# ROOM FOR CHANGE

Designing For Adaptability in the Dynamic City

Hanne Bosma | P4

22 May 2026

# The challenge: the built environment vs. change



Urbanisation



Population growth



Rise of smaller households



Work and living patterns shifting

# The challenge: the built environment vs. change

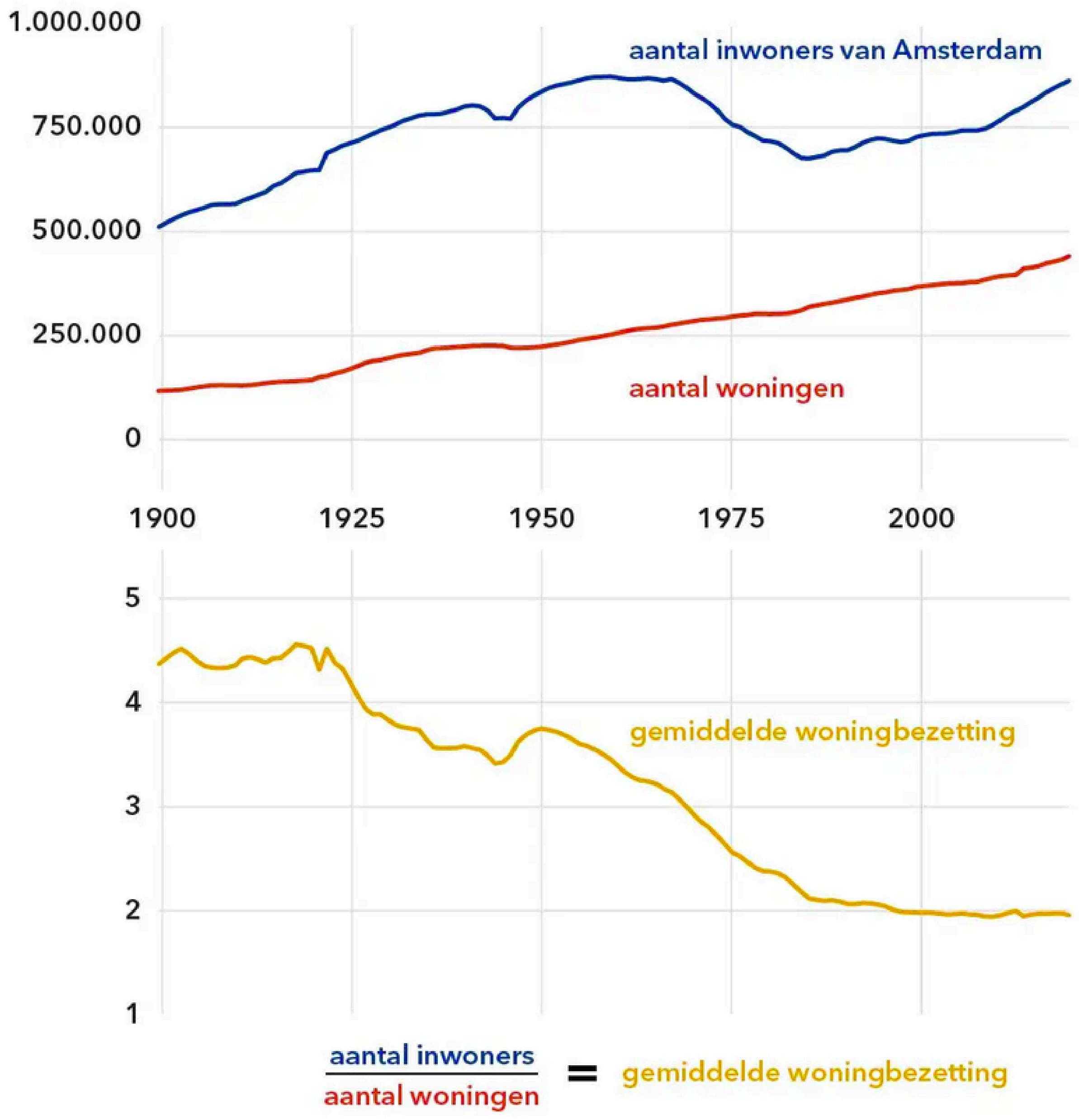
Designed for fixed functions > mismatch

*Centraal Beheer Apeldoorn*

*voormalig kantoor CBS*

# The challenge: the built environment vs. change

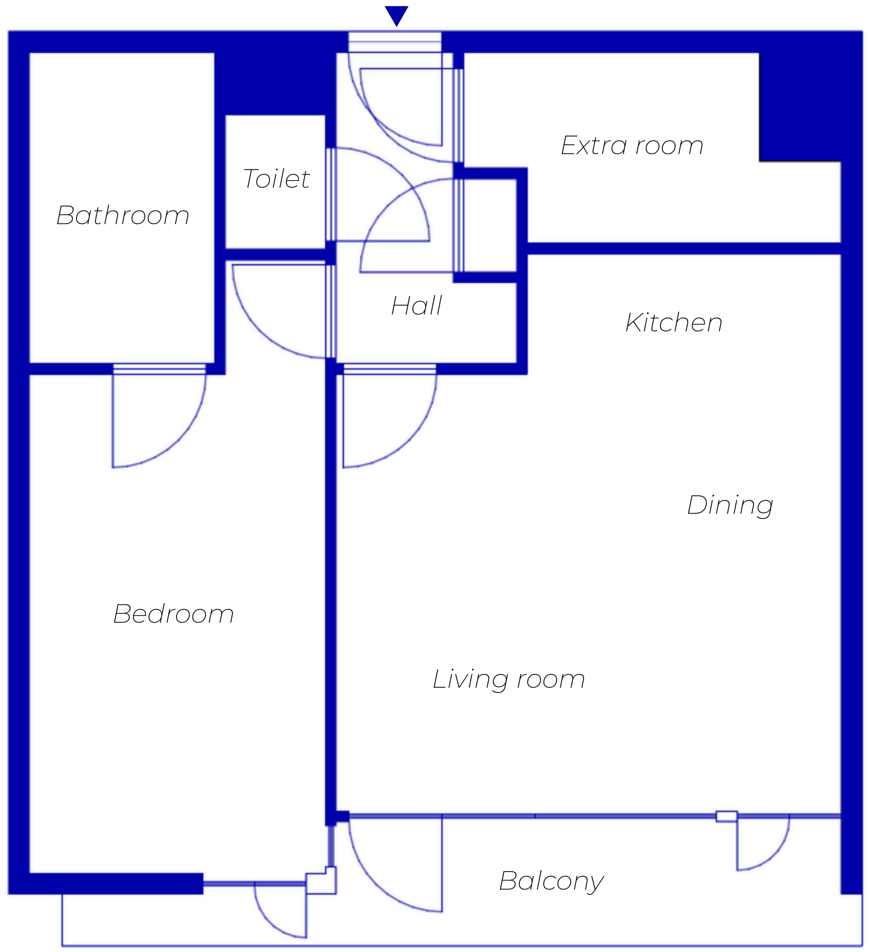
Changing household compostion

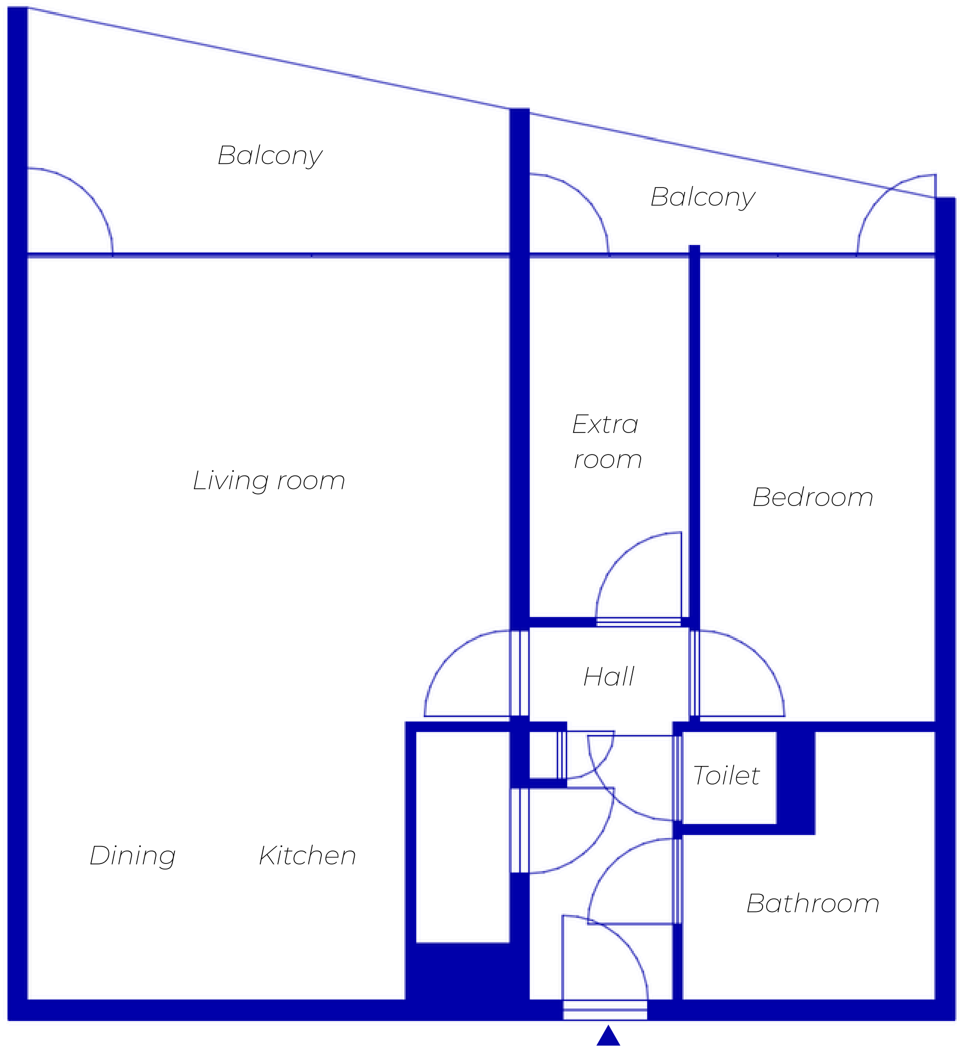



*(Woekeren Met Vierkante Meters | Website Onderzoek En Statistiek, 2019)*

# The challenge: the built environment vs. change

Standard housing floor plans



# The challenge: the built environment vs. change

## Consequences: vacancy or demolition


Een leegstaand kantoorpand in kantorenwijk Plaspoelpolder. © ANP XTRA Lex van Lieshout

**'Leegstand kantoren daalt, maar blijft structureel hoog'**

Anton Kappers / ANP

nieuwsuur

Donderdag 17 april 2025, 07:00

**Te weinig woningen in ongebruikte panden: 'En dat met alle leegstand'**

**Sloop van kantoorgebouw De Hoekstede**

1 week ago Ronald Mooiman


DE WESTKRANT

Home › Nieuws

Nieuw-West Nieuws Uitgelicht Wonen

**Sloop 700 woningen, nieuwbouw 1500 woningen in Nieuw-West**

*Ingrijpende vernieuwing met autoluwe straten in Couperusbuurt, Ruychaverkwartier en Hoekenes*

Door redactie De Westkrant · 13 juni 2024

RTL Z

**Kantoor steeds vaker gesloopt in plaats van omgebouwd tot woning**

Ruben Koops · 11 juni 2024 · Aangepast: 12 juni 2024

oost-online

Nieuws en ontdekken tussen Amstel en IJ

Agenda · Welkom · Buurten · Uit in Oost · Sport&Fit · Cultuur · Stad&Natuur · Rubriek · Dwars · Meer


OVERZICHT · WATERGRAAFSMEER

**Sloop van de Van der Kunbuurt in volle gang**

*Foto van Wim Ettema*

Door redactie · 2 juni 2025

> "Ik vergelijk deze periode graag met de jaren vijftig en zestig, toen zijn ook snel veel woningen gebouwd. De afgelopen 25 jaar is daarvan veel gesloopt"
>
> — Dick van Gameren

# The challenge: the built environment vs. change

Drijvende kracht verandering:
verstedelijking - gebruikers - klimaatverandering

▼

Gebouwen zijn doorgaans ontworpen voor een specifieke functie

▼

Mismatch naar verloop van tijd

▼

Gevolgen:
leegstand - inefficiënt ruimtegebruik - voortijdige sloop

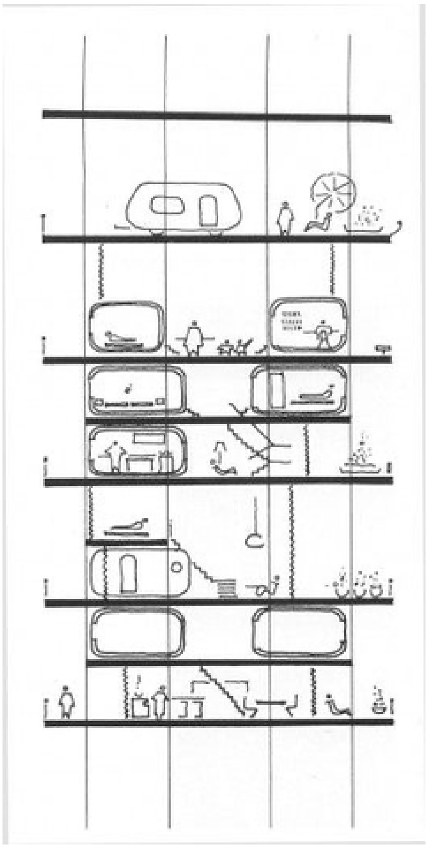
▼

Functioneel verouderd vóór het einde van de technische levensduur,
gebruiker moet ergens anders heen

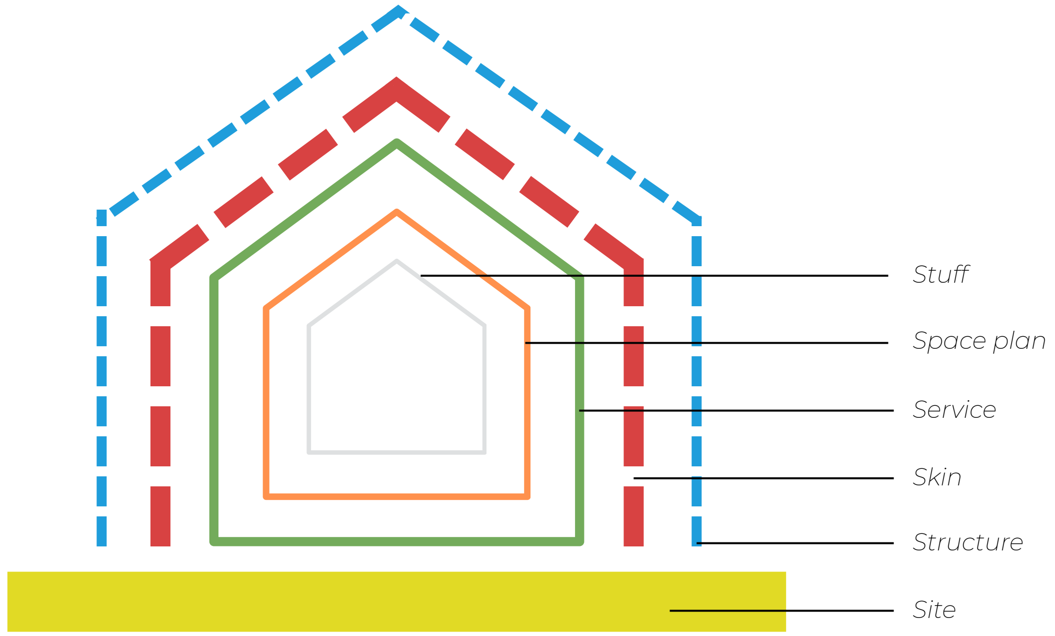
In what ways can design principles promote the **adaptability** of a living environment at different scales (immediate surroundings, city block, and individual dwelling), so that it can respond to **societal developments** over the long term?

# RESEARCH

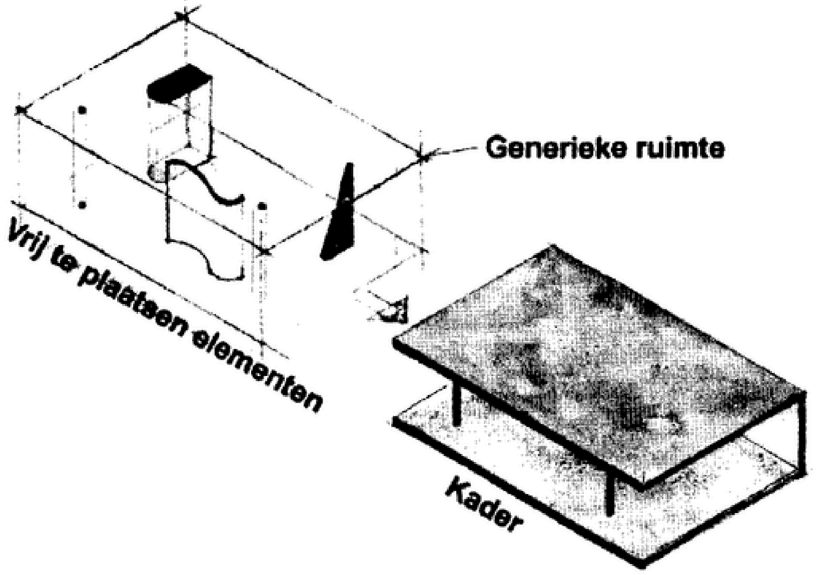
# Theory



'Support and infill'
Habraken, 1962




'Lifespan of layers'
Brand, 1995




'Frame and Generic Space'
Leupen, 2002

# Casestudies

*Schiecentrale 4B*

*Patch22*

*Solid 11*

*CiWoCo*

*Superlofts Houthaven*

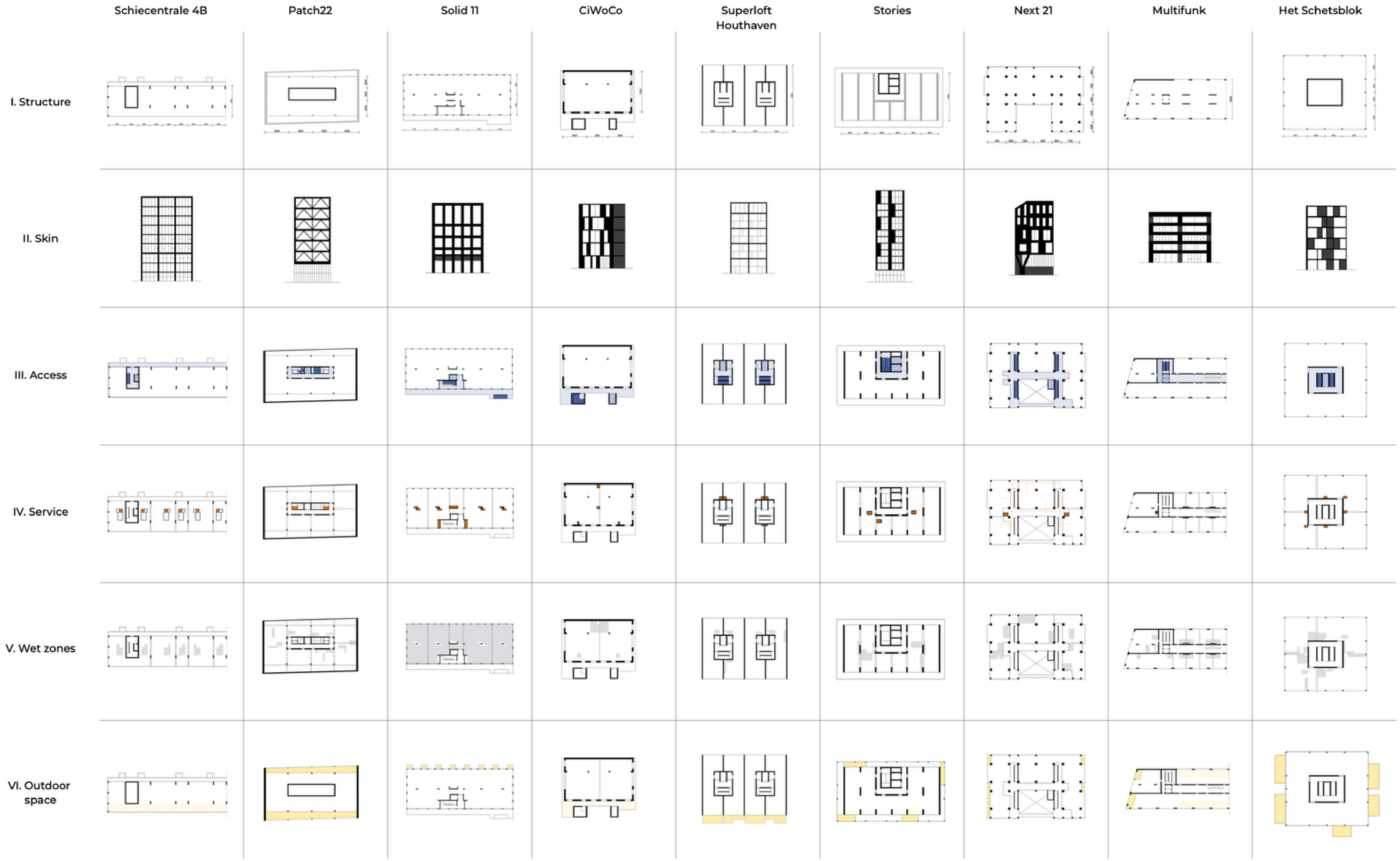
*Stories*

*Next21*

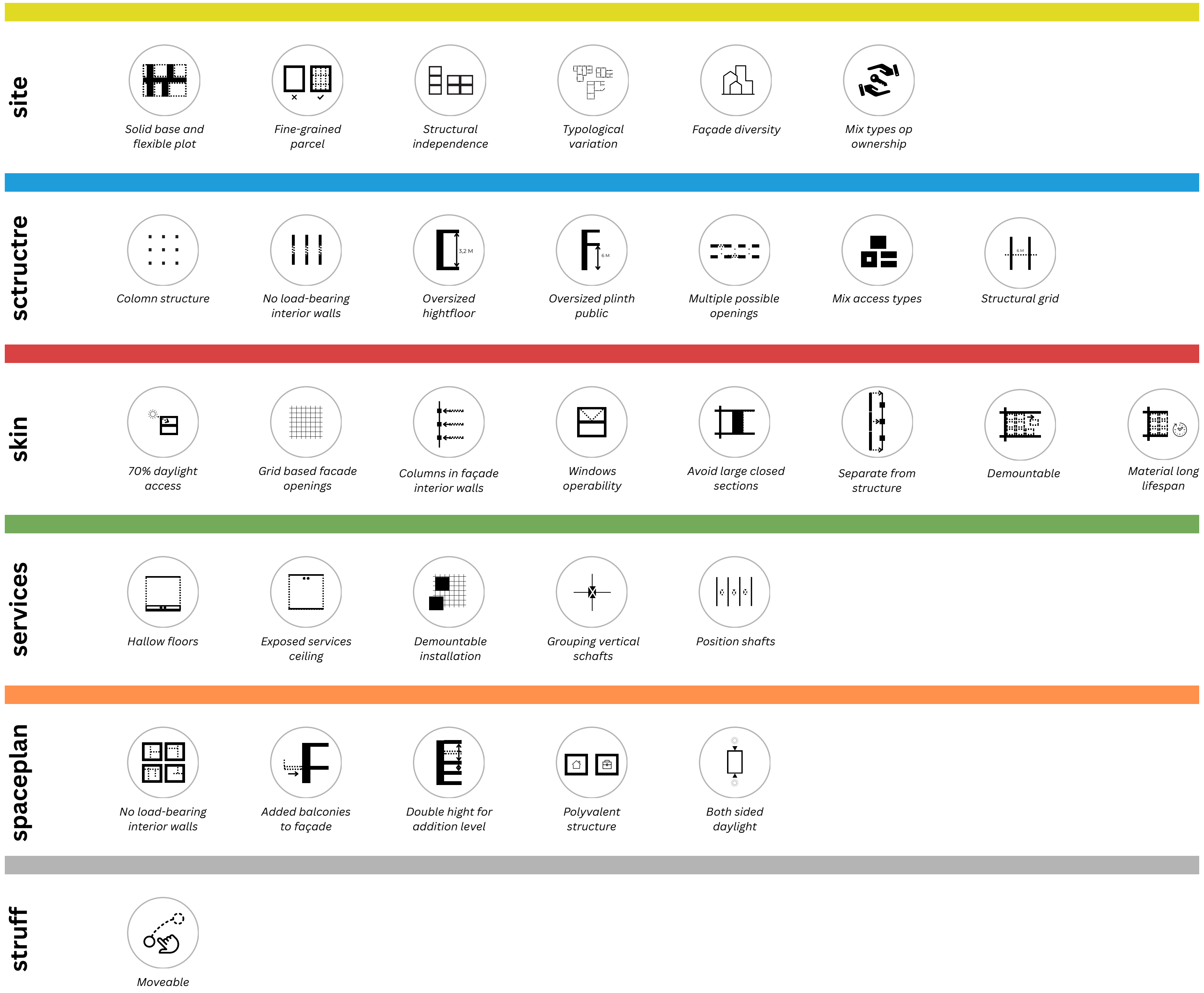
*Multifunk*

*Het Schetsblok*

# Casestudies



# Design guidelines



# Design strategies for adaptability

1. Stimuleer multifunctioneel gebruik van ruimtes.
2. Maak toekomstige opsplitsing of samenvoeging van woningen mogelijk.
3. Houd de verschillende lagen (de 6 S’s) onafhankelijk van elkaar.
4. Ontwerp woningen die geschikt zijn voor verschillende huishoudtypen.

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4. Ontwerp woningen die geschikt zijn voor verschillende huishoudtypen.

# Ontwerpdoel

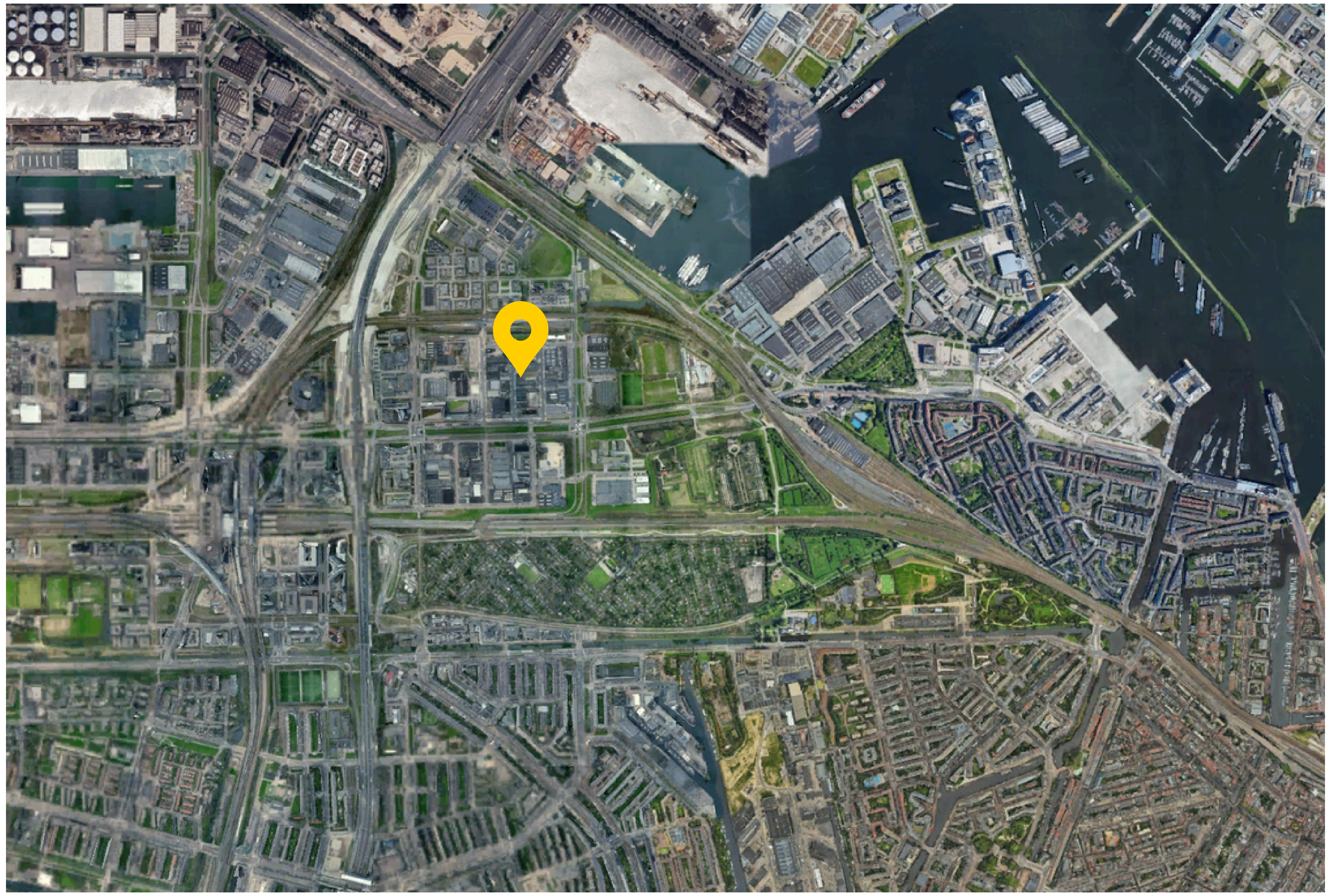
Creating a living environment that can respond to changing resident needs and societal and technical developments, enabling buildings to remain **usable over the long term**, **support diverse ways of living**, and **flexibly adapt to changing use over time**.

# DESIGN LOCATION

Sloterdijk North - Amsterdam

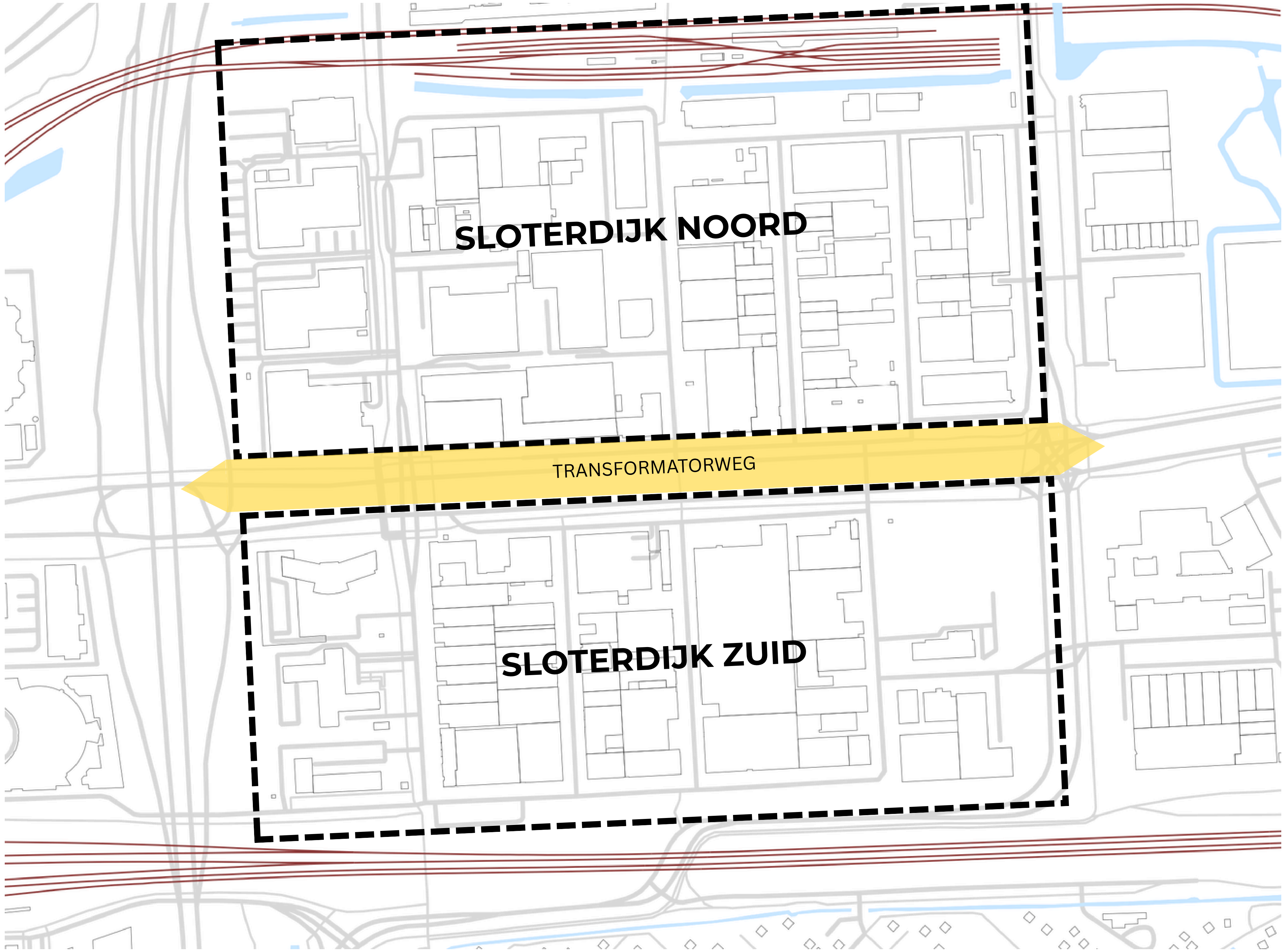
# Location

Amsterdam, The Netherlands



Sloterdijk North

# Location

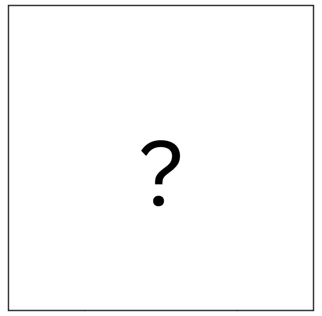


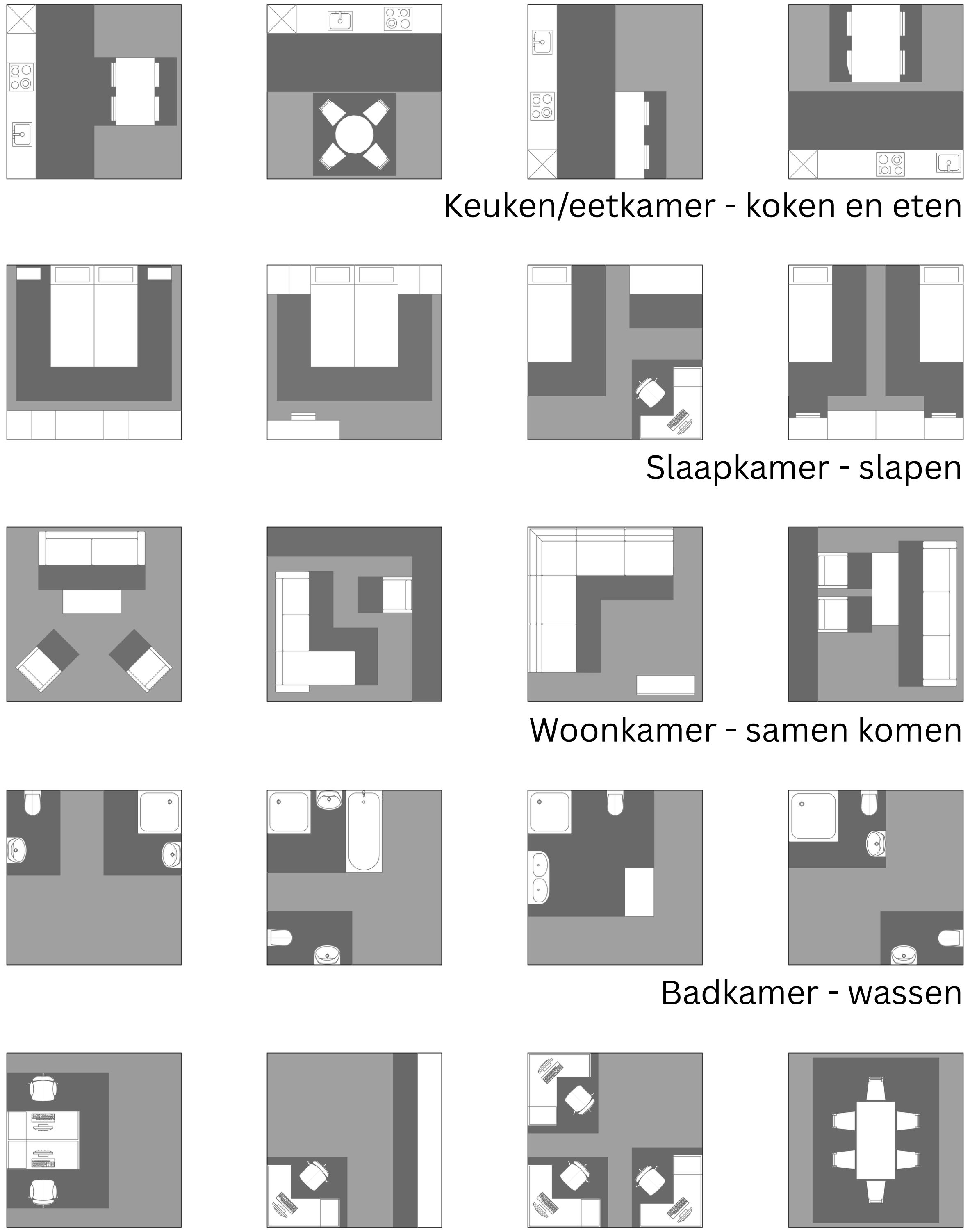
# Ambitions of the Municipality of Amsterdam

- *Highly urbanised area*
- *80% residential - 20% non-residential*
- *Mixed functions*
- *Diverse housing supply in size*
- *Balance between tranquility, liveliness, privacy and functionality*
- *Diverse target groups*
- *Lively plinth on the ground floor*
- *Adaptive buildings and plinth*
- *Recreation and transport on the water*
- *Low parking standard and out of the picture*
- *Stimulate shared mobility*
- *Leading role for cyclists and pedestrians*
- *Well-connected public transport*
- *Improve the quality of green areas*
- *Provide identity: port with raw authenticity*
- *High sustainability standards*
- *Multiple use of roof: living space, green roof, technology, solar panels and water collection*
- *Existing street pattern and grid are largely retained*
- *Different heights (8–20 m) and towers (30, 45, 60 m) with setbacks (5 m)*
- *Variation in mass and form ensures rhythm, diversity and spatial quality*
- *Each block is interrupted by at least one intermediate street without car traffic*
- *Courtyards are collectively and greenly designed*
- *Balconies and roof terraces connect with the street or inner area*
- *Plinths are multifunctional, flexibly deployable and future-proof*

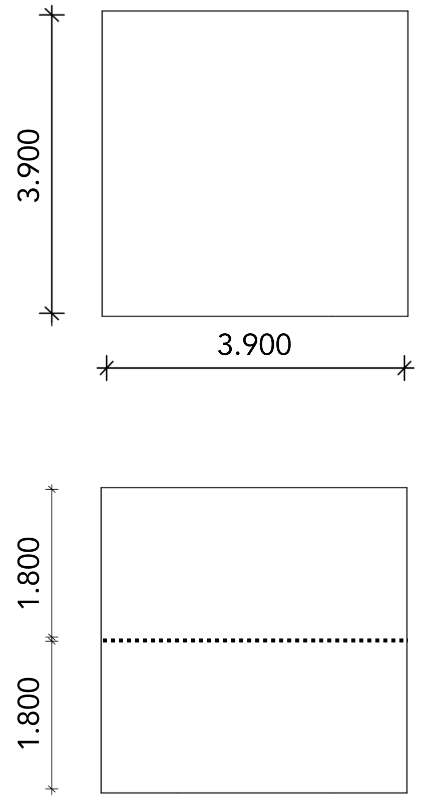
DESIGN: **SHIFT**

# Polyvalent space



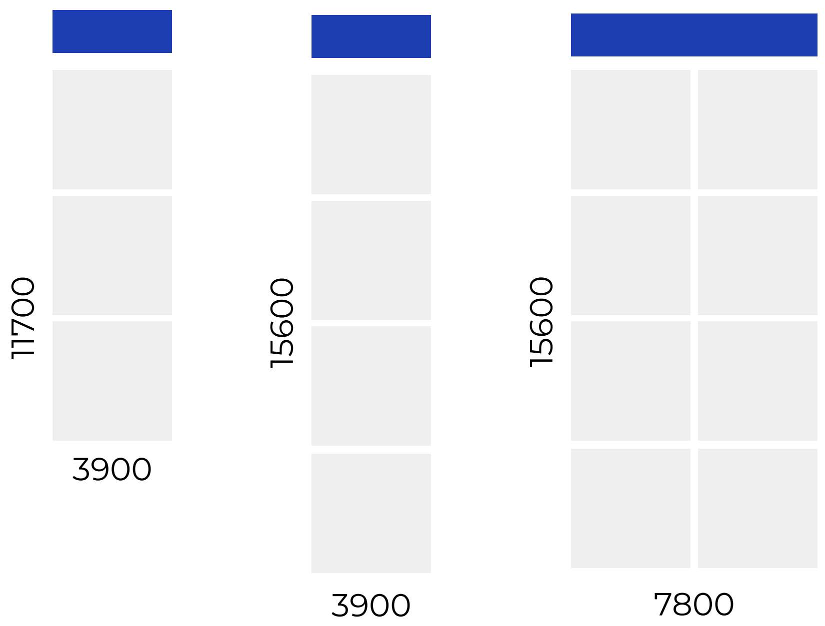




Kantoor - werken

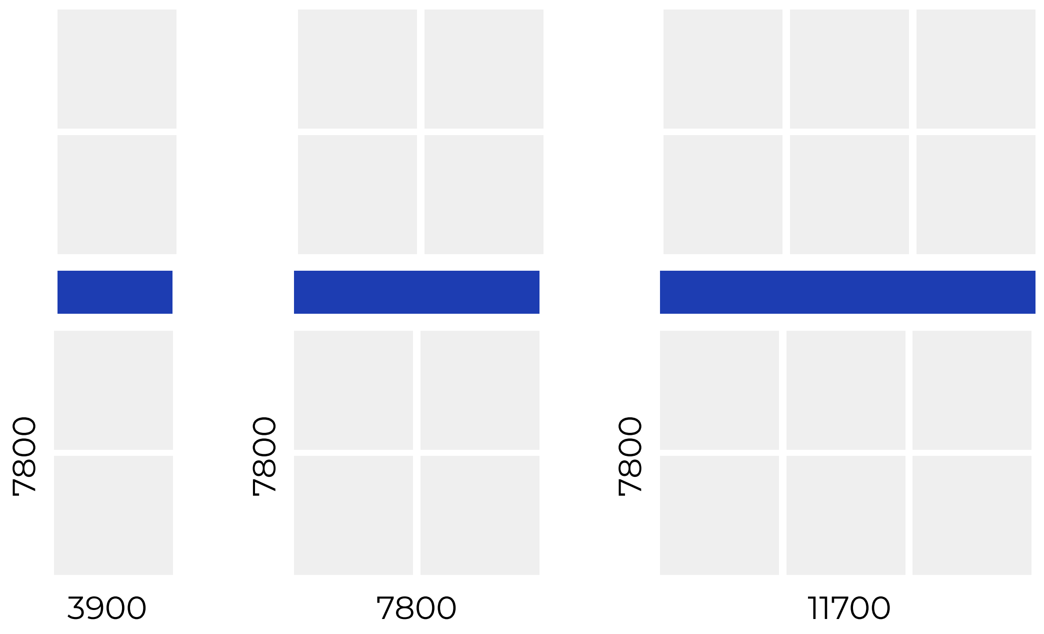


# Polyvalent space

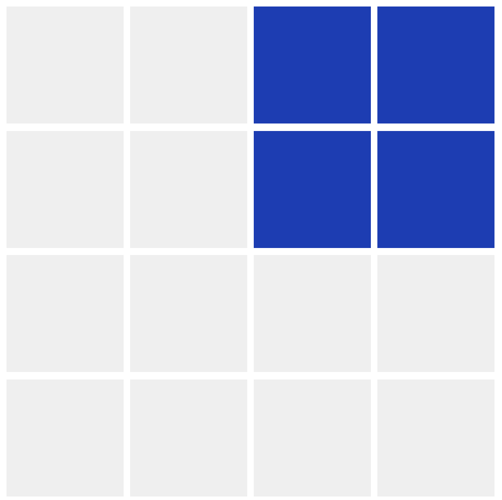
*Polyvalent structure*




45,63 m2 60,84 m2 121,68 m2



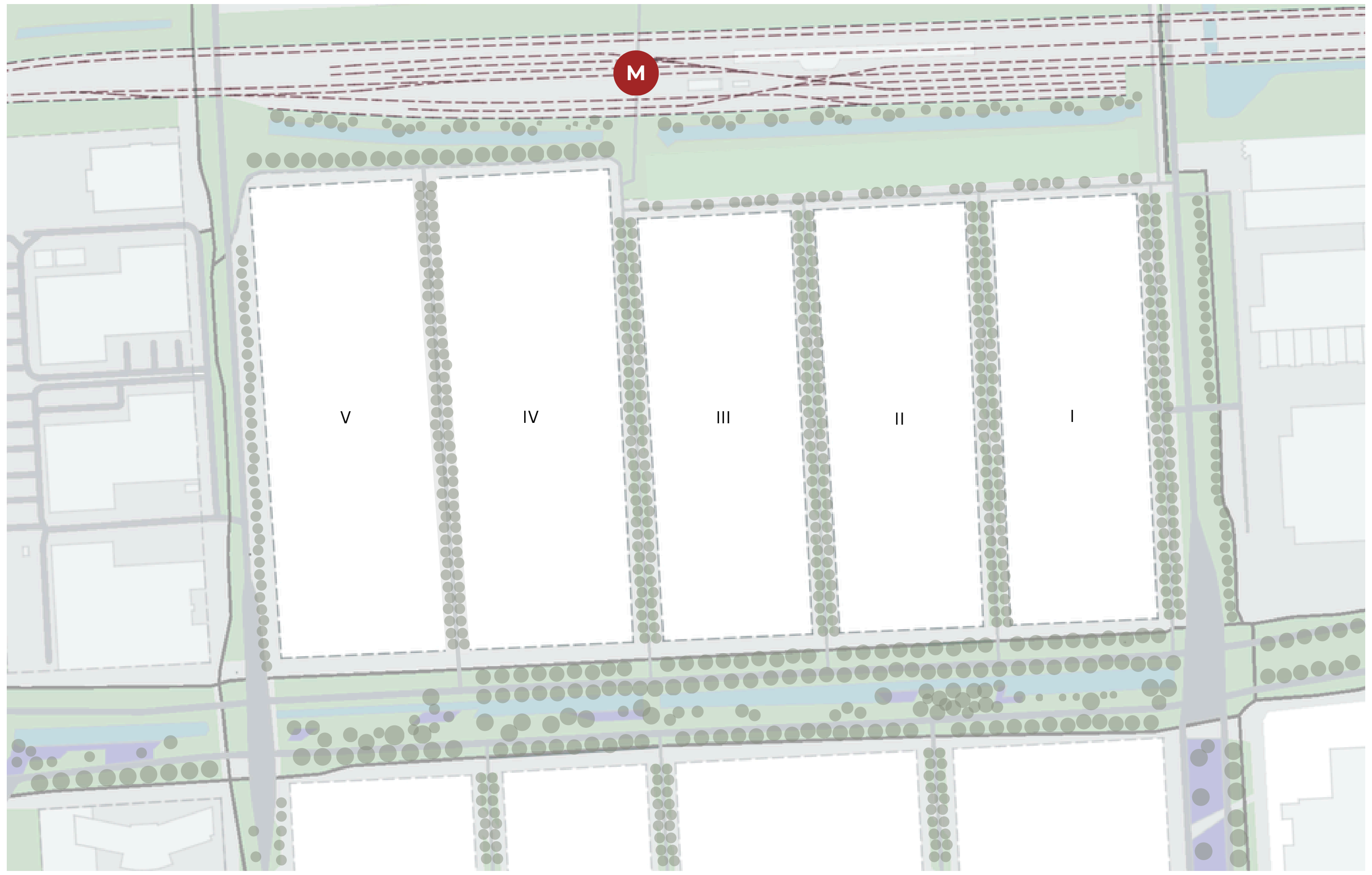

30,42 m2 60,84 m2 91,26 m2



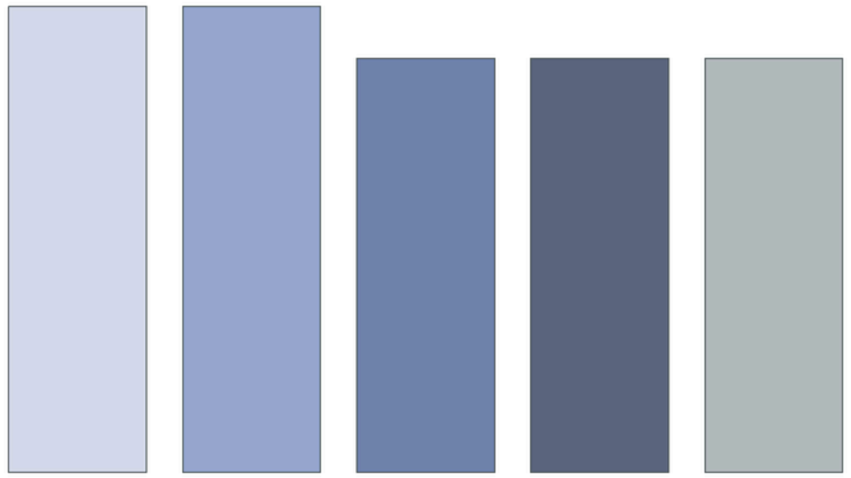
**Galerij** **Gang** **Interne kern**

# Masterplan


N:V
N:IV
N:III
N:II
N:I
TRANSFORMATORWEG
Z: V
Z: IV
Z: III
Z: IIa
Z: IIb

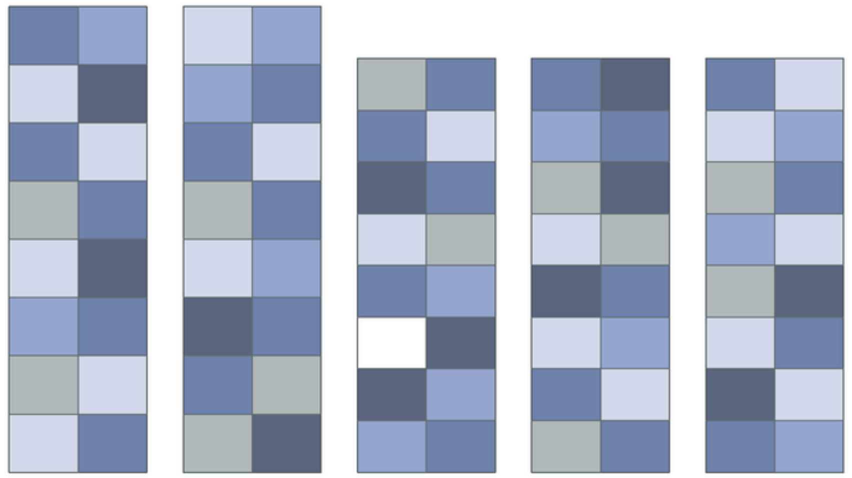

M
V
IV
III
II
I

# Reconfiguration



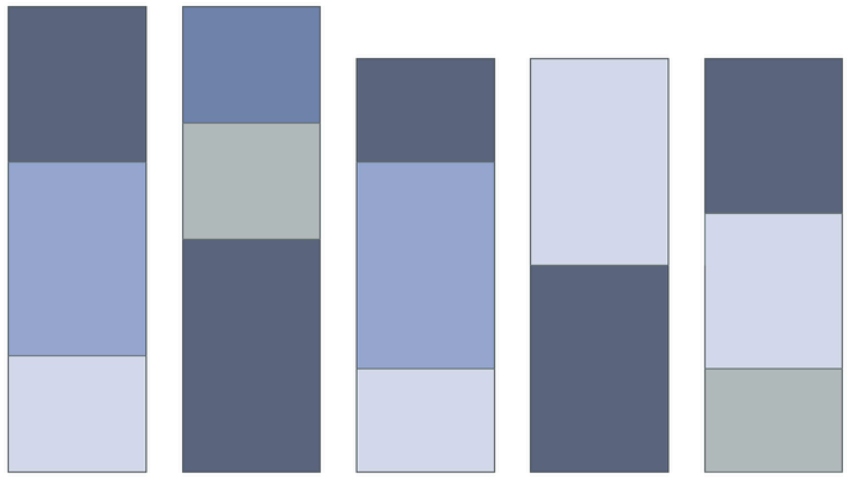
**Reconfiguration of the entire block**

Blocks of 19200 - 21600 m2



**Reconfiguration of a fine-grained plot division**

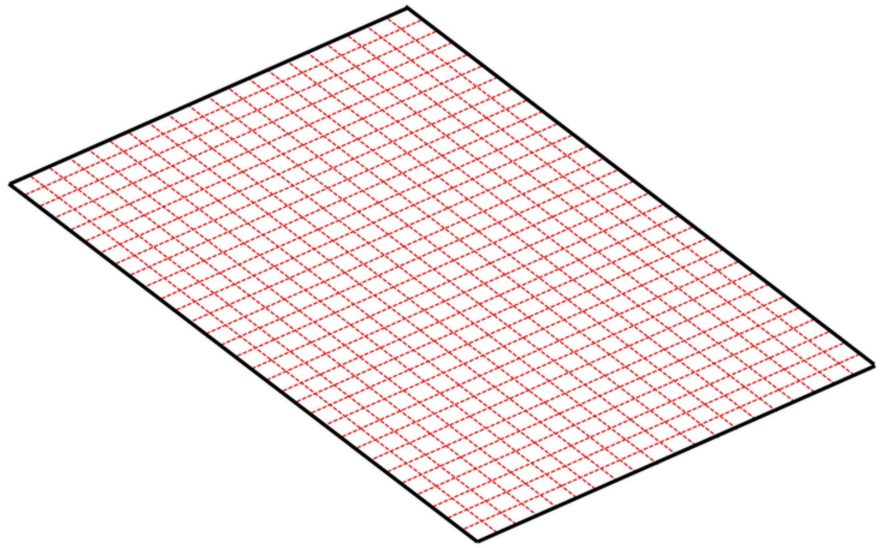
Blocks of 1200 m2



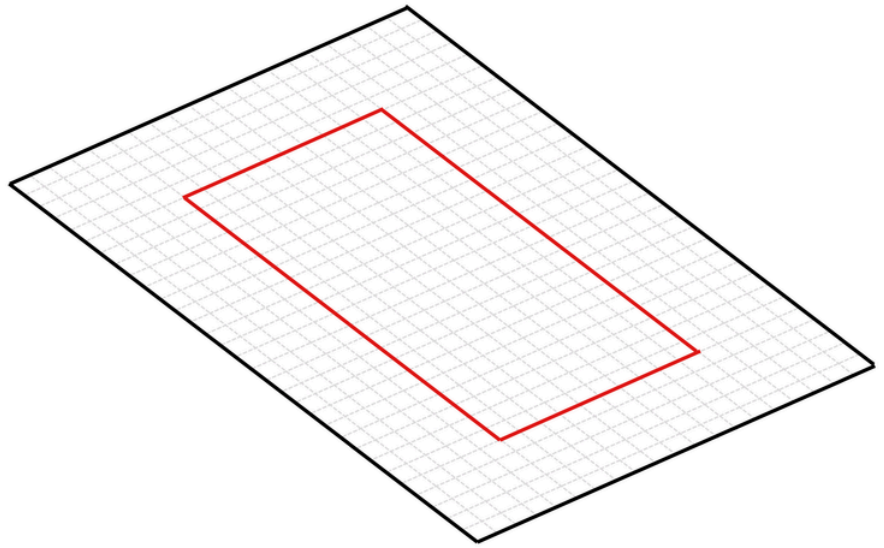
**Reconfiguration with a diversity of medium-sized plot divisions**

Blocks of 4320 - 9840 m2

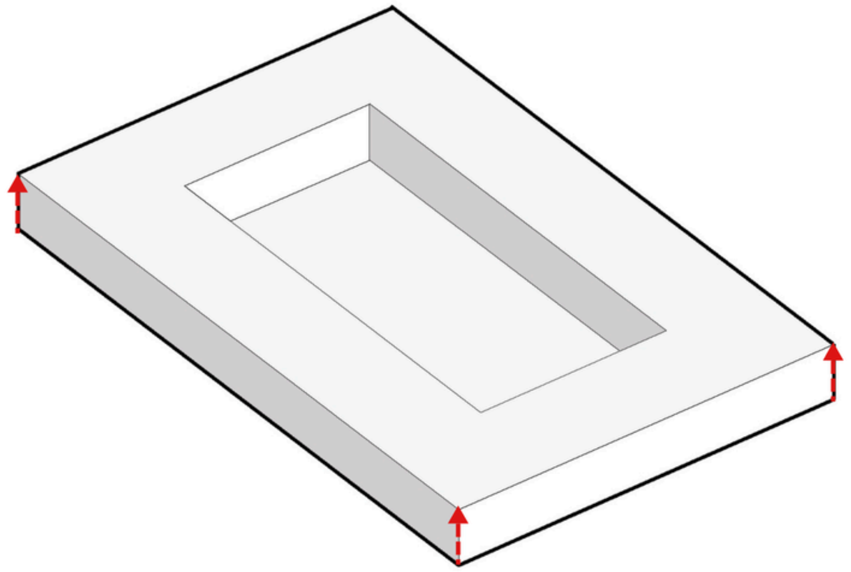
# Mass



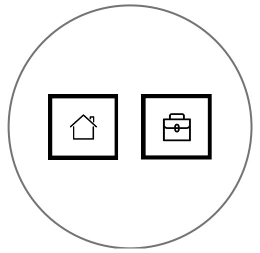
I. raster 3,9 x 3,9



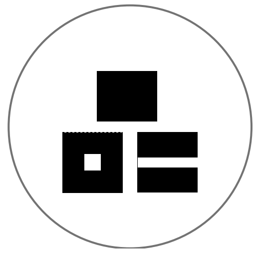
II. building module



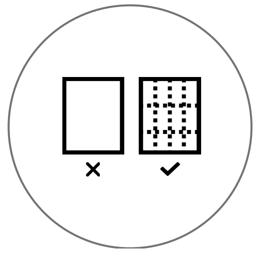
III. mass



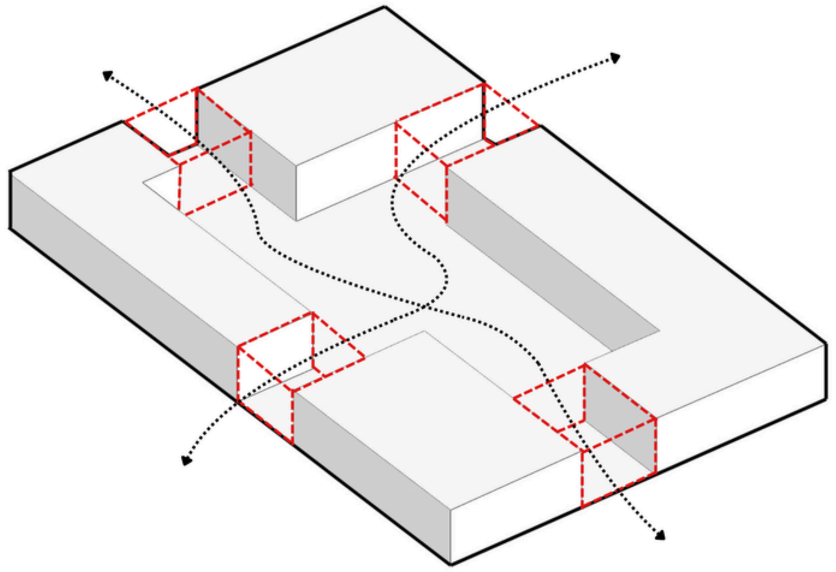
*Polyvalent structure*



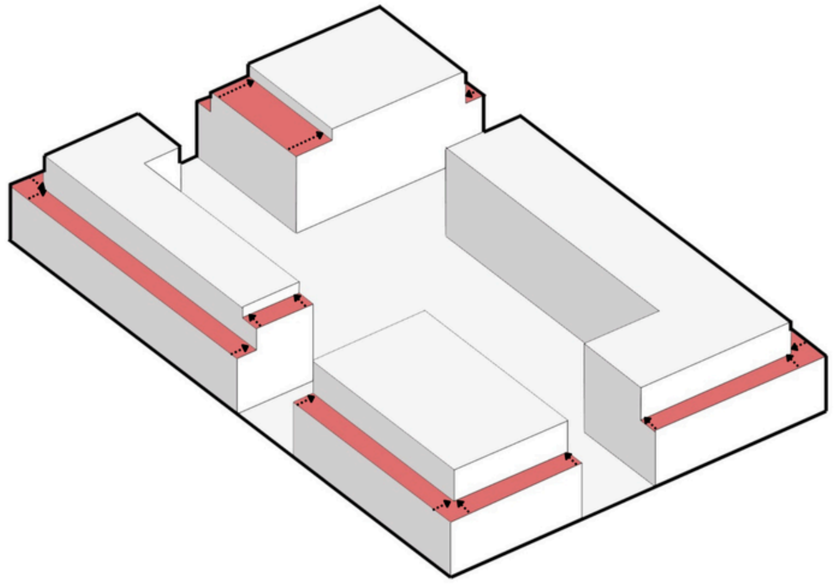
*Mix access types*



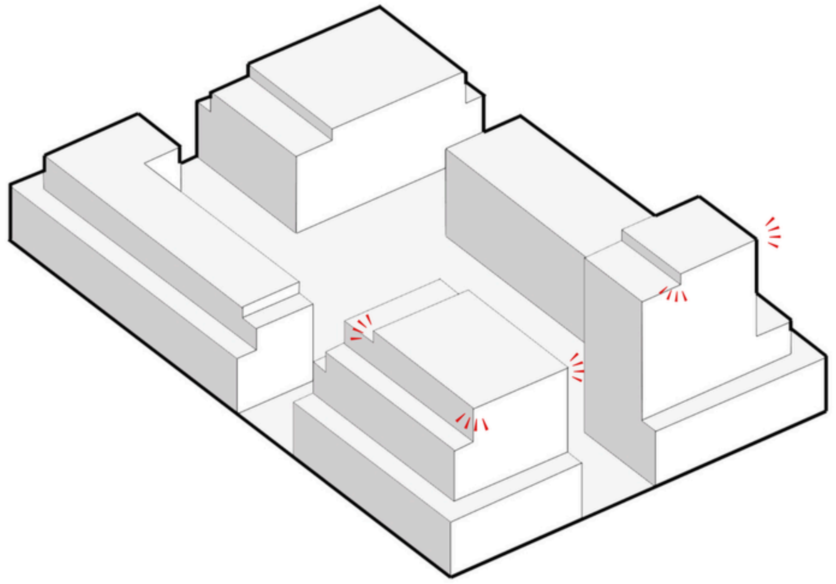
*Fine-grained parcel*



IV. breaking open and splitting mass

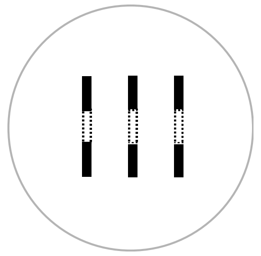


V. setbacks

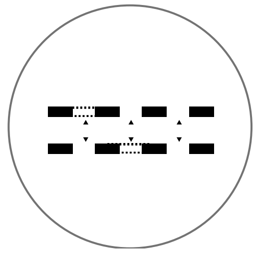


VI. high-rise accents

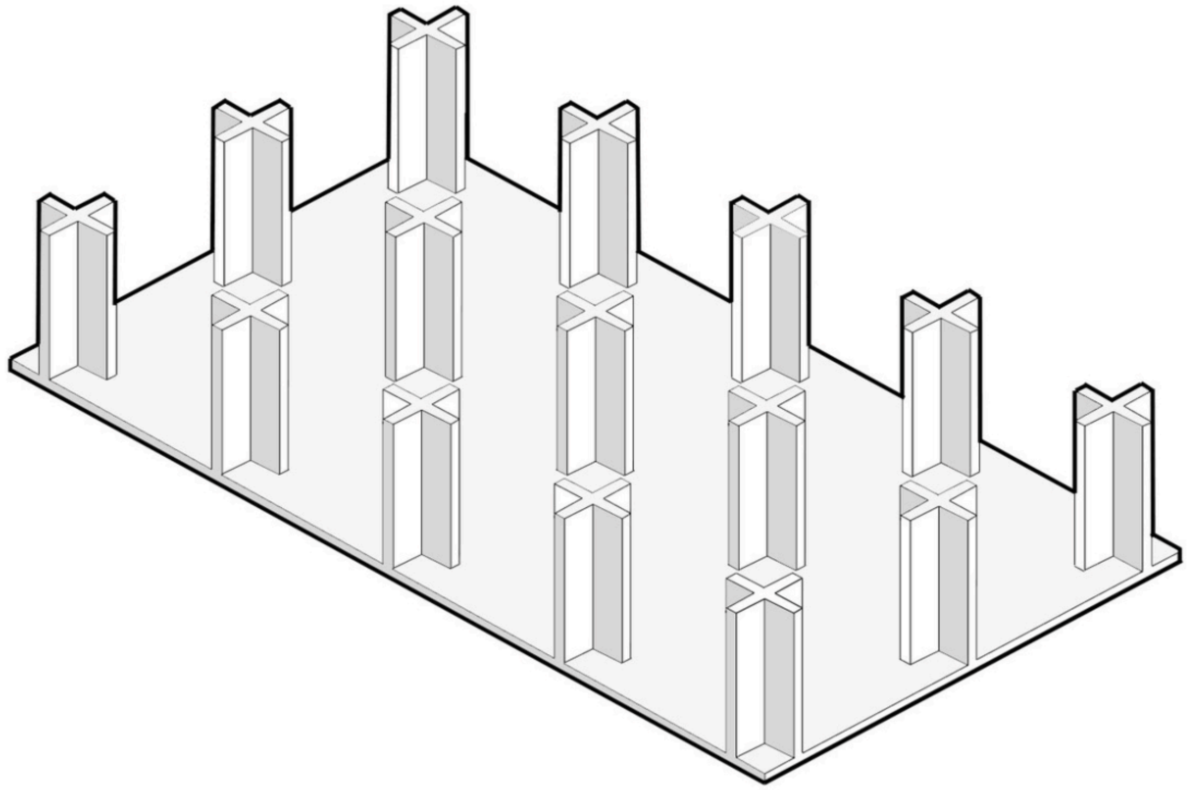
# Concept



No load-bearing interior walls

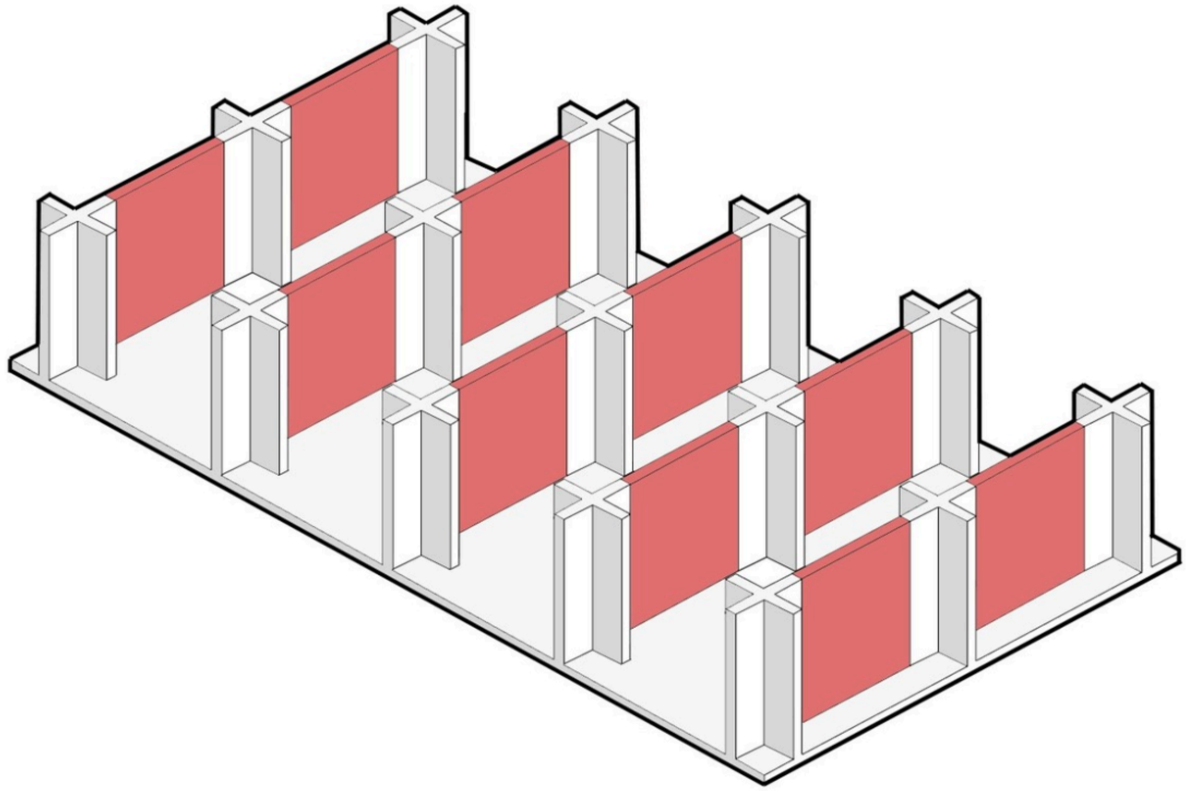


Multiple possible openings

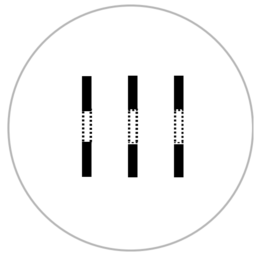


'support'

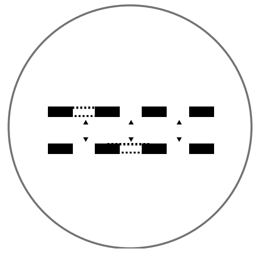
# Concept



‘support + infill’

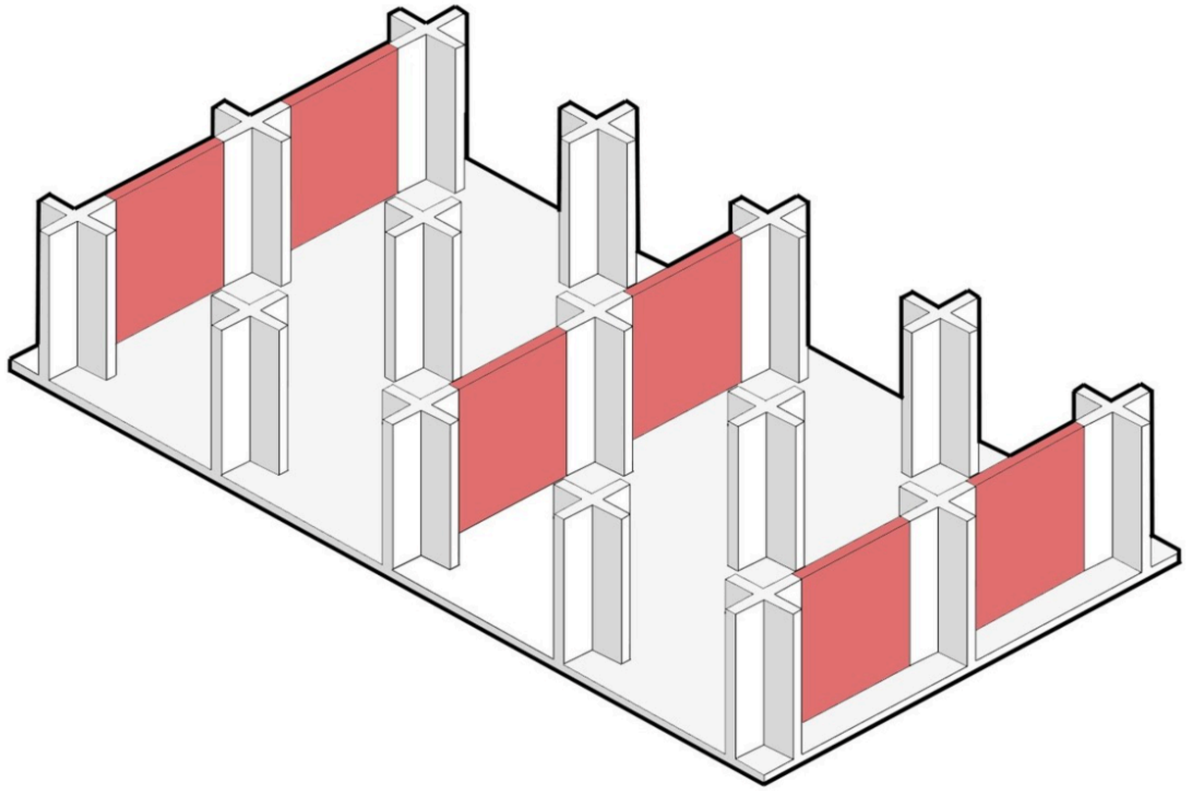


*No load-bearing interior walls*

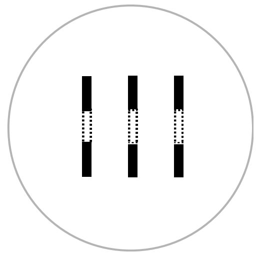


*Multiple possible openings*

# Concept



‘support + infill’



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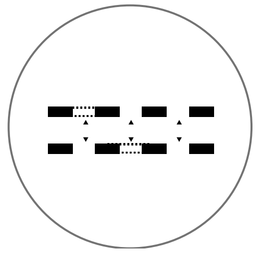
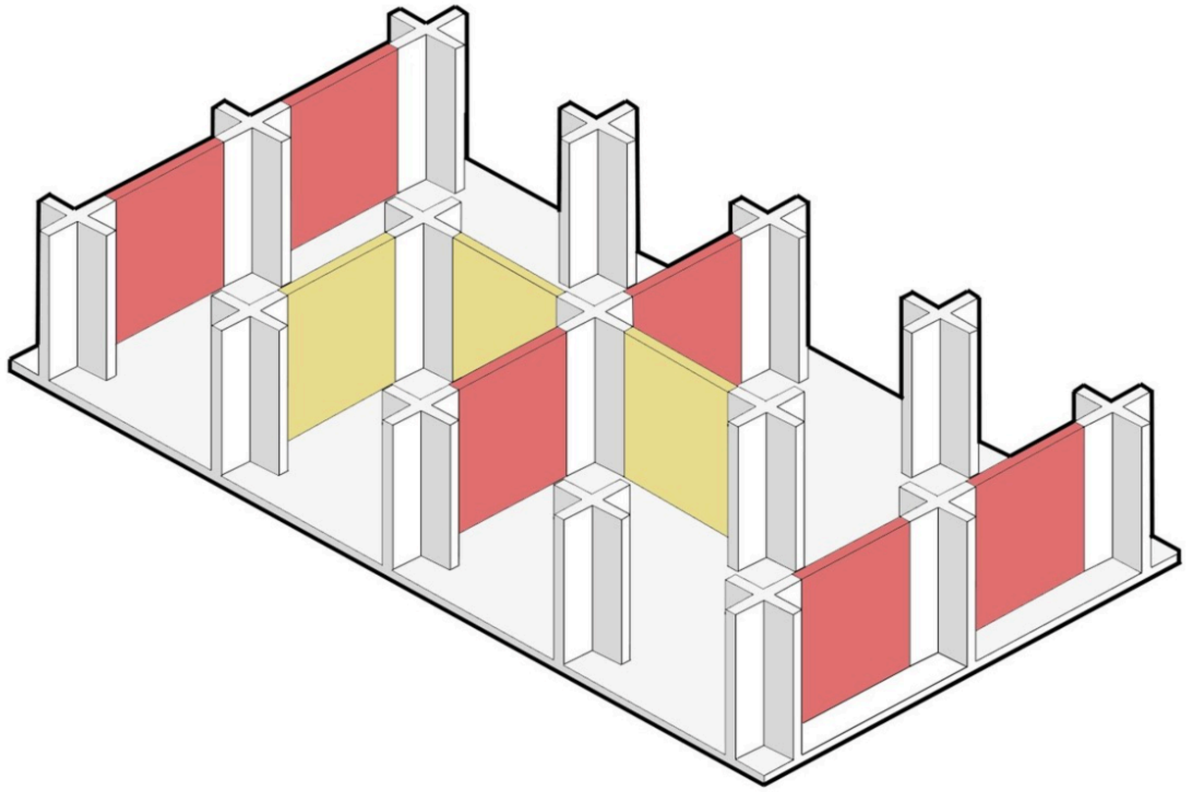


*Multiple possible openings*

# Concept



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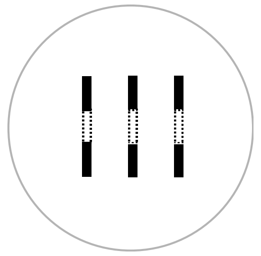

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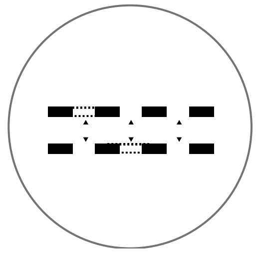
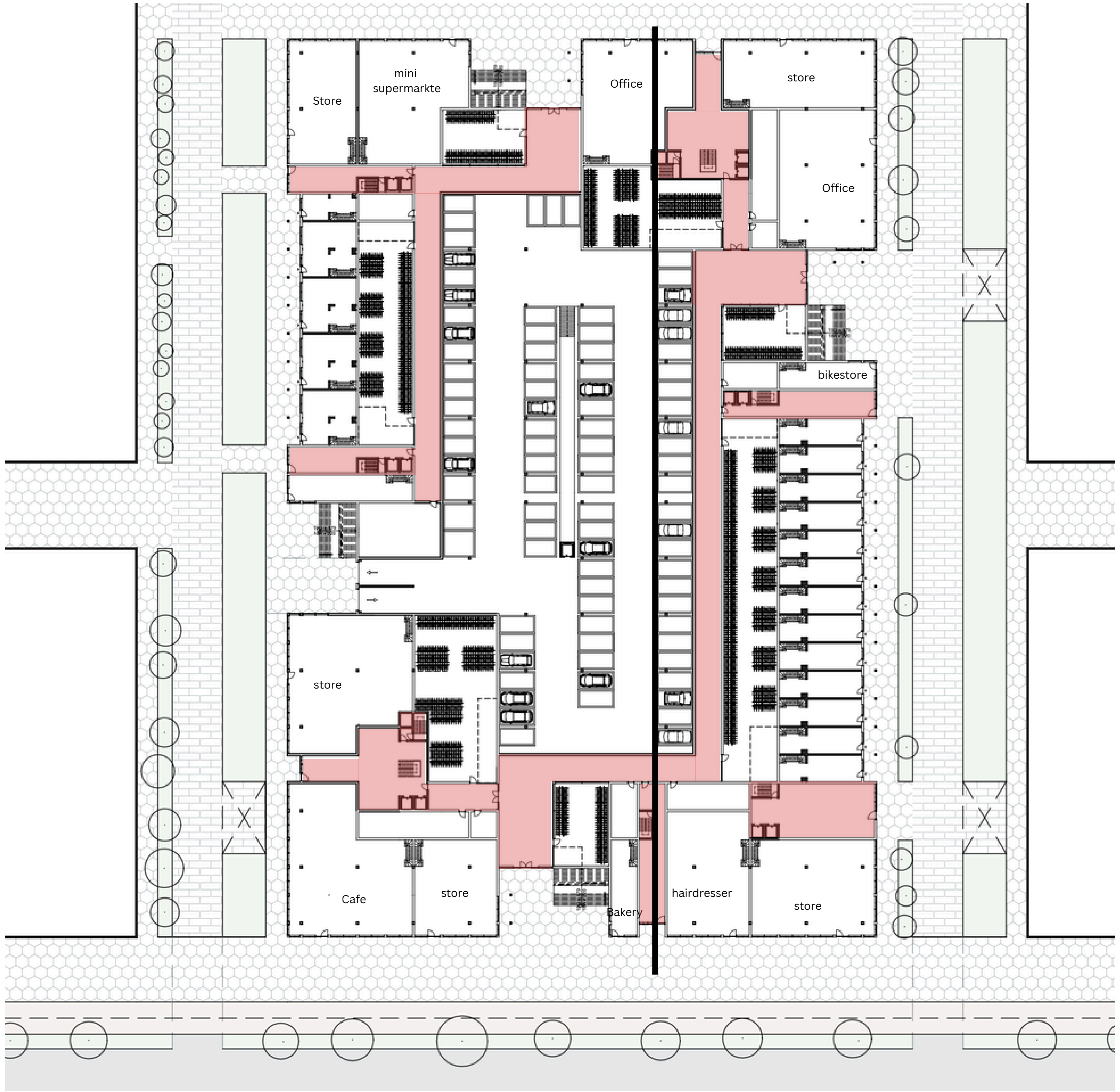
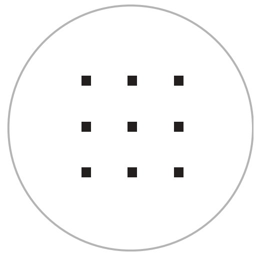


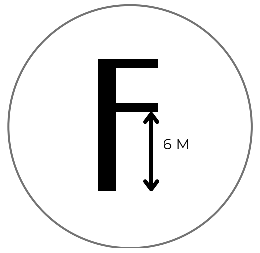
*Multiple possible openings*

# Situation



Colomn structure

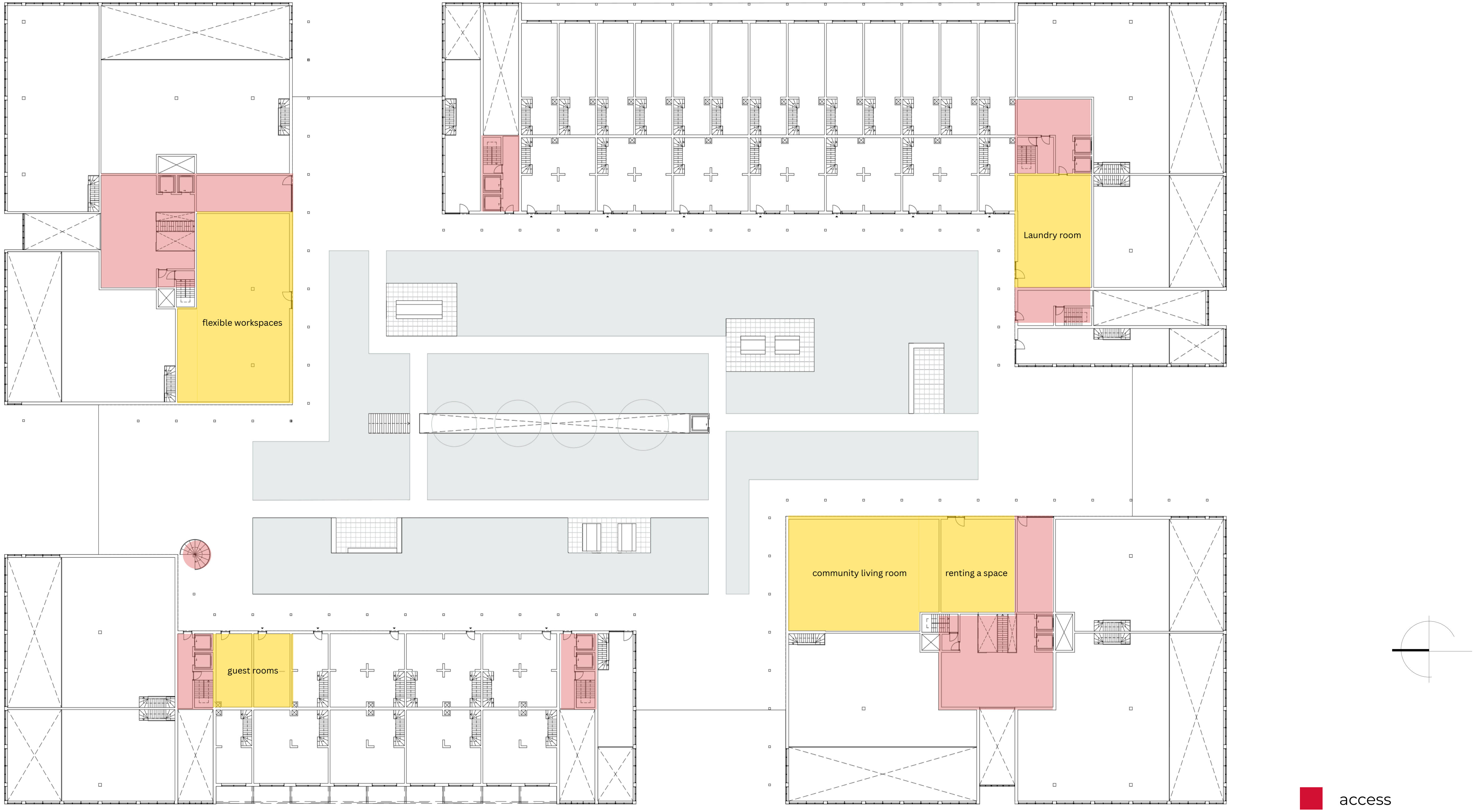



Oversized plinth public

access

common spaces

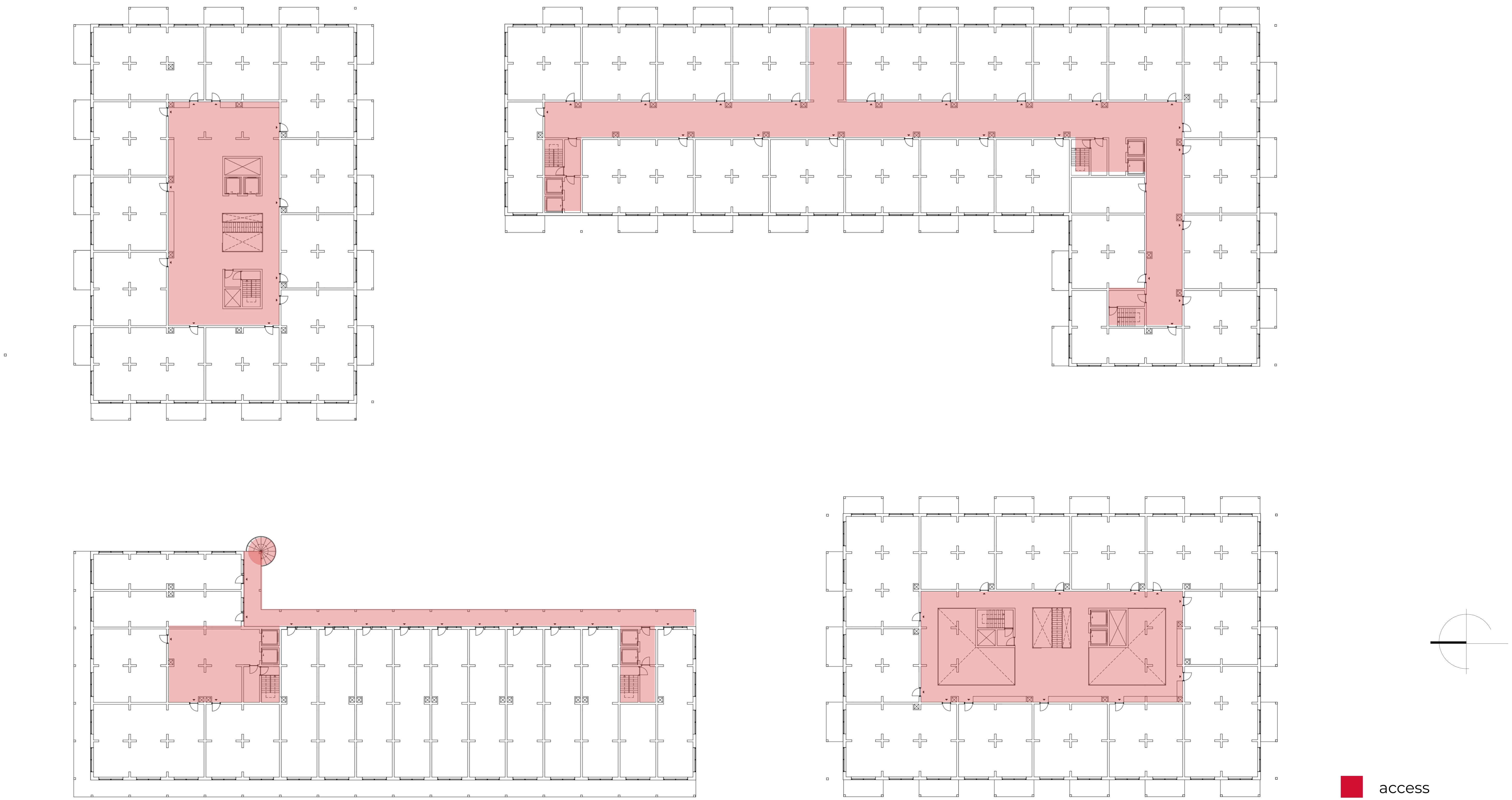
# 1st floor




access

common spaces

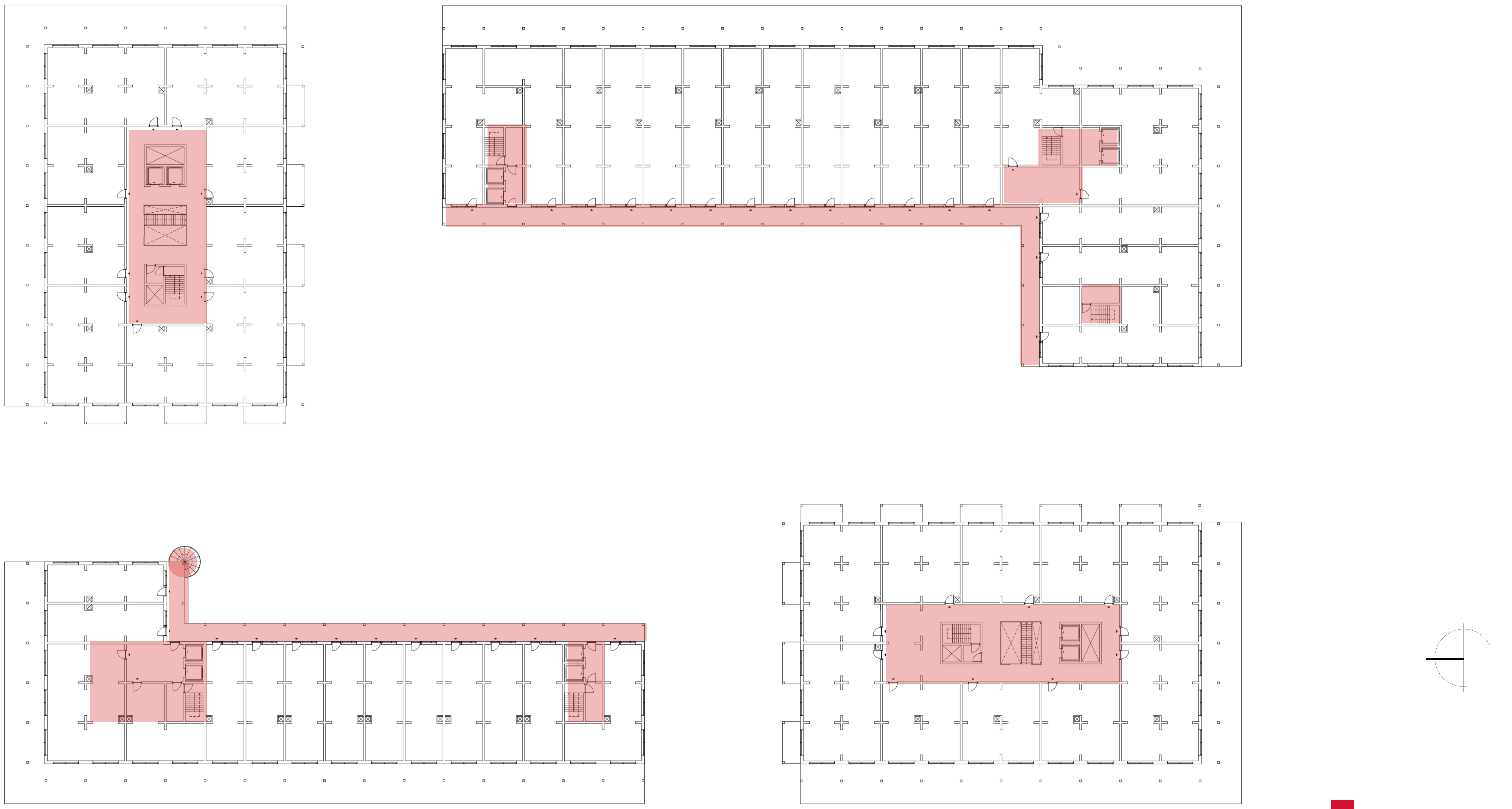
# 3rd floor - 4$^{th}$ floor



access

common spaces

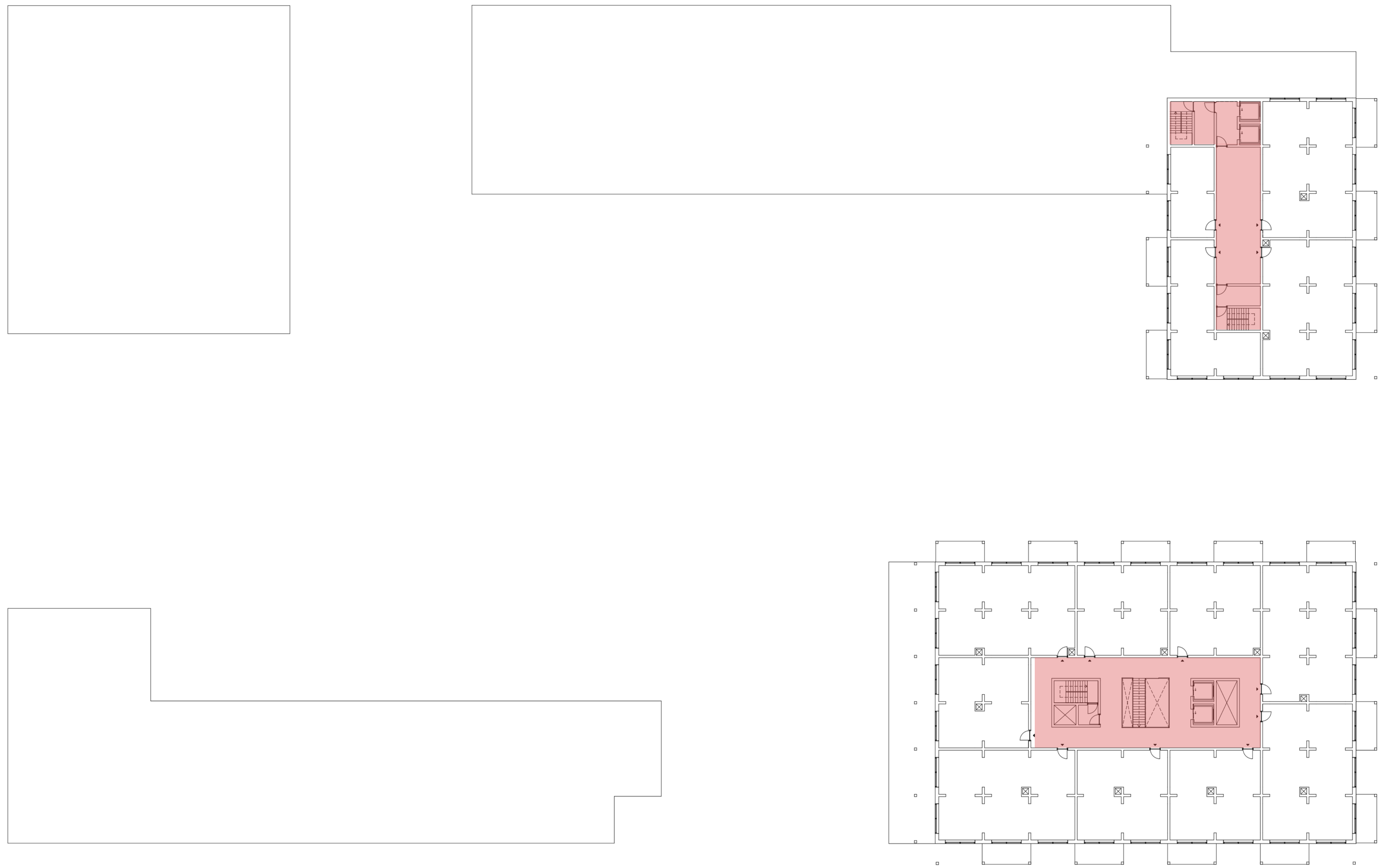
# 5th floor - 7$^{th}$ floor

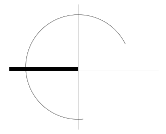


access

common spaces

# 8rd floor - 12th floor

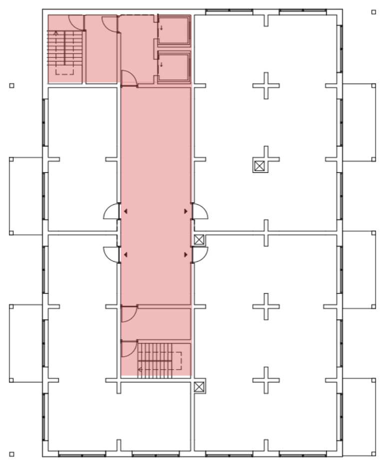




access

common spaces

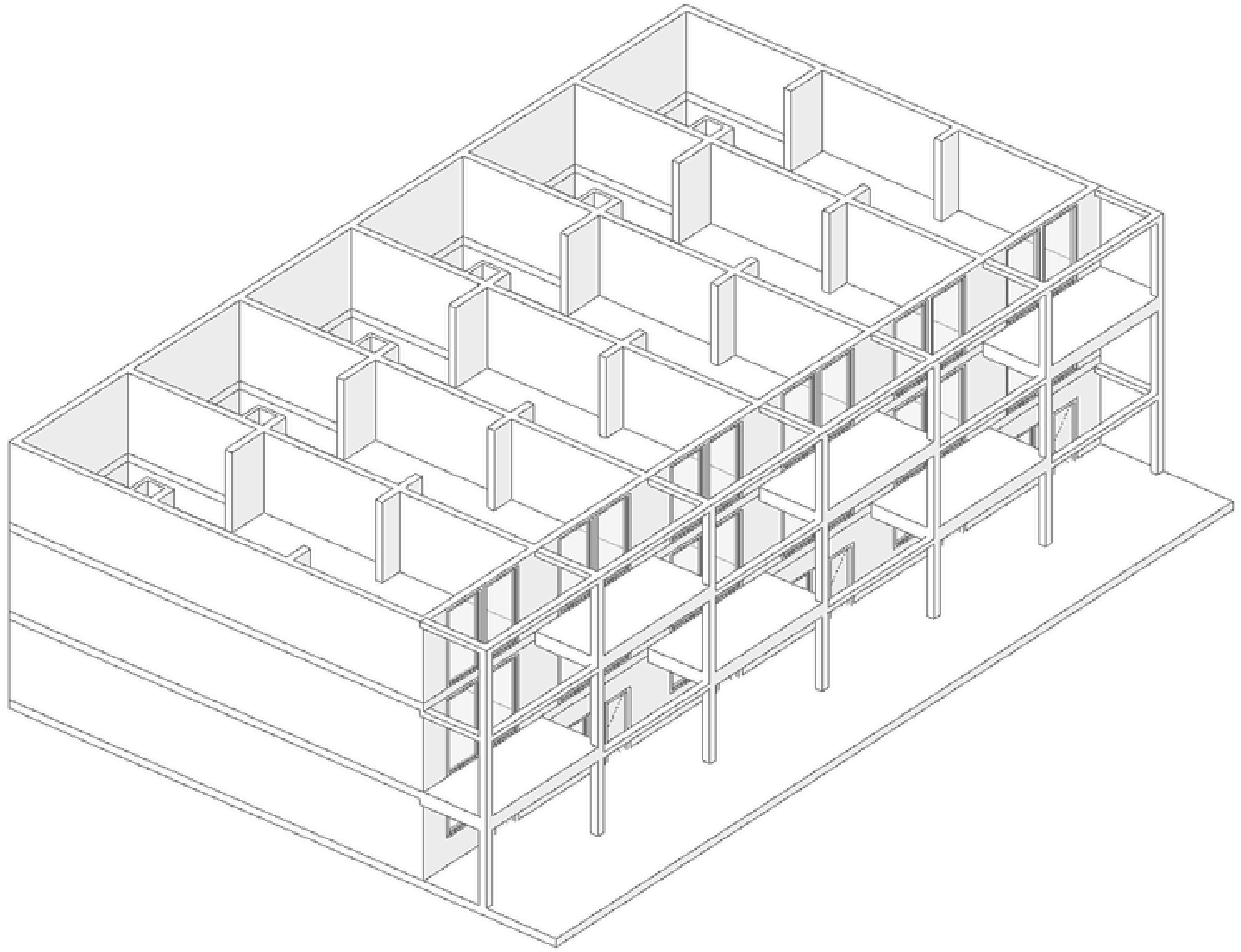
# 13th floor - 16th floor

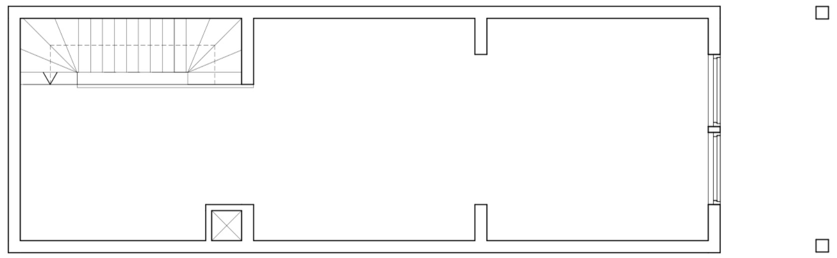


access

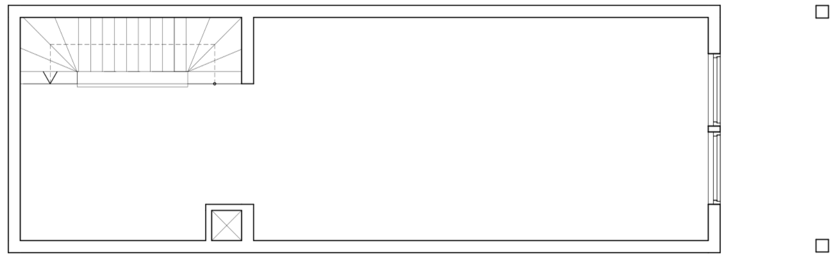
common spaces

# Appartments

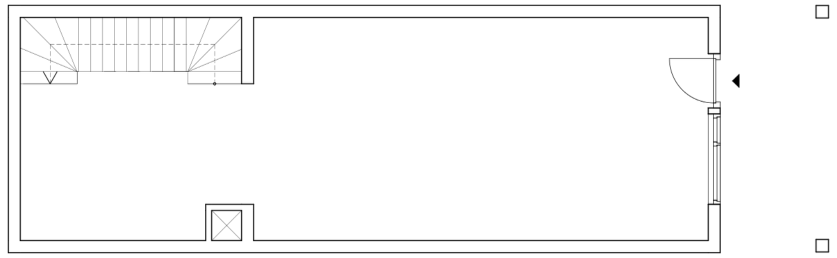




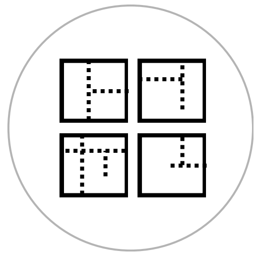
2nd floor



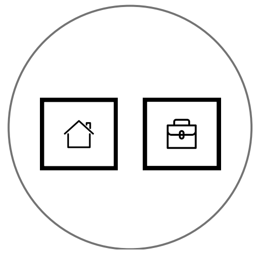
1st floor



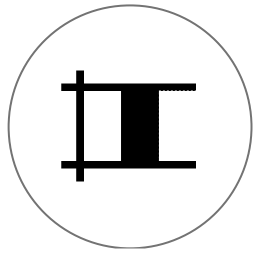
Ground floor



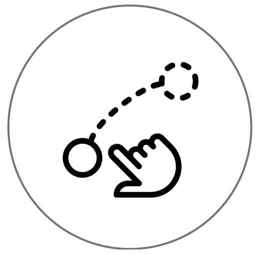
*No load-bearing interior walls*



*Polyvalent structure*



*Avoid large closed sections*



*Moveable*

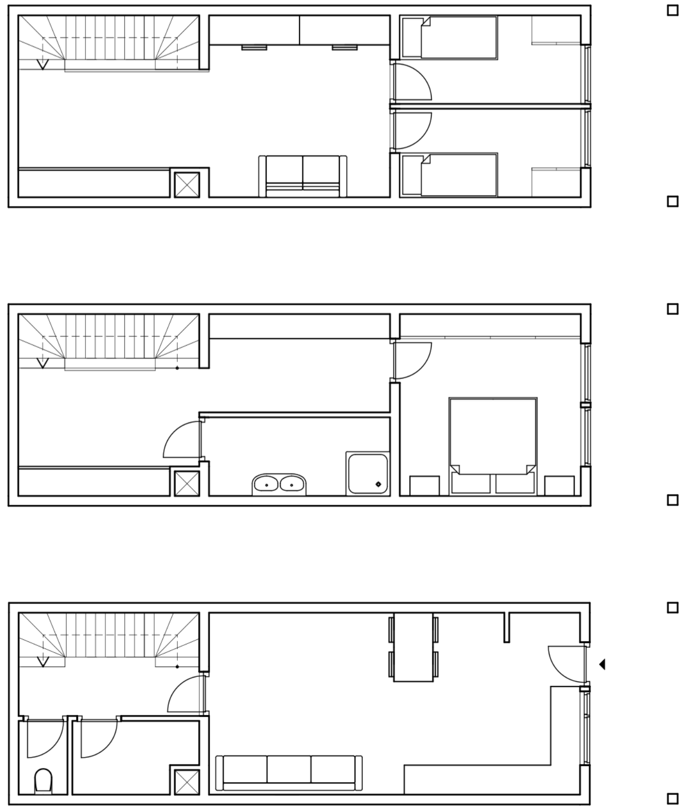
'support'

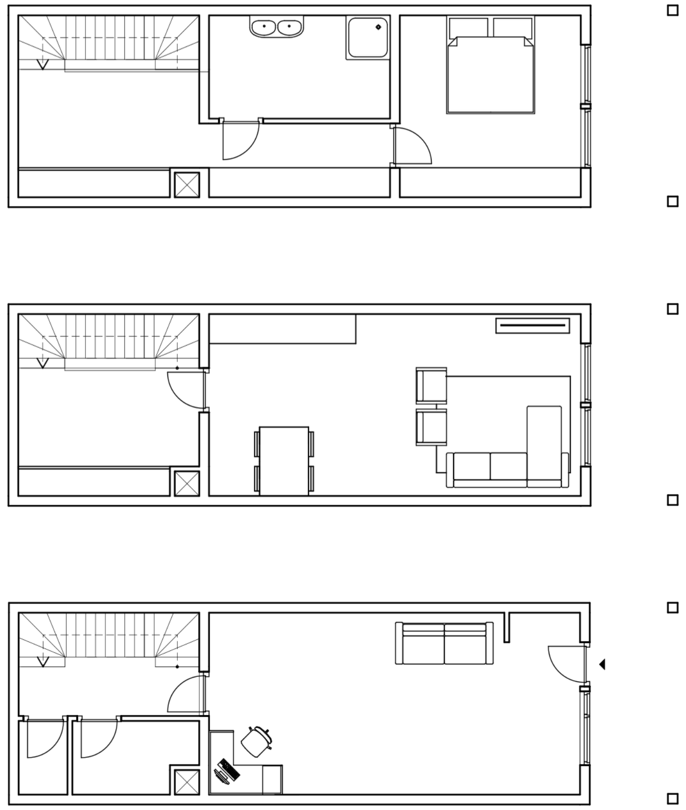
**Ground bound**

123 m2

# Appartments



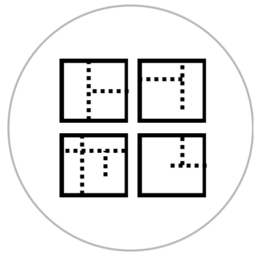




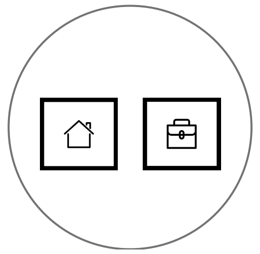
‘infill’

**Ground bound**

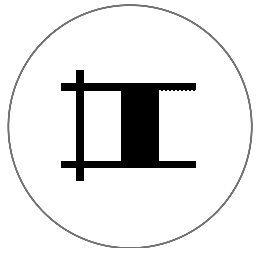
123 m2



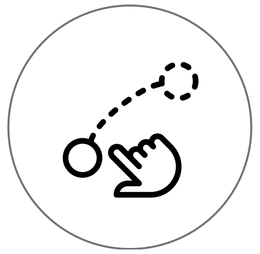
*No load-bearing interior walls*



*Polyvalent structure*

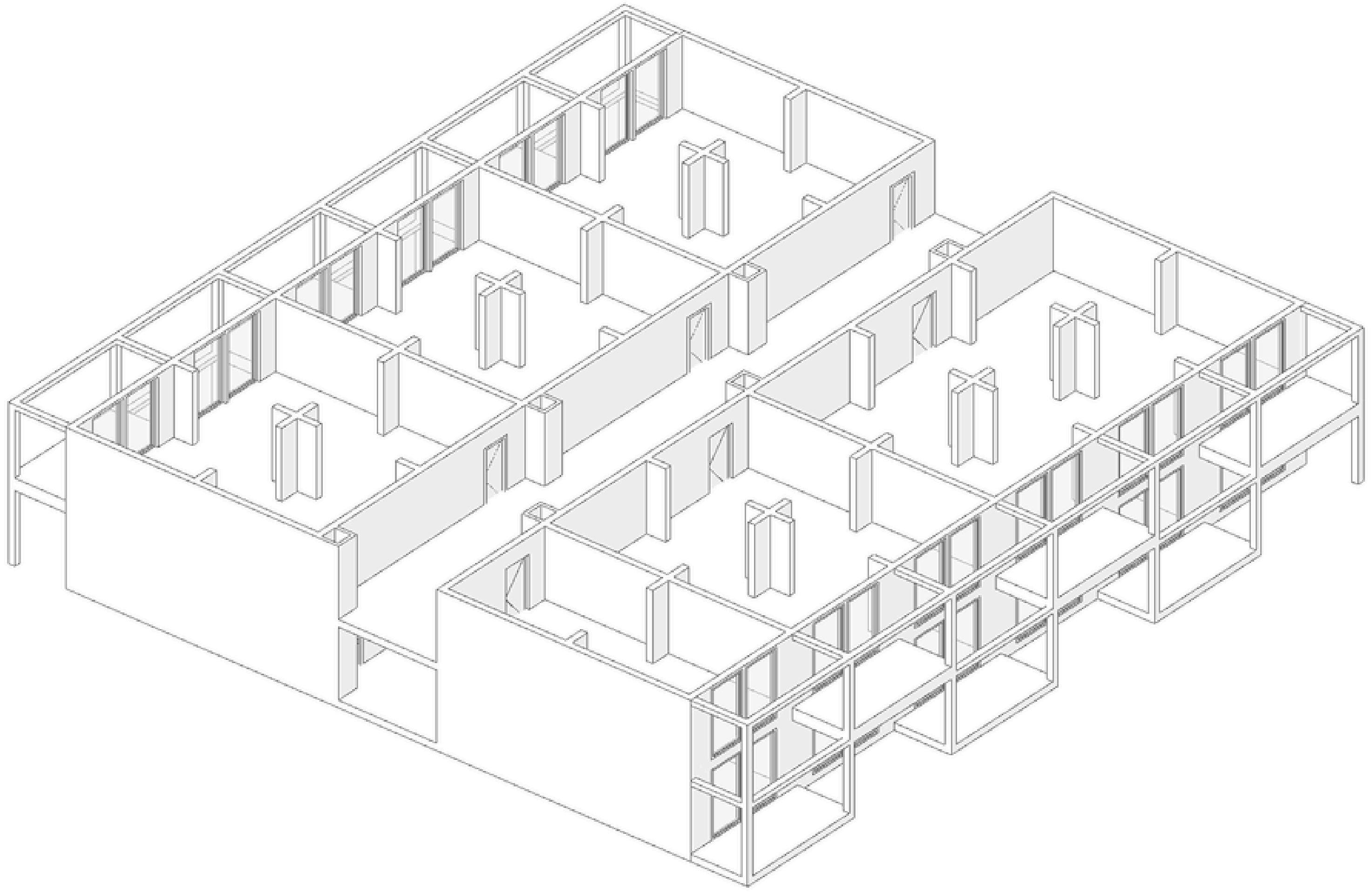


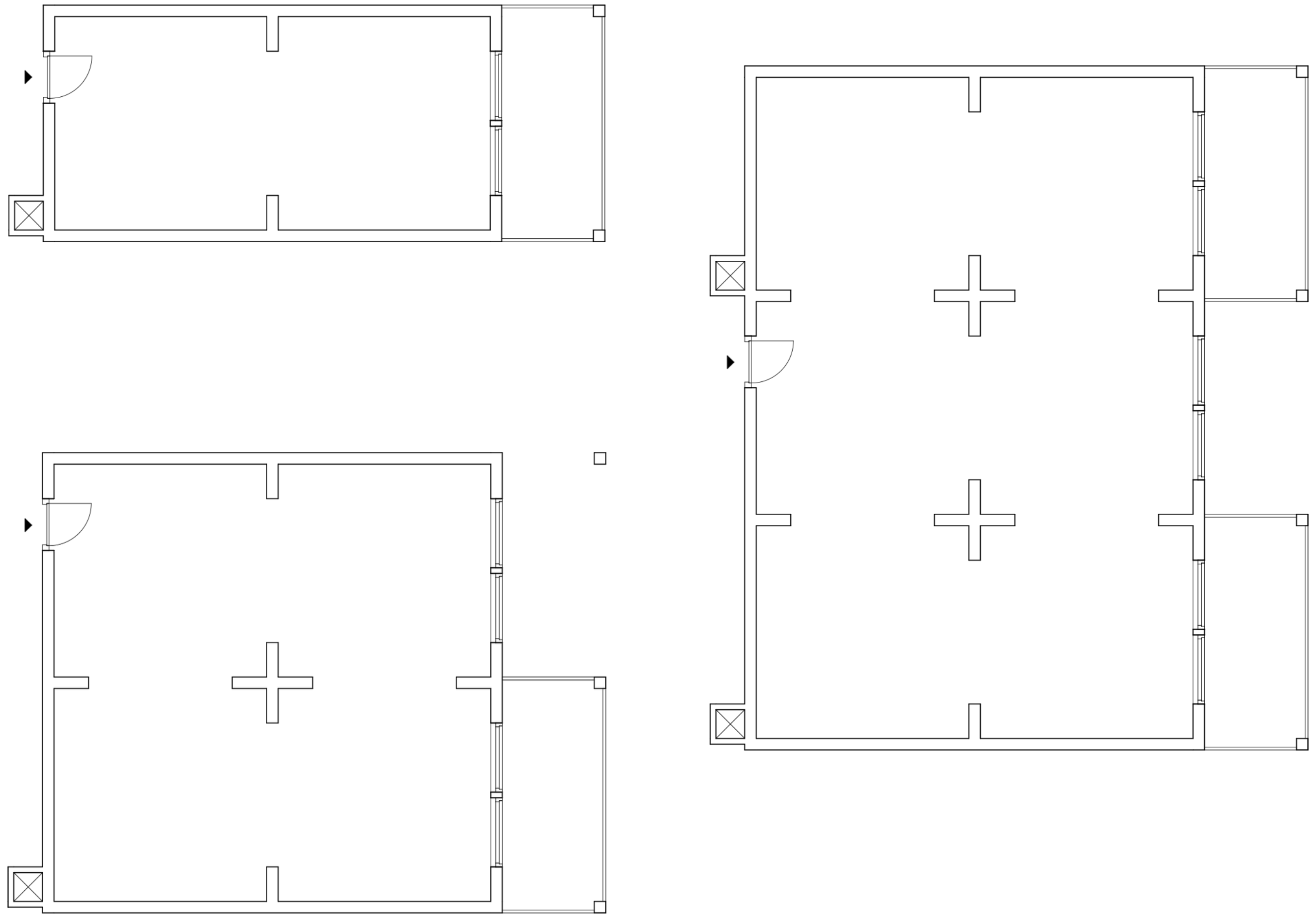
*Avoid large closed sections*

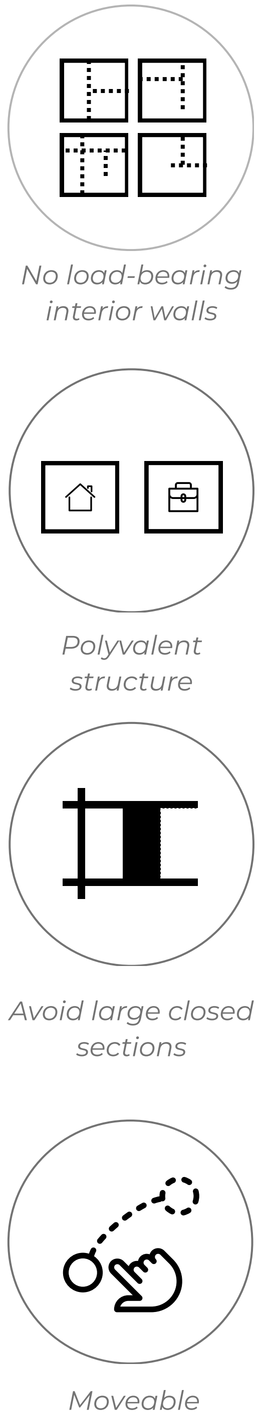


*Moveable*

# Appartments





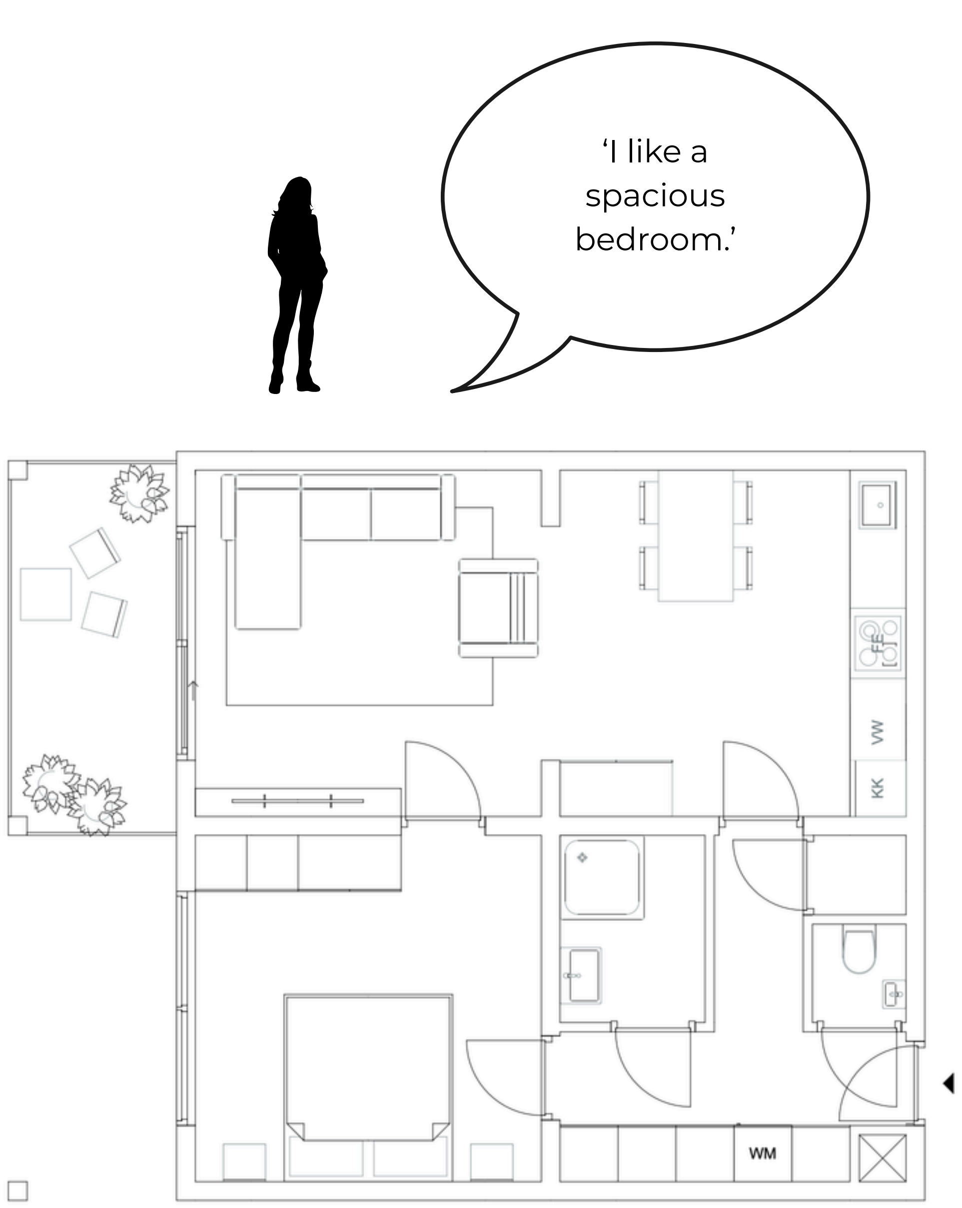


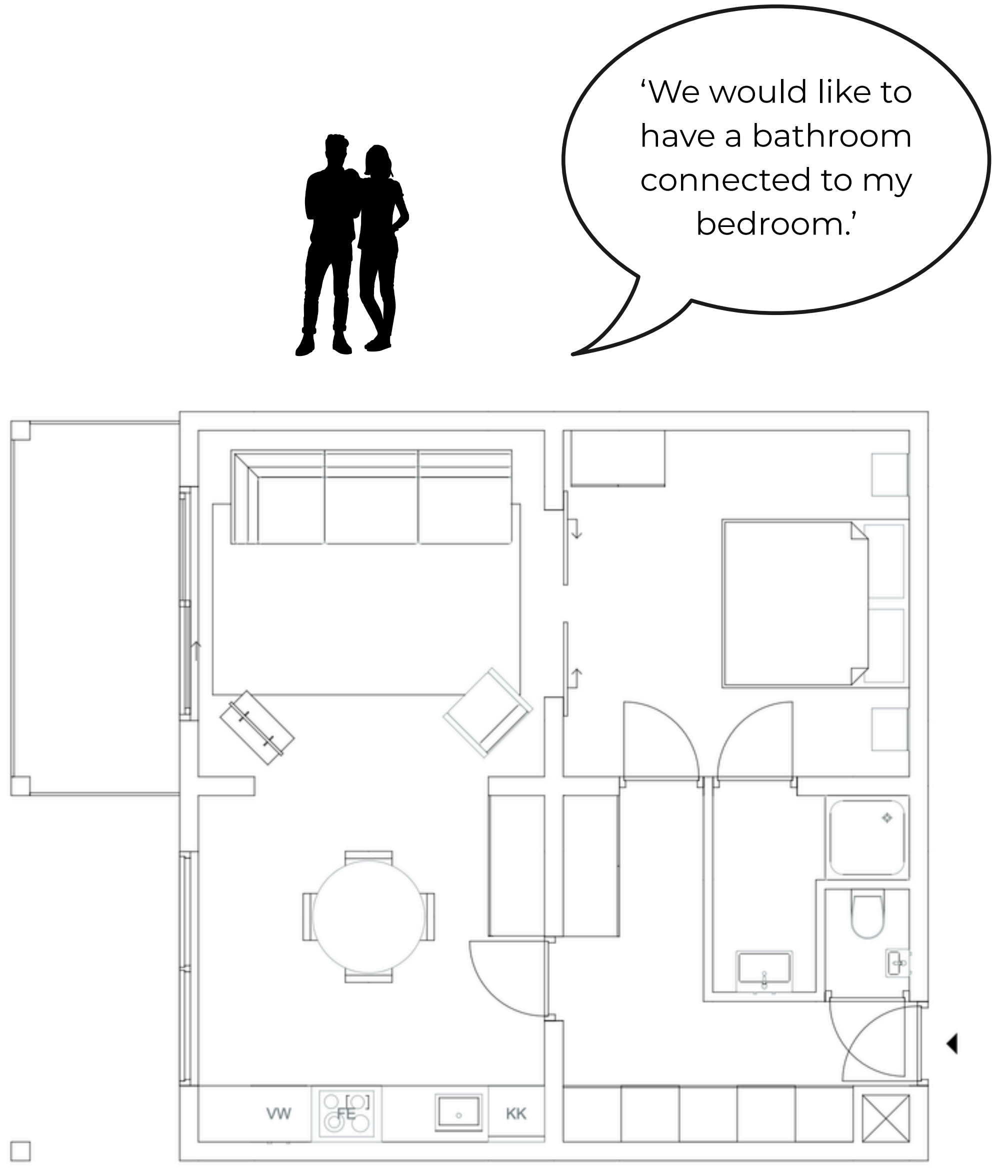

'support'

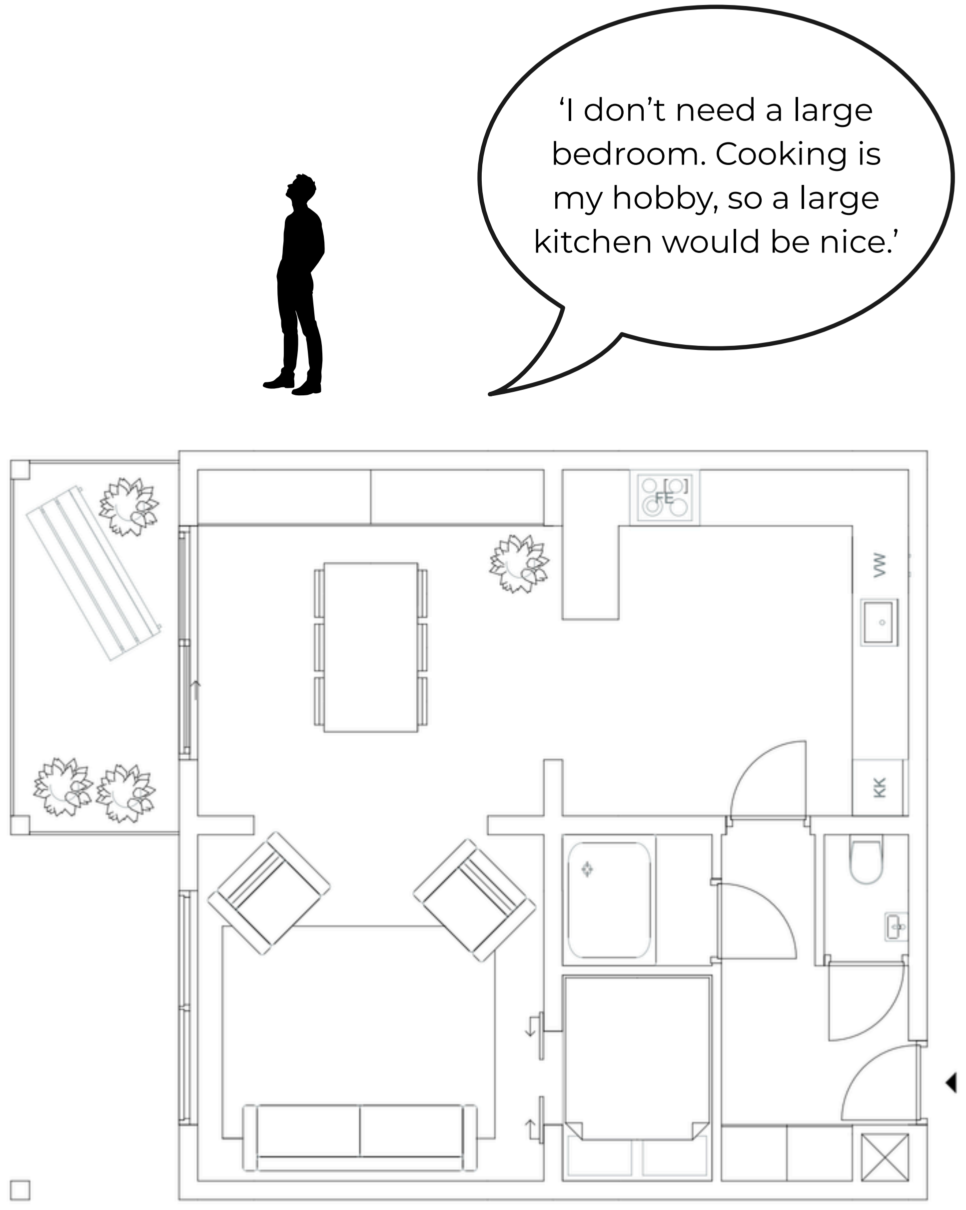
**Corridor**

27,38 - 54,70 - 82,14 m2

# Appartments



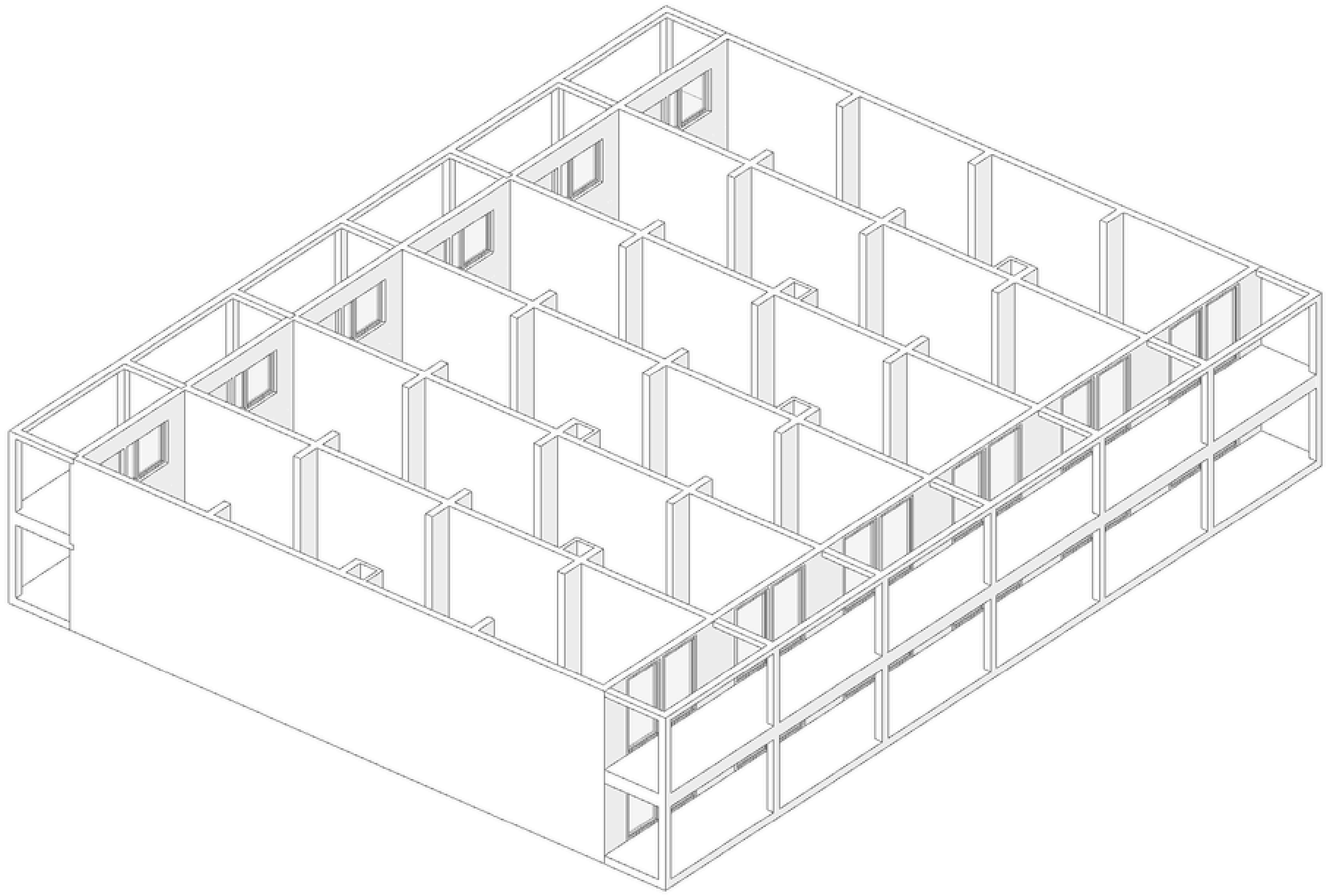



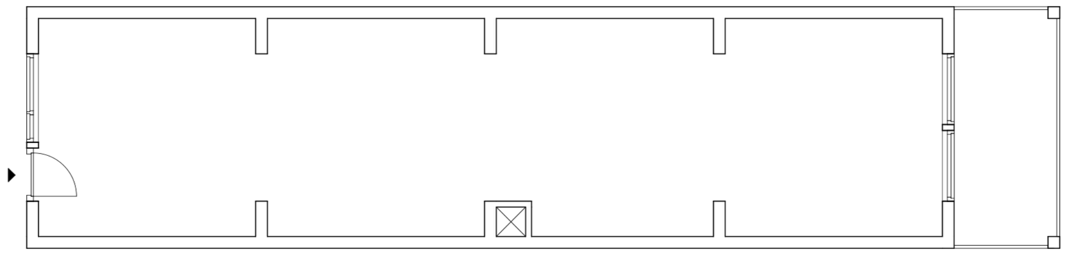

'infill'

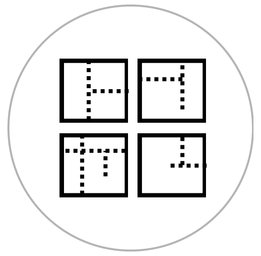
**Corridor**

123 m2

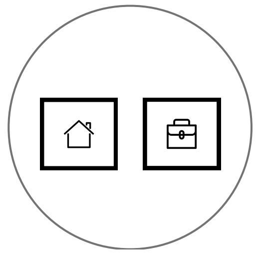
# Appartments



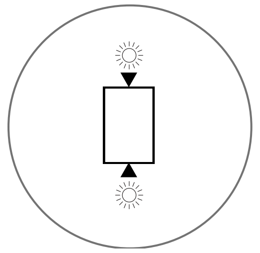




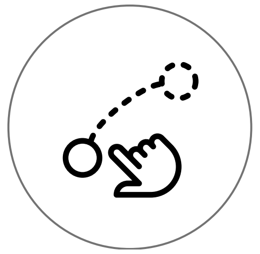
*No load-bearing interior walls*



*Polyvalent structure*



*Both sided daylight*



*Moveable*

‘support’

**Gallery**

54,70 m2

# Appartments

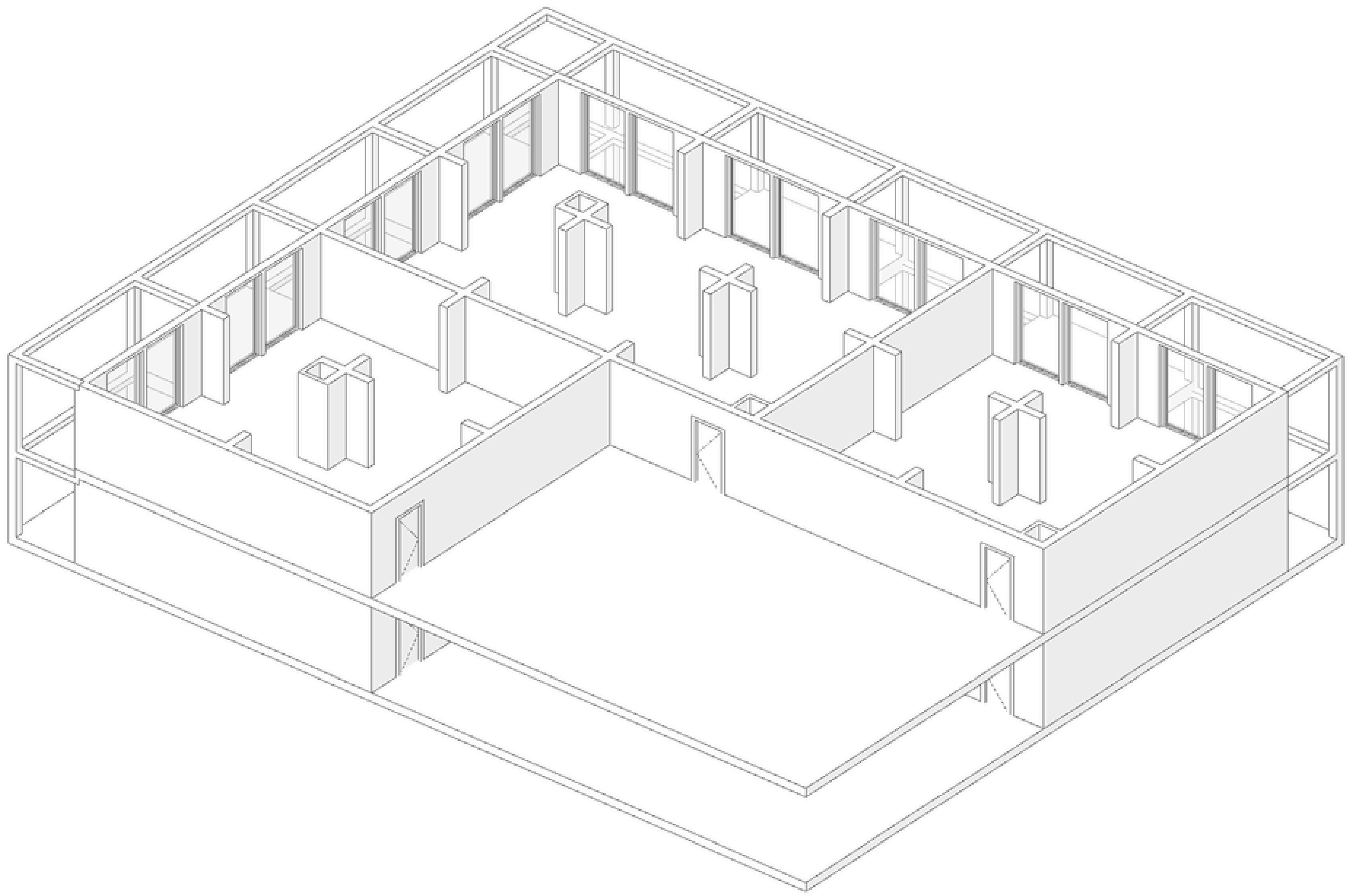


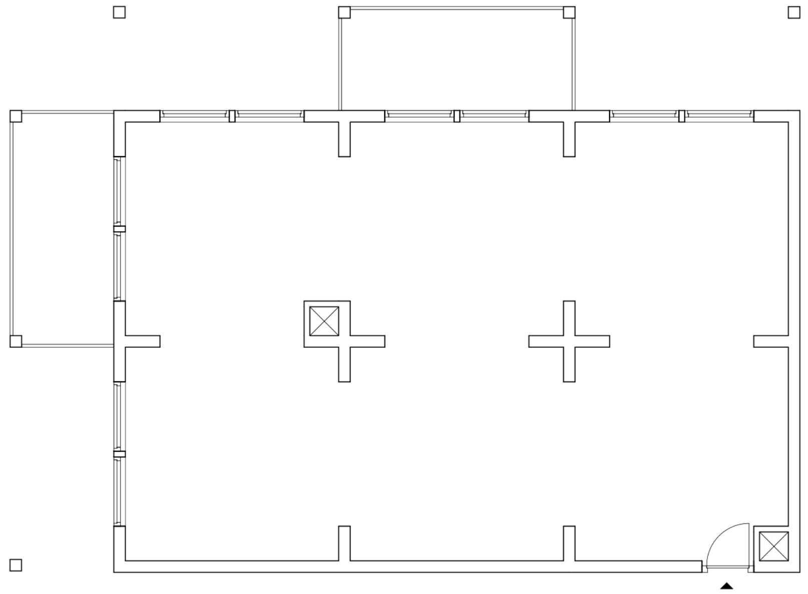
‘infill’

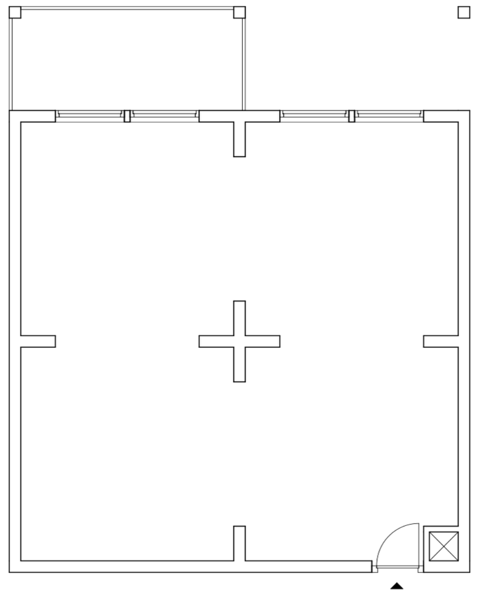
**Gallery**

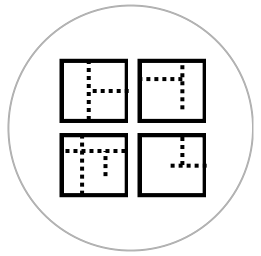
54,70 m2

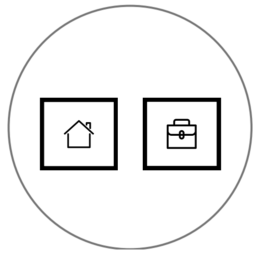
# Appartments

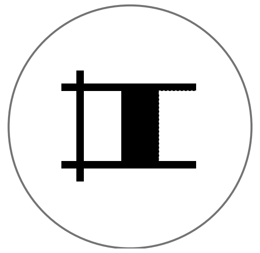


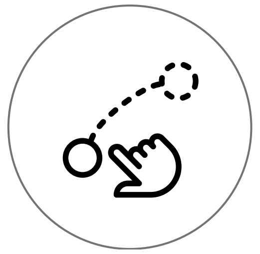





No load-bearing interior walls


Polyvalent structure


Avoid large closed sections

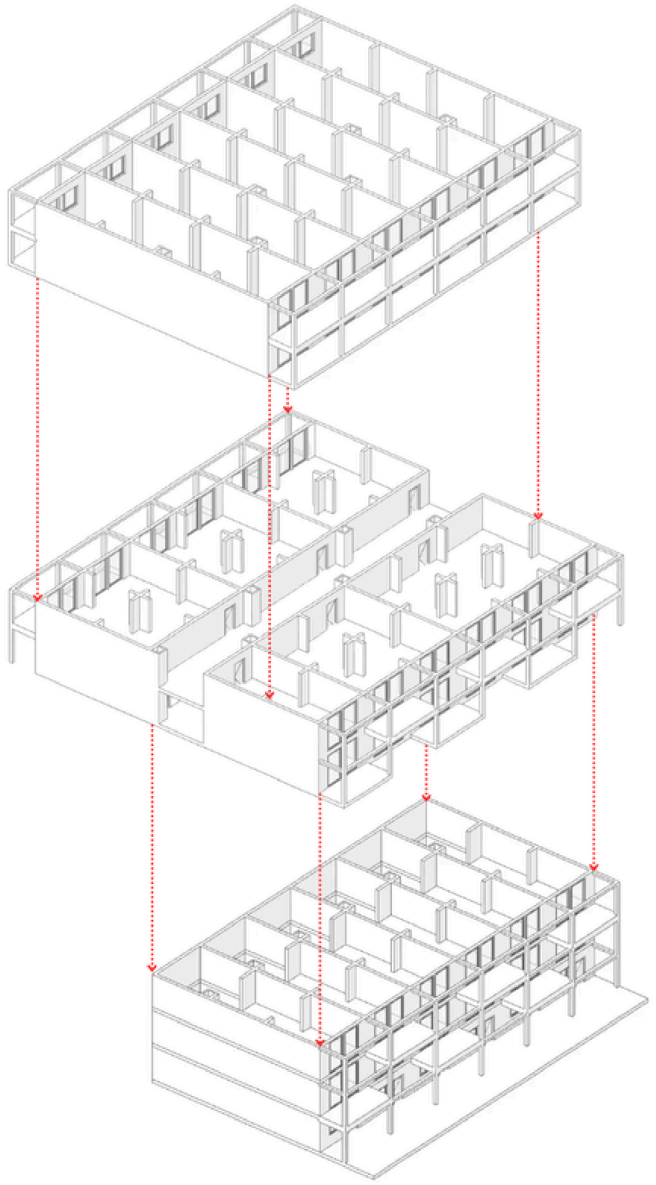

Moveable

'support'

**Intern core**

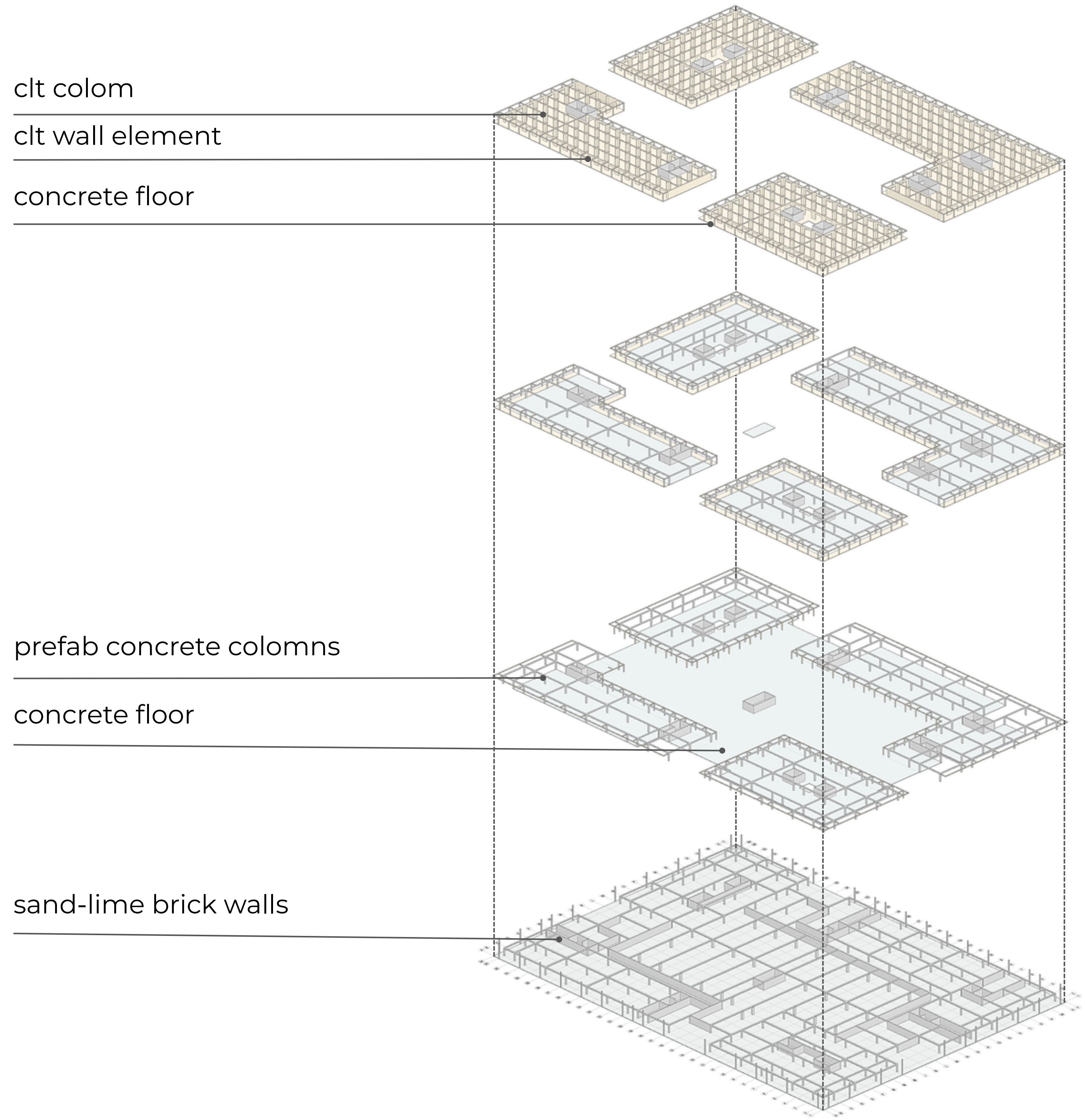
27,38 - 41,07 - 54,70 - 68,45 - 82,14 m2

# Appartments



**Ground bound - corridor - gallery**

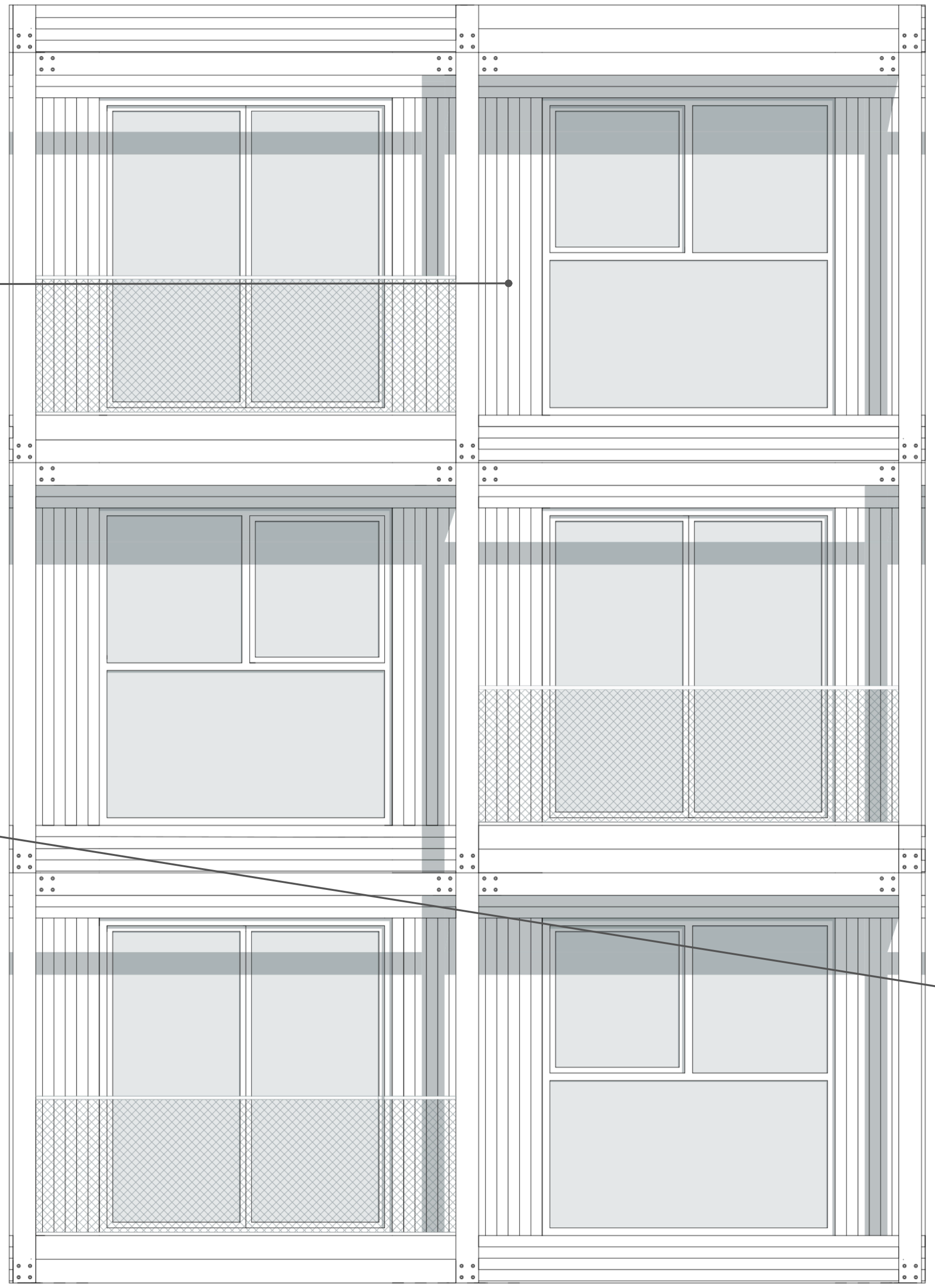
# Construction

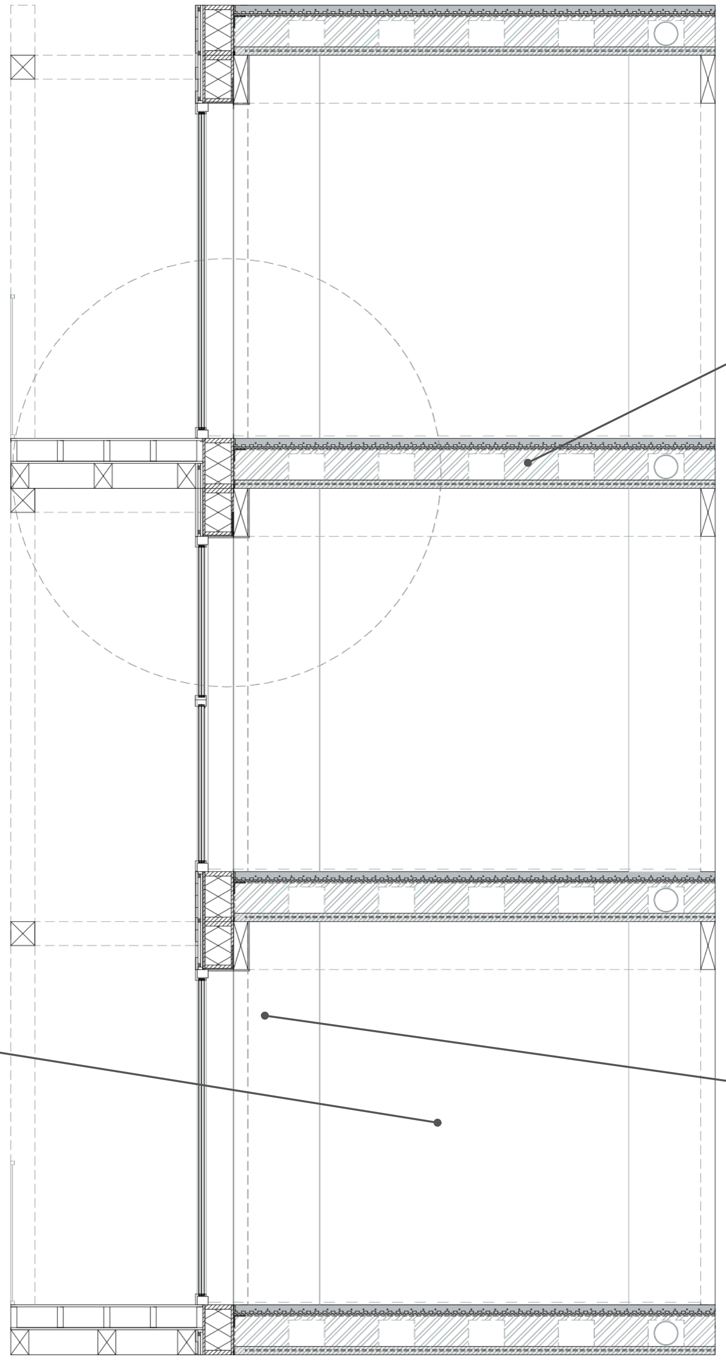


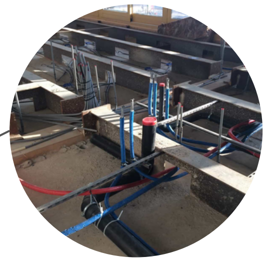
# Construction

Thermo wood

3200 floor height

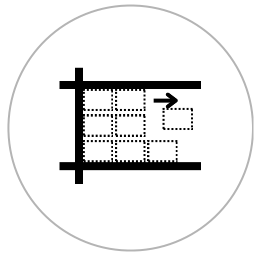




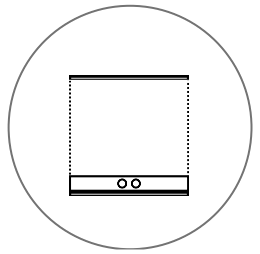


Slimline floor system

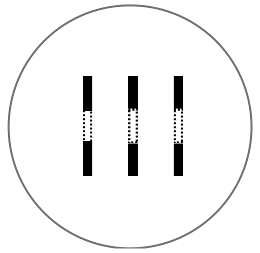
Open structure



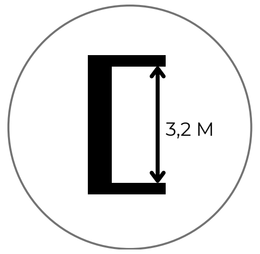
*Demountable*



*Hollow floor*

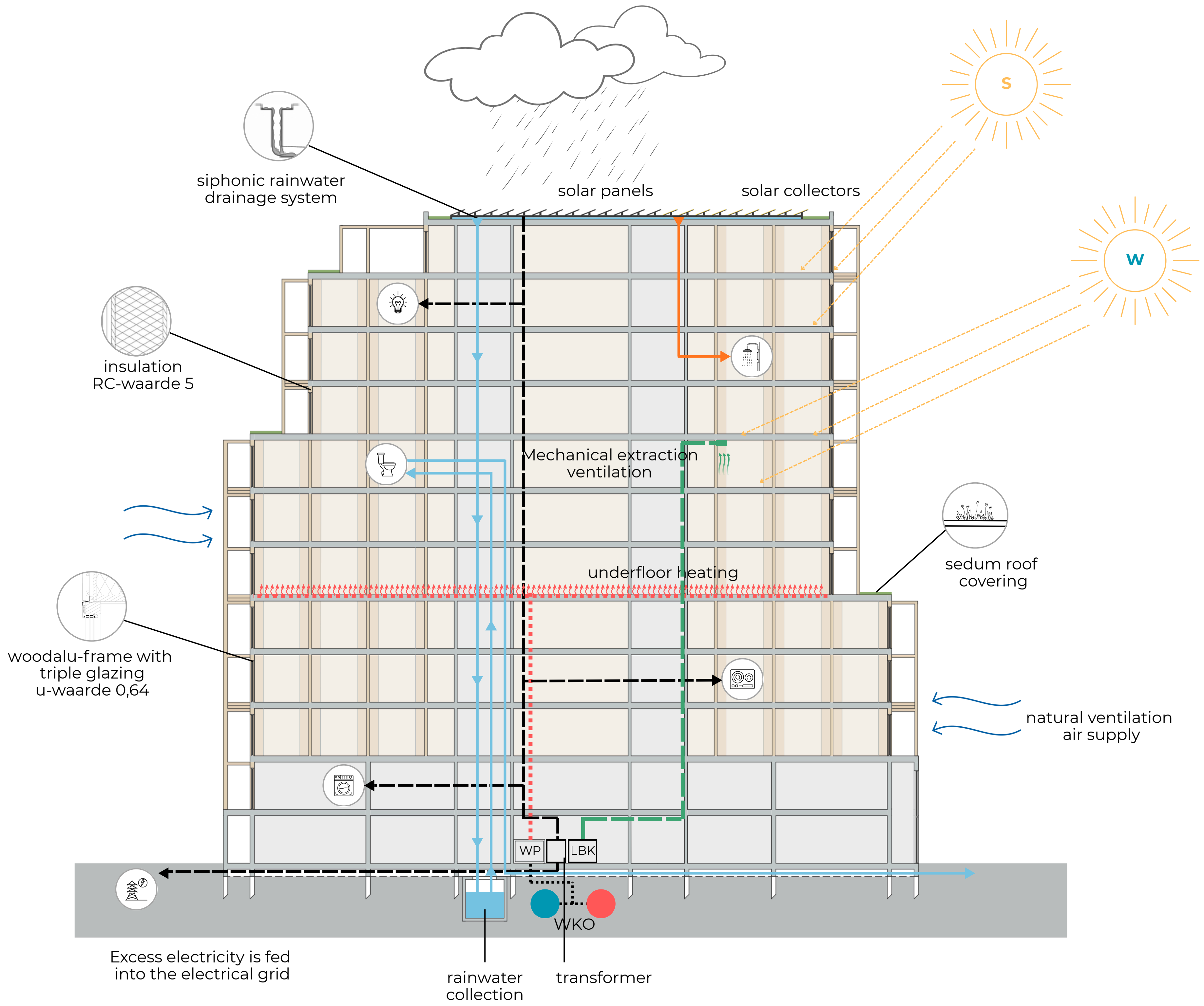


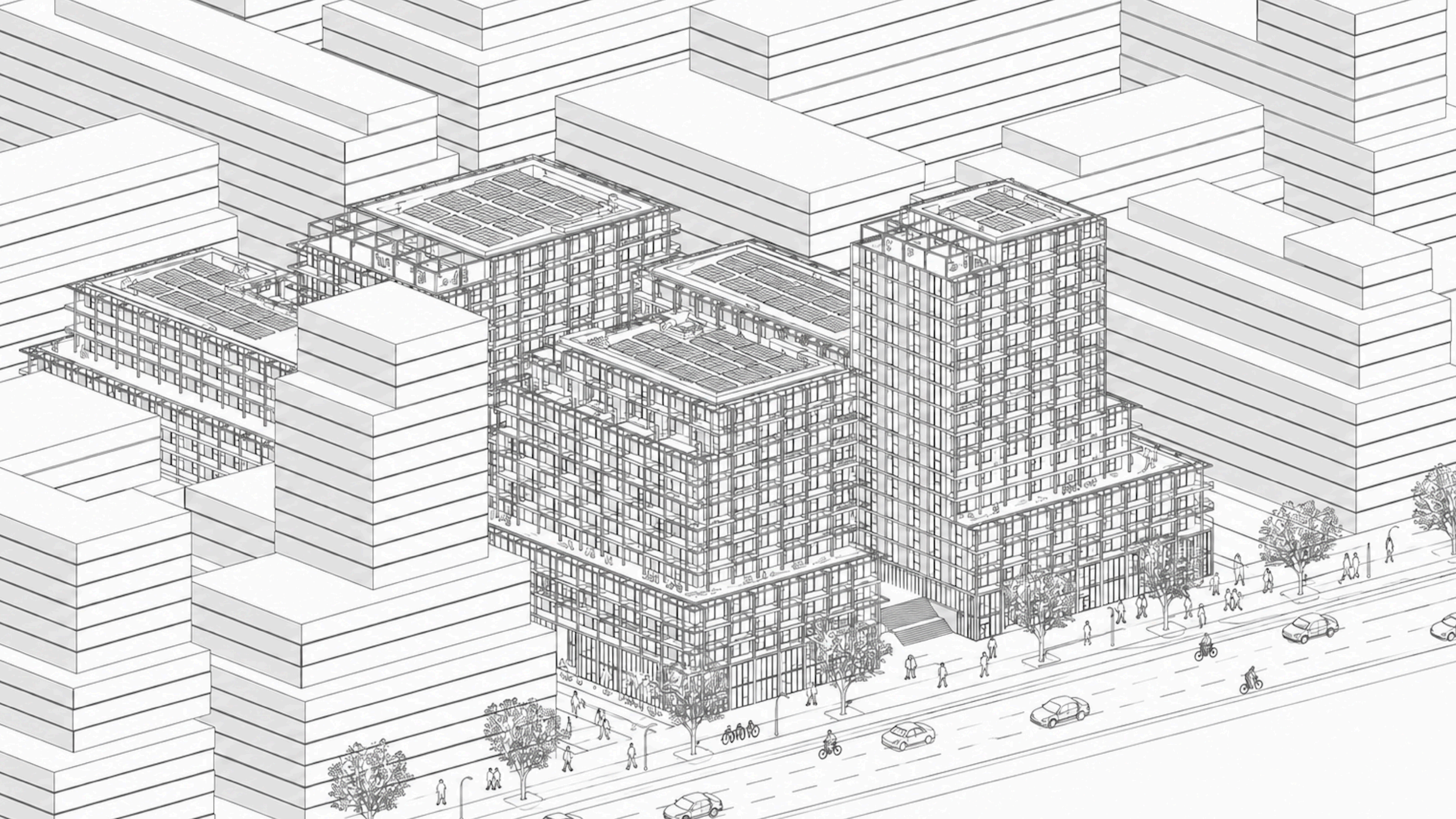
*No load-bearing interior walls*



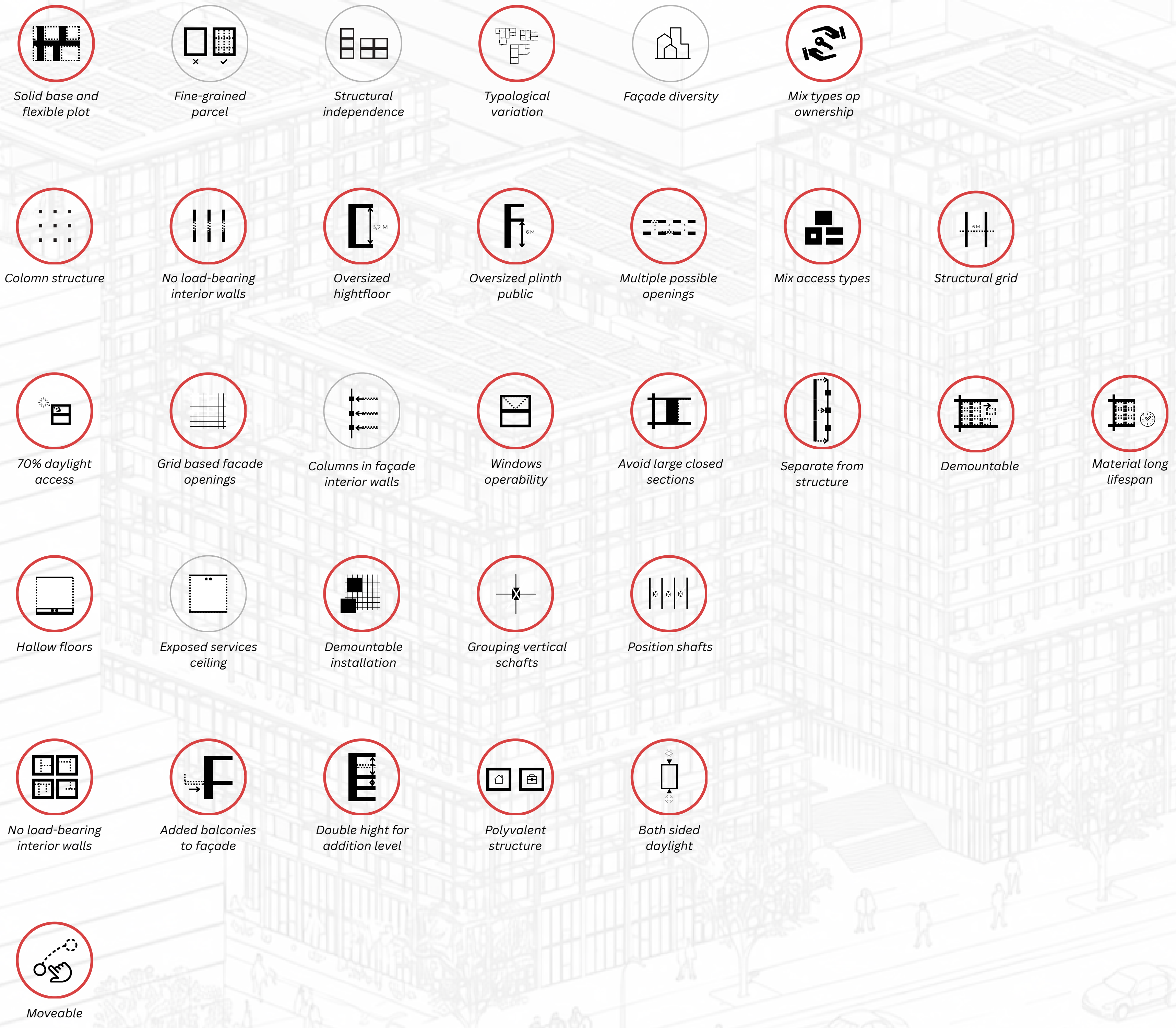

*Oversized hightfloor*

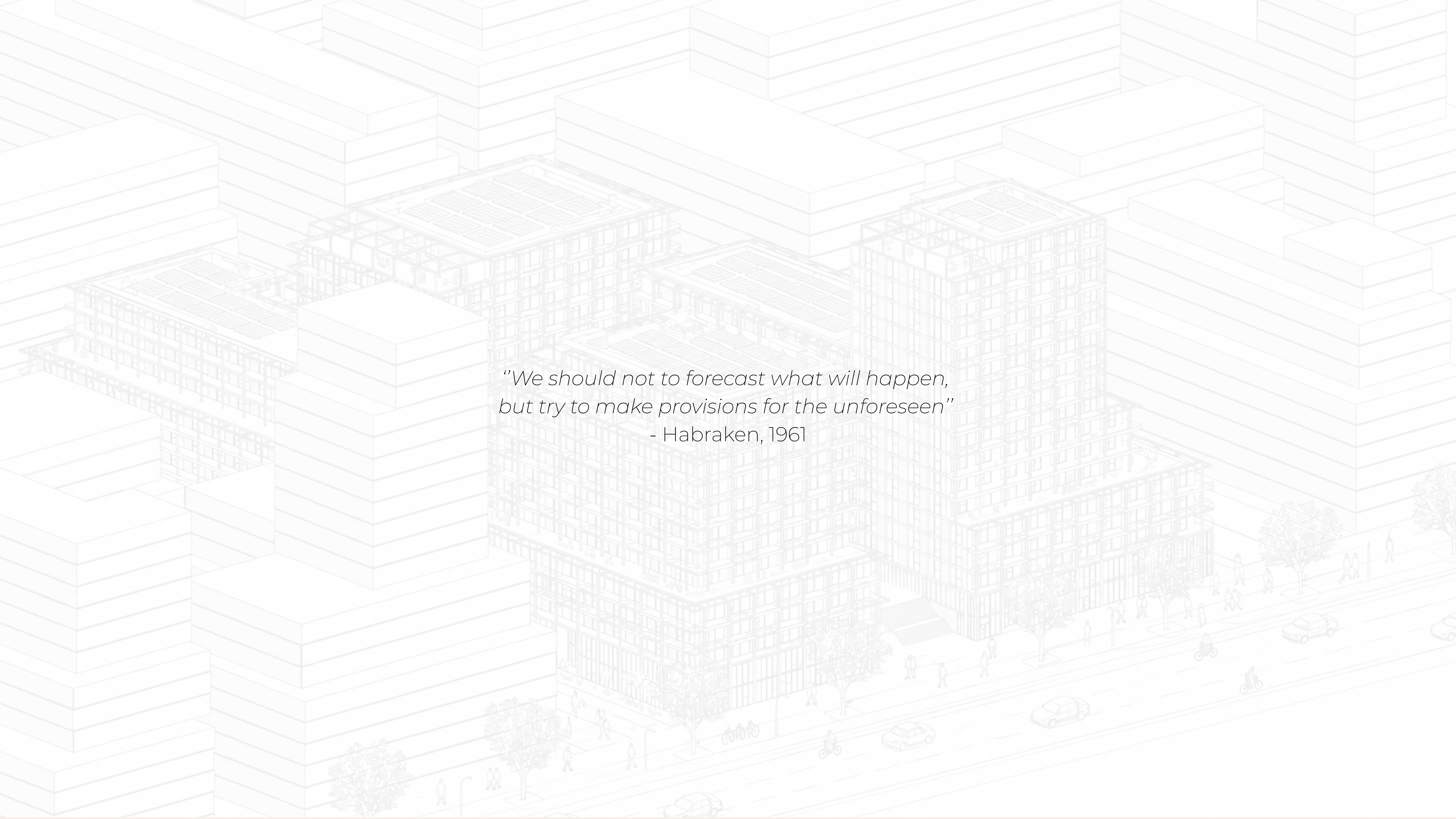
# Climate scheme





# Adaptability





*"We should not to forecast what will happen, but try to make provisions for the unforeseen"*

- Habraken, 1961

# ROOM FOR CHANGE

Thank you!