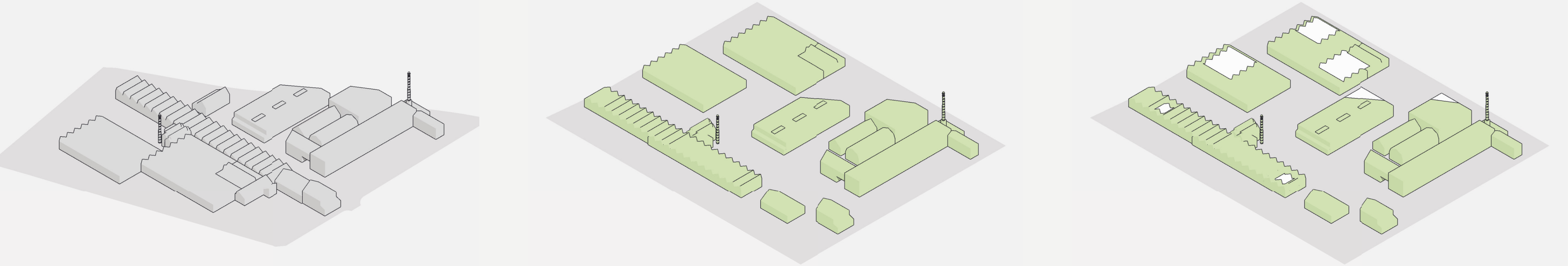


# BACK TO THE ROOTS

the bridge between the past & the future

It is a new strategy for dealing with lost heritage. I took Tilburg as a case for this graduation project, but it is possible to use this strategy for lost heritage worldwide. It offers a new opportunity for the field, a new way of dealing with lost heritage. The step-by-step plan of this new strategy consists of researching lost heritage, making a selection, researching the heritage, reconstructing the original, determining a new location, performing manipulations to fit it into a new area and adding a new layer.

Since my childhood, I have been fascinated by heritage. I wish these buildings could have talked. What stories would we all have been able to hear? This has inspired me to delve further into the history of my current hometown, Tilburg. Tilburg has a rich textile history; unfortunately, much of this history was demolished in the previous century. By rebuilding a unique piece of history, I want to give back the identity and soul to the city because it deserves it. Recognizing and feeling at home with history as inspiration so that the future inhabitants of the city of Tilburg do not lose their connection with the textile past.



the original factory (original layout & location)

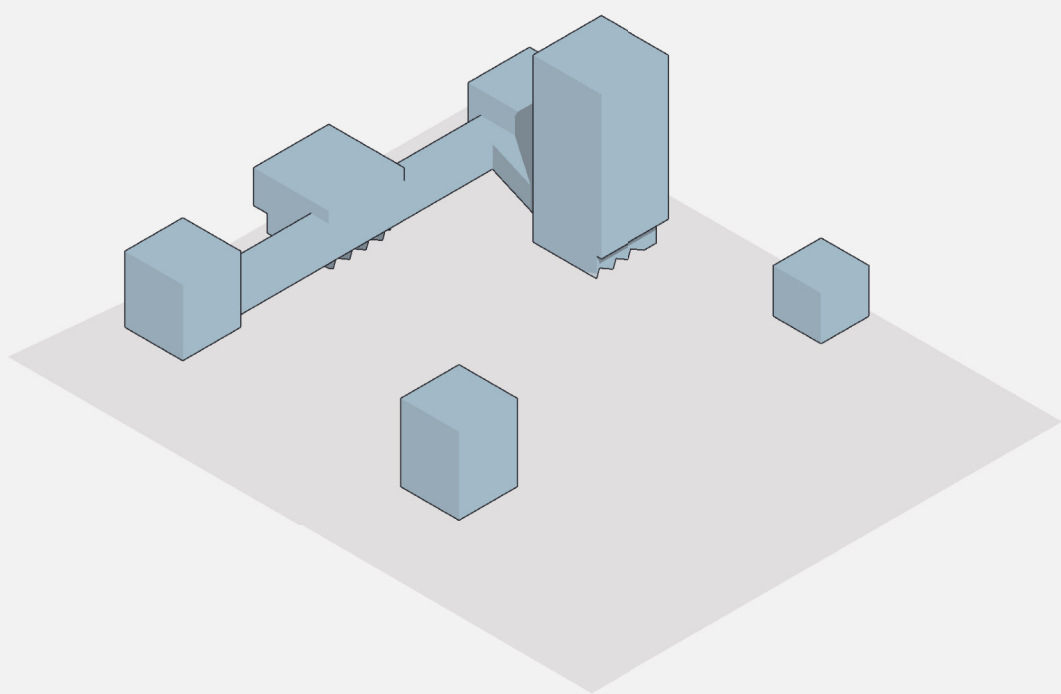
The project concept consists of reincarnating the old demolished textile factory of Pieter van Dooren. For that, I researched the original factory, at the original location and with the original layout.

the reincarnation (new layout & location)

My vision for the factory reconstruction consists of reinterpreting the complex in the new urban fabric. For this, the ensemble must be rearranged relative to the original. This layout ensures urban integration, making new functions possible.

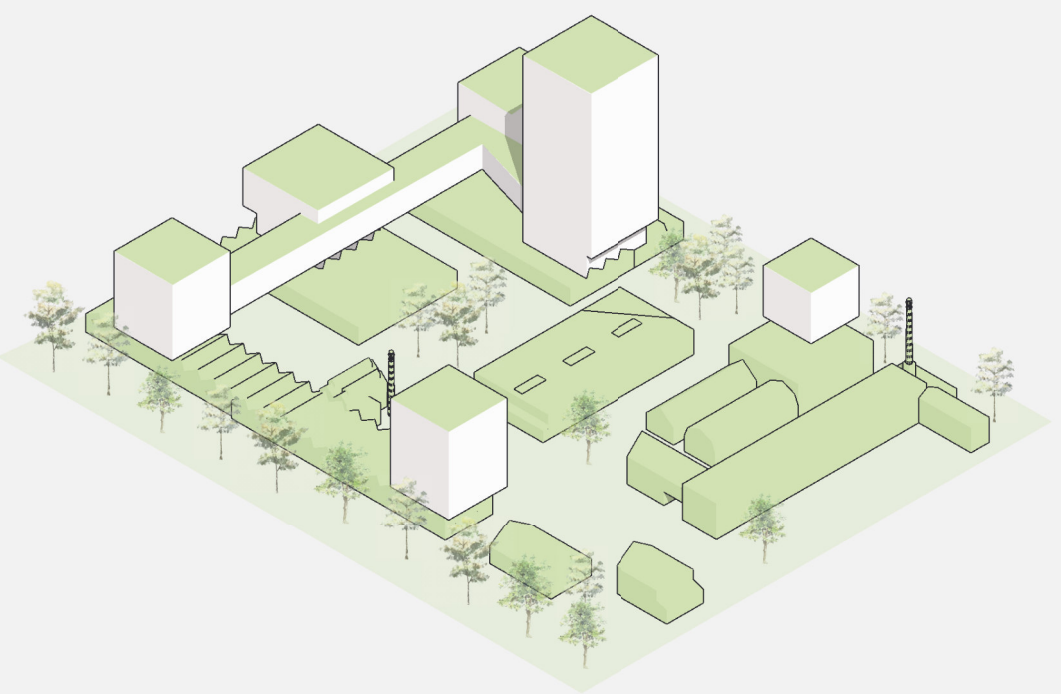
design interventions

The factory volumes are reconstructed to the original; this is very important in connection with recognisability. This means that no large adjustments are made, only mirroring, healing or open up volumes is possible.



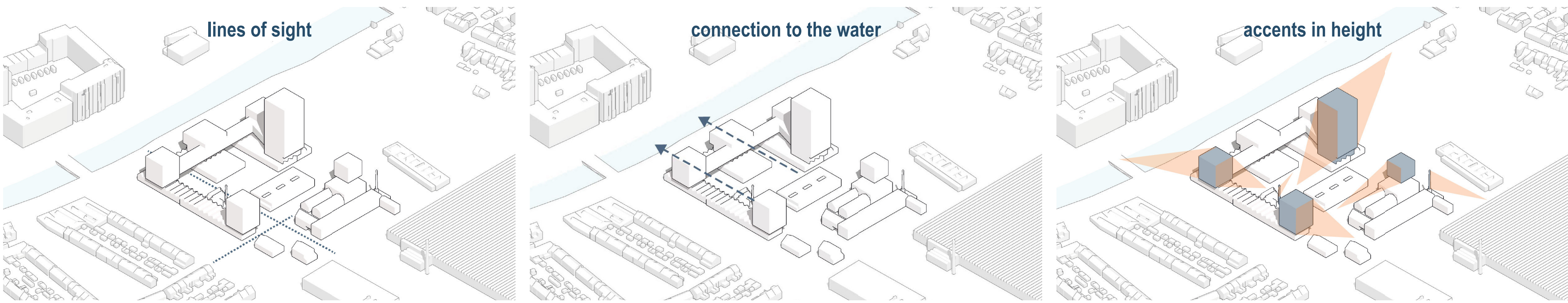
new volumes, additions to the factory

I have also chosen to add new construction volumes to the factory to achieve a higher loading capacity for the project area. These volumes have an abstract design and create the most significant possible contrast with the factory



final design

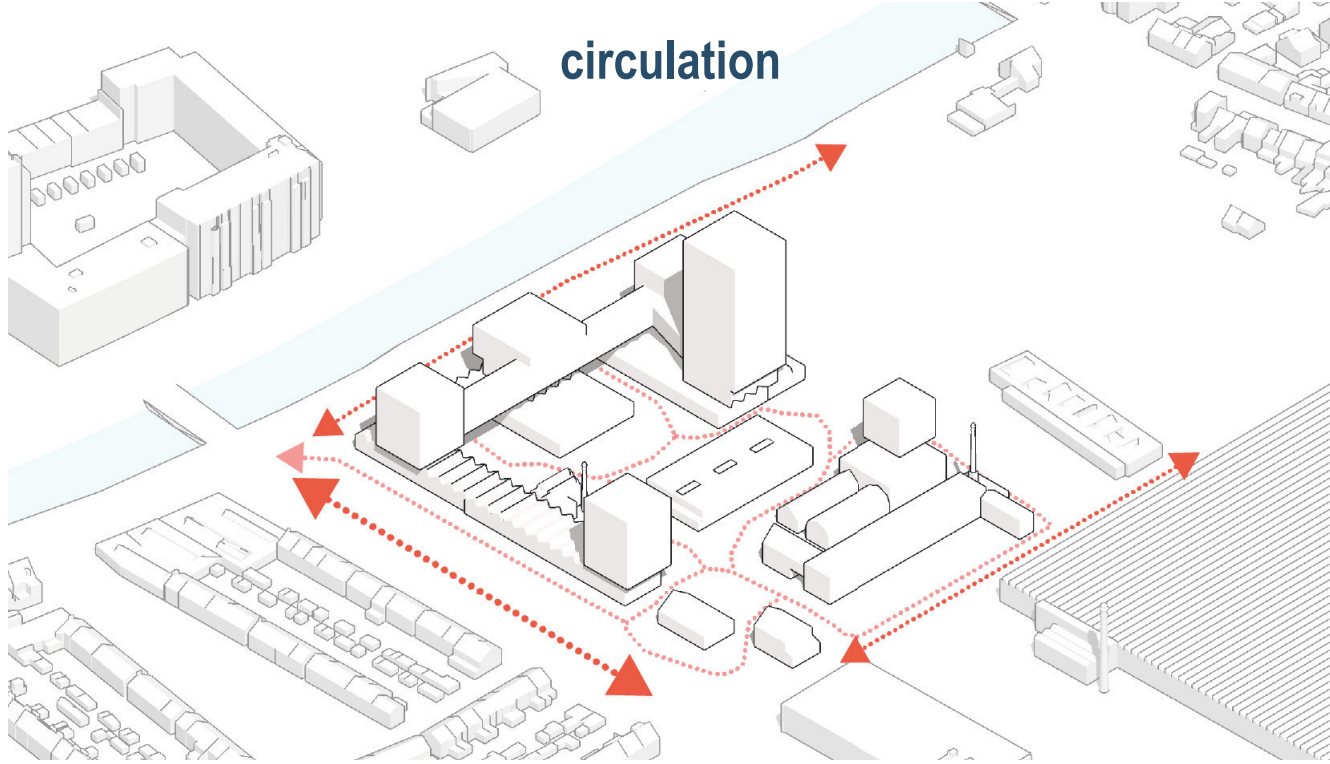
I take the freedom of reinterpreting it into a future time, a new location, materialization and configuration. A point of departure is to leave the building parts volumetrically intact, to view the building parts separately from each other.



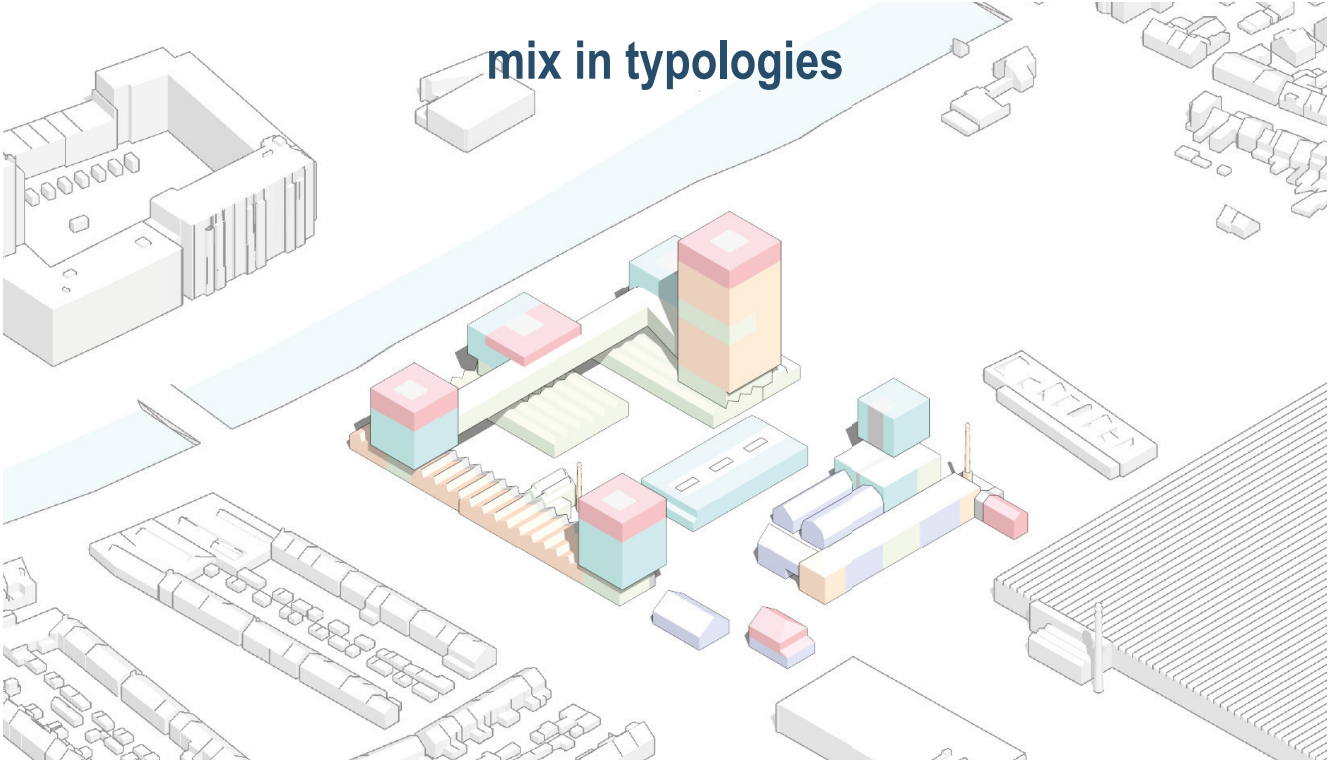
The sight lines, axes running through the waterway to the alongside laying Aabe factory and the line to the adjoining neighbourhood were essential to include in the integration of the factory.

To guarantee sufficient airiness between the buildings, I wanted to include the connection with the waterway in the configuration of the complex.

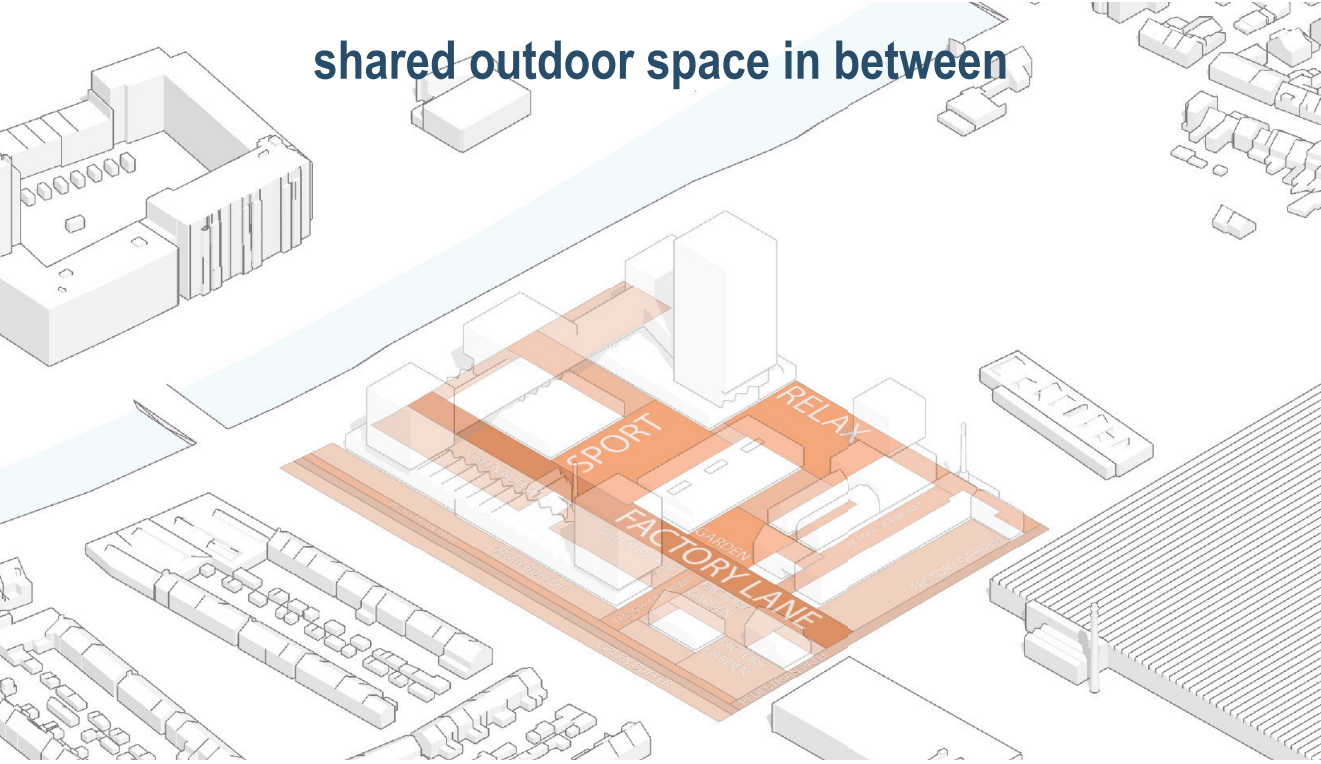
The accents in height create new landmarks. These are carefully positioned in specific locations. The positioning of these height accents was done in response to the surrounding existing buildings.



The roads around the complex will remain intended for cars, partly due to the shopping centre and serving as a supply artery to the centre. The complex will be completely car-free and offers space for pedestrians and cyclists.



Various typologies can be found in the complex. For example, I have developed a variety of typologies intending to bring together a healthy mix of target groups with the same living necessities.



Inspired by the original factory configuration, I have returned open spaces between the factory volumes. In these places, there is room for greenery, sports, relaxation, gardening, etc

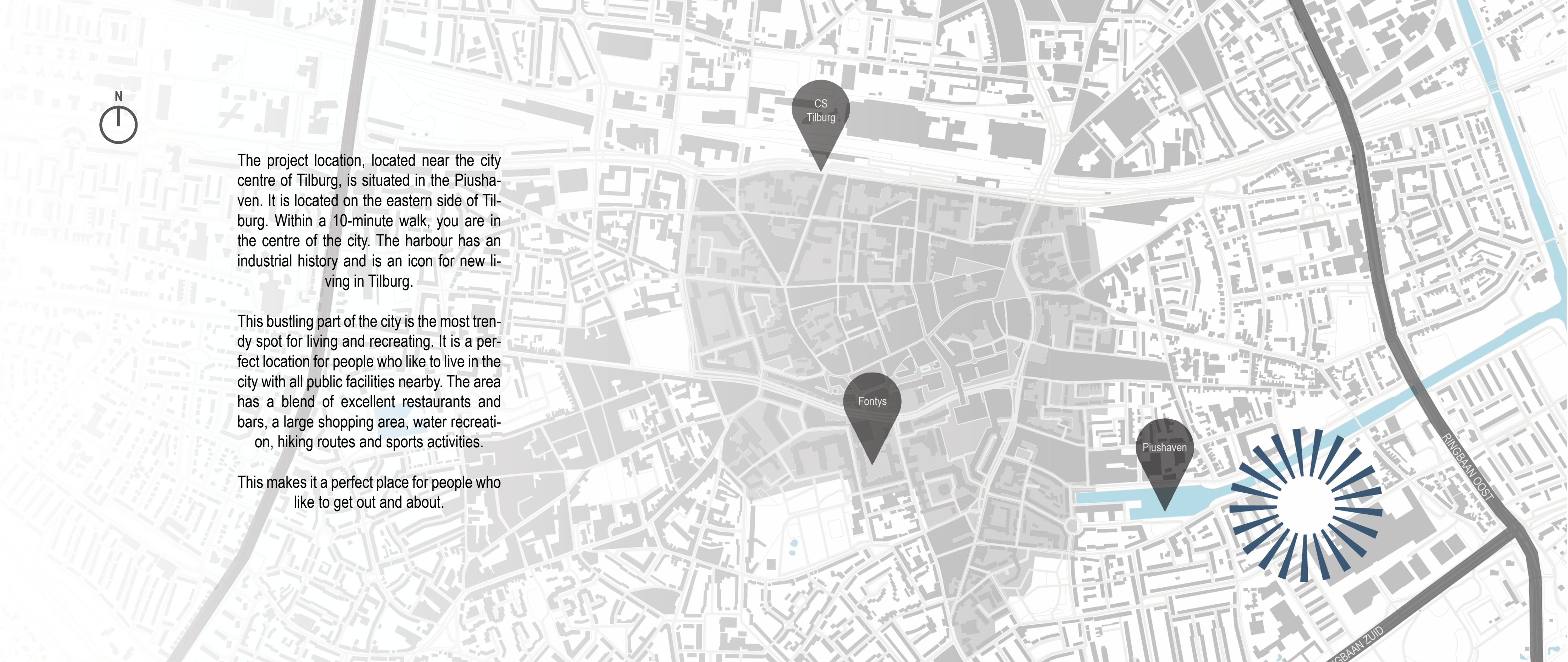


I used these pillars to develop a new master plan. It results in a new living environment that connects to the past but meets current and future life expectations.

SPECIAL PROGRAM	HOUSING PROGRAM	TARGET GROUPS
PARKING GARAGE (SHARED) CARS	TYPE A	ONE-PERSON HOUSEHOLDS
PARKING GARAGE BICYCLES	TYPE B	TWO-PERSON HOUSEHOLDS
COMMUNAL LIVINGROOM	TYPE C	ELDERLY
FLEX RETAIL SPACE	TYPE D	STARTERS
FLEX WORK SPACES	COMMUNAL SPACES	STUDENTS
OUTDOOR AREAS	LAUNDRY ROOM	
	STORAGE ROOM	

The project program consists mainly of residential spaces. Many sub-programmes are associated with this housing program, including a social function. This social function can be found in the communal areas of residents of the neighbourhood. These social functions are dominated by the stimulation of social interaction and discovery.

This mix of target groups is necessary to make it affordable for all groups. The location is near the city centre and in a bustling young neighbourhood, where a good mix of target groups already lives. There is plenty to do for young and old, and the social factor to bring these groups together has already proved successful.



The project location, located near the city centre of Tilburg, is situated in the Plushaven. It is located on the eastern side of Tilburg. Within a 10-minute walk, you are in the centre of the city. The harbour has an industrial history and is an icon for new living in Tilburg.

This bustling part of the city is the most trendy spot for living and recreating. It is a perfect location for people who like to live in the city with all public facilities nearby. The area has a blend of excellent restaurants and bars, a large shopping area, water recreation, hiking routes and sports activities.

This makes it a perfect place for people who like to get out and about.



# OUTDOOR SPACES

Back to the Roots is the new residential environment in the city of Tilburg. It is a reincarnation of Pieter van Dooren's lost textile factory, with a focus on living, history and social interaction. This new living environment has been developed for the young and the aged. I have decided to create a diversity in living typologies to match the mix of target groups and quality of life. These living typologies occupy smaller living areas and have a strong connection with shared facilities. In this new living environment, the focus is on sharing facilities, which creates more social interaction between residents and users. The residential program is enclosed by the historic character of the area. The lost textile factory of Pieter van Dooren is a lost icon for the textile history of Tilburg. The strong textile history gives the city an identity, which I would like to give back to the inhabitants of Tilburg.



The outdoor spaces are characterized by the openness and the combination between the past and the future. This is visible in architecture through materialization and volumetric interpretation. The outdoor spaces are green buffers between the buildings and connect life in the area. The high-rise buildings and the low factory volumes provide an impressive image and sense of the experience of the area. Here time and place come together in a new place in the city.



From above, it is easy to see that the area has a green character. This green character fits in well with the sustainability ideas used during the project's elaboration. The gaps between the factory volumes mark back to the original factory configuration. These have been used to inspire the interpretation of the outdoor spaces. The difference in design language and appearance contrasts the past and the future as great as possible.



The factory house is an iconic building for the original factory complex. Due to the different appearance, materialization and detailing, I keep this unique building in the reincarnation special compared to the other factory volumes. Furthermore, the view of the water is essential and visible from this angle. The factory lane is the street that connects the Aabe factory with the rest of the Piushaven and Tilburg. It is symbolically linked to the main street of the lost factory of Pieter van Dooren.



factory lane

gardening

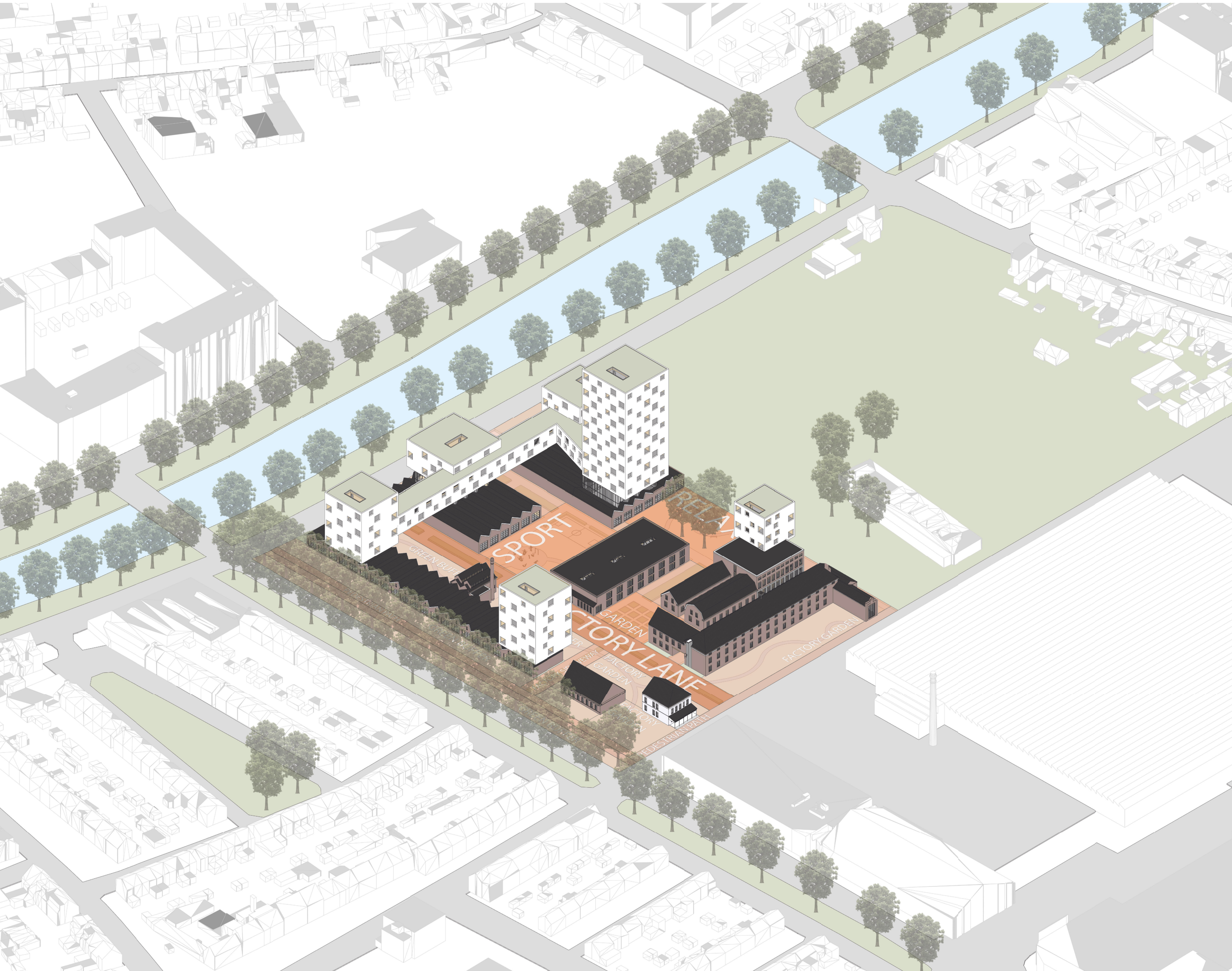
recreation



relax

sport

factory garden



The outdoor spaces also have a different program. For example, spread over the area, outdoor space focuses on sports, relaxation, gardening, circulation, etc. Diversity in outdoor spaces is necessary to create spaces for the different demands of the inhabitants. The factory lane is the main road of the area. This main road refers towards the original factory main axis. The main road connects multiple large open areas to each other. There is an outdoor space for sports, relaxations, gardening and recreating.





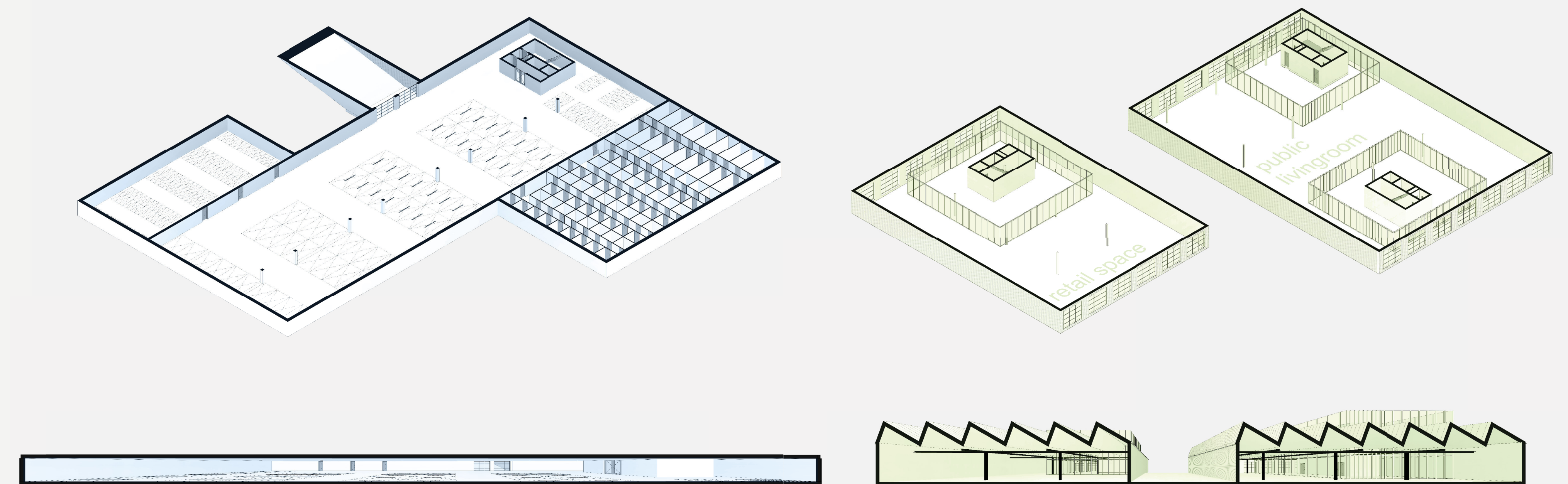
In this overview, all typologies are made visible over the entire project area. Type A is recognizable by a turquoise colour. The light purple colour shows type B. Type C is visual in orange. Type D is visible in red. The green colour marks the communal facilities, and the traffic areas are shown in grey.

# COMMUNAL TYPOLOGIES

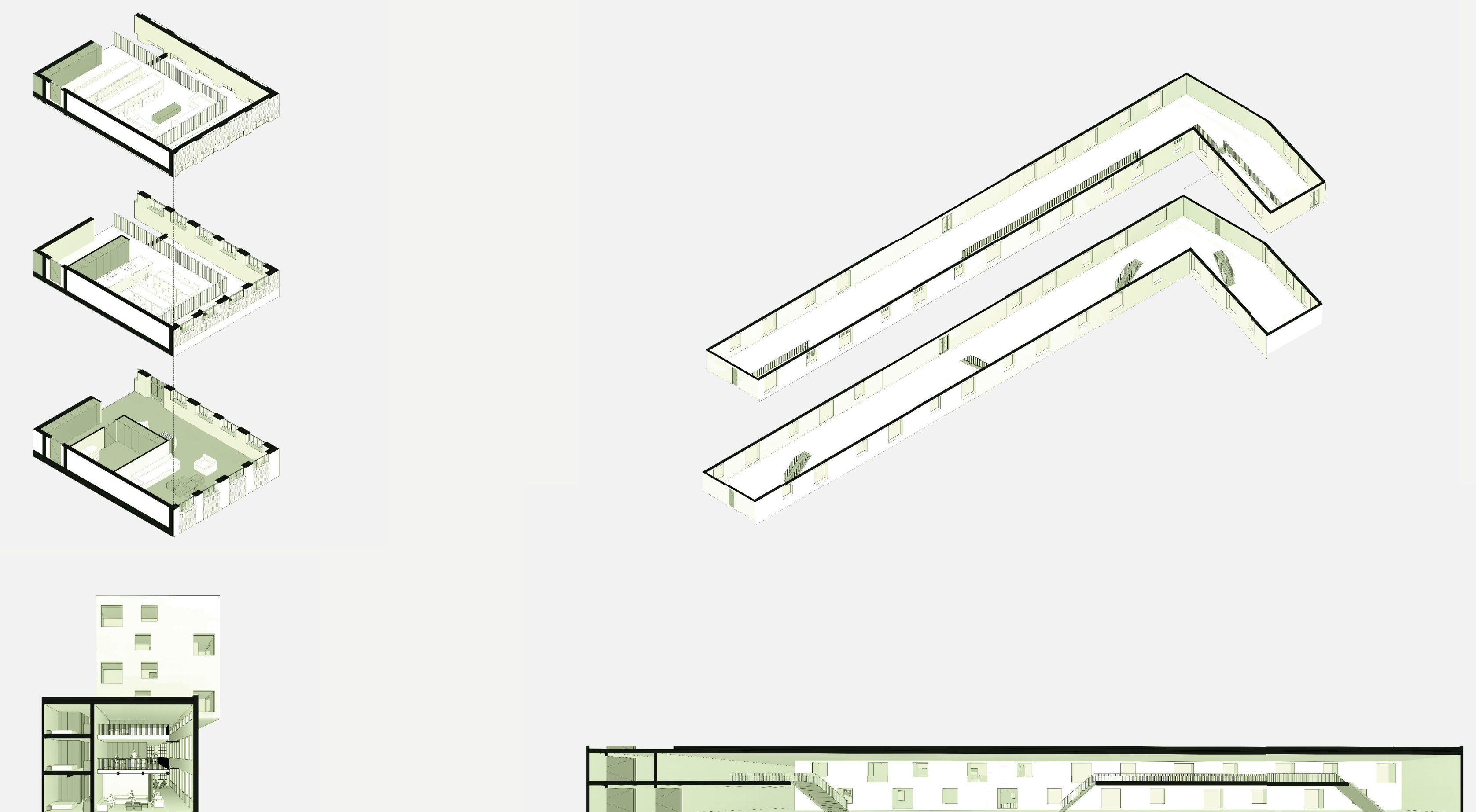
## Communal areas

livingroom  
kitchenarea  
workspaces

parking garage for shared cars 400m<sup>2</sup>  
parking garage bicycles 600m<sup>2</sup>  
communal living spaces 1000m<sup>2</sup>  
flexarea for communal ideas 1000m<sup>2</sup>  
flex work spaces 300m<sup>2</sup>  
outdoor areas (relax, sports and recreation)



Various shared facilities have been included throughout the project area. For example, a parking garage has been included in the plan, located under block D, where a bicycle shed, storage rooms and car parking spaces have been realized. These car parking spaces are partly intended for shared cars. Residents can rent these cars, all vehicles will be completely electric.



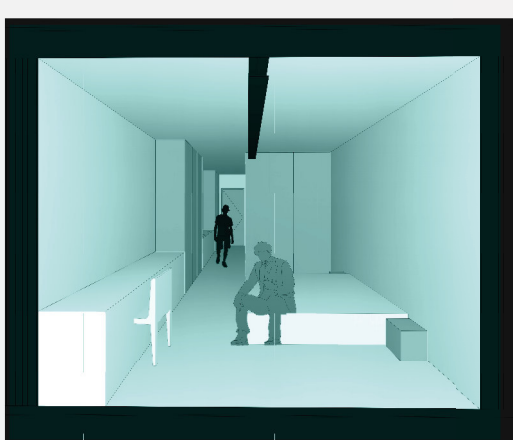
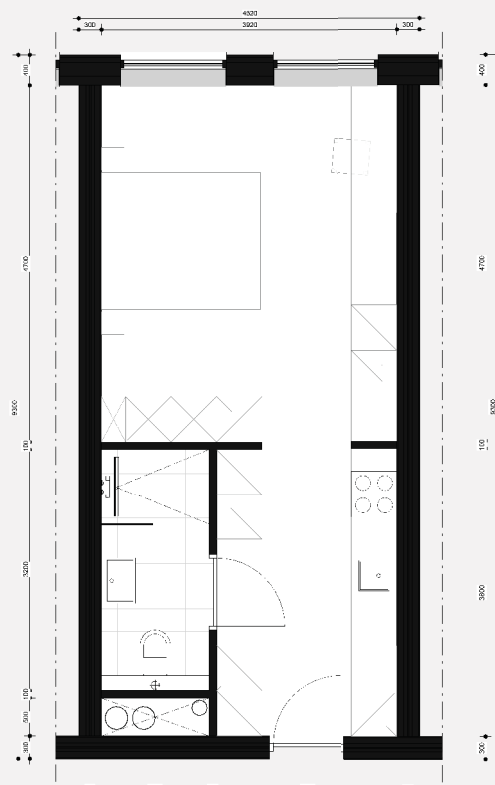
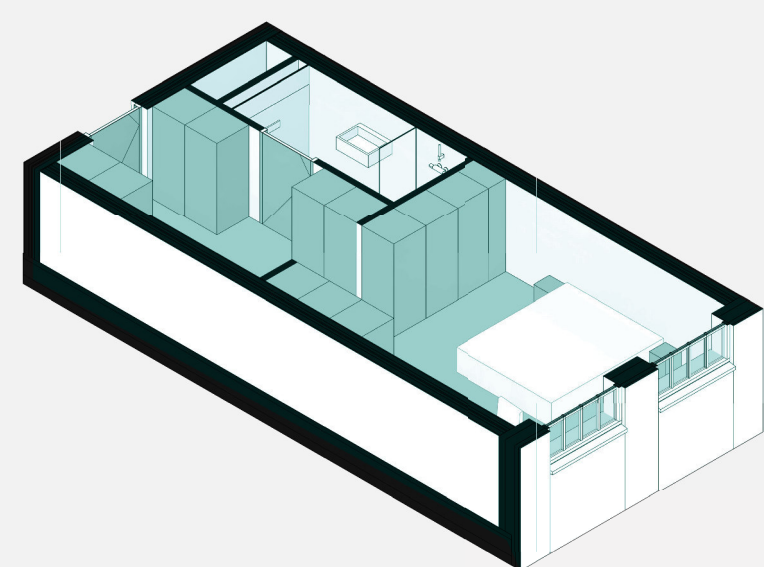
A neighbourhood living room has also been included in the plan. This space serves as a social zone to bring people into conversation. There is also a flexible retail space, this could be the new space for the thrift shop for example. I believe this area must be filled with a social function in the future neighbourhood plan. Various workplaces have also been created where people can rent a space to work, study or have a meeting. The shared facilities are all about sharing, meeting and together.



# TYPOLOGIES OF LIVING

## TYPE A

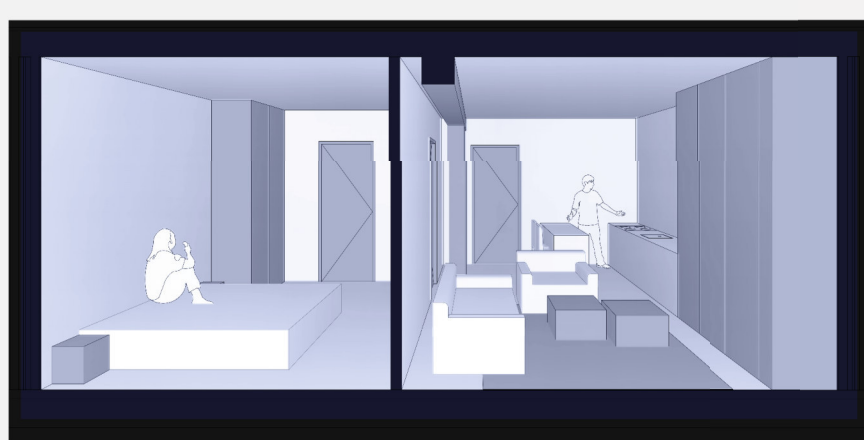
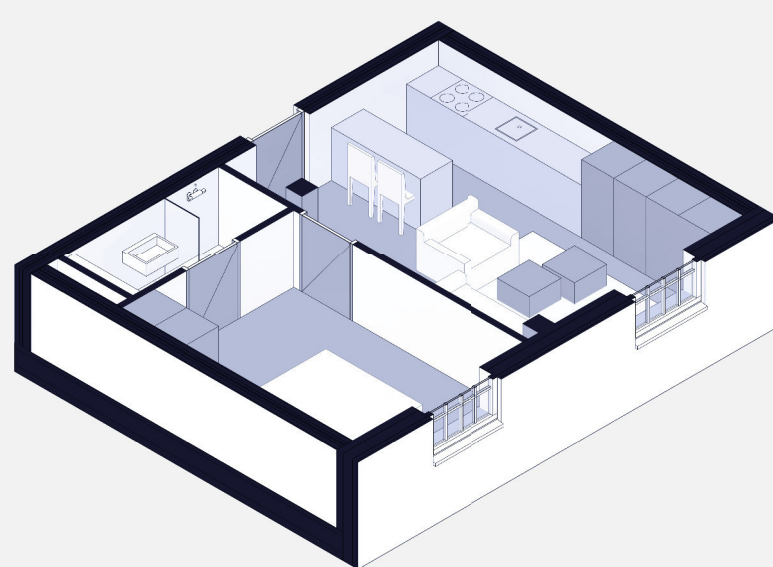
entrance  
bedroom 25m<sup>2</sup>  
bathroom 5m<sup>2</sup>  
  
total 30m<sup>2</sup>



Type A is the smallest typology. It consists of a studio with an entrance, bathroom, pantry and a bedroom. These shared facilities include a kitchen, living room, flexible space, laundry room and storage room. I decided to make the house smaller to encourage residents to go to the communal areas. As a result, this living type consists of 30 m<sup>2</sup>.

## TYPE B

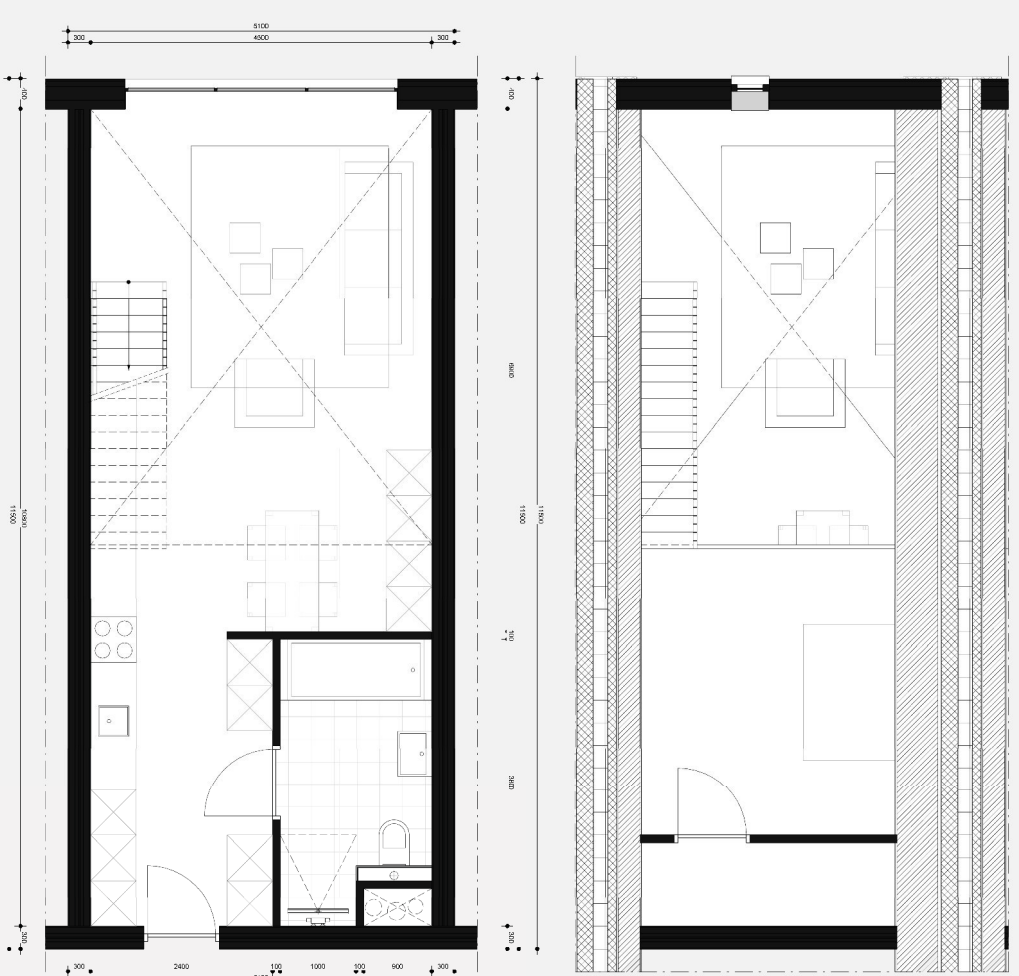
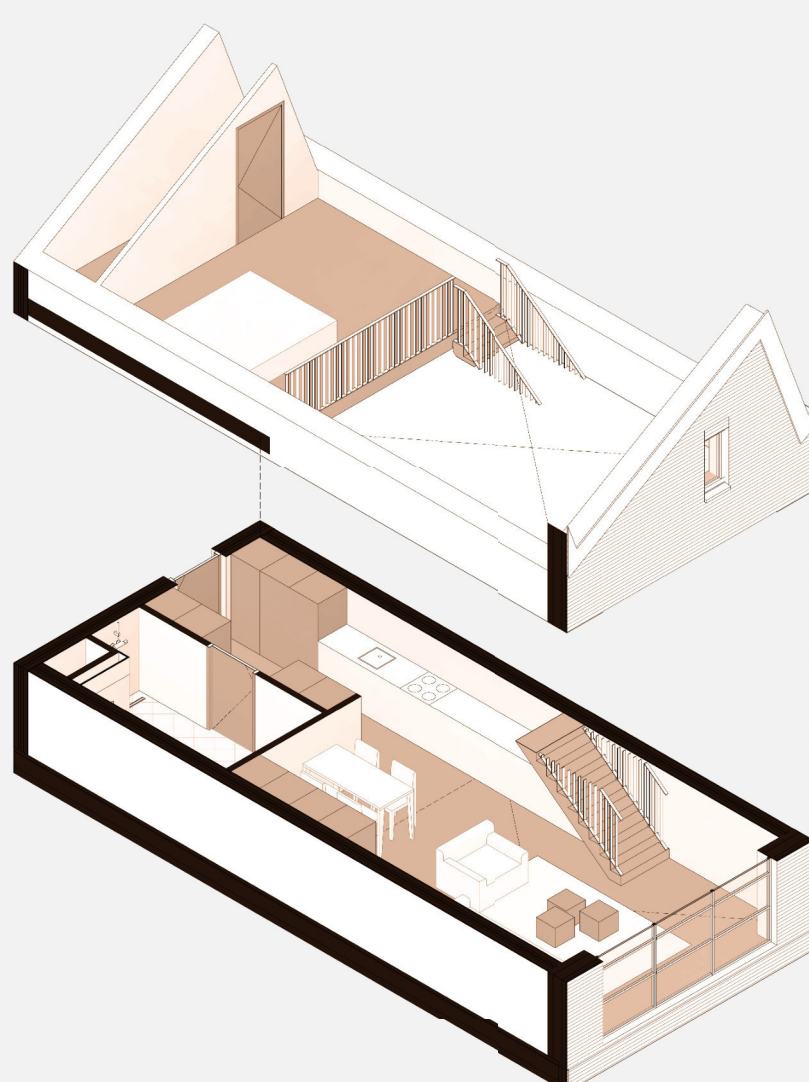
entrance  
livingroom+kitchenarea 18m<sup>2</sup>  
bedroom 16m<sup>2</sup>  
bathroom 4m<sup>2</sup>  
storage 4m<sup>2</sup>  
  
total 40m<sup>2</sup>



Type B is slightly larger compared to housing type A. It consists of 40m<sup>2</sup>, a kitchen, living room, bedroom, storage room and bathroom. This type also has communal facilities to reduce the number of m<sup>2</sup> and stimulate the use of these communal facilities. As with type A, these communal facilities consist of a living room, kitchen, laundry room and storage room.

## TYPE C

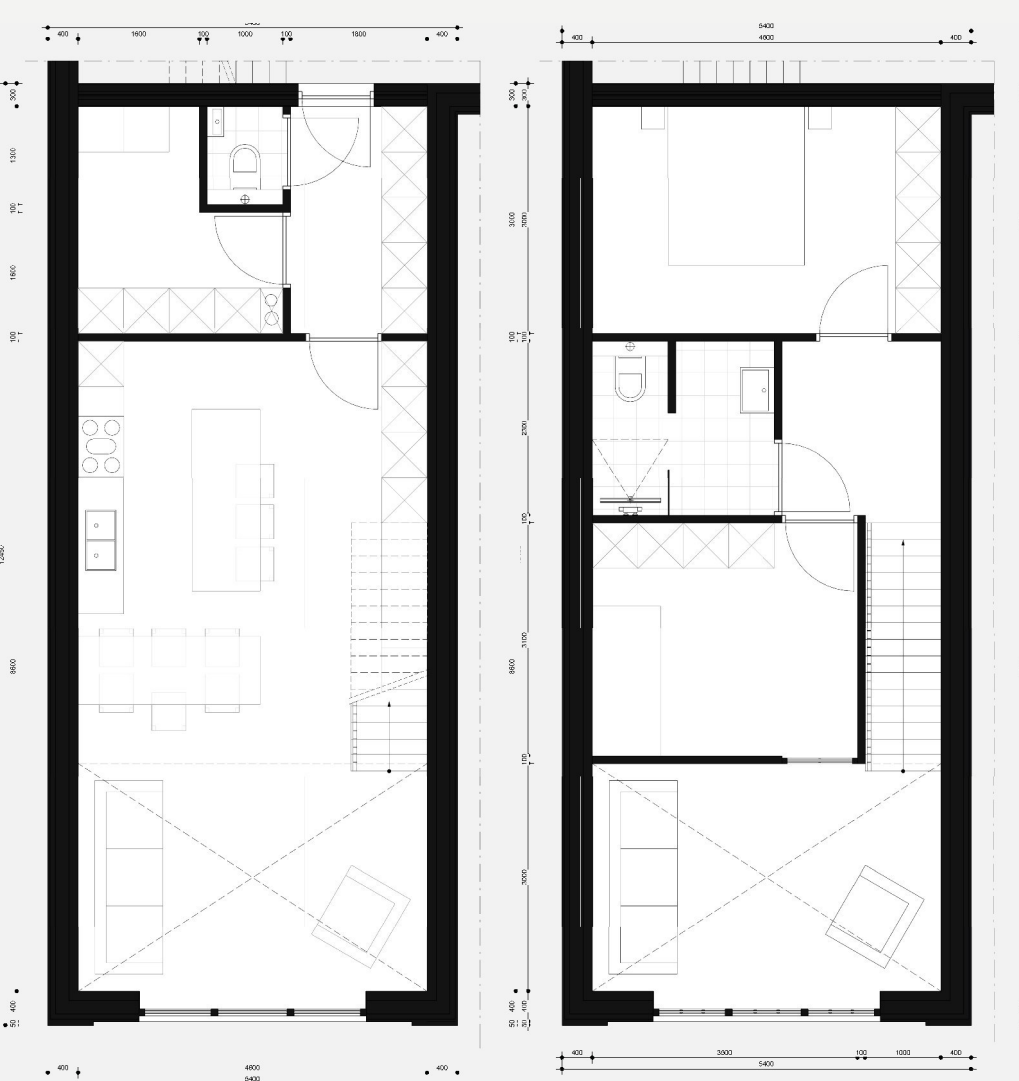
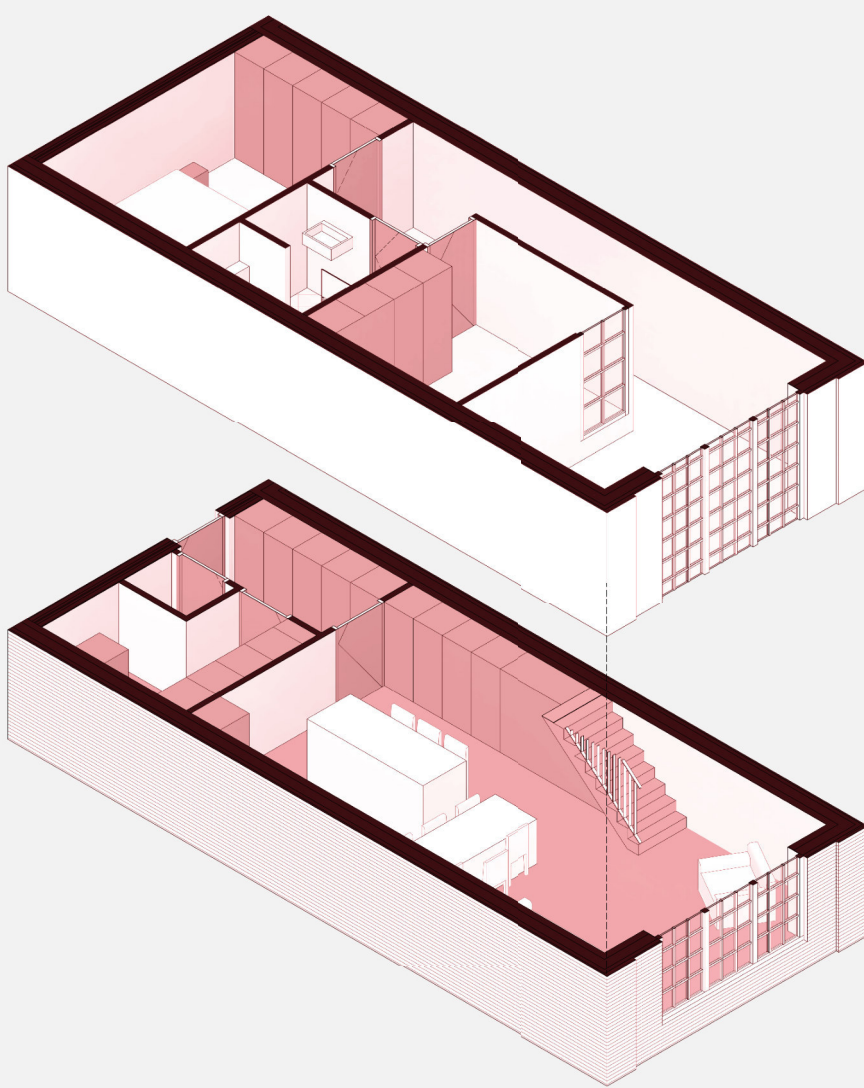
entrance 3m<sup>2</sup>  
tech. 1m<sup>2</sup>  
toilet 1m<sup>2</sup>  
livingroom+kitchen area 30m<sup>2</sup>  
bedroom 16m<sup>2</sup>  
bathroom 4m<sup>2</sup>  
storage 5m<sup>2</sup>  
  
total 60m<sup>2</sup>



Type C consists of 60 m<sup>2</sup>. The living type consists of an entrance, toilet, living room, kitchen, bedroom, bathroom and a storage room. The communal facilities consist of a laundry room, storage room and a multifunctional room. This space can be used, for example, to organize group activities. The link to the communal facilities is less present than in the two previous types.

## TYPE D

entrance 3m<sup>2</sup>  
tech. 1m<sup>2</sup>  
toilet 1m<sup>2</sup>  
livingroom+kitchenarea 45m<sup>2</sup>  
bedroom 10m<sup>2</sup>  
bedroom 15m<sup>2</sup>  
bathroom 8m<sup>2</sup>  
laundry room+storage 9m<sup>2</sup>  
  
total 95m<sup>2</sup>



Type D is the largest of the developed housing types. This consists of an entrance, technical room, toilet, living room, kitchen, bathroom, bedroom, storage room and laundry room. It covers 95 m<sup>2</sup> and is more separate from communal facilities. Type D is the least common distributed over the complex.



Lifestyle type A is small but likeable. It comprises a compactly designed space with a separate bathroom, pantry and bedroom. I have chosen to use the colours white and oak a lot. I like to challenge the residents to decorate the walls with a personal decoration. It has been deliberately kept compact to encourage residents to use the shared facilities.



Life type B is larger than the previous one. This consists of a living room/kitchen, a separate bedroom and a bathroom. The remarkable thing about this house is that the original construction has been entirely reconstructed and kept visible in the house. This keeps the connection to authentic craftsmanship visible. I also chose oak and many white colours as a basis.



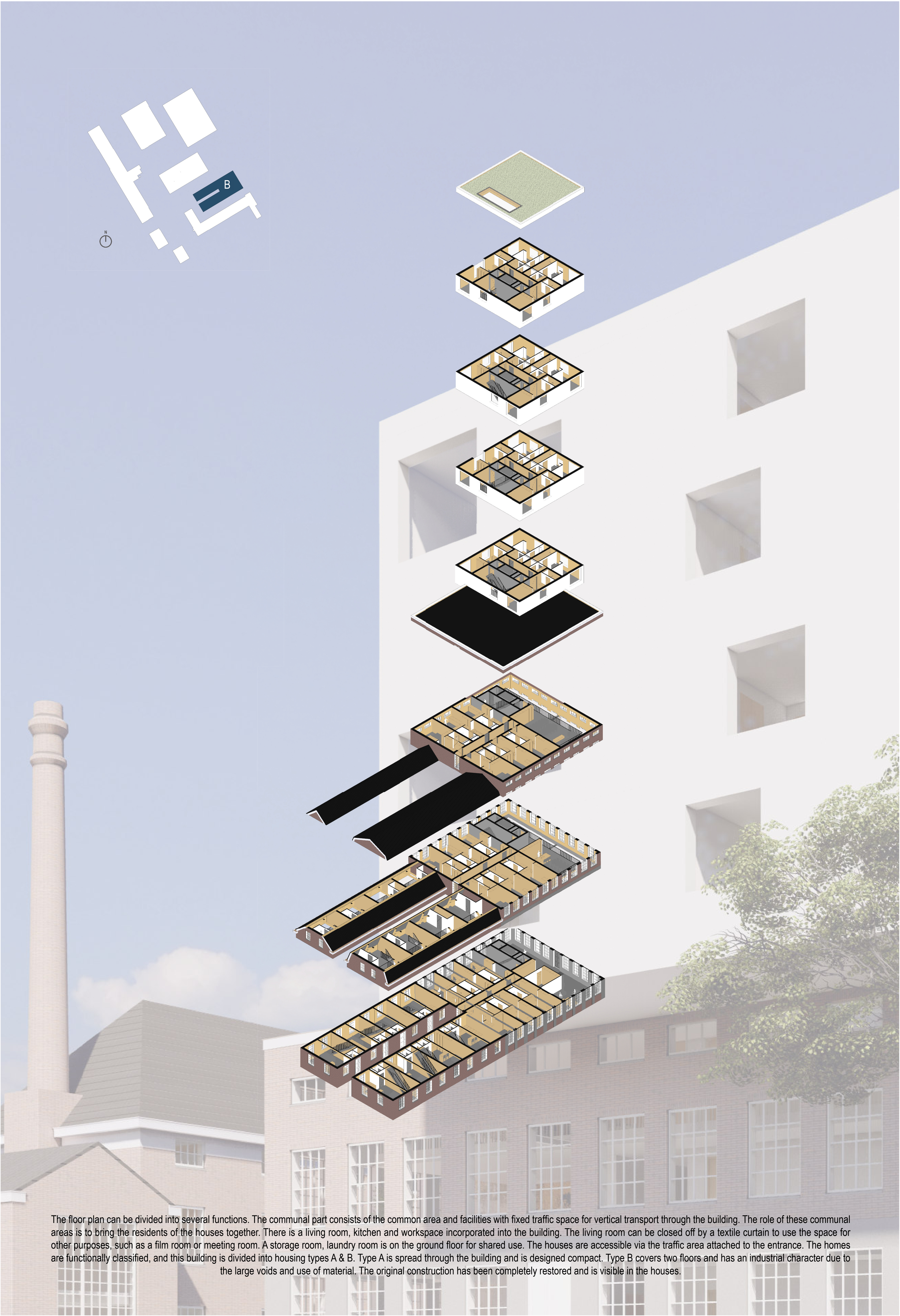
Life type C has a mezzanine as a bedroom. The storage room can also be found on the mezzanine. Furthermore, there is a lot of light through the large façade, and the height provides extra spaciousness.



Lifestyle type D is the largest variant. This consists of two bedrooms, a spacious kitchen, living room, bathroom, laundry room and toilet. The high heights of spaces also characterize this type of housing.







The floor plan can be divided into several functions. The communal part consists of the common area and facilities with fixed traffic space for vertical transport through the building. The role of these communal areas is to bring the residents of the houses together. There is a living room, kitchen and workspace incorporated into the building. The living room can be closed off by a textile curtain to use the space for other purposes, such as a film room or meeting room. A storage room, laundry room is on the ground floor for shared use. The houses are accessible via the traffic area attached to the entrance. The homes are functionally classified, and this building is divided into housing types A & B. Type A is spread through the building and is designed compact. Type B covers two floors and has an industrial character due to the large voids and use of material. The original construction has been completely restored and is visible in the houses.

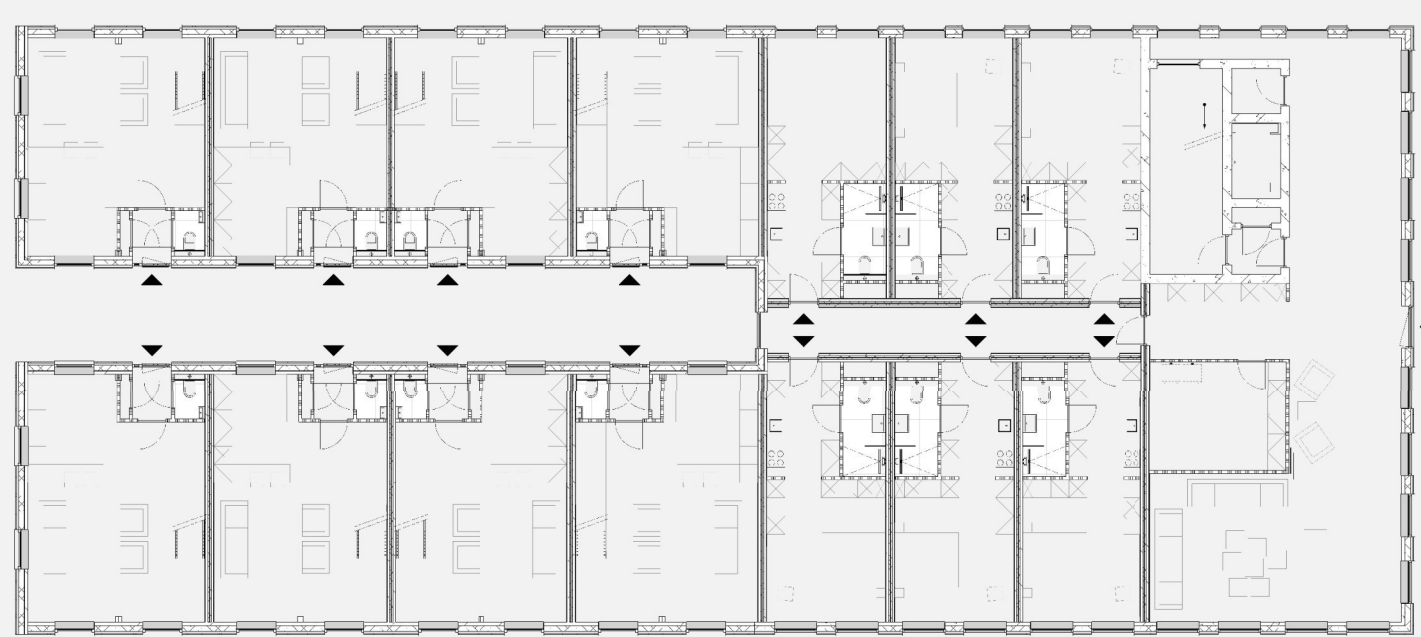
# BLOCK B



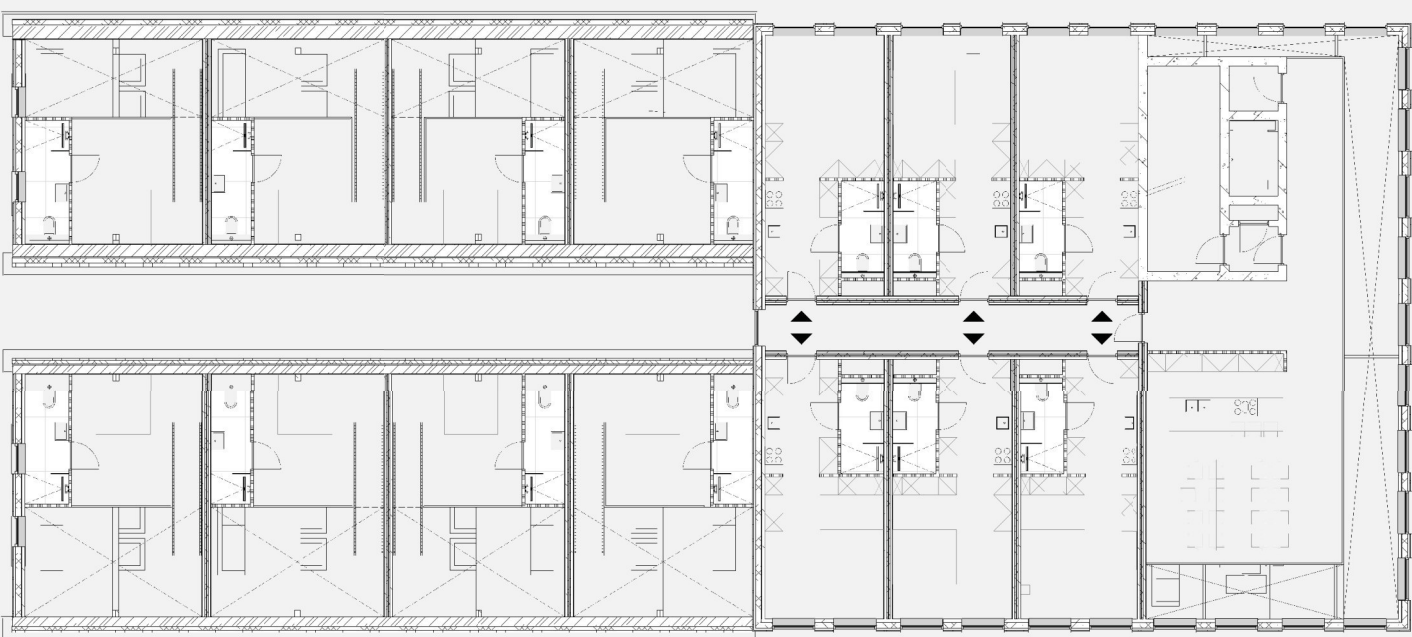
The communal areas are repeated in several places in the complex. It is the intention that residents of that building make use of these communal facilities. A living room, kitchen and workspace have been created. A shared laundry room/storage room is also included. The common areas have been created in the most spectacular locations in the factory volumes.



Personalizing the personal living spaces is possible in terms of wall finishes, style and atmosphere. The layout of these spaces is fixed. A wall has been set up in the communal areas that can be designed according to the wishes of the living group. It can be used however you want and is completely free. You can choose to have this wall overgrown or apply a mural. This way, residents can personalize their living spaces together if they want.



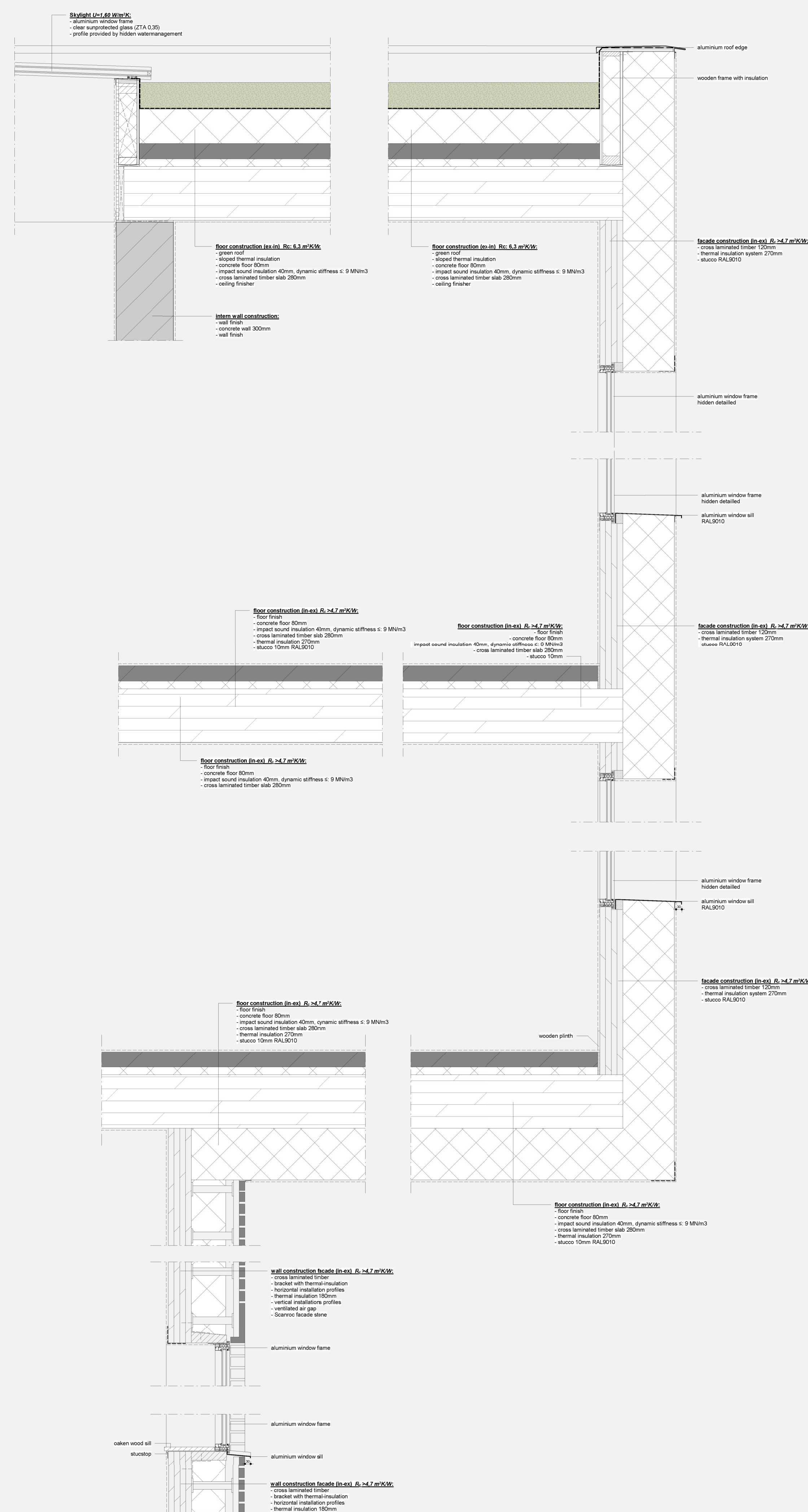
main floor



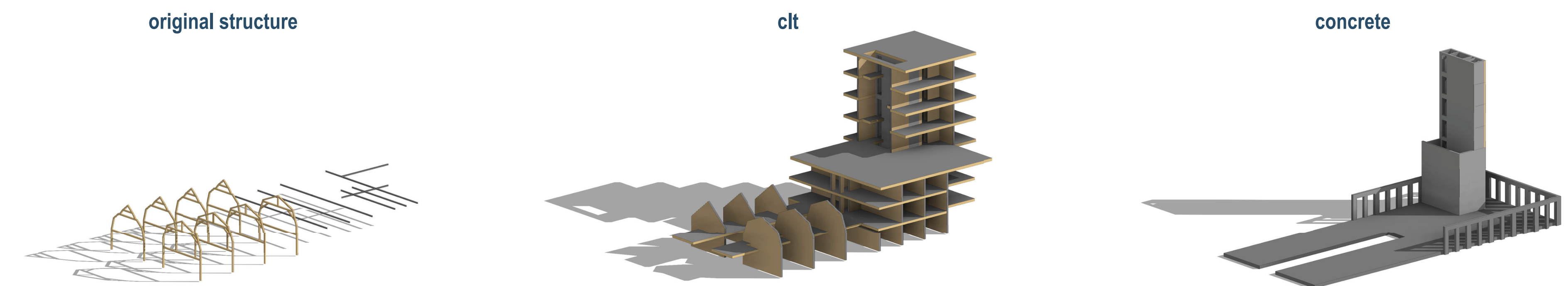
first floor



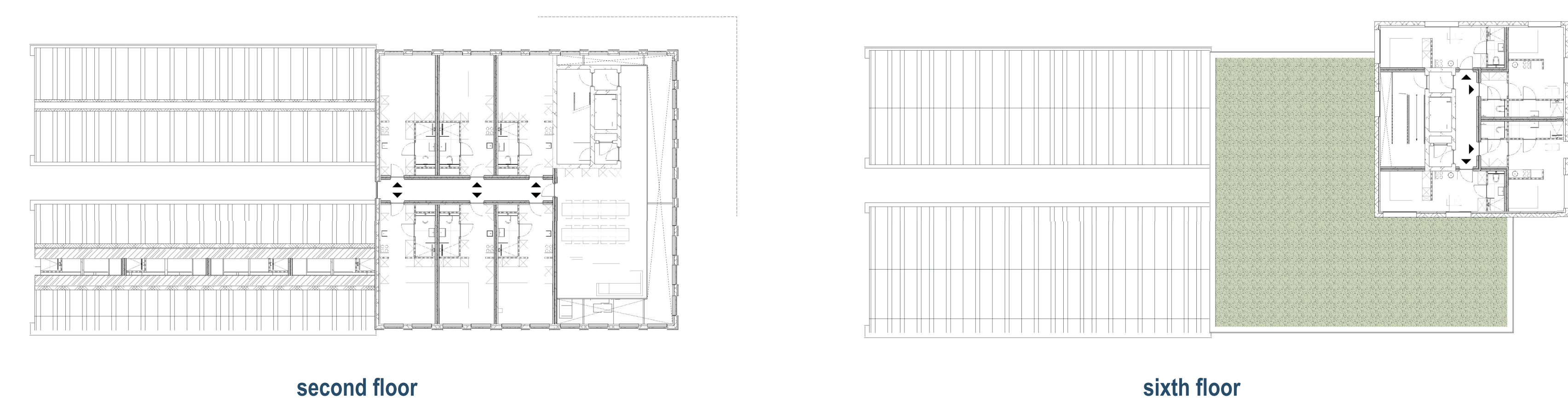
## MATERIAL & DETAIL



In the original situation, the elaborated structure also has a partly cemented plinth. I have chosen to make this part in the new situation utilizing a stucco system with a stucco layer with a grey concrete look. For the newly added volume, I opted for an appearance that is as abstract as possible. I want to achieve this by using a stucco facade, where the openings are set back in relation to the outer wall. This way, they are holes in surfaces, creating an abstract total. For the window frames, I chose aluminium frames. These are 100% recyclable without loss of quality. Therefore, it was essential for me to achieve the original look by using the possible aluminium profiling. Furthermore, white wooden fascia parts have been chosen as in the original factory. These buoy parts are finished with an aluminium roof profile.



The construction is a reincarnation of the original structure. I have chosen to examine the construction of all the buildings in detail and restore them in the buildings. I also looked at the use of materials in these constructions. The constructions of the buildings are originally made of wood and steel. For the stability of the building, I chose to make a concrete plinth. This concrete plinth is attached to the concrete elevator core. The rest of the walls and floors are made of CLT. CLT is often used in combination with concrete for stability.



The rebuilding of the factory opens doors for the use of new innovative materials. I think the factory must have the same appearance as the original. I have chosen to apply a wholly circular and maintenance-free Scanroc facade system to achieve this. This gives a masonry look but is made of cement-bound brick slips. It is an innovative system because it is mechanically fixed instead of glued. The sloping roofs are finished with black concrete roof tiles, the most durable roof tiles currently on the market. The production of a concrete roof tile creates less CO<sub>2</sub> emissions than other roofing materials. I opted for a green roof for the flat roofs. These green roofs positively influence the urban climate, removing polluted air particles and produce essential oxides.