A healthy neighborhood, for all generations & sustainable renovation for ERA gallery flats

**APPARTMENT**

Transformation of apartments

The floor plan of the 508 apartment buildings offers two of flexibility. In this project, different possibilities of flexibility are explored within the existing load-bearing structure. The possibilities exist to combine and or split apartments. This flexibility makes it possible to cater to new needs of our society.

The Netherlands is dealing with an aging society. In about fifteen years, one third of our population will be older than sixty-five. Thirty-seven percent of our current housing originates from the post-war period and the majority of this stock is not equipped for elderly. For this reason, it is essential to start looking for suitable elderly housing and new ways of living together within the current stock. This project focuses on how to provide this growing group of people with suitable housing.

**BUILDING**

Adjustments

To improve the living conditions of elderly people, which incorporate safety, comfort, accessibility etc., several improvements to the gallery flat have been done. The galleries and balcony are made wheelchair friendly. This means that wheelchair users can enter their houses and use their balcony without a hassle.

**NEIGHBOURHOOD**

Neighbourhood network

One in three elderly people is lonely, which increases the risk of depression and other health problems. Isolationism strengthens social isolation. That is why a new network of pedestrian paths is created in the neighborhood, which connects our social networks and provides a sense of orientation. The network consists of a threshold-free surface, with proper lighting. This creates a new base for this enormous building, which deserves a new interpretation.

The blind plinth is opened up by replacing the closed storage doors with wooden frame doors with a glass panel. This new plinth is framed by light concrete elements, which house the storage units. The facade strips are connected to this plinth by the new facade and are finished by planters. The entrance is made accessible with a ramp and provides a clear organization for the whole neighborhood.

New prefab facade panels

The renovation of the kitchen, bathroom and toilet is combined with the connection of the houses to district heating (residual heat). The public space around the entrance also has a compact and efficient transformation. A 'facility strip' offers space for underground containers and cycling visitors. The facility strip is connected to the sidewalks of the building and bordered by planters. The entrance is anchored in its surroundings and provides a clear organization for the whole neighborhood.

Combinations

It is possible to combine different apartments on one single floor. Apartments are stackable. One building can either be completely transformed or just a part of the building.

New prefabricated facade panels

The new facade panel is prefabricated and has high insulation qualities which convert the cold bridges from gallery/balcony to the load-bearing structure. The new facade can be fixed onto the load-bearing structure within a couple hours. This means that one row of one building can be provided with a new facade.

**APPENDIX**

Original unit

New unit

**NEW ORIGITAL UNIT NEW**

**NEW A B C D E F**

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01 NEIGHBOURHOOD

THE NETWORK

The most delicate traffic system is pedestrian and bicycle traffic. Because the metro system and the car system are separated and the only principal link between accessibility (area traffic) in Ommoord is the connection between the car system and the pedestrian system. In the original plan we find a system of path and pathways that connect with all the apartment buildings, streets and facilities. It may be concluded that the walking and cycling paths have a very important function as a transportation system of the district, namely that it is the only truly connecting system and still has a very high use value.

The several pedestrian pathways in Ommoord function as a connector between other transport systems and the different neighborhoods and centres. Over time they change direction, the paths have an organic arrangement, which leads to a path that is not direct, and the pathways have an organic arrangement. The network paths have a labyrinth-like appearance.

The core network is an improvement of the already existing pedestrian system. They are three elderly people's lonely, loneliness leads to depression and other health problems, isolation strengthens social isolation. That is why a new network of pedestrian pathways is necessary. The network paths have an organic arrangement, which leads to disorientation and long walking distances. Due to the fact that there are no direct connections, the pedestrian pathways have a labyrinth-like appearance. The network consists of a threshold free surface, with proper lighting. It helps with orientation and wayfinding, all transformed flat lifts are clad with different brick patterns, and colors and create more diversity on eye level.

LIVING TOGETHER

‘Het nieuwe samenwonen’ allows people with a need for care to live longer in their familiar environment and creates affordable living space for new residents in the Rotterdam district. Unused housing is in the form of a care-dependent is used to accommodate new residents in the district. This ‘part-living’ offers affordable housing to care-dependent elderly people, expats or students in the same area. The environment is adapted to this and the neighborhood and care network is optimally utilized. This forms the basis for an accessible, feasible solution for care.

On an individual level, homes are adapted for those needing care and at the same time new residents occupy the unused space. At neighborhood level, storage areas of several residential blocks are enhanced with public functions to bring the elderly and young together. The combination of existing and new residents offers a perspective for new social connections. A revival of the power of the community.

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GREEN

The green structure in Ommoord is one of the main features of the site. The building blocks are situated in a park like environment with an abundance of green space (fig. 4). The urban design of Ommoord is based on a collection of high-rise buildings organized in a network of mixed-use nodes and public greenery. A group of blocks between buildings and green spaces which will accommodate the care network to the environment and the districts. To fully be able to benefit from the greenery in Ommoord, the network also connects through the various green gardens.
02 BUILDING

ASSEMBLY
New prefab facade panel

Expansion unit
The age proof house is an adjusted house with no major changes. The focus of this transformation is the improvement of accessibility and comfort within the house. Many elderly have difficulties walking or using a wheelchair. This apartment is made threshold free and wheelchair friendly. Bathroom and kitchen are designed with wheelchair friendly dimensions.

In this form of residence, people choose to live together as one group. The elderly live in independent living spaces, share common spaces and undertake certain activities together. In return for this living group, they receive a part of the care work. The elderly and the younger people form a living group, while the elderly help the younger people do their housework.

Cheap living space for students, in exchange for living in a community together with elderly. This is the basis of the student living group. The elderly residents profit from company from young people, which gives them a chance to enlarge their social circle and the students do not have to borrow money for expensive rent and the empty rooms are not lost.

The kangaroo house is a living form where people who need care can live independently and are part of the household of a caregiver (family member). The house consists of two independent apartments with their own entrance, kitchen, bathroom, etc. The two apartments are placed side by side or above each other and by means of a connecting door or an intermediate staircase it is possible to go to one another.

Designed for residents who need daily help for daily activities like cooking, cleaning, mobility, etc., this apartment is an adapted house. The focus of this transformation is the improvement of accessibility and comfort within the house. Three safety barriers can be removed walking up or down a wheelchair. This apartment is made threshold free and wheelchair friendly. Bathrooms and kitchens are designed with wheelchair friendly dimensions.