

# Towards a dementia proof society

Designing for Care | P5 Presentation | 07-07-2020

Rozemarijn Peeters | 4382358

Als ik de dingen niet meer weet.

Als ik de namen niet meer ken,
en al wat ik weet meteen vergeet,
zodat ik onherkenbaar ben.
Herinner mij dan, stralend in de zon,
vol levenskracht, toen ik alles nog kon.

- Will Stipsen





## Ouderen vinden moeilijk nieuwe woonruimte



Carina van Aartsen 24 februari 2020, 16:27 1169 keer gelezen

Eén op de drie ouderen is de afgelopen tijd actief op zoek geweest naar nieuwe, geschikte woonruimte. Van die groep is het 89 procent niet gelukt om deze woonruimte te vinden. Dat blijkt uit een korte peiling van ANBO.

ANALYSE BEZOEKREGELING VERPLEEGHUIZEN

#### Naar buiten? De deur van het verpleeghuis zit nog op slot

Vanaf maandag mogen verpleeghuisbewoners weer meer bezoek ontvangen. Maar in de praktijk worden in elk verpleeghuis de bezoekregels anders uitgelegd. Tot frustratie van bewoners en hun naasten.

Michiel van der Geest 12 juni 2020, 21:18



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**DESIGN** 

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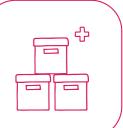


Fieldwork Conclusions

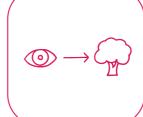










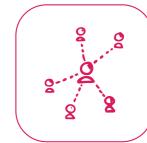


















Erica lives in Huis Assendorp. Since a while she is suffering from the first symptoms of Dementia. She is oblivious, confused and wanders through the hallways at night.



Erica lives together with her dog Dushi. Due to her symptoms she forgets to let her out every now and then. Luckily other residents from Huis Assendorp will pick up Dushi to let her out.

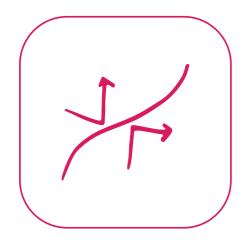


Erica had lost her keys. After searching and wandering for hours, they were found in her bag she was carrying the whole time.



To what extend can the concept of an open society help creating an architectural setting in which people with dementia no longer have to move to an enclosed care facility?





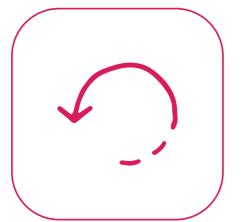
Boundaries: where things end



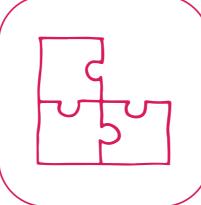
Borders: where species can interact



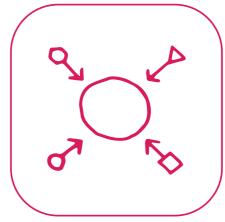
Diverseness



Unresolved narrative



Incomplete form

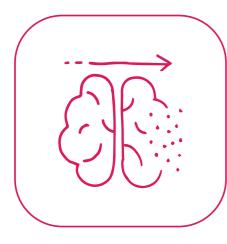


Inclusiveness



Expression of human behaviour

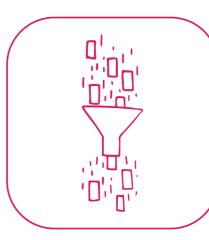




Default between short term and long term memory



Rolling back memory



Poor filtering of incentives





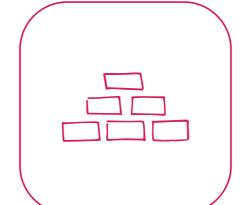
Small scale living



Stimulance via movement and sound



Walk



Materials



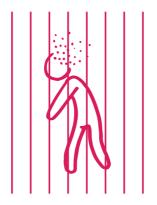
Colours



### Enclosed care facility

"A closet, room, or other comparable, stationary, and fully enclosed area equipped with secured locks or other functioning security devices that permit access only by a registered primary caregiver or registered qualifying patient."

- Law insider (n.d.).



A sick person locked up as a prisoner



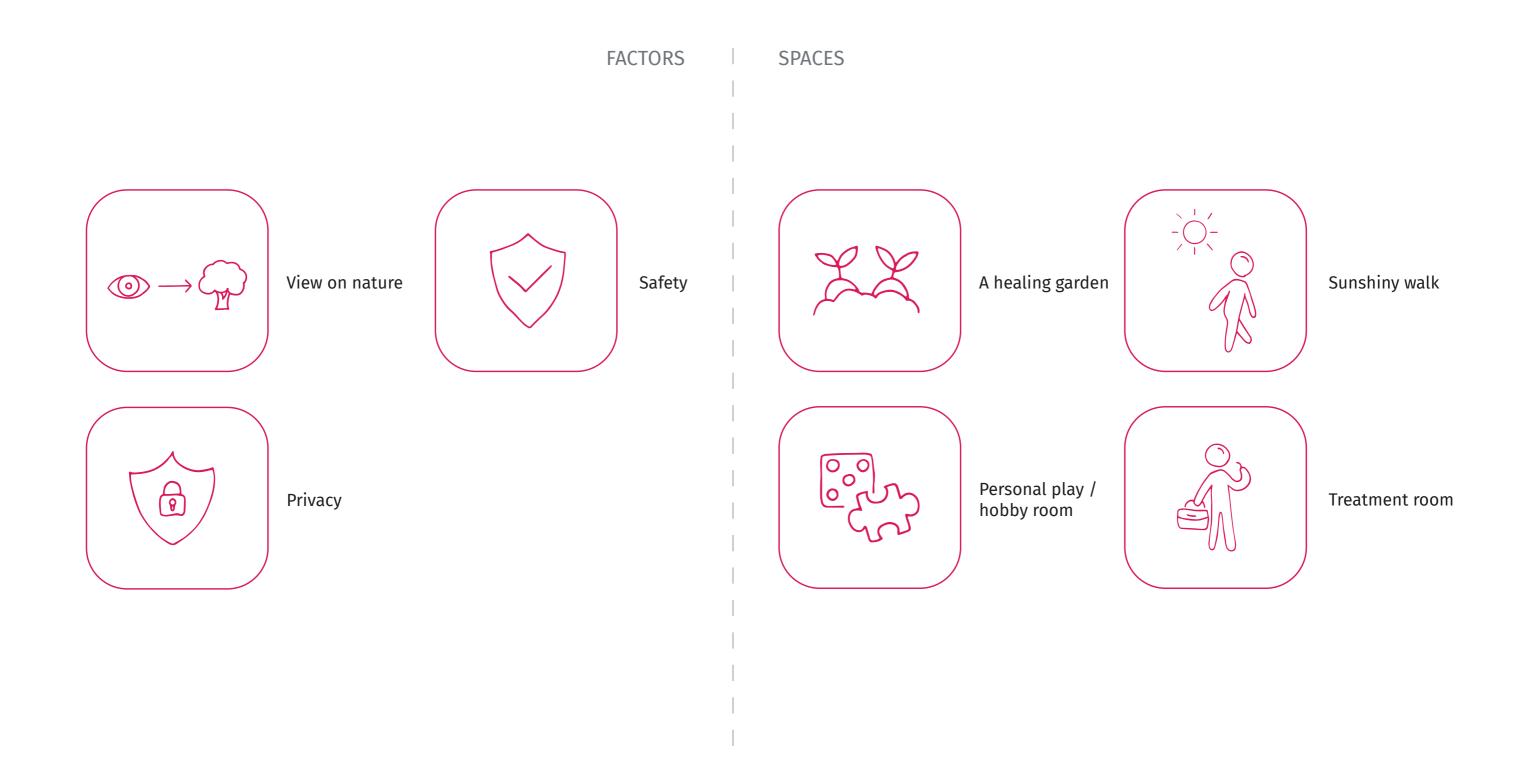
Use domotica for those who need it



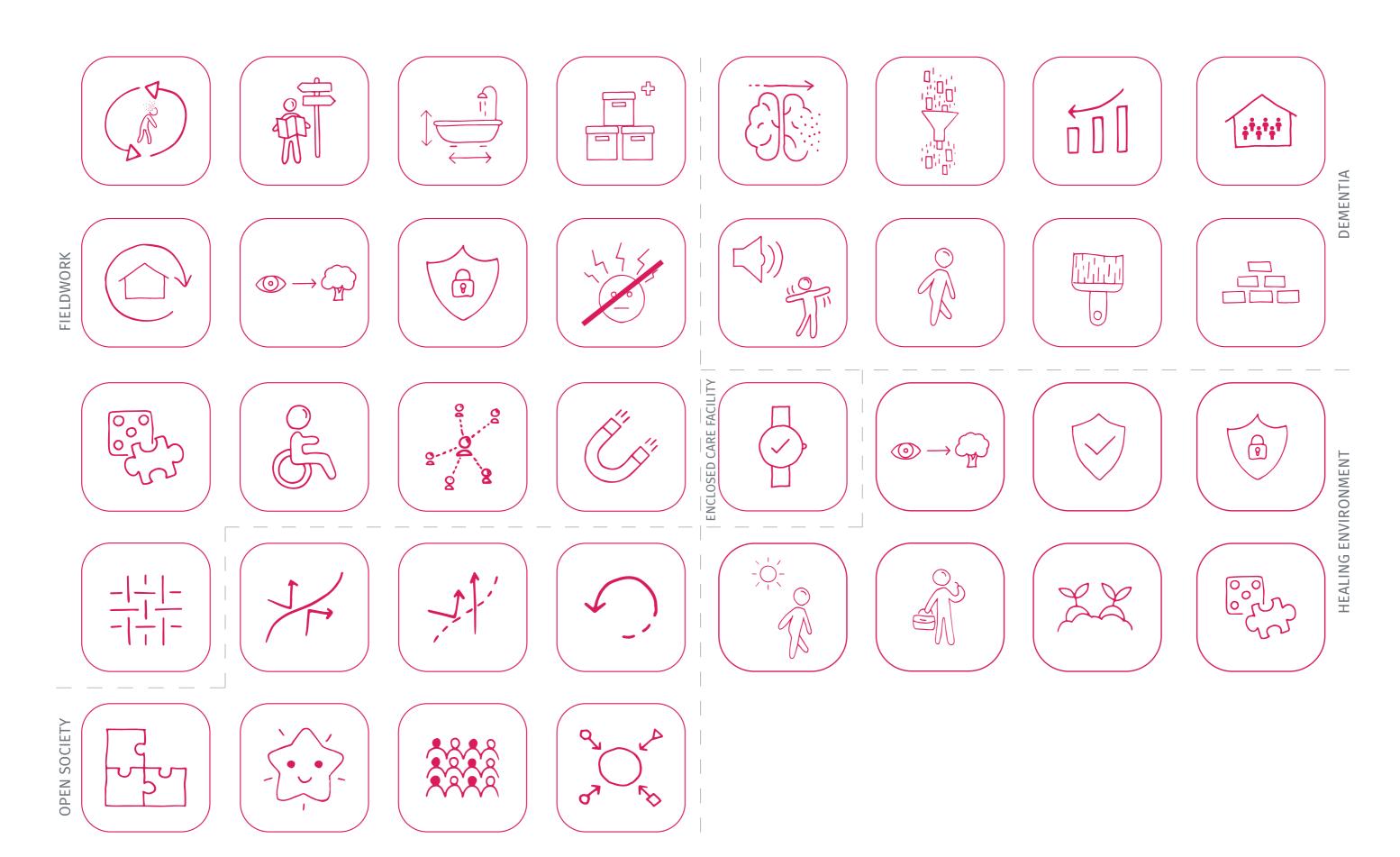


## Healing environments for Elderly

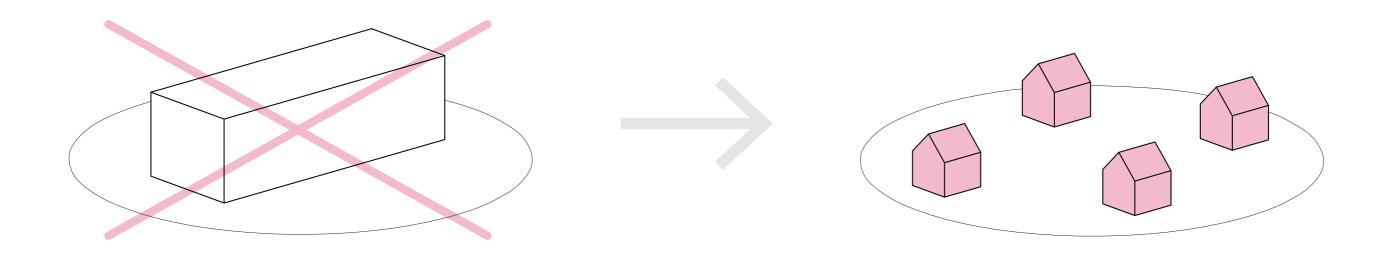
**Dutch Housing Tutorial** 



# Design tools Summary

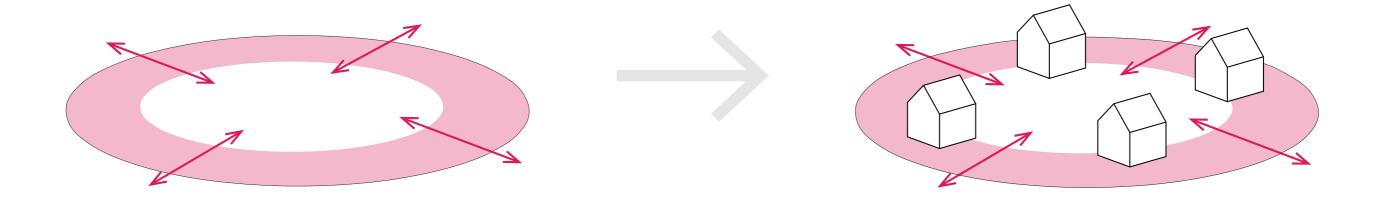


### Small scale collective living



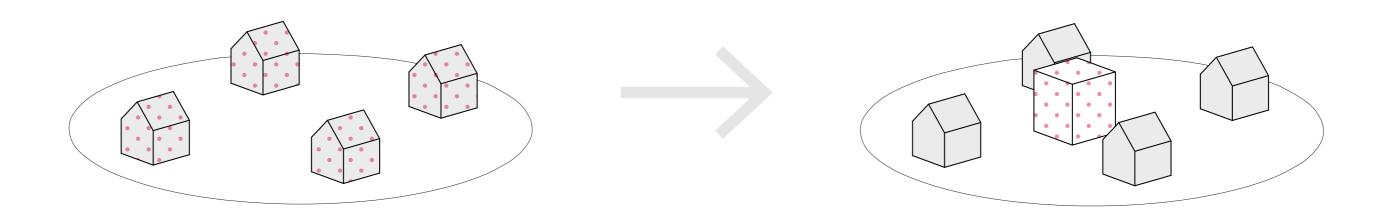
One household contains of 6 private units. When people know each other they will take care of each other. Houses should be easy adaptable.

#### Focus on Borders



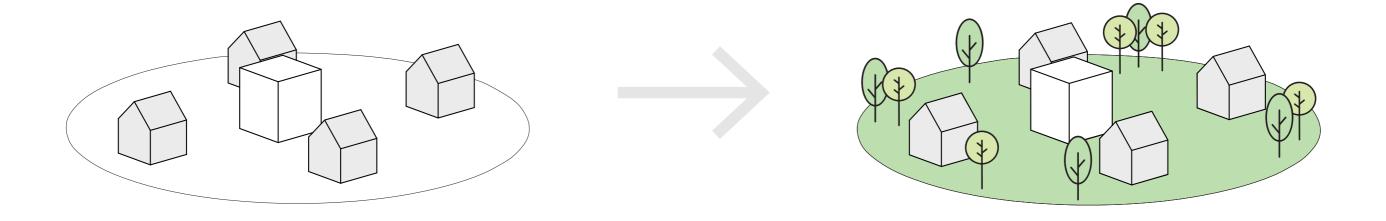
Place houses in border zones to enhance interaction with the neighbourhood.

### Living & Activities separated



Separate living and activities to create a balance between serenity and liveliness for the residents.

## **Healing Surroundings**

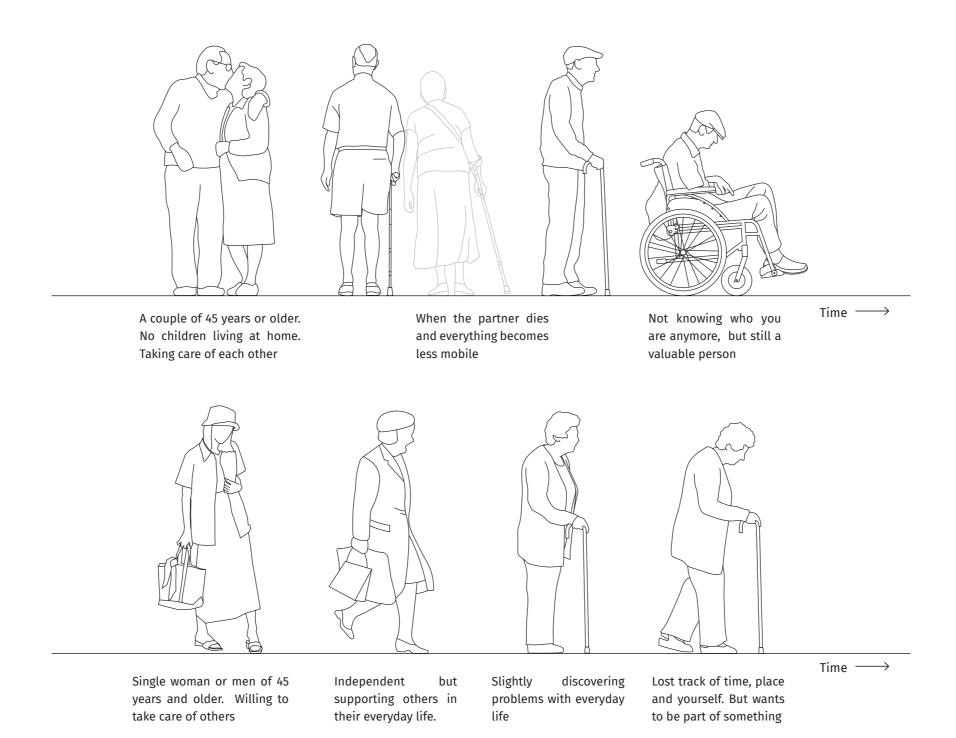


Create a healthy surrounding environment.



## The target group

#### an aging group



### Dementia

#### Four phases

Four different phases of dementia can be distinguished. Sometimes phases run together, which makes it harder to distinguish. The loss of the 'I' experience occurs on a conductive scale.

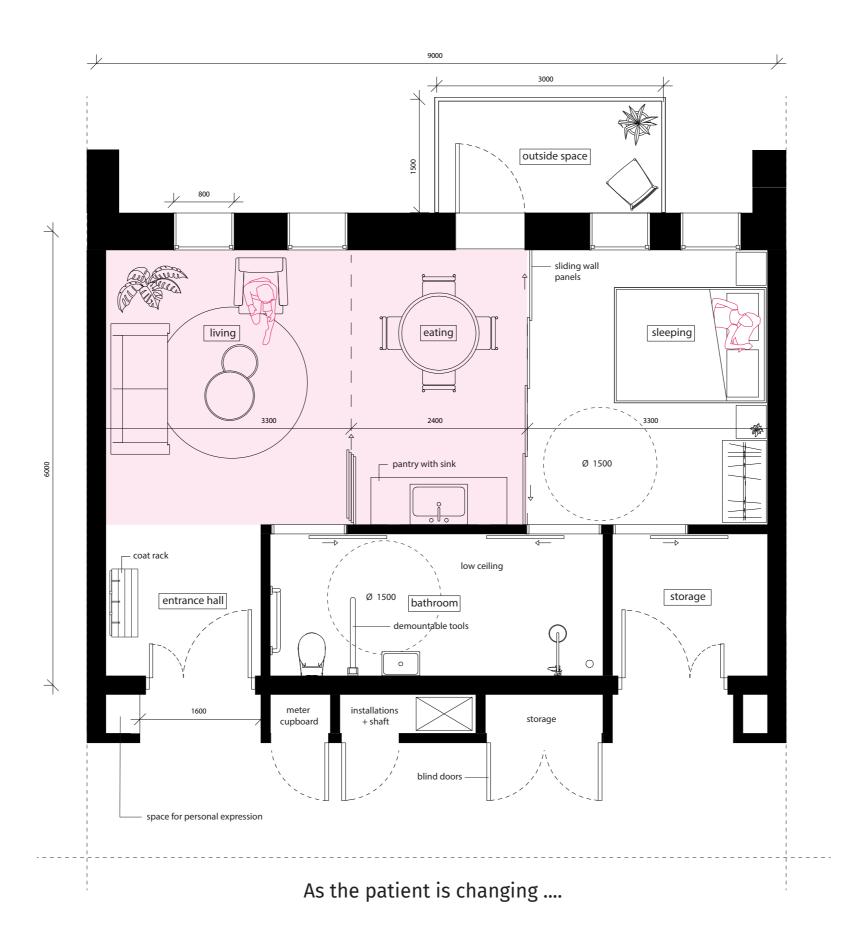
|             | de <mark>bedreigde</mark> ik<br>(the threatened me)  | de verdwaalde ik<br>(the lost me)  | de <mark>verborgen</mark> ik<br>(the hidden me)   | de verzonken ik<br>(the sunken me)                                       |
|-------------|--|--|---|--|
| TIME        | Lives in the present   | Mixes past and present   | Lives in the past   | Lives in inner world   |
| AWARE       | Is aware of memory<br>problem and<br>deterioration, tries to<br>hide problems              | Limited awareness of<br>memory problem and<br>deterioration  | No awareness of<br>memory problem and<br>deterioration  | No awareness of memory problem and deterioration                         |
| EMOTIONS    | Nervous, irritable,<br>insecure, suspicious,<br>angry, sadness and fear.<br>Blame another. | Restless, fear, panic.<br>Often shows emotions.<br>Mood swings. Often 'on<br>their way home'.  | Often shows emotions.  Mood swings. Cries / laughs for no apparent reason.  | Emotions are difficult to perceive.                                      |
| LANGUAGE    | Verbal communication,<br>uses correct words<br>and sentences. Voice<br>expresses emotion.  | Verbal and non-verbal communication, problems with finding correct words. Voice is monotonous.   | Primarily non-verbal communication. Major problems with wording. Voice melodic and slow. Repetition of words and sentences. | No verbal communication. Voice is weak and soundless.                    |
| PHYSICAL    | Can perform most<br>general daily life<br>activities himself,<br>sometimes needs help.     | Needs guidance with<br>general daily life<br>activities. Sometimes<br>incontinent by accident  | General daily life activities must be taken over. Becomes more passive, can no longer walk independently. Incontinent.      | Completely dependent on others. Complete passivity. Incontinent.         |
| STIMULI     | Conscious of environment   | Usually, responds<br>alert to environmental<br>stimuli   | Occasionally, stimuli<br>from the environment<br>still come in  | Most of the stimuli from the environment don't come in anymore           |
| ORIENTATION | Knows what time of day it is. Knows the way home. Recognizes family / caregivers.          | Difficulties with time and day planning. Limited knowledge of way in and around the house. Limited recognition of family and caregivers.                   | No sense of time. Gets lost in own house and the immediate surroundings. No recognition of family and caregivers            | Complete<br>disorientation, has no<br>idea of time, place and<br>person. |
| OBJECTS     | Recognizes the function of objects and uses them correctly.                                | Collects objects, often loses objects. Does not recognize the function of various objects and does not use them correctly.  Designing for Care   P5 Preser | A certain object can offer comfort. Hardly recognizes the function of objects.  | Does not recognize the function of objects.                              |

## Dementia

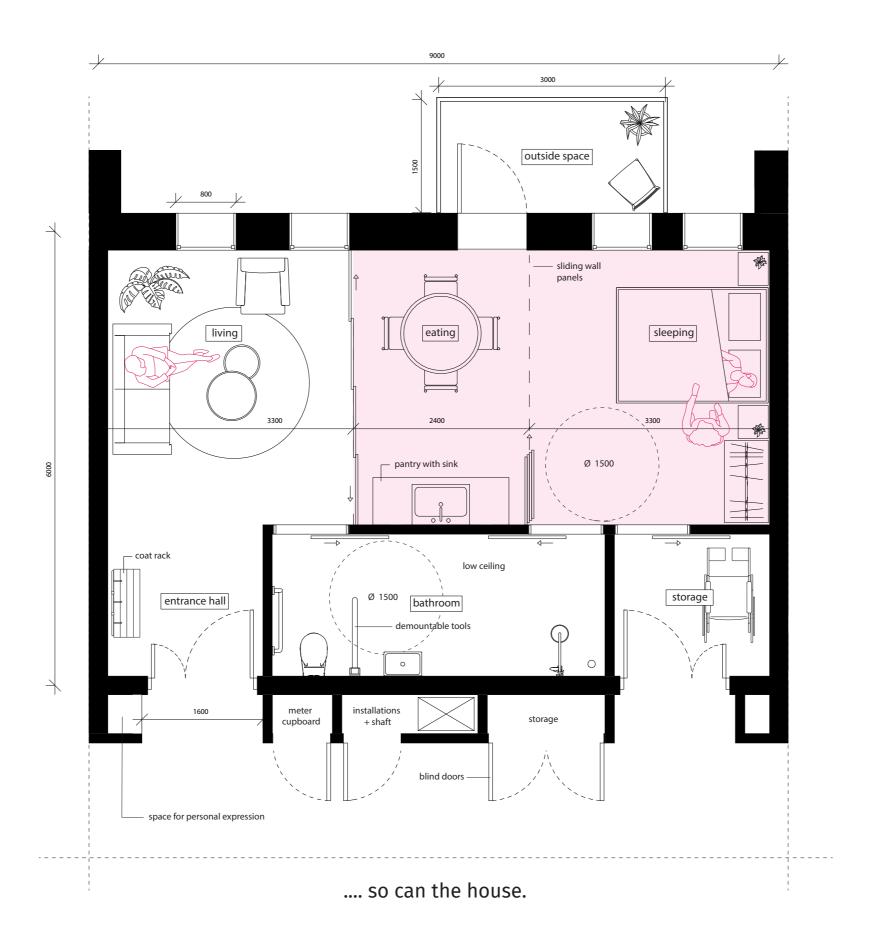
#### & its meanings for architecture

| de <mark>bedreigde</mark> ik<br>(the threatened me) | de <mark>verdwaalde</mark> ik<br>(the lost me) | de <mark>verborgen</mark> ik<br>(the hidden me)   | de <mark>verzonken</mark> ik<br>(the sunken me) |
|---|--|---|---|
| Bedroom   | Bedroom  | Bedroom   | Bedroom   |
| Bathroom  | Bathroom                                       | Bathroom  | Bathroom  |
| Dining room   | Dining room                                    | Dining room   |   |
| Living room   | Living room                                    | Living room   |   |
| Kitchen   | Kitchen  | ]<br>   | nand  |
| Hobby room  | Hobby room                                     | l  <br>   | care demand                                     |
| Laundry room  | Laundry room                                   |   |   |
| Supermarket   | Supermarket                                    |   |   |
| Cafe  | Immediate outside surroundings                 |   |   |
| Various outside spaces                              |  |   |   |
|   |  |   |   |
|   |  |   |   |
|   |  |   |   |
|   |  |   | ·<br>·  |
|   |  | <b>*</b> + <b>*</b> * * <b>*</b> * * * * |   |
| informal care                                       | informal care  Designing for Care   P5 Preser  | informal care + professional care   ntation   Rozemarijn Peeters  | professional care                               |

#### Normal situation

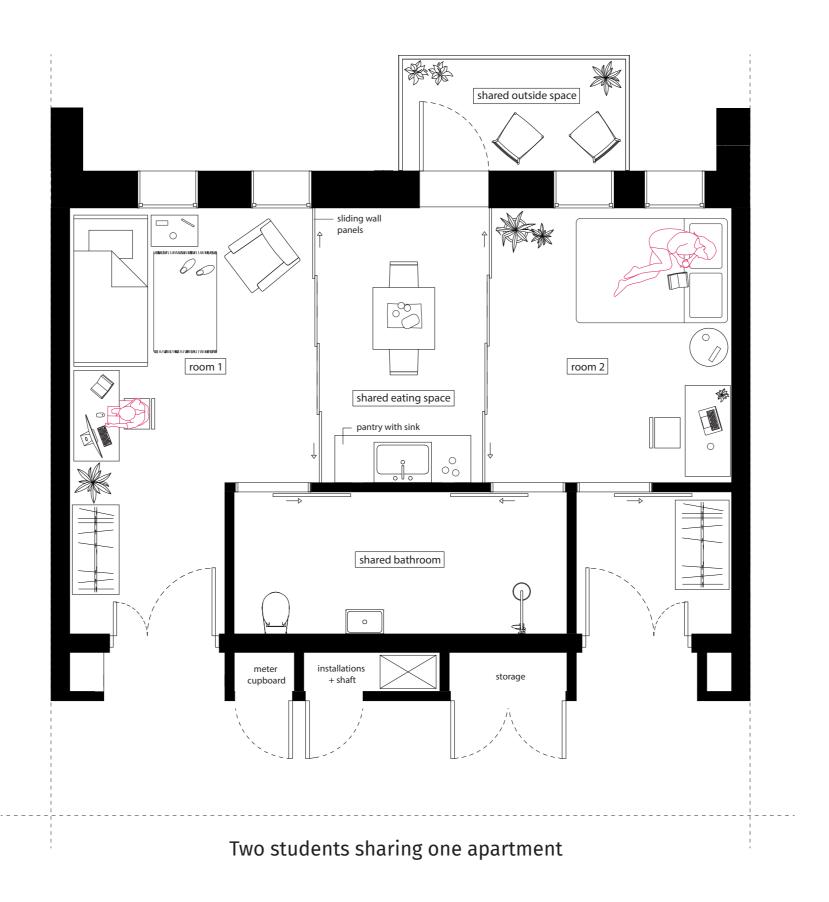


#### Care situation



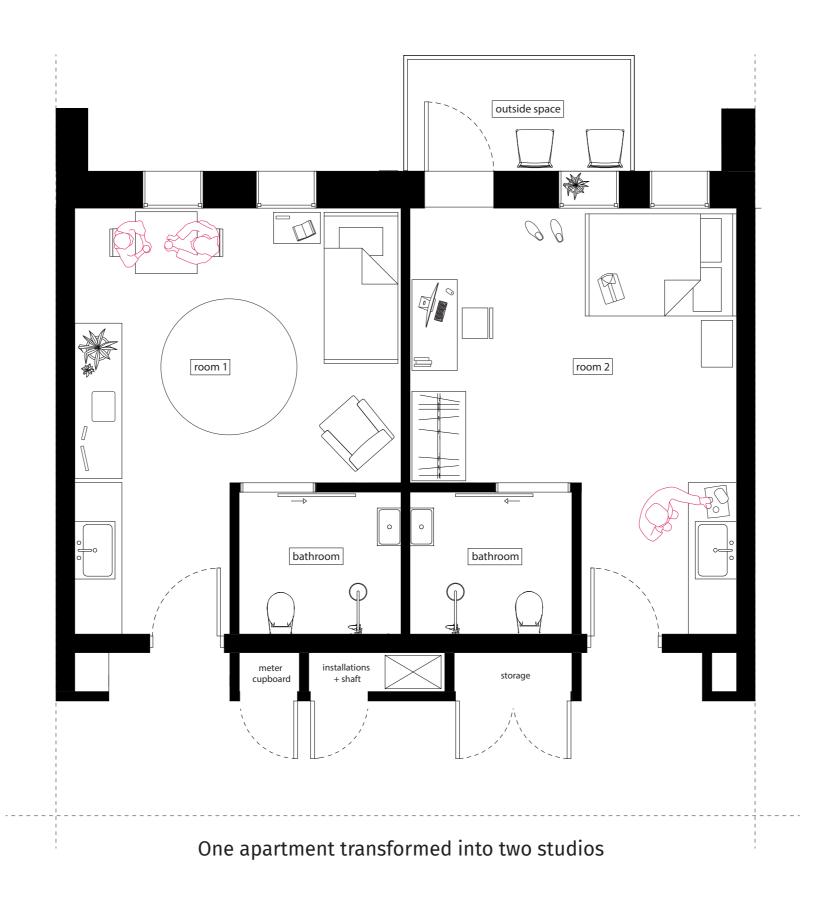


In the future



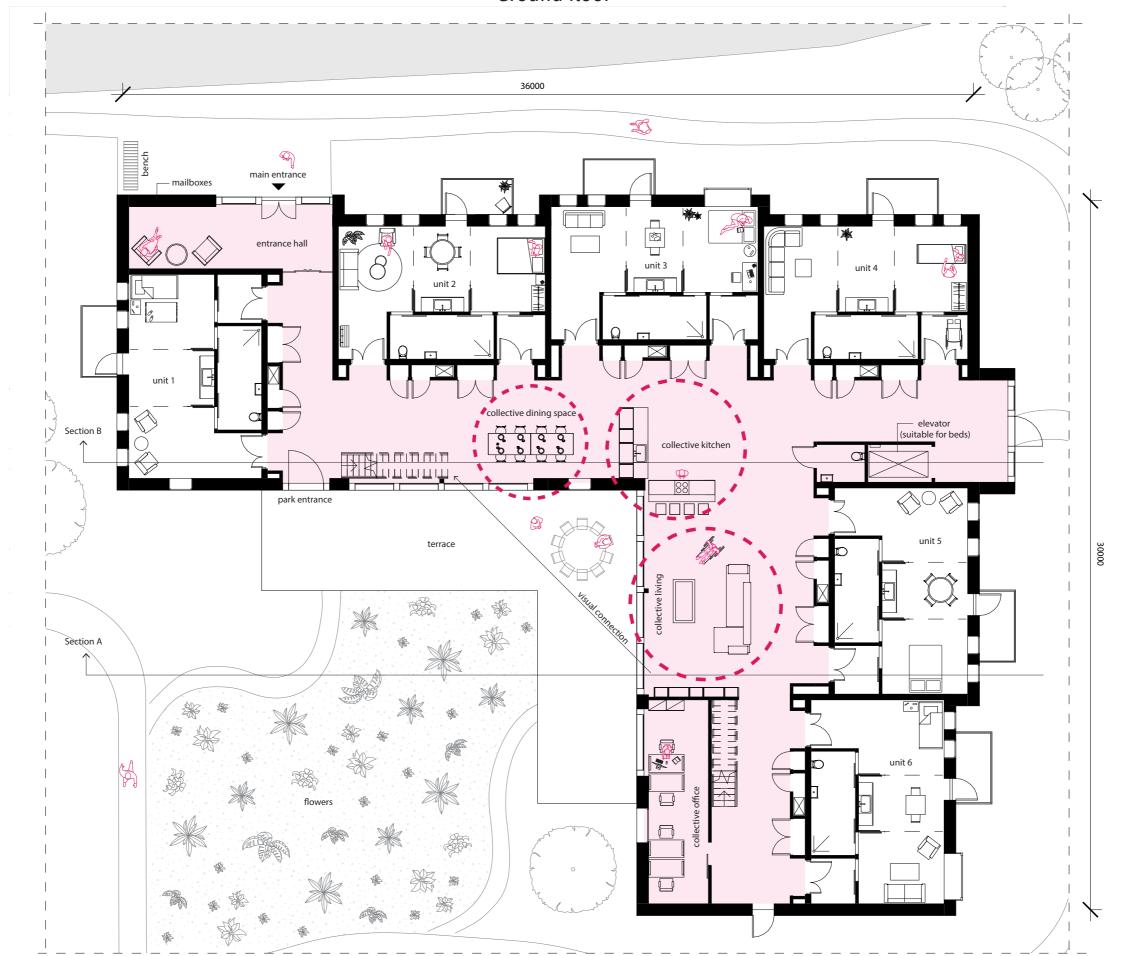
1 m

In the future

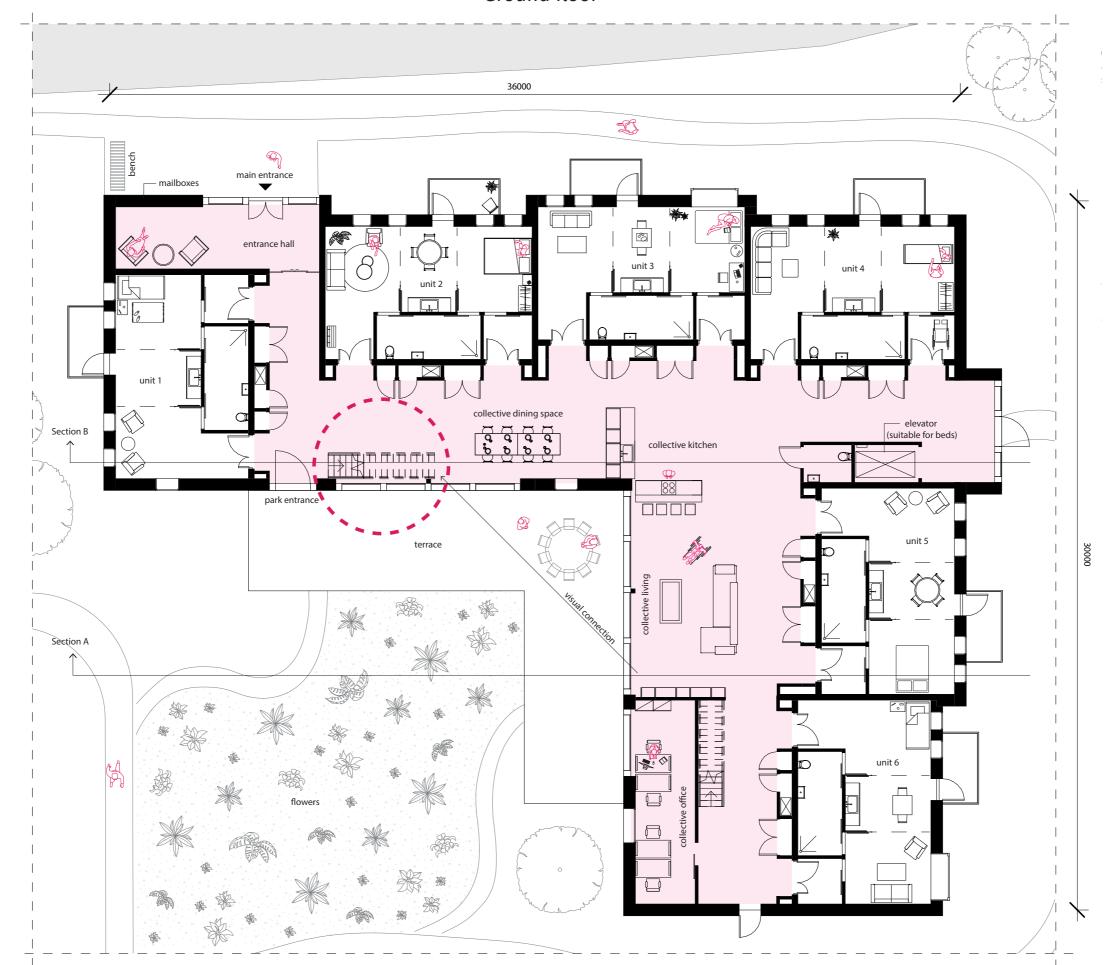


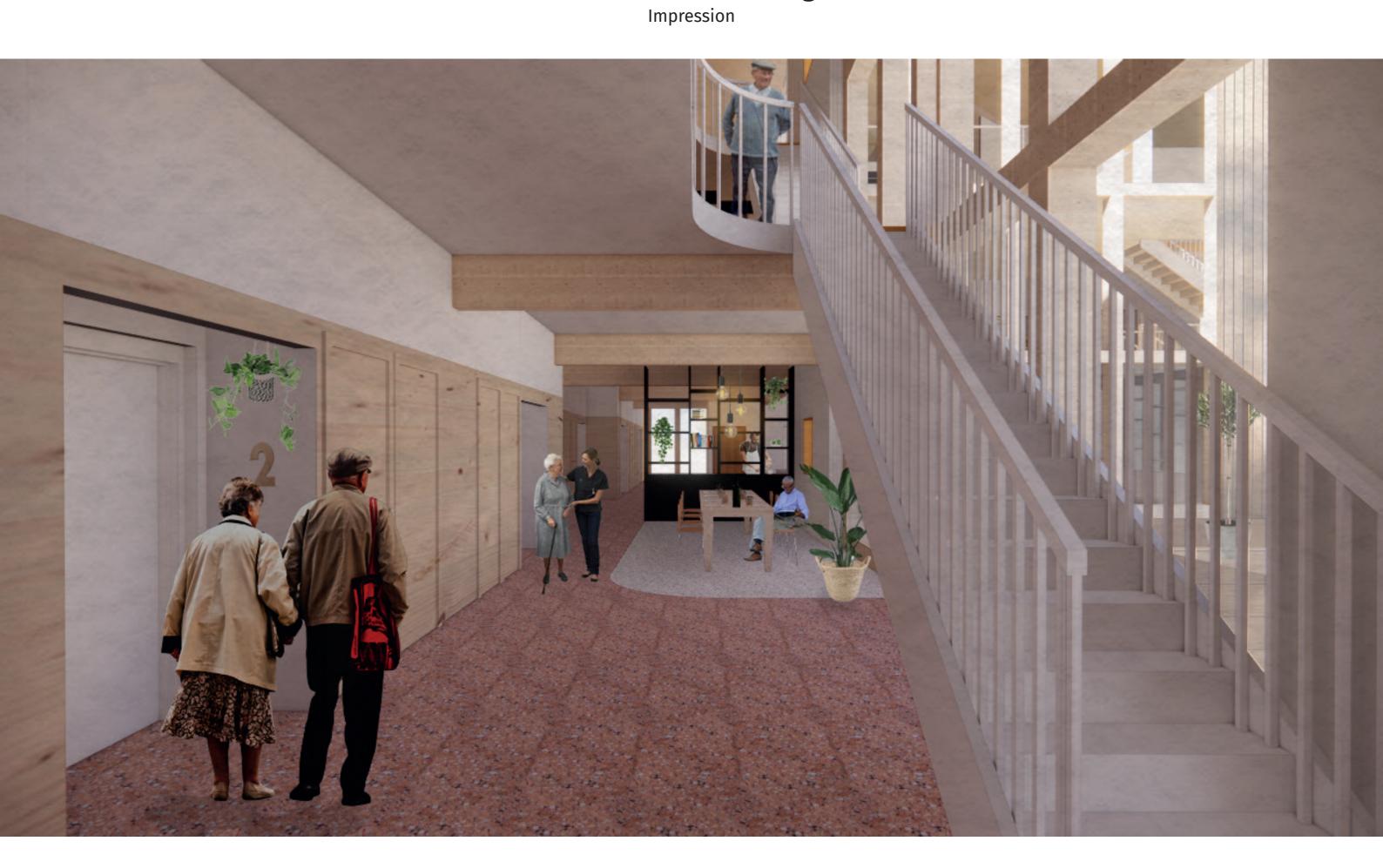




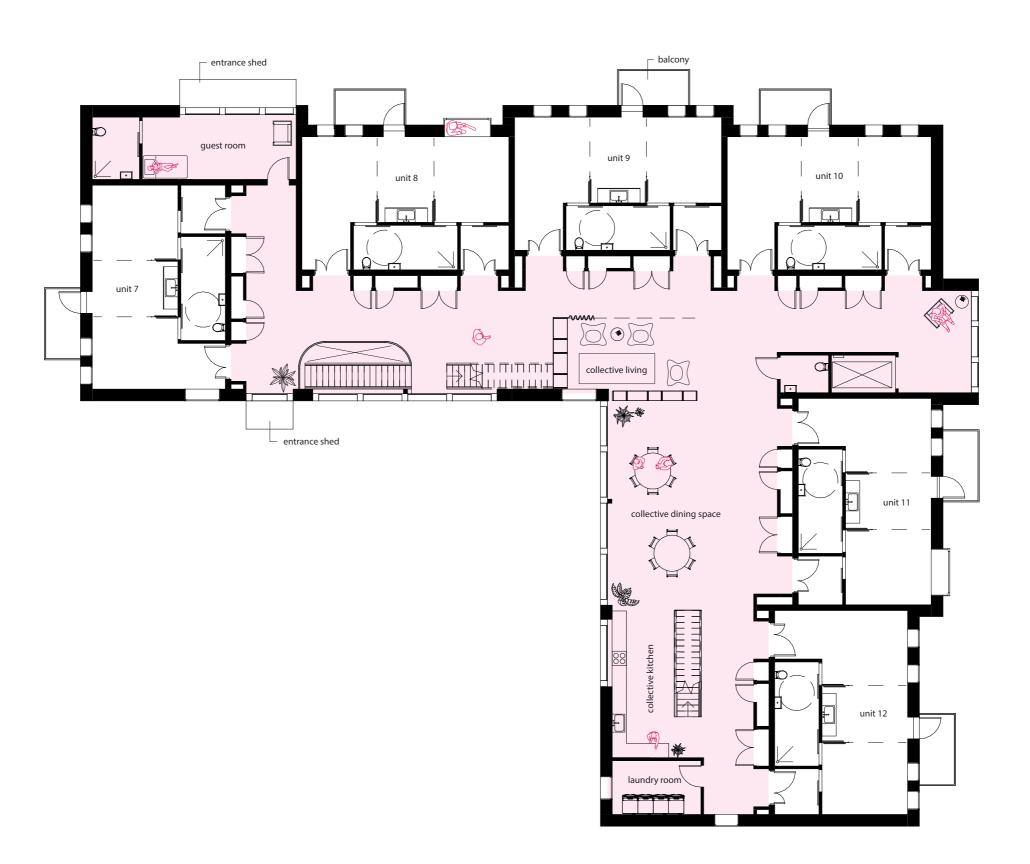






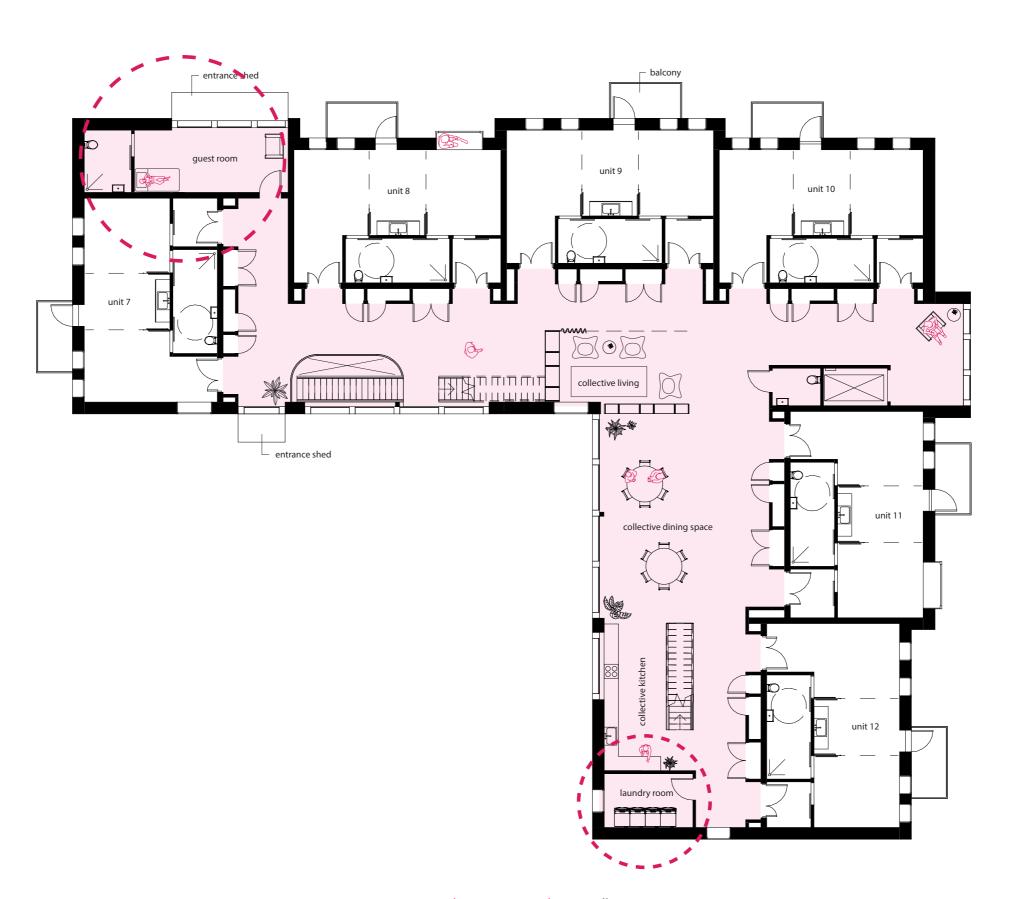


# The collective living First floor



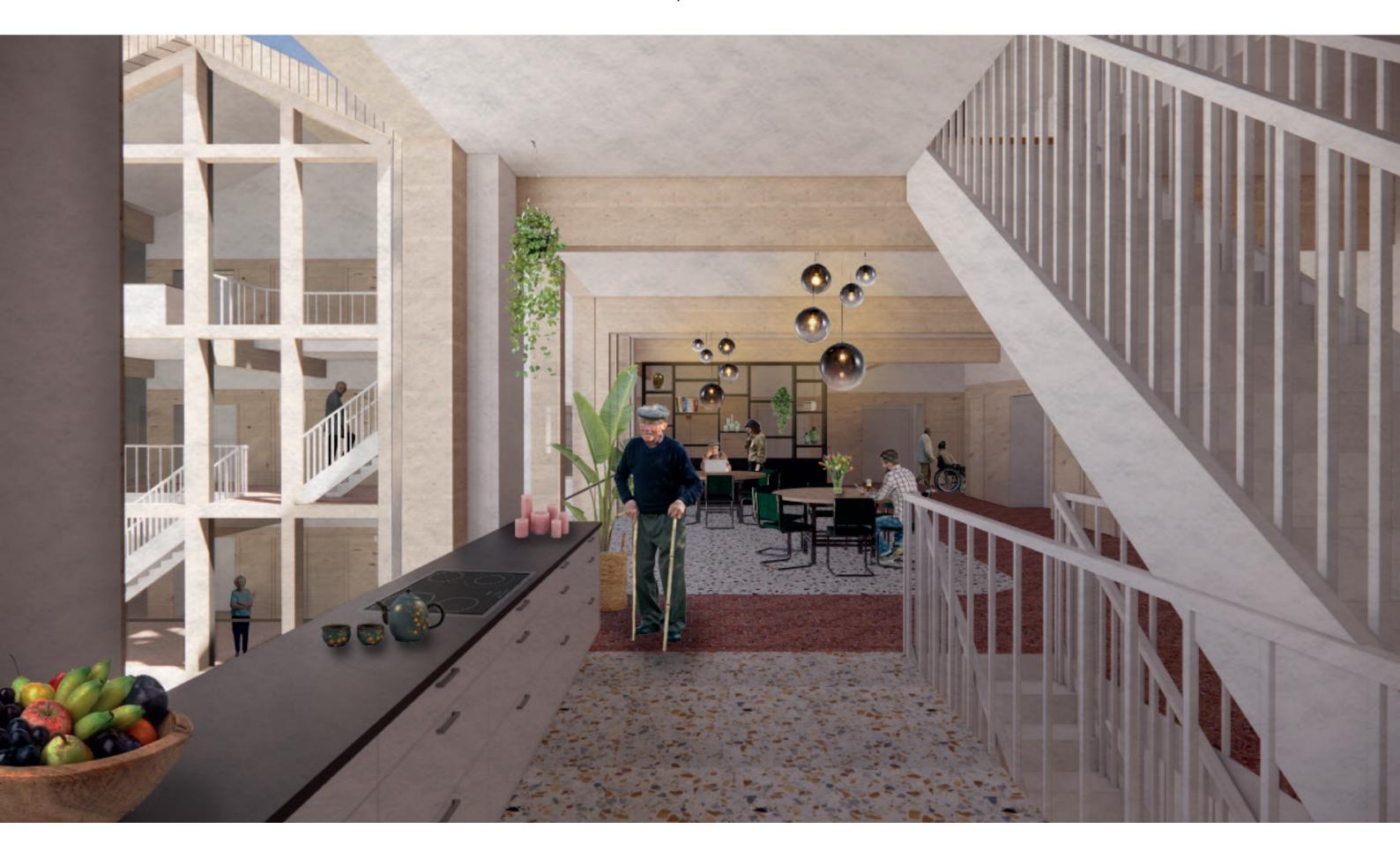


# The collective living First floor

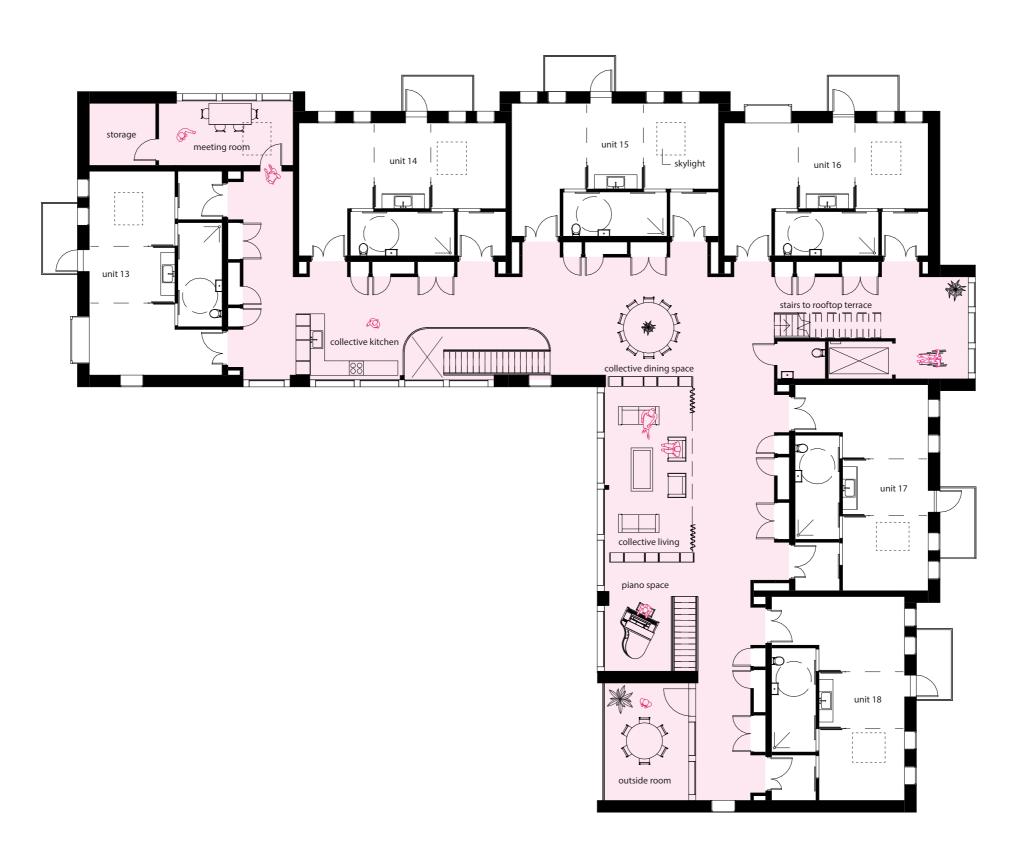




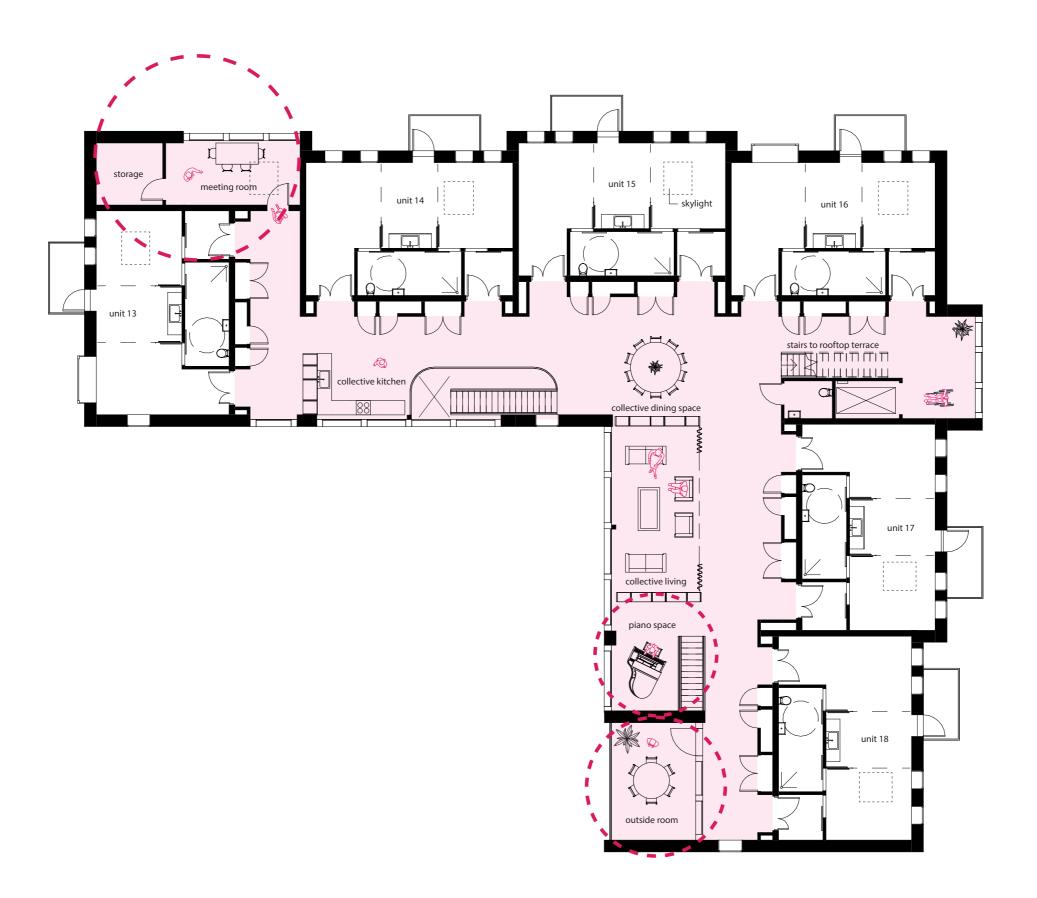
Impression



# The collective living Second floor



# The collective living Second floor





# The collective living

Impression



## The collective living

#### Rooftop terrace



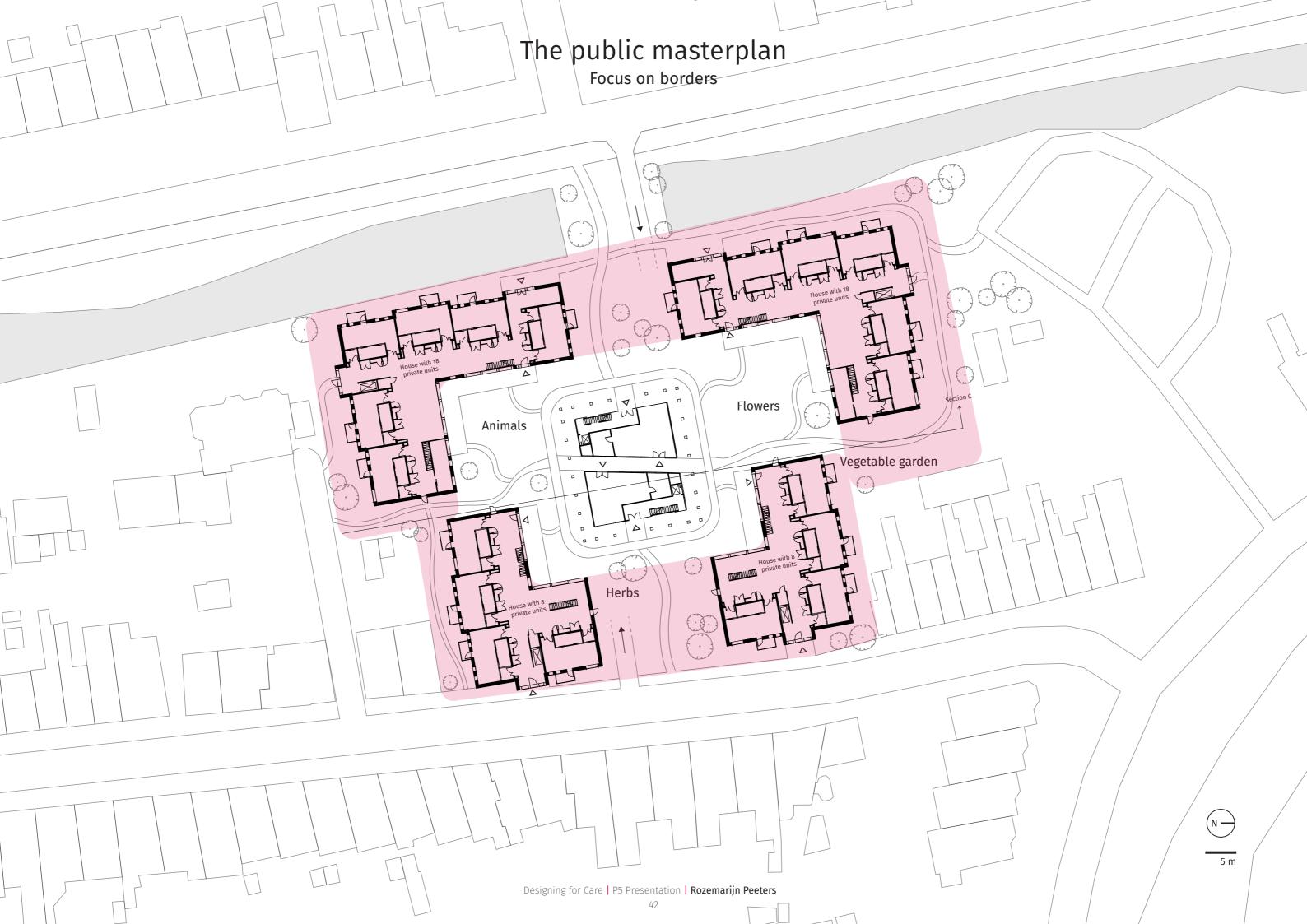


#### Section B

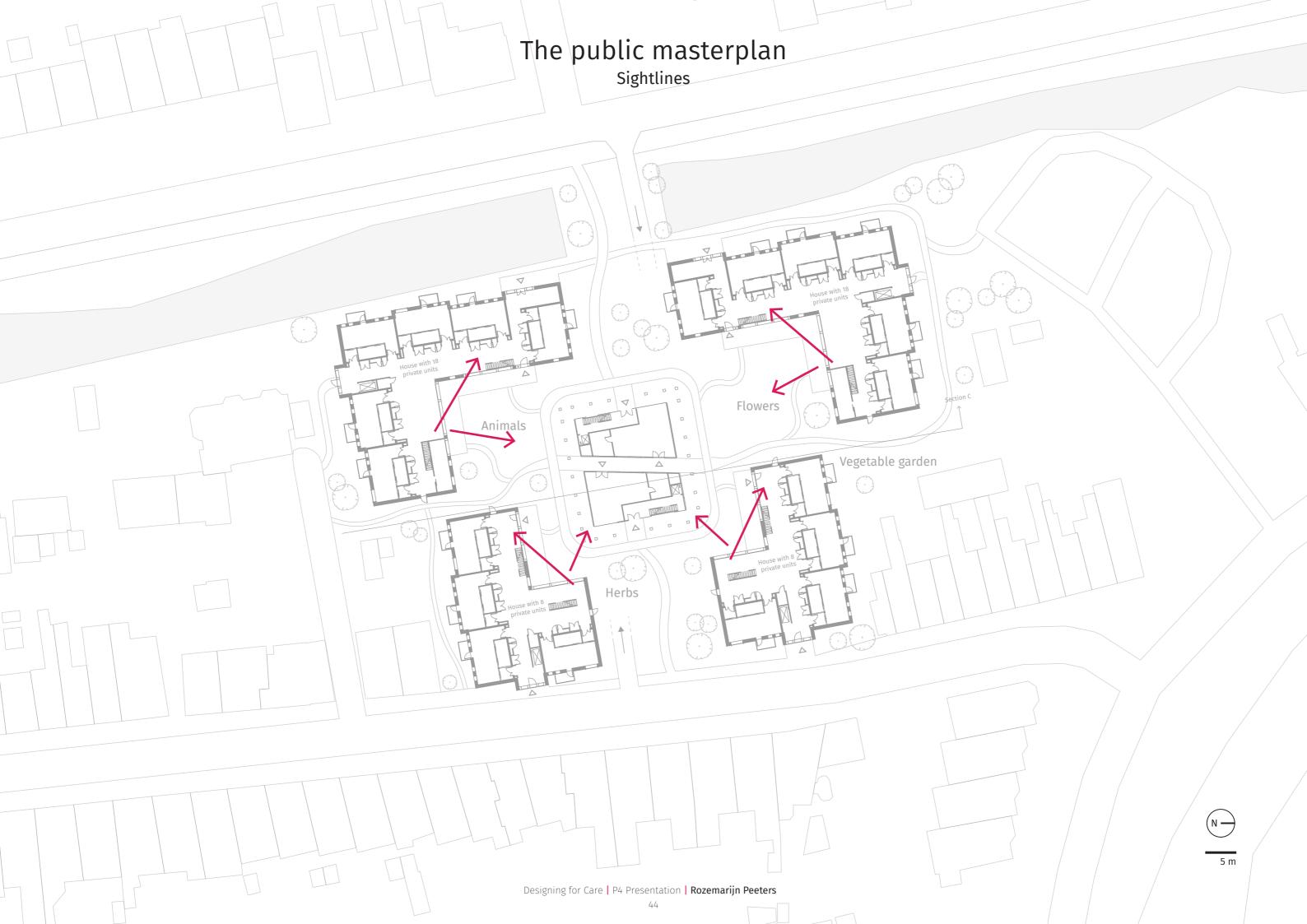












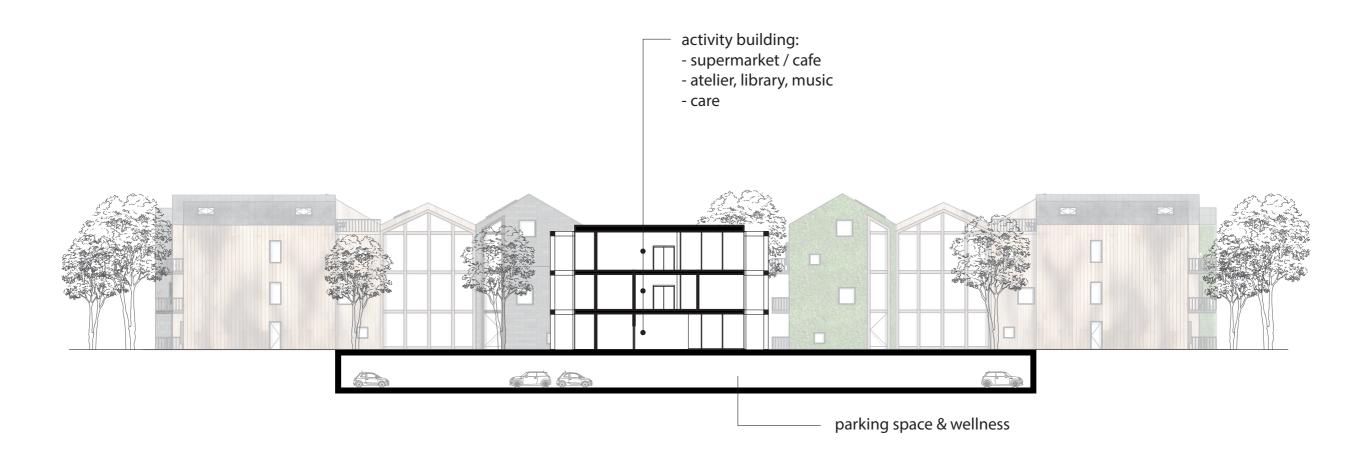


# The masterplan

Impression



# The masterplan Section



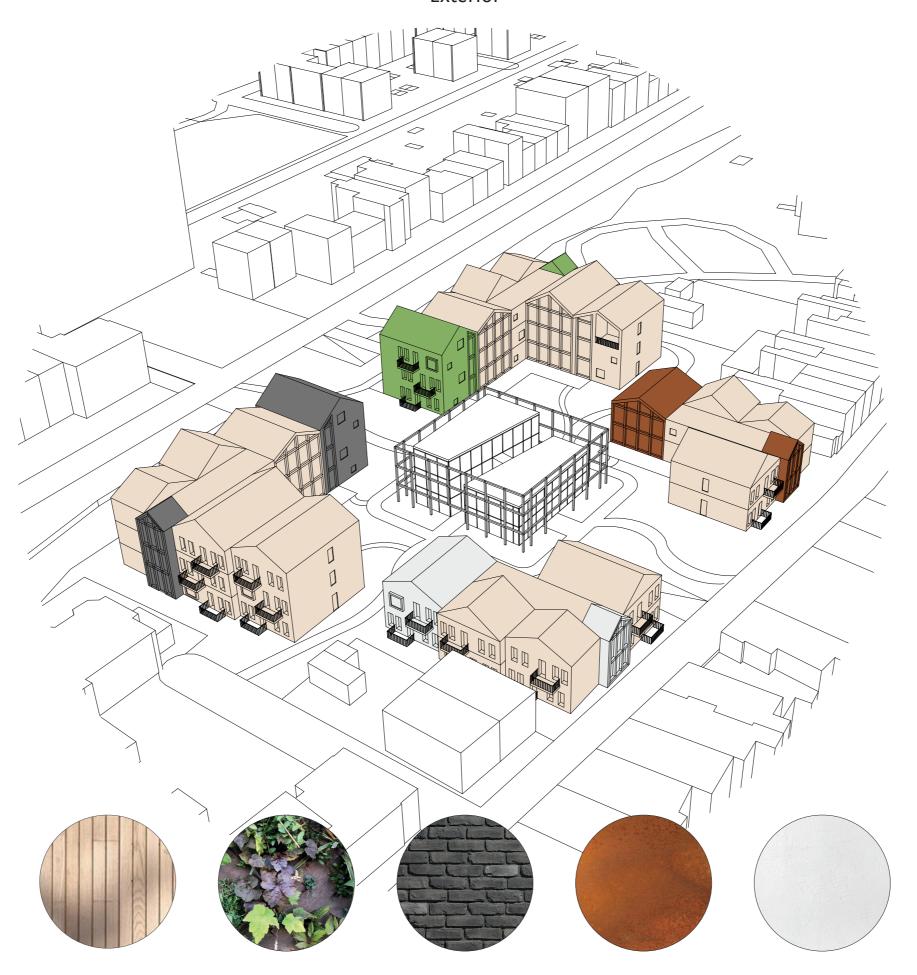
# The city Leiden





#### Materials

#### Exterior



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#### Elevations

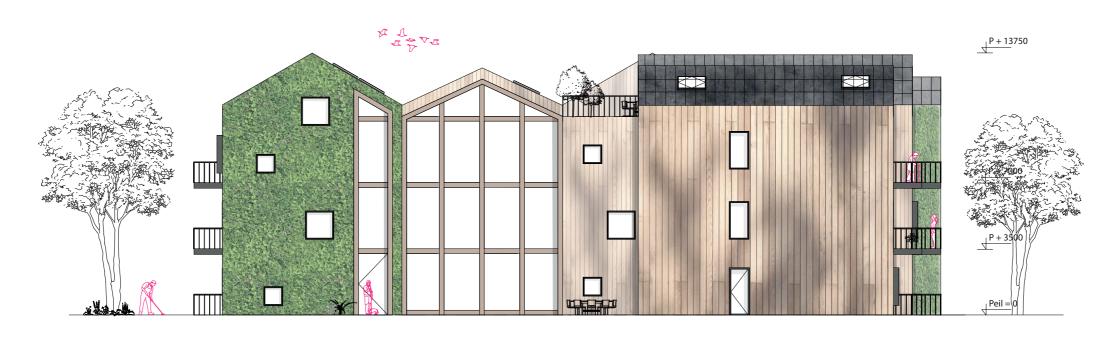


west elevation



north elevation

#### Elevations



east elevation



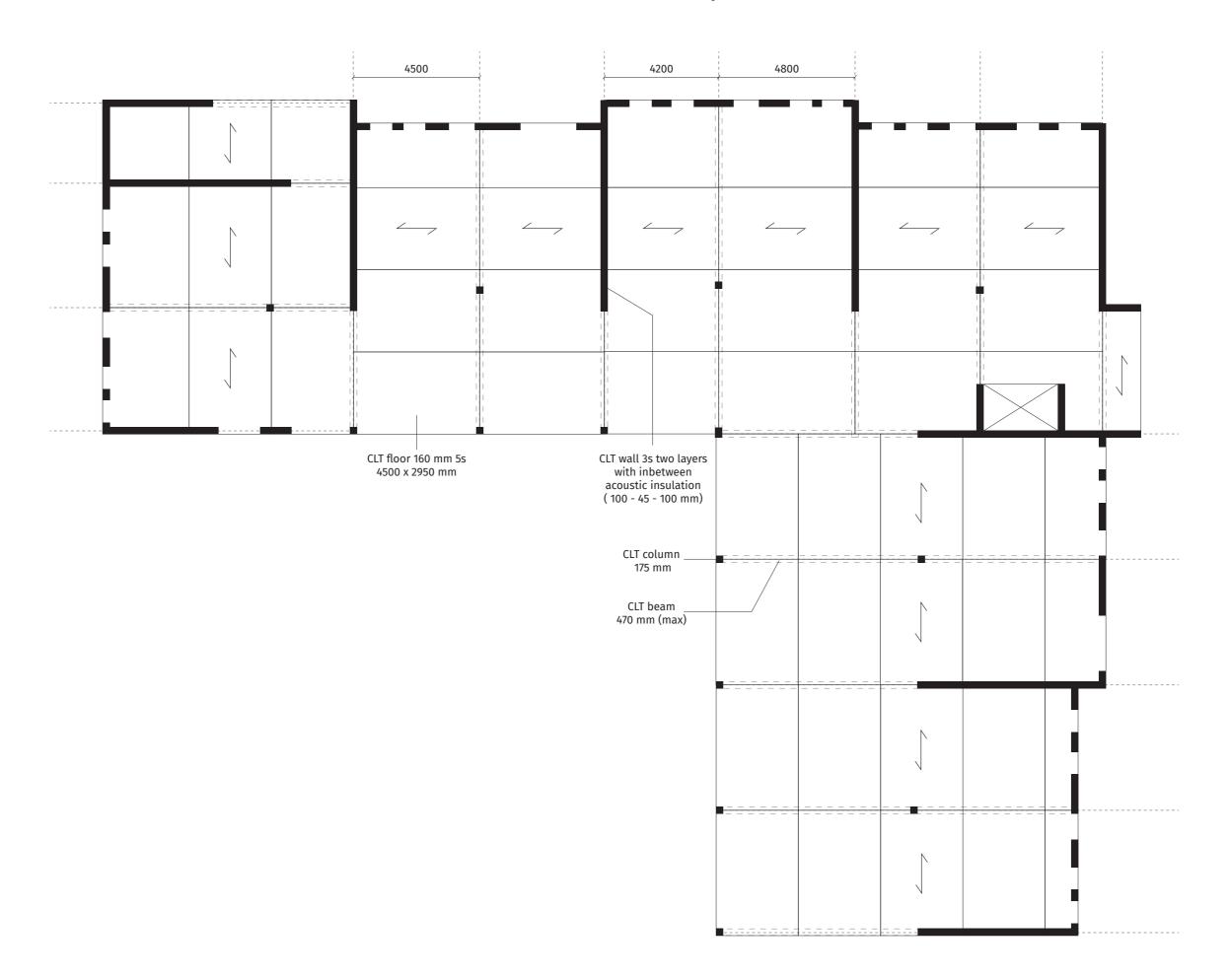
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### Materials

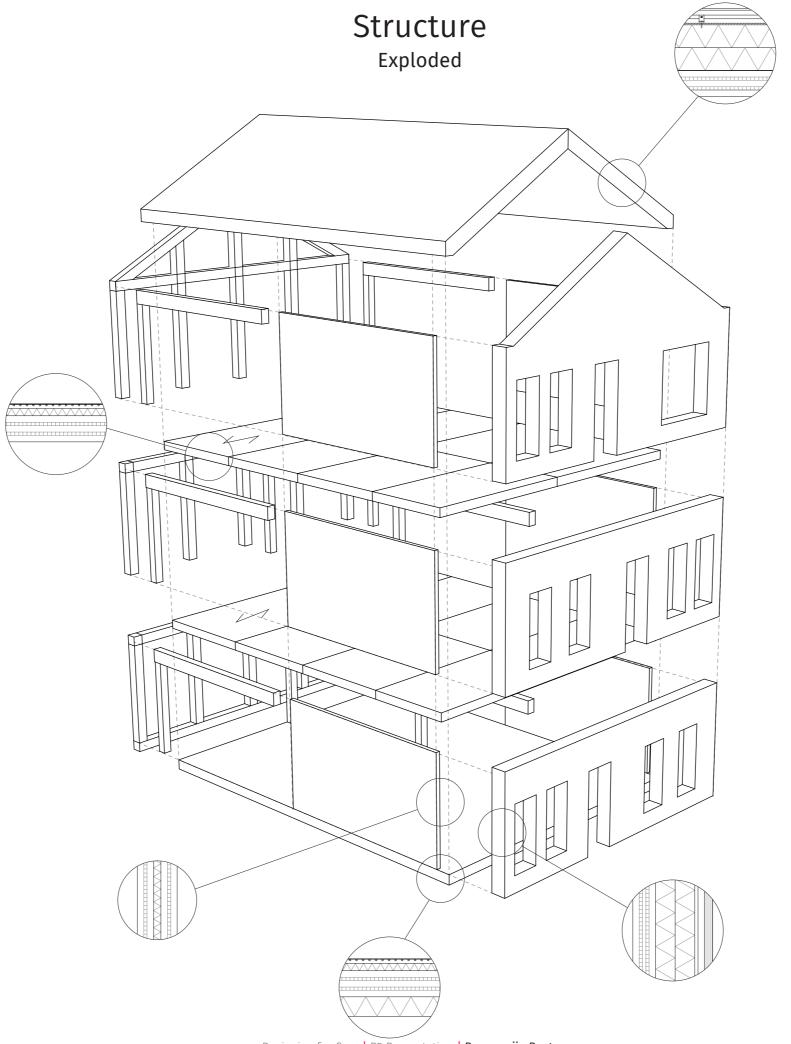
Impression



## Structure in floorplan

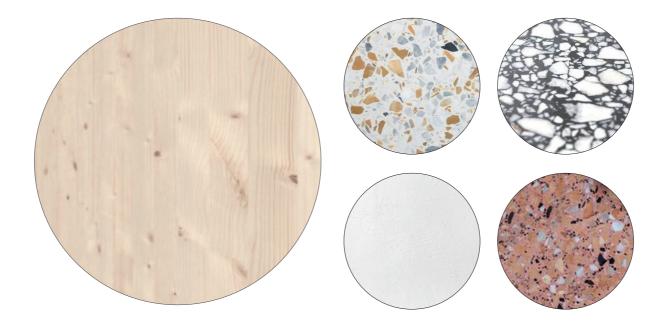






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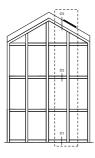
# Materials Interior



## Facade fragment

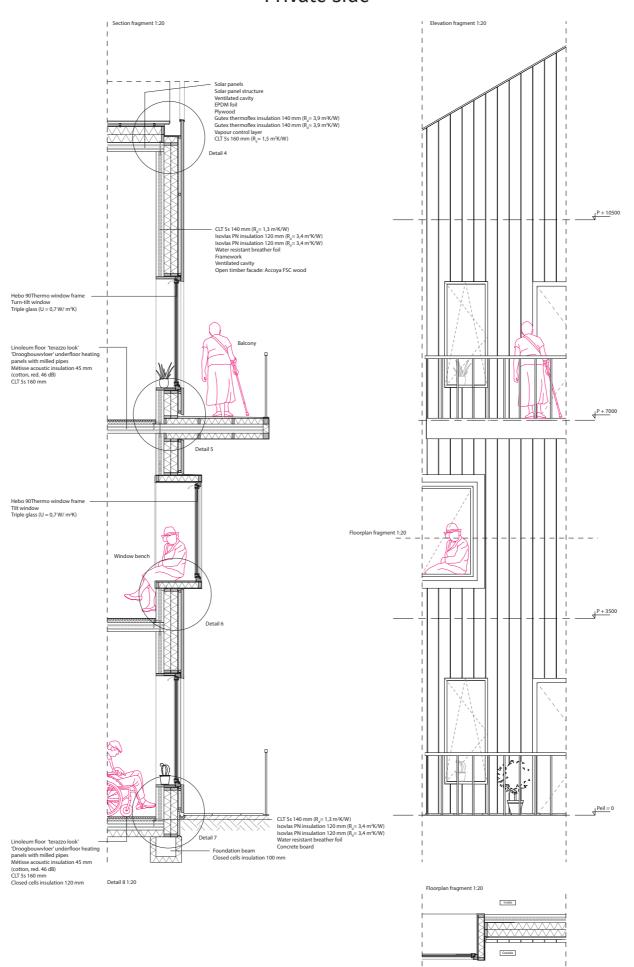
# Collective side



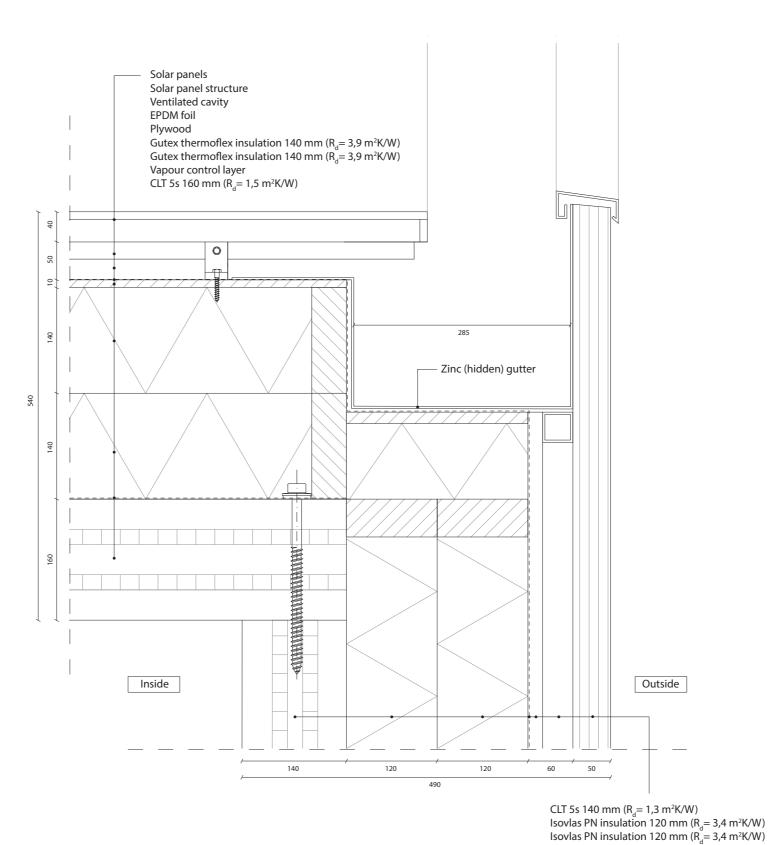


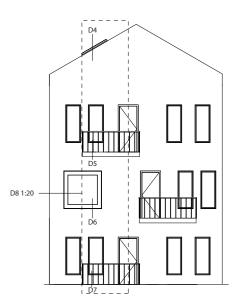
## Facade fragment

#### Private side







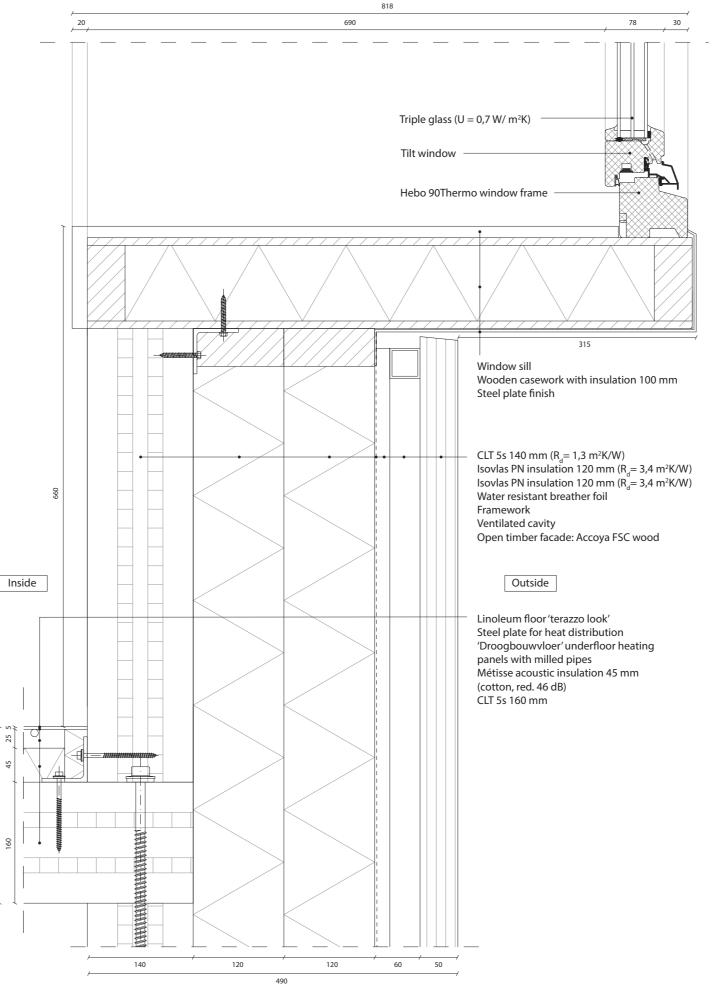


Elevation 1:200

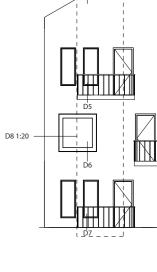
Water resistant breather foil

Open timber facade: Accoya FSC wood

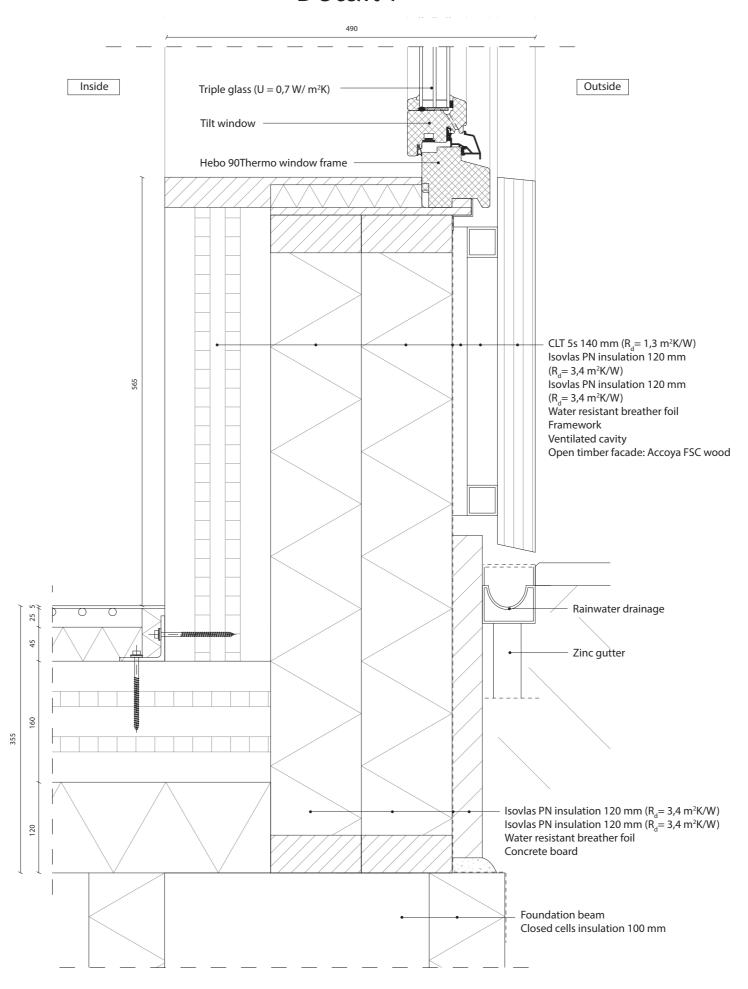
Framework Ventilated cavity

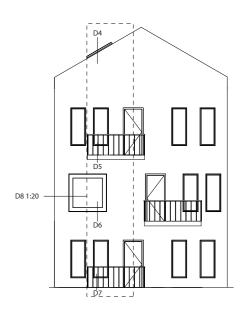


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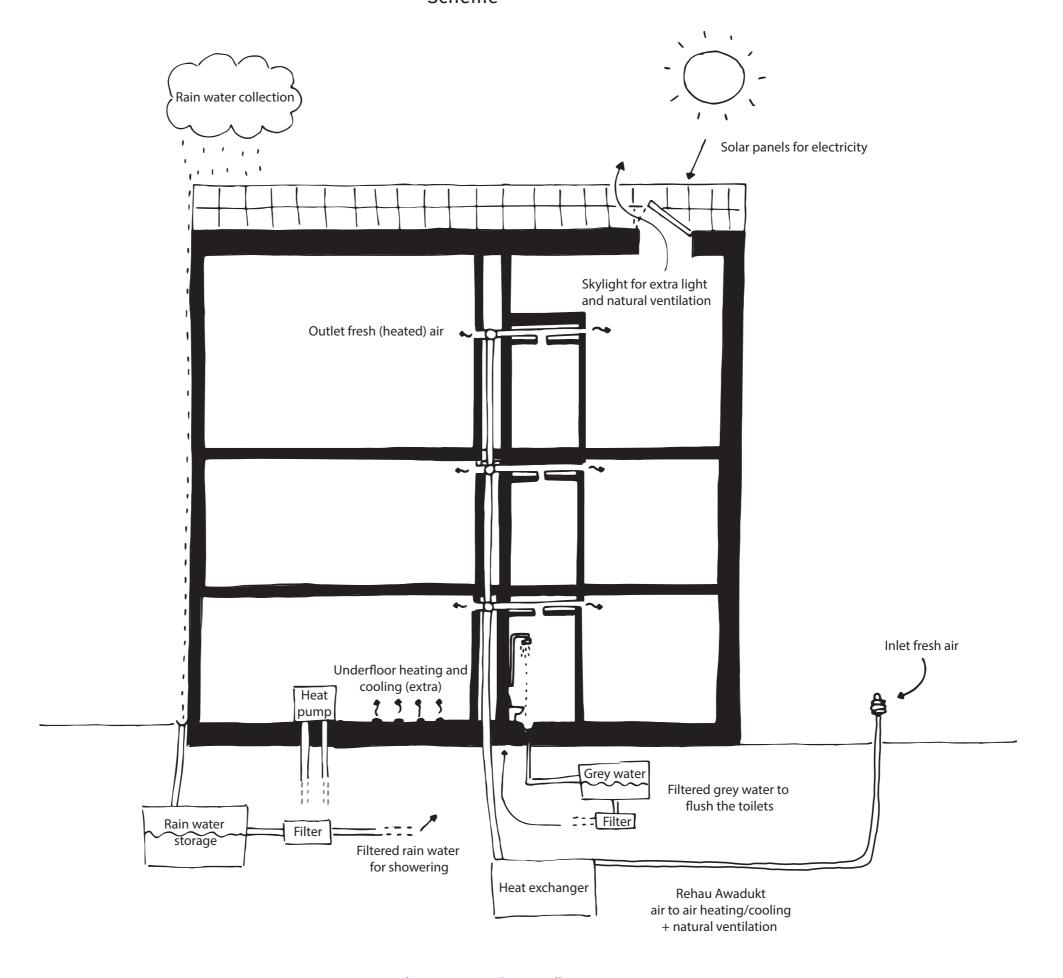
Elevation 1:200





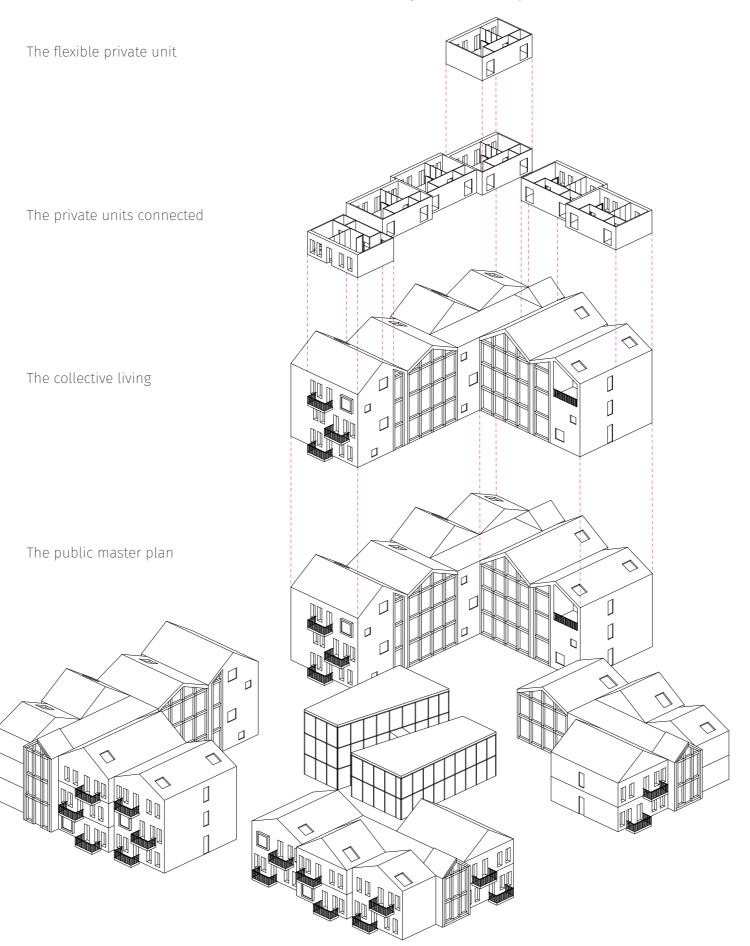
Elevation 1:200

# Climate and installations Scheme



#### The Plan

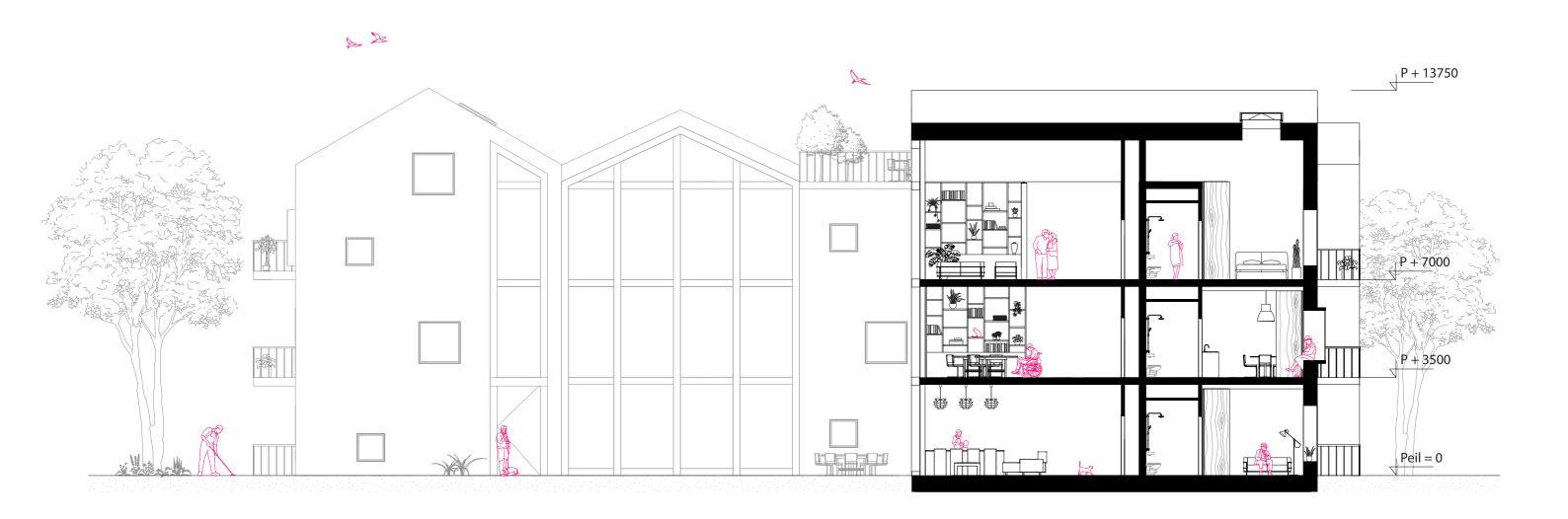
#### Towards a dementia proof society



# Thank you for your attention.

Questions?

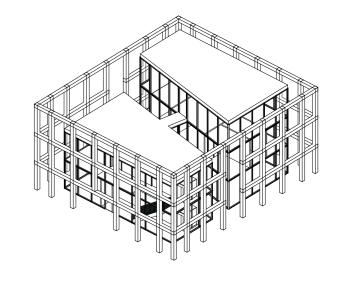
#### Section A

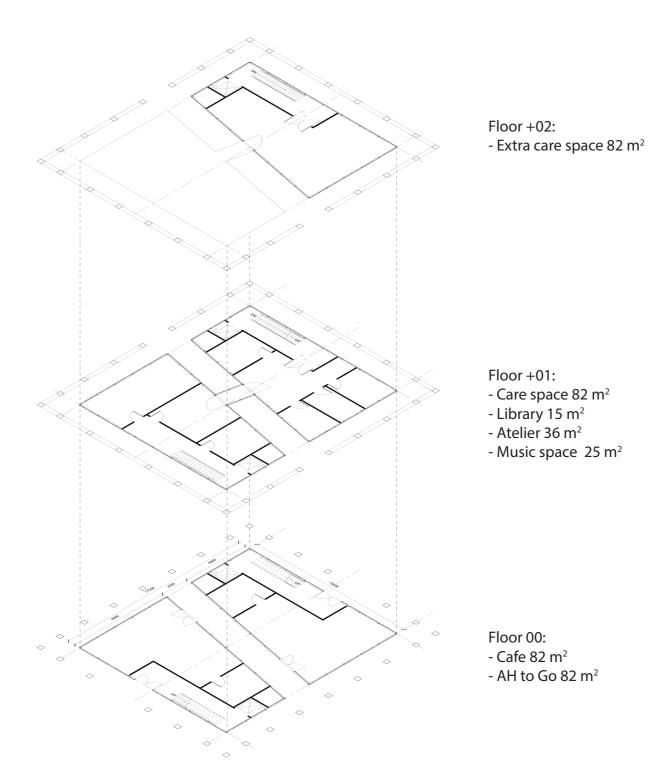




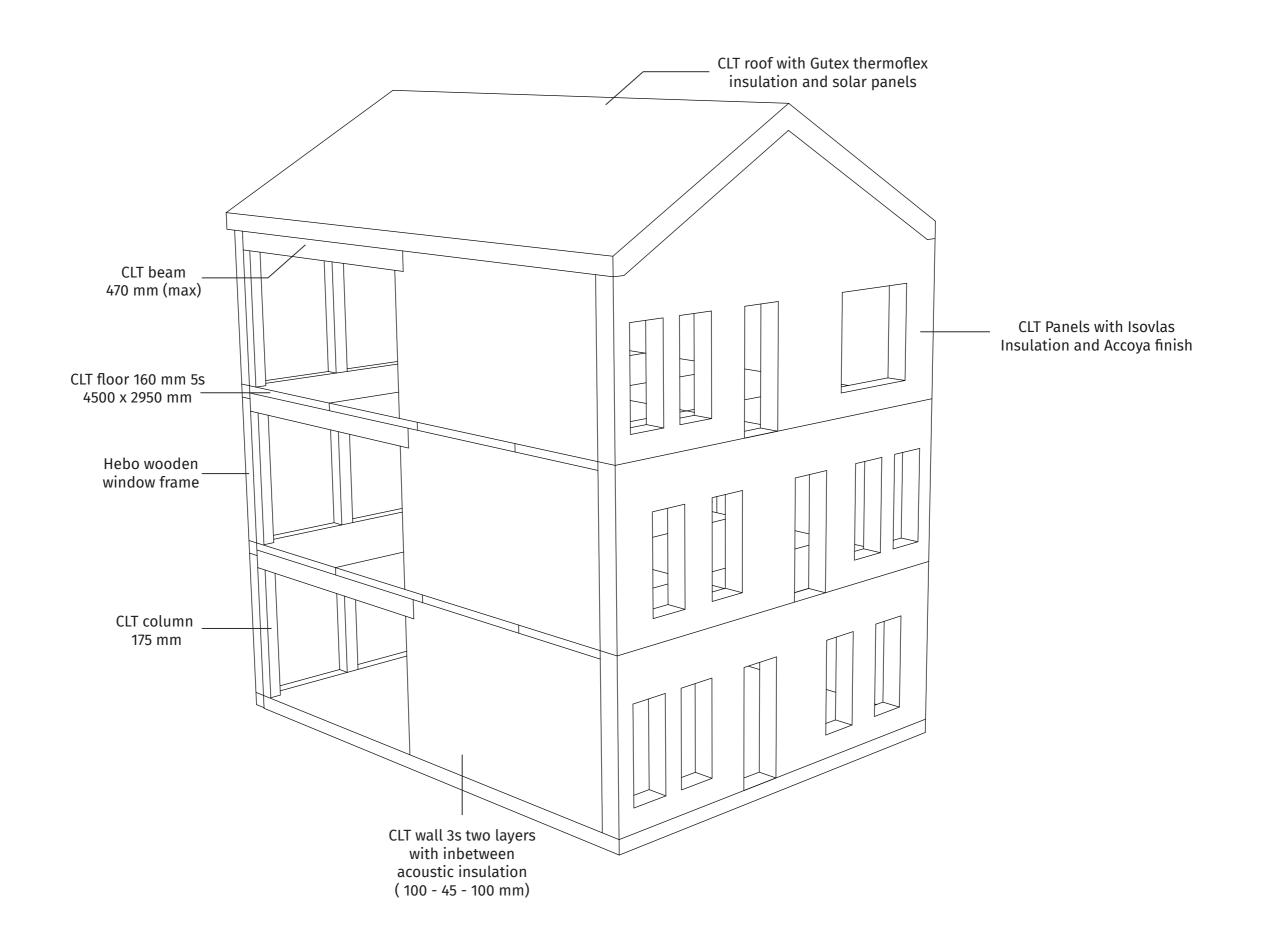
## Activity building

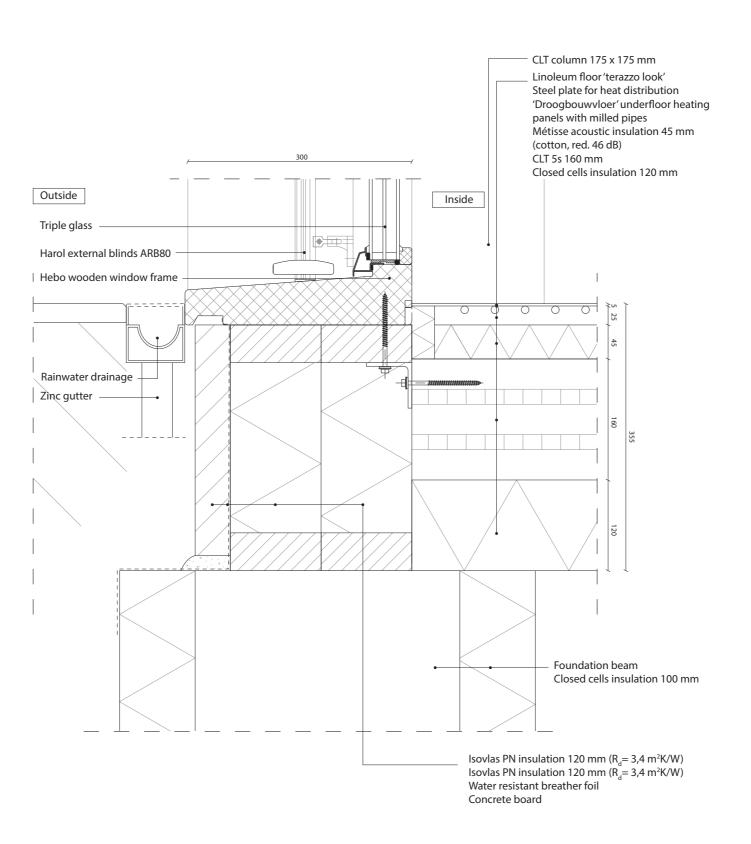
#### Community centre

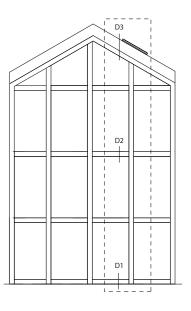




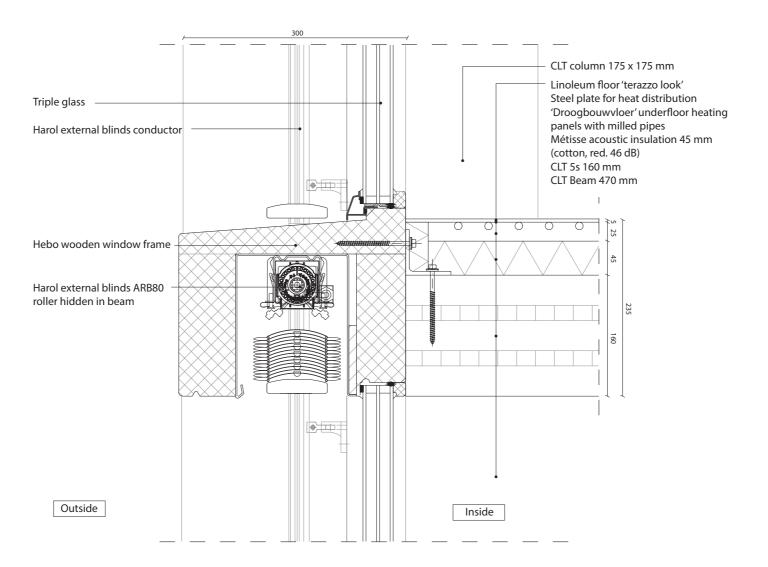
#### Structure

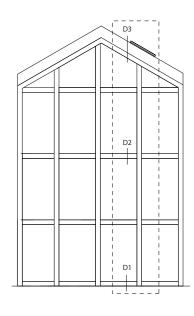




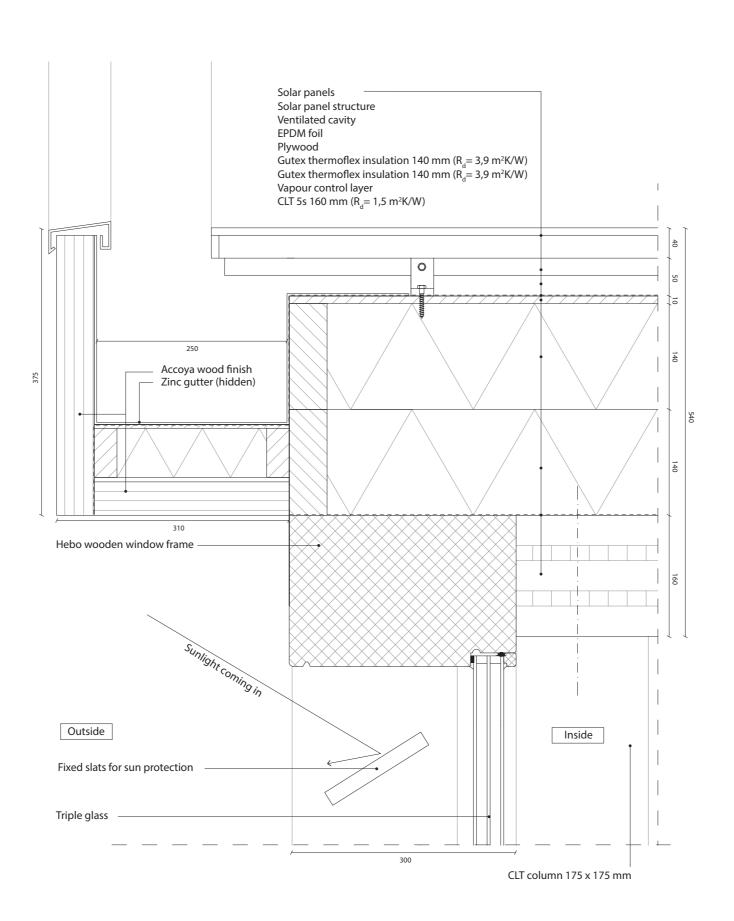


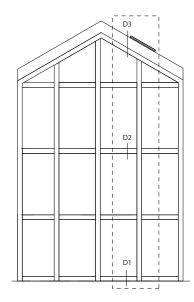
Elevation 1:200





Elevation 1:200





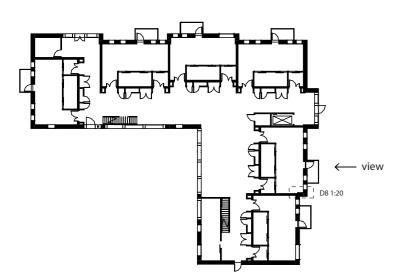
Elevation 1:200

# Detail 5 Triple glass (U = $0.7 \text{ W/ m}^2\text{K}$ ) Turn-tilt window Hebo 90Thermo window frame Inside Outside CLT 5s 140 mm ( $R_d$ = 1,3 m<sup>2</sup>K/W) Isovlas PN insulation 120 mm ( $R_d$ = 3,4 m<sup>2</sup>K/W) Isovlas PN insulation 120 mm ( $R_d = 3.4 \text{ m}^2\text{K/W}$ ) Water resistant breather foil Framework Ventilated cavity Open timber facade: Accoya FSC wood Slope Prefabricated concrete slab on a slope Water resistant breather foil Gutex thermoflex insulation 100 mm ( $R_d$ = 2,8 m<sup>2</sup>K/W) CLT 5s 160 mm ( $R_d$ = 1,5 m<sup>2</sup>K/W) Gutex thermoflex insulation 100 mm ( $R_d$ = 2,8 m<sup>2</sup>K/W) Water resistant breather foil Steel plate finish 60

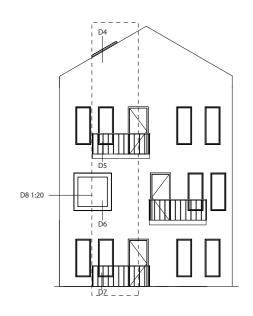
D8 1:20

Elevation 1:200

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Scale 1:20



Elevation 1:200

