

# ROOM FOR CHANGE

Designing For Adaptability in the Dynamic City

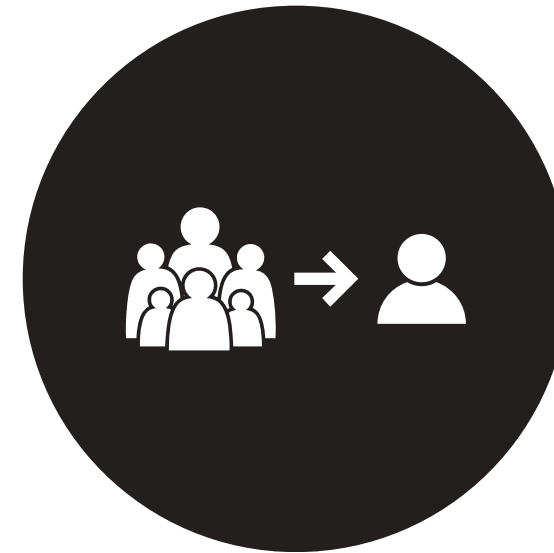
# De uitdaging: de gebouwde omgeving versus verandering



Verstedelijking



Bevolkingsgroei



Toename van kleinere  
huishoudens



Veranderende woon-  
en werkpatronen

# De uitdaging: de gebouwde omgeving versus verandering

Ontworpen voor vaste functies → mismatch



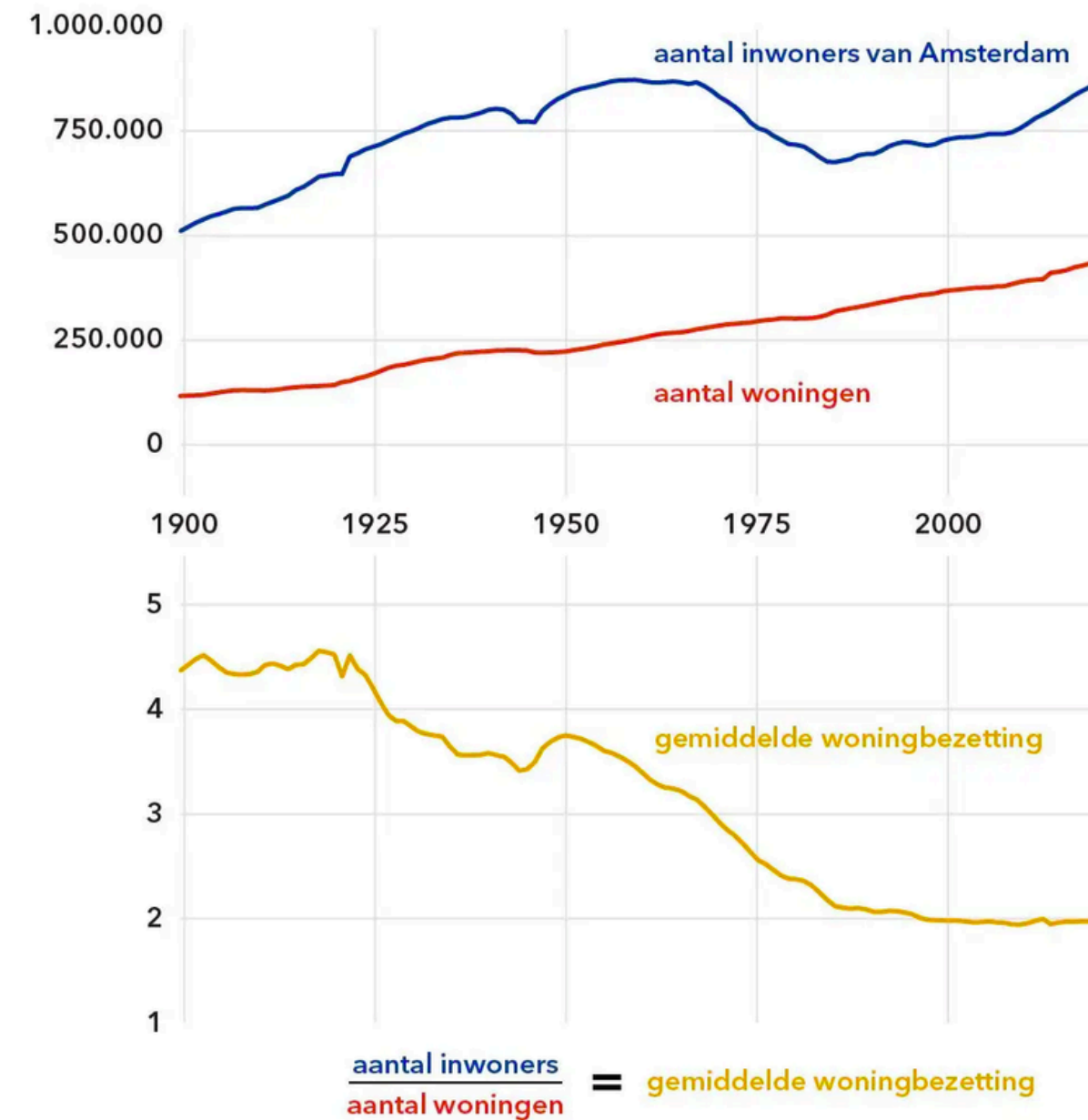
*Centraal Beheer Apeldoorn*



*voormalig kantoor CBS*

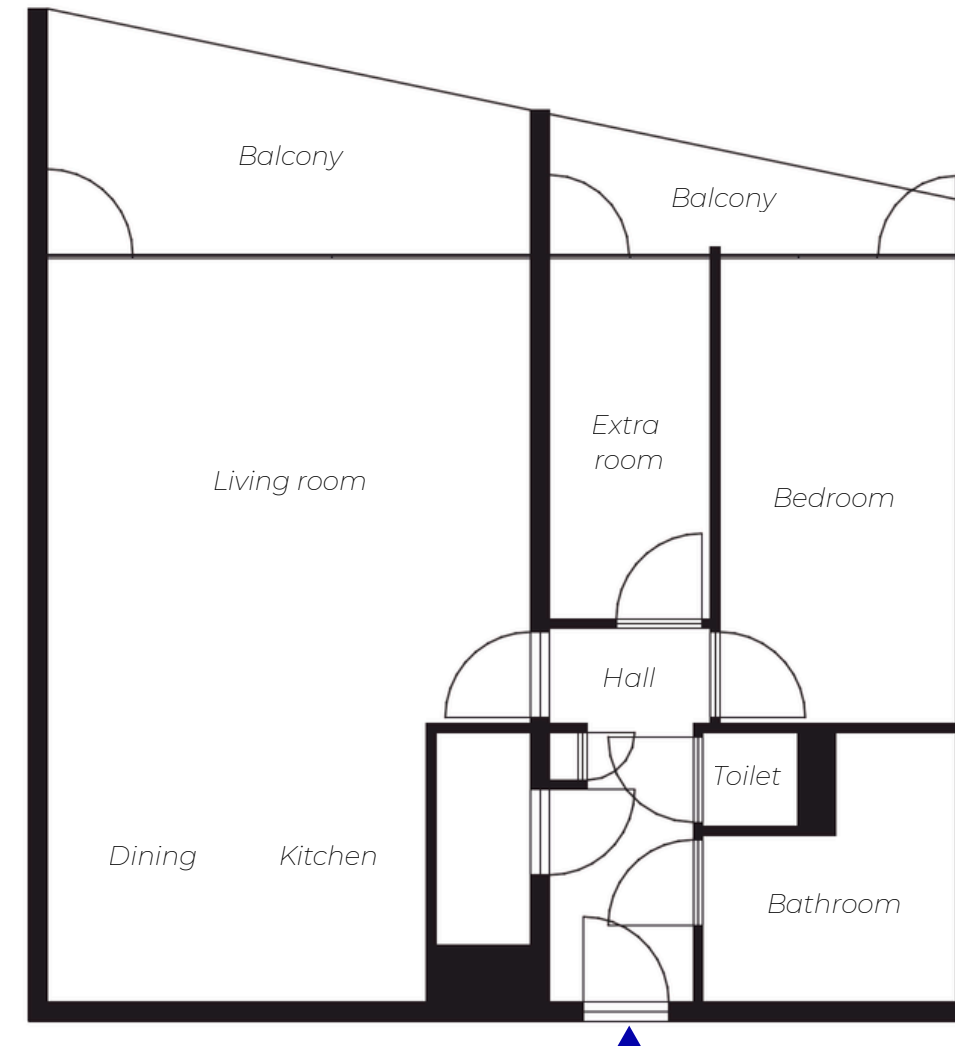
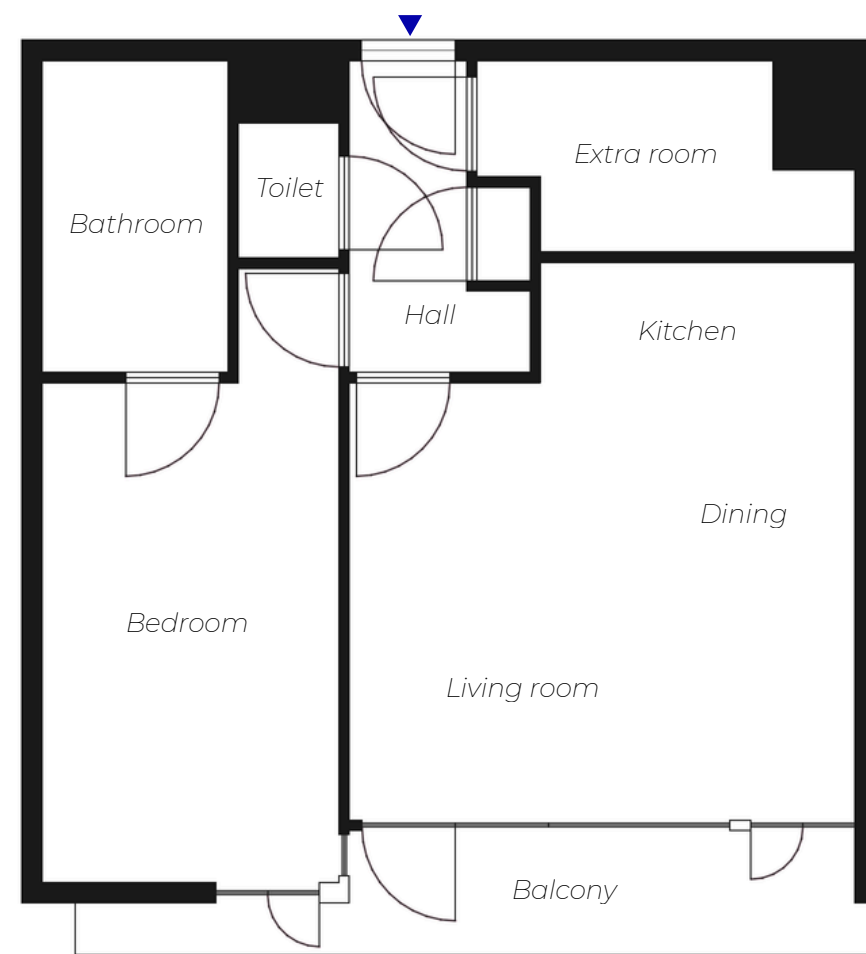
# De uitdaging: de gebouwde omgeving versus verandering

Veranderende huishoudsamenstelling



# De uitdaging: de gebouwde omgeving versus verandering

Standaard woningplattegronden



# De uitdaging: de gebouwde omgeving versus verandering

Gevolgen: leegstand of sloop



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

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



Anton Kappers / ANP

nieuws

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



Sloop van kantoorgebouw De Hoekstede



“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

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

Home Overzicht Sloop van de Van der Kunbuurt in volle gang

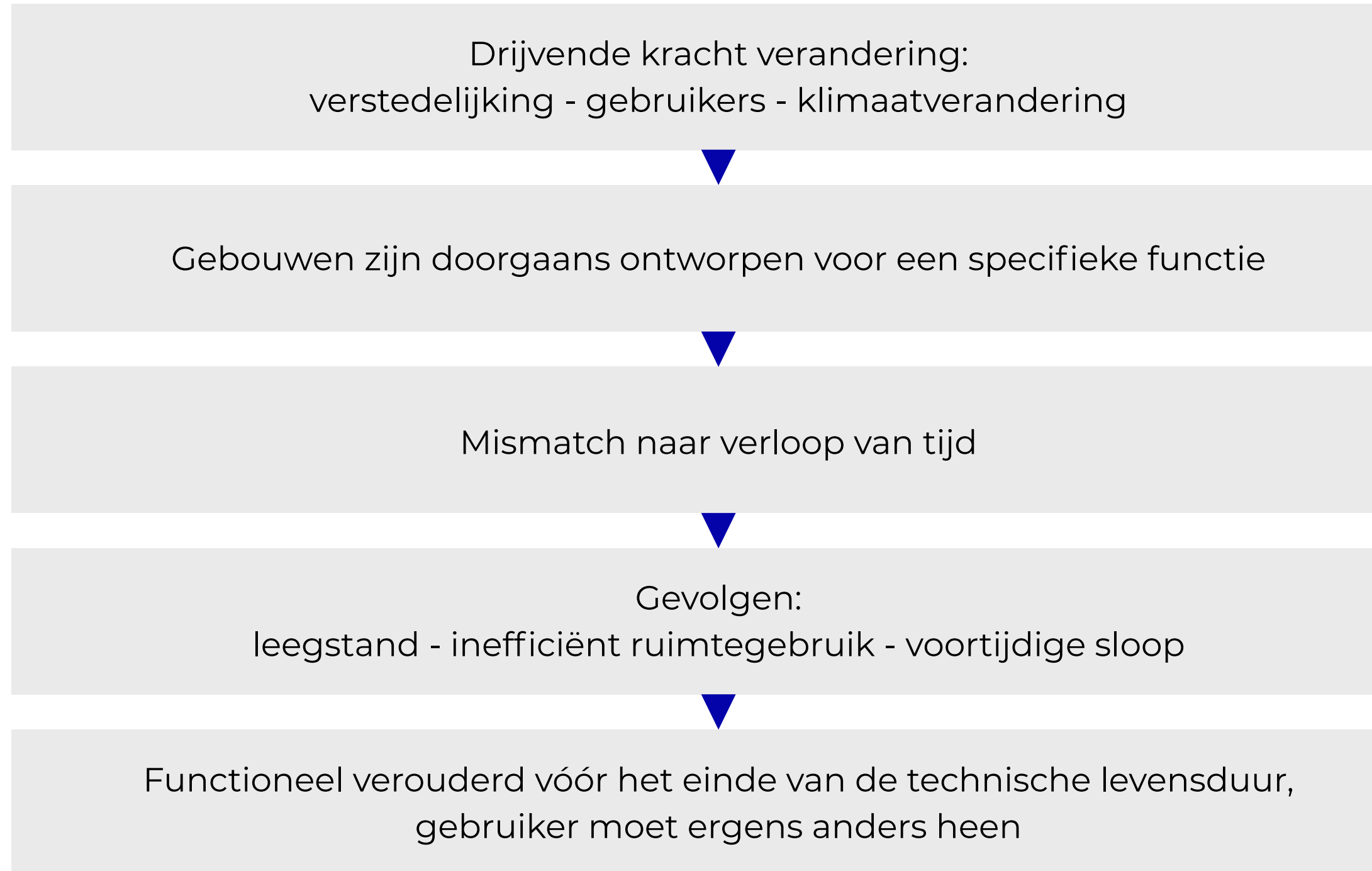


## Sloop van de Van der Kunbuurt in volle gang

Foto van Wim Eitema

Door redactie · 2 juni 2025

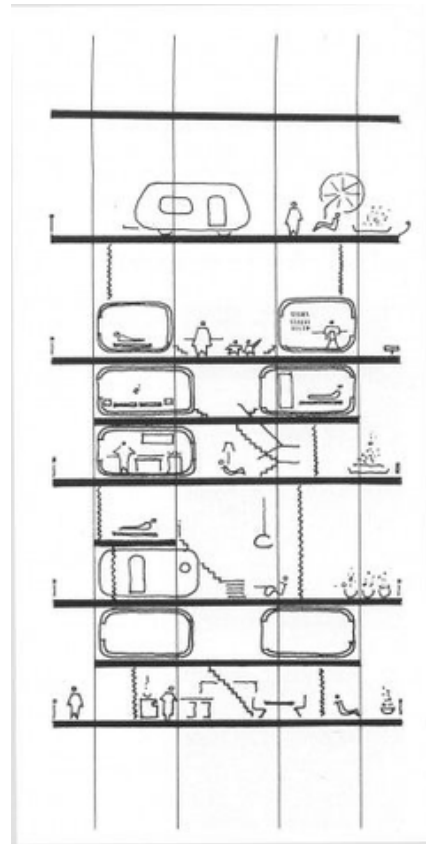
# De uitdaging: de gebouwde omgeving versus verandering



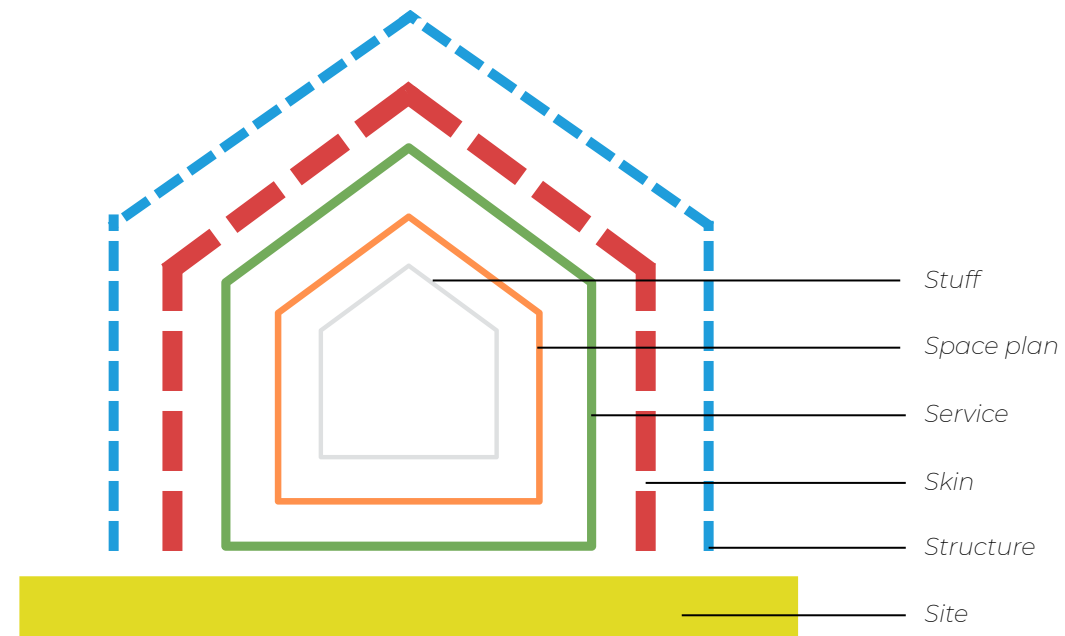
Hoe kunnen ontwerpprincipes de **aanpasbaarheid** van een leefomgeving op de schaal van de directe omgeving, het bouwblok en de individuele woning versterken, zodat deze op de lange termijn kan inspelen op **veranderende maatschappelijke ontwikkelingen**?

RESEARCH

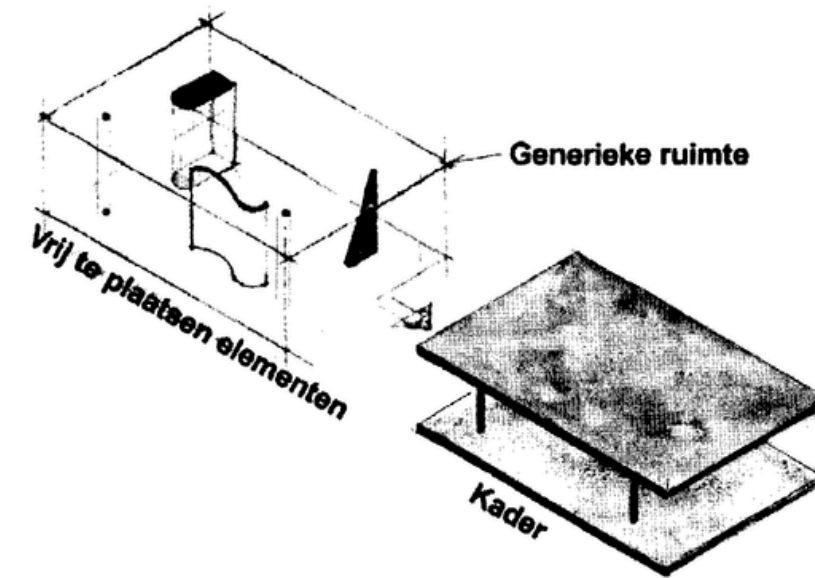
# Theoretisch kader



'Support and infill'  
Habracken, 1962

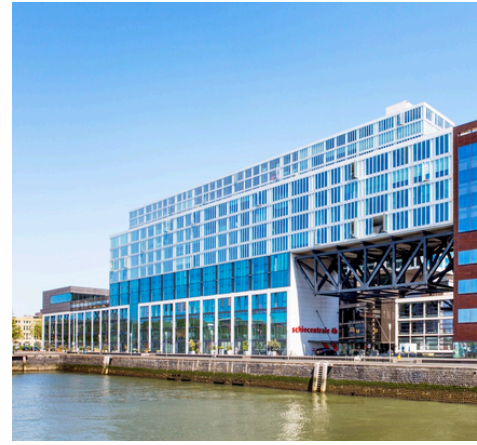


'Lifespan of layers'  
Brand, 1995



'Frame and Generic Space'  
Leupen, 2002

# Casestudies



*Schiecentrale 4B*



*Patch22*



*Solid 11*



*CiWoCo*



*Superlofts Houthaven*



*Stories*



*Next21*



*Multifunk*



*Het Schetsblok*

# Casestudies

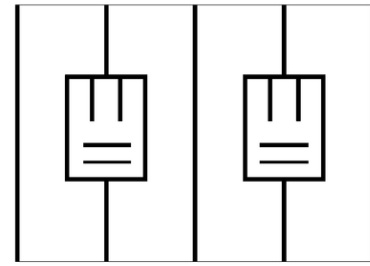
	Schiecentrale 4B	Patch22	Solid 11	CiWoCo	Superloft Houthaven	Stories	Next 21	Multifunk	Het Schetsblok
I. Structure									
II. Skin									
III. Access									
IV. Service									
V. Wet zones									
VI. Outdoor space									

# Ontwerpstrategieën aanpasbaarheid

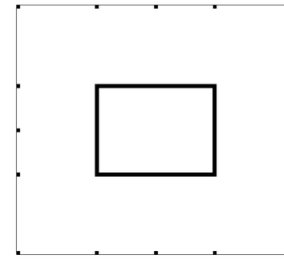
- 1** Stimuleer multifunctioneel gebruik van ruimtes
- 2** Maak toekomstige opsplitsing of samenvoeging van woningen mogelijk
- 3** Houd de verschillende lagen (de 6 S's) onafhankelijk van elkaar
- 4** Ontwerp woningen die geschikt zijn voor verschillende huishoudtypen

# Casestudies naar ontwerprichtlijn

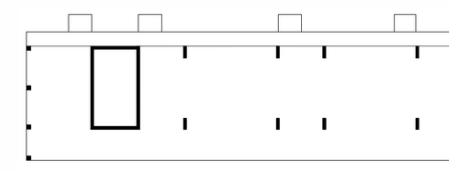
## *Draagconstructie*



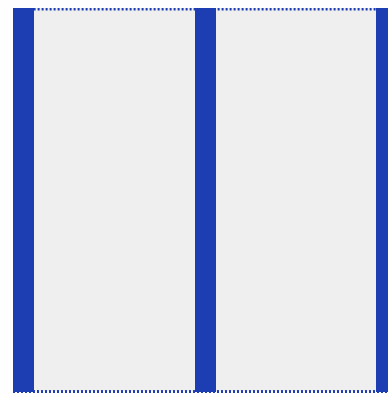
*Superloft Houthaven*



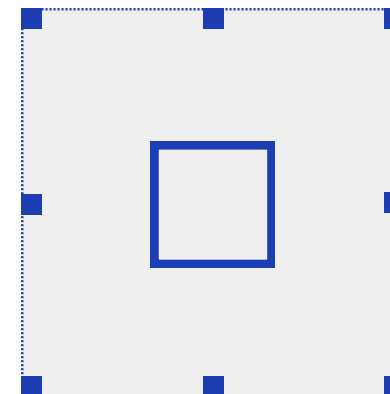
*Het schetsblok*



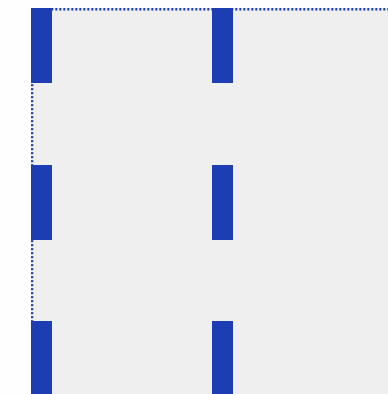
*Schiecentrale 4B*



Massieve structuur



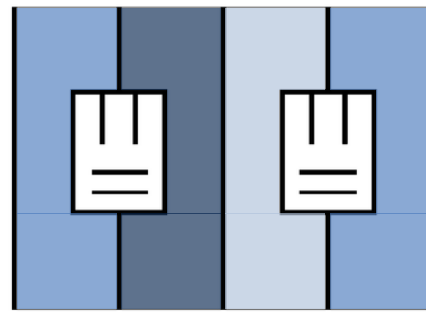
Skelet + massieve  
structuur



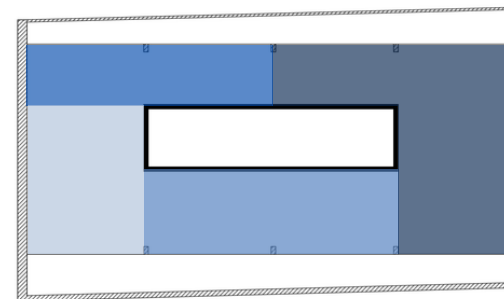
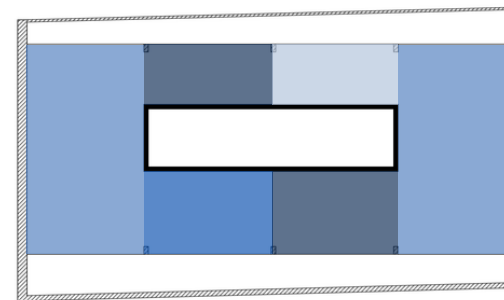
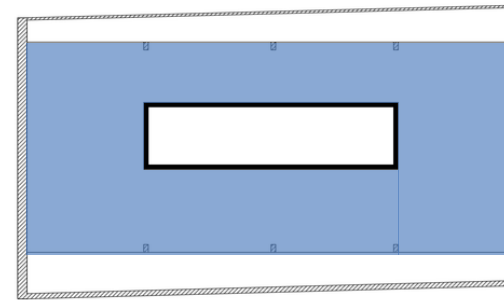
Schijven structuur

# Casestudies naar ontwerprichtlijn

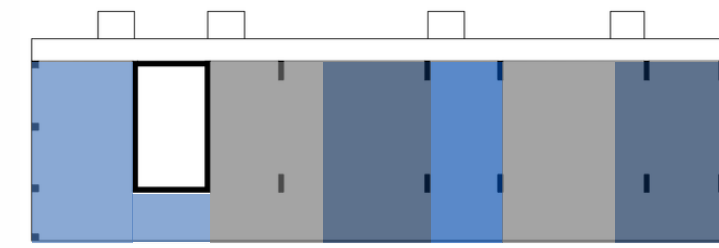
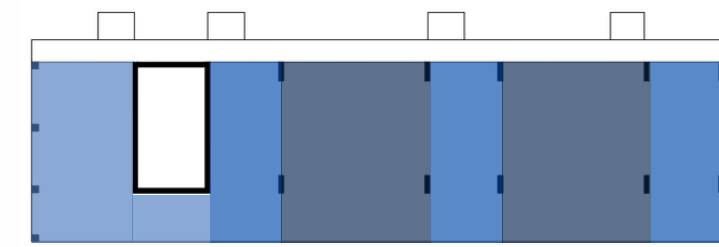
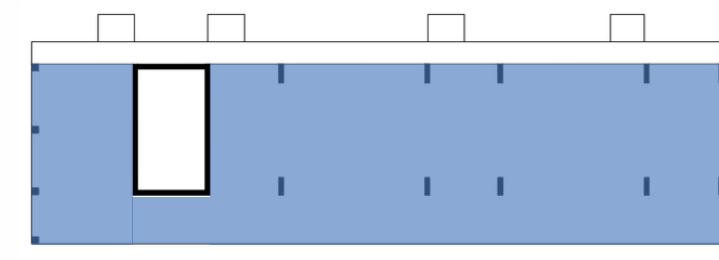
*Draagconstructie*



*Superloft Houthaven*



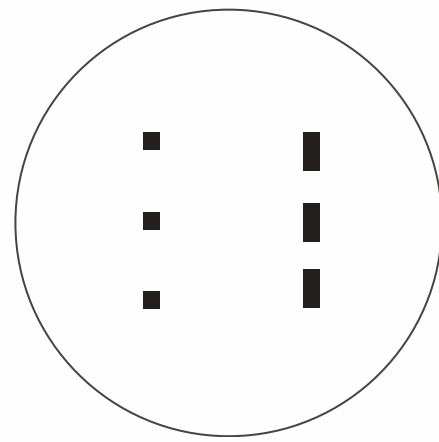
*Patch 22*



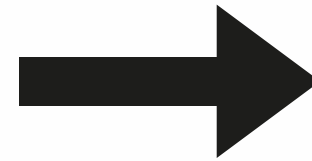
*Schiecentrale 4B*

# Casestudies naar ontwerprichtlijn

*Draagconstructie*



*Kolom of schijven  
structuur (open)*



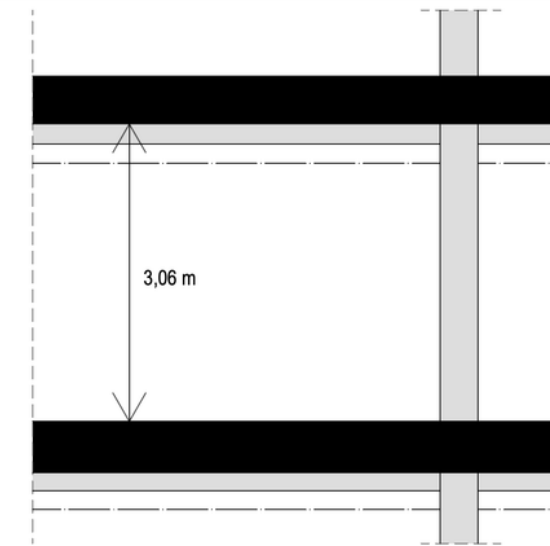
**1** Stimuleer multifunctioneel gebruik van ruimtes.

**2** Maak toekomstige opsplitsing of samenvoeging van woningen mogelijk.

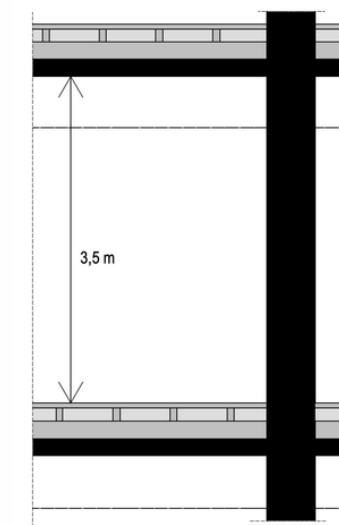
# Casestudies naar ontwerprichtlijn

## *Vrije verdiepingshoogte*

	Woon functie	Kantoor functie	Onderwijs functie	Horeca functie
Min. netto vloer hoogte	2800 mm	3200 mm	3200 mm	3100 m
Plenum	200 mm	600 mm	600 mm	500 mm



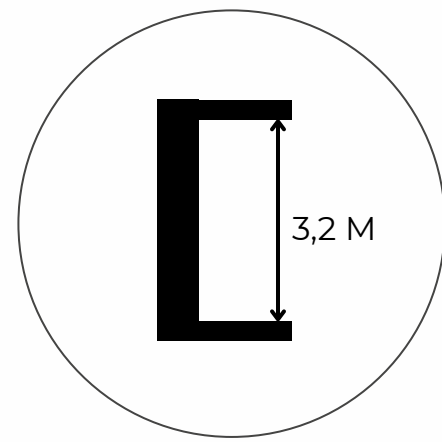
*Schiecentrale 4B*



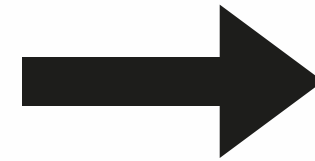
*Patch22*

# Casestudies naar ontwerprichtlijn

*Vrije verdiepingshoogte*



*Royale  
verdiepingshoogte*

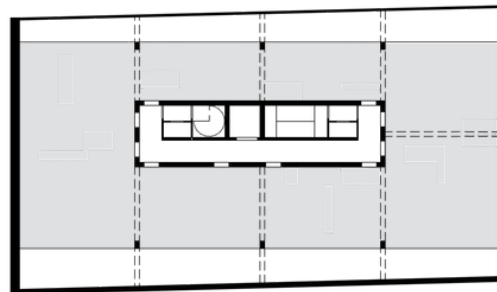
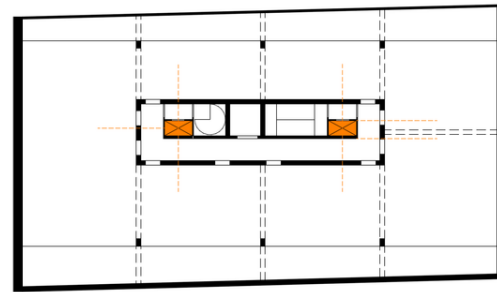


1

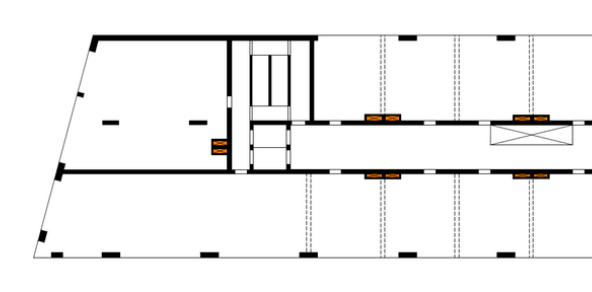
Stimuleer multifunctioneel gebruik van ruimtes.

# Casestudies naar ontwerprichtlijn

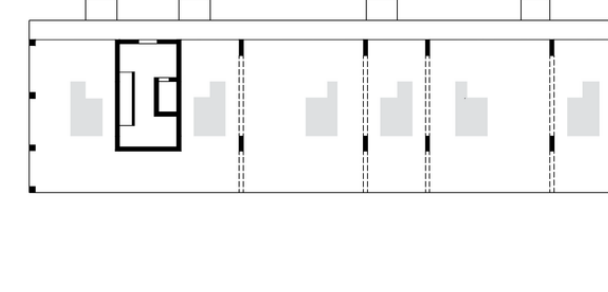
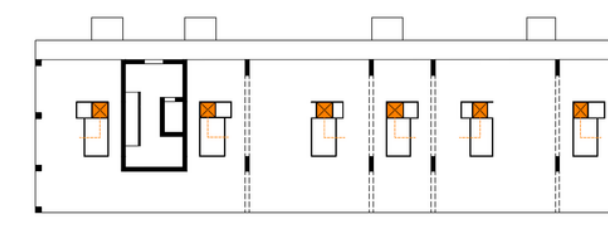
*Positie schacht*



*Patch22*



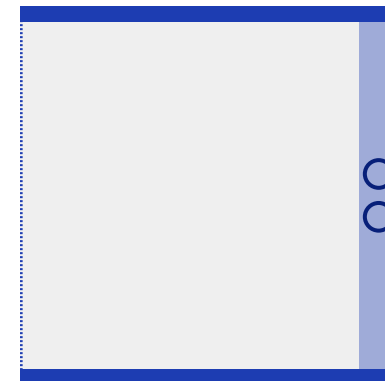
*Multifunk*



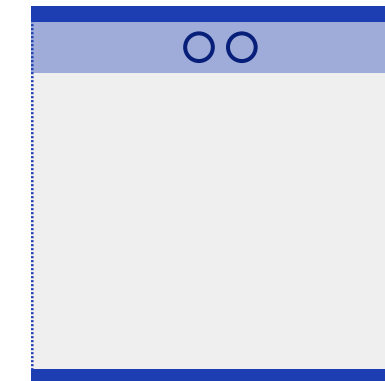
*Schiecentrale 4B*



Holle vloer



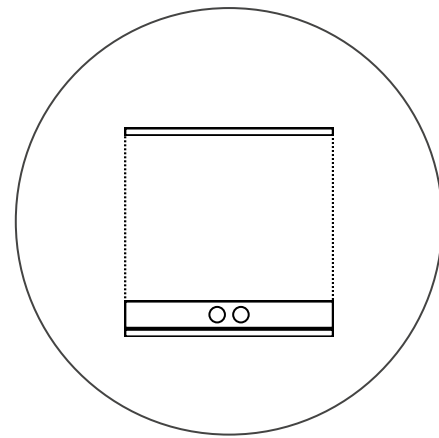
Holle wand



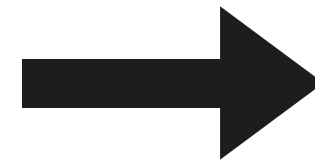
Verlaagd plafond

# Casestudies naar ontwerprichtlijn

*Positie schacht*



*Holle vloer*



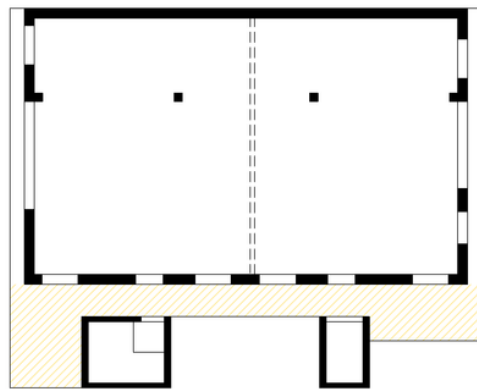
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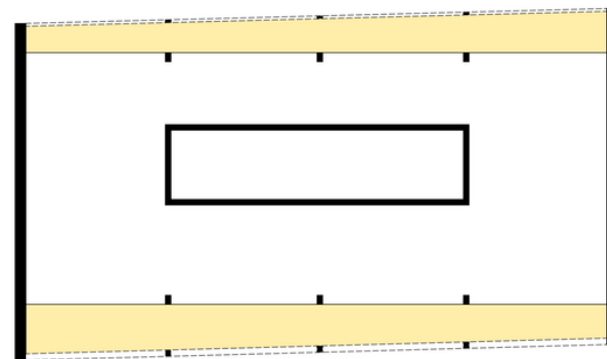
**3** Houd de verschillende lagen (de 6 S's) onafhankelijk van elkaar.

# Casestudies naar ontwerprichtlijn

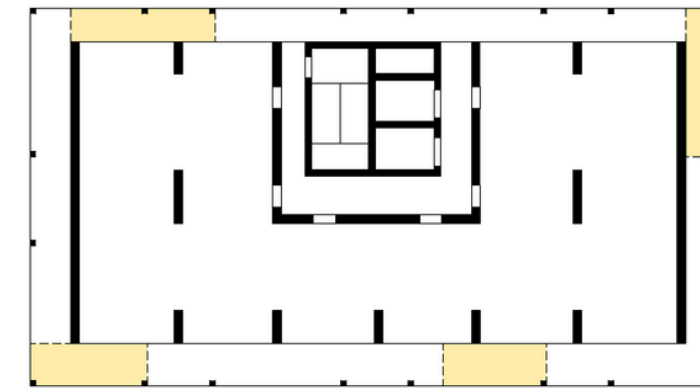
*Buitenruimte*



*CiWoCo*



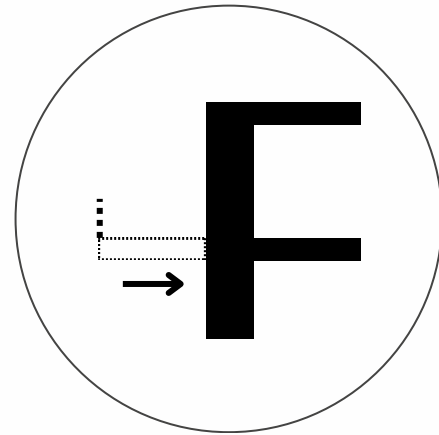
*Patch22*



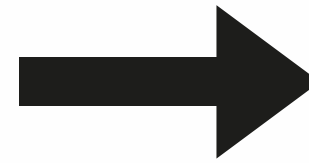
*Stories*

# Casestudies naar ontwerprichtlijn

*Buitenruimte*



*Toe te voegen  
buitenruimte aan gevel*



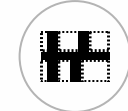
**1** Stimuleer multifunctioneel gebruik van ruimtes.

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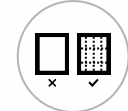
# Ontwerprichtlijnen

## Aanpasbaarheid

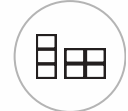
site



Solid base and flexible plot



Fine-grained parcel



Structural independence



Typological variation

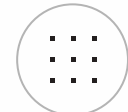


Façade diversity

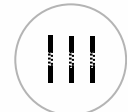


Mix types of ownership

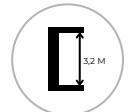
structure



Column structure



No load-bearing interior walls



Oversized high floor



Oversized plinth public



Multiple possible openings



Mix access types

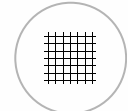


Structural grid

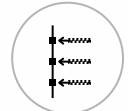
skin



70% daylight access



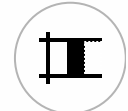
Grid based facade openings



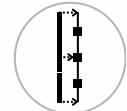
Columns in facade interior walls



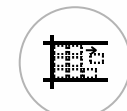
Windows operability



Avoid large closed sections



Separate from structure



Demountable



Material long lifespan

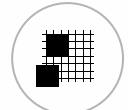
services



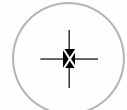
Hollow floors



Exposed services ceiling



Demountable installation



Grouping vertical shafts



Position shafts

spaceplan



No load-bearing interior walls



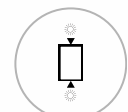
Added balconies to facade



Double height for addition level



Polyvalent structure



Both sided daylight

struff



Moveable

# Ontwerp doel

Het creëren van een aanpasbare en toekomstbestendige leefomgeving die kan inspelen op veranderende gebruiker behoeften en maatschappelijke en technologische ontwikkelingen, zodat gebouwen **langdurig bruikbaar** blijven, **diverse woonvormen ondersteunen** en zich kunnen **aanpassen aan veranderend gebruik** door de tijd heen.

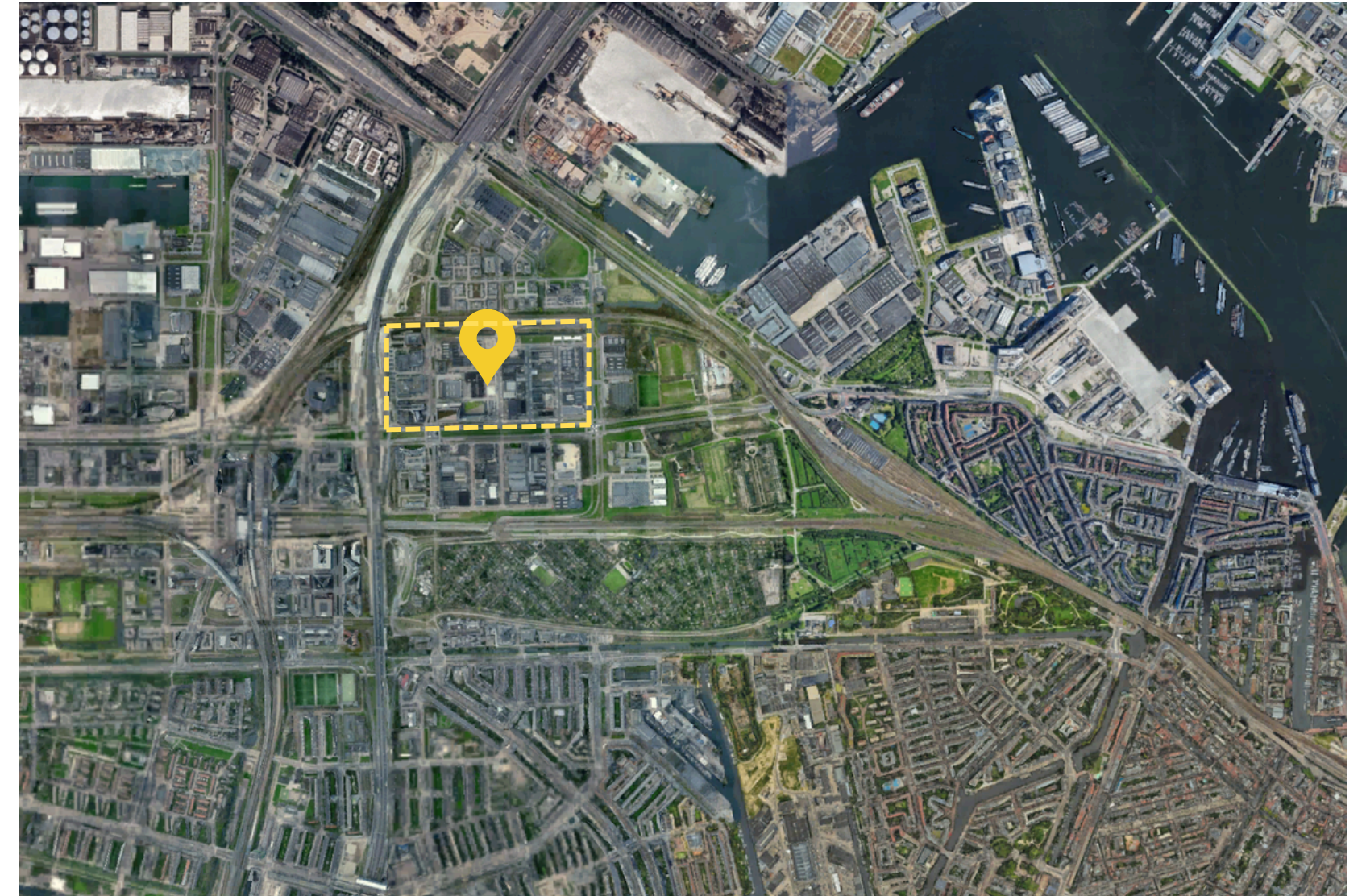
# DESIGN LOCATIE

Sloterdijk Noord, Amsterdam

# Locatie



*Amsterdam, Nederland*



*Sloterdijk Noord*

# Locatie



*Transformatorweg*

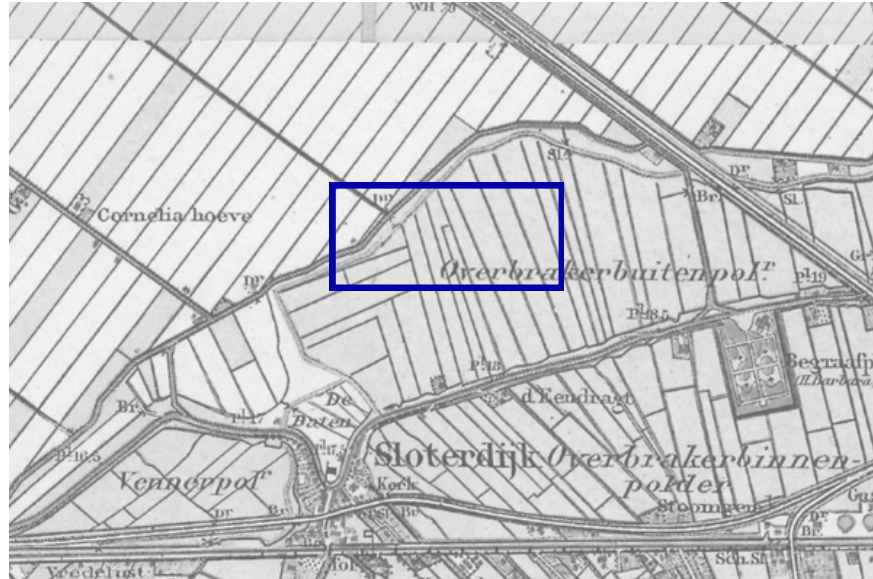


*Westerlijke havengebied*



*Havengebied*

# Locatie ontwikkeling



1900



1960



1970



1980



2000

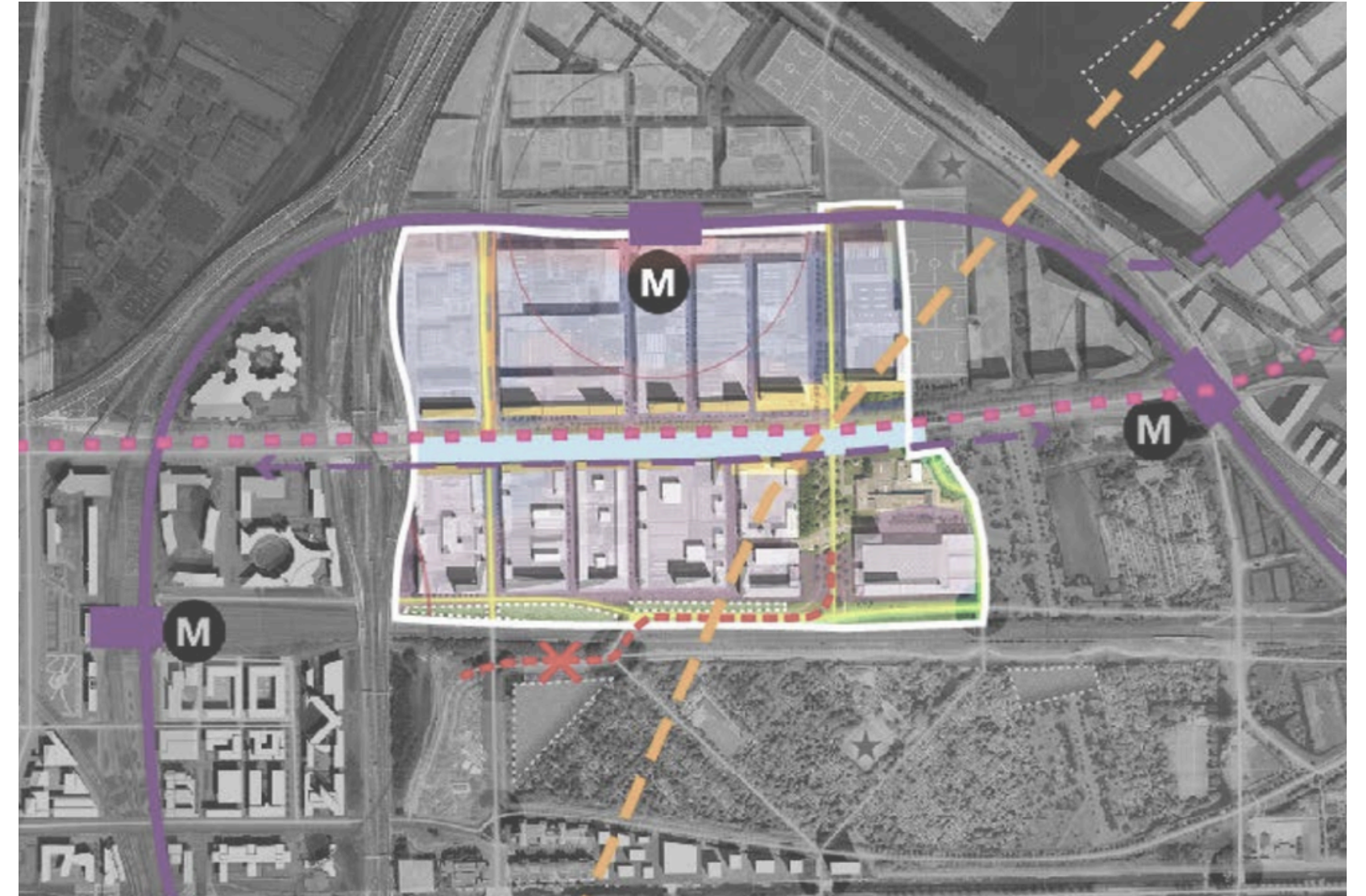


2024

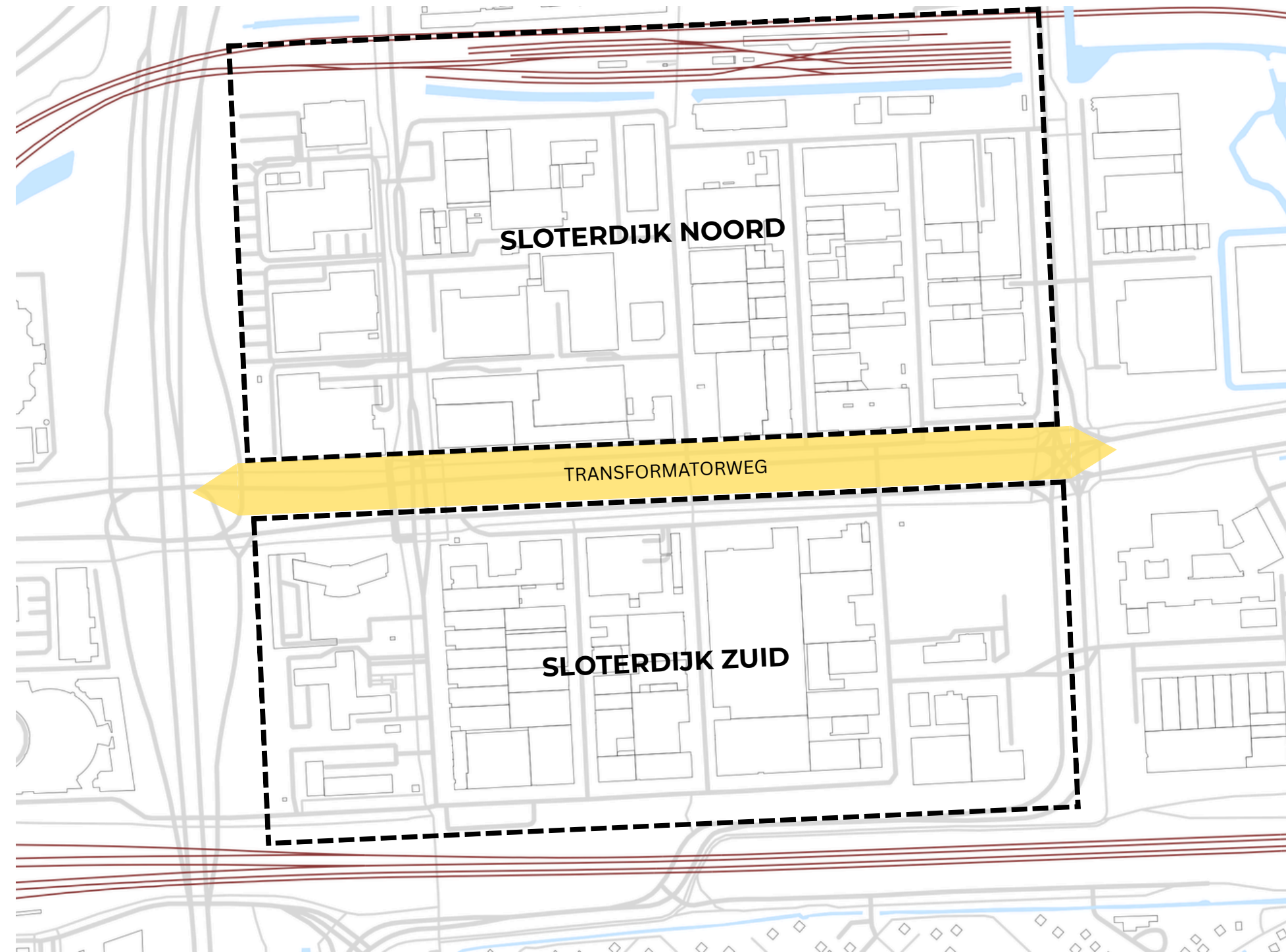
# Locatie heden



# Havenstad



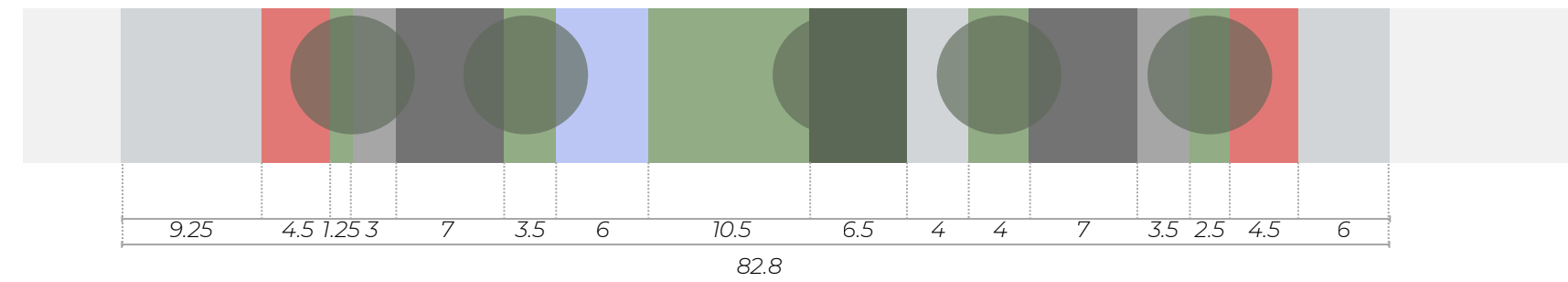
# Locatie



# Transformatorweg



*building - sidewalk - bikepath - green - Transformatorweg - green - water - green - sidewalk - green - Transformatorweg - green - bike path - sidewalk - building*

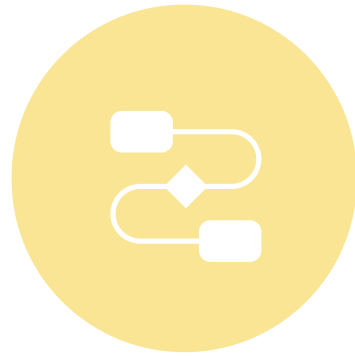


# Transformatieweg

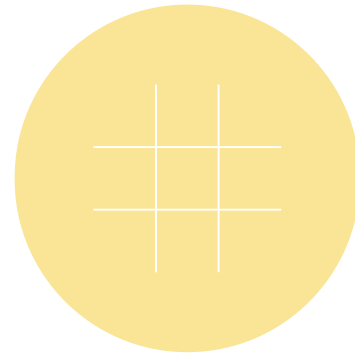
Impressie Boulevard



# Ambities Gemeente Amsterdam



*Vloeiende  
functies*



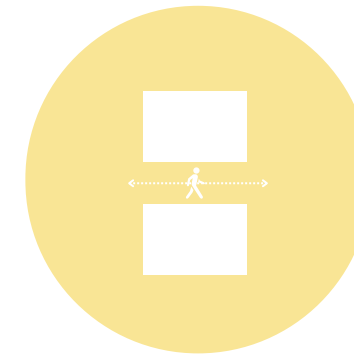
*Overzichtelijk  
straatpatroon*



*Hoogte verschil*



*Variatie massa*



*Dwarsstraat*



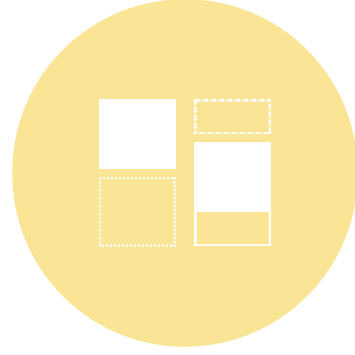
*Collectieve  
binnenplaats*



*Transparante en  
levedige plint*



*Multifunctioneel  
plint*



*Straatwand 2-3  
architectonische  
eenheden*



*Diversiteit  
materiaalgebruik*



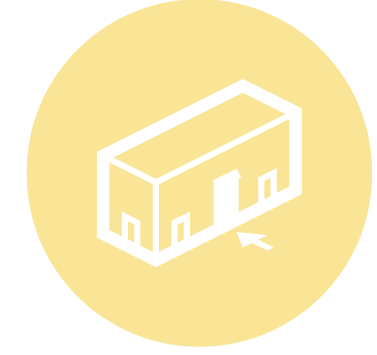
*Meervoudig  
gebruik dak*



*Balans privé en  
functionaliteit*



*Transparant*

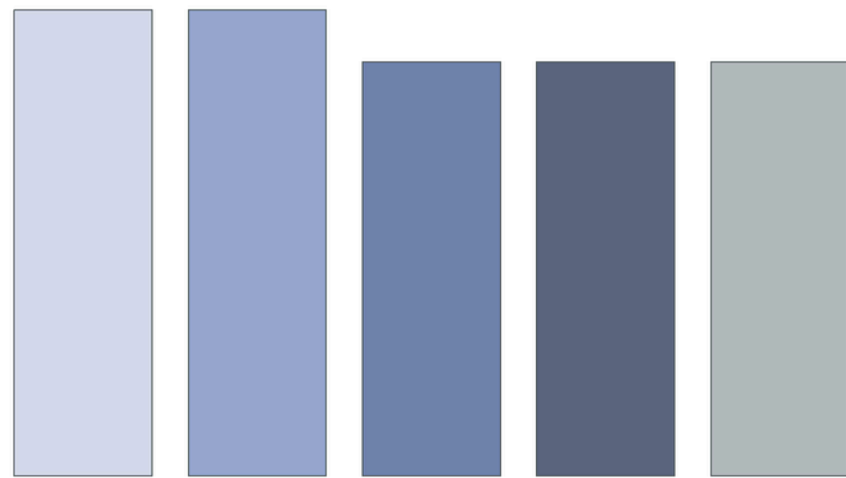


*Woning  
ingangen aan  
straat*

# Masterplan

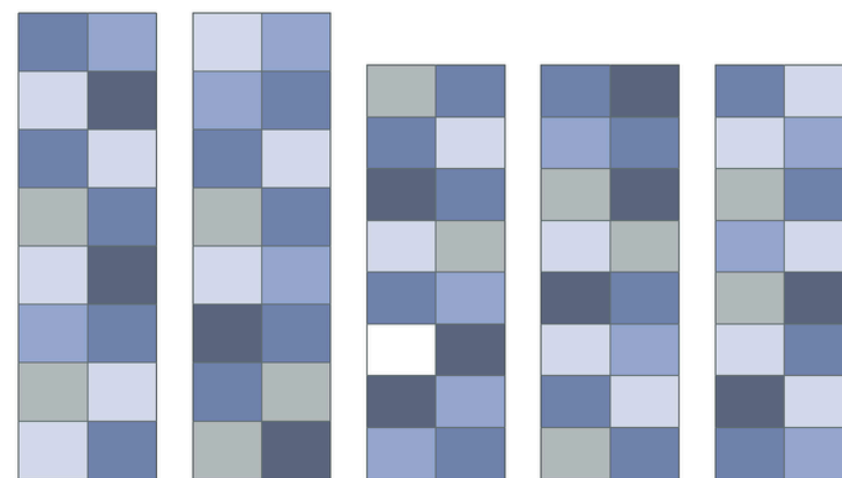


# Herkaveling



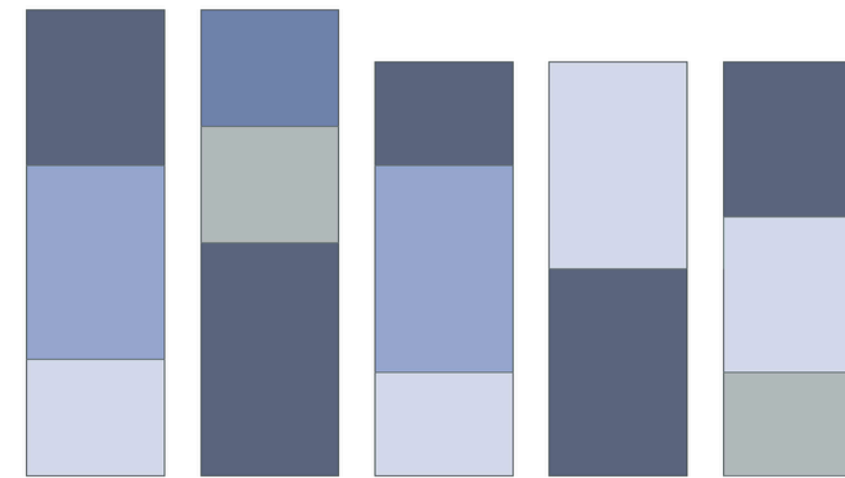
**Herindeling van het volledige bouwblok**

*Blokken van 19200 - 21600 m<sup>2</sup>*



**Herindeling van een fijnmazige kavelstructuur**

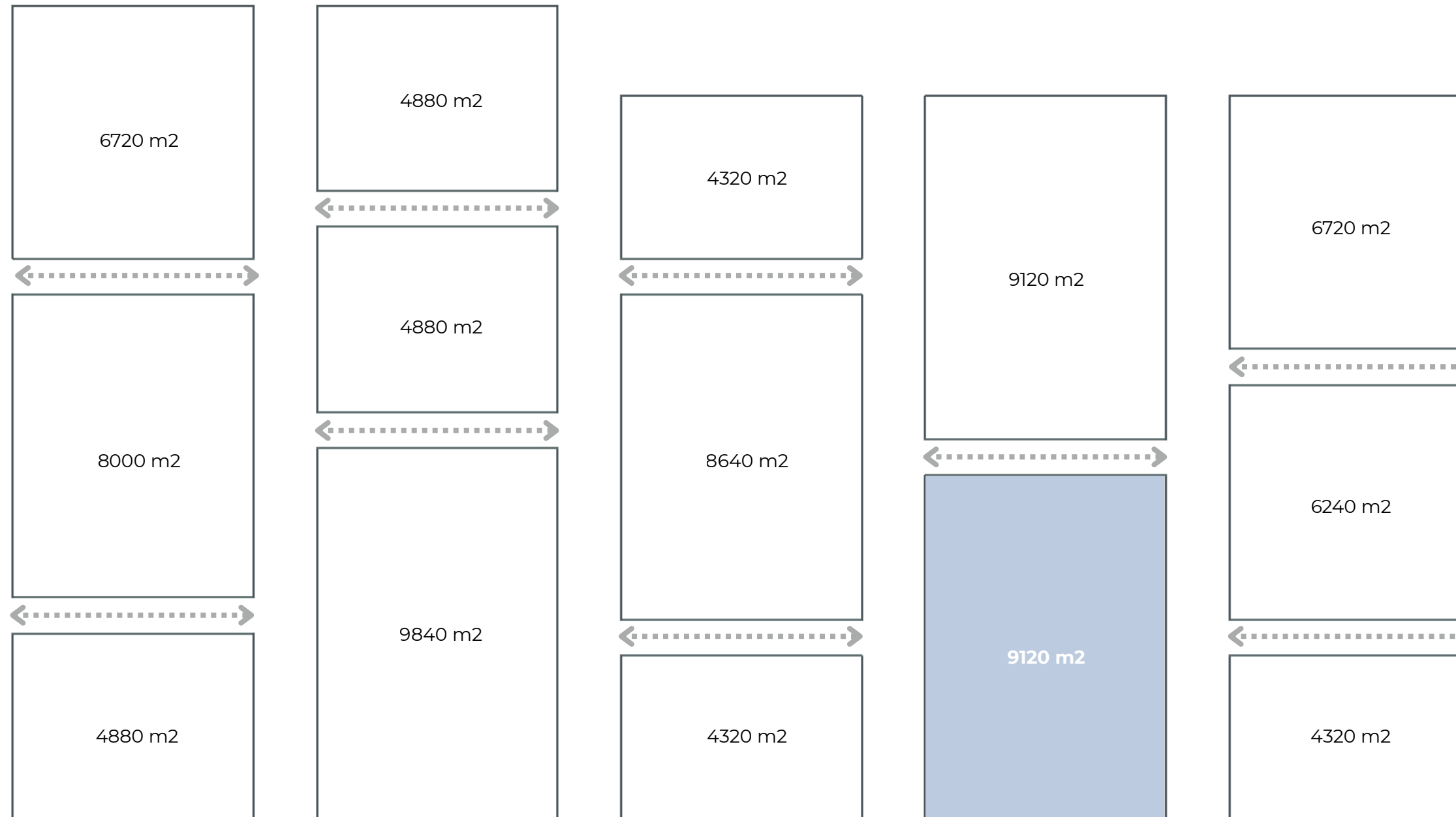
*Blokken van 1200 m<sup>2</sup>*



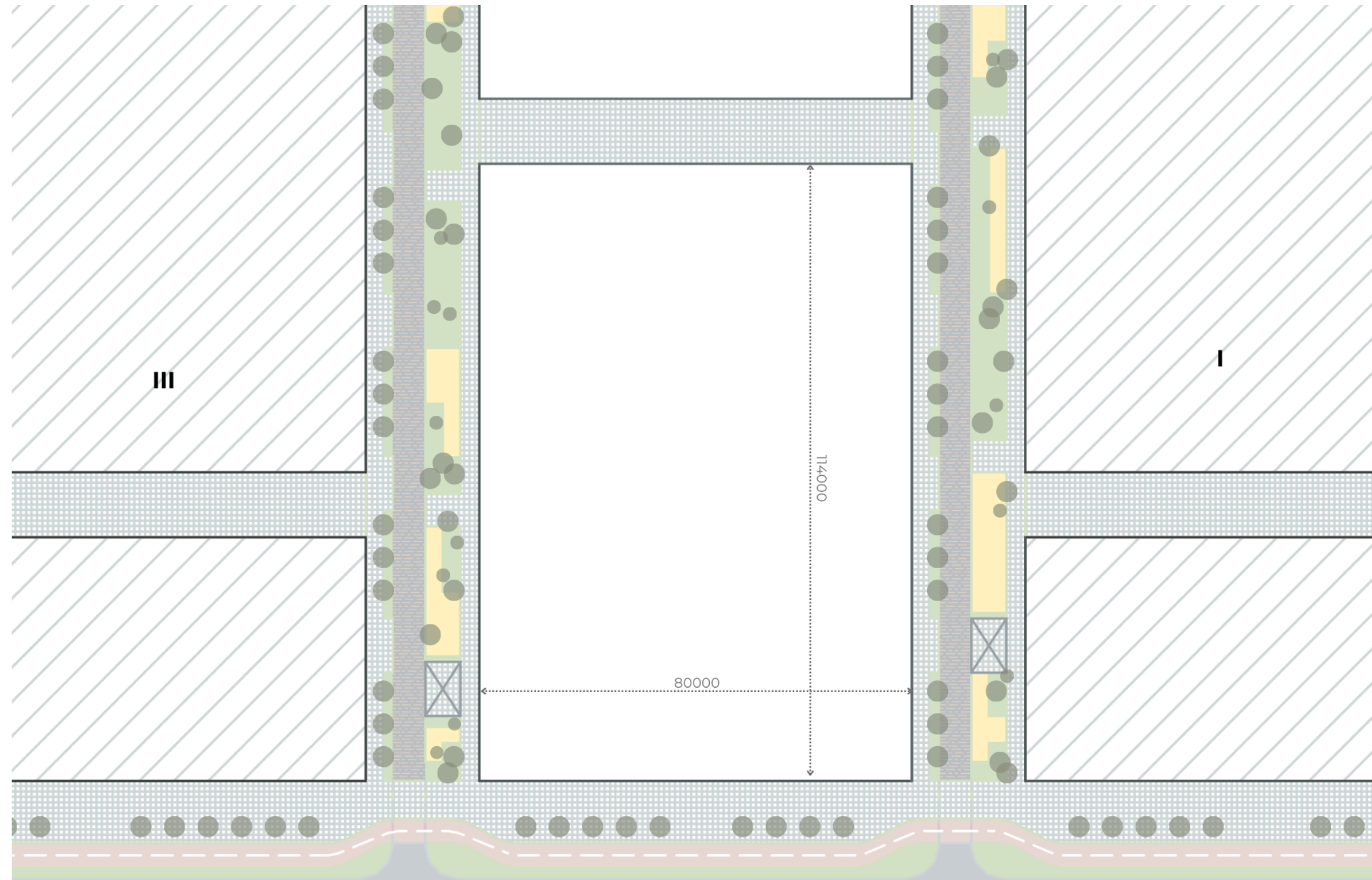
**Herindeling met een diversiteit aan middelgrote kavelstructuur**

*Blokken van 4320 - 9840 m<sup>2</sup>*

# Herkaveling

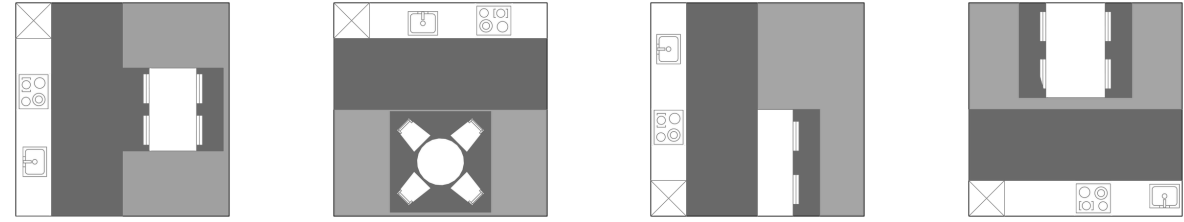
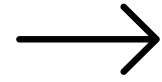
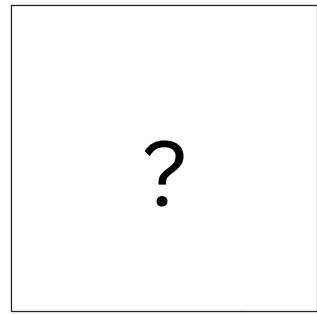


# Plot

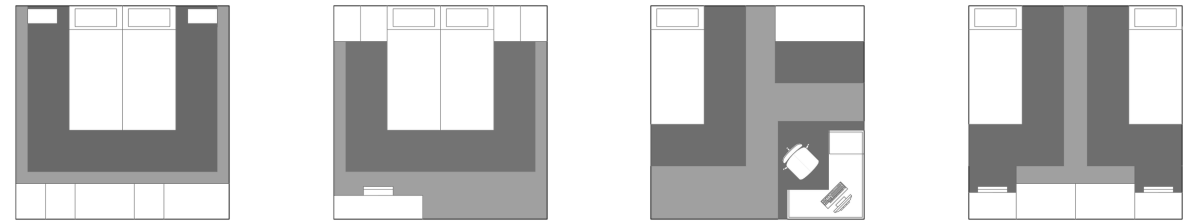


DESIGN: **SHIFT**

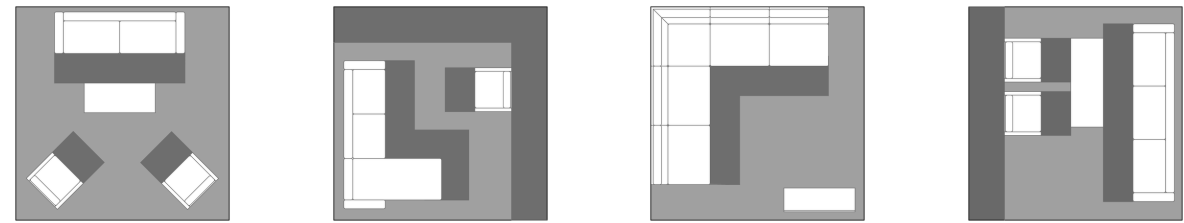
# Polyvalente ruimte



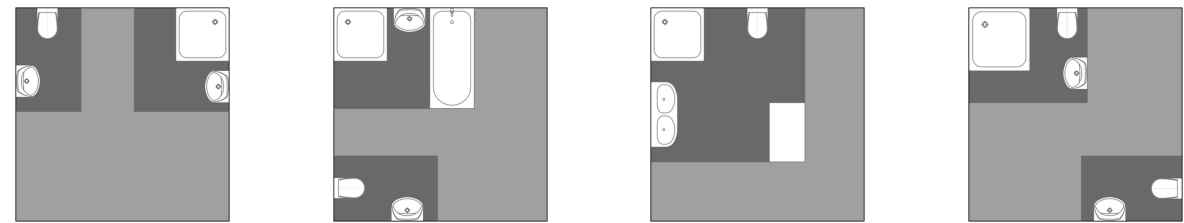
Keuken/eetkamer - koken en eten



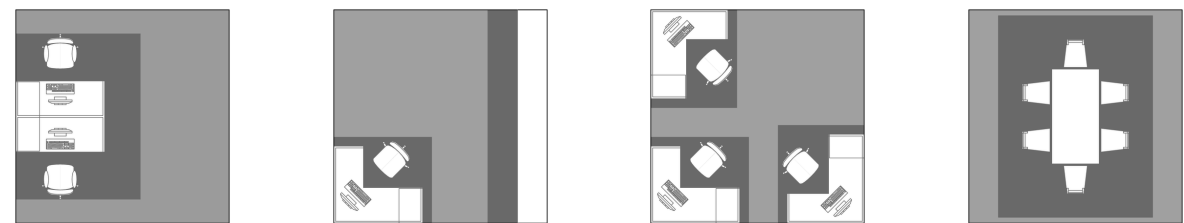
Slaapkamer - slapen



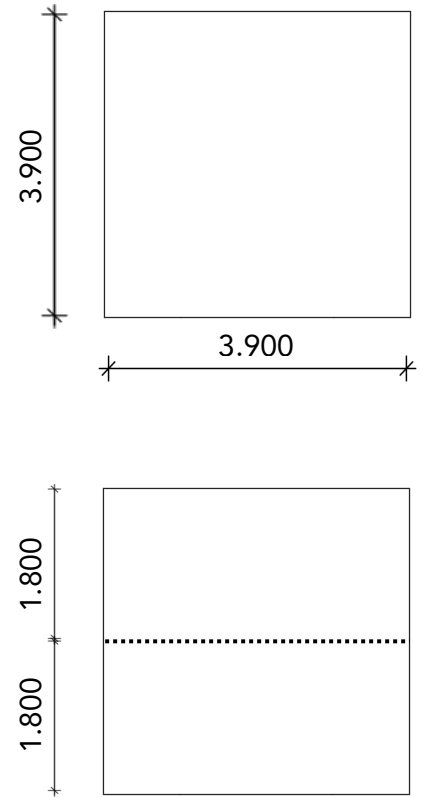
Woonkamer - samen komen



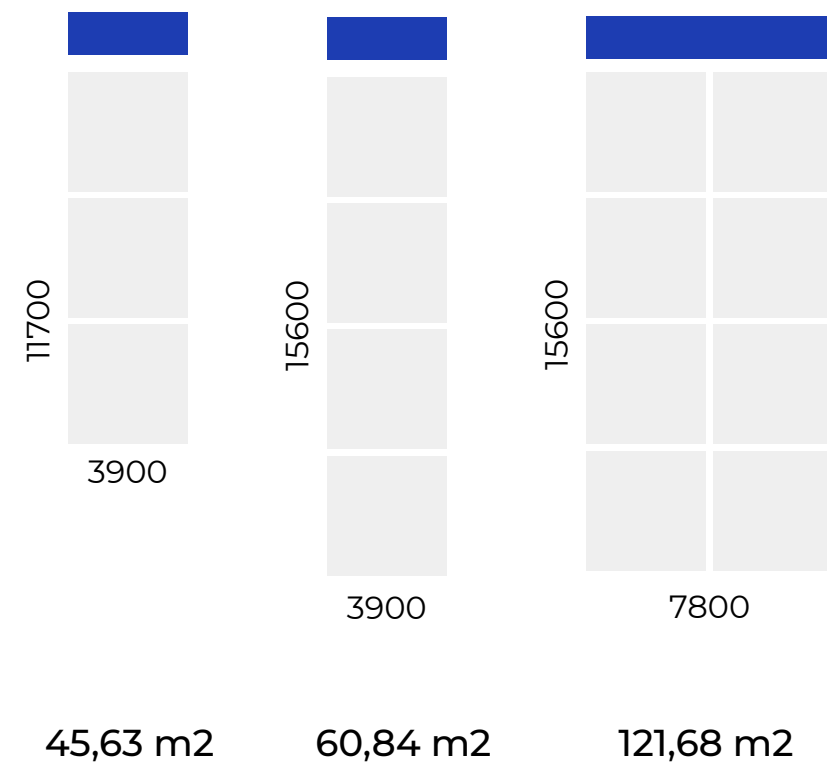
Badkamer - wassen



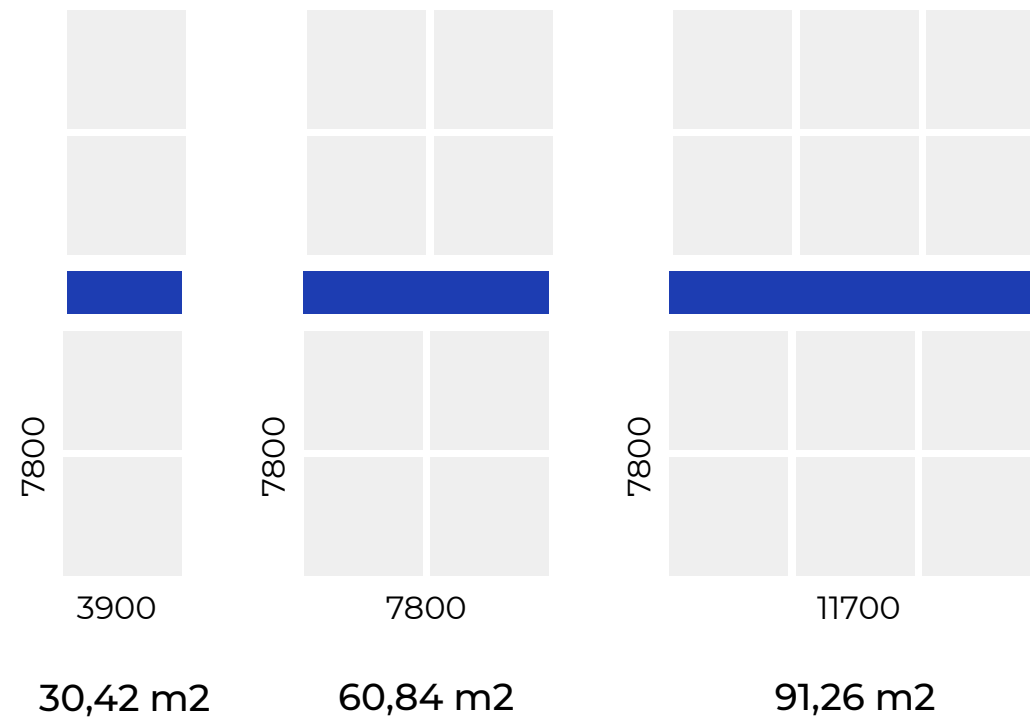
Kantoor - werken



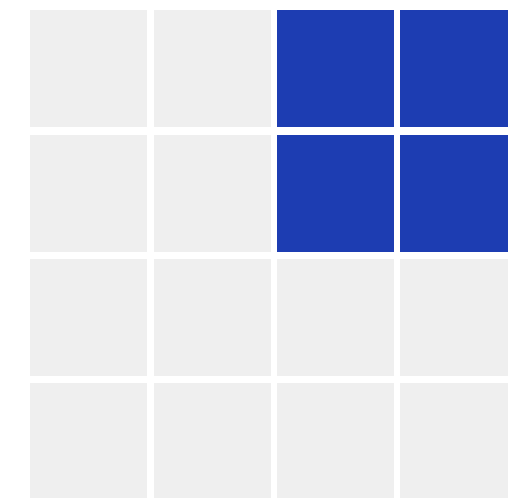
# Polyvalente ruimte



**Galerij**

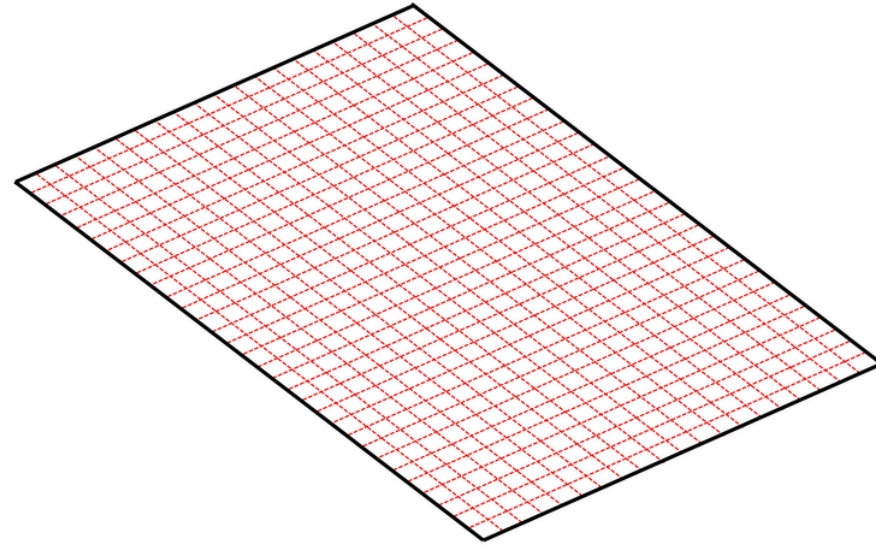


**Gang**

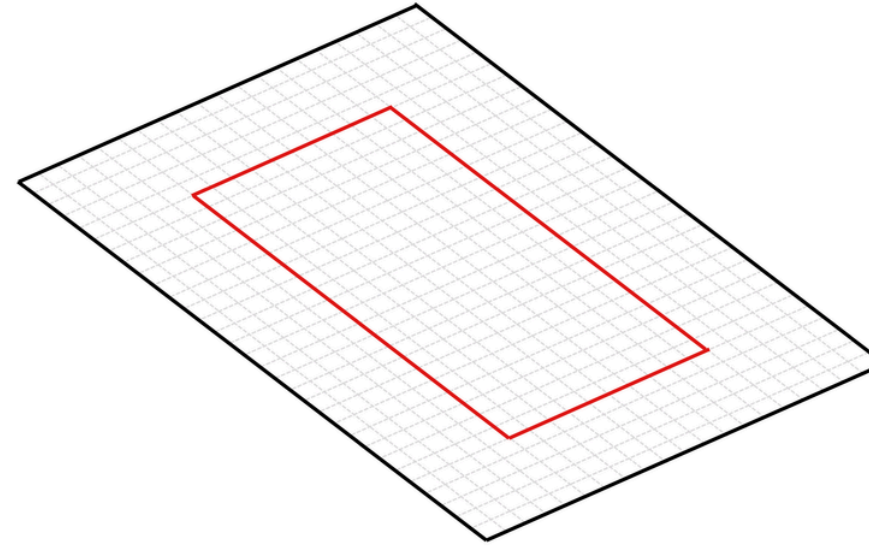


**Interne kern**

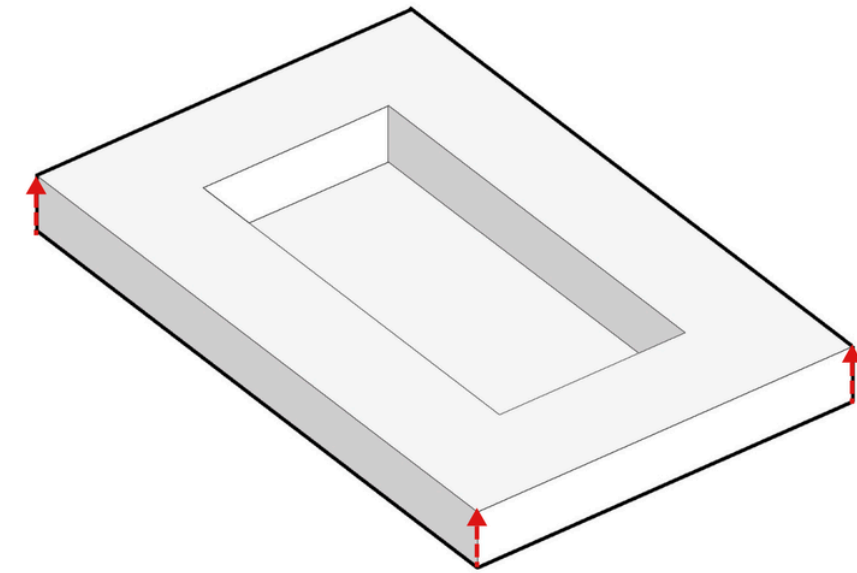
# Massa



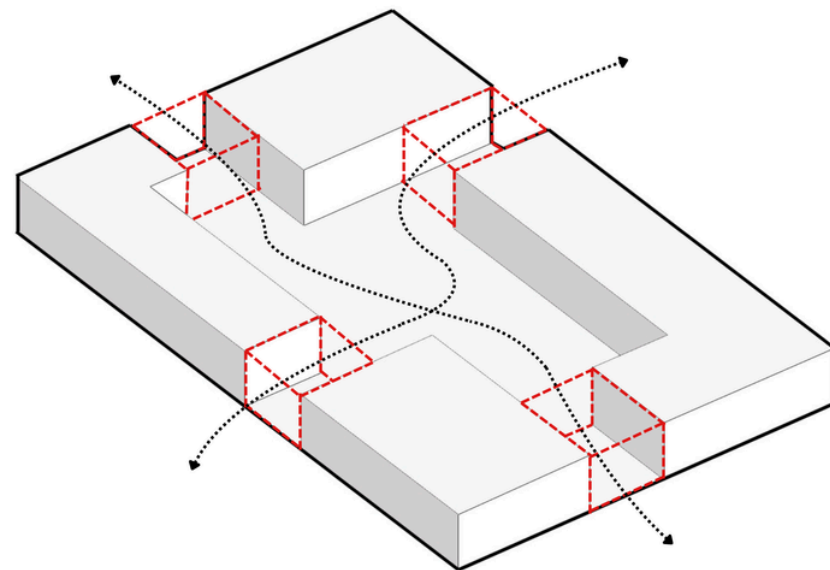
I. raster 3,9 x 3,9



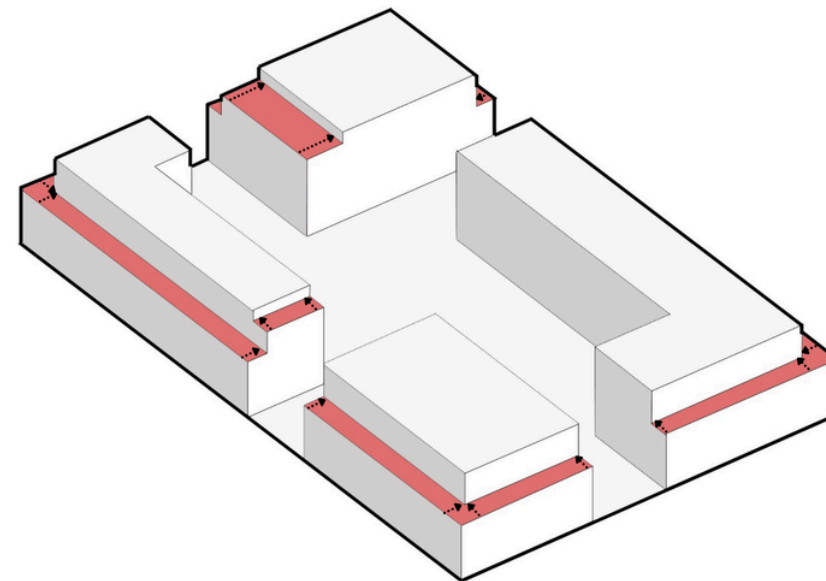
II. gebouwmodule



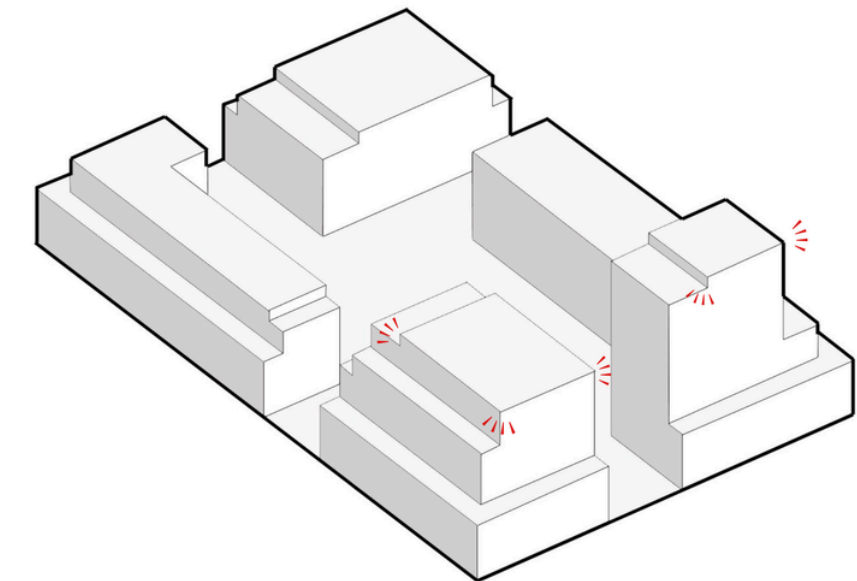
III. massa



IV. openbreken en splitsen massa's

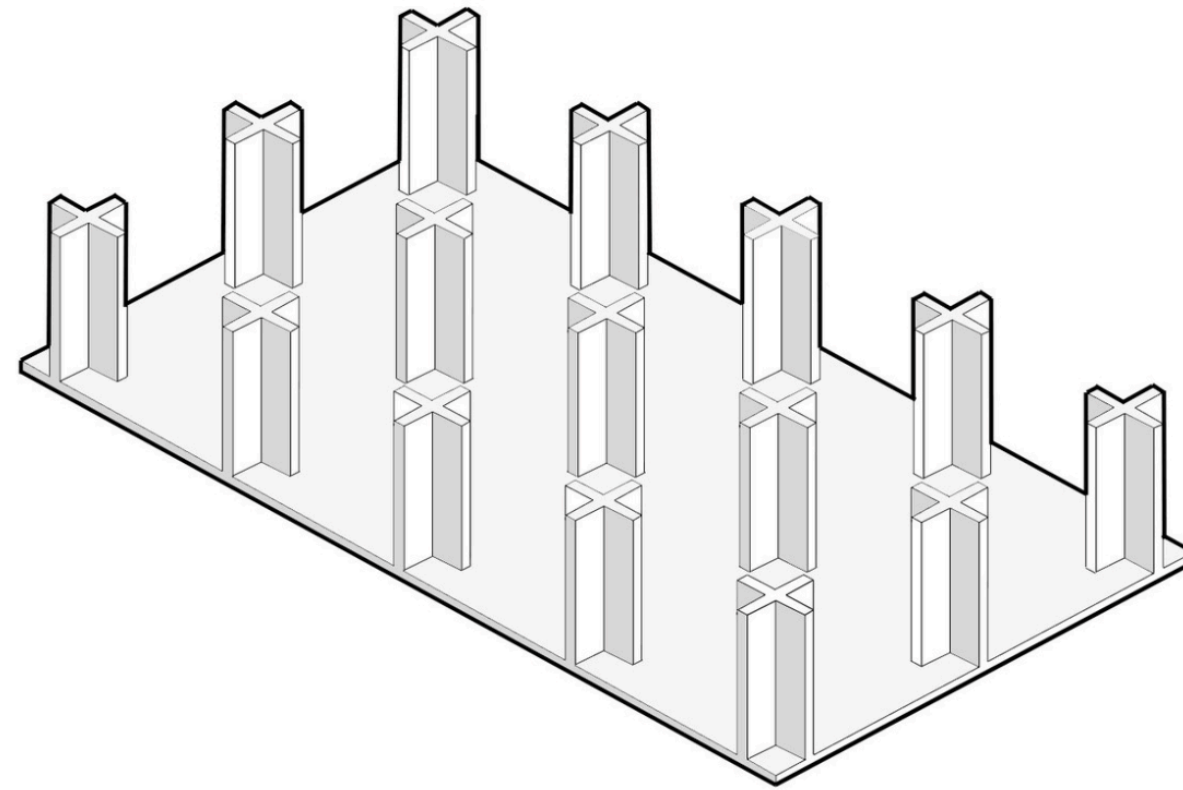


V. setbacks



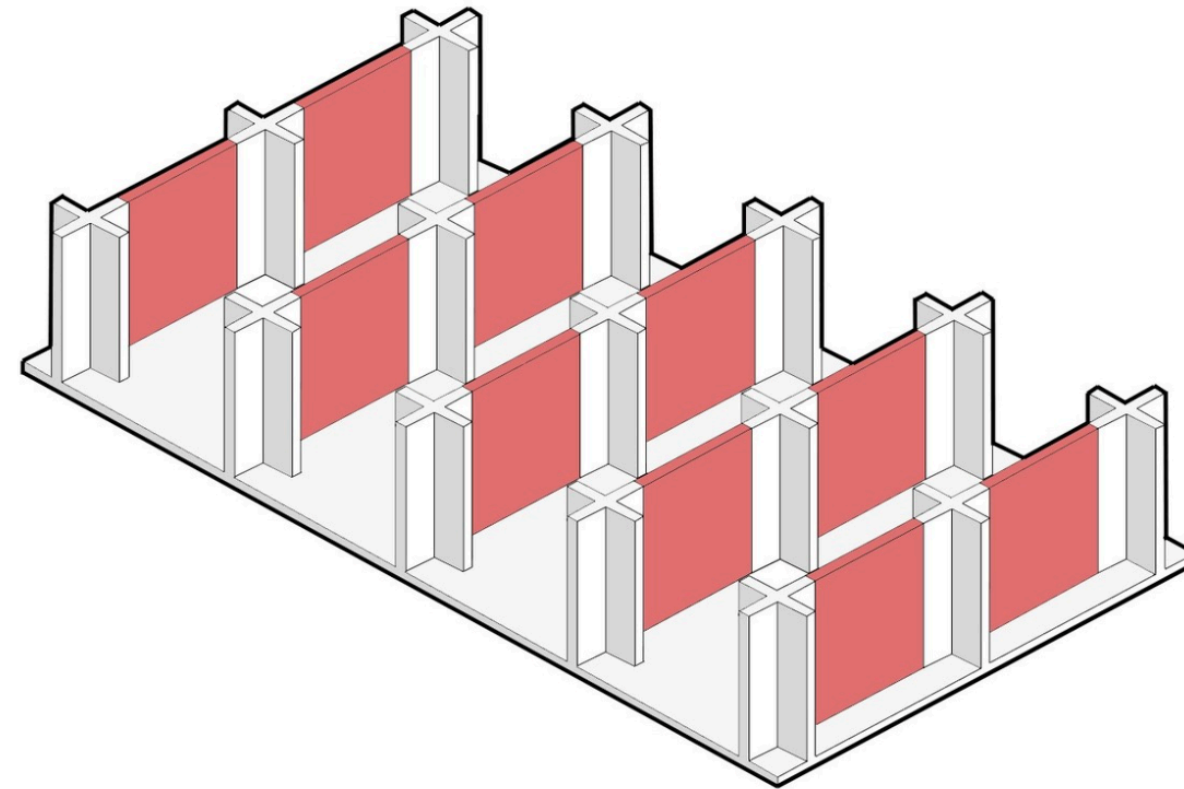
VI. hoogbouw accenten

# Concept



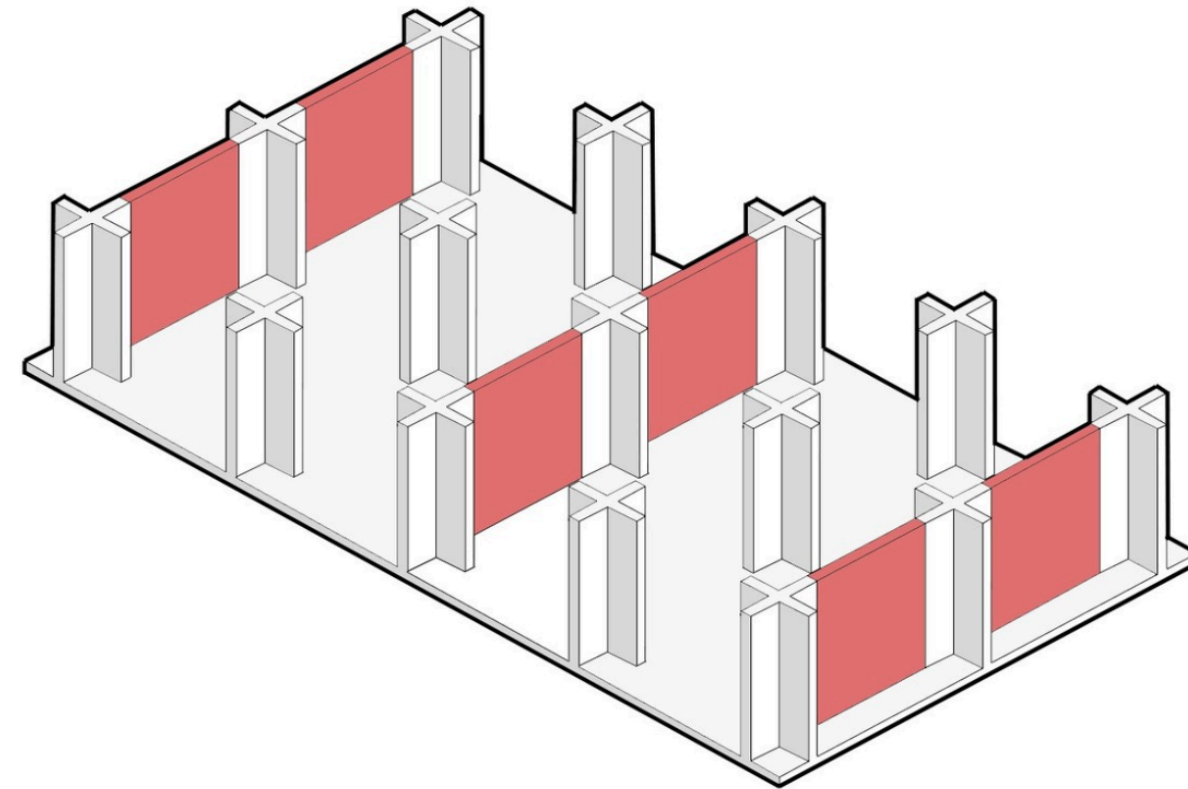
'support'

# Concept



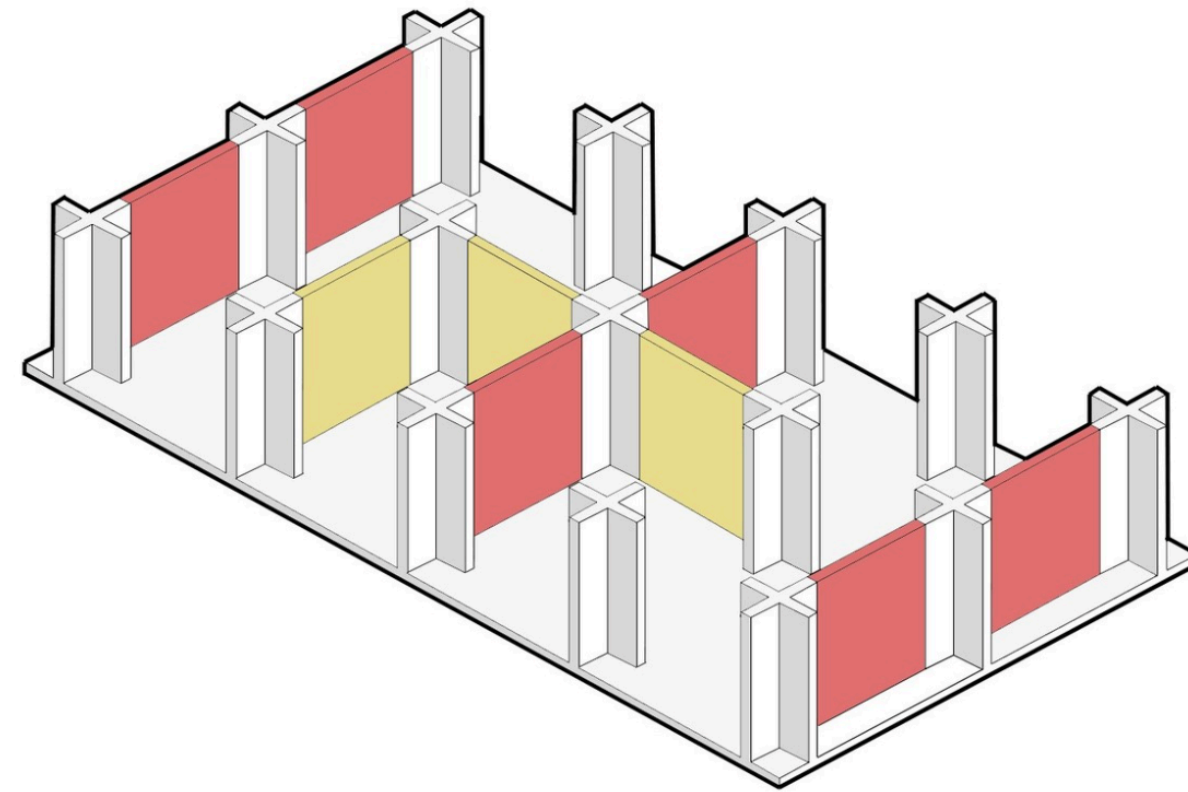
'support + infill'

# Concept



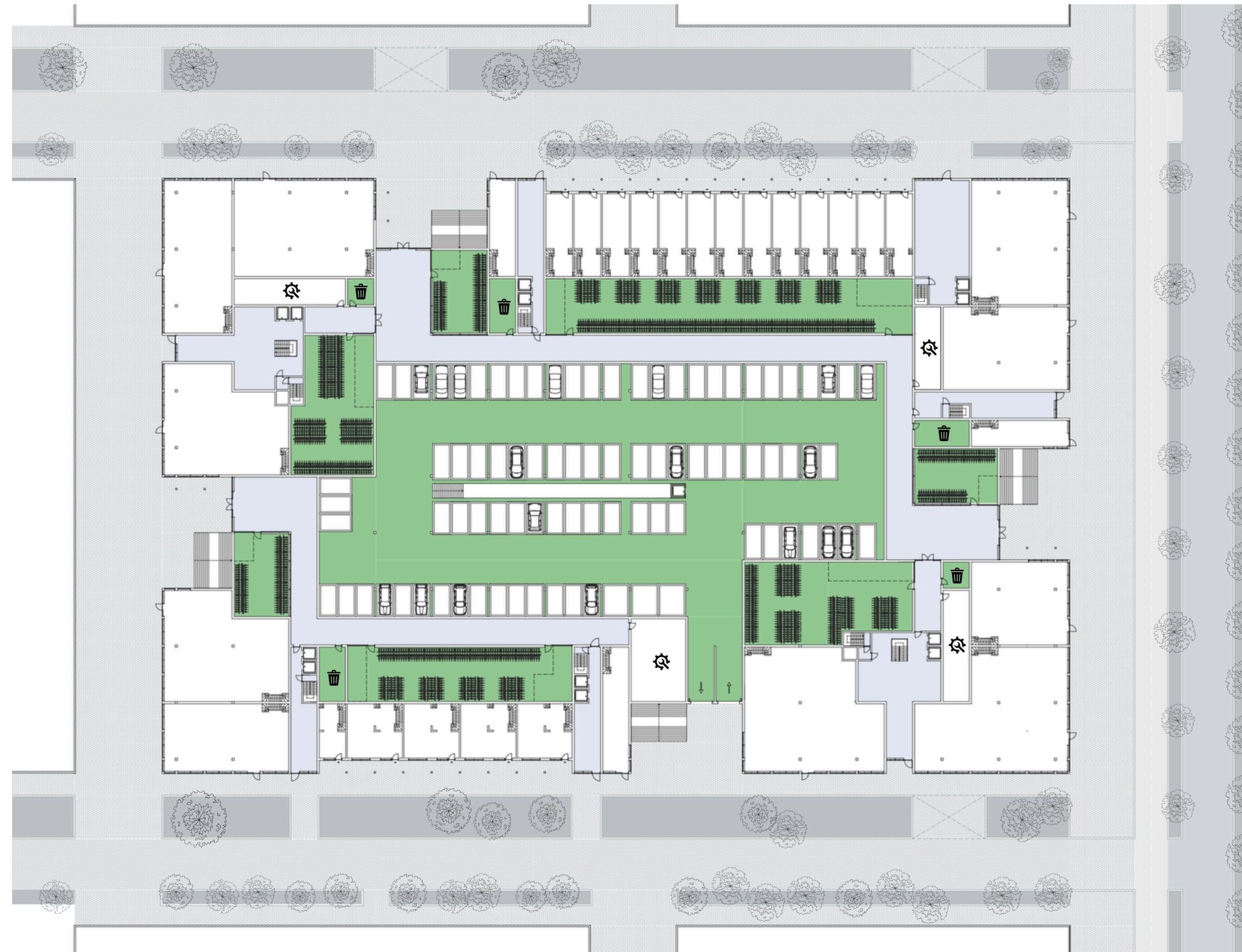
'support + infill'

# Concept



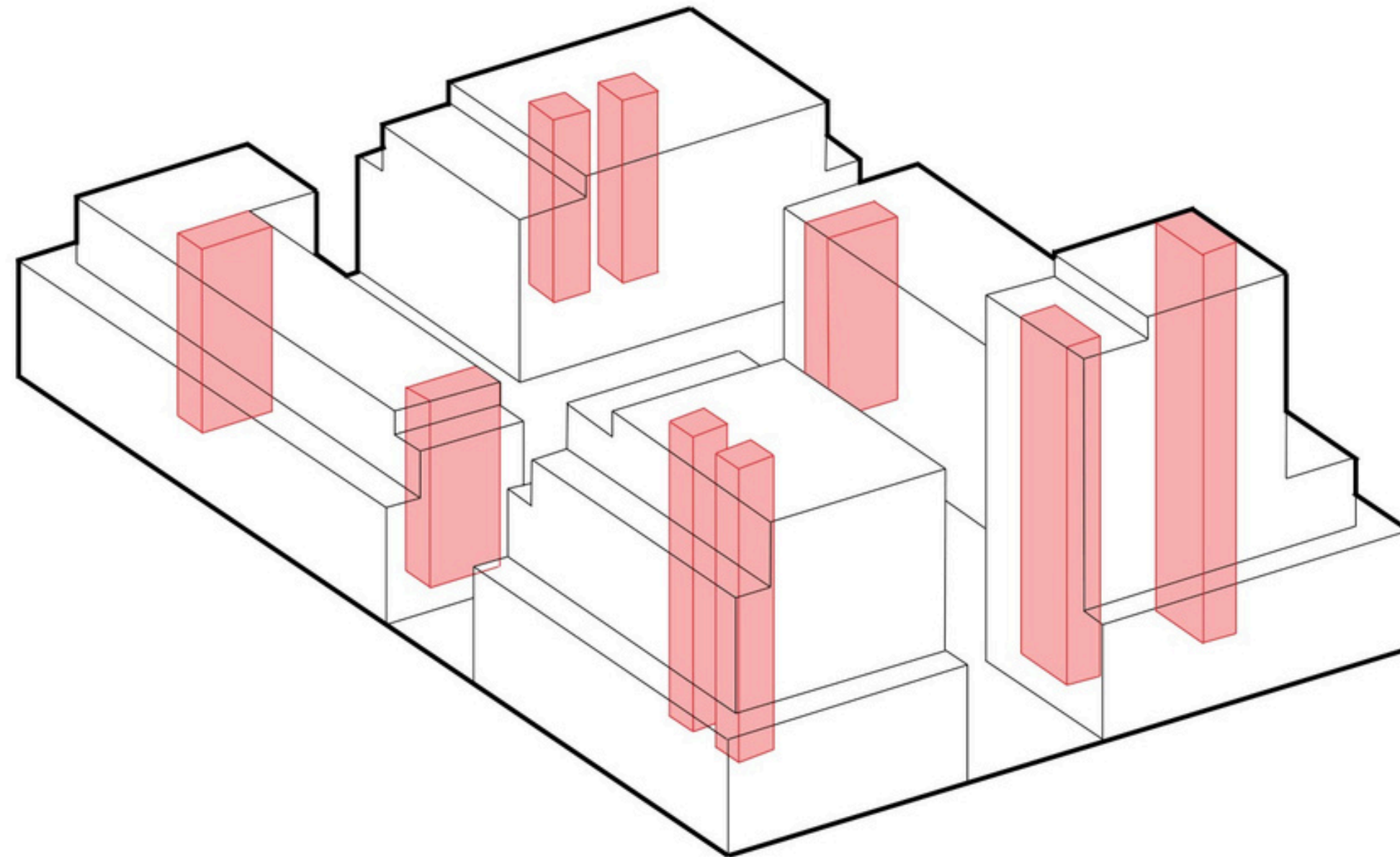
'support + infill'

# Situatie

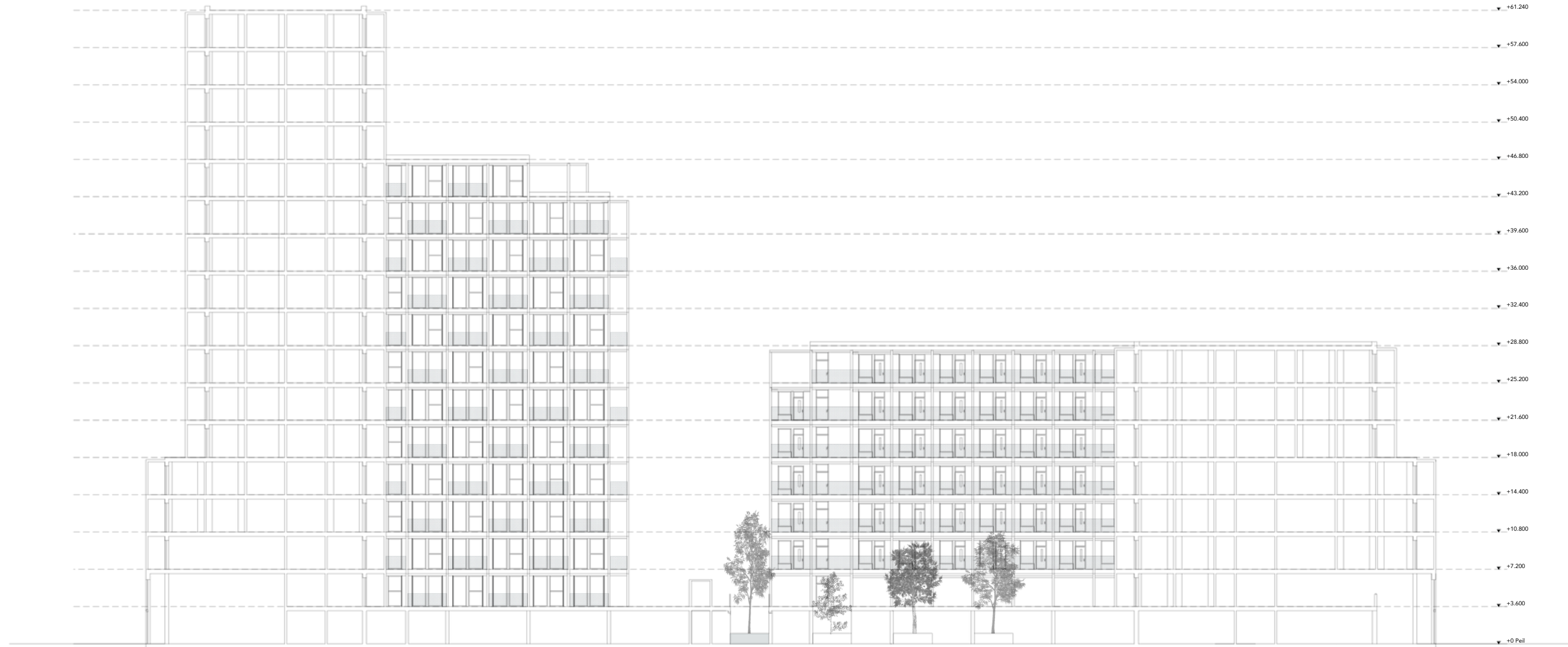




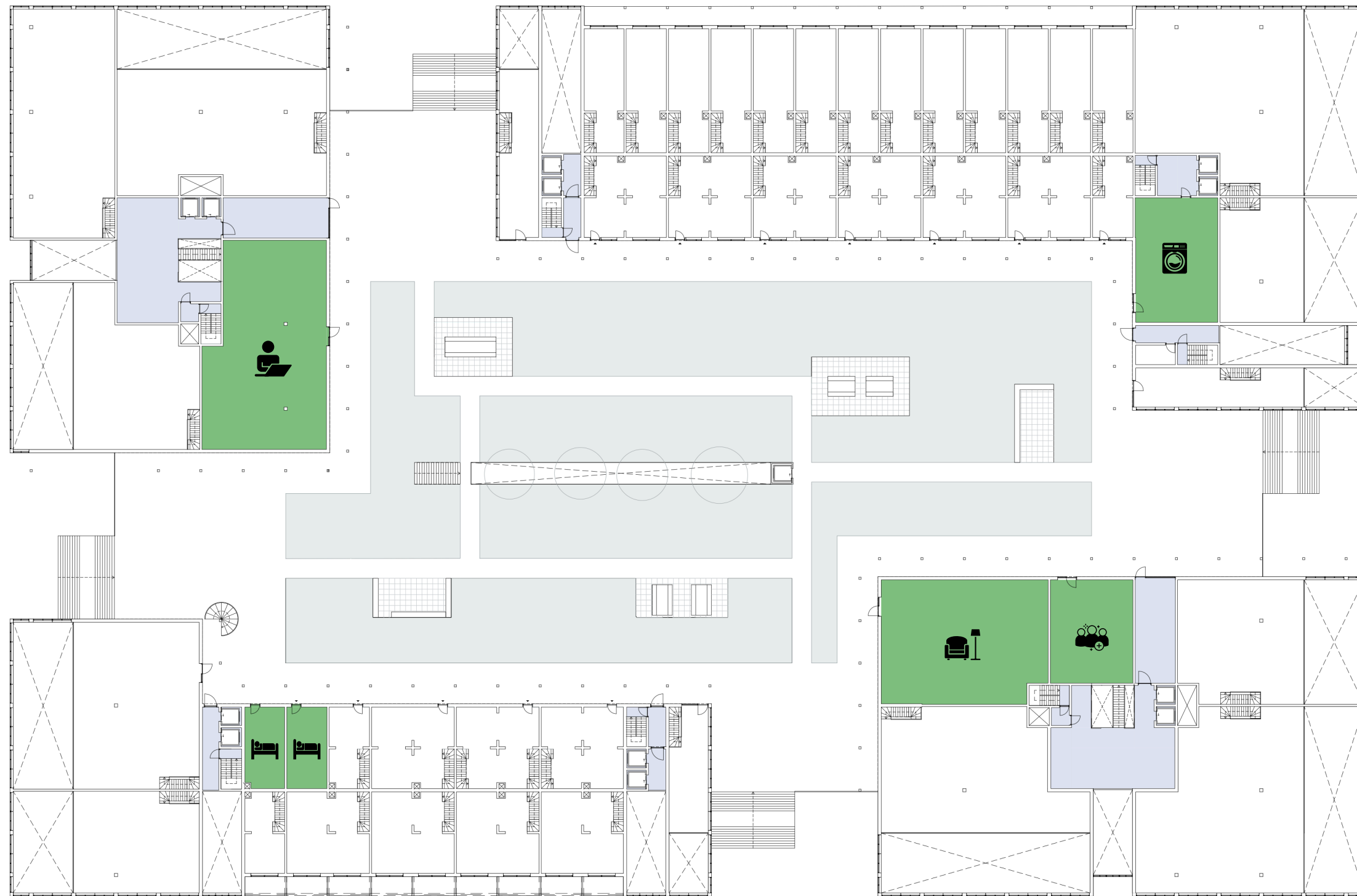
# Verticale ontsluiting



# Doorsnede

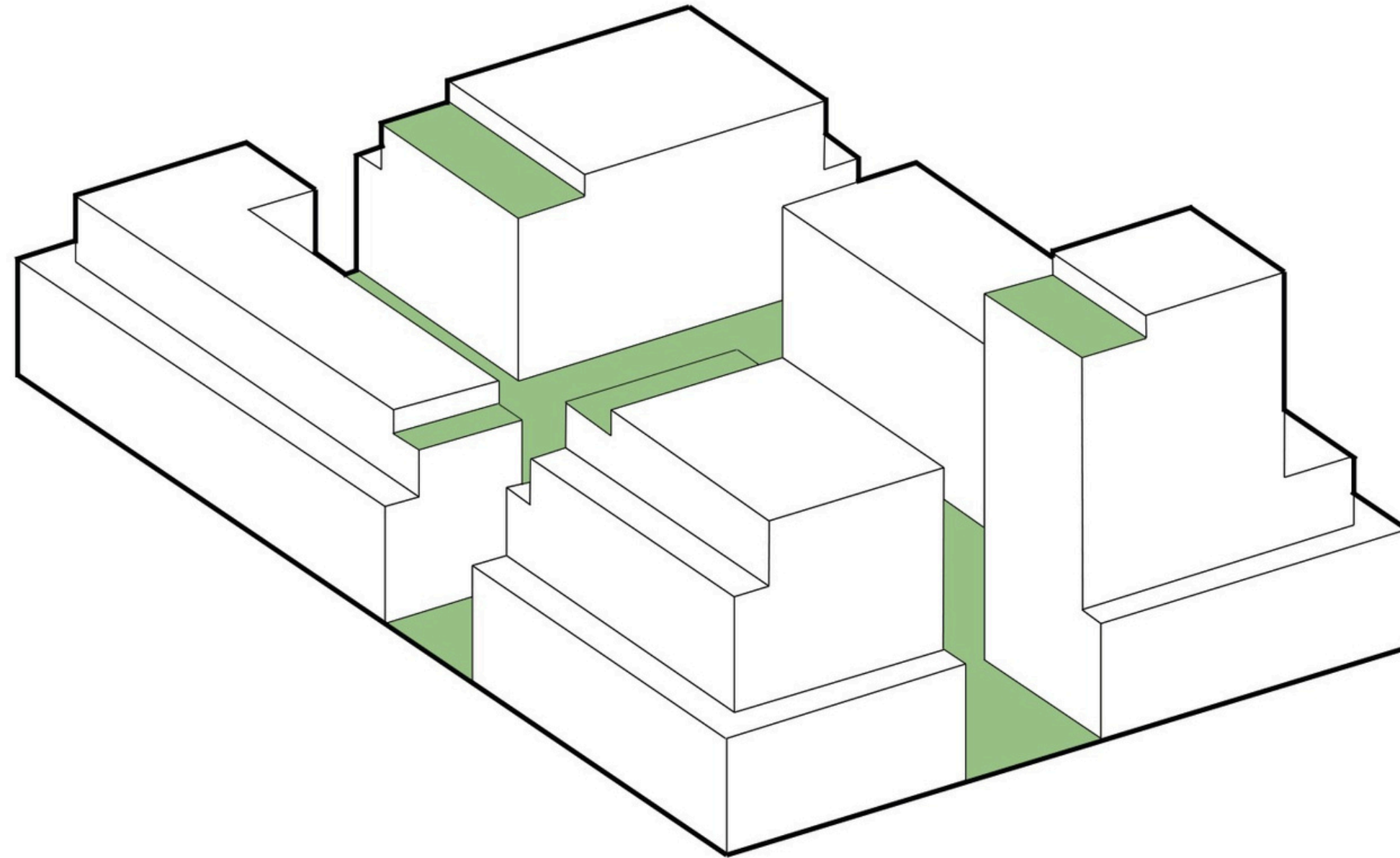


# 1e verdieping



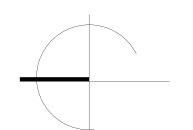
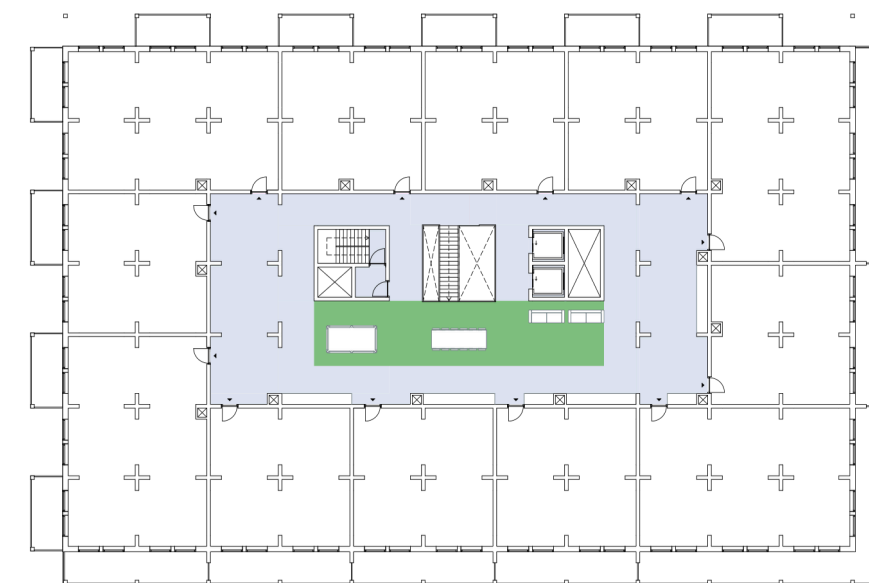
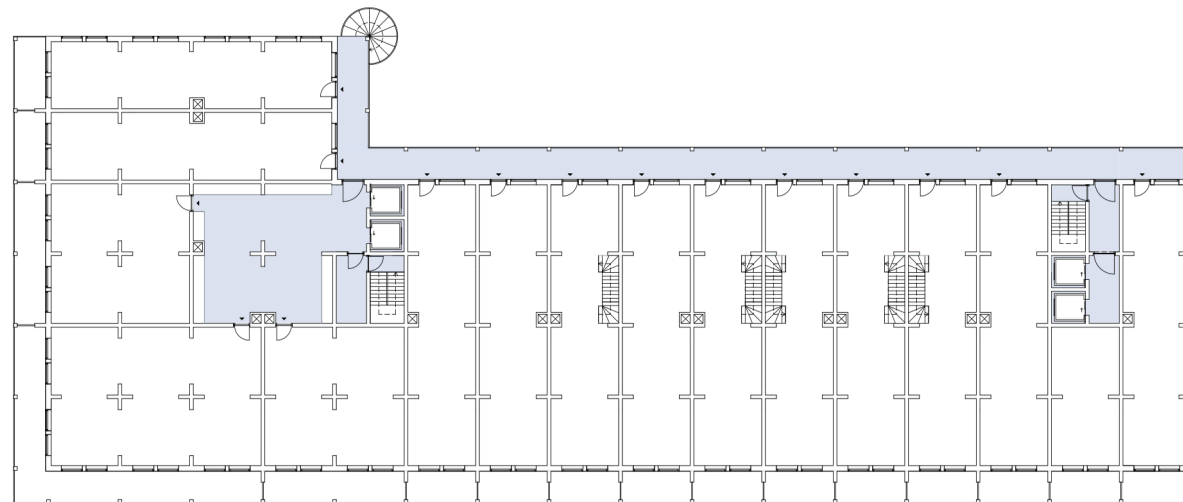
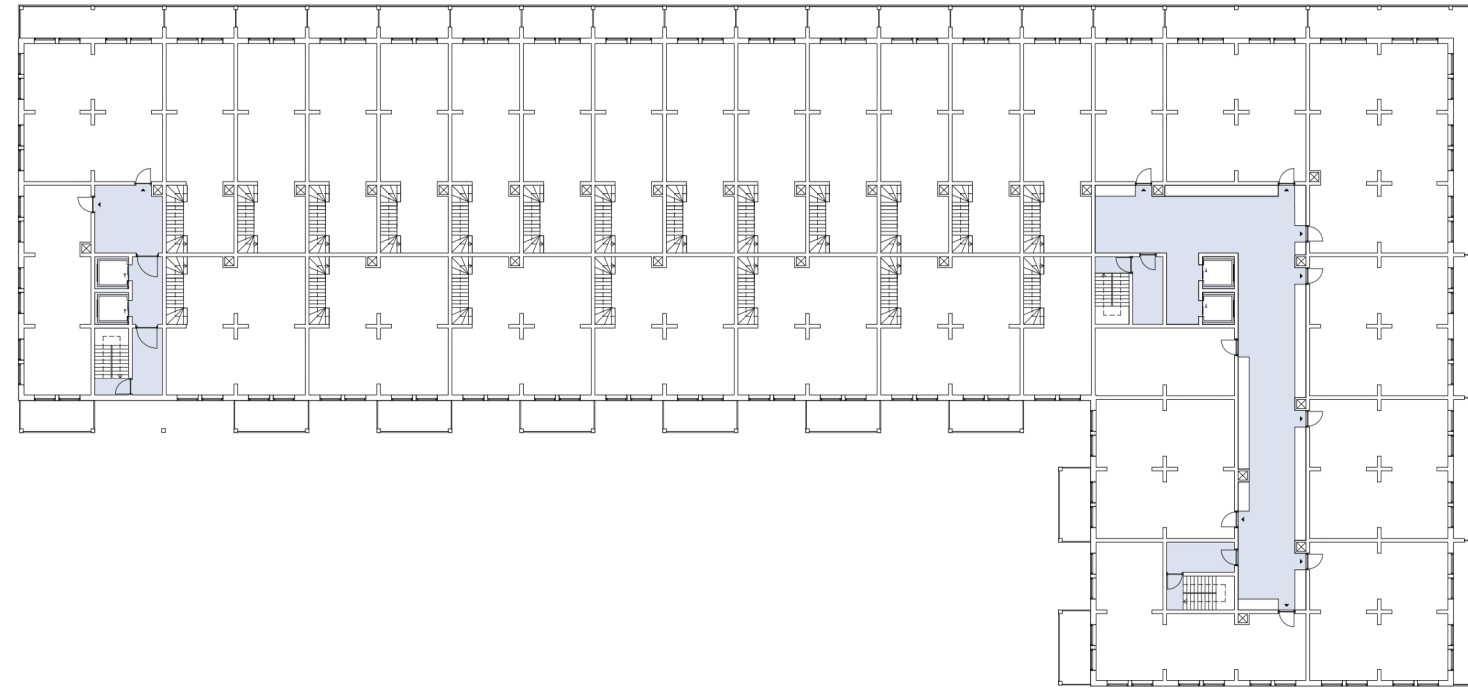
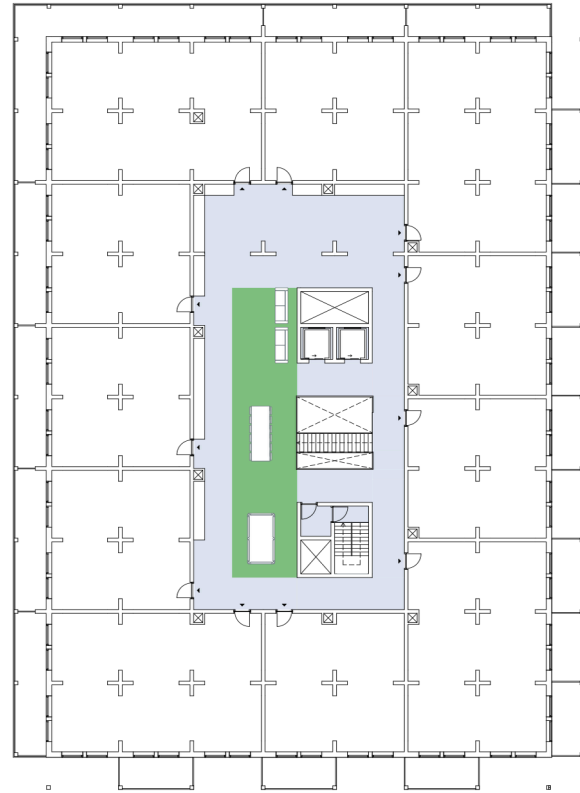


# Collectieve buitenruimte





# 2e verdieping

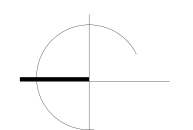
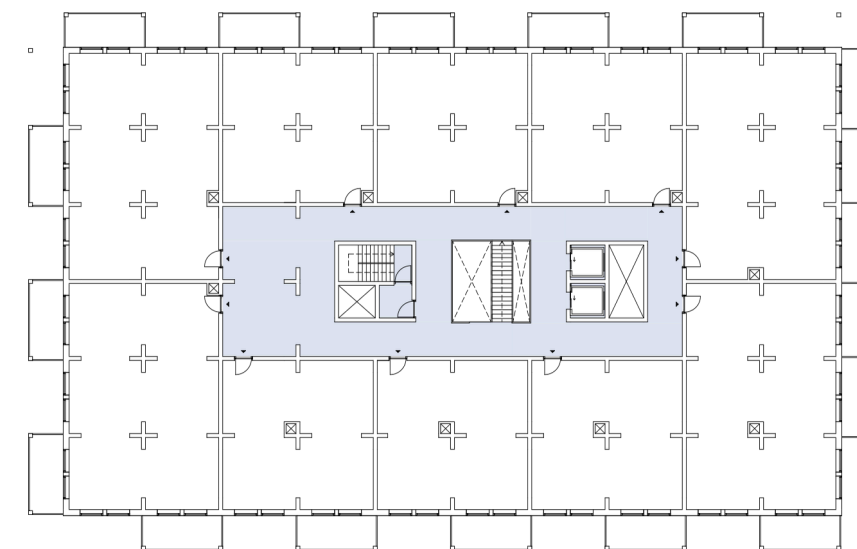
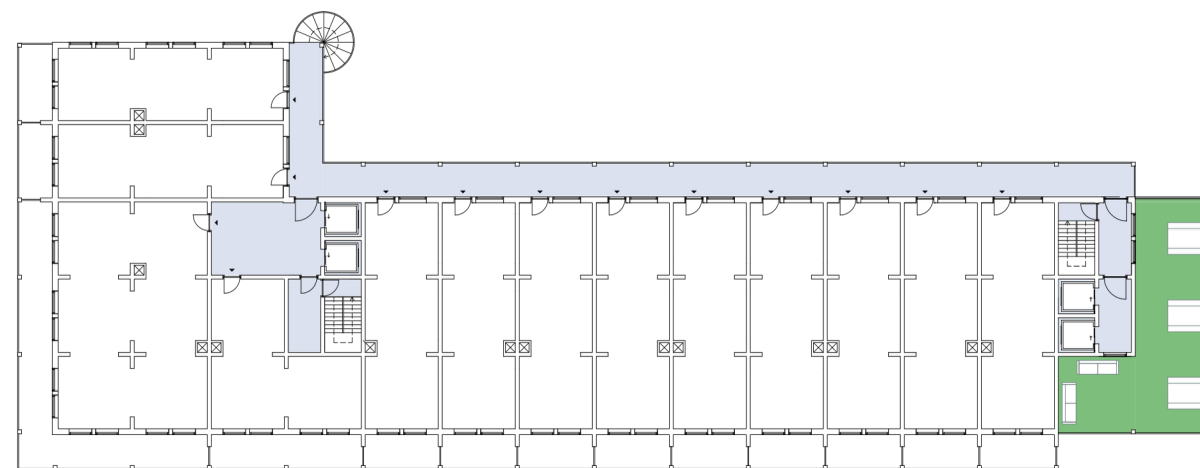
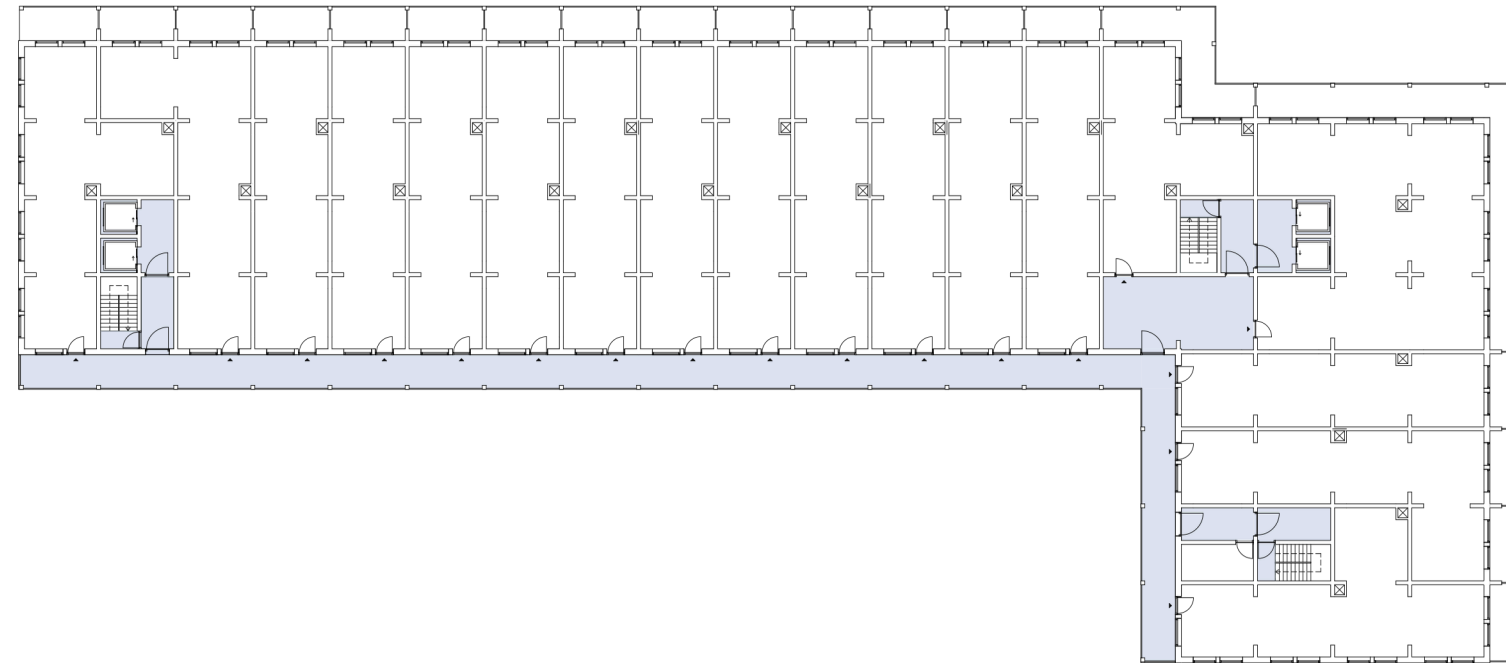
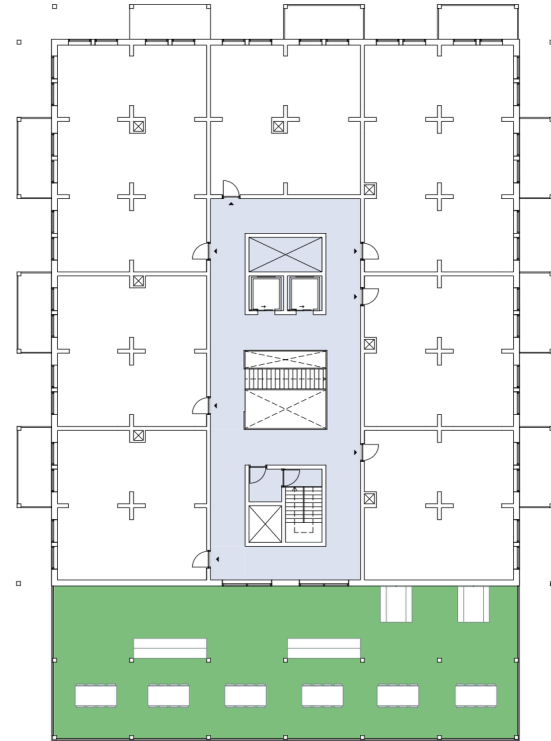




101

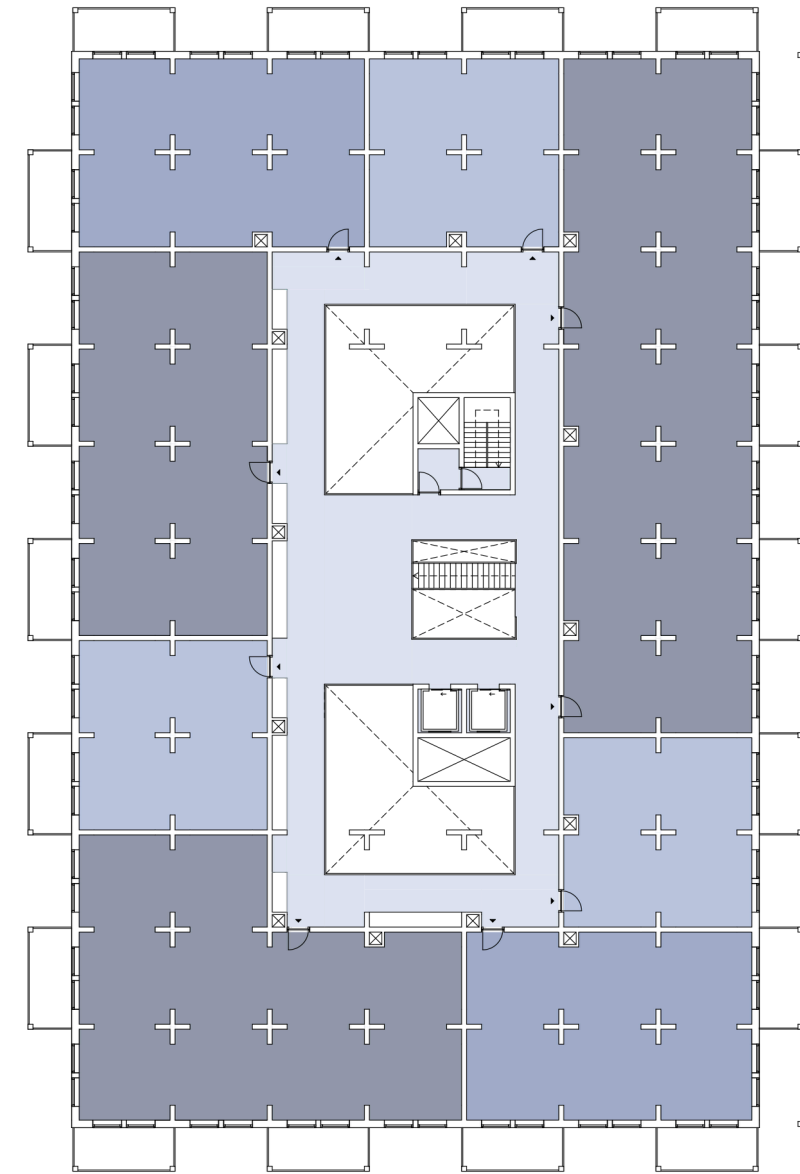
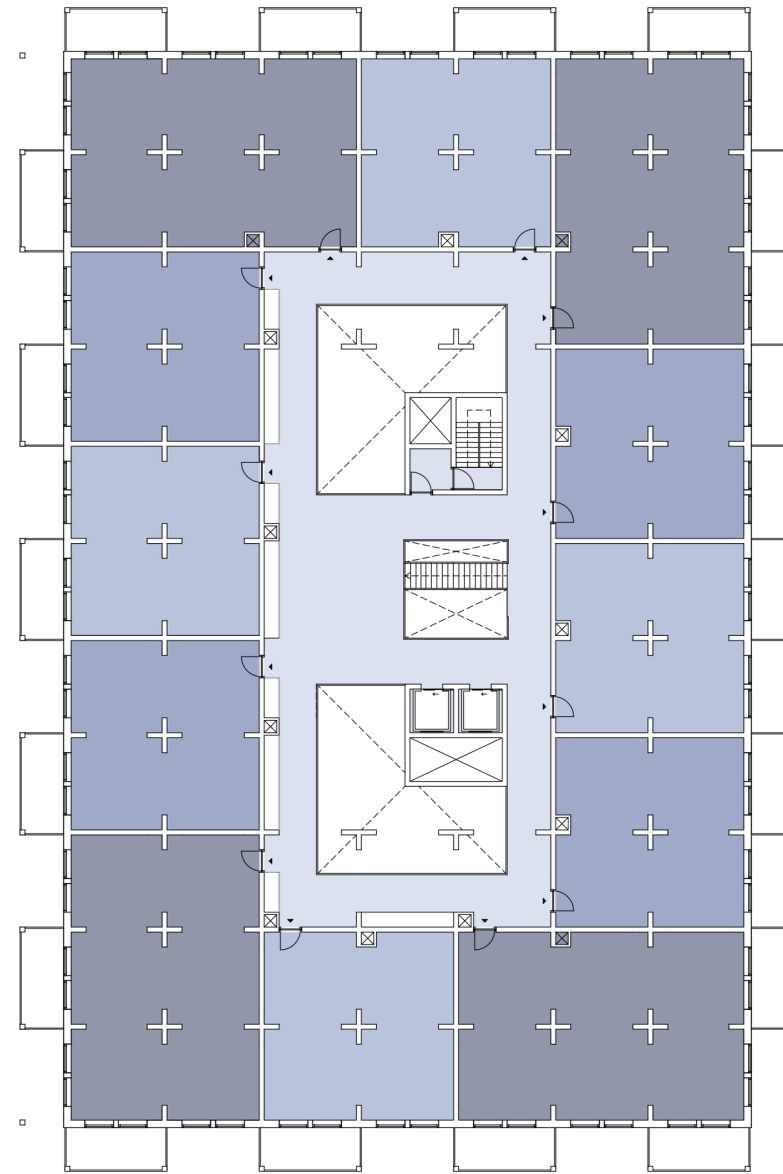
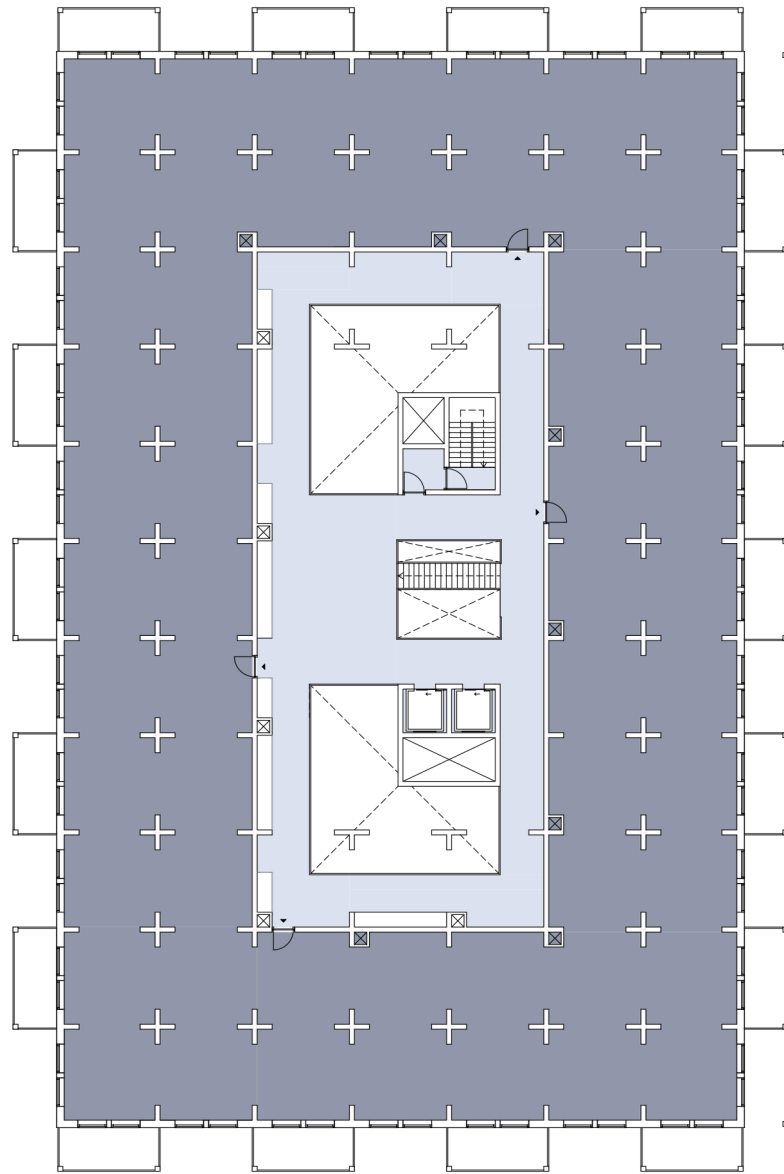
102

# 7e verdieping

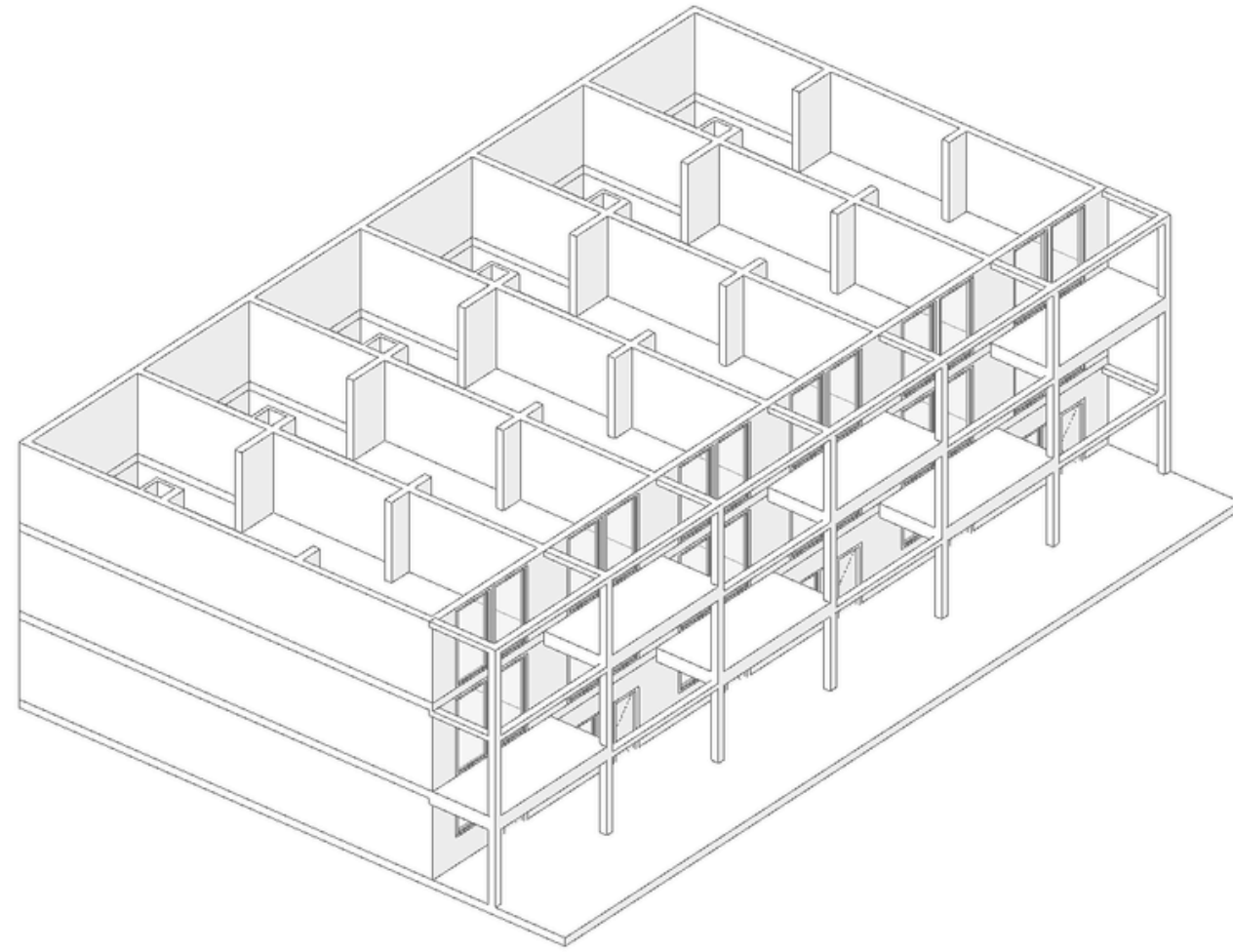




# Herindelingen



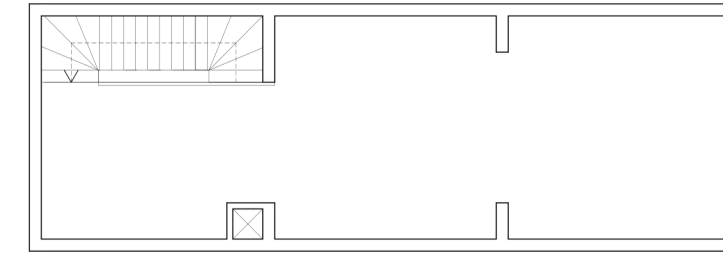
# Woningen



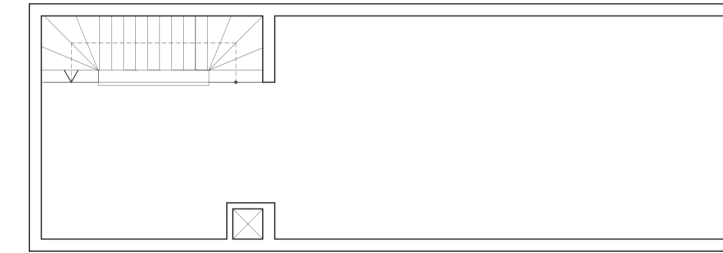
'support'

## Grondgebonden

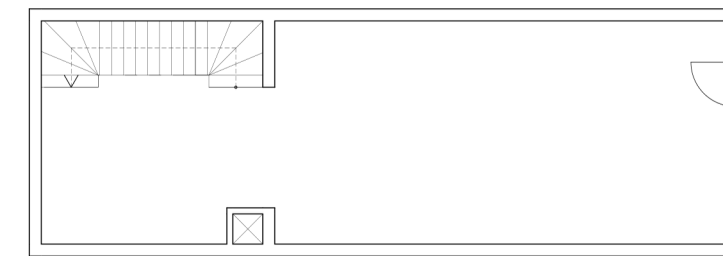
123 m<sup>2</sup>



2e verdieping



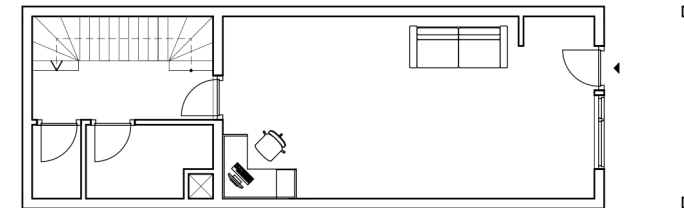
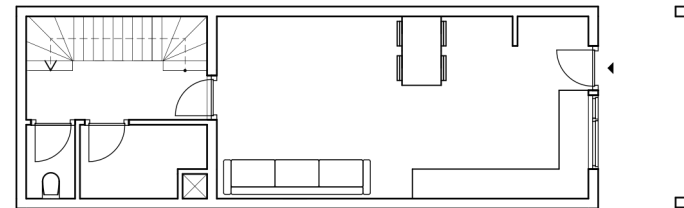
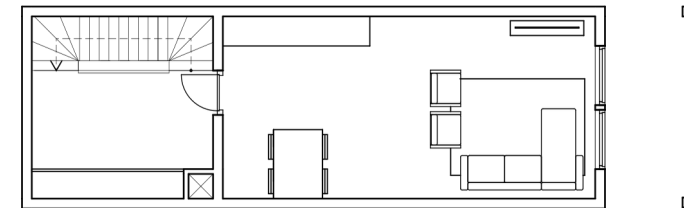
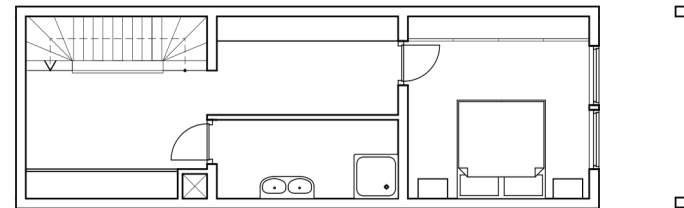
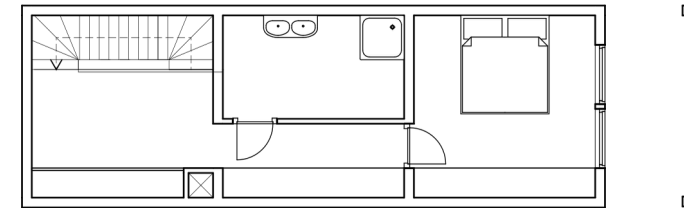
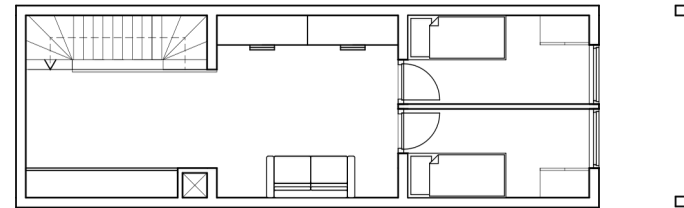
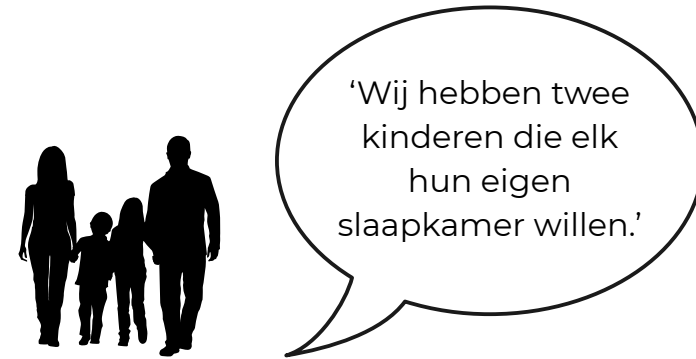
1e verdieping



Begane grond



# Woningen

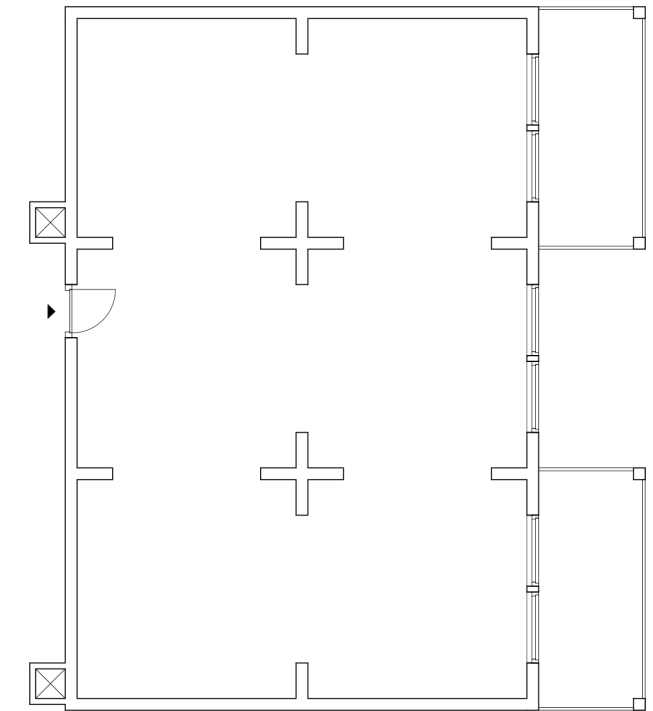
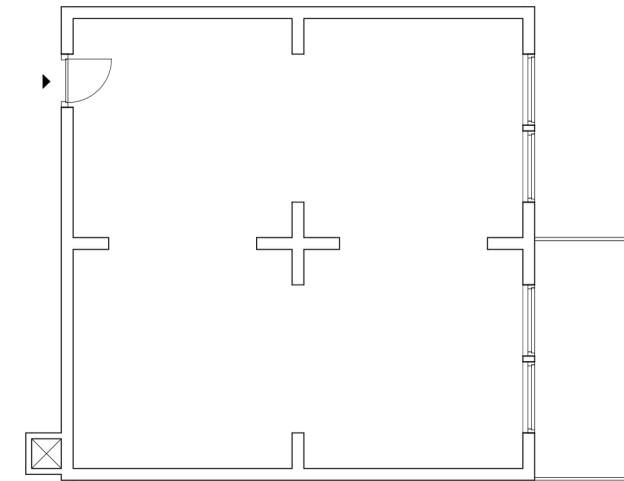
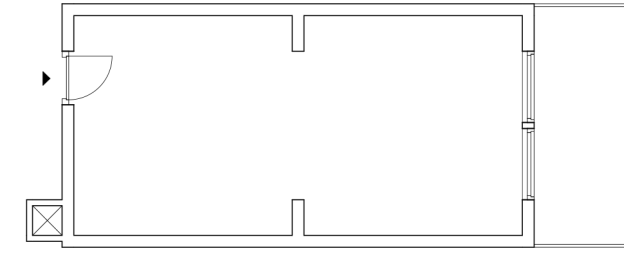
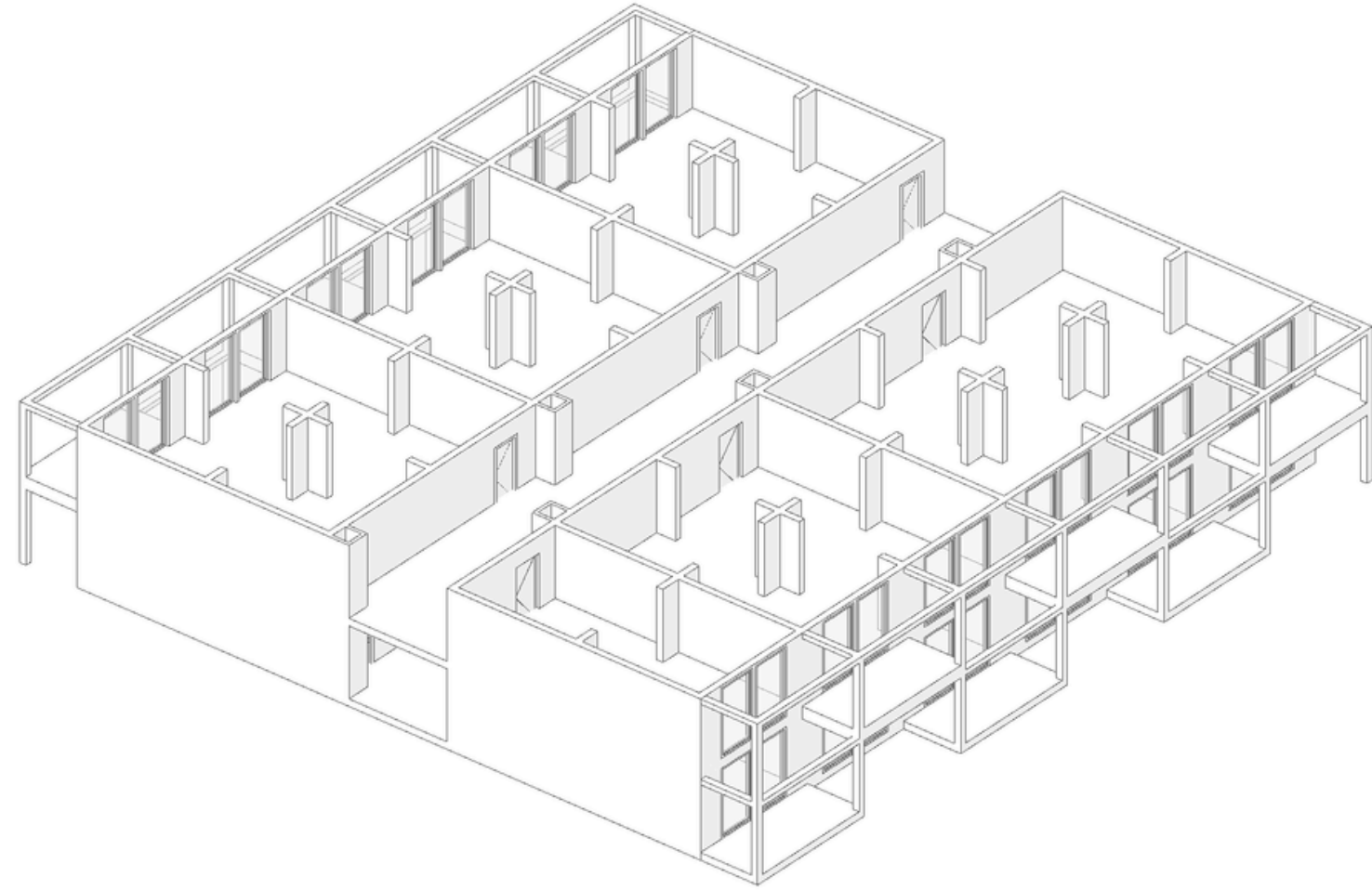


'infill'

**Grondgebonden**

123 m<sup>2</sup>

# Woningen



'support'

**Gang**

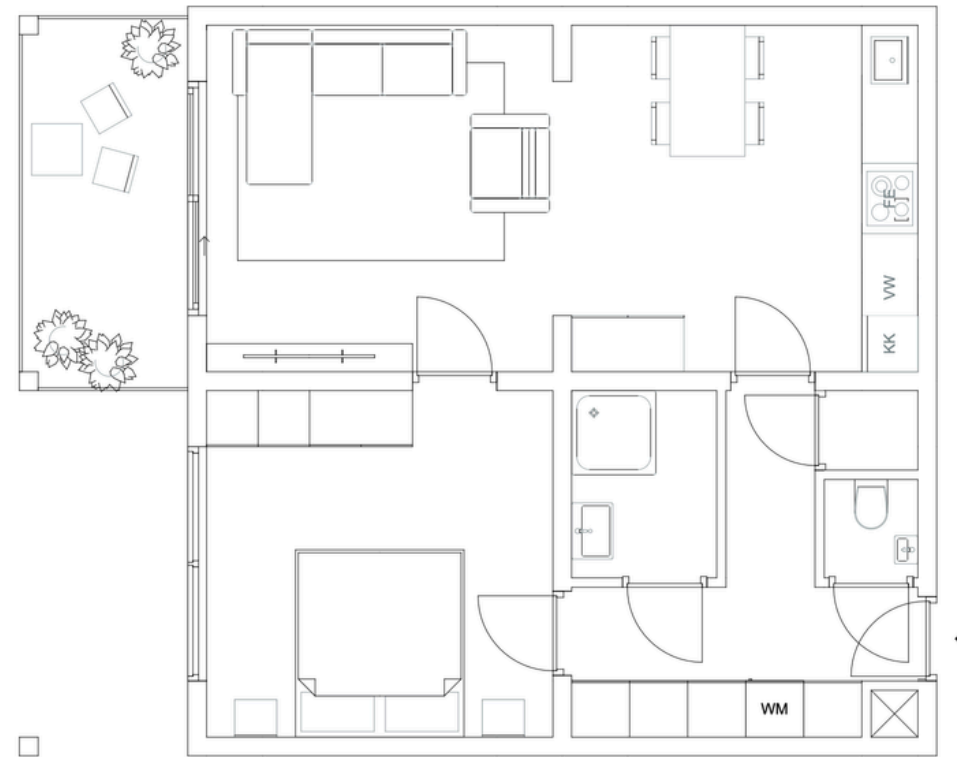
27,38 - 54,70 - 82,14 m<sup>2</sup>



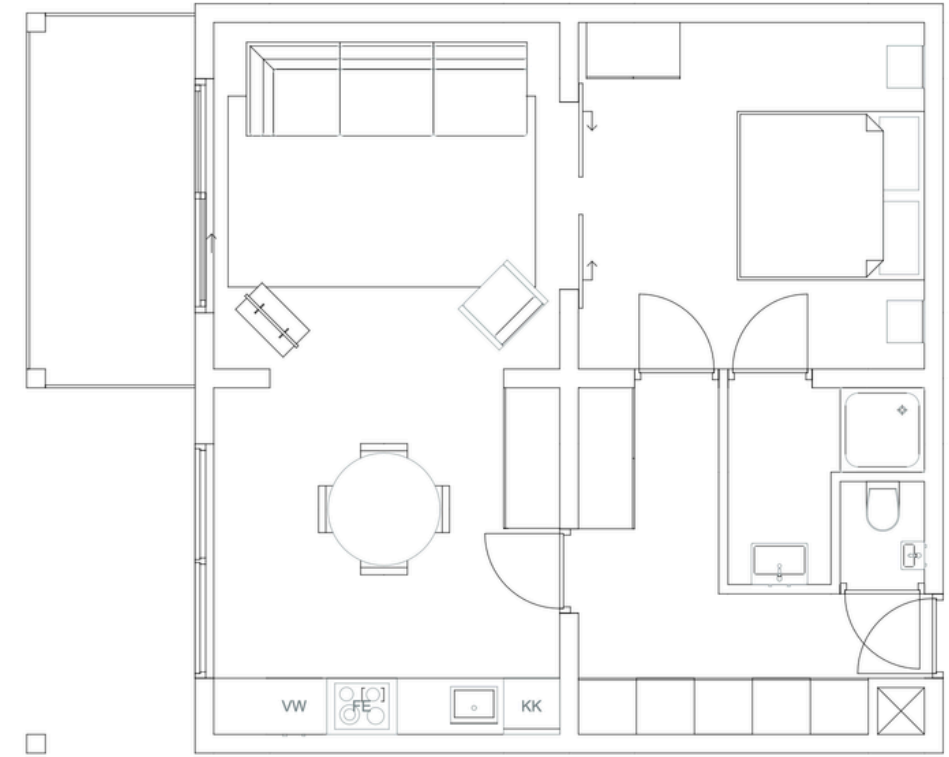
# Woningen



'Ik wil graag een ruime slaapkamer.'



'Wij zouden een badkamer direct aan onze slaapkamer willen.'



'infill'

## Gang

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

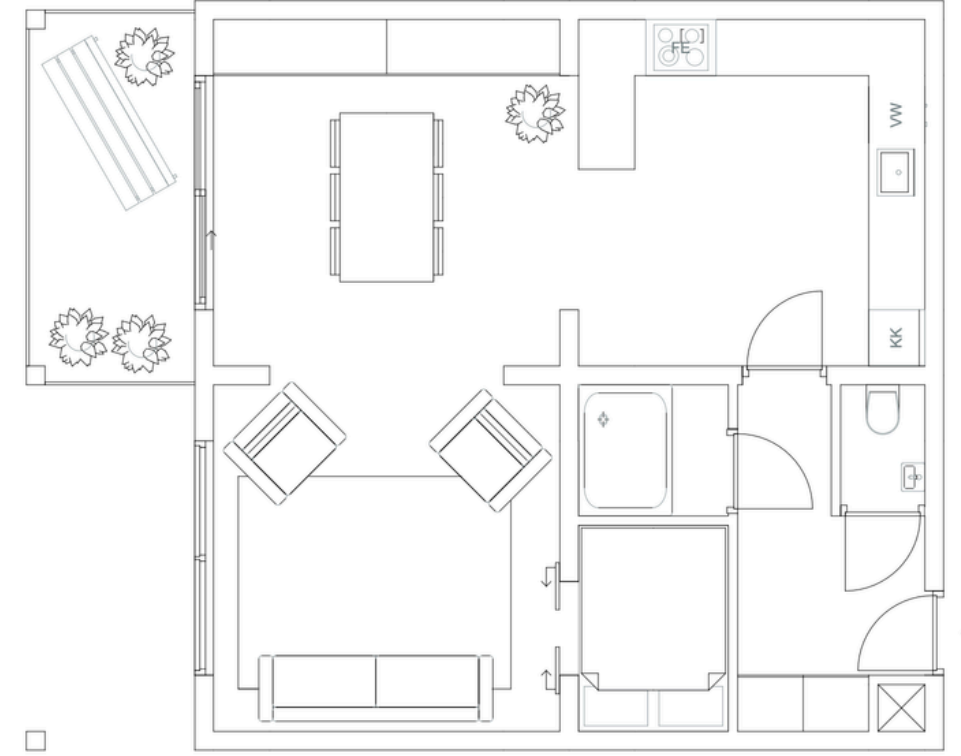
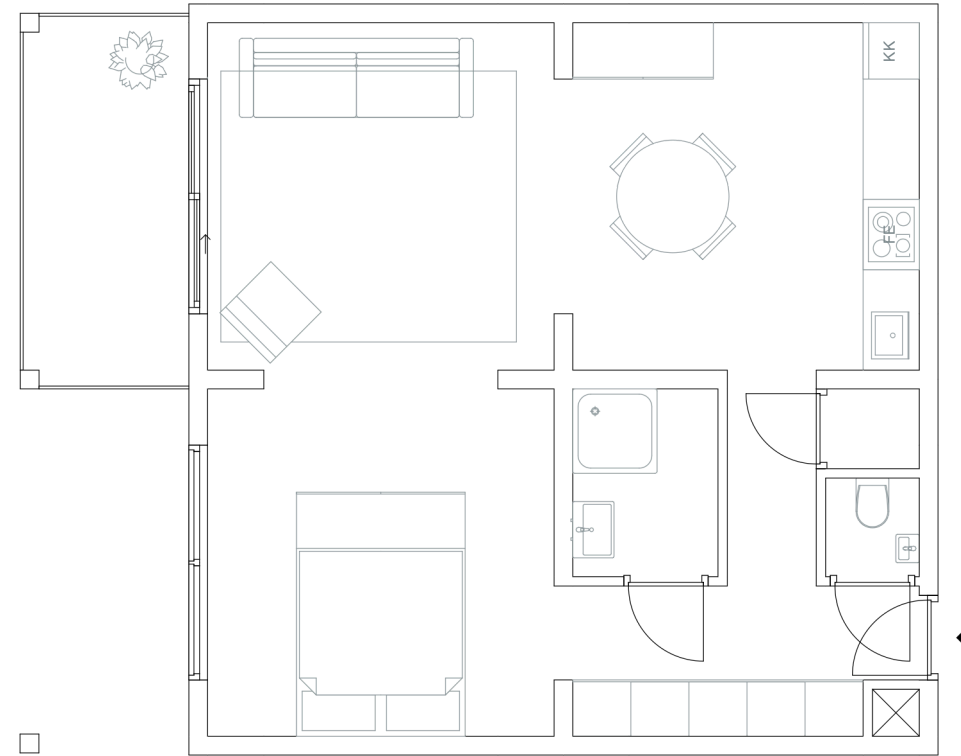
# Woningen



'Ik houd mijn woning het liefst zo open mogelijk.'



'Ik heb geen grote slaapkamer nodig. Koken is mijn hobby, dus een grote keuken zou fijn zijn.'

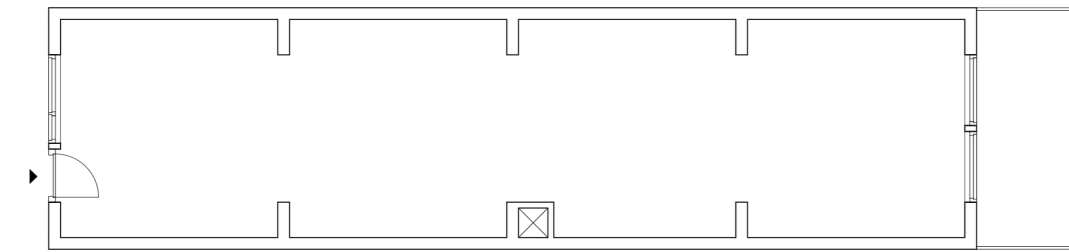
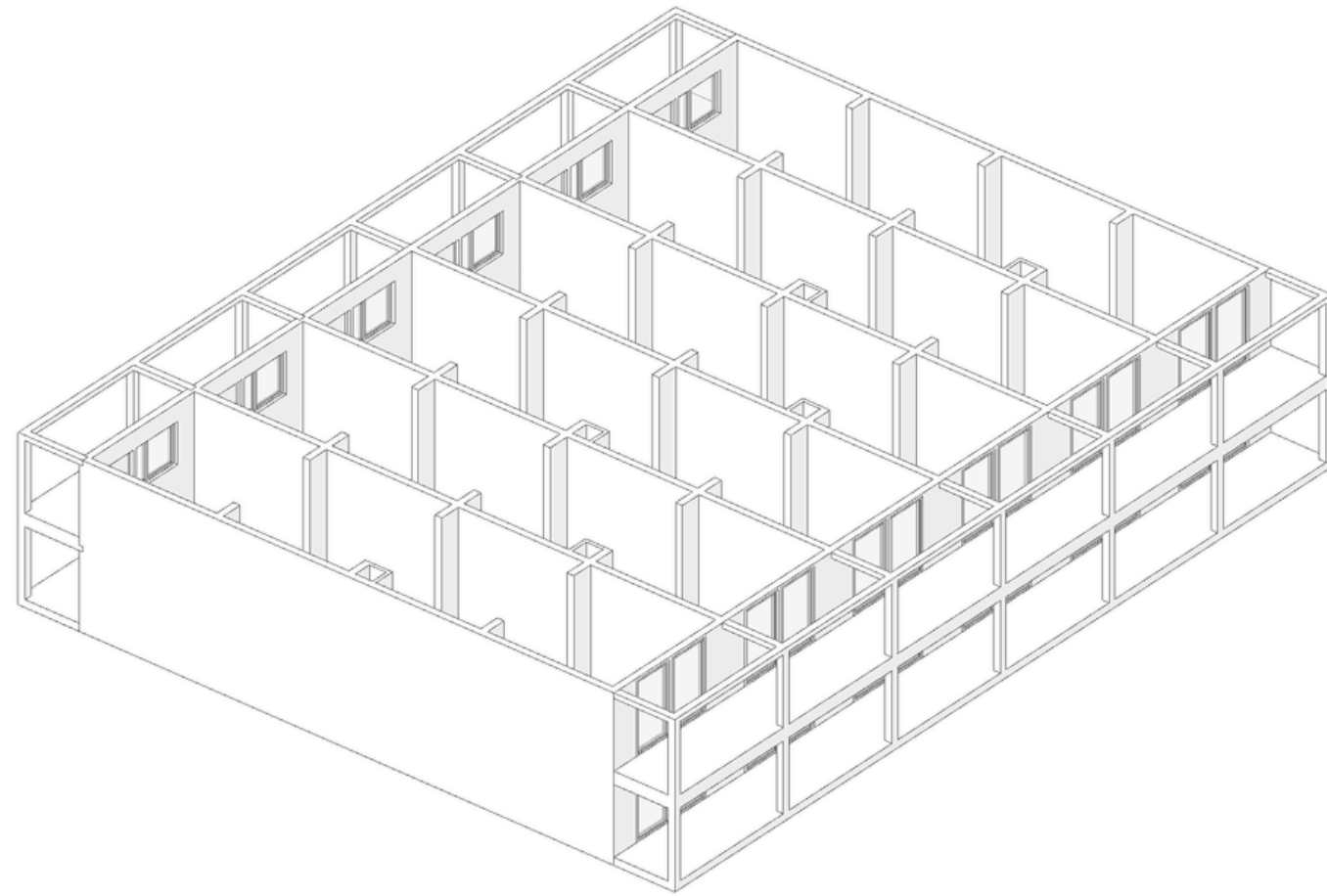


'infill'

## Gang

27,38 - 54,70 - 82,14 m<sup>2</sup>

# Woningen



'support'

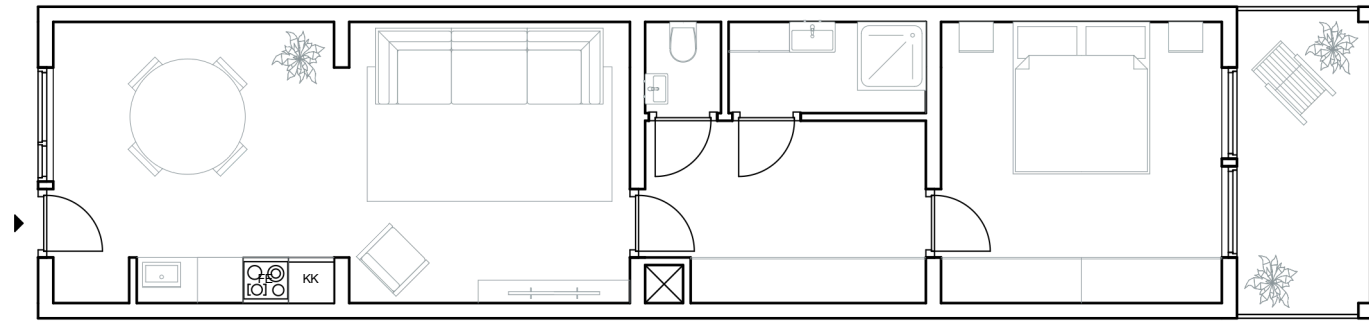
**Galerij**  
54,70 m<sup>2</sup>



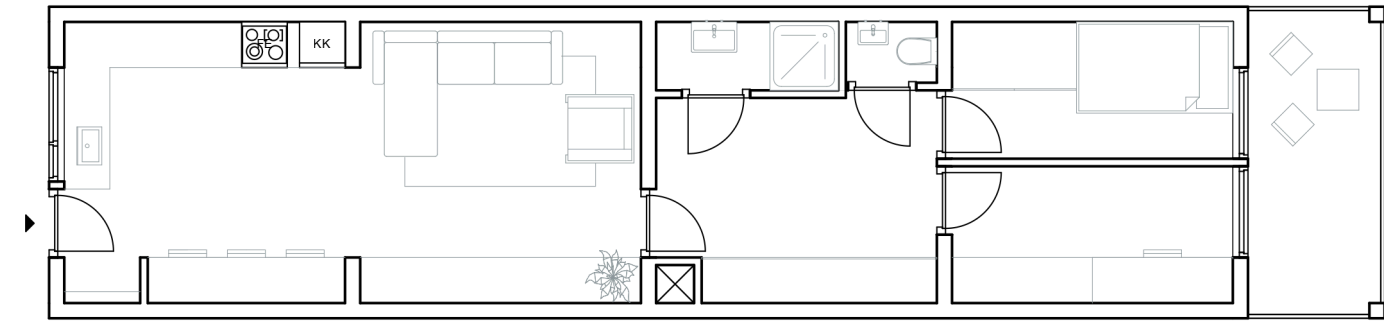
# Woningen



'We hebben geen grote keuken nodig. We koken bijna niet meer.'



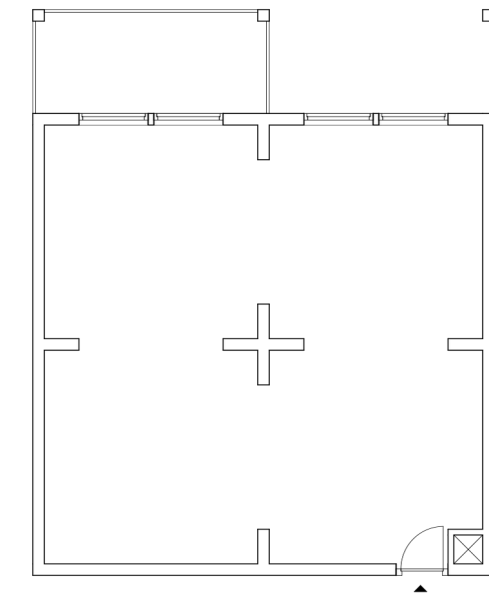
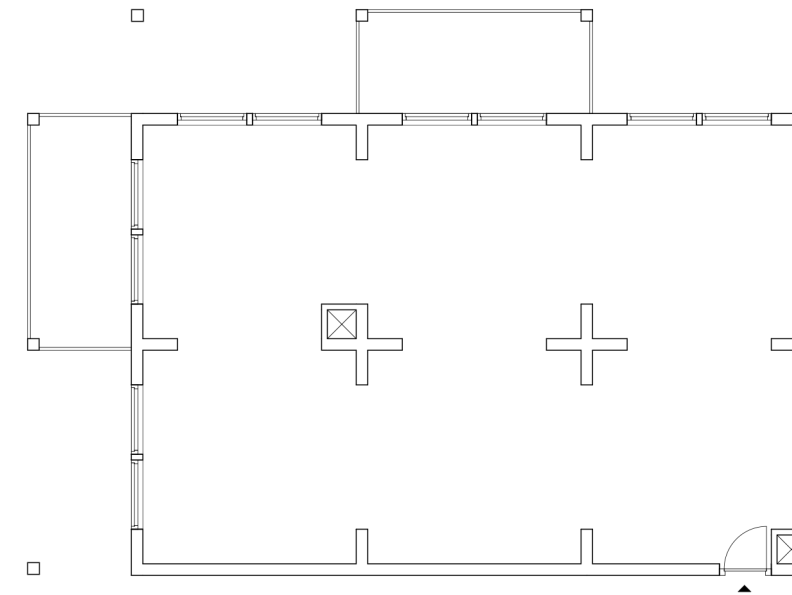
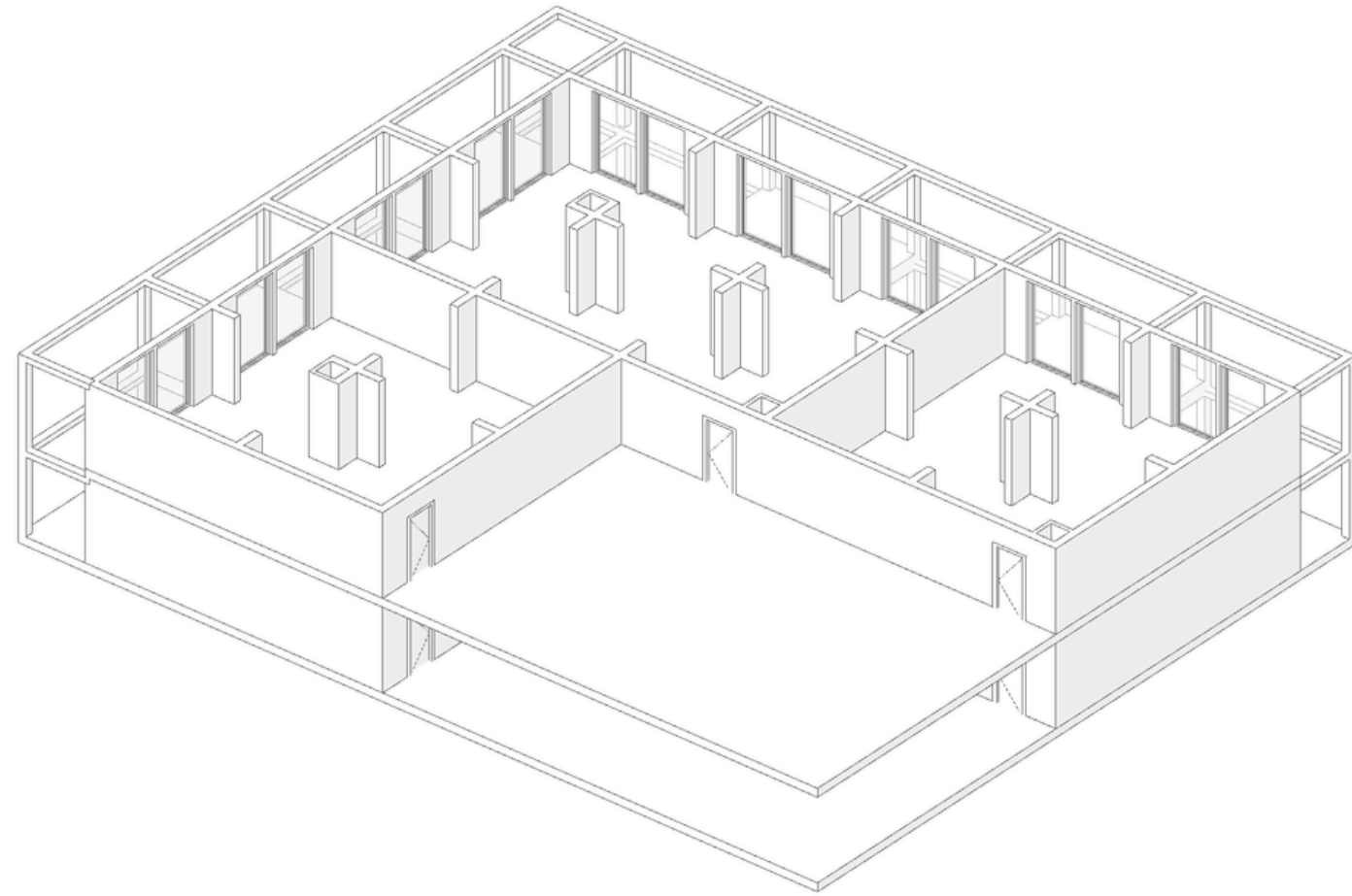
'Ik zou graag een kleine werkkamer willen. Mijn slaapkamer hoeft niet groot te zijn.'



'infill'

**Galerij**  
54,70 m<sup>2</sup>

# Woningen



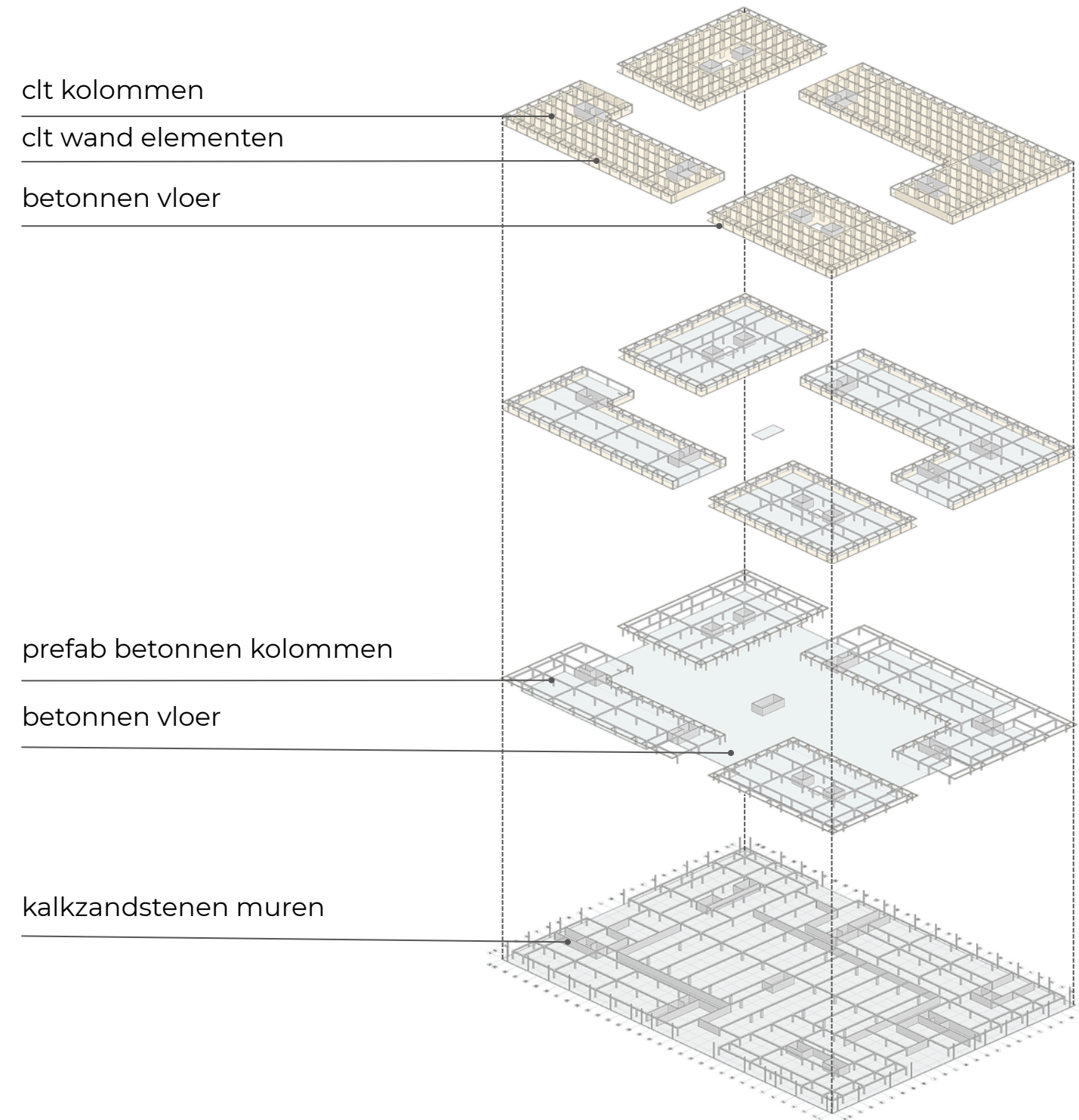
'support'

## Interne kern

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



# Constructie



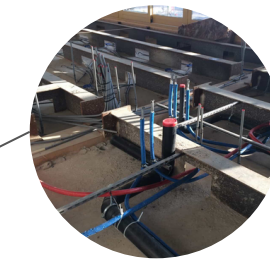
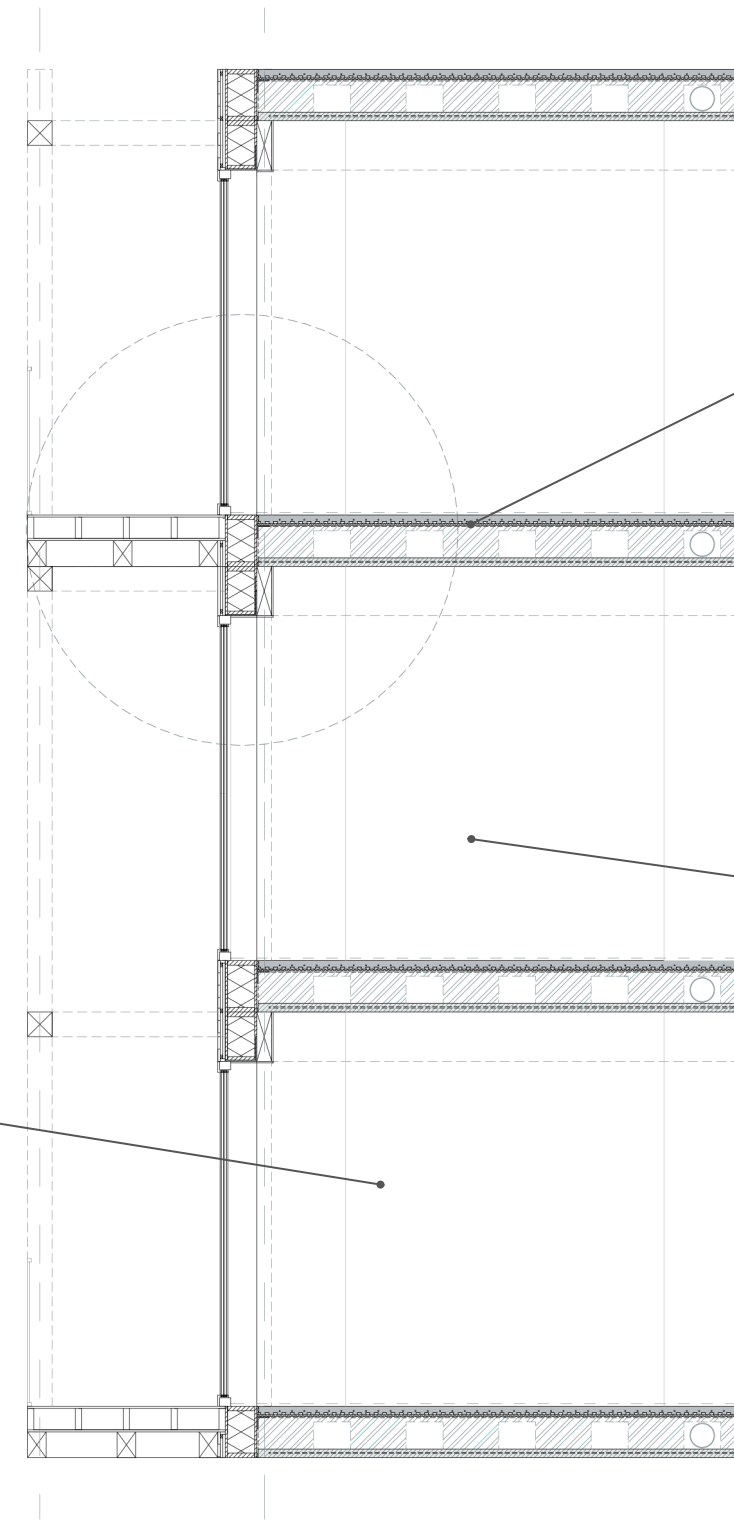
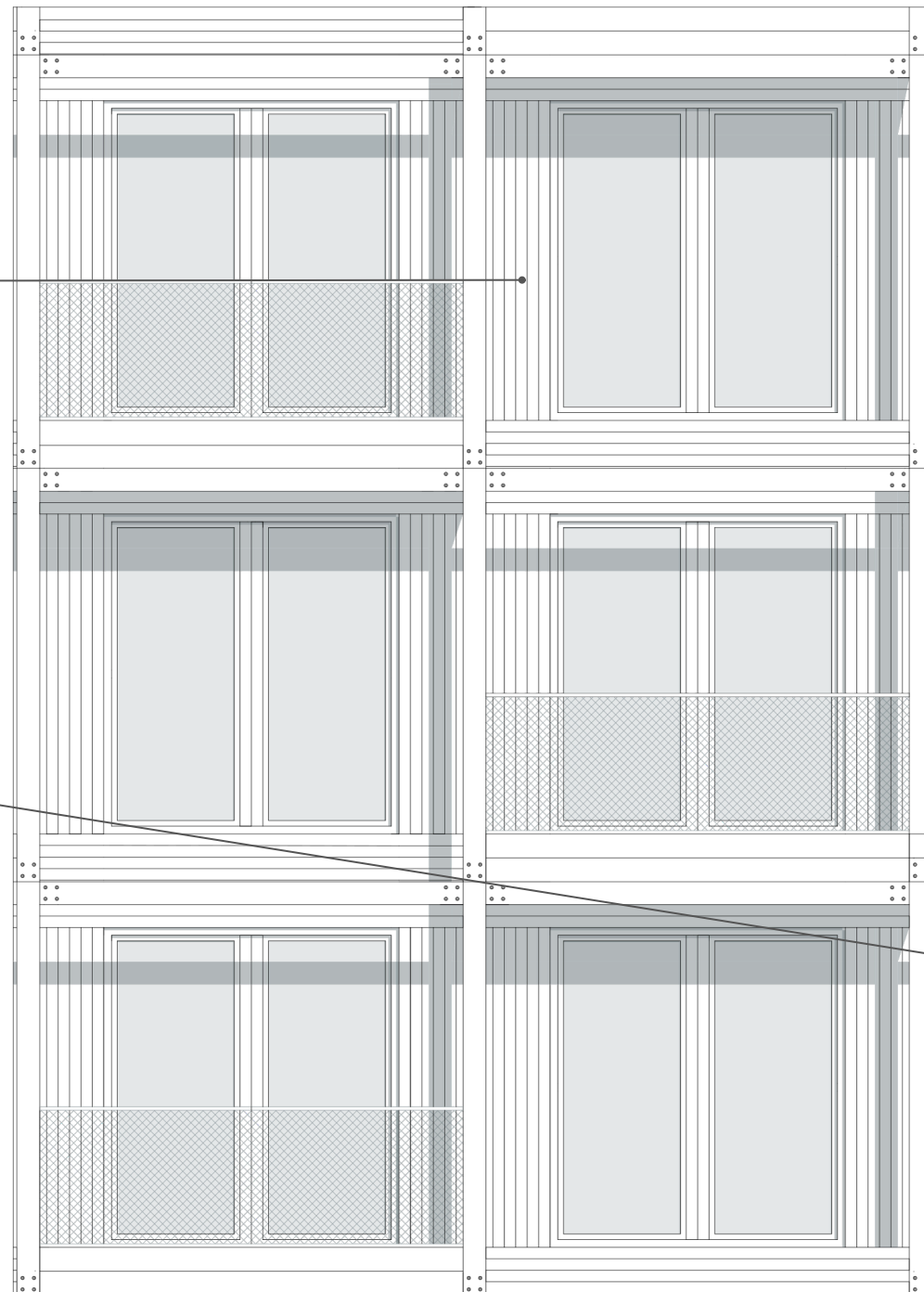
# Constructie



Thermo wood



3200 verdiepingshoogte

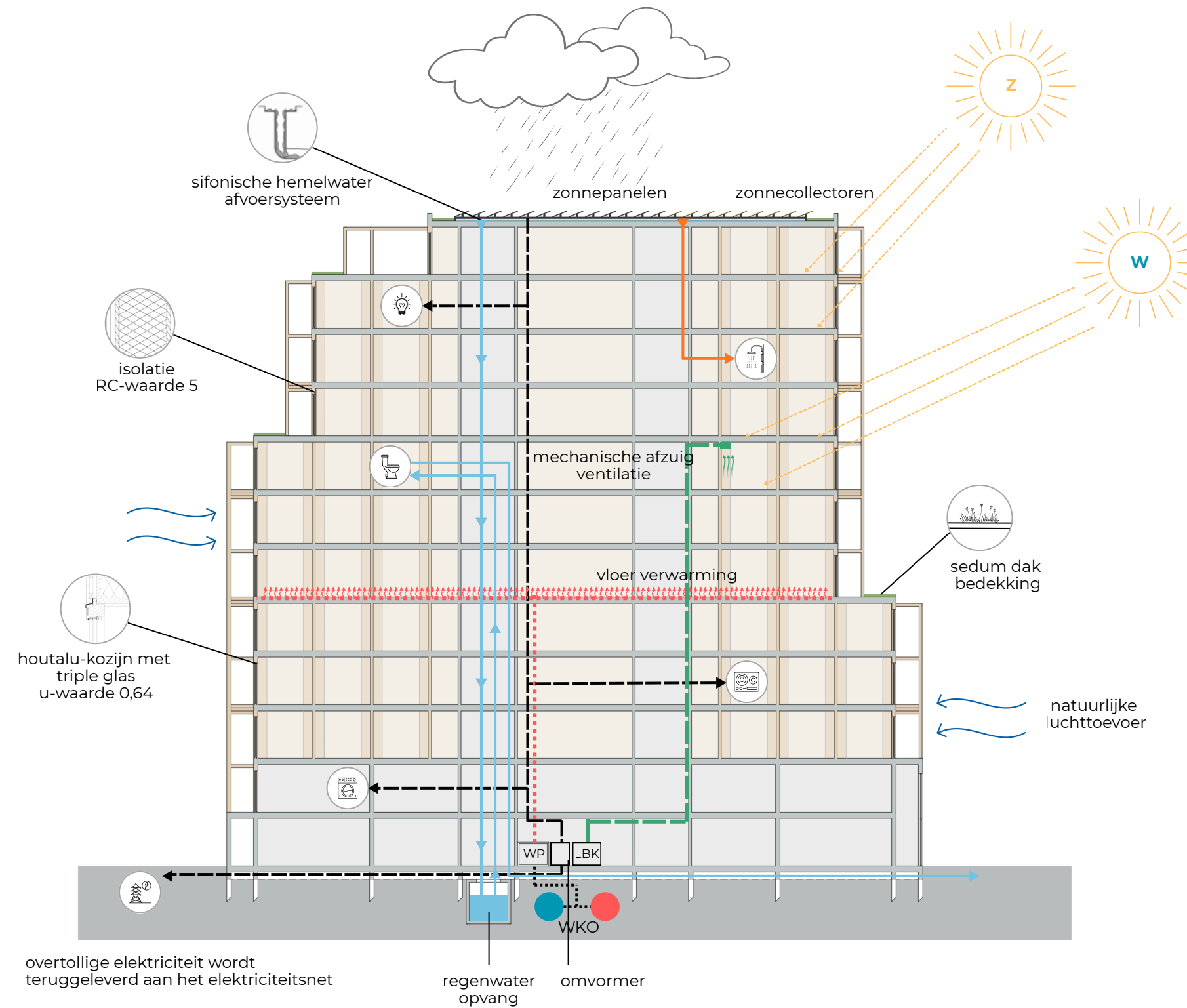


Slimline floor system



Open draagstructuur

# Klimaat











# ROOM FOR CHANGE

Bedankt!