

COLLECTIVE RE-USE

A REINTERPRETATION OF
THE PORTIEK DWELLING

P5 presentation : Master of Architecture TU Delft
July 3rd, 2014

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Quist, Esther Gramsbergen



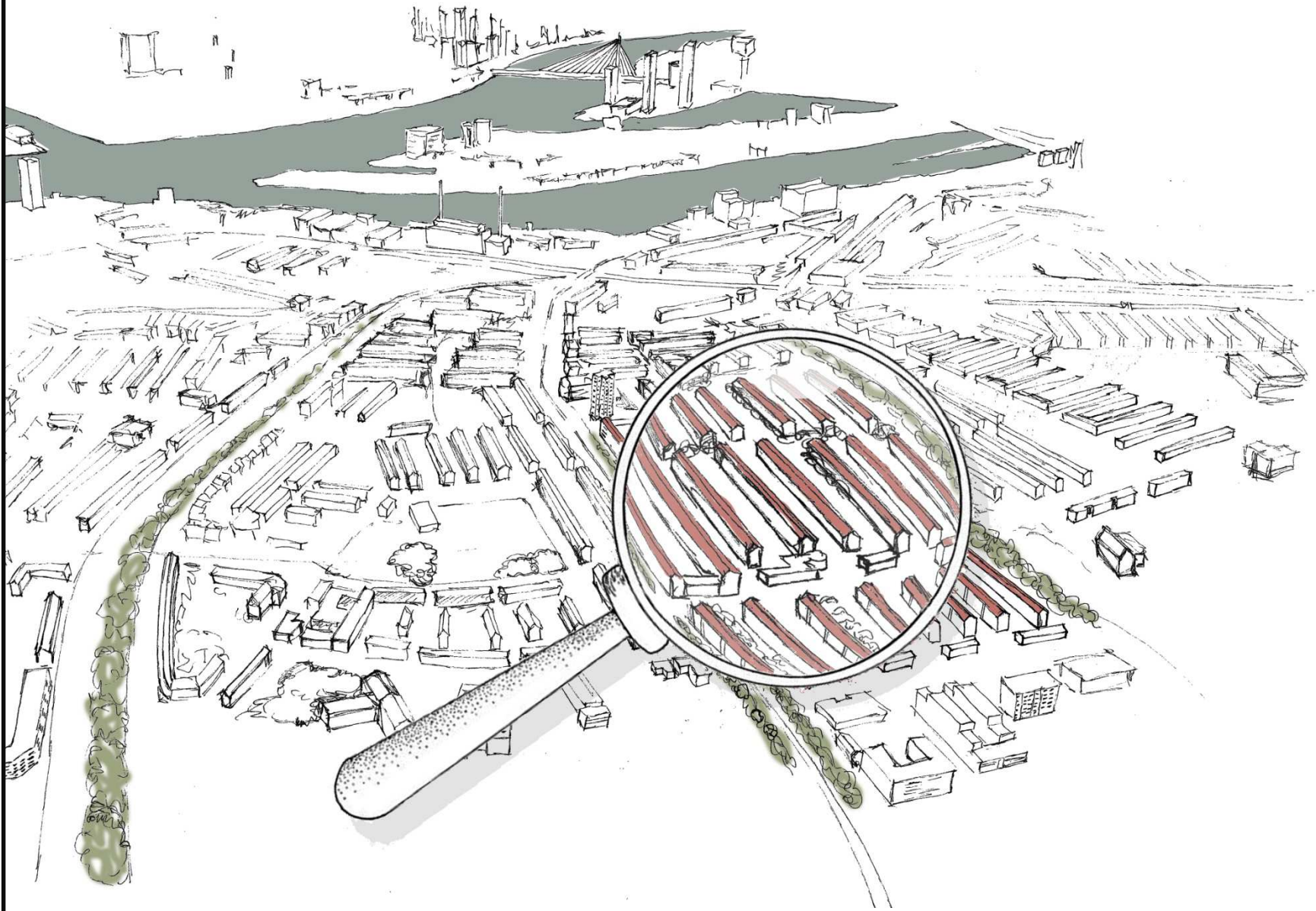
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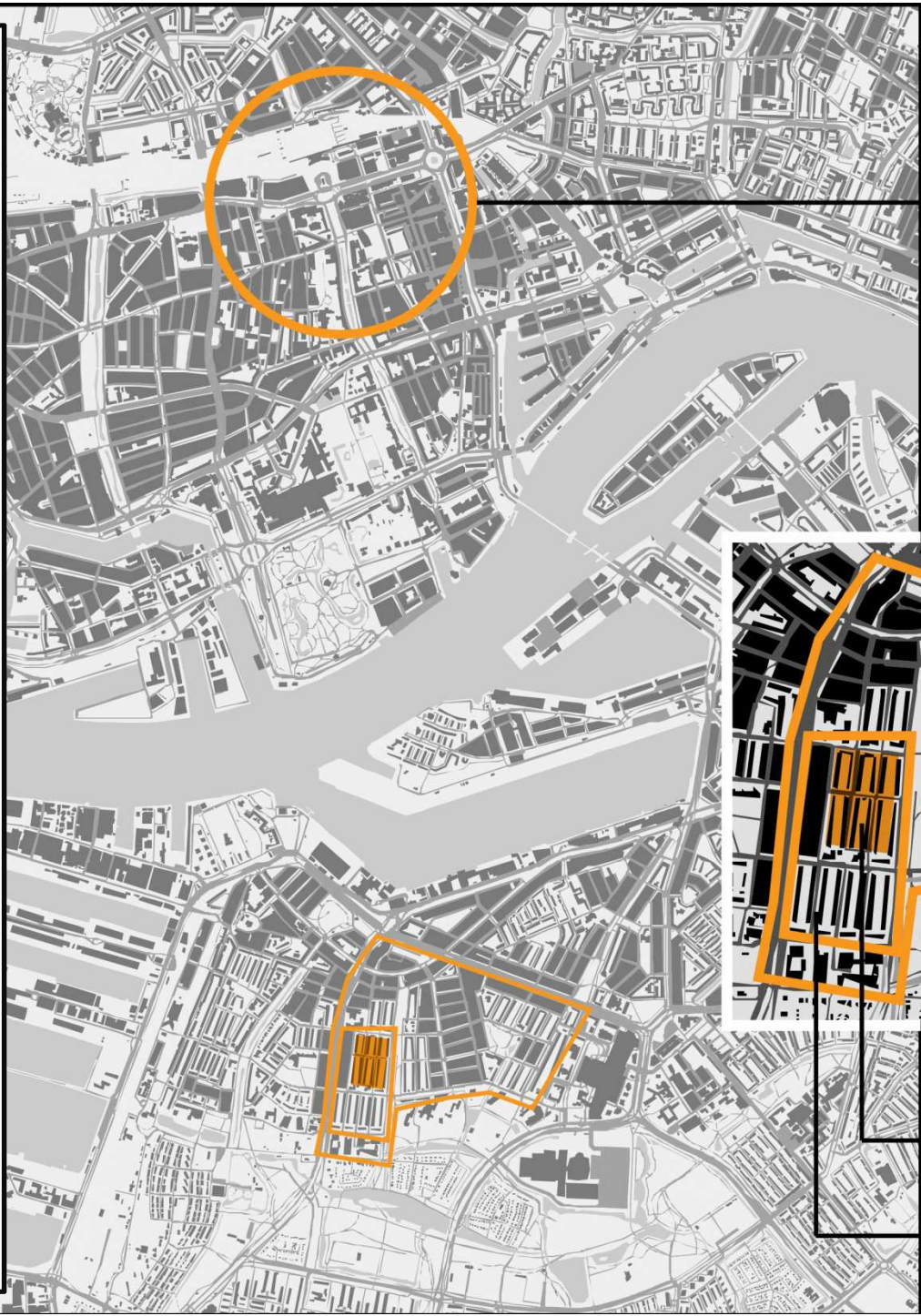
**RMIT Graduation Studio:
Transforming Housing Heritage Rotterdam Carnisse**



THE VOGELBUURT



THE VOGELBUURT



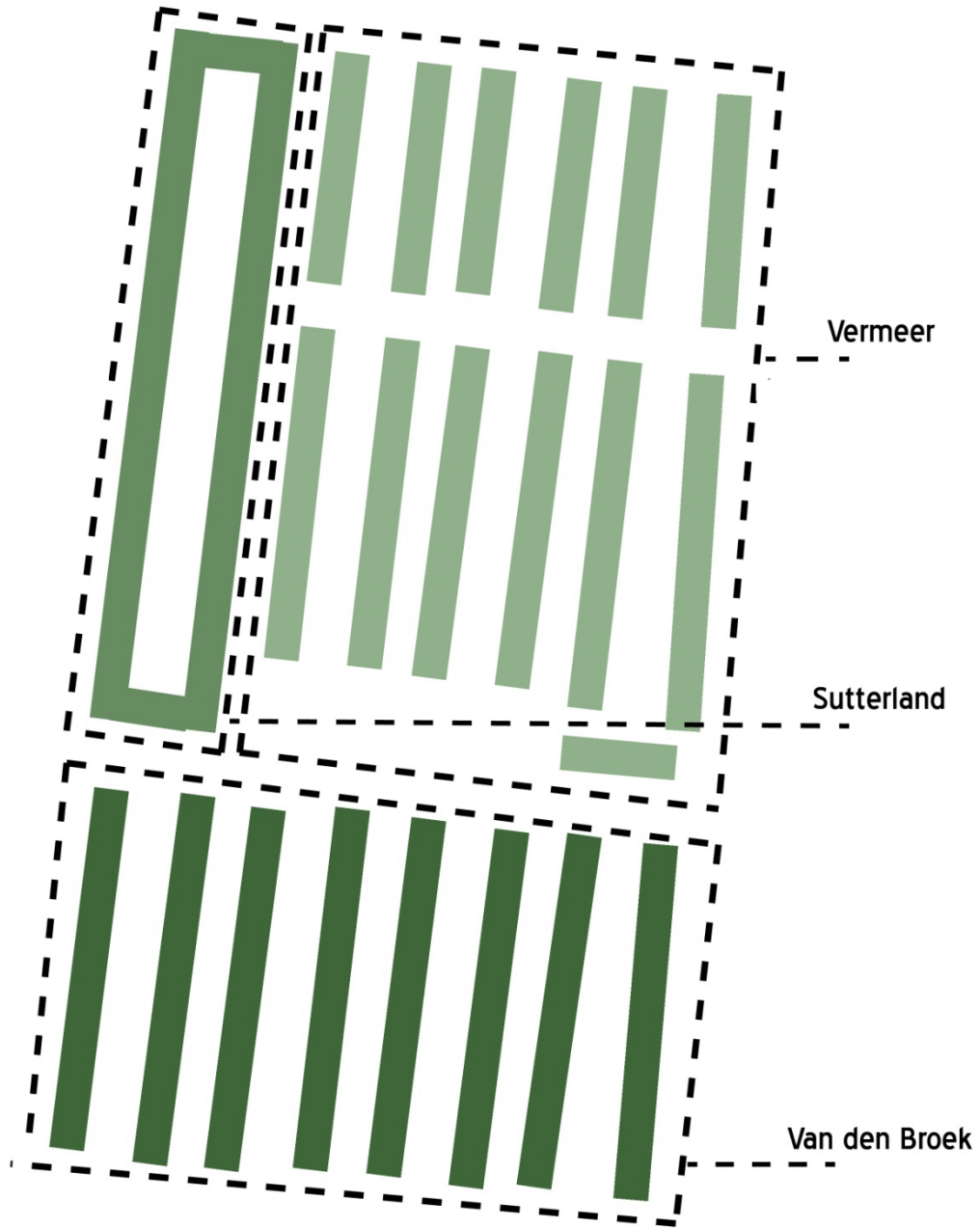
Rotterdam Central Station

Carnisse

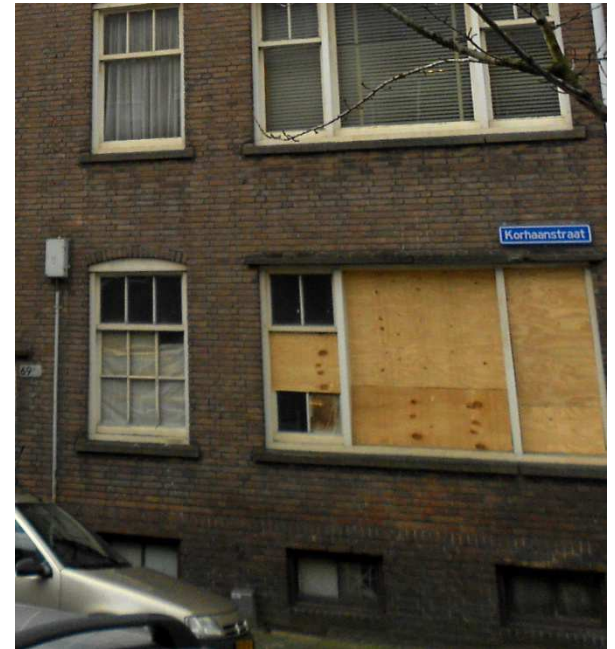
Vermeer Neighborhood

Vogelbuurt

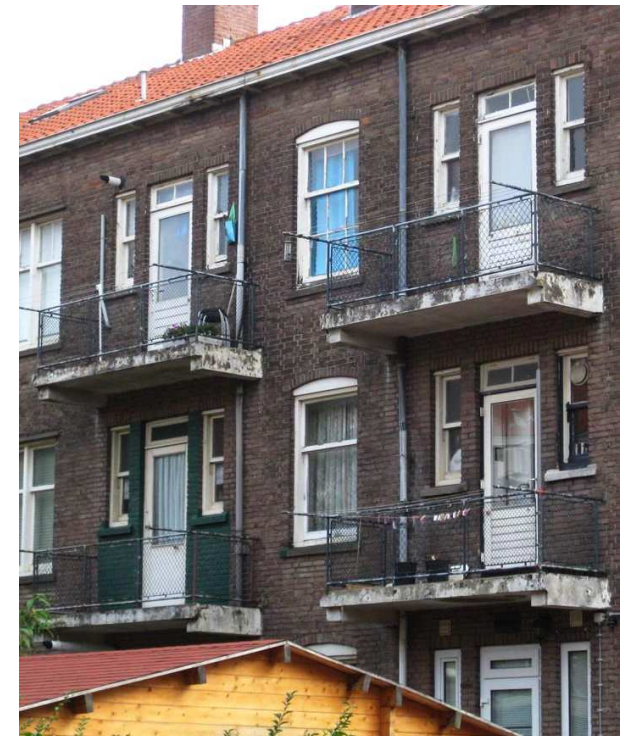
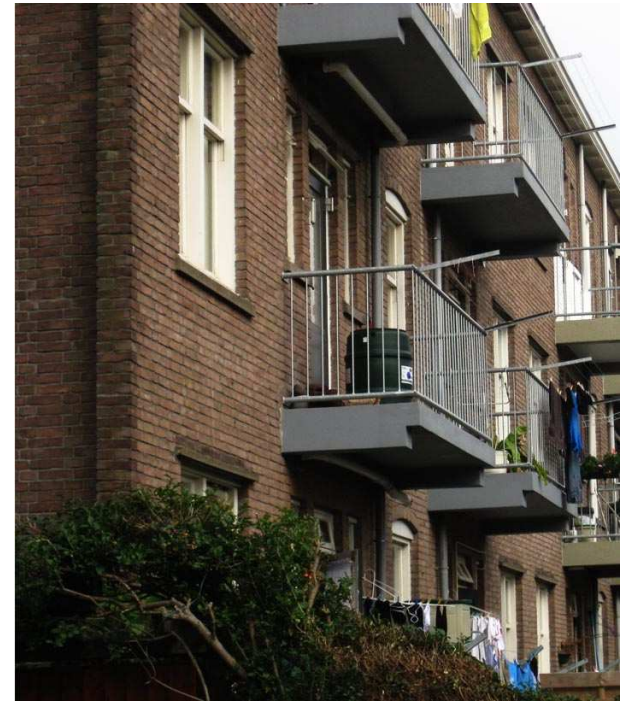
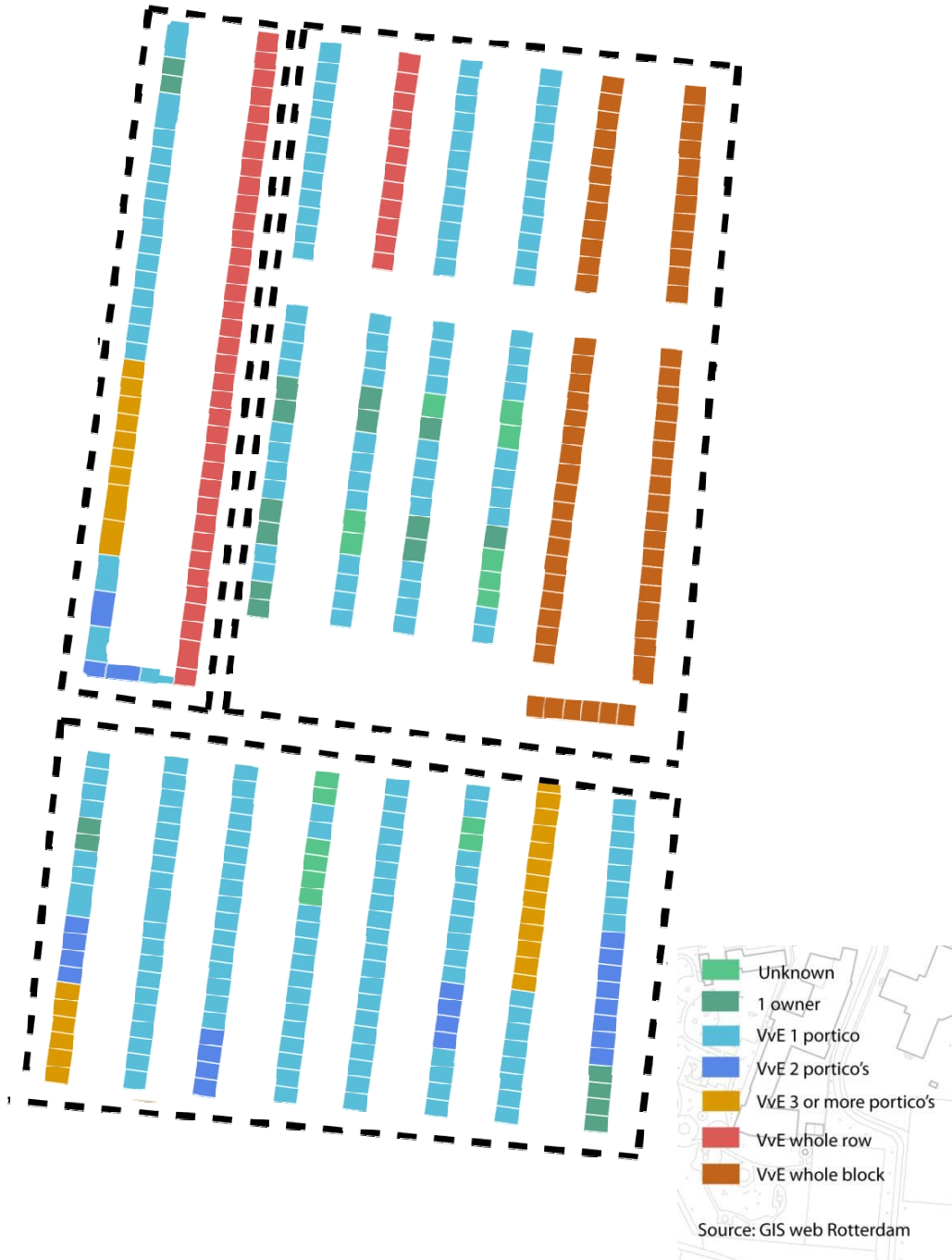
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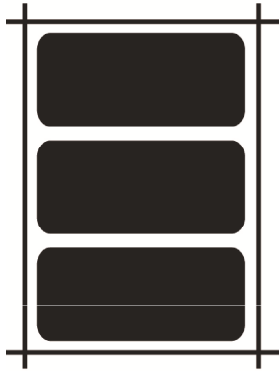
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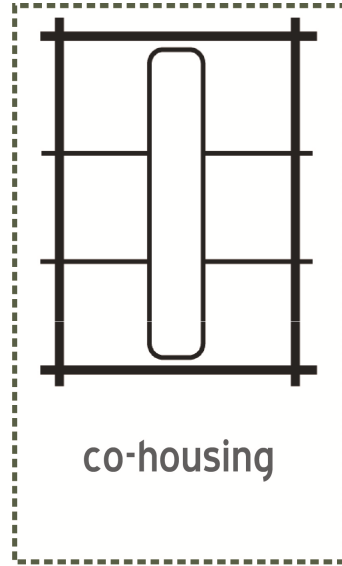
THE VVE



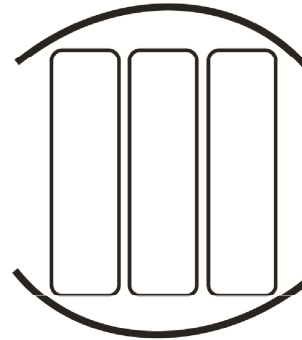
OTHER COLLECTIVES



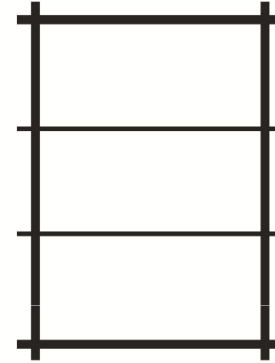
Vereniging
van Eigenaars
(VVE)



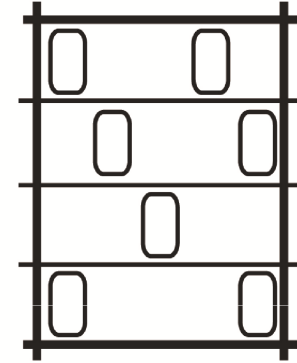
co-housing



CPO

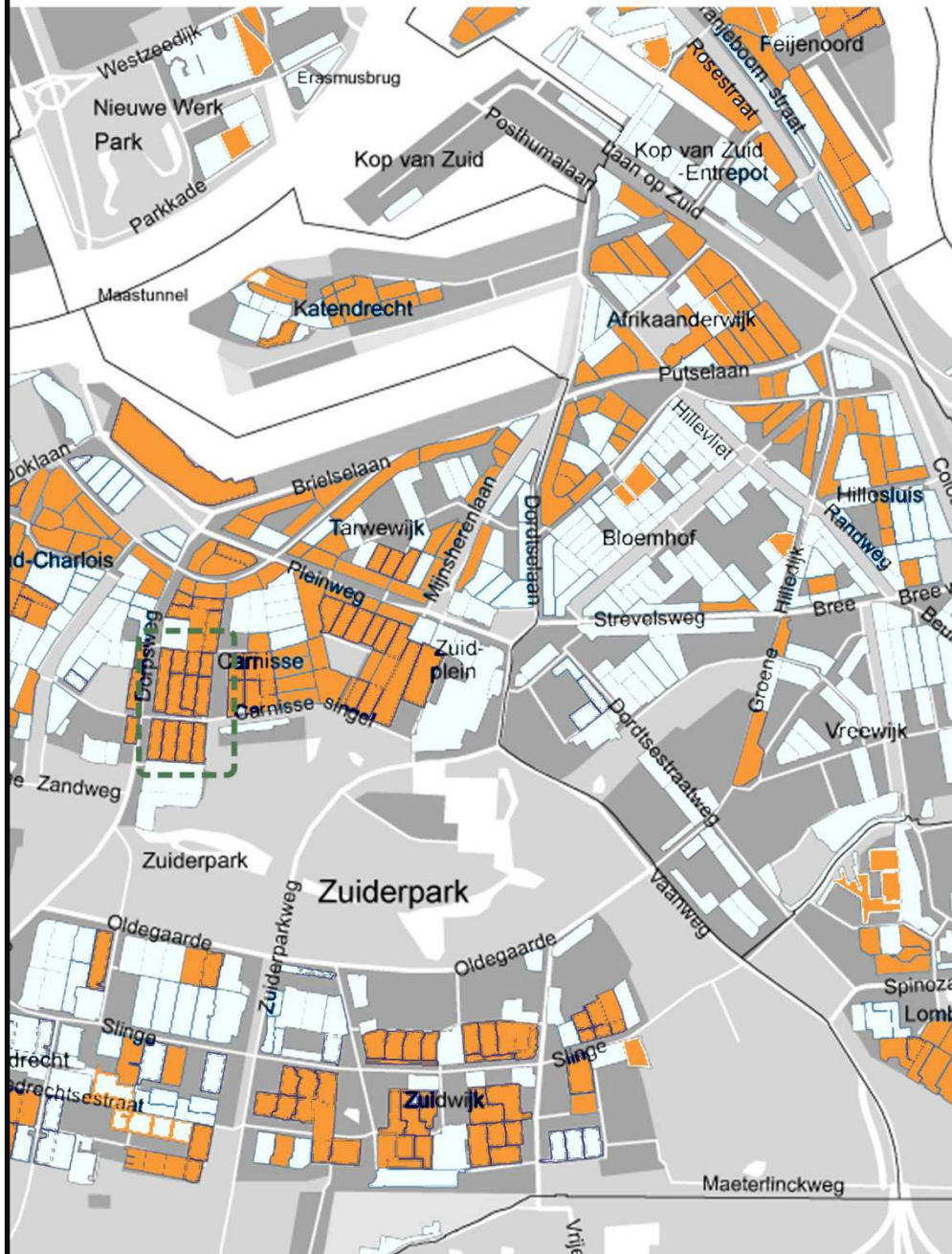


Housing
Cooperative



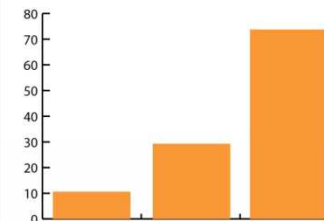
Gestippeld
wonen

PORTIEK FLATS

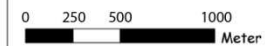


Historical significance

700.00 portiek flat dwellings were built in NL between 1945 and 1975 :



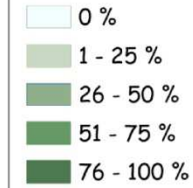
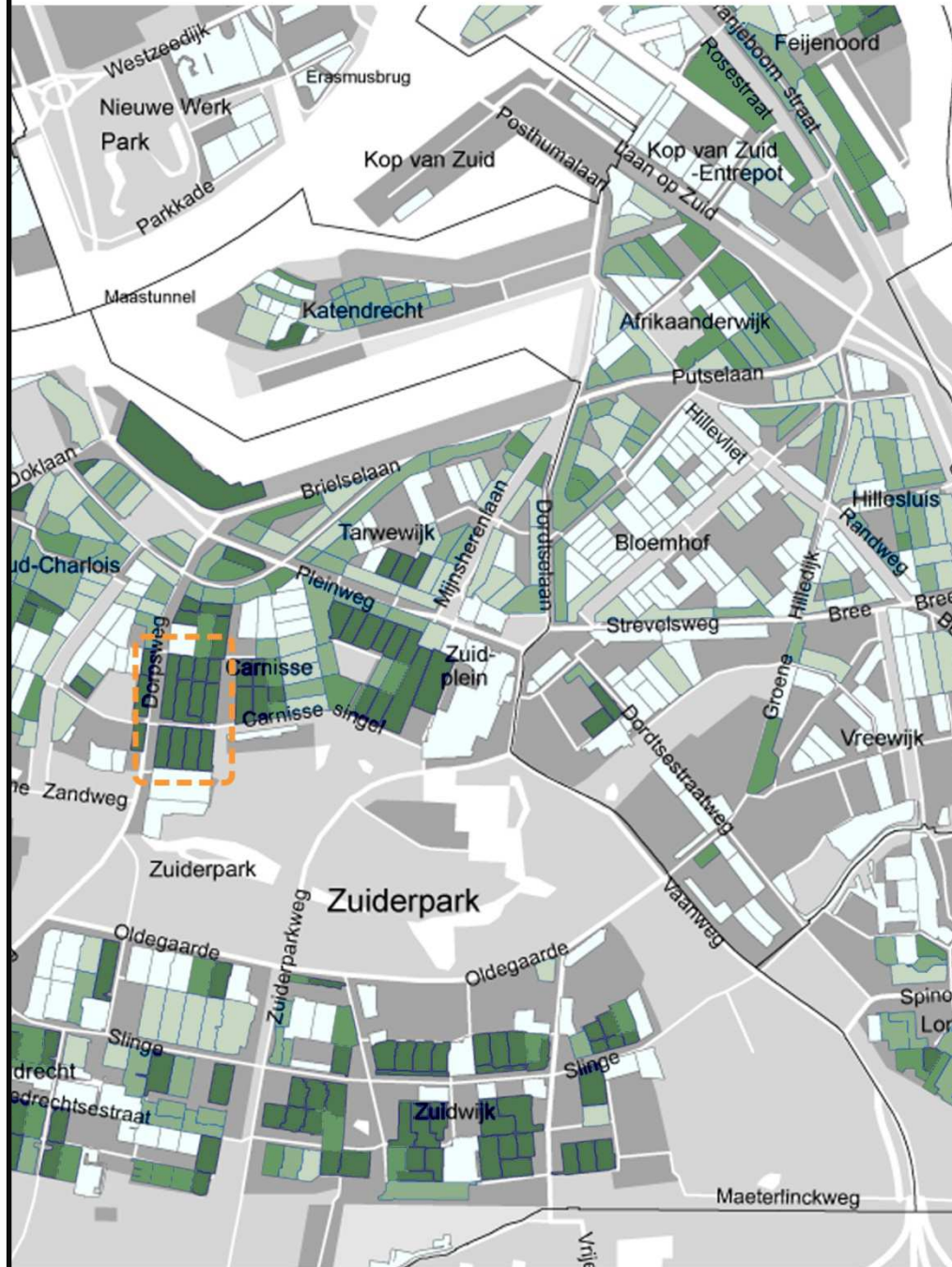
10% of the total housing stock
29% in the city of Rotterdam
73% in Carnisse



Bron: BRS
Bewerking: dS+V/Verg/Geo-info
Peildatum 2009
juli 2009

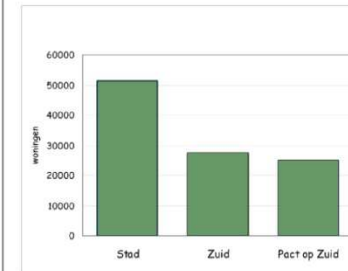
ref.: P102b_Woningtypologie
Projectnr.: 502

“VULNURABLE” HOUSING



Vulnerable apartment housing:

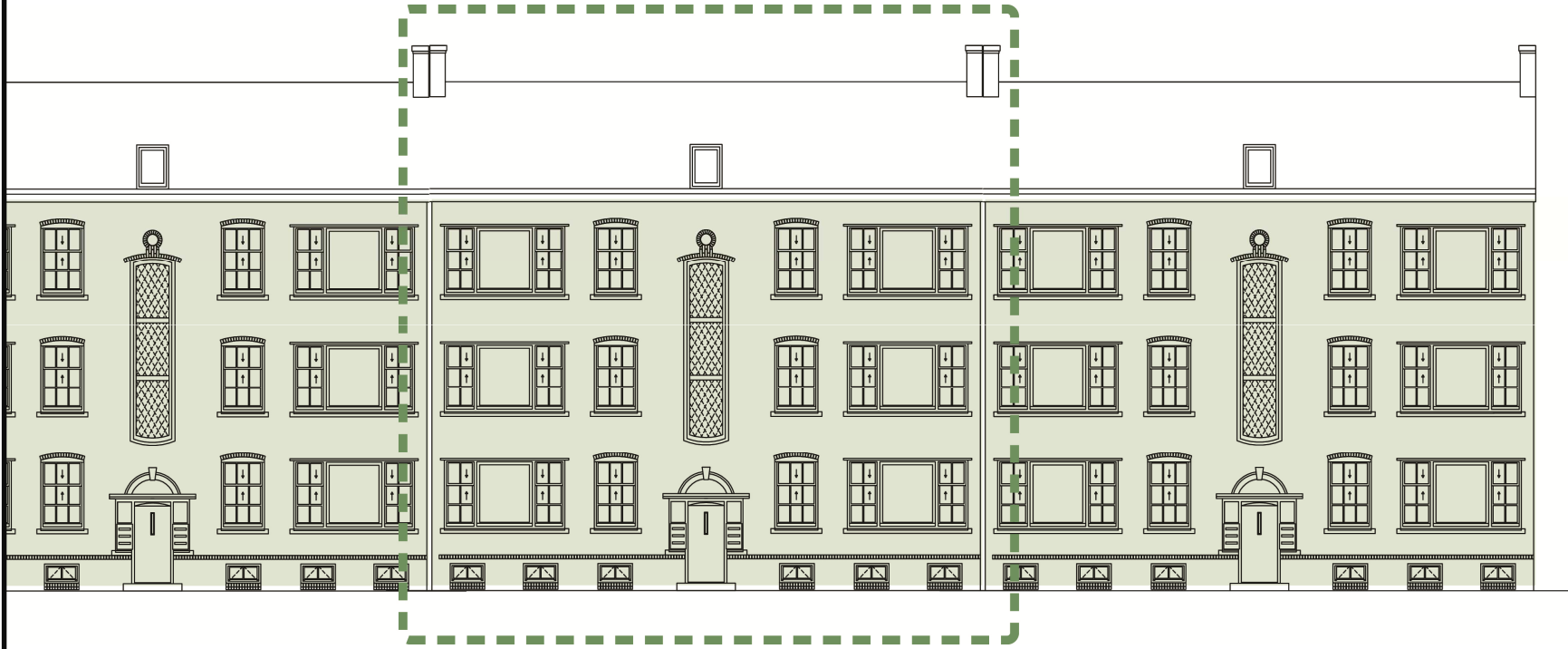
Floor area of less than 75 m² and book value of under 130.000



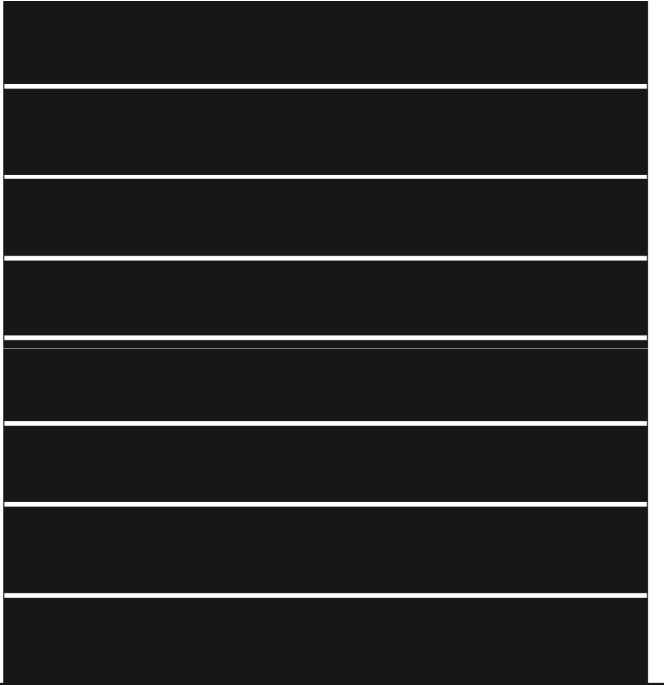
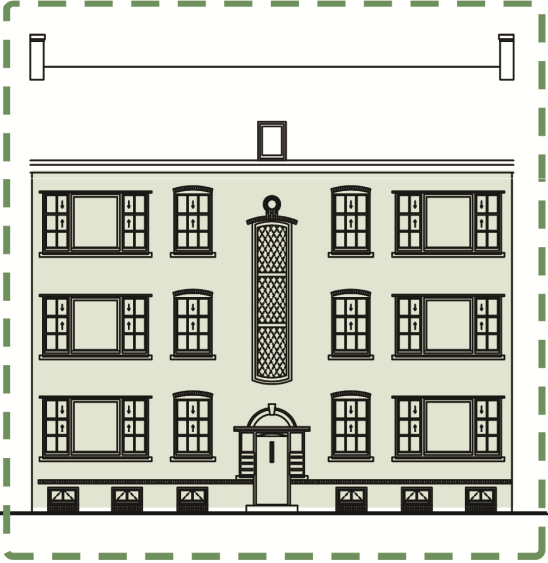
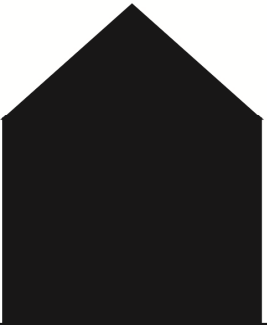
Bron: COS
 Bewerking: dS+V/Verg/Geo-info
 Peildatum: 1-1-2008
 juli 2009

ref.: P117b kwetsb voorr meergez
 Projectnr.: 502

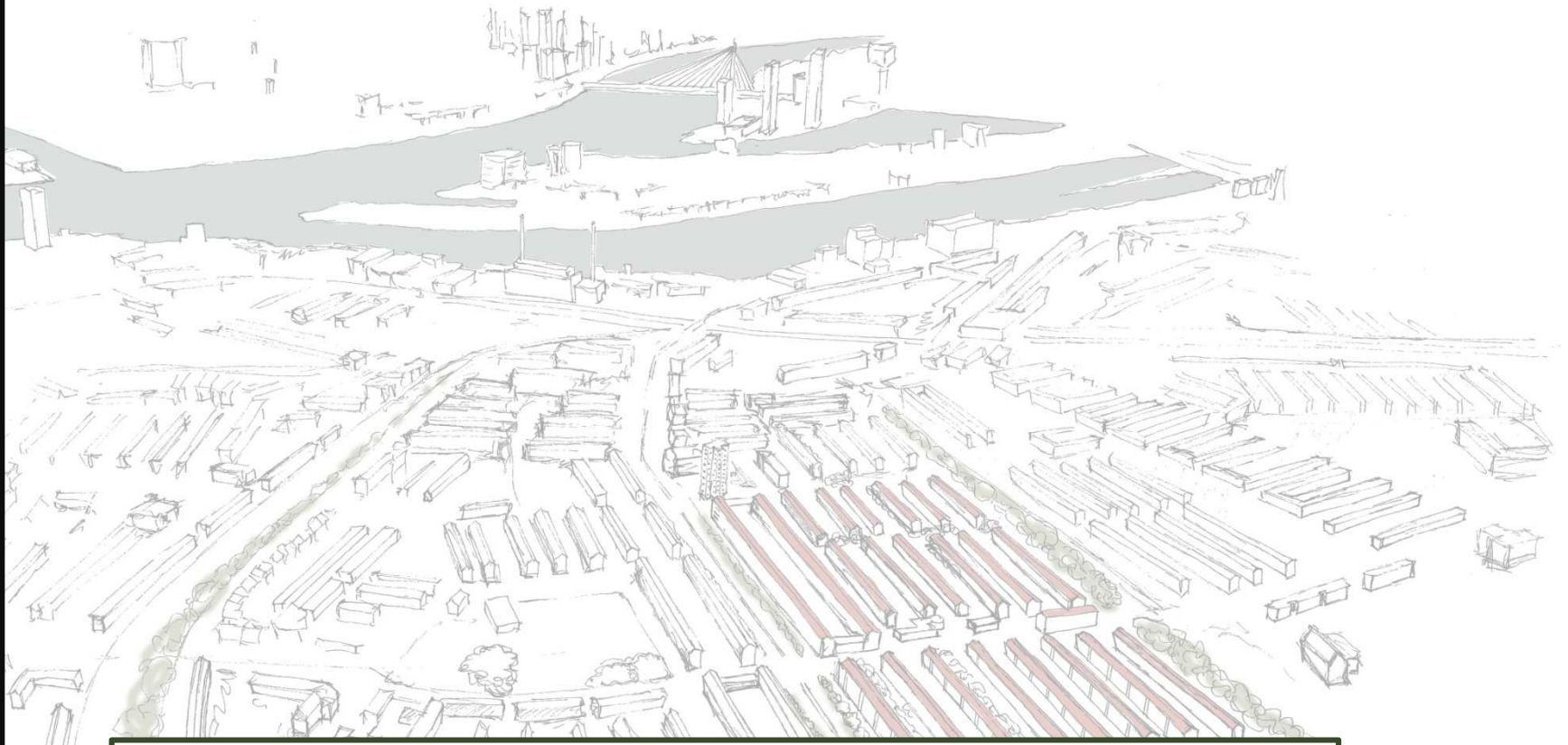
THE PORTIEK AS UNIT



THE PORTIEK AS UNIT



RESEARCH QUESTION



“How can the post-war **portiek flat** dwelling be **reinterpreted** to accommodate **collective living** to advance the regeneration of the post war neighborhood?”

RESEARCH SUBCATEGORIES



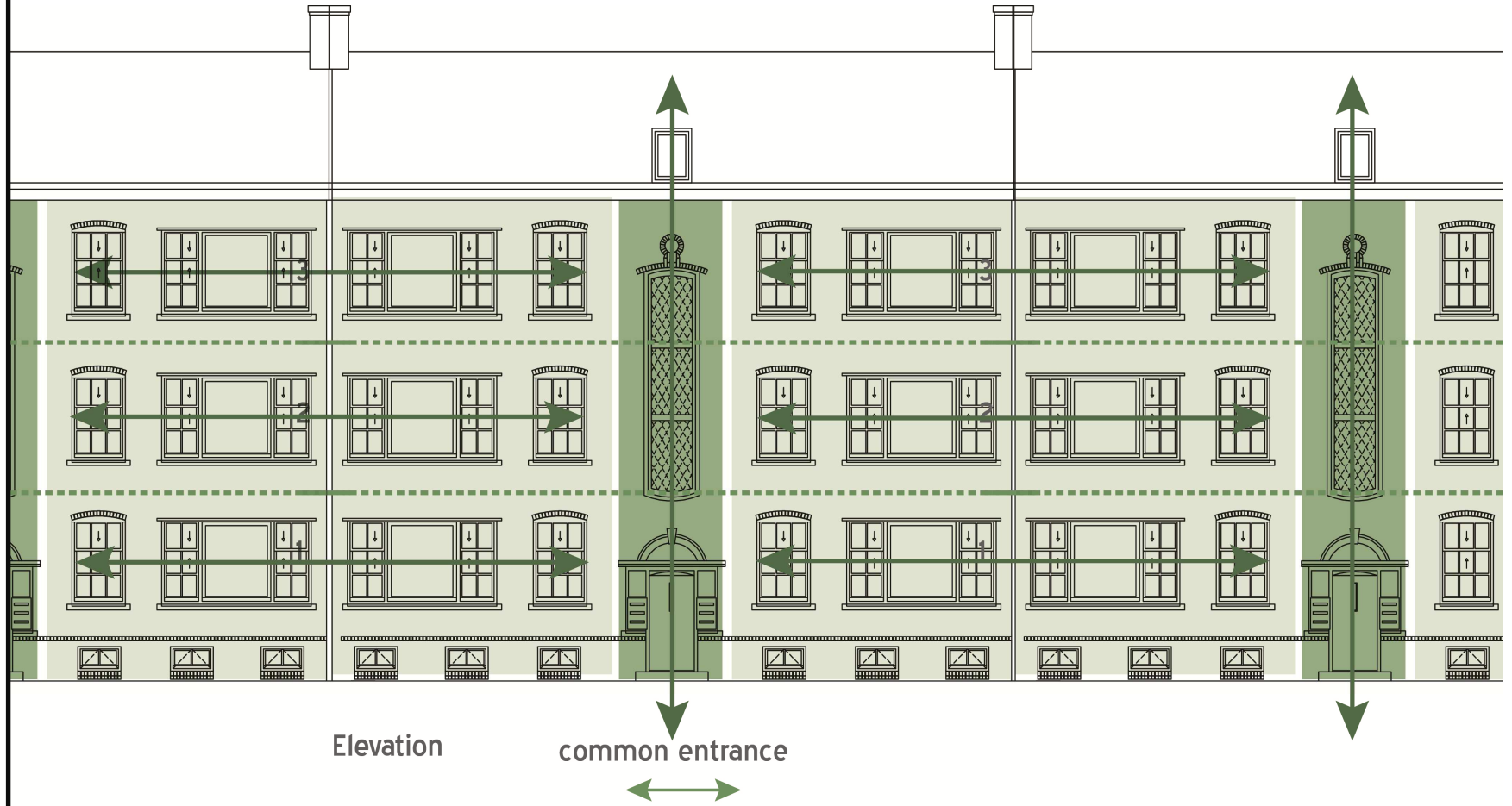
THE PORTIEK

“De zoektocht van de functionalistisch georiënteerde architecten naar **HELDERHEID EN REPETITIE**, leidde tot een nieuw verticaal ontsluitinstype, de zogenaamde moderne portiek. **EEN GEMEENSCHAPPELIJKE VOORDEUR GEEFT TOEGANG TOT EEN COLLECTIEVE TRAP DIE IN TWEE HALVE STEKEN TWEE APPARTEMENTEN PER VERDIEPING ONTSLUIT**. De plaats van de entree is op iedere verdieping gelijk en diep in de woning gelegen, wat de gevel vrijhoudt voor verblijfsruimten.”

(Leupen & Mooij, 2008 p. 144)



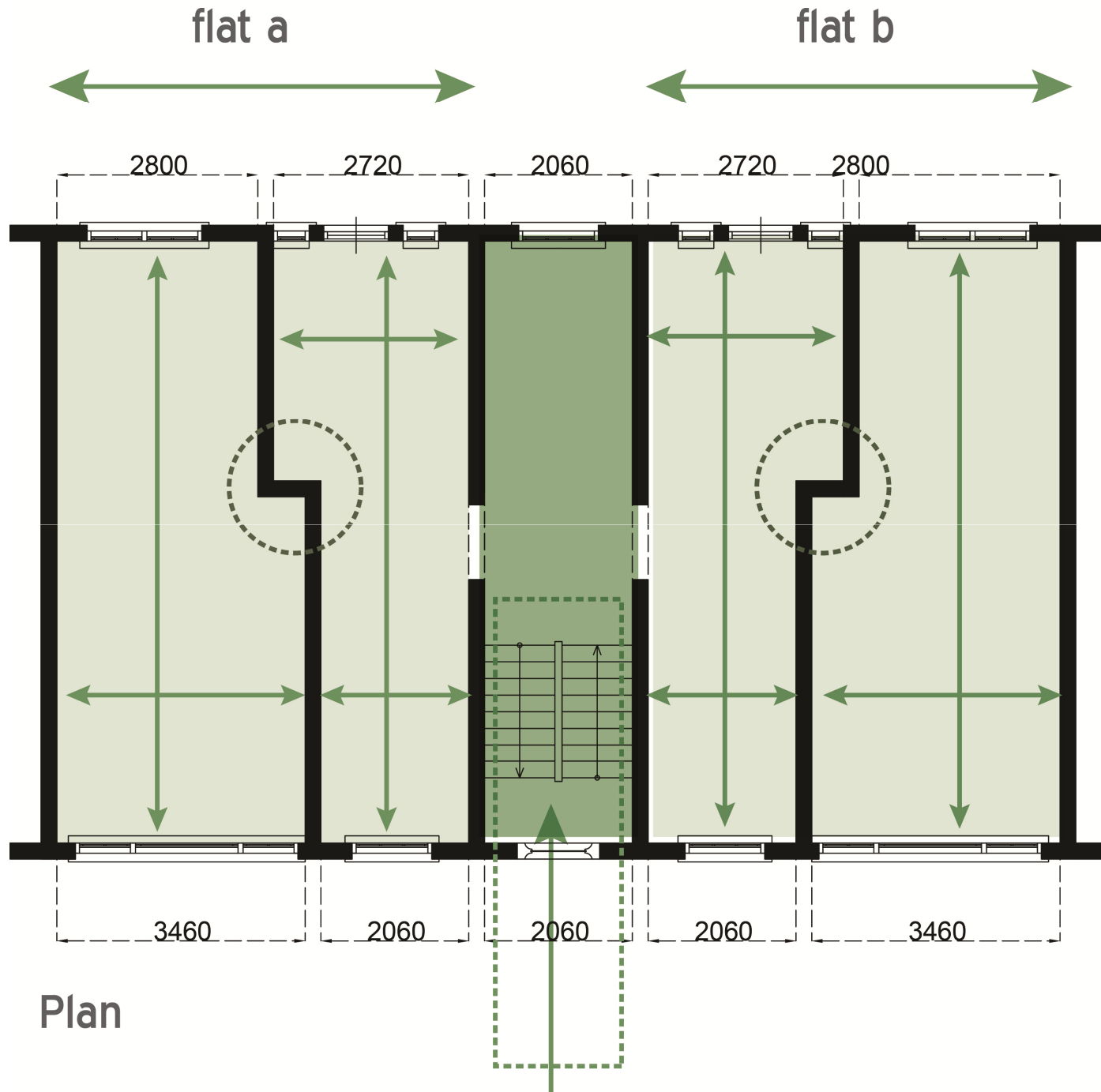
THE PORTIEK



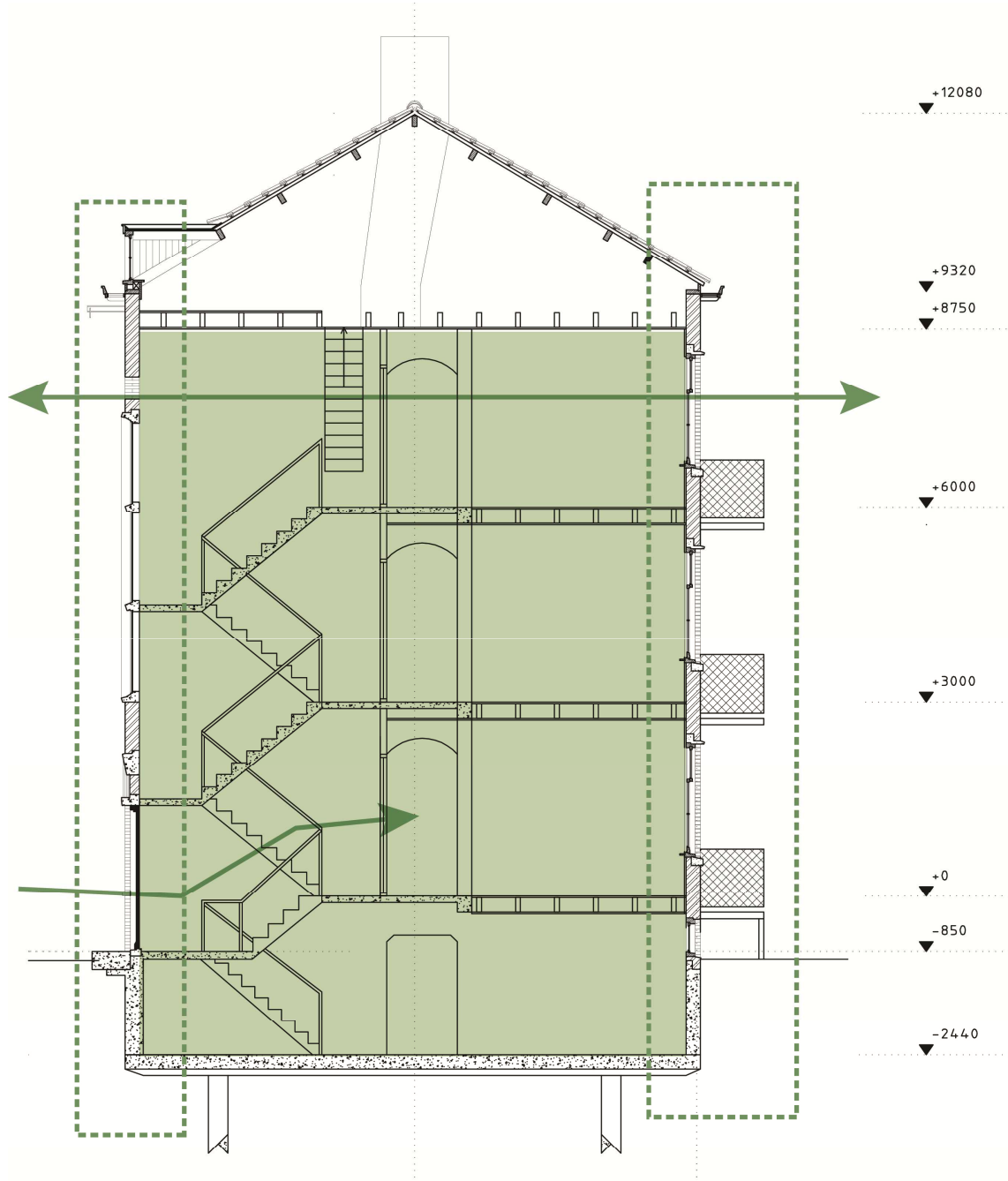
Elevation

common entrance

THE PORTIEK



THE PORTIEK

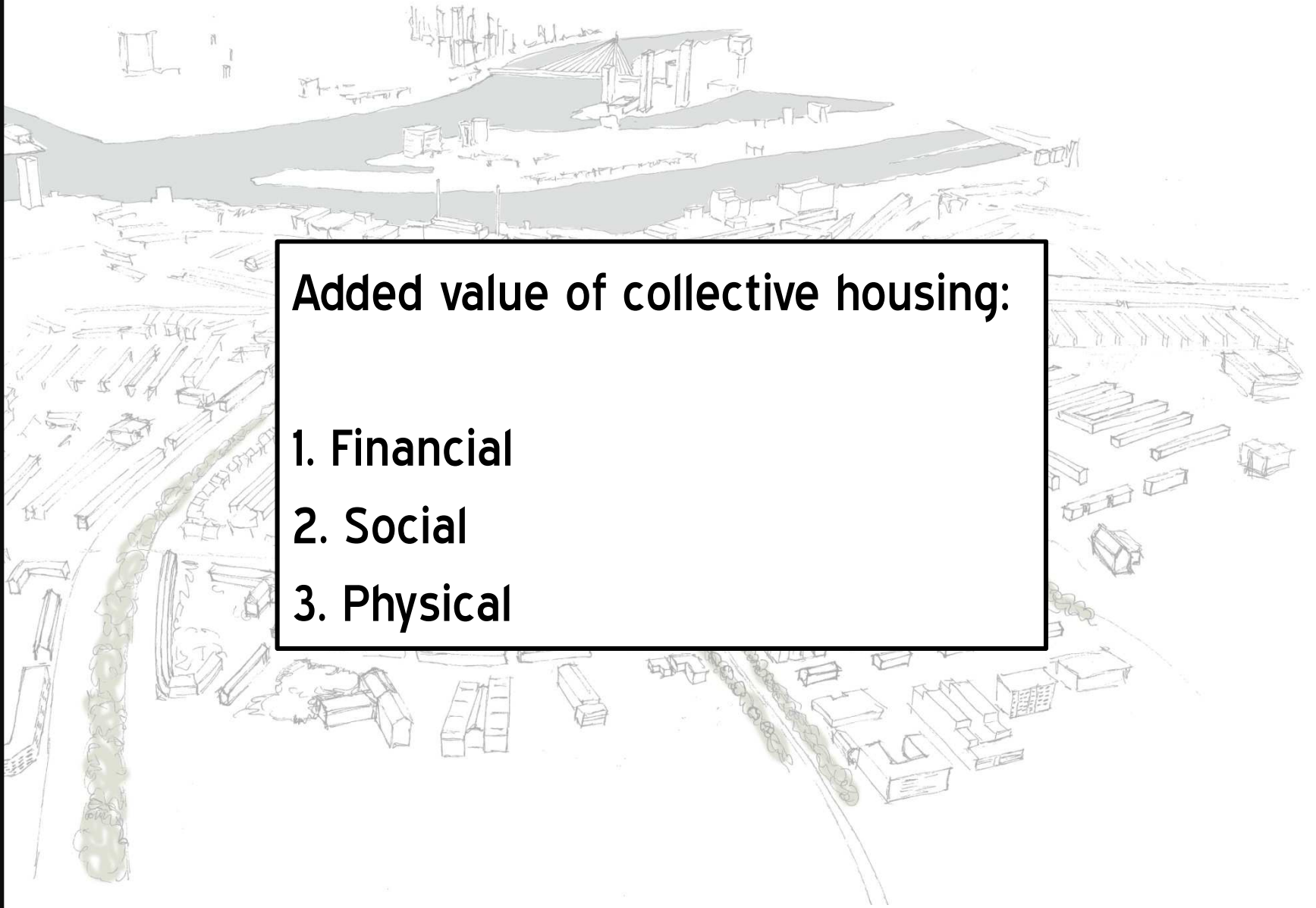


Section

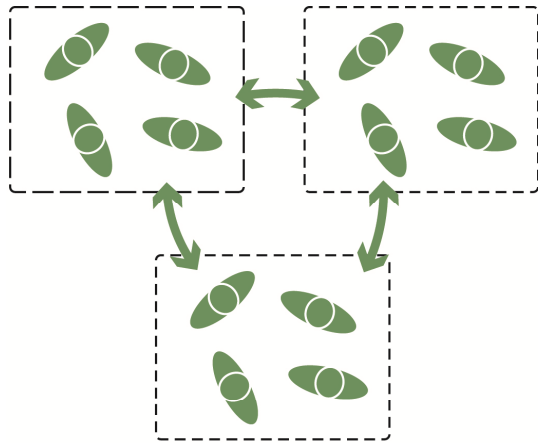
COLLECTIVE HOUSING

Added value of collective housing:

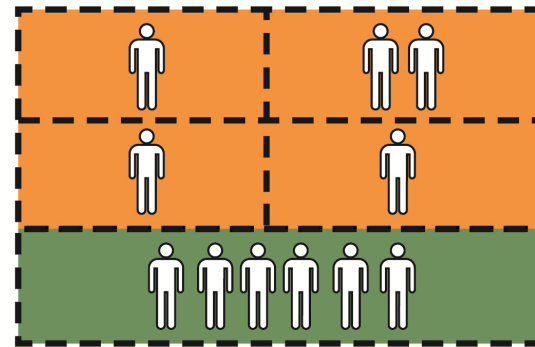
- 1. Financial**
- 2. Social**
- 3. Physical**



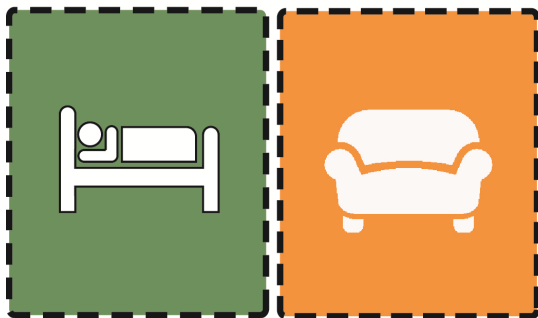
COLLECTIVE HOUSING



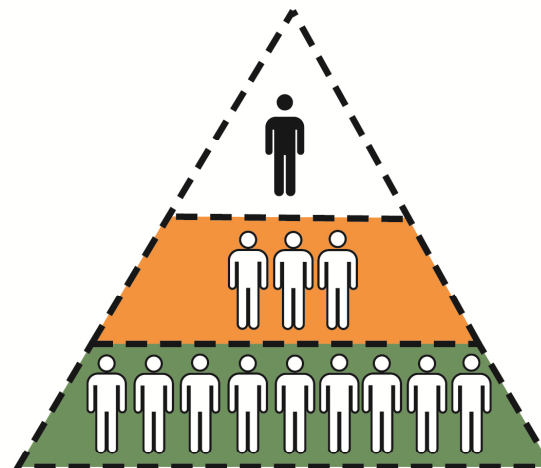
Large groups split into clusters



Separation of public and private



Separation of public and private



Hierarchy of space

TARGET GROUPS



Traditional cohousing demographics are not the demographics of the area.

TARGET GROUPS

Migrant workers



Senior Citizens



Single Parents



TARGET GROUPS

Migrant workers



Senior Citizens



Single Parents



TARGET GROUPS



Migrant workers



Senior Citizens



Single Parents



TARGET GROUPS



Migrant workers



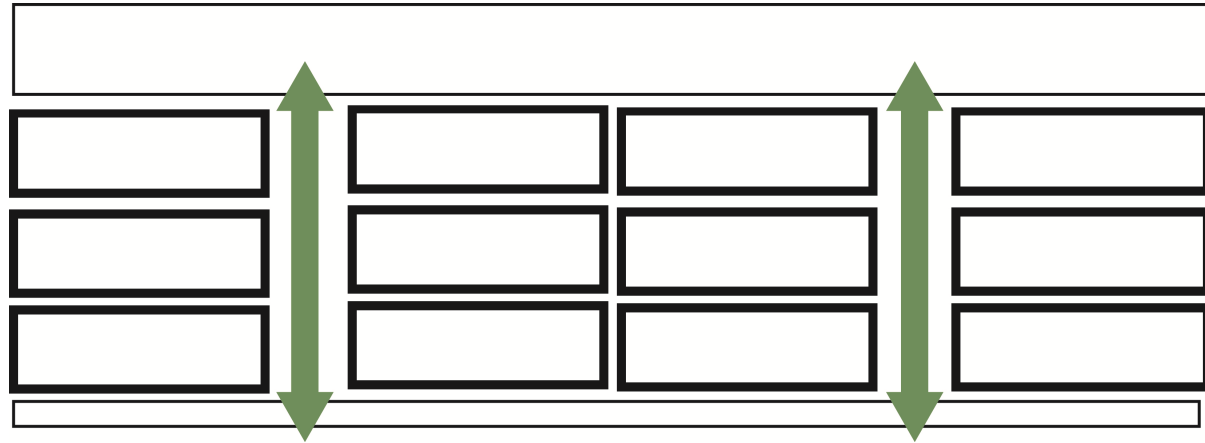
Senior Citizens



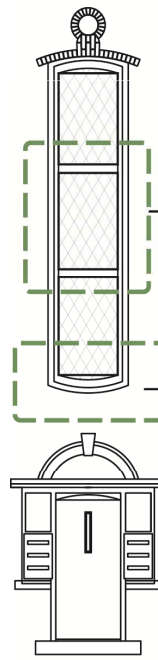
Single Parents



DESIGN PRINCIPLES

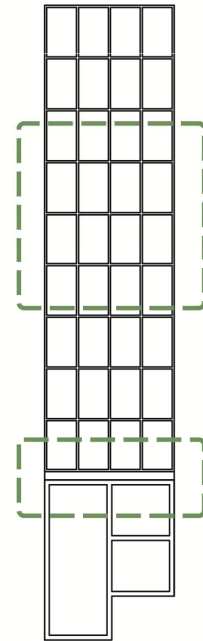


Preserve clarity and repetition in facade.



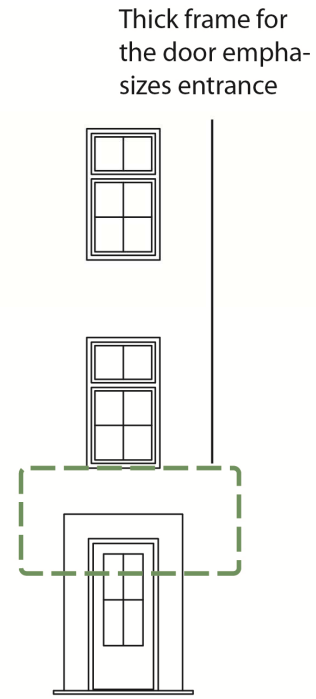
Division of the portiek gives hint to the levels behind.

Expressive elements in the execution



Plenty of glass lets light in during the day and lights the street at night.

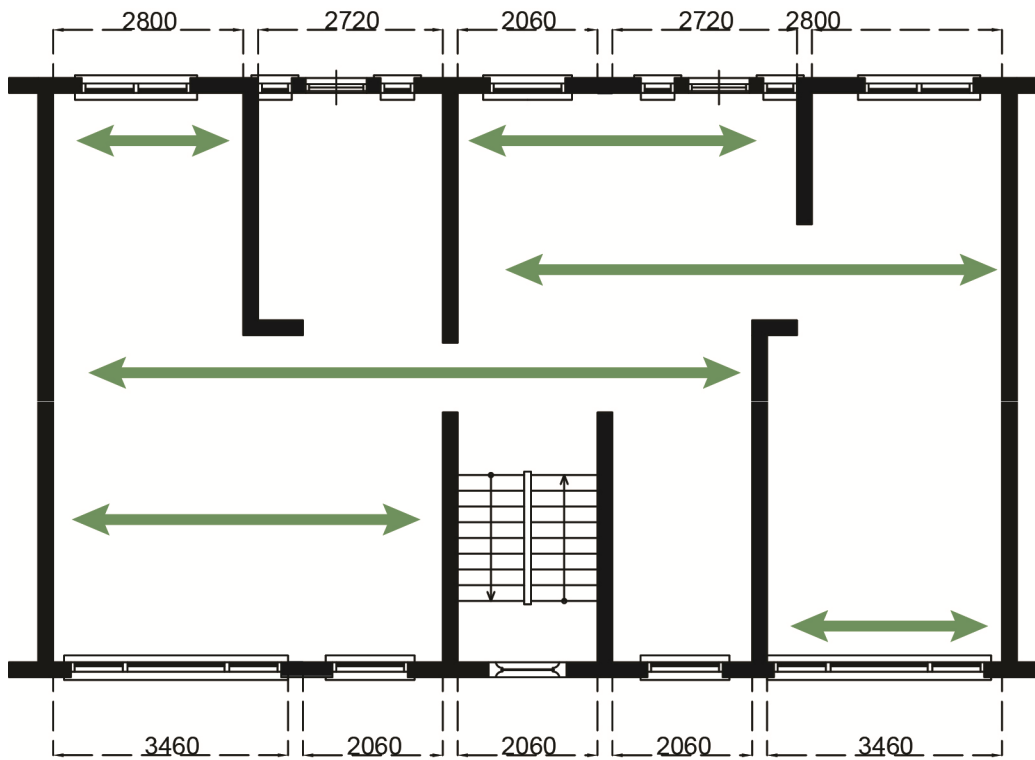
Asymmetrical entrance more efficient in cramped entrance



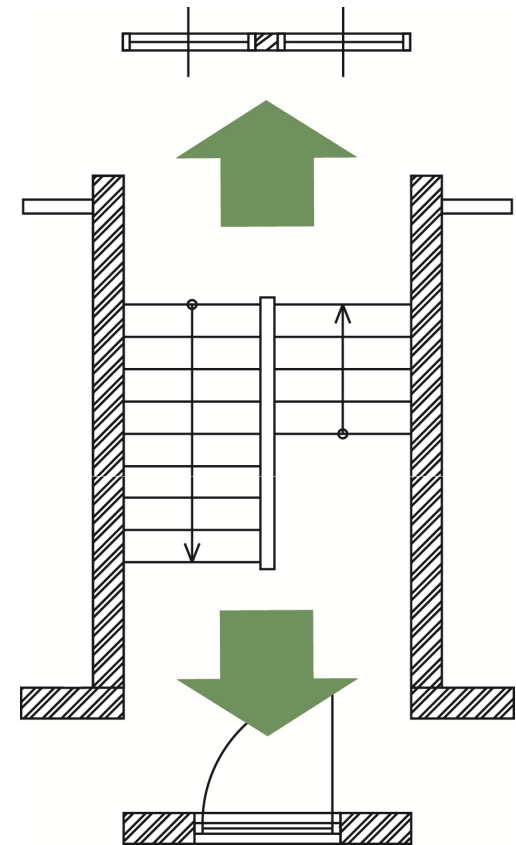
Thick frame for the door emphasizes entrance

Use existing features as inspiration

DESIGN PRINCIPLES

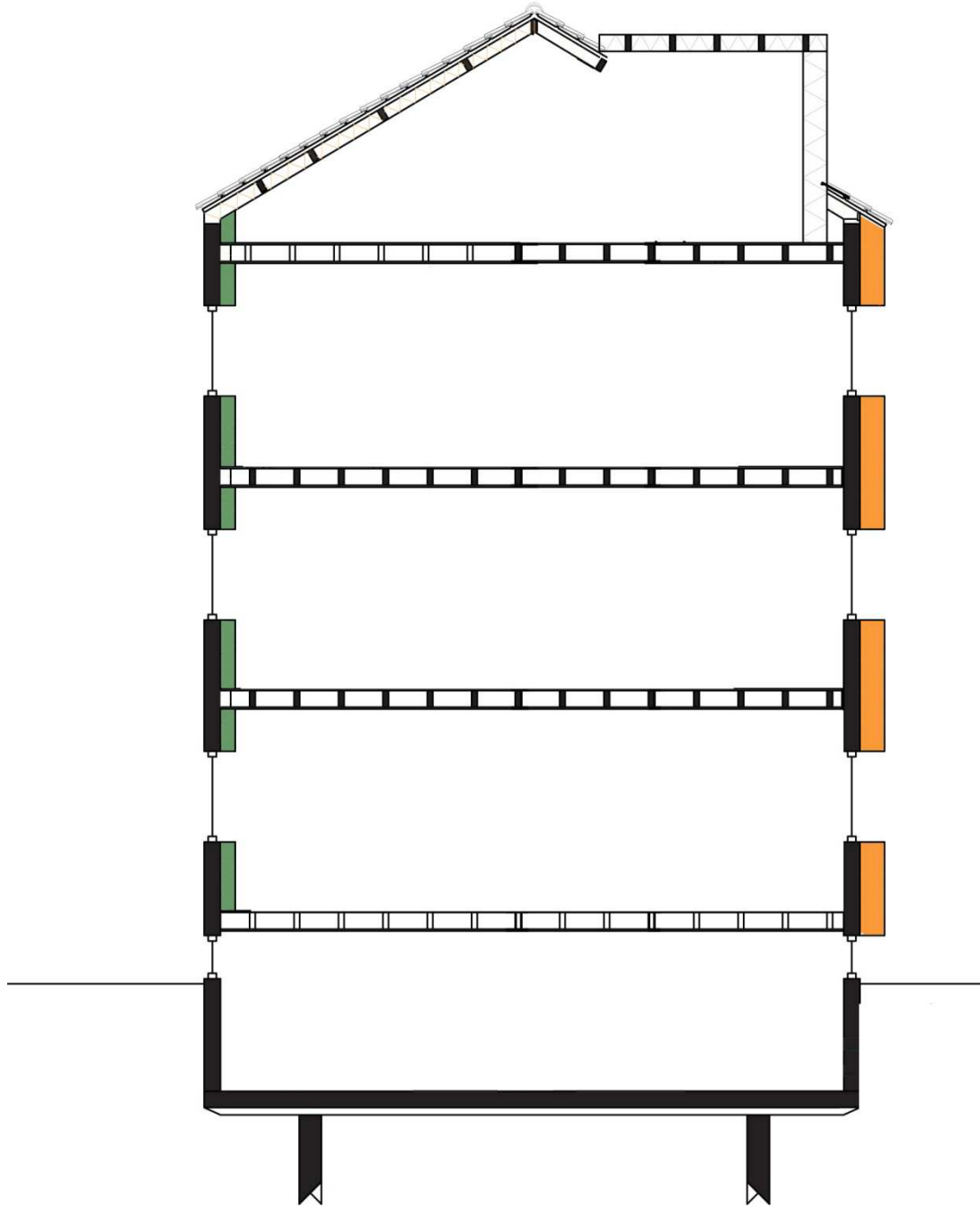


Widen space between load bearing walls to create open and flexible space.



Open up cramped stairwell

UPGRADE EFFICIENCY



High efficiency insulation at the inside of the front facade with thicker insulation at the outside of the rear facade.

1. Efficiency versus comfort
2. Conforms to standards set up by advocacy group Flexwonen voor Arbeidsmigranten.



SENIOR CITIZENS

1. All areas wheelchair and handicap accessible.
2. Social network close to home.
3. Apartments still independant living space.



SINGLE PARENTS

- 1. Sharing chores while retaining family autonomy.**
- 2. Adaptable for the different stages of growing up from babies to teenagers.**



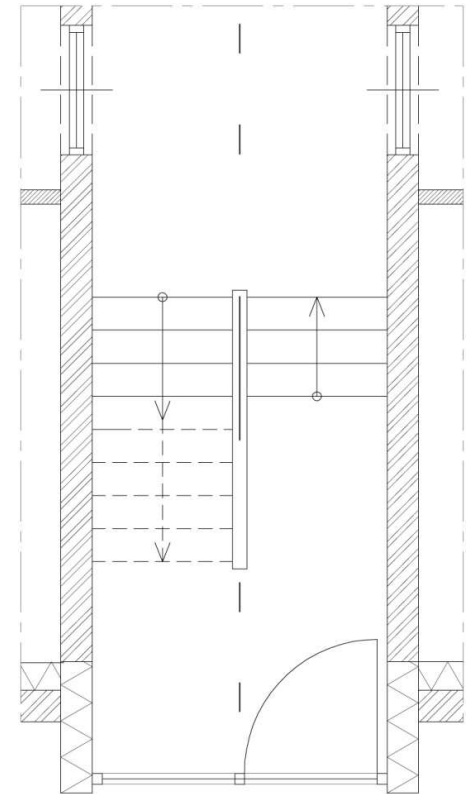
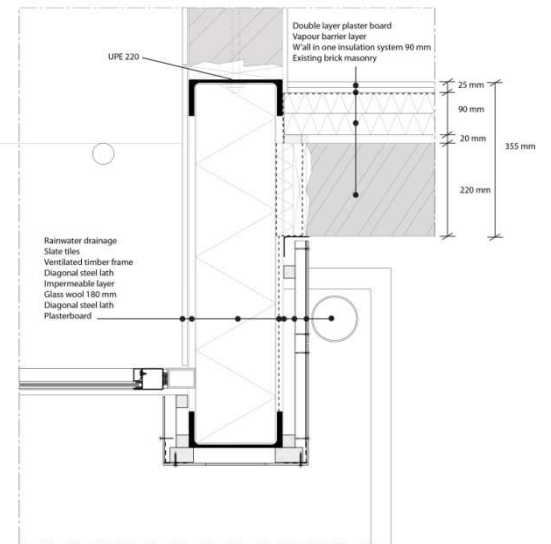
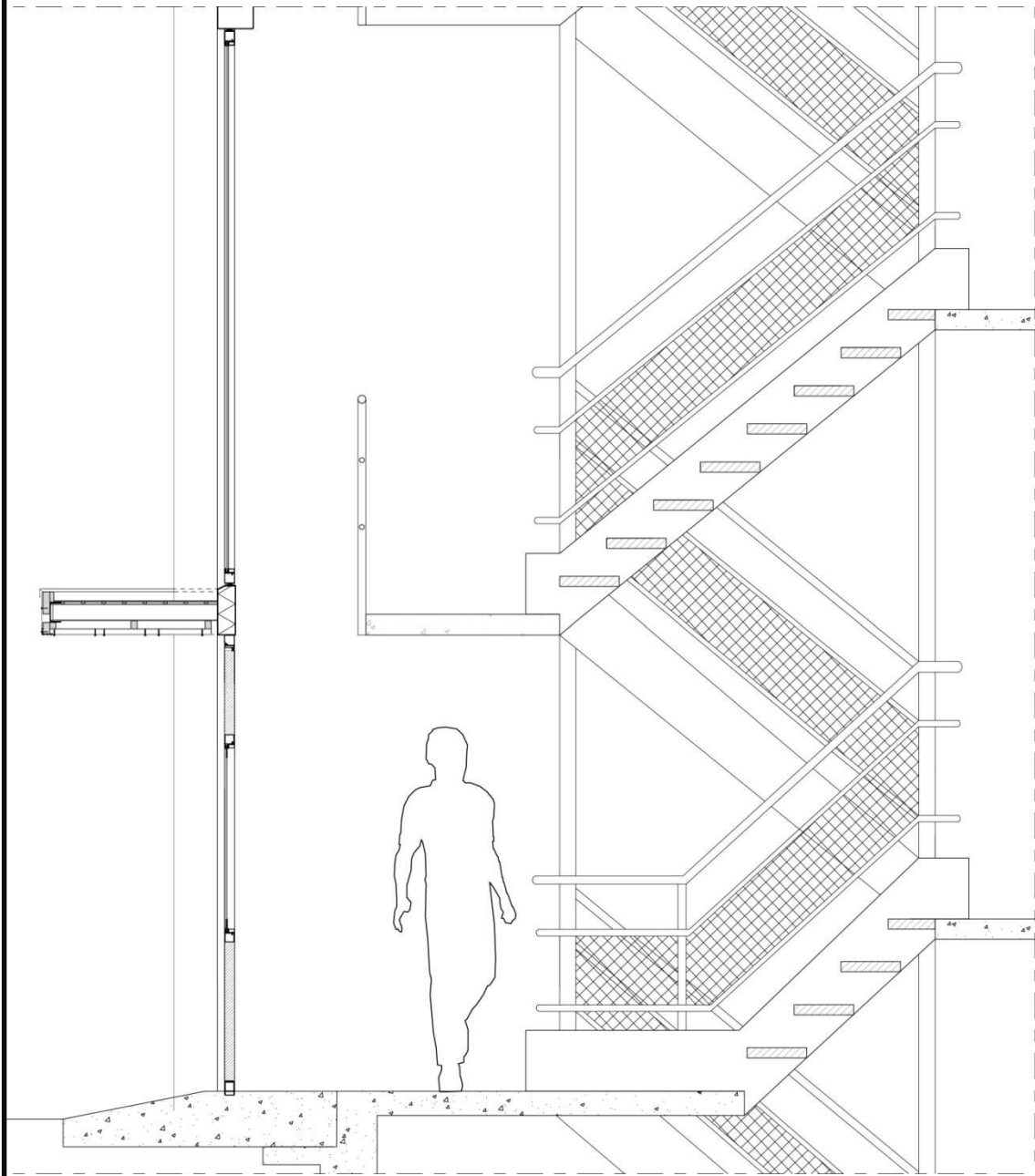
DESIGN



ENTRANCE



ENTRANCE

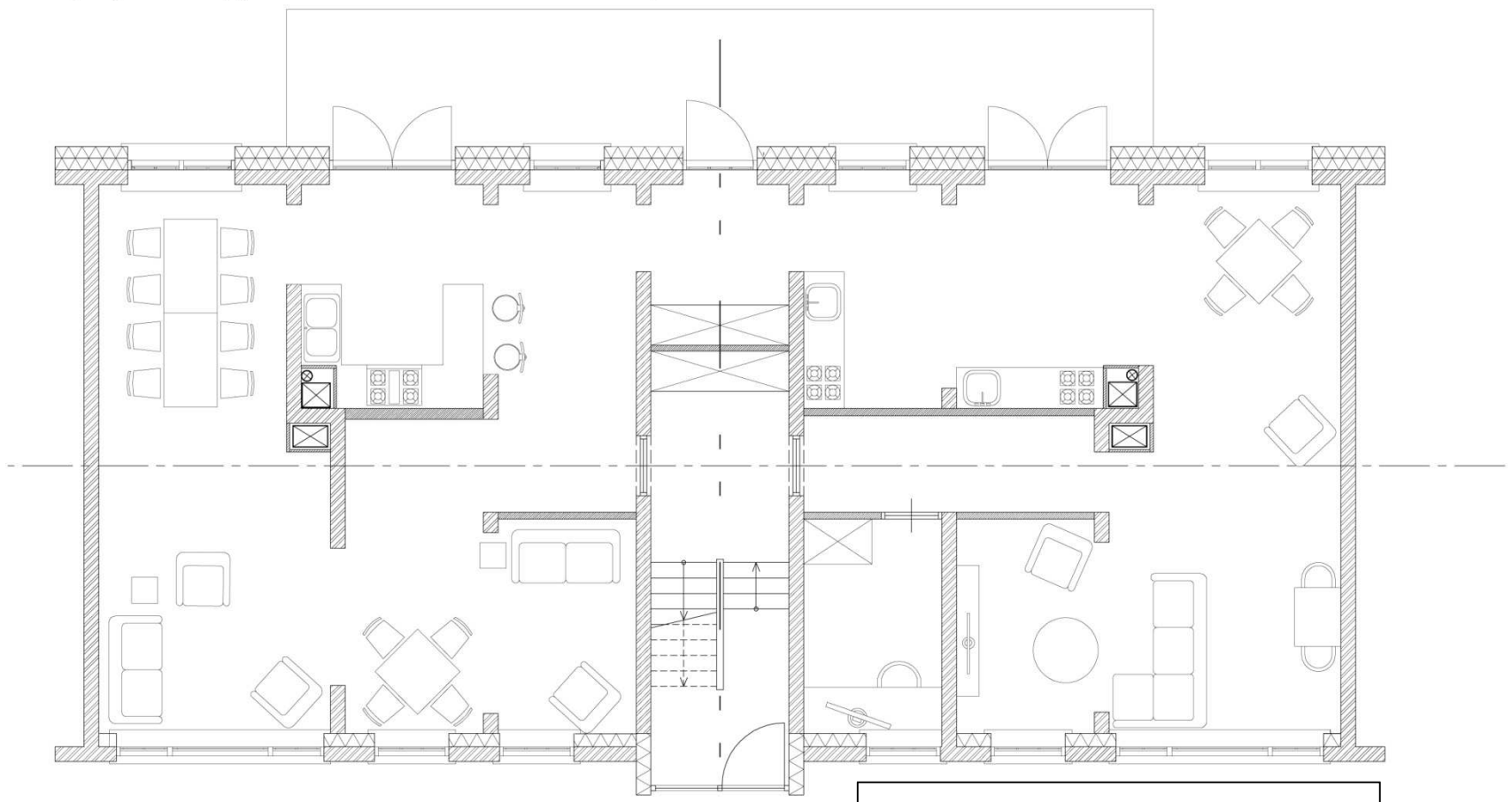
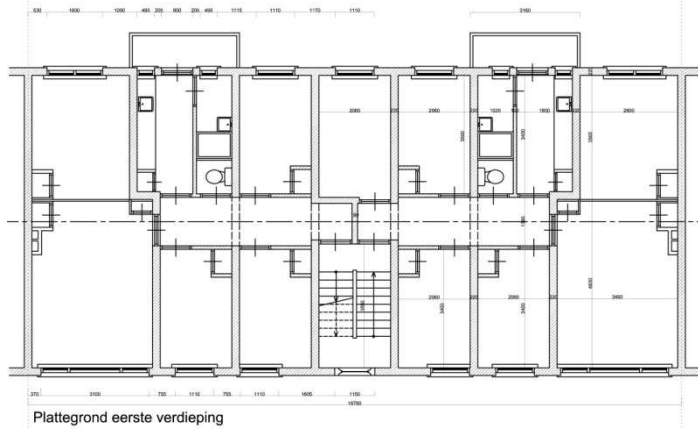


Entrance section, plan and detail

ENTRANCE



WIDENING SPACE

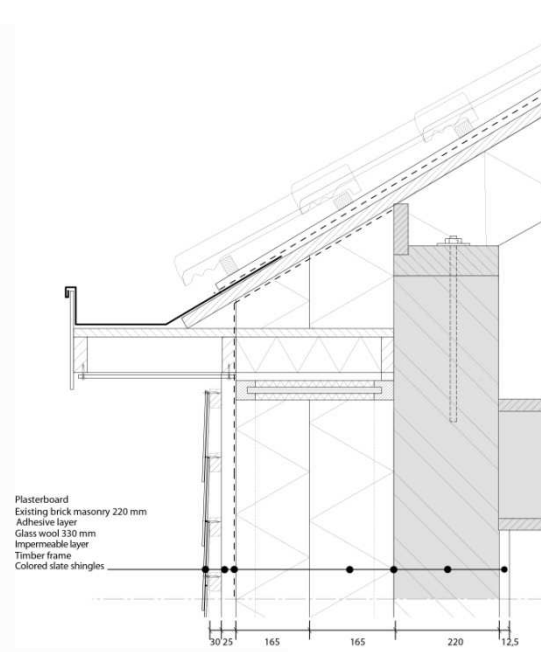
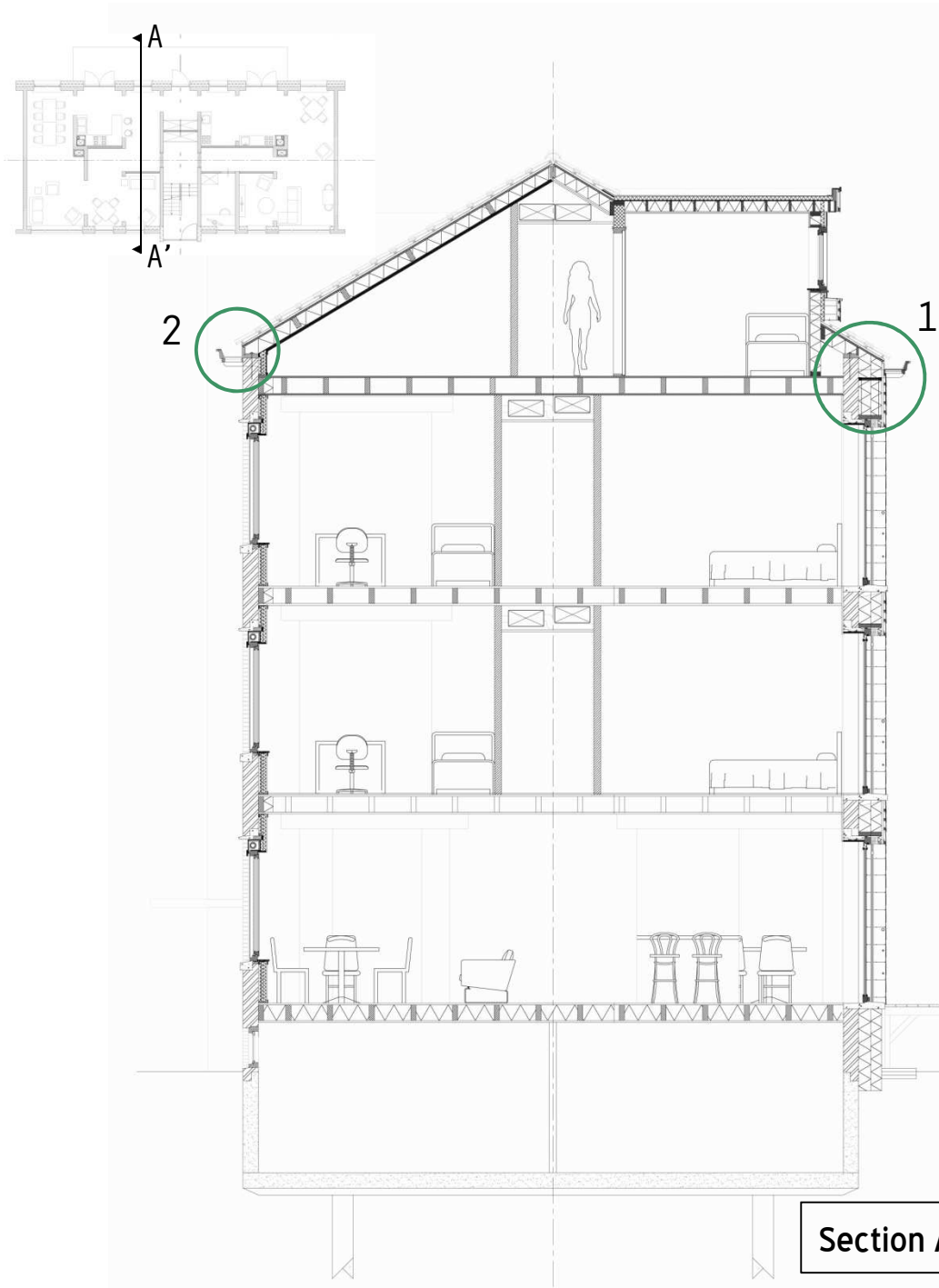


Ground floor plan, migrant workers

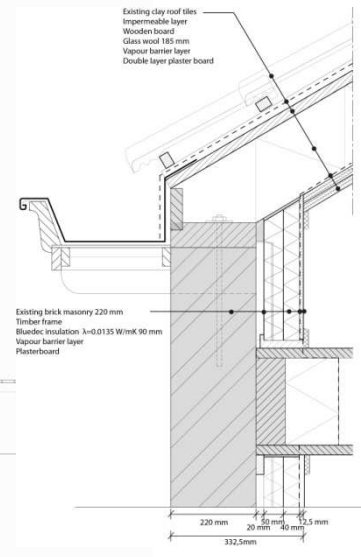
WIDENING SPACE



UPGRADING EFFICIENCY



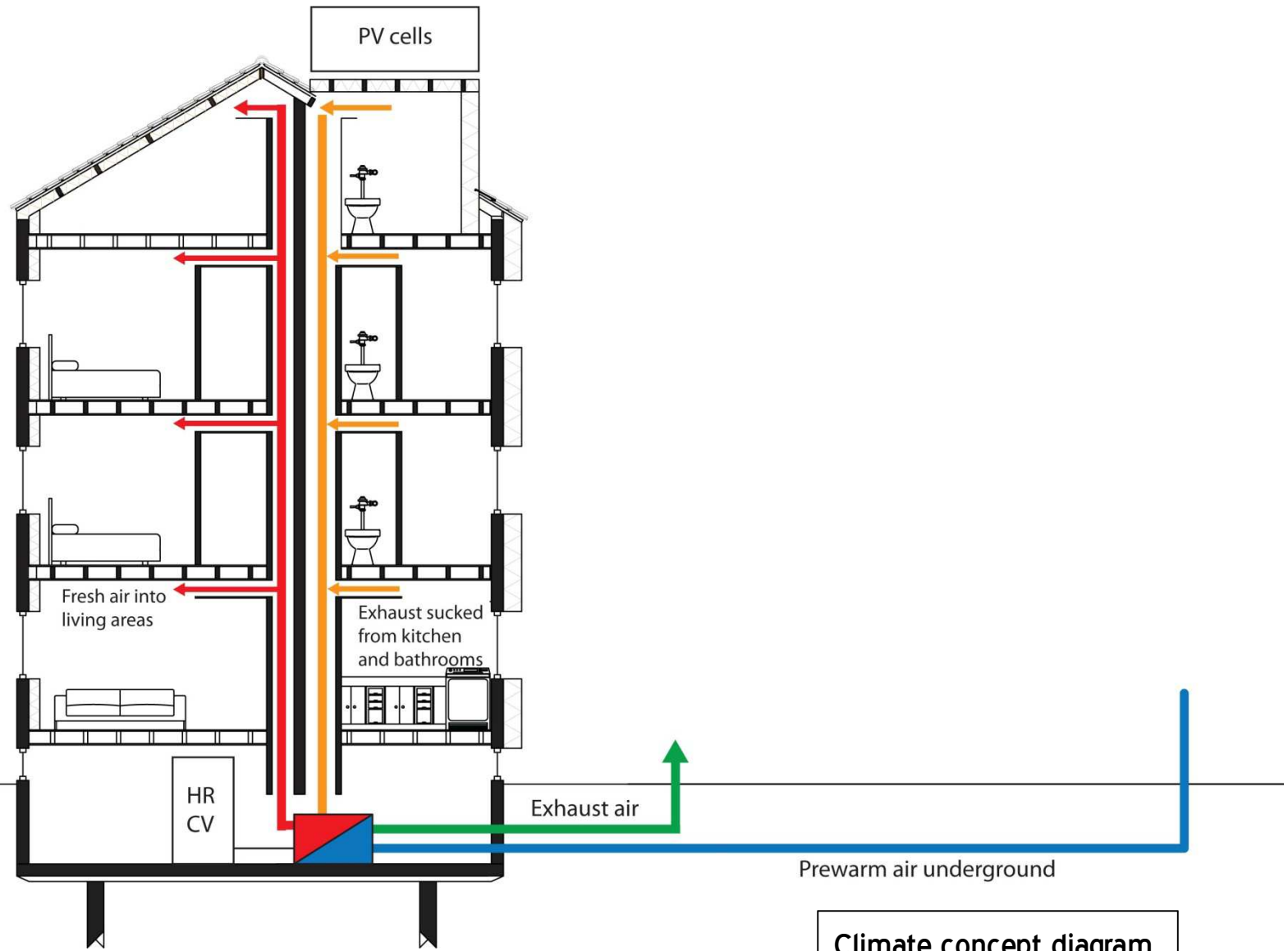
Detail 1: outside insulation



Detail 2: inside insulation

Section A-A'

UPGRADING EFFICIENCY



Climate concept diagram

DIFFERENCES



Front facades

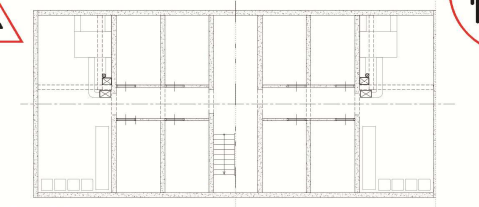


Rear facades

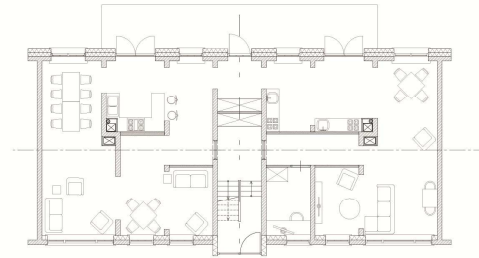
PLANS



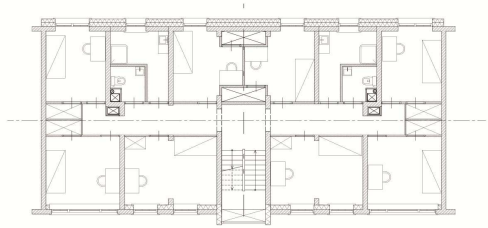
FLOOR



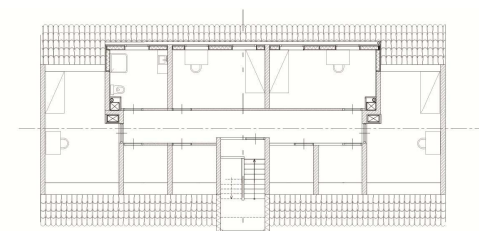
BASEMENT



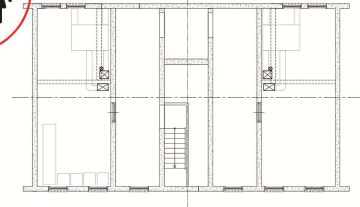
GROUND FLOOR



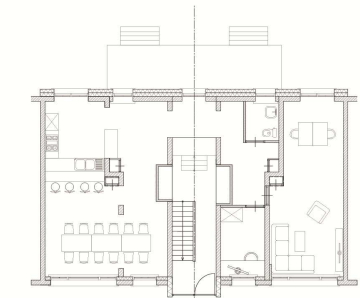
2ND AND 3RD FLOOR



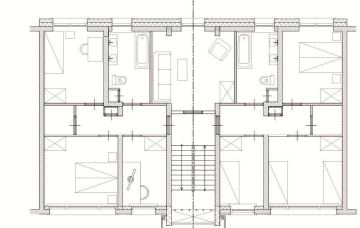
PLANS



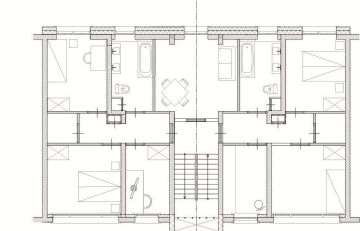
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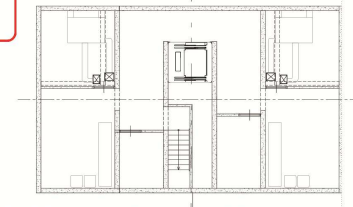
GROUND FLOOR



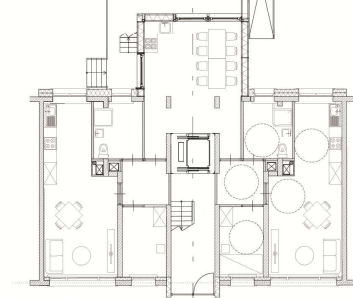
2ND FLOOR



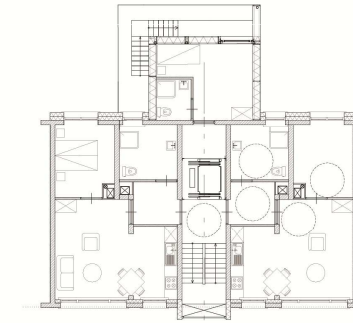
1:100



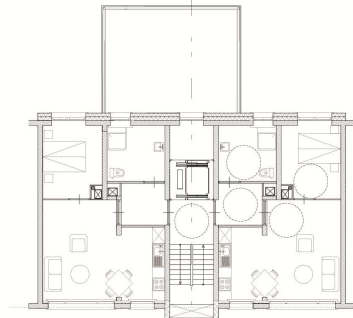
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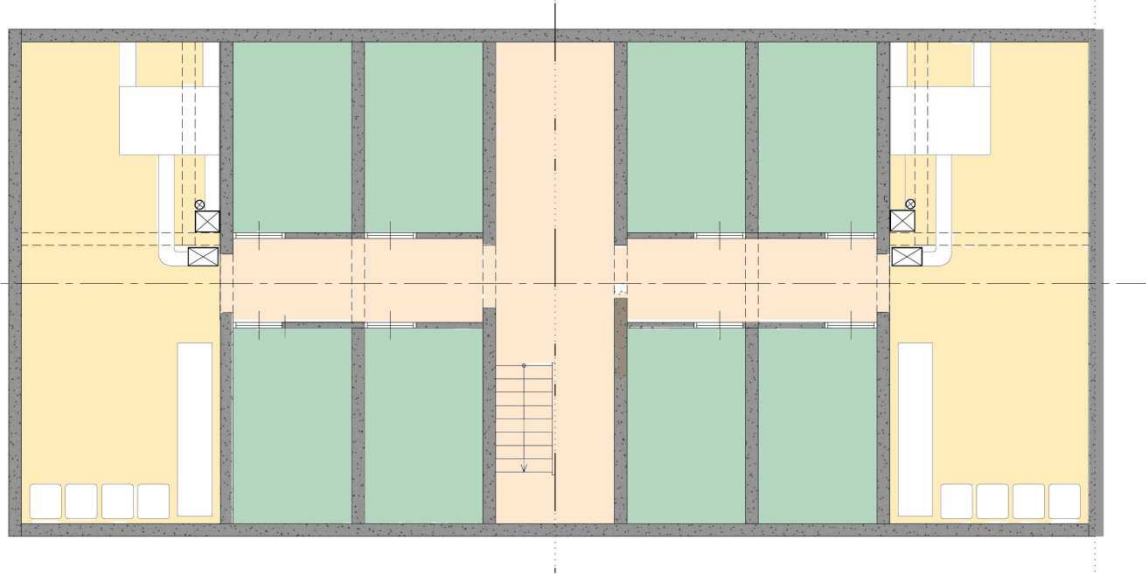
GROUND FLOOR



2ND FLOOR

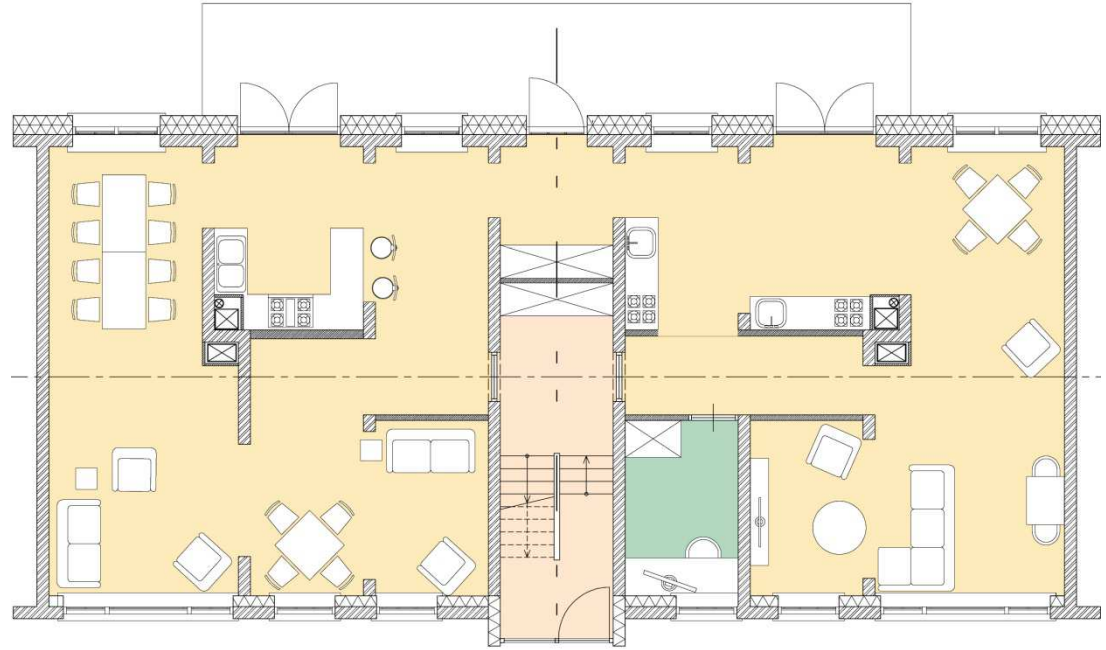
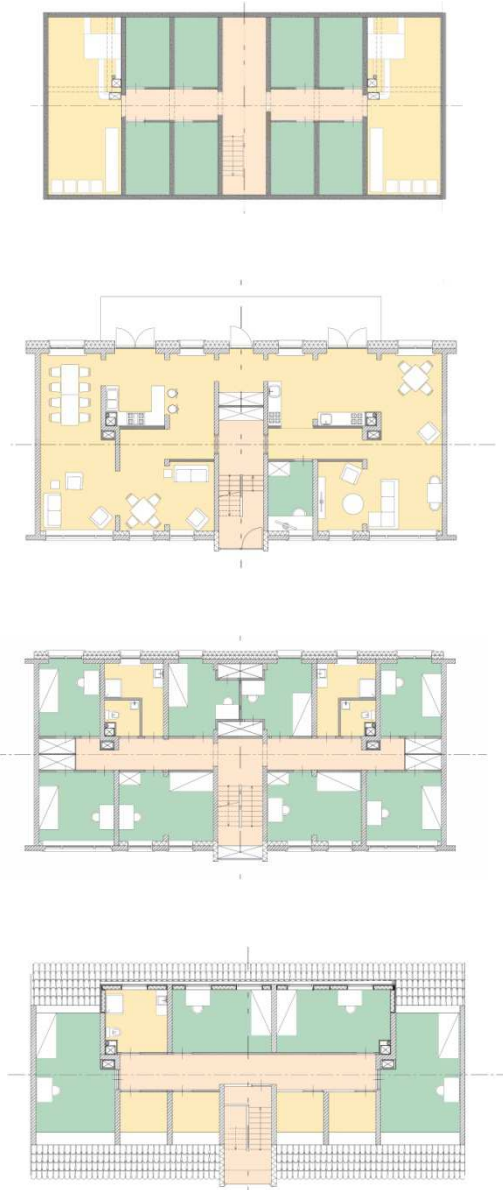


MIGRANT WORKERS



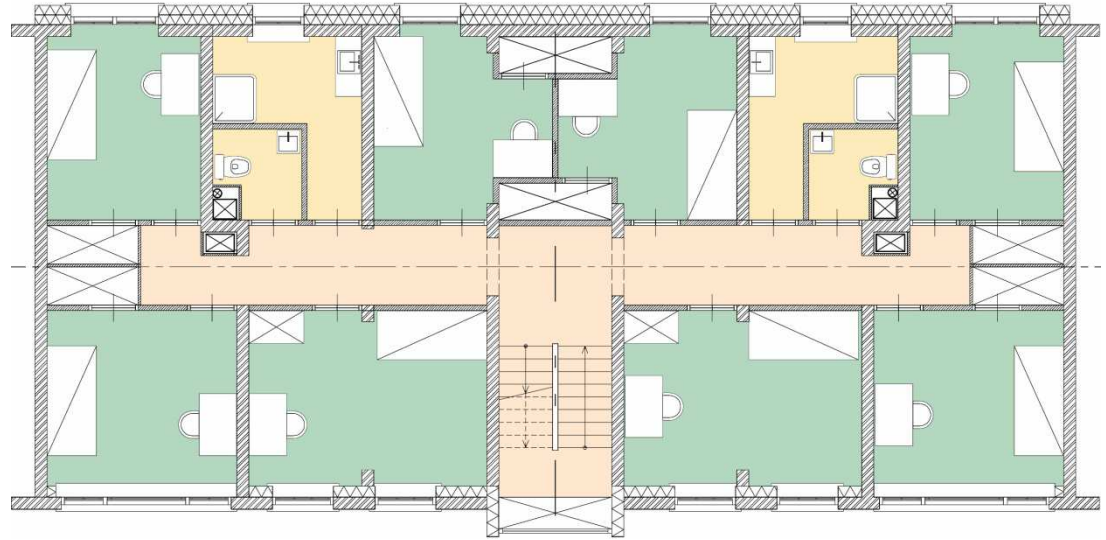
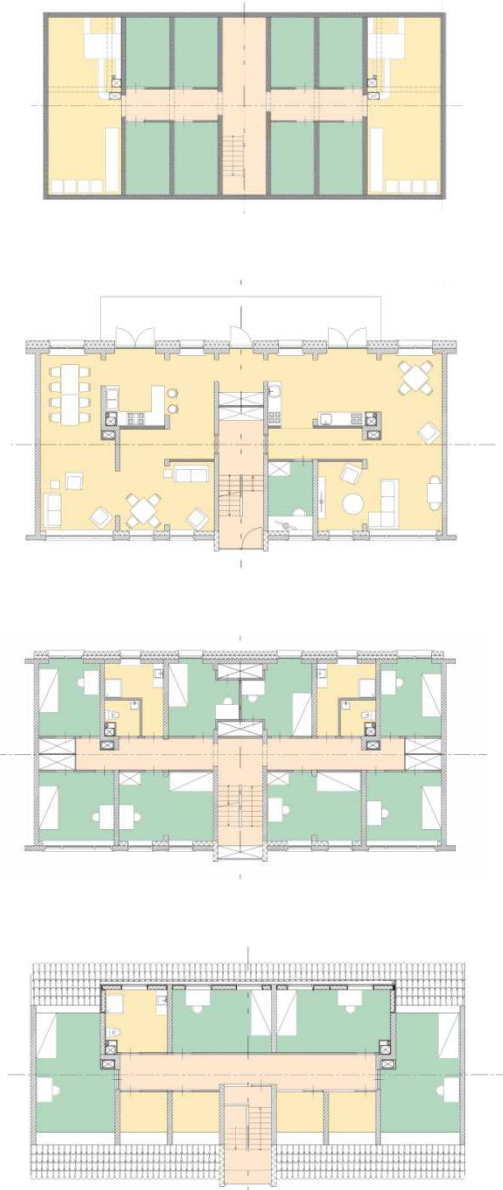
basement

M I G R A N T W O R K E R S



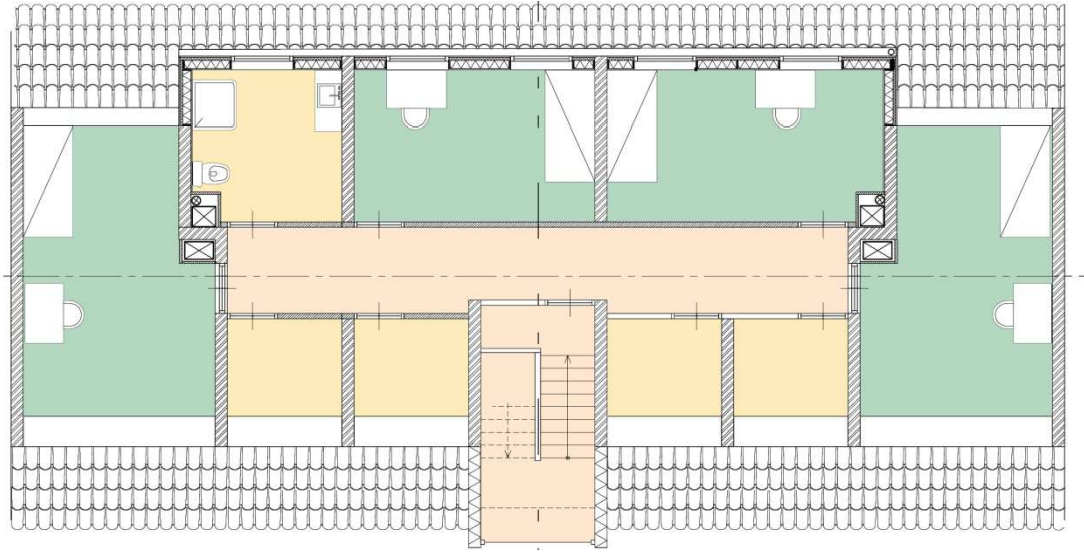
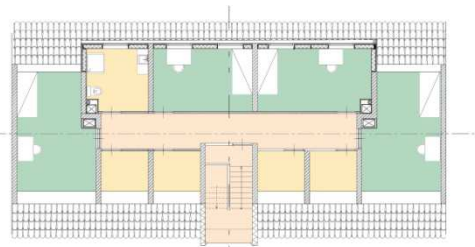
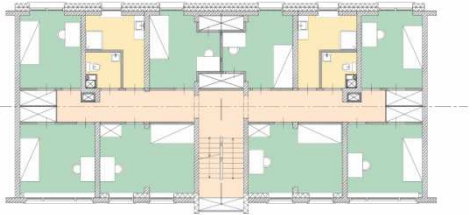
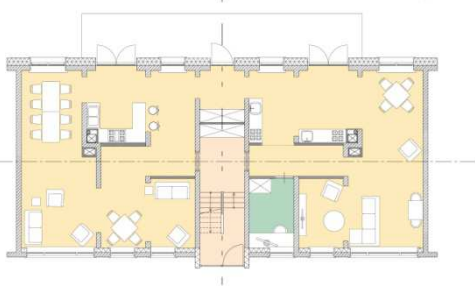
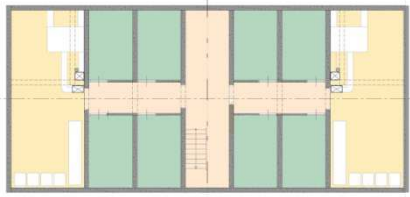
ground floor

MIGRANT WORKERS



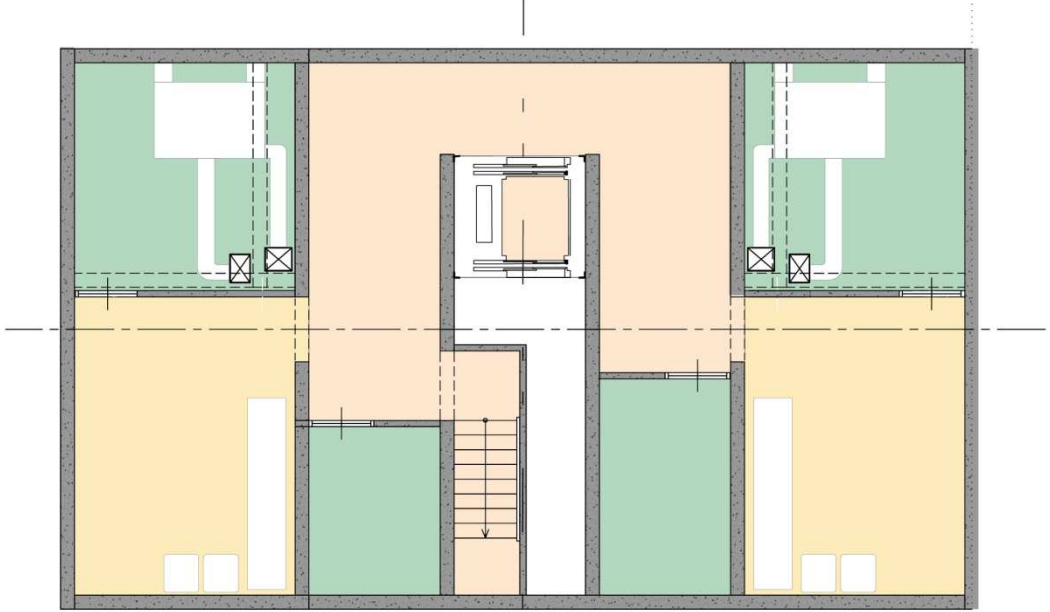
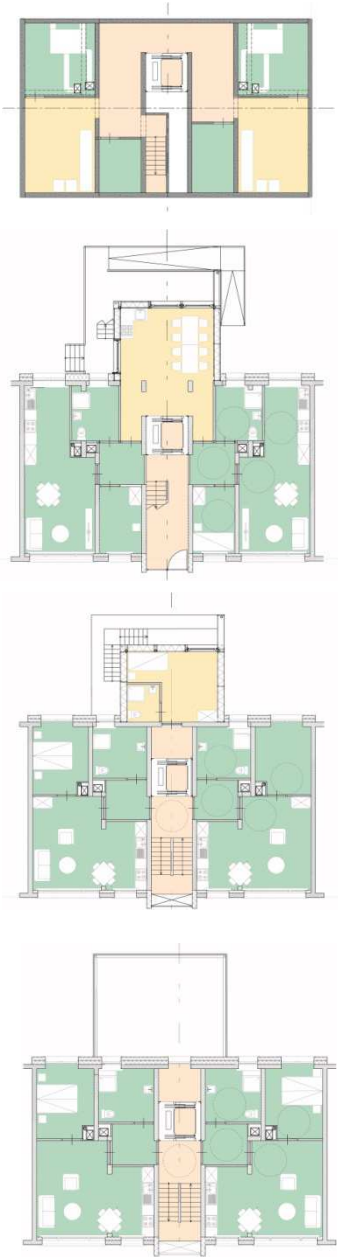
1st and 2nd floor

M I G R A N T W O R K E R S



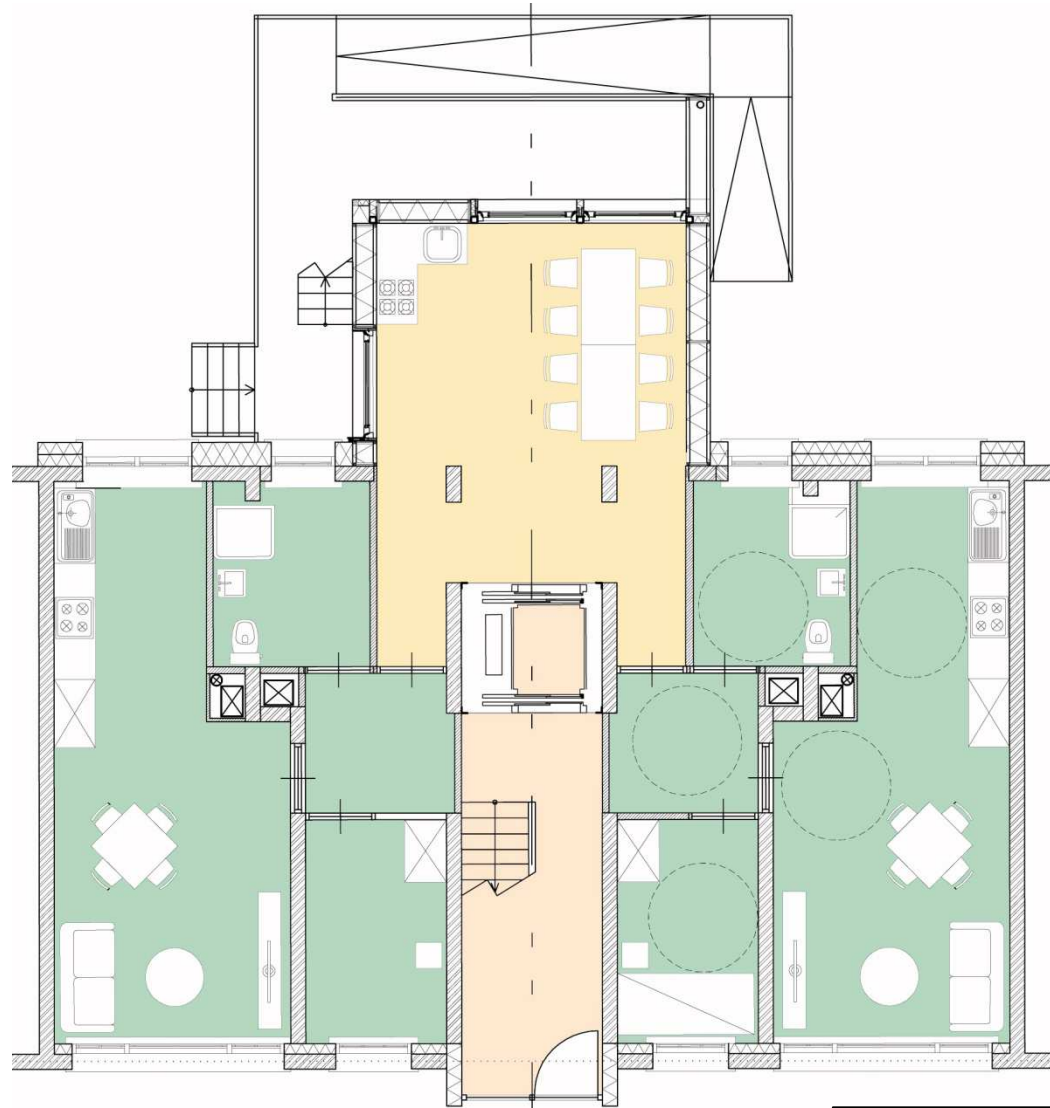
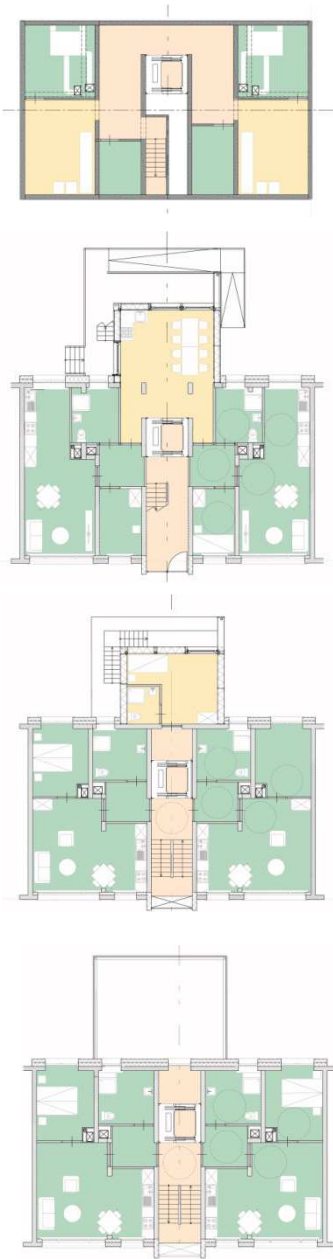
attic

SENIOR CITIZENS



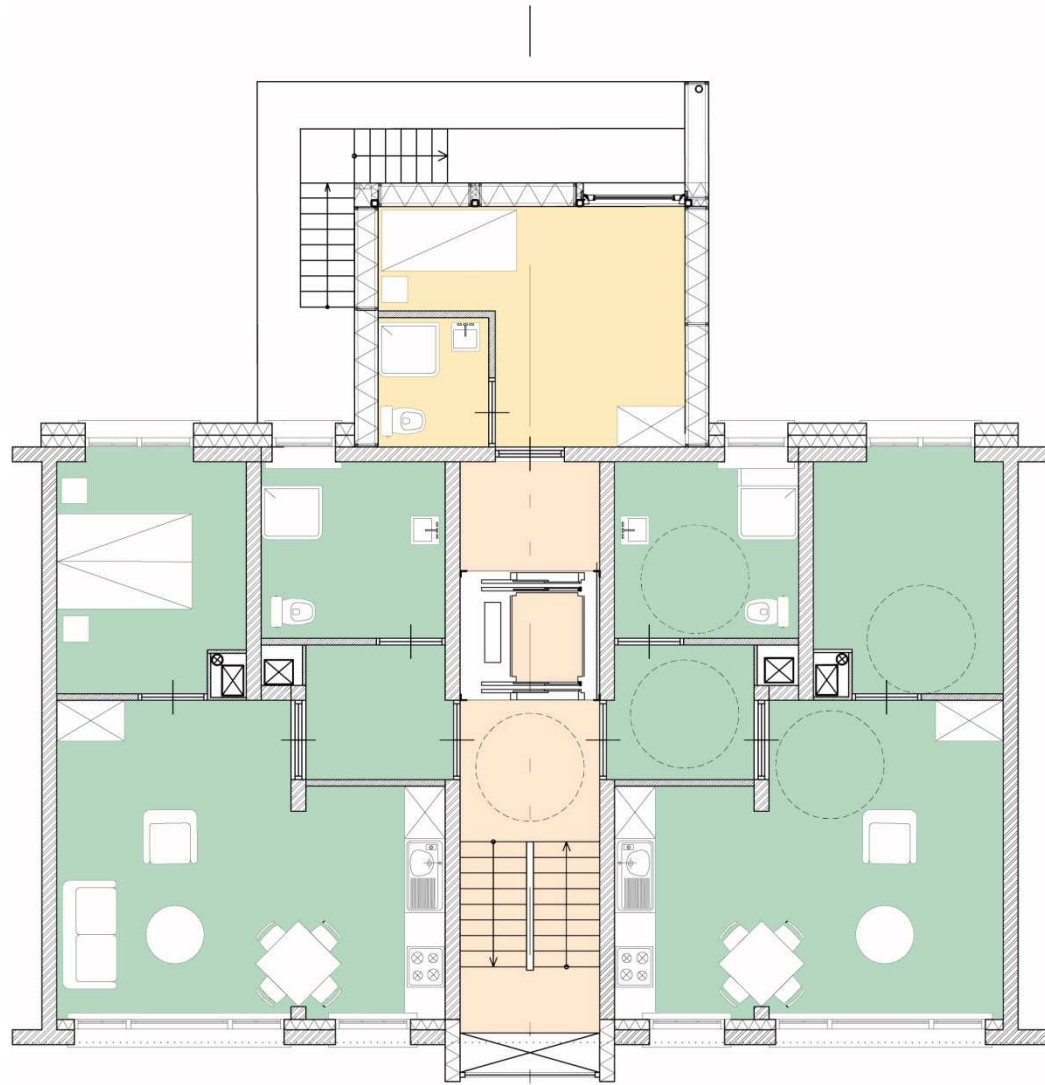
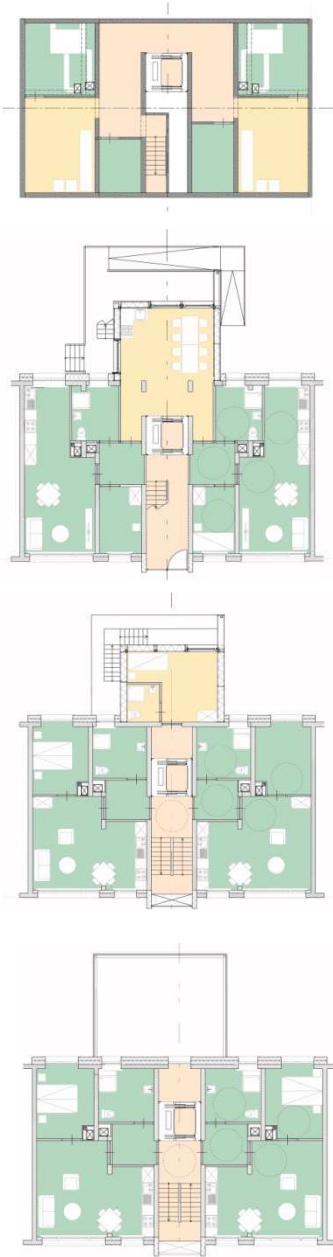
basement

SENIOR CITIZENS



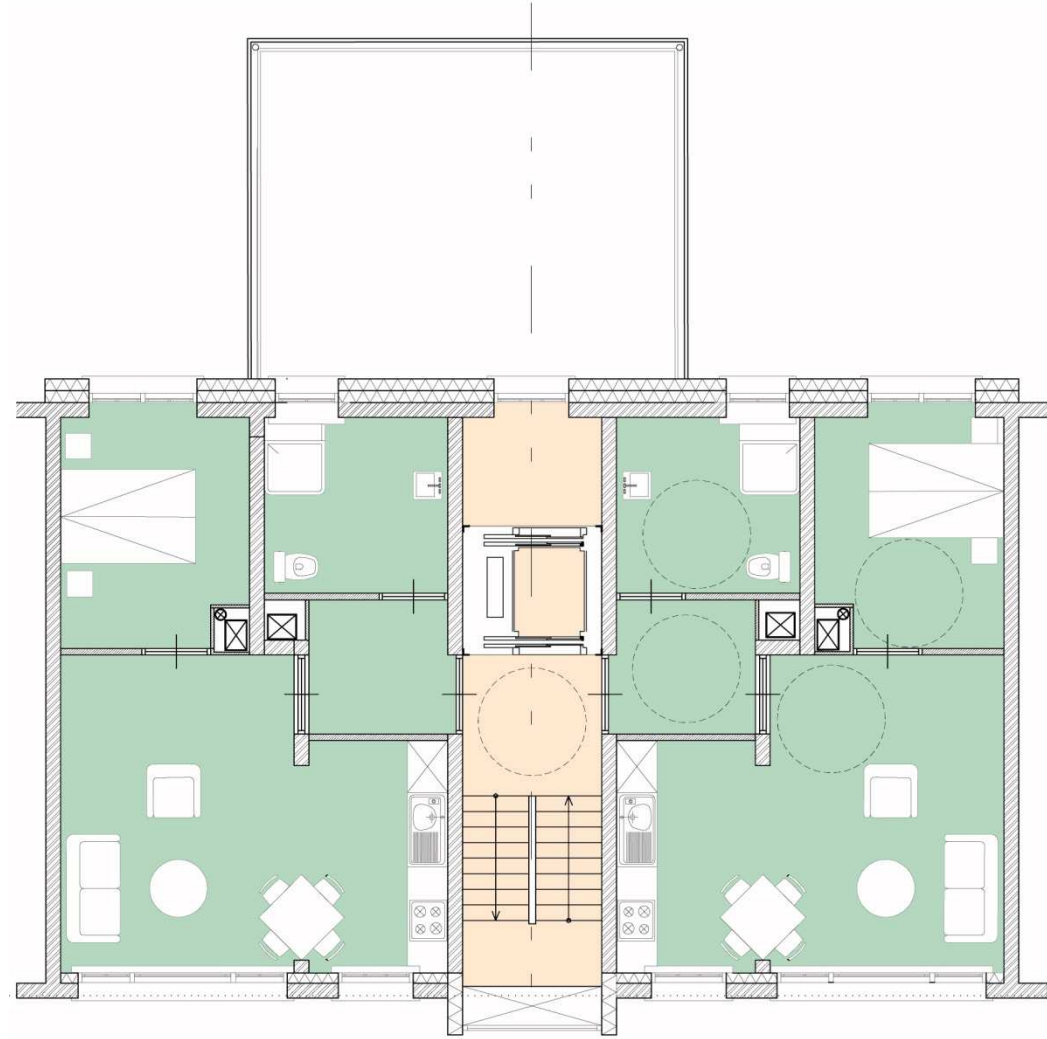
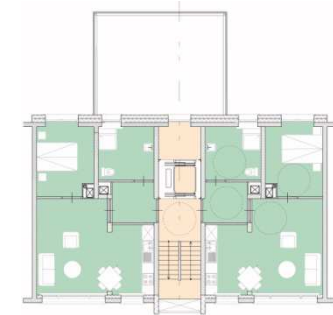
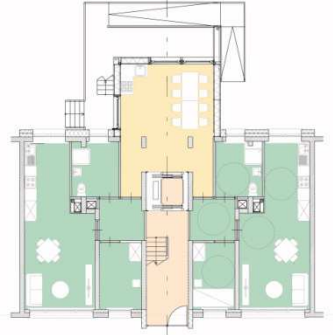
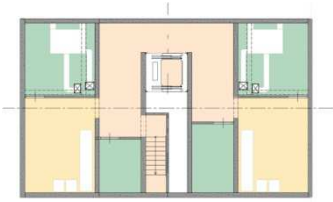
ground floor

SENIOR CITIZENS



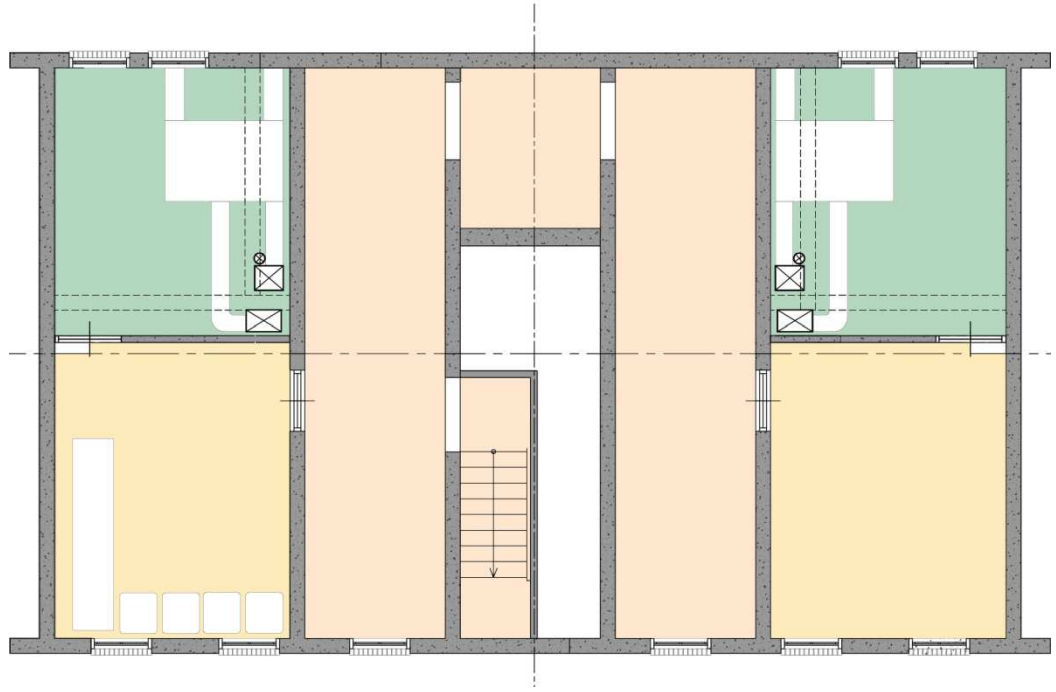
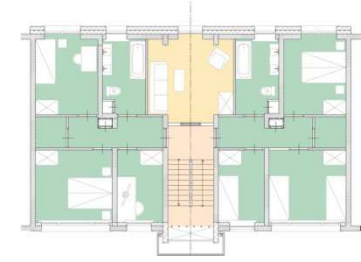
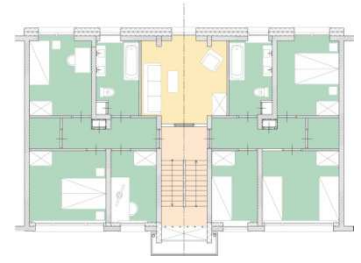
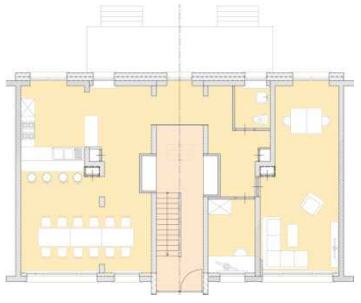
1st floor

SENIOR CITIZENS



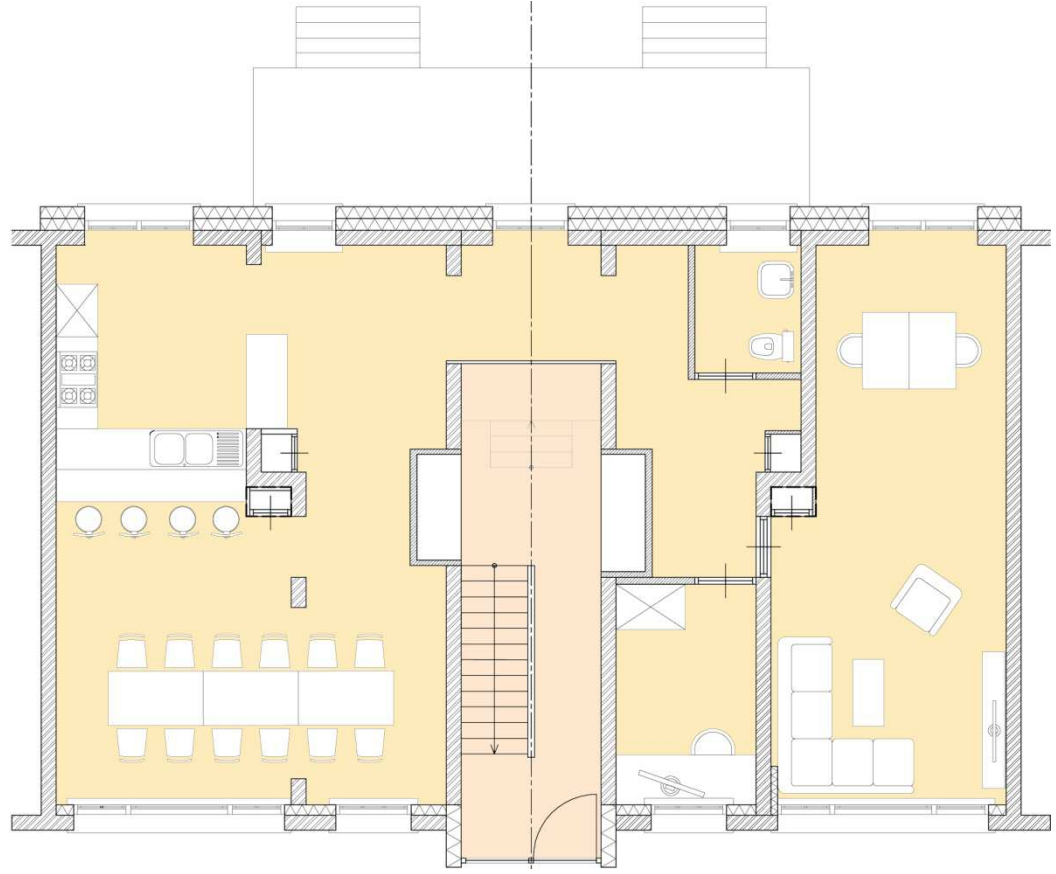
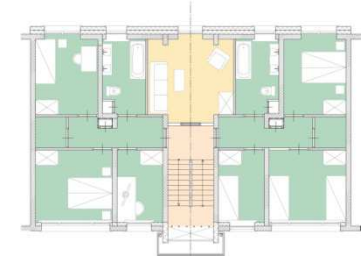
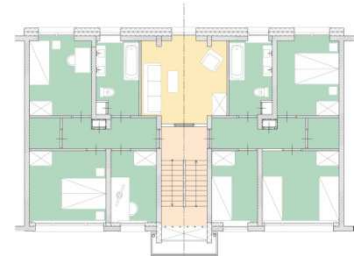
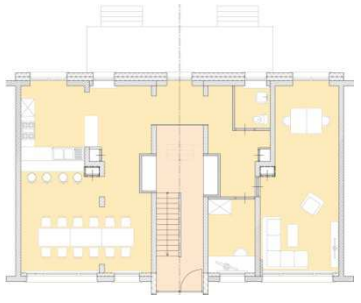
2nd floor

SINGLE PARENTS



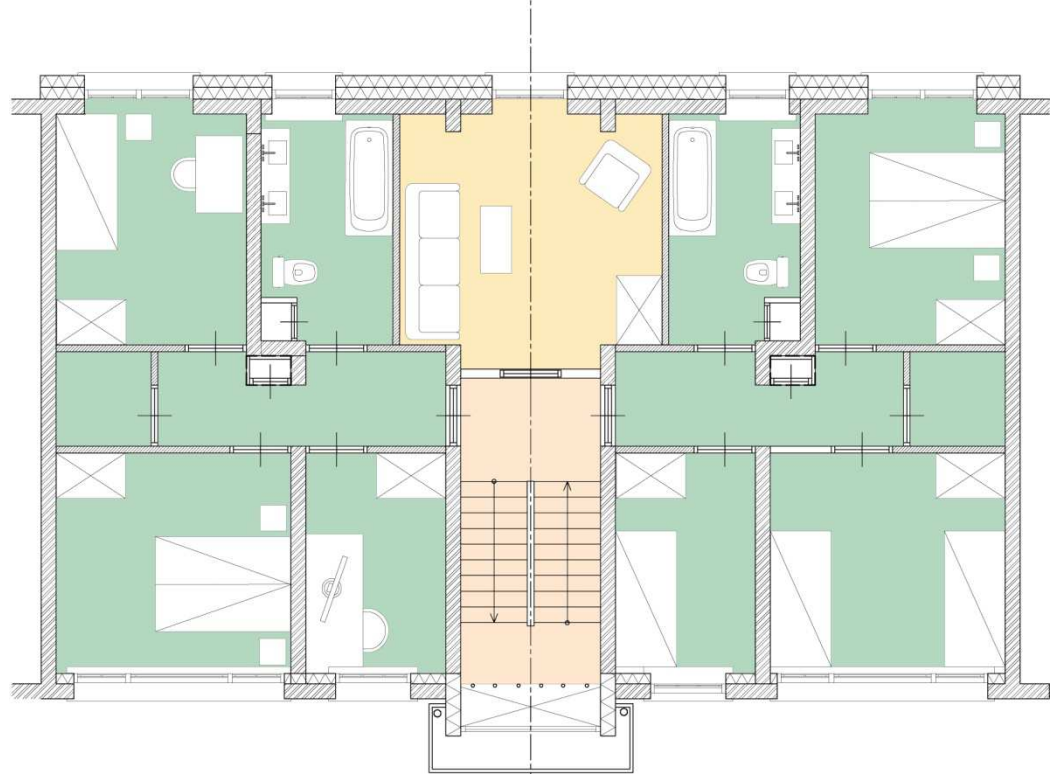
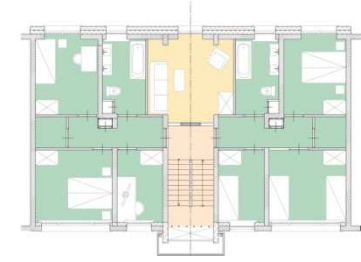
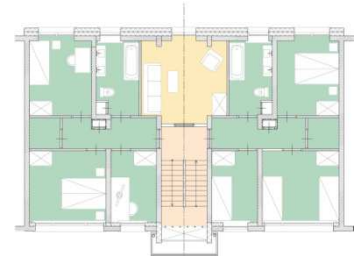
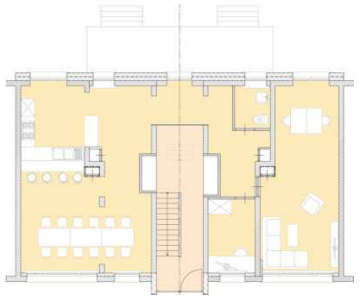
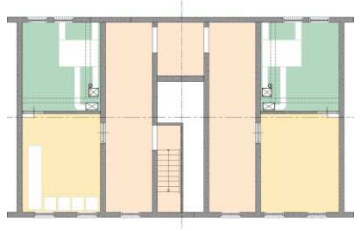
basement

SINGLE PARENTS




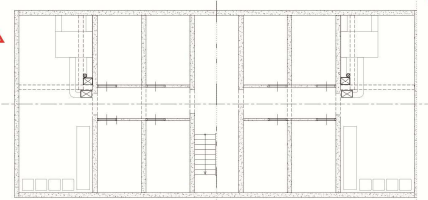

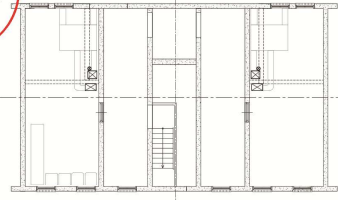

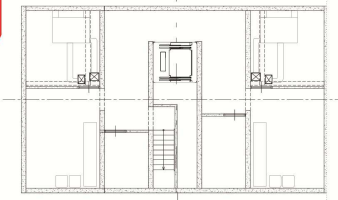
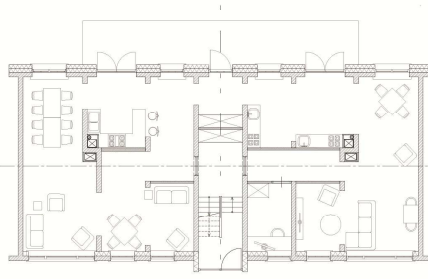
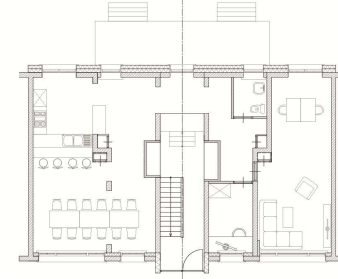
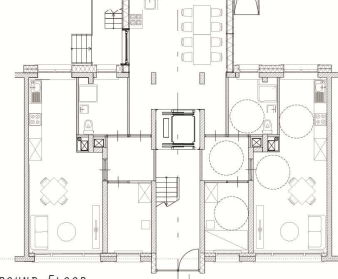
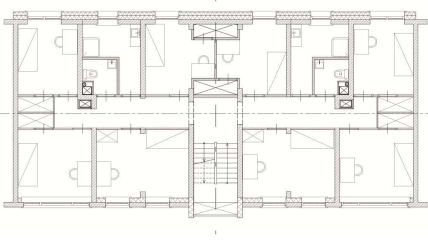
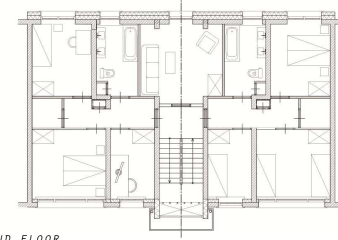
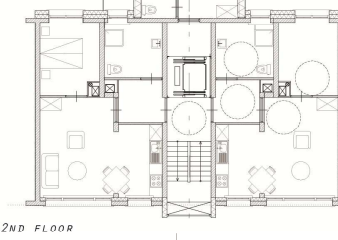
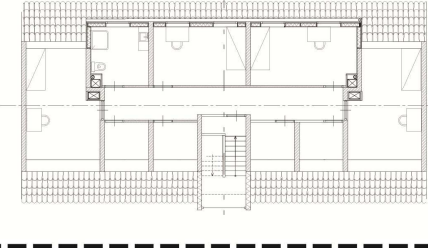
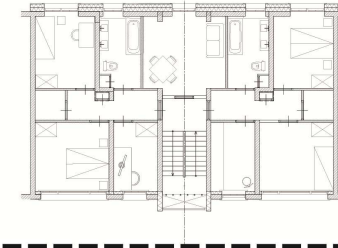
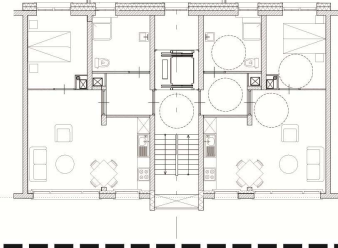
ground floor

SINGLE PARENTS



1st and 2nd floor

PLANS

<i>FLOOR</i>	<i>PLANS</i>	<i>1:100</i>
  <i>BASEMENT</i>	  <i>BASEMENT</i>	  <i>BASEMENT</i>
 <i>GROUND FLOOR</i>	 <i>GROUND FLOOR</i>	 <i>GROUND FLOOR</i>
 <i>2ND AND 3RD FLOOR</i>	 <i>2ND FLOOR</i>	 <i>2ND FLOOR</i>
		

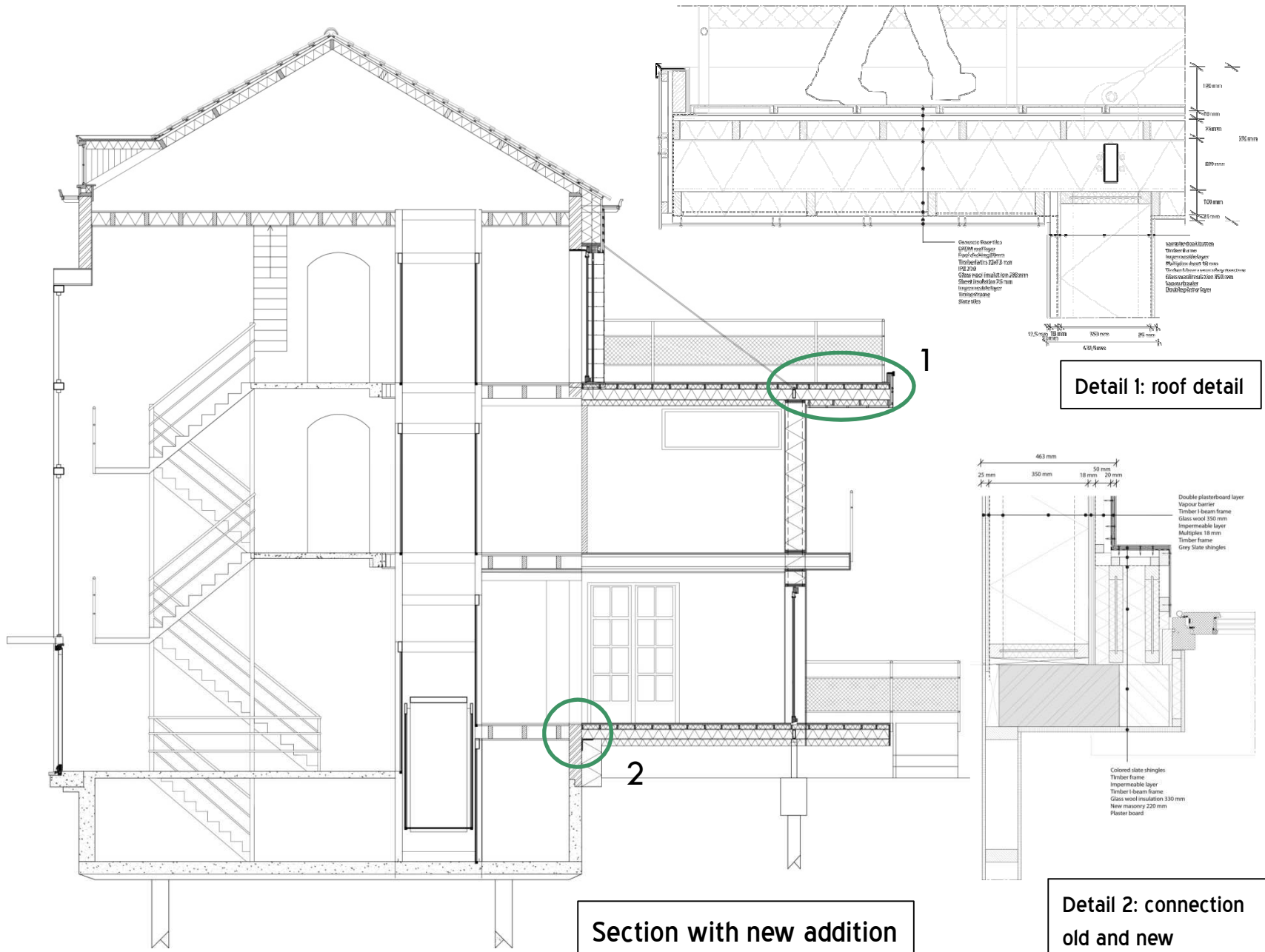
ADDITIONS



Rear facade: Varicolored slate shingles
Additions: Dark slate tiles with oak batten infill



ADDITIONS



Section with new addition

Detail 2: connection old and new

ADDITIONS



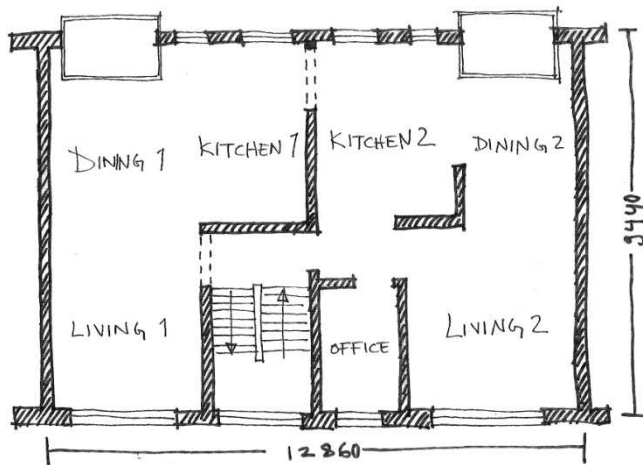
NEW PUBLIC SPACE



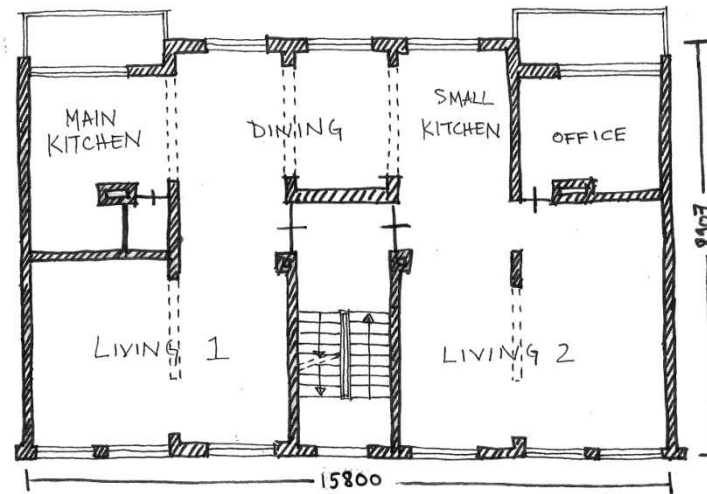
NEW PUBLIC SPACE



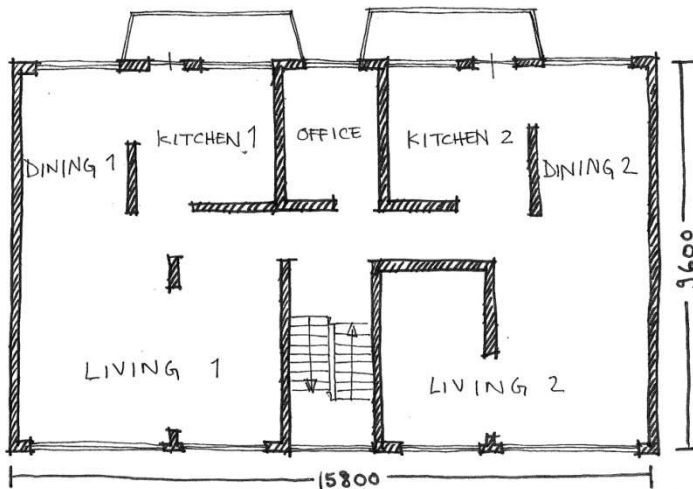
IMPLICATIONS



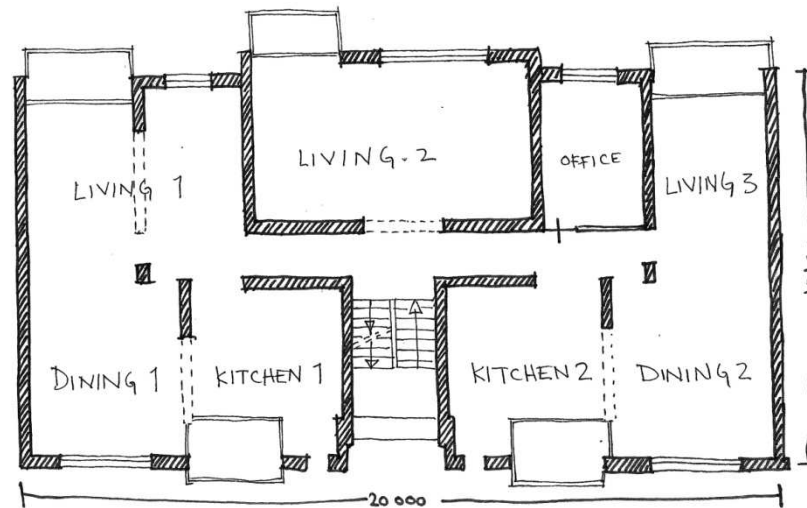
Canneburglaan



Moerweg III

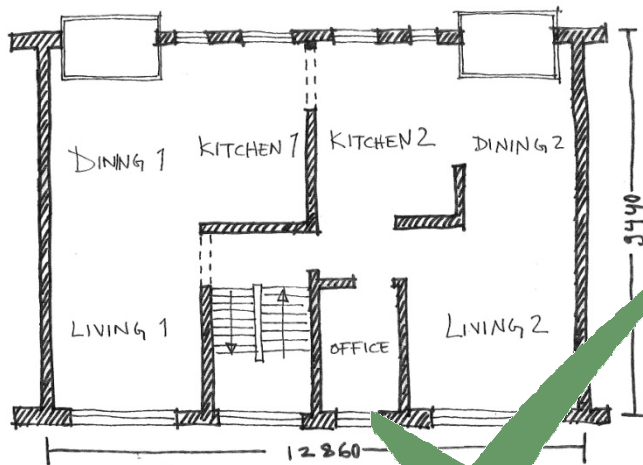


Haveltestraat

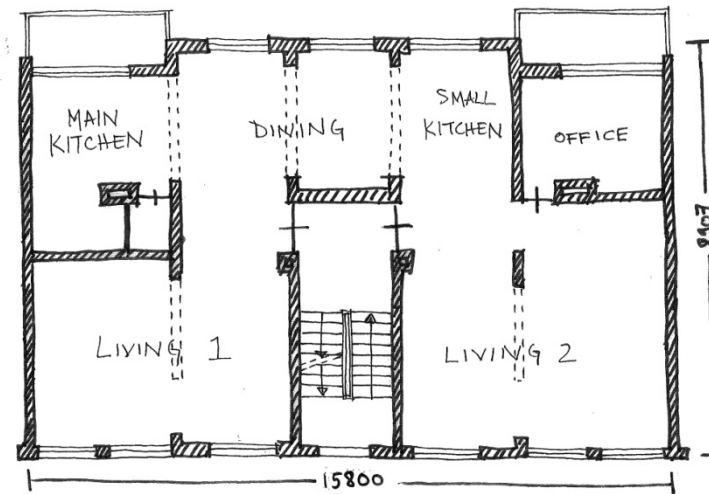


Moerweg IV

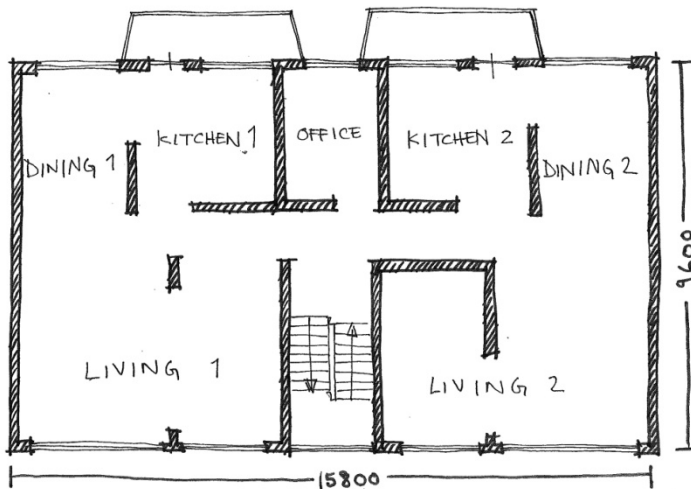
IMPLICATIONS



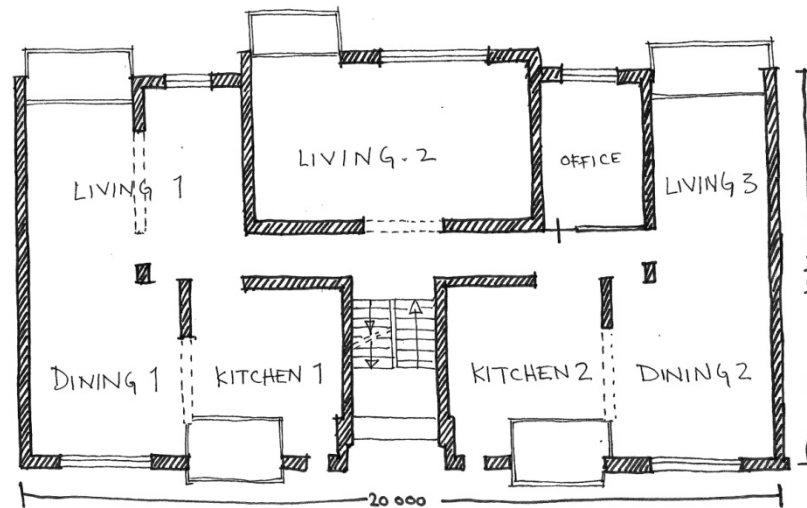
Canneburglaan



Moerweg III

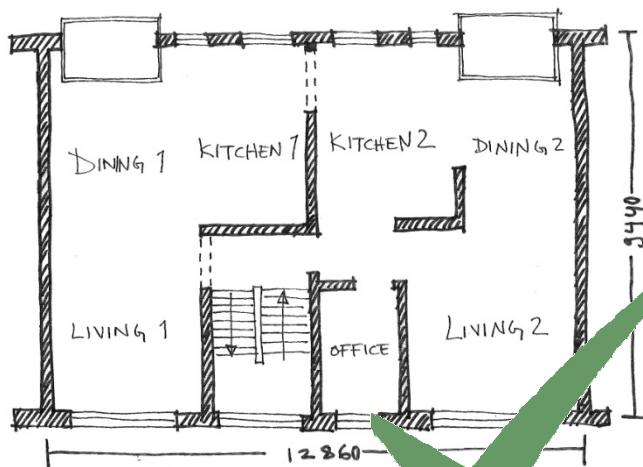


Haveltestraat

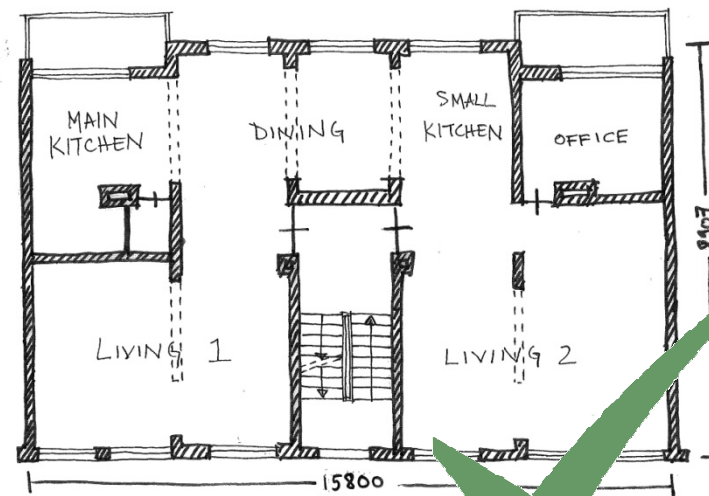


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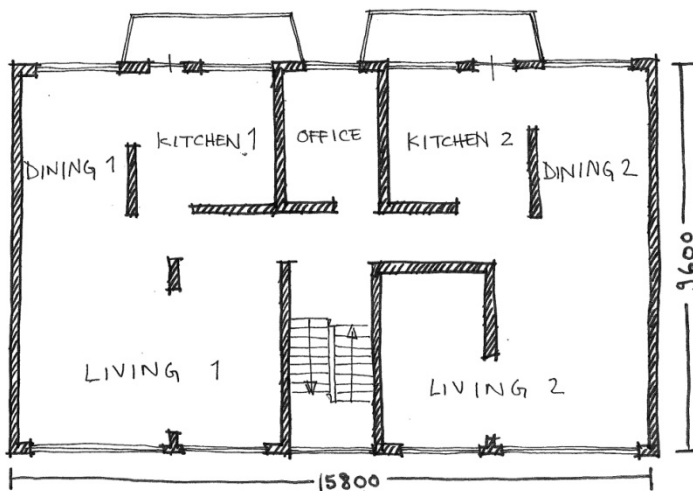
IMPLICATIONS



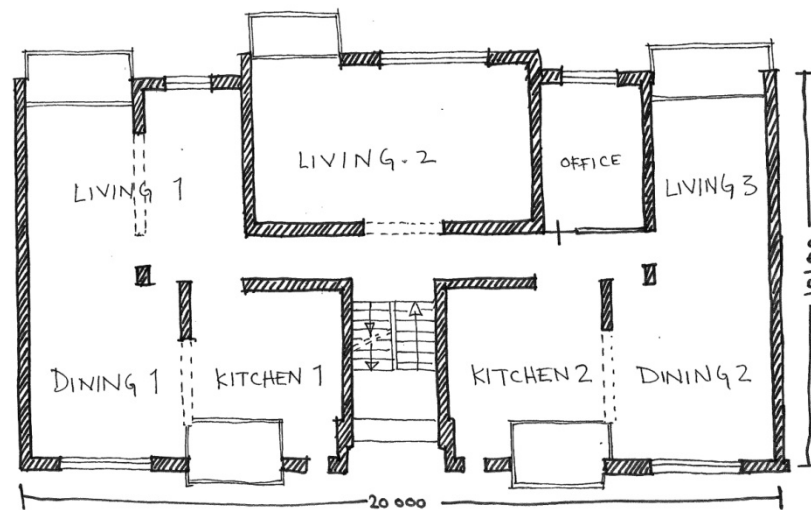
Canneburglaan



Moerweg III

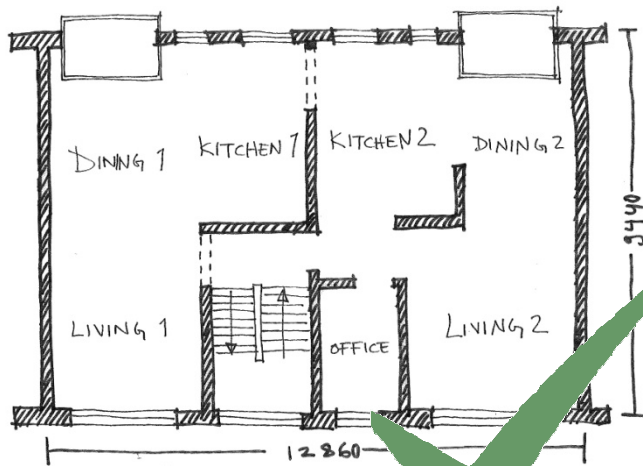


Haveltestraat

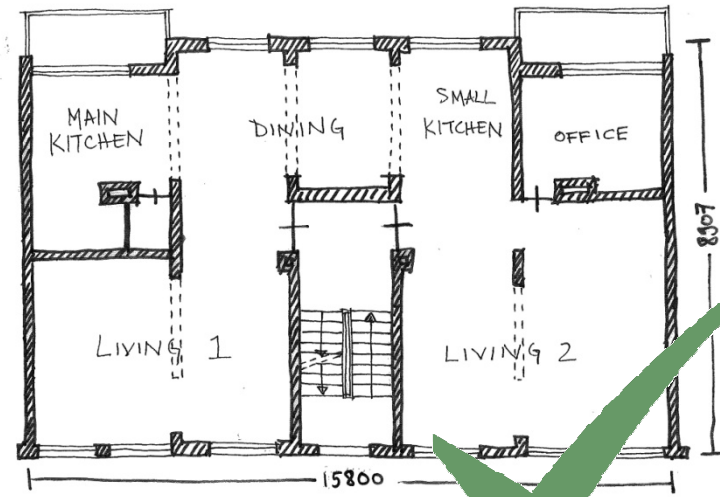


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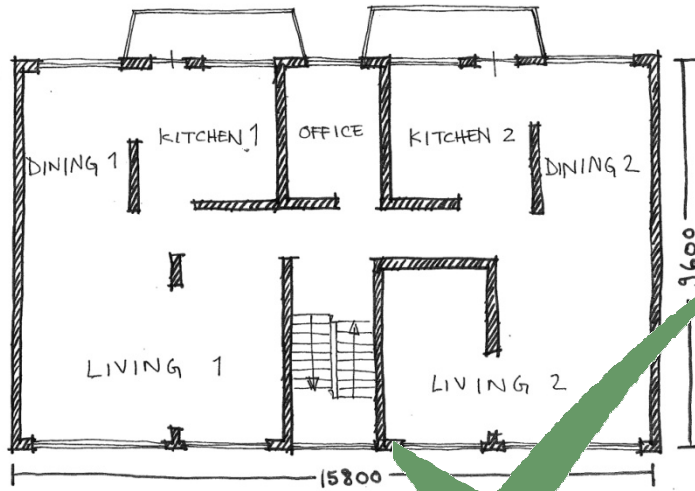
IMPLICATIONS



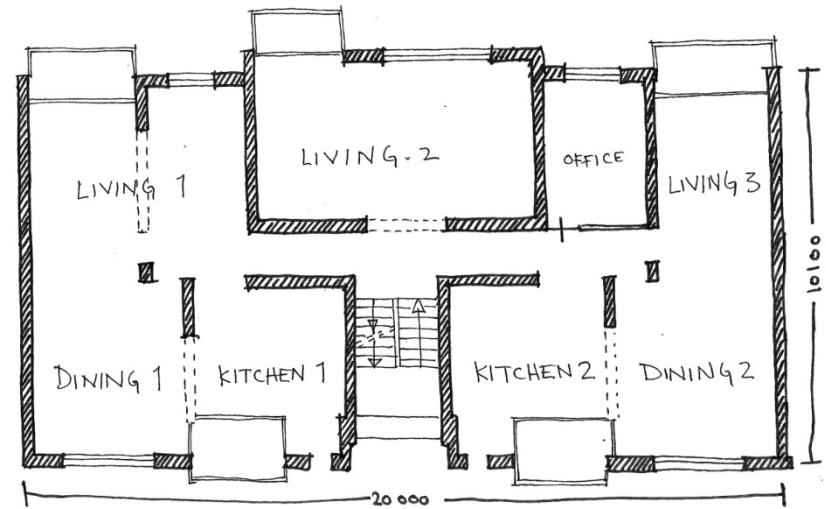
Canneburglaan



Moerweg III

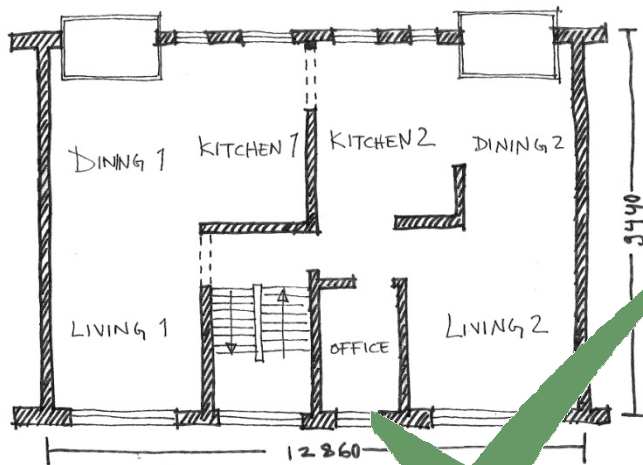


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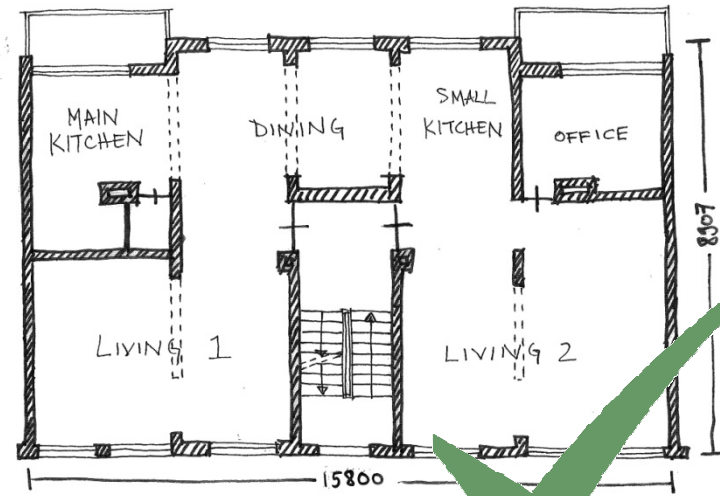


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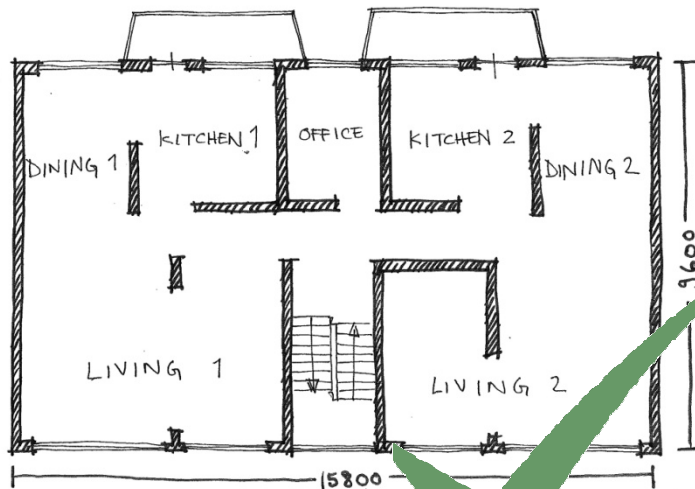
IMPLICATIONS



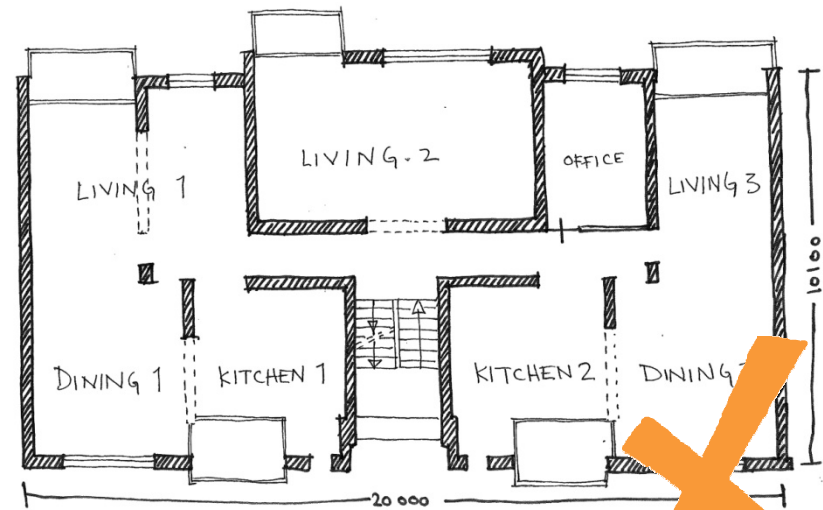
Canneburglaan



Moerweg III



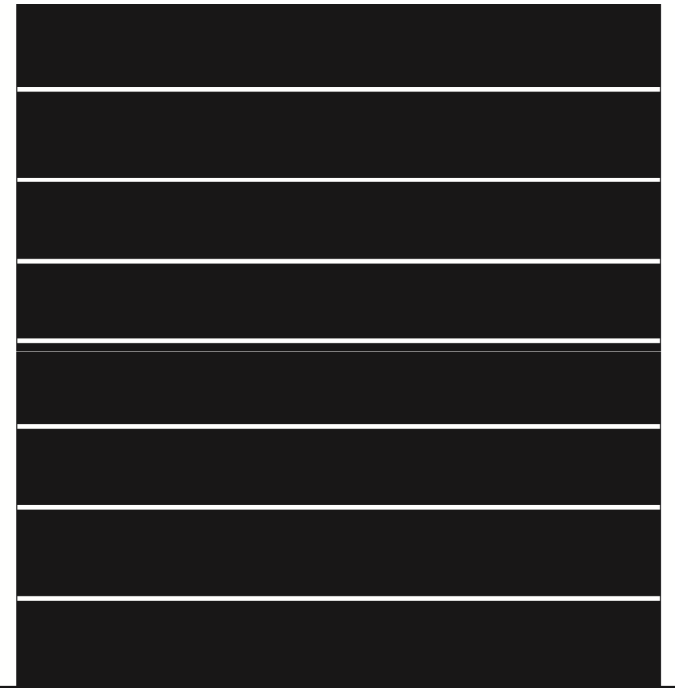
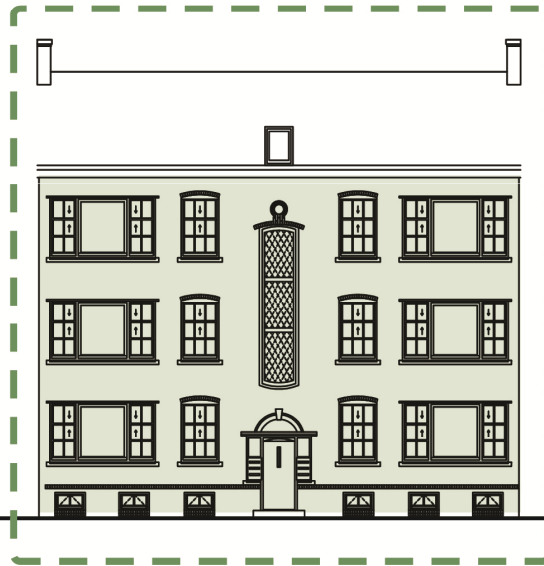
Haveltestraat



Moerweg IV

SCALE

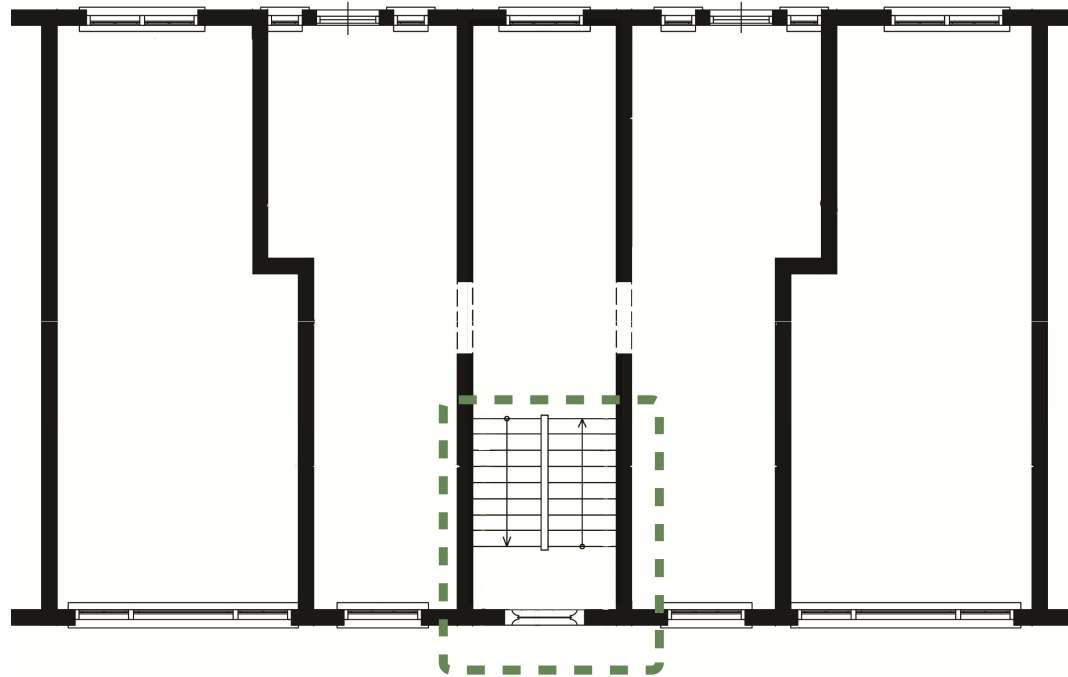
Between a singly family house and gallery flat:



Both an opportunity and a limiting factor.

SETUP

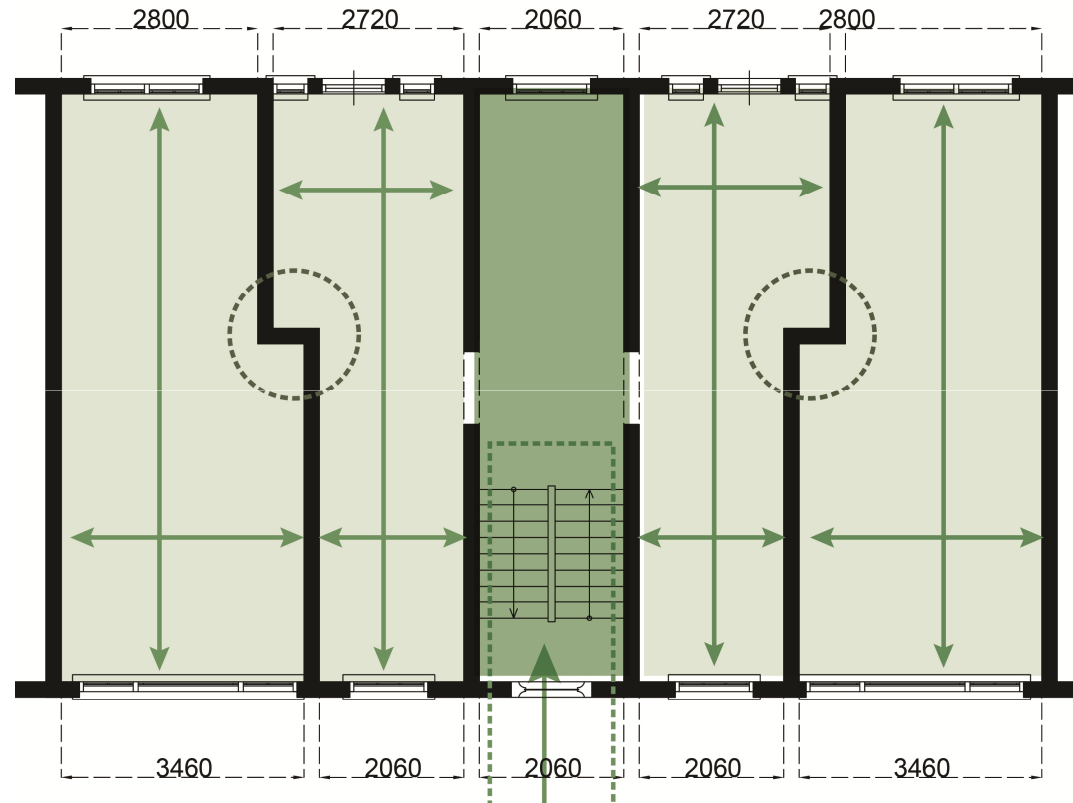
Central stairwell for accesses
all areas :



Shared stairwell was a liability for the
autonomy of individual apartments but
becomes an asset by collective.

STRUCTURE

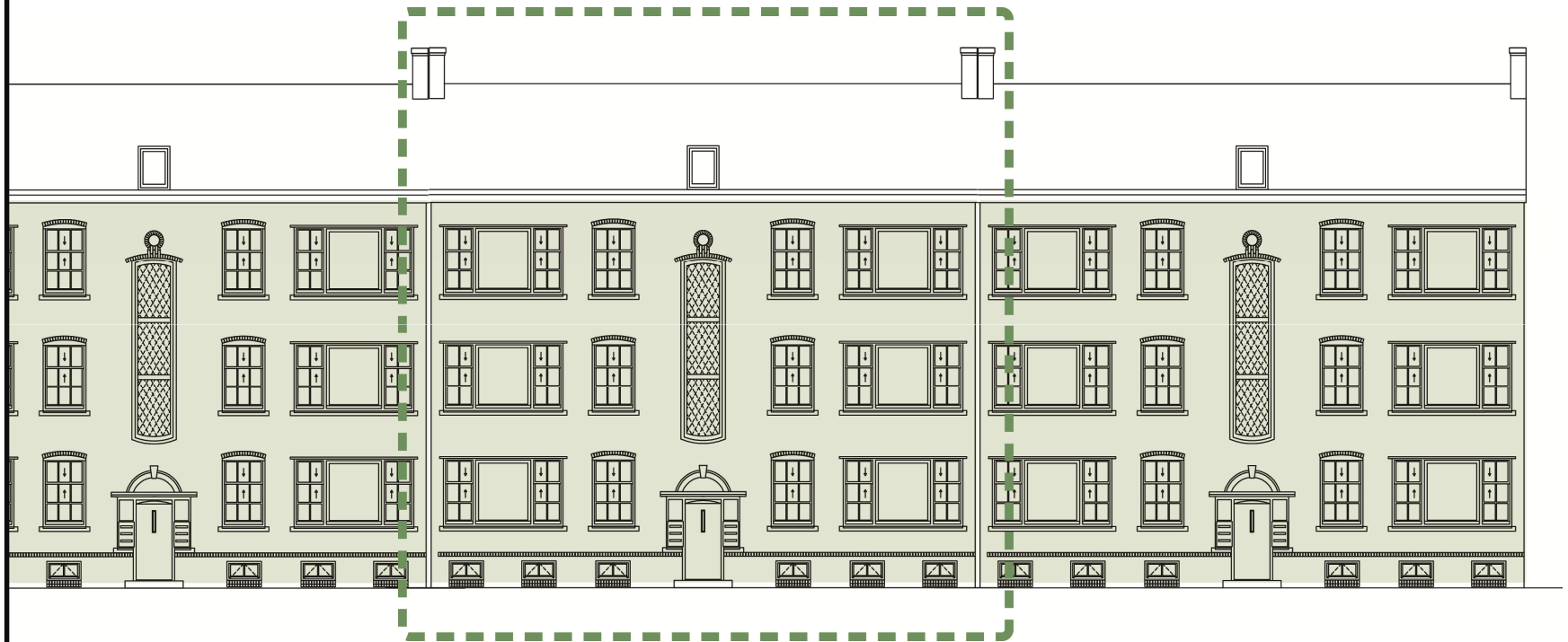
Narrow spaces separated by load bearing walls:



Especially the kink which is characteristic of this housing type forms a limiting factor in the flexibility of the space.

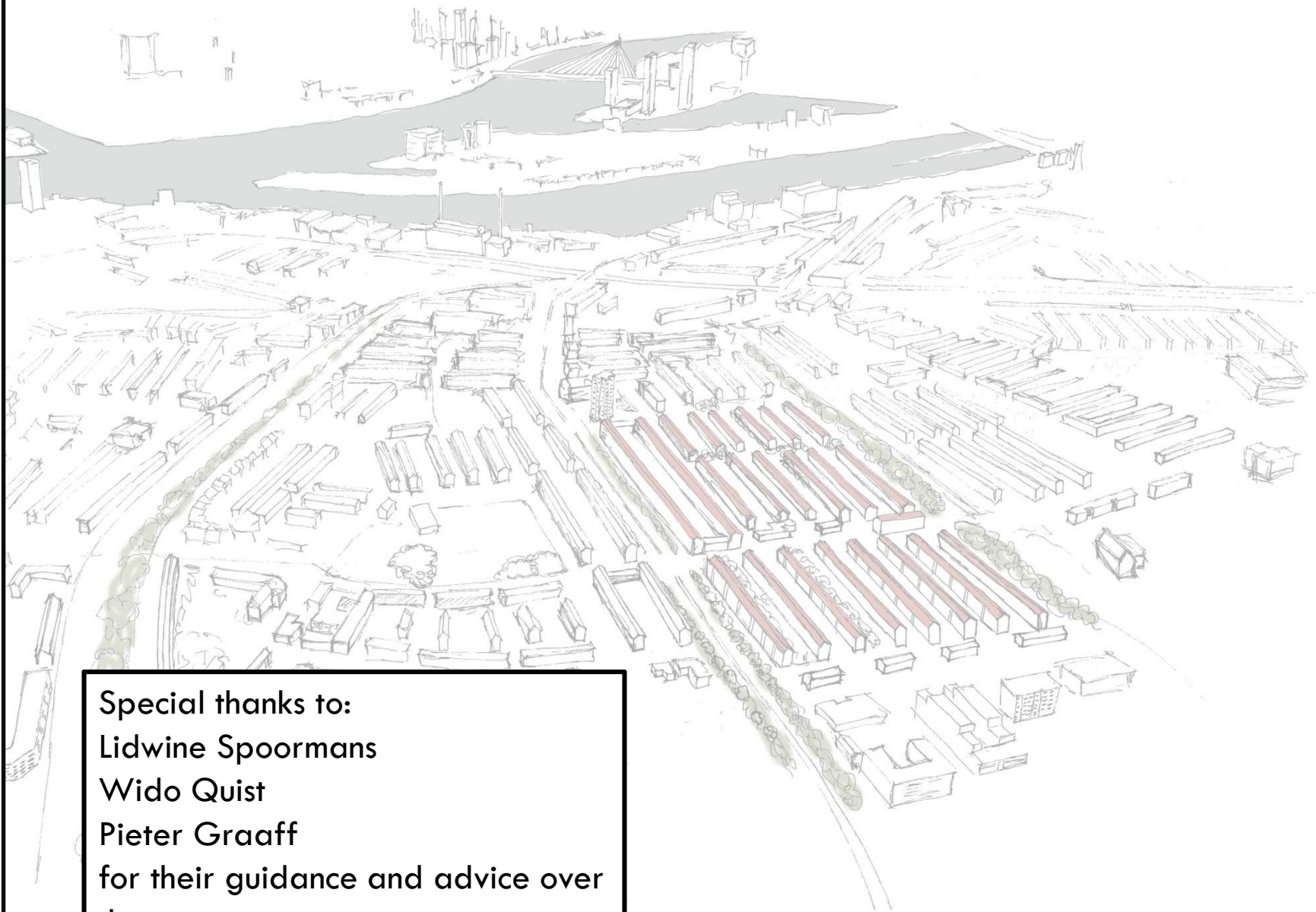
CONCLUSION

Most research has focused on individual apartments.



Examining dwelling as a unit opens up new possibilities.

THANK YOU



Special thanks to:
Lidwine Spoormans
Wido Quist
Pieter Graaff
for their guidance and advice over
the past year.