



BREAKING THE PATTERN

Densification as a catalyst for improving
the liveability of post-war neighborhoods.

Master of Urbanism, Graduation Thesis
Studio: Design of the Urban Fabric

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2nd mentor: Reinout Kleinhans
Delegate: Leontine de Wit

P5 Presentation
20-06-23

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4704401

BREAKING THE PATTERN

Densification as a catalyst for improving
the liveability of post-war neighborhoods.

Problem field
Research
Findings
Design framework

Problem field

History
Inspiration



Trouw
Woningzoekers zitten klem:
‘Er is gewoon helemaal
niets’



Economen verbaasd dat
woningmarkt niet afkoelt



Huizenmarkt ook buiten de
Randstad 'booming', hoe zit het
in jouw regio?



Vanaf 2022

'Grote steden willen beleggers verbieden
woningen op te kopen'

de Volkskrant
Huizenprijzen sprinten met
15 procent in een jaar nóg
harder omhoog: grootste
toename in 20 jaar



Experts: Bijbouwen is niet ultieme
oplossing voor betaalbaardere woningen

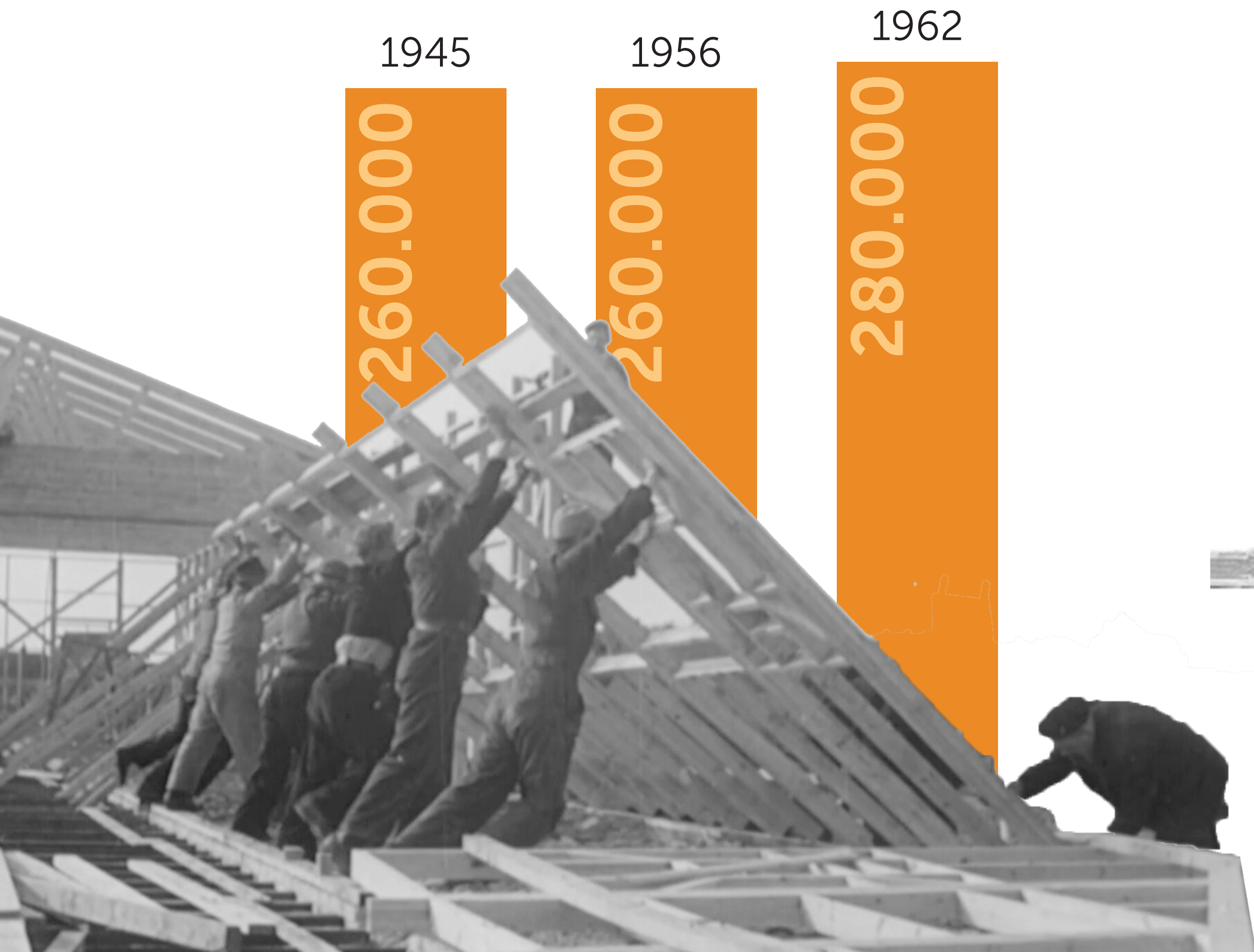
1million



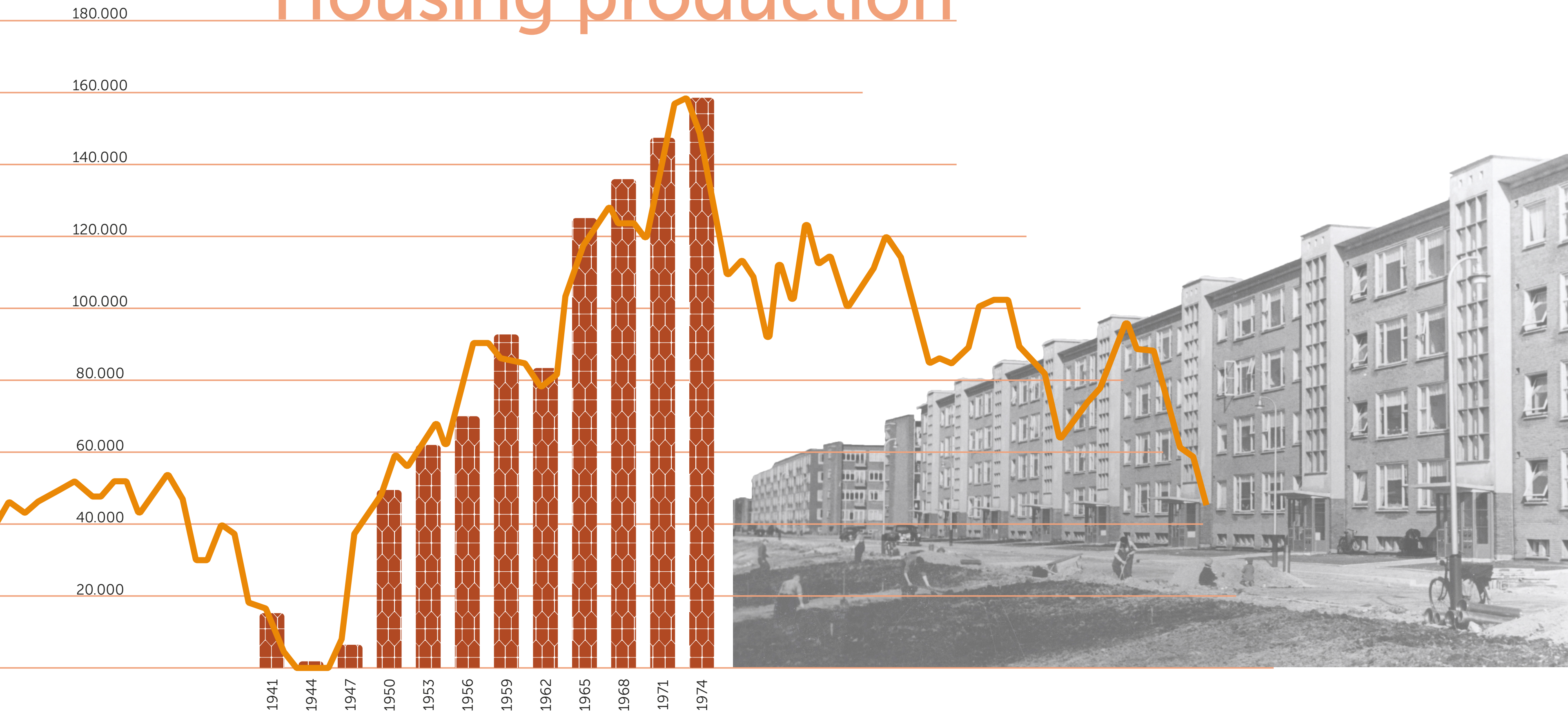
90.000
houses
destroyed

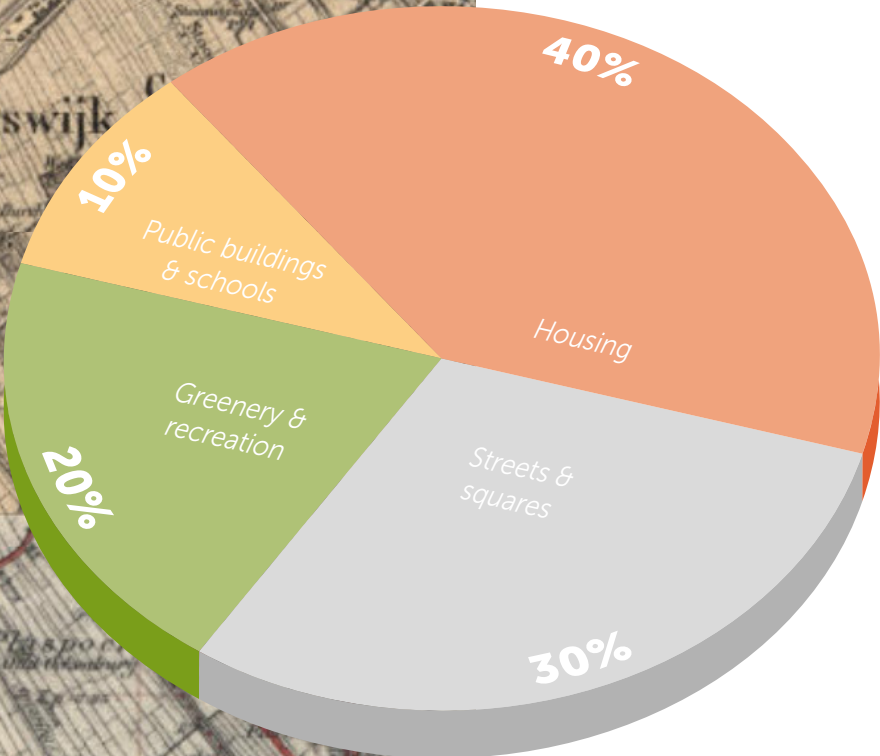
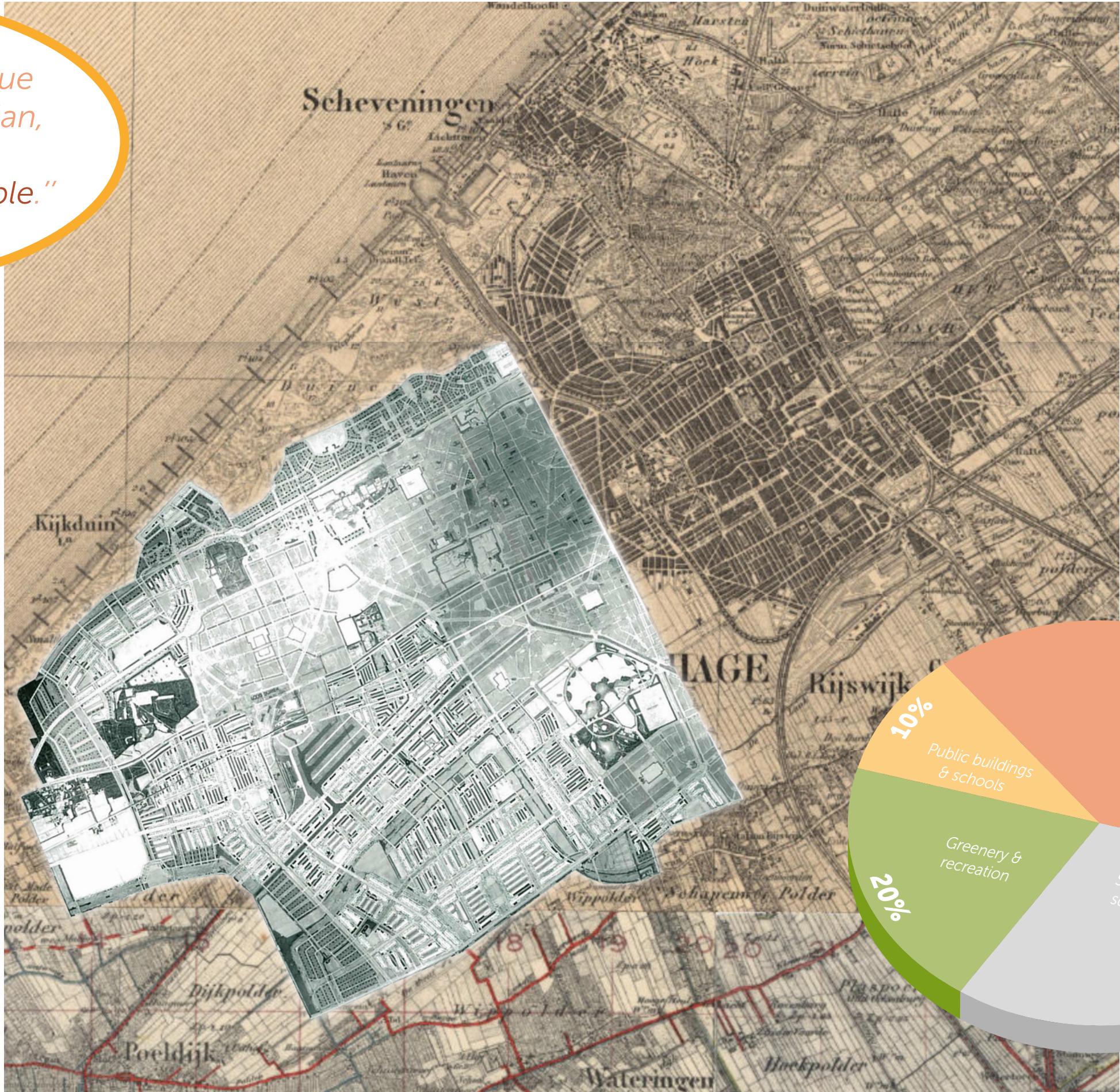


Public enemy #1



Housing production

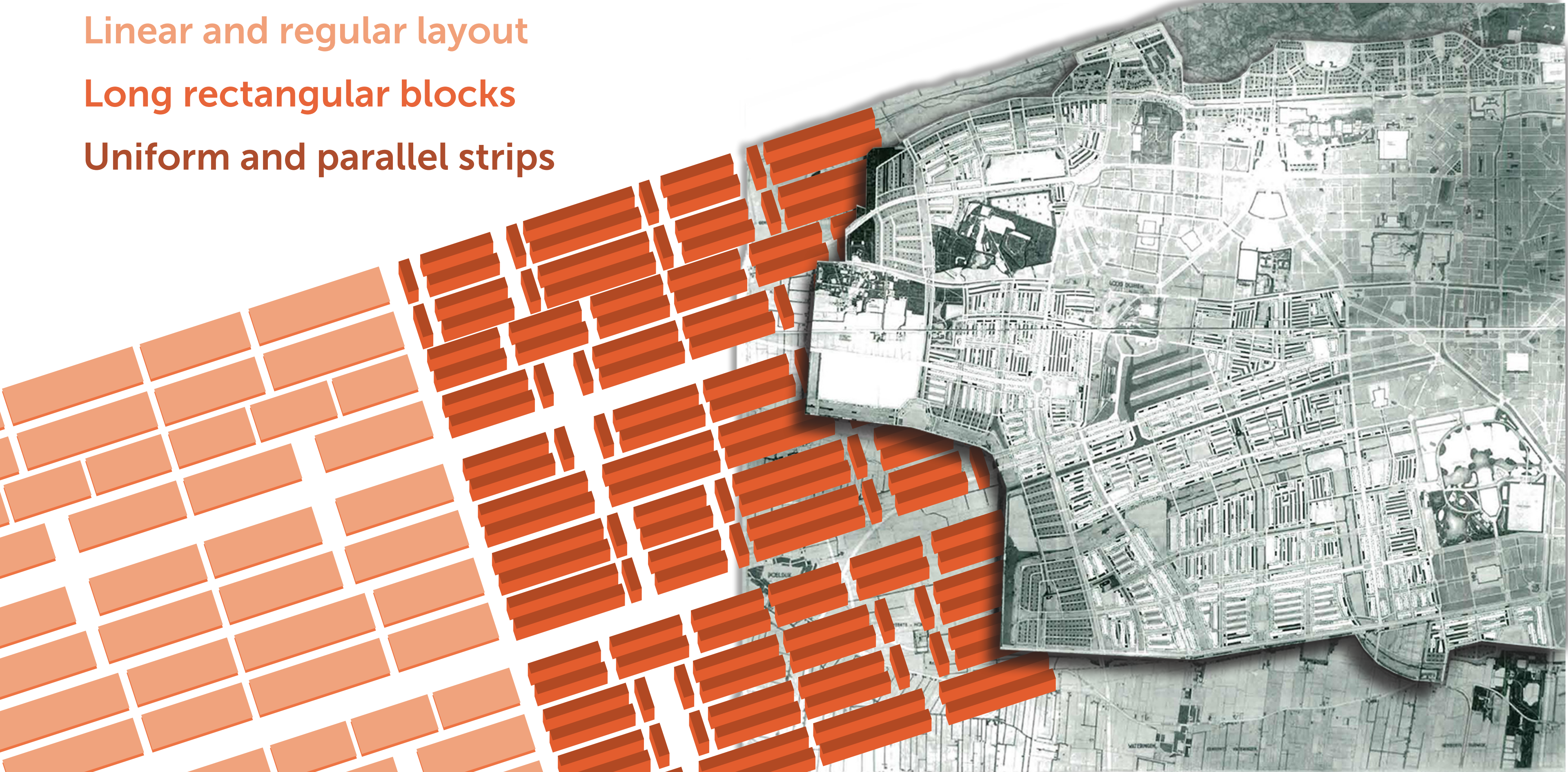


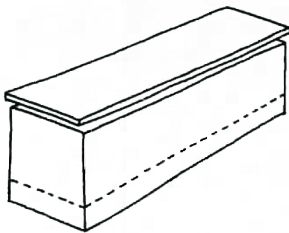


Linear and regular layout

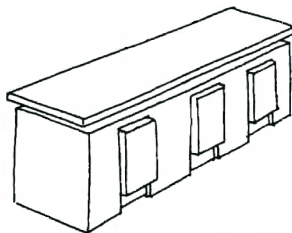
Long rectangular blocks

Uniform and parallel strips

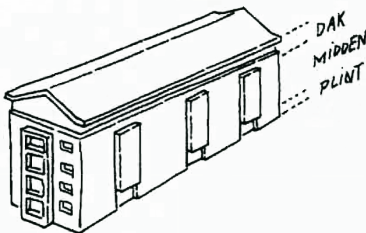
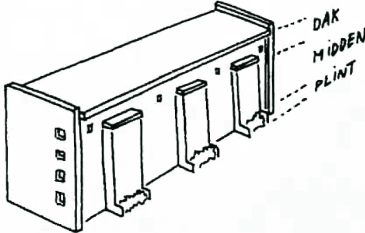




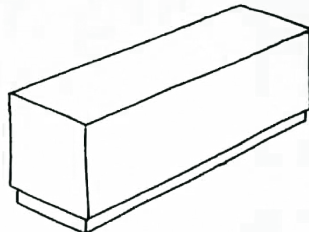
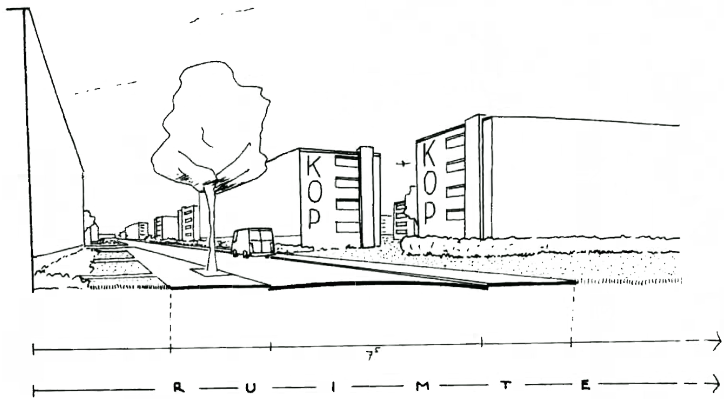
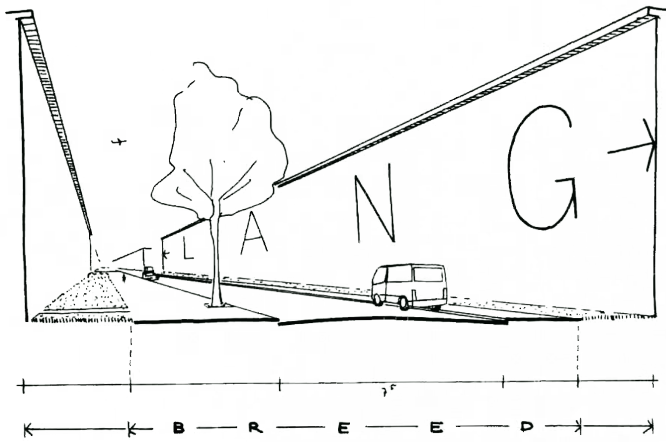
BLOK ONDER EEN DAK



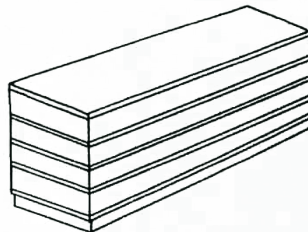
VERTICALE GELEDING VAN DE GEVEL



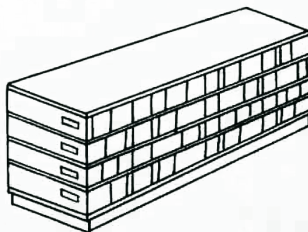
TWEE UITWERKINGEN



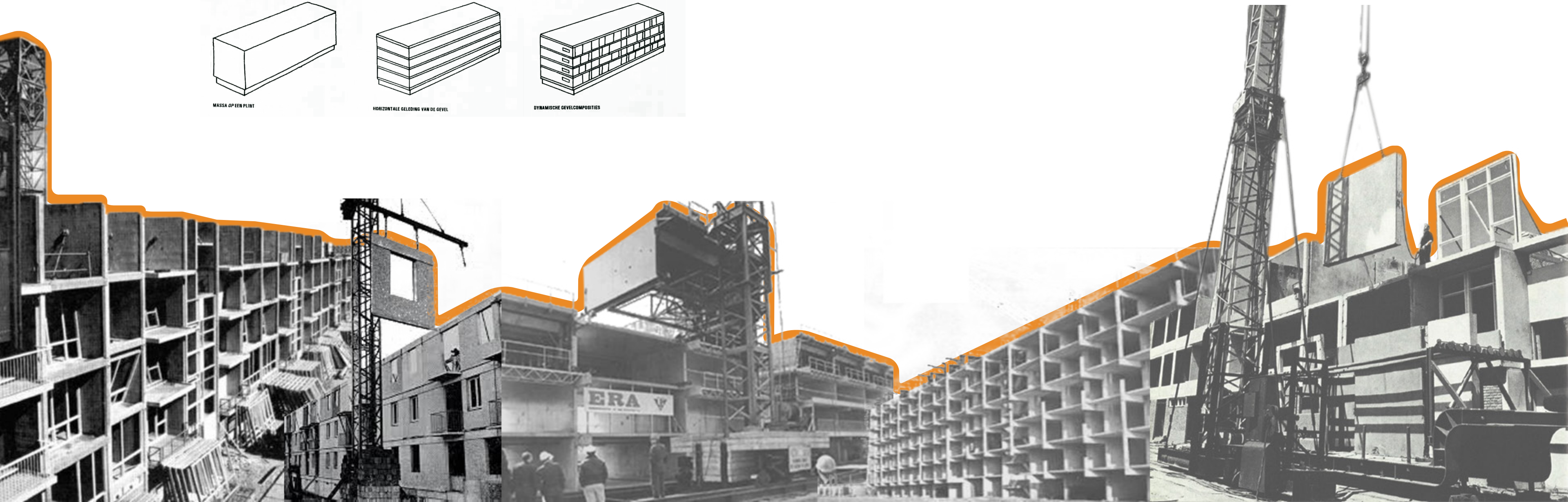
MASSA OP EEN PLINT



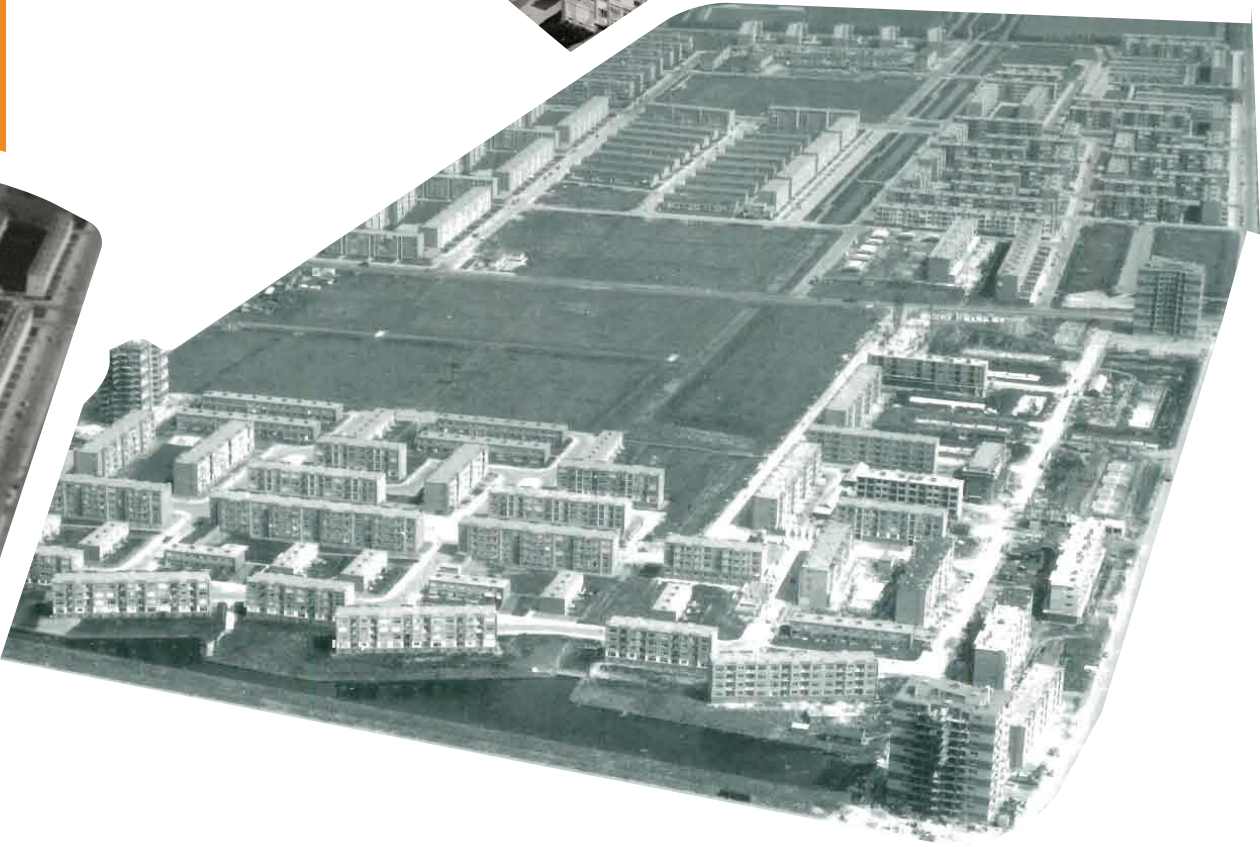
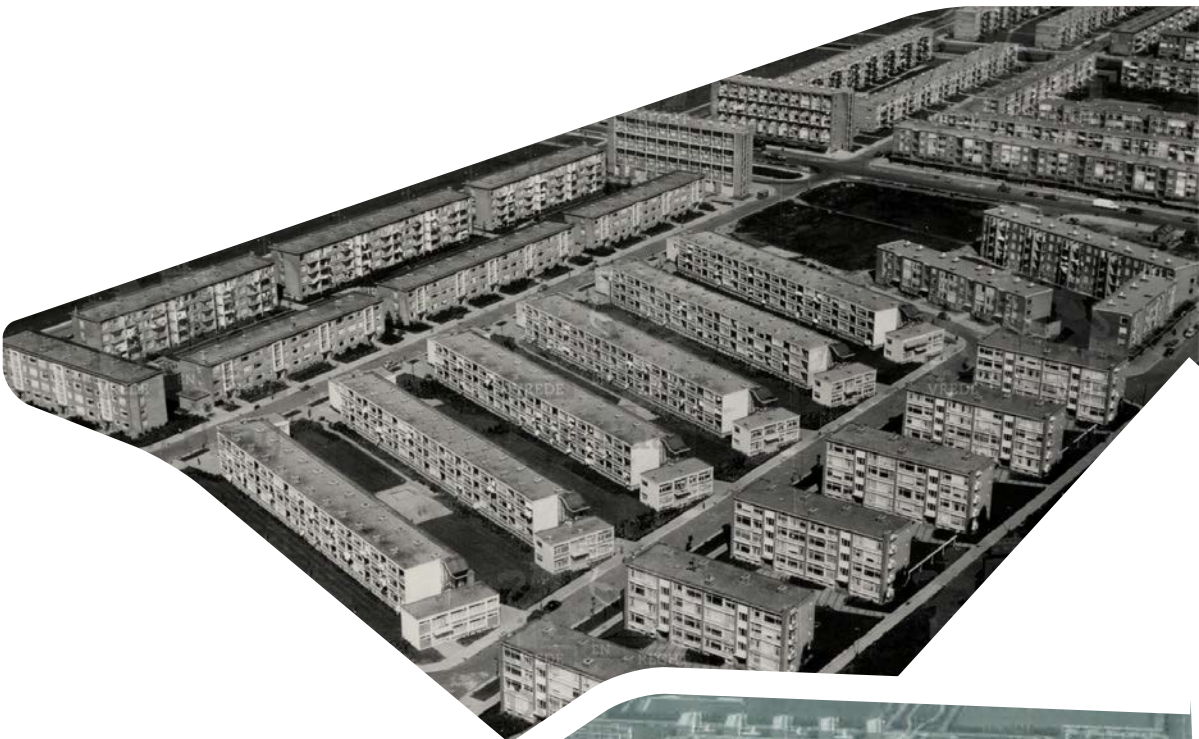
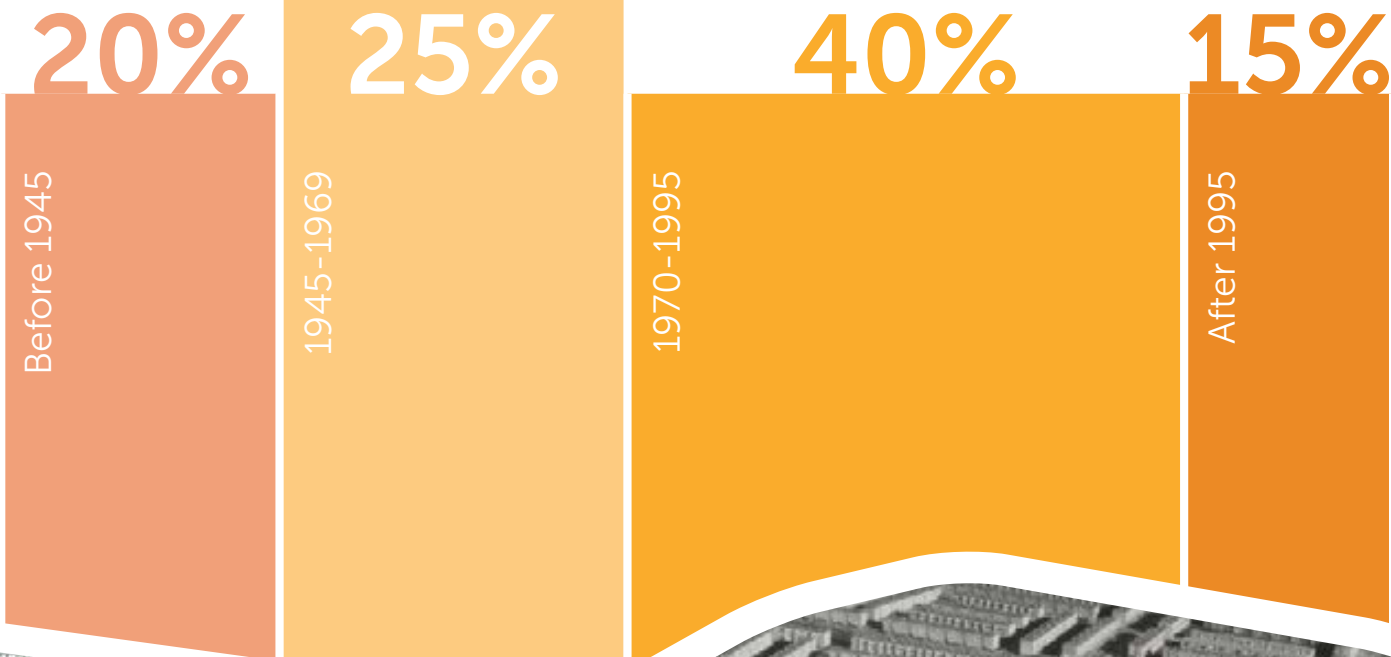
HORIZONTALE GELEDING VAN DE GEVEL

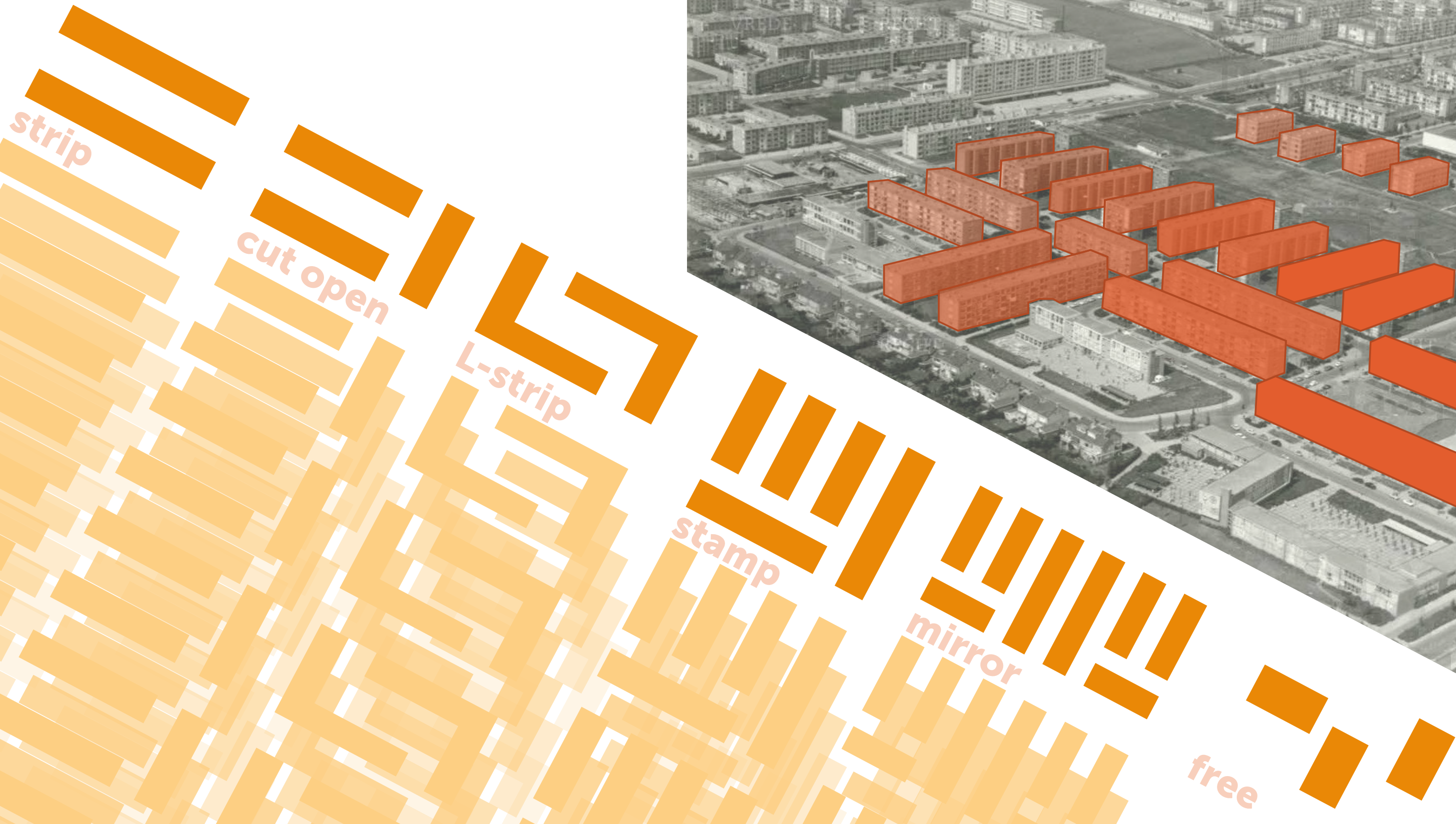
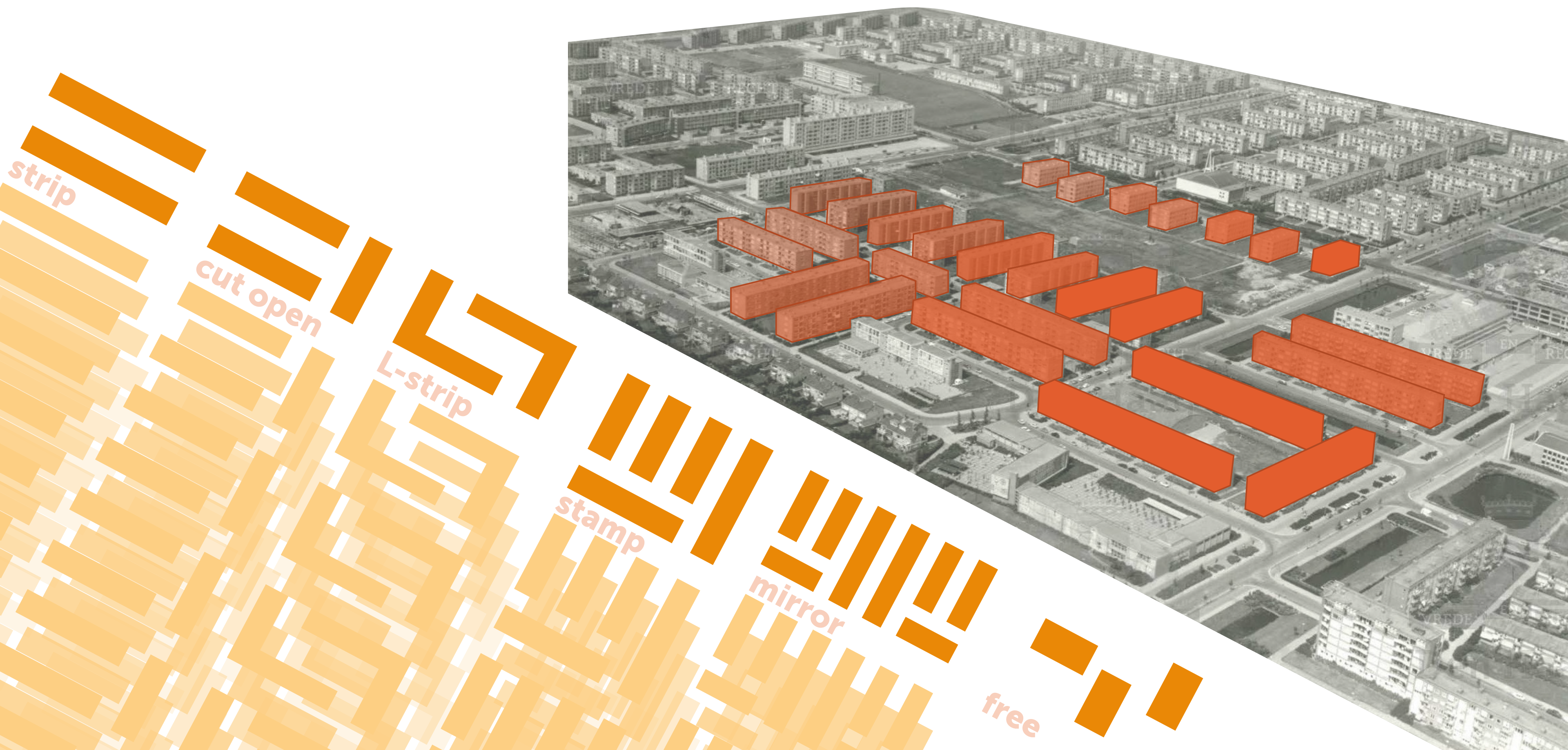


DYNAMISCHE GEVELCOMPOSITIES



two million post-war dwellings





Light Air Space

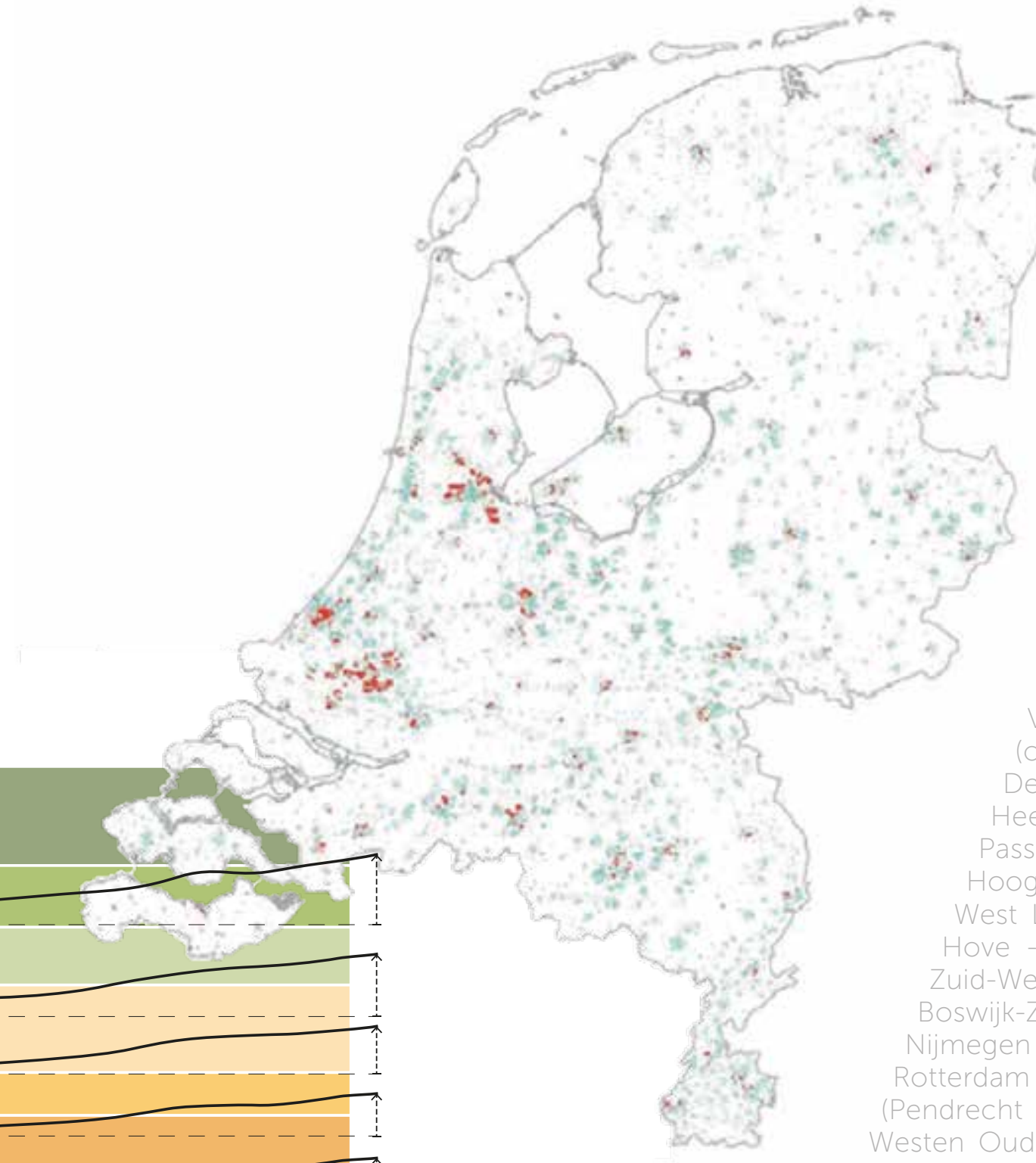
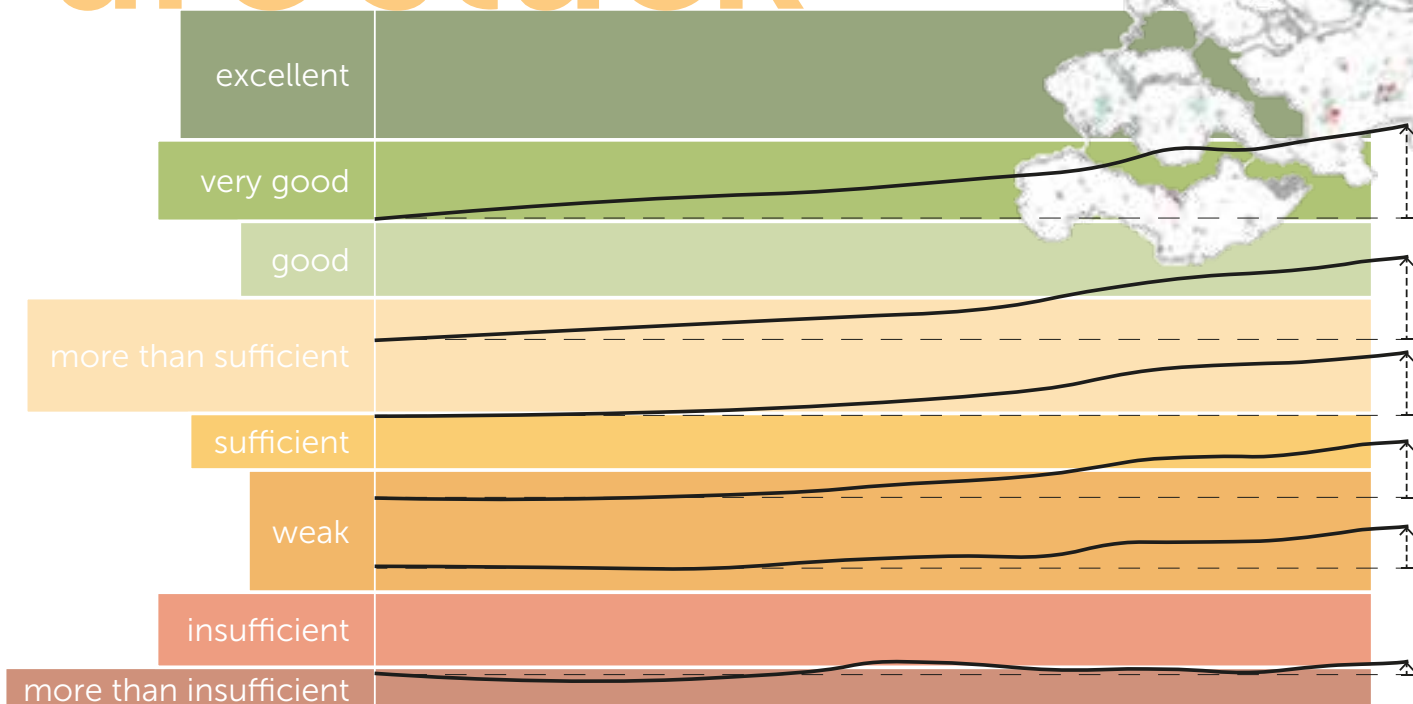


40 Vogelaarwijken



- Overdie
- Alkmaar
- De Kruiskamp
- Amersfoort
- Bos en Lommer, Westelijke Tuinsteden, Oost, Noord, Bijlmer
- Amsterdam
- Klarendal, Presikhaaf, Arnhemse Broek, Malburgen / Immerloo
- Arnhem
- Stationsbuurt, Schilderswijk, Bouwlust, Vrederust, Morgenstond en Moerwijk, Transvaal, Rivierenwijk
- Den Haag
- Wielwijk / Crabbehof
- Deventer
- Woensel West, Doornakkers, Bennekel
- Dordrecht
- Velve-Lindenhof
- Eindhoven
- Korrewegwijk, De Hoogte
- Enschede
- Meezenbroek
- Groningen
- Heechterp-Schieringen
- Heerlen
- Noordoost
- Leeuwarden
- Hatert
- Maastricht
- Oude Westen, Oude Noorden, Crooswijk, Bergpolder, Overschie, Oud Zuid, Vreewijk, Pendrecht, Zuidwijk, Nieuwland
- Nijmegen
- Kanaleneiland, Ondiep, Overvecht, Zuilen Oost
- Rotterdam
- Poelenburg
- Schiedam
- Utrecht
- Zaanstad

510.000
people
are stuck



2000

643 Nota 'Mensen, Wensen, Wonen' - VROM

2003

56 Stedelijke Vernieuwing Winsemius - VROM

2007

140 Vogelaarswijken - Minister WonenWijkenIntegratie

2010

37 40-plus wijken - VROM

2016

12 Platfrom31 wijken

2022

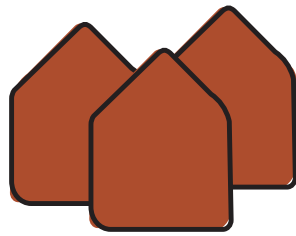
20 Urban focus areas - RVO

Q4 Leutherberg Vogelhut Venray Brukske Vlaardingen Babberspolder Oost Zaanstad Zaandam
Zuidoost Poelenburg Zoetermeer Palenstein Meerzicht Zwolle Holtenbroek Diezerpoort

320.000 housing shortage



The Netherlands is dealing with a **housing** and **liveability** crisis.



- Shortage of 320.000 dwellings
- Need of 900.000 homes by 2030
- Inbalance in housing typologies
- Existing housing stock lacking
- 510.000 people poor living quality
- The worst are under constant pressure
- Spatial inequality increases
- Vulnerable population is stuck

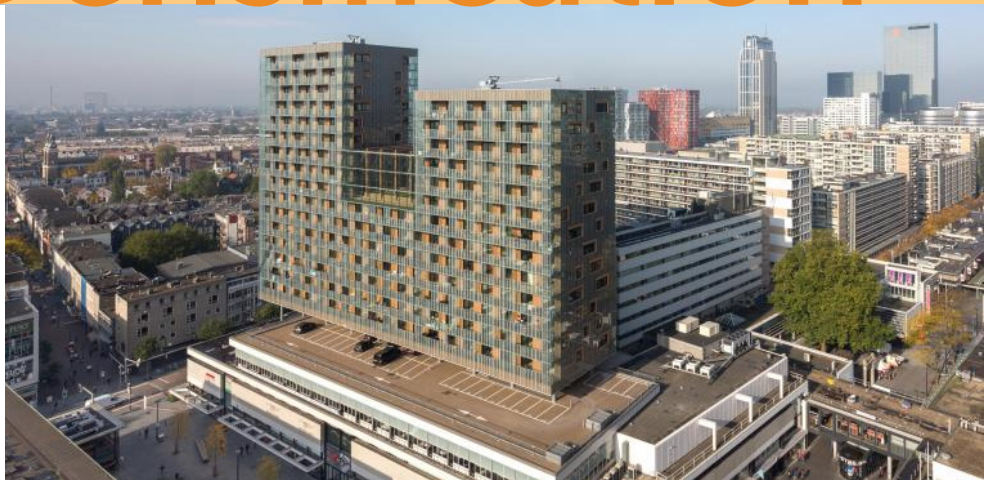


Renovation



Demolition

Densification



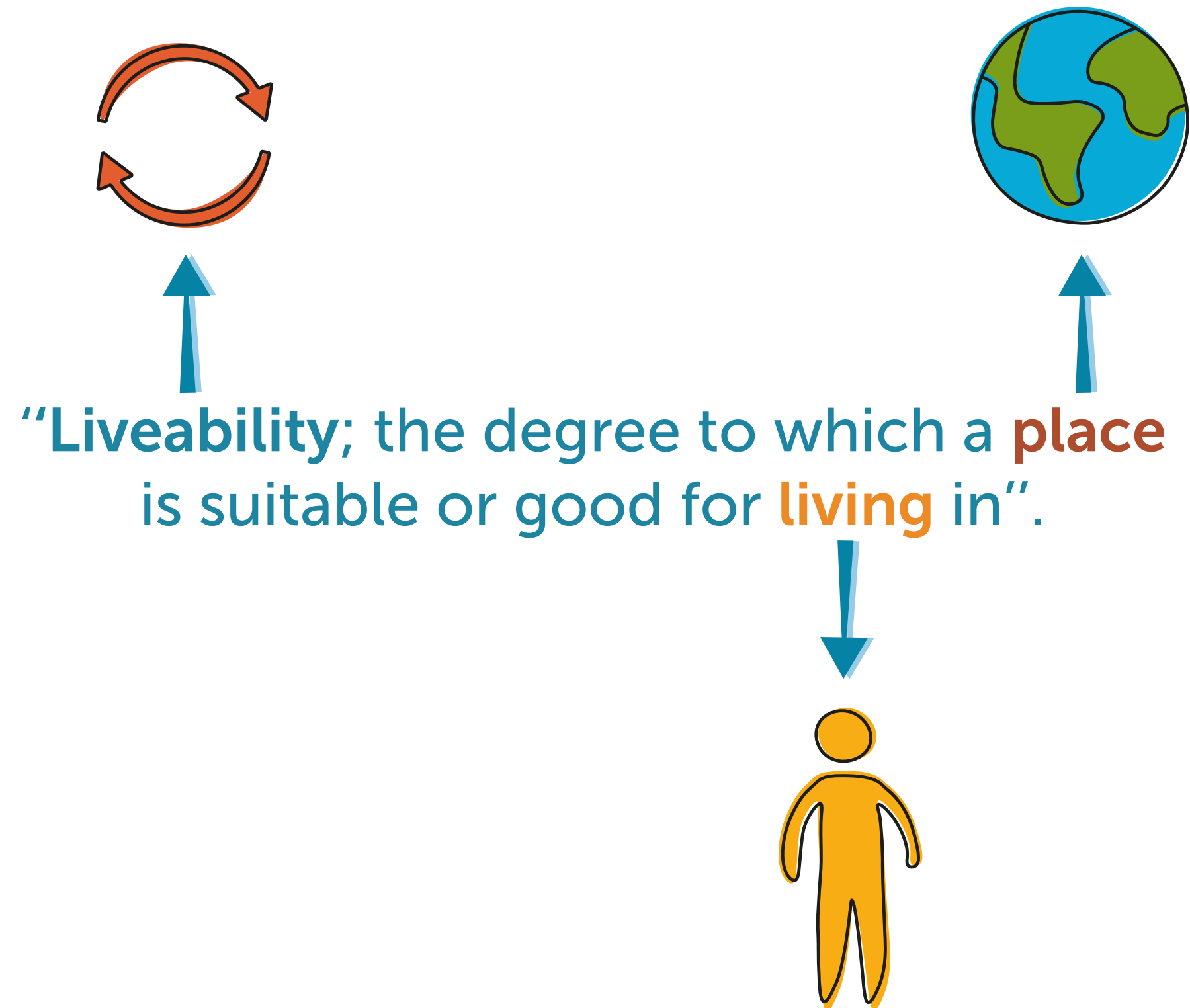
City expansion

Main question: How can densification be the catalyst to the improvement of liveability in post-war neighborhoods?

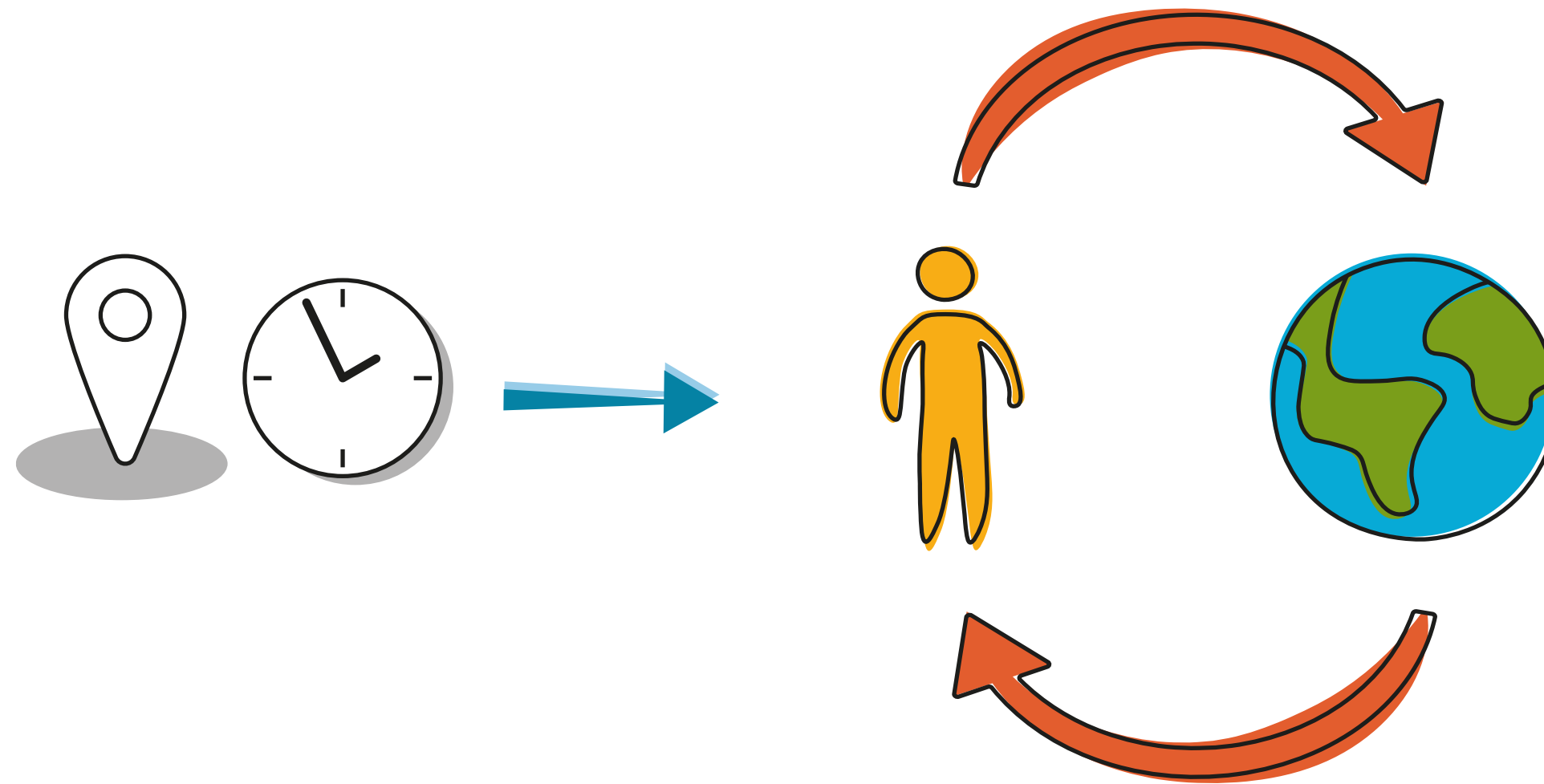


Research

Liveability
Densification
Case studies

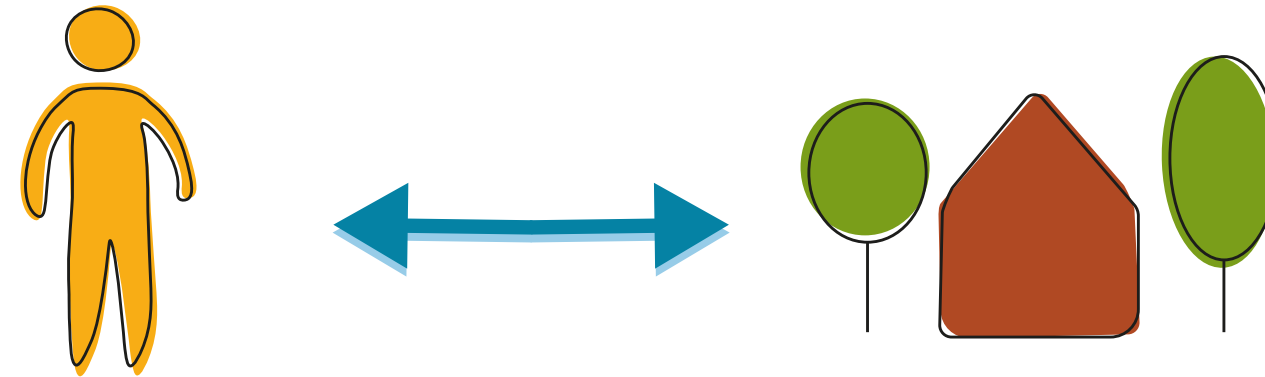


Object Environment



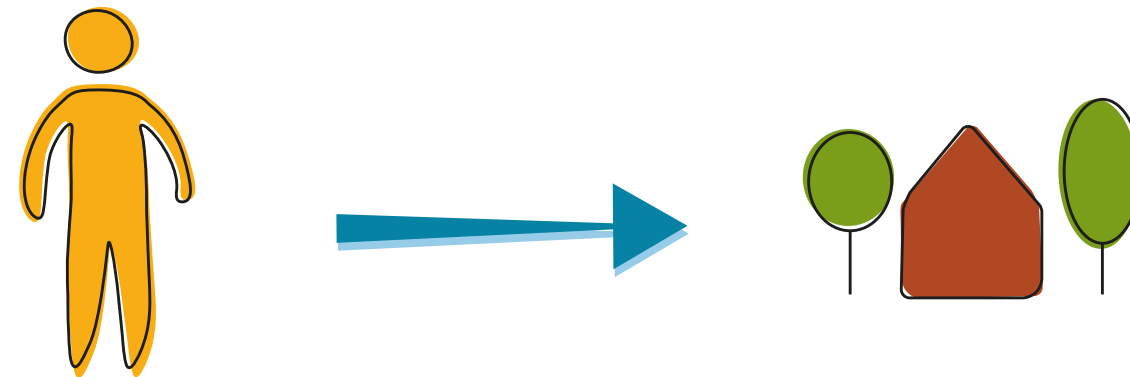
Time Place

Apparant



Theory

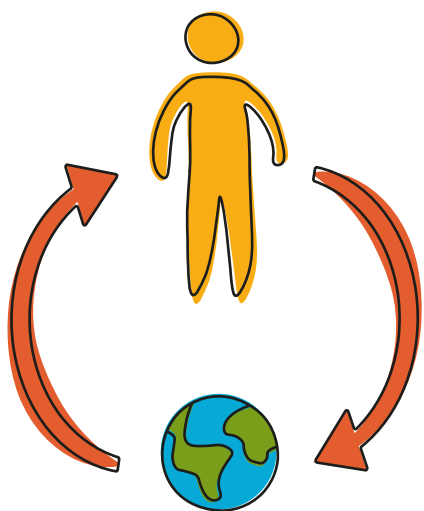
Perceived



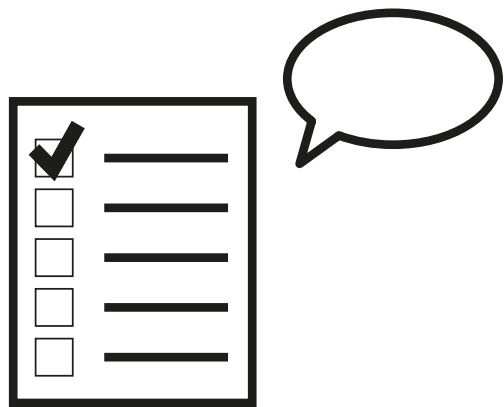
Supposed



Practice



Perceived

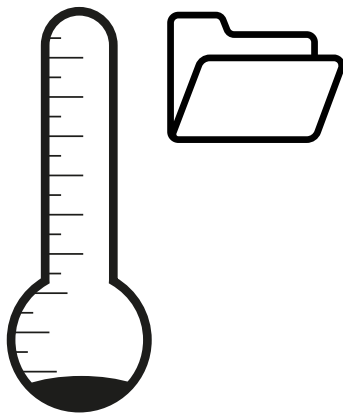


Questionnaire

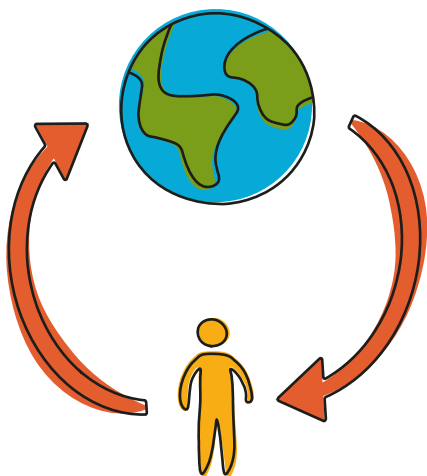
Questions

- Quality of dwelling
- Quality of living environment
- Greenery and playing facilities
- Presence of public amenities
- Social situation of living environment
- Loneliness
- Nuisance
- Sense of safety
- Progress and responsibility of liveability

Supposed



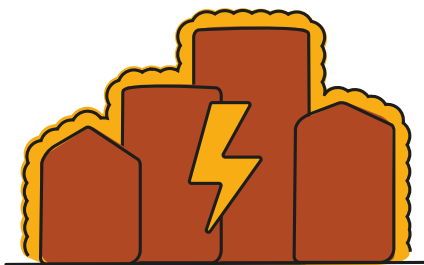
Calculation tool



Numbers

- Recorded crimes
- Presence and proximity to amenities
- Leisure and sports facilities
- Diversity by stage of life
- Density of inhabitants
- Quality of dwellings
- Housing typologies
- Road safety
- Presence of and proximity to greenery

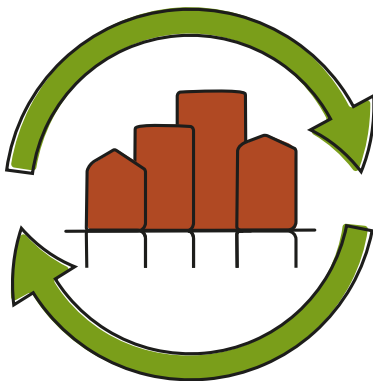
Efficient energy usage



Support urban amenities



Reuse of existing urban areas



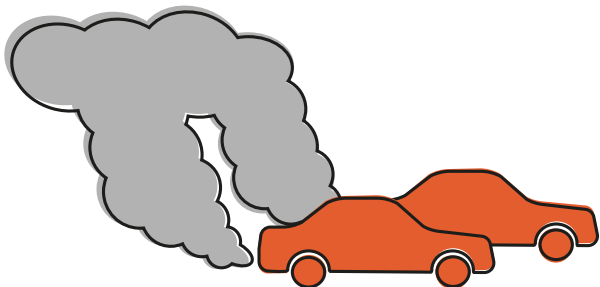
Social urban vitality



Strengthen local economy



Limitation of car-use



Preservation unbuilt spaces



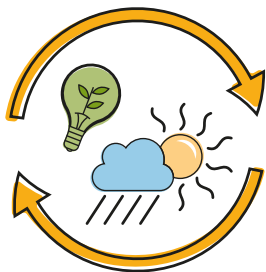
COMPACT CITY



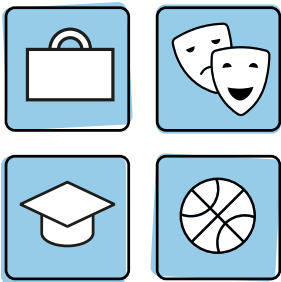
Health



Well-being



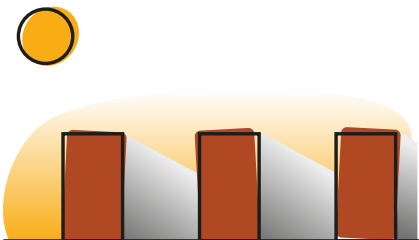
Climate adaption &
renewable energy



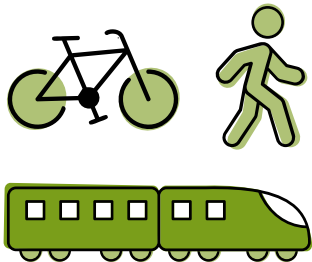
Variety of urban
amenities



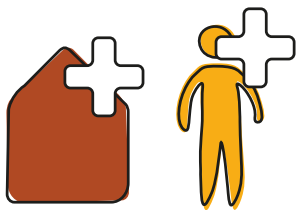
Traffic congestion



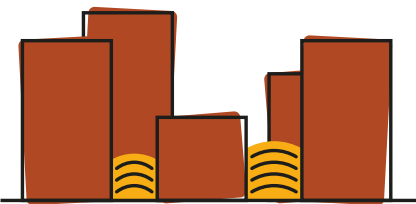
Shadowing



Sustainable modes
of transport



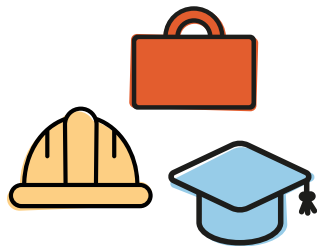
Increase of
dwellings & residents



Diminishing
open space



High costs of
land and buildings



Work, labour &
education

Con's

Pro's

Welschen 7



Kanaleneiland



Platensiedlung



Case studies

Design Framework

Criteria
Relation
Interventions

Mix / Diversity

Population
Housing
Amenities
Greenery

Social interaction

Daily amenities
Dwellings
Public services
Health care

Health

Ecological
Mental
Sustainable
Physical

Human scale

Streetscape
Buildings
Infrastructure
Public space

Mix / Diversity

Population
Housing
Amenities
Greenery

Social interaction

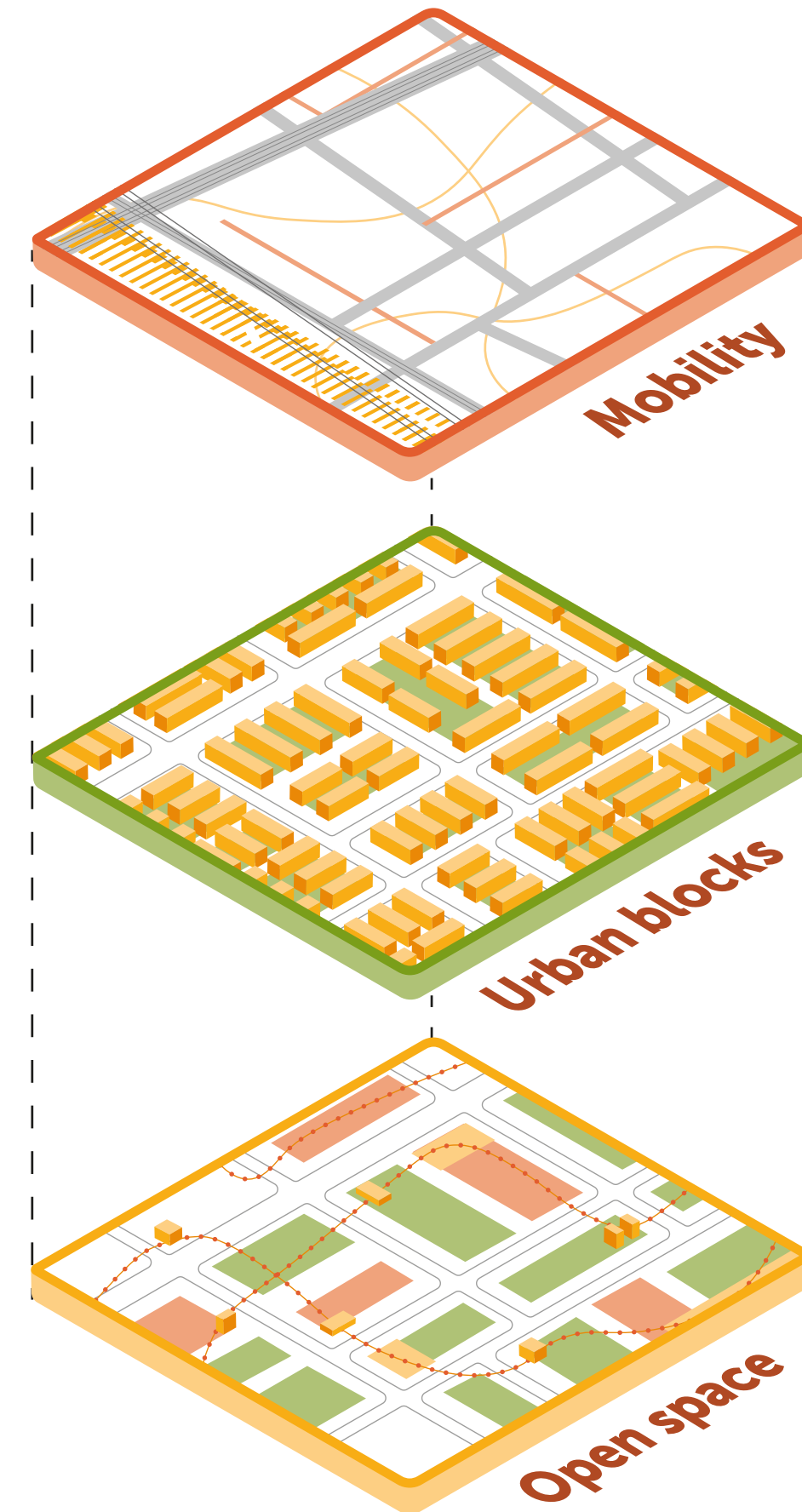
Daily amenities
Dwellings
Public services
Health care

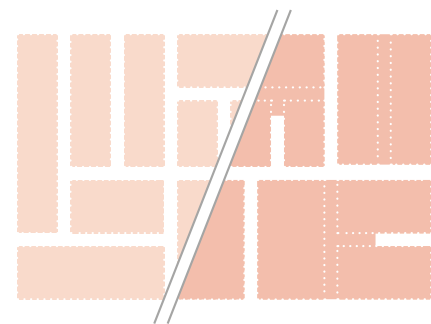
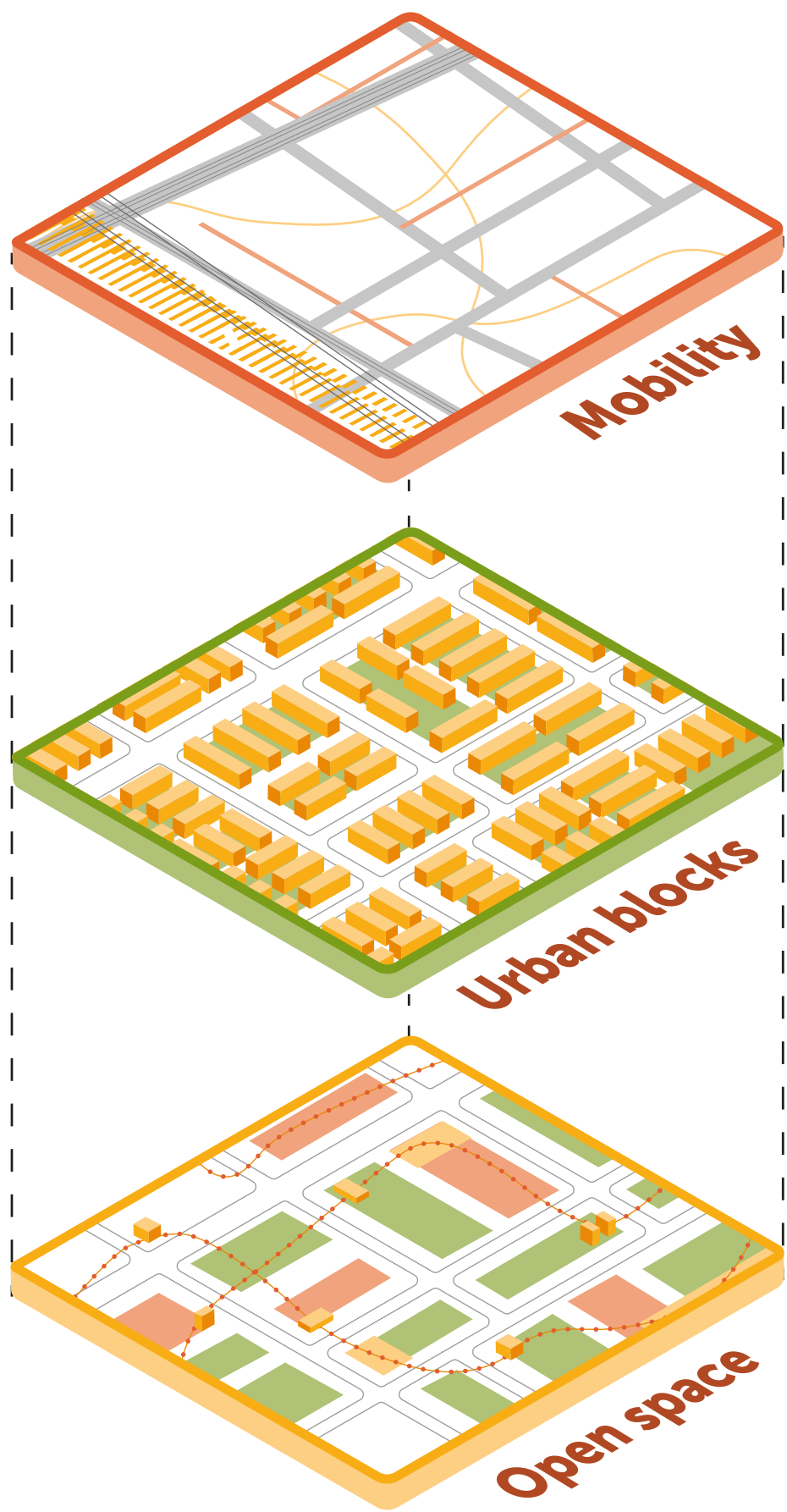
Health

Ecological
Mental
Sustainable
Physical

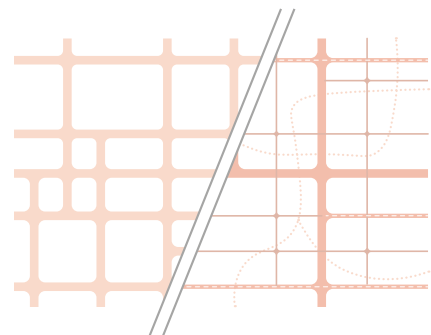
Human scale

Streetscape
Buildings
Infrastructure
Public space

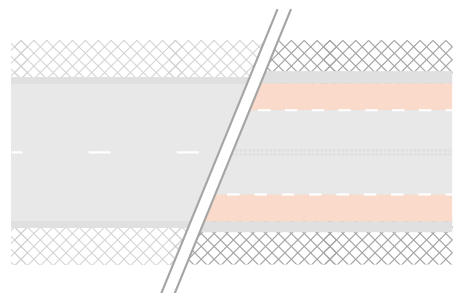




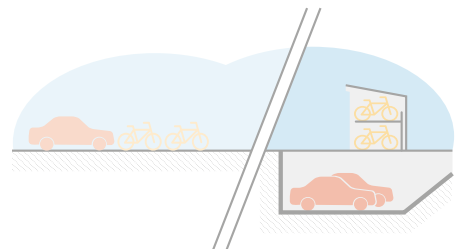
Break with urban fabric



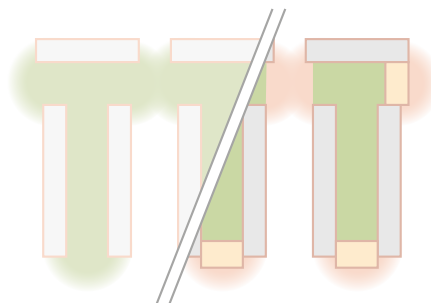
New mobility hierarchy



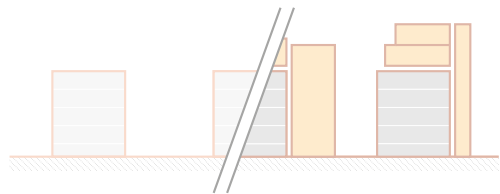
Design for slow traffic



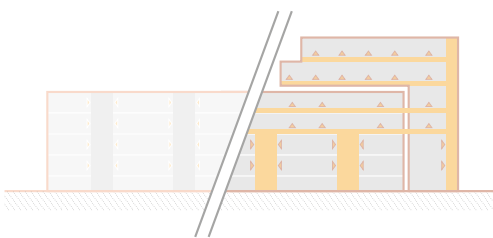
Facilitate parking



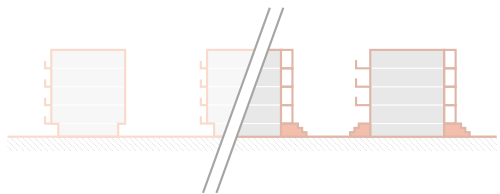
Enclose courtyards



Extent onto buildings



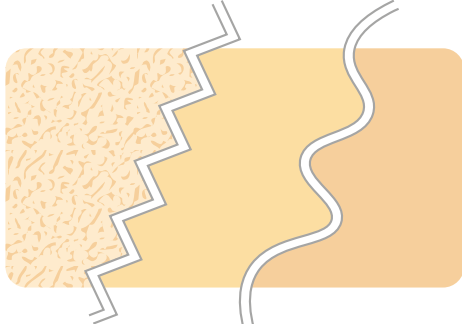
Interactive circulation ways



Connect inside to outside



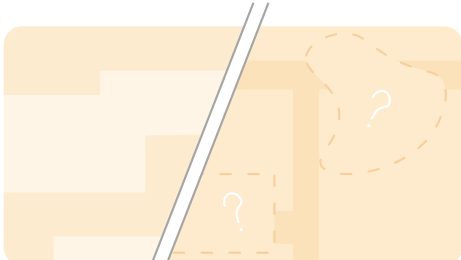
Rebalance open space



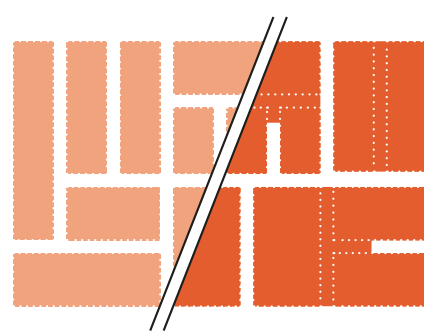
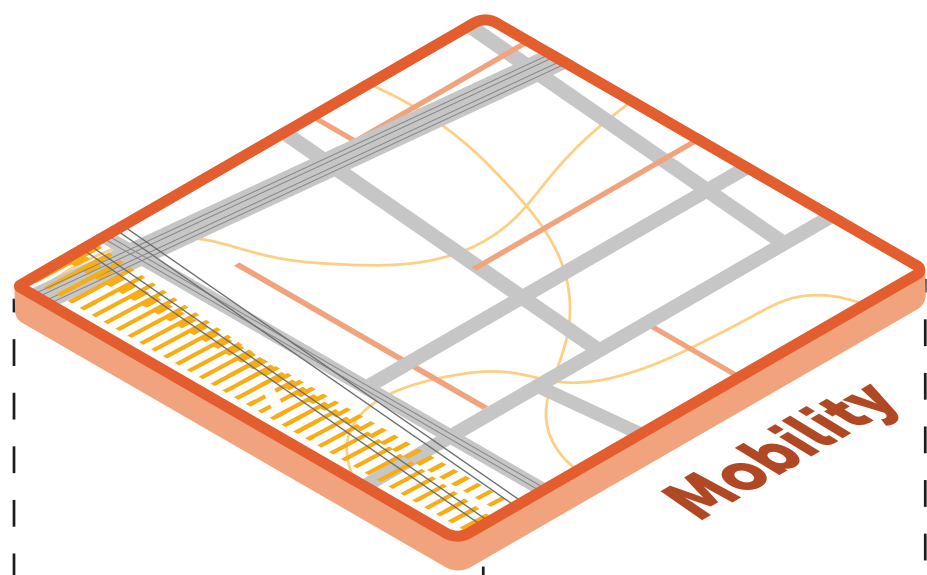
Clearly define borders



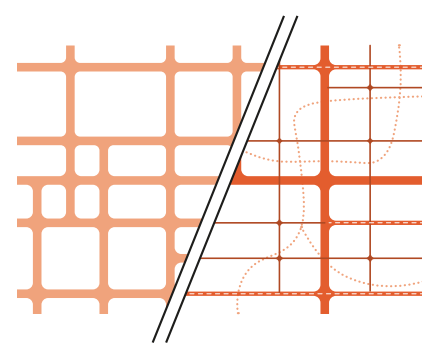
Place for social interaction



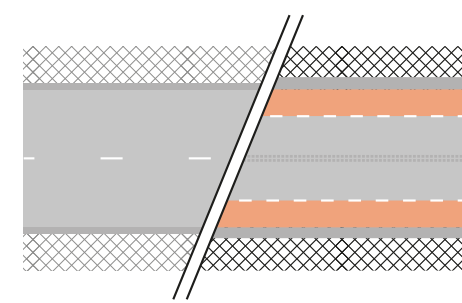
Stimulate civic initiative



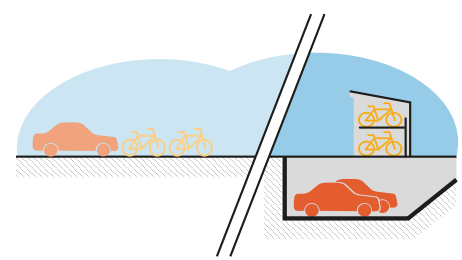
Break with urban fabric



New mobility hierarchy

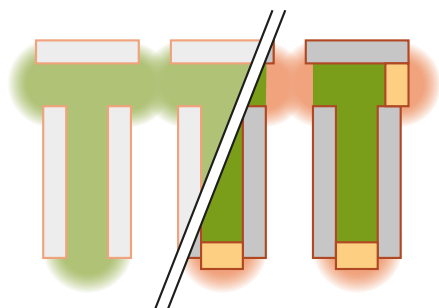
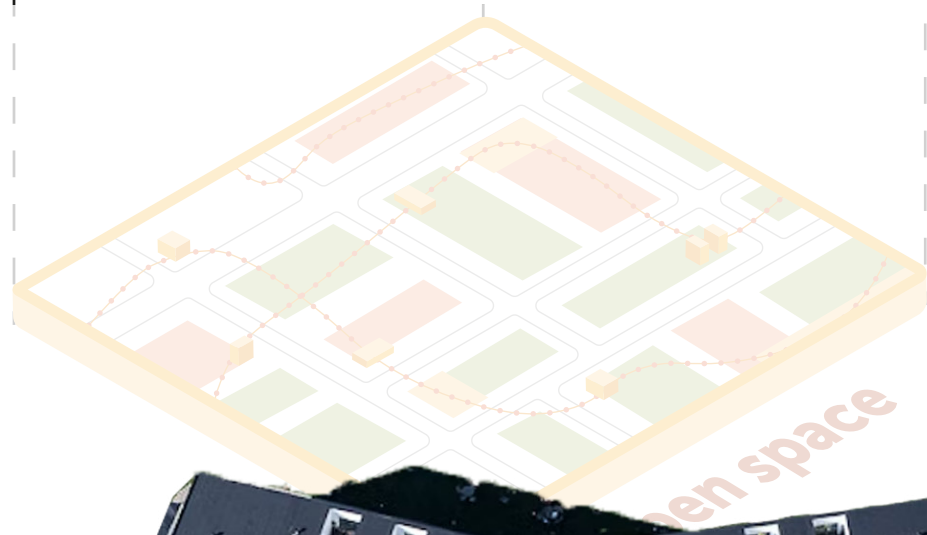
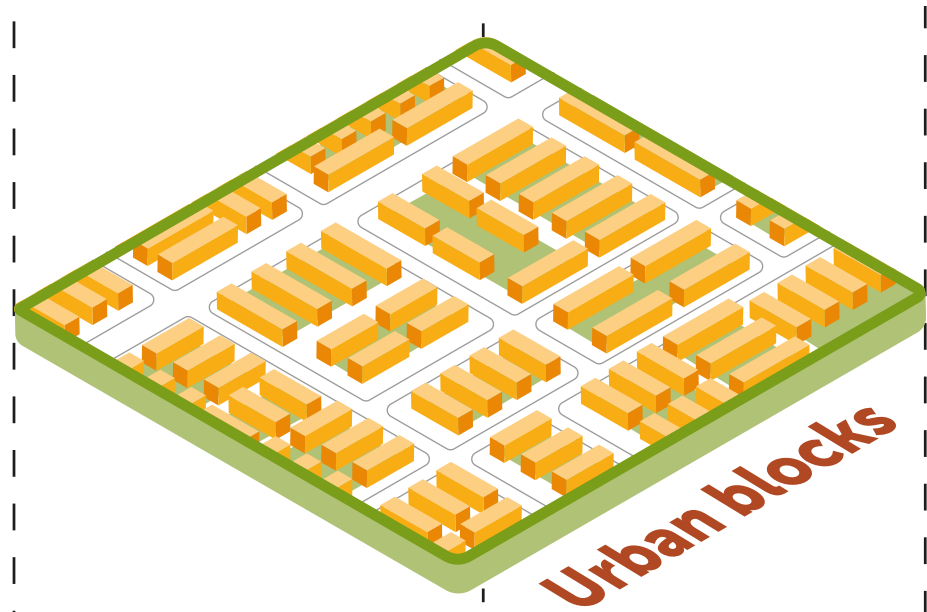


Design for slow traffic

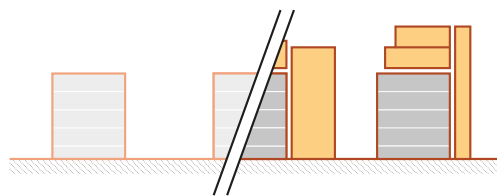


Facilitate parking

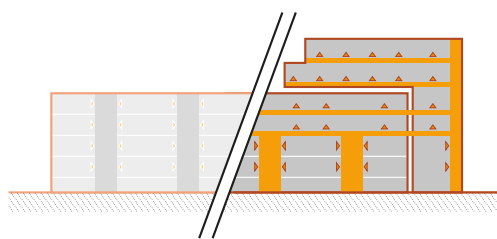




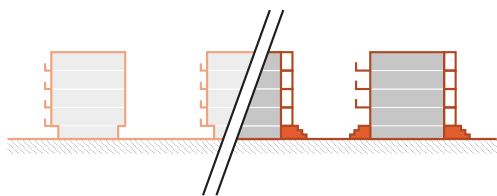
Enclose courtyards



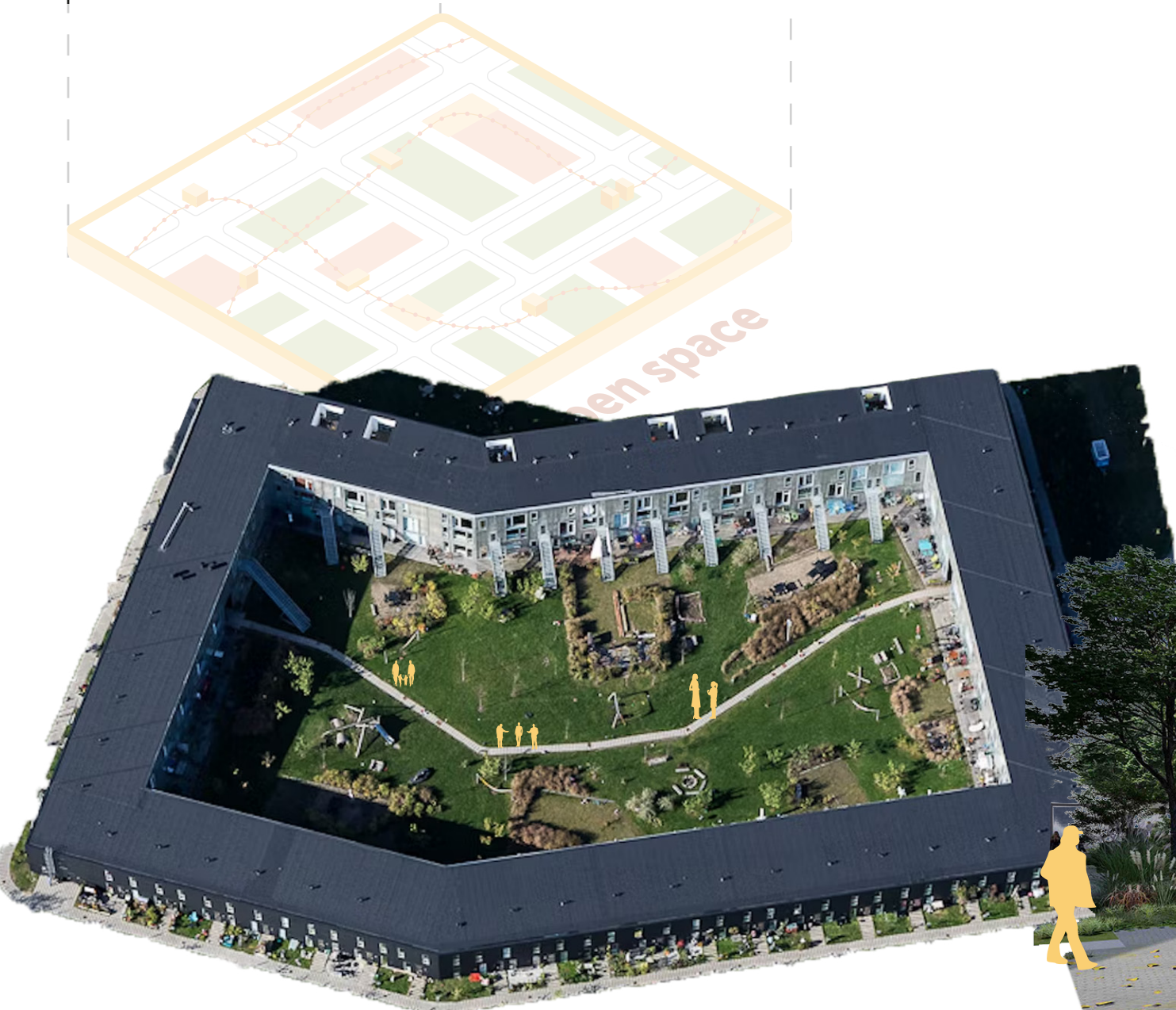
Extent onto buildings

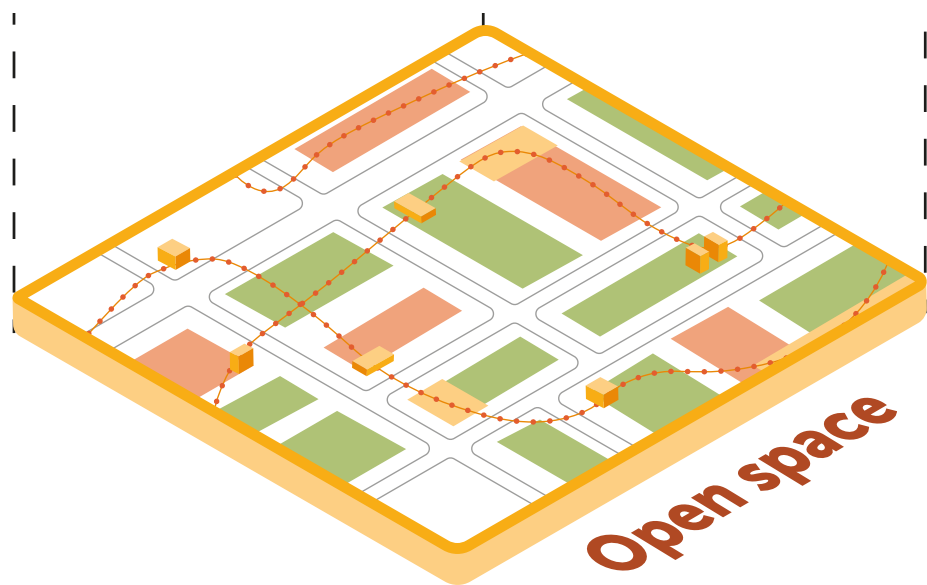


Interactive circulation ways

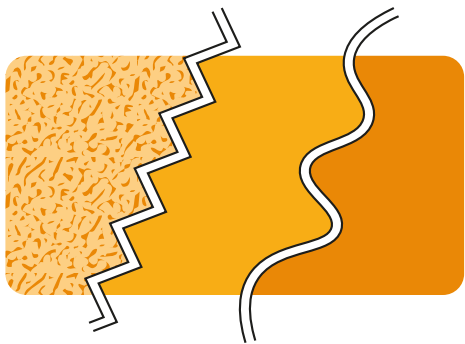


Connect inside to outside





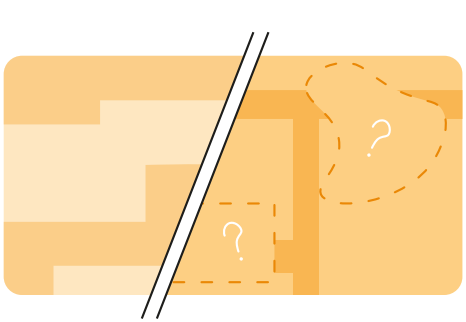
Rebalance open space



Clearly define borders

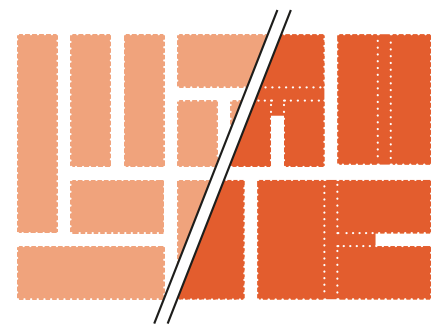
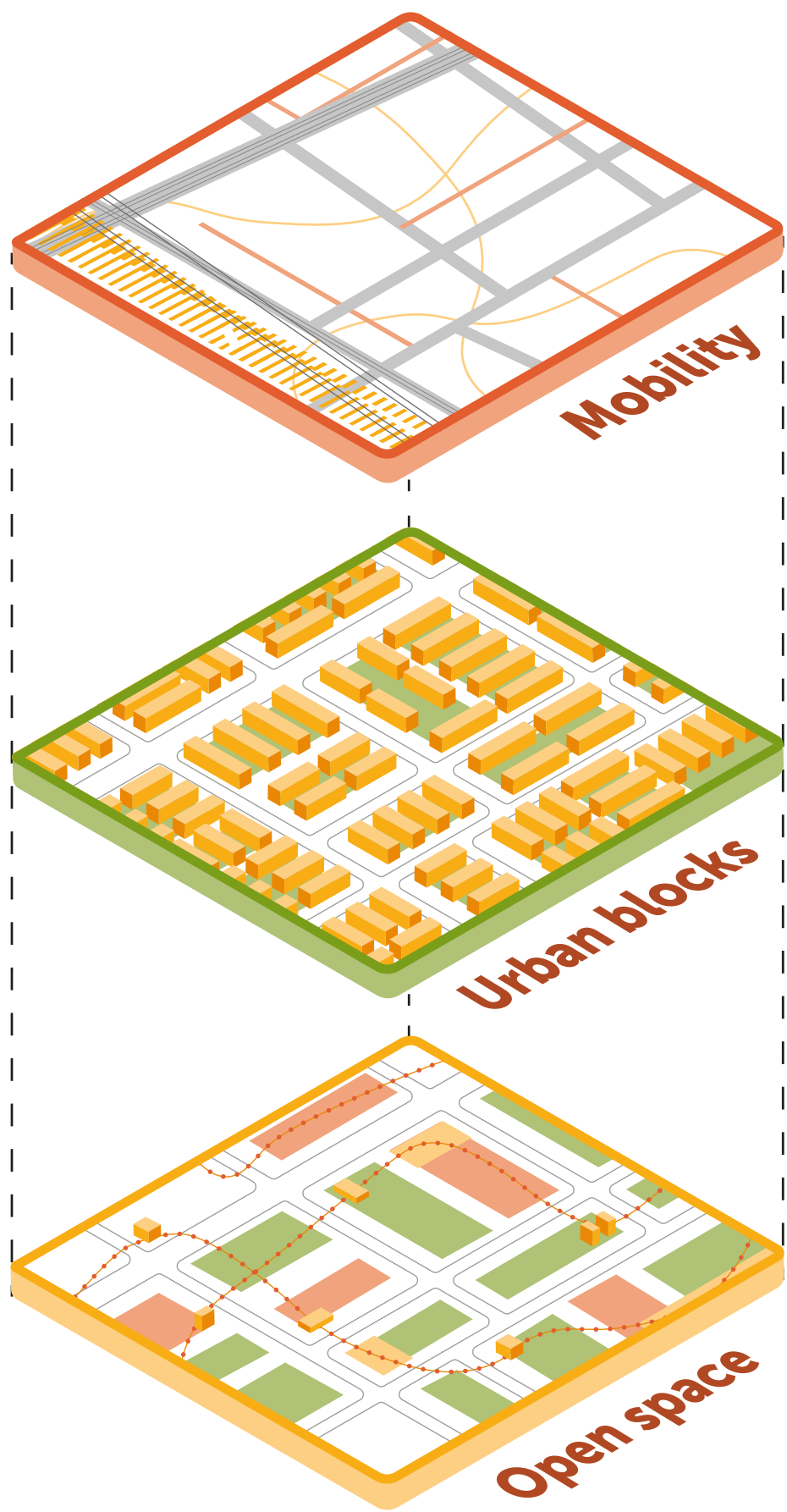


Place for social interaction

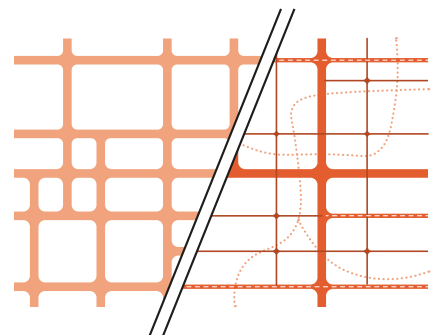


Stimulate civic initiative

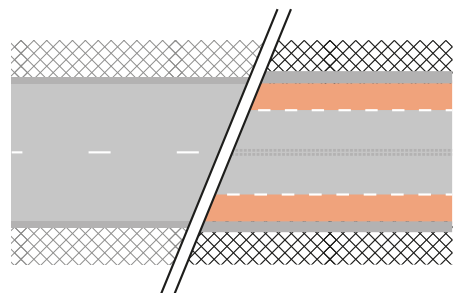




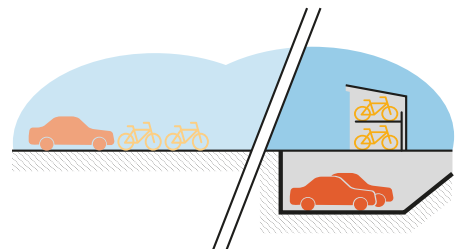
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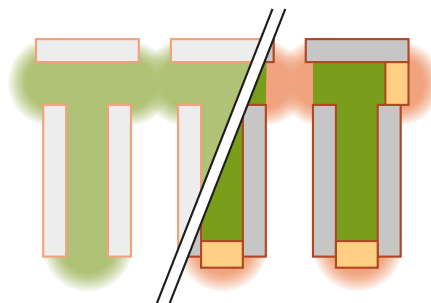
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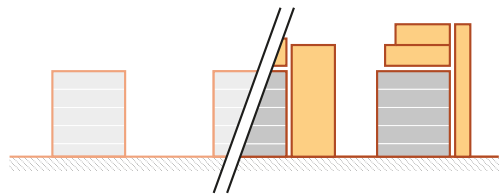
Design for slow traffic



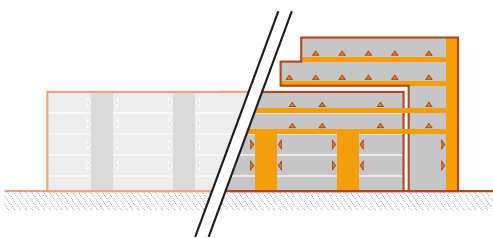
Facilitate parking



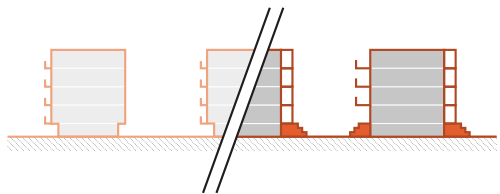
Enclose courtyards



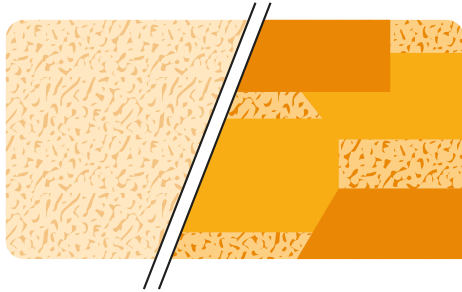
Extent onto buildings



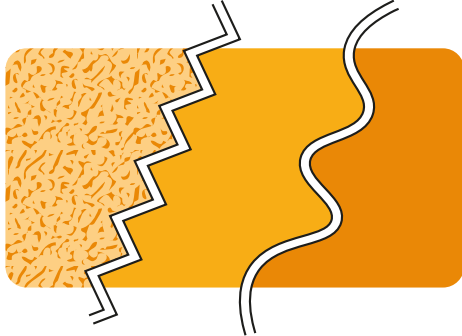
Interactive circulation ways



Connect inside to outside



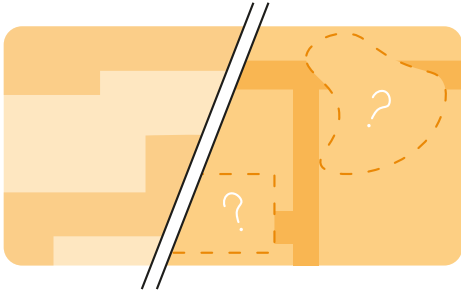
Rebalance open space



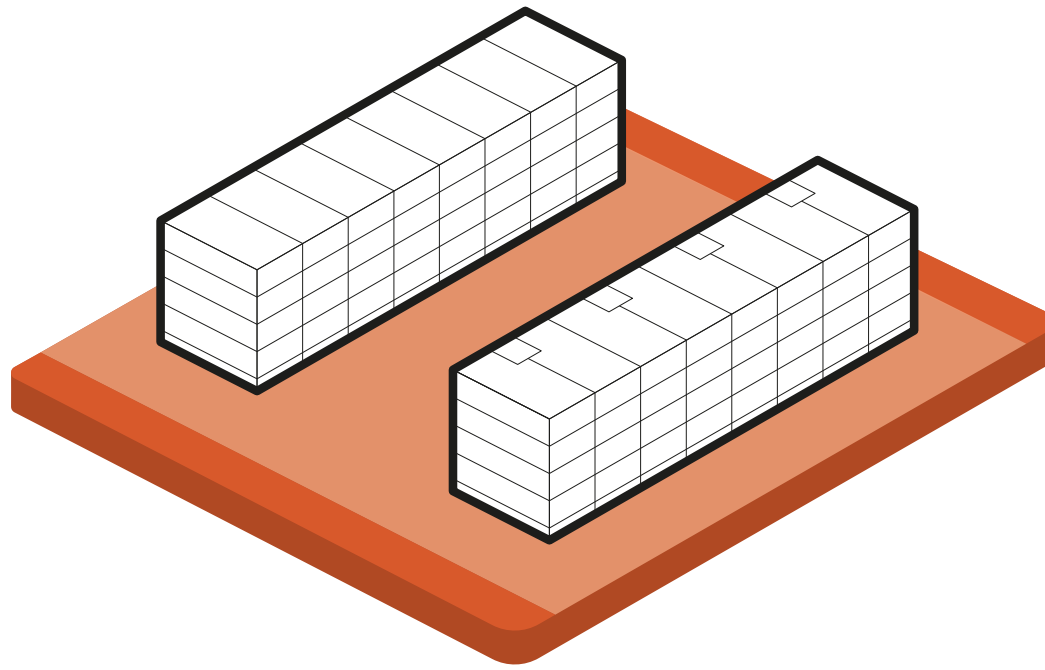
Clearly define borders



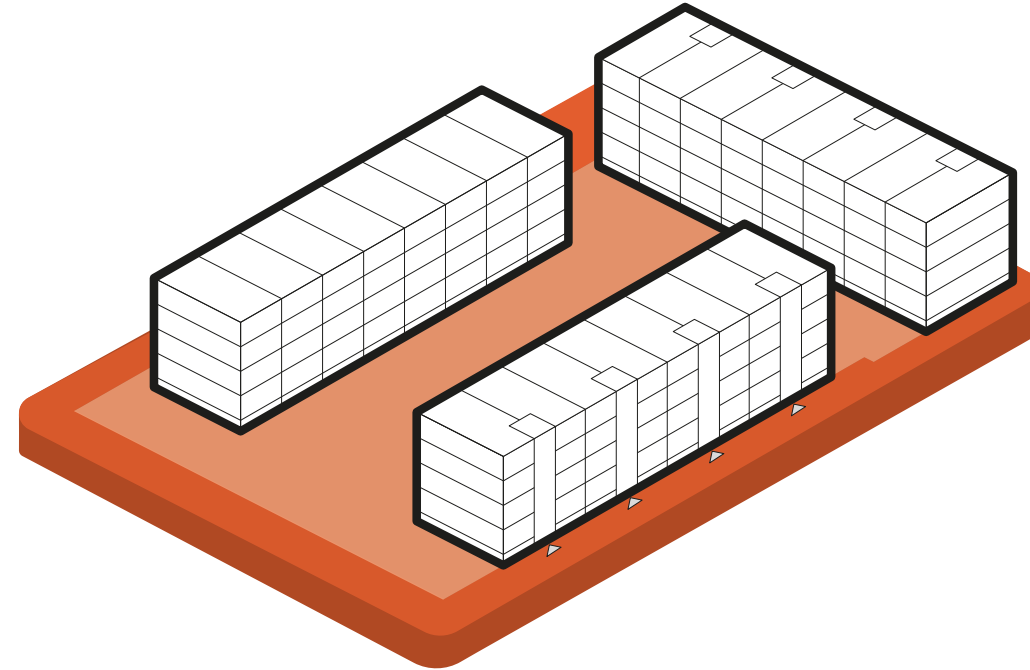
Place for social interaction



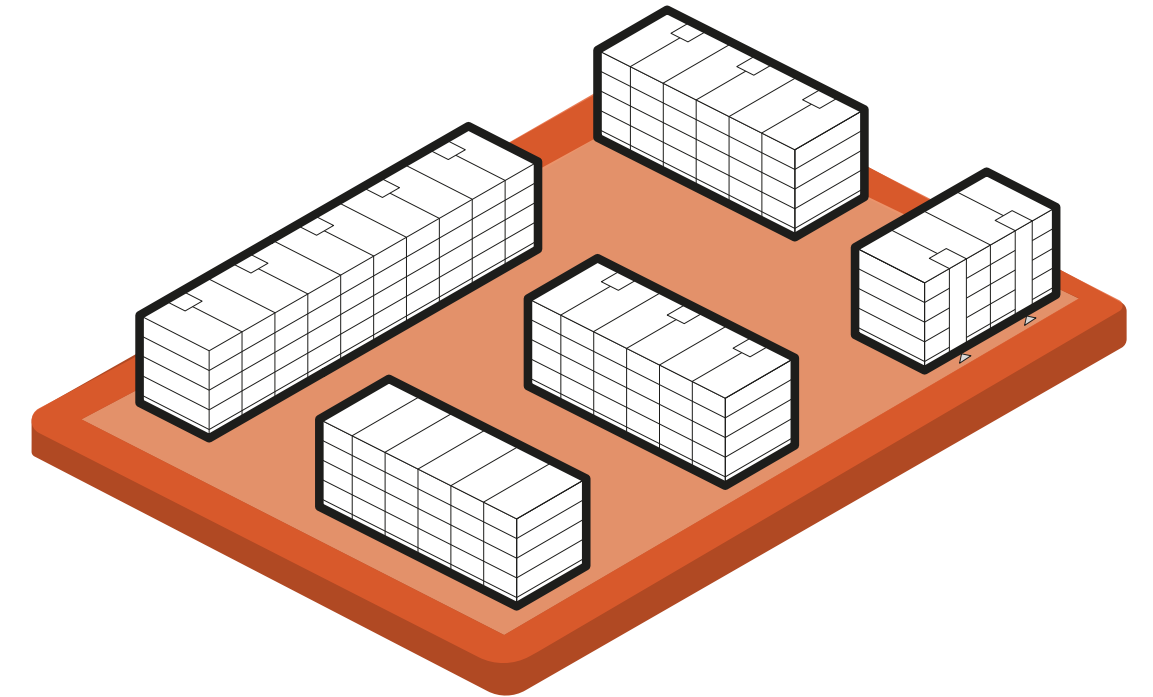
Stimulate civic initiative



parallel

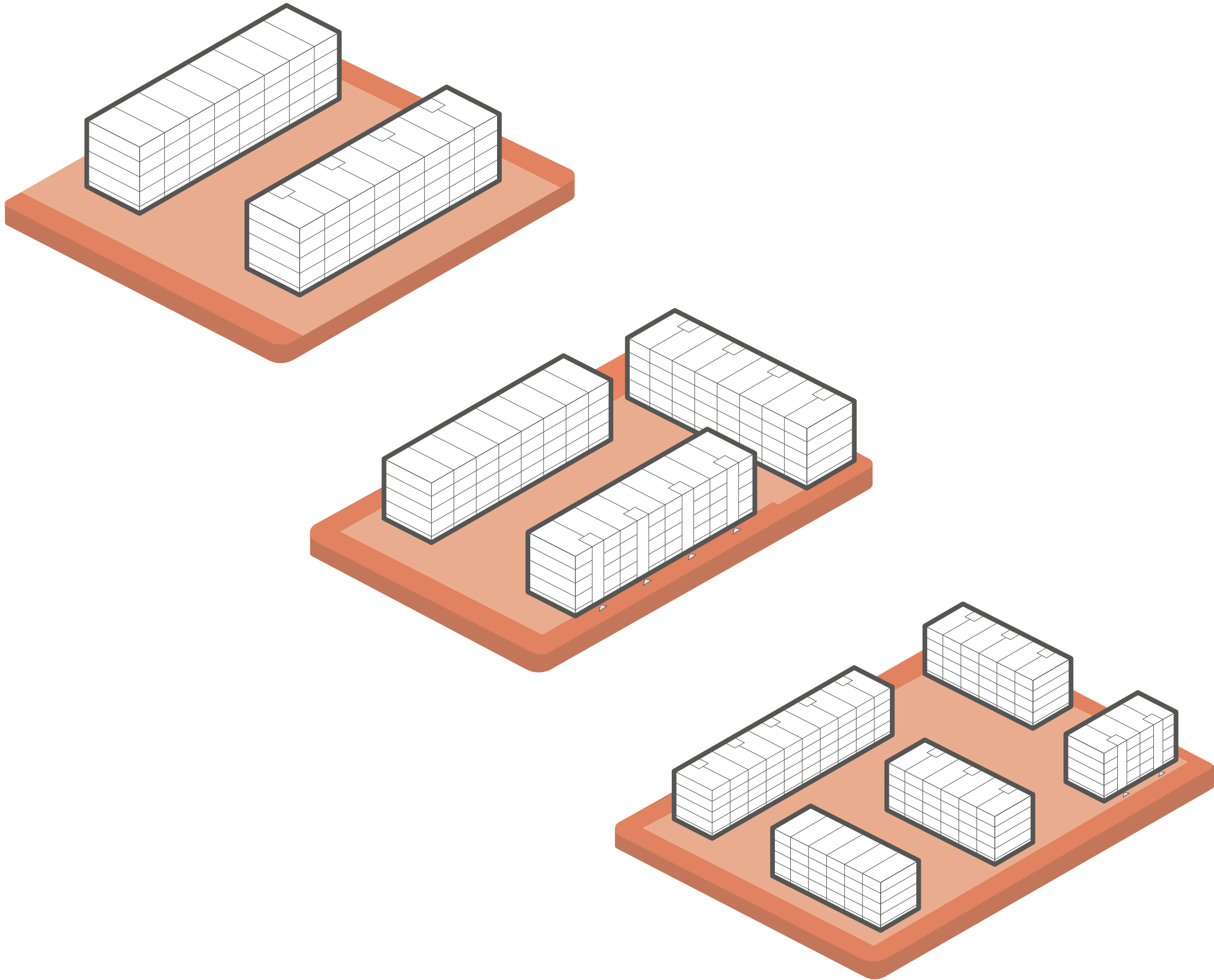
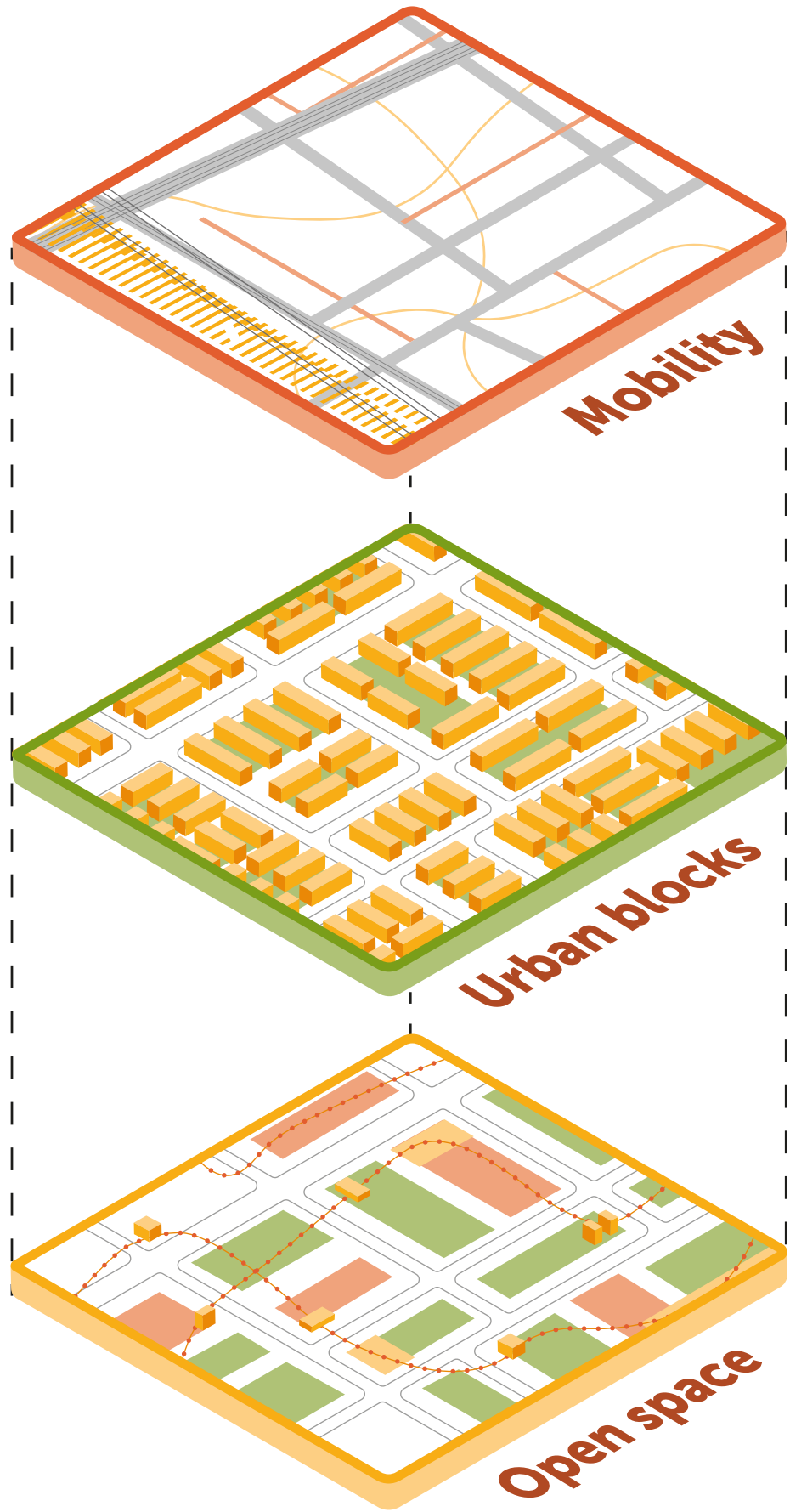


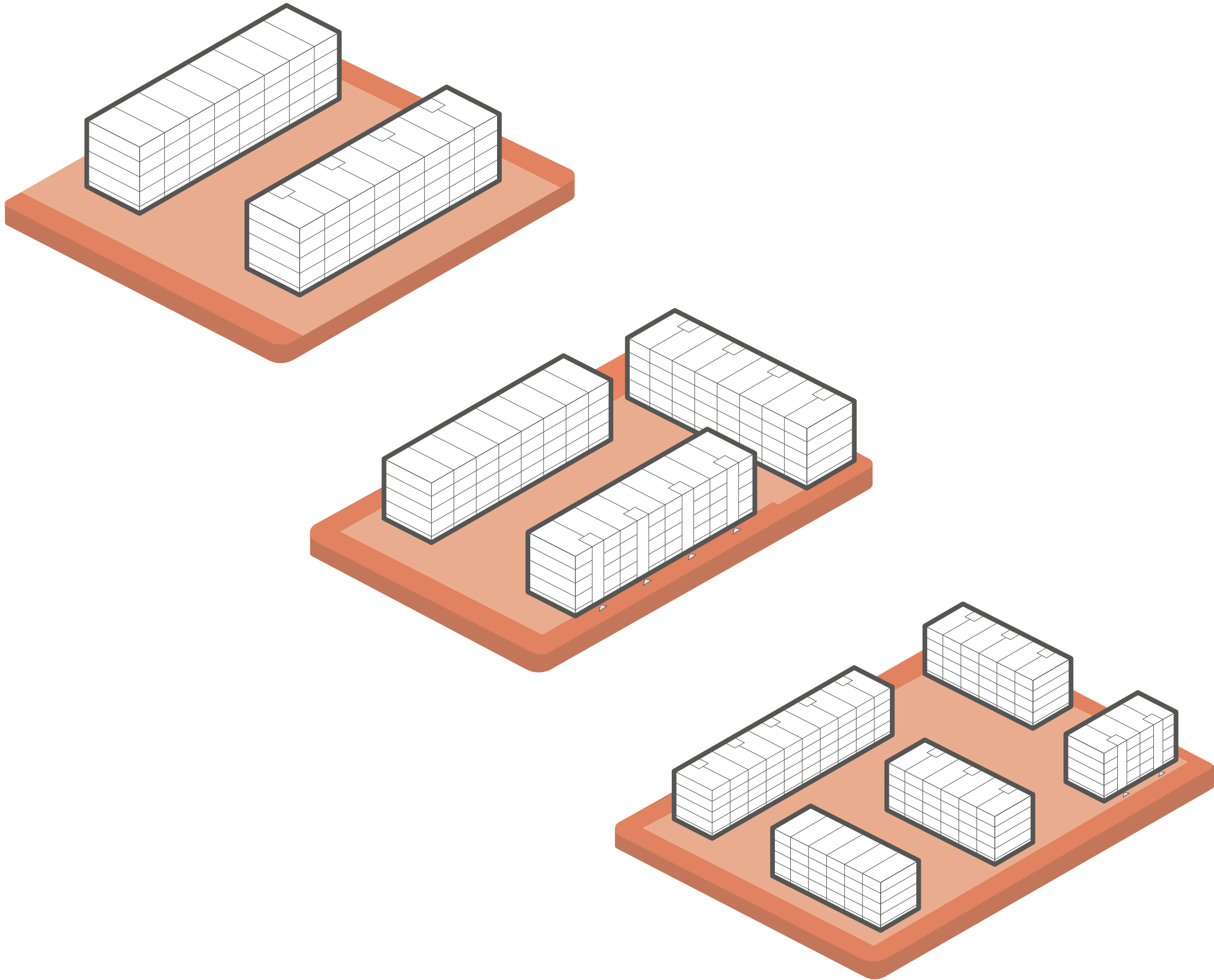
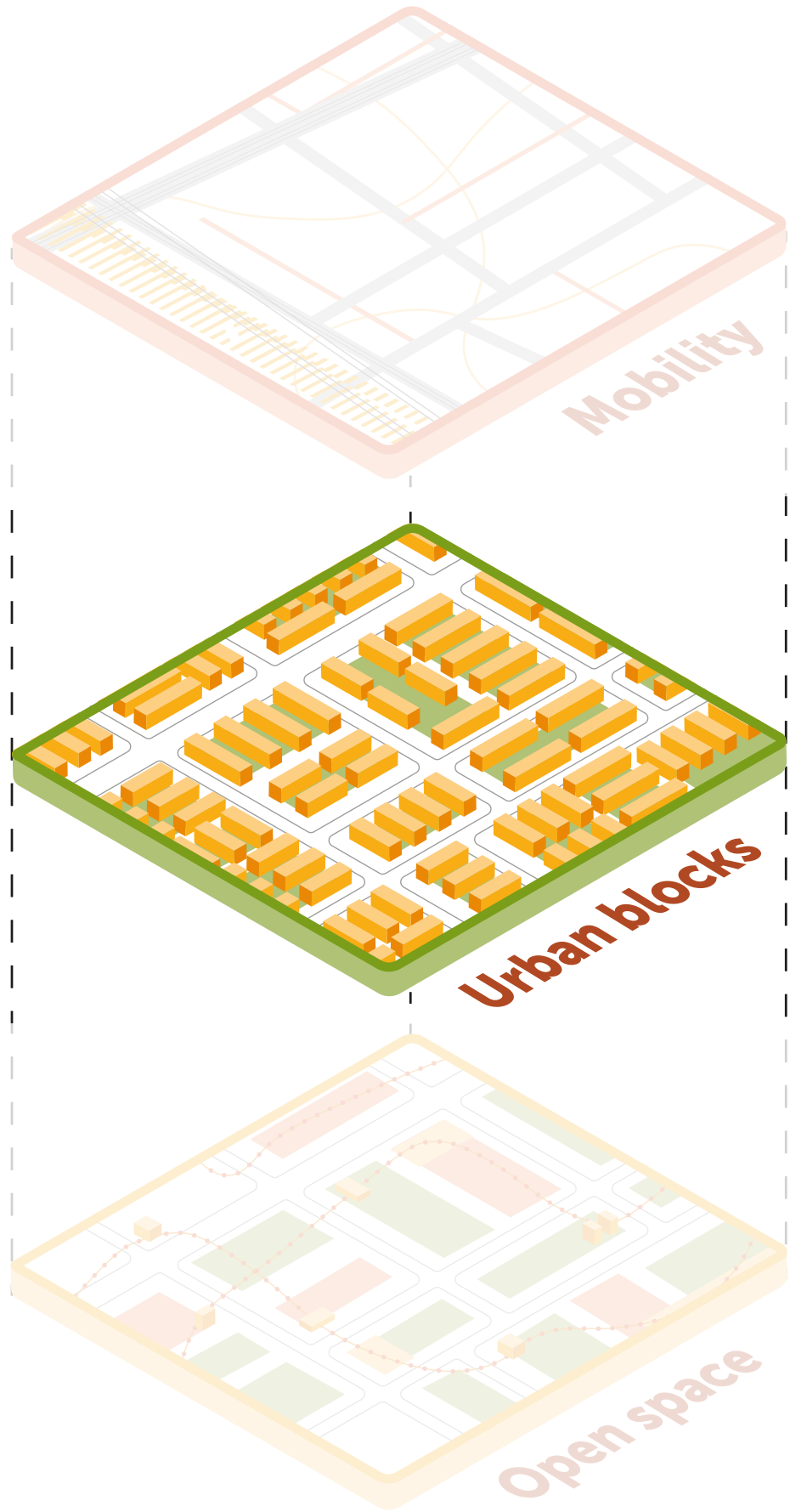
cut-open



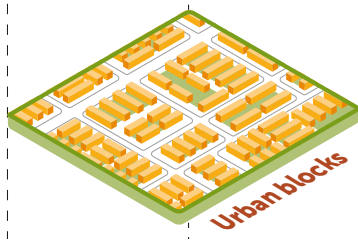
stamp





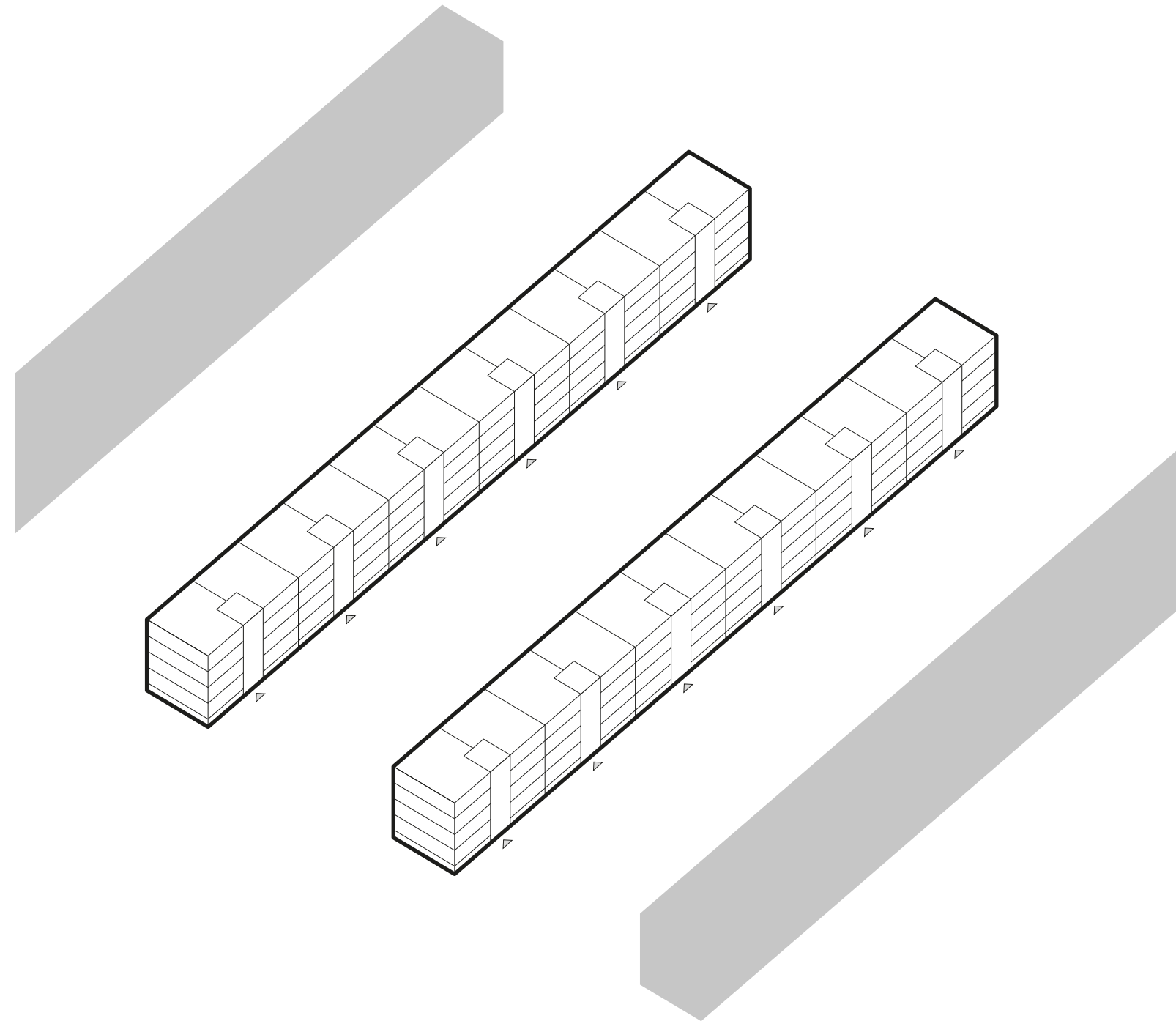
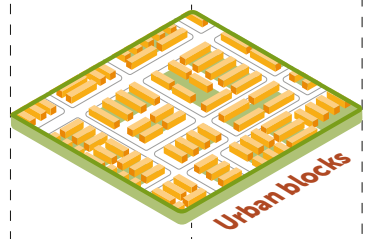


parallel



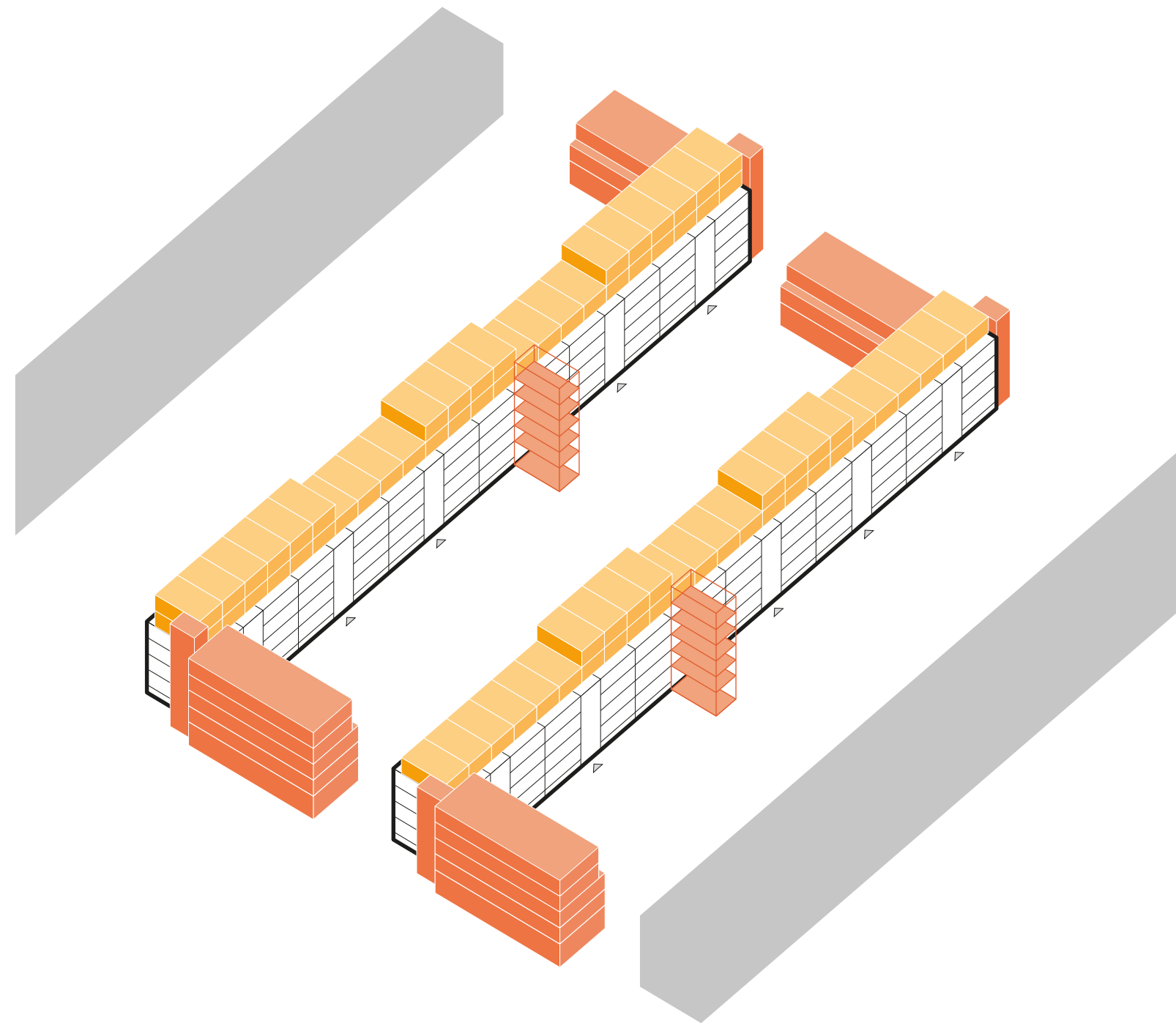
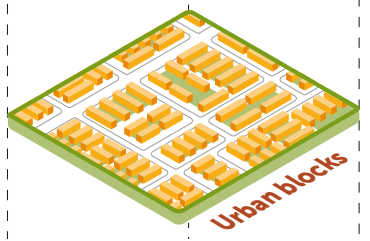
Morgenstond midden

parallel



48x
120 m²

parallel



48#
52#

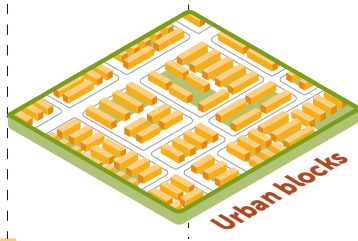
= 168 %

48x
120 m²

32x
60 m²

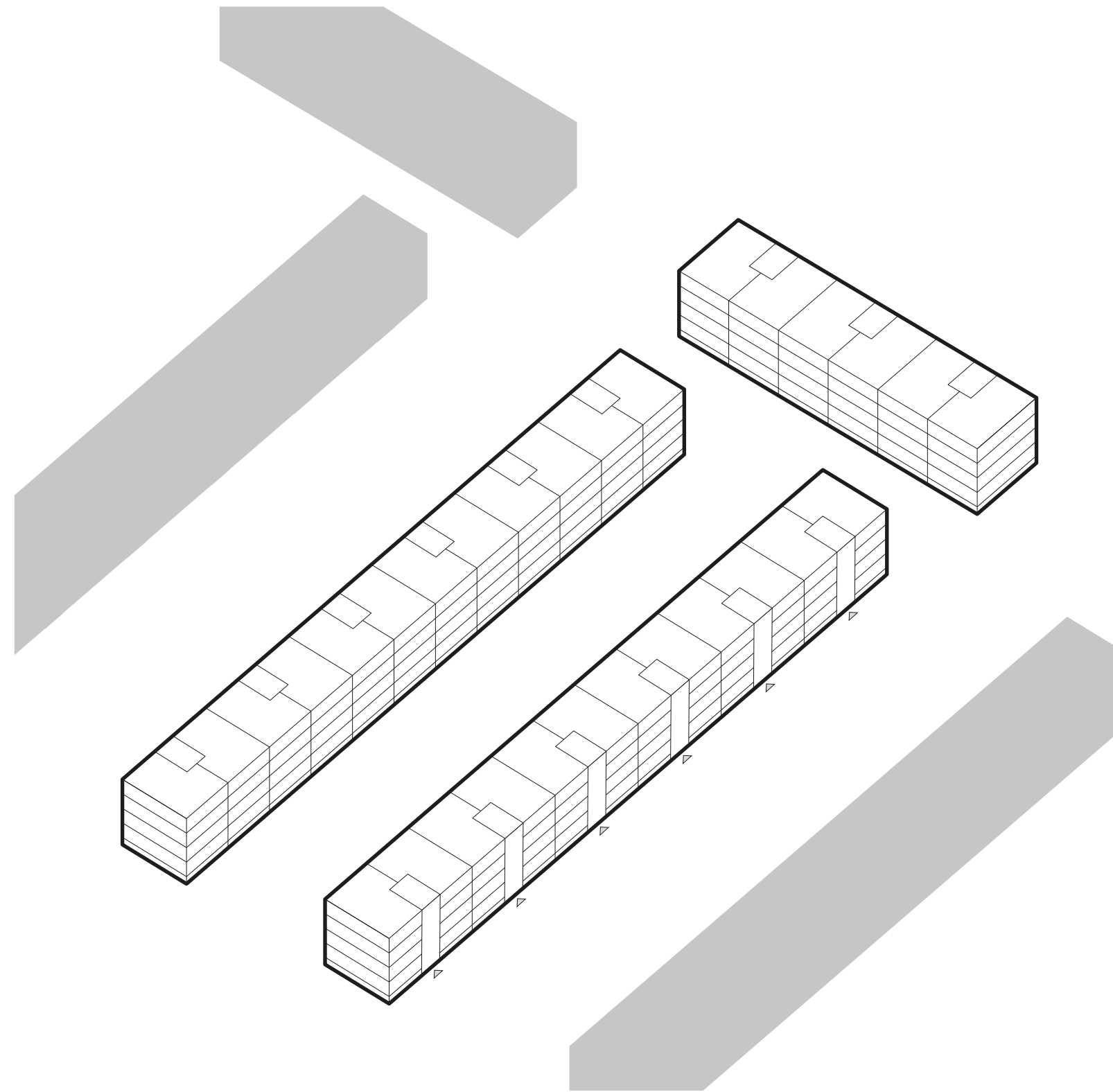
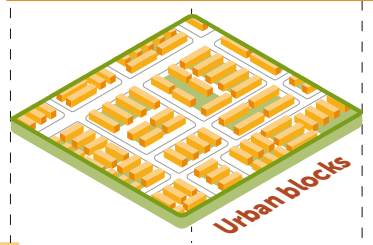
20x
100 m²

cut-open



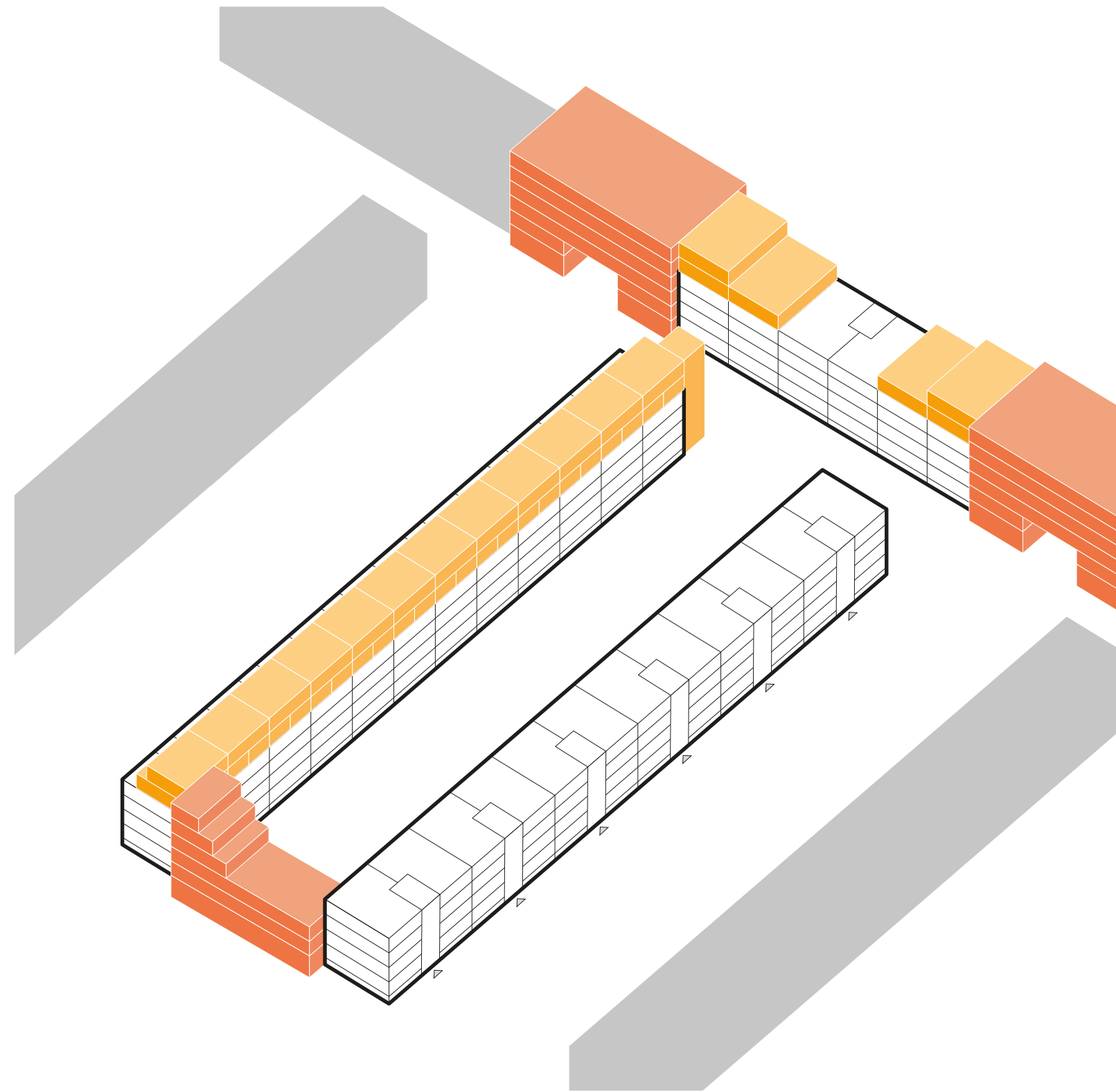
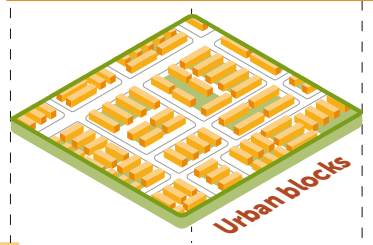
Morgenstond zuid

cut-open



120x
120 m²

cut-open



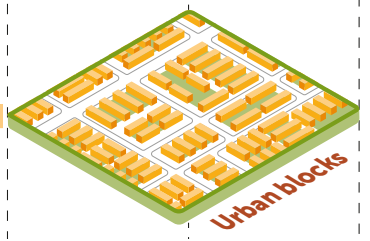
120x
120 m²

42x
60 m²

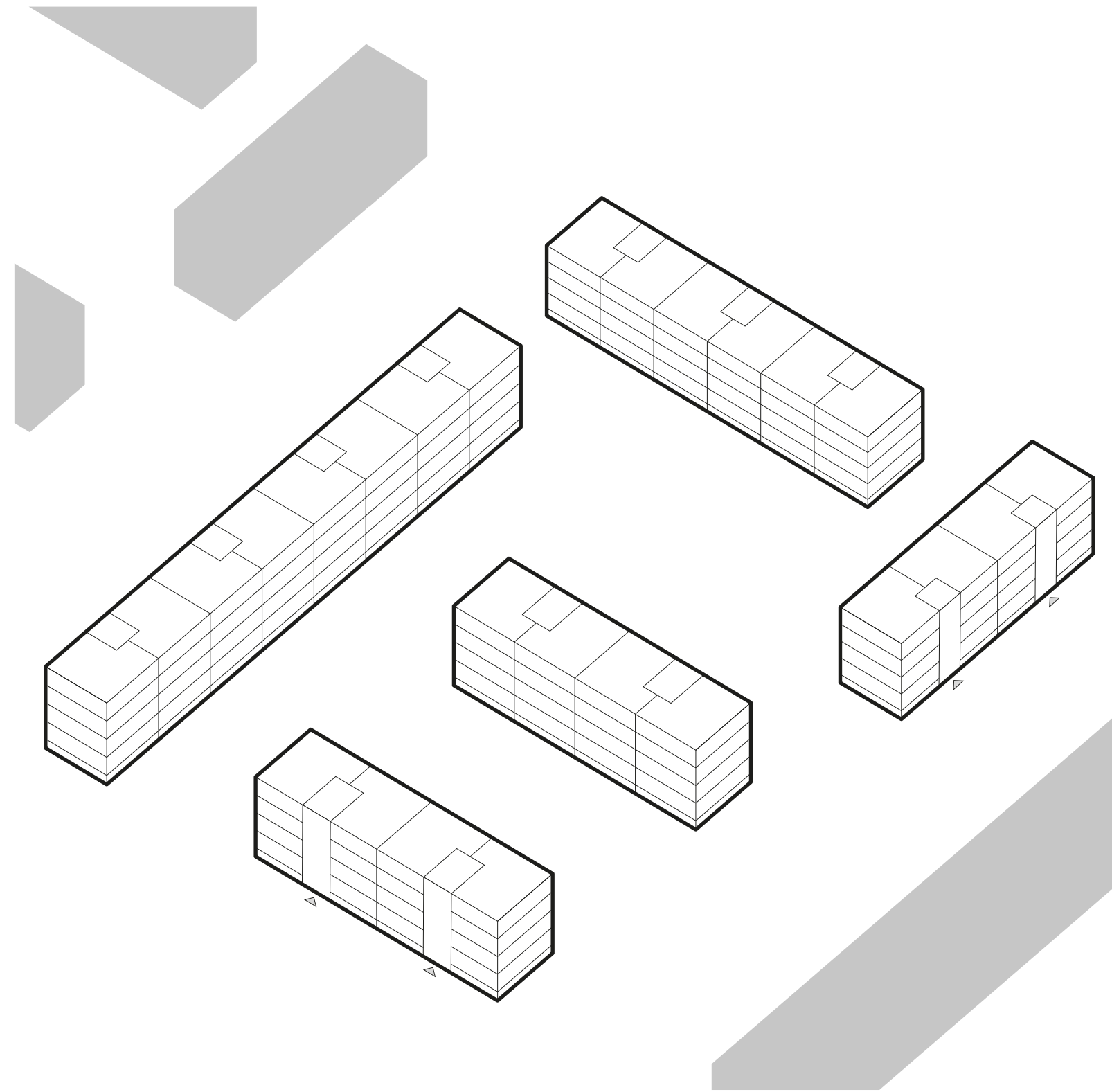
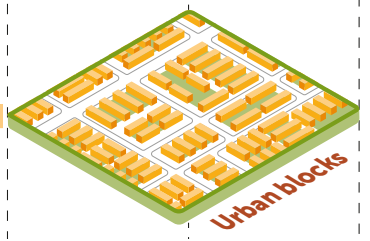
38x
100 m²

120#
80#

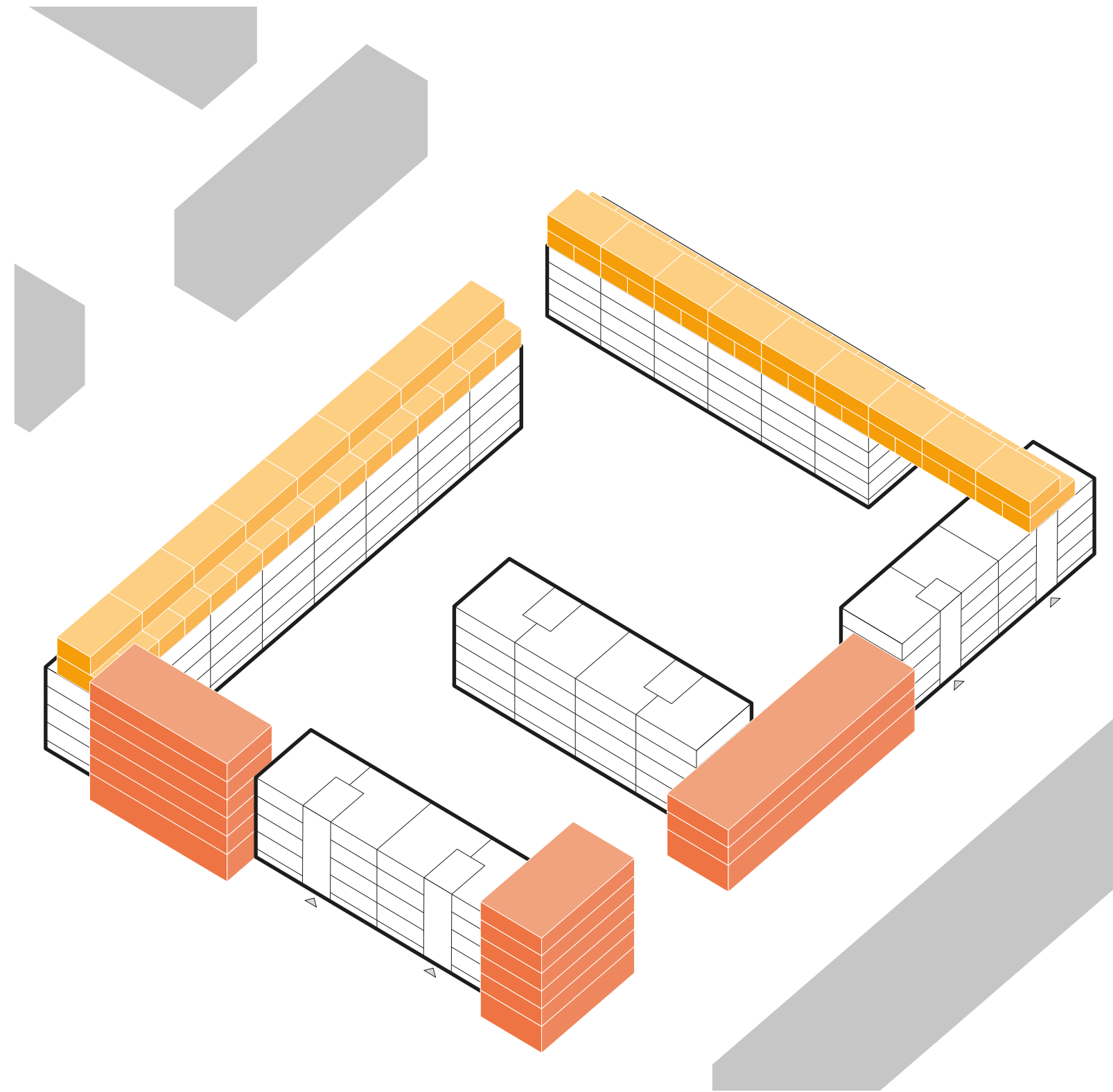
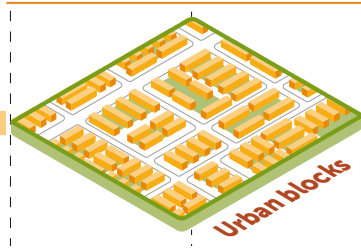
= **150 %**



De Dreeven



104x
120 m²

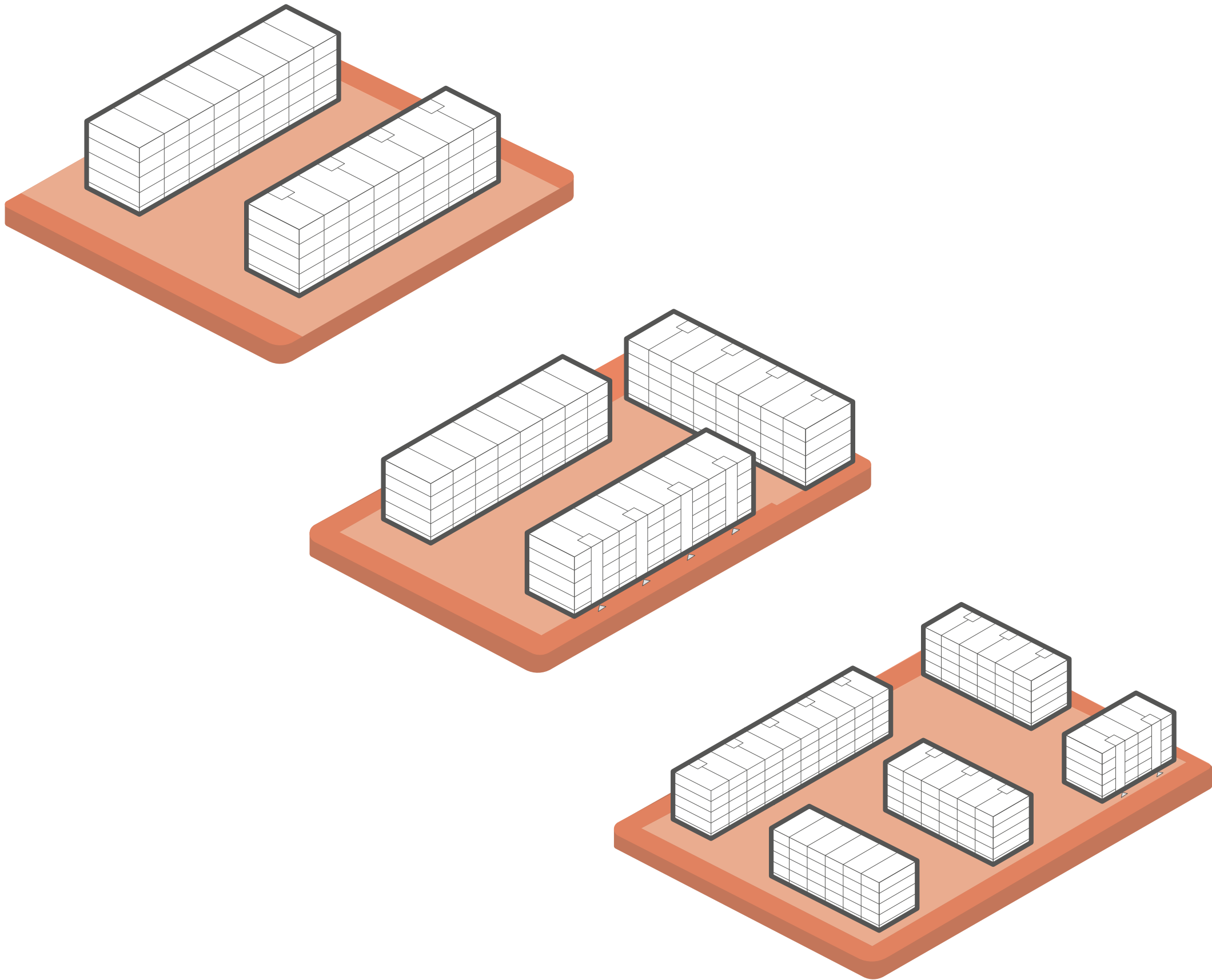
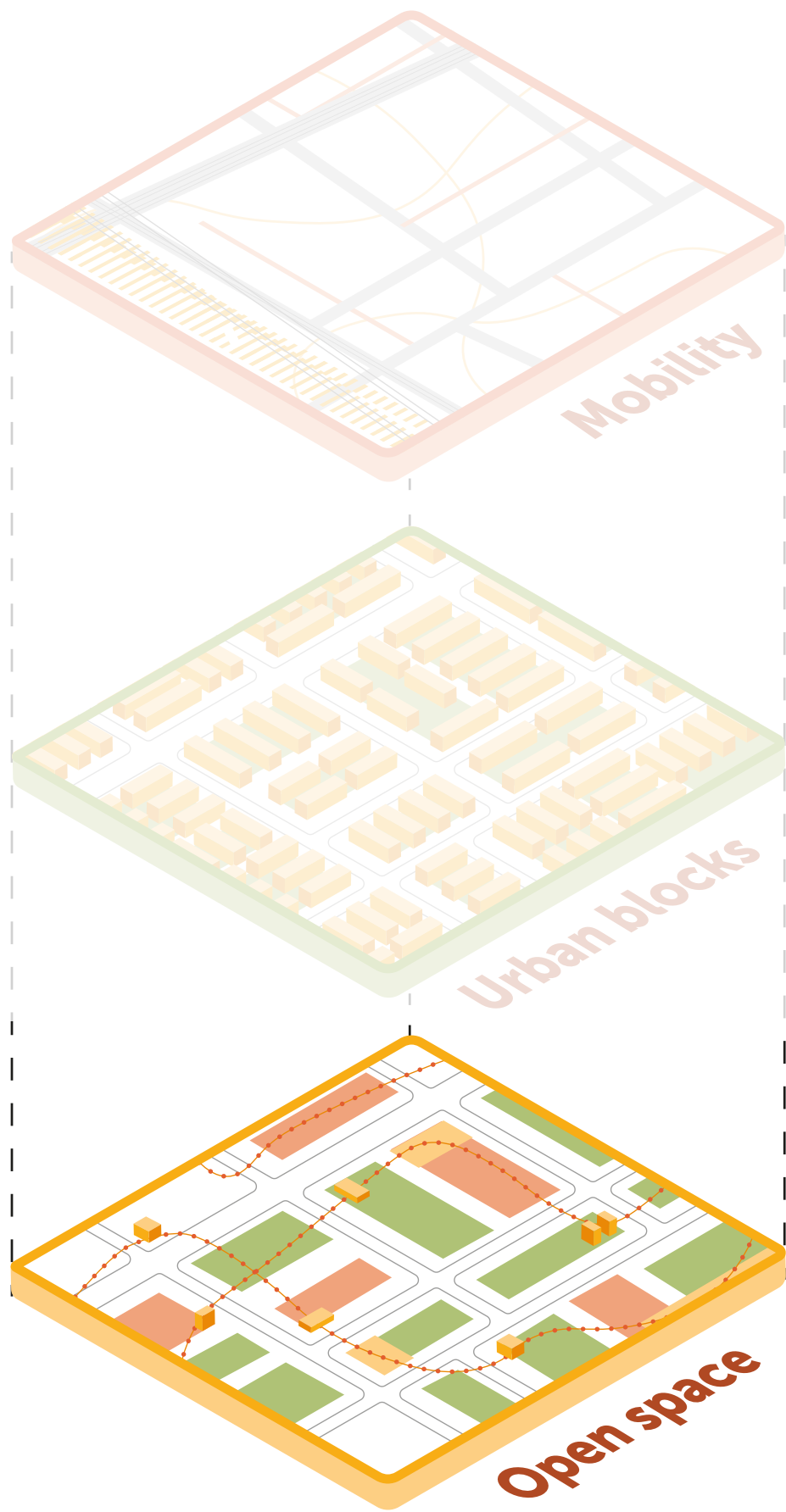


104#
105#
= 174 %

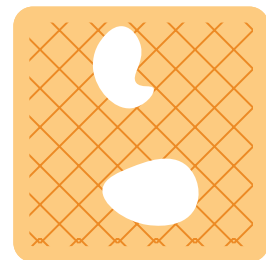
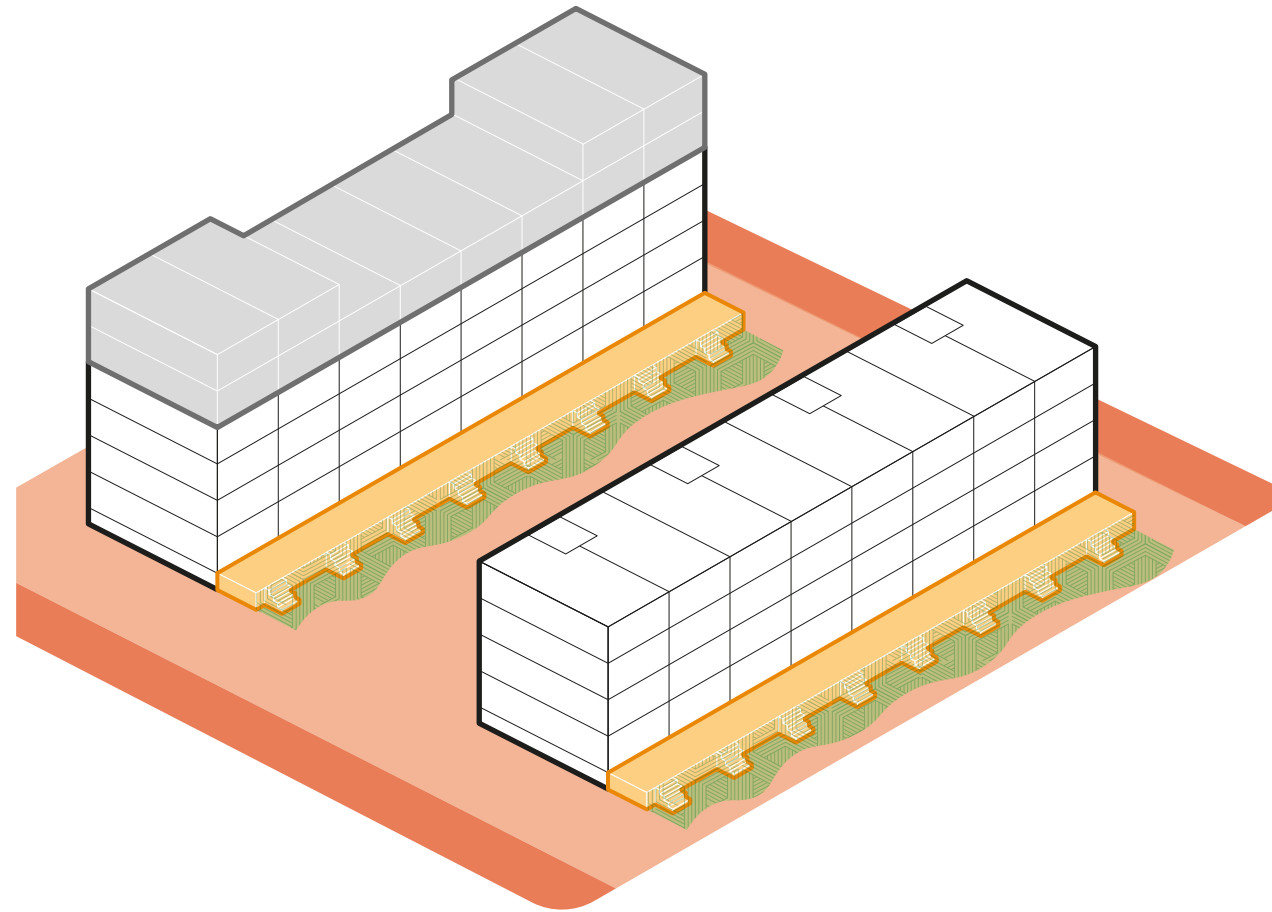
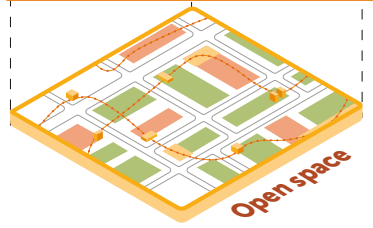
104x
120 m²

51x
60 m²

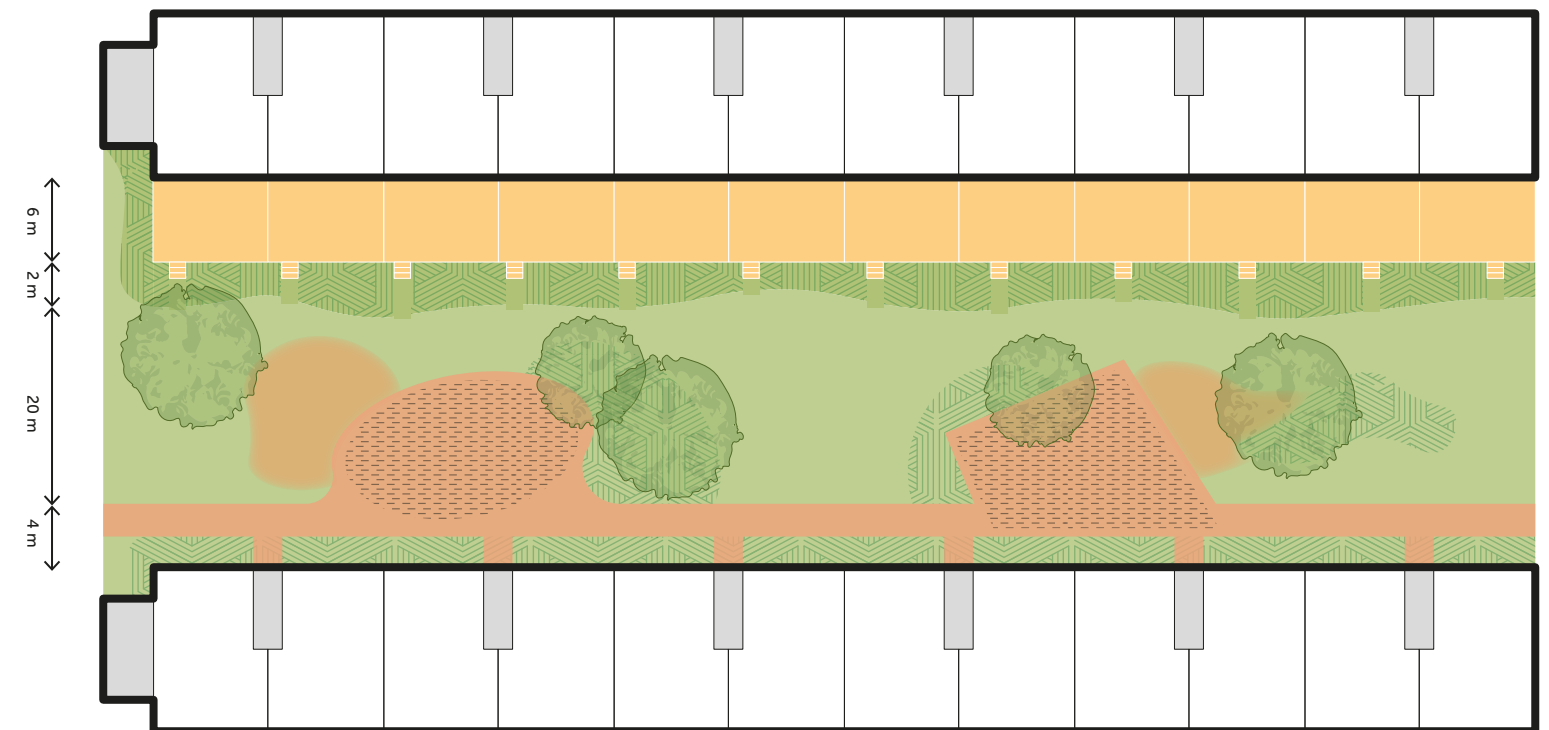
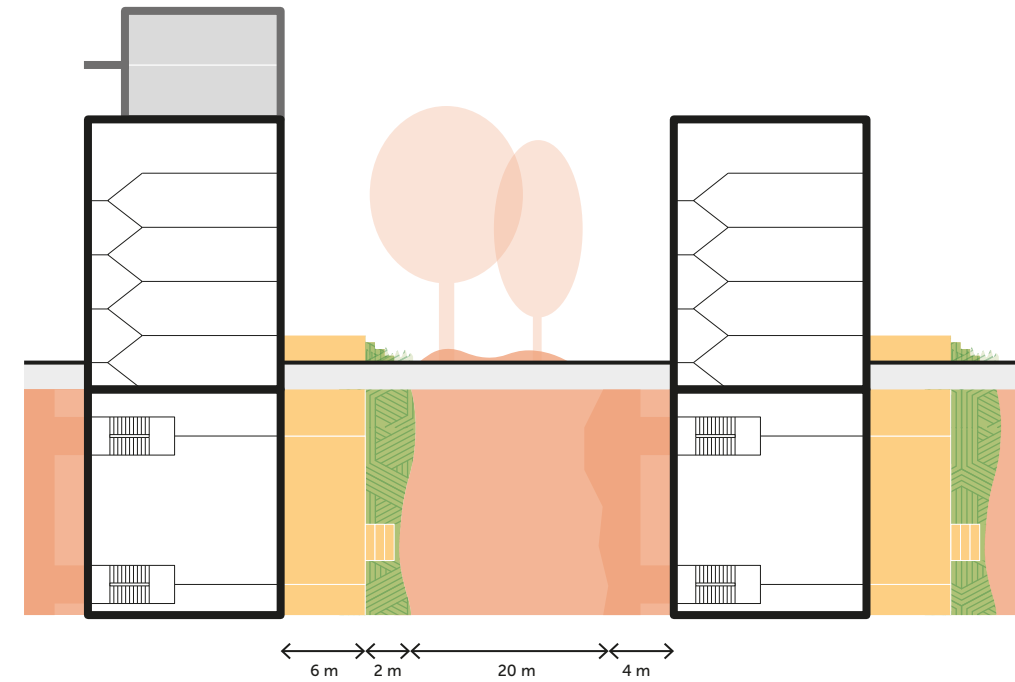
55x
100 m²



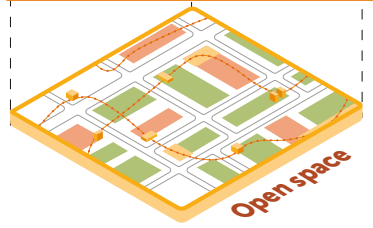
parallel



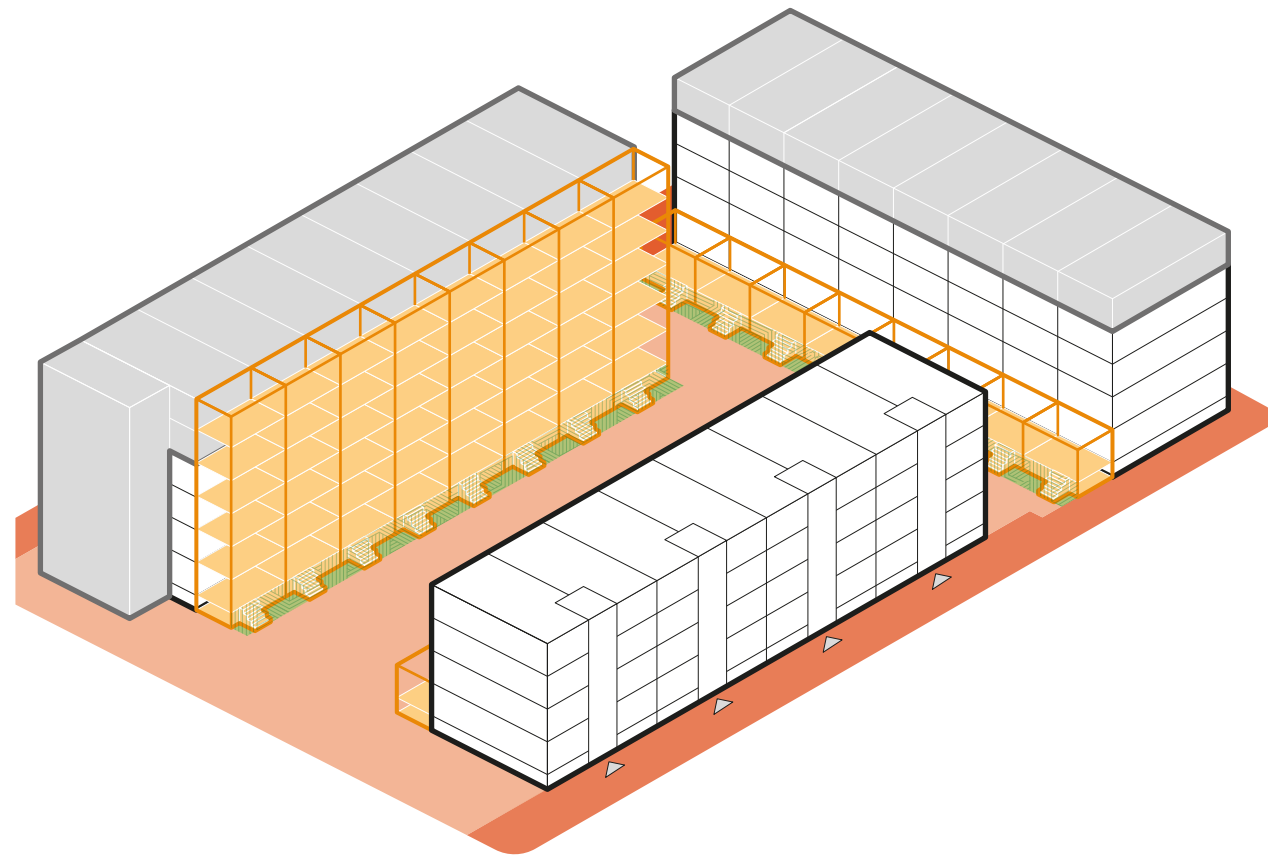
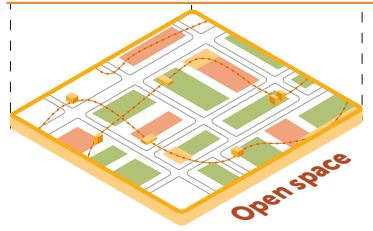
PRIVATE ^{border} PUBLIC



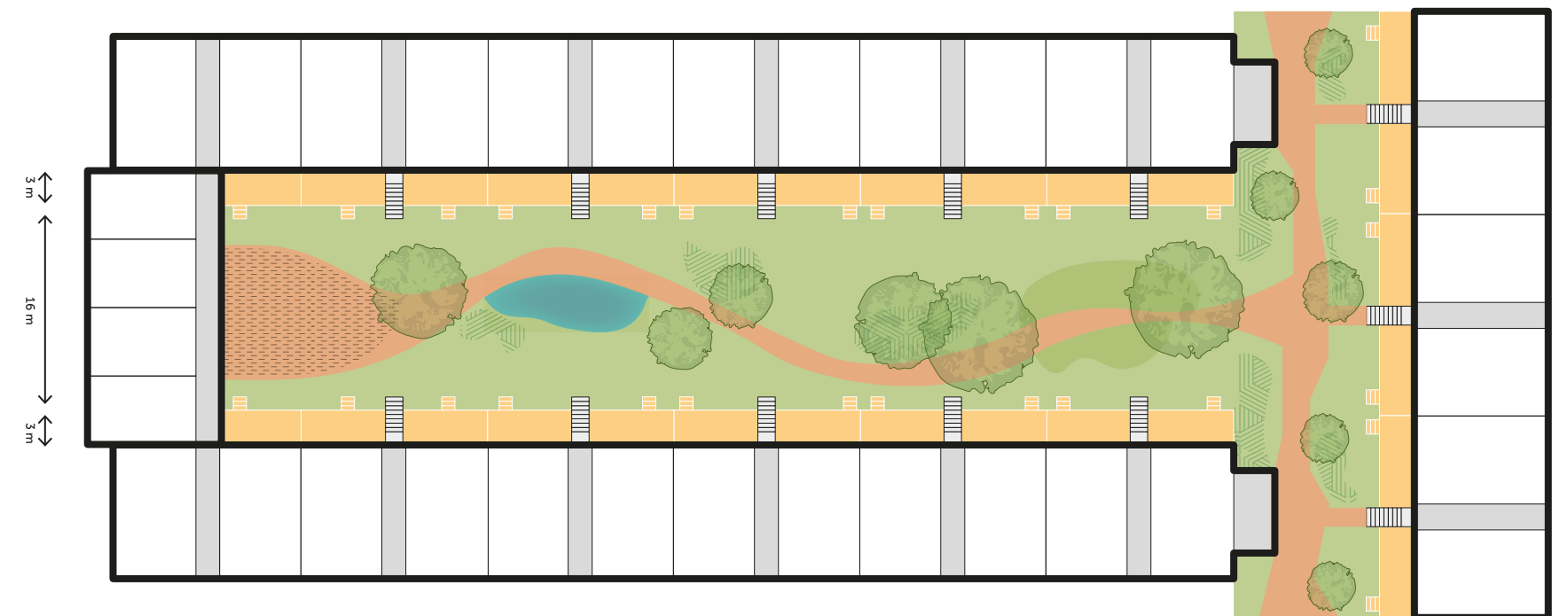
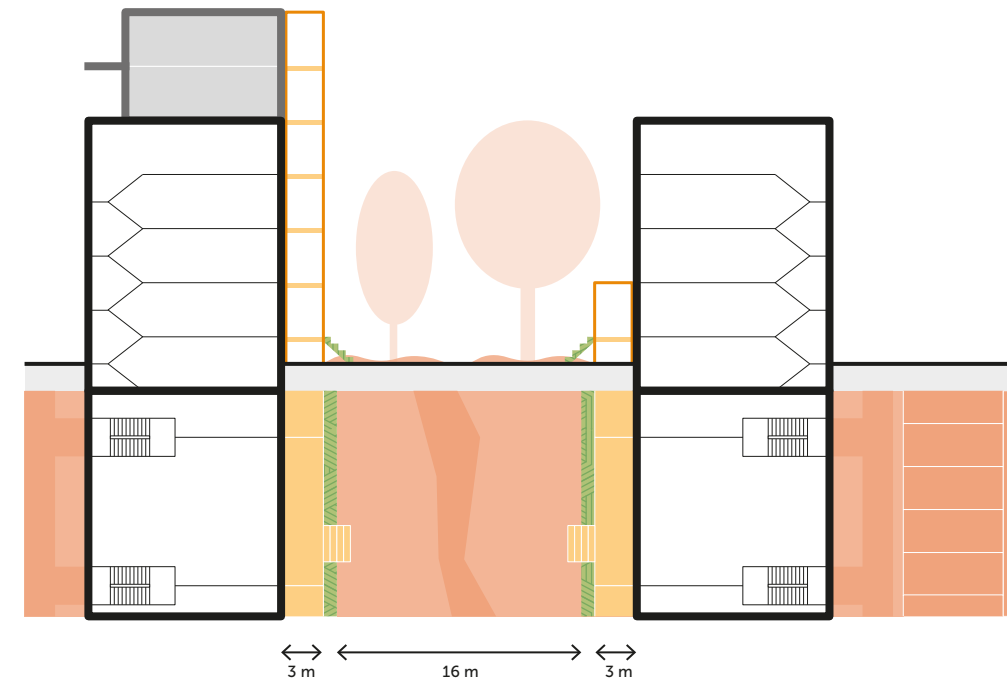
parallel

PRIVATE ^{border} PUBLIC

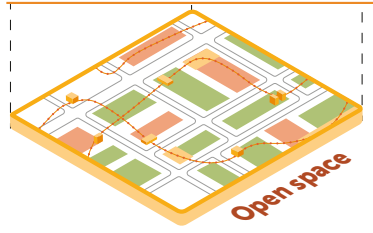
cut-open



PRIVATEborderPUBLIC

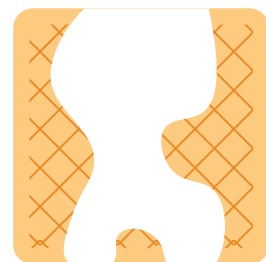
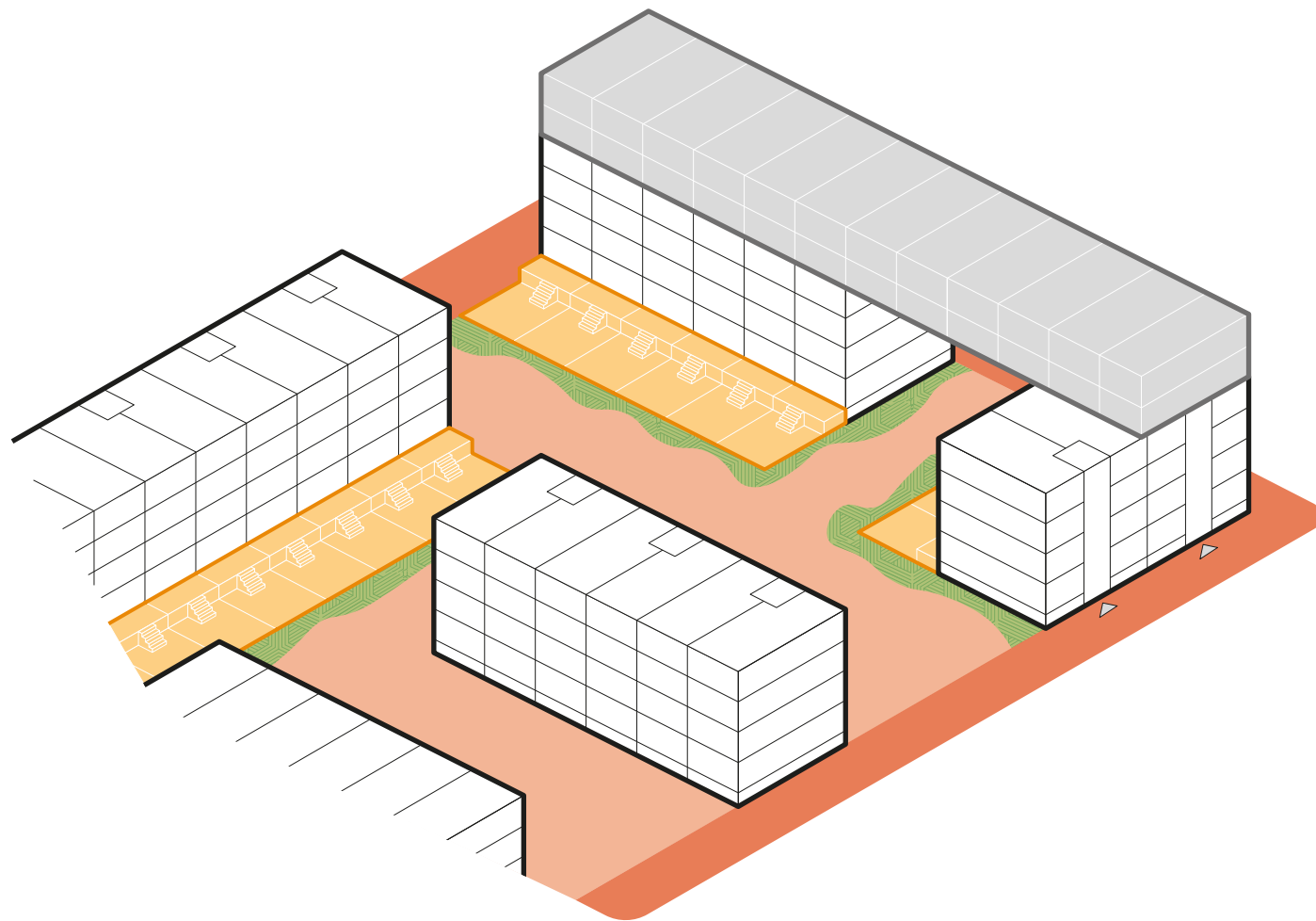
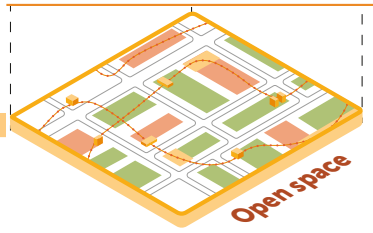


cut-open

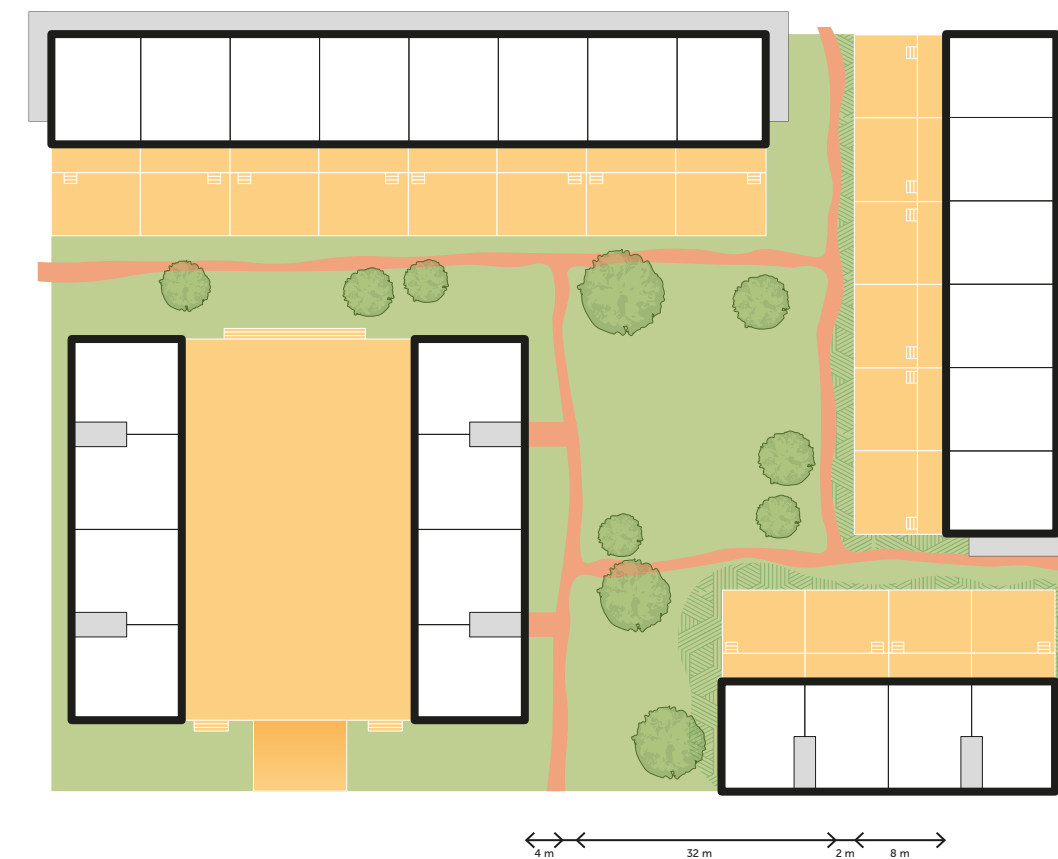
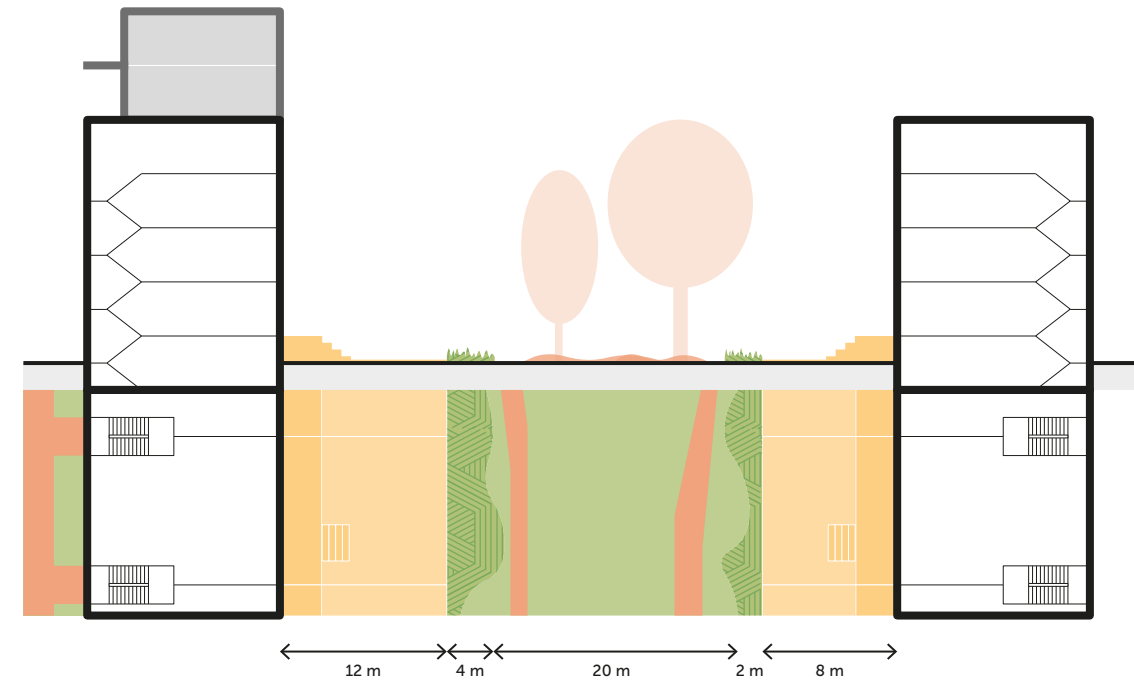


PRIVATEborderPUBLIC

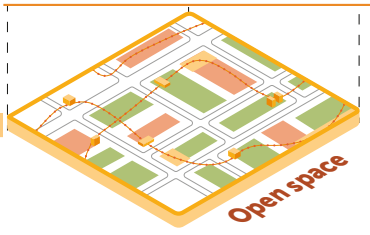
stamp



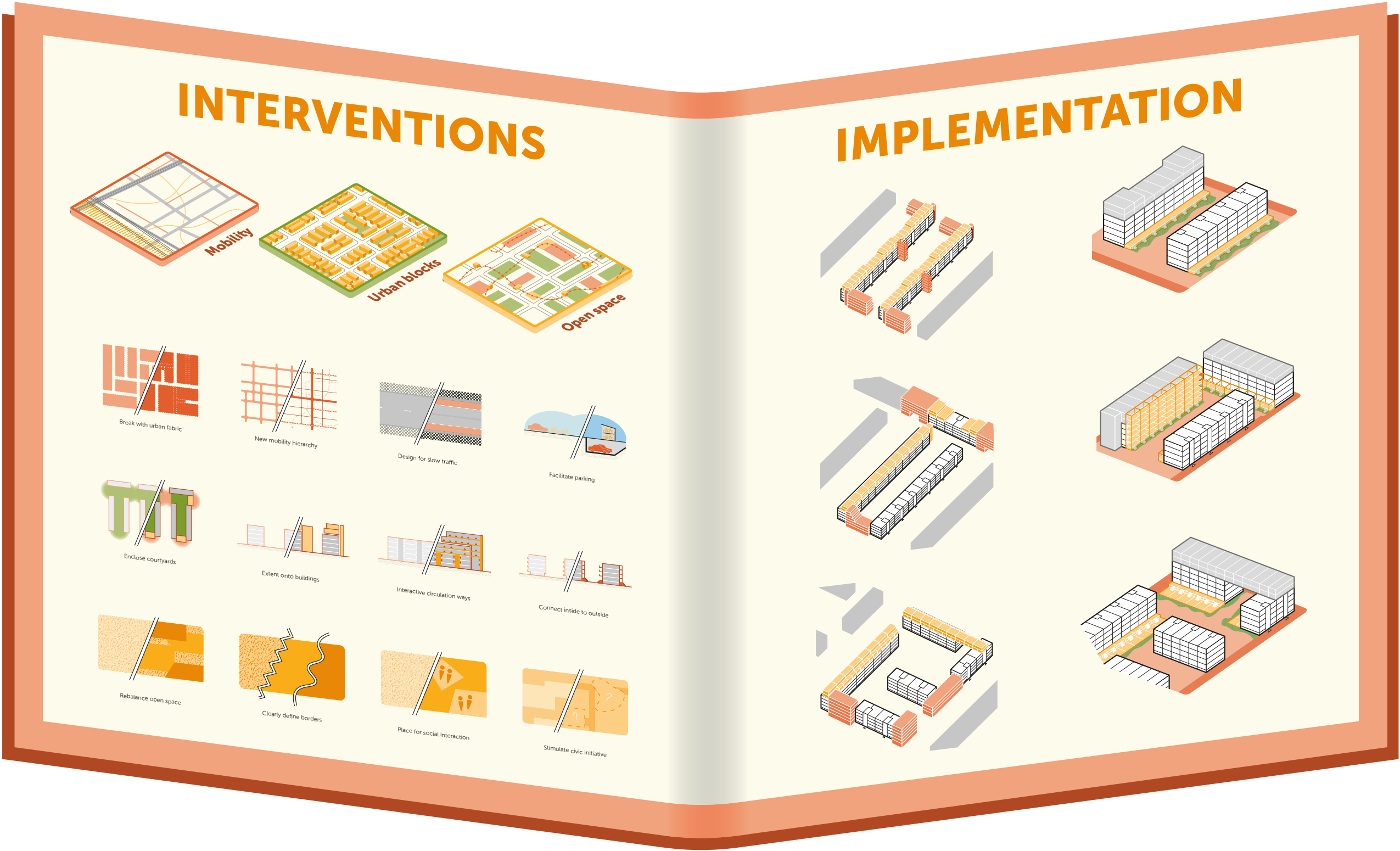
PRIVATE
border
PUBLIC



stamp



PRIVATE
border
PUBLIC



BREAKING THE PATTERN





BREAKING THE PATTERN

Densification as a catalyst for improving
the liveability of post-war neighborhoods.

Master of Urbanism, Graduation Thesis
Studio: Design of the Urban Fabric

1st mentor: Robbert Jan van der Veen
2nd mentor: Reinout Kleinhans
Delegate: Leontine de Wit

P5 Presentation
20-06-23

Nando Versteeg
4704401