

Kärra Village



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AUT164

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About us



Alexandra

Has completed a bachelor's degree in Architecture at Chalmers University of Technology in Gothenburg. Is Currently studying the master program "Architecture and Urban design" at Chalmers University of Technology. Is interested in small scale architecture and to create architecture for different needs.



Elsa

Has completed a bachelor's degree in Architecture at Lund school of Architecture. Is currently studying the master program "Architecture and Urban Design" at Chalmers University of Technology. Is interested in housing and parametric design.



Viktor

Has completed a bachelor's degree in Architecture at Beuth University of Applied Sciences in Berlin. Is currently studying the master program "Architecture and Planning Beyond Sustainability" at Chalmers University of Technology. Is interested in timber construction and modularity.

Intruduction

The aim of this project is to create a dementia village in Kärra, Gothenburg. The population in the world gets bigger and older for every year. An ageing and larger population also means more people get dementia. It is estimated to go from 55 million people with dementia in the world in 2019 to 139 million people with dementia in 2050. This rising number of people with dementia means that we need to build more homes that can support the people living with dementia.

Our goal is to create a home that improves the everyday life of people with dementia by creating safe spaces that support their needs and help them live more independently. But also a place that offers various daily activities, both as a fun part of everyday life and to help ease the symptoms of dementia. This for example by creating spaces for different needs and stages of dementia. Spaces where you always can chose to be social or private, inside or outside, calm or active.

Facts about dementia

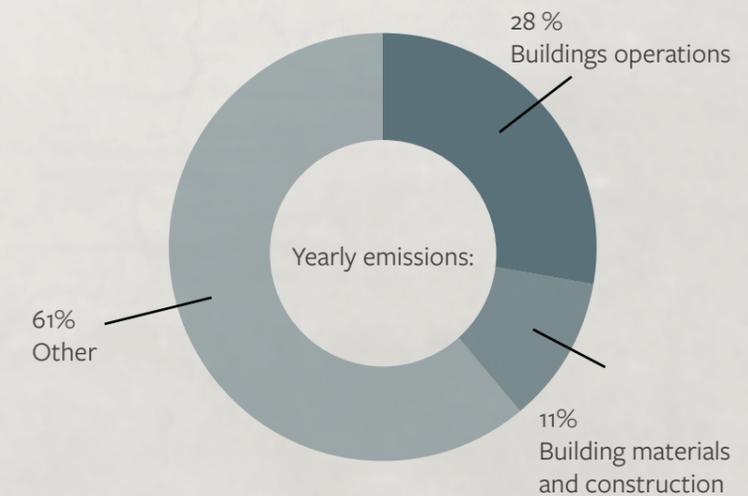
Dementia is not a disease but a symptom of the brain not functioning in the right way anymore. The symptoms caused by dementia will affect a person's life more or less. In the early stages of dementia, the symptoms can be mild, but the symptoms tend to start slowly and become more tense as time goes on. Some of the common symptoms of dementia are:

- Difficulties concentrating
- Struggling when planning and thinking things through
- Daily tasks can be hard to accomplish such as cook from a recipe or paying with bank card
- Problems communicating and language issues, it can be for example to keep up with a conversation
- Problems estimate distance even if the eyesight is good
- Overwhelming emotions and mood changes

Unfortunately there is no cure for dementia today, but there are treatments that are helpful and more or less can stop the symptoms for a while. One way to relieve the symptoms are by using medicine, but there is also some other treatments that can help. That can for example include:

- Activities that gives a cognitive stimulation. For examples word puzzles or taking part in discussions.
- Have an active lifestyle in all levels such as physically, mentally and socially. This can help people avoid feeling depressed and higher their self esteem.

Reusing buildings



The current climate crisis demands that we find new and better ways of building. The building sector produces nearly 40% of the yearly emissions in the world, whereof the building materials and construction generates 11% of the emissions yearly. Reusing buildings are a more sustainable way of working since it reduces the amount of materials needed when building and also reduces the emissions caused by the demolishing process.

Our project will be placed on a plot where there already is an existing building. The building works as a health center and an extra elderly care facility. We have decided to keep this building and remodel it to fit the new dementia village and its purpose. However the condition of the building is not ideal and it is of need of a renovation. We will use the current structure of the building, but there is a need for new facades and a new roof. Since we can use the whole structure and foundation we think it is a good choice in order to save emissions. We will both work with the existing building and add new volumes to fit the program on the plot.

The site

The project site is placed in Kärra. Kärra is a district in the northern part of Gothenburg. A majority of the architecture in the area is from the 60's and 70's. Around the site the buildings are two to four stories high residential complexes and rowhouses, except for the one story preschool west of the site. Most of the public functions in Kärra are placed in the city centre. From the city centre to the project site it is 350 meters.

Strengths

- Close to Kärra Centre and services
- A lot of greenery and walkingpaths in the area
- Only low buildings in the area
- Big plot - space to "give back" to the community
- Existing building can be reused

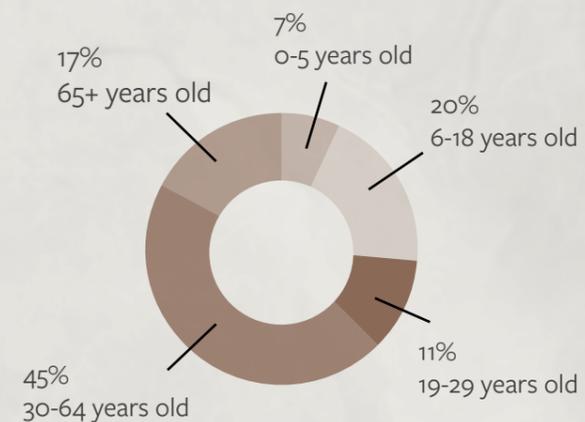
Weaknesses

- The existing building is very deep, it will make it hard to get good daylight conditions
- Lack of healthy restaurants in the area
- The height differences on the plot
- There is no gym in the area

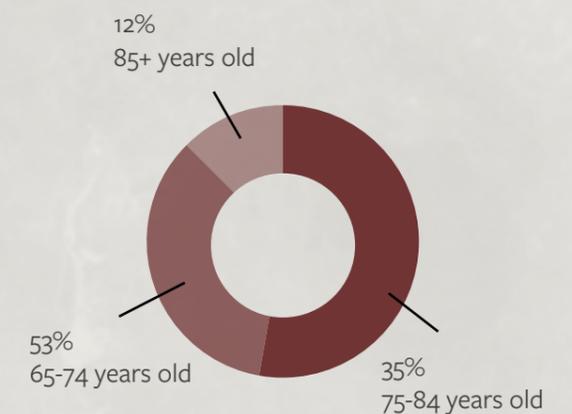


- | | | |
|-------------------------|---------------------|----------------|
| 1. Project site | 4. Pharmacy | 7. Café |
| 2. Indoor swimming pool | 5. Library | 8. Hairdresser |
| 3. Dentist | 6. Pizza restaurant | 9. Supermarket |

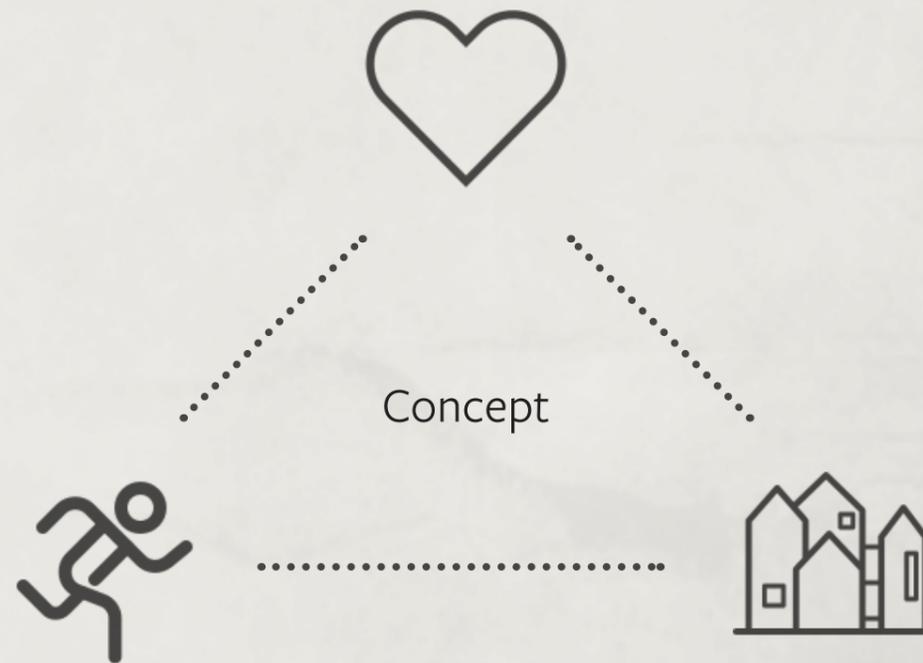
Age division:



Over 65 years:



Source: Stadsledningskontoret, Göteborgs Stad



Active living

Having an active lifestyle, in both physically, mentally and socially can help relieve the symptoms when having dementia. We want to design a place that encourages people to be active by making adventurous buildings and outside spaces with as few dead ends as possible. This by creating circulation and walking paths, but also spaces to rest and meet people on the way. There is easy access to the outside with multiple doors leading to the gardens and outside walking paths. The courtyards have different activity levels to make sure everyone can participate on their own terms. There will also be gym areas, both inside and outside, to make sure there is an easy access for the residents.

Feeling home

We want the residents to feel like they are moving home when they move to the dementia village. To create a feeling of being home and having your own “family” we keep all the units small with only 6 or 8 apartments. Everyone living in the village has a shared living room with the other residents in the unit, as well as their own private apartment with a small kitchen, separated bedroom and their own balcony.

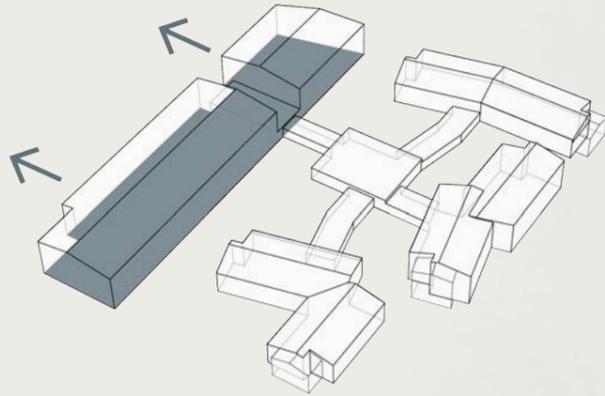
To decrease the institutional impression we are breaking down the volumes as well as working with materials that gives a warm and welcoming feeling.

Bringing society inside

Older people don’t leave their homes as much. Therefore we want to bring society to them instead. The main building, that is on the site today, is facing the city centre and we are creating spaces for the whole society of Kärä in that part of the complex. A place where residents and people living in Kärä can meet.

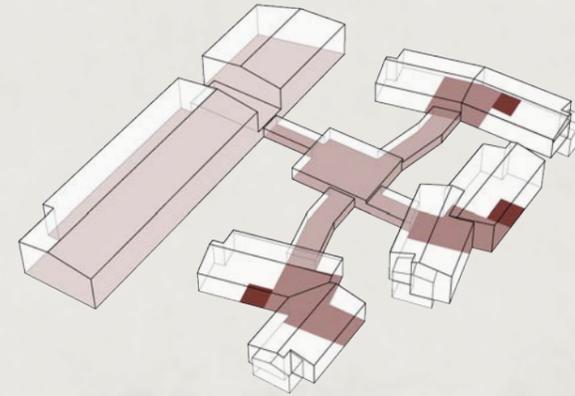
The additions are more private and the functions in them are for the residents only. To connect the main building and the additions there are walkways and a square. These together creates a mini village for the residents inside of the complex. A village with streets, shops, a library, beauty salon, activity room, café and different types of seating. A social place where the residents can meet.

Design strategies



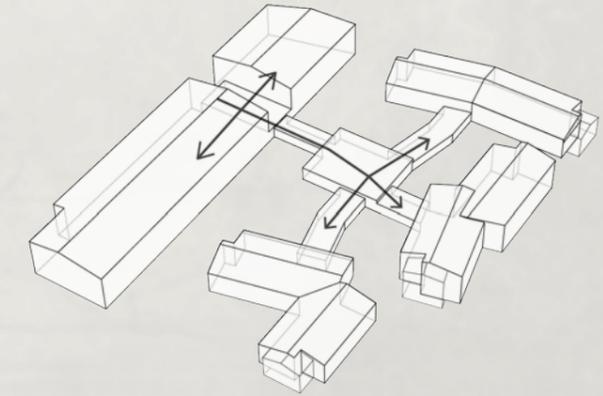
Adding to Kärra

The plot of the project is placed close to the city centre of Kärra. We want our project to not only be a place for the residents in the dementia village, but to also be an addition for the people living all over Kärra. As of now, Kärra does not have a restaurant that focuses on healthy food or gym. These are two things we want to add to the community.



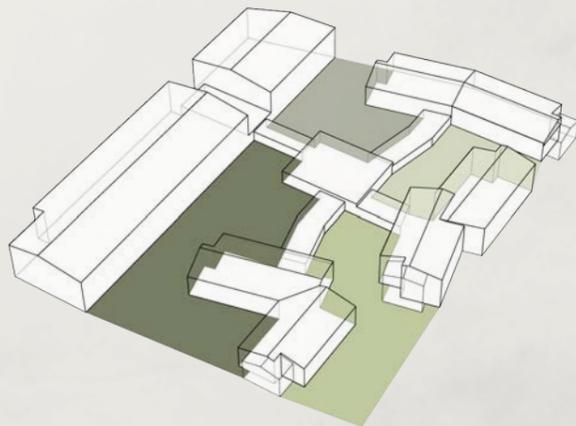
Different levels of privacy

1. Very public - The ground floor of the main building is open for everyone.
2. Public - The square and its functions are accessible for the residents and their family and friends. A more "private city".
3. Semi-private - The common rooms in the units are a shared space for the people living in them.
4. Private - The private apartment for the resident.



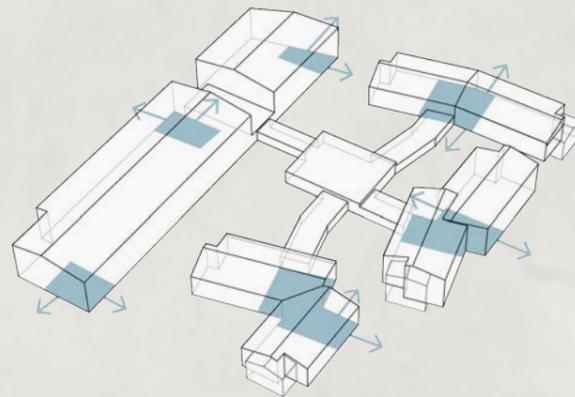
Wayfinding

After entering through the main entrance you only need to make one turn to arrive to your unit wherever you live. This to make it easier for the residents to be independent and find the way on their own. On each level, the units are different. This makes it easier to know which unit you are at.



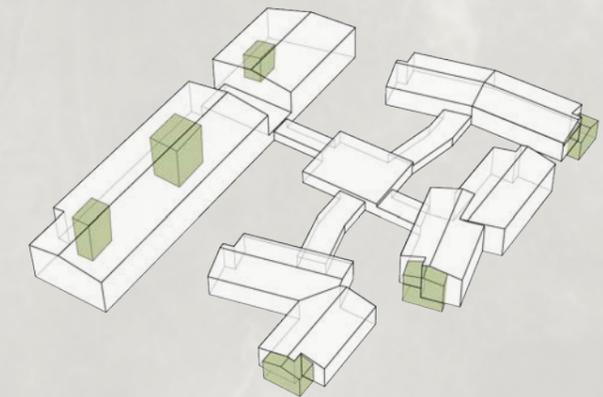
Different courtyards

The buildings create different courtyards. However, no courtyard is completely closed off with buildings. This to make sure that the residents feel like they are part of their neighbourhood and have a visual contact with it when they are outside. The courtyards are instead closed with hedges and plants.



Two directions

All common rooms have windows facing two directions to enable good light conditions and to provide two different views from the room.



Connection to the outside

Each unit in the additions have a greenhouse connected to them. This to create a semi-outside area to make sure the residents can have a connection no matter the weather. In the main building there is instead atriums and larger balconies with roof to get more daylight all year around.

Ground floor

1:500

- 1. Gym
- 2. Storage
- 3. Changing rooms
- 4. Apartment for visitors
- 5. Storage outdoor wheelchairs
- 6. Restaurant
- 7. Dish room
- 8. Kitchen
- 9. Rentable room
- 10. Storage aid
- 11. Outdoor storage
- 12. Drug storage
- 13. Cleaning
- 14. Laundry staff clothes
- 15. Staff changing room
- 16. Storage tenants
- 17. Staff room
- 18. Office
- 19. Meeting room
- 20. Sprinkler room
- 21. Heating
- 22. Waste assisted living
- 23. Waste restaurant
- 24. Electricity
- 25. Delivery
- 26. Bike parking staff
- 27. Café
- 28. Flexiroom
- 29. Activity room
- 30. Library
- 31. Shop
- 32. Bike parking visitors
- 33. Parking



Group 1



First floor

1:500



+15.3

+14.0

+14.0

+13.6

+12.0

+13.0

+12.4

+10.4

+9.7

+9.0

+11.0

+11.0

+8.6

+8.8

+11.0

+8.6

+11.0

+10.5

+8.0

+9.0

+10.5

+10.0

+8.0

+7.8

+7.8

5 m

50 m

Group 1

8



Second floor

1:500



Group 1

9



Basement

1:500

- 1. Sprinkler room
- 2. Electricity
- 3. Ventilation
- 4. Storage tenants



Group 1



The garden

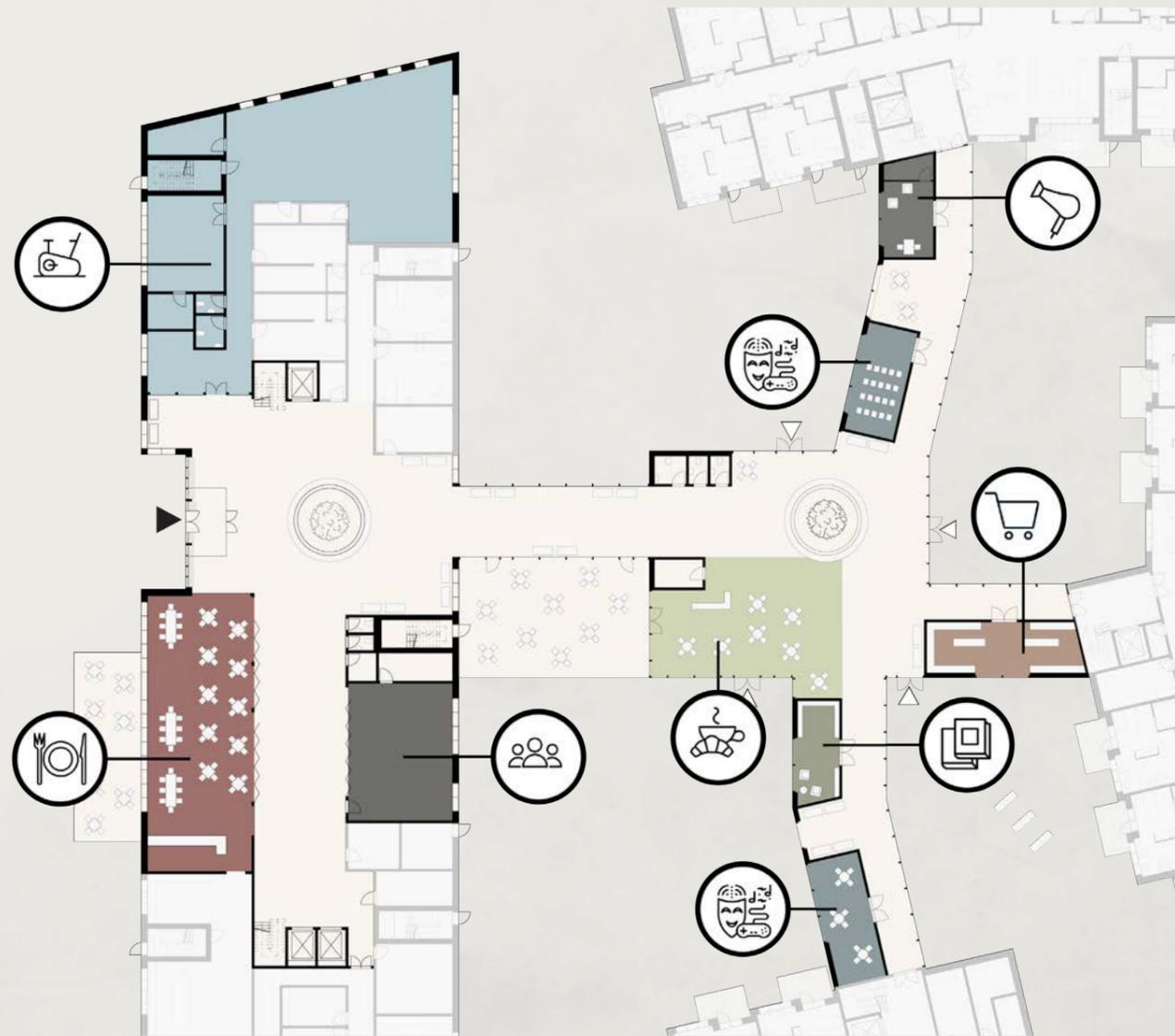
The courtyards have different activity levels and different functions. This to create spaces where everyone finds something they like. There is a greenhouse and planting boxes for gardening, two different walkpaths with various sitting places along the walk, a small chicken farm and an outside gym. The following images are references for these spaces:



Group 1



The square



The square is a gathering point and social space in the complex. The left part (the main building) is open for everyone in the city and contains a gym, restaurant and rentable facility. The right part (the addition) is only for the residents and their family and friends. It is made as a small village with streets leading to the units. Here the residents can go grocery shopping, have a coffee at the café, read a book at the library, have an appointment at the beauty salon or use one of the two activity rooms. The activity rooms are flexible and can be used for different purposes, for example a small concert, an atelier for painting or a game room.

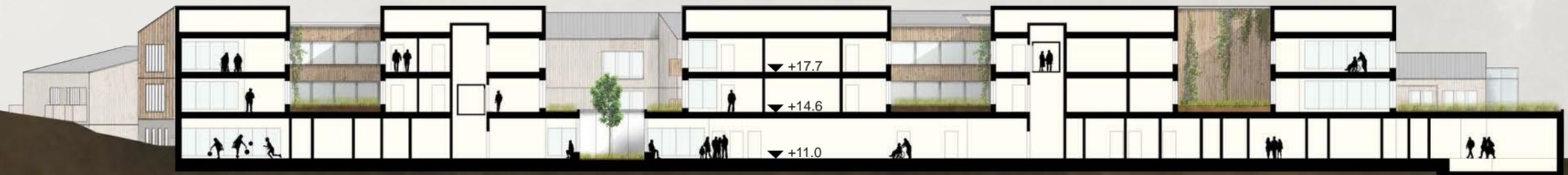


View from the garden towards the square

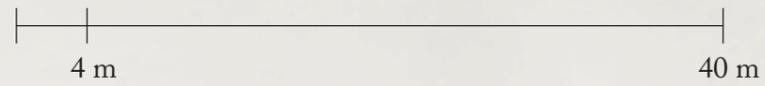
Sections and facades



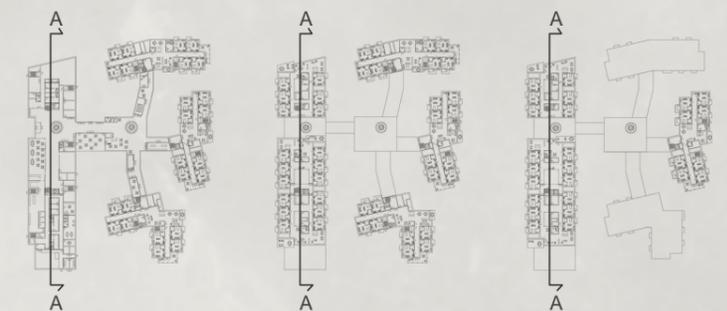
West facade
1:400



Section AA
1:400



Group 1

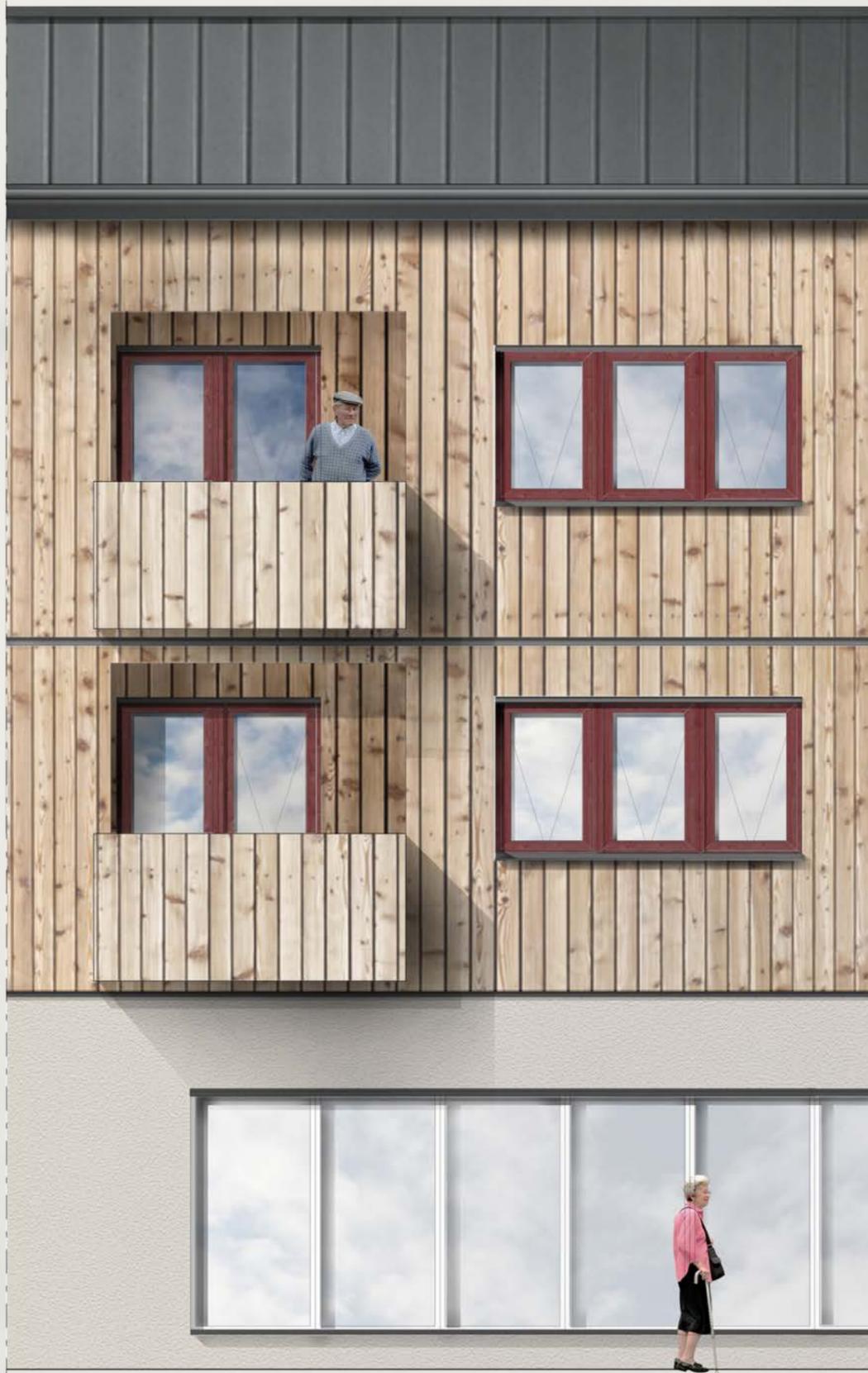




View from the entrance

Facade and section main building

1:50



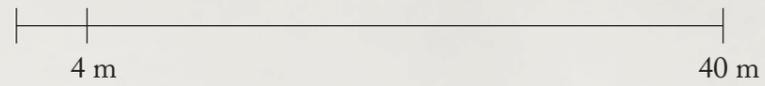
Sections and facades



East facade
1:400



Section BB
1:400



Group 1



Unit additions

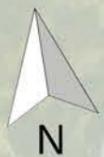
1:200

- 1. Common room
- 2. Staff office/meeting room
- 3. Cleaning room
- 4. Storage
- 5. Laundry
- 6. Disinfection/waste
- 7. Greenhouse



2 m 20 m

Group 1



18



View from the common room in the east addition

Unit main building

1:200

- 1. Common room
- 2. Staff office/meeting room
- 3. Cleaning room
- 4. Storage
- 5. Laundry
- 6. Disinfection/waste
- 7. Atrium



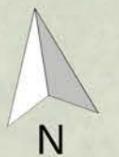
Group 1

20

+11.0

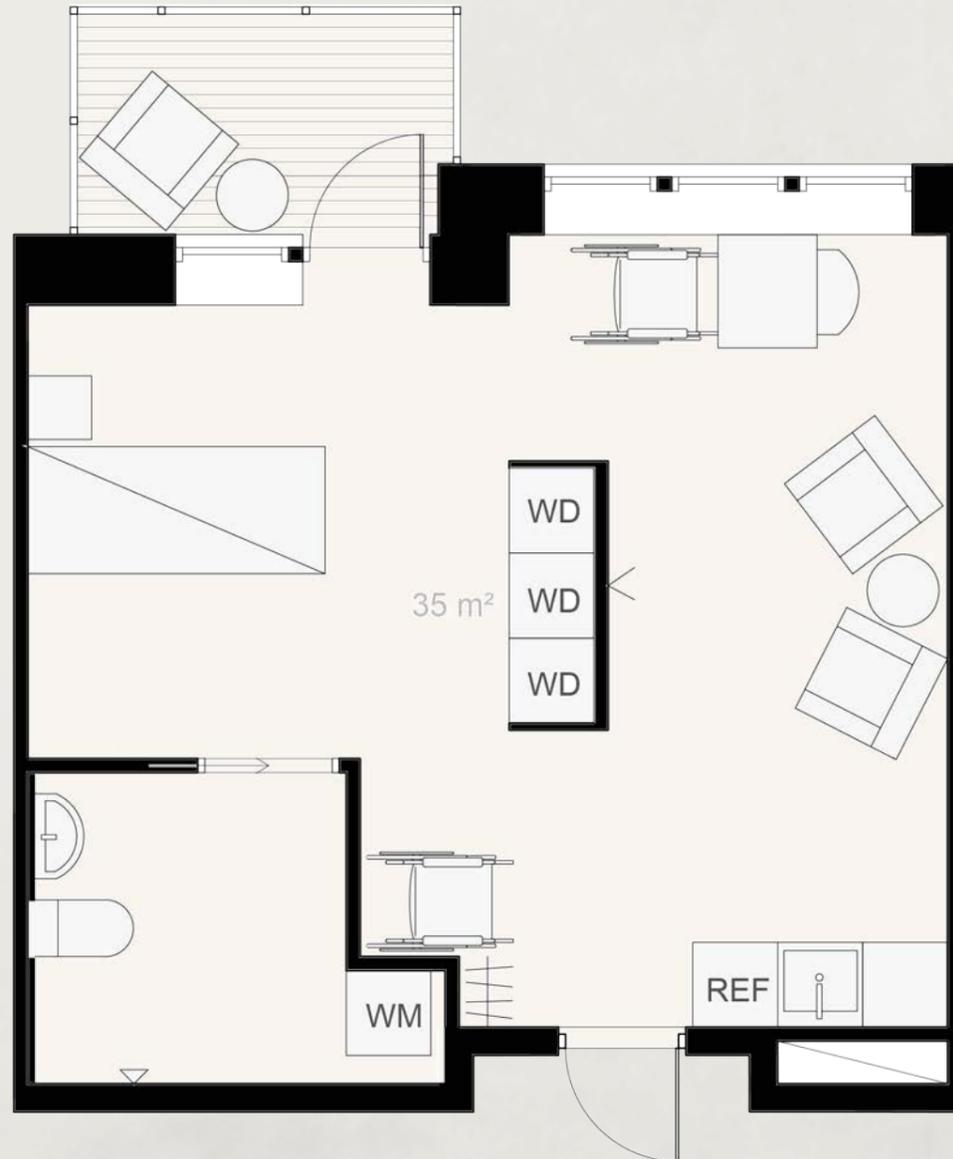
+10.5

+10.0



Apartment

1:50



The apartments are 35 squaremeters. There is a nisch going in from the hallway to create a clear entrance situation. All doors have different colours so that it is easier to differentiate them. When entering the apartment there is storage for a wheelchair and coats to the left and the living space to the right. The apartments are designed with a separate bedroom and living room. There are no dead ends in the living space, but instead a circulation around the center wall. The living space has a natural spot for the tv and space for a table by the window. The bathroom is directly connected to the bathroom to enable a short distance between the two rooms.

All apartments have a view towards the outside from both the living space and the bedroom. This for the residents to have a connection to the outside everywhere in the apartment. The balcony door can be open and let fresh air into the bedroom.





Thank you!