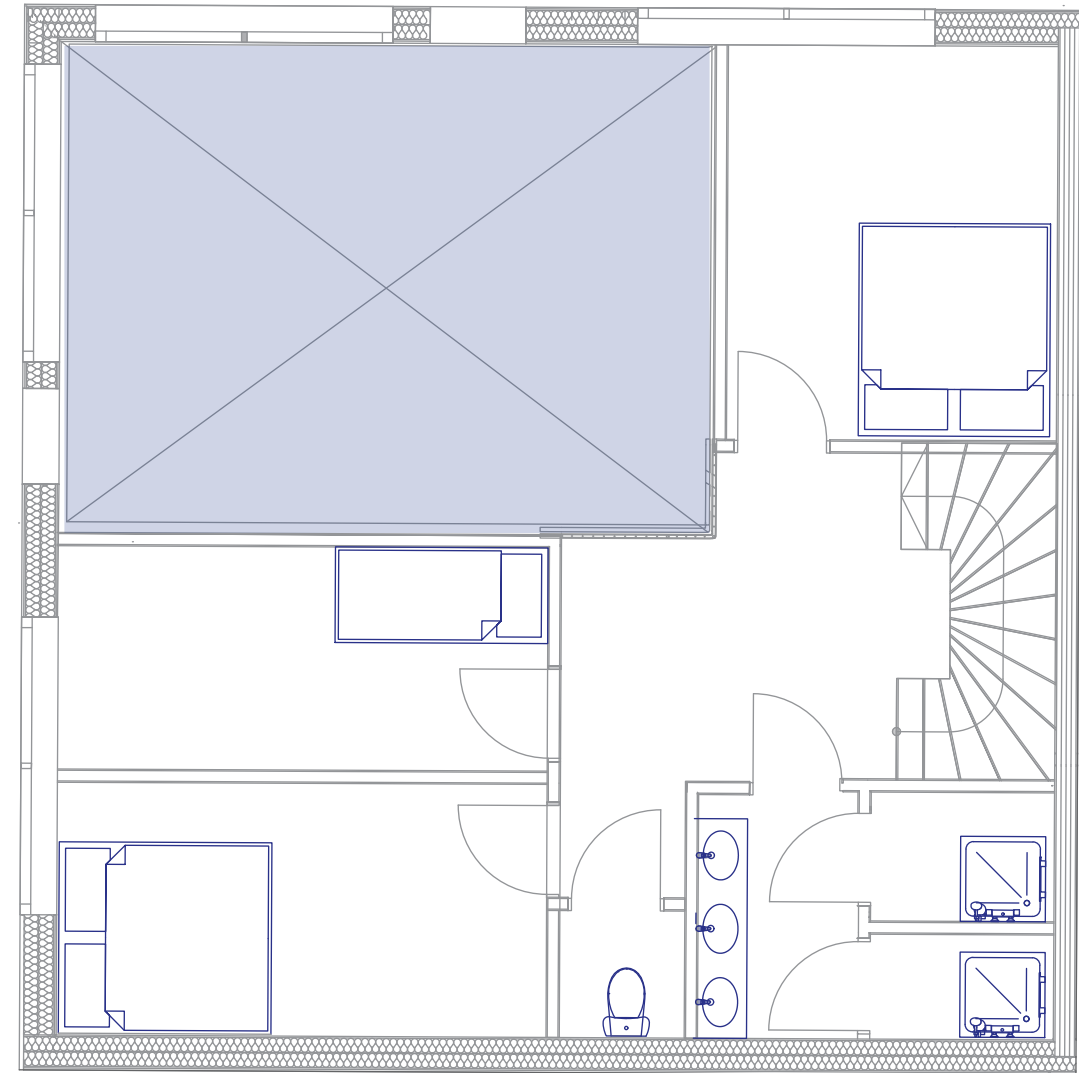
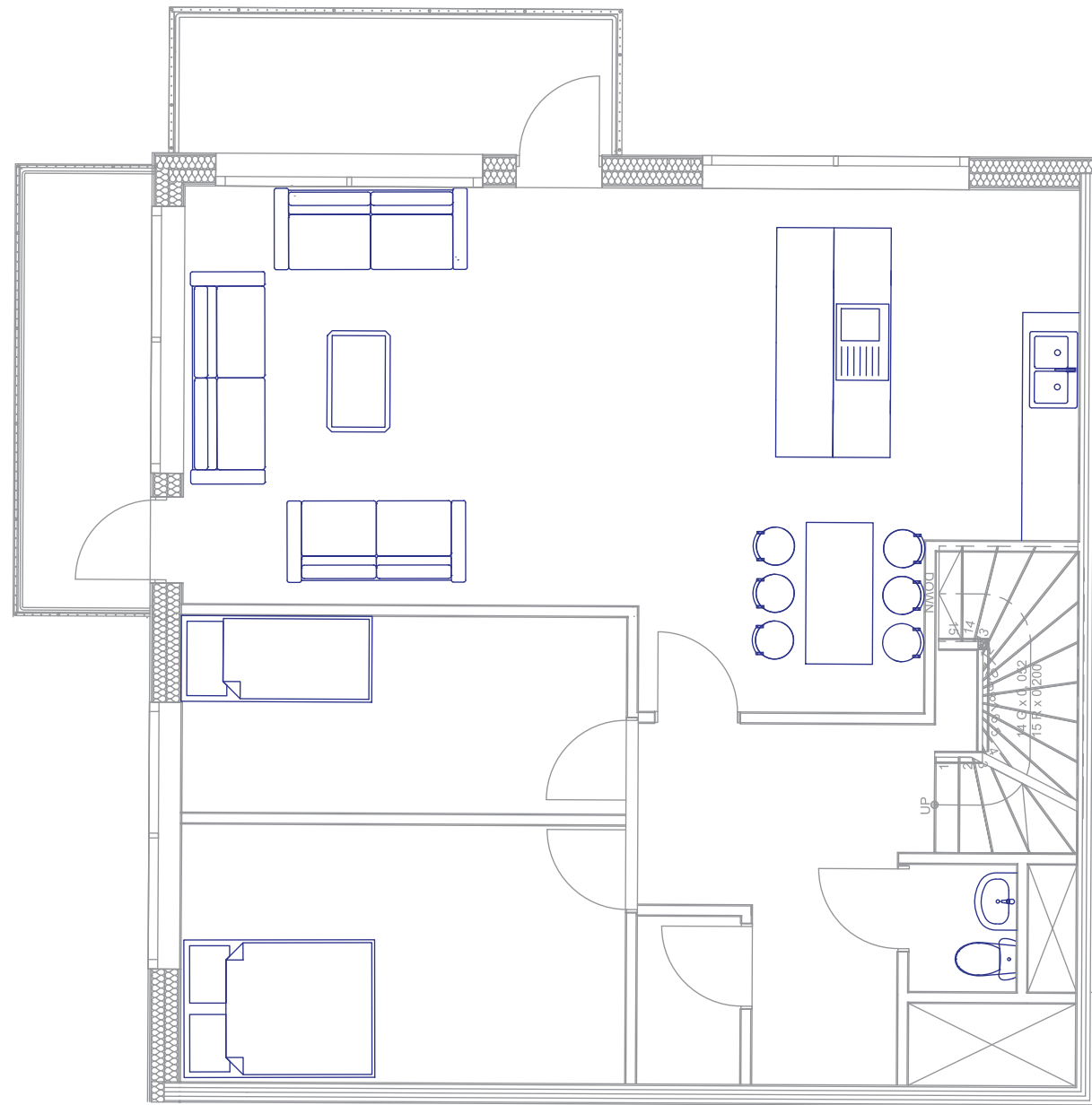




# Dwelling Typologies

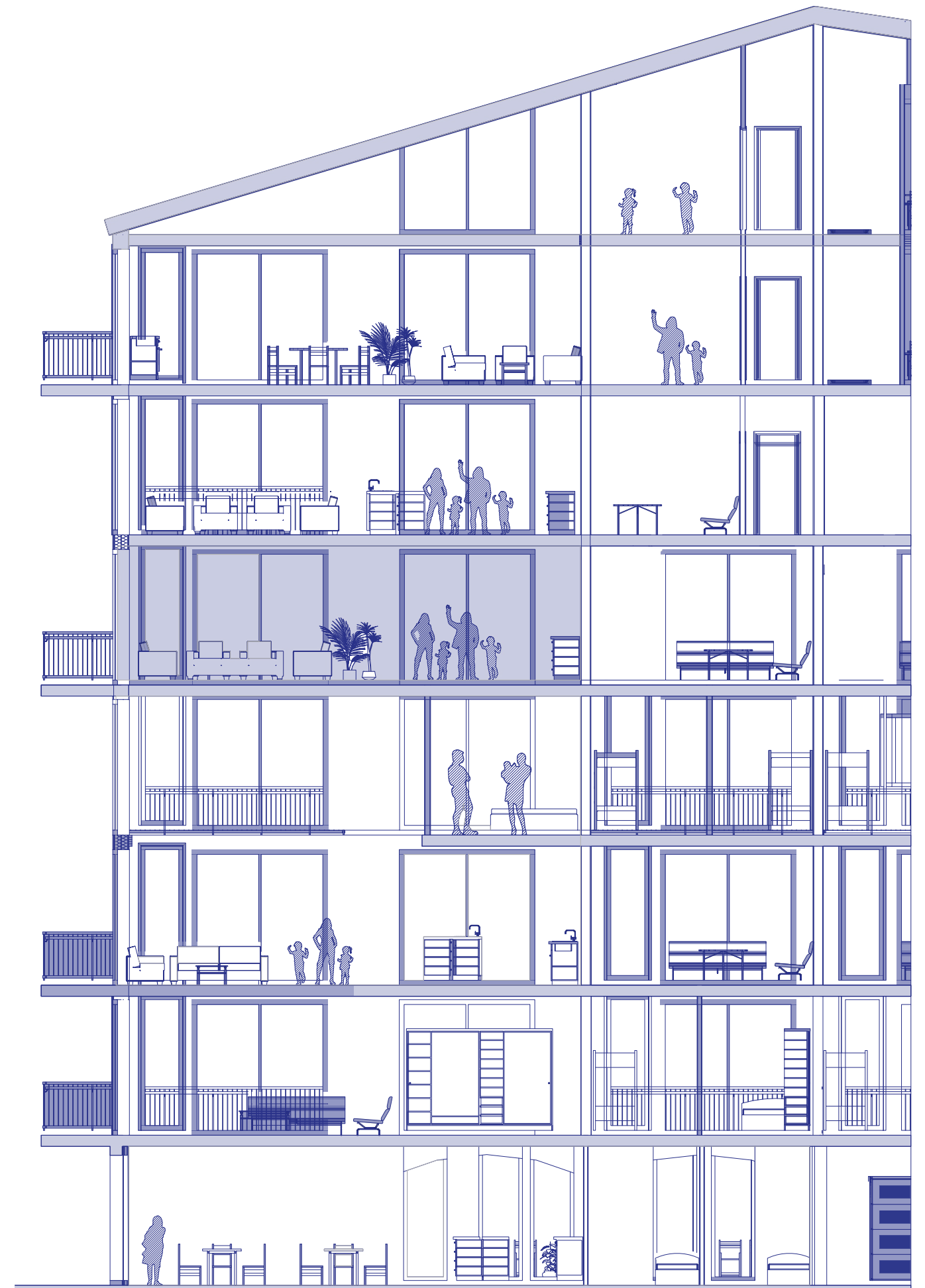
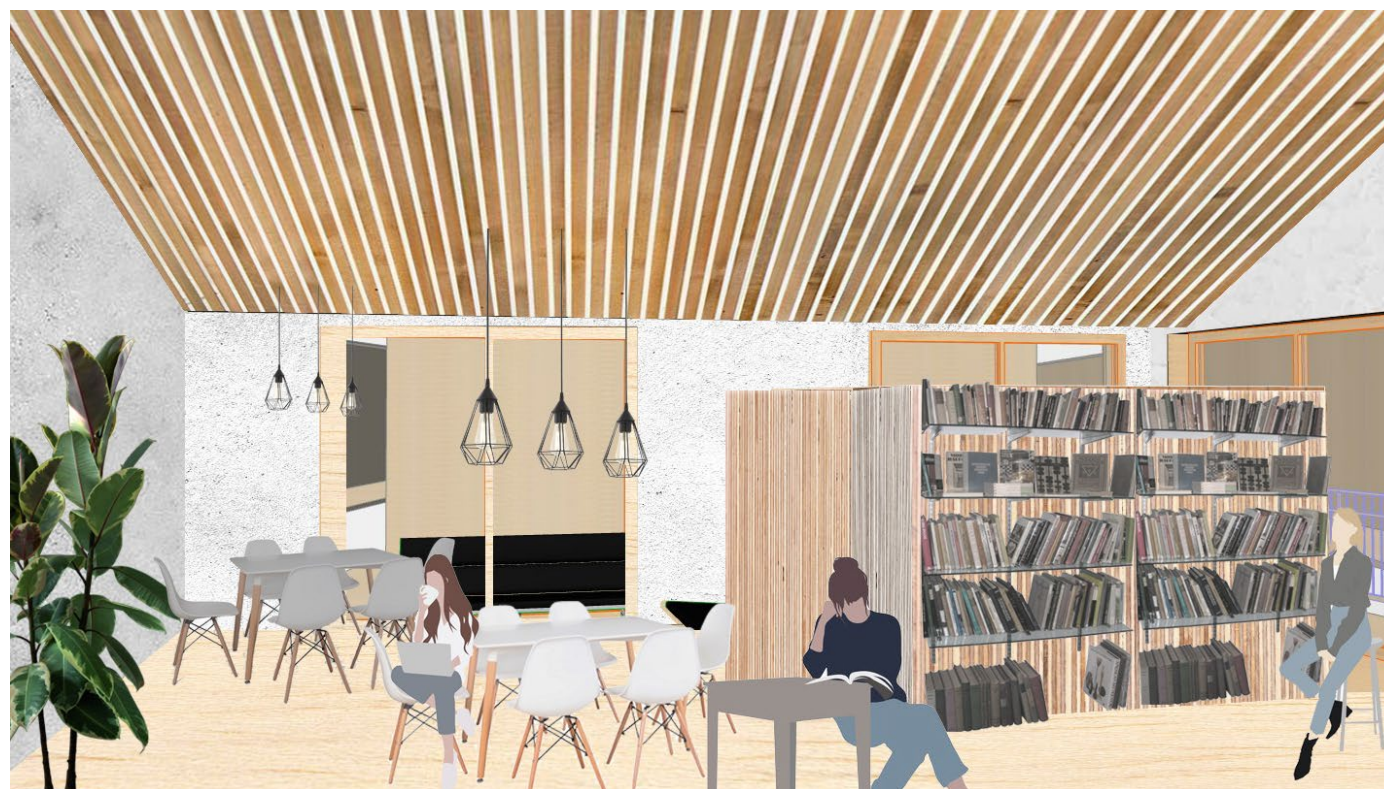
Communal Living: Type F

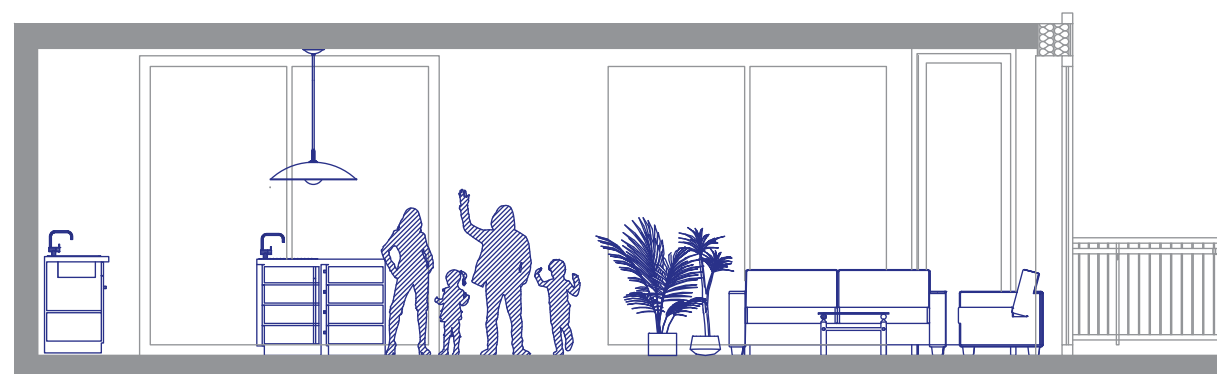
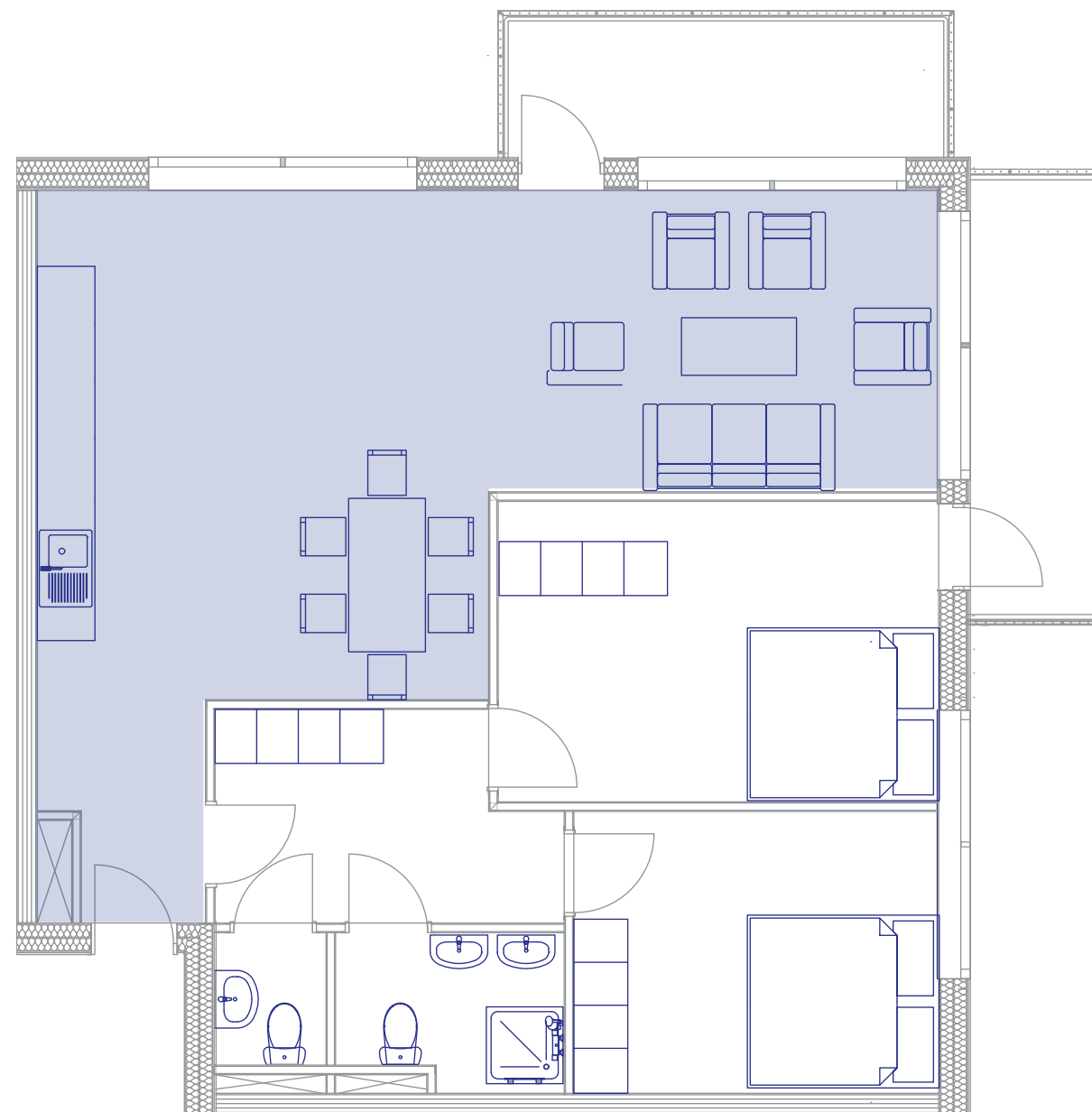




# Dwelling Typologies

Communal Living: Type G

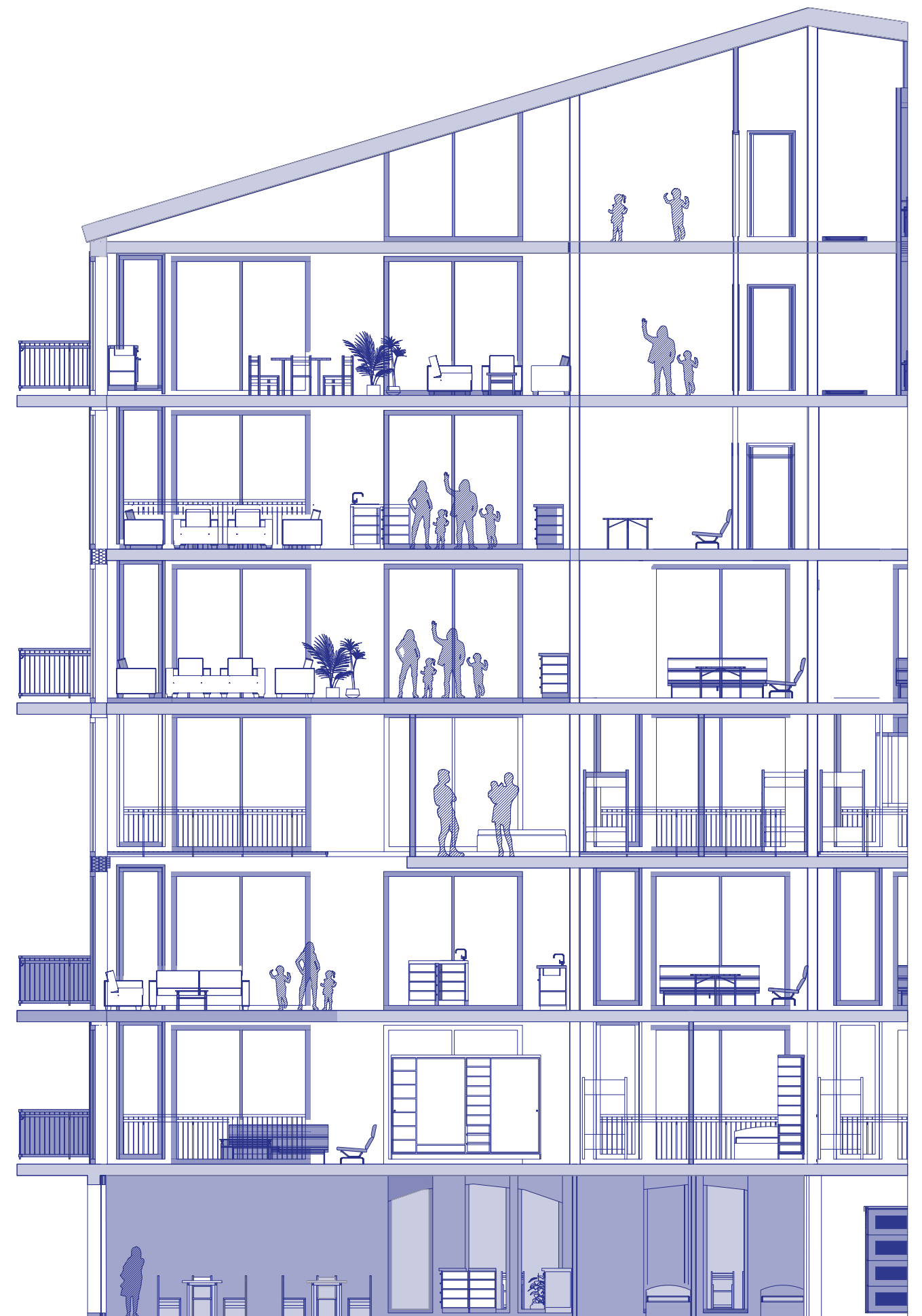


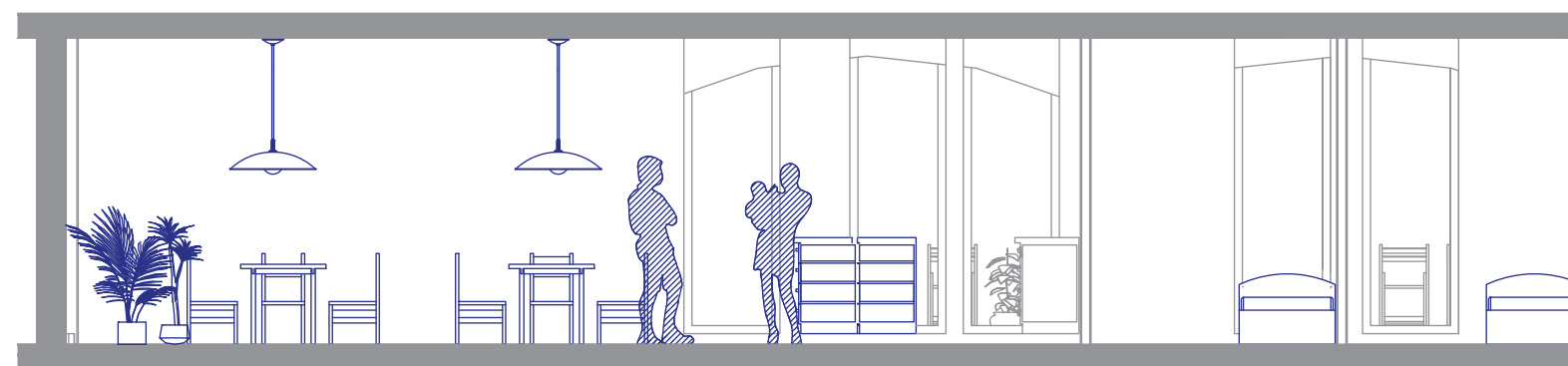
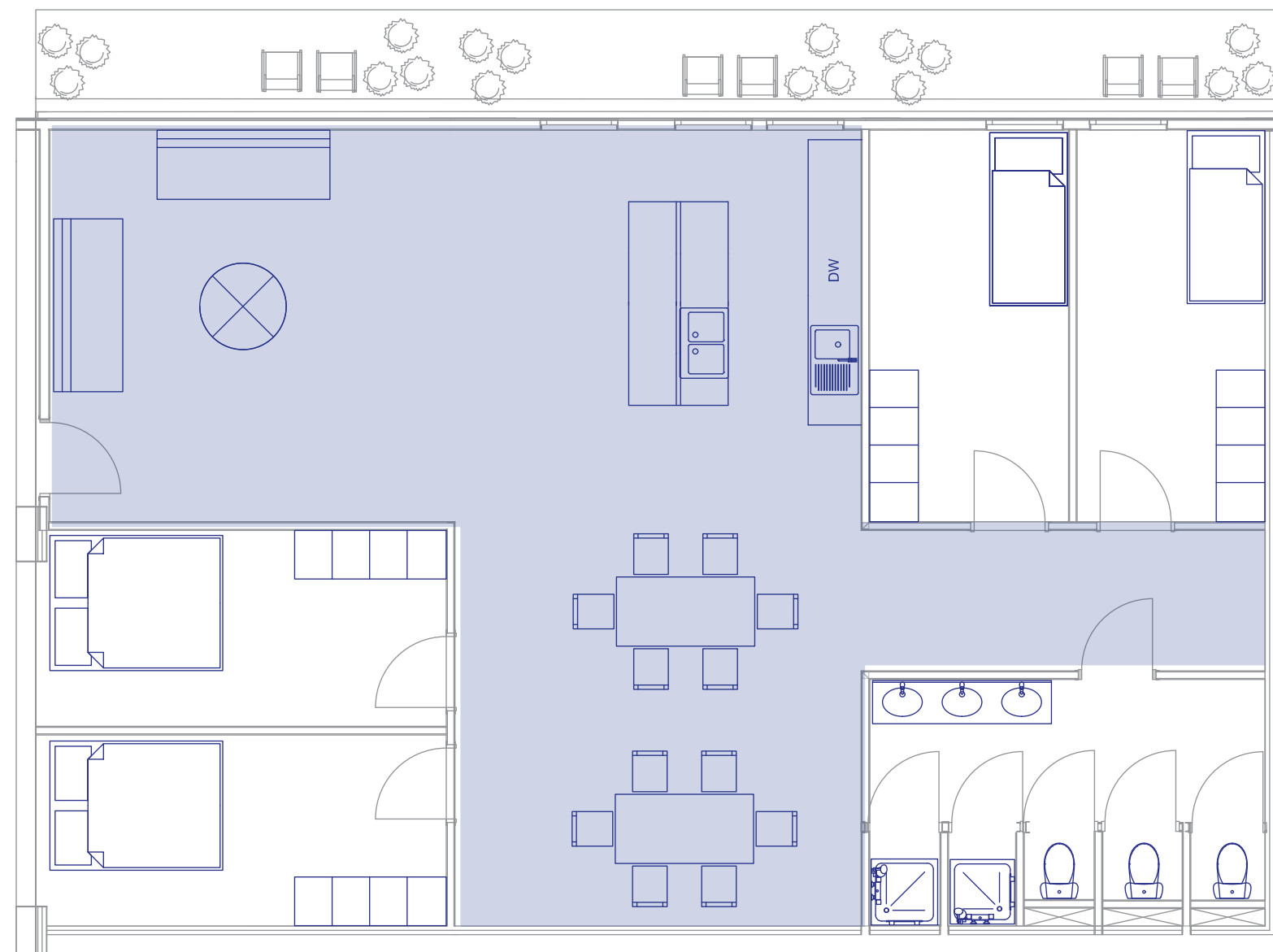




# Dwelling Typologies

Communal Living: Type H

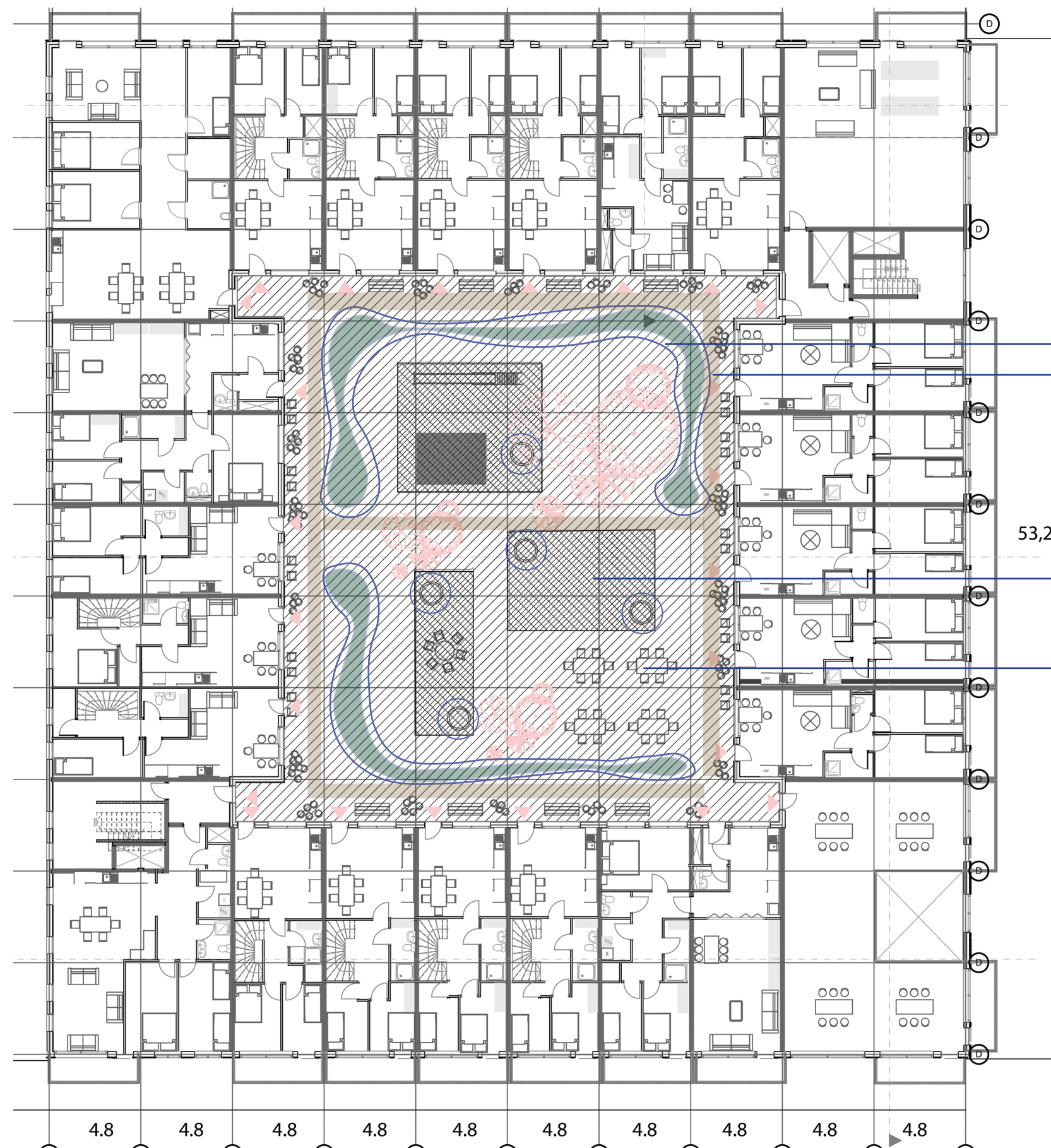






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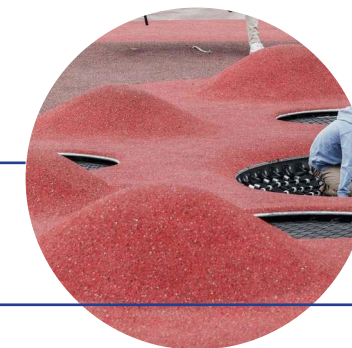
Communal Garden



Concrete grinded  
for pathways



Gravel grinded  
for drainage of water



Rubber Mulch



Larch wood furniture









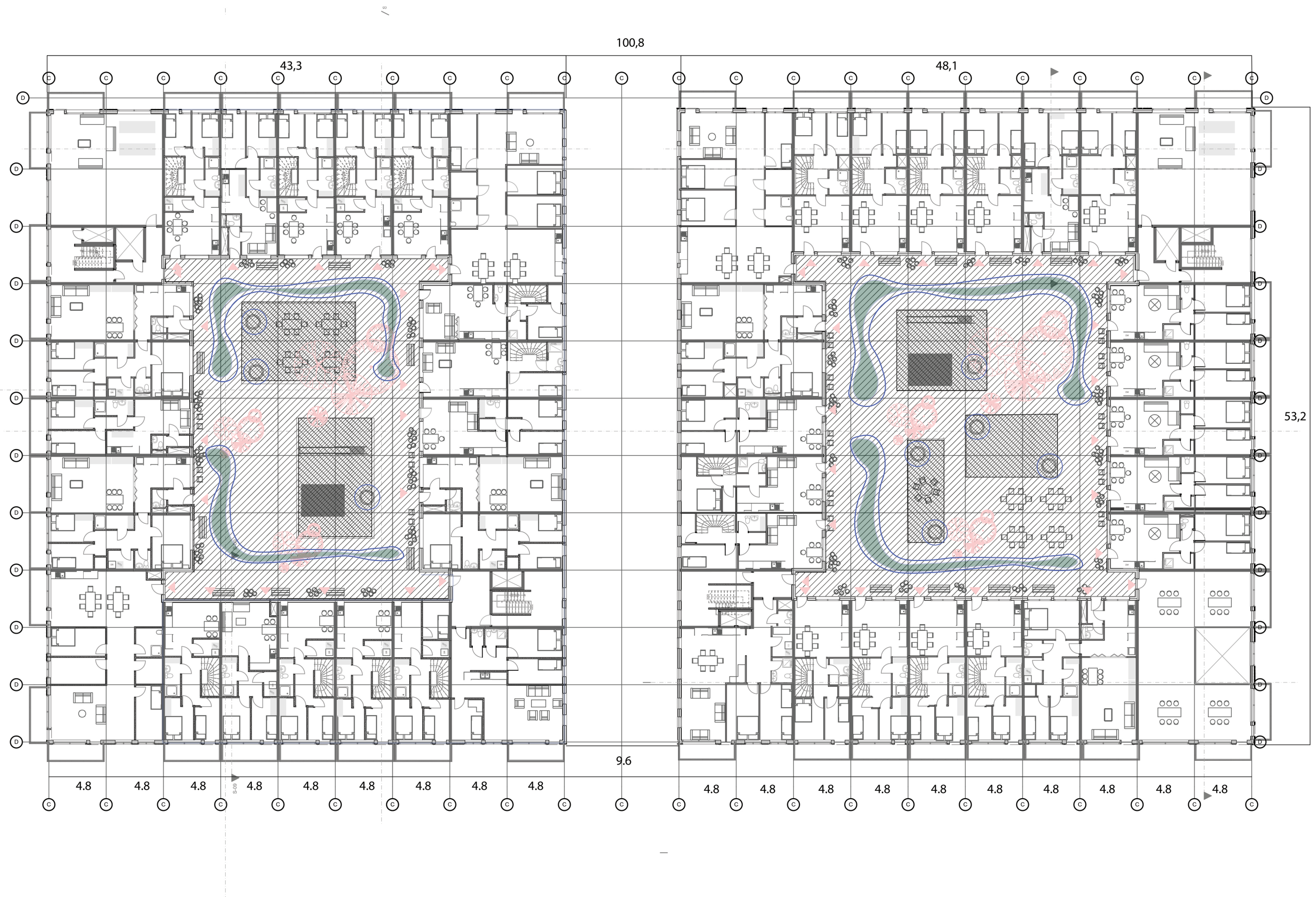


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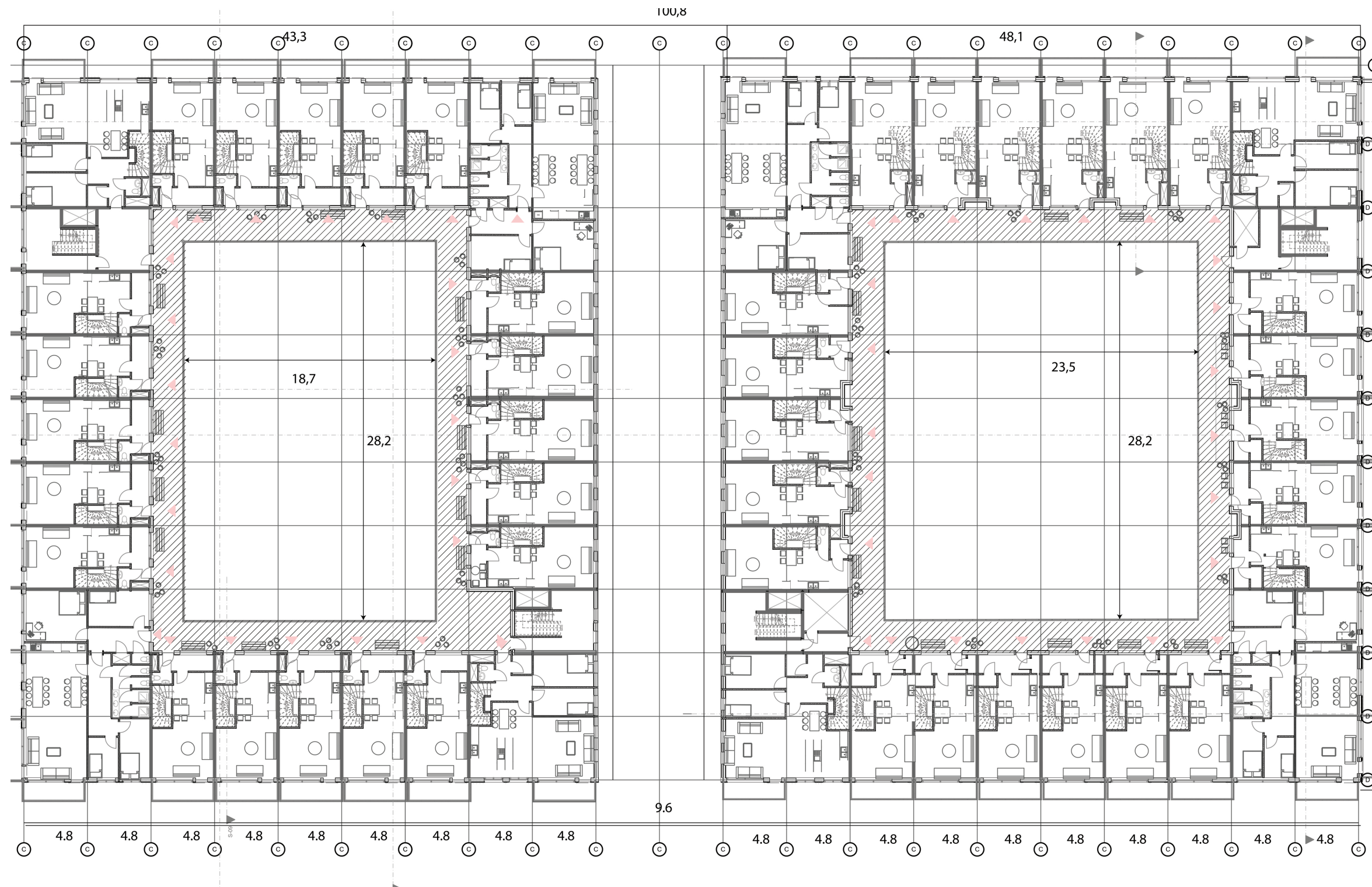
Building Block

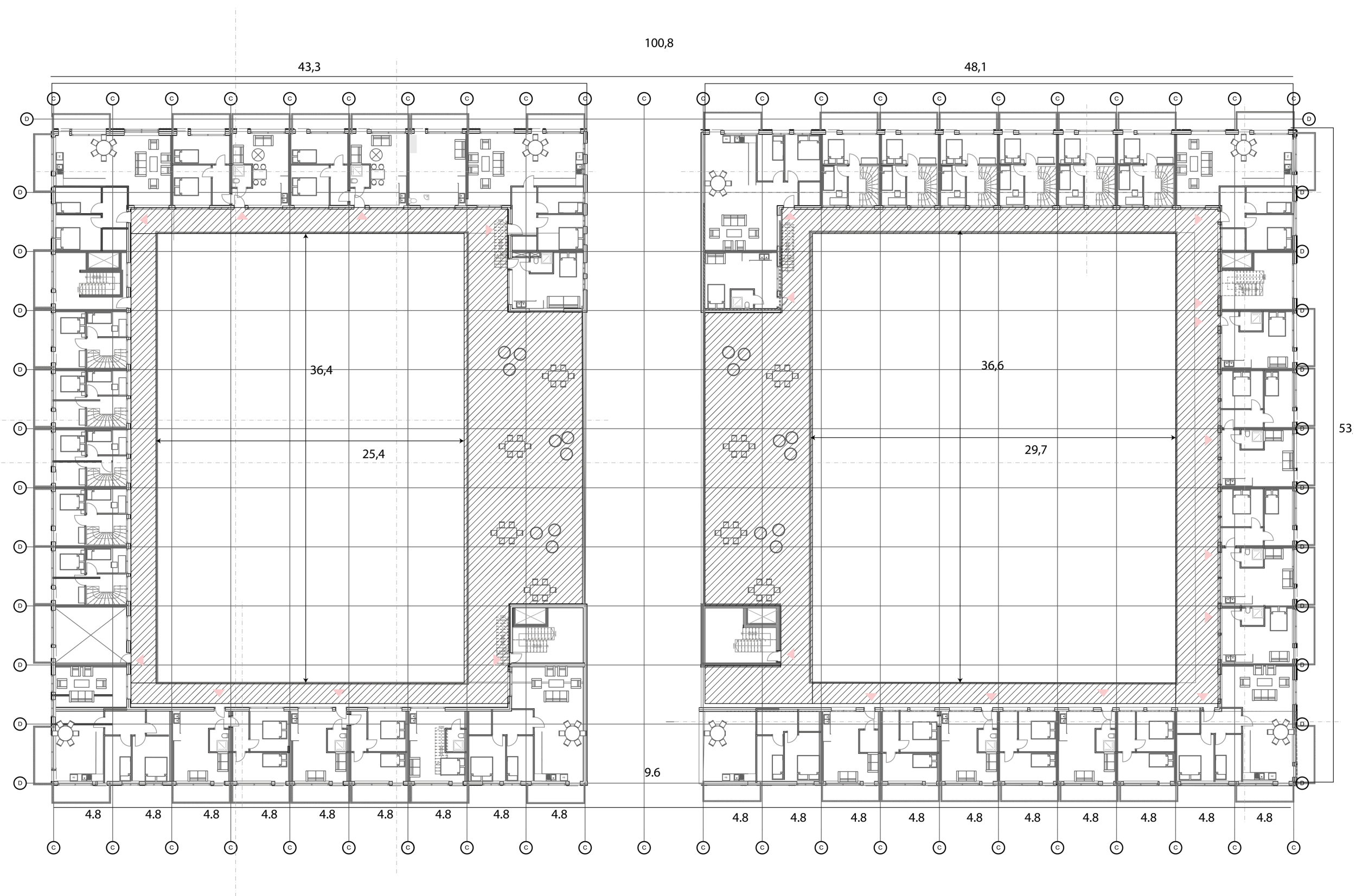




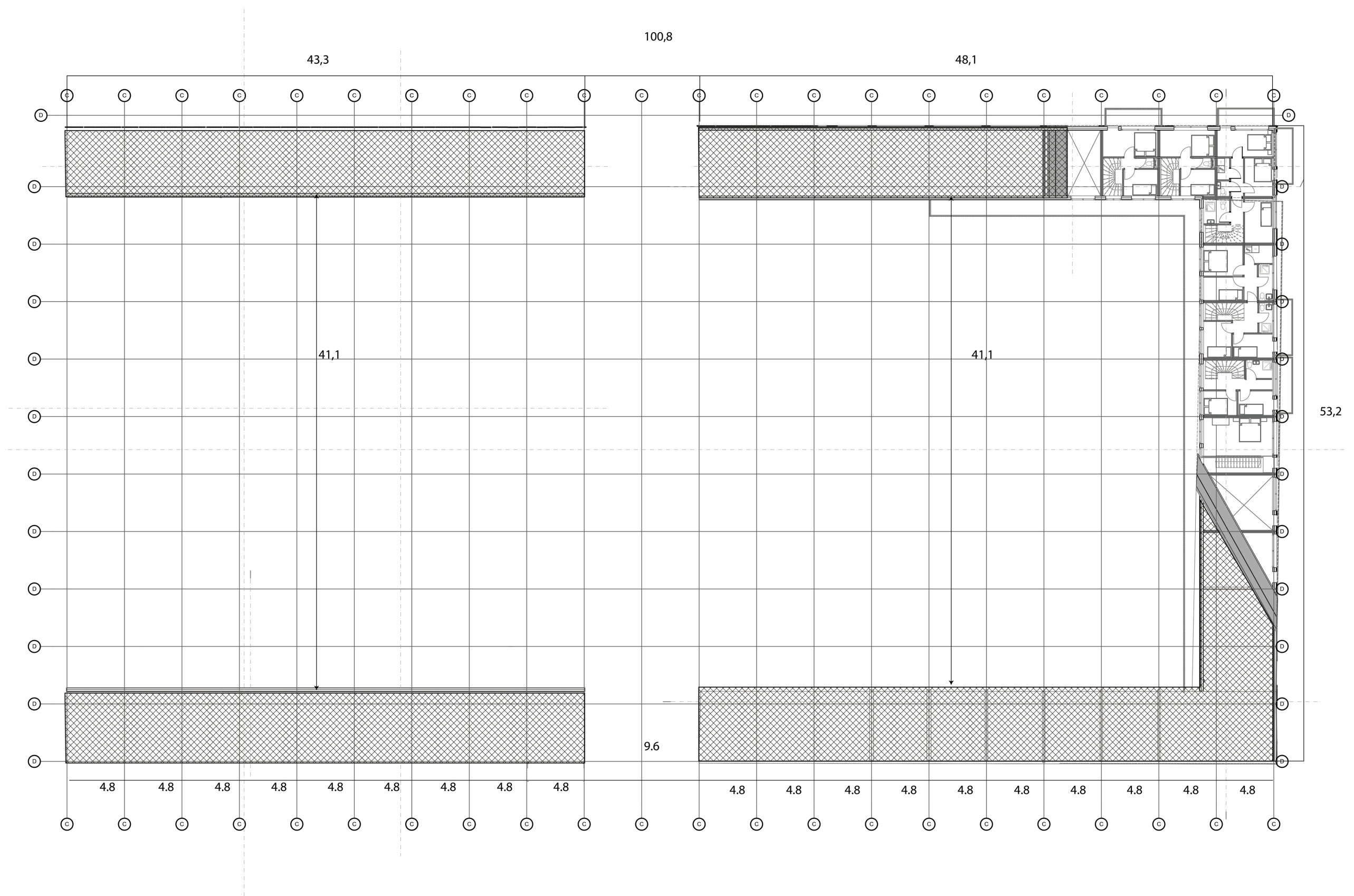










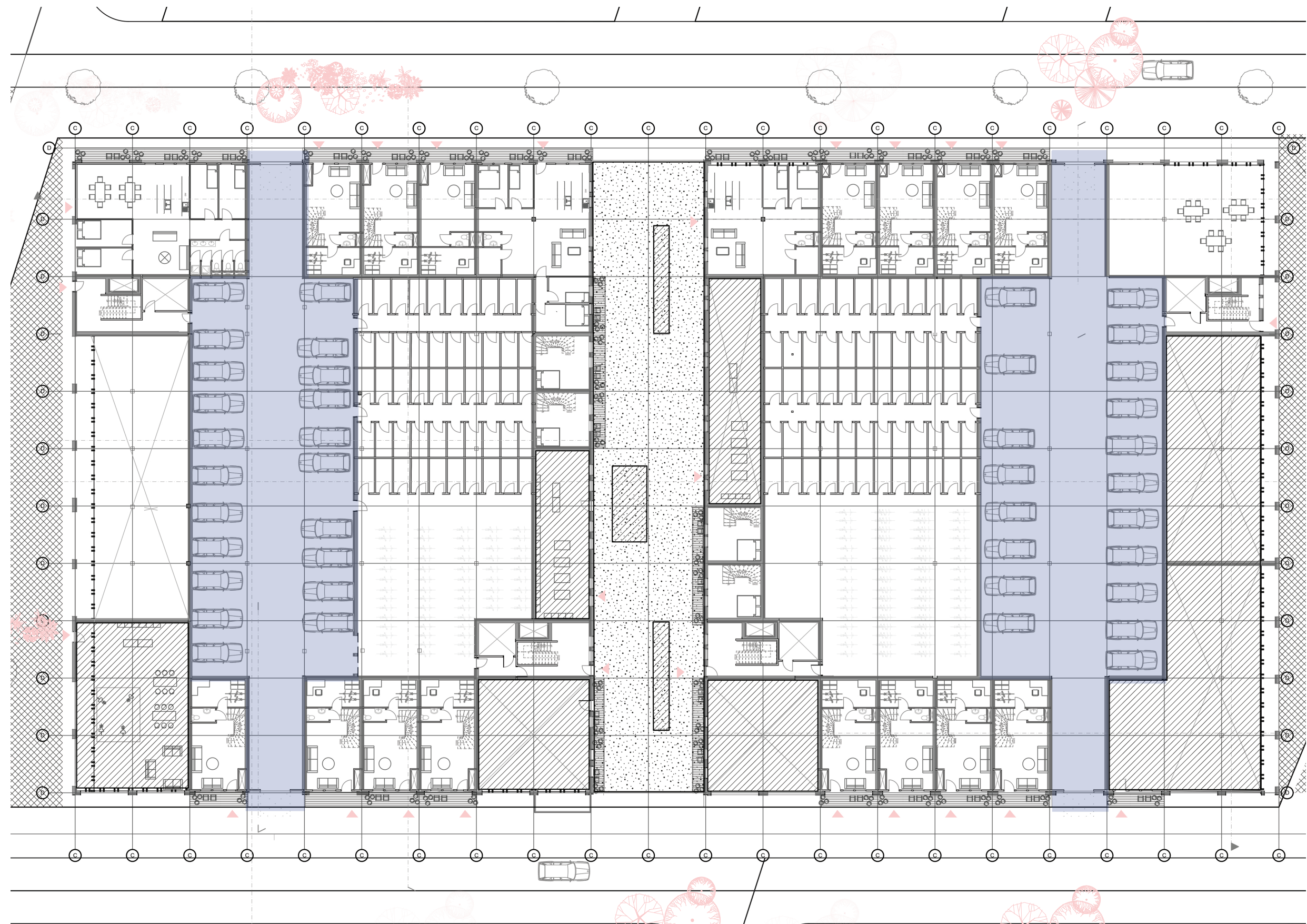


+9 1:250

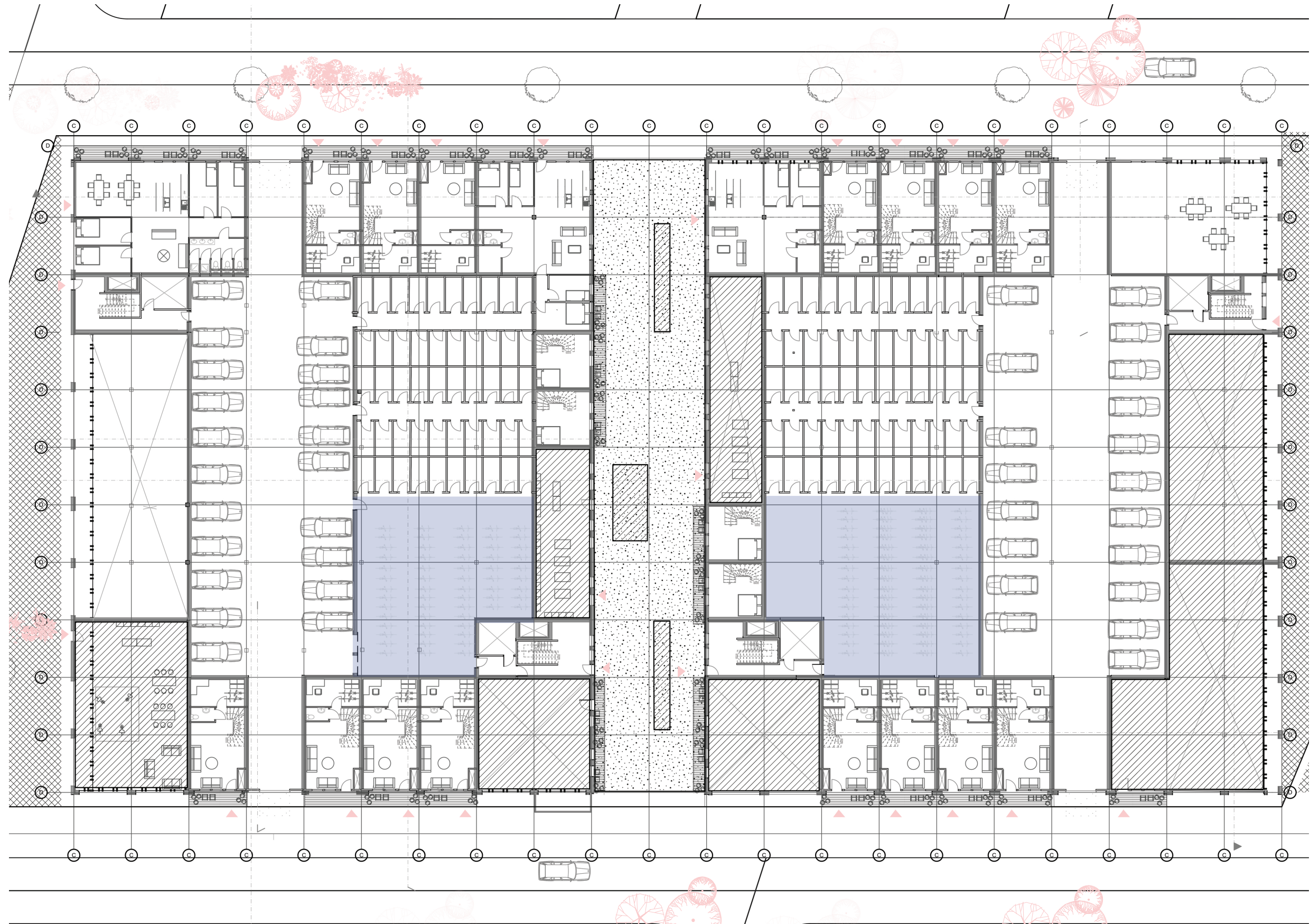


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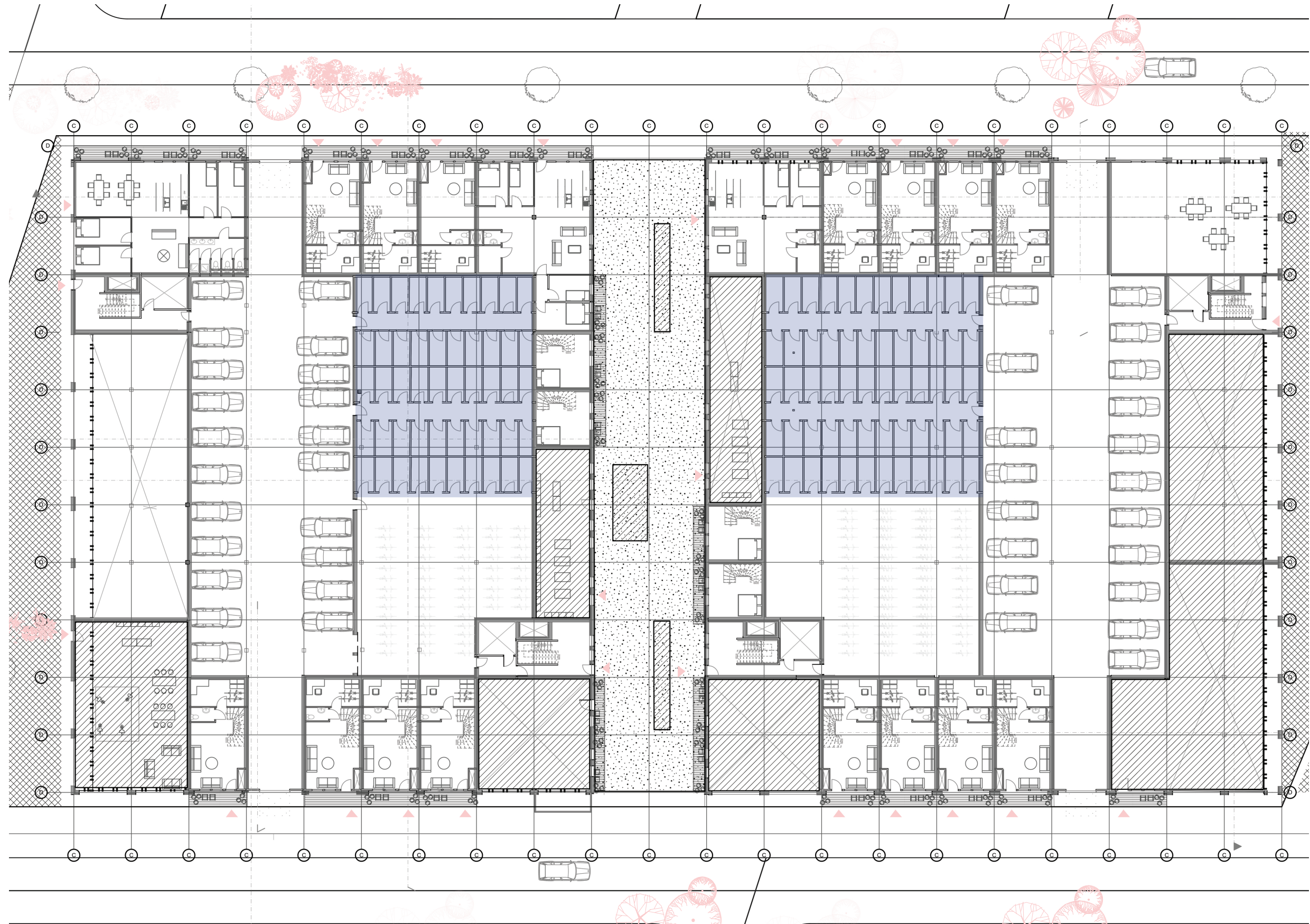
Functions



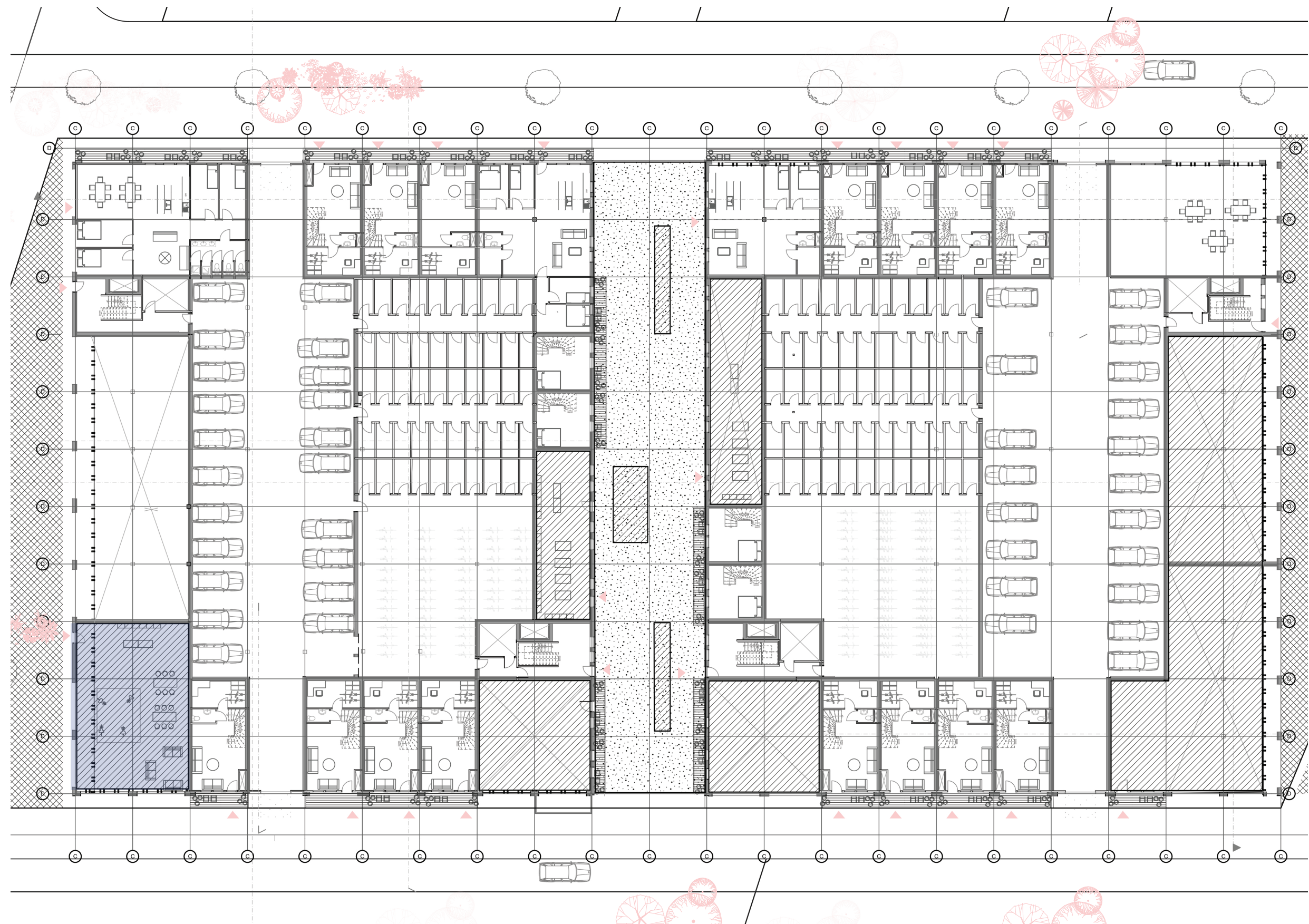




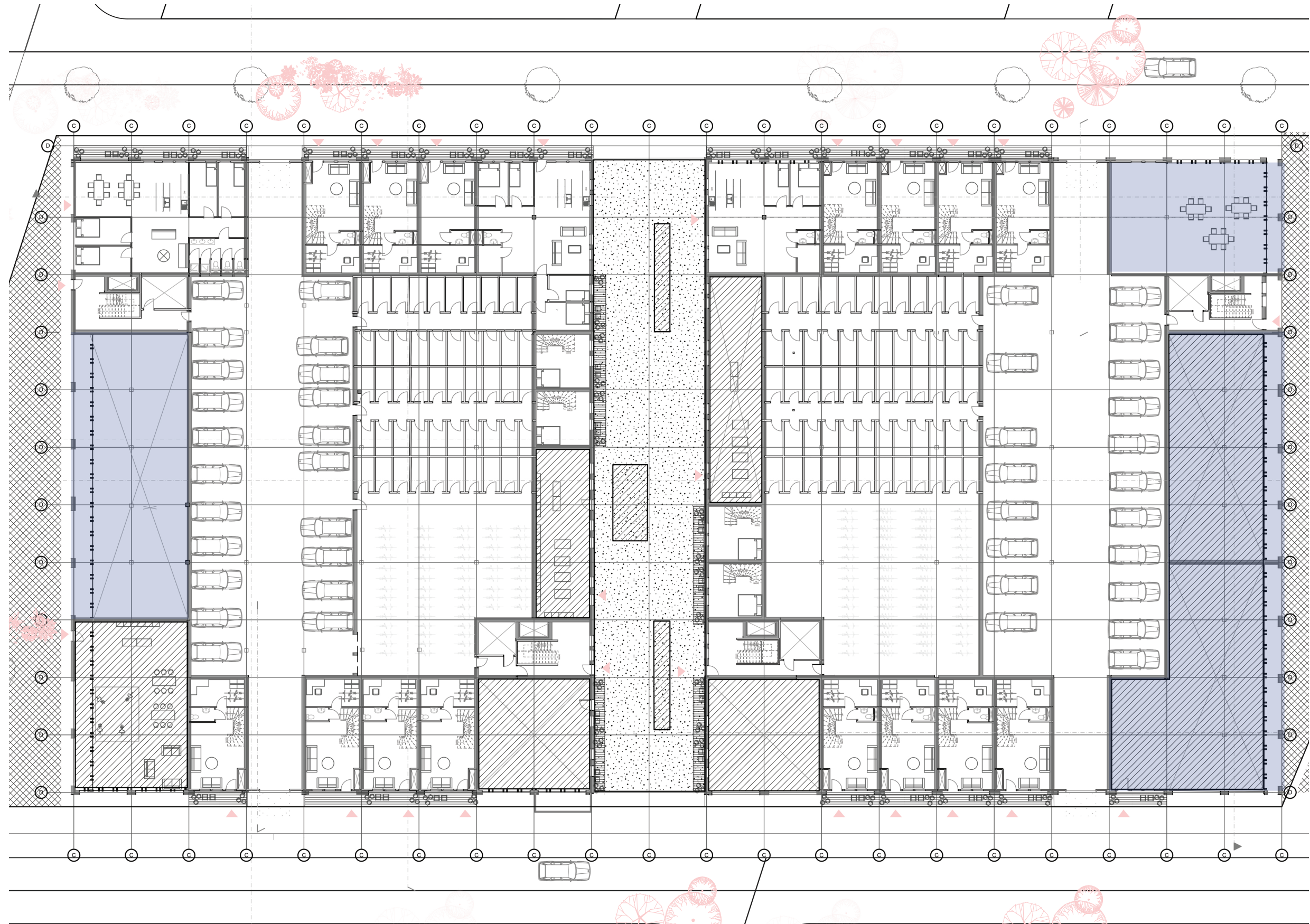




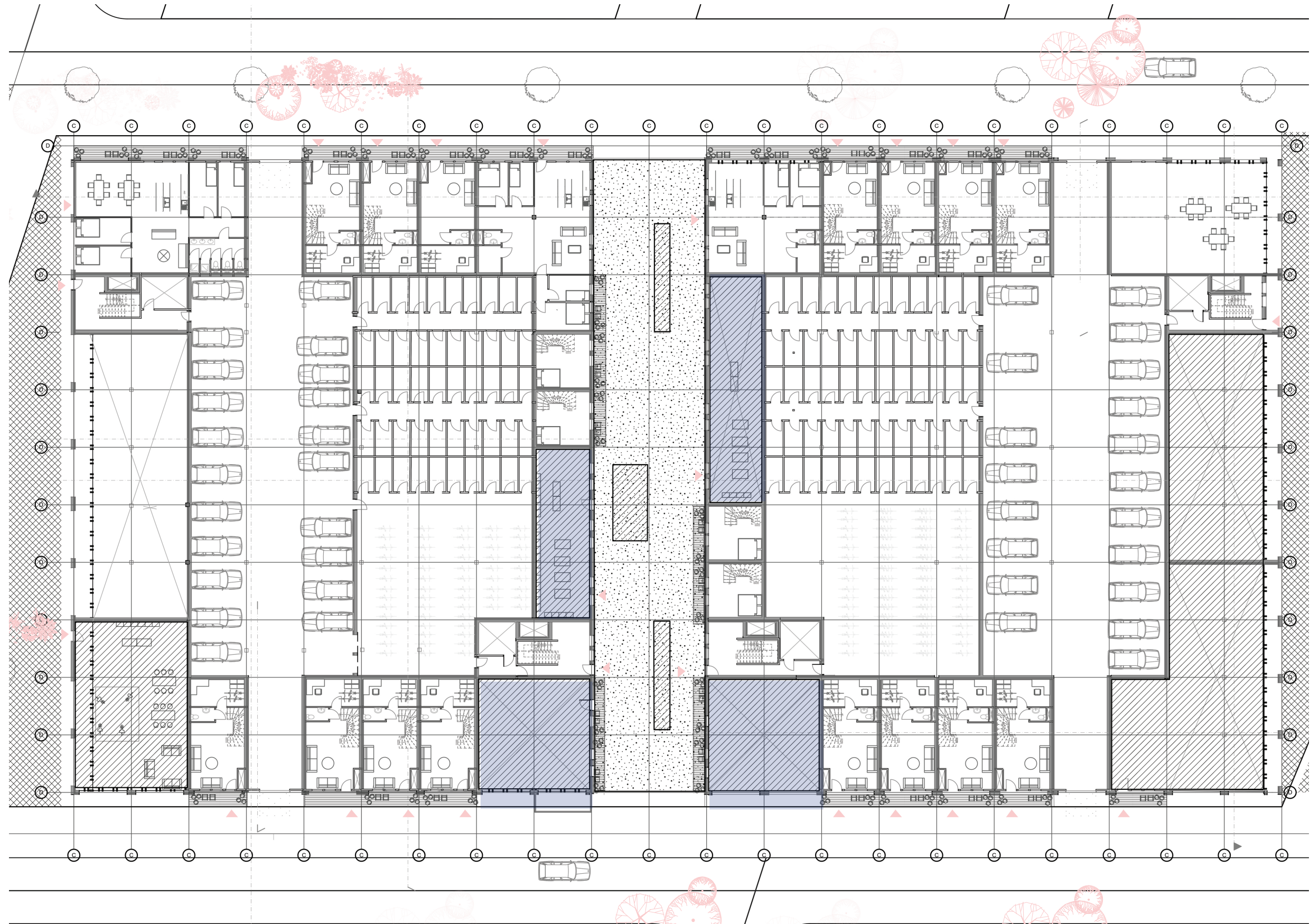








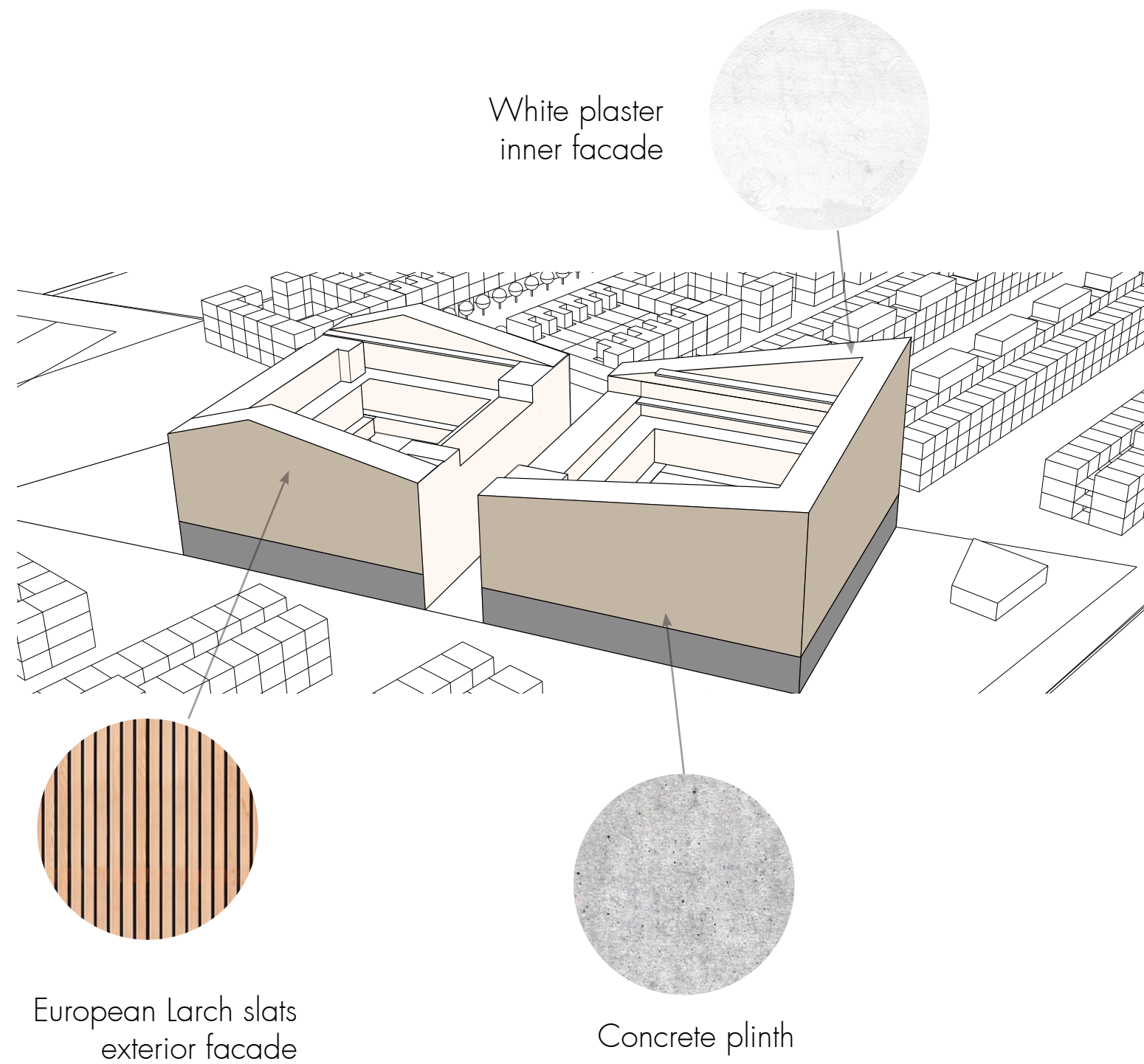




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Facades

## Materialisation







North Facade 1:200

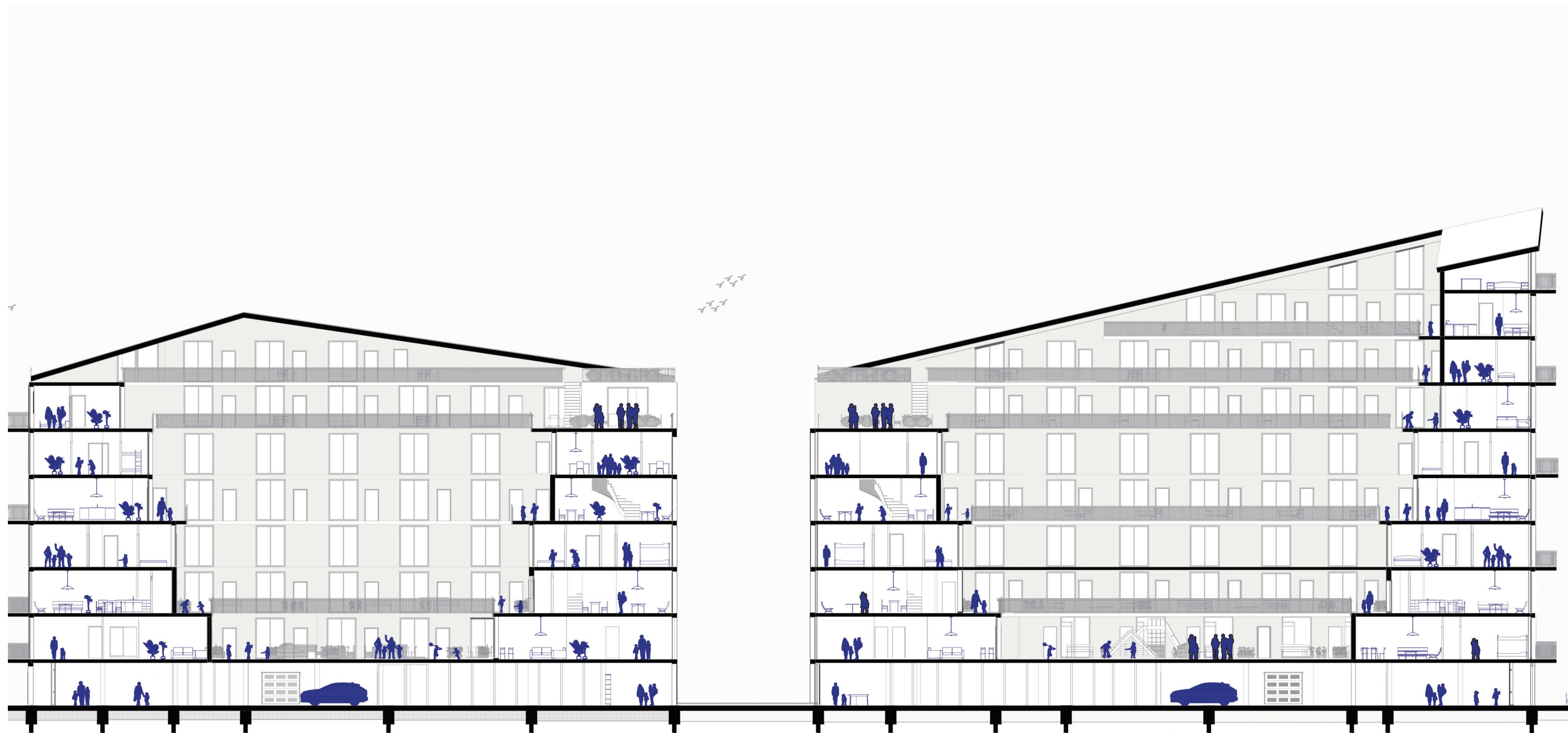






West facade 1:200

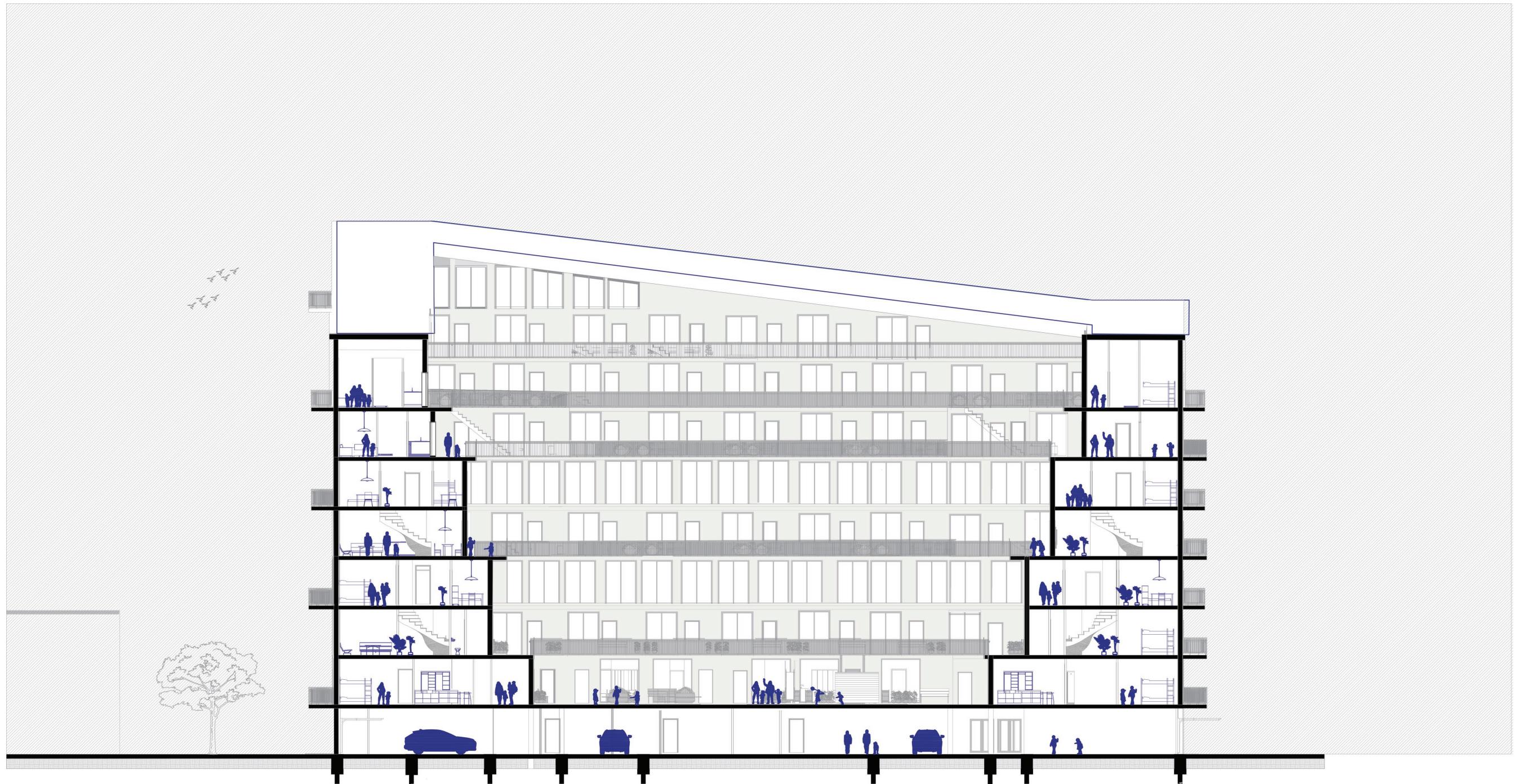




Section Longitudinal 1:200







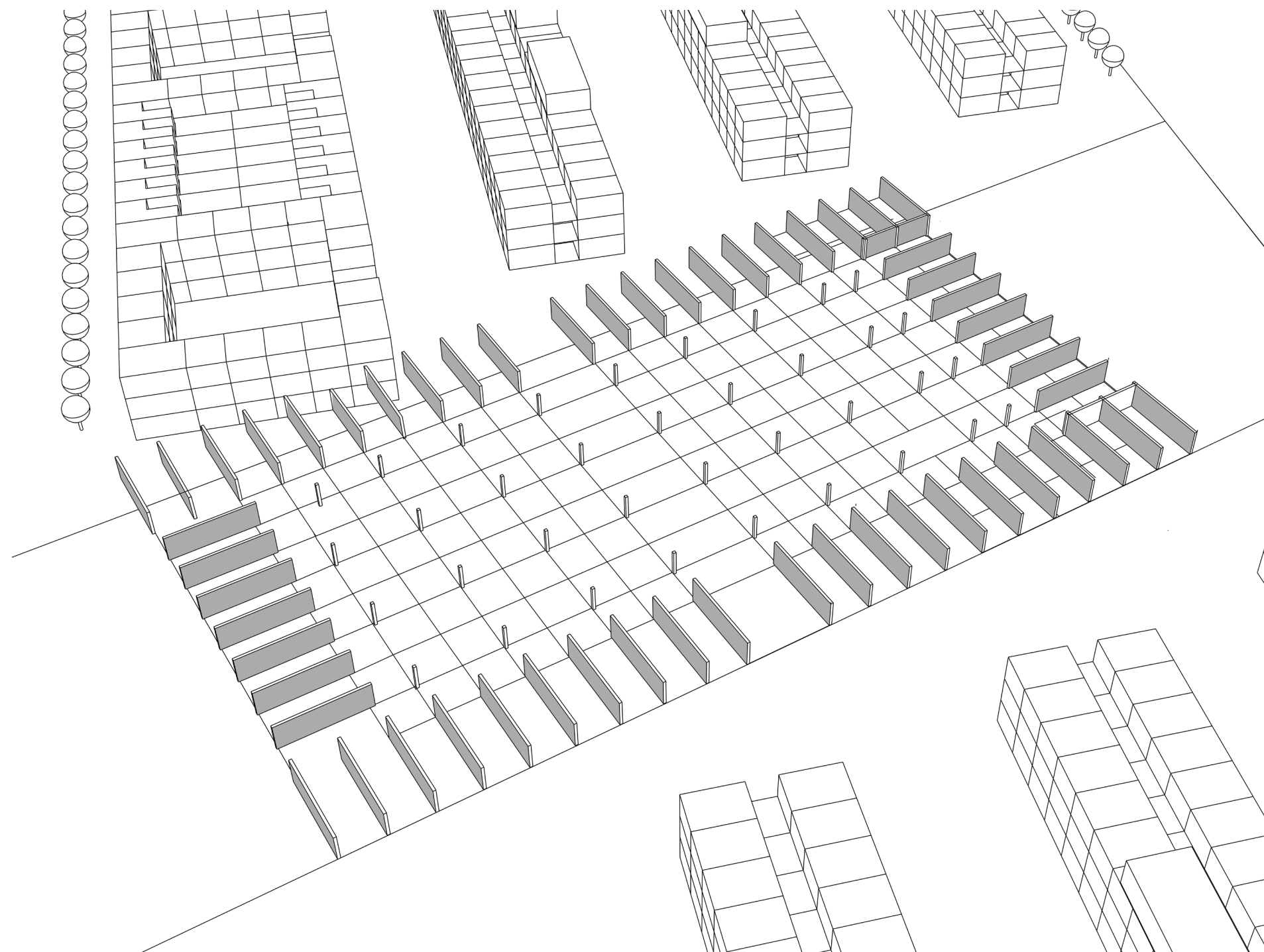
Section Cross 1:200





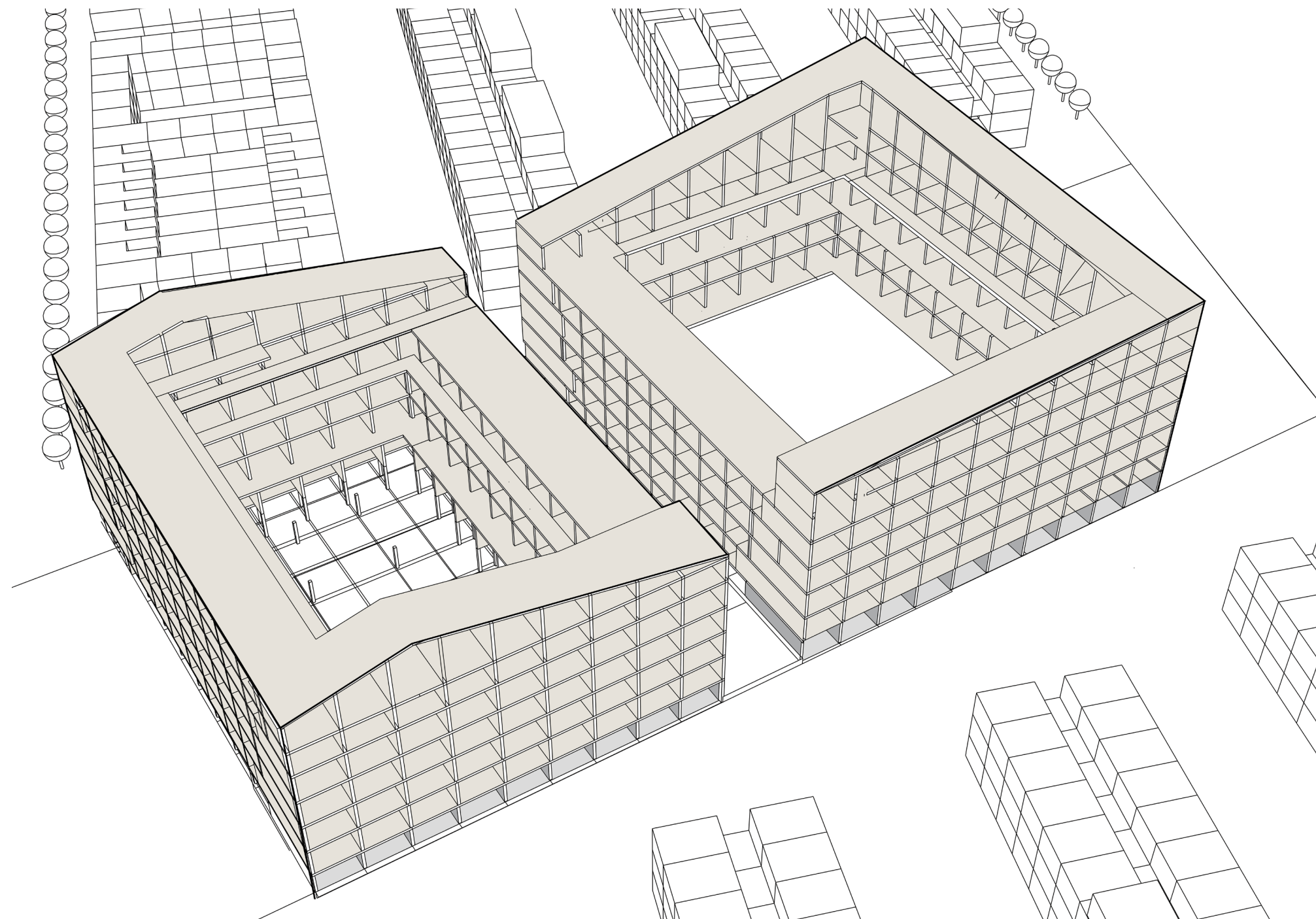
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Construction



Construction: concrete base

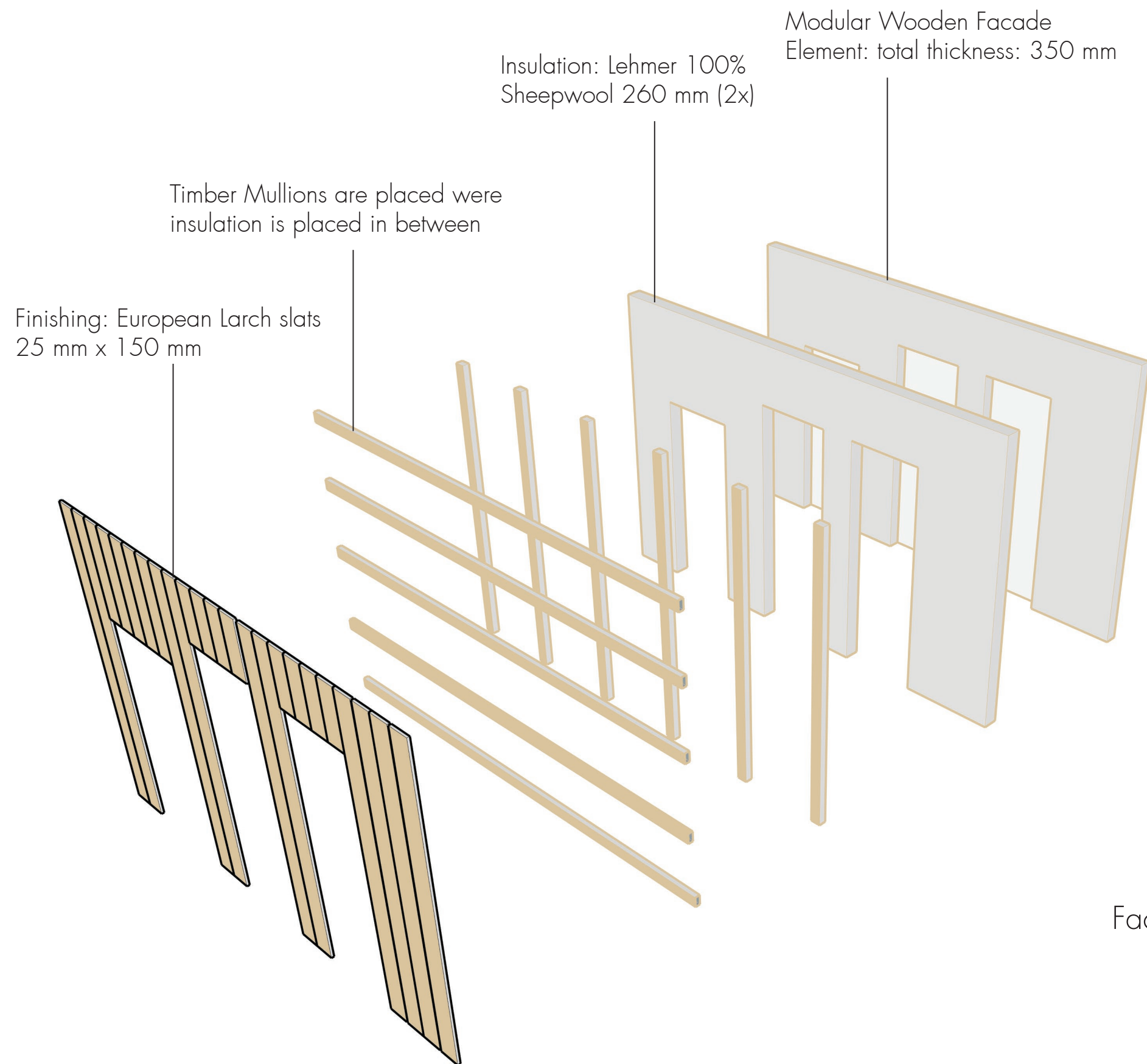




Construction: CLT finishing



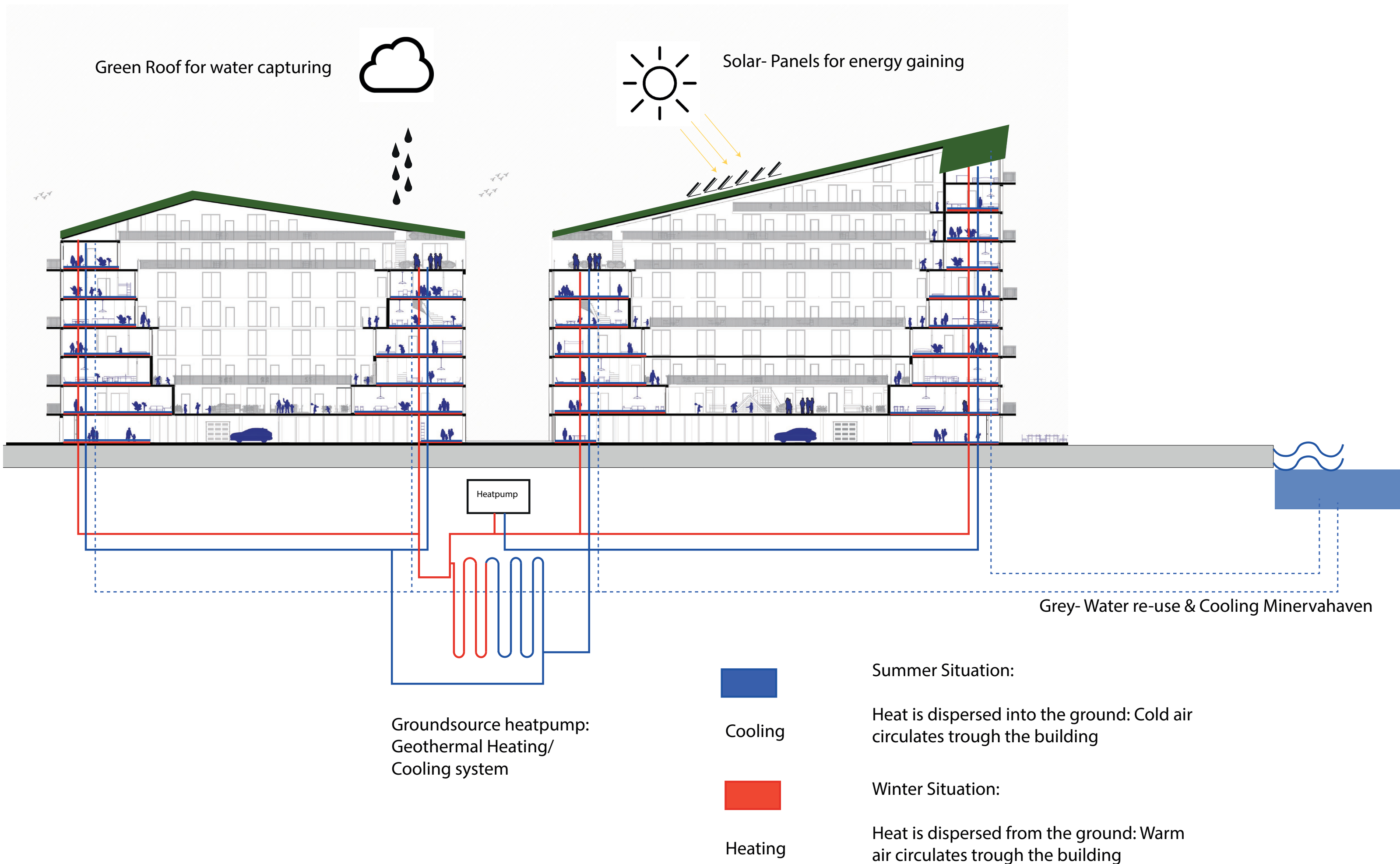




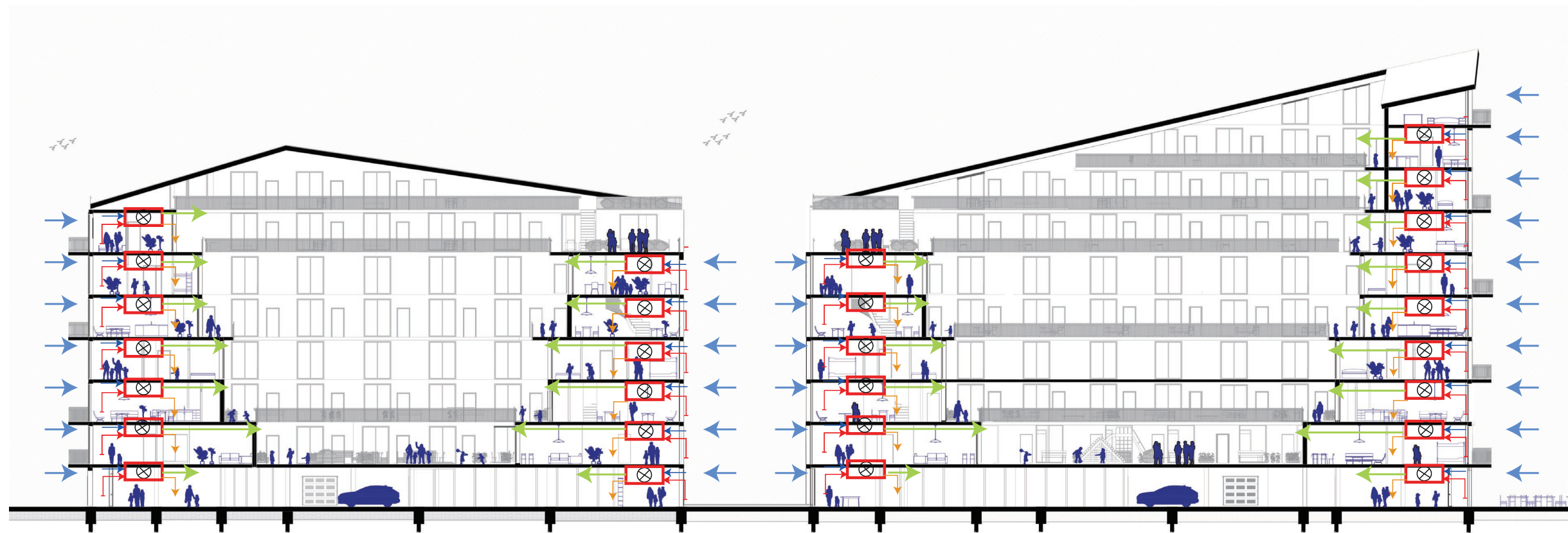
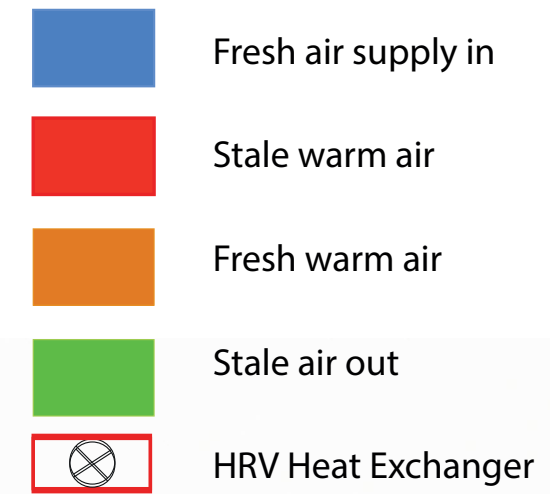
Facade construction: 350 mm

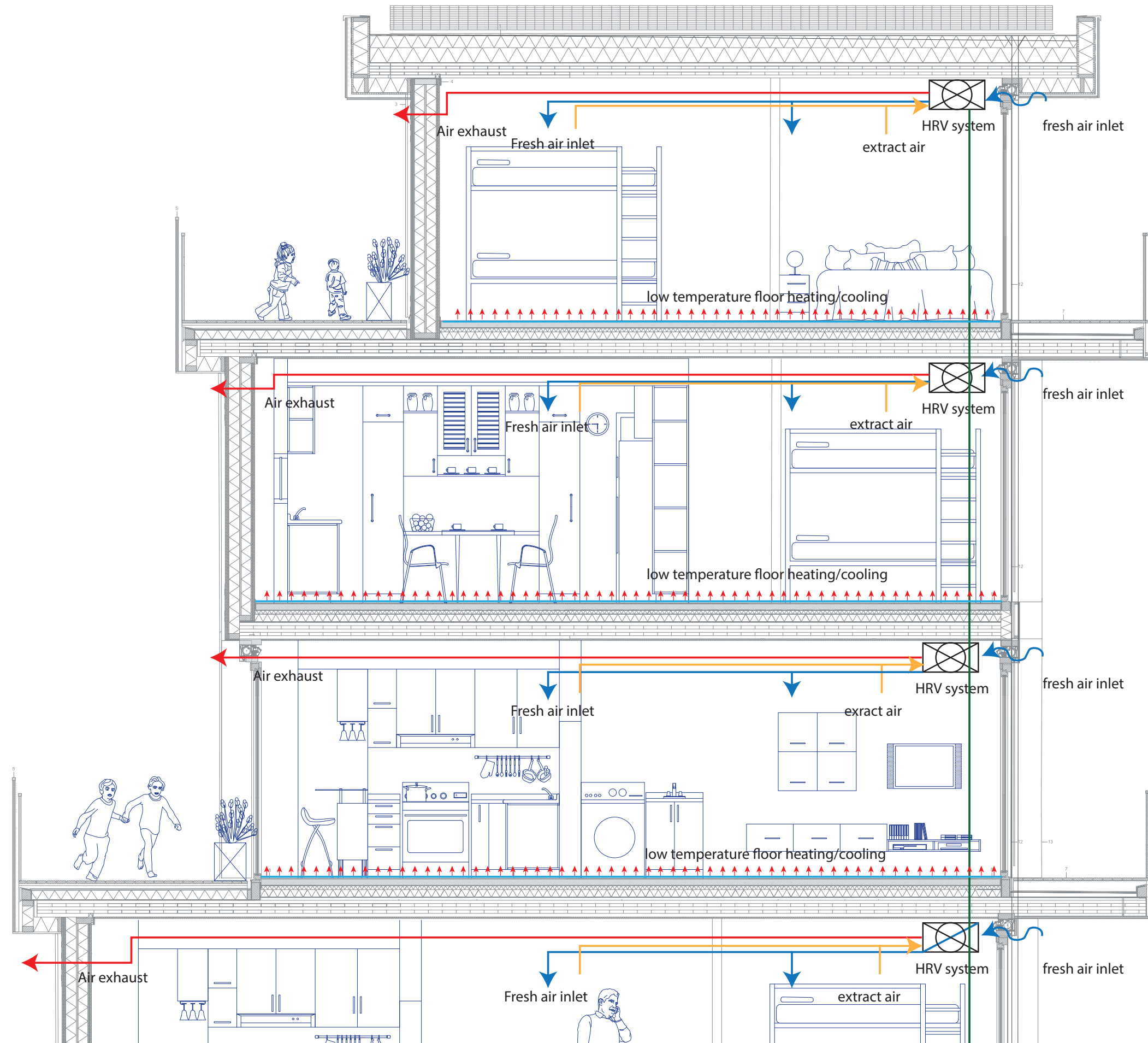
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Building Comfort







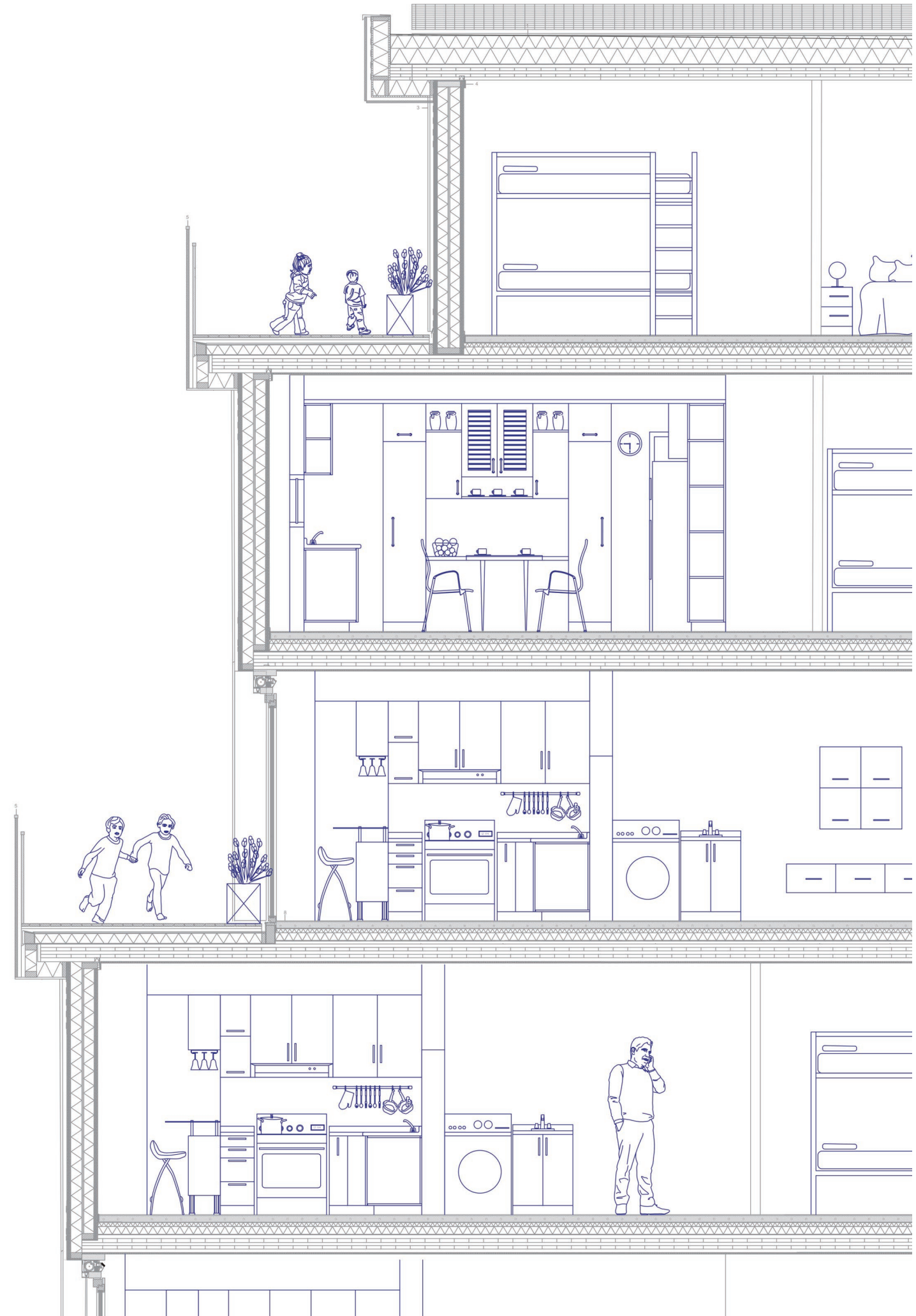
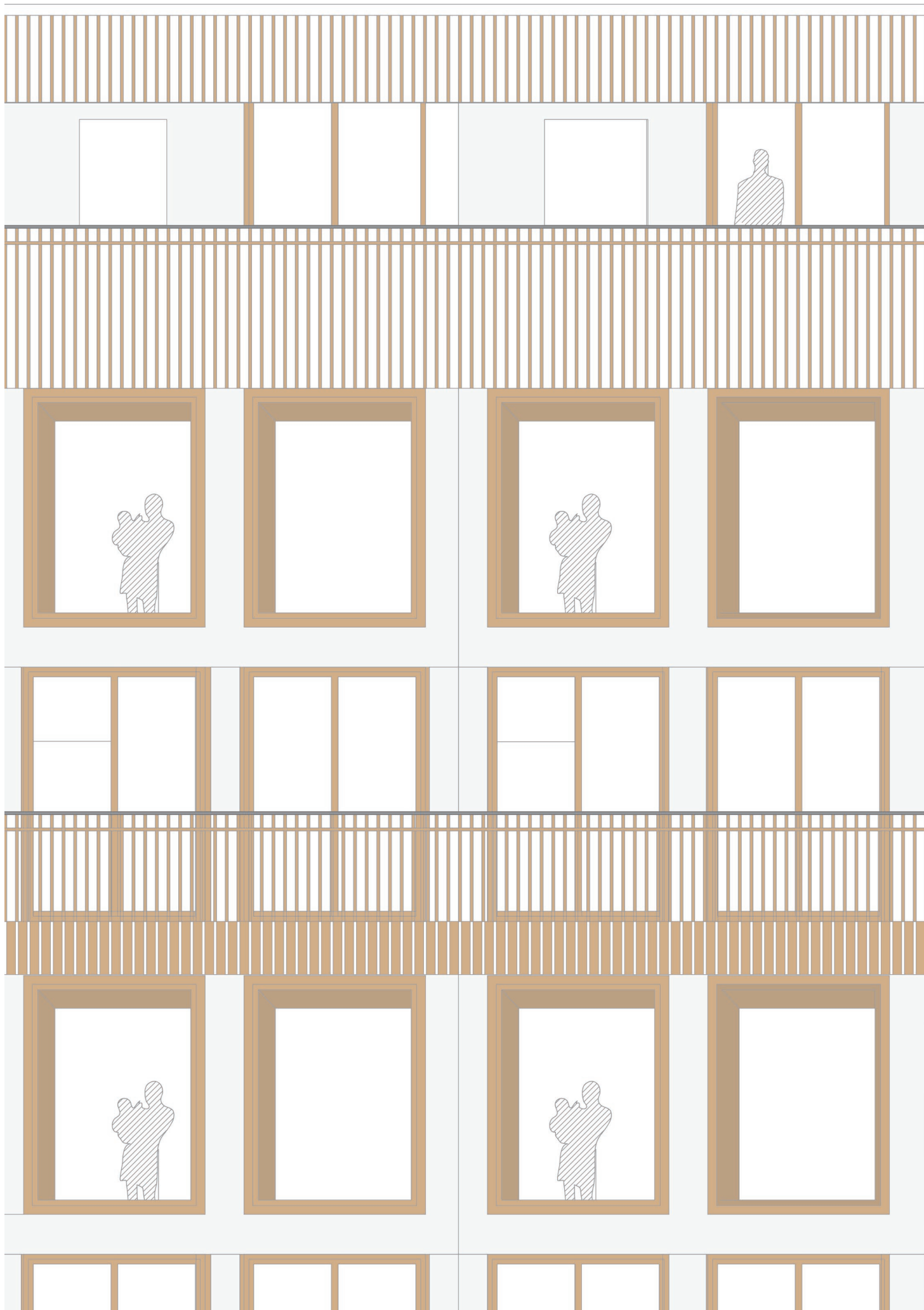


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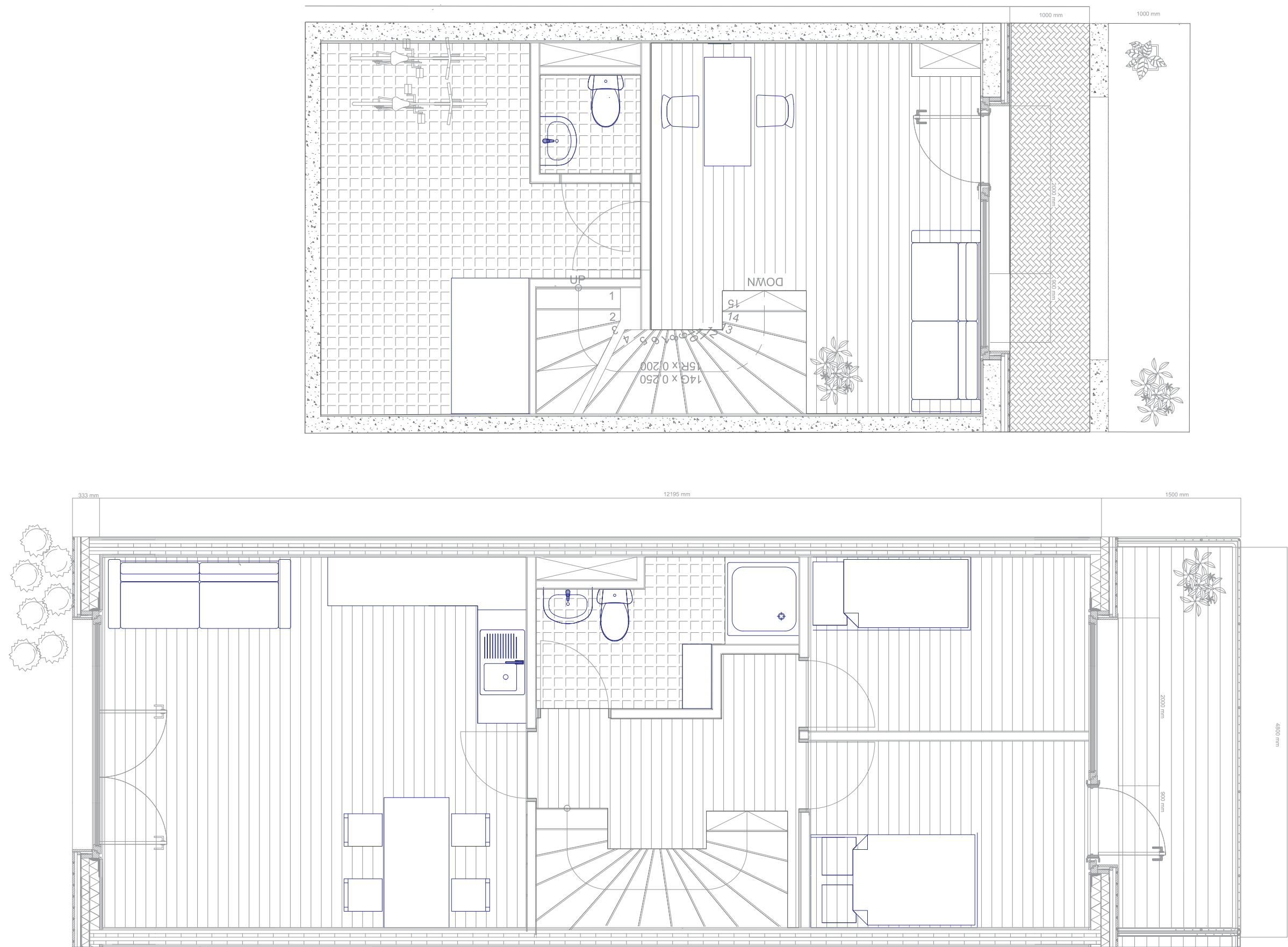
Details



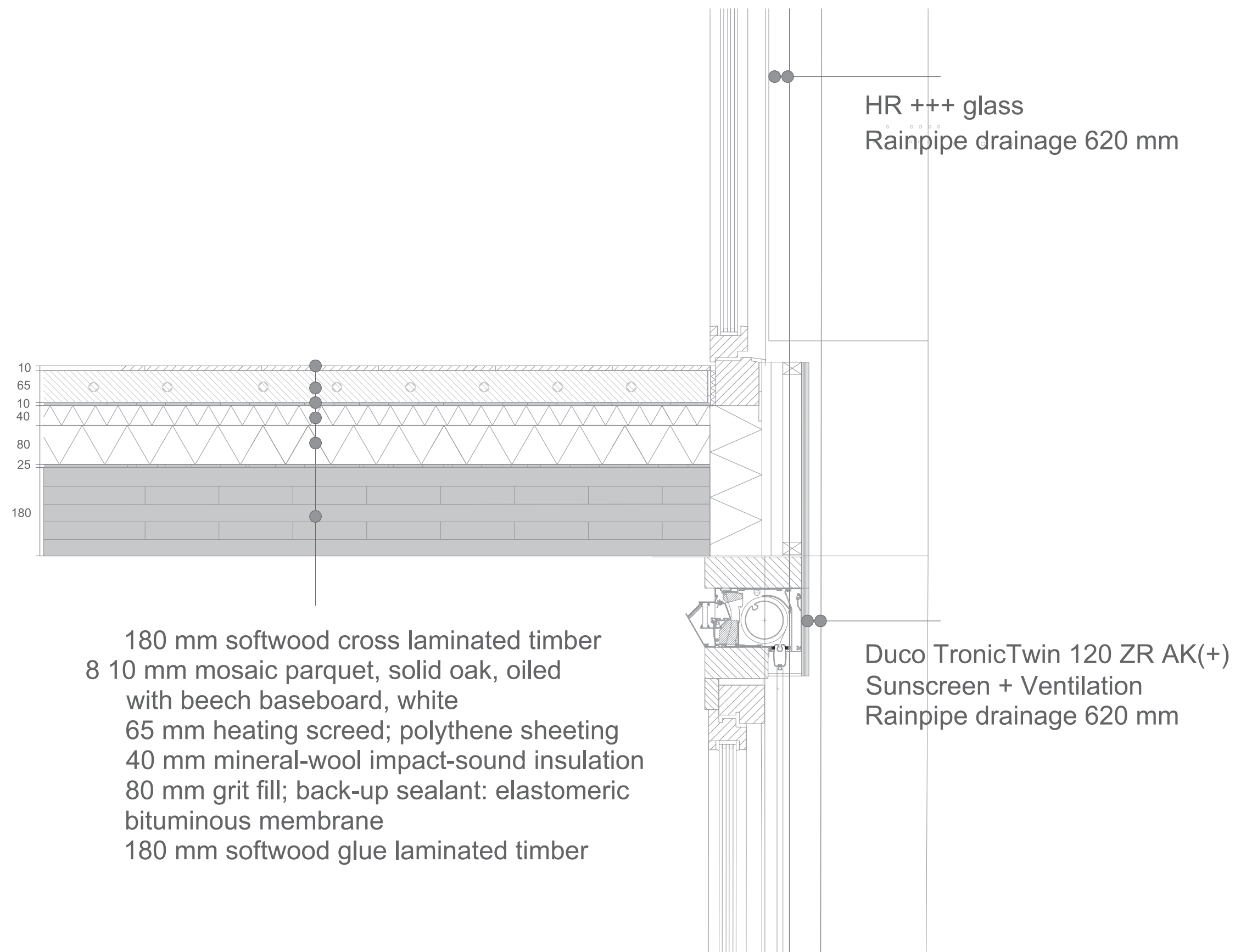








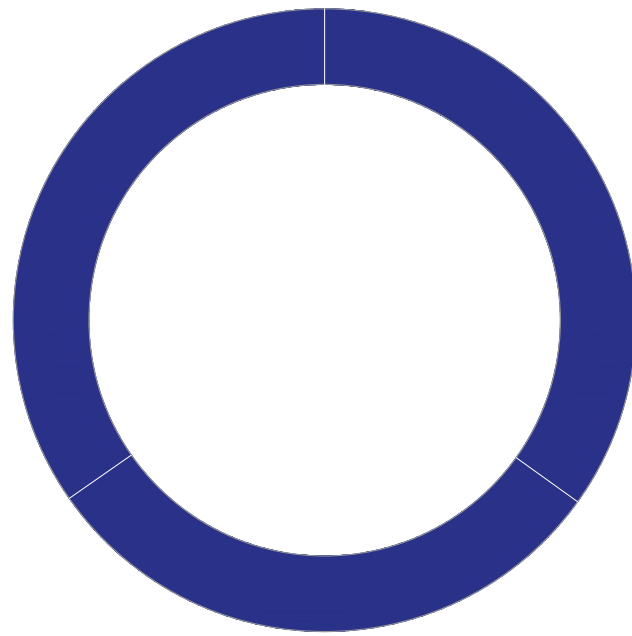




Detail 2 1:5

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Conclusions

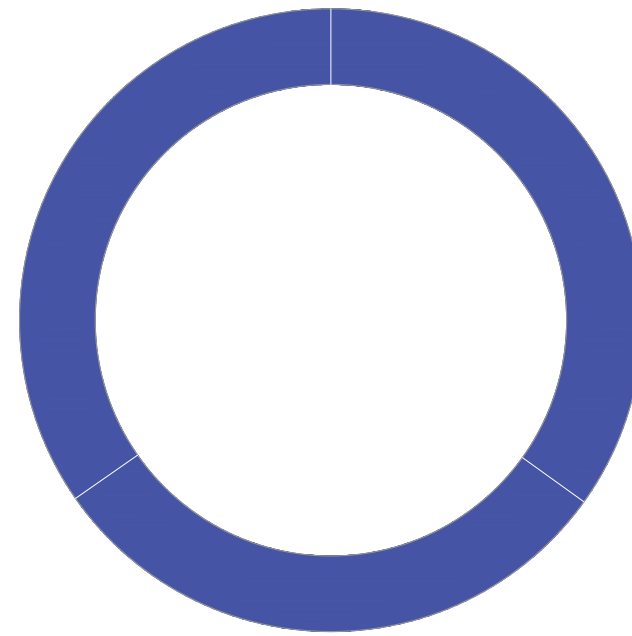


## **Social**

Provide the building with communal functions

Provide the building with enough outdoor spaces

Make sure there will be enough room for social encounters

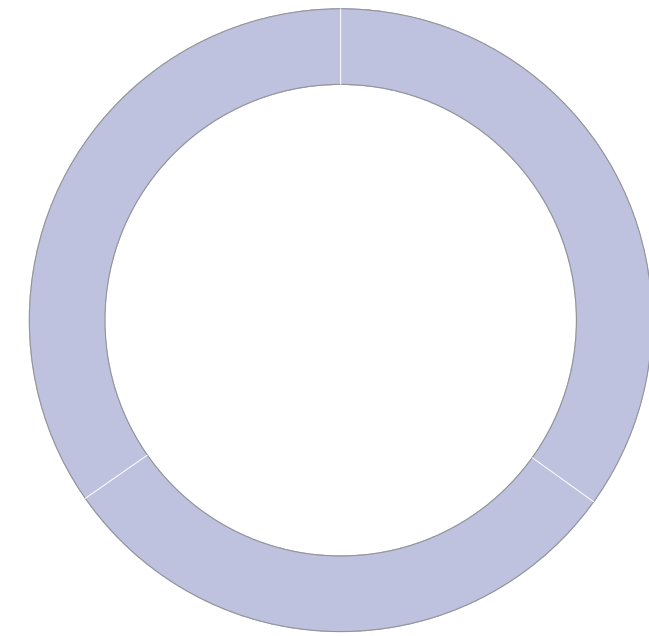


## **Economic**

Proximity of functions in time and space

Cultural activities close by

Work on close distance



## **Technical**

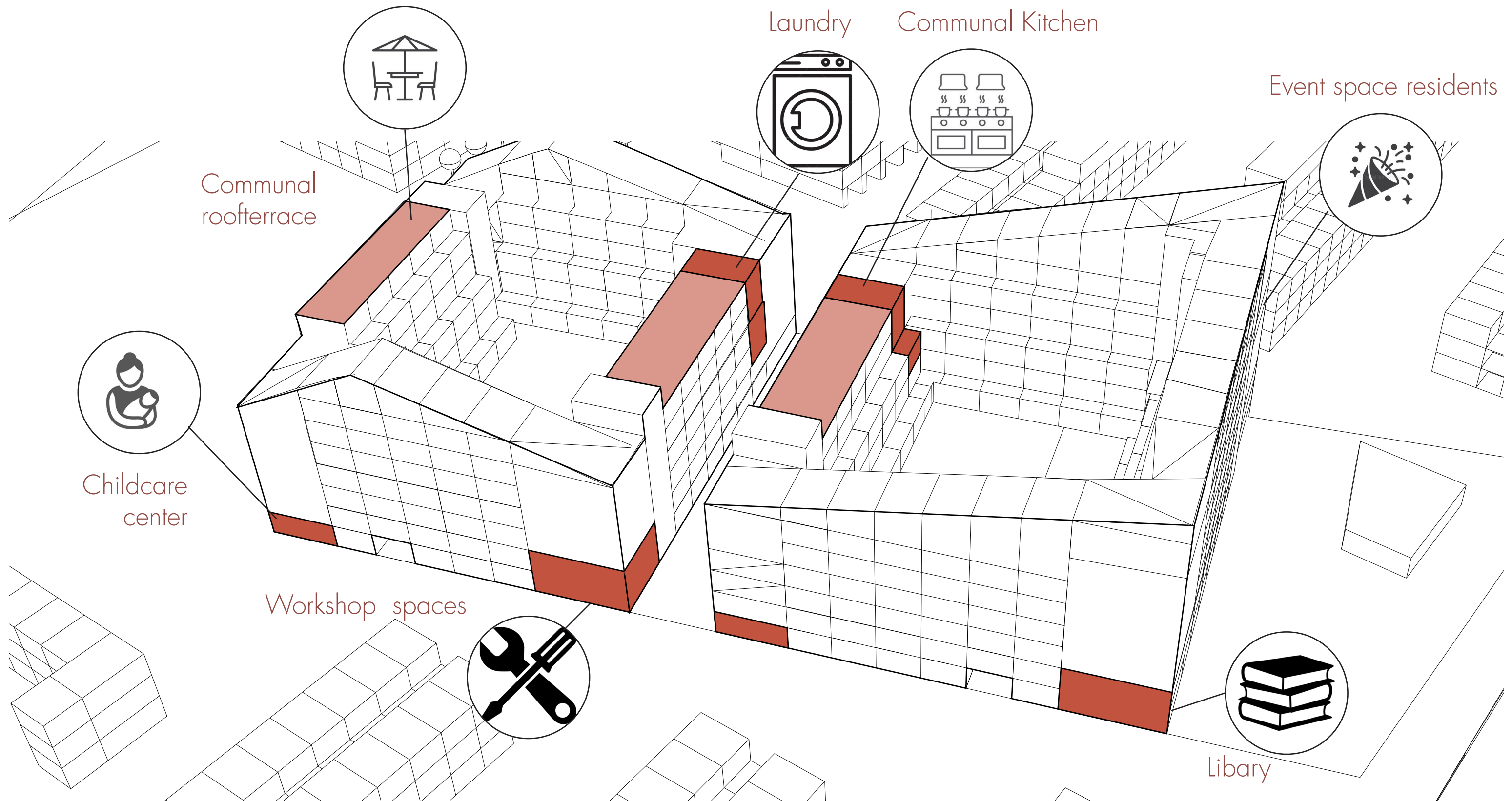
Personal identification with the location

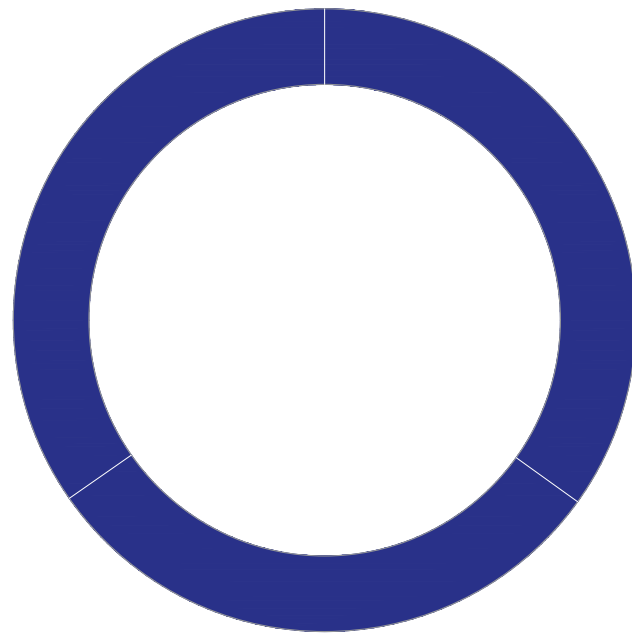
Identifiability with the building itself

Distinguish in urban life



## Communal Functions



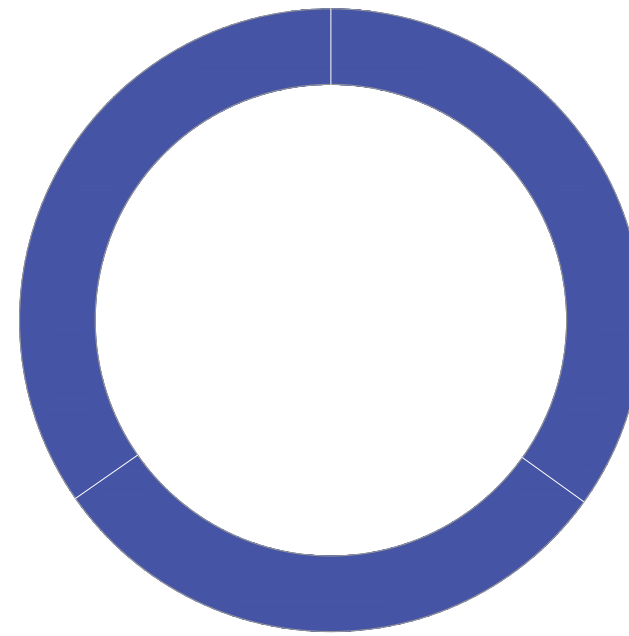


## **Social**

Provide the building with communal functions

Provide the building with enough outdoor spaces

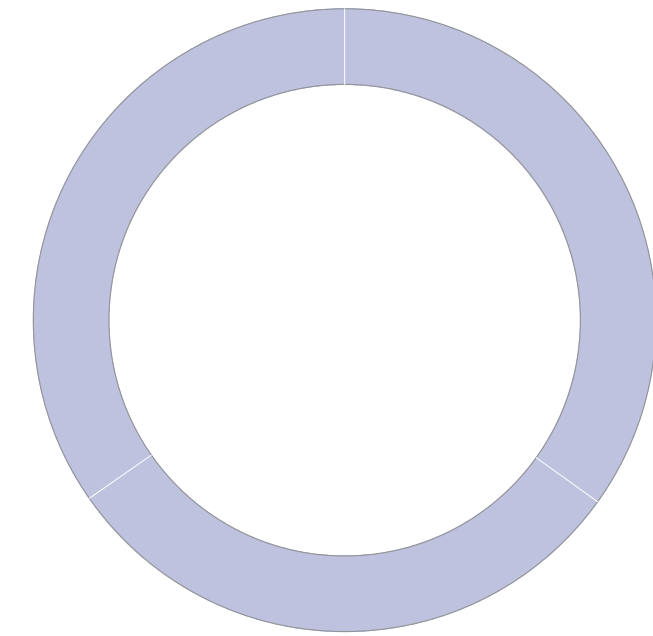
Make sure there will be enough room for social encounters



## **Economic**

Create an economic system with leaving out developers: Cooperative

Leave space for residents to take responsibility & involve as stakeholders



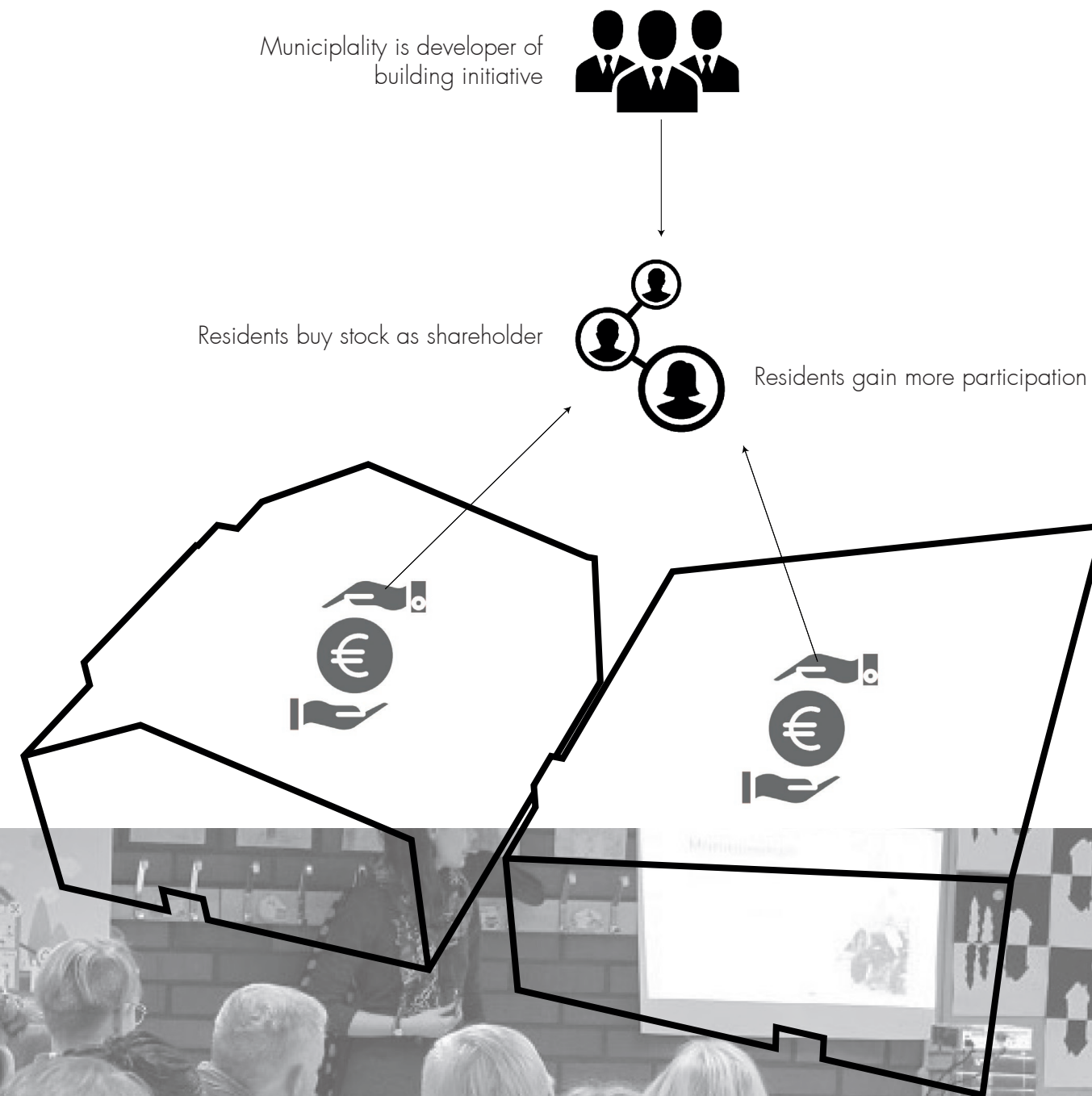
## **Technical**

Personal identification with the location

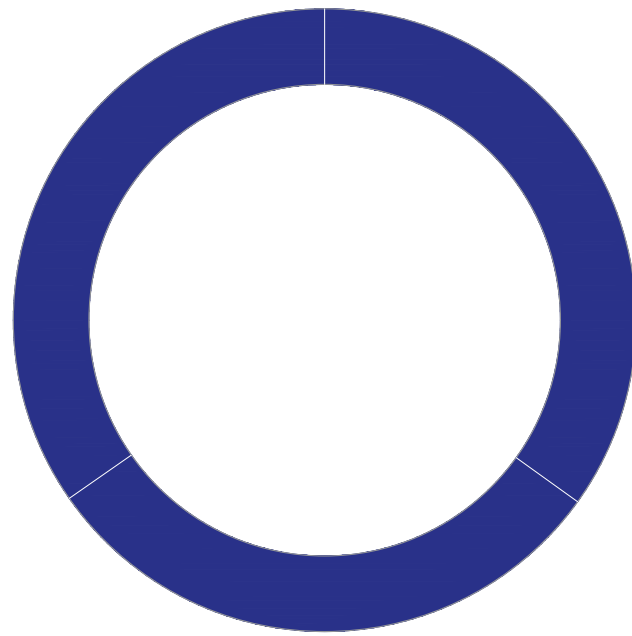
Identifiability with the building itself

Distinguish in urban life

## CO-OPERATIVE





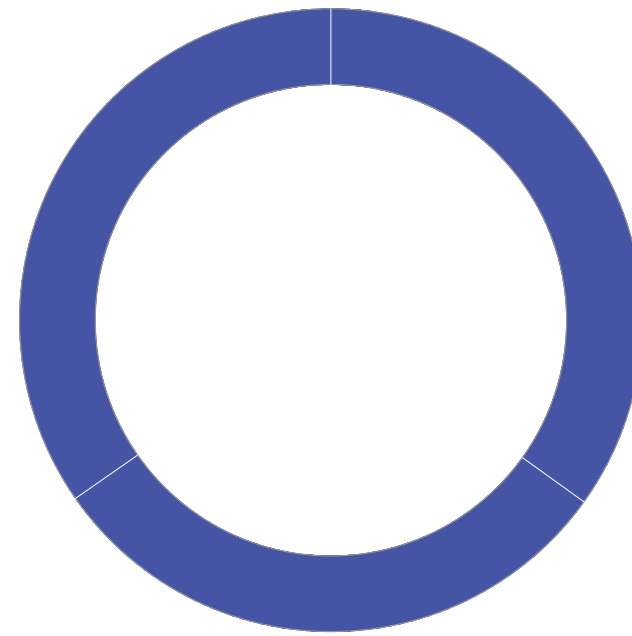


## **Social**

Provide the building with communal functions

Provide the building with enough outdoor spaces

Make sure there will be enough room for social encounters

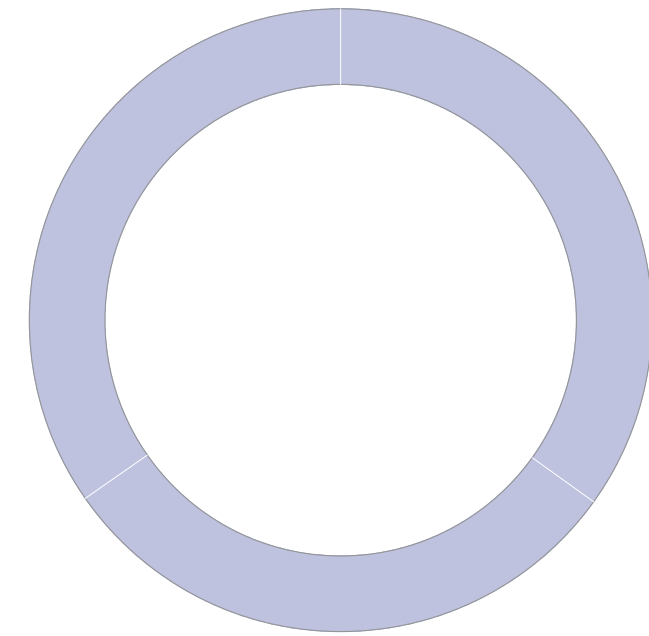


## **Economic**

Proximity of functions in time and space

Cultural activities close by

Work on close distance



## **Technical**

Use sustainable materials: European larch wood + CLT construction

Use passive climate systems

Use modular construction techniques: design for disassembly

# Future Concept



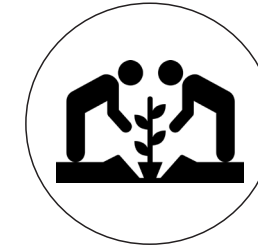
Sustainable facade materials: European Larch (Hardwood)



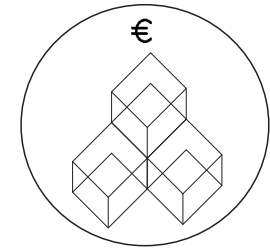
Green roof for water capturing



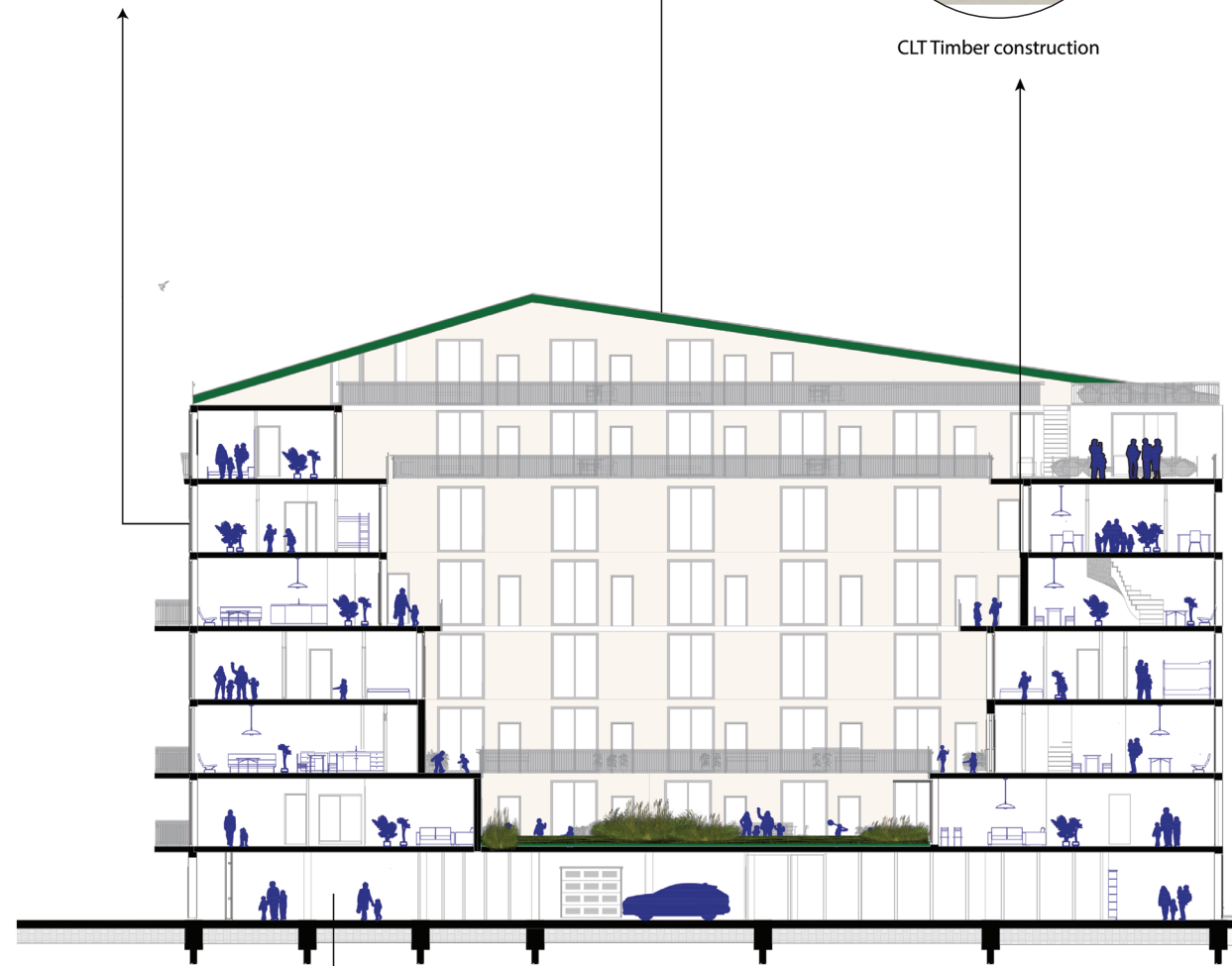
CLT Timber construction



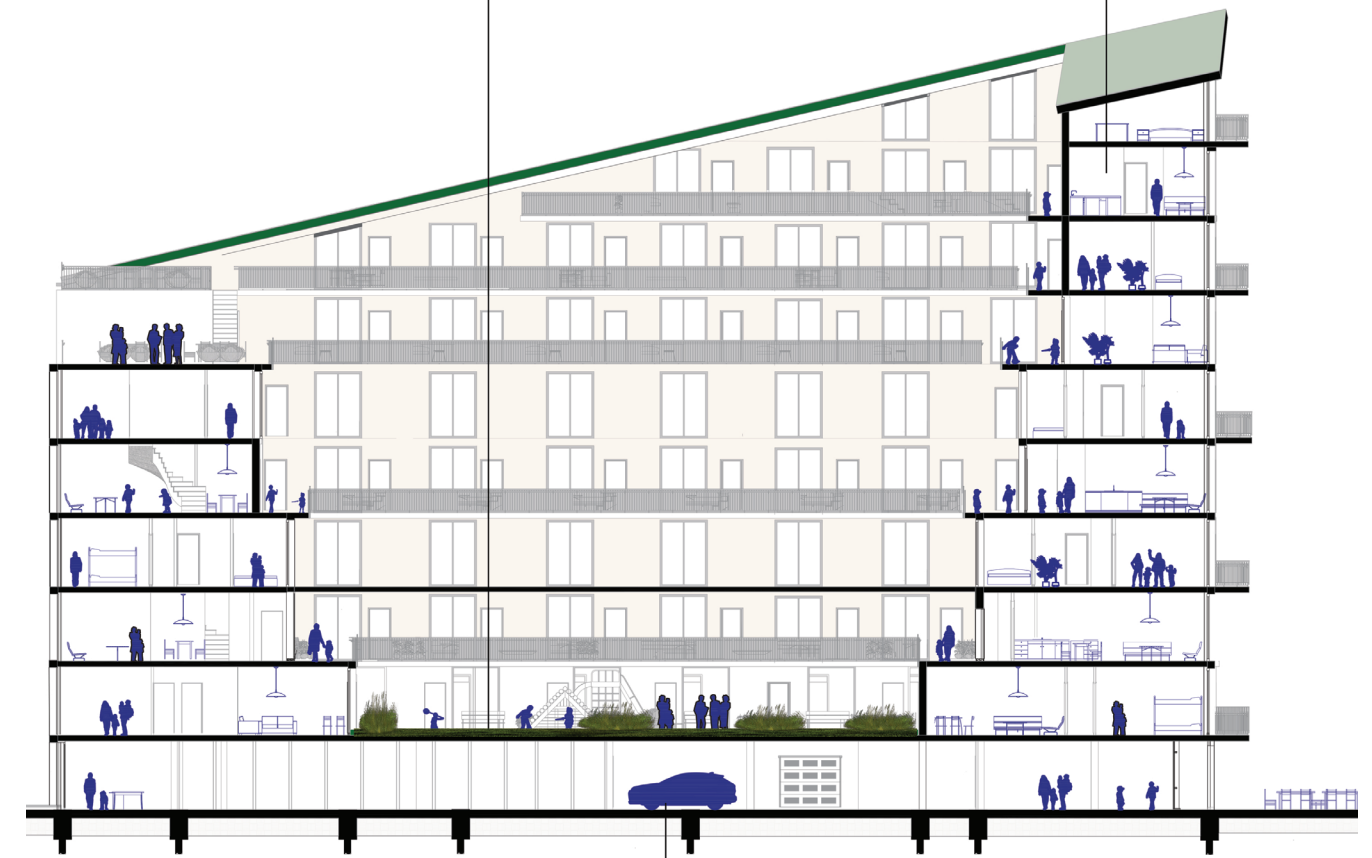
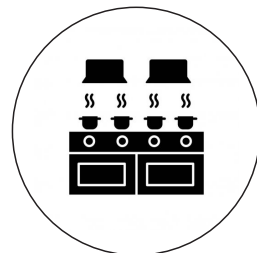
Possibility for urban farming (Communal)



Compact family units: minimal size



Communal spaces: food-sharing & reducing stress for working parents (Cooperation)



Car sharing system: Minimizing CO2



Future Building Concept











Thankyou!