permanent temporality

mitigating housing insecurity for migrant naka workers living in informal settlements in Ahmedabad

Dinja van Bakel | Global Housing Studio | TU Delft



- urban growth
- migrant labour

Ahmedabad, Gujarat, India



- contradiction
- housing insecurity

migrant workers are often exluded from formal housing systems.



- daily waige work
- employment is uncertain
- proximity to naka

labour naka's

naka = informal daily labour pick up point



living close to work

temporariness of informal settlements

↓

housing insecurity

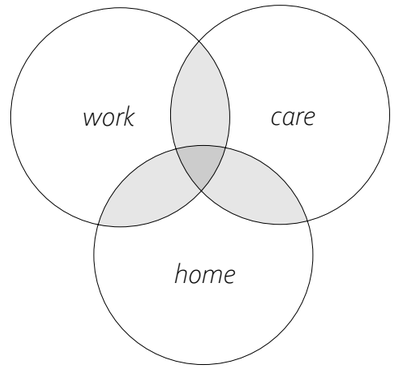
constant risk of eviction prevents making investments

↓

poor living conditions

improvised basic needs
unprotected against environmental conditions
excluded from long term social networks and economic stability

beyond shelter



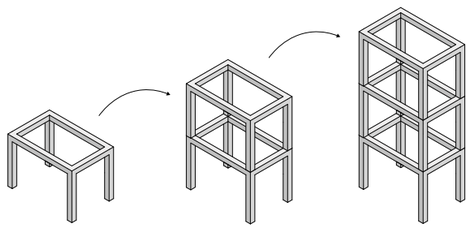
The absence of spatial structures that mediate between work, care and domestic life forces many naka workers to inhabit unsafe and unhealthy environments.

lack of adequate, secure and flexible housing for migrant workers

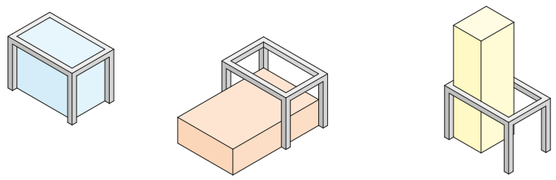
How can **flexibility** be used as a design approach to provide **secure** and **socially supportive** living conditions for **migrant households** in informal settlements?

research / case studies / fieldwork

1. ability to change



continuity

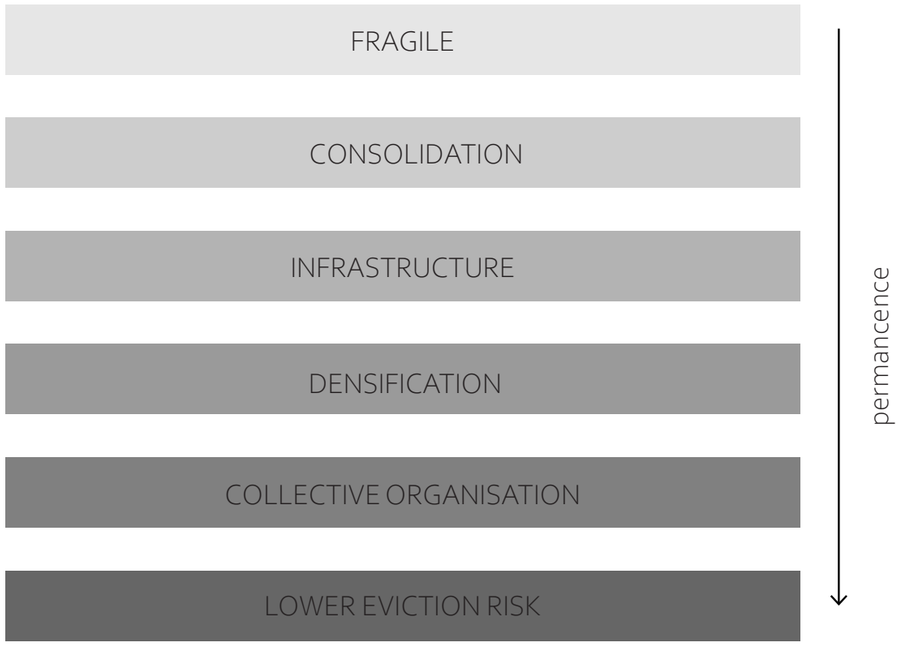


flexibility

permanent temporality

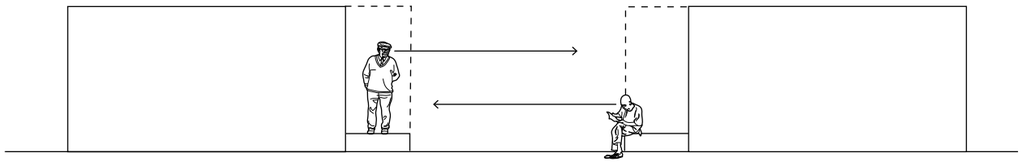
housing condition where stability and change
coexist over time

2. provide security



strategies to adress housing insecurity

3. safety through everyday presence



visibility & vigilance

4. thresholds / otla

laundry

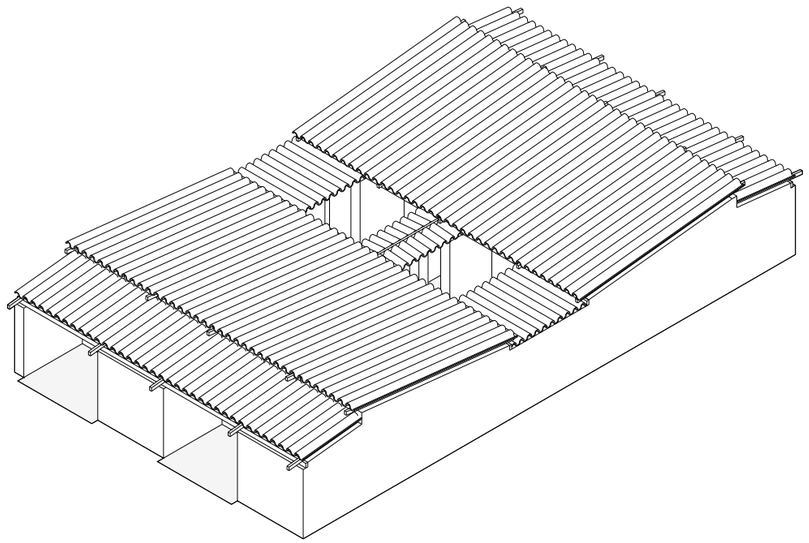




craftwork

extension of the home

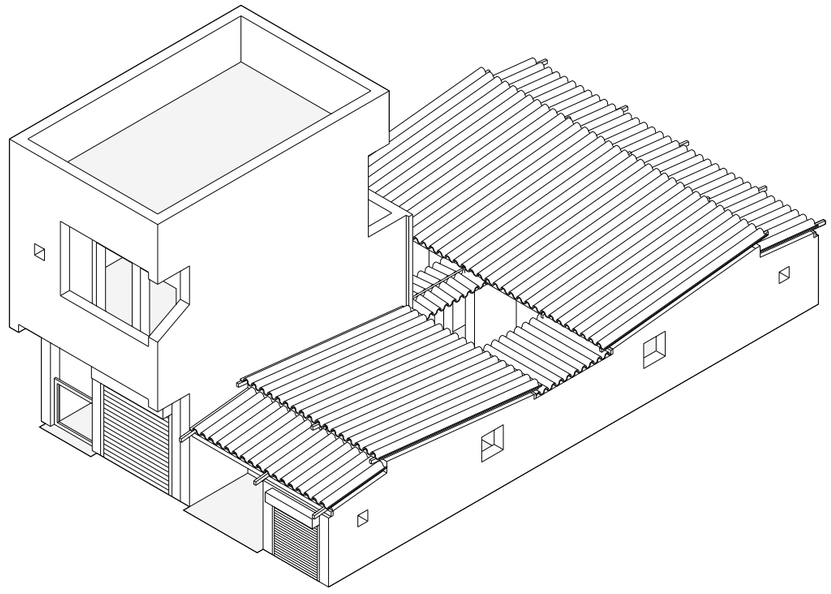
5. incrementality / growth



vasna resettlement colony

incremental growth, hierarchy in collectivity of spaces

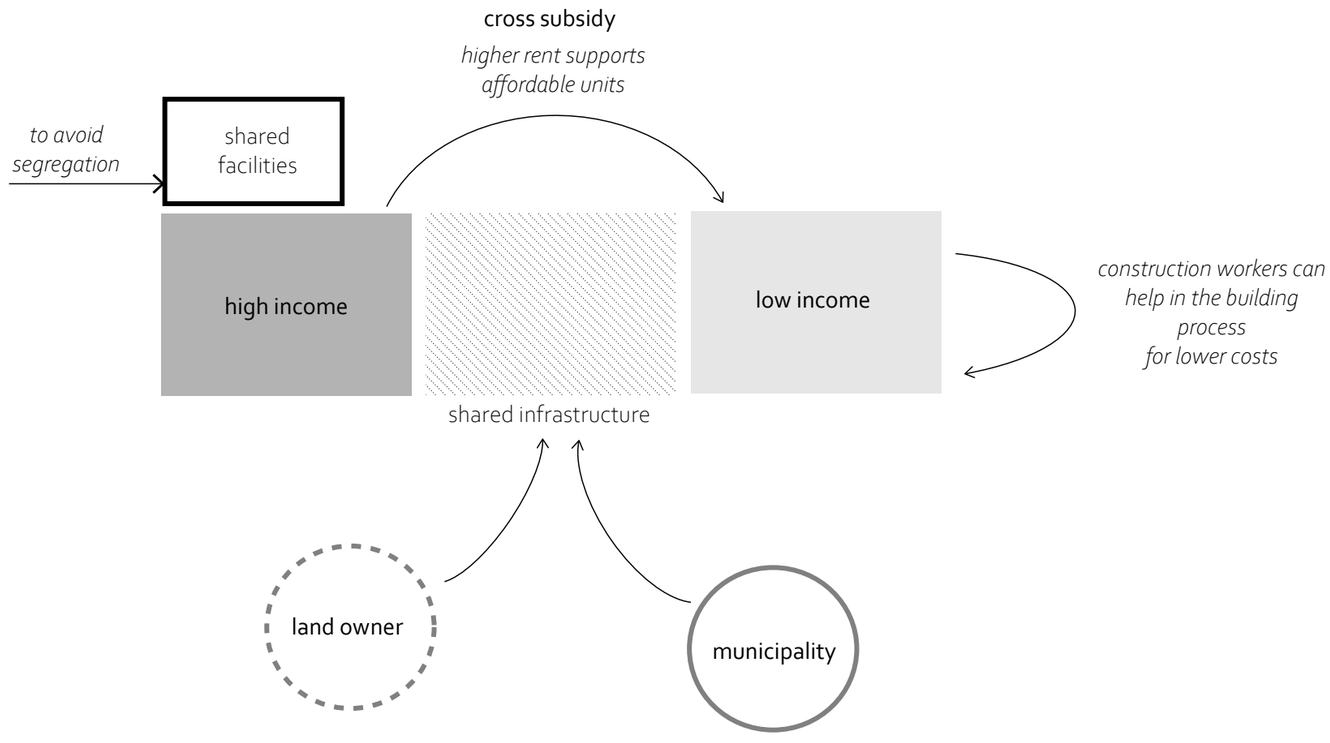
5. incrementality / growth



vasna resettlement colony

incremental growth, hierarchy in collectivity of spaces

6. social mixing



managerial strategy: cross-subsidisation

housing market in India

EWS + LIG	< 600,000 INR	economically weaker section + low income group
MIG	600,000 – 1,200,000 INR	middle income group
HIG	> 1,200,000 INR	high income group

housing market in India

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Badade nagar
balconies, MIG housing



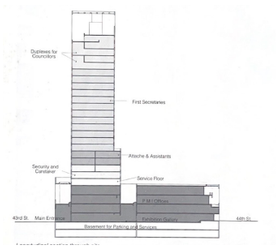
BDD chawls
shared spaces, privacy level, EWS



Screen 54
buffering direct sunlight, HIG housing



CIDCO housing
shared open spaces, LIG housing



Permanent Mission of India to the US
private and public, HIG housing

understanding housing needs among income groups

EWS + LIG

- otla (private)
- connection to the street
- multifunctional space
- possibility to expand / grow
- ownership and security
- flexibility
- shared outside space

MIG

- privacy; no dwelling on the street
- small private outdoor space
- multiple bedrooms
- elevator
- public and private parts of the house are seperated

HIG

- seperate servant room
- entrance by elevator
- large private outdoor space
- public and private parts of the house are seperated
- multiple bedrooms with bathroom ensuite
- parking in the building
- privacy; dwellings start at the 4th floor

design proposal



Rajiv Nagar, Ahmedabad



Rajiv Nagar, Ahmedabad



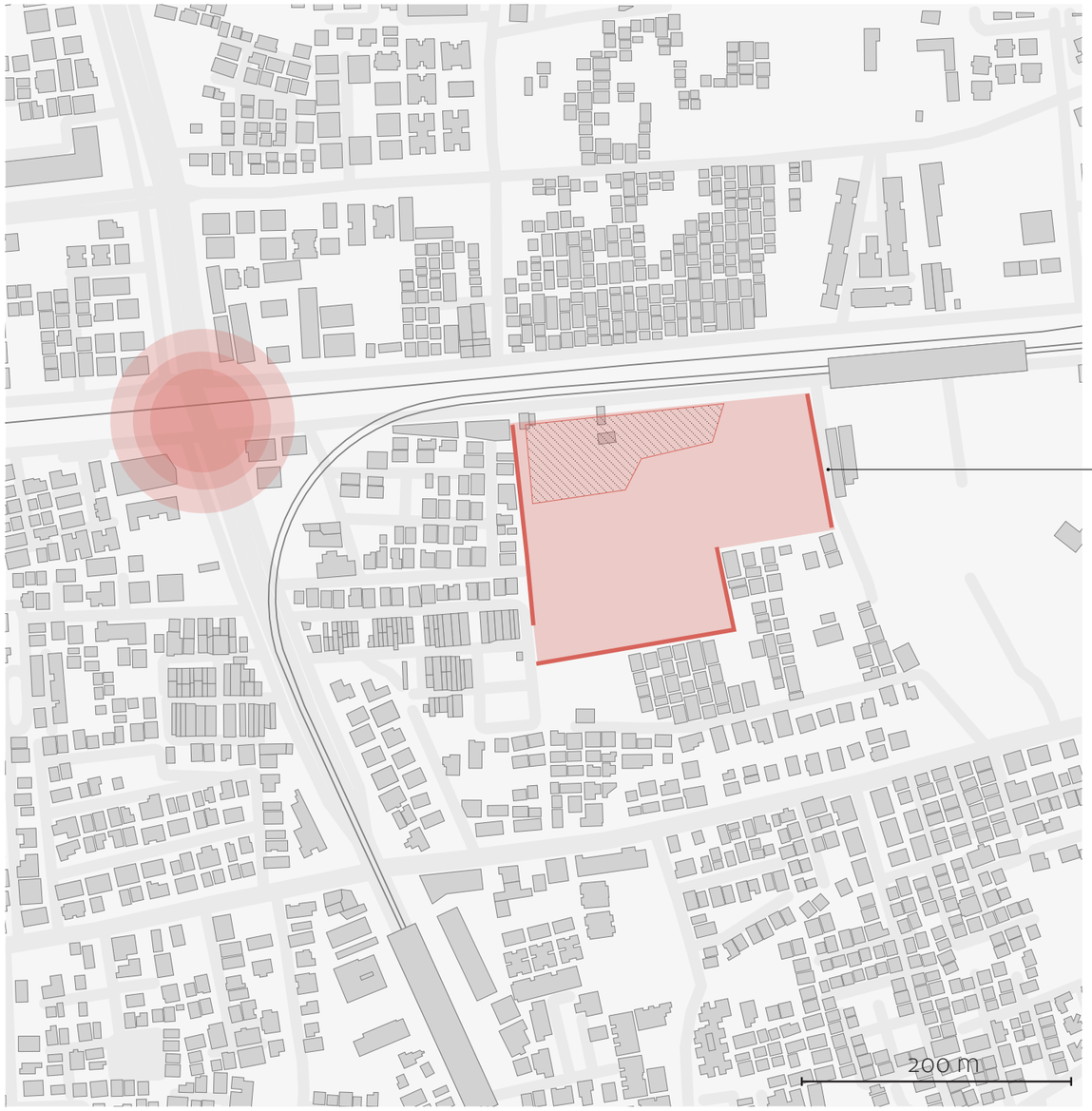
Rajiv Nagar, Ahmedabad



Rajiv Nagar, Ahmedabad



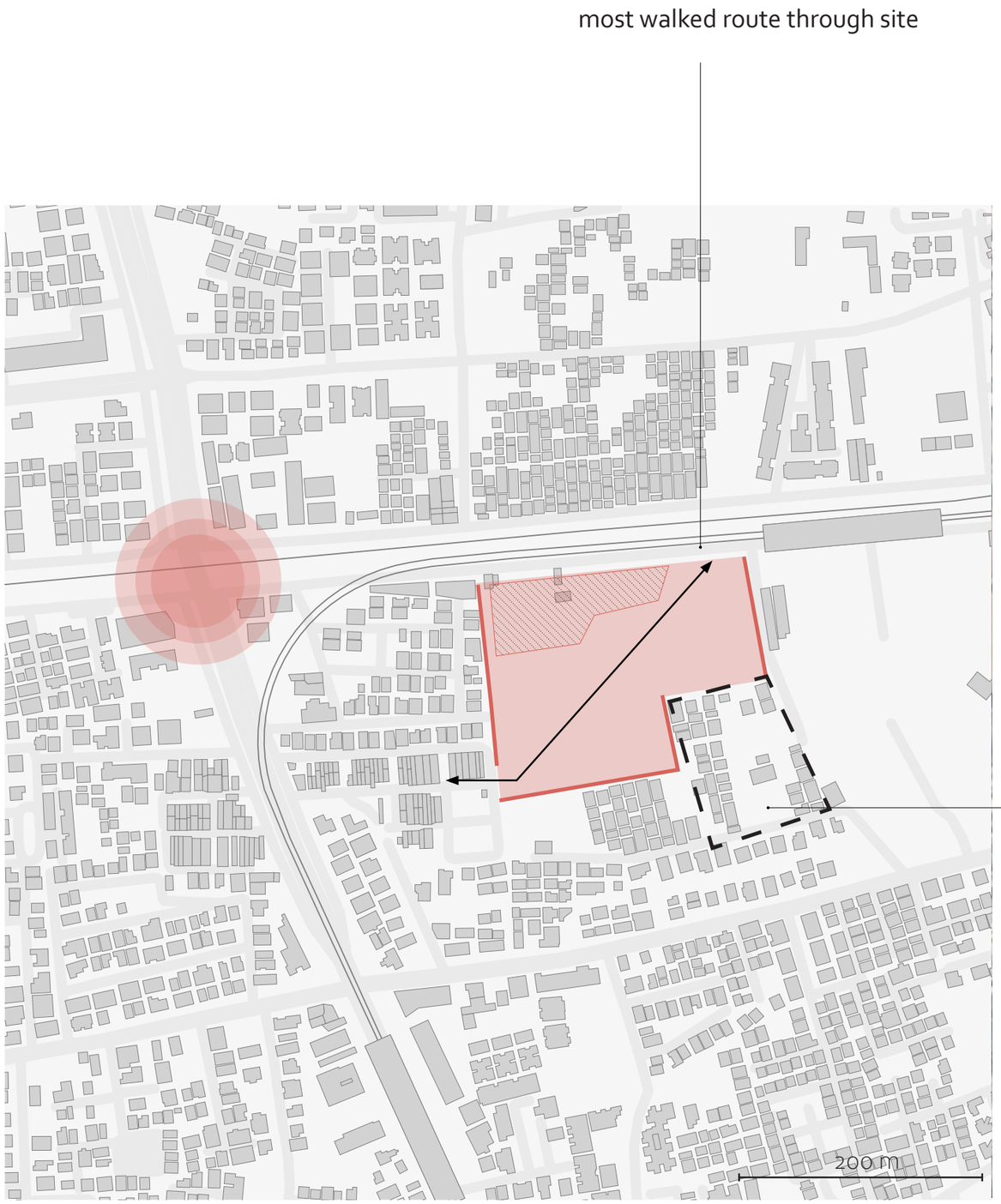
Rajiv Nagar, Ahmedabad



Rajiv Nagar, Ahmedabad



brick walls



Rajiv Nagar, Ahmedabad

who lives on the site?

family of four



one year old self built home from left over material
(kutcha shelter)



father is naka construction worker
did not get employed today



mother stays at home for children







housing in the existing settlement





blurred line between inside and outside





informal and unsafe pathways





otla in surrounding neighbourhoods



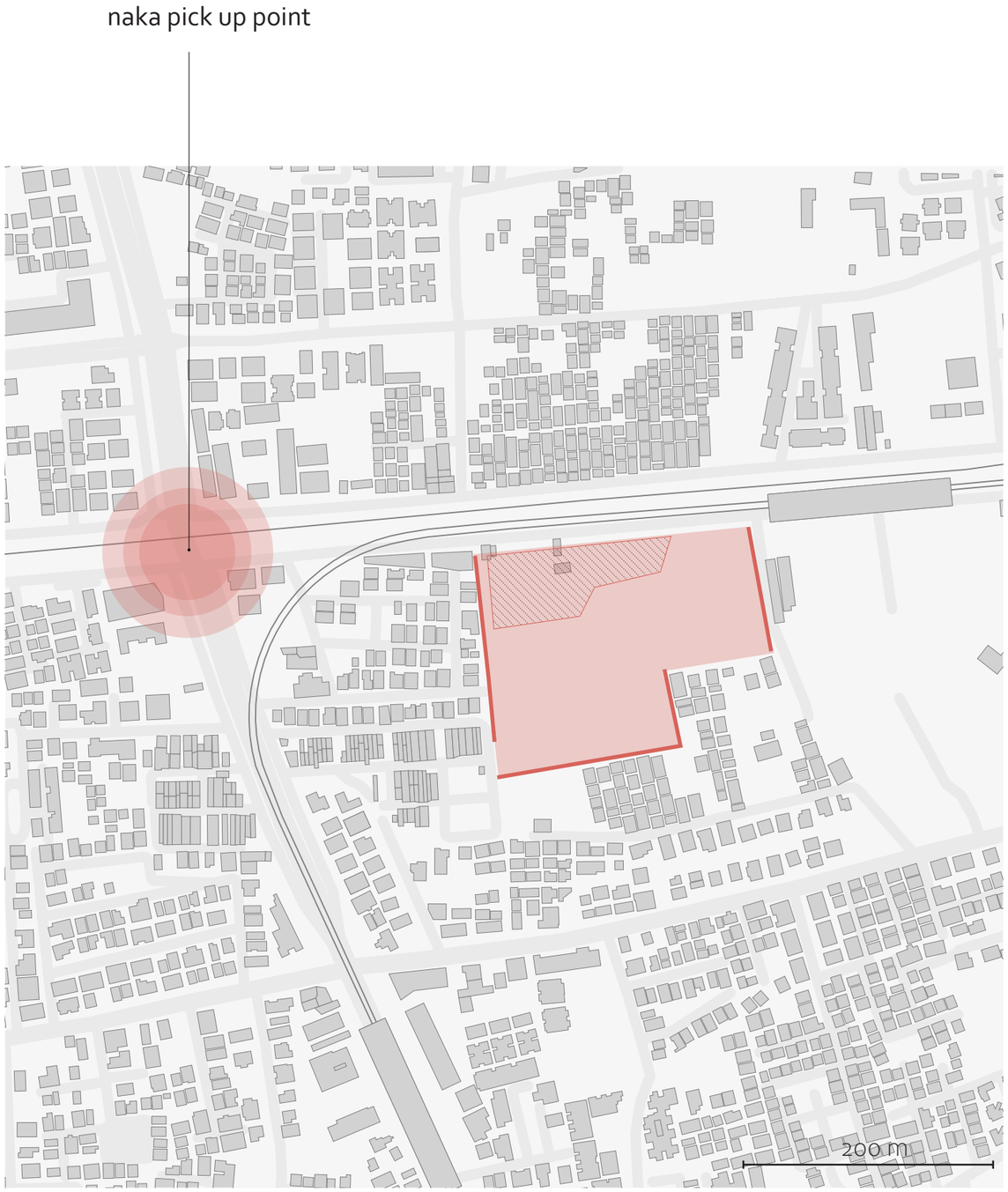


otla in settlement





need for hierarchy of pricacy of spaces



Rajiv Nagar, Ahmedabad



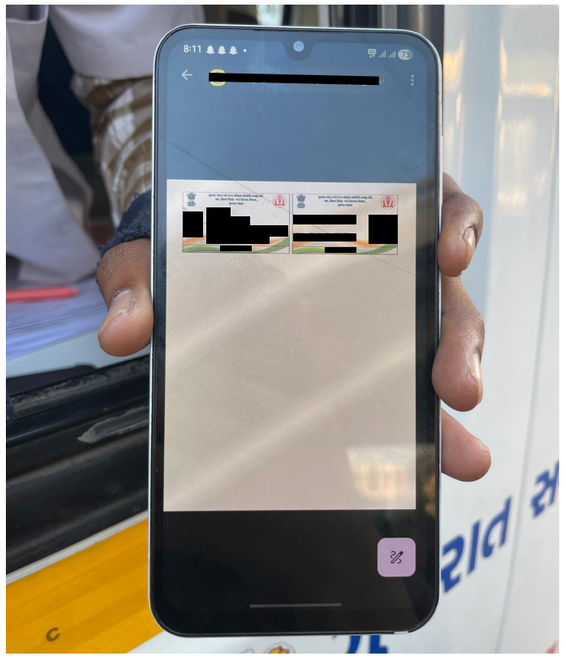
male naka workers



female naka workers







E-Nirmann card

temporary healthcare solution



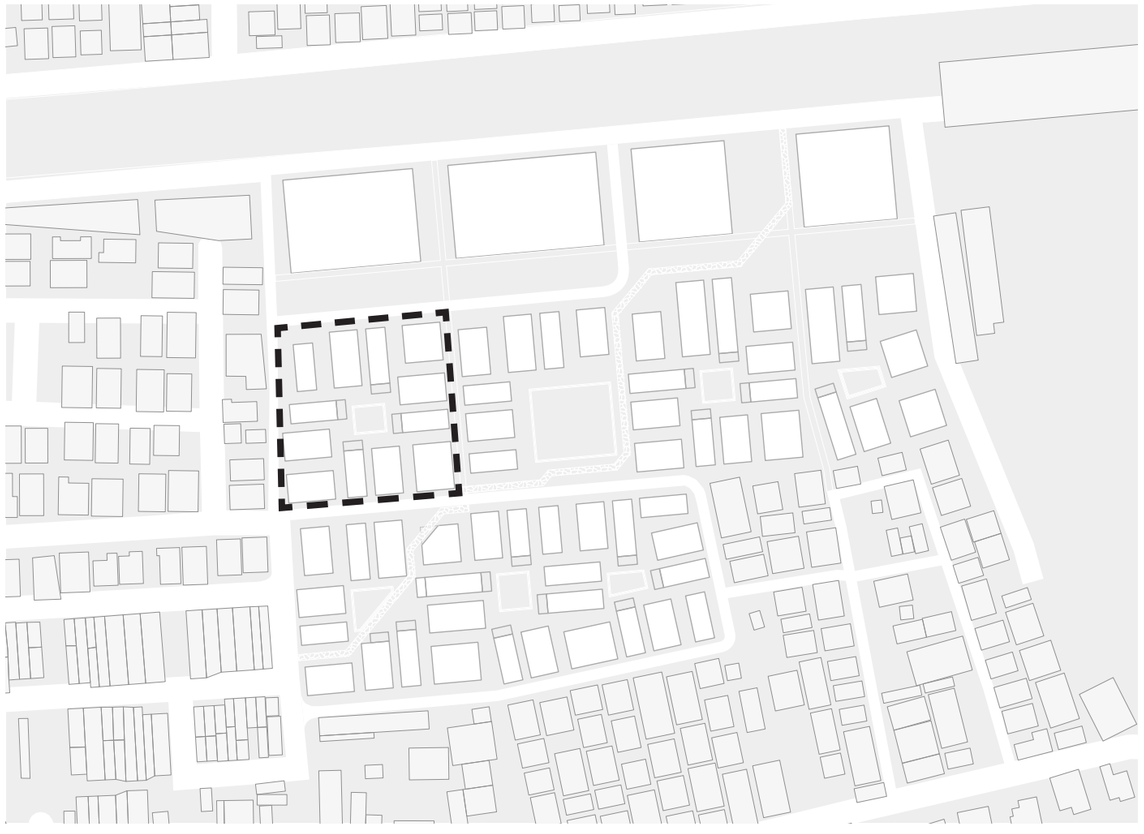


breakfast and lunch

design



1.2000



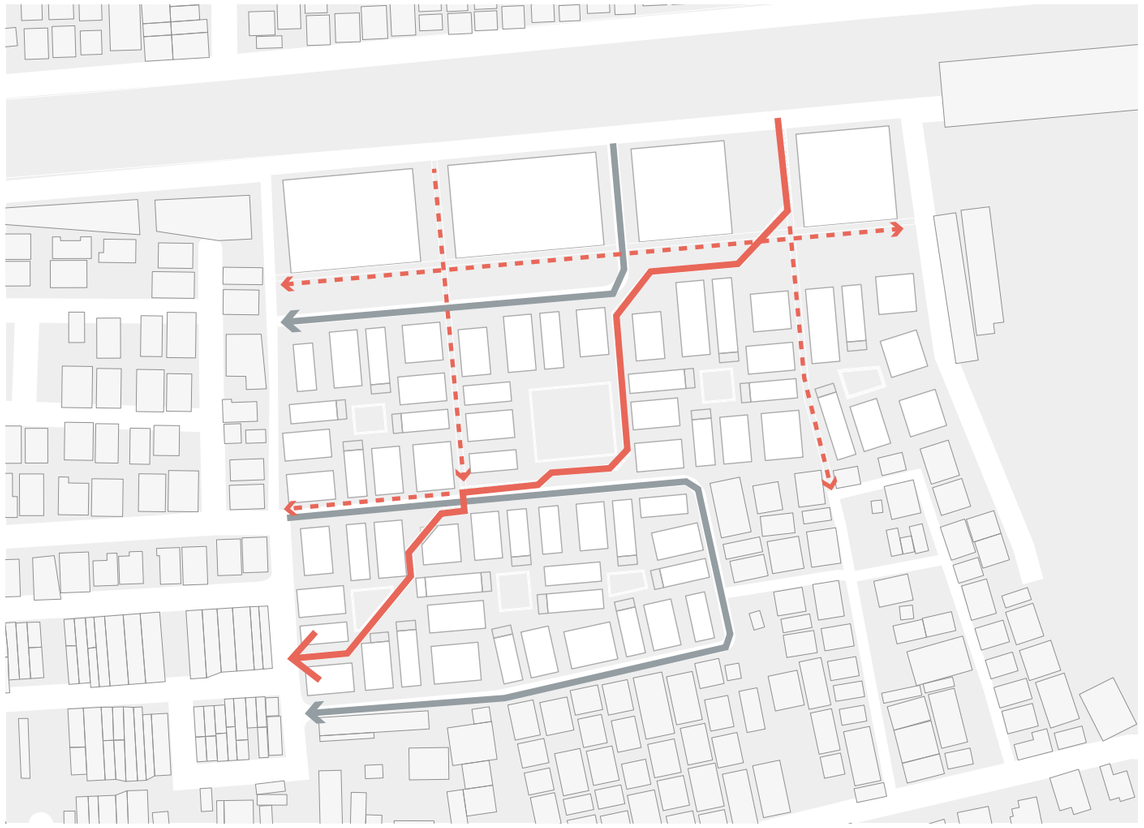
1.2000



- less permeable
- higher buildings
- noise blockage

1.2000

border conditions



1.2000

infrastructure



1.2000

main pedestrian route



1.2000

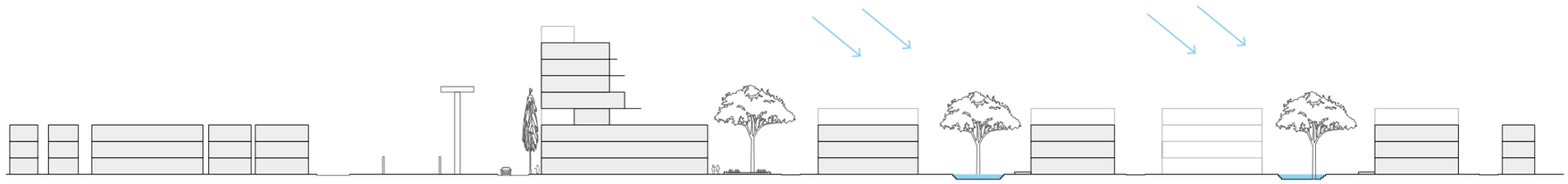
false ashoka tree | high, tall, dense | height = 10-18 m | width = 2-4 m

neem tree | high, wide profile | height = 12-20 m | width = 10-15 m

greernery



1.1000 section



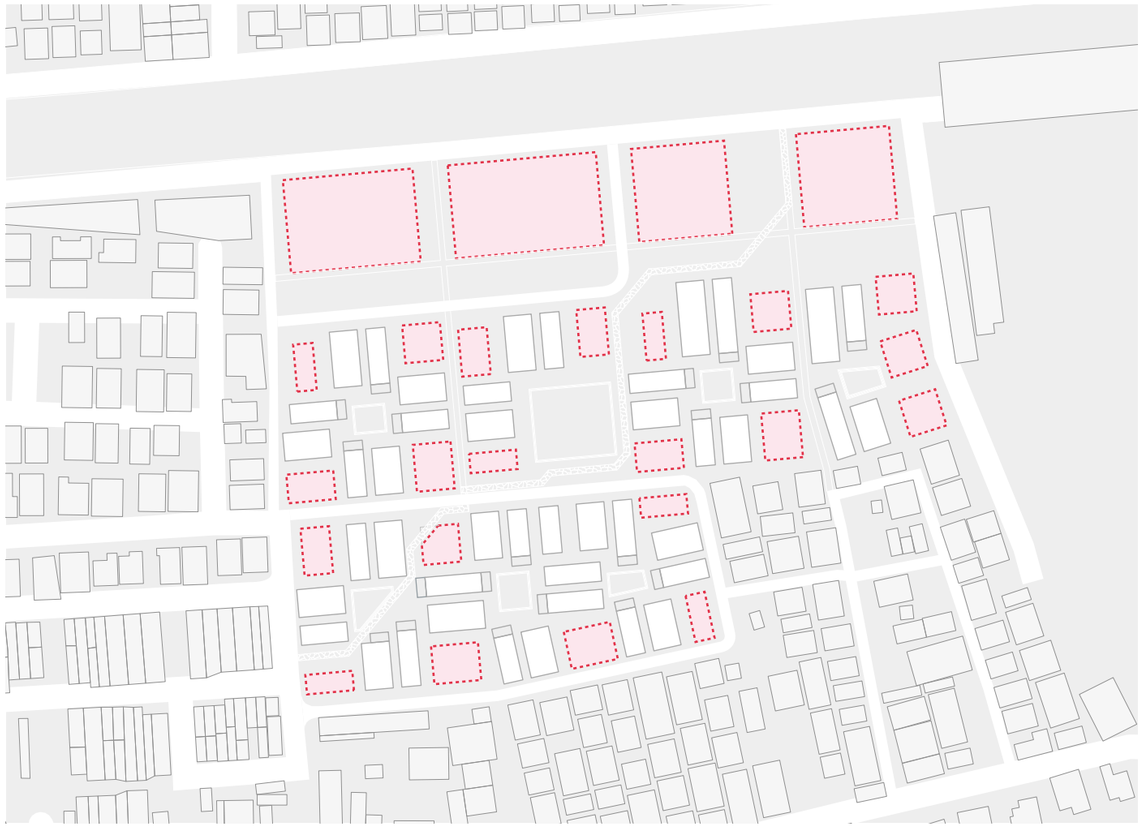
1.1000 section

monsoon squares



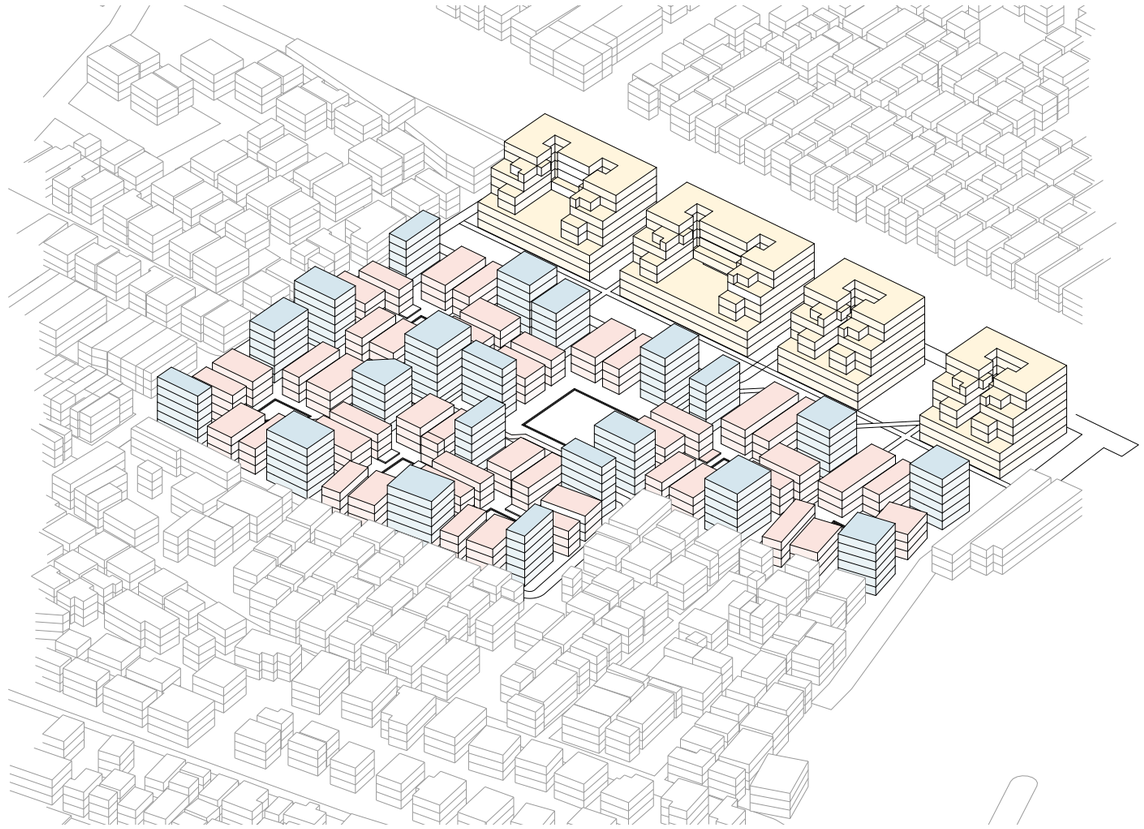
1.2000

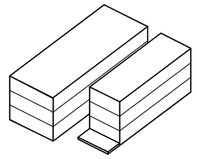
visibility



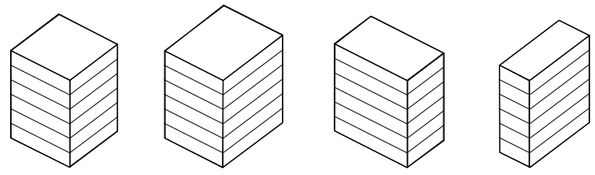
1.2000

public functions

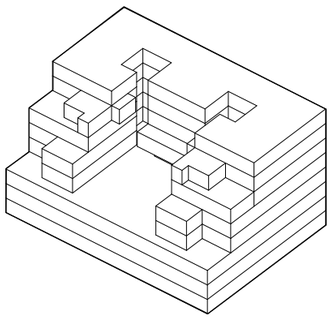

HIG
MIG
EWS / LIG



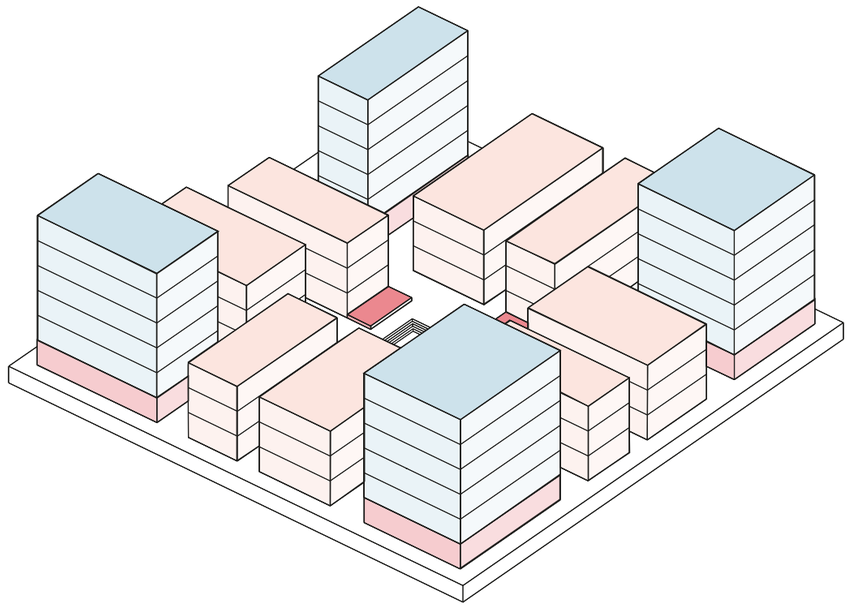
EWS + LIG units



MIG units



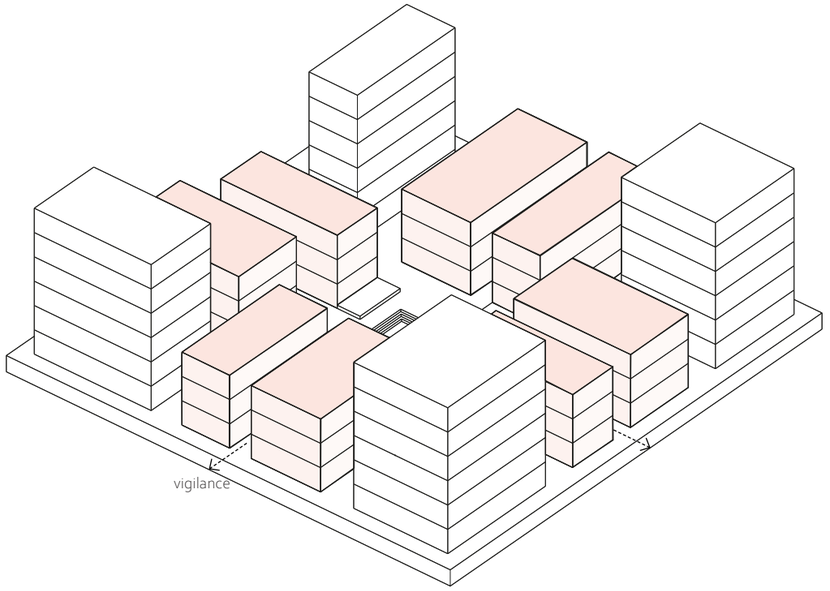
HIG units



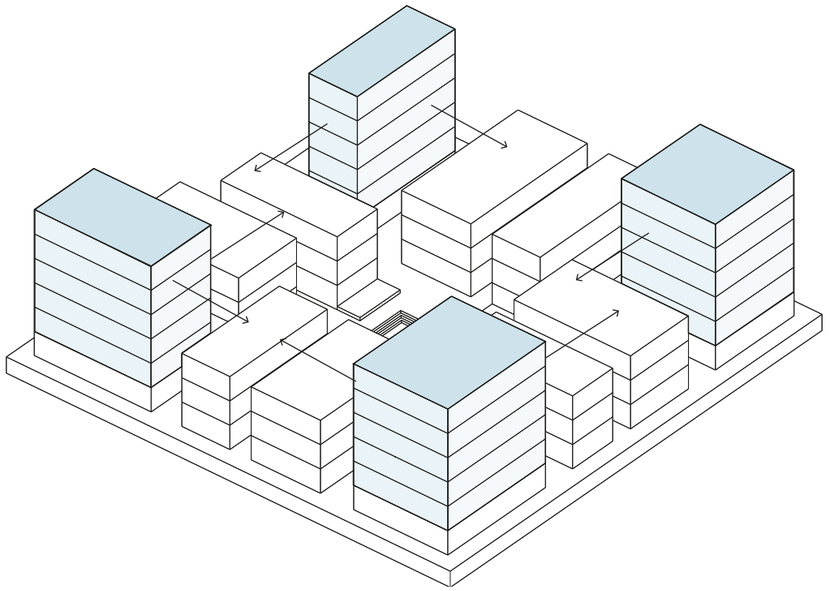
MIG 66-144 m²

Commerce / community

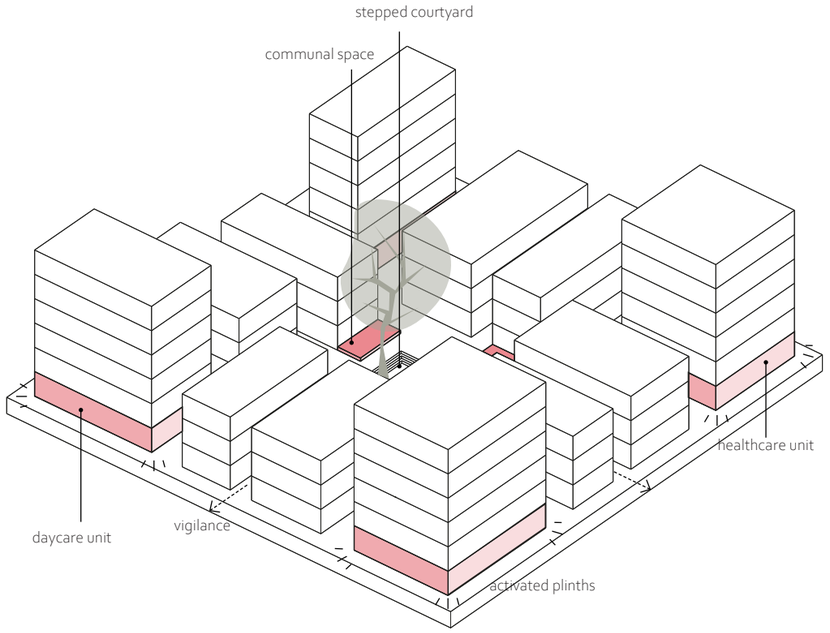
LIG 8-12 m²



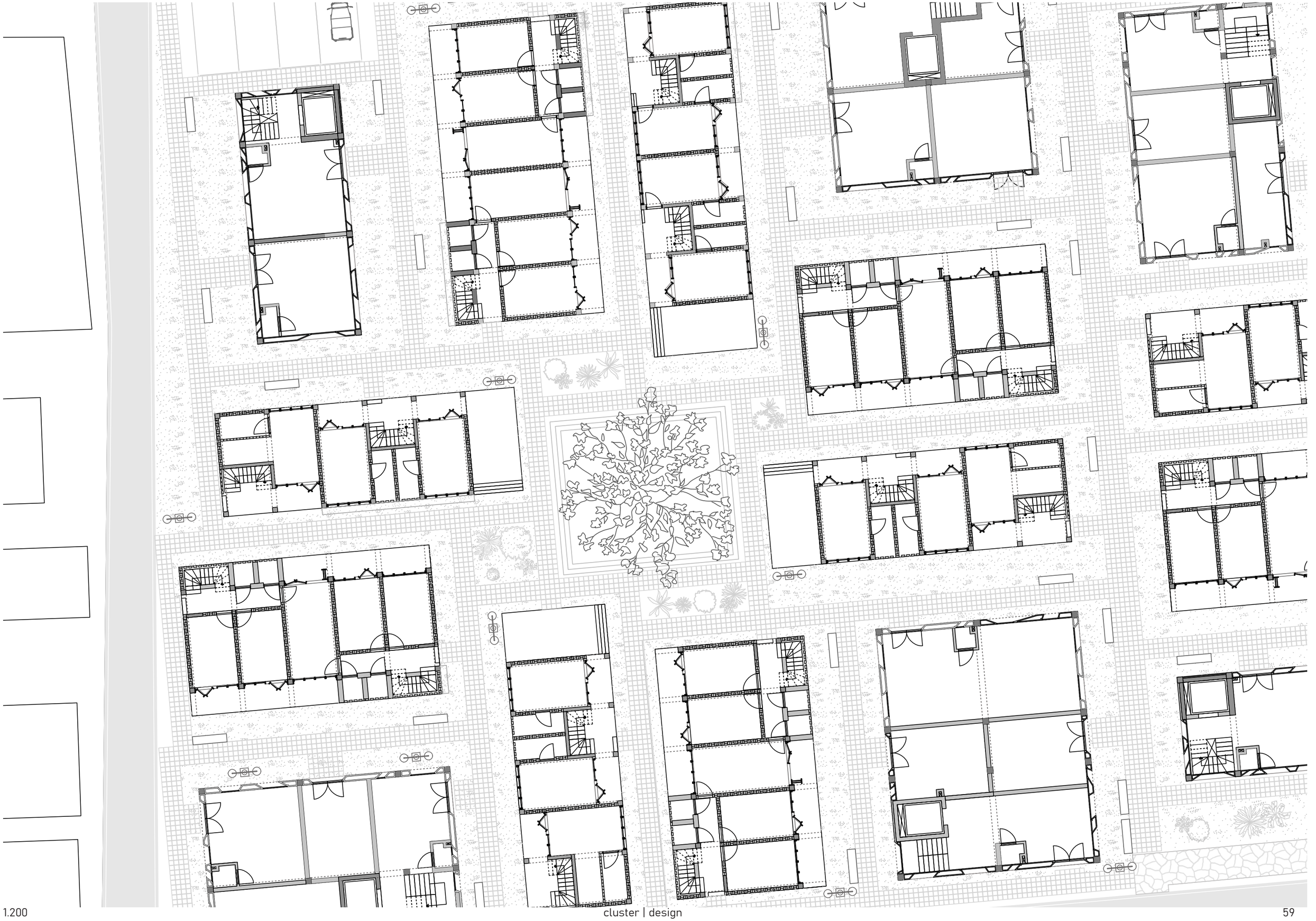
EWS / LIG buildings



MIG buildings

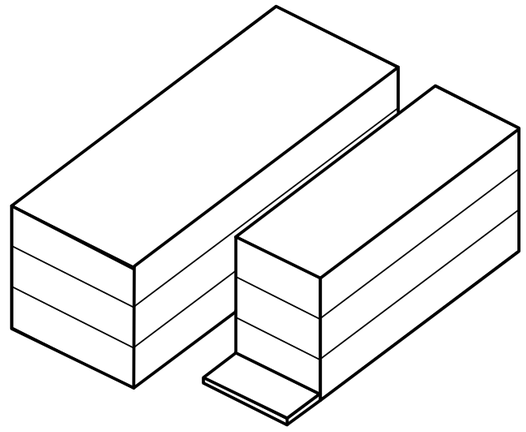


active plinths



1.200

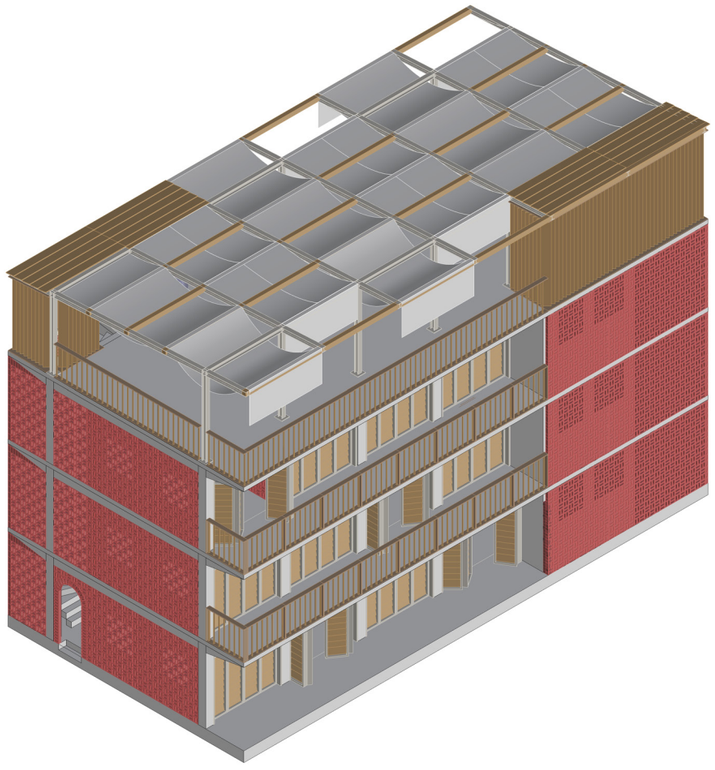




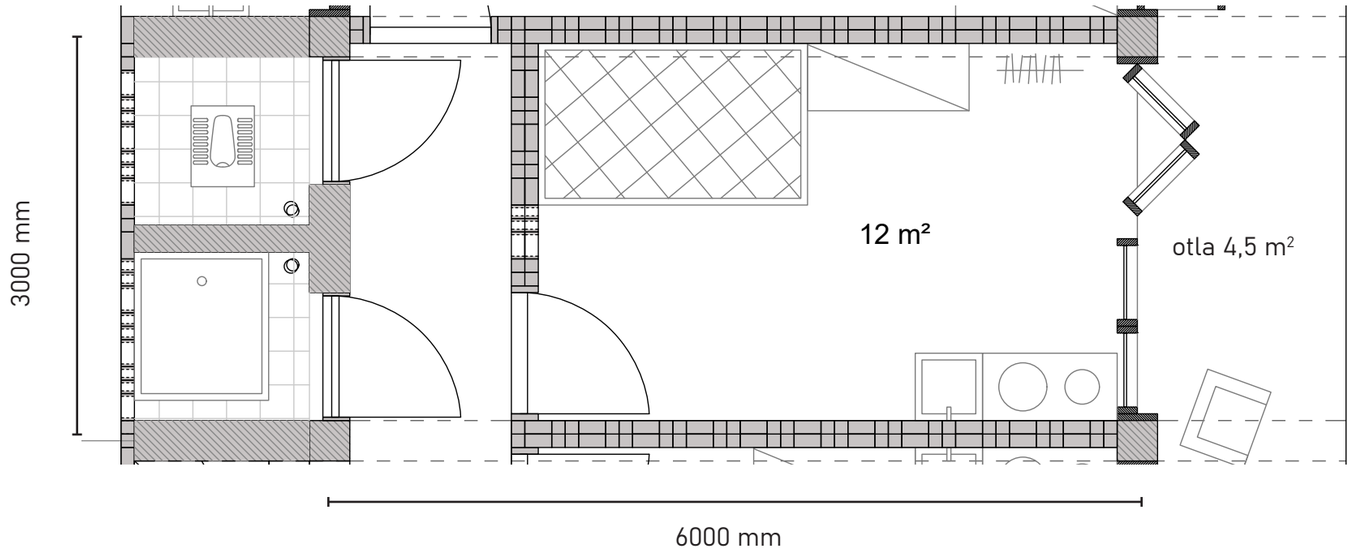
EWS / LIG typology

TARGET GROUP MATRIX			
GROUP	**INCOME** (INR)	**M²** (exl. outdoor space)	**SPATIAL QUALITIES**
EWS + LIG	< 600,000	8 - 16 (start)	- otla (private) - connection to the street - multifunctional space - possibility to expand / grow - ownership and security - flexibility - shared outside space

EWS / LIG typology

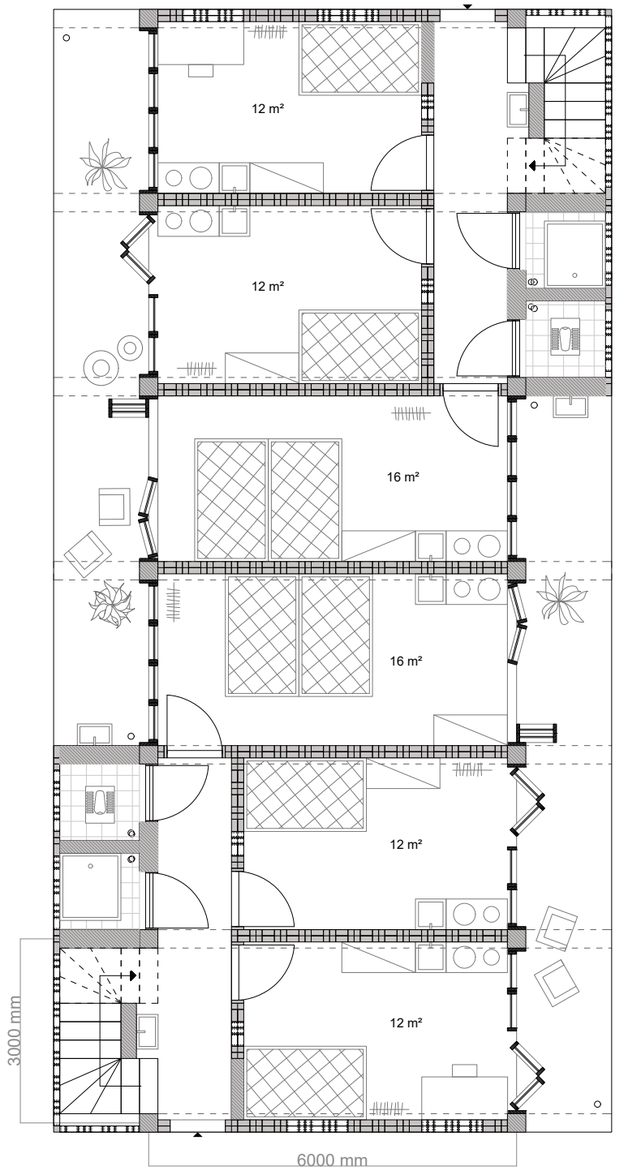


axonometry



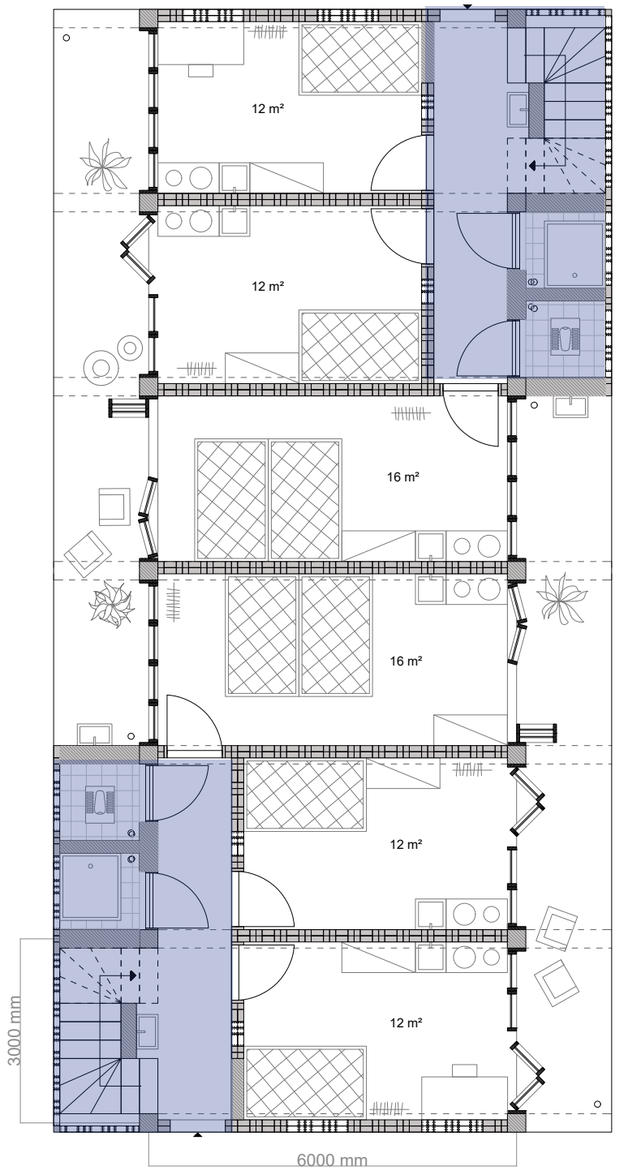
typical unit 1.50

multifunctional space



typical building 1.100

9000 x 18000



typical building 1.100

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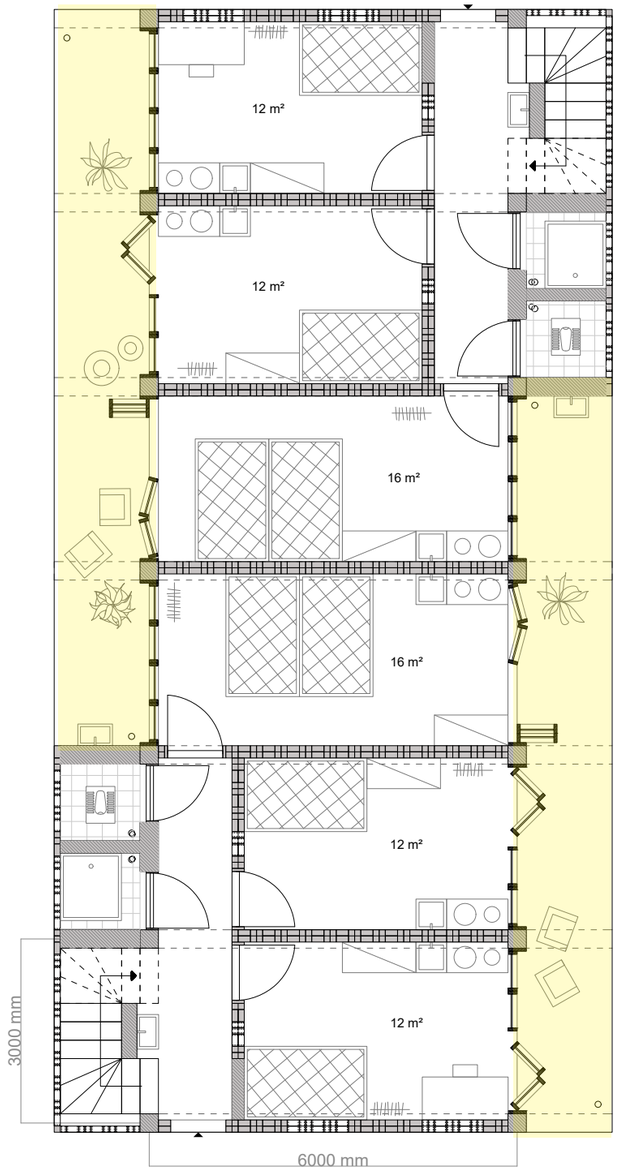
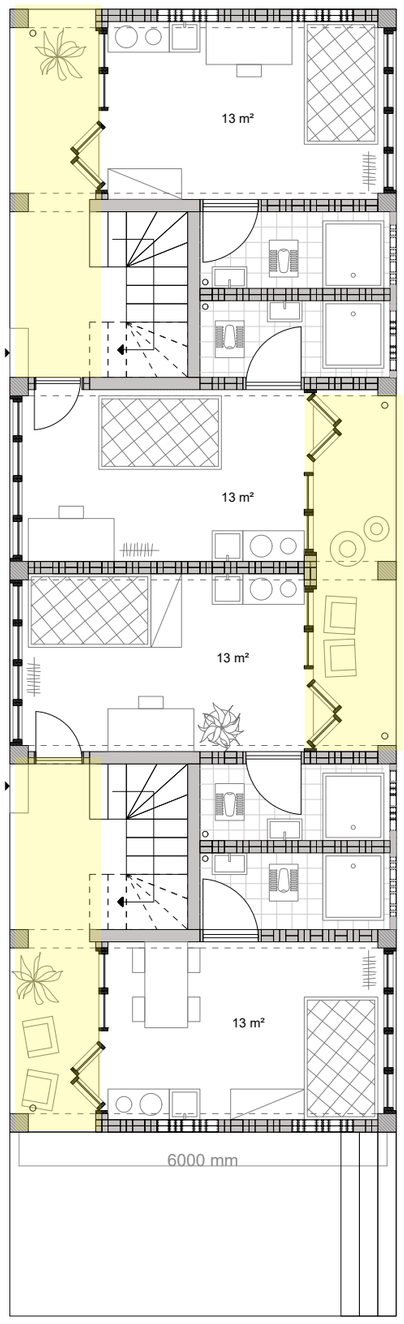
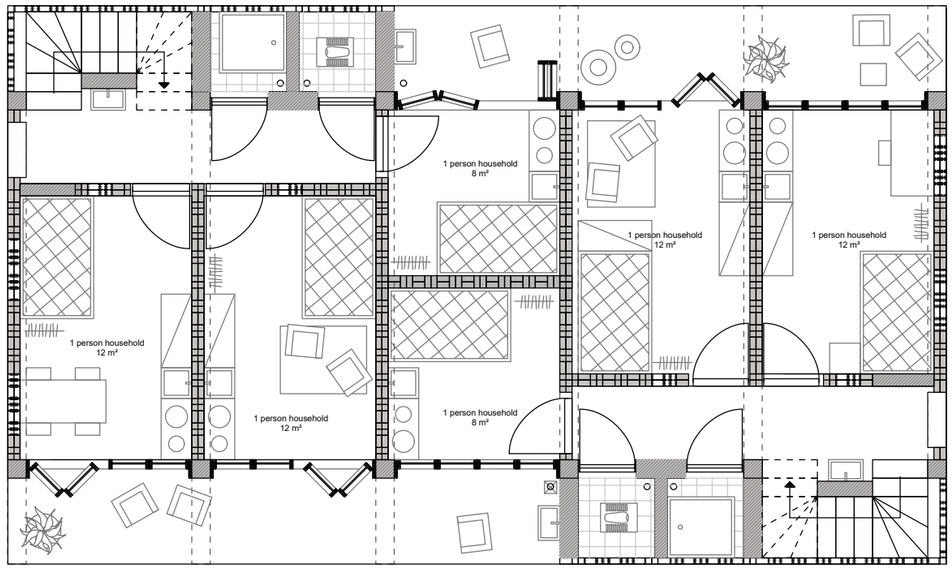




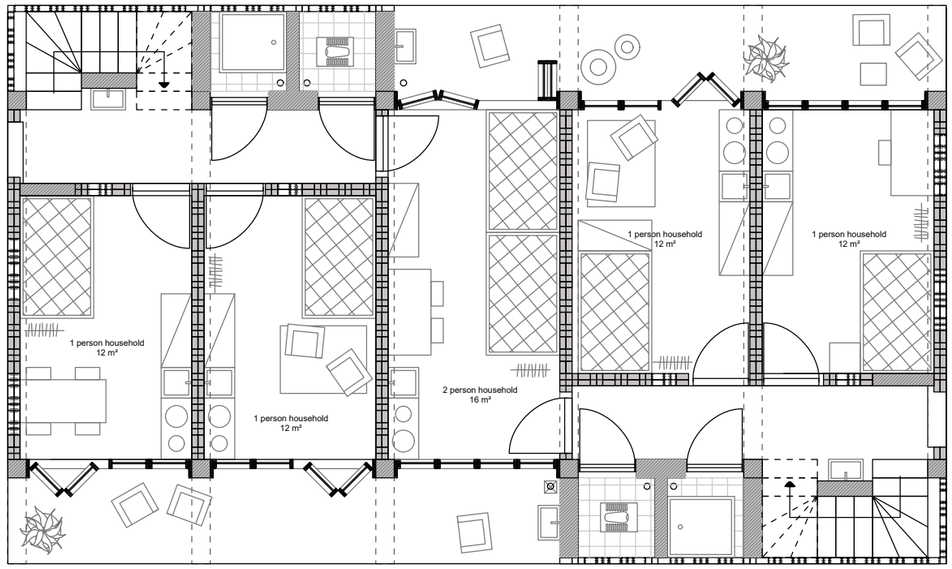
typical building 1.100

9000 x 18000 and 6000 x 18000 mm.



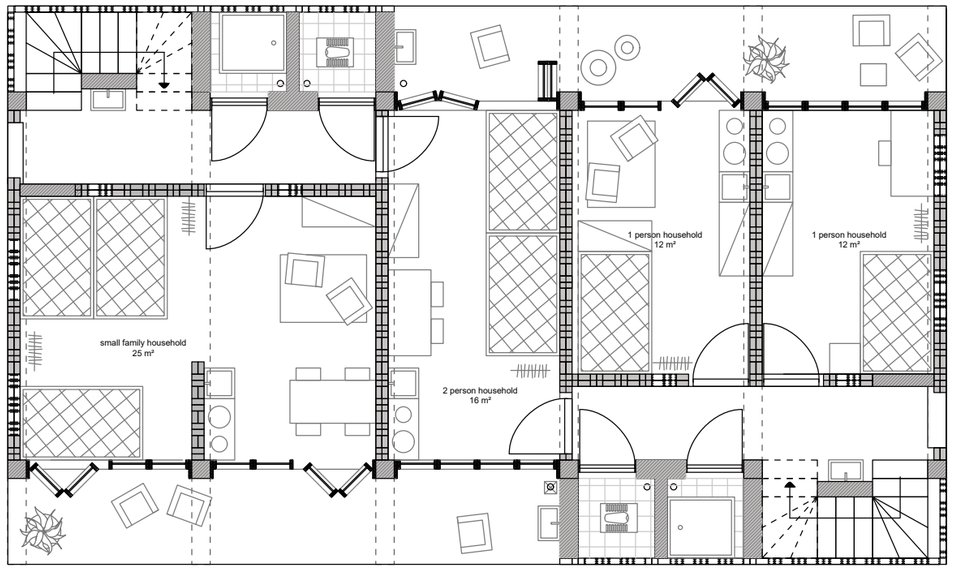
phase 01

6 units per floor: 8-12 m²
1.100



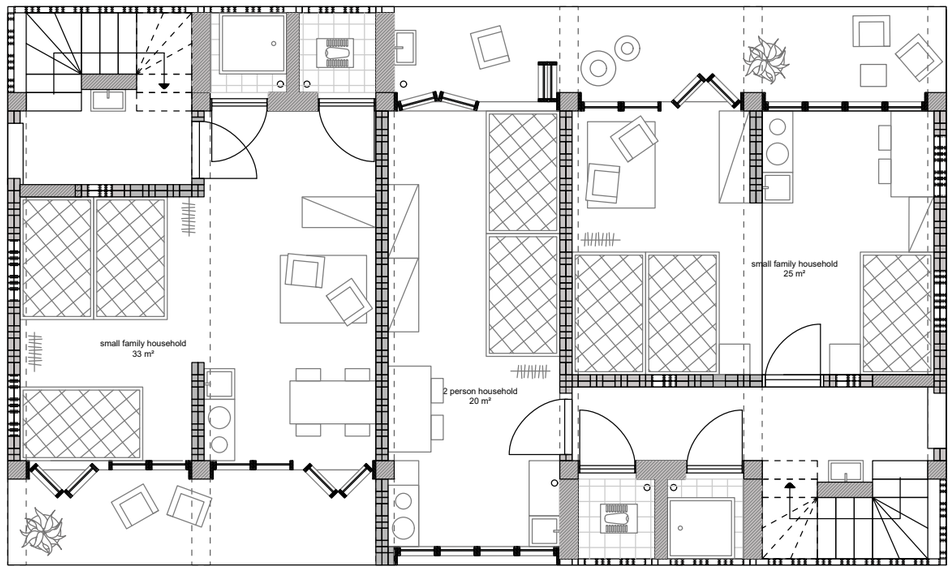
phase 02

5 units per floor: 12-16 m²
1.100



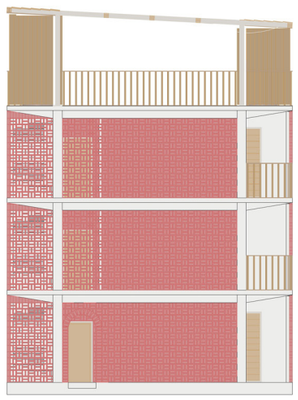
phase 03

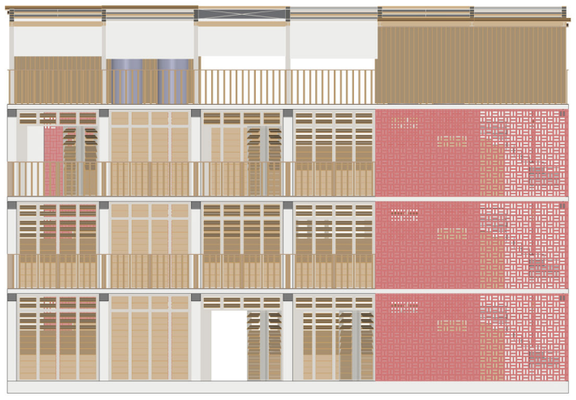
4 units per floor: 12-25 m²
1.100

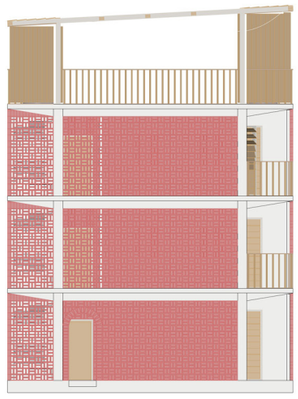


phase 04

3 units per floor: 20-33 m²
1.100









facades

1.100









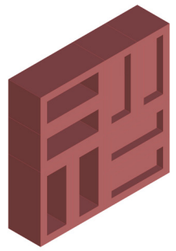
section

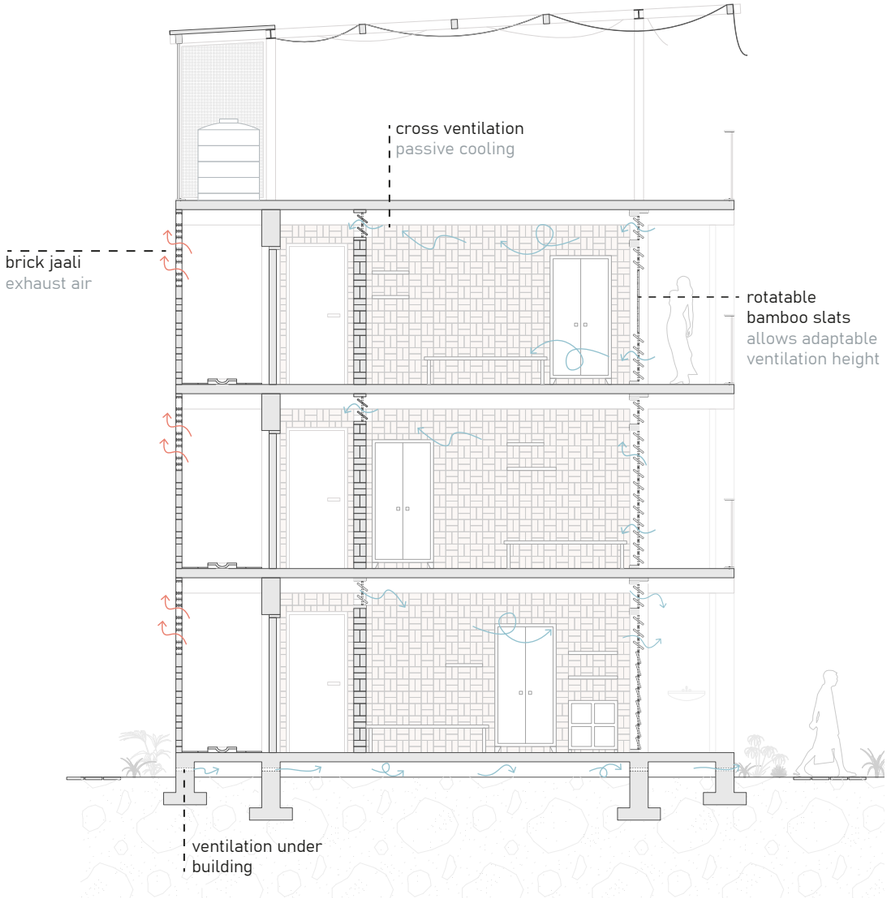
1.50



everyday life in the neighbourhood

work, care, housing and public space come together



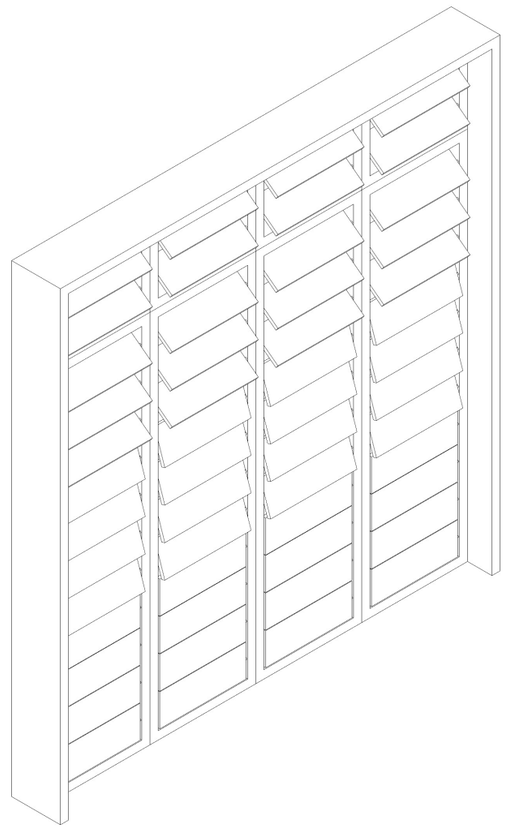


climate - ventilation

1.100







ventilation system

detail 1.10



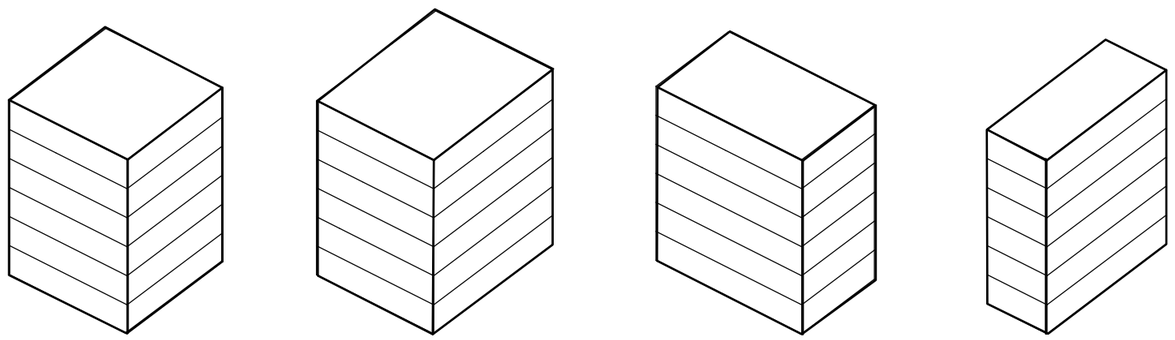
everyday life in the neighbourhood

work, care, housing and public space come together



everyday life in the neighbourhood

work, care, housing and public space come together

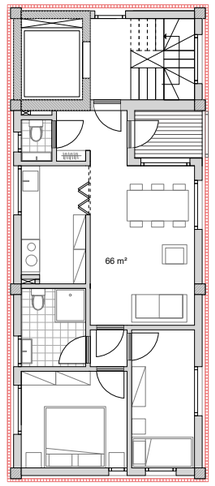


MIG typology

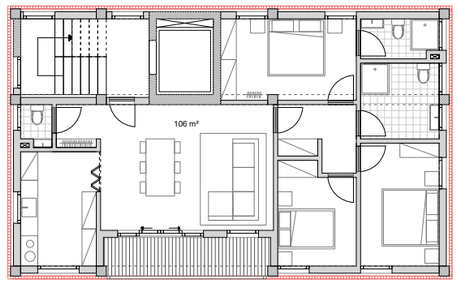
TARGET GROUP MATRIX

GROUP	INCOME (INR)	M² (exl. outdoor space)	SPATIAL QUALITIES
MIG	600,000 - 1,200,000	66-144	- privacy; no dwelling on the street - small private outdoor space - multiple bedrooms - elevator - public and private parts of the house are seperated

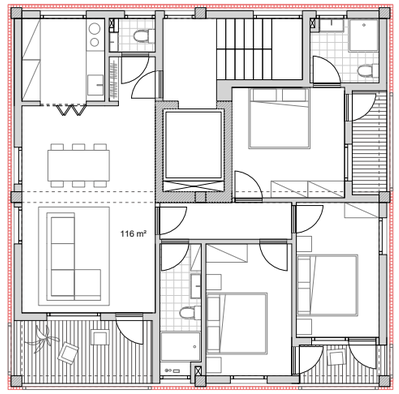
MIG typology



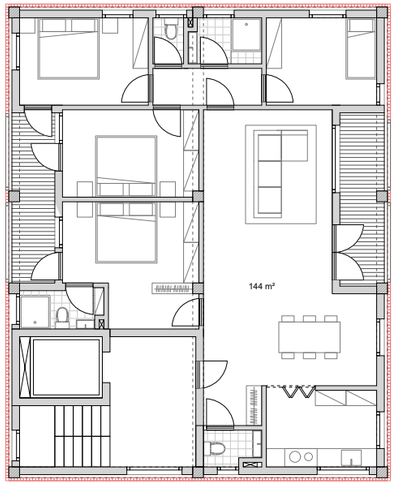
6000 x 15000 mm



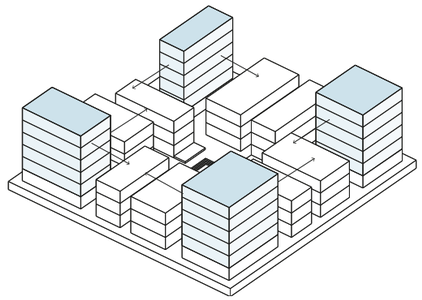
9000 x 15000 mm



12000 x 12000 mm

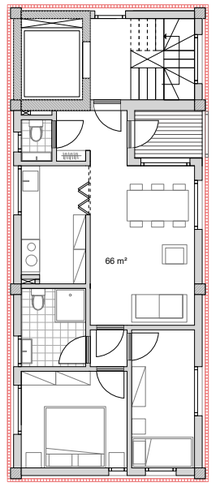


12000 x 15000 mm

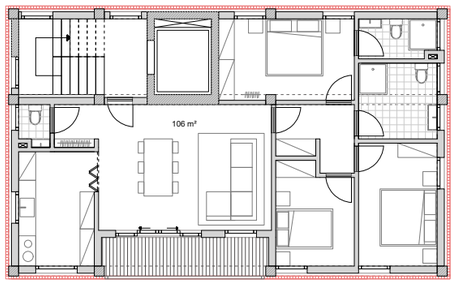


four types: flexibility for clusters

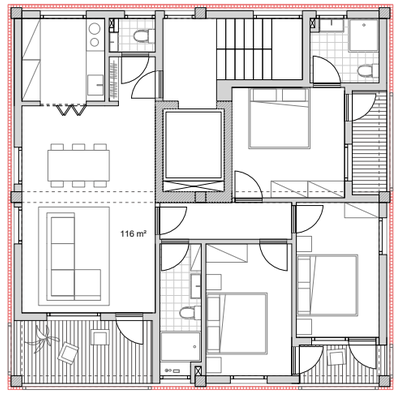
1.200



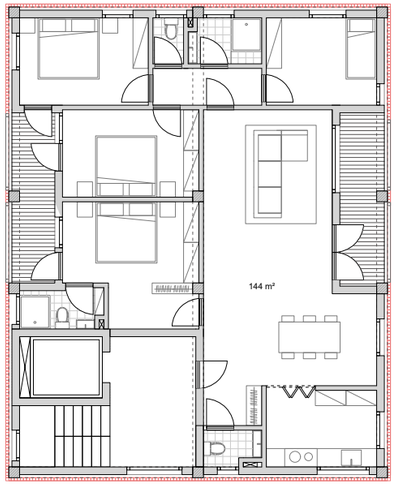
66 m²



106 m²



116 m²

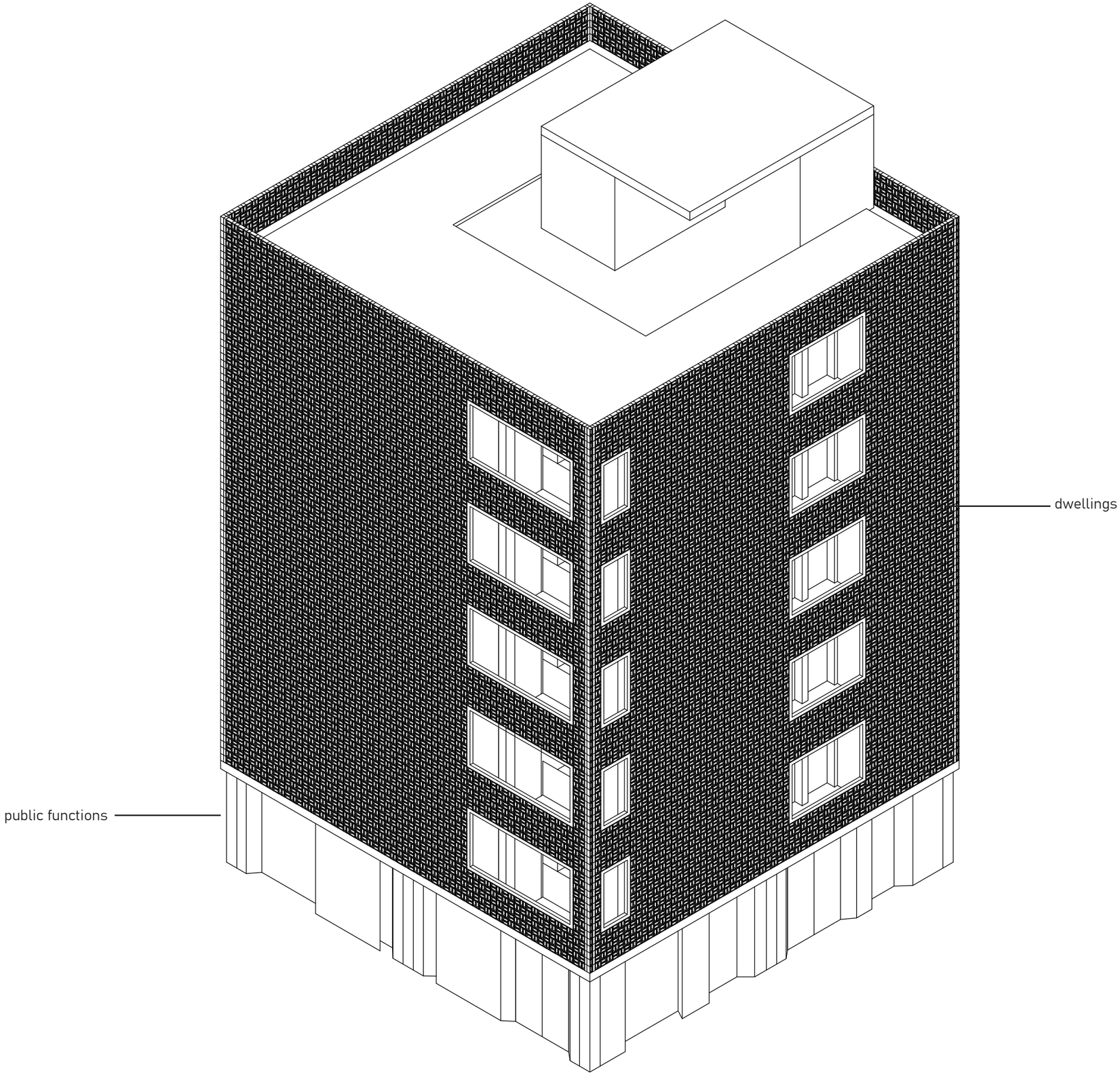


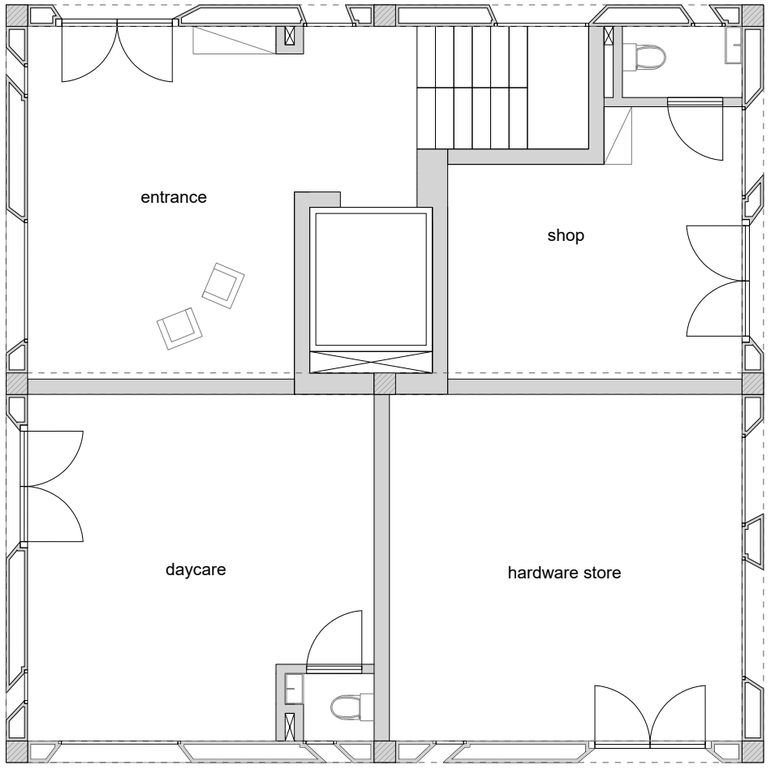
144 m²

segments of middle income groups

gradual housing ladder within the middle income group

1.200


dwellings
public functions



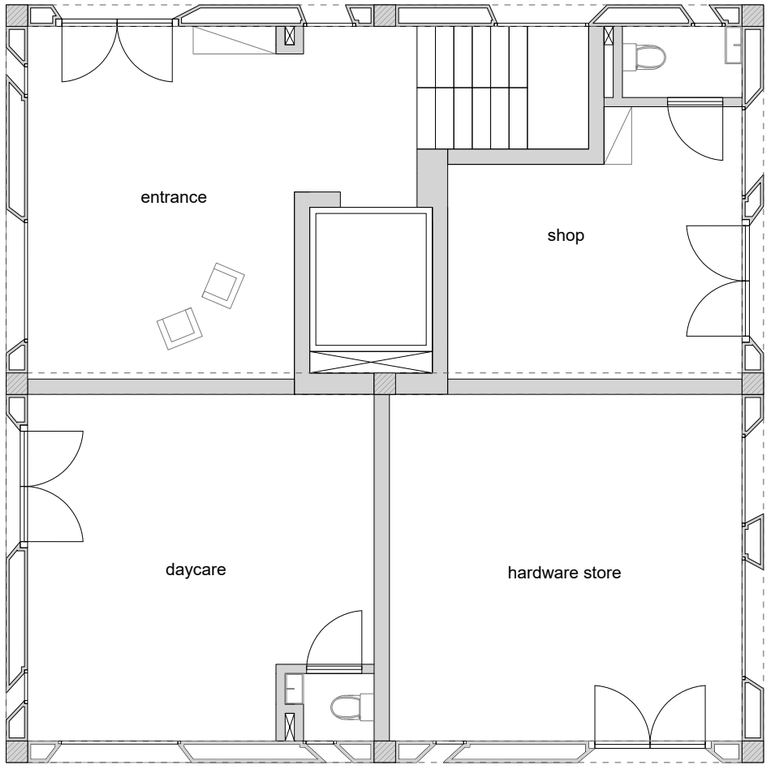
groundfloor



floor 01 - 05

MIG I - 116 m²

12000 x 12000 mm 1.100



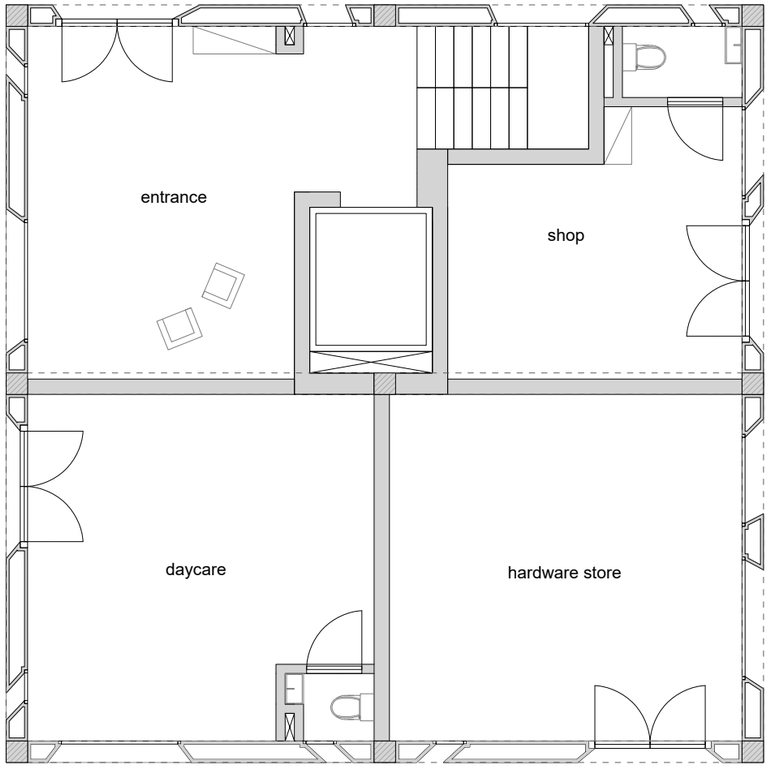
groundfloor



floor 01 - 05

MIG I - 116 m²

12000 x 12000 mm 1.100



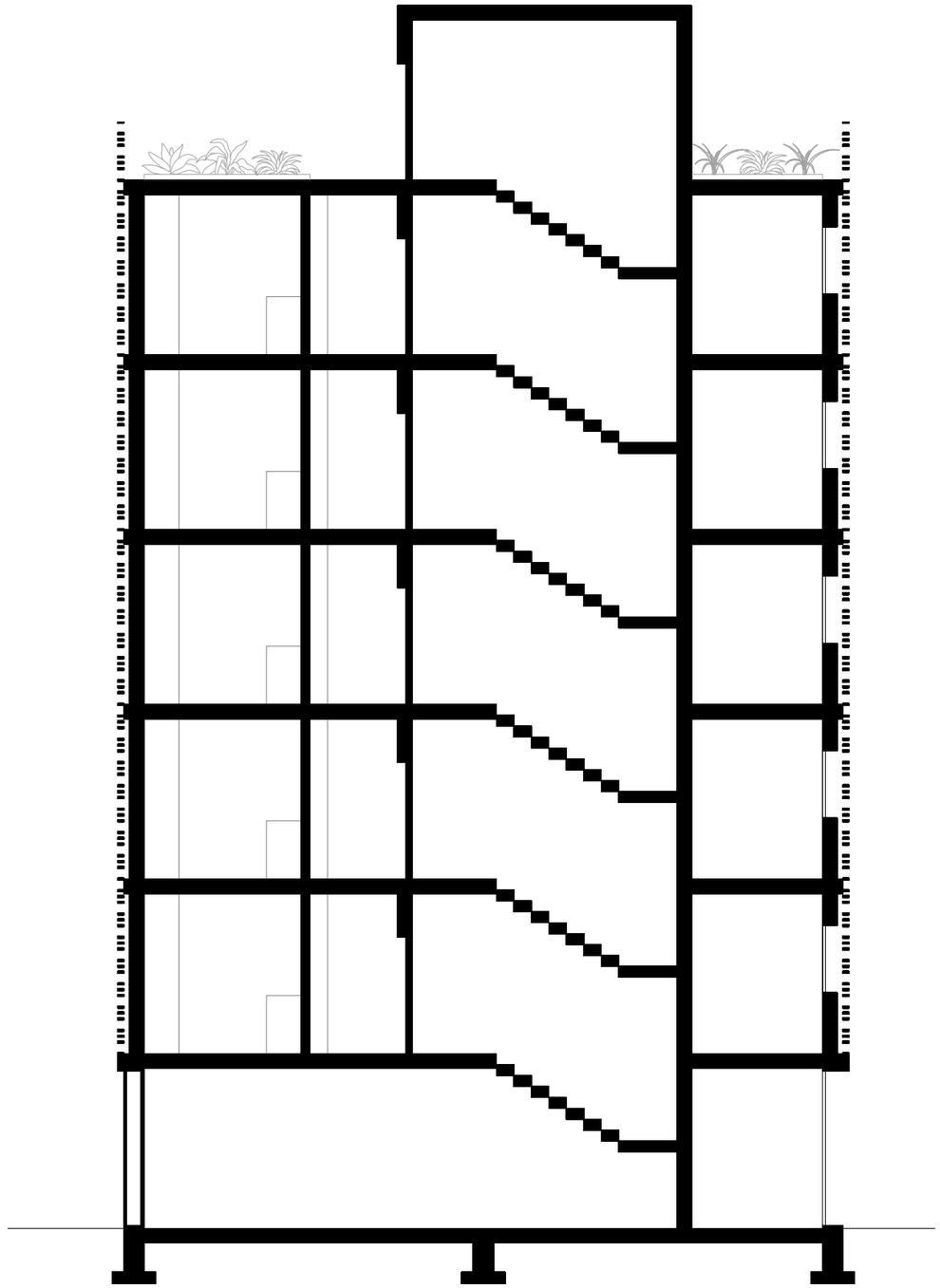
groundfloor



floor 01 - 05

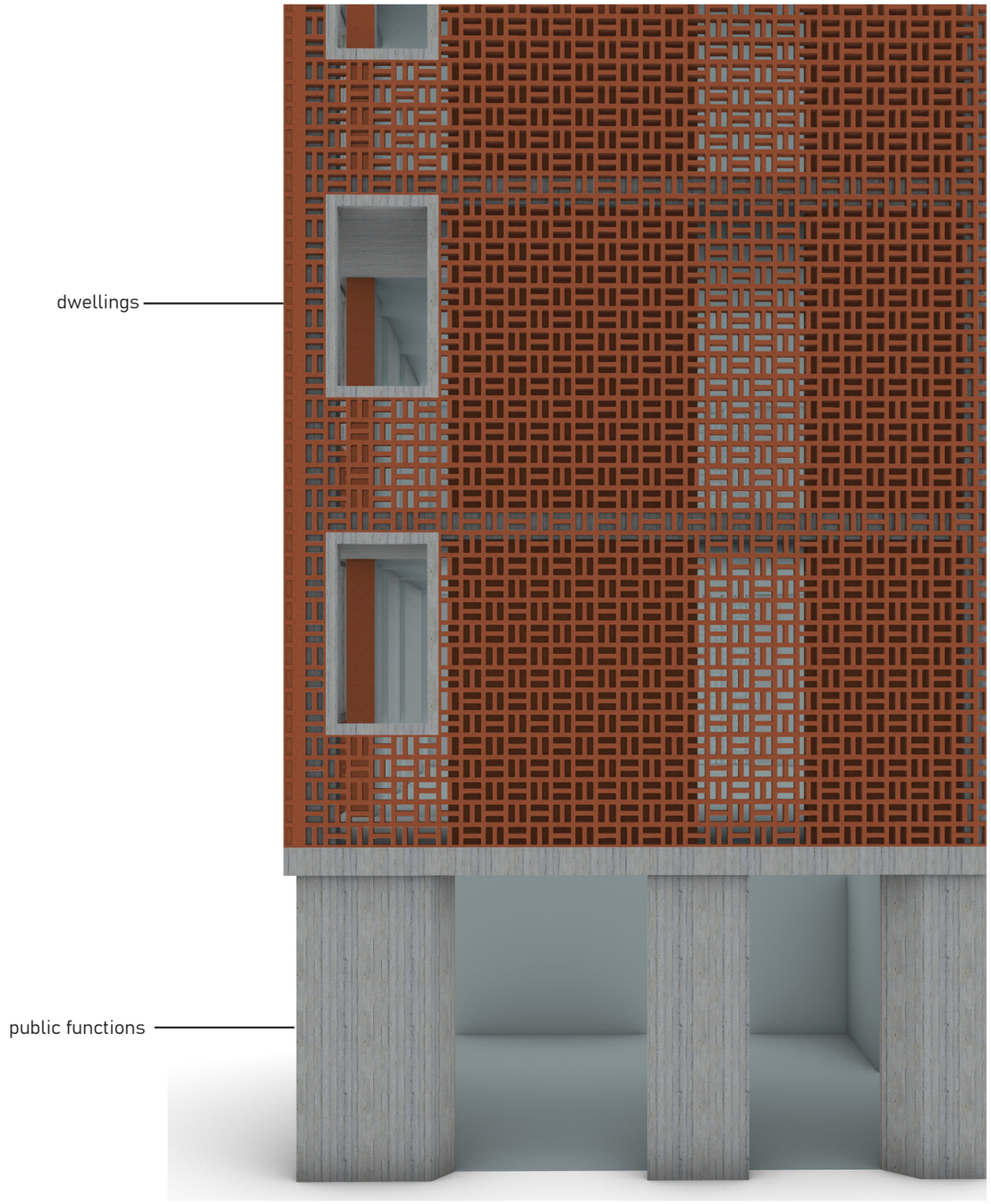
MIG I - 116 m²

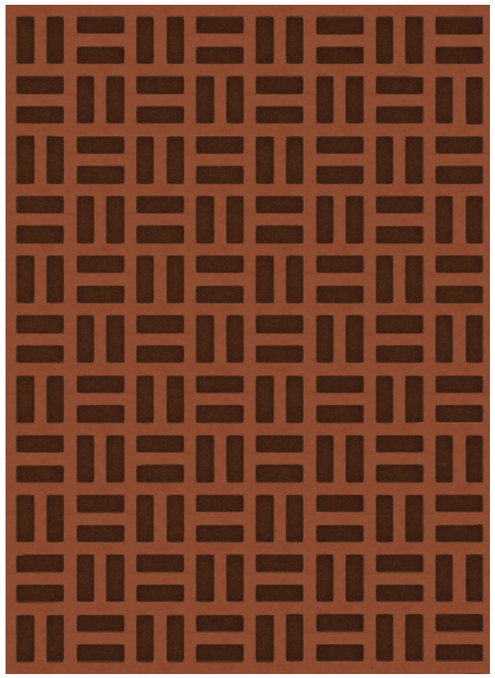
12000 x 12000 mm 1.100

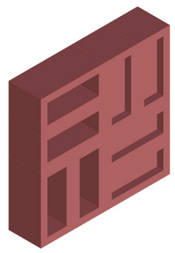


MIG I - 116 m²

12000 x 12000 mm 1.100







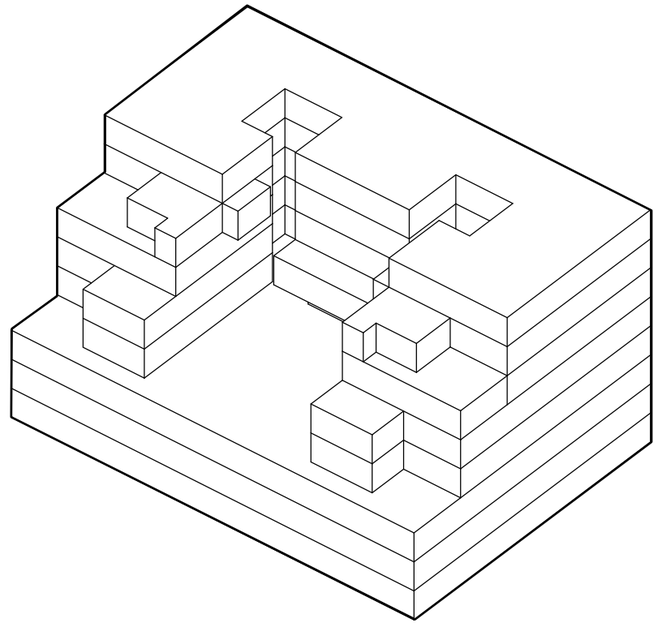
facades

seperation public and private



everyday life in the neighbourhood

work, care, housing and public space come together

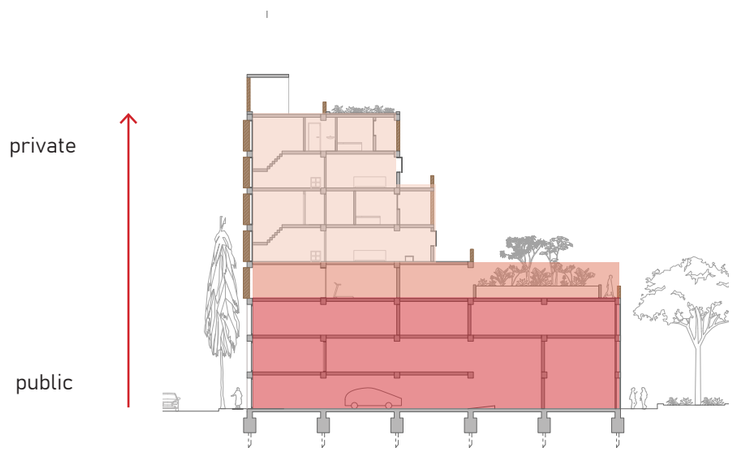


HIG typology

TARGET GROUP MATRIX

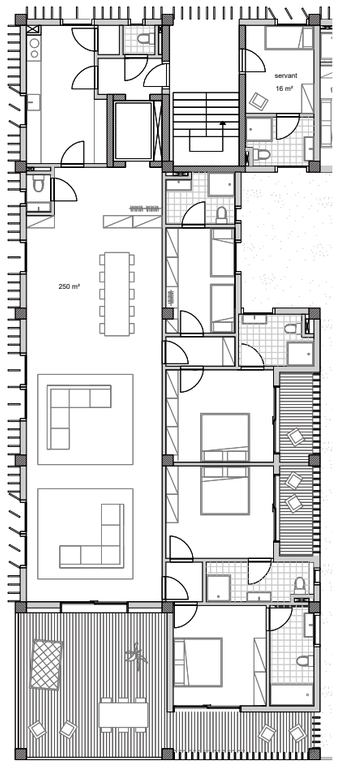
GROUP	INCOME (INR)	M² (exl. outdoor space)	SPATIAL QUALITIES
HIG	> 1,200,000	145 - 310	- seperate servant room - entrance by elevator - large private outdoor space - public and private parts of the house are seperated - multiple bedrooms with bathroom ensuite - parking in the building - privacy; dwellings start at the 4th floor

HIG typology



organisation public and private

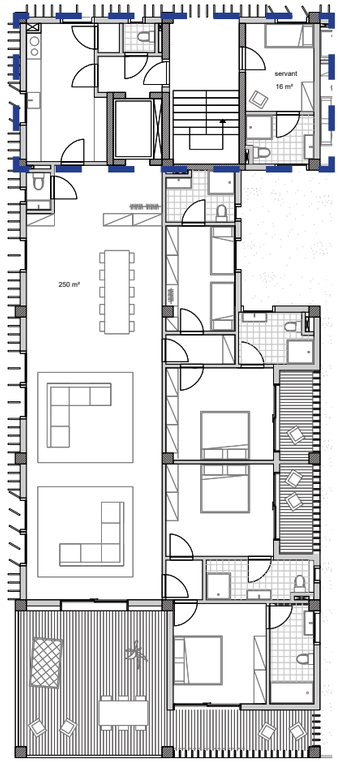
section 1.500



typical unit 250 m²

1.250

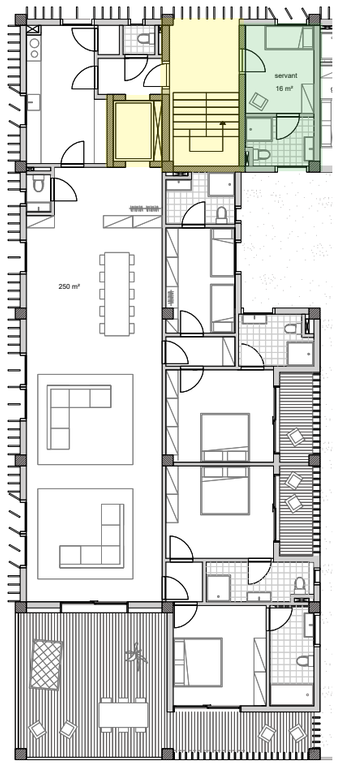
traffic noise



south oriented

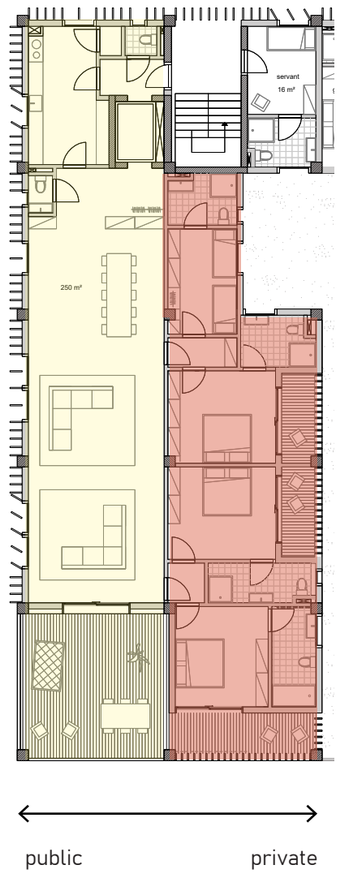
typical unit 250 m²

1.250



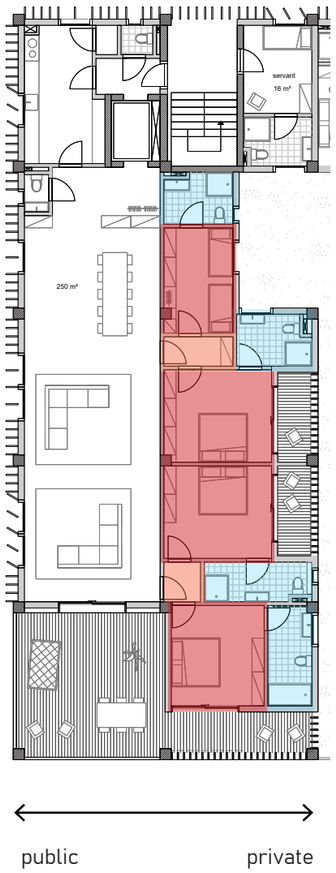
typical unit 250 m²

1.250



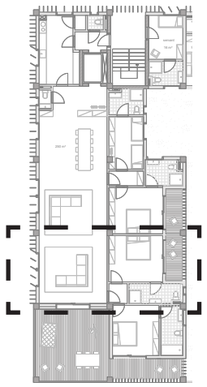
typical unit 250 m²

1.250



typical unit 250 m²

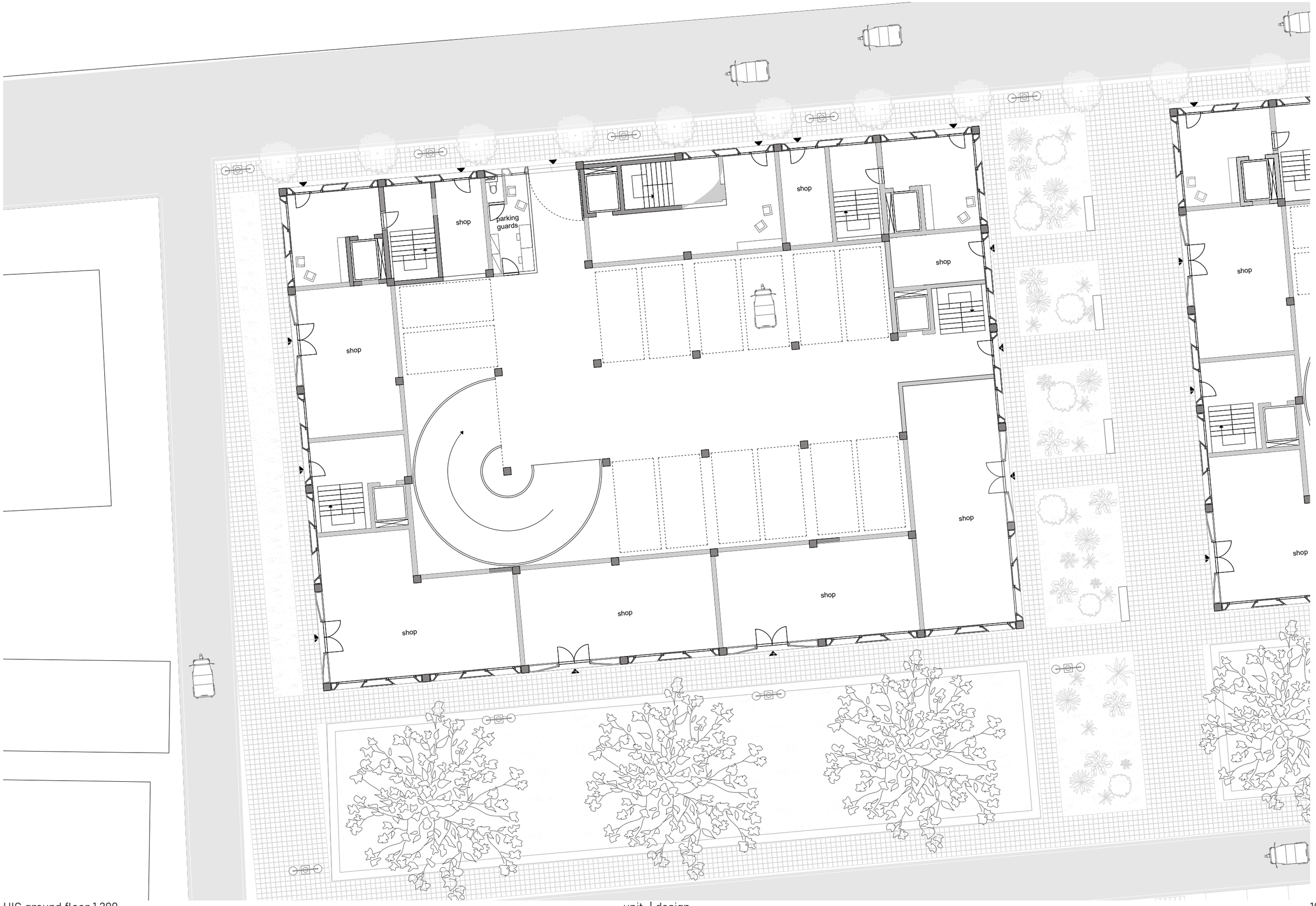
1.250



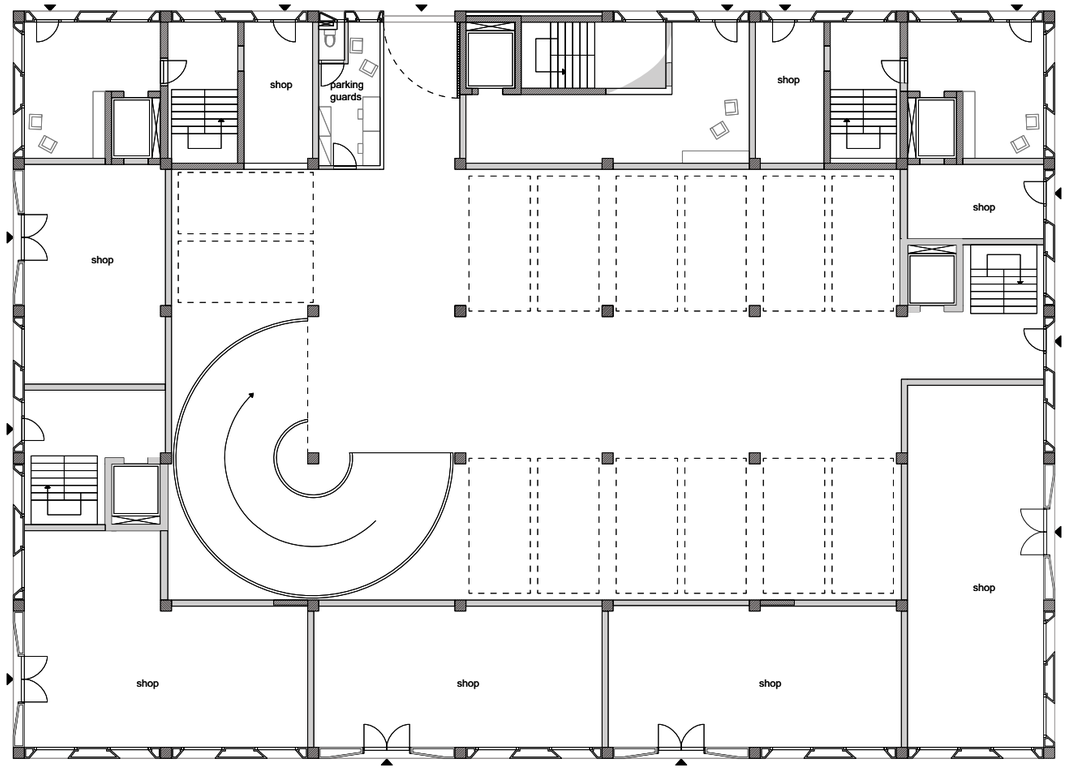


sunlight regulation

1.100

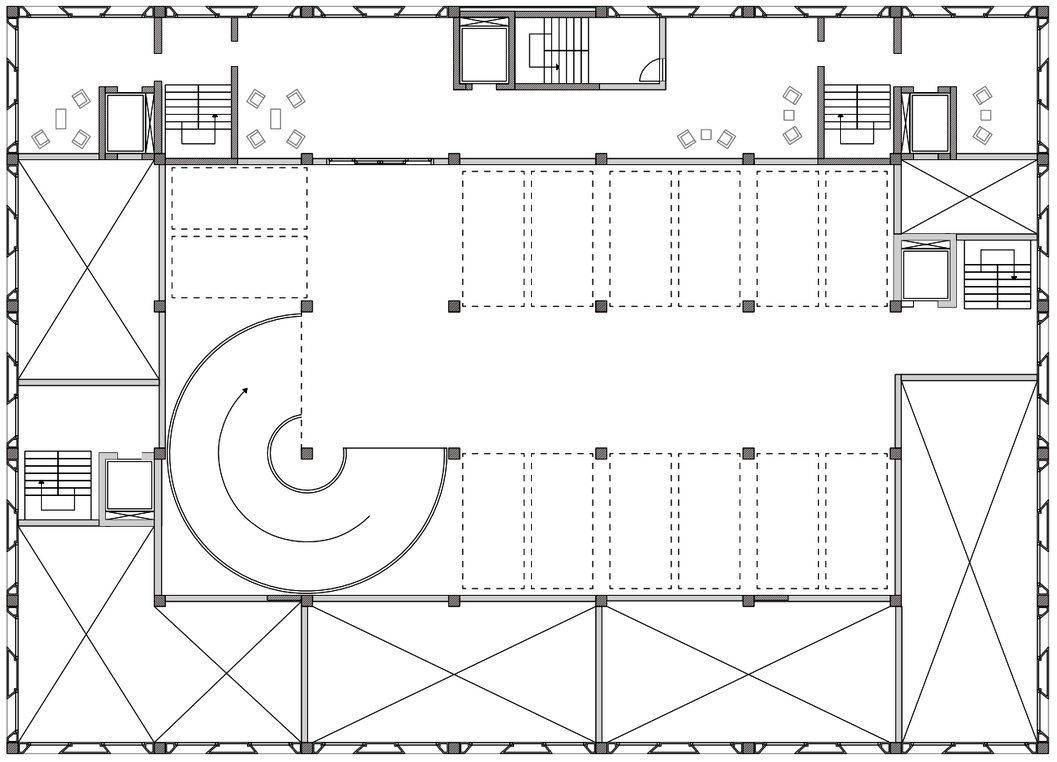


HIG ground floor 1.200



ground floor

1.250



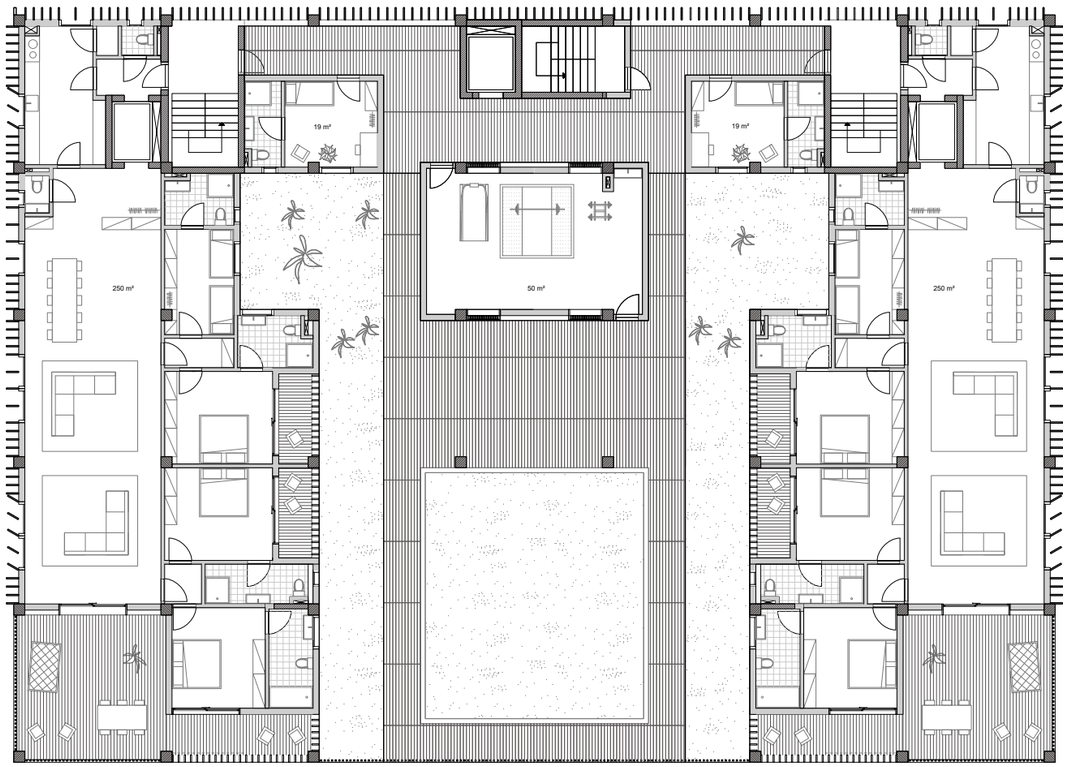
first floor

1.250



third floor

1.250



fourth floor

1.250



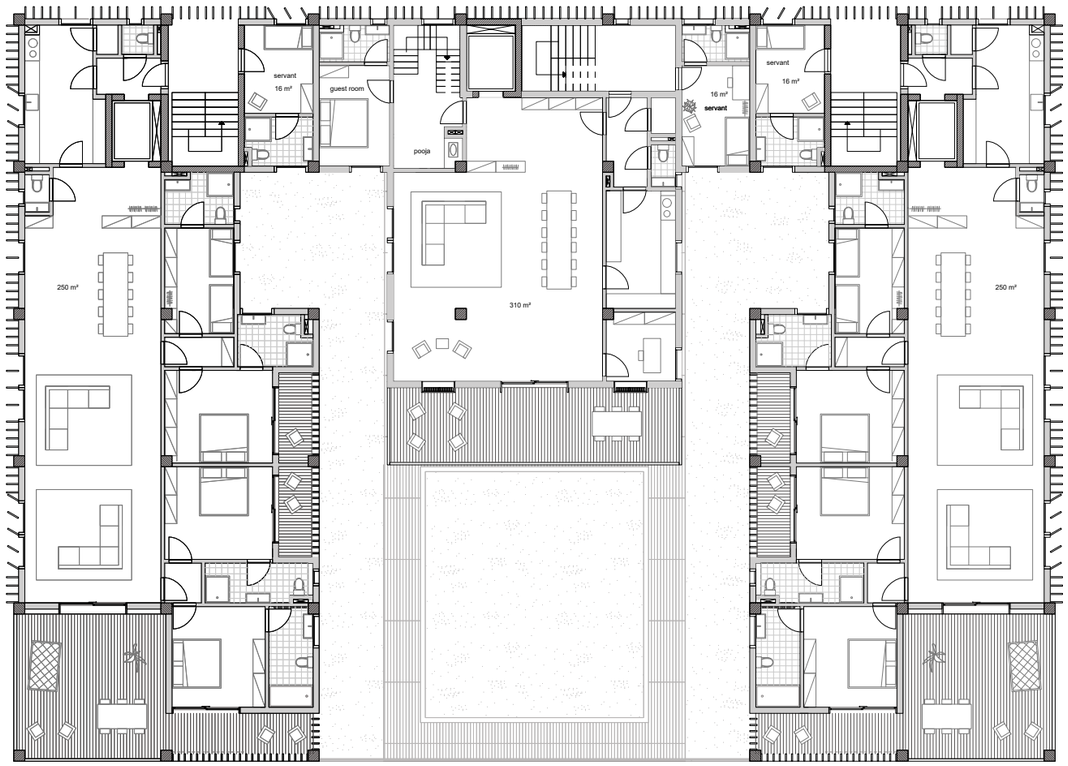
everyday life in the neighbourhood

work, care, housing and public space come together



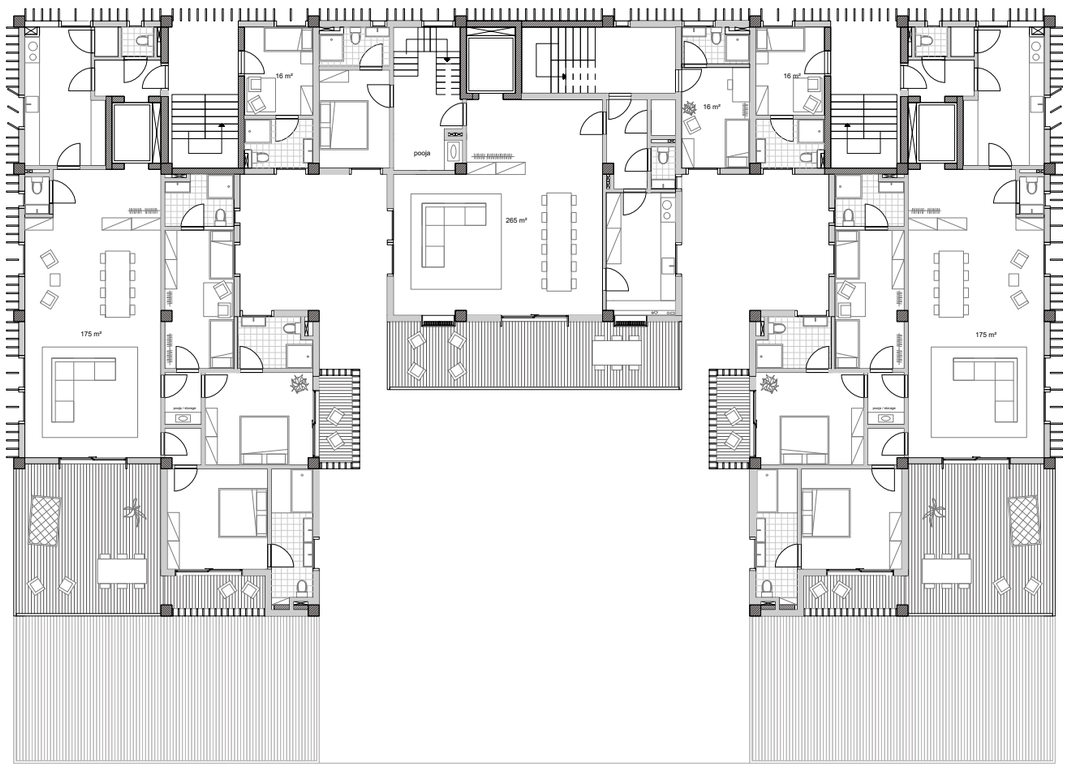
everyday life in the neighbourhood

work, care, housing and public space come together



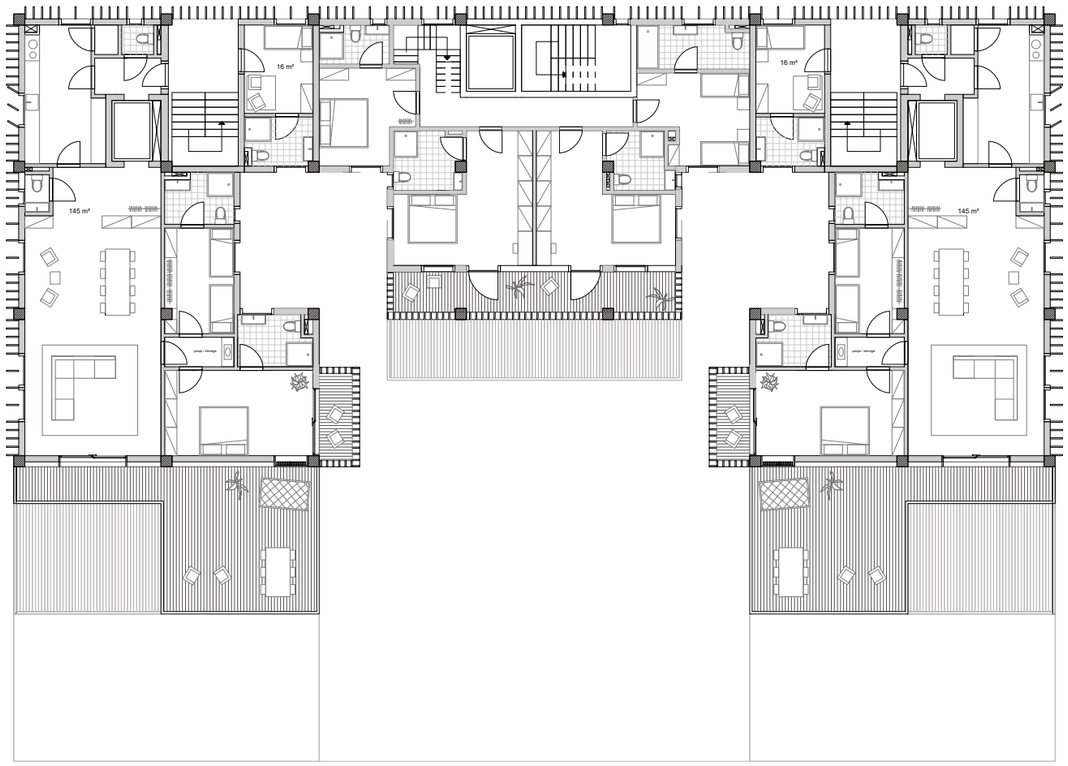
fifth floor

1.250



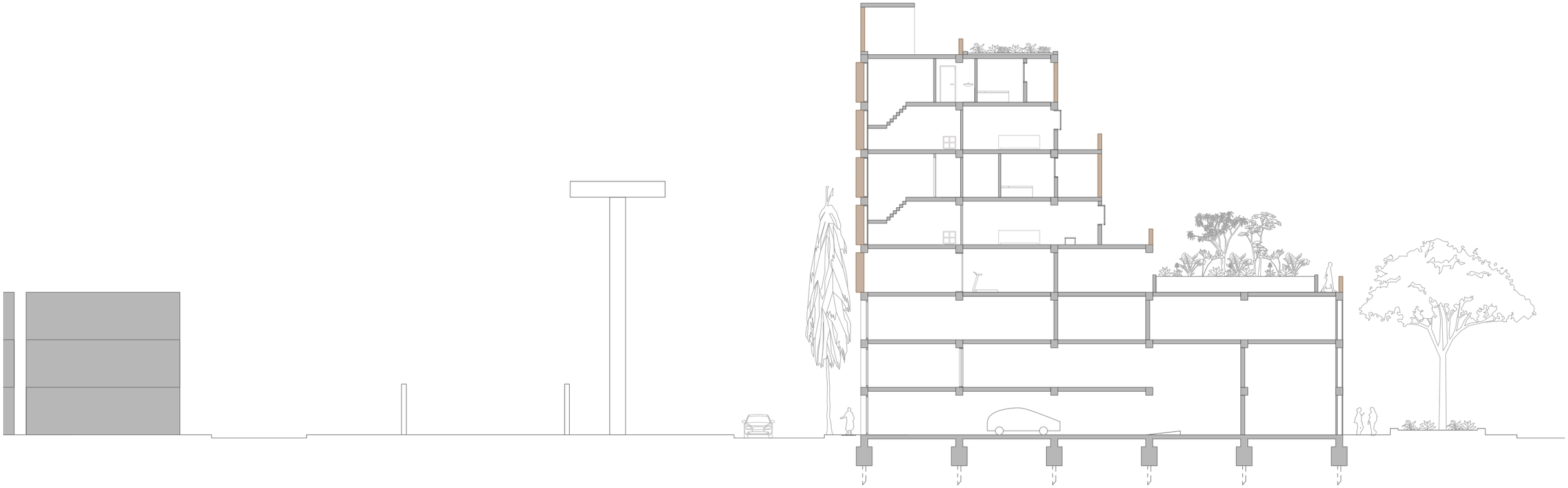
sixth floor

1.250



seventh floor

1.250



section

1.250









facades

1.550



everyday life in the neighbourhood

work, care, housing and public space come together



everyday life in the neighbourhood

work, care, housing and public space come together



everyday life in the neighbourhood

work, care, housing and public space come together



everyday life in the neighbourhood

work, care, housing and public space come together

challenge		design response
housing insecurity	→	flexible, adaptable housing system
risk of eviction		consolidation and collective infrastructure
lack of care facilities		shared facilities within each cluster
social segregation		mixed income clusters
changing households		adaptable units

answering the research question:

How can flexibility be used as a design approach to provide secure and socially supportive living conditions for migrant households in informal settlements?

permanent temporality

housing that can accomodate change without requiring demolition, relocation or displacement


thank you.