HUSOCAP

Husocap is a public building in Copenhagen. It is an answer to the question of what role a public building plays in todays society. The design is focussed on an increasing segregation in Denmark and thus as well in Copenhagen. Husocap focusses on contemporary issues in that face Copenhagen and Vesterbro but at the same time looks at the long history Danish society has and contribute in maintaining this history. The building houses different types of programme that apply to certain target groups. The building is situated in Skydebanehaven, a historic park in the neighbourhood of Vesterbro.

DENMARK

Denmark is build on the Danish values. These all come down to equality. Danes value a flat hierarchy and people who do not think that someone else is better than him or her.

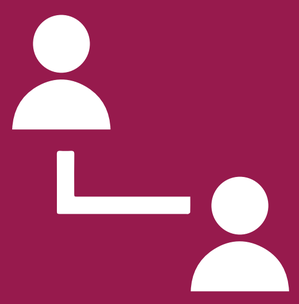
This equality is being threatened by the Ghetto Legislation. Once a residential area is marked as a ghetto people in this ghetto are being treated differently.

Because of gentrification Vesterbro has become a monotone neighbourhood when it comes to the people living there. As a result the diversity in the neighbourhood is low.

Interviews conducted in Vesterbro revealed that the people themselves lack diversity in the neighbourhood. This means that these people are open to welcoming other target groups into their neigbhourhood.

The municipality says they strive towards a more coherent city. This is done by forcing social housing in certain neighbourhoods such as Vesterbro. This means that like the city, the neighbourhoods themselves become more diverse as well.

HUMAN CAPITAL



SOCIAL CAPITAL

Peoples happiness is determined by their capital. This means not just capital in the physical form of money or things. Capital can also be valued in Human Capital and Social Capital. Human Capital is the skill or training people have to be good at something, this gives them purpose and increases their health. This can be seen as a form of self enrichment. Social Capital is the networks people have, who they know. This does not just make them happy but opens op opportunities in live. Most of the time people get things done not by what they know but through whom they know. The public condenser cannot play a rol in the Physical Capital of people but can play a role in their Human Capital and Social Capital.

TARGET GROUPS

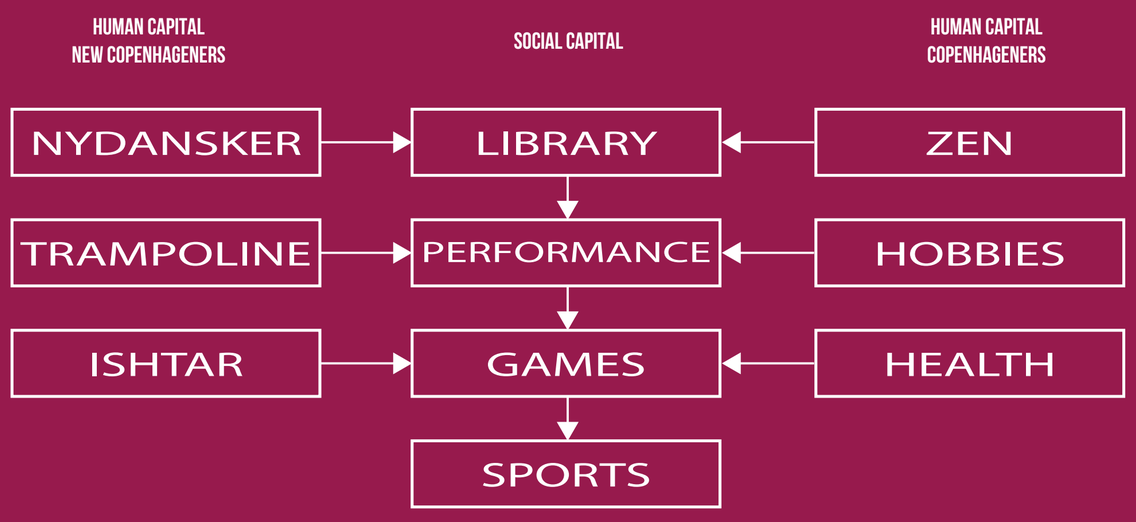
COPENHAGENERS

People with origins in Copenhagen or Denmark. These people grew up in the country and the city and thus have the abilities and connections to manage themselves in Copenhagen. Their priorities lie in keeping themselves healthy and happy. This can be done by sports, training and learning.

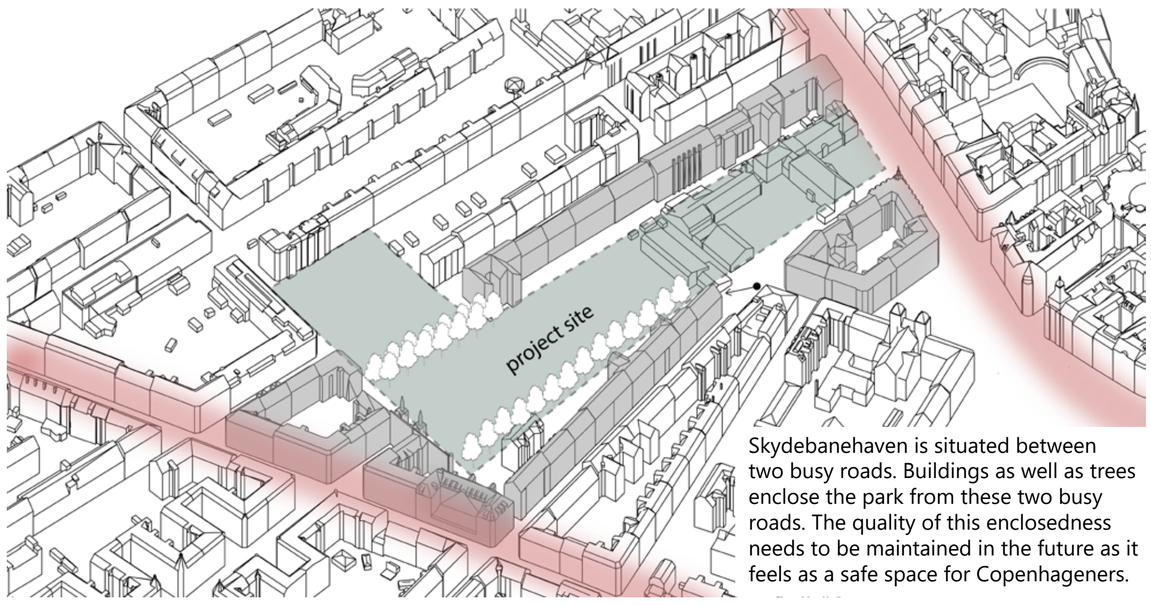
NEW COPENHAGENERS

These are people not originating from Copenhagen or Denmark. They have roots somewhere else and therefore have different habits and believes. Because of this most of them have trouble managing themselves in Danish society. Because of this they have the priority to learn their way around in language, getting a job and getting to know the people.

CONCEPT

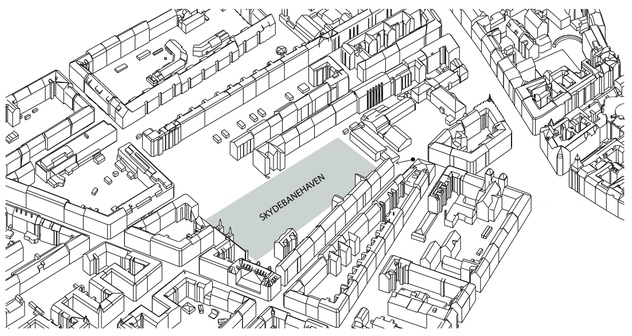


SKYDEBANEHAVEN



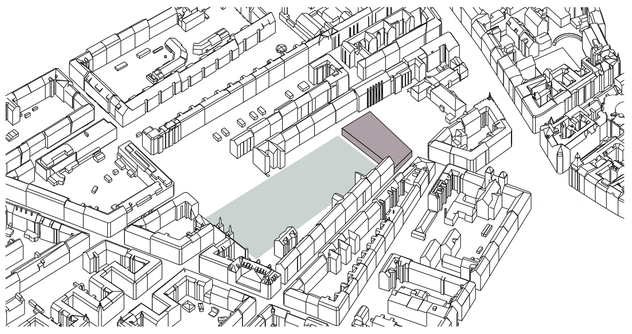
Skydebanehaven is situated between two busy roads. Buildings as well as trees enclose the park from these two busy roads. The quality of this enclosedness needs to be maintained in the future as it feels as a safe space for Copenhageners.

MASSING

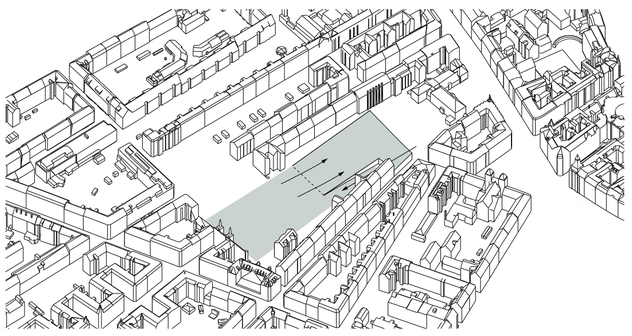


Skydebanehaven is an enclosed park within an densely populated urban block. It is surrounded by housing blocks, an ancient gate belonging to a shooting range and a youth house. It contains a playground, a small sport field and a grass field where people relax. Bacause it is so cointained it feels like an oasis of peace within a very busy city centre. These qualities have to be maintained.

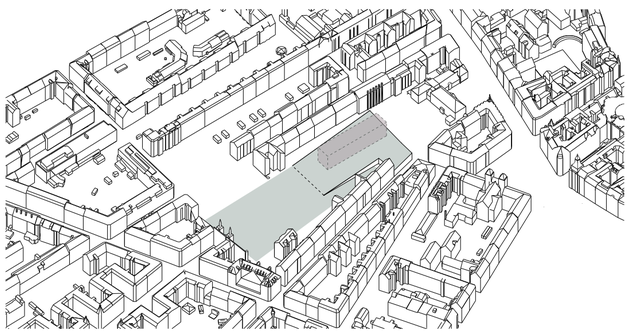
The blocks up north from Skydebanehaven are a messy ensemble in an onterwise very well defined urban block. This creates a very uninviting entrance to the park.



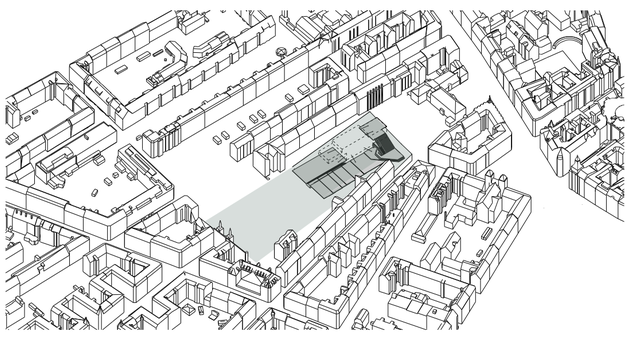
To create a clear entrance and definition of the urban block. continue the lines of the existing urban block and close of the park formally.



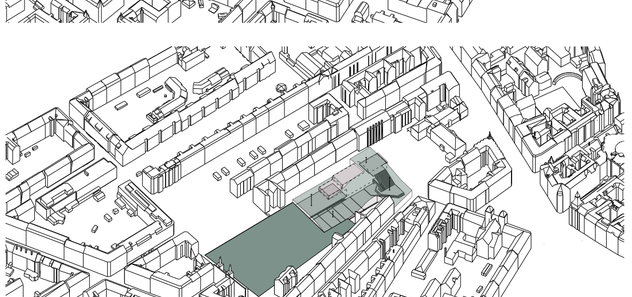
To keep the current qualities of the park intact continue the park onto the roof of the volume. this way it keeps its secluded feel.



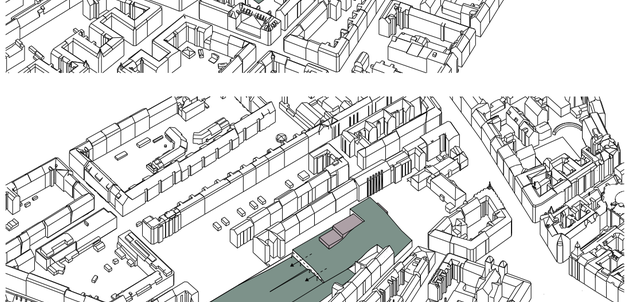
Into this created volume a solid shape is placed with the self enrich programme. This is the goal for what the visitors come. It is a block within the bigger building. It will get it's own look and feel.



This block of self enrichments is connected with the connect programme. This is a ribbon of sports, games, theater and a library. It enables vision from the blocks to the connect programme and it provides circulation.



All the connect programmes need different heights to provide the function they are designed for. This creates a curved roof on top of the building.

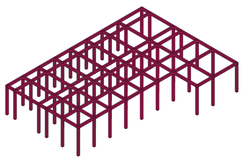


The sports and games programme also has a programme that extends outwards. Therefore the park is getting this stacked landscape that provides circulation to the programmes inside.

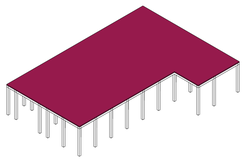
APPROACH

ATRIUM

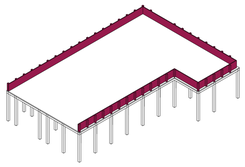
CONSTRUCTION



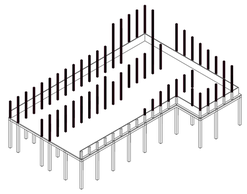
The whole structure needs to be supported belowground by a concrete foundation.



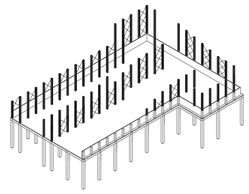
A concrete basement floor slab is created upon which the rest of the construction will be built.



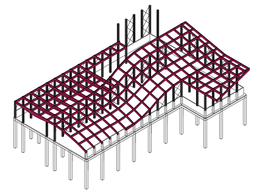
Because the wood construction material can not go from one climate into the other climate the concrete construction is topped up onto the ground floor.



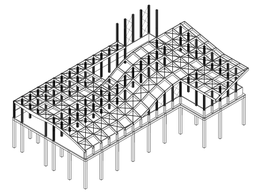
On the ground floor and in the basement the wood columns are built to support the roof.



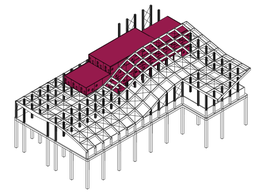
Wind bracing is porivded in three directions to create a firm structure.



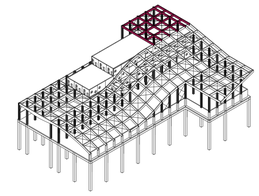
The wood roof sructure is built upon the wood columns creating a sloped roof structure.



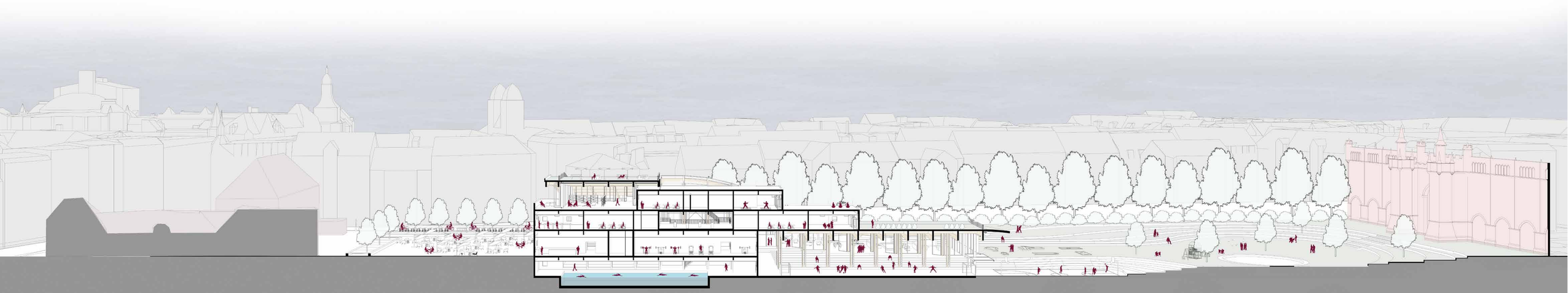
Wind bracing is provided in the roof structure so that the roof funtions as a slab.



The solid blocks are constructed of CLT. CLT elements are stiff elements and thus create a stable structure.

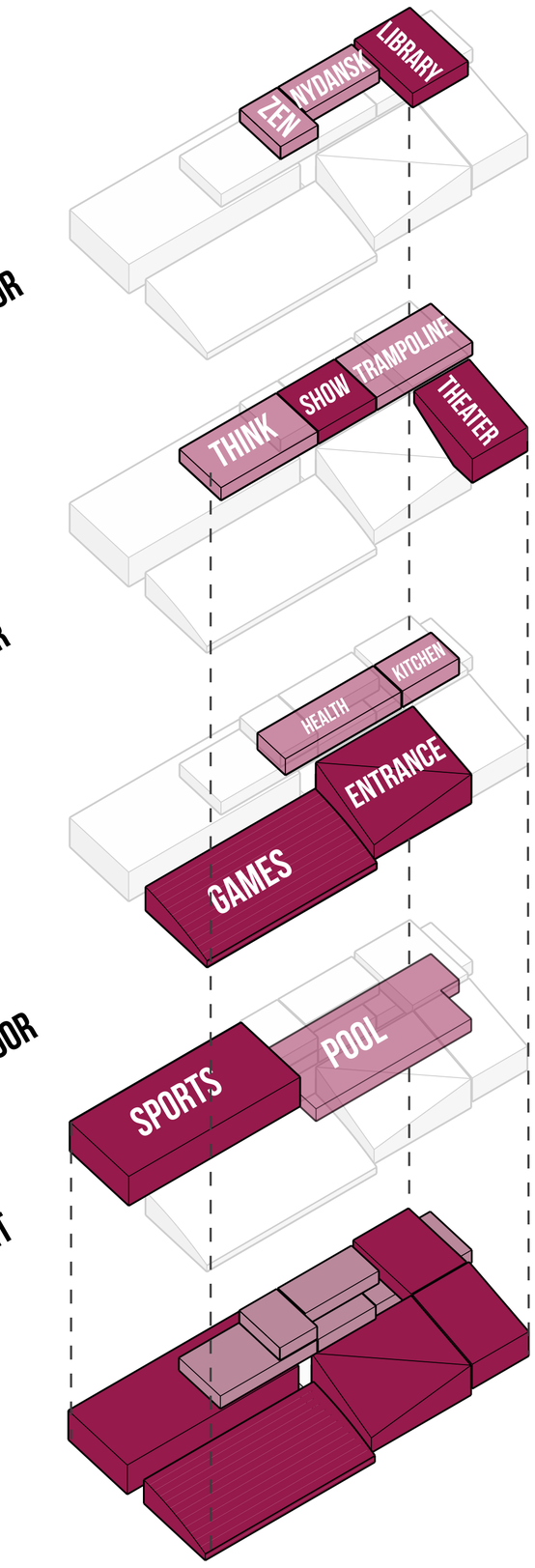


Complete the roof structure in the same manner as the rest of the roof.



SECTION

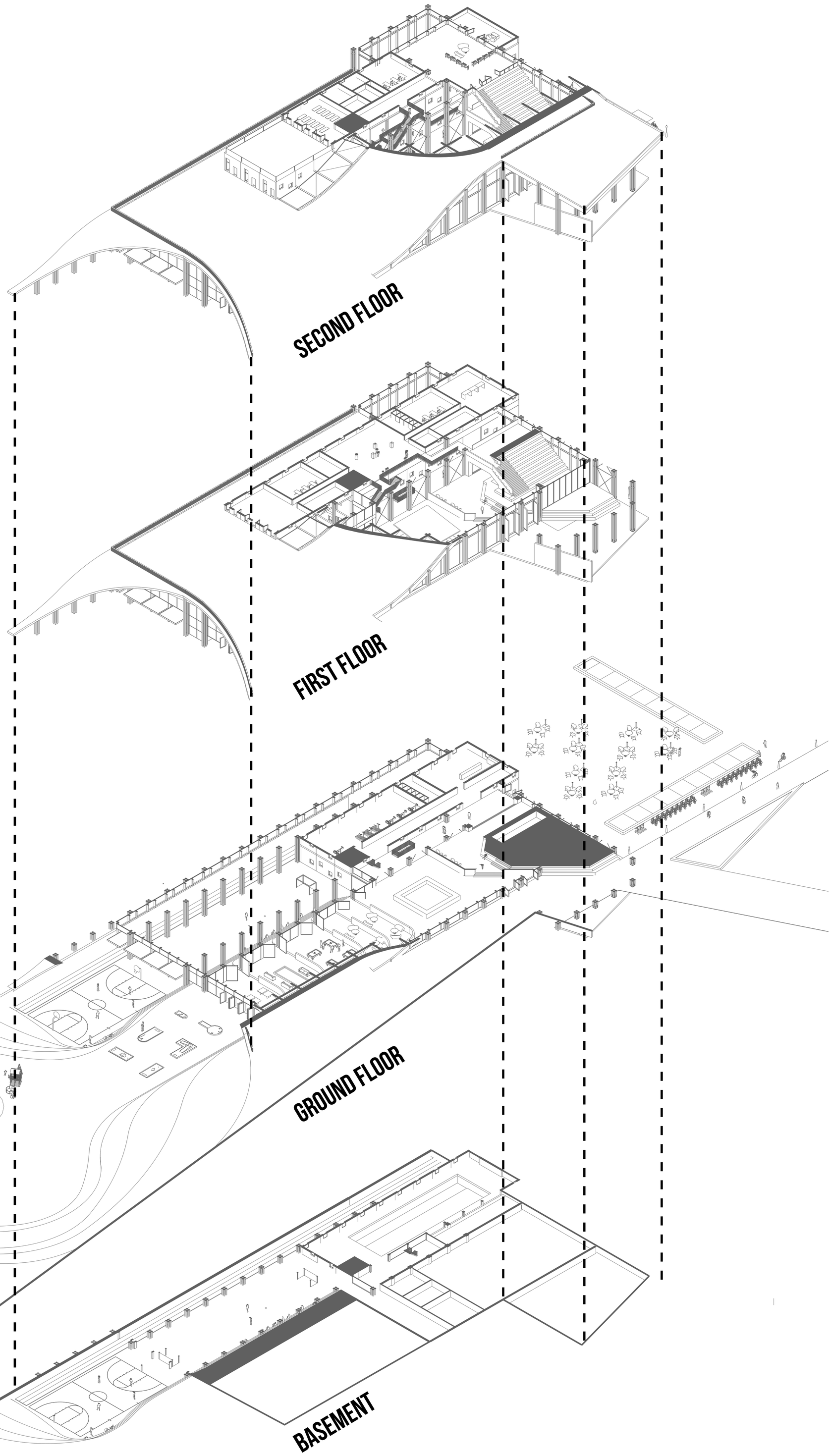
PROGRAMME



Self enrich programme

Connect programme

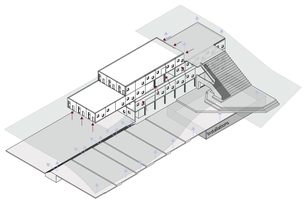
FLOOR PLANS 1:500



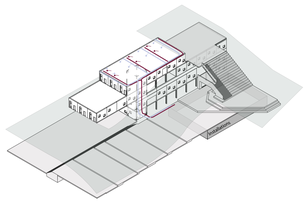
ENTRANCE & GAMES

PARK

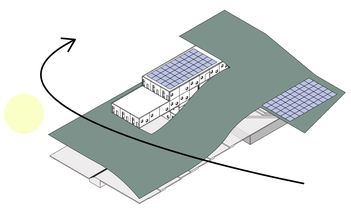
CLIMATE AND SUSTAINABILITY



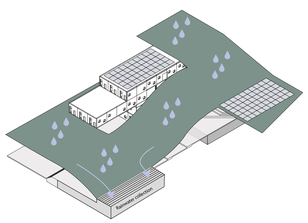
The connect programme has a big open character and the structure is in sight. Having all kinds of installations in sight would affect this quality. Fresh air is blown in through the floor since a space has been reserved below ground level for installations. The air will be drawn out through the surface of the blocks, this way the ceiling of the connect programme is kept free of installations.



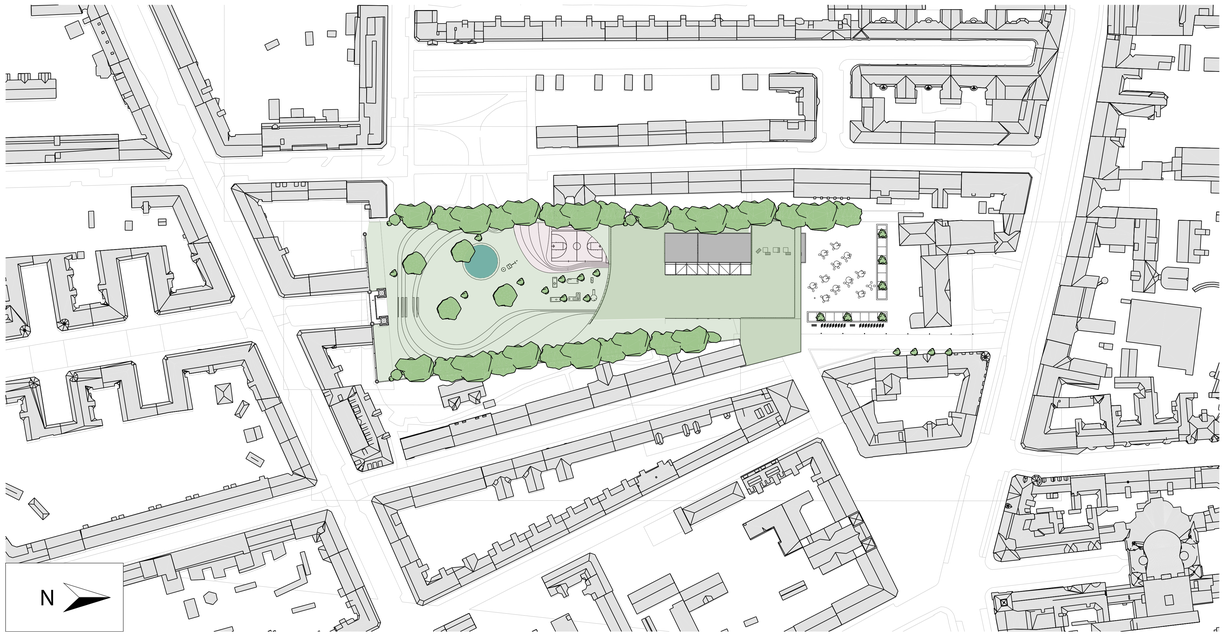
The blocks have their own climate system. This is a more traditional approach with lowered ceilings to guide all the ducts to their destination. The vertical transport is done through a shaft in the centre of the building.

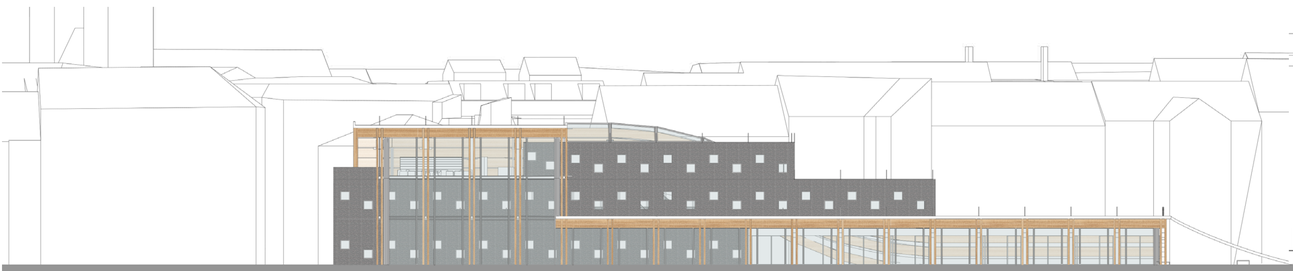


Not all the roof surface of the roof is used by activities. Therefore the unused parts of the roof will be used to place solar panels. This way the energy consumption of the building is reduced. The building's is orientated towards the south, therefore the solar panels have maximum efficiency

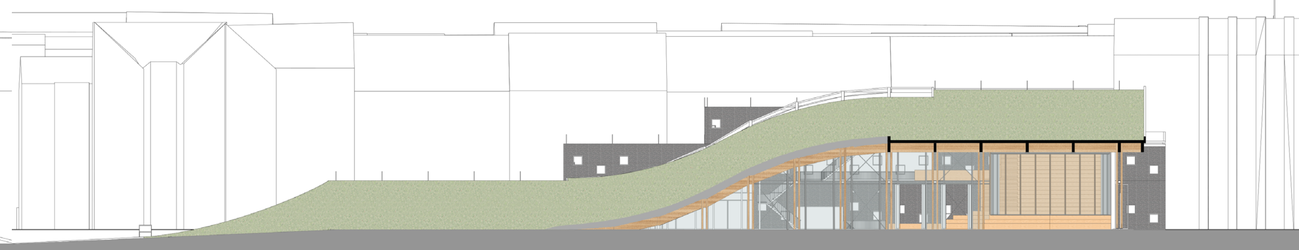


Since the building has this big green sloping roof it can be used to store water in first place. When it's storage capacity overflows it is guided downwards to the rainwater collection and used in the grey water system. This is water that can be used for toilets and cleaning water.





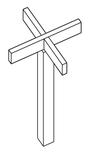
WEST FACADE



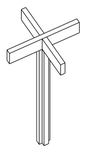
EAST FACADE

CONSTRUCTION DESIGN AND DETAILING

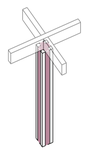
The construction is designed that the beams intersect one another at certain points.



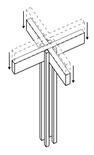
At some of these intersections columns are placed to uphold the roof structure.



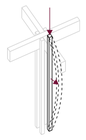
The column can be designed as the intersection as well.



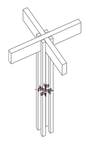
In this case it has been designed as the negative of the cross. To keep it as transparent as possible.



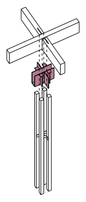
This way the intersecting structure can also be placed within the individual columns.



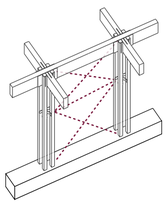
Because of the sideways force the columns tend to bend outwards.



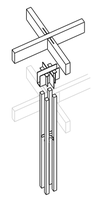
To prevent this from happening steel connections have been made along the length of the column.



A custom made steel shoe connects the roof structure to the column.

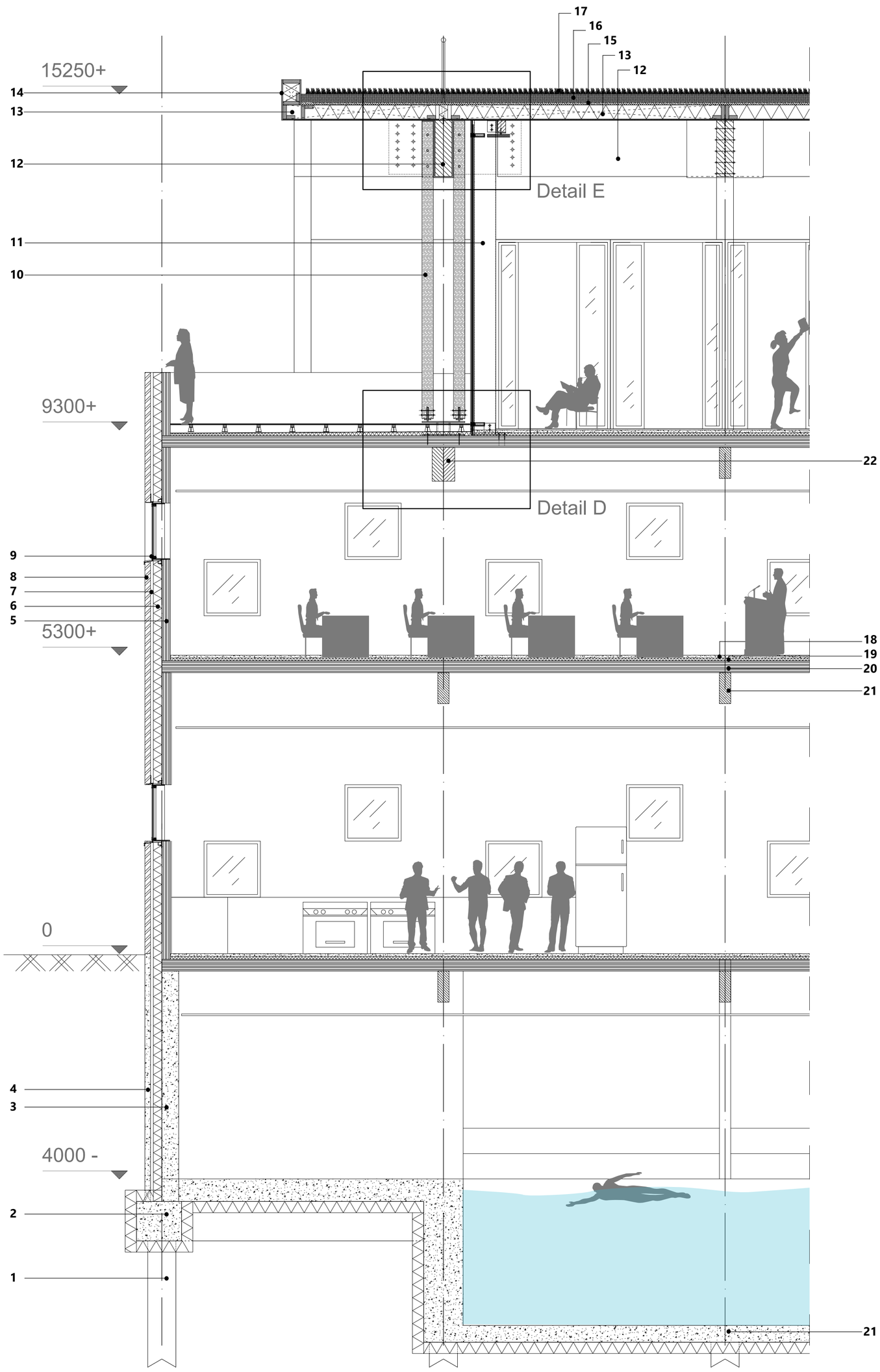


Simultaniously the steel connections and shoes can be used to connect wind bracing.



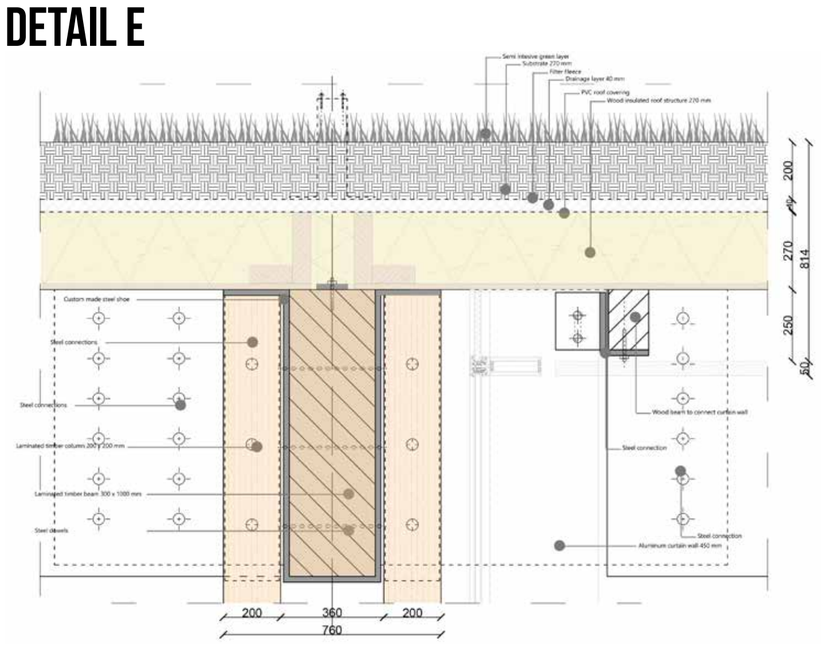
Because everything is made up of dry connections the complete structure is demountable in the future.

FRAGMENT SECTION

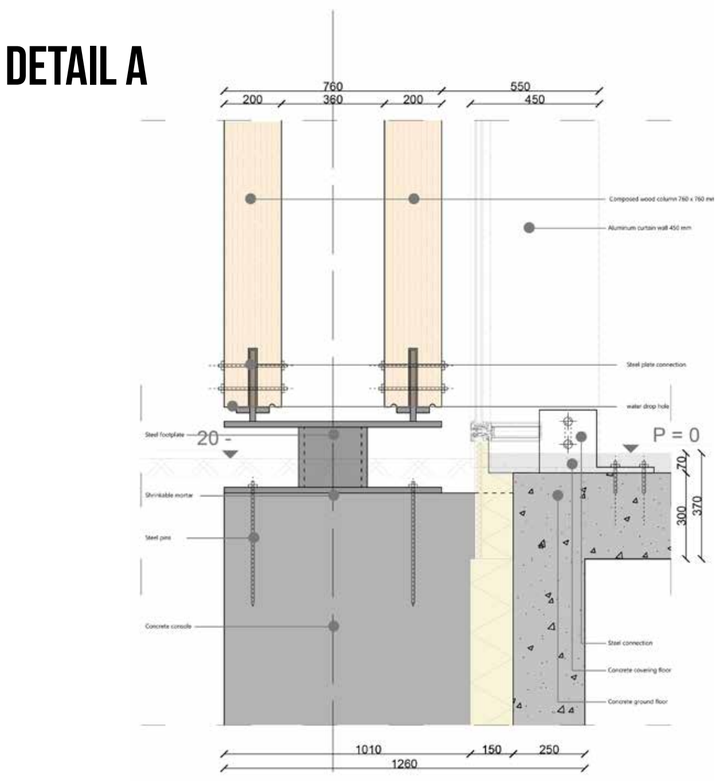


DETAILS

DETAIL E



DETAIL A



1 Foundation Pole
2 Foundation Beam
3 Inner concrete basement wall
4 Outer concrete basement wall
5 CLT inner wall
6 Insulation
7 Cavity
8 Brick outer wall
9 Aluminium window frame
10 Composed wood column
11 Aluminium curtain wall profile
12 Laminated timber beam
13 Wood insulated roof structure
14 Steel roof edge finish
15 Drainage layer
16 Substrate
17 Semi intensive green layer
18 concrete covering floor
19 Insulation
20 CLT construction floor
21 Laminated timber beam
22 Double laminated timber beam