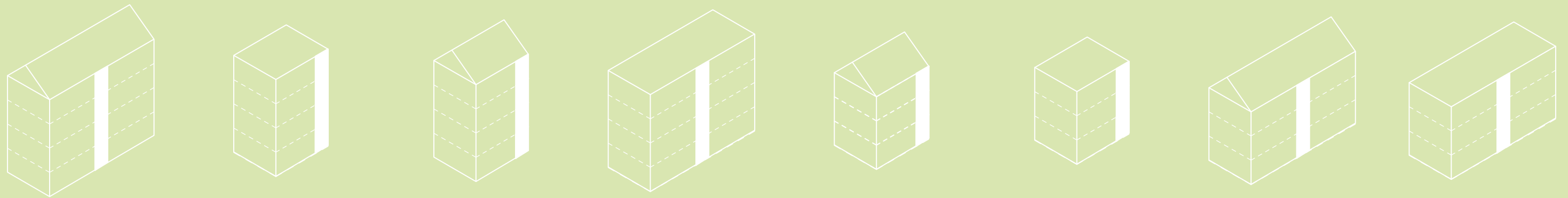


Improving Neighbourhood Satisfaction in Post-War Neighbourhoods

ARCHITECTURAL DESIGN STRATEGIES FOR LIVEABILITY



HERITAGE & ARCHITECTURE
Resourceful housing: Adapting 20th
Century Heritage

DELFT UNIVERSITY OF TECHNOLOGY

Sara Ozcan
5248043

Introduction
Problem Statement

Research
Research question
Values and attributes of residents in Amsterdam Nieuw-West
Enhancing liveability with architecture
Architectural design strategies

Design
Design case

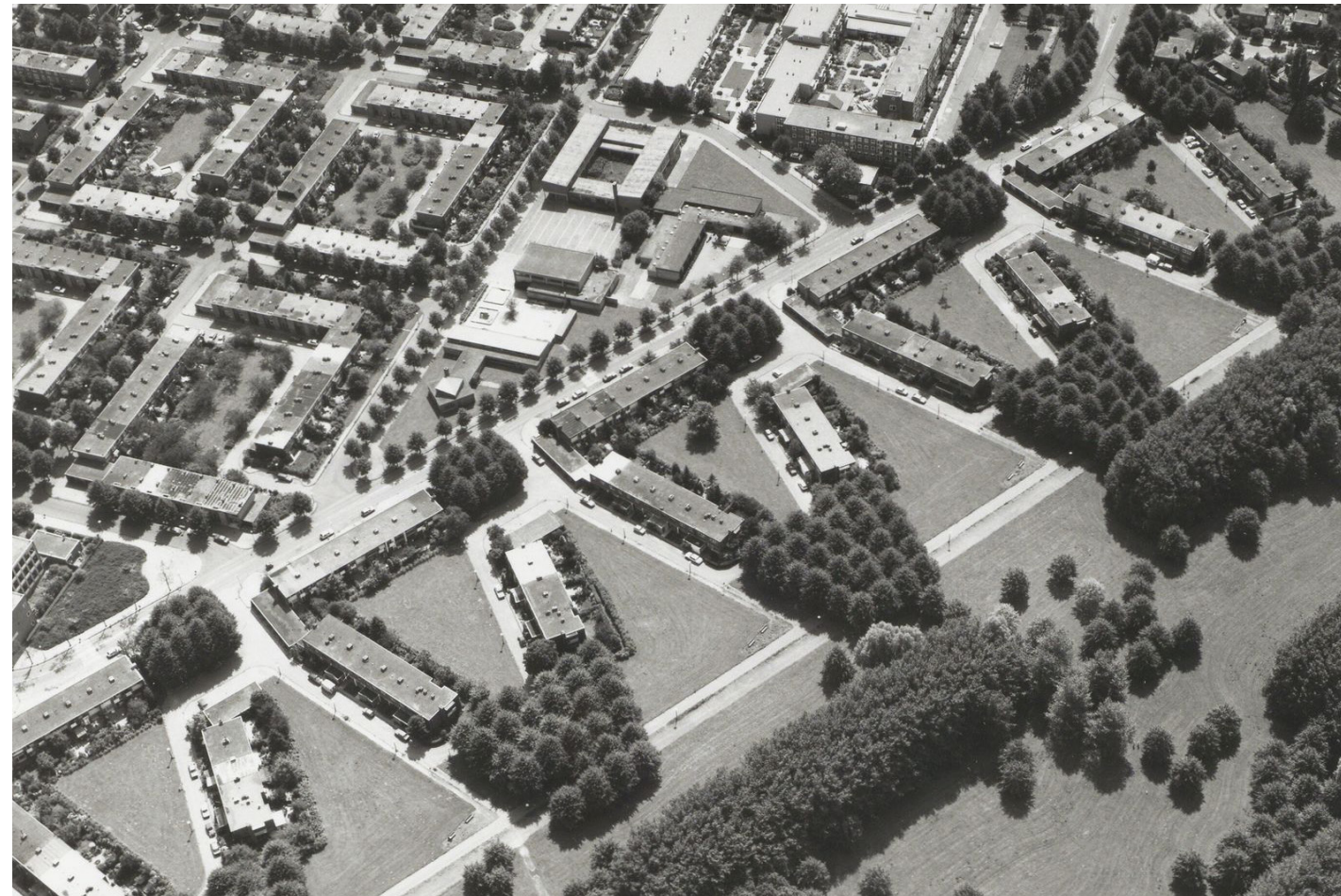
Assesment
Assessing the design strategies

Introduction

Problem statement

POST-WAR NEIGHBOURHOODS

Post-war neighborhoods were characterized by modernist principles, featuring innovative design and prefabrication methods (*van Beekhoven et al., 2005*), but many have since faced physical and socio-economic challenges (*Argilou et al., 2008*). Addressing these issues requires a focus on neighborhood satisfaction, which encompasses liveability factors like safety, amenities, social cohesion, and aesthetic appeal.



Slotervaart (van Eesteren)

Introduction

Problem statement

LOW NEIGHBOURHOOD SATISFACTION SCORE IN AMSTERDAM NIEUW-WEST

'Wonen in Amsterdam' (2023) survey indicates an average neighborhood satisfaction score of 7.5 for Amsterdam residents.

Amsterdam Nieuw-West, particularly Osdorp, scores significantly lower of 6.2, with safety and social cohesion also receiving poor. (*Dienst Onderzoek en Statistiek, 2007*)

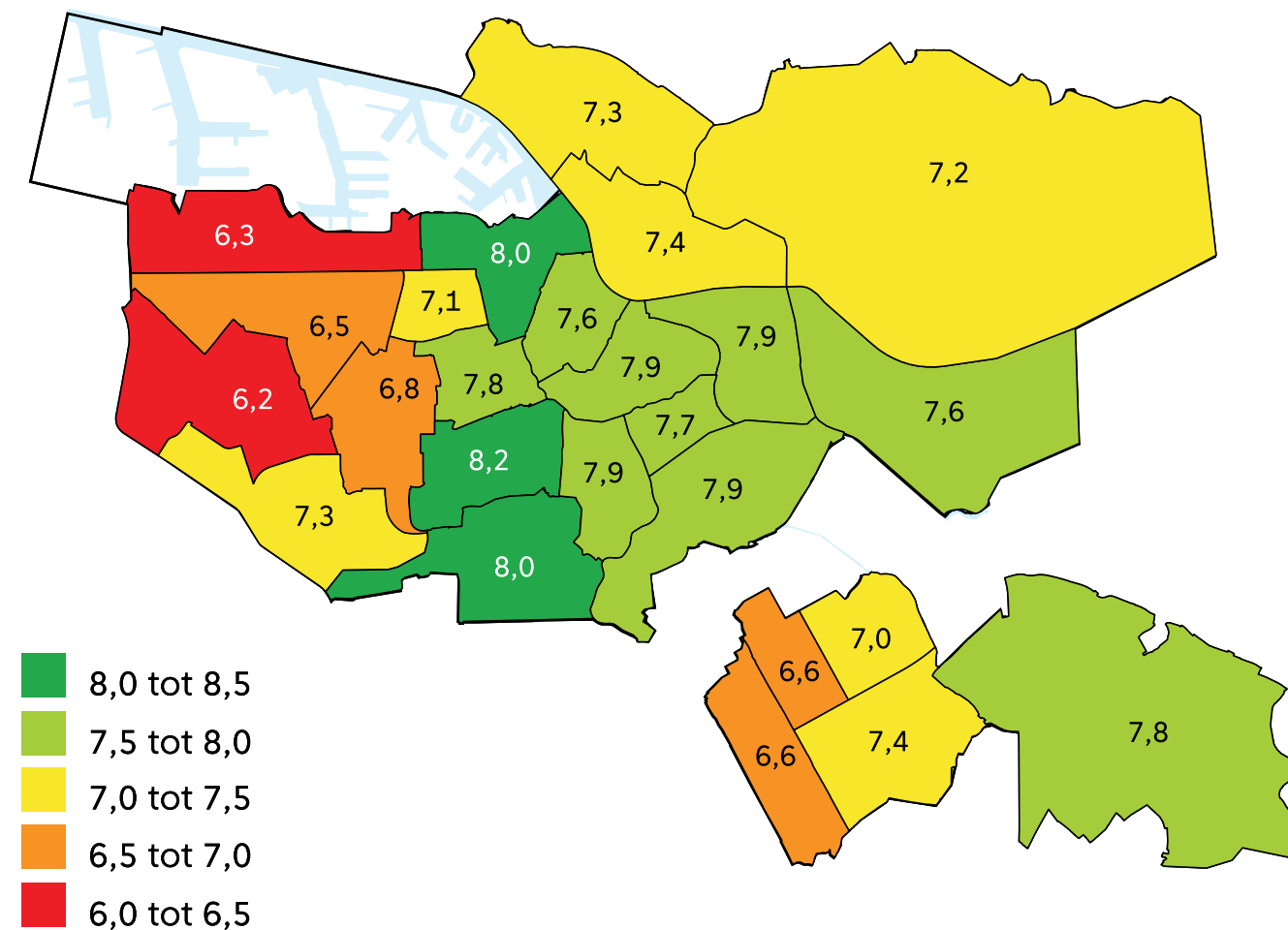


Image source: Wonen in Amsterdam 2023 Leefbaarheid. (2023).

Introduction

Research question

What architectural design strategies can be applied to post-war housing to improve neighbourhood satisfaction by enhancing liveability, while considering the values and attributes perceived by residents?

SUB-Q1.

What are the current values and attributes of Nieuw-West based on residents perception?



Interview

Value Framework by
Ana Pereira Roders (2007)

SUB-Q2.

How can architecture contribute to the liveability of a post-war building?



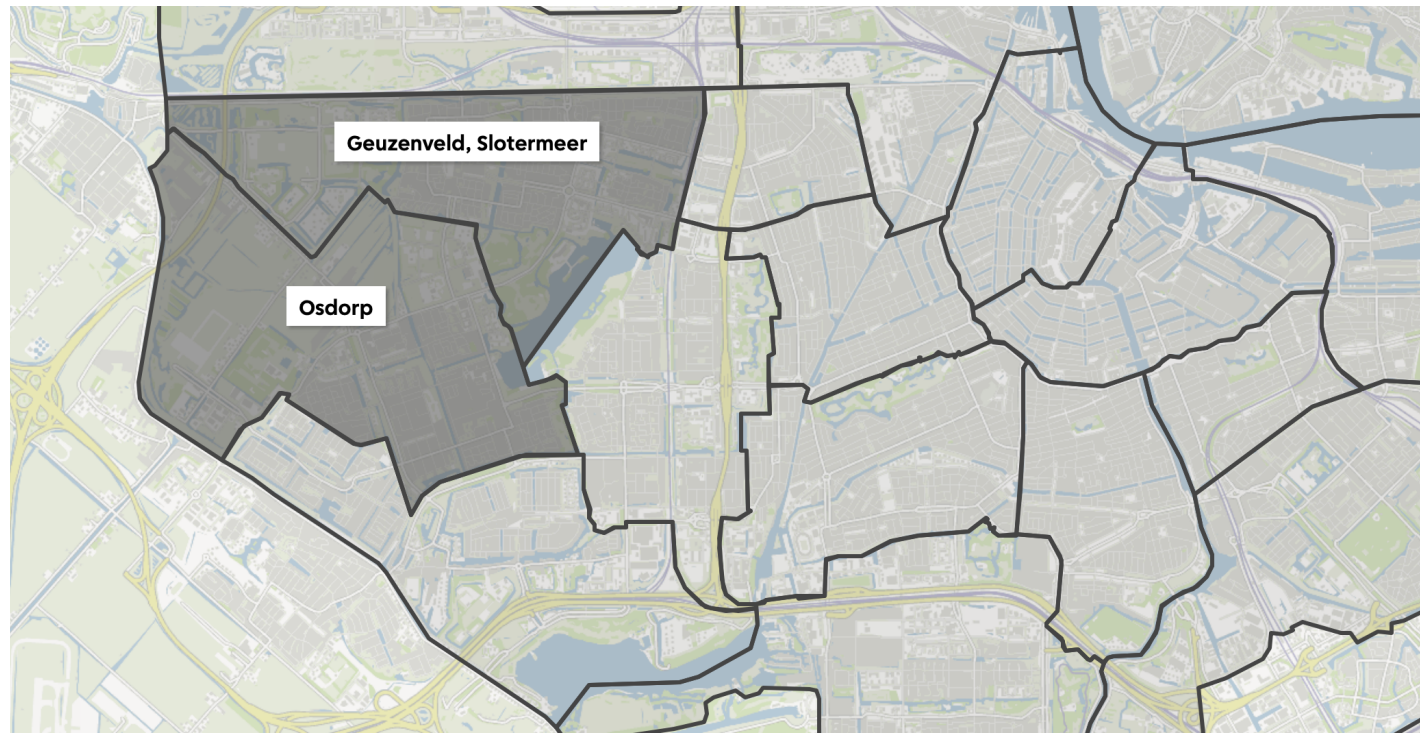
Literature review

Liveability framework by
Leby and Hashim (2010)

The goal is to identify and assess architectural design strategies that have the potential to enhance the liveability in post-war neighbourhoods.

Research

Values and attributes of residents in Amsterdam Nieuw-West



BALLARAT IMAGINE METHOD

What do you love in...?

How do you imagine...?

What do you want to retain in...?

(Buckley et al., 2015)

IMAGINE OSDORP & GEUZENVELD-SLOTERMEER

What do you love in your neighbourhood?

What do you imagine for your neighbourhood?

What do you want to retain in your neighbourhood?

What makes you feel at home in your neighbourhood?

If you were to take us anywhere in your neighbourhood, where would it be?

What makes you feel included in your neighbourhood?

How would you describe your neighbourhood in one word?

Research

Values and attributes of residents in Amsterdam Nieuw-West

	RAW DATA	CATEGORIZED DATA	VALUE TYPE
Q1. What do you love in your neighbourhood? Participant 16 Osdorp: "I find it pleasant to live here because the streets are very wide , and it is open here."	Wide streets	Spacious	Aesthetical
	Safe	Safety	Political management
	Feeling involved	Social inclusion	Social emotional and collective
Q5. How do you imagine your neighbourhood? Participant 7 Geuzenveld-Slotermeer: " Safe and everyone feeling involved . Beautiful and green is how I hope to see it."	Beautiful	Appearance	Aesthetical evidential
	Green	Greenery	Ecological spiritual
	Greenery	Greenery	Ecological spiritual Historic-conceptual
Q6. What must be retained in your neighbourhood? Participant 25 Osdorp: "The greenery , the water here, the trees . I think it is very beautiful , especially in the summer people come from all over to come and spend the day here. We wouldn't want to see that go."	Water	Water	Ecological spiritual Historic-conceptual
	Trees	Greenery	Ecological spiritual Historic-conceptual
	Beautiful	Appearance	Aesthetical evidential

Research

Values and attributes of residents in Amsterdam Nieuw-West

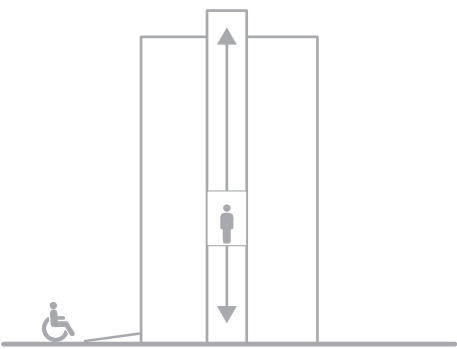
RAW DATA	CATEGORIZED DATA	VALUE TYPE			
Wide streets	Spacious	Aesthetical	<div><div>Social</div><div>Emotional and individual Social recognition (10%/4%)</div><div>Emotional and collective Recognizable (7%/7%) Social inclusion (13%) Conviviality (3%/7%)</div><div>Allegorical Generational harmony (7%/11%) Respect (7%)</div><div>11/8</div></div>	<div><div>Economic</div><div>Use Diverse shops (13%/14%) Youth facilities (7%/14%) Diverse facilities (20%) Cultural facilities (7%/7%) Greenery (10%) Elderly facilities (4%) Children facilities (3%)</div><div>18/10</div></div> <div><div>Political</div><div>Management Social safety (17%/18%) Social housing (10%/7%) Progress (10%/4%) Carparking (7%) Traffic safety (3%/4%) Diverse housing (3%/4%) Single family homes (3%/4%) Calm (3%/4%) Public transport (4%) Children safety (4%) Free (3%)</div><div>26/13</div></div>	<div><div>Ecological</div><div>Spiritual Greenery (10%/4%)</div><div>Essential Renovation (13%/11%) Clean (21%) Appearance (10%) New buildings (4%)</div><div>Existential Adaptive re-use (3%)</div><div>14/11</div></div> <div><div>Aesthetical</div><div>Evidential Appearance (10%/4%) New buildings (4%)</div><div>3/2</div></div> <div><div>Scientific</div><div>Technological Urban agriculture (3%)</div><div>1</div></div>
Safe	Safety	Political management			
Feeling involved	Social inclusion	Social emotional and collective			
Beautiful	Appearance	Aesthetical evidential			
Green	Greenery	Ecological spiritual	<div><div>Value Type</div><div>Secondary value Attribute (percentage GS) Attribute (percentage Osdorp)</div><div>Frequency attribute GS/Osdorp</div></div>		
Greenery	Greenery	Ecological spiritual			
Water	Water	Historic-conceptual			
Trees	Greenery	Ecological spiritual			
Beautiful	Appearance	Historic-conceptual			
		Aesthetical evidential			

Imagine attributes classified in Value Framework by Ana Pereira Roders (2007)

Research

Enhancing liveability with architecture

FUNCTIONAL ENVIRONMENT



Accessibility and Services

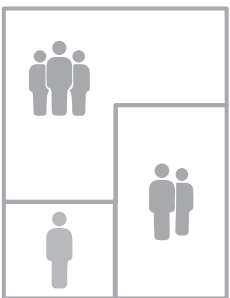
Well-connected neighbourhoods tend to foster higher levels of community engagement. *(Higgs, C., et al., 2019)*

Retrofitting efforts, including elevators, ramps, and wider door ways, can significantly enhance liveability. *(Preiser, W.F.E., & Osdroff, E., 2001)*



Mixed-use planning

Integrating diverse functions, like residential, commercial, and recreational spaces, within structures to enhance functionality and create vibrant environments *(Gehl, 2010)*



Human-centred approach

Accommodate changing household sizes and increase housing capacity by dividing existing dwellings. *(Remøy and van der Voordt, 2014)*

Densification strategies like a mix of housing types and sizes to accommodate diverse household compositions and promote social inclusivity. *(Abels, 2018)*

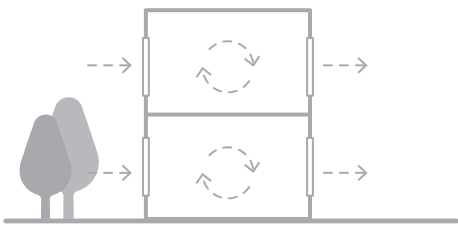
PHYSICAL ENVIRONMENT



Aesthetics and appeal

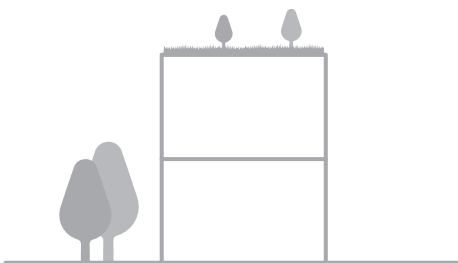
Visually appealing spaces impact health, happiness, and quality of life in urban areas. *(Harvey, 2014; Mehaffy, 2021)*

Enhancing visual appeal through façade renovations, colour schemes, and artistic elements positively impact residents' well-being. *(Harvey, 2014; Mehaffy, 2021)*



Sustainability

Sustainability strategies like improving energy efficiency in buildings through better insulation and modern systems can enhance liveability. *(Fleur-Bahi et al., 2017)*



Nature and urban setting

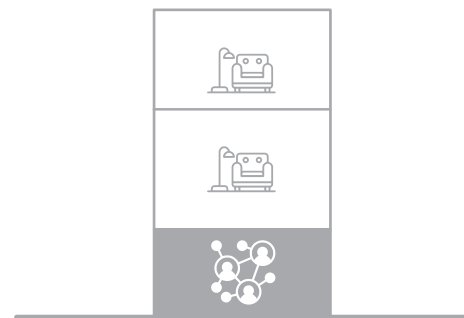
Incorporating nature improves residents' well-being and building environmental performance. *(Vogt et al., 2020)*

Parks and outdoor spaces foster community ownership and positively impact social, and physical health. *(Vogt et al., 2020)*

Research

Enhancing liveability with architecture

SOCIAL COHESION

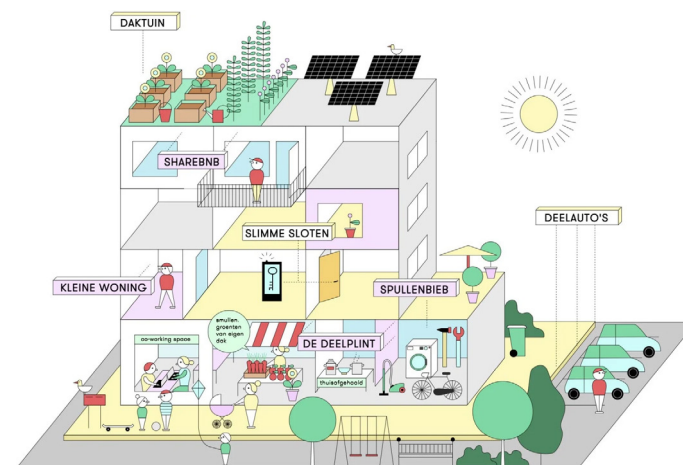


Shared spaces

Shared spaces in buildings promote social interaction among residents.

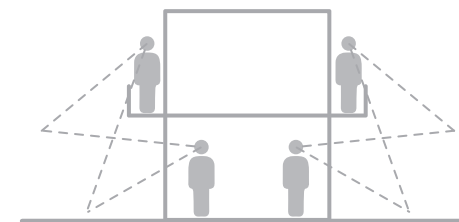
(Gehl, 2010)

The use of collective and shared spaces, like communal facilities, co-working spaces, shared guest rooms, and flexible mini-shops, foster a sense of community.



(Popup city, 2021)

SAFETY



Natural surveillance

Increasing visibility in ground floor spaces and common areas to create “eyes on the street” for safety.

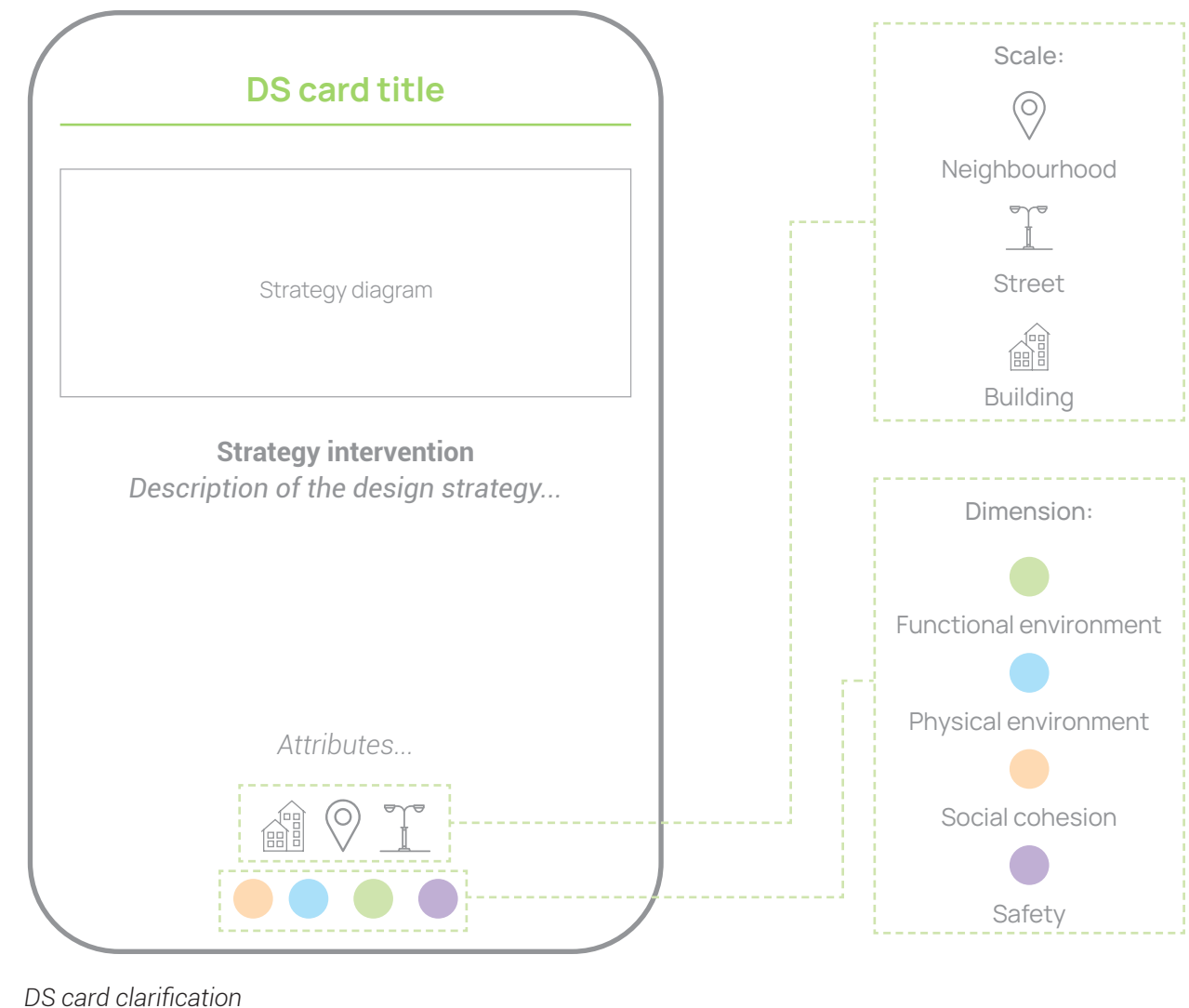
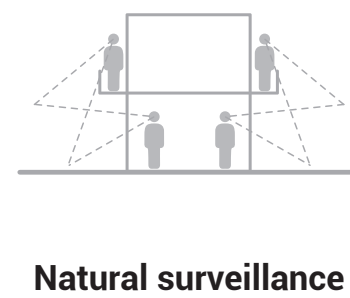
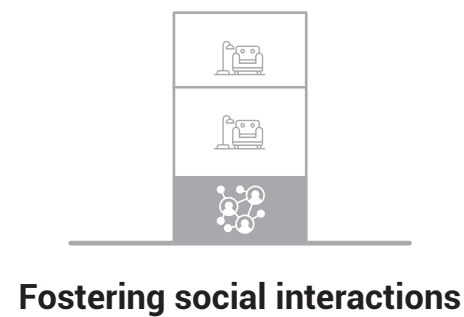
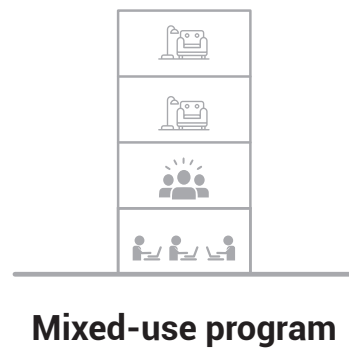
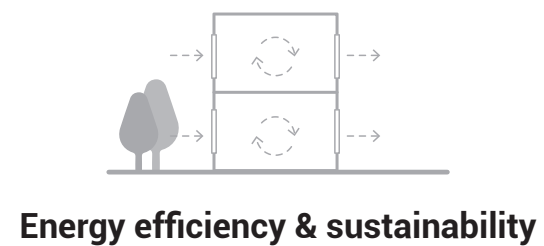
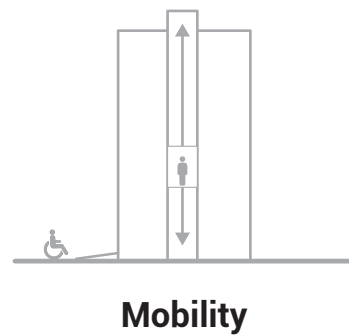
(Jacobs, 1961)

Secure entry systems and clear demarcation between public-private space improve residents’ sense of safety.

(Newman, 1972)

Research

What architectural design strategies can be applied to post-war housing to improve neighbourhood satisfaction by enhancing liveability, while considering the values and attributes perceived by residents?



Research

What architectural design strategies can be applied to post-war housing to improve neighbourhood satisfaction by enhancing liveability, while considering the values and attributes perceived by residents?

Housing differentiation



Reconfiguring floor plans

This strategy involves reconfiguring existing post-war buildings to offer a mix of apartments, townhouses, and single-family homes. The aim is to accommodate various family sizes, income levels, and lifestyle preferences, promoting inclusivity and community diversity.

Inclusivity, adaptability, social diversity



Mixed-use program



Adding functions to program

Integrating residential, commercial, and recreational spaces within neighborhoods to foster vibrant environments where residents can live, work, and play. This strategy enhances accessibility and economic vitality.

Accessibility, economic vitality



Greenery integration



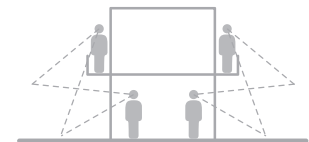
Integrating green spaces

Prioritizing the development of parks, gardens, and green corridors to promote health, relaxation, and social interaction, aligning with residents' values and aspirations.

Greenery, diverse parks, communal garden, nature



Natural surveillance



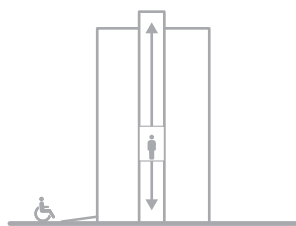
Enhancing safety through natural surveillance

Creating environments that encourage natural surveillance, such as well-lit public spaces and clear sightlines, to improve security and promote a sense of safety.

Social safety



Mobility



Accessibility enhancements

This strategy focuses on retrofitting post-war structures with features such as elevators, ramps, and wider doorways to improve accessibility for all residents, particularly the elderly and those with mobility challenges.

Inclusivity



Heritage-sensitive



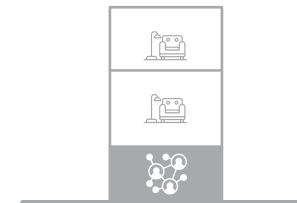
Heritage-sensitive renovations

Architectural interventions that respect and incorporate historical design elements to maintain the unique character of neighborhoods, fostering a sense of pride and belonging among residents.

Cultural identity, recognition, appearance



Fostering social interactions



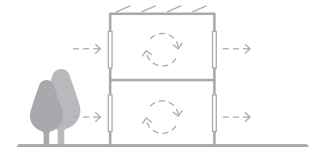
Communal spaces for social cohesion

Designing community centers, plazas, and shared gardens within existing structures to encourage social interaction and strengthen community bonds.

Conviviality, interaction, togetherness, social cohesion



Energy efficiency & sustainability



Improving energy efficiency and sustainability

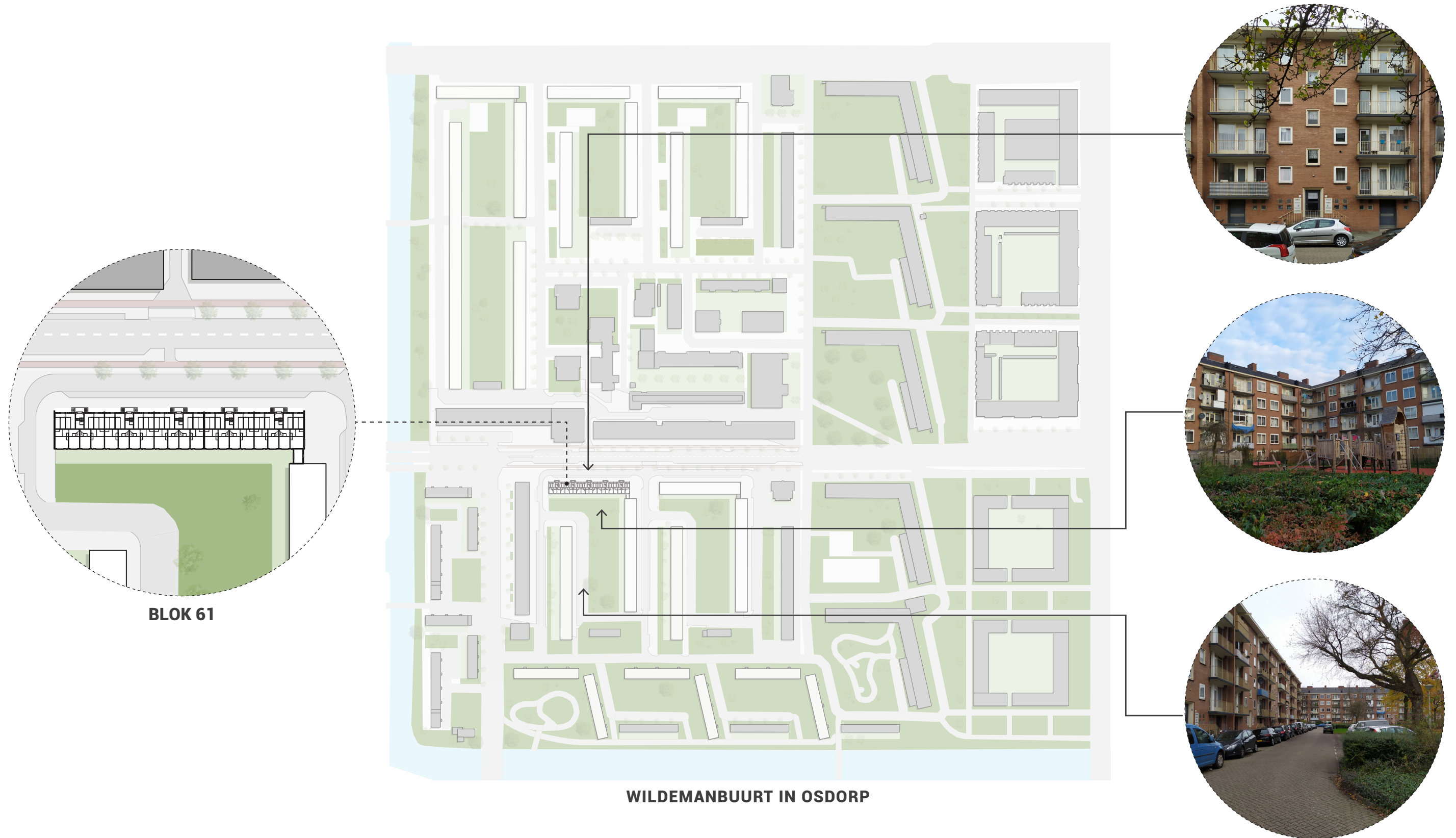
Incorporating thermal comfort, natural lighting, and strategic window placement to reduce energy consumption and improve indoor environmental quality.

Renovation



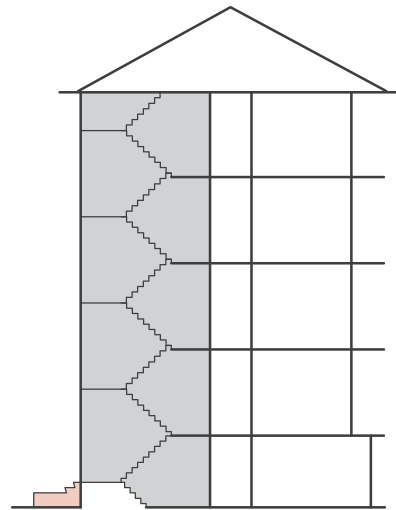
Design case

Testing design strategies that would allow existing porch buildings to be resurfaced to improve liveability



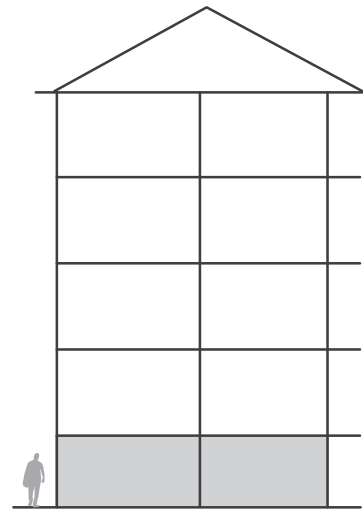
Design case

What are the case study specific problems?



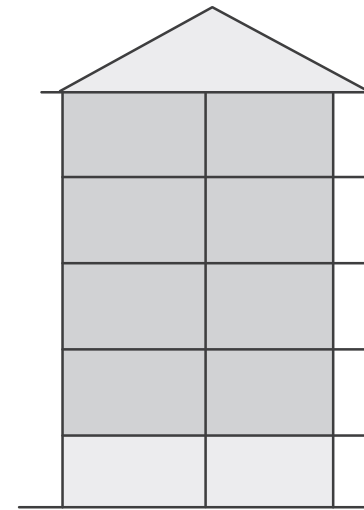
LIMITED ACCESSIBILITY

The porches are connected to staircases and offer no accessibility for the disabled and also less comfort for residents.



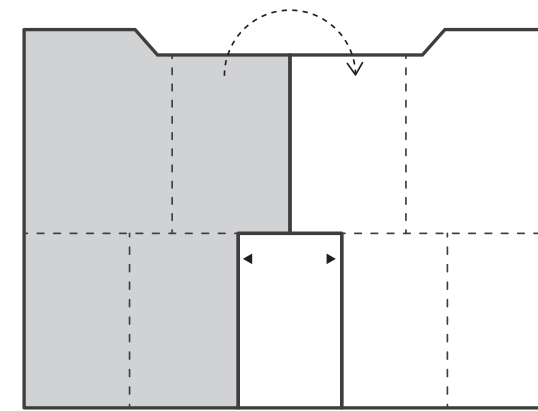
ANONYMOUS PLINTH

The functions in the ground floor create an anonymous closed off plinth.



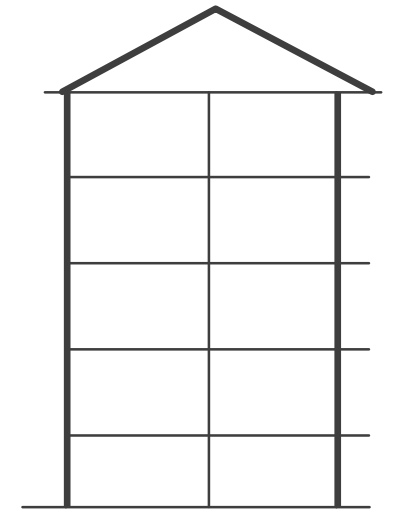
NO FORMAL COMMUNAL SPACES

With only housing as the program, the building is very private and there is no room for social interactions.



ONE HOUSING TYPE

With the exception of the maisonette on the ground floor, there is only 1 housing type and no wide diversity of dwellings.



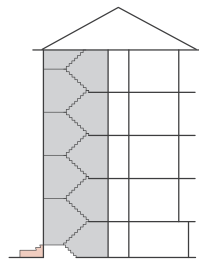
NON-INSULATED

The facades and roof are not insulated, which could lead to energy loss and uncomfortable indoor temperatures..

Design case

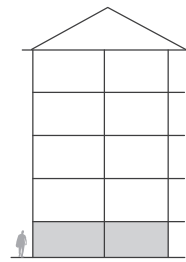
Which 'DS' cards are needed to improve the problems?

Problem 1



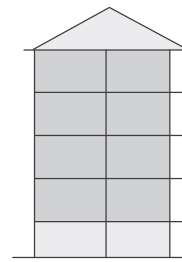
LIMITED ACCESSIBILITY

Problem 2



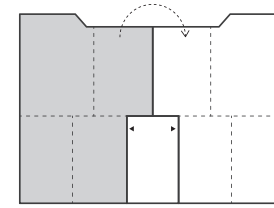
ANONYMOUS PLINTH

Problem 3



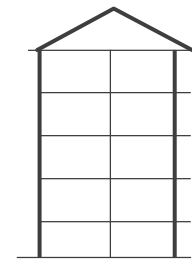
NO FORMAL COMMUNAL SPACES

Problem 4



ONE HOUSING TYPE

Problem 5



NON-INSULATED

Mobility

Accessibility enhancements
This strategy focuses on retrofitting post-war structures with features such as elevators, ramps, and wider doorways to improve accessibility for all residents, particularly the elderly and those with mobility challenges.

Inclusivity

Natural surveillance

Enhancing safety through natural surveillance
Creating environments that encourage natural surveillance, such as well-lit public spaces and clear sightlines, to improve security and promote a sense of safety.

Social safety

Mixed-use program

Adding functions to program
Integrating residential, commercial, and recreational spaces within neighborhoods to foster vibrant environments where residents can live, work, and play. This strategy enhances accessibility and economic vitality.

Accessibility, economic vitality

Fostering social interactions

Communal spaces for social cohesion
Designing community centers, plazas, and shared gardens within existing structures to encourage social interaction and strengthen community bonds.

Conviviality, interaction, togetherness, social interaction

Housing differentiation

Reconfiguring floor plans
This strategy involves reconfiguring existing post-war buildings to offer a mix of apartments, townhouses, and single-family homes. The aim is to accommodate various family sizes, income levels, and lifestyle preferences, promoting inclusivity and community diversity.

Inclusivity, adaptability, social diversity

Energy efficiency & sustainability

Improving energy efficiency and sustainability
Incorporating thermal comfort, natural lighting, and strategic window placement to reduce energy consumption and improve indoor environmental quality.

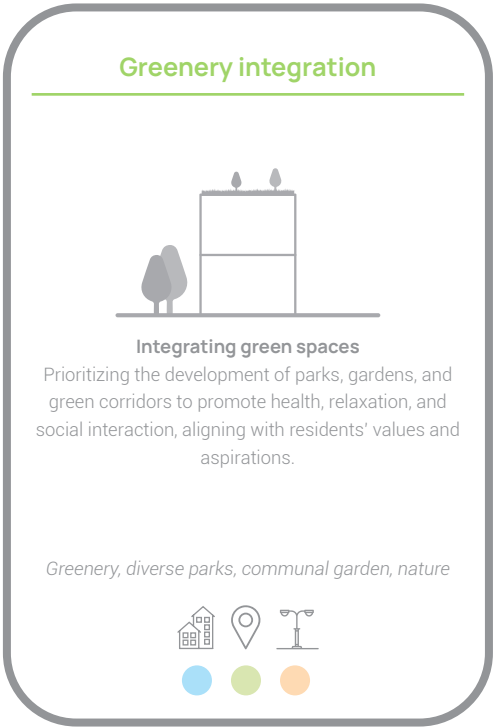
Renovation

General social heritage challenges



BALANCING PRESERVATION AND MODERNIZATION

Heritage projects face the dilemma of updating buildings for modern use while preserving their heritage and character.



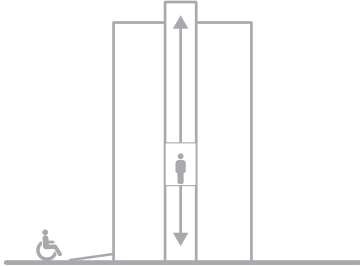
PRESENCE OF GREENERY

This strategy depends on whether greenery already exists or not. If greenery is present, it might need to be rearranged to improve user quality.

P1. Limited accessibility

How can the mobility of the porch building be improved?


Mobility



Accessibility enhancements

This strategy focuses on retrofitting post-war structures with features such as elevators, ramps, and wider doorways to improve accessibility for all residents, particularly the elderly and those with mobility challenges.

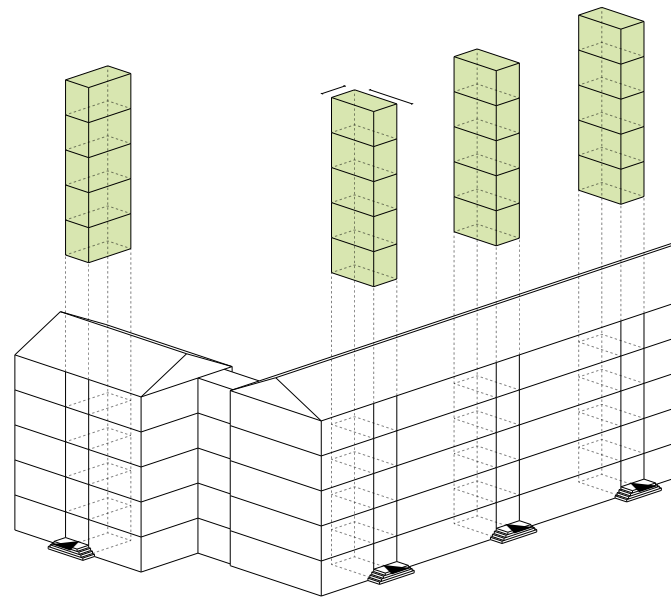
Inclusivity



Sara Ozcan | Heritage & achitecture - Resourceful housing: Adapting 20th Century Heritage | P4 presentation

P1. Limited accessibility

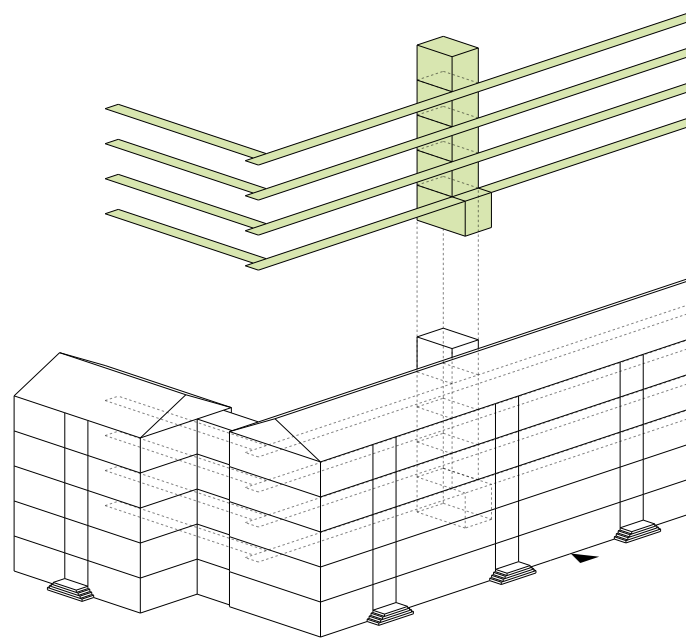
How can the mobility of the porch building be improved?



OPTION 1.

USING THE EXISTING PORCHES AS ELEVATOR SHAFTS

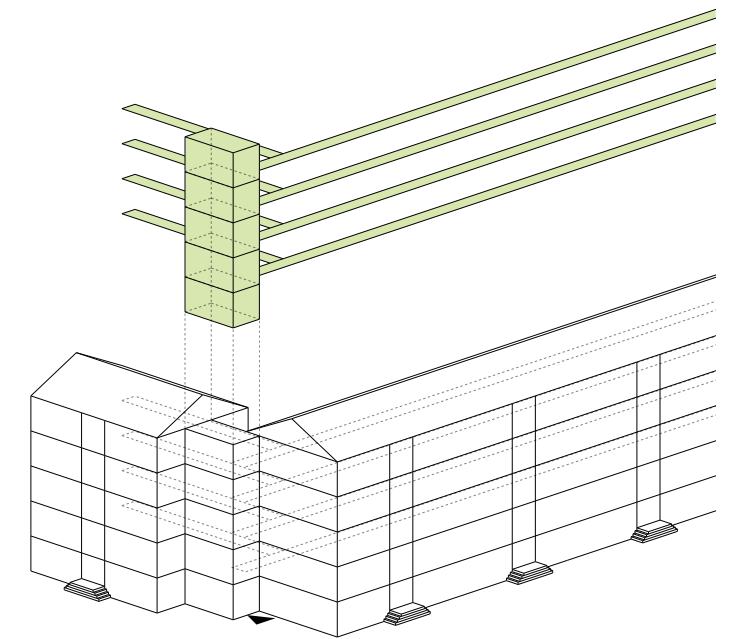
- does not fit within dimensions
- ramp needed
- costly



OPTION 2.

ADDING AN ELEVATOR SHAFT IN THE COURTYARD

- + one central rising point
- obstructs view
- entrance required through plinth



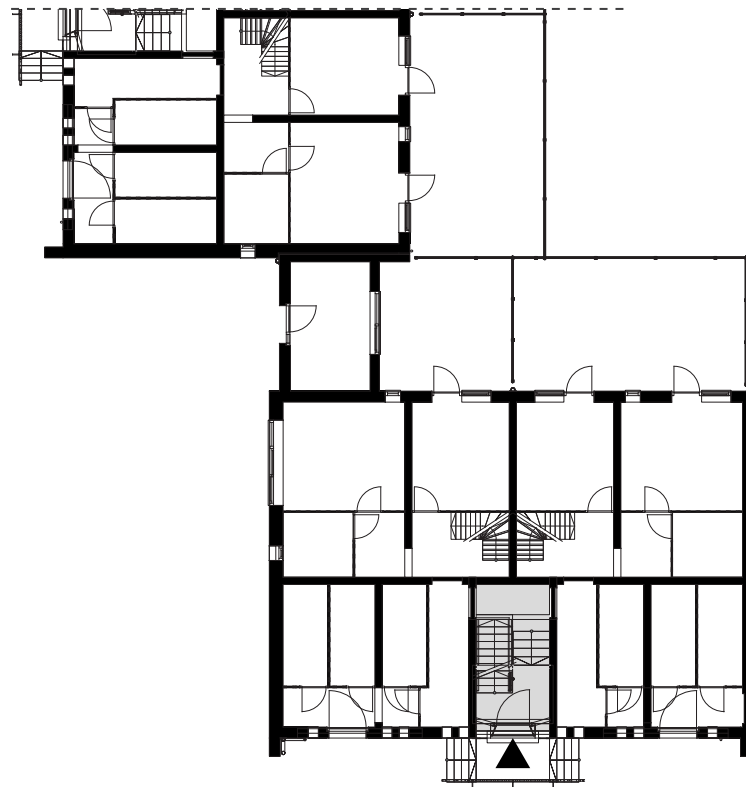
OPTION 3.

ADDING AN ELEVATOR SHAFT IN THE CORNER

- + one central rising point
- + entrance directly from street
- + corner infill

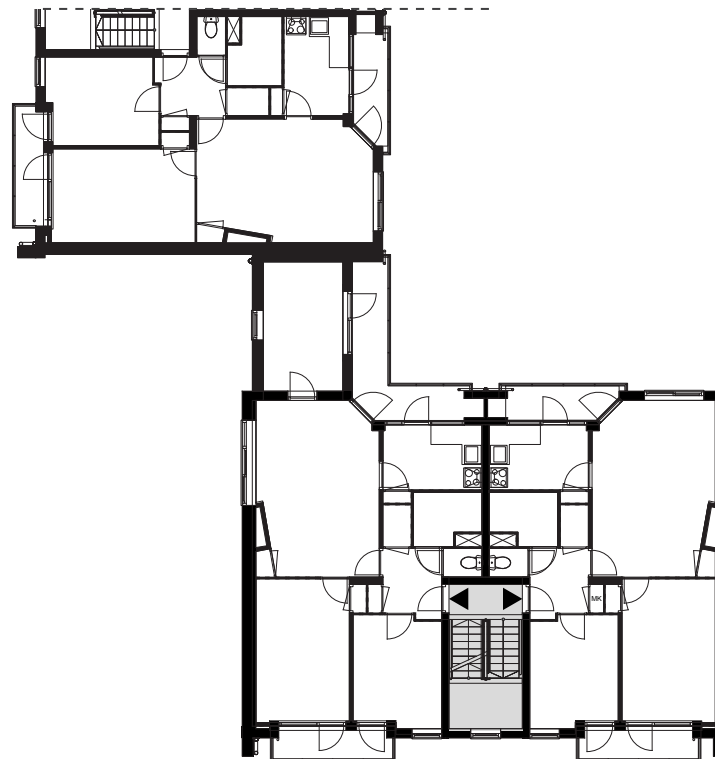
P1. Limited accessibility

How can the mobility of the porch building be improved?



GROUND FLOOR

(existing)

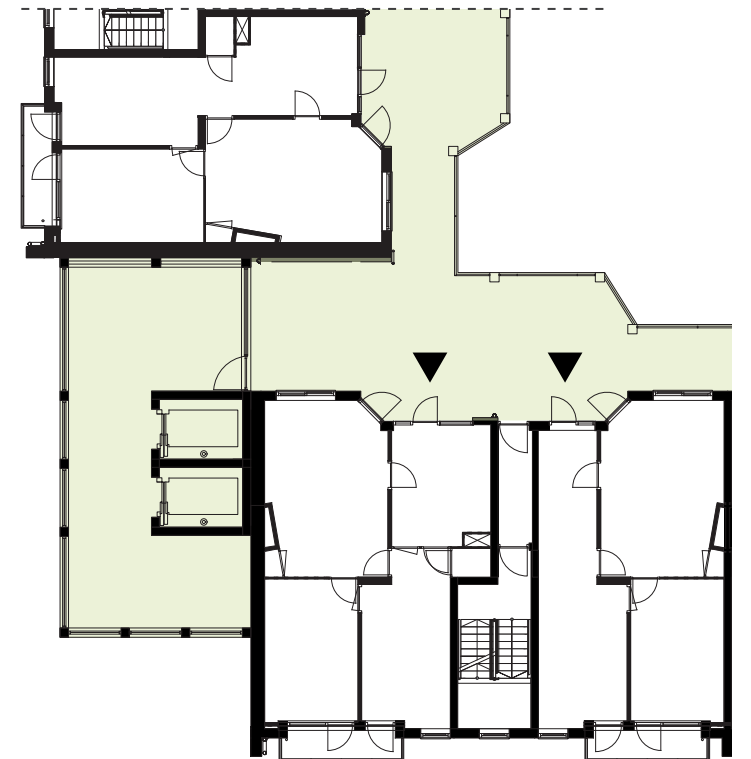


FLOORS

(existing)



GROUND FLOOR



FLOORS

P1. Limited accessibility

How can the mobility of the porch building be improved?



NORTH ELEVATION
(existing)



SOUTH ELEVATION
(existing)



NORTH ELEVATION

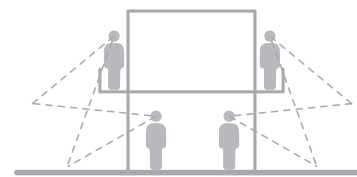


SOUTH ELEVATION

P2. Anonymous plinth

How can you create eyes on the streets?

Natural surveillance



Enhancing safety through natural surveillance

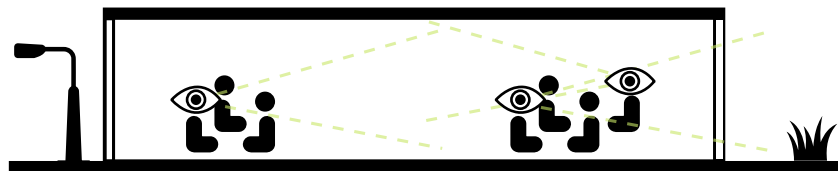
Creating environments that encourage natural surveillance, such as well-lit public spaces and clear sightlines, to improve security and promote a sense of safety.

Social safety



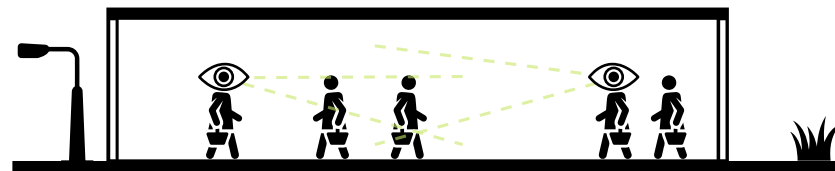
P2. Anonymous plinth

How can you create eyes on the streets?



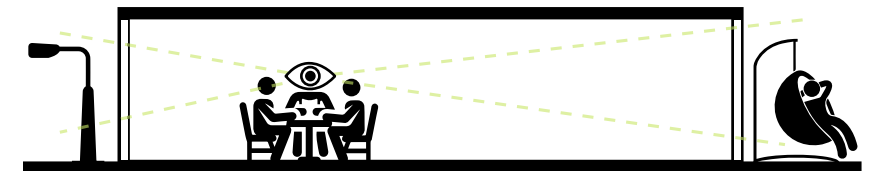
OPTION 1.
COMMUNAL IN PLINTH

- + provides social control
- less public involved
- possible limited use



OPTION 2.
COMMERCIAL IN PLINTH

- + attracts external audiences
- limited activity related to opening hours
- insufficient interaction with surroundings



OPTION 3.
HOUSING IN PLINTH

- + constant presence and activity
- + social control of the environment
- lack of privacy on the street-side

P2. Anonymous plinth

How can you create eyes on the streets?
(existing)



PLINTH NORTH ELEVATION



PLINTH SOUTH ELEVATION



- no activity due to the closed plinth and storage areas behind it.

P2. Anonymous plinth

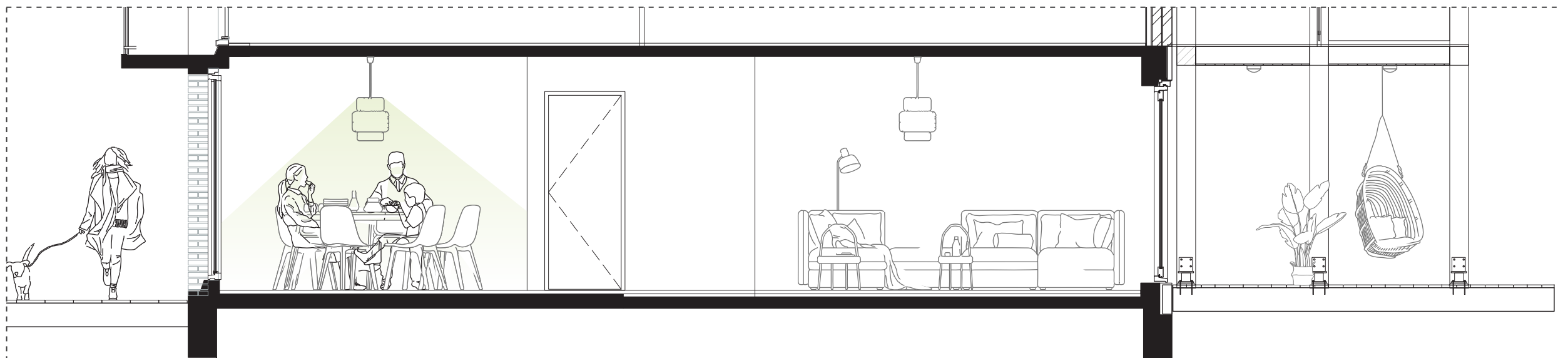
How can you create eyes on the streets?



PLINTH NORTH ELEVATION



PLINTH SOUTH ELEVATION



- + plinth is more open due to the large window openings, and there is more activity because of the living area, both inside and outside, resulting in increased social control on the street and in the courtyard.

P2. Anonymous plinth

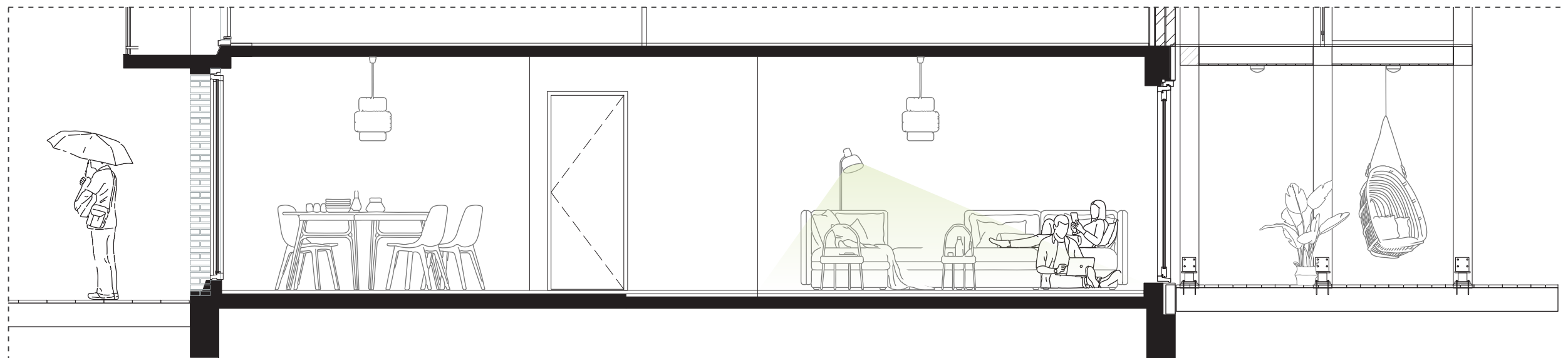
How can you create eyes on the streets?



PLINTH NORTH ELEVATION



PLINTH SOUTH ELEVATION



- + plinth is more open due to the large window openings, and there is more activity because of the living area, both inside and outside, resulting in increased social control on the street and in the courtyard.

P2. Anonymous plinth

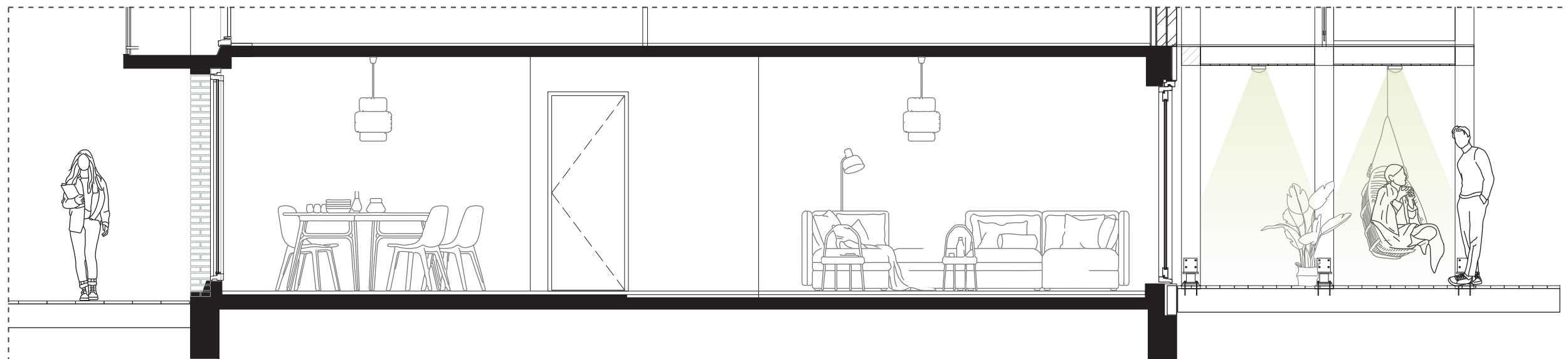
How can you create eyes on the streets?



PLINTH NORTH ELEVATION



PLINTH SOUTH ELEVATION



- + plinth is more open due to the large window openings, and there is more activity because of the living area, both inside and outside, resulting in increased social control on the street and in the courtyard.

P2. Anonymous plinth

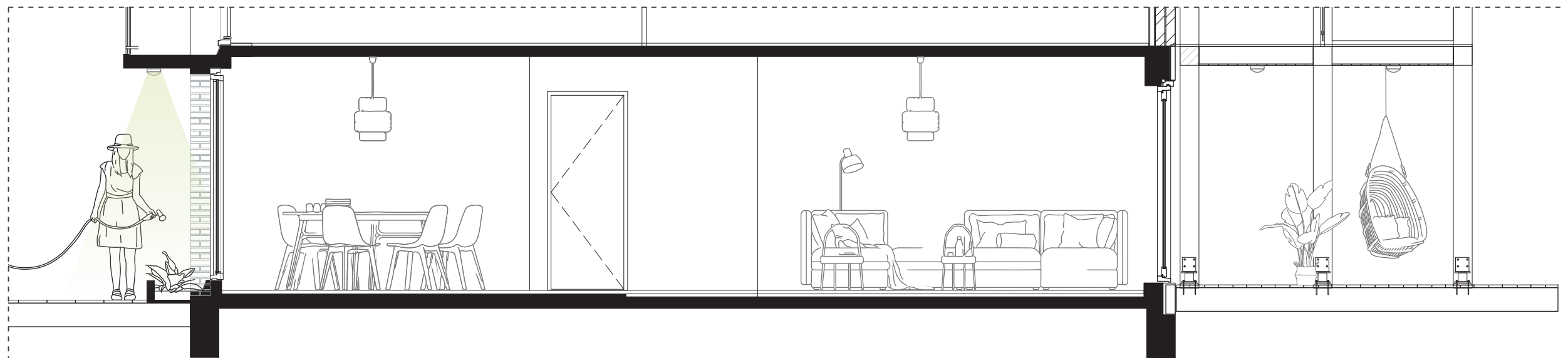
How can you create eyes on the streets?



PLINTH NORTH ELEVATION



PLINTH SOUTH ELEVATION



+ activity on the street can be created by a facade garden

P3. No formal communal spaces

How to foster social interactions?

Mixed-use program



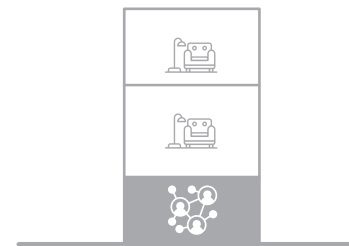
Adding functions to program

Integrating residential, commercial, and recreational spaces within neighborhoods to foster vibrant environments where residents can live, work, and play. This strategy enhances accessibility and economic vitality.

Accessibility, economic vitality



Fostering social interactions



Communal spaces for social cohesion

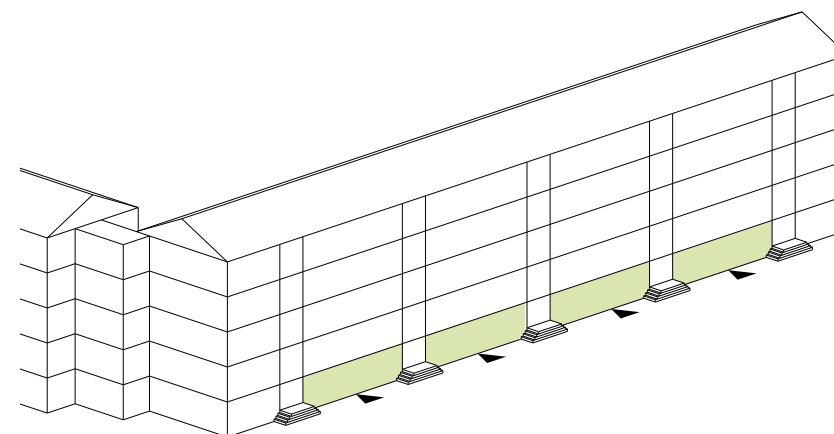
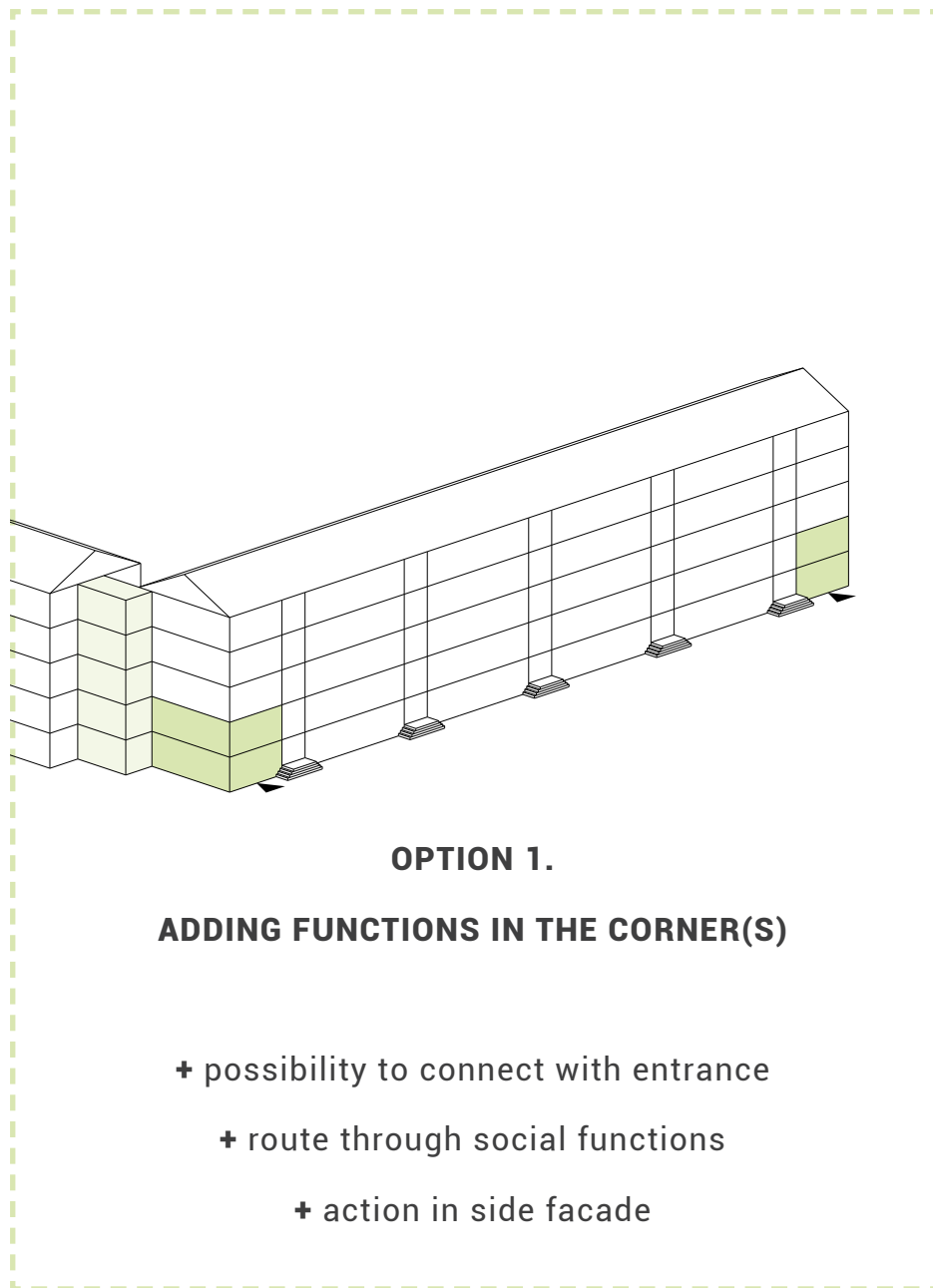
Designing community centers, plazas, and shared gardens within existing structures to encourage social interaction and strengthen community bonds.

Conviviality, interaction, togetherness, social cohesion



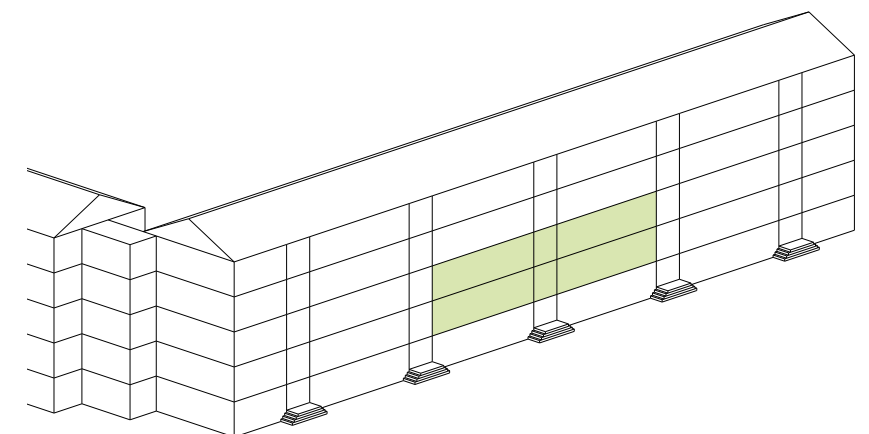
P3. No formal communal spaces

How to foster social interactions?



OPTION 2.
ADDING FUNCTIONS IN THE PLINTH

- + easily accessible to residents from the street
- only accessible from the outside

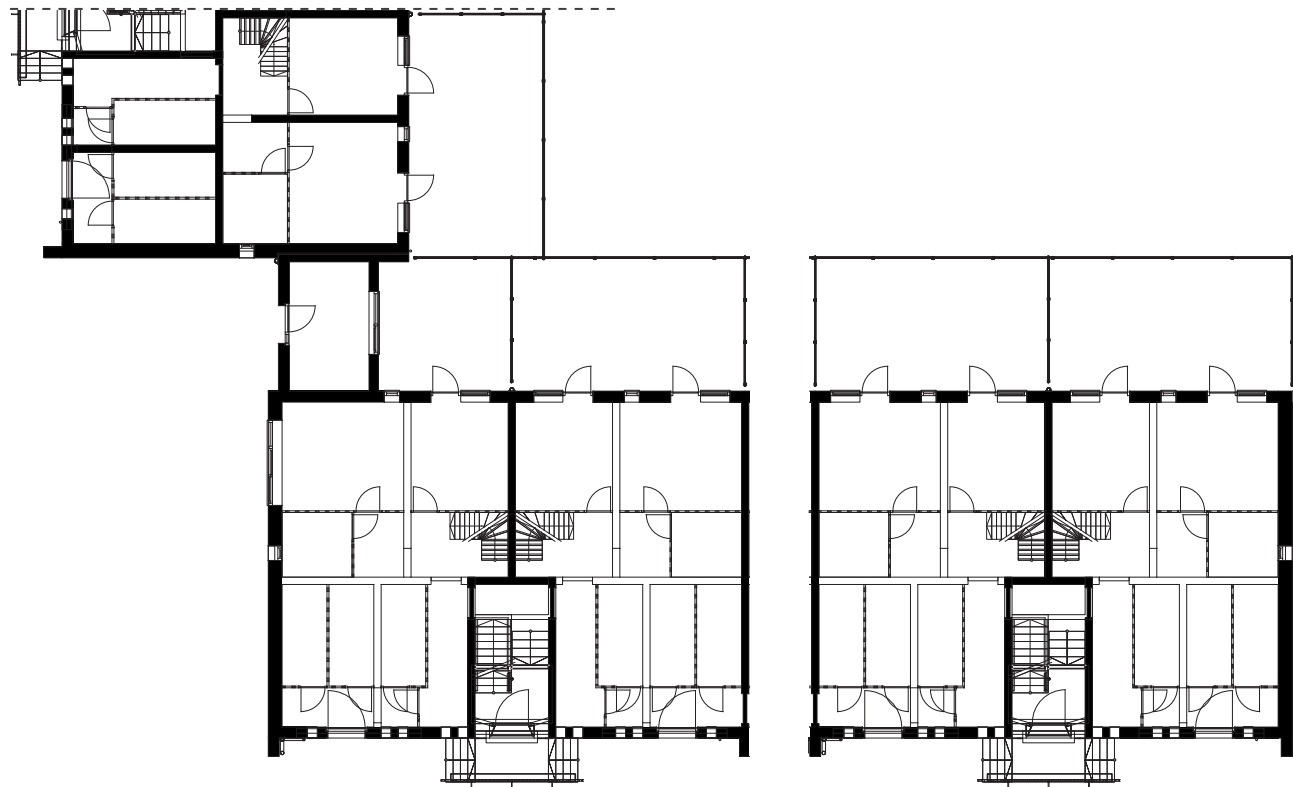


OPTION 3.
ADDING FUNCTIONS IN THE CENTER

- + internally accessible through galleries
- not tied to a specific route

P3. No formal communal spaces

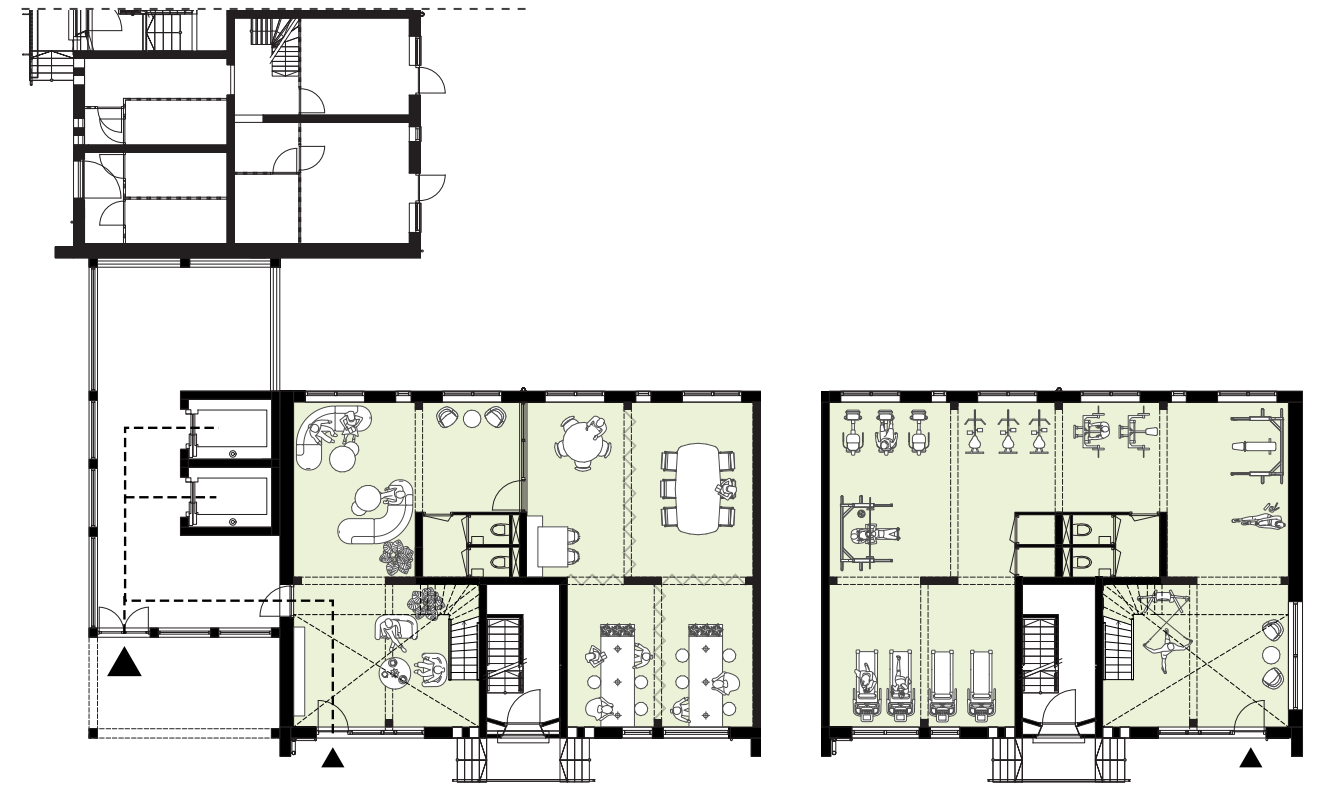
How to foster social interactions?



Left corner

Right corner

GROUND FLOOR
(existing)



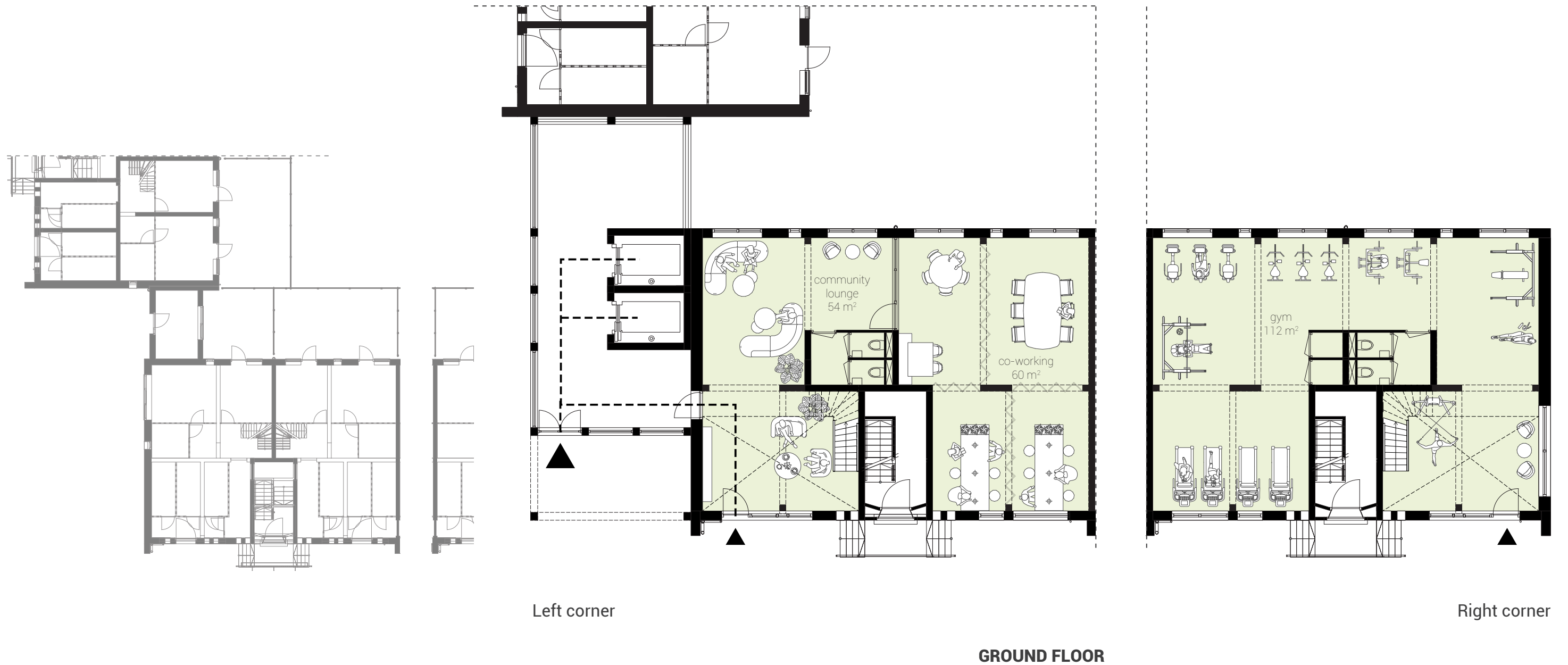
Left corner

Right corner

GROUND FLOOR

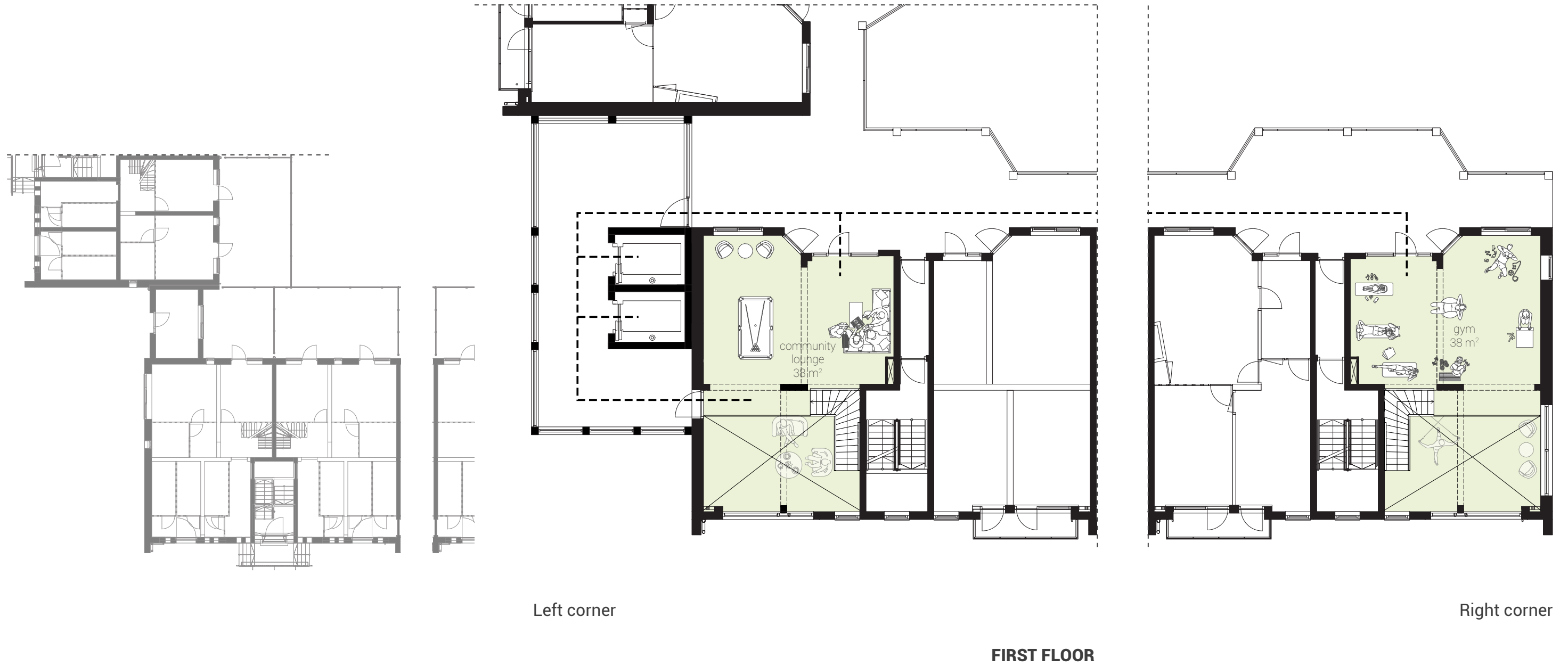
P3. No formal communal spaces

How to foster social interactions?



P3. No formal communal spaces

How to foster social interactions?



P3. No formal communal spaces

How to foster social interactions?



(existing)



Left corner

Right corner

End facade

P4. One housing type

What housing types can be realized within the current structure?

Housing differentiation



Reconfiguring floor plans

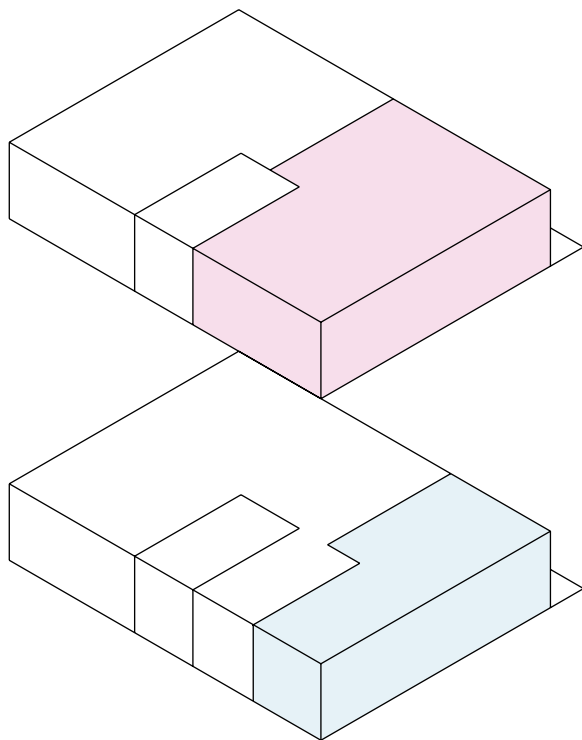
This strategy involves reconfiguring existing post-war buildings to offer a mix of apartments, townhouses, and single-family homes. The aim is to accommodate various family sizes, income levels, and lifestyle preferences, promoting inclusivity and community diversity.

Inclusivity, adaptability, social diversity



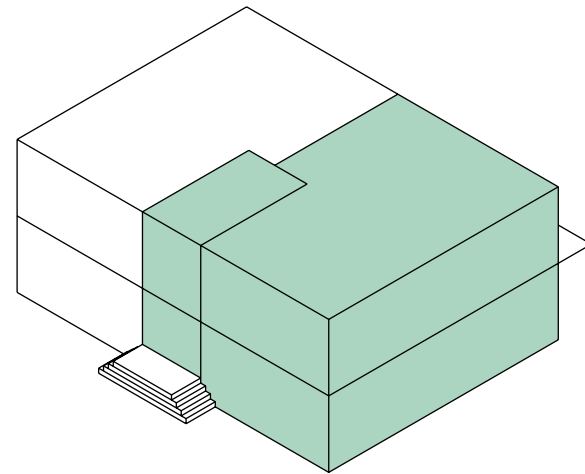
P4. One housing type

What housing types can be realized within the current structure?



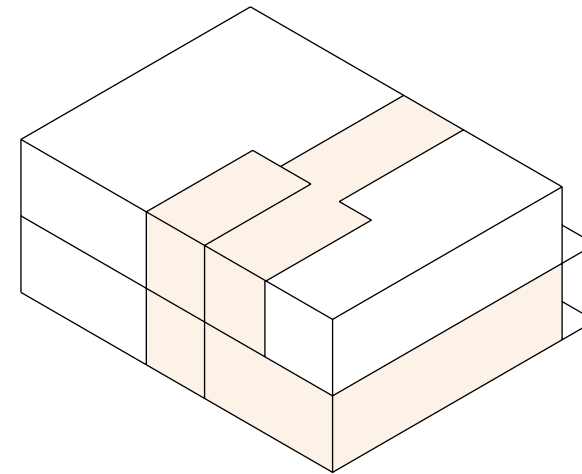
APARTMENTS

30 - 60 m²



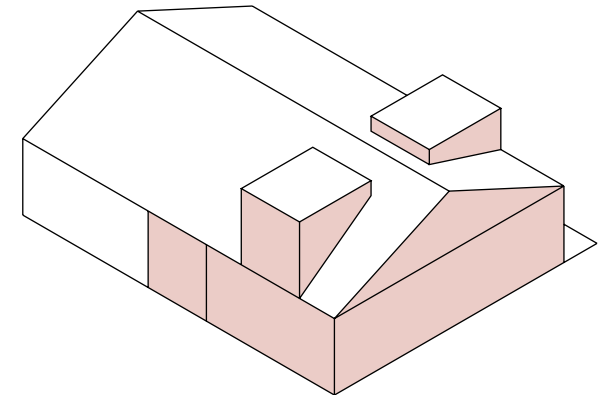
GROUND FLOOR MAISONETTE

138 m²



REGULAR MAISONETTE

105 m²



MAISONETTE WITH ATTIC

114 - 123 m²

P4. One housing type

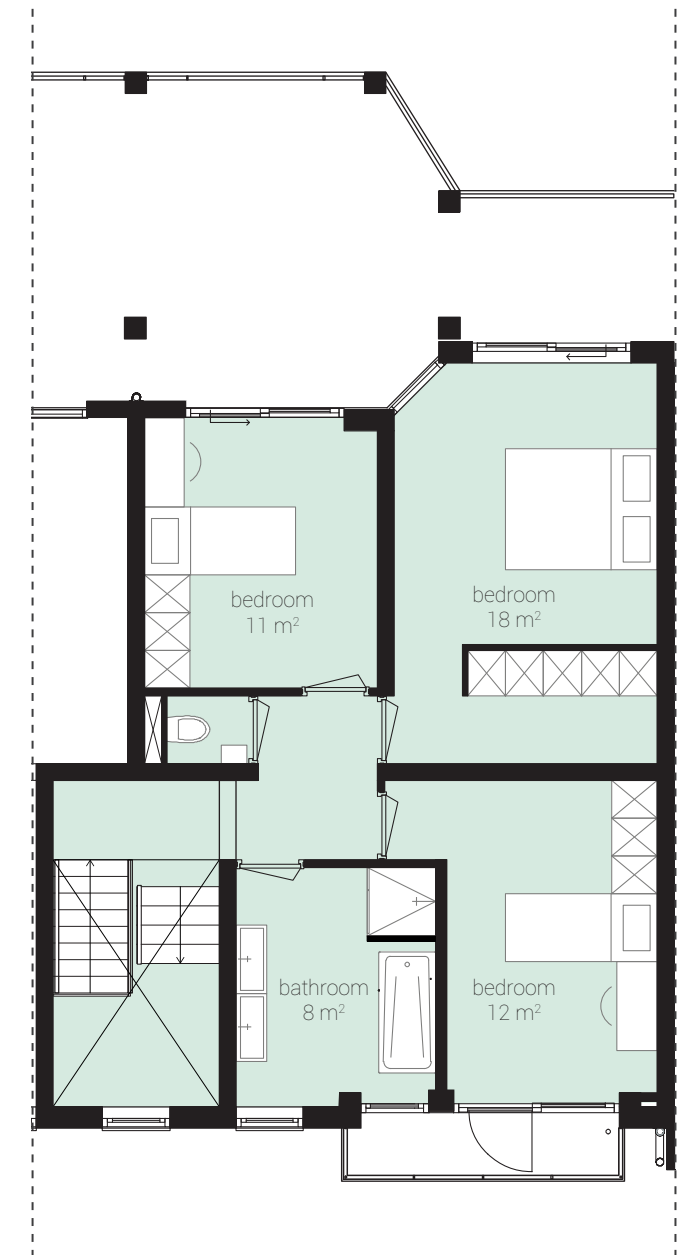
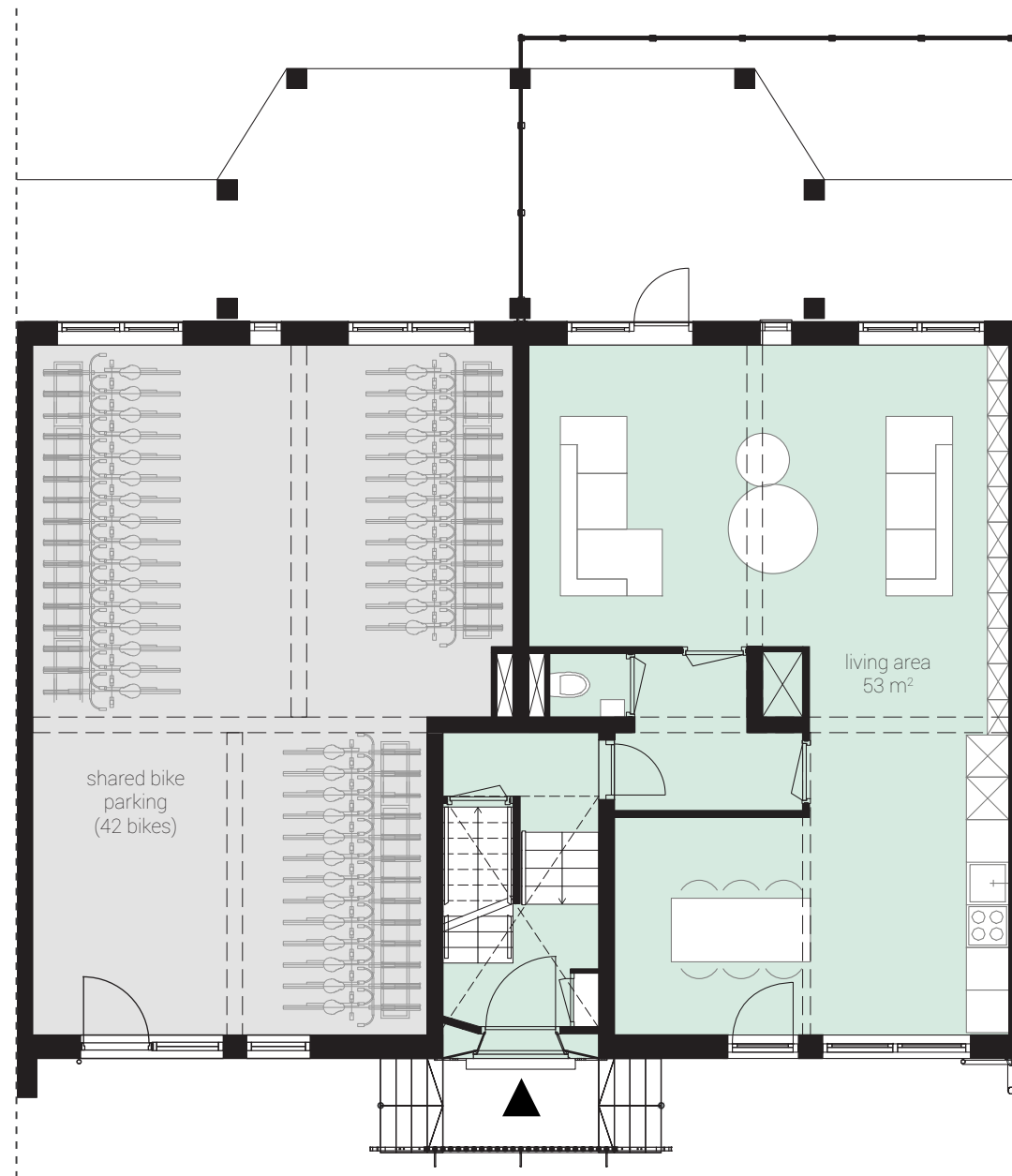
What housing types can be realized within the current structure?

GROUND FLOOR MAISONNETTE - 138 m²

- + existing stair gets a new function
- + storage space under the stair
- + the plinth is open which creates natural surveillance towards the street and the courtyard
- connected to the gallery

EXISTING DWELLING - 58 m²

- separate living room and kitchen
- no designated dining area
- two bedrooms



P4. One housing type

What housing types can be realized within the current structure?

FRIENDS APARTMENT - 58 m²

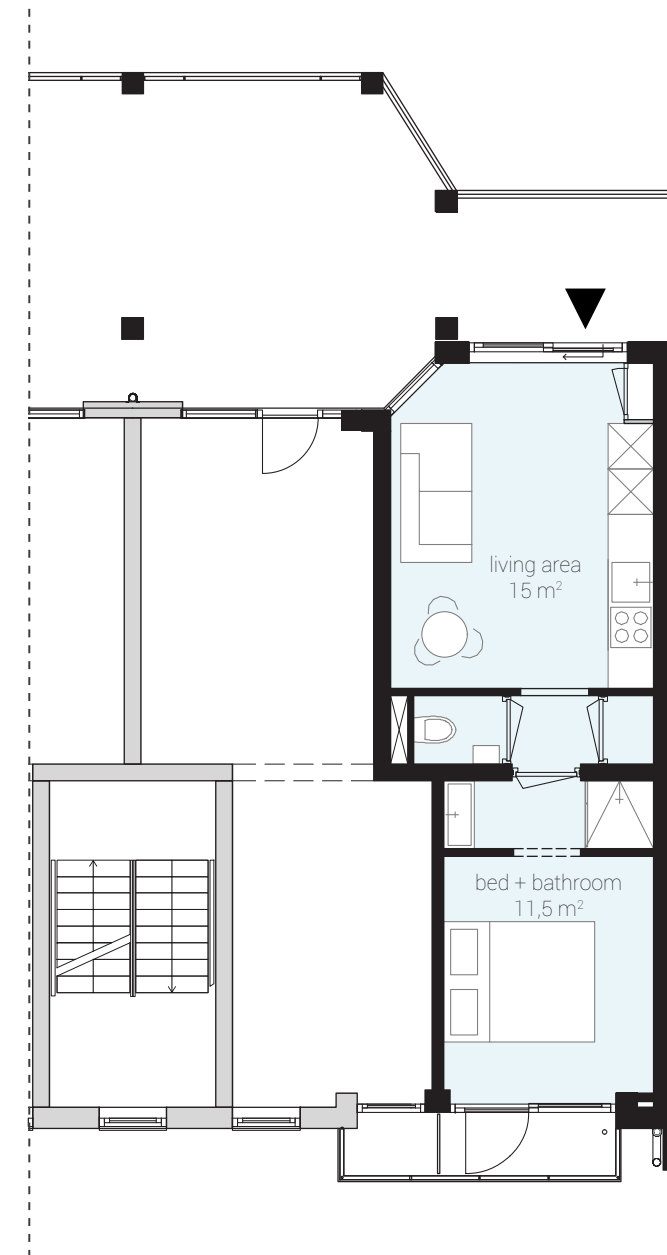
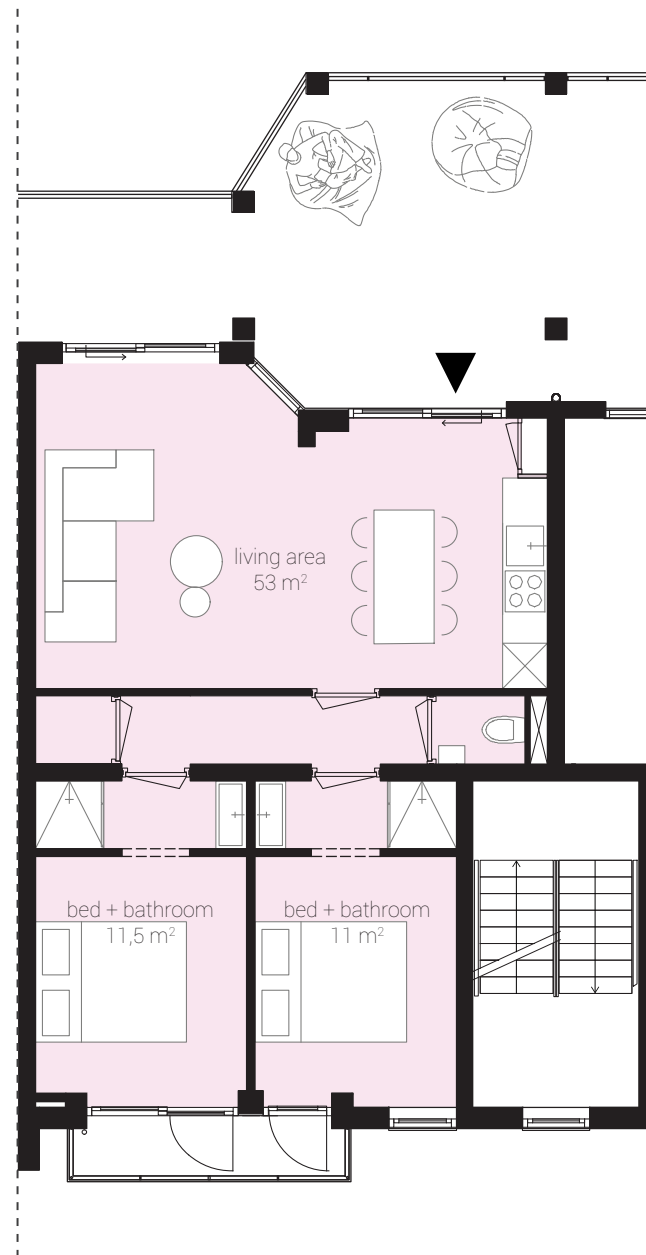
- + shared living room but private bathrooms
- /+ small (shared) storage space

SINGLE APARTMENT - 30 m²

- + studio sized apartment but with master bedroom
- /+ small storage space
- entrance right into living space

EXISTING DWELLING - 58 m²

- separate living room and kitchen
- no designated dining area
- two bedrooms



P4. One housing type

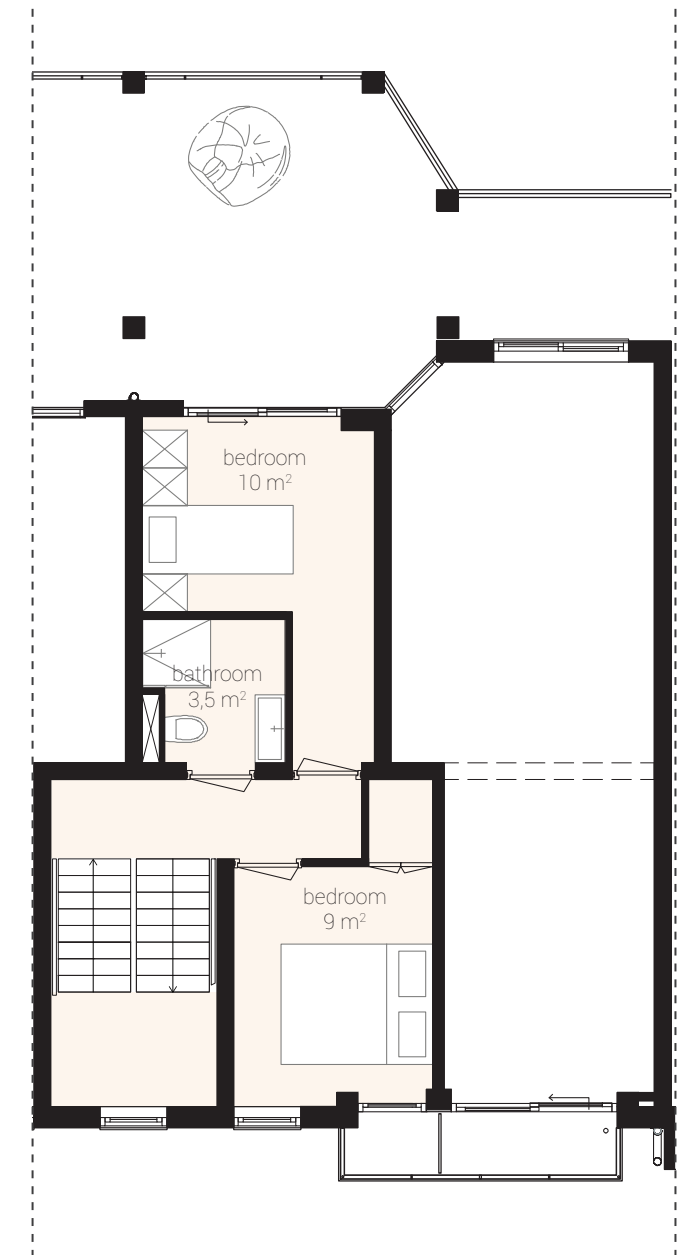
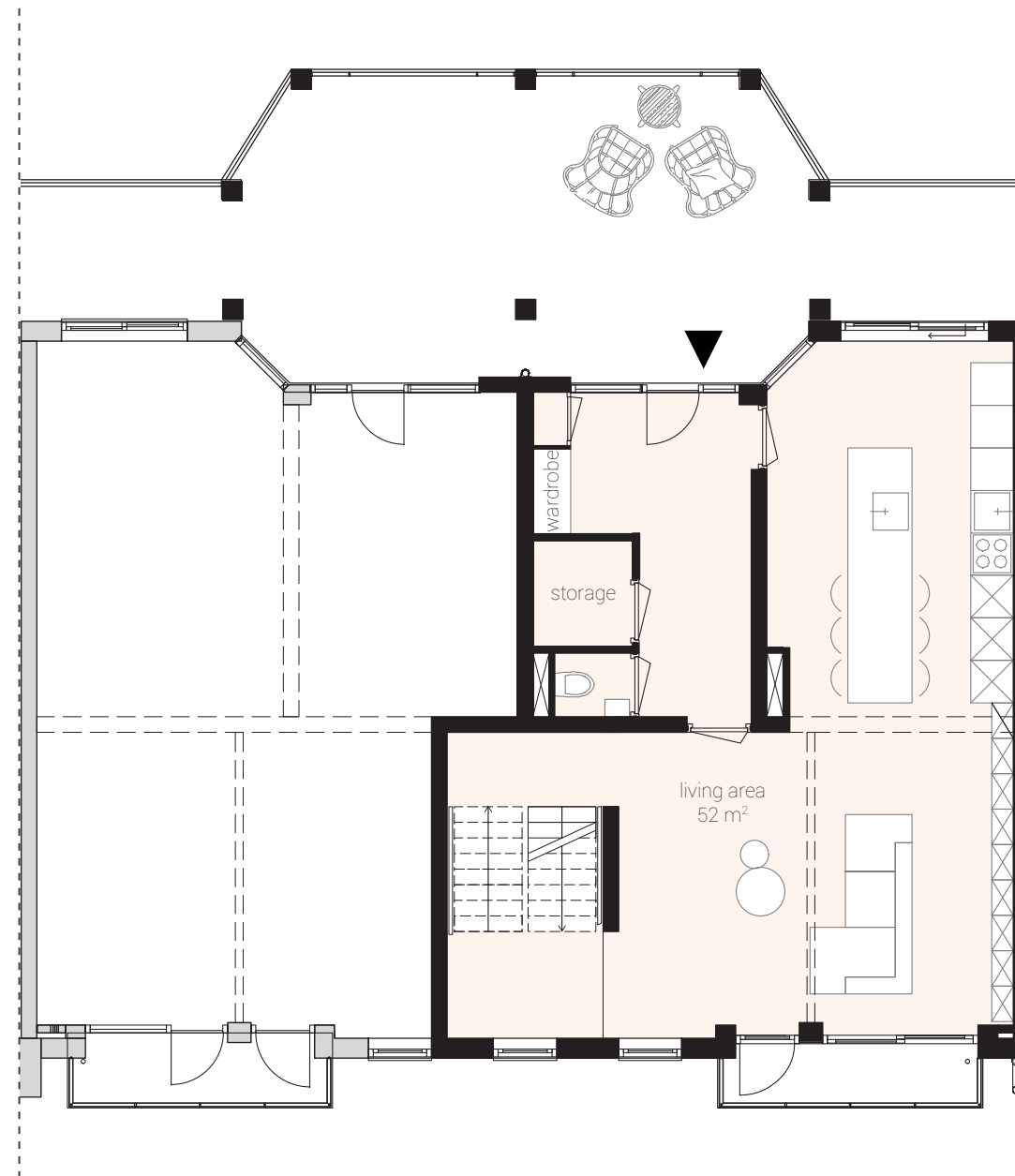
What housing types can be realized within the current structure?

REGULAR MAISONNETTE - 105 m²

- + existing stair gets a new function and becomes architectural element of the dwelling
- + spacious entrance hall
- + storage space
- small bathroom
- small bedrooms

EXISTING DWELLING - 58 m²

- separate living room and kitchen
- no designated dining area
- two bedrooms



P4. One housing type

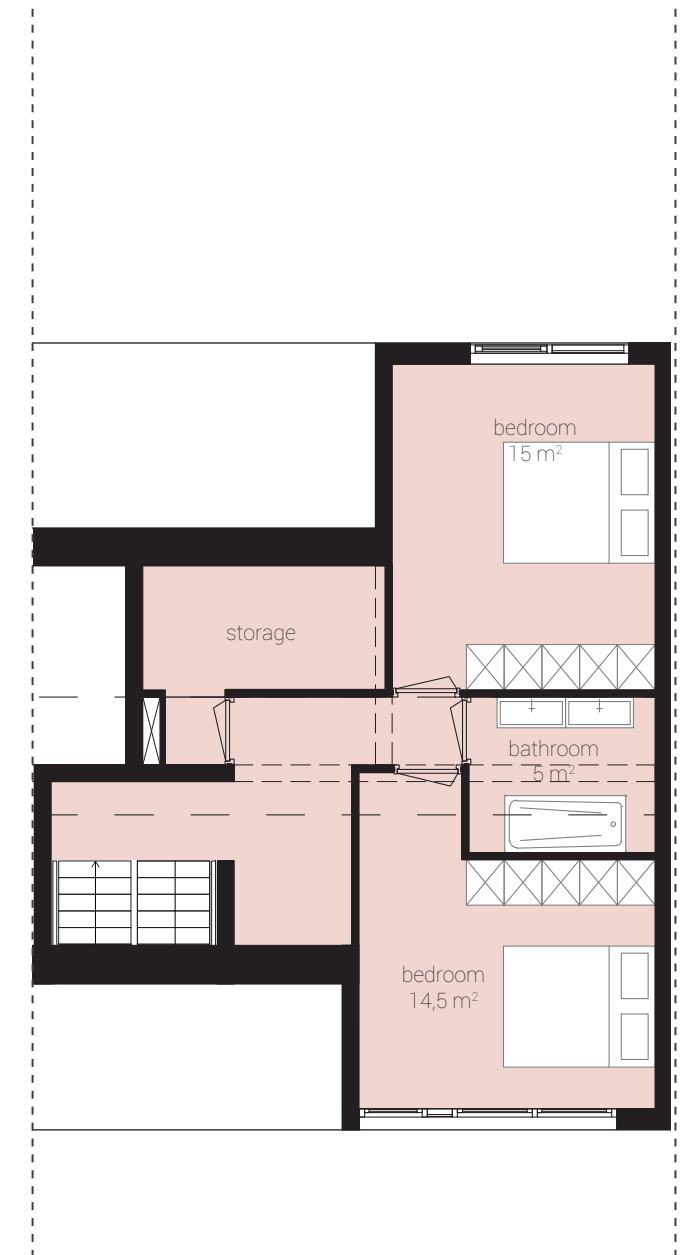
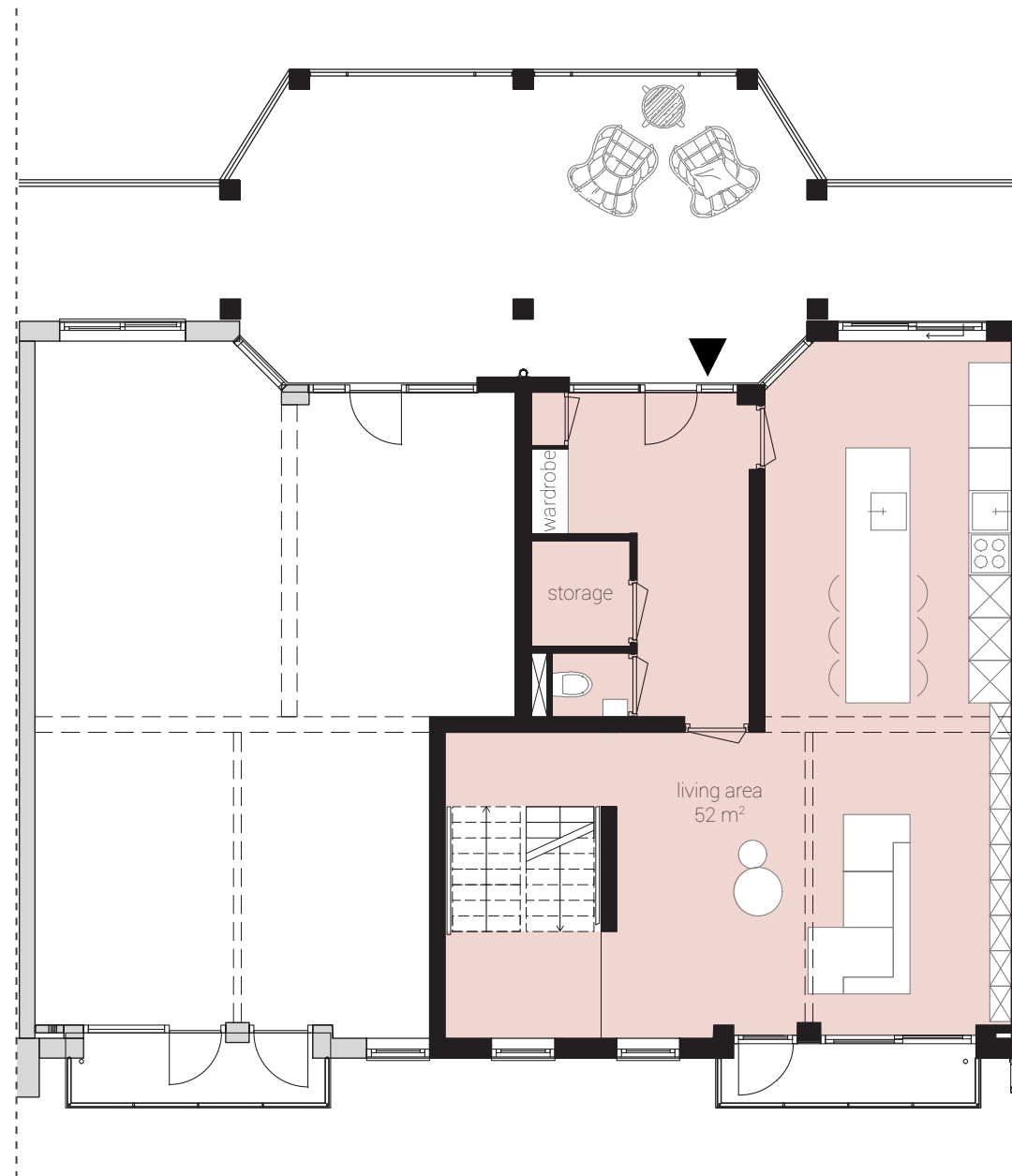
What housing types can be realized within the current structure?

MAISONETTE WITH ATTIC - 123 m²

- + existing stair gets a new function and becomes architectural element of the dwelling
- + spacious entrance hall
- + spacious bedrooms through dormers
- + storage spaces in attic

EXISTING DWELLING - 58 m²

- separate living room and kitchen
- no designated dining area
- two bedrooms



P4. One housing type

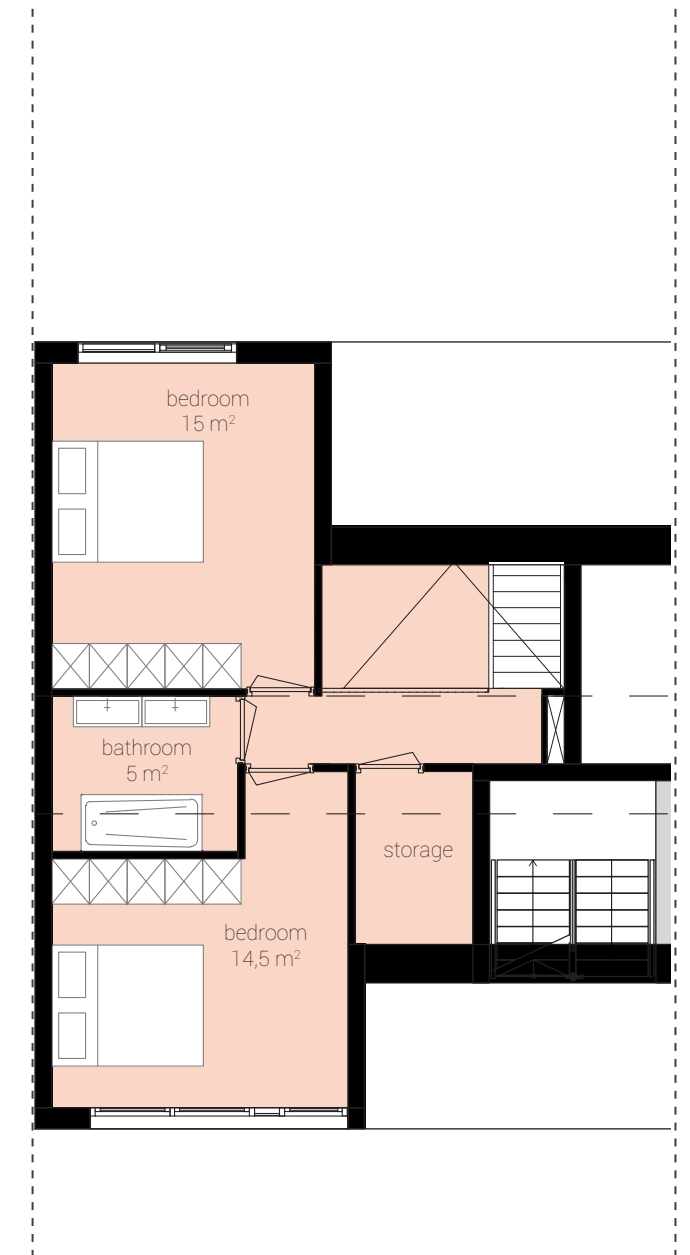
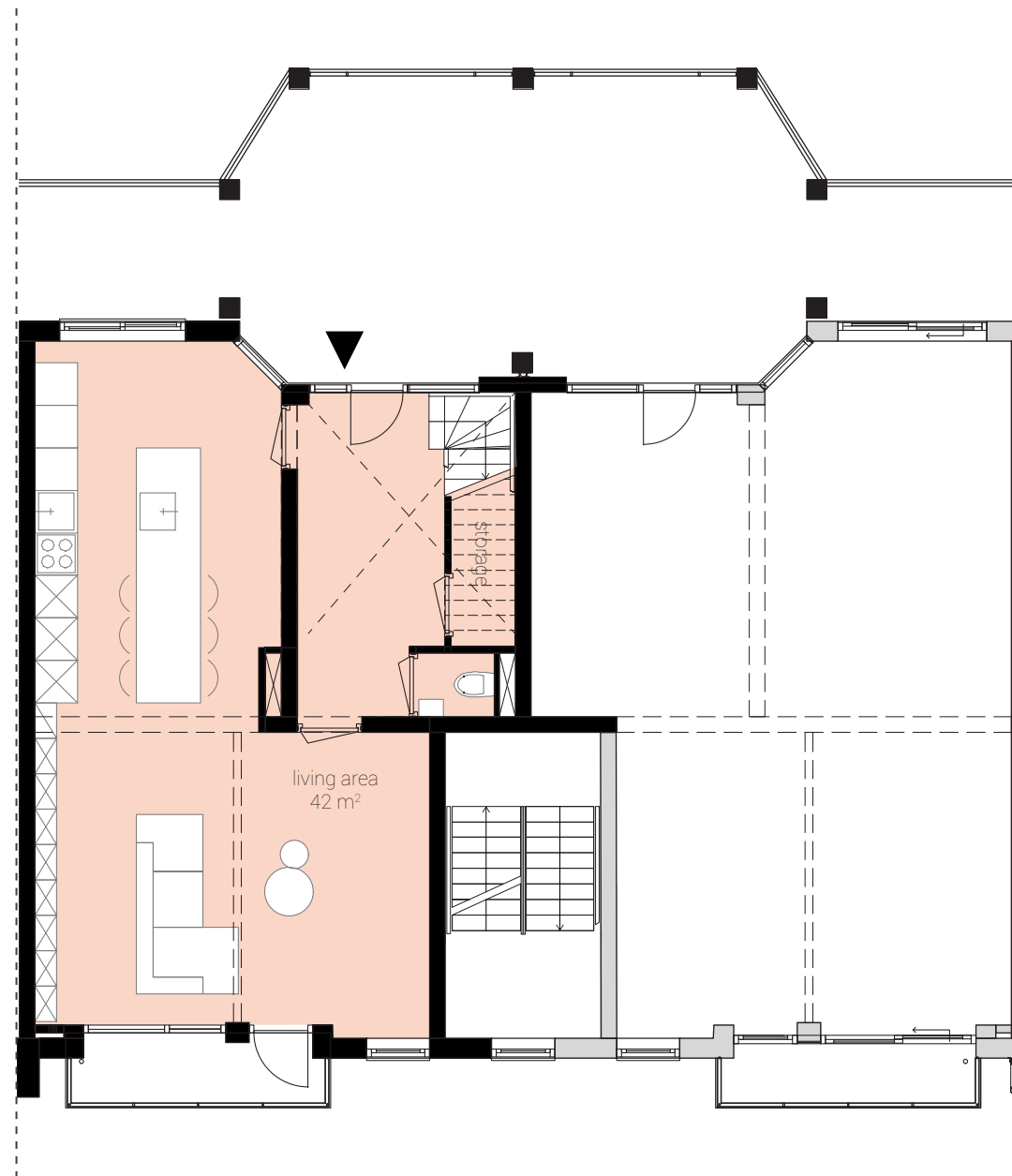
What housing types can be realized within the current structure?

MAISONETTE WITH ATTIC - 114 m²

- + spacious entrance
- + spacious bedrooms through dormers
- + storage spaces in attic and under the stairs

EXISTING DWELLING - 58 m²

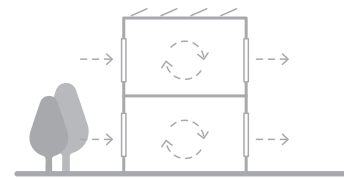
- seperate living room and kitchen
- no designated dining area
- two bedrooms



P5. Non-insulated

How can the energy efficiency of the porch building be improved?

Energy efficiency & sustainability



Improving energy efficiency and sustainability

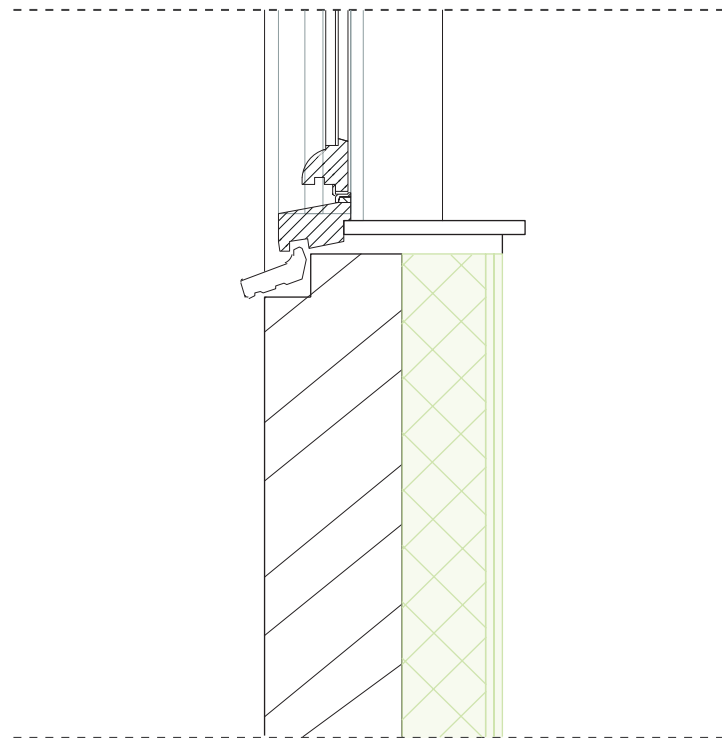
Incorporating thermal comfort, natural lighting, and strategic window placement to reduce energy consumption and improve indoor environmental quality.

Renovation



P5. Non-insulated

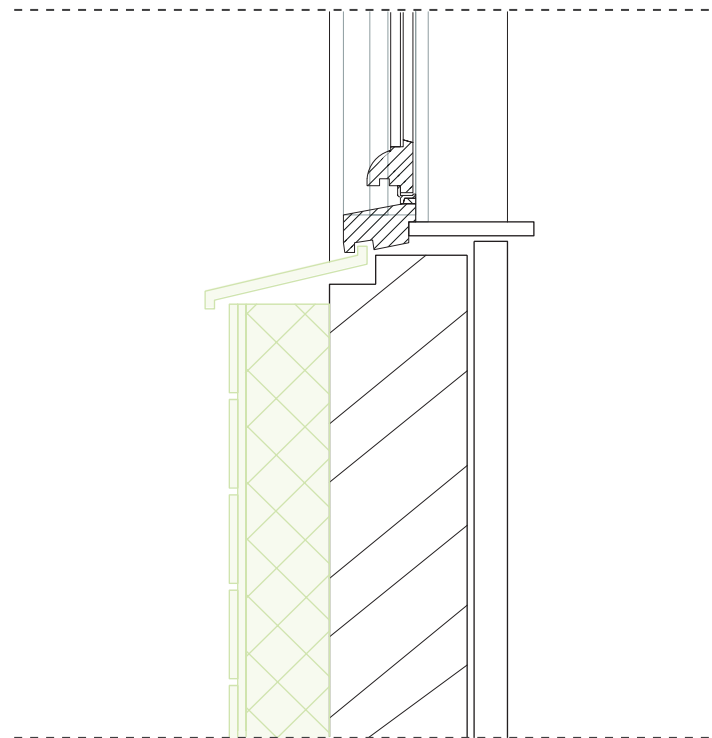
How can the energy efficiency of the porch building be improved?



OPTION 1.

INSULATING THE FACADE FROM THE INSIDE

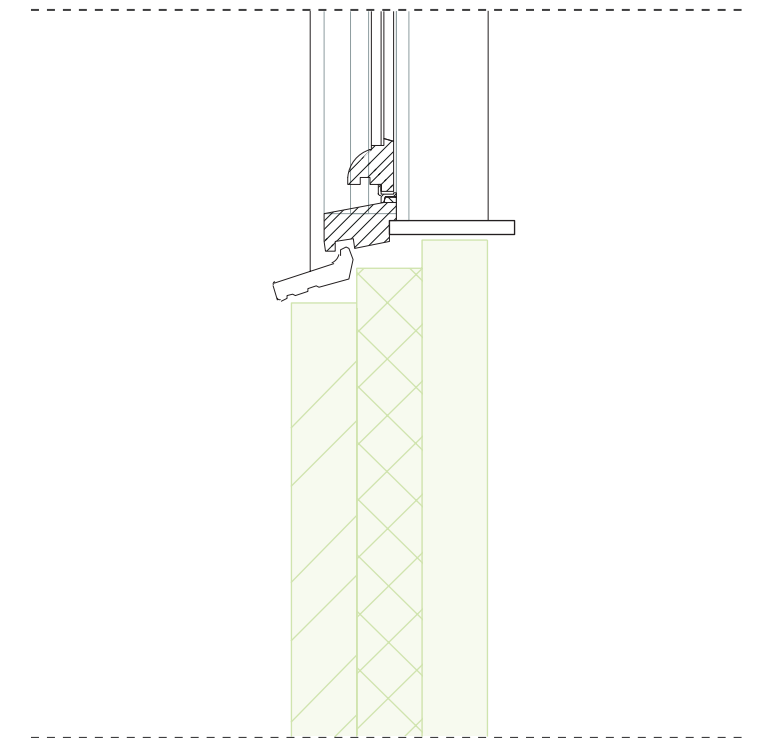
- + preserving the exterior facade
- loss of living space
- complex due to thermal bridges



OPTION 2.

INSULATING THE FACADE FROM THE OUTSIDE

- + better thermal performance
- + preservation of space
- /+ change in appearance



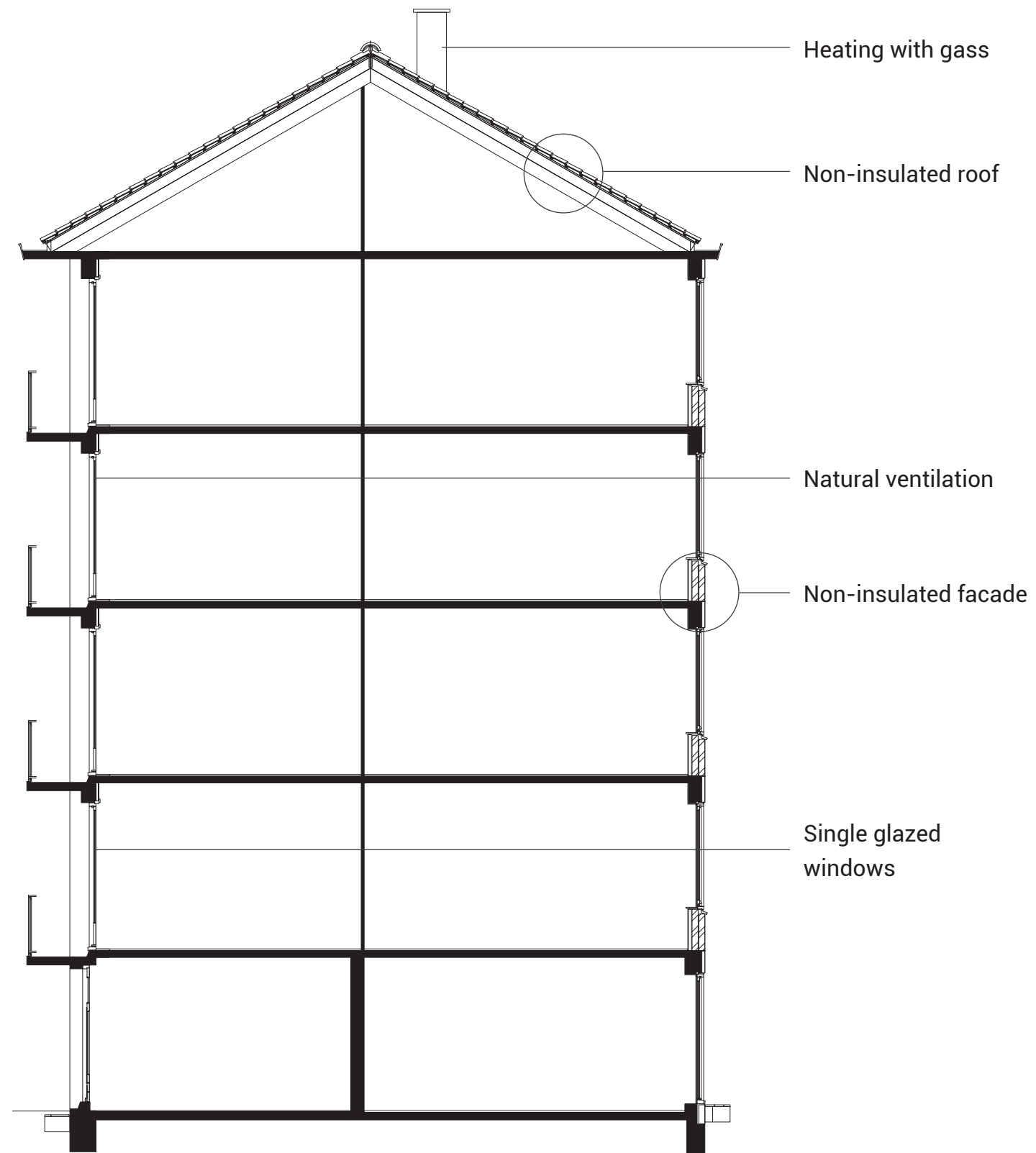
OPTION 3.

REPLACING THE FACADE WITH NEW

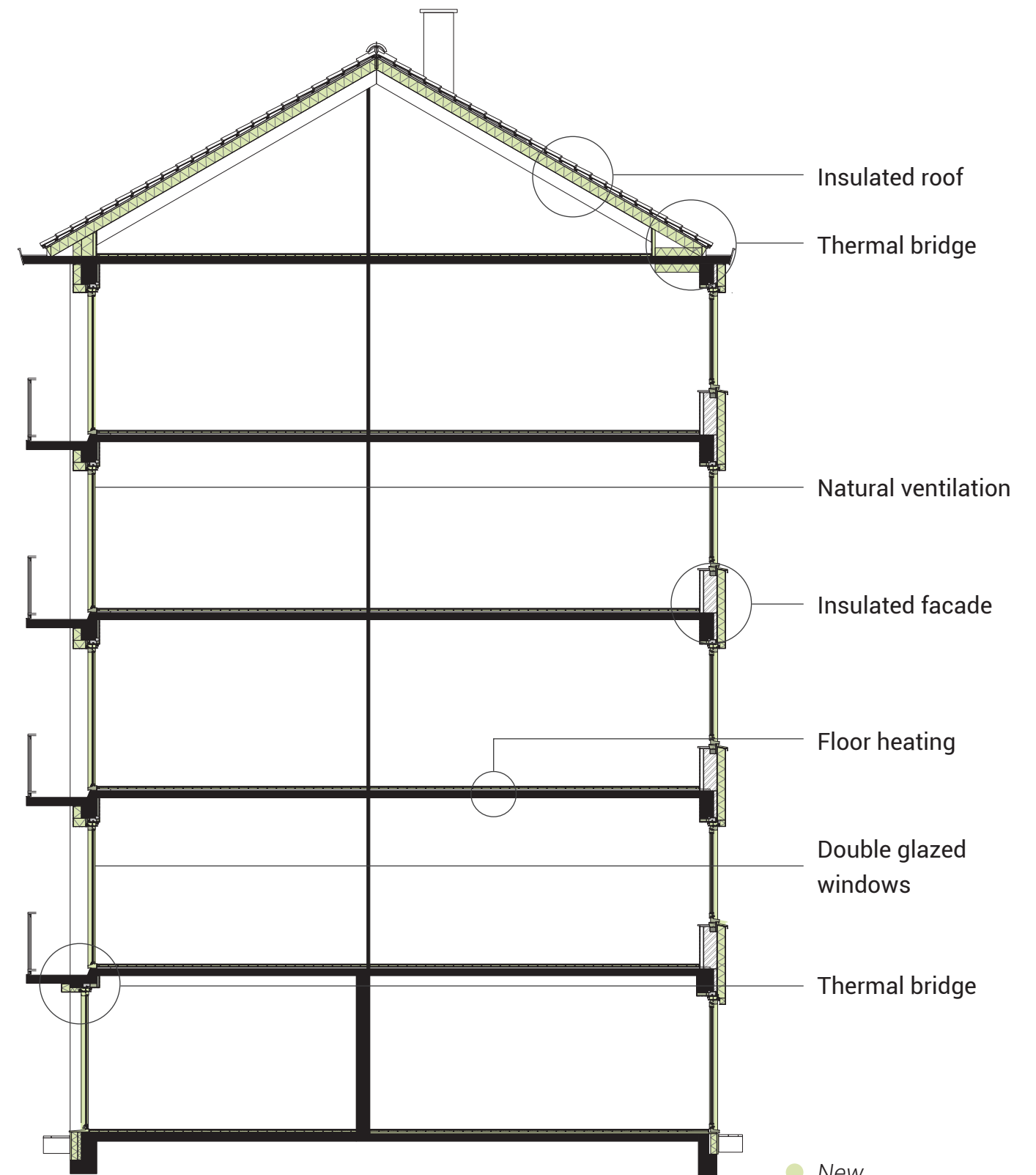
- structurally complex
- /+ removing materials, using sustainable materials
- higher costs
- /+ change in appearance

P5. Non-insulated

How can the energy efficiency of the porch building be improved?



EXISTING

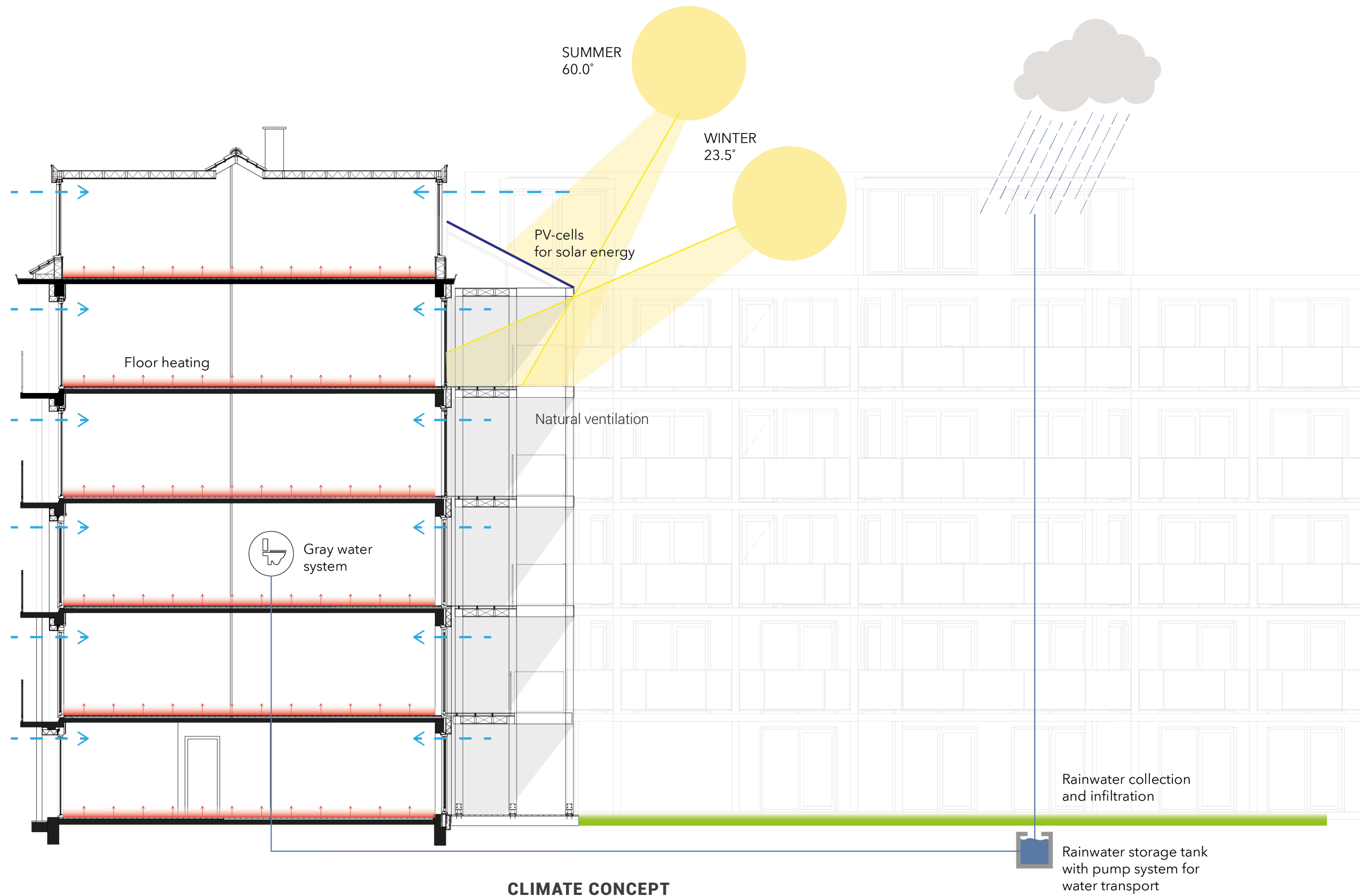


ENERGY EFFICIENCY IMPROVED

● New

P5. Non-insulated

How can the energy efficiency of the porch building be improved?



Social heritage challenges

What architectural building characteristics should be preserved to retain its identity?

Heritage-sensitive



Heritage-sensitive renovations

Architectural interventions that respect and incorporate historical design elements to maintain the unique character of neighborhoods, fostering a sense of pride and belonging among residents.

Cultural identity, recognition, appearance



Social heritage challenges

What architectural building characteristics should be preserved to retain its identity?



● Order 3: Medium value
An architectural unit with design and/or distinctive **typology** characteristic of the period and/or significant **contribution to the composition** of the subdivision and field.

● Order 2: High value
An architectural unit with an architectural design and/or typology characteristic of the period, which also makes a significant contribution to the composition of the subdivision and field.

(Gemeente Amsterdam, Waarderingskaarten AUP)

Source: maps.amsterdam.nl

Social heritage challenges

What architectural building characteristics should be preserved to retain its identity?
(existing)



Social heritage challenges

The entrance and communal space



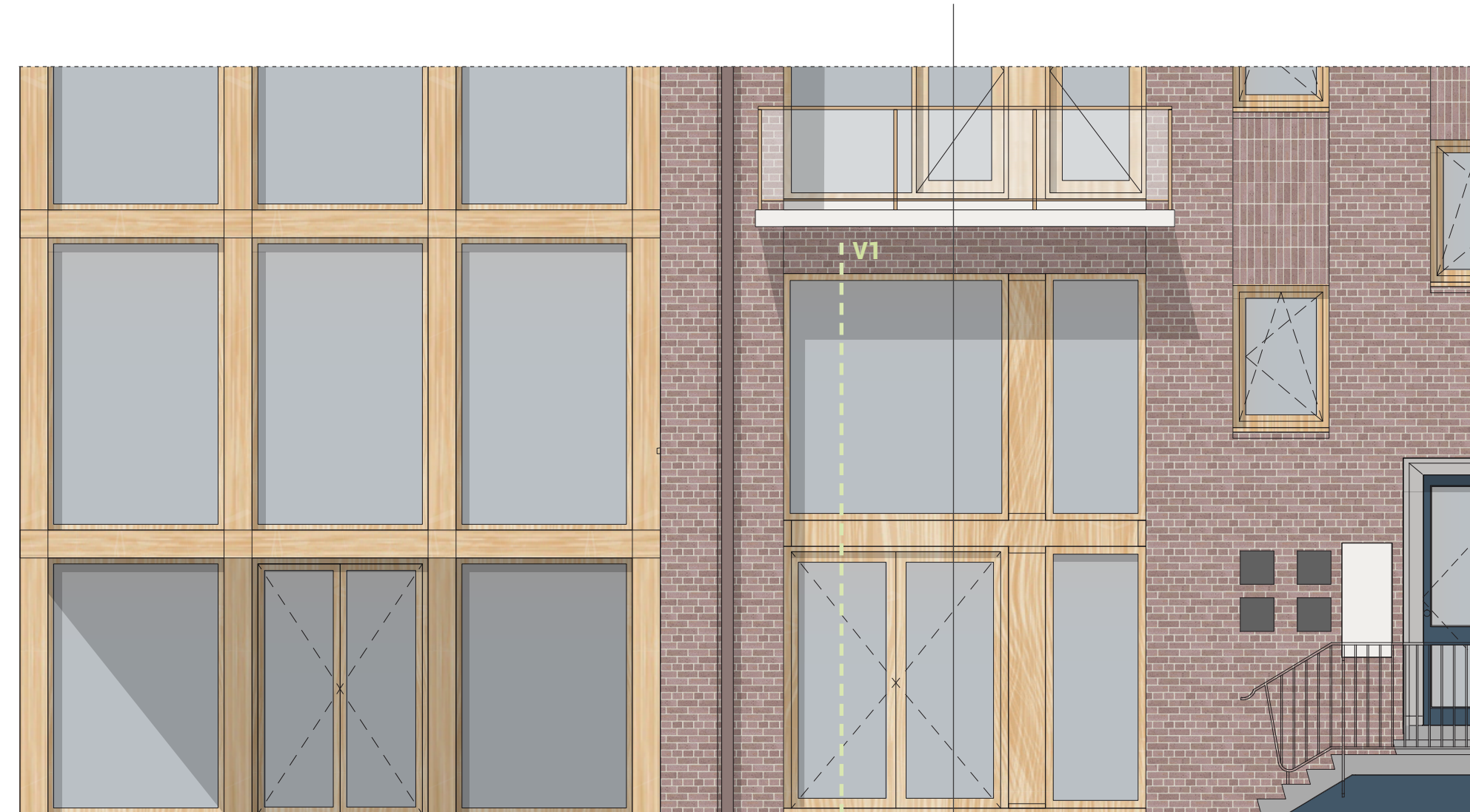
EXISTING



Retain the qualitative value of architectural ideas, but use them functionally in a contemporary way for a changing society.

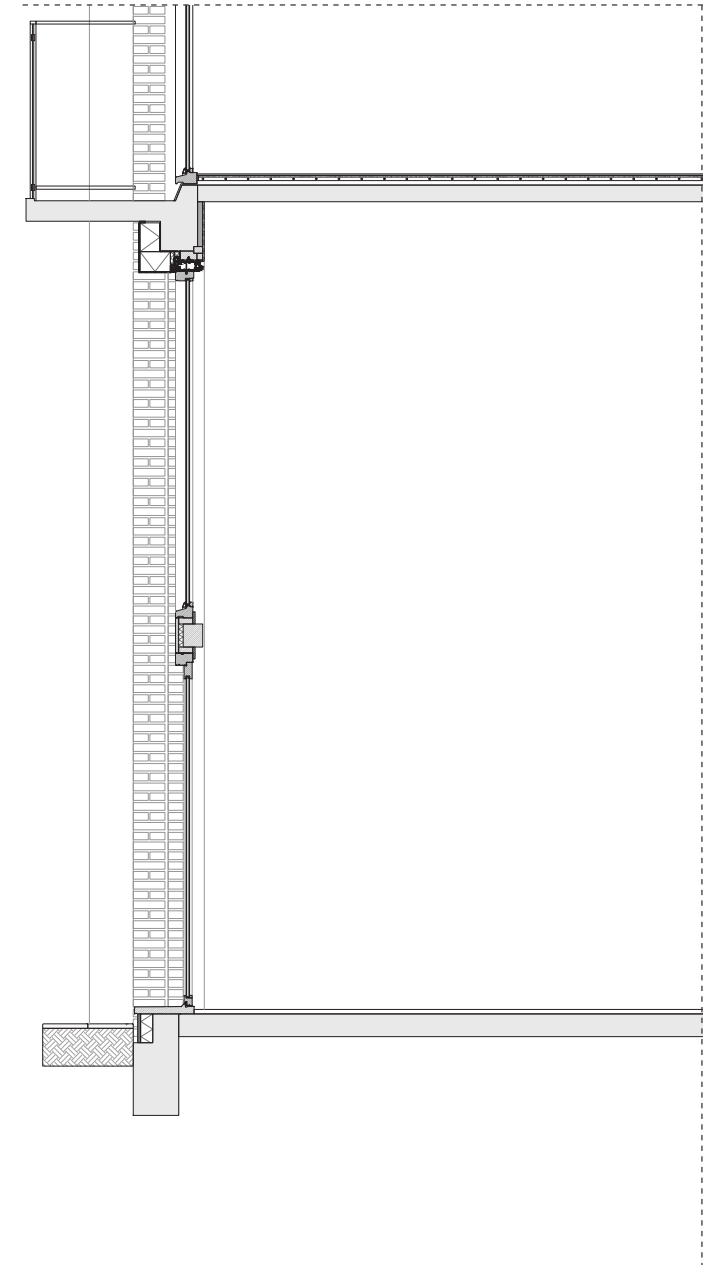
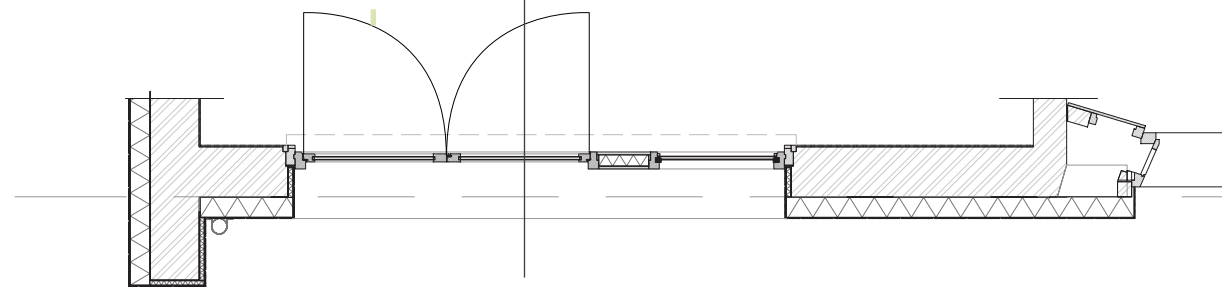
Social heritage challenges

The entrance and communal space



NORTH ELEVATION

All newly added elements, such as the elevator core, facade openings, and galleries, are made of wood.

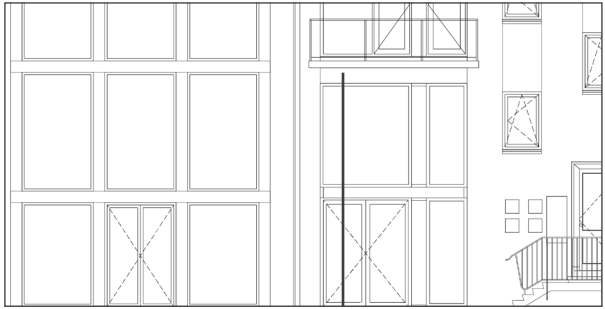


Social heritage challenges

The entrance and communal space



Detail V1. 1:5



● New



EXISTING

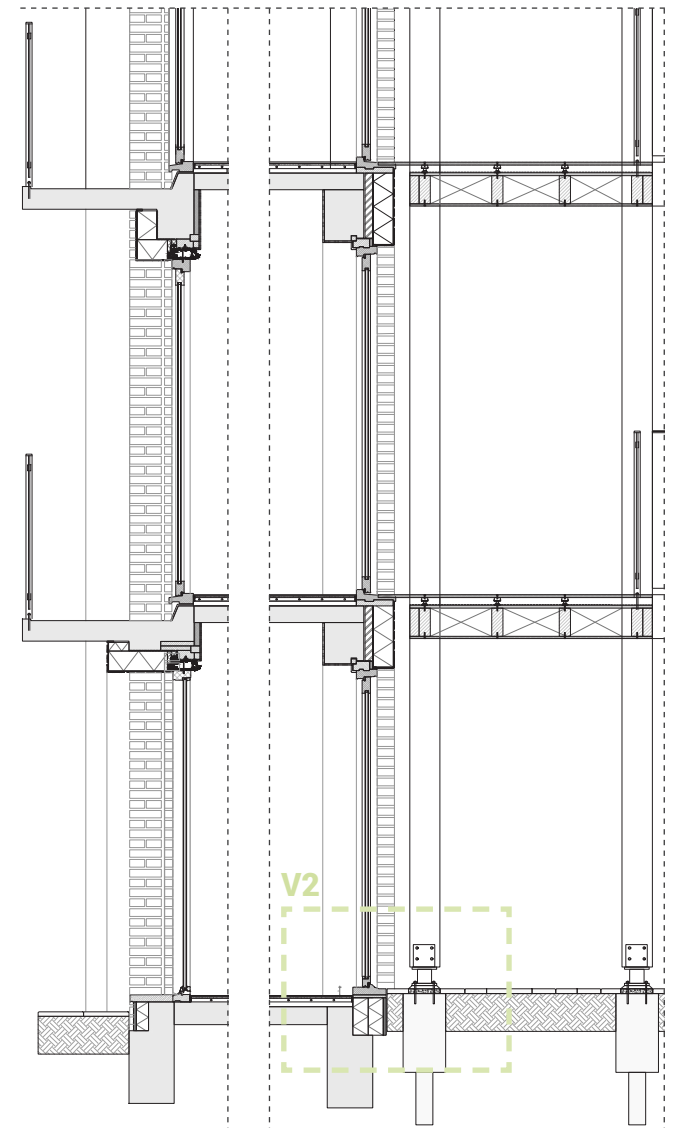
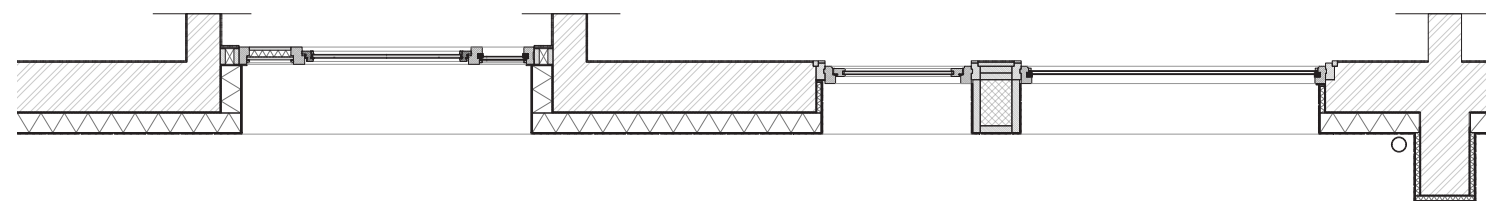


Social heritage challenges

Ground floor dwelling



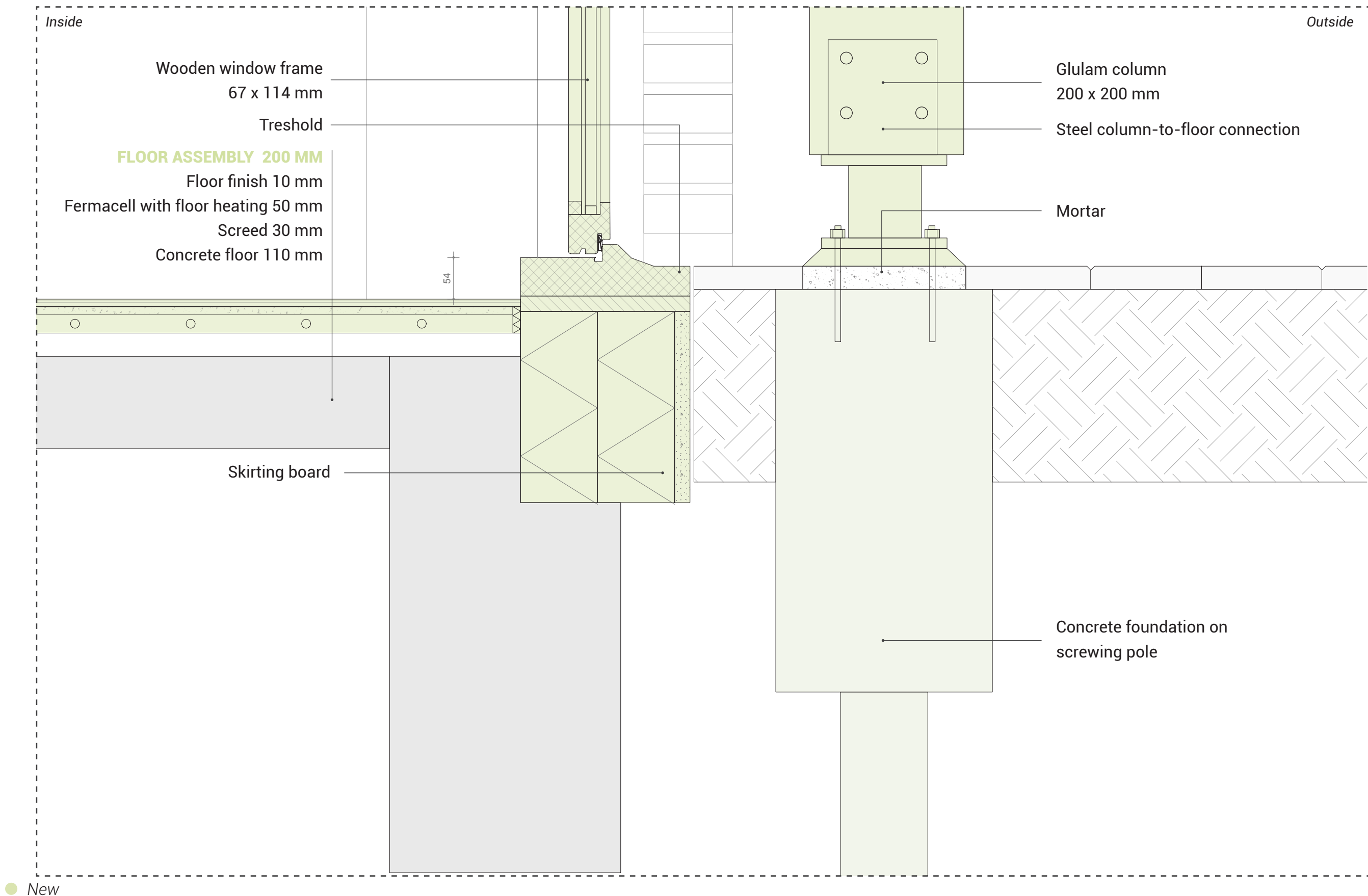
NORTH ELEVATION



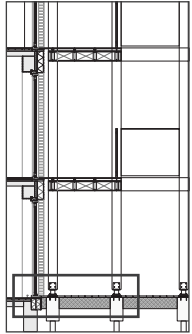
The entrance door to the ground floor apartment exudes a welcoming atmosphere through its material, color and transparency.

Social heritage challenges

Ground floor dwelling



Detail V2.
1:5





The dialogue between the two materials represents a balance between heritage and present, each expressing its era and function. Together they create a balanced composition where existing and new coexist.

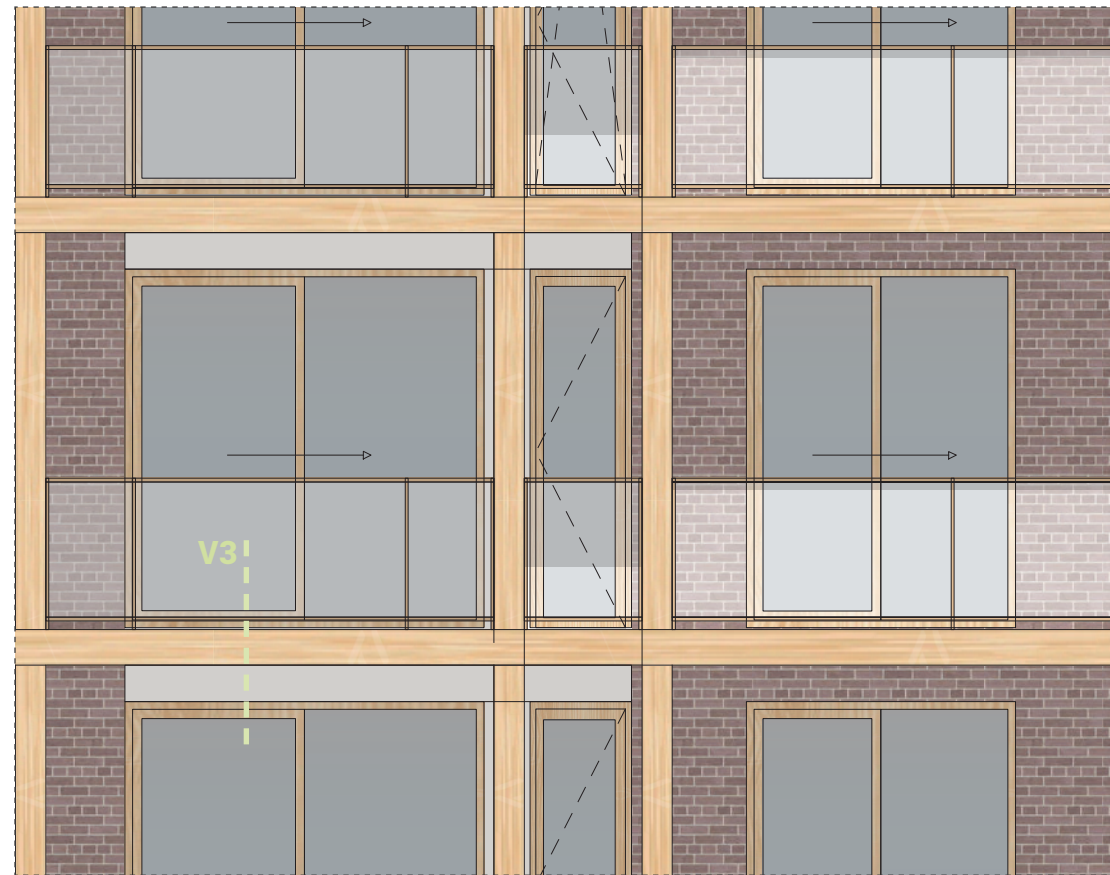
Social heritage challenges

Apartment dwelling

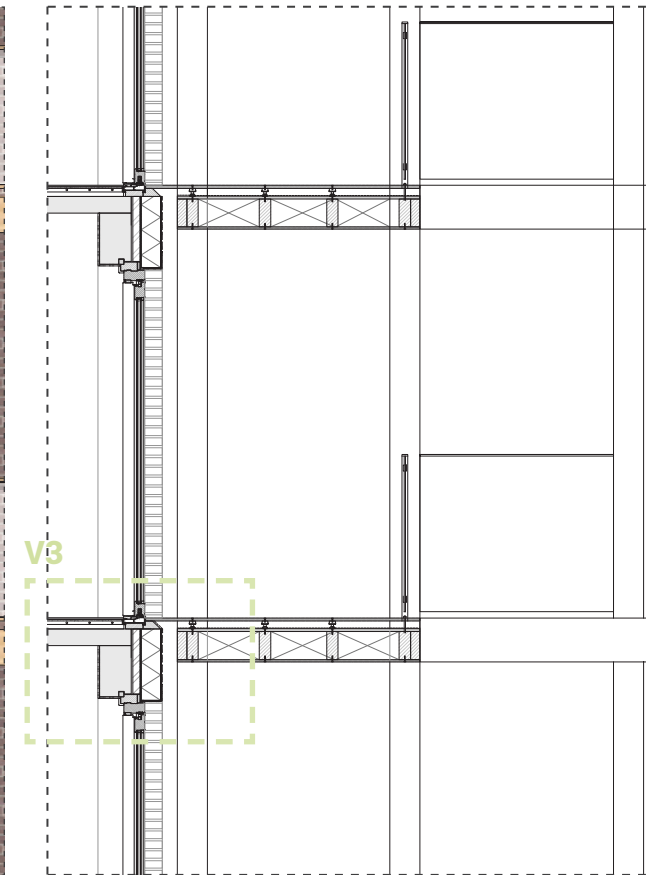


NORTH ELEVATION

The brick slips offer flexibility in the masonry bond pattern. While maintaining the existing bond, a playful accent has been added by vertically aligning the brick slips between the windows.

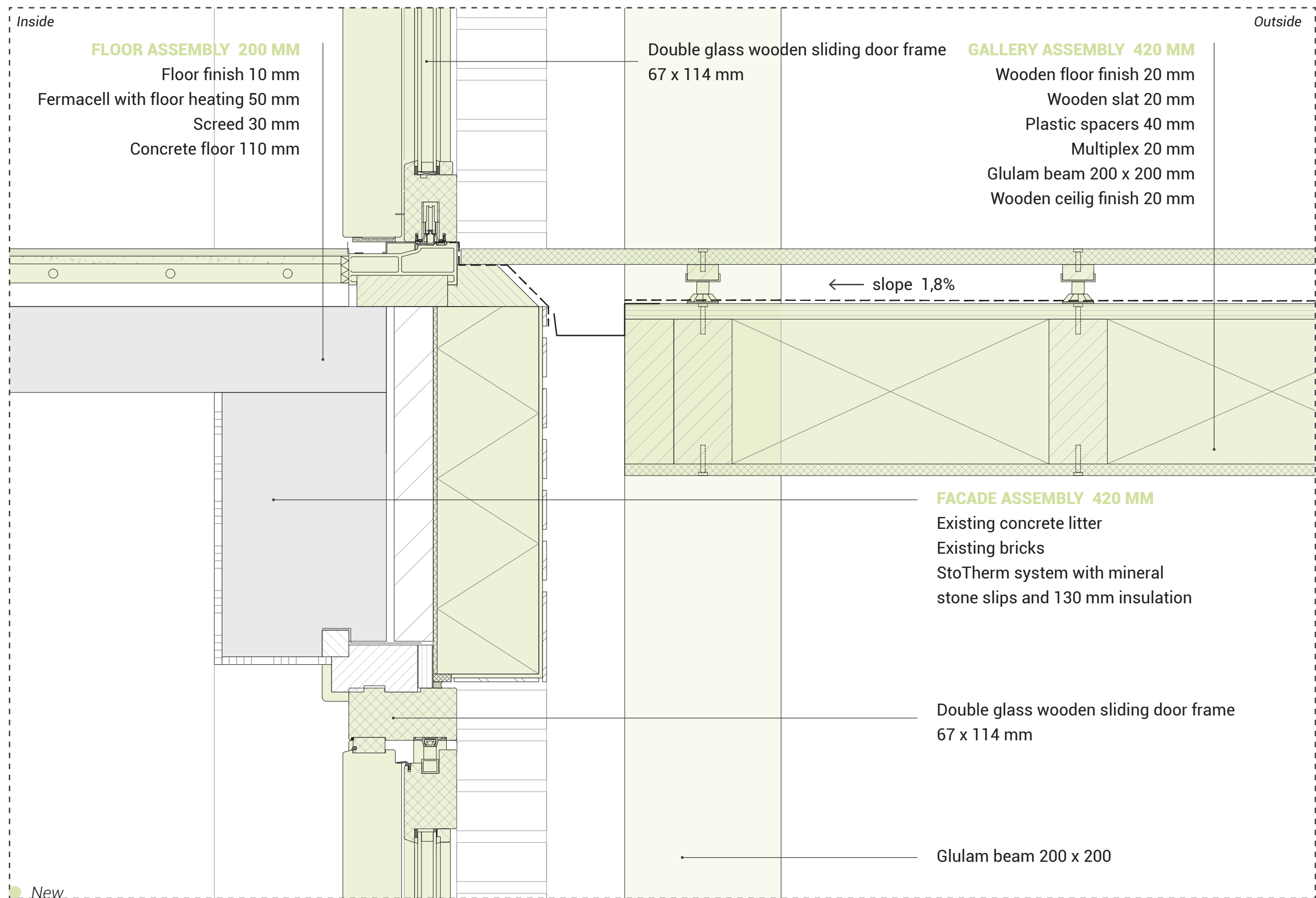


SOUTH ELEVATION

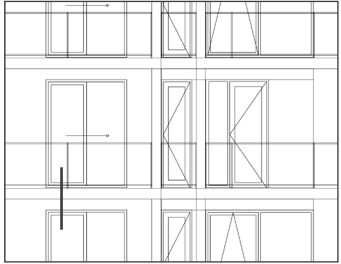


Social heritage challenges

Apartment dwelling



Detail V3. 1:5



Social heritage challenges

Maisonette with dormers

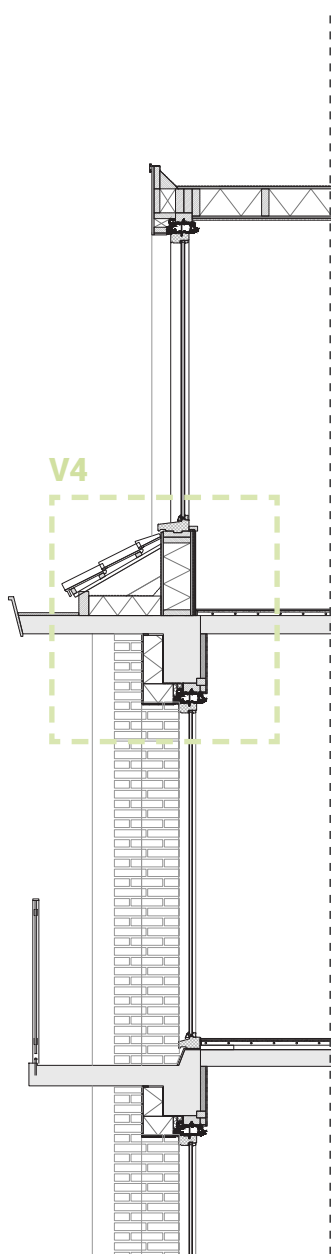


NORTH ELEVATION

The new dormers harmonize with the existing facade and emulate the aesthetic and layout.

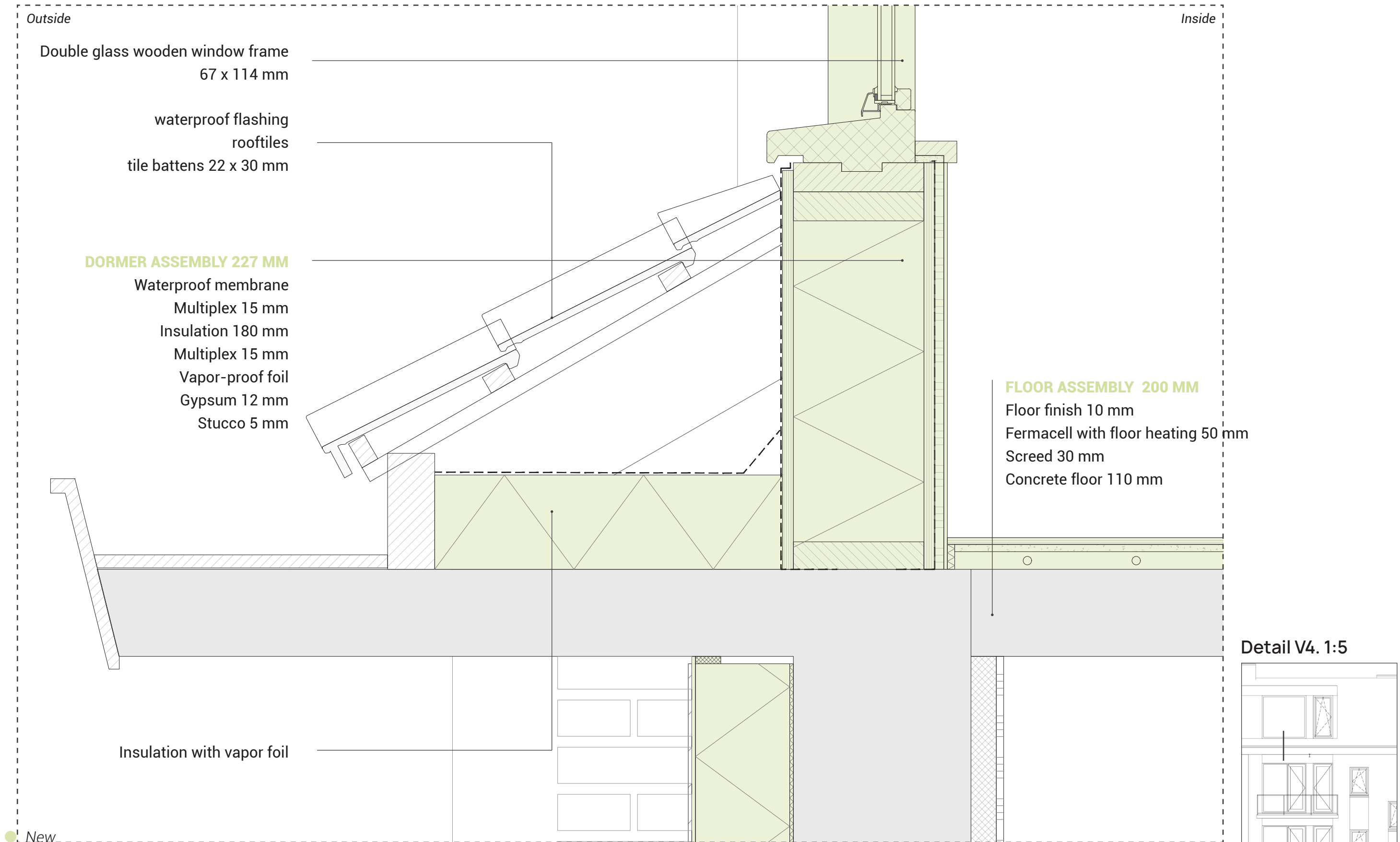


SOUTH ELEVATION



Social heritage challenges

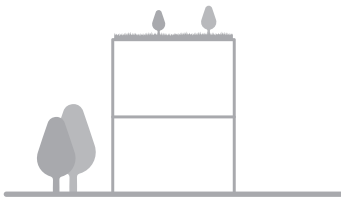
Maisonette with dormers



Greenery integration







How can the courtyard be rearranged?

Greenery integration



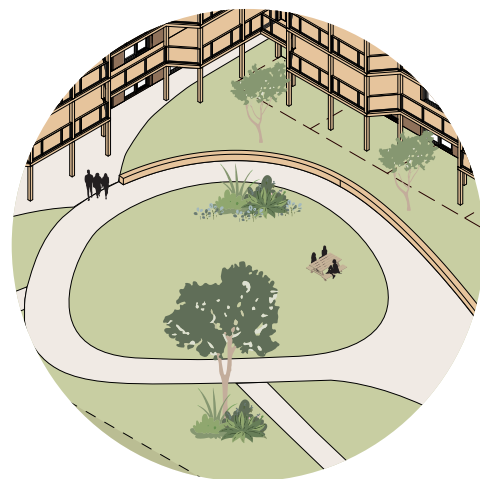
Integrating green spaces
Prioritizing the development of parks, gardens, and green corridors to promote health, relaxation, and social interaction, aligning with residents' values and aspirations.

Greenery, diverse parks, communal garden, nature



Greenery integration

How can the courtyard be rearranged?



ENHANCE BIODIVERSITY

A diversity of vegetation to increase the biodiversity and provide shaded areas during the summer.



SELF-MANAGEMENT

Opportunity for neighbourhood residents to manage a piece of the garden themselves, which can encourage social interaction.

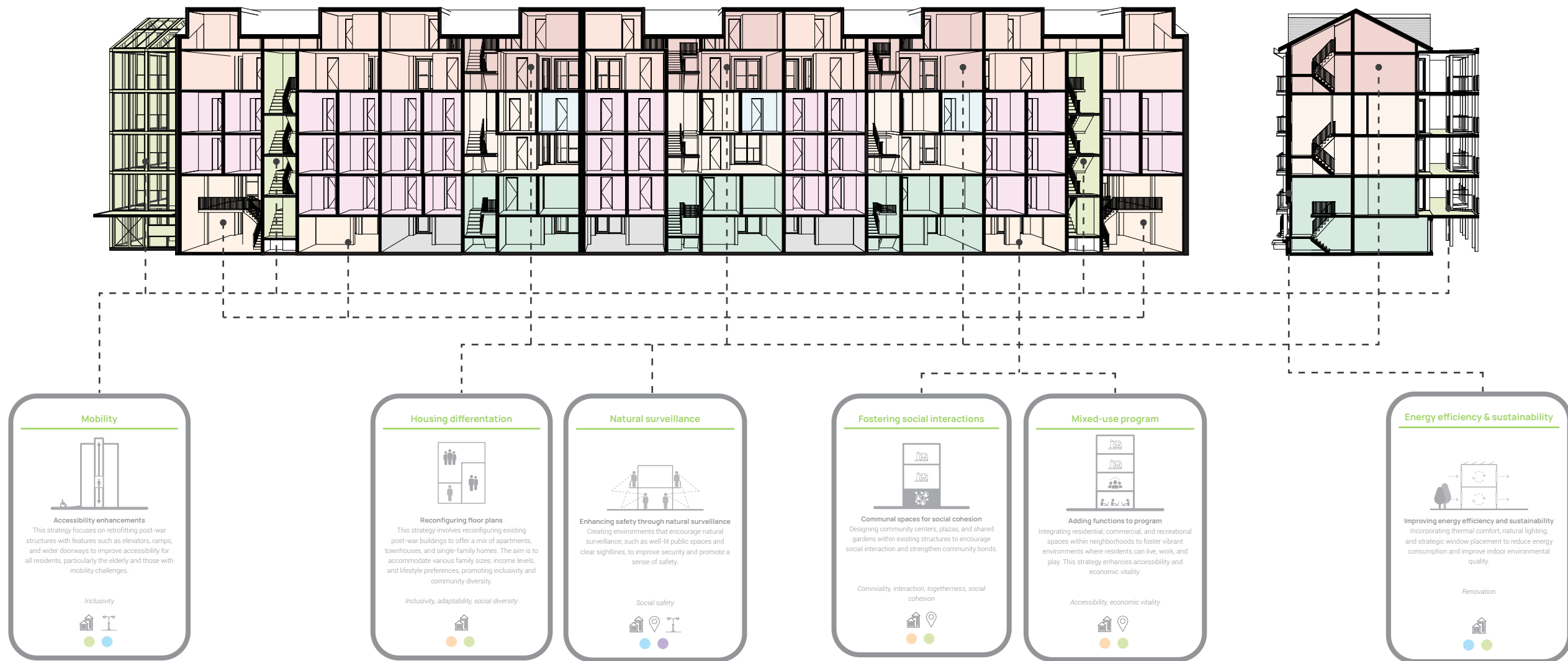


SOCIAL ENCOUNTERS

The layout encourages and creates a child-friendly space for meeting and brings local residents together.

Assessing the liveability design strategies

How do the design strategies interact?



IMPROVING ACCESSIBILITY

- + elevator access provides better accessibility
- + gallery also provides space for social interaction
- orientation of gallery affects daylighting
- two staircases needed as escape routes
- height difference should be solved through small slopes

MORE DWELLING TYPES

- + 6 dwelling types instead of 2
- + gallery also provides space for social interaction
- attic apartments dependent on floor height
- change of housing typology (architecturally valued by municipality)

COMMUNAL SPACES ADDED TO PROGRAM

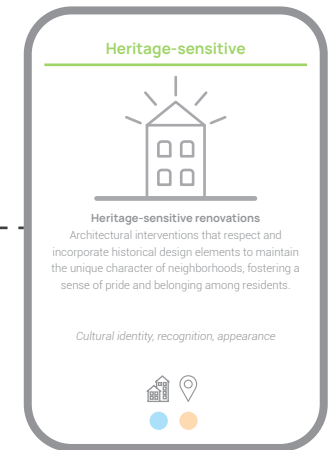
- + meeting spaces for residents
- + activity in the plinth which provides natural surveillance
- less space for housing
- requires maintenance, repairs and responsibility

RETROFITTING INSULATION

- + improved thermal comfort
- + energy efficiency upgrade
- +/- Impact on external features and aesthetics
- some considerations lead to thermal bridges

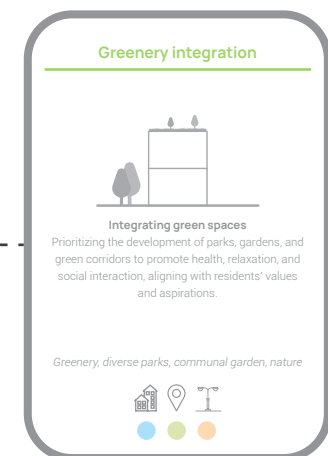
Assessing the liveability design strategies

How do the design strategies interact?



MAINTAINING HISTORICAL AND CULTURAL VALUE OF THE BUILDING

- + preservation of the neighbourhoods heritage identity
- +/- change of housing typology
- could price out current residents

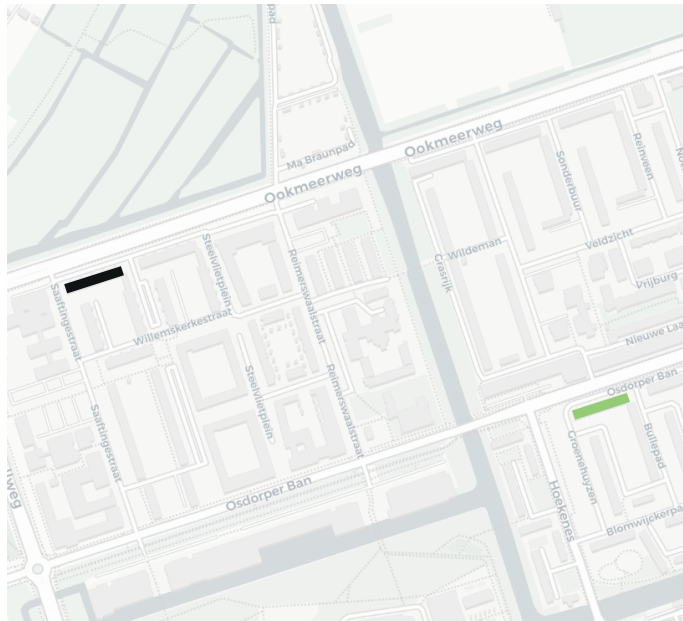


REARRANGEMENT OF THE COURTYARD

- + increasing ecological value
- + promotes ownership and involvement
- requires more maintenance and expertise
- not all residents might have interest or time

Assessing the liveability design strategies

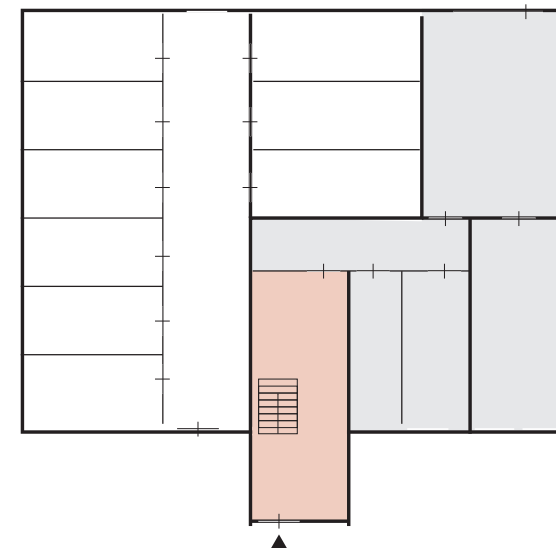
How can the design strategies be applied on other porch buildings?



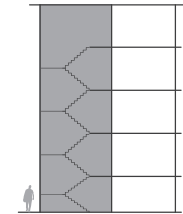
OOKMEERWEG IN OSDORP



North facade



Ground floor

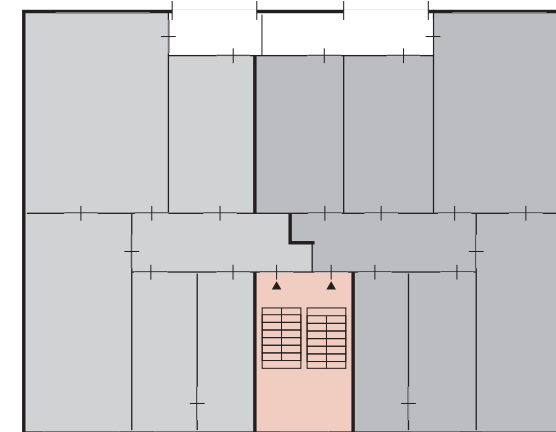


LIMITED ACCESSIBILITY

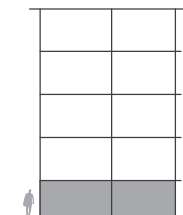
The porches are connected to staircases and offer no accessibility for the disabled and also less comfort for residents.



South facade



1st - 4th floor



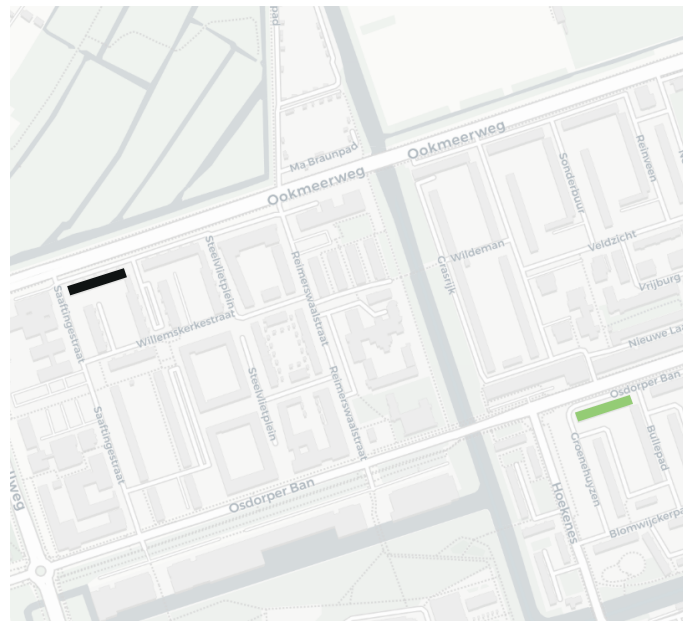
ANONYMOUS PLINTH AND END WALL

The end wall is completely closed off, making the corner feel very anonymous.

OOKMEERWEG EXISTING SITUATION

Assessing the liveability design strategies

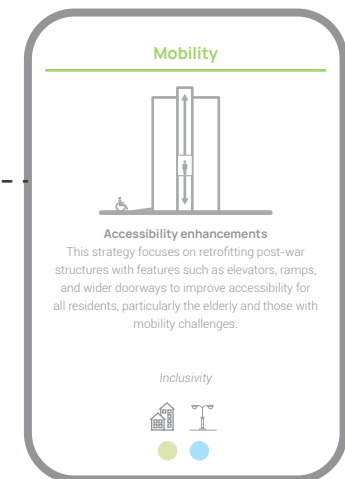
How can the design strategies be applied on other porch buildings?



OOKMEERWEG IN OSDORP



North facade

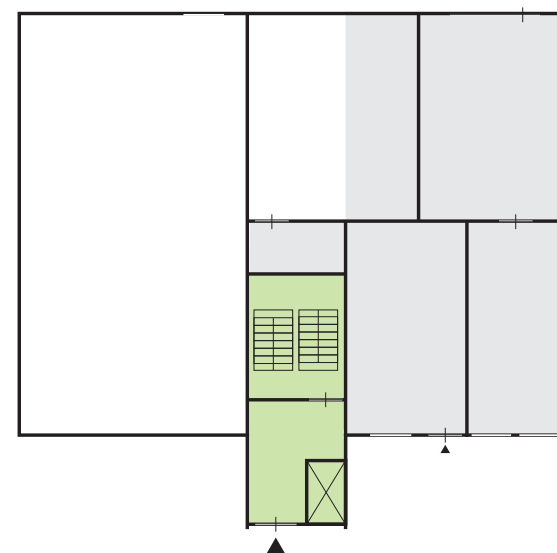


IMPROVING ACCESSIBILITY

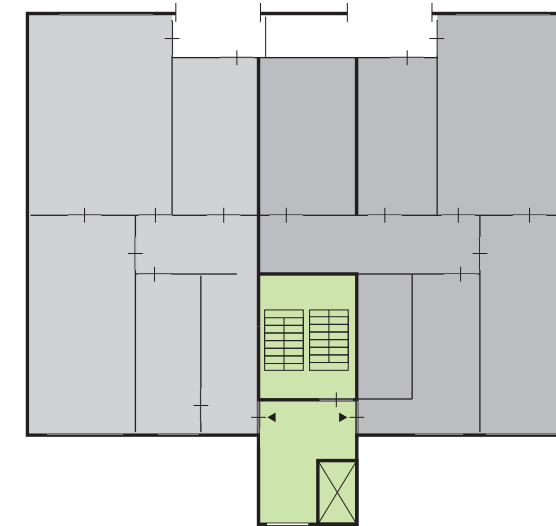
+ each block has it's own elevator core

+ fits within current dimensions

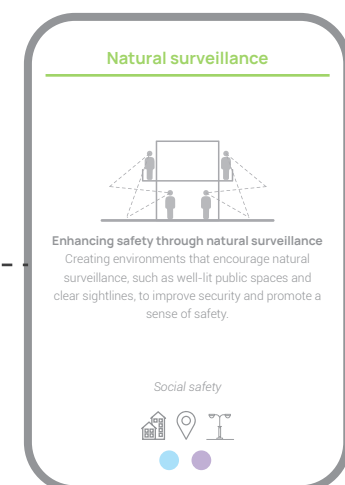
- less social encounters among neighbours
- floorplan must be adjusted for relocated entrance



Ground floor



1st - 4th floor



MORE EYES ON THE STREET

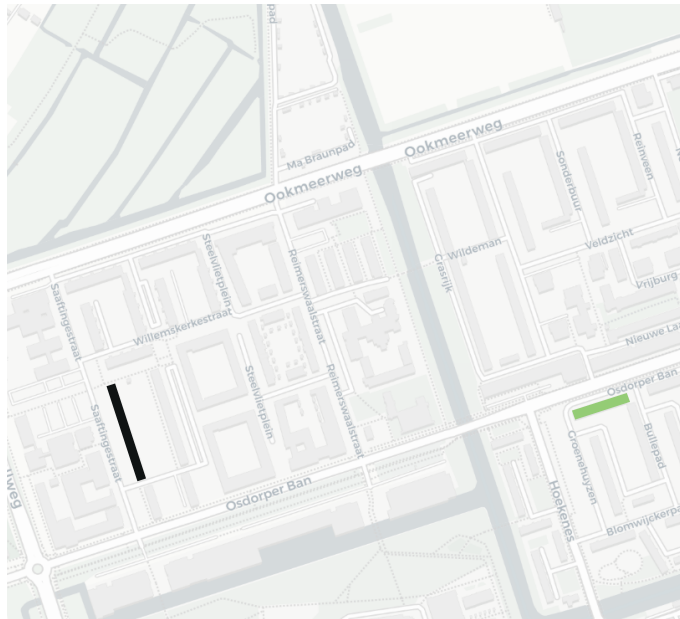
+ more daylight and sightlines from corner apartments

- less privacy in the plinth

OOKMEERWEG DESIGN STRATEGIES APPLIED/TESTED

Assessing the liveability design strategies

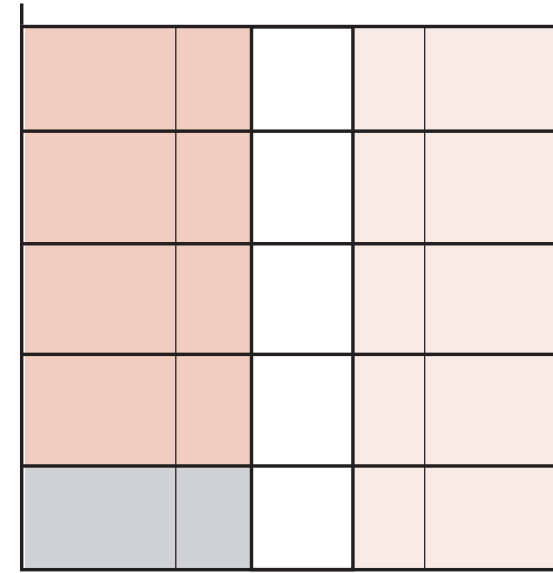
How can the design strategies be applied on other porch buildings?



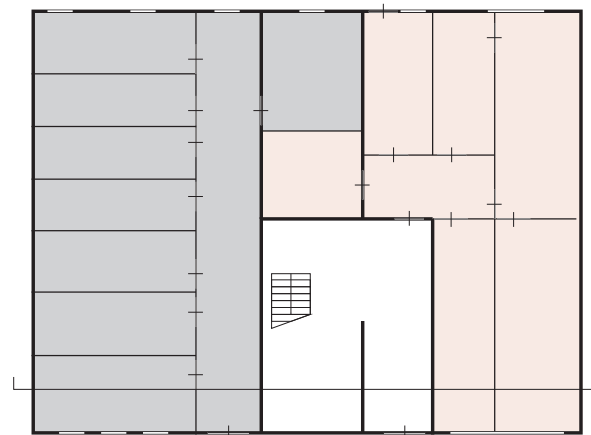
SAAFTINGESTRAAT IN OSDORP



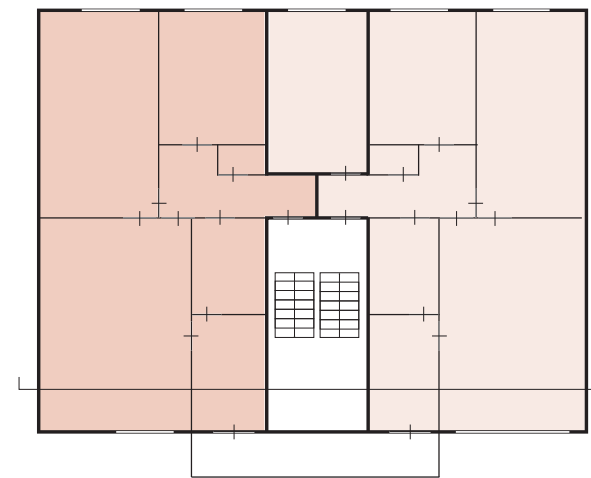
North facade



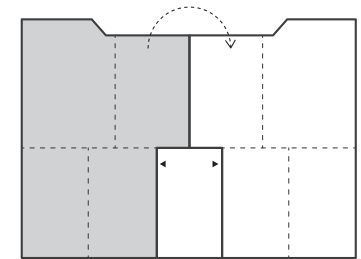
Section



Ground floor

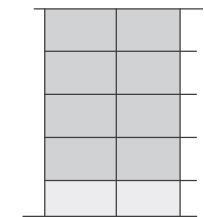


1st - 4th floor



ONE HOUSING TYPE

There is only 1 housing type and no wide diversity of dwellings.



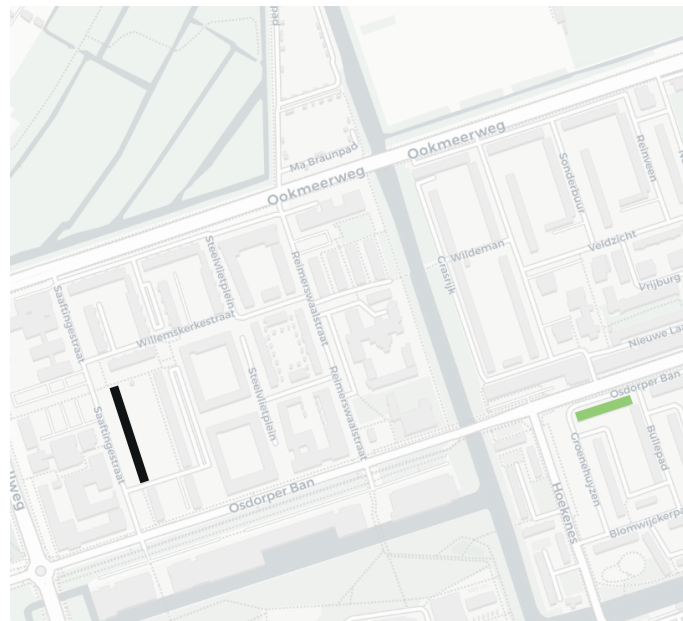
NO FORMAL COMMUNAL SPACES

With only housing as the program, the building is very private and there is no room for social interactions.

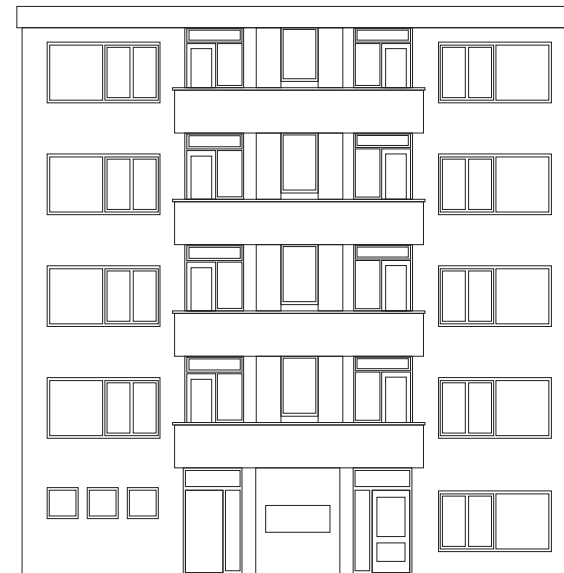
SAAFTINGESTRAAT EXISTING SITUATION

Assessing the liveability design strategies

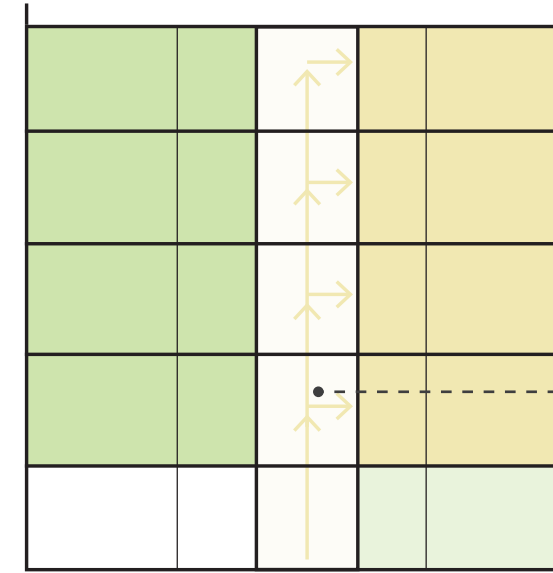
How can the design strategies be applied on other porch buildings?



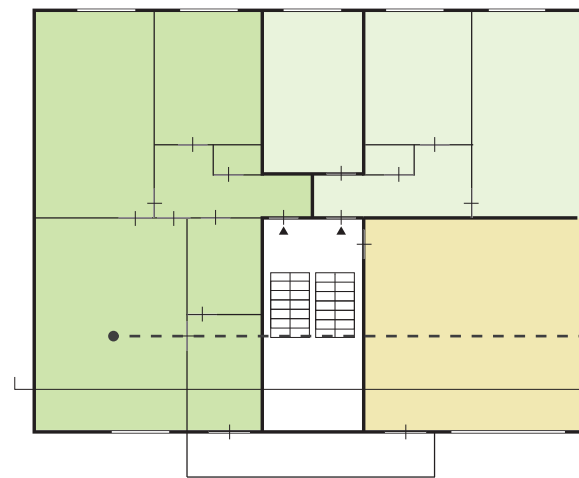
SAAFTINGESTRAAT IN OSDORP



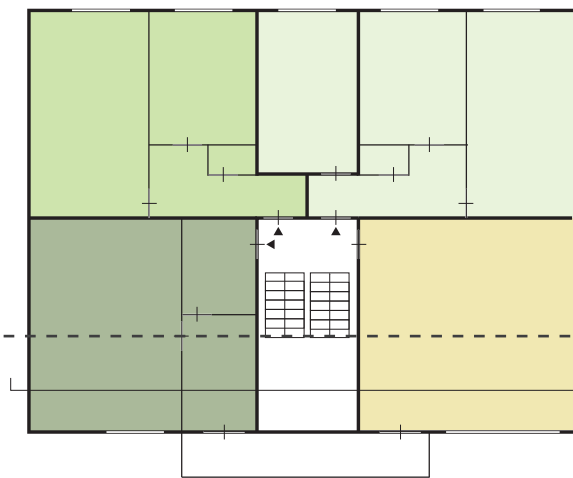
North facade



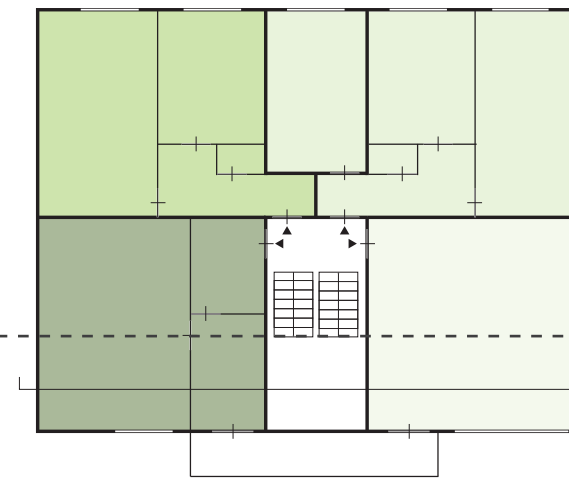
Section



1st - 4th floor (2 dwellings)

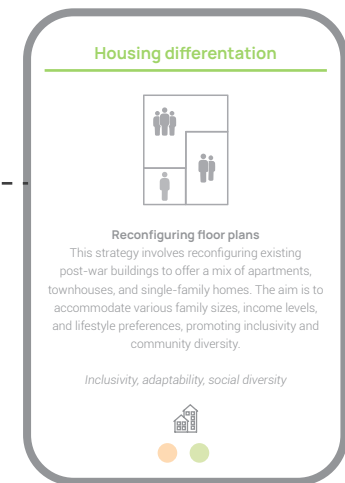


1st - 4th floor (3 dwellings)



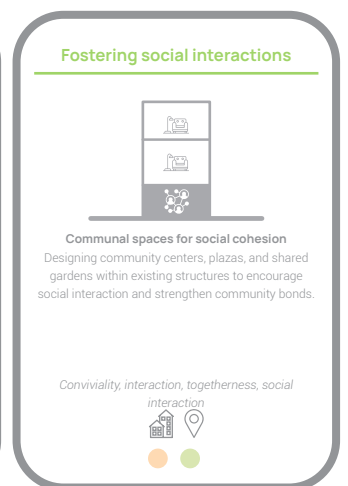
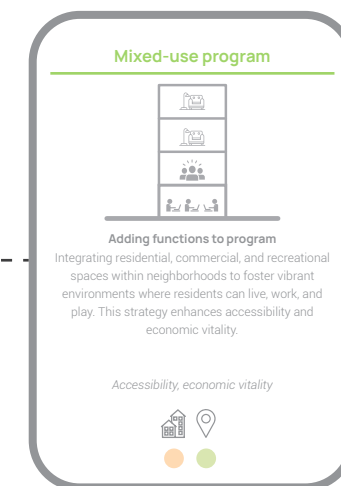
1st - 4th floor (4 dwellings)

SAAFTINGESTRAAT DESIGN STRATEGIES APPLIED/TESTED



HOUSING DIFFERENTIATION

- + variety of dwelling sizes accommodate different target groups
- dwelling(s) oriented to one direction
- not all dwellings include outdoor spaces



COMMUNAL SPACES INTEGRATED INTO PROGRAM

- + communal spaces connected to the staircase to stimulate social encounters

Thank you for listening!

HERITAGE & ARCHITECTURE

Resourceful housing: Adapting 20th
Century Heritage

DELFT UNIVERSITY OF TECHNOLOGY

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