RESEARCH REPORT

Research Report
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Delf University of Technology
Dutch Housing Graduation Studio 2020
Theo Kupers | Pierijn van der Putt | Ferry Adema

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ONBEPERKT WONEN

Living independently in a stimulating residential environment for young people with a mild intellectual disability

PREFACE

My aunt and uncle lived for years on the Jacoba van Beijerenlaan, not the most representive part of Delft. In a regular apartment, just like everyone else. My family took care of their financial status. But sometimes, out of sight of the family, they got in trouble. The umpteenth expensive bill of a new subscription fell on the doormat. Or they were scammed at their own door by someone who sold CDs and videotapes for outrageous prices. Due to their intellectual disability my uncle and aunt could not resist to this abuse of their cognition.

As a future architect I feel responsible for the safety and quality of the residential environment. A home is the basis of everyone's life. Where every's life is personal, each home should that be too. Since elementary school I want to create what the actual dwellers really need. Providing customization is of one of my most important values.

And so I also want to imply this in my graduation project with. Providing a residential environment for young people with a mild intellectual disability became the assignment. This research report forms the basis for my final design. I want to thank all the support I got from the social instances in order to help me in my research.

I hope you will enjoy reading this report and I am curious if it will widen your horizon according to the vulnerable people of our society!

With kind regards,
Martijn van Leeuwen

CONTENT

INTRODUCTION

M4H

ROTTERDAM

ROTTERDAM.
MAKE IT HAPPEN.

Looking out over de skyline of Rotterdam you notice the Port of Rotterdam and the urban development. These are the two main ingredients of the intended plan area of the municipality of Rotterdam to create a live-work environment for creativity, innovation and making together. This plan area is called M4H, an abbreviation of Merwe-Vierhavens. Collectiveness is one of the basic principles in the view on this plan.

The Dutch Housing Graduation Studio is taking this collectiveness further into account to create a high-dense and inclusive living environment. With our eye on the '1 million new homes', there is a challenging task for architects to create high quality and affordable housing for a diverse population.

The studio aims to tackle these challenges in an old harbour area, M4H, on the north bank of the Maas river. The excavating of the harbour 'Vierhaven' dates back to 1912, after which the 'Merwehaven' was excavated in 1916. It formed the basis for the transhipment storage of imported goods, from where they were transported inland. Nowadays large fruit import and export companies are dominating the area. Plans are there to transform this to the 'Make It Happen' region of Rotterdam, where the focus is on innovation, entrepreneurship and talent development.

In line with this ambitions we design a building, where we can merge this ambitions with a living environment for the inclusive city. As a total group of 15 students we propose a new urban master plan in which every student will design a collective building which houses a specific user group and a group of people who are going to work there: The Makers.

The Skyline of Rotterdam - © Martijn van Leeuwen (2020)

Research and design are inseparable connected in this process. Where the research part focusses on defining the user group and the makers, the design will translate these challenges into a new building. It is an circular process, where the research will constantly influence the design and the design raises new questions for the research. This research report contains the conducted research in relation to the topic, ending with the first attempts to create a building.

The research part starts with defining the user group from the overall challenge: an inclusive city. The topic research forms the basis of the research, where the relevance of the user group is demonstrated and a thorough analysis leads to who the actual dwellers are and what kind of requirements they have to their residential environment. This is underlined with the analysis of three case studies, which are less or more relevant for the user group. In this part is also defined what kind of makers will find their place in the building.

After the individual part of the topic research, an in-depth analysed of collectivity will follow in the second part. In our group of 15 students we developed a method to study collectivity in residential buildings. On the base of 15 case studies we defined five approaches of collectivity. Main topics of analyzing were the type of housing, functions in the building, accessibility, the relation between public and private and movement in the building. This analysis shows several ways to integrate moments of collectiveness in the conceptual design of everyone's own building.

We as a group not only defined ways to integrate collectivity in our designs, but also designed an urban master plan for the Keilekwartier of M4H. The total group of 15 students is devided in four groups of 3 - 4 students to design a quadrant of this plan. All plans together form a coherent composition for our view on Keilekwartier. This is the basis in which every student has chosen its own building block. Fromout this urban master plan, presented in part three, the individual building block is shaped. Therefore the results of the courses 'Research Tutorial' are involved in part four. With the use of Virtual Reality the block is shaped from the eye's height perspective.

This research report comes to an end in part five, where the first attempts of the conceptual design are presented. Because of the ongoing process in the studio, these results can differ from the presented ideas during P2. But it forms the basis of the building in which the research is translated into design.

TOPIC RESEARCH

1M HOMES

We are currently facing a huge dwelling assignments in the Netherlands: we have to build up to one million homes in 2035 (ABF Research, 2017). Due to an expectation of the growth of the population with around 822 thousand people between 2018 and 2035, there is need for affordable and suitable housing solutions in the Netherlands (TU Delft, 2020). With the task to build up tot 75.000 new dwellings each year, we need to question ourselves if those new dwellings are suitable for everyone? Aren't we losing our eye for the actual dweller? We have to pay some extra attention to a smaller group of this growing population.

The Skyline of Rotterdam - © Martijn van Leeuwen (2020)

THE COMMUNITY

RELEVANCE

Around 15% of the Dutch population has an IQ between 50 and 85. 142.000 Of those people have an IQ lower than 70, wherefrom around 74.000 people with a mild intellectual disability (VGN, 2019). These people are not social self-reliance in one or more ways and need some support. Also in the group of people with an IQ between 70 and 85, a substantial part has a mild intellectual disability. In 2018 there were in total circa 1,1 million people with a mild intellectual disability (Woittiez et al., 2019).
It's not directly visible, but they often have trouble in keeping up with the increasingly complex society in social areas. Problems in the field of the social self-reliance can occur on multiple levels, among which social communication, health, safety, work and the ability to live independently (Woittiez et al., 2019).

Before 2015 people with a mild intellectual disability could rely on the care for the disabled for their housing. Since the introduction of a new law – Wet Maatschappelijke Ondersteuning (WMO) – in January 2015 this was no longer possible and they have to follow the regular process. (Architectuur Lokaal, 2016). However, because of their cognitive and financial problems, they often have little or no chance to successfully complete this process. "Zij weten zich in de regel met moeite staande te houden en zonder steun en zorg kan dat leiden tot problematisch gedrag" (Architectuur Lokaal, 2016, pp. 4).

It can be difficult for the parents to take care of their children when they stay longer at home, but there is no longer an alternative due to the changed WMO.

HandicapNL, 3 Februari 2017

Movisie, 26 November 2018

Mantelzorgelijk, 12 januari 2017

Iederin, 5 december 2015

INCLUSIVE SOCIETY

A few years ago, numbers of the research of the SCP (Social Cultural Planning Agency) showed that the demand for care for people with an intellectual or physical disability increased each year strongly (Woittiez et al., 2014). At that time, the most outstanding declaration for this decrease was the increasing complexity of our society (De Haan et al., 2018). The consequences of this trend has a lot of influence on the daily life of people with a mild intellectual disability.

It's essential to know people with MID are just people like you and me. They have the same needs, dreams and wishes. Only they have trouble in moving forward in life, because making social contact is not naturally for them (Van Jaarsveld et al., 2016). Besides a lower IQ than the standard average of 90 - 110, people with MID have trouble in their social self-reliance. They need some support in social fields, like social skills, daystructure, finance, work, doing the household and more.

Till 2015 people with MID were assured of healthcare by the Dutch law AWBZ (Algemene Wet Bijzondere Ziektekosten). From 1 January 2015 there is only right to this kind of healthcare if intensive care and superivision is required all day long. This no longer applies to people with MID. For their healthcare they are now assured by the new law, WMO (Wet Maatschappelijke Ondersteuning. But a substantial difference between the AWBZ and WMO is the duty of care. Inside the AWBZ people have the right to healthcare.

But in the WMO these people should be compensated, with an emphasis on should. Municipalities are not required to provide services for the healthcare of these people (Woittiez et al., 2014). People with MID are now responsible for their own functioning and now have to apply for help and support by their own. They have to ask their own network for support first. This network also includes their neighbourhood or district. Only when there are no possibilities for help and support from their own network or from voluntary organizations, they are admitted to the formal help and support by the WMO (Woittiez et al., 2014).

The importance of a valuable neighbourhood is recognized by the Piramid of Maslow (Figure 1). It's also called the Theory of Human Motivation. It shows the building blocks on which our statisfaction is build. Maslow assumes when a 'lower' need is statisfied, more space opens for higher needs (Movisie, 2019). The need for a safe living environment is on the second place, after the physological needs. The neighbourhood can contribute to someone's statisfaction, because it can fulfill more levels in the piramid. But it is also a building block which must be statisfied, before someone can work on his self-development.

According to Dannenberg (2016) there are four different scenario's about how the society can deal with vulnerable people. The scenario's also reflect the ideas about vulnerable people from the past and what should be the focus from now on.

Figure 1 - Piramid of Maslow (1943), from: Movisie (2019).

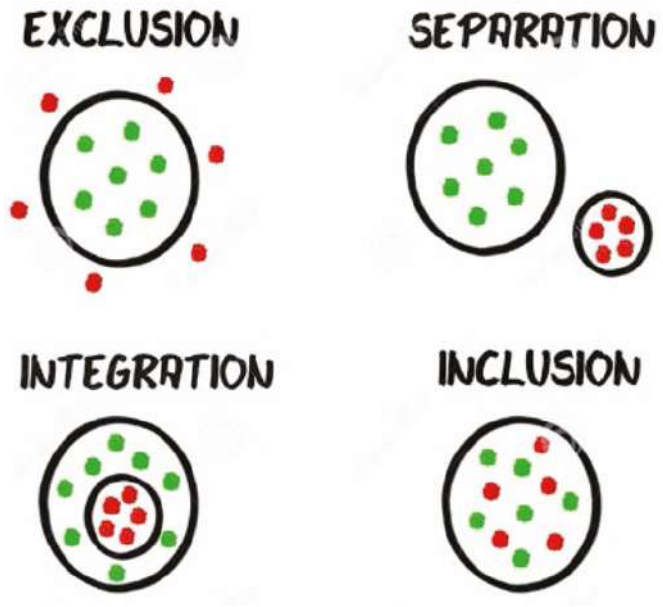


Figure 2 - Four Scenario's, from: Dannenberg (2016).

The most easiest way to deal with vulnerable people was to exclude them from our society. Unfortunately this still happens at this time. Close to this is separation, where people are still not part of our society but are separated from it. Well-known examples are the mental health institutions in the woods. From this part starts the re-integration of these people in our society. Projects with protected living are the most outstanding examples in this field of integration. But the focus now is on inclusion. Here, the people are part of our society just like everyone else. This trend of inclusion is also recognizable in different fields like education and work (Dannenberg, 2016).

Since the entrance of the WMO, the government policy on healthcare is built on an inclusive society, but our residential environment is not yet ready for this kind of inclusiveness. The focus of the healtcare system is on living on your own, but without a suitable environment this is not going to work. Especially young people with MID are having trouble in this. Due to the changed WMO they now have to stay longer at home, because of their need for support. This is for the parents and caregivers a huge task. But also for the young people, where they have the willingness to live independently just like others (Architectuur Lokaal, 2016). It's our task to design a user specific residential environment which is suitable for them. Young people with MID are in need of a suitable and stimulating environment, this raises the following research question:

RESEARCH QUESTION

"In which way can the design of the residential environment contribute to the social self-reliance of young people with a mild intellectual disability?"

The research question focusses on a inclusive residential environment, where the dweller can dwell independently with a little support from its personal network and neighbourhood. In order to answer the main research question, subquestions are raised to get a deeper understanding of the community and their needs for their residential environment.

SUB-QUESTIONS

- What is a mild intellectual disability?
- Who are the faces behind people with a mild intellectual disability?
- What exactly changed in the care of people with MID due to the entrance of the WMO?
- What kind of healtcare is essential by people with MID?
- What are the problems in how people with MID dwell nowadays?
- How can the direct neighbourhood contribute to the well-being of people with MID?
- What kind of services and facilities are needed for the caregivers of people with MID?
- What kind of residential environment do people with MID prefer?
- How can people with MID be supported in their social self-reliance?

THE LIMITATIONS

DEFINITION MID

People with a MID can have several problems, this makes it difficult to indicate the exact number of the population. Multiple definitions are used to describe MID. The most outstanding characteristic is on the base of the IQ. Someone has an intellectual disability when he or she has clearly cognitive limitations (Woittiez et al., 2014). Whether this is the case, is based on an intelligence test. The result of the intelligence test is not a fixed value, because it can be influenced by someone's mood and motivation, but also concentration. That's why we have to consider it as an interim value (Woittiez et. al, 2014).

People with an IQ between 50 and 70 belong automatically to people with MID. People with an IQ lower than 50 belong to the group of people with a severe intellectual disability. Also in the group of moderately retarded people, with an IQ between 70 and 85, a substantial part belongs to MID. This depends on their social self-reliance. Someone's social self-reliance is determined by checking how the person scores in conceptual, social and practical skills (Schalock et al. 2010).

Social self-reliance is also considered as adaptive social behaviour. This has nothing to deal with the IQ, but there often is a connection: someone with a lower IQ is mostly not skilled enough to care of themselves. Problems in coneptual skills can occur in literacy, time and money. Social skills can lack of self-esteem, social resonsibility and problem-solving capacities. More practical skills include personal care, dealing with money, travelling with public transport and working in a profession (Woittiez et al., 2014). The score on these three levels determines someone's need of support. In the Netherlands we use a more widened definition of MID. In international standards, the IQ is limited to 70 or 75. We also adopt people with an IQ of 70 to 85 to MID, on the condition they are not social self-reliance.

According to the American Association on Intellectual and Development Disabilities (AAIDD) in Schalock et al. (2010) someone is diagnosed with an intellectual disability when we can speak of:

- A significance limitation in intelligence (two standard deviations below the average).
- The occurrence of relevant limitations in the social self-reliance (more than two standard deviations below the average.
- The occurence of these limitation before the age of 18th year of life.

The most accurate definition of a mild intellctual disability, which is often used in the Netherlands, is the one of the Social Cultural Planning Agency (SCP). According to Woittiez et al. (2014, pp. 3) the definition of MID is:

- *People with an IQ between 50 and 70;*
- *People with an IQ between 70 and 85 who are having trouble in their social self-reliance.*

The social self-reliance is also considered as limited social adaptability. This is the case when the disabilities are causing problems in at least two of the following areas:

+ *Communication;*
+ *Self-care;*
+ *Be able to live independently;*
+ *Social and relational skills;*
+ *Making use of community facilities;*
+ *Make independent decisions;*
+ *Functional intellectual skills;*
+ *Work;*
+ *Relaxation;*
+ *Health;*
+ *And safety.*

POPULATION WITH MID

There is no exact number of people with MID in the Netherlands, because it is hard to say who is also experiencing problems in their social self-reliance. Also the CBS (Centraal Bureau voor de Statistiek) is not familiar with an exact number of people with MID.

Most of the literature is based on raw estimations dating from 2014 from the SCP. Commissioned by the RIVM (Rijksintituut voor Volksgezondheid en Milieu), the SCP made an estimation of the population with MID. They renewed this research in 2019, which are the most reliable estimations.

One of the methods to determine the population is on the basis of the intelligence-test. These tests are composed to represent the normal of a population. The IQ is the average with a standard deviation of 15. According to figure 4, the population with an IQ between 50 and 70 is 2,1% of the total population. 13,6 % Of the population has an IQ between 70 and 85. These numbers form the basis of the estimations of the SCP (Woittiez et al. 2019).

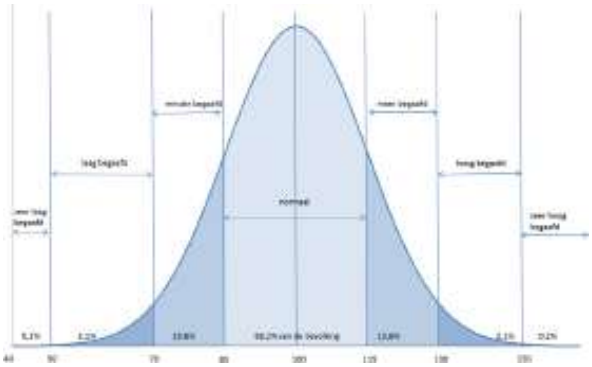


Figure 3 - IQ Population, from: Woittiez et al. (2019, pp. 4).

The term which is used to indicatie the amount of people with MID is called 'prevalence'. The prevalence says something about the appearence. In this case it means how often MID appears as part of the total population.

According to the research of the SCP, published in 2019 there are 142.000 people in the Netherlands with an intellectual disability, which means an IQ below 70 (VGN, 2019). 68.000 Of them have an IQ below 50 and the other 74.000 an IQ between 50 and 70. Furthermore, there is a group of circa 2,2 million people with an IQ between 70 and 85.

How much of them deal with MID depends on their social self-reliance. Here, a difference can be made between adults and young people. It seems that young people have more trouble in their social self-reliance than adults, which is stated by the higher prevalence among young people. This could be caused by the high education requirements or because there is a lot of awareness on disabilities at that age (Woittiez et al., 2019). At the same time, adults can have developed skills to become more social self-reliance over the years or are later marked with an psychiatric label and disappear of the radar.

The SCP used an older research, dating from 2011 to specifiy the prevalence of MID among young people up to an age of 17 years with an IQ between 70 and 85. According to this research 37% of these young people have trouble in their social self-reliance and are indicated with MID (SCP, 2011). The prevalence among adults is determined on the base of an older research, dating from 2000. On the base of an survey the prevalence is estimated on 30% of the adults (Woittiez et al., 2019).

Although some of the literature used in the research of the SCP seems to be outdated, these results are the most representative. Out of this latest research, the total prevalence of people with MID is 1,1 milion people in 2018, with an width between 0,8 and 1,4 million as extreme values. This means 6,4% of the total Dutch population deals with MID. There is no other research available which gives a more precise estimation (Woittiez et al., 2019).

SHIFTING PARADIGM

However the focus now is on a inclusive society, so people with MID have the same chances as anyone, this has not always been the mindset of our society. This is developed over the years, starting in early 19th Century.

The start of scientific research towards intellectual disabilities dates from around 1800, during the French Enlightenment (Van Gennep, 1997). At that time there was a dominating paradigm from Descartes, which assumes the existence of innate ideas. A paradigm is way of thinking from the science of philosophy. The word 'paradigm' is introduced in the science of theory by Thomas Kuhn, by which he indicated a scientific achievement. These paradigms can change over time, when new theories and data won't fit the paradigm. This happens after scientific conflicts and controversies. When a new paradigm arises, the old one will be released (Van Gennep, 1997).

The paradigm of Decartes evoluated into the paradigm of Condillac, which assumed that all knowledge starts with experience. By holding these experiences, general ideas arise. People with disabilities were seen as the crippled people, who generates compassion (Lissens & Broekaert, 2014).

When it became obvious it was not possible to recover from these disabilities, the paradigm 'medical model' made its appeareance. According to the medical defectparadigm, the emphasis of the disabled was on what they were not capable of. They were seen as patients who had to be cared in large institutions outside the society. Disabled people were seen as a burden on society, and especially in nazi-times sometimes sentenced by death. (Lissens & Broekaert, 2014).

After World War II, the paradigm slightly changed towards the normalisation paradigm which had a major influence on the policy of the healtcare for people with a intellecutal disability. (Van Gennep, 1997). From around the 60's it became less obvious to house people with disabilities in large institutions far outside our civilization (Brummel, 2017). The way of thinking changed due to the public opinion about disabilities. This resulted in Denmark, in 1959 in a new law on the care of the disabled. *"De sleutel van deze nieuwe wet lag in een klein zinnetje, namelijk dat de verstandelijk gehandicapte een bestaan moet kunnen leiden dat 'zo dicht bij het normale ligt als maar mogelijk is'.*" (Van Gennep, 1997, pp. 9).

From the 70's people with disabilities became our fellow citizens (Van Gennep, 1997). The normalisation paradigm, flourishing in the 70's and 80's, caused a separation in the integration in the society. Some people who were capable enough had the possiblities to integrate in society. Others with more disabilities were left behind in the institutes (Moonen, 2015).

During the 90's the quality of existence became the central focus, which led to the citizenship paradigm (Gennep, 2007). People with disabilites were now regarded as equal citizens of society, with the same rights and obligations. Therefore, they have to be supported by the society. *"Mensen leven in deze wereld en hoeven niet 'klaargestoomd' te worden om een plek in de samenleving te mogen innemen. Wij zijn allen lid van de samenleving en daar wij denken dat dit nodig is, kunnen wij ondersteuning vragen aan andere mensen in die samenleving of aan instituties die de ondersteuning kunnen bieden."* (Moonen, 2015, pp. 27). People with disabilities have to be seen as equal citizens of our society.(Vermeer, 2000).

A shift is recognazible in the healthcare system. During the medical defectparadigm, the quality of care was dominating. From the citizenship paradigm this changes to the quality of life. *"Bij kwaliteit van bestaan staan empowerment, sociale inclusie, zelfbepaling, individuele ondersteuning en persoonlijke*

Defectparadigma	Ontwikkelingsgericht-paradigma	Burgerschapsparadigma
Persoon met een handicap	Persoon met mogelijkheden	Persoon met rechten en plichten
Patiënt	Leerling	Burger / Cliënt
Dokter, Verpleger	Orthopedagoog, Psycholoog	Orthopedagoog, Psycholoog, Persoonlijk begeleider
Verpleging	Ontwikkeling, Training	Ondersteuning
Goede zorg	Mogelijkheden	Kwaliteit van leven
Instituties	Speciale voorzieningen	Wonen in de samenleving
Segregatie	Normalisatie	Inclusie

Figure 4 - Characteristics of paradigms, from: Moonen (2015, pp. 27).

ontwikkeling centraal." (Lissens & Broekaert, 2014, pp. 12). According to Van Gennep (1997) the new citizenship paradigm consists of a few elements, that are interrelated:

- The primacy of society
  As an equal citizen, the person decides about his own support in care.

- Choice and control
  The person can choose by its own where he and with who he wants to live, where he wants to wark and what he wishes to do spend his free time.

- Support
  In the new paradigm, the word 'care' is replaced with 'support'. This consists of the knowledge and needs the persons have to fully participate in society. The person no longer has to prove himselves to be accepted, he already is part of our society.

- The quality of life
  The person shapes and fills in his own existence under normal conditions as they are in society, in a way the person is satisfied with his own existence.

This new paradigm is sometimes defined as the support paradigm. Van Gennep advocates in his article on shifting paradigms (1997), this shift will have consequences for the policy, economy and organisation of care. Here he is warning for occuring problems like, what he calls 'etikettenzwendel' (EN = label scamming). Old systems will then be labelled with new names, despite nothing has changed according to the new paradigm. "*Zorgaanbieders kunnen ten onrechte bestaande woonvoorzieningen 'ondersteund wonen'(supported living) gaan noemen en bestaande arbeidsprojecten 'ondersteund werken' (supported employment).*" (Van Gennep, 1997, pp. 30).

All above mentioned shifted paradigms caused changes in the housing of intellectual disabled people. Erik Dannenberg desribes in 'Van beschermd wonen naar een beschermd thuis' the terms exclusion, separation, integration and inclusion (Dannenberg, 2016).

In the beginning people with intellectual disabilities were seen as crippled and not part of our society. They were excluded from it. This changed at the time of the medical defect-paradigm, but still the emphasise was on their disabilities. Nevertheless they got care in large institutions, separated from the society. In the next paradigm, the view of the disabilities changed into that of the possibilities. When people had the capacity, they could integrate in society. New housing forms were built, where people with a disability lived in so-called 'housing-groups'. People with the same disabilities lived together in a group as an integrated form in the society. From the citizenship paradigm till now the framework is formed by inclusion. Inclusion assumes that having a place in society is a fundamental human right and does not need to be earned This is the most important difference between inclusion and integration, where integration stands for adapting to our society and inclusion for already being part of it. (Van Loon, 2001).

Figure 5 - Paradigms based on Gennep (1997) and Moonen (2015).

We're currently still in the citizenship paradigm, but we may question ourselves if we are inclusive enough. According to Xavier Moonen, endowed professor in MID, we still deal with a negative view and are people with MID still not always accepted in society. "*Burgers zonder beperking willen lang niet altijd met mensen met beperkingen samenleven.*" (Moonen, 2015, pp. 16). He is referring to Vermeer (2000), who says these people are still not fully embedded in society.

Moonen in is article 'Is inclusie van mensen met een verstandelijke beperking vanzelfsprekend?' advocating for the next step; working towards an inclusion paradigm (Figure 6). "*Die inclusieve samenleving kent alleen maar mensen, ieder met haar of zijn eigen unieke ondersteuningsvragen die in het eigen netwerk of samen met professionals beantwoord worden teneinde een goede kwaliteit van bestaan ogelijk te maken Mensen wonen in gemeenschap en zijn partners om gezamenlijk hun idealen te realiseren.*" (Moonen, 2015, pp. 32).

Inclusieparadigma	
Mensvisie	Persoon met ondersteuningsvraag
Status	Medemens
Hulpverlener	Netwerken / Professional
Middel	Mijn ondersteuning
Doel	Mijn kwaliteit van bestaan
Plaats	Gemeenschap
Maatschappelijk	Partner

Figure 6 - The Inclusion Paradigm, from: Moonen (2015, pp. 32).

WMO

The changed paradigm also had its effect on the organisation of the Dutch healthcare system. People with MID were now seen as full-fledged citizens, but the socialization of the care stayed behind (Brummel, 2017). In line with the citizenship paradigm, the dutch law 'Wet Maatschappelijke Ondersteuning' made its appeareance in 2007. The purpose is that everyone in this society can participate.

Already in December 2006, the United Nations have adopted a convention on the rights of persons with disabilities. The guiding principle was that people with disabilities could fully participate in society. This convention is in 2016 adopted by the Dutch government. This convention is named in the changed WMO, dating from 2015, where the connection with the inclusive society was accomplished (Brummel, 2017).

The old WMO from 2007 made a re-entrance in 2015 with newer ambitions. The organisation of the healthcare system radically changed. A major difference was the disappearence of the 'Algemene Wet Bijzondere Ziektekosten'(AWBZ). It was replaced with the 'Wet Langdurige Zorg (WLZ). From that moment, people with disabilities could only apply for care from the WLZ when care and supervision is essential all day long (Woittiez et al., 2014). For instance, they have the right on housing, personal care, support, treatment and transportation. Other functions like support and guidance moved to the WMO, this are exactly the needs of people with MID.

The WMO provides the legal framework for the policy on support of municipalities. This kind of support is meant for people with physical, mental, intellectual or psychosocial disabilities. But the duty of care changed with this transition. Inside the AWBZ people have the right to care. But in the WMO these people should be compensated, municipalities are not activily providing services for the care of these people (Woittiez et al., 2014). People with MID are now responsible for their own. According to the WMO, they have to ask their own network for support first before they can apply for support of the municipality. This network also includes the neighbours of the residential envrionment (Woittiez et al., 2014).

When someone receives a WMO-indication of the municipality he has the right on healthcare. This can be compensated in two ways:

- Natura
  This means the municipality decides which care institutions are involved and payed of the budget.

- Persoons Gebonden Budget (PGB)
  PGB is the personal budget. The client will receive the compensation and can decide by its own where he will spend the money on. The municipality is not involved. This means also keeping a financial adminsistration, which can be hard for someone with MID.

The WMO-indication als says something about the kind of healthcare. With a WMO-indication there are less hours per week available for support then with an WLZ-indication. But for some people with a WMO-indication, support is needed. Most of this support is currently given by the parents at home.

Because there are almost no alternatives for independently living, parents of young people with MID are starting parent initiatives (Plaisier & de Klerk, 2018).They join their f orces to create a residential environment which suits the best to their children. They put all the compensation together, which they receive out of the PGB, to arrange care and support.

An other essential modification is the introduction of the Dutch law of participation in 2015, the 'Participatiawet'. This law is giving municipalities the responsibility for benefits and guidance to the labor market of young people with disabilities (Woittiez et al., 2014). Municipalities are no longer only responsible for healthcare and housing, but also for the working environment.

With all these new tasks in the field of healht-care, young people, work and income the muncipality plays an important role in the daily life of people with disabilities (Woittiez, et al., 2014). This makes the system even more complex, where every municpality can approach the same dilemma in different ways and provide a custom solution.

THE ACTUAL DWELLERS

As already mentioned the user group of the building are young people with MID. On previous pages are the characteristics, limitations, population and healthcare system described. Although this gives a representative view of the user group, a more specific definition is given here.

The focus is on young people with MID who have the willingness to live independently, just as there friends. They often lived at their parents before who took care of them. When they are moving out, they need to improve their social self-reliance in order to fully live independently.

Out of the in-depth research appears that it really depends on the indication of MID what kind of care is given by the municipality and how many hours this can be in a week. That is were it gets tricky, because there are so many definitions. The changes of the WMO is part of the problem, so this is also the guiding theme in the user group. They have a WMO-indication instead of LWZ. This means they receive support from the municipality in one of the two forms: natura or PGB.

All actual dwellers are in between the age of 18 and 23 years. Till the age of 18 years, young people with MID are supported by the Dutch youth law, the 'Jeugdwet'. But when they turn 18, they are part of the WMO. Because the WMO is focused on own strength, this transition can cause problems (Koks-Leensen, 2018). The age of 23 years is a general age limit, mostly used by healthcare organizations in the Netherlands (Stichting Koraal Groep, 2012). Furthermore this is a crucial age in the rights on receiving a housing allowance (Belastingdienst, 2020).

So, the user group is in the age between 18 and 23. But this does not mean, the building will not be for people older than 23. These age limitations only indicate the timespan in which they get more responsibility and there is more need for indepence. It is just as relevant that those people can move to another dwelling in the building, when their social self-reliance is improved and they can fully take care of themselves. This says something about the flexibility of the residential environment.

Something that is close related to the residential environment is the working environment. Work is valuable for people with MID, because it gives them structure and regularity in a day rhythm (Woittiez et al., 2014). But because of their limitations, it is harder for them to generate a stable income.

Because of their cognitive limitations they need work what is focussed on pratical skills. As a consequence of our increasing complex society, also simple work is asking for higher requirements. When they have not the ability to work, they require more attention from the healthcare for daystructure. Working is just as important for the social self-reliance as the residential environment. Above all, work is also providing a social network on which they can rely if they need help and support.

Most of the residents have an income near the social minimum, are eligible for a benefit and can apply for housing allowence (Plaisier & de Klerk, 2018). They only receive housing allowence if the rental does not exceed €431,25 (Belastingdienst, 2020). This is the maximum of the housing rental, with all services included.

Net ff anders - © Linnele Deunk (2020)

NET FF ANDERS

'Net ff anders' is a documentary series about six young people with a mild intellectual disability. The documentary shows the problematique of these people and the willingsness to live on their own. The series were broadcasted on the Dutch television in January 2020.

Our approach in architecture at university is mostly on the imagined dwellers, instead of the actual dwellers. We do a lot of literature research to create an image of the future residents, but not always have a view of who these people are as a person. Something that seems essential in this research. My research is focussing on providing customization, which asks for a more antropological approach. In order to focus on the actual dwellers, a few people of this series are briefly introduced as possible residents of my design.

Veerle - © Linnele Deunk (2020)

VEERLE (22)

Veerle is very cheerful and loves horseriding, music, singing, make-up and her two cats. She is working in a deli-shop. She is living with her parents in Amsterdam, but wants to live on her own. The only thing is she find it hard to make decisions. Therefore she is avoiding some situations. Cooking is one of them. Because she is afraid for failure, she prefers to avoid these situations. Learning cooking is essential for her to eventually live independently (KRO-NCRV, 2020).

Sander - © Linnele Deunk (2020)

SANDER (24)

Sander has a YouTube channel, where he shows the world what it is like to deal with MID. He has some problems in language and speaking. Despite he is vlogging his life, he finds it difficult to make social contact. Unfortunately people made abuse of his kindness, that's why he wants to work on more self-confidence and resilience (KRO-NCRV, 2020).

Sanne - © Linnele Deunk (2020)

SANNE (21)

Sanne is cheerful, enthousiast and not afraid. She is working in a supermarket. But she has a MID and also ADD. Too much incentives are causing distraction for her. She wants to live on her own, but therefore she needs to get grip on her concentration and getting home with the right groceries instead of what she didn't need. Keeping overview and dealing with money are the most important problems she is experiencing in her social self-reliance (KRO-NCRV, 2020).

CASE STUDIES

Some difficulties in finding case studies occured, because it seems the research question is that much relevant there are almost no reference projects. Most of the projects for people with MID focusses on supported living, but where all these people live together in a community, separated from other user groups. Although it looks like this is a good starting point, it's more a kind of integration instead of inclusion. But sometimes the word 'inclusion' is wrongly used to identify these projects. This refers to the 'label scam', where Van Gennep (1997) is talking about. Anyway, to create a in-dept analyses, some other projects are selected on the base of people with MID, other disabilities or how to focus on inclusiveness.

KAMERS MET KANSEN 2013

'Kamers met Kansen' (EN = 'Rooms with Opportunities') is a recently new project in Amsterdam, where young people with problems live together. They project is meant for young people between 18 and 23 years who have the willingness to live and work independently, but need a little support. With a team of 16 professionals they guide these young people to an independent existence (Kamers met Kansen, 2020). This project is the most closely related existing project to the research, but it is a step before independent living.

Kamers met Kansen has three projects in Amsterdam: New-West, Southeast and East. The analysed project is the one in New-West, called the 'Pieter Calandlaan Blok 5', designed by DKV Architecten. Here the project has contains 20 apartments with in total 70 rooms (Figure 7). 5 Apartments are so-called HBO-dwellings, where two people live together. The other 15 are KMK-dwellings, where three young people live together with one main resident.

Render from Pieter Calandlaan - © Kamers met Kansen

Render Courtyard - © Kamers met Kansen

Courtyard - © Dirk Verwoerd

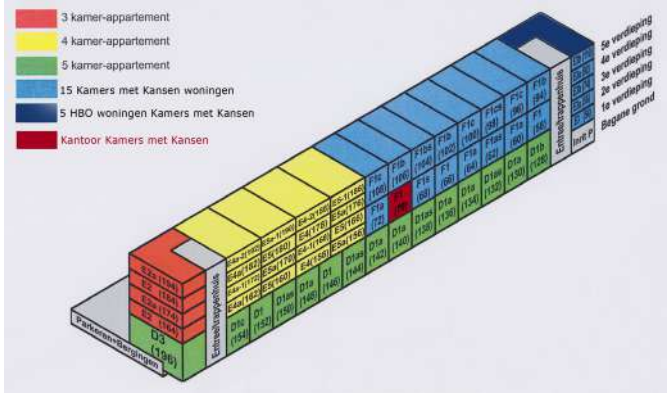


Figure 7 - Typology Pieter Calandlaan - © Kamers met Kansen

KAMERS MET KANSEN AMSTERDAM

HBO

The HBO-dwelling is meant for two people or a young mother with a child. These dwellings are located next to the elevator. The dwelling has two rooms of 15.8 and 17.1 m^2, connected with a shared kitchen of 19 m^2.

The rooms both have their own bathroom, but are sharing the toilet and kitchen. Out of contact with the organisation 'Kamers met Kansen' appears that the shared kitchen is sometimes causing indifferences. Complaints about doing the dishes, garbage, using each other's stuff and the furnishing are common.

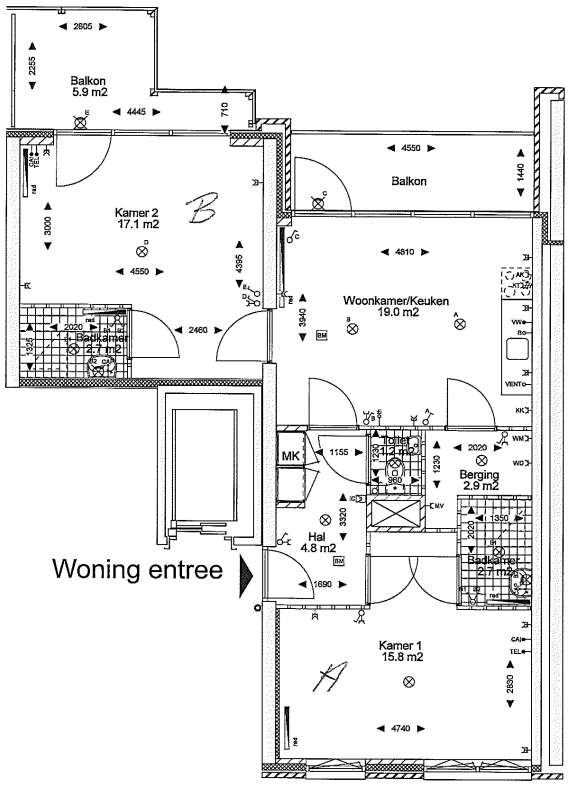
Resident 1 has a total private living area of 18.5 m^2, where resident 2 has 25.9 m^2, because of its private balcony. The shared rooms are together 31.5 m^2. Furthermore about the dimensions, the width of the rooms is set to 4550 and 4740 mm. This seems to be wide enough, because the entrance is in the middle of the dwelling and is not crossing any rooms.

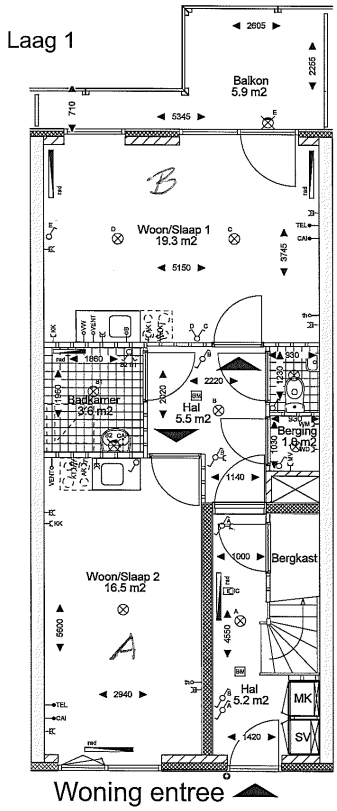
KMK

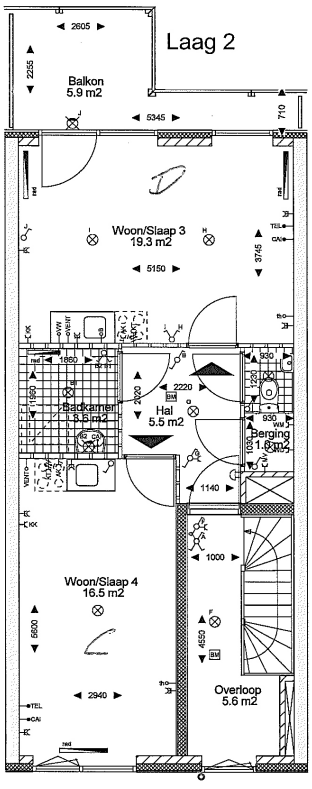
The KMK-dwelling is a special kind of dwelling, which reminds the most to a studentroom. The dwelling is a maisonette, existing of 2 levels, where all four residents share the same entrance. Per level they share the toilet and bathroom, but they all have their own kitchen.

In comparison with the HBO-dwelling, the rooms are slightly wider. The width is set to 5450 mm, wich makes it possible to integrate a living room of 2940 mm and an entrance at the same side. This because the building is accessible by the gallery.

The HBO-dwelling is more focussed on collectiveness, because they share the kitch / living room. The KMK-dwelling is the most independent type, where they can learn from their main resident. This kind of collectiveness is helping in improving their social self-reliance, because they can ask their fellow residents if they are stuck with something.







HBO Apartment - © Kamers met Kansen

KMK Apartment - © Kamers met Kansen

WESTKAAP 2018

Westkaap is an assisted living project in Vlaardingen for people with intellectual disabilities and mild intellectual disabilities. It is a collaboration of housing corporation Waterweg Wonen and foundation Philadelphia.

The building is designed by Marge Architecten. In the original plan they tried to create a restaurant on the ground floor, where the residents of the building could work. But this was not achievable. Eventually it became 36 apartments of ca. 52 m^2, 4 communal living rooms of 75 m^2, a sleeping guard room, a guest bedroom, and on the ground floor an office room and communal bicycle shed.

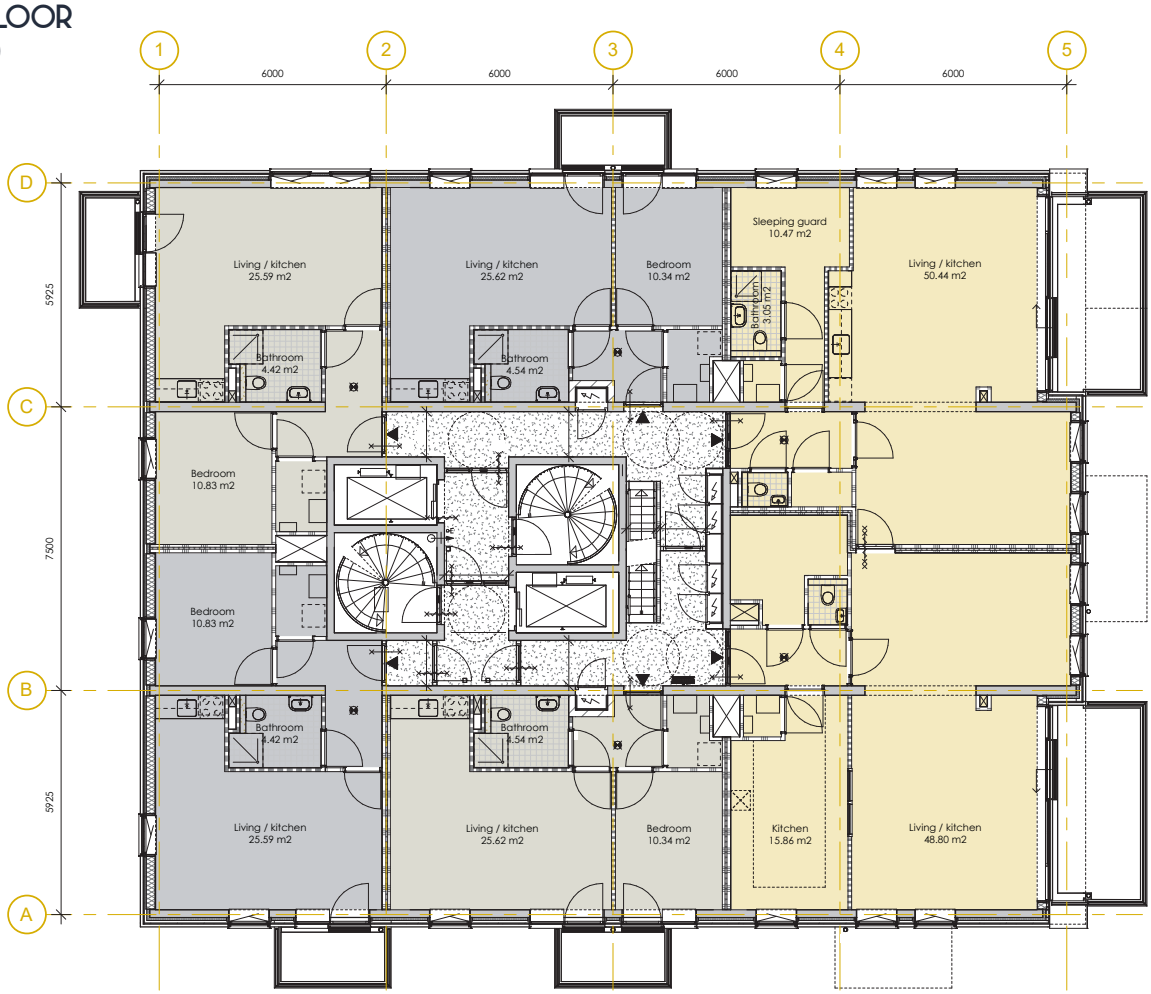
To make the plan financial achievable they integrated 12 apartments of 75 m^2, wherefrom 2 on the ground floor and 10 on the two top floors. Floors 1 till 6 are totally meant for the people of foundation Philadelphia.

The building block has 2 entrances, one for the 12 regular apartments and one for the people with intellectual disabilities.

Westkaap - © Van Zanten Bouw

Every apartment was focussed on independent living, so it has its own living room, small kitchen (not for cooking), bedroom, bathroom, storage and balcony. Furthermore it was important to create large bathrooms, where care can be given. Every 9 apartments are connected to one communal living room.

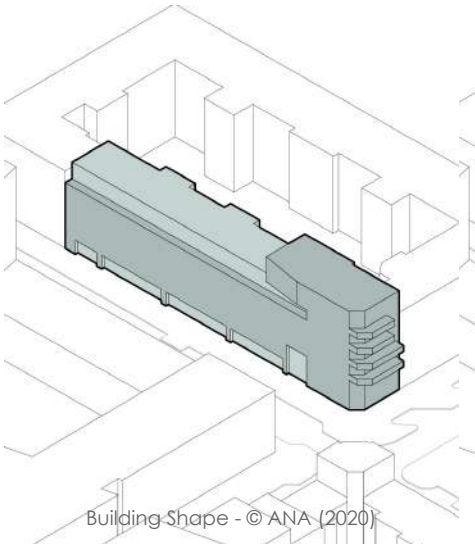
2ND FLOOR
1:200



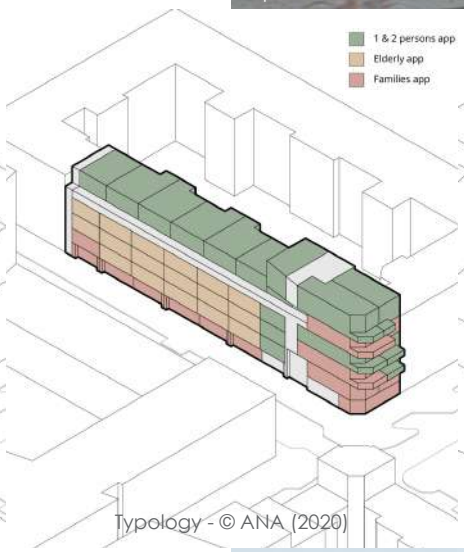
KRAMATWEG 2021

One way to stimulate social control is maximalizing the social interactions. The Kramatweg in Amsterdam, designed by ANA focusses on elderly housing. Here the gallery forms an interesting connection between private and collective. Deepened balcony's provide a transition between the gallery and dwelling and also stimulate social interaction with all the neighbours on the same level.

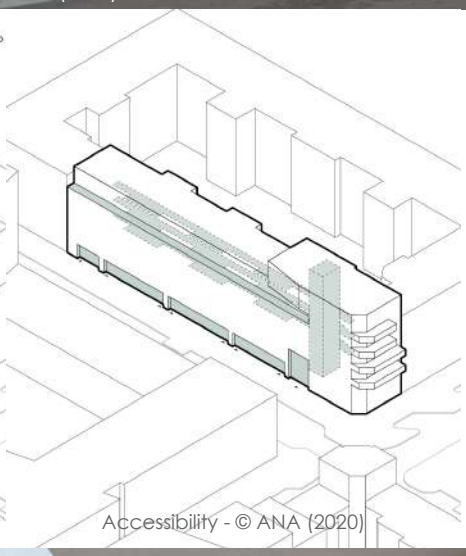
Impression Facade - © ANA (2020)



Building Shape - © ANA (2020)



Typology - © ANA (2020)

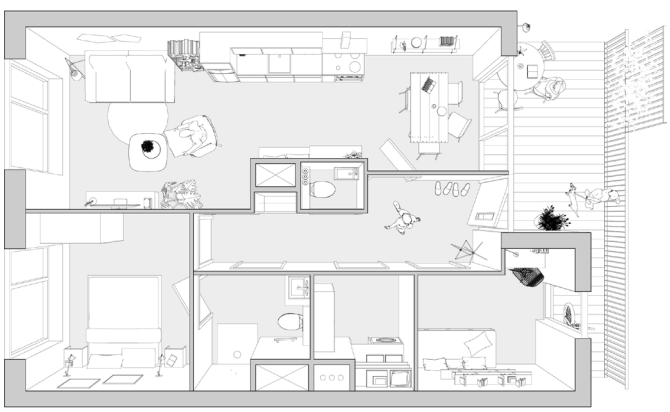


Accessibility - © ANA (2020)

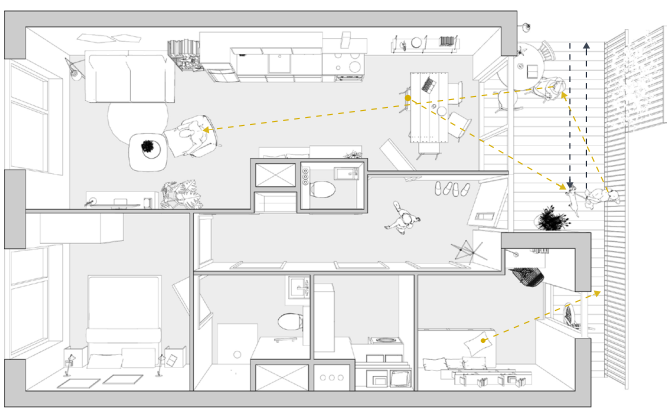
The gallery is set to 2 - 2,5 meters where space is reserved in front of your own front door. This small space can be used to sit on your own 'balcony', facing the more collective gallery. When neighbours are walking by, people can easily make social contact. From the dining room large windows are looking out on the gallery, which stimulates social control.

Furthermore, the plan of the dwelling is designed in a way that more private rooms are on the site of the streets, where more open rooms are close to the gallery.

Impression Gallery - © ANA (2020)



Dwelling Plan - © ANA (2020)



Social Interaction - Own Illustration

THE REQUIREMENTS

RESIDENTIAL ENVIRONMENT

The aim of the project is to work towards an residential environment where young people with MID can live independently, with a little bit of support where they need this. The design of the building should and the neighbourhood are seen as the key elements which can contribute them in their social self-reliance. But what are their requirements towards the residential environment and what kind of neighbours should be there?

Movisie, a national knowledge institute specialised in social issues, developed a guide on how to include people with disabilities in our neighbourhood. In their publication 'Een buurt voor iedereen' (2019) they are questioning how we can include everyone in our neighbourhood so they feel safe and welcome.

They name five characteristics of 'a neighbourhood for everyone' (NL = 'Een buurt voor iedereen') and how to achieve them (Movisie, 2019):

- An open attitude
  It is important that all people involved in the neighbourhood (residents, vol unteers, professionals) are open to diversity. Work on the connection between groups, work against stigmatizing and stimulate social contacts.

- Make a difference
  To feel home in your living environment, it is important to contribute something to it. Work on qualities of people and work on interaction; people rather give than receive.

- Communal facilities
  For vulnerable people it is often not naturally to make social contacts and participate in social activities. Therefore work on active citizenship and communal facilities for inclusion.

- Sustainability
  People in vulnerable positions have fluctuating periods in which it goes well or not. Take care of a strong network on which they can fall back and ensure accessible access from professional.

- Safety
  This is a basic condition for 'a neigh bourhood for everyone'. A neighbour hood should be safe for all residentens and social workers, at home and in the building. Arrange a 24/7 support point with the help of professionals, work on public safety, spaces were people feel comfortable and communicate clear and timely.

These interventions have their effect on the building and the dwelling as well. According to the dwelling requirements something can be said about the layout. This is based on the case studies and interviews out of the publication 'Wonen in een kelderbox' from Architectuur Lokaal (2016). They did research towards a residential environment for young people with MID. Dwelling requirements in this field are hard to define, because the user group is that specific that all the requirements are that too. Although in the publication of Architectuur Lokaal people with MID name what is important for them according their disabilites.

One of the participants say it is important to have separate rooms, otherwise it will be too busy (Architectuur Lokaal, 2016). Because people can have difficulties in relaxtion, they need a separate space where they can rest when they have too much impulses. So, it can be helpfull to separate private rooms from the more open rooms.

Communal facilities can help in not feeling alone. Social interactions are important to feel involved. What kind of communal space this will be, is presented in the conceptual design.

According to safety, an other participant prefers to live above the street. "*Boven wonen voelt veiliger.*" *(EN = Living upstairs feels safer)* (Architectuur Lokaal, 2016, pp. 28).

The apartments have to be comfortable and not too large based on their limited budget. According to the case studies, especially Westkaap, around 50 m^2 will meet their needs. Here it is important the bathroom is larger than normal, because of the potential demand for the help of caregivers.

These preferences for the envrionement are supported by an interview I had with a mentor of people with intellectual disabilities. Out of this interview (Appendix, Interview Ipse de Bruggen) a few characteristics came forward which are important for the interior of the dwelling. Again, this is very specific and detailed information. But it represents a general view of what is important to people with MID.

+ Clarity
  Pracitcal interior, everything you need close by.
+ Structure
  Store stuff in the same place.
+ Recognizability
  For instance bright colours.
+ Cleaned Up
  Many spaces to store everything.
+ Little Distraction
  For instance separated rooms, not distracted by television while cooking.

INCLUSIVE USER GROUPS

Working towards an inclusive building means that the user group will fully live and participate in society. This differs from an integrated building, where the user group lives together in a group as part of the society.

These other user groups make an important contribution to the social inclusion. Therefore it is important the other user groups provide an stimulant for people with MID, so they are stimulated to get the best out of themselves:

1. Starters / young people

They are in the same stage of life and are facing the same challenges. This group is mostly busy with building their life in the fields of living, working, friends and relationships. They are the same age or a little older and therefore know where people between 18 and 23 go through. Because they are dealing or already dealt with this age, they can provide tools to handle in difficult situations. These apartments will be around the same surface of 50 m^2 as for the people with MID, 2-room apartments meant for singles and couples.

2. Essentials

Other valuable people are those who already deal with inclusiveness, called the 'Essentials'. Especially some public professions have to deal with inclusion everyday. These professions include police officers, firefighters, teachers and nurses. Those are the people who are essential for a vital city like Rotterdam. Unfortunately they cannot find a place in the city.

The problem is they earn too much to qualify for social housing, but they earn to less for the free rental market or buying a house. At this moment, only 8,5% of all owner-occupied houses is affordable for these essentials (Financieel Dagblad, 2019). They belong to the middle incomes. The mayor of Rotterdam wants to house these people in his city, because he regards them as essential for a healthy city (Algemeen Dagblad, 2018). Therefore the muncipality of Rotterdam wants to build more houses in the category of €711,- to €1.000,- (Rijnmond, 2019). These dwellings will be 2-room apartments for singles and couples and 3- or 4-room dwellings for families.

These people have already a feeling for an inclusive society from their profession and are unconsciously working with this. For instance, the nurses constantly deal with carefulness in their daily life. This makes these people perfect for keeping an eye on things and providing support where needed. They contribute to a safe and inclusive living environment.

3. Makers / Creative entrepreneurs

The makers will form the connection between the living and working envrionment. The aim to house creative entrepreneurs will follow out of the next part. They will form the spider in the web of the working environment. Those creatives are all dealing with pracitcal skills, which suits to needs in work of people with MID. Furthermore, with their local network in the area they can connect people and work to help generate income, an other essential part of improving social self-reliance.

THE MAKERS

FOCUS M4H

Out of the report 'Ruimtelijk Raamwerk M4H' appears the vision of the muncipality of Rotterdam on M4H. The Municipality and the Port of Rotterdam want to develop M4H to an innovative live-work environment optimalized for the innovative makers industry, with a mix of working, living, culture, horeca and education (Rotterdam Makers District, 2019). The makers-industry is represented in the The Makers District, which will be an innovative environment at the intersection of the harbour and the city (Bal & Bulterman, 2019).
The makers industry is consisting out of three global fields; the processindustry, the 'core' makers industry and the 'Twilight' zone (Figure 8). Where RDM focusses on the process and core industry, M4H has its challenge in the 'Twilight Zone'. One of the five objectives of M4H is on innovative business (with an accent on the makers-industry) and attracting additional support to facilitate companies from the start-up phase to corporate (Rotterdam Makers District, 2019).

BEELDMAKERS

The 'Beeldmakers' (EN = visual designers) are the visual designers who create content for other companies. These designers are indispensable in every business growth phase; from start-up to growth and corporate. Especially in the start-up phase it is important to communicate your new business to the world, the visual designers provide these needs. Furthermore, they offer possibillities for long-term collaborations in the same area. Those creative people are part of the creative industires, one of the focus point of M4H and include:

+
- Arists & Sculptors
- Illustrators & Typographers
- Digital Designers
- Photo- & videographers
- 3D Visualisation
- Printshop

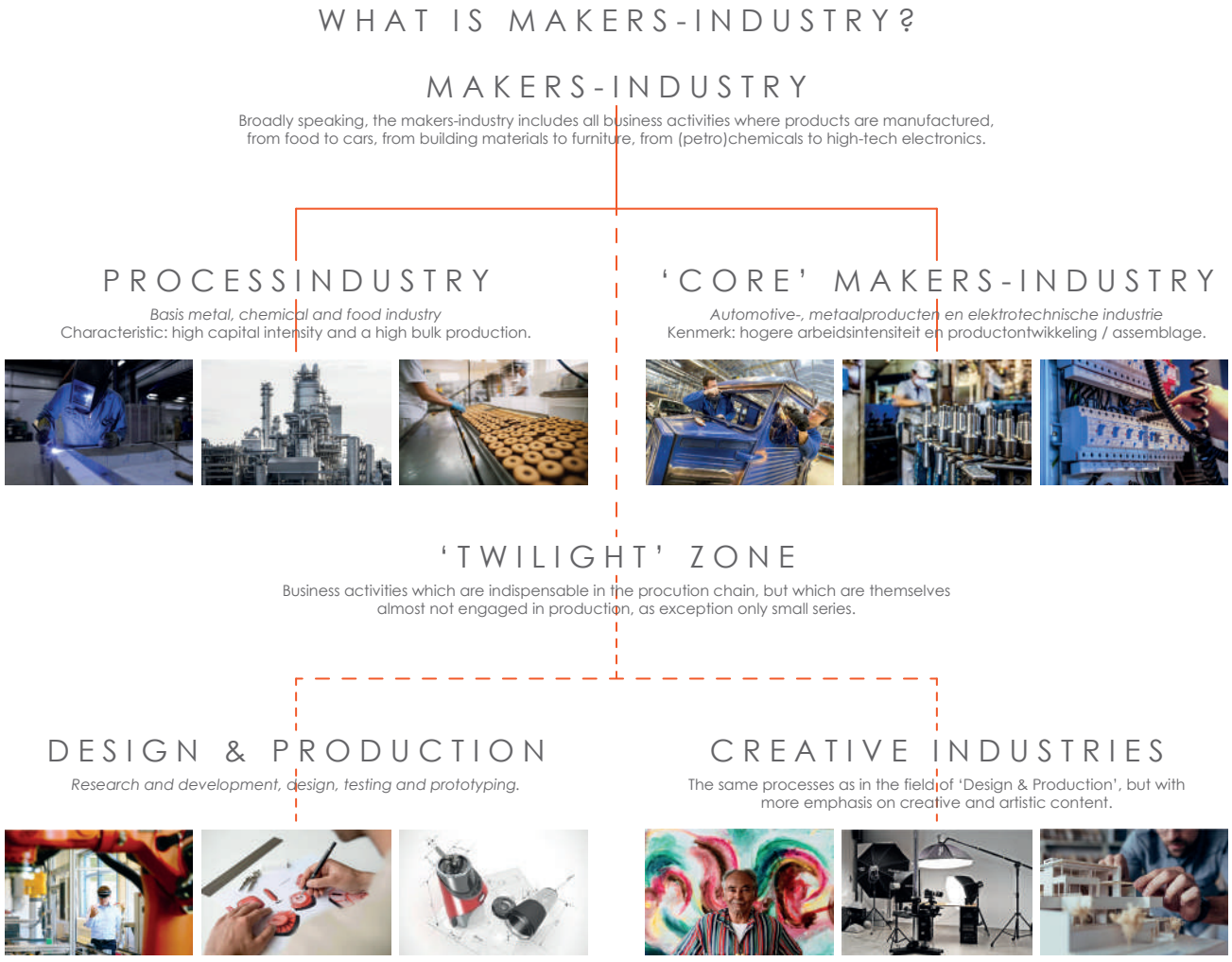


Figure 8 - Own illustration based on EVR010: 'Spanning Wonen en Maakindustrie' (Bal & Bulterman, 2019).

RELEVANCE

The creative industries are part of the creative sector, which accounts for 20% of the economy of Rotterdam (Rutten & Koops, 2018). These industries are mainly the domain of freelancers and small businesses, which mainly settle in high-density environments which are going to be transformed in the future.

Here, they fulfill the role of 'Placemakers'. *"Ze verbeteren het fysieke aangezicht van een pand en gebied, geven het een nieuwe uistraling en brenger er positiveve energie in." (EN = They improve the physical appearance of a building and area, give it a new look and bring a positive vibe)* (Bal & Bulterman, 2019, pp. 7).

At the beginning there is a win-win situation, because creative entrepreneurs with production activities, can house their ateliers in large spaces, for instance anti-squat. These spaces are mostly old-dated, but can therefore rented cheaply and with a flexible contract (Bal & Bulterman, 2019). The project developers are enthusiastict to house these entrepreneurs, because make money with spaces which were otherwise empty till the transformation. Furthermore, because of their 'Placemakers' function, they make the area attractive.

But when the transformation starts, these creative entrepreneurs are kicked out, with no opportunities to qualify for affordable spaces in the transformed project. Finding other large ateliers which are affordable enough is a though search. Creative entrepreneurs are aware of their placemaking value and also project developers recognize the great social value they deliver for the environments (Bal & Bulterman, 2019).

OPPORTUNITY

Bal & Bulterman point in their essay 'Spanning tussen wonen en maakindustrie' on the opportunities of M4H for the creative industries: *"Gaat het daar lukken om in de herontwikkeling voldoende en gevarieeerde bedrijfsruimte te realiseren tegen een voor creatieve bedrijven betaalbare huur?" (EN = Will it be possible to realize sufficient and varied business spaces at affordable rental for creative businesses?)* (Bal & Bulterman, 2019, pp. 7).

The second objective of M4H is focussed on creating employment for the full range of the population of Rotterdam (Rotterdam Makers District, 2019). This inclusive approach is also evident for the user group: young people with a mild intellectual disability. *"Ook kwetsbare groepen in de stad profiteren, bijvoorbeeld doordat werkgelegenheid ontstaat in ondersteunende diensten." (EN = Also vulnerable groups in the city benefit, for example because employment arises in supported services)* (Rotterdam Makers District, 2017, pp. 4).

Especially people with MID have trouble with working in our complex society, they need work with practical skills. Working with their hands is something they excel at. That is just something where the makers industry suits the best, this industry needs people like them. M4H is a great opportunity to combine work and living for people with MID. They can work in the area, but also in the building with the visual designers. For instance, photographers need assistence in transporting their equipment and a printshop needs people in the production process. But the creative entrepreneurs also offer a large network relations and companies if they are looking for something else than visual design.

THE COLLECTIVITY

GROUP RESEARCH

The research of the collectivity is fulfilled in collaboration with Anne de Schepper, Coen Gordebeke, Daan van Schie, Deniz Tichelaar, Fija van der Laan, Isabel Huiskes, Maaike Mossinkoff, Maarten Jellema, Mazeen Majeed, Nathalie van Wees, Teun Theijse, Teun van Knegsel, Tijmen Dijk, Martijn van Leeuwen and Sebastiaan Nieuwenhuizen.

Introduction

These are the three main current issues in Dutch housing:

1. There is a growing housing shortage in the Netherlands. Between 2019 and 2030 around one million new residences will need to be built. (Ministerie van Binnenlandse Zaken en Koninkrijksrelaties, 2019) So a lot of housing has to be built in a short time span. Partly because of the housing shortage housing prices are rising quickly which can lead to the exclusion of less well-of groups of people.
2. Additionally, there is little space to build upon. With the continuing urbanization of Dutch society, most residences will have to be built in and around existing cities. These cities are now densifying their existing urban fabric with new housing developments, but will still have great difficulty building enough on the available plots of land.
3. Then there is possibly the biggest issue of all: climate change. Building has had a huge impact on our environment and will continue to do so. Solutions have to be found to strongly reduce our emitting of greenhouse gases, our shrinking of biodiversity and our depletion of (natural) resources.

Enter communal housing.
By sharing certain facilities among a group of inhabitants, less space is needed for each of the inhabitants' needs. Say eight apartments each have their own washing machine, that means that eight square meters of the building houses washing machines. But not all these machines are used all the time. If per eight apartments two machines are available for all eight residents, only two square meters of the building needs to be reserved for everyone's needs. If enough floor space is 'saved' through sharing facilities, additional rooms or even additional apartments can be built for the same amount of money in the same amount of time.

And this can be part of the solution to the first problem; the housing shortage. Being able to build more apartments within the same time span is obviously beneficial to reaching the goals set for 2030. The sooner the housing shortage can be solved, the quicker housing prices will stabilize (or even drop). The less fortunate people in our society would stand a better chance finding suitable housing at an affordable price. They might not have to move to more peripheral areas of the city because they can no longer afford the rents in the city centre.

As stated, the second current issue in Dutch housing is the availability of space. Delft for instance has no big empty plots left to build upon apart from the currently planned developments. (Gemeente Delft, 2016) And even the planned developments may not even be sufficient. If major real estate developments have shared facilities in them, a lot of additional apartments can be built on the same plot.

Communal housing also addresses climate change and our impact on this world. "The building and construction sector accounted for (…) 39% of energy and process-related carbon dioxide emissions in 2018 (…)" (United Nations Environment Programme, 2019, p. 9) The process of building itself as well as the production of building materials are the biggest contributors to these emissions. Now, this is a far greater issue than can be solved through the means of a type of housing, but it can again be partly be solved through it. Simply put less individual facilities leads to less real estate needed which leads to less materials needed per capita. Per capita, because the housing shortage demands us to fill up superfluous real estate with more dwellings. If less materials are needed per capita, less energy is consumed in making the necessary materials for an equal amount of dwellings. Less energy will have to be put into the transportation and placement of materials as well. Less materials needed per capita also means that each person has a smaller impact on the depletion of natural resources. Scarcity of virgin materials is growing, and all materials we extract from this planet are finite resources.

Communal housing comes in many different shapes, some more suited for a specific situation than others. As the Dutch saying goes "zoveel mensen, zoveel wensen". Although it can prove itself valuable for solving the previously mentioned problems, it is by no means the single solution to the issues at hand. The desired degree of collectivity always depends on the specificities of the project. Through the analyses of case studies we can learn what types of living and which types of communities are suitable for what situations, and draw lessons from them for our own design practices.

Methodology

In this research a number of 15 residential buildings have been analysed, elaborating on a wide variety of housing typologies. Main issues as the type of housing, functions in the building, accessibility, the relation between public and private and movement in the building have been studied. The latter has resulted in a representative route of a resident through the building with possible collective encounters. Spatial aspects which influence these encounters have been pointed out to emphasize the relation between architecture and collectivity. A brief overview of all research is included in this report and will discuss the earlier mentioned topics in the coming section. Finally a conclusion will be drawn on the topic of collectivity.

Sources:

Ministerie van Binnenlandse Zaken en Koninkrijksrelaties. (2019, July). Achtergronddocument Opgaven in de fysieke leefomgeving: huidige situatie en ontwikkelingen. Retrieved from https://ontwerpnovi.nl/download+pdf+ontwerp-novi/HandlerDownloadFiles.ashx?idnv=1407076

Gemeente Delft. (2016). Woonvisie Delft 2016-2023. Retrieved from https://www.delft.nl/wonen/wonen-delft/woonvisie-2016-2023

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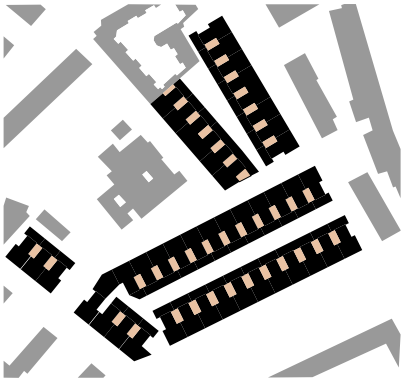
Pullens Estate

Pullens Yard, From: http://kenning-tonrunoff.com/pullens-yards/



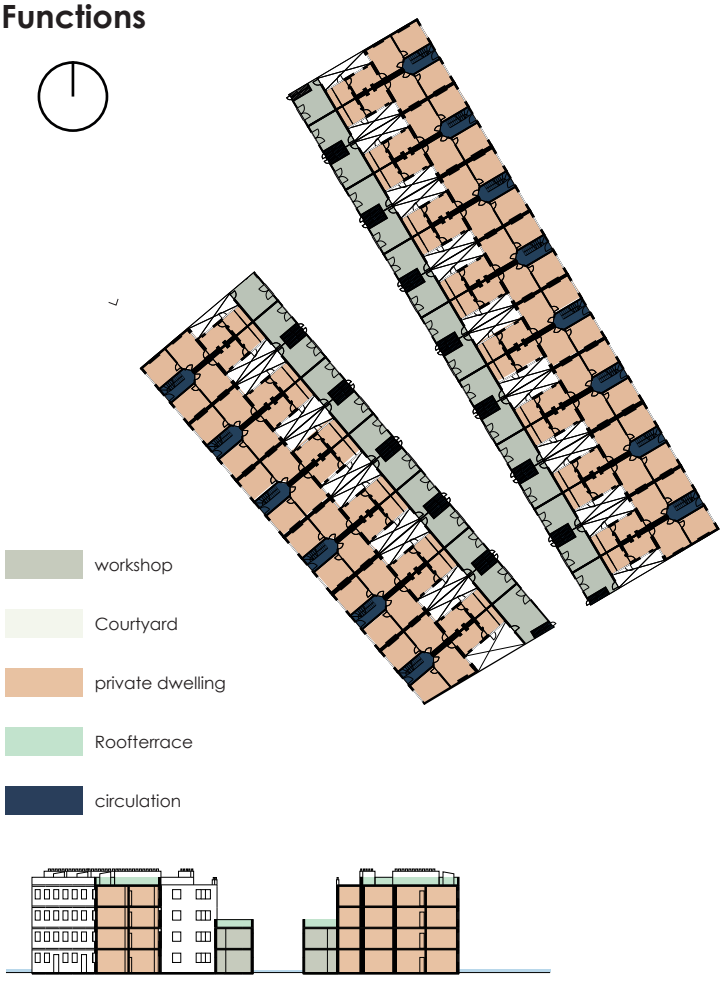
year: 1901
architects: James Pullen
city: London, England
type: Porch Appartments
amount: 351 units
plot size: 9354 m²
total floor area: 17.529 m²
FSI = 1,87

The Pullen Estate is a building complex combining living and working in London, England. The dwelling units face the outer streets while the workshops are facing inwards.

The appartments were built to provide relatively cheap but decent housing for poorer families. Each unit is 4 floors high and consists of 8 appartmets and 4 workshops.

Originally 684 appartments were built. However, today only 351 remain. The remaining complex is protected by conservation area status.

Functions



Functions

The Pullens buildings are more or less split in two when speaking about functions. Appartments are situated facing the street, while workshops on the first two levels are facing the smaller so called yards.

The appartments are accessed via porches accessing two appartments per floor. The workshops ont he ground floor are accessed directly via the yard, while the workshops on the first floor are accessed via a private staircase.

The appartments on the ground- and first floor are directly connected to workshops. However in reality they were often sold seperately.

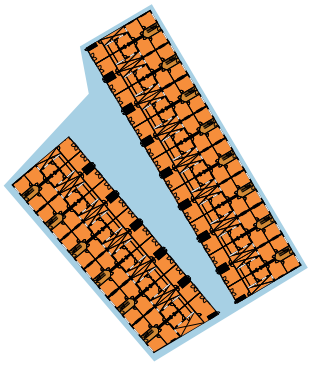
private-public

within the building private spaces are dominant. Only the staircases are shared with 7 other households. Streets surrounding the buildings are all public. However, the inner yards have a more communal character, all tansport is mixed and slow and the pavement can serve as extra space for the workshops to be used.

Most of the communal spaces are found on the rooftops. The third floor has a communal roofterrace stretching all accross the building facing the inner yard. The fourth floor has communal roofterraces that are shared with eight housholds.

Even though the roof terraces on the third floor stretch across the building and could be used as a upper street connecting various appartments, the terrace was inmediately divided into private terraces.

private-public



Groundfloor

Top view

Pullens buildings as seen from the street

From: http://kenningtonrunoff.com/pullens-yards/

Collectivity

Encounters - ground floor

1
-greetings to someone on the street. Small passage of words. 3 meters distance.
-small chat in the porch with neigbour. 1-2 meters distance.
2
-Visual contact while being in the small courtyard. 4 meters distance.
-Work related conversation or chat with neigbouring makers in own shop. 2 meters distance.
-Less proffesional conversation with neigbouring makers, supposingly more people at once. 1-4 meters distance.
3
-Work related conversation or chat with neigbouring makers in their shop. 2 meters distance.
4
-as the street gets smaller, encounters become more likely. The street works as a funnel.
-The gate can be a meeting point for all makers. 1-2 meters distance.

Encounters - third floor

1
-Visual encounter with neigbour from ground floor or quick look at other appartments.
-small chat in the porch with neigbour. 1-2 meters distance.
2
-Visual contact with courtyard while being on the roof of workshops. Possible brief chat.
-Contact with people from different appartment that are simultaneasly using the roofterrace. Fence prevents sharing. 2 -4 meters distance.
-Visual contact with inner (worker)street. More than 5 meters.

informal short meeting · informal long meeting · negative · sight · formal short meeting (0-10 min) · formal long meeting (10-∞ min)

Conclusion

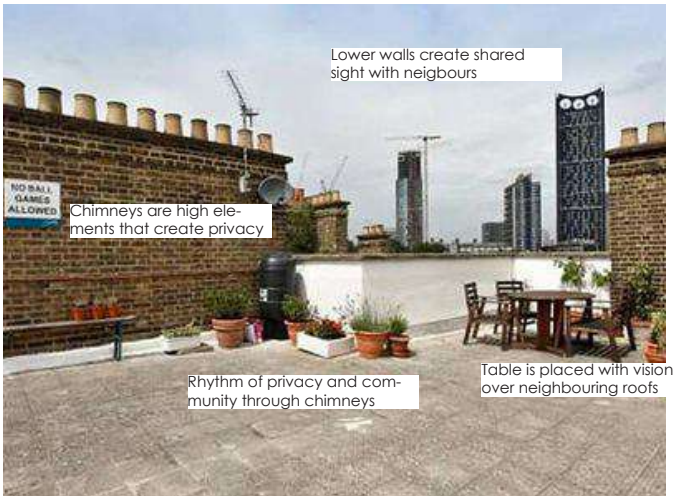
Pullens Estate has some very interesting features considering collectivity. The inner yards welcome a lot of local activity. There is a lot of interaction between the facade and the inner yard.
The roof terraces on the third floor seemed to have missed their purpose. Possibly the lack of clearly expressed function has misguided the inhabitants in their usage of the space.

Architecture and sociability

Peacock Yard

From: http://www.urban75.org/blog/pullens-yards-winter-open-studios-elephant-and-castle-london-se17/

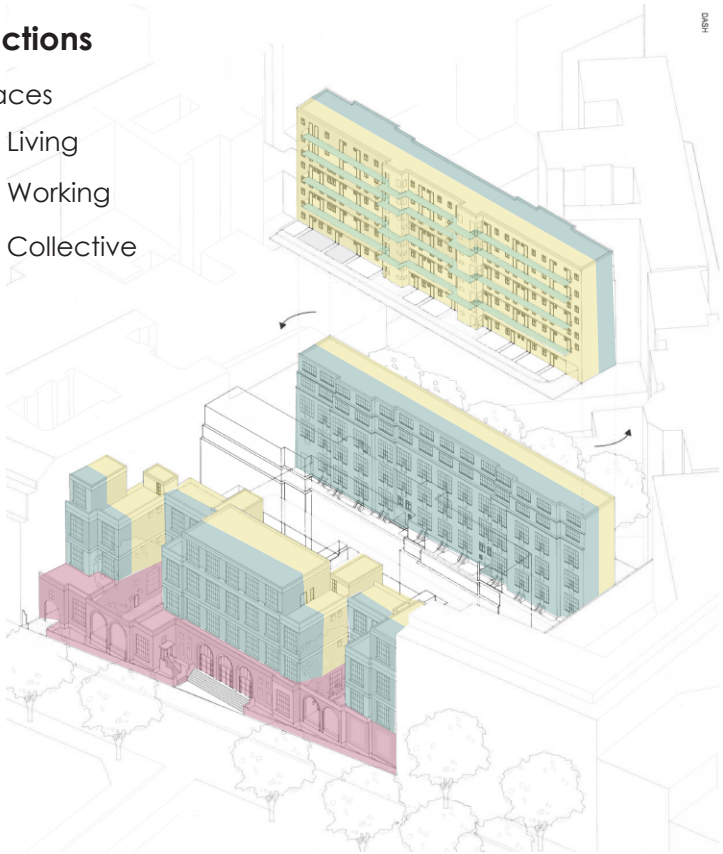
Rooftop



From: https://www.spareroom.co.uk/flatshare/london/elephant_and_castle/4722758

Functions

Spaces
- Living
- Working
- Collective



Year 1930 -1932
Architects Henry Résal & Adoiphe Thiers
Location Paris, 189, rue Ordener
Type work homes - Atelier housing for artists
Amount 165

Acces

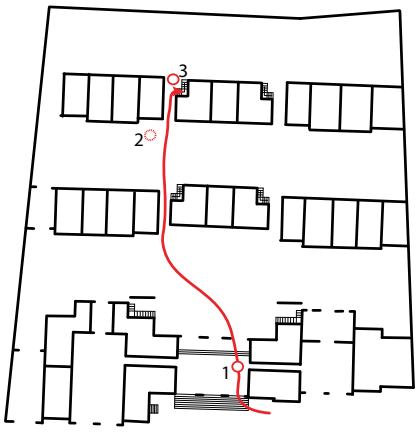
The first block consists out of collective spaces on the ground floor level. The two entrances: the main entrance in the middle and the car entrance at the left side, are located here.
Cité Montmartre has three different acces typologies: the galerie, the ground bound and the porch typology (only in the first building).

Living & working

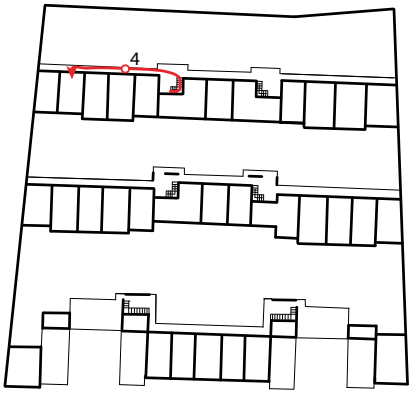
The blocks have two different sides. a side that could be interpreted as the living side: the side where the galleries and front doors are placed. And the side that could be interpreted as the working side: the side with the high ceiling windows for apartments, and where the ground bound dwellings have an extra door connected towards the collective area with stairs.

Routing in plan

scale 1:1500



Ground floor



Level 1

Routes & moments of collectivtiy

The route that one takes starting from the public street to come home leads to a few points of possible collective moments. The route can be quite long which increases the chance of running into another neighbour.
The points are in most cases located on the routes from the private door through the collective area towards the public streets. Especially places where one is able to stay for a longer time. For example the private stairs facing the collective area, one is able to sit there and thus interact more with passing by neighbours.

Conclusion

Cité Montmartre facilitates different kinds of collectivity. The main entrance and the collective areas in between create a lot of different opportunities for small interactions between passing by neighbours through the area. This relates to the length of the route one takes through this area and the created opportunity of sitting outside.

Collective spaces

Main entrance

The atelier facade

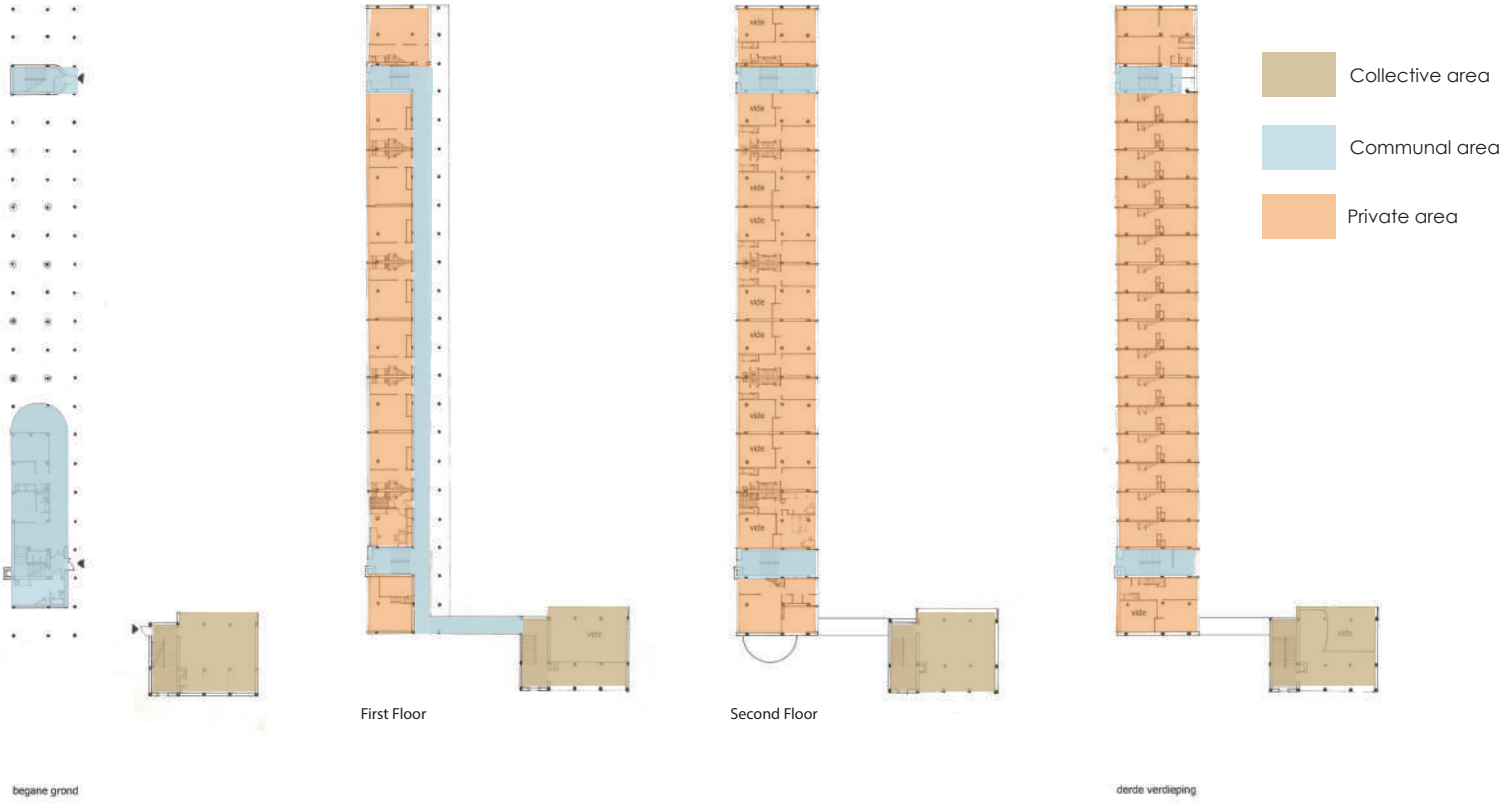
The gallery

Narkomfin

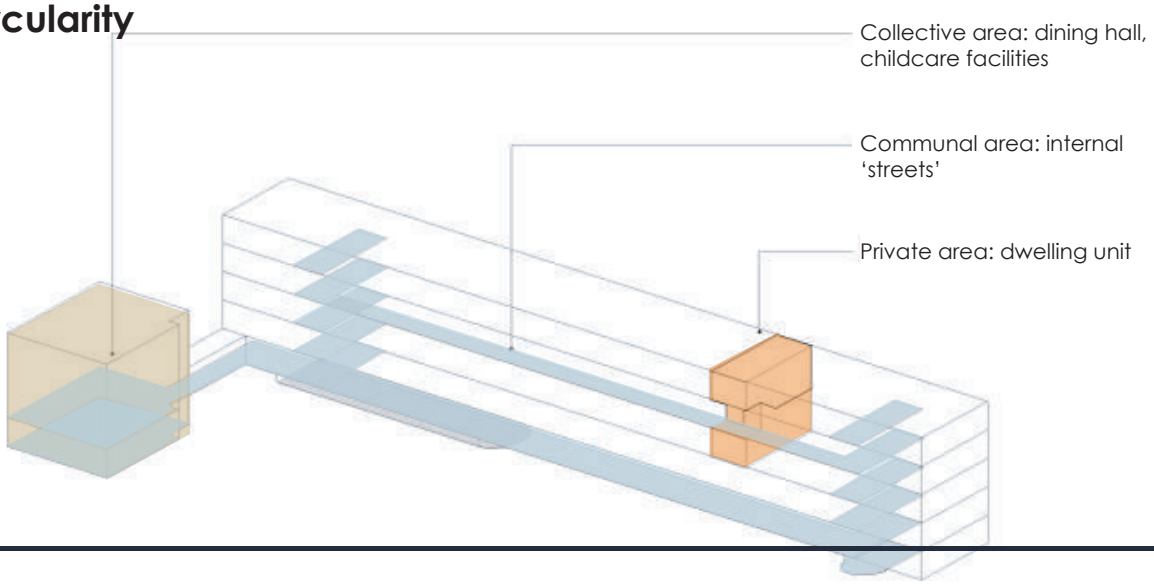
Year: 1930
Architects: Moisei Ginzburg, Ignaty Milinis
City: Moscow, Russia
Type: transitional type of experimental house
Amount: 54 units

Ginzburg had a clear vision about how architecture could play an active role in embracing the communal life. Therefore the living unit in the Narkomfin building must be redirected outwards towards society at large. This was achieved by moving many daily functions into communal areas, such as lounging, excercising, eating, child-care.

Floorplans



Circularity

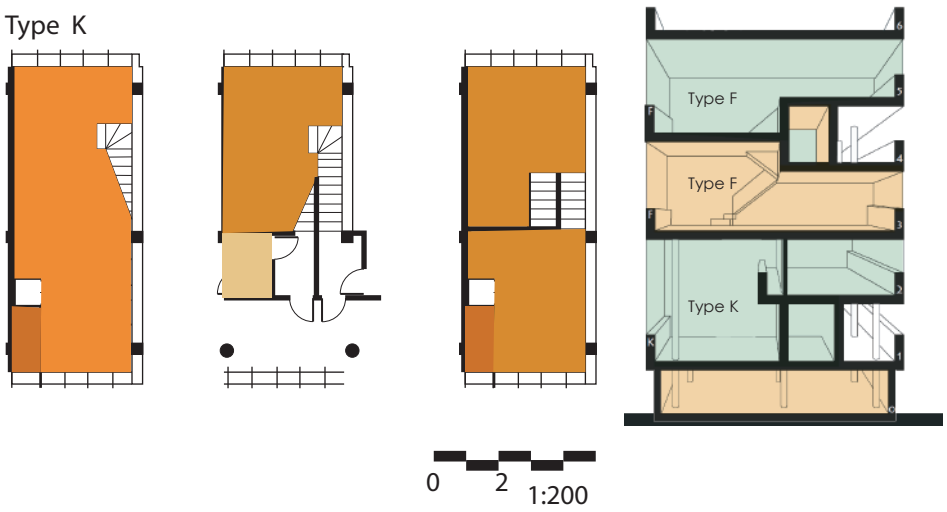


Narkomfin

Dwelling units

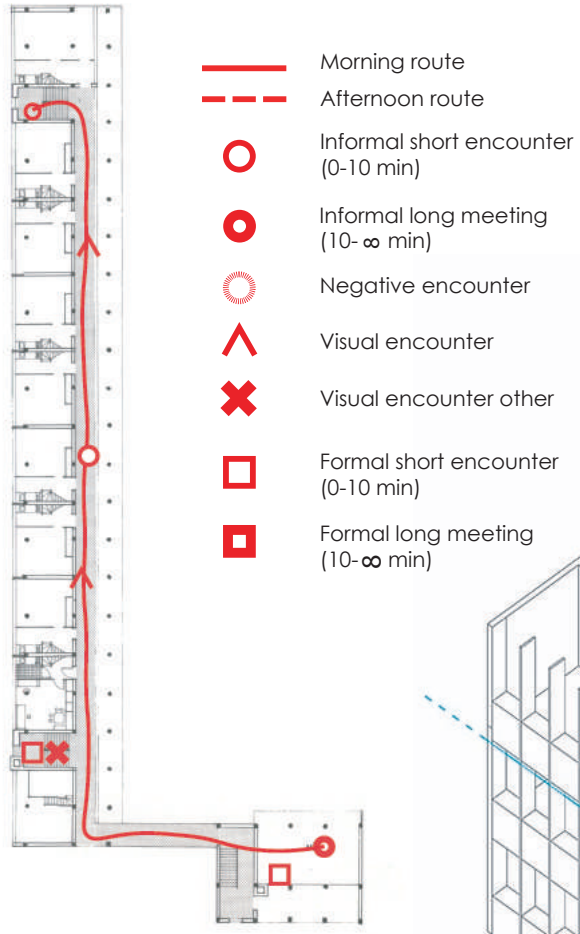
Type F

Type K



The interior features two level apartments, spacious entry halls and corridors, and a community terrace on the roof. The building stands on pilotis, and features ribbon windows, a plain facade and a roof that can be used for additional facilities. In communal apartment buildings, people would be free from individual household work and spend most of their leisure time in public. Narkomfin has five inhabited floor levels, but only two corridors, on the second and fourth level. The Narkomfin has two types units: F-type and K-type, both having the innovation of a split level. In section, each apartment forms the shape of an L, and interlock so that the central void becomes the access corridor. The F type units are minimal dwelling units – containing only a single room divided into a living and sleeping area as well as a bathroom. In each unit a small and removable kitchenette is included. Most of the units belong to the K-type (with a double height living room) and F-type connecting to an outdoor gallery.

Collective encounters



Morning route

Afternoon route

Informal short encounter (0-10 min)

Informal long meeting (10-∞ min)

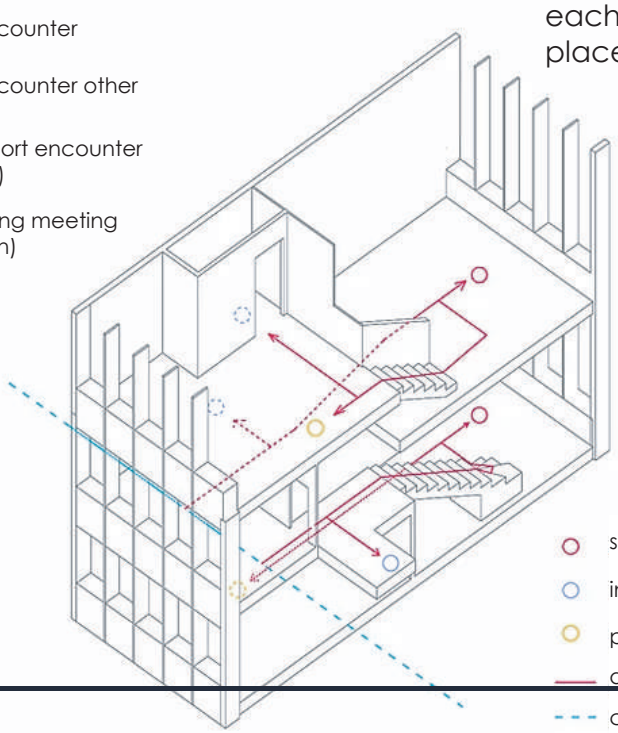
Negative encounter

Visual encounter

Visual encounter other

Formal short encounter (0-10 min)

Formal long meeting (10-∞ min)



Conclusion

Collectivity was very important in this design. The building has separated private areas from public areas and therefore separating living from working. By placing the communal spaces in a collective annex-building, the habitants are forced to interact with each other. Collectivity also takes place in the corridors and gallery.

Sources:
archi.ru. (2018, 10 18). retrieved on 5 15, 2020, from archi.ru: https://archi.ru/en/79374/15-faktov-o-dome-narkomfina

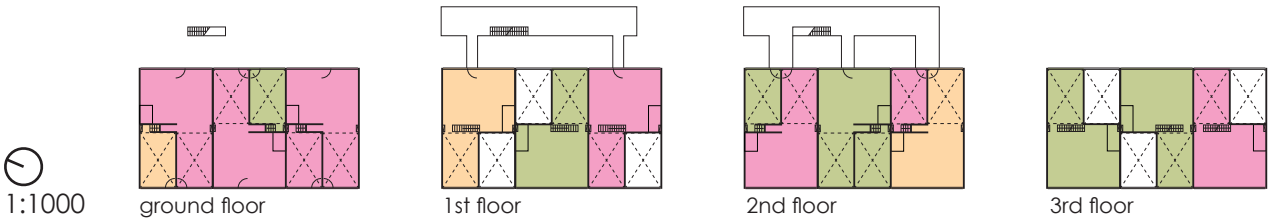
architect jvr. (2015, 6 7). Retrieved on 6 5, 2020, from https://architectjvr.wordpress.com/2015/06/07/welcome-to-moscow-welcome-to/

de Architect. (2019, 10 1). Retrieved on 5 16, 2020, from https://www.dearchitect.nl/architectuur/-blog/2019/10/blog-gemeenschappelijk-wonen-narkomfin-gebouw-1928-in-moskou-door-moisej-ginzboerg-en-ignaty-milinis-101230824

Kölner Brett

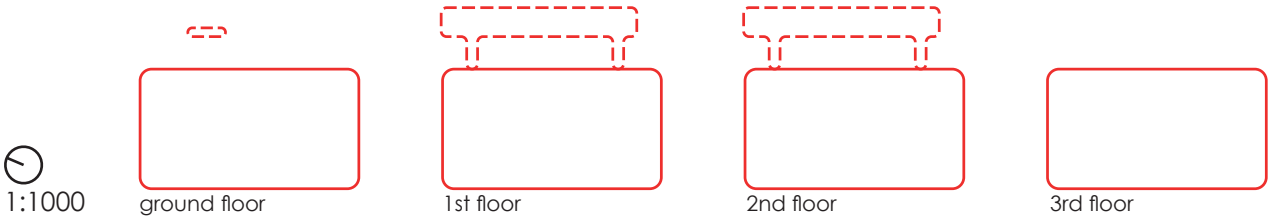
year: 2000
architect: b&k + brandlhuber&knies GbR
location: Cologne, Germany
type: live-work building
amount: 12 units

Kölner Brett is a response to the need to for live-work units in Köln by desgining possibility. The building is made up of 12 large units, each consisting of a horizontal and a vertical space. The units are entirely empty apart from pipes and electricity, so that the future inhabitant can completely design their own space. These units can then again be merged to create larger dwellings and offices. They are accessed through a large stair-case-gallery that sits extened from the block on the east side.



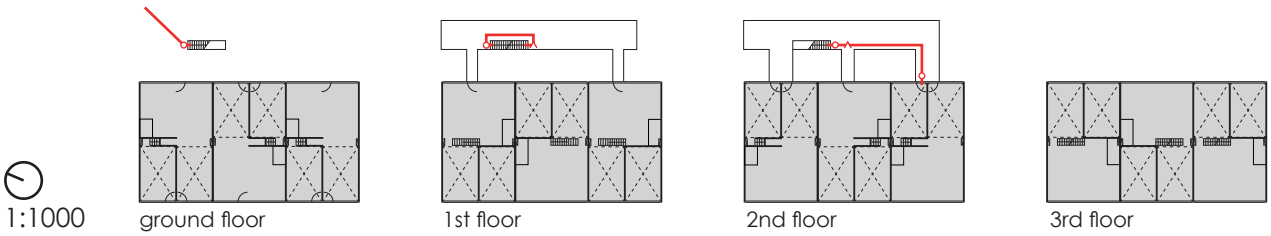
functions

The building is made up of 12 units that can either be entirely directed towards living, working or at a mix between the two functions. Nor of the sources, nor the architect, could give a clear indication of what the exact distribution was for living and working, so this is an estimation based on pictures. (Green: Live, Pink: Work, Yellow: Live-work)



public-private

Kölner Brett consists of private homes and an extended gallery at a distance from the homes, with the gallery being collective, but publicly accessible. It forms the transitional zone between the privacy of the live-work unit and the openness of the street.



route, moments of collectivity

The route that one takes from the dwelling to the exterior throughout the day sees a few potential moments of collectivity. These are mainly at points where the route intersects other routes, at doors and at stairs, and a greeting can be exchanged. There are no collective facilities that can provide for moments of collectivity.

in conclusion

Kölner Brett is not designed for collectivity, instead it puts a great focus on individuality. The owner can shape their unit or units to their own desire and make it completely unique. The only natural moments of collectivity consist of meeting one another on the gallery when exiting or entering the dwelling.

source and pictures: https://www.brandlhuber.com/0019-koelner-brett

De Hoge Heren
Wiel Arets Architects

year: 2001
architect: Wiel Arets Architects
location: Rotterdam, the Netherlands
type: Housing
amount: 285 apartment divided over two towers

Two residential high-rise towers are situated on a 6-story plinth. This plinth contains public and resident parking, a public gym and the main entry hall. A void in the centre of the buidling enables natural light to spill into the interior. The towers stand within a green terrace on the roof of the plinth, onto which the lobbies open, so that ample outdoor space is offered to residents, in additional to that of their private terraces. On the same floor, a collective fitness- and sauna room, a swimming pool, guest rooms and work spaces are situated.

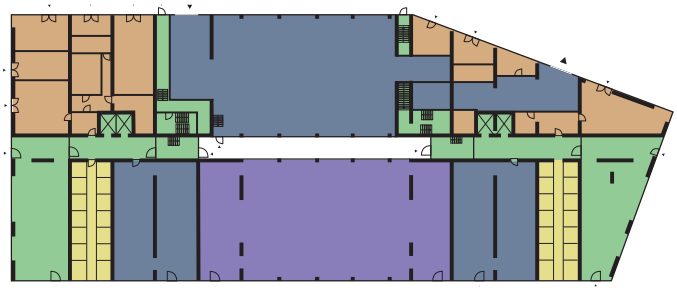
Functions

- entrance
The ground floor contains the entrance of the building, the first part of the parking garage, bike parking, privatly owned storage rooms, garbage rooms, technical services and a public gym.

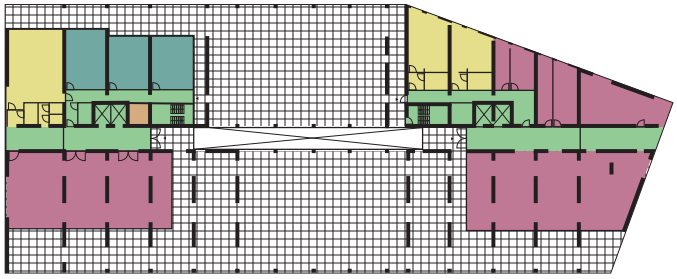
- parking
Parking space is situated on the four floors between the ground floor and the lobby on the sixth floor. The car-parking garage is accesible through an entrance on the ground floor at the north side of the building. The bike sheds are located on the south side of the ground floor.

- housing
Royal sized apparments are housed in the two towers. Each floor contains 10 appartments, sizes vary from 122-143 square meters. The Hoge Heren houses a total of 285 apartments (160 rental, 50 furnished rental and 75 free-market). No other functions are housed in these towers.

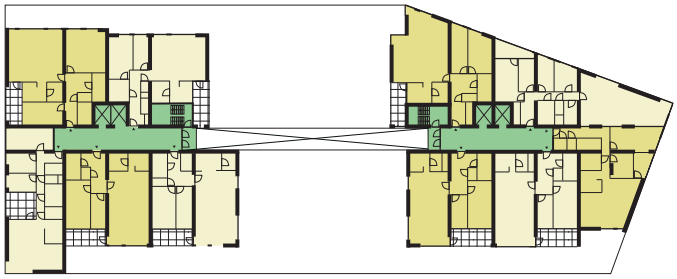
ground floor .
entrance
public gym .

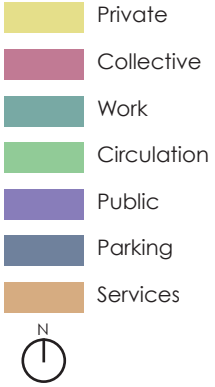


6th floor .
lobby
roof terrace



7th - 34th floor .
appartments





Public - Semi-public - Private

The lobby and roof terrace on the sixth floor contains various semi-private funcitons such as a swimming pool and sauna, a fitness room, workspaces, and guest apartments. This floor creates the border between partly public ground floor and parking garage and the privatly owned apartments in the tower.

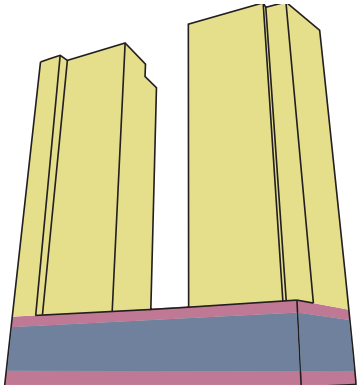
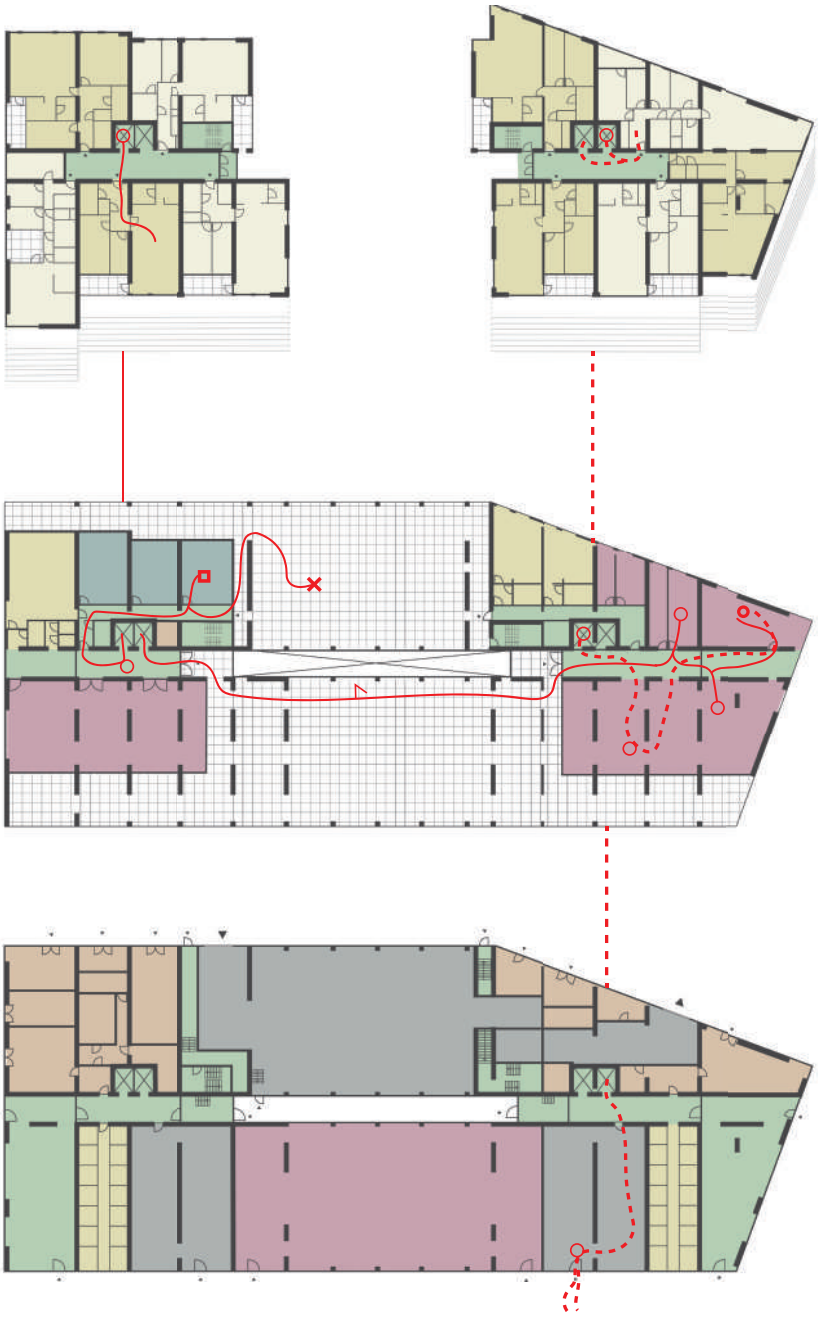


image from: Wiel Arets Architects. Hoge Heren. retrieved from https://www.wielaretsarchitects.com/en/projects/hoge_heren/

De Hoge Heren
Wiel Arets Architects



Route resident A
Route resident B
Informal short encouner (0-10 min)
Informal long meeting (10-∞ min)
Negative encounter
Visual encounter
Visual encounter other
Formal short encouner (0-10 min)
Formal long meeting (10-∞ min)

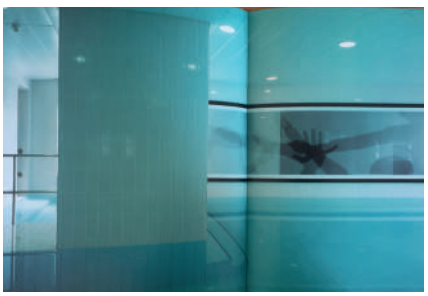
Conclusion

The programme of the Hoge Heren building has a strong distribution between public, semi-private and private area's. A public fitness facility is placed on the ground floor, seperated from the rather functional semi-private spaces like the service rooms and storage sheds. The parking garage on the 2nd to 5th floors separates the ground floor from the semi-private 6th floor where all collective spaces are situated. This is the only floor where residents would meet each other besides the informal encounters in places such as the elevator or the bike sheds. The rest of the floors, in the towers, are completely private oriented. The residents can move through the building in a relatively anonymous way. They can choose to meet other residents themselves by making use of the facilities on the 6th floor.

< The interior of the lobby on the sixth floor is open and clean. The palet of materials like natural stonde and wood results in luxurious character.

< The interiors of the semi-pivate office spaces on the sixth floor are open and flexible.

< The outside area down the central void has a futuristic character through the use of aluminium finishes and green-coloured lightning, and dark tiles.



< The interior of the semi-private swimming pool is open and light. The luxurious atmoshpere, light spots and art make it feel like a pool of an hotel.

imageS from: Wiel Arets Architects. Hoge Heren. retrieved from https://www.wielaretsarchitects.com/en/projects/hoge_heren/ (left)
Kim Zwarts, from: Hilverink, H. G. 2002. *Hoge Heren. Rotterdam Wiel Arets.* Maastricht: Vesteda. (right)

Svartlamoen housing

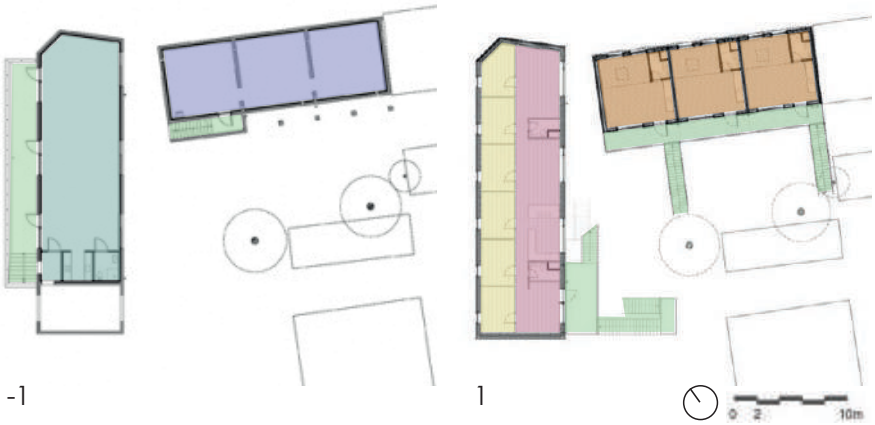
year: 2005
architect: Brendeland & Kristoffersen arkitekter
location: Trondheim, Norway
type: Student dormitory & studios
amount: 22 dormitory units and 6 studios

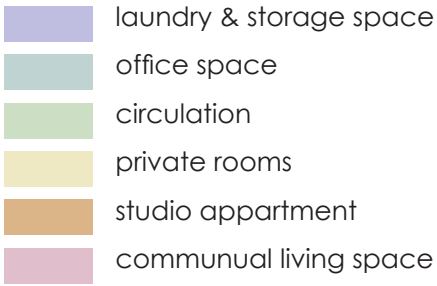
Svartlamoen is a residential complex for young people. When it was realized it was the largest building in the world made of solid wood. It made a statement about Norwegian housing policy, which did not pay enough attention to people of all ages with a low income.

Functions

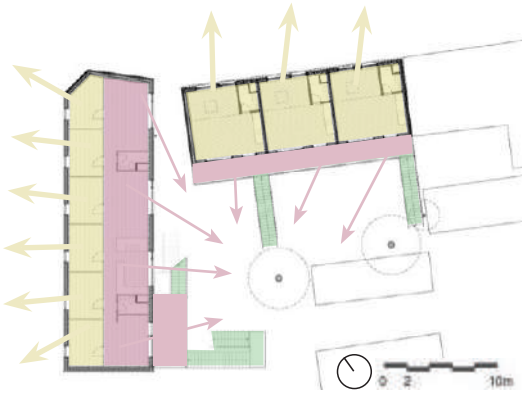
The whole complex contains 28 living units, whereby the main building consists of a half sunken plinth with office spaces and four group homes 0f 110 to 128 m2 for 5 to 6 people. Half of the dwellings are communual spaces: the kitchen, living room, bathrooms and balconies. The average floor area per peson is 22 m2, which is considerably lower than the 50 m2 which is the Norwegian standard.

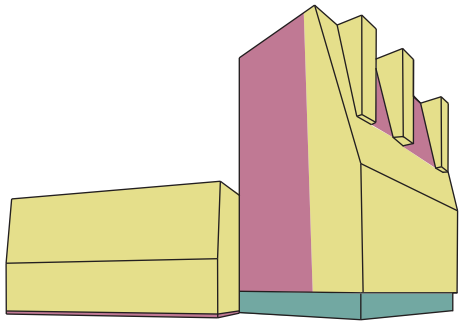
The low two-storey block contains two sets of three studio appartments of 28 m2. This building also has a laundry room and storage space in the basement.





Private-public



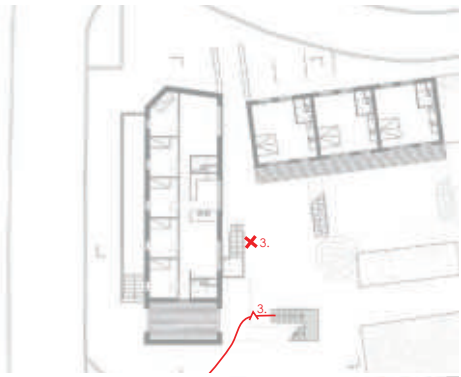


The housing complex is build around a courtyard, which is the collective centre of the site. The two housing buildings facing the court are closely connected to the court, which is therefore easy accesible from out of the dwellings. All the private spaces in the higher building are oriented to the outside of the complex, while all the communual spaces are oriented towards the central courtyard. Both buildings also have their own collective outdoor spaces alongside the courtyard. The high building with the group houses has a large steel stairs which serves as access to the houses and as balcony at the same time. The lower building with the individual houses has a collective porch at both floors.

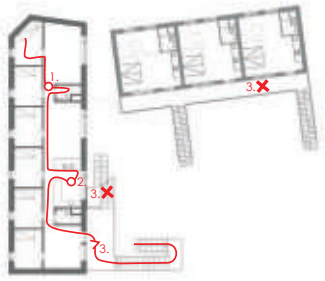
Collective encounters

Svartlamoen housing

Morning:



Ground floor



First floor

Afternoon:

Ground floor

First floor

Morning route

Afternoon route

Informal short encounter (0-10 min)

Informal long meeting (10-∞ min)

Negative encounter

Visual encounter

Visual encounter other

Formal short encounter (0-10 min)

Formal long meeting (10-∞ min)

Spatial characteristics

1. The communual livingroom is an open space wich deliberatly was left unfinished by the architects, so that the residents could make it their own by decorating the walls and placing furniture.

3. The central courtyard is an open space, flexible in use. It is used as a place to store bikes, to sit and to relax. A hammock in the middle is one of the items which can be used by all residents.

4. The galleries in front of the buildings function also as the collective balconies. Because of the large dimensions it is possible to relax here in the sun on your own or with your roommates.

6. The communual kitchen is in the same space as the communual living room. From here large windows give a sight into the courtyard, so the inhabitants can always see what is going on there.

Conclusion

Collectiveness was very important in this design. The courtyard is litterly central to the collectiveness of the complex. It is the space where the inhabitants of the entire complex can meet one another, when they store their bike, sit and relax or when they engage in any other activity they planned. The next layer of collectiveness consists of the outdoor spaces of the buildings adjecent to the courtyard. The shared 'balconies' evoke encounters between people who live on the same floor. The last layer consists out of the communual living rooms.
To make sure that the people would actualy make use of these spaces, the designers actively involved them during the design phase and afterwards by delivering an unfinshed product, so the inhabitants could make it their own.

Images from:
Architecture norway (2005) Svartlamoen housing, Trondheim, retrieved from: http://architecturenorway.no/projects/dwelling/svartlamoen-2005/
Fourth door (2010) Svartlamoen, Trondheim – Harbinger to Norway's massive wood phase-change, retrieved from: http://www.fourthdoor.org/annular/?page_id=1269

De Olieberg

Theo Kupers Architecten

The Olieberg is a building in which people with a certain disability can live in a 'companion' home. They live mixed with "normal" people through the building. There is a meeting point where supervisors can provide support 24 hours a day. You can also eat, wash or drink a cup of coffee there. So this is also the place where you could meet someone from the same building.

Various interventions have been made in the corridors. Firstly, there are voids so you can look on other floors and there is more light in the corridors. There are also recesses on each floor to both sides so that you have a view of the beach on one side and the city on the other.

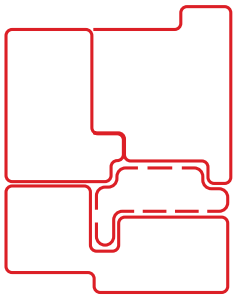
The 'dune-garden' (the courtyard) is a collective for local residents and only accessible from the buildings. This is also the playground of the nursery. There is a fence around this.

Private

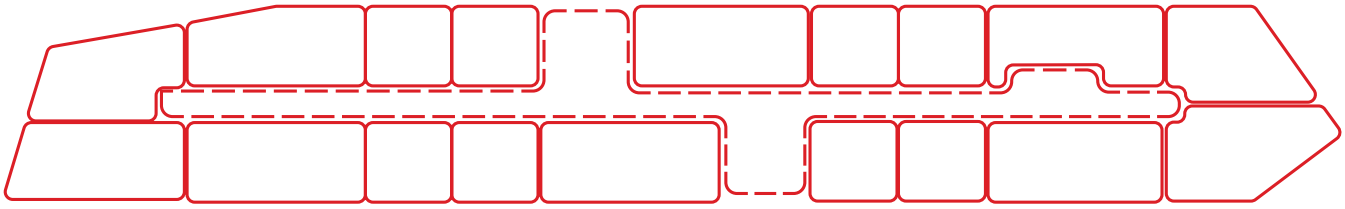
Collective

For specific public

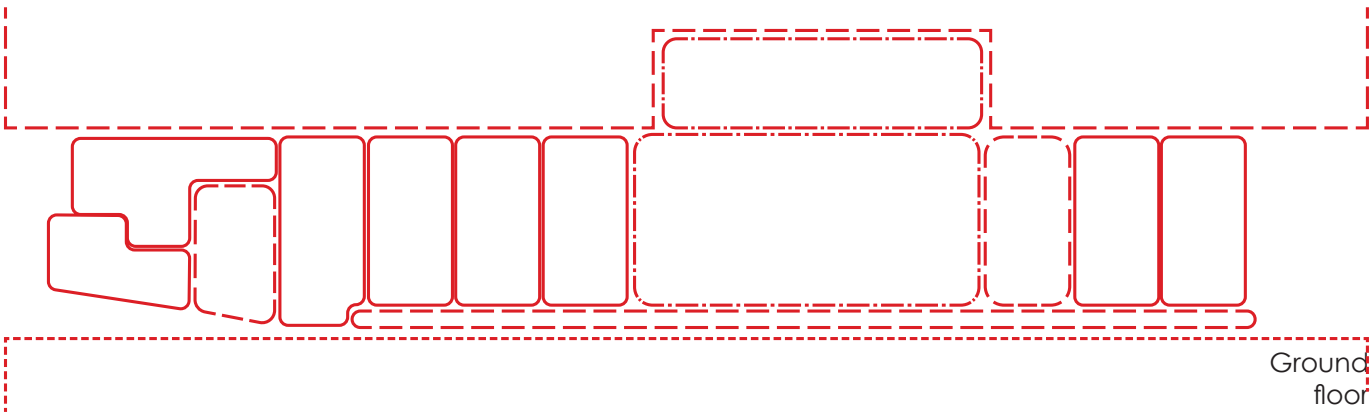
Public



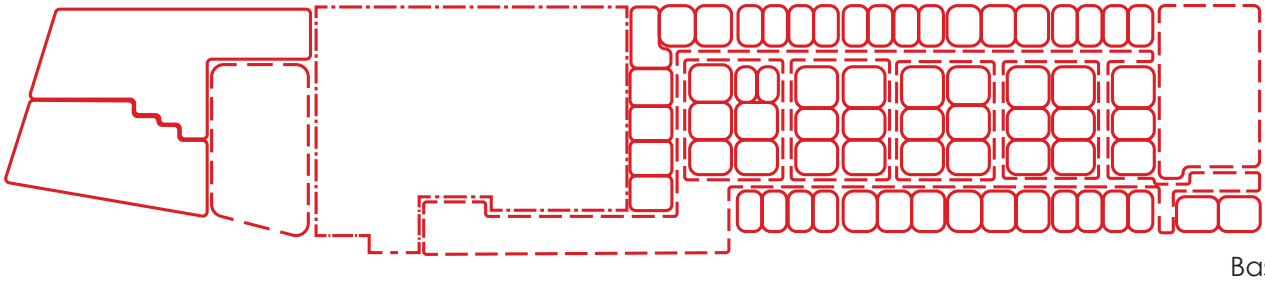
Seventh floor



First floor



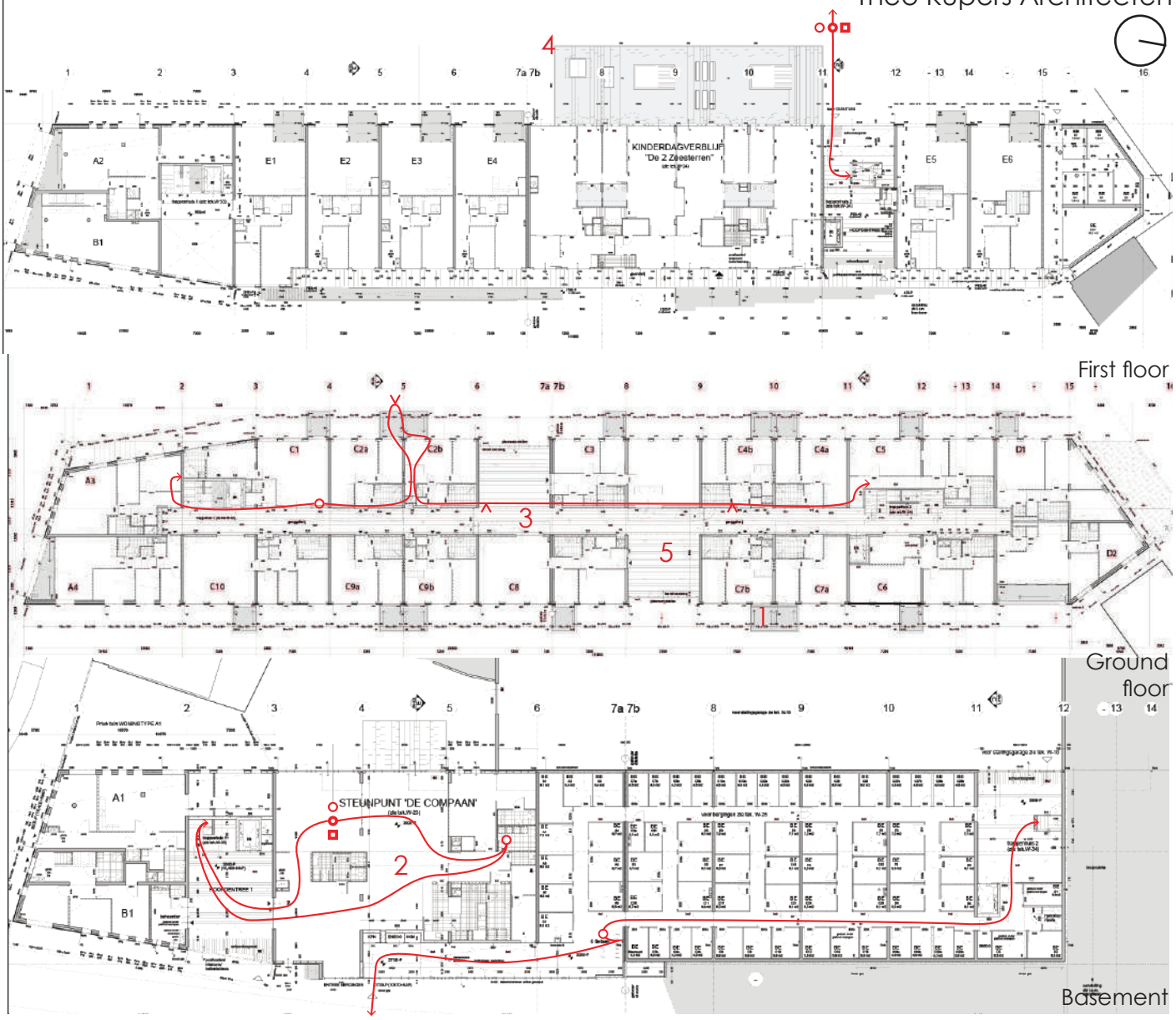
Ground floor



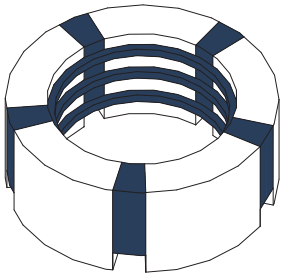
Basement

De Olieberg

Theo Kupers Architecten



Tietgen Dormitory

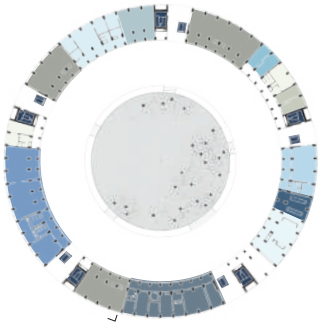


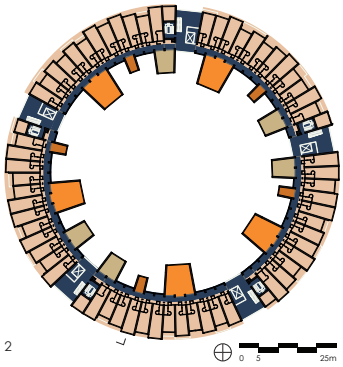
Exterior Tietgen Dormitory (Lindhe, J. M., 2014a)

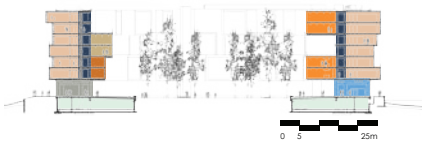
year: 2006
architects: Lundgaard & Tranberg Arkitekter
city: Copenhagen, Denmark
type: student dormitory
amount: 360 units
plot size: 6.082 m²
total floor area: 26.781 m²
FSI = 4,4

The Tietgen Dormitory (Tietgenkollegiet in Danish) is a circle-shaped dormitory in Copenhagen, Denmark. The circular shape is meant to address all its surroundings equally, and makes private dwellings look outward and shared rooms look inward. The circle surrounds a public courtyard. On the ground floor, the building has many facilities that can be used by all residents such as study rooms, music rooms and a big multifuntional assembly hall where sometimes events take place. The upper six floors are student housing. Every group of twelve dwelling units shares common rooms such as a kitchen and a utility room. These rooms face the courtyard, possibly making the shared experience a communal experience.

functions







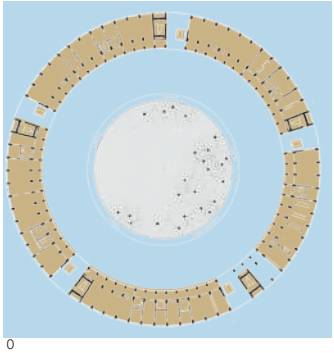
circulation
letterboxes
offices
assembly hall
washing room
room for groupwork
reading room
computerroom
gym
bike storage
workshop
music room
entertainment/study room
private dwelling
kitchen/living room
utility room
garage

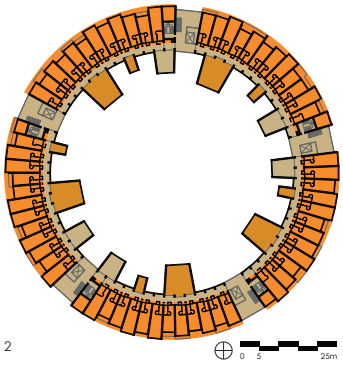
functions

The ground floor of Tietgen houses many shared facilities that are accessible for all residents of the block. There are different kinds of study rooms, a shared washing room, workshops and even a gym.

The floor plan of the second floor is exemplary for all other floors. The hallway which gives access to the individual dwellings outlines the center courtyard. Shared spaces such as kitchens, utility rooms and multifunctional rooms are placed on the other side of the hallway, opposite the individual dwellings. One has to pass through the hallway to go to their kitchen.

private-public





public
communal (for all residents)
communal (for group of residents)
private

private-public

The center courtyard is publicly accessible, but can be closed off by fencing off the five access routes. It is not clear in whether this happens on a regular basis or only in particular cases such as during an event.

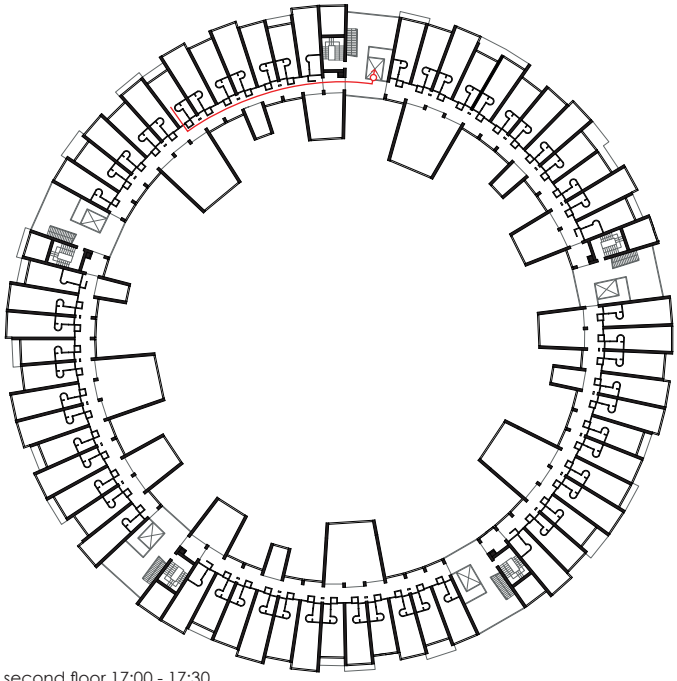
The ground floor building parts can be used by any of the residents of Tietgen. The staircases can only be accessed by residents as well. It is unclear whether the elevators can be used by outsiders, but that does seem to be the case.

The first through sixth floor are only accesible to residents and their guests. Every hallway section, from one elevator to the next, is closed off with locked doors. Twelve residents per section form a group that shares a kitchen/living room and a utility room for hanging laundry.

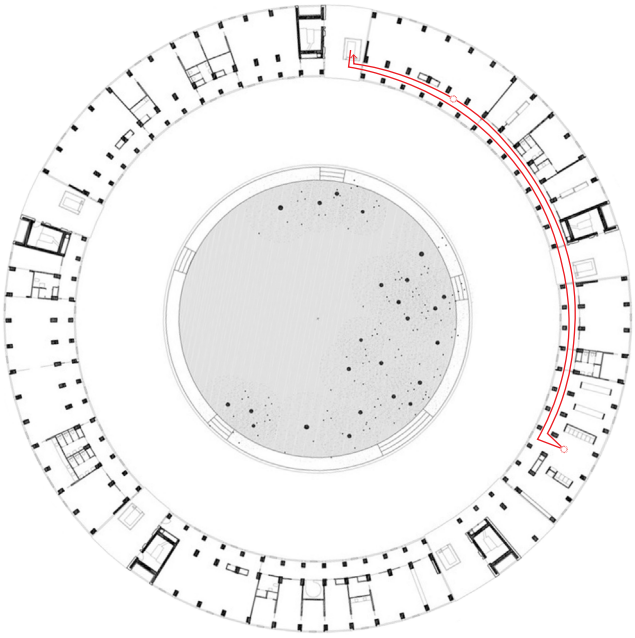
The third shared space in a section can have various functions; cinema room, billiard room, study room. They can be used by all residents, although they do need to ring the group's bell.

Courtyard Tietgen Dormitory (Lindhe, J. M., 2014a)

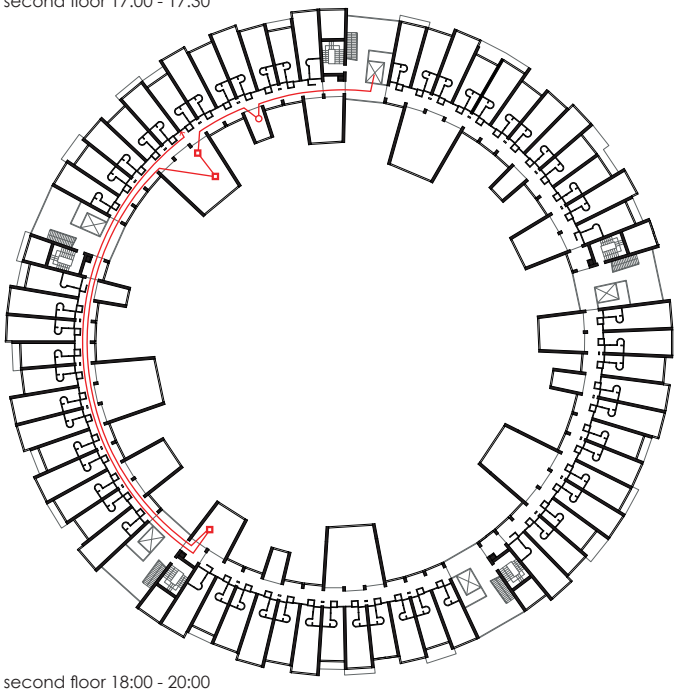
Lindhe, J. M. (2014a). [Exterior Tietgen Dormitory]. Retrieved from https://www.archdaily.com/474237/tietgen-dormitory-lundgaard-and-tranberg-architects
Lindhe, J. M. (2014b). [Courtyard Tietgen Dormitory]. Retrieved from Lindhe, J. M. (2014). [Exterior Tietgen Dormitory]. Retrieved from https://www.archdaily.com/474237/tietgen-dormitory-lundgaard-and-tranberg-architects



second floor 17:00 - 17:30



ground floor 17:30 - 18:00



second floor 18:00 - 20:00

17:00 - 17:30
(picking up laundry from room)
- greet at elevator

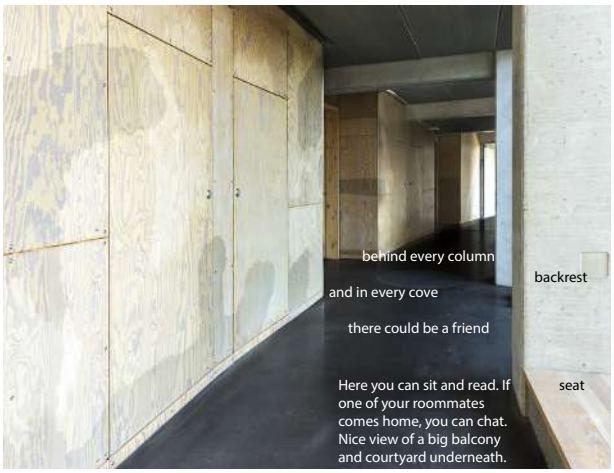
17:30 -18:00
- greet at laundry room
- greet in ground floor hallway

18:00 - 20:00
- chatting in utility room
- cooking with roommates
- dining with roommates
- hanging out in cinemaroom with fellow students and roommates (back to private room)

Conclusion

There are three 'rings', from outer to inner they are; private rooms, communal hallways, and communal facilities. Having privacy directed outward and communal practices directed inward (to a courtyard) can be beneficial to a sense of community.

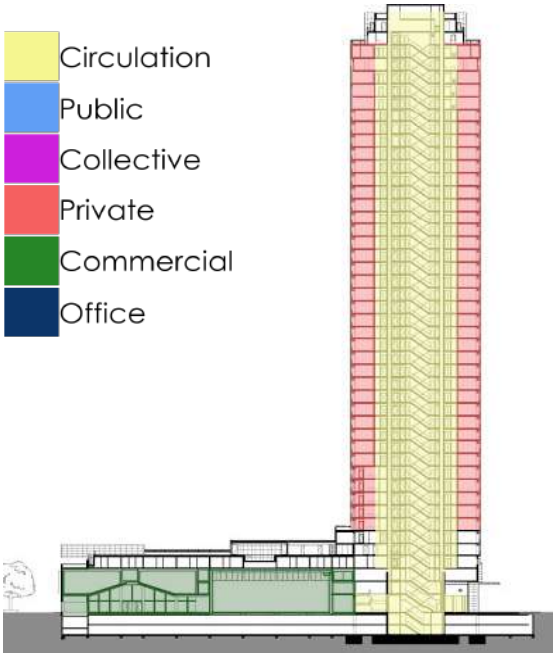
architecture and sociability



Tietgen Hallway 1 (Lundgaard & Tranberg Arkitekter, n.d.)

Tietgen Hallway 2 (Vahle A/S, n.d.)

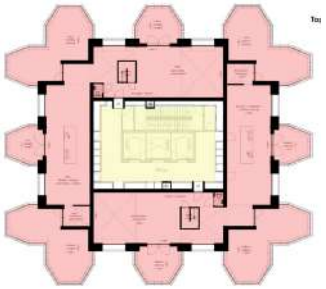
Lundgaard & Tranberg Arkitekter. (n.d.). [Tietgen Hallway fourth floor]. Retrieved from https://www.ltarkitekter.dk/tietgen-en-0
Vahle A/S. (n.d.). The pivot doors act as fire doors [Photograph]. Retrieved from https://vahle.dk/en/projects/pivot-doors-tietgen-college/



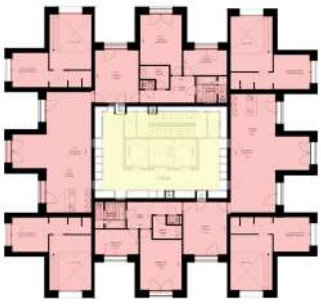
Architect: Alavaro Siza
Built: 2007
Adres: Van der Hoevenplein 9-243
Whilhelminapier (postcode 3072)
Client: Vesteda
Contractor: Besix Branch Nederland
Typology: 234 appartementen

Functions

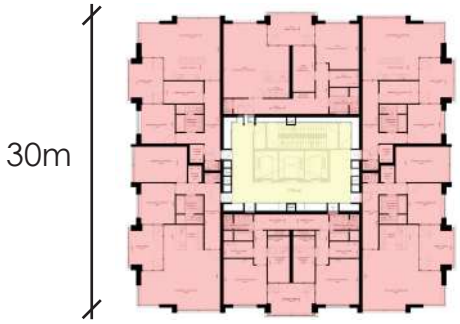
The building has very formal collective spaces in the form of collective functions such as a swimming pool and a commercial-collective function in the form of a cinema.



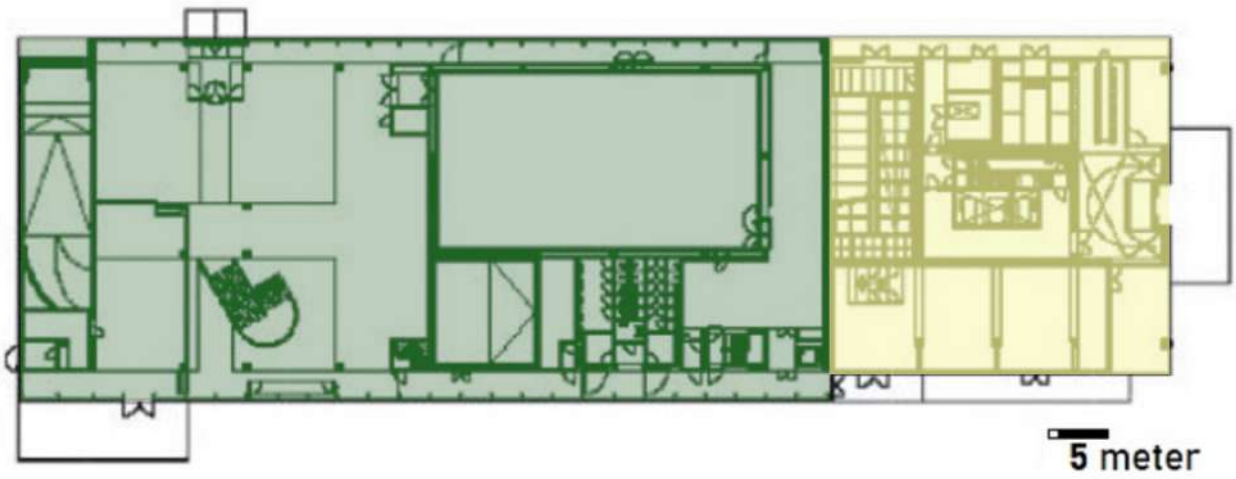
Floor 45



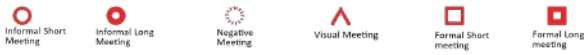
Floor 41



Floor 22



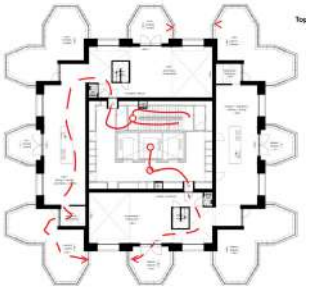
Groud Floor



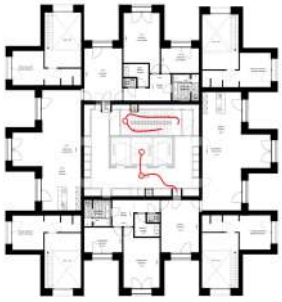
Meeting

The building does not have much in the form of short term formal meeting spaces. Formal meetings can take place in the formal places of activity such as the swimming pool and cinema as mentioned earlier. Informal meetings can take place in the garage and stairwell, or in the elevators and spaces before the entrance of the homes on each level.

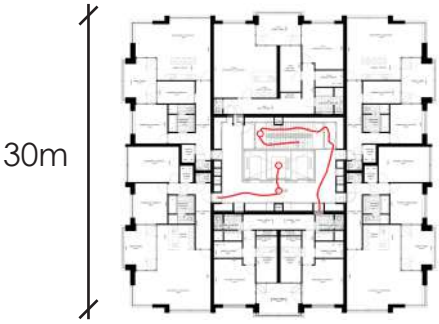
Overall, this building is geared towards spacious and more luxurious homes. On the 45th floor there are a few large homes with many balconies from some of which it is possible to see your neighbor on their balcony, of course given that they are on the exact right balcony of the 4 balconies that these homes have.



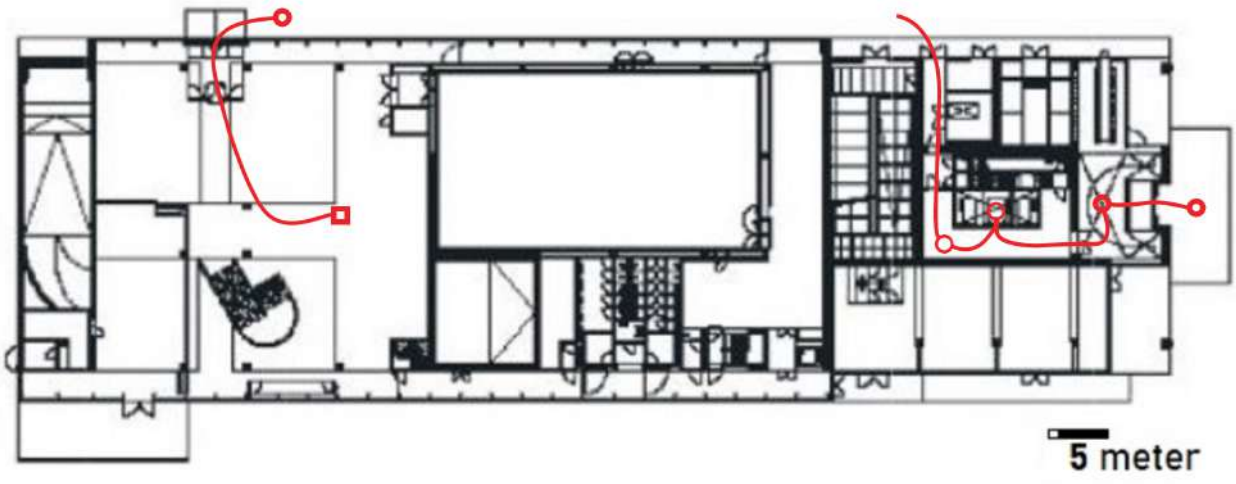
Floor 45



Floor 41



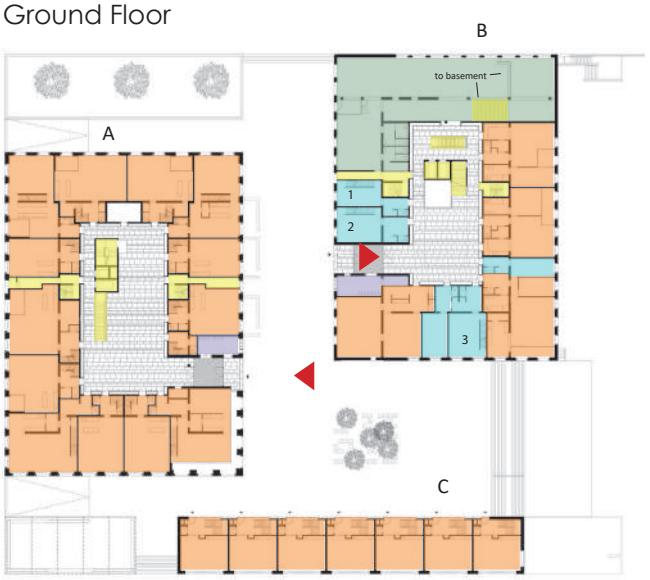
Floor 22



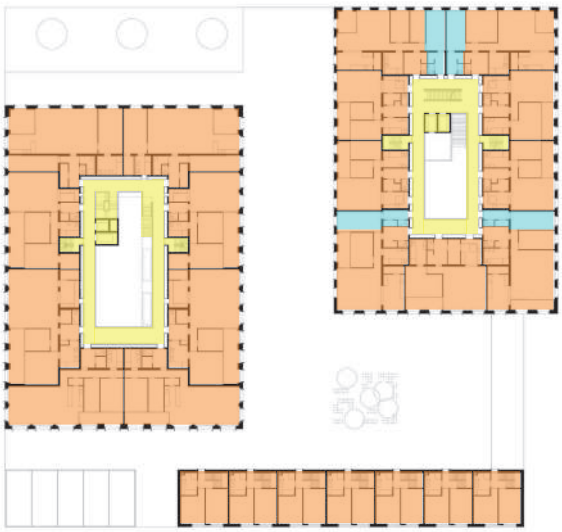
Groud Floor

Piazza Céramique

Ground Floor



Level 2



Living
Working
Circulation
Mailboxes
Commercial

0 2 5m

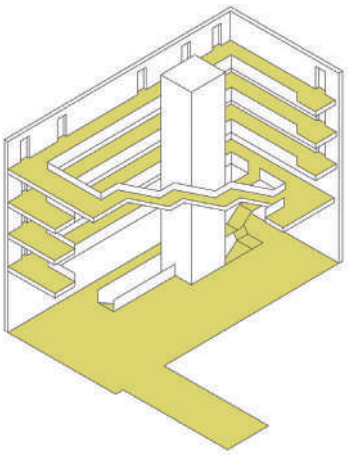
North

year: 2001 - 2007 tender first price
architects: Jo Janssen & Wim van den Bergh
city: Maastricht, The Netherlands
type: dwelling & working
amount: 92 dwellings and workspaces
plot size: 60.000 m2
total floor area: 18.970 m2
FSI = 3,16

Block A	Dwelling
Block B	Dwelling + Working
Block C	7 workhomes designed by Luijten/Verheij architecten

Both blocks have a collective entrance lobby in an atrium. Surrounded around the atrium the dwellings and workplaces are situated. The parking is under an elevated deck in the basement, which is beneath the whole plot, so under the three blocks.

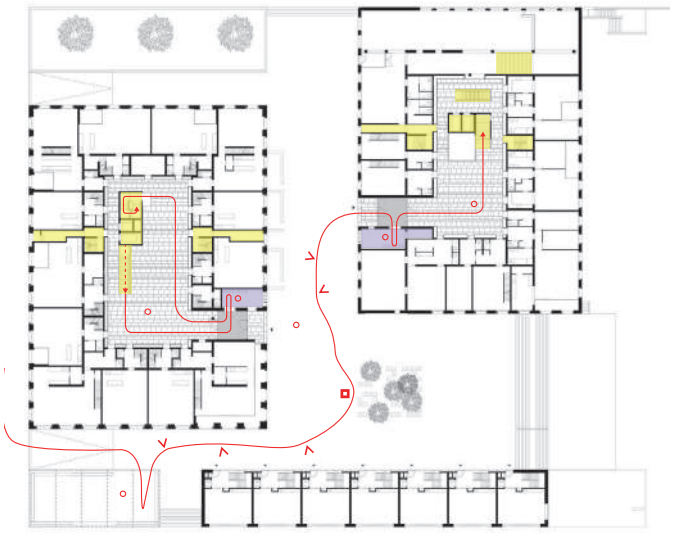
the lifts and stairs are in the middle of the atrium, the piazza's. The circulation of both blocks A and B comes down to the basement. In Block A on the groundfloor are maisonnettes so they don't have an acces on the second floor. The stairs and galleries circulate around the atrium so you have always an overview of what is happening on the other side or on the groundfloor.



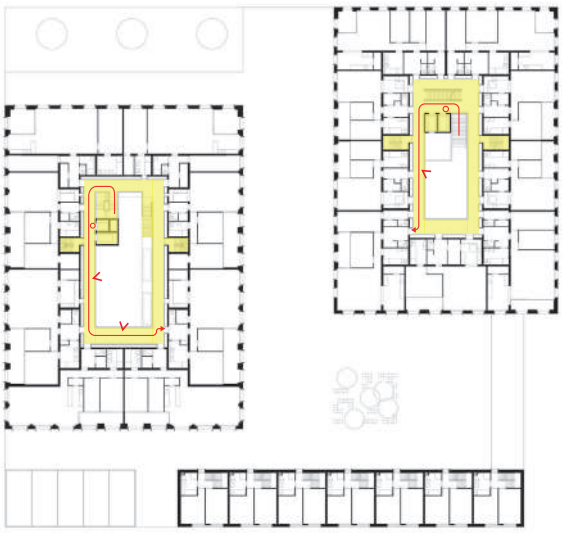
Circulation

Atrium and deck outside. Jo Janssen Architecten. (2007). Piazza Céramique. Retrieved from, https://jojanssenarchitecten.nl/project/92pc

Circulation
Mailboxes



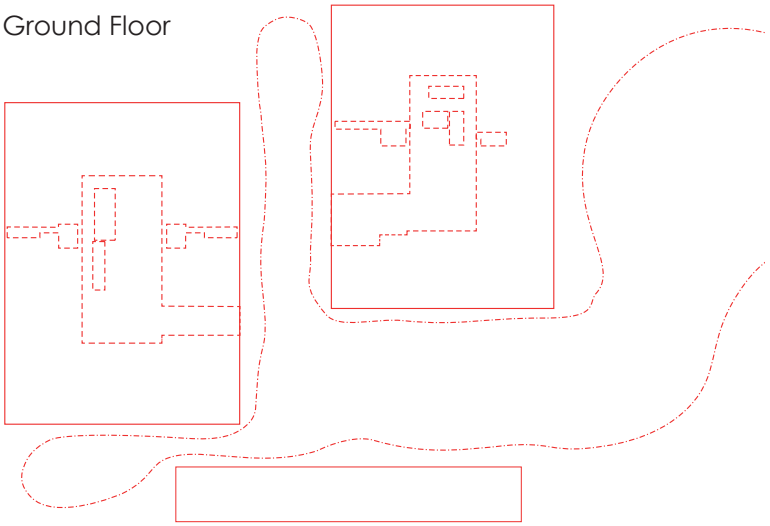
Ground Floor



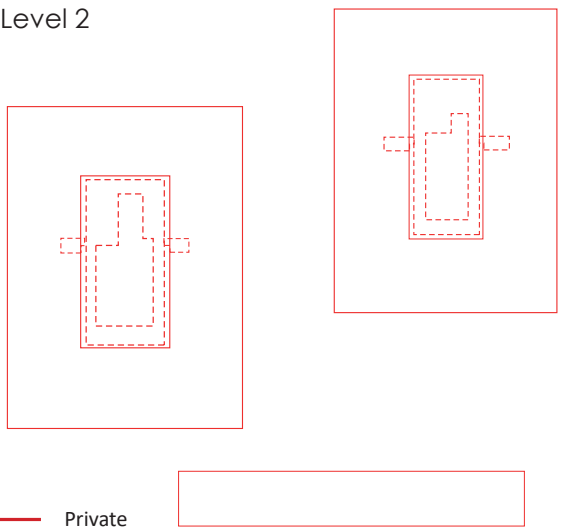
Level 2

0 2 5m North

Ground Floor



Level 2



Private
Collective
Public

0 2 5m North

Conclusion

The building has a collective atrium with galery acces to the dwellings. The buildings are situated on a public deck and a public garden.

Due to the seperate entrances of the buildings which are outside on the the lifted deck in the inner area between the three buildings people are more forced to meet each other. Instead of on street level at the the street side. On the deck there is a place to sit and meet.

However, thanks to closed walls and doors on the galleries in the atrium, people only accidentally meet each other when someone's steps out of their house or is waiting in front of the lift.
People who come from the parking garage below groundlevel can go up to their floor level invisible with the lift. When taking the stairs and walking to their mailboxes they can meet some people in the lobby in the atrium. Going up the stairs to the higher levels people walk up in the atrium and have a view over the atrium the whole time. So people can see each other even when you are not on the same floorlevel.

General

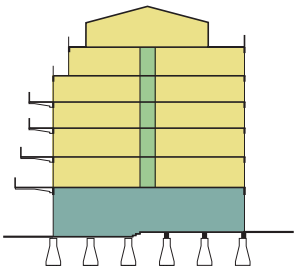
St. Jobsveem exterior (Mei Architects, n.d.)

Year of construction: 1913
Year of transformation: 2007
Architects: Mei architects, Wessel de Jonge
Location: Rotterdam, The Netherlands
Type: Luxury lofts and penthouses
Plot size: 3.250 m^2
Total floor area: 21.000 m^2
FSI: 6.46

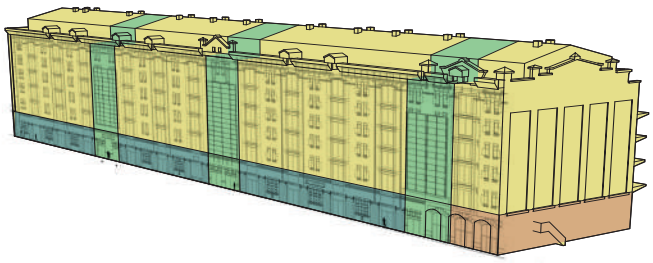
The St. Jobsveem is a listed monument and a former warehouse along the St. Jobshaven in Rotterdam. In 2007 it has been transformed to dwellings. The largest intervention has been the opening of the brick facade, on three locations in the long building. Behind these openings are now the stairs located.

Functions

The largest part of the building has a residential function in which 99 loft apartments and 10 penthouses are located. All dwellings have an open floor plan. All dwellings, except from the penthouses which are a new addition, have a large depth. This has to do with the size of the original warehouse. The only communal space for the residents in the building are the storage boxes on the ground floor. In the plinth of the building are office spaces located, for external companies. They barely have a connection with the rest of the building as both working and living have a seperate entrance.



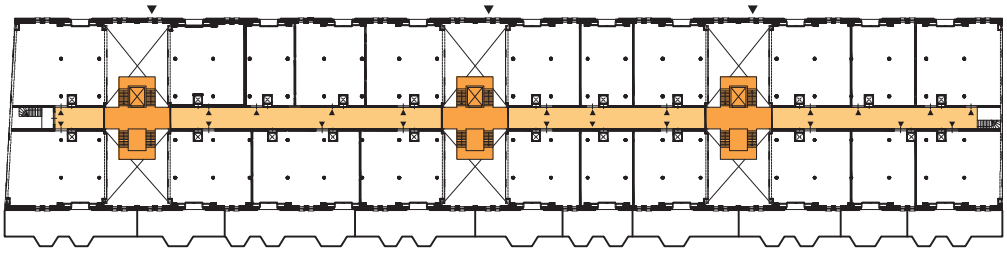
Section
1:1000



Accessibility

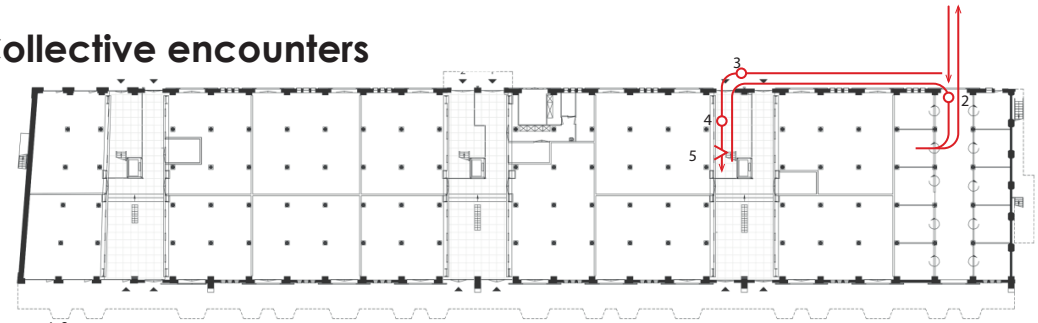
The building is cut by three atriums. These atriums are the entrance points of the building. To make the atriums in the old monumental warehouse, some major adaptions have been made during the transformation in 2007. In the light atriums a staircase and elevator provide access to the floors above. Here a corridor leads to the front door of the dwellings.

First floor
1:1000



Collectivity

Collective encounters



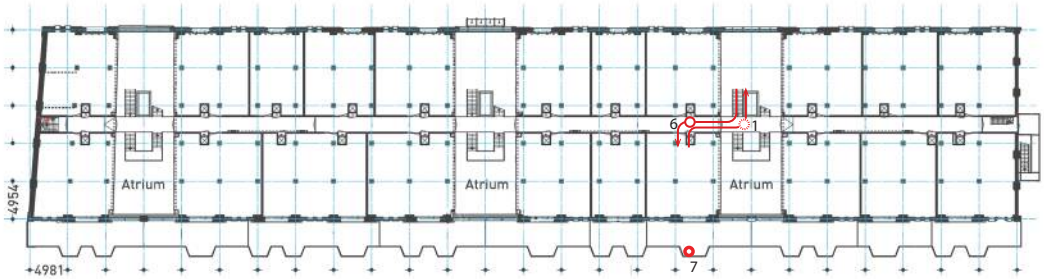
Unforseen short encounter

Unforseen long encounter

Negative encounter

Visual encounter

Ground floor
1:1000



First floor
1:1000

Spatial characteristics

1. The stairs are the meeting place in the building. Residents from all floors come together here. The skylight and the big glass facade make it the lightest space in the building, which make it a comfortable space.

3. The entrances of the residential part and the office part are situated right next to each other. This provides some kind of encounter in from of the building.

4. Mailboxes are located on the ground floor in the atrium. This increases the chances of residents meeting each other in the atrium. It becomes a place where longer conversations could take place. between residents.

5. The dwellings adjecent to the atriums have a glass facade facing the atrium. This is done for extra daylight in the dwellings, but also provides a visual connection with people on the stairs. It can strenghen the sense of community, but also decreases the privacy in the dwelling.

7. Although located inside the dwelling itself, the balconies provide a space where collectivity can take place. The cantilivered balconies with an decreasing depth on the higher levels make it possible to have interaction with the neighbours above or below.

Conclusion

Collective encounters take place in the mobility spaces of the building. The light atriums are the cores of the collective cores for in which residents meet. It might be stated that glass is in multiple ways used to bring in some form of collectivity within this massive, closed monument. The shape of the building, the long corridors and the closed structure of the building do not stimulate collectivity. However, this is not so strange bearing in mind that it was not build as a residential building.

Images from Mei Architects and Wessel de Jonge Architecten

The Building

Year: 2012
Architects: 51N4E
Location: Nevele, Belgium
Type: Elderly Homes
Amount: 54 Apartments
Plot size: 7.460 m² **Programme**: 4.400 m²

OCMW Nevele
51N4E
1:500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General

OCMW Nevele is an elderly home project in Nevele, Belgium. It houses 54 apartments over 3 levels, with a total programme of 4.400 m². Characterizing is that the building exists of three wings with large hallways. Because of the large windows, a lot of light is infiltrating in the hallways. On the other site, the bedrooms contain smaller windows, creating more intimacy.

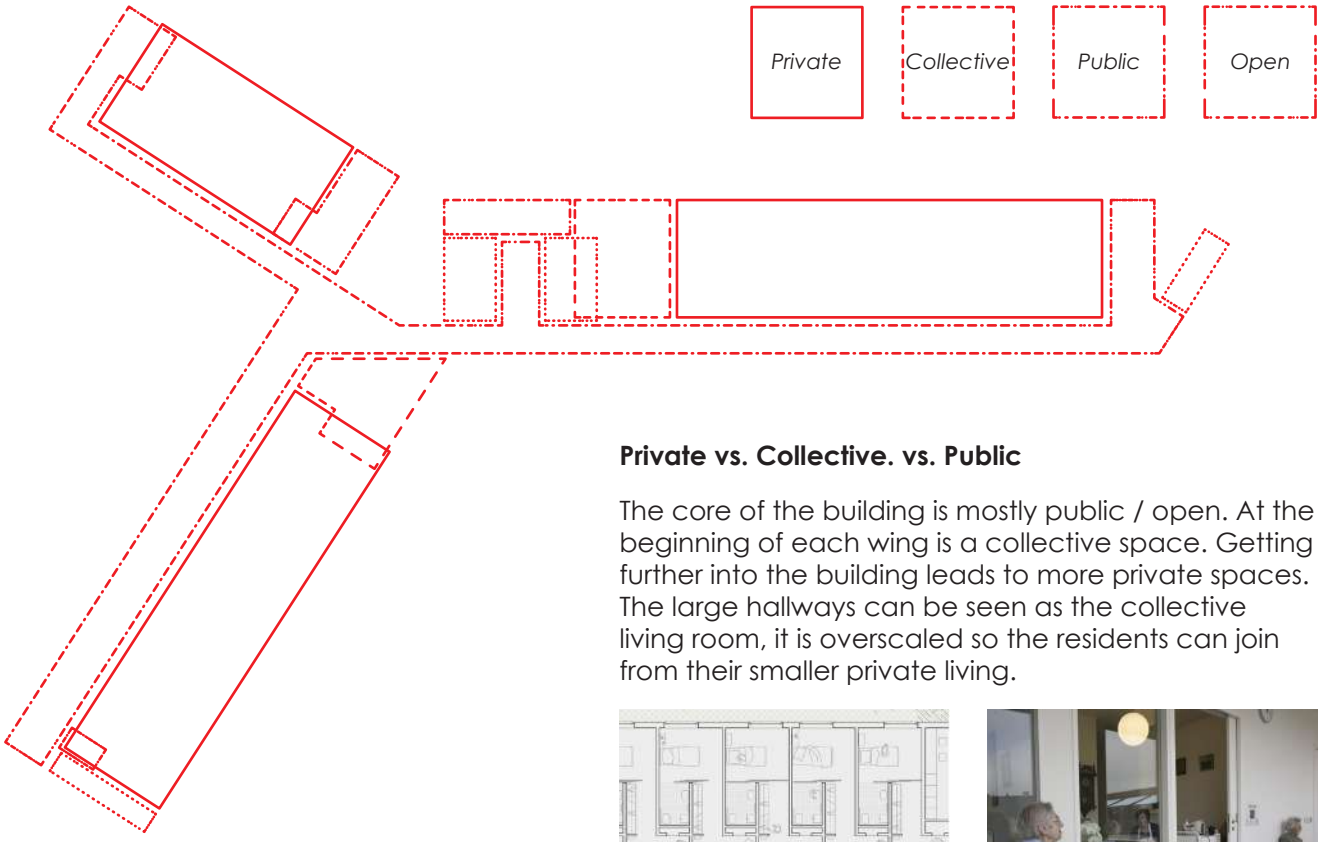
Living-Healthcare

OCMW Nevele is not an example of a working-living environment, but more living and healthcare. The building has three wings with all a collective car-function at the beginning. These functions are centred around the core of the building. All apartments are positioned along the large hallways. Each room in the apartment is doubled, offering a living room and a bedroom. The caregivers work in the building, operating from the core of the wings.

The Collective

OCMW Nevele
51N4E

1:500

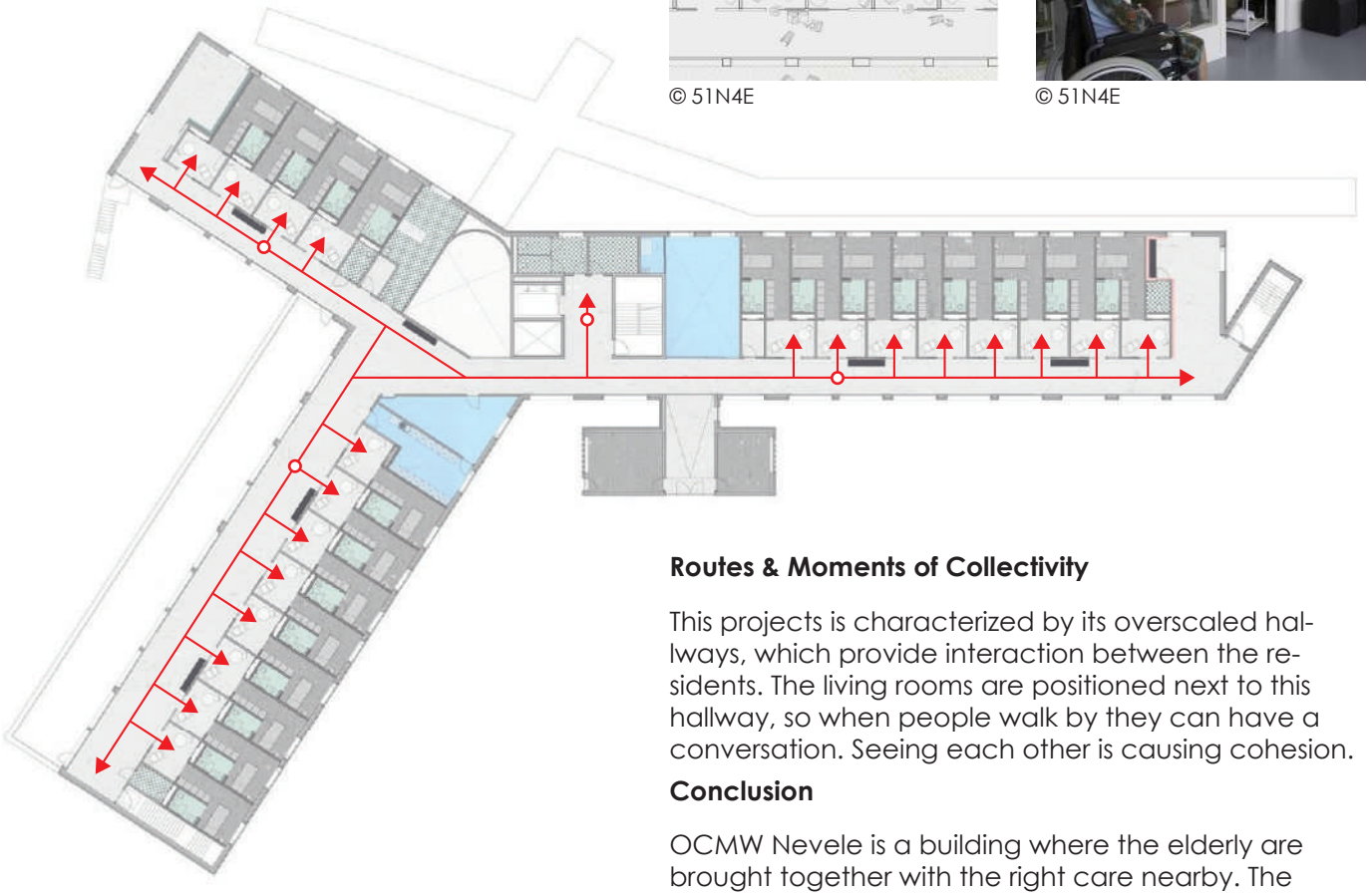


Private vs. Collective. vs. Public

The core of the building is mostly public / open. At the beginning of each wing is a collective space. Getting further into the building leads to more private spaces. The large hallways can be seen as the collective living room, it is overscaled so the residents can join from their smaller private living.

© 51N4E

© 51N4E



Routes & Moments of Collectivity

This projects is characterized by its overscaled hallways, which provide interaction between the residents. The living rooms are positioned next to this hallway, so when people walk by they can have a conversation. Seeing each other is causing cohesion.

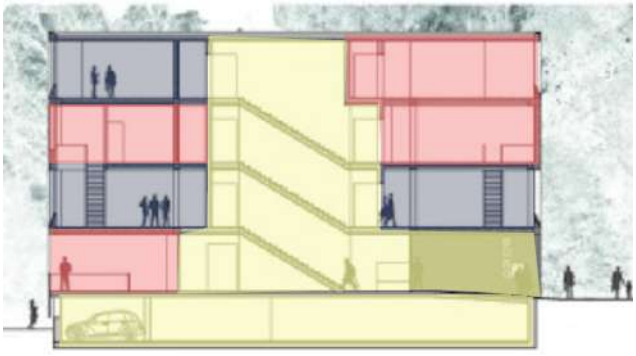
Conclusion

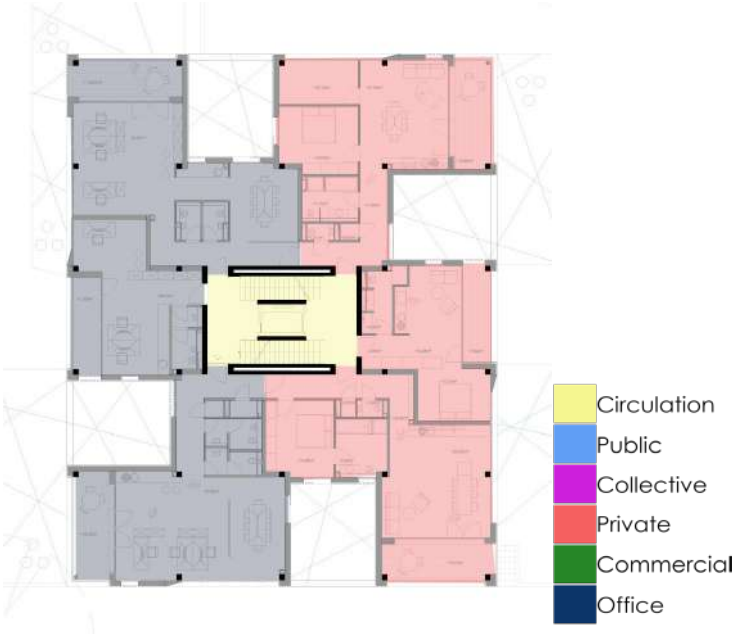
OCMW Nevele is a building where the elderly are brought together with the right care nearby. The hallway forms the essential element in the connection between the private and the public.

Architects: Bieling Architekten
Built: 2011 - 2013
Adress: Hamburg
Client: IBA Hamburg
Typology: 16 dwelling and working spaces
12 maisonettes and 4 apartments
Area: 2.040 m2
GFA: 2.500 m2

Functions

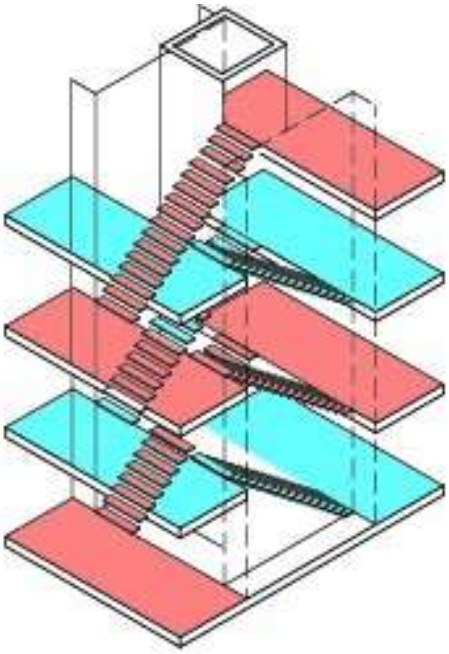
The Hybrid House is a hybrid, as the name suggests, of living and working. The homes in the building have office areas that can be accessed separately from the circulation. This results in a somewhat checkered pattern of living and working. The circulation is unique as the staircase functions as a helix. However it is important to note that from one floor you still only have one stairwell option as the two are separated from each other. It is still possible to access another stairwell via walking through the home to the other side or to the floor above/below where you will have access to the other stairs. Or ofcourse through the elevator however this is not safe.

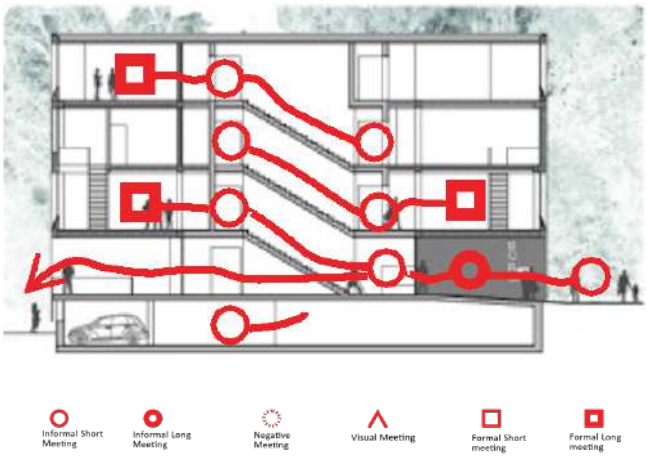


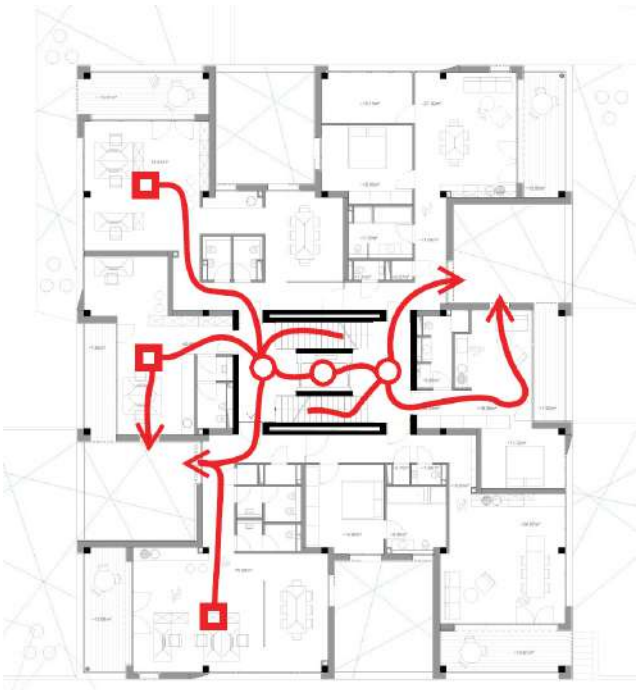


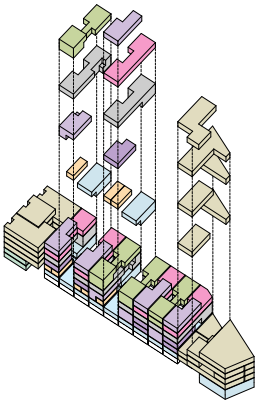
Meeting

Informal and short meetings can take place in the parking area, in the stairwell or elevator and at the entrance of the building. Formal meetings take place inside the work area of the houses. There are no short term formal meeting spaces.







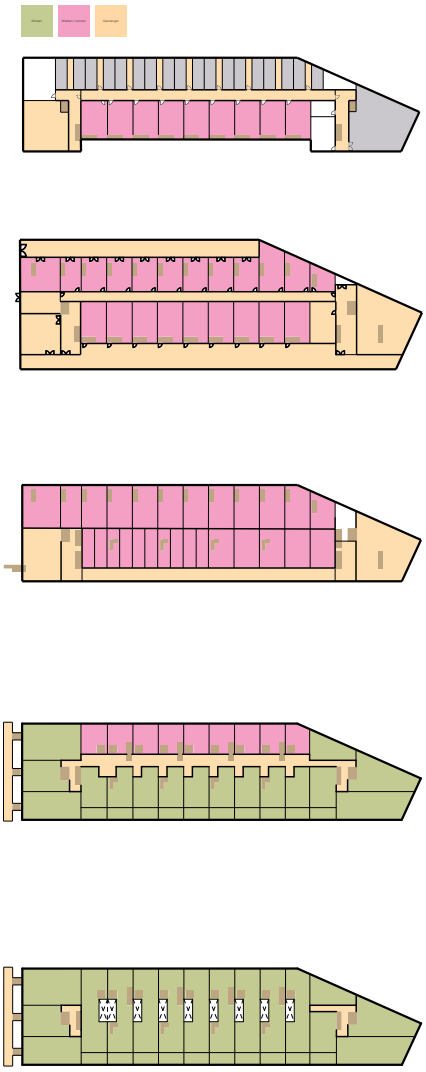


IBeB

year: 2018
architects: HEIDE & VON BECKERATH
city: Berlin
type: home-work building
amount: 87 live-work dwellings
plot size: 2798 m2
total floor area: 8.945 m2
FSI = 3,2

The IBeB is a home-work building in Berlin, completed in 2018. IBeB stands for Integratives Bauprojekt am ehemaligen Blumengroßmarkt.
The home-work building is set up to link living and working, which is why there are no separate workspaces. The building is five storeys high and has 87 live-work homes. It is mainly characterized by the special access from the center. At 3 levels, the digestion is formed by "Access roads". The construction process is also special. During the design process, the architects continuously consulted with the future residents.

Functions and typologies



Functions

The building has different typologies that are connected through interweaving between living and working. This makes it difficult to define each typology separately but roughly there are four to differentiate: workshop, appartment small (+studio), maisonette, appartment large.

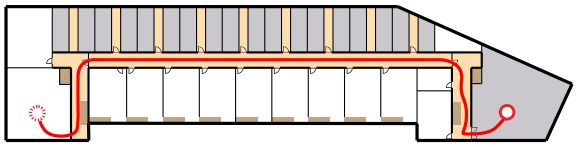
- 57% owner-occupied homes
- 25% Cooperative living / studio use
- 10% Social rent
- 8% Commercial spaces.

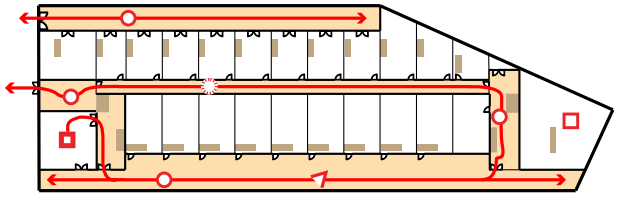
Living and working is distributed throughout the building.
Every home also has its own workspace, which is what makes this building so special. Living and working is usually divided over 2 layers per combination. This means that there is still a separation between living and working, but the spaces are directly connected through an internal as well as an external staircase.

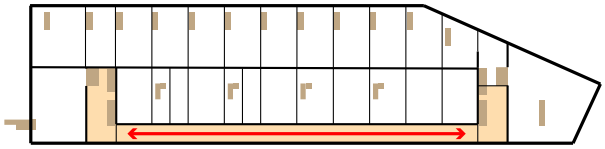
Private-public

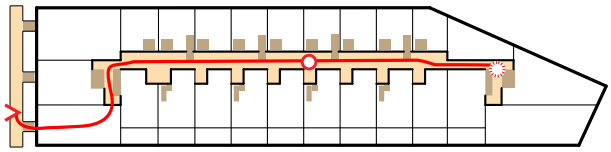
The baseboard is higher than the other layers and is together with the split level almost completely raised from glass. A roof garden is located on top of the building, which is not visible from street level.

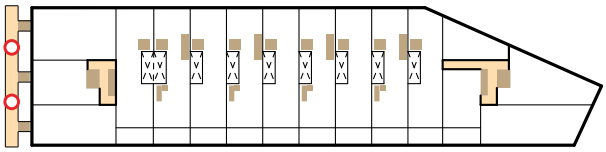
The craftsmanship with which this building was designed lies in the intelligent access structure. The architects created four horizontal 'access streets'.

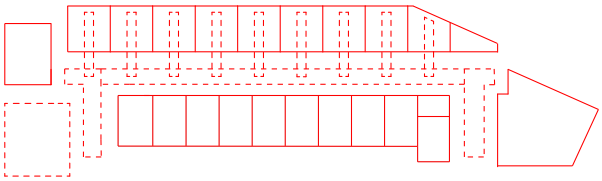


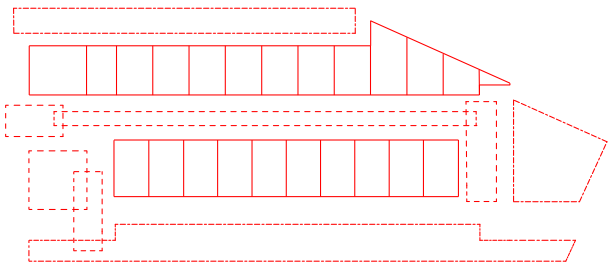












Private-public

Werkstraat and Atelierstraat
On the mezzanine level ("split level"), the wide gallery on the south side also provides access to work and living spaces that are internally linked with workspaces on the ground floor and on the first floor.

Central Corridor
On level 1 (that is, above the mezzanine level) they designed a central corridor to which five atriums (lichthoven) are linked that lead daylight deep into the building. This rue intérieure also opens up levels 1 and 2 via stairs and entrances that are connected to this corridor.

Roofstreet
Finally, on level 4 there is a 'roof-street' giving access to the living-working units on levels 3 and 4, separate studios, a collective space and a hortus conclusus on the roof.

Within this access structure the typologies vary of living and working spaces. 20 workshops for business and home-work use are situated in the plinth. All workshops that are directly accessible from the ground floor have direct access to a publicly accessible street for pedestrians and cyclists and can be set up as a workshop, office, gallery or shop. The transition from the double-height Souterrain Ateliers on the south side to the public space is formed by a cleverly situated, deepened patio, over which a bridge is stretched from the street to the entrance of the studio.

Conclusion

Both heads of the building have an urban sculptural quality. In the elongated south facade, the brick facade is interrupted by cantilevered balconies, which emphasize the horizontality of the facade. The plinth is strikingly transparent with space for public-oriented functions. By putting these functions in the plinth, the building acquires a collective character that is directly visible from the ground level.

In addition, part of the basement under the commercial area could possibly be used for a collective function. The open playground on the north side also contributes to the collective character of the building.

Furthermore the three horizontal streets on ground level stimulate the most collective encounters. These streets connect all the other communal spaces (i.e. gym, gemeinschaftsraum etc.). The large dimensions of the street on the south façade makes this more than just an acces route. People will actually use this space for longer informal meetings. The light characteristics of the street emphasize this long stay use.

Dwelling Type

Babel
Laurens Boodt Architecten
Rotterdam, The Netherlands
Maisonettes, Vertical Street

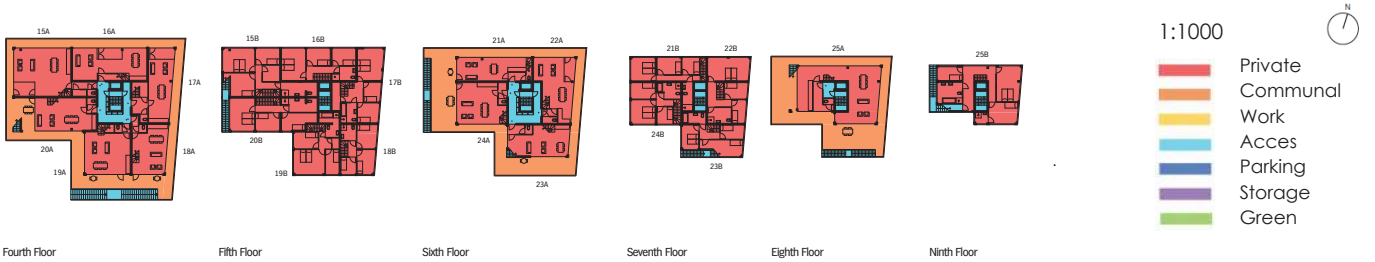
The Tower of Babel is a design for a new residential tower with 24 family homes on the Kratonkade on Lloydpier in Rotterdam. A special feature of this residential tower is the street that goes up around the building and which connects the various private terraces.

Spread over 12 floors, the family homes varying in size from approx. 90 to 145 m². The ground floor apartments have an entrance at street level, the other houses are accessible by elevator. The size of every floor is different, which accomodates the stair and terraces around the building.


Laurens Boodt Architecten


Laurens Boodt Architecten
1:500


Floor -1 Ground Floor First Floor Second Floor Third Floor

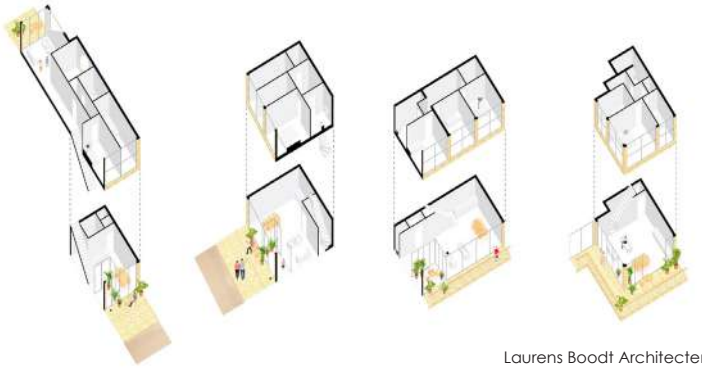


Fourth Floor Fifth Floor Sixth Floor Seventh Floor Eighth Floor Ninth Floor

Houses

All the houses in this building are maisonettes and consists of two floors. The ground floor of every house is connectes to the street space. Here are the living roos and the kitchen.

On the second floor of every individual house you can find the bedrooms, bathrooms and storage.


Laurens Boodt Architecten

Communal

Street space

At the street level there is a gate with a staircase that forms the entrance to the street space around the building. The street space is widened on the first floor to a square, for a vegetable garden, picnic area, etc.

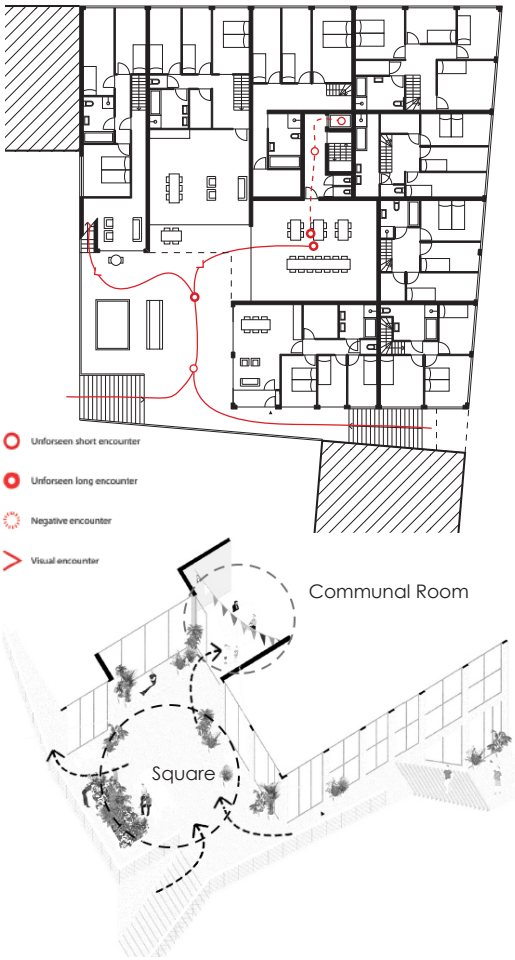
The street space continues upwards along the houses, with the stairs connecting the different platforms. The stairs are a reason for play, seating and viewing point.

On the square there is a common room for children's parties, (flex) workplace, meetings, etc.

Private Outdoor Space

The houses have loggias that can be fully opened, making these private outdoor spaces. These also function as an entrance on the ground floor.

In addition, homes have a private outdoor space on the street space, which is indicated by a number of thumbtacks.



Conclusion

In the design for this building there are a lot of opportunities for communual space use. The vertical 'street' is leading you along al this communal spaces, like a large square, a communal room and the roof terrace.

But because of the fact that this residential building isn't built yet, it is hard to say if this vertical street will work that good in real life.

The residents living on the higher levels probably will park their car and take the elevator situated in the core of the building, and will never use the street to go up.

If the communal spaces will work the way they are designed will totally depend on the residents living in this building.

Conclusion

As the preceding case studies show, there are many different ways to respond to the inclusion of collectiveness in a building. While all preceding buildings are complexes with multiple residences and sometimes workplaces, they don't all directly include a collective element. Some buildings are collective in the sole aspect that they share a common staircase or hallway. Buildings like Kölner Brett, St. Jobsveem, Piazza Céramique and Hybrid House make these moments of collectivity incidental, with no specific space designed for meetings, but them occurring where paths cross on their ways through the building.

A different approach to this common staircase or hallway is to specifically design it so that it becomes a space where people meet and spend time. Examples are places like the hallway of de Olieberg, with its small squares where people can place benches, and the wrapping vertical street of the Babel building, where there will be space for picnics and children's parties.

Another way designers create moments of collectivity is by adding facilities to the building that draw the residents and create the collective interactions that can occur within such an environment. These facilities can include fitness areas or swimming pools, like in Hoge Heren or New Orleans. But they can also consist of more general communal areas like in Narkomfin, actively serviced collective facilities like in OCMW Nevele, or the independently organised variety of special room functions in the Tietgen dormitory. In that last building, as well as in de Olieberg, another potentially shared facility appears: The garden.

A fourth approach is one step more intimate. This step can be seen in Tietgen Dormitory and Svartlamoen housing. This approach revolves around communal living, where some of the living spaces are shared. This can include a kitchen, living room and laundry room. This step reduces the size of the private space, which means that the costs are shared. This can lead to more affordable housing.

More implicit ways of approaching collectivity are achieved through the visual senses. Many projects connect different spaces visually. This can enhance one's experience of safety as well as to actually improve safety. Visual connections can also stimulate actual meetings. However there are situations (like on the roof terraces of the Pullens building) where visual connections have been mitigated by inhabitants to increase privacy.

These five approaches to collectiveness and the shaping of moments of collectivity thus revolve around the design decisions for two aspects of the building: The collective access (ontsluiting) and collective facilities. How these are shaped and shared can be the determining factor in how the collective aspect of the building take shape.

Intention and result can also fail to meet each other through design when (but also in general) designing for collective use. This is the case especially with more ambitious designs considering collectivity. Demanding a lot from your users as a designer can cause them to resist the design. This does not mean that the ambitious is impossible. It rather points out that the ambitious design should be critically reviewed.

Figure 9 - Keilekwartier Current Situation

THE OPPORTUNITY

QUADRANT D

At the beginning of the graduation studio we developed the urban master plan for M4H as a group. We devided the studio in four groups, containing all 3 or 4 students. Each group worked on one of the quadrants A, B, C or D towards a urban master plan. All groups worked together to shape a new framework for the Keilekwartier in M4H.

This part shows the total urban master plan and the results of group D. Quadrant D is designed in collaboration with Martijn van Leeuwen, Maarten Jellema, Isabel Huiskes and Teun Theijse.

URBAN MASTER PLAN

RUIMTELIJK RAAMWERK M4H

The urban master plan developed in the total group is in line with the vision of the municipality of Rotterdam, represented in 'Ruimtelijk Raamwerk Merwe-Vierhavens Rotterdam' (2019). The Makers District in M4H is existing of five area's, where we focussed on the 'Keilekwartier' (Figure 10). The Gustoweg and Keilewkartier have the same ambitions: urban work-living environments with space for craft and creative businesses, in the transition to workenvironments on the edges.

The Keilekwartier has three major structures: the cultural route, the green structure along the waterside and the (cycling) roads. The old-dated Ferro Dome will be the heart of the cultural centre, in the middle of the Galileipark, Marconikwartier and Keilekwartier.

URBAN MORPHOLOGY

In line with the culture-historical investigation (Van Es & Voerman, 2017), most of the existing buildings are preserved. This stands out in the urban morphology of quadrant A (Figure 12). Because the existing buildings are small, the small grain size is preserved in the new buildings. Plot C and D contain the larger buildings. This namely is coming from the existing buildings such as the Katoenveem, so the new buildings suit to the old ones. All the buildings form the same building line as the 'Ruimtelijk Raamwerk' desribes.

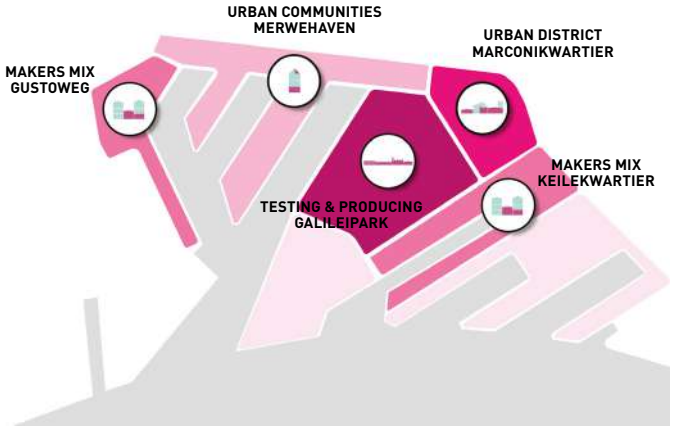
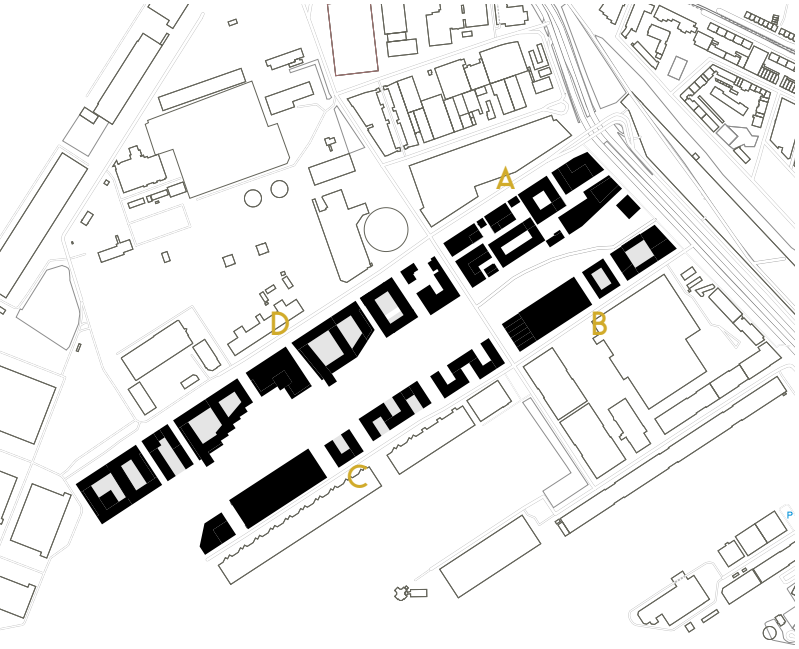


Figure 10 - Five Area's M4H, form: Rotterdam Makers District (2019).

Figure 11 - Vision Keilekwartier, from: Rotterdam Makers District (2019).



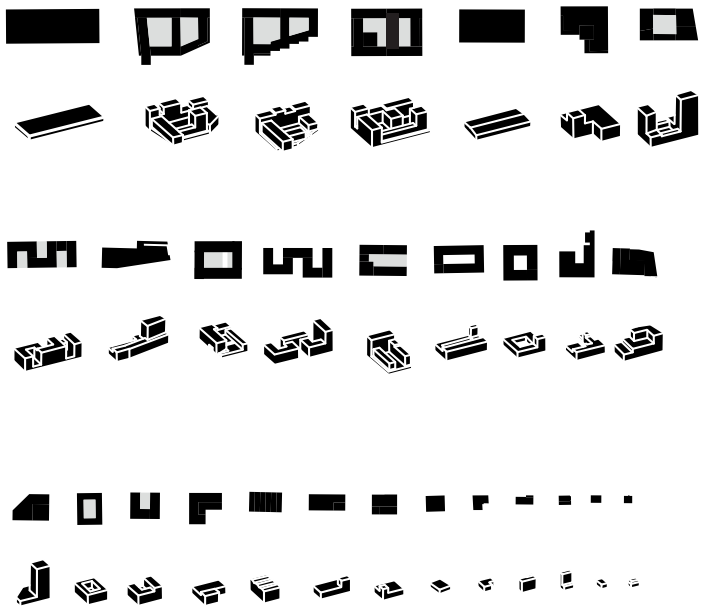


Figure 12 - Quadrants in Urban Morphology

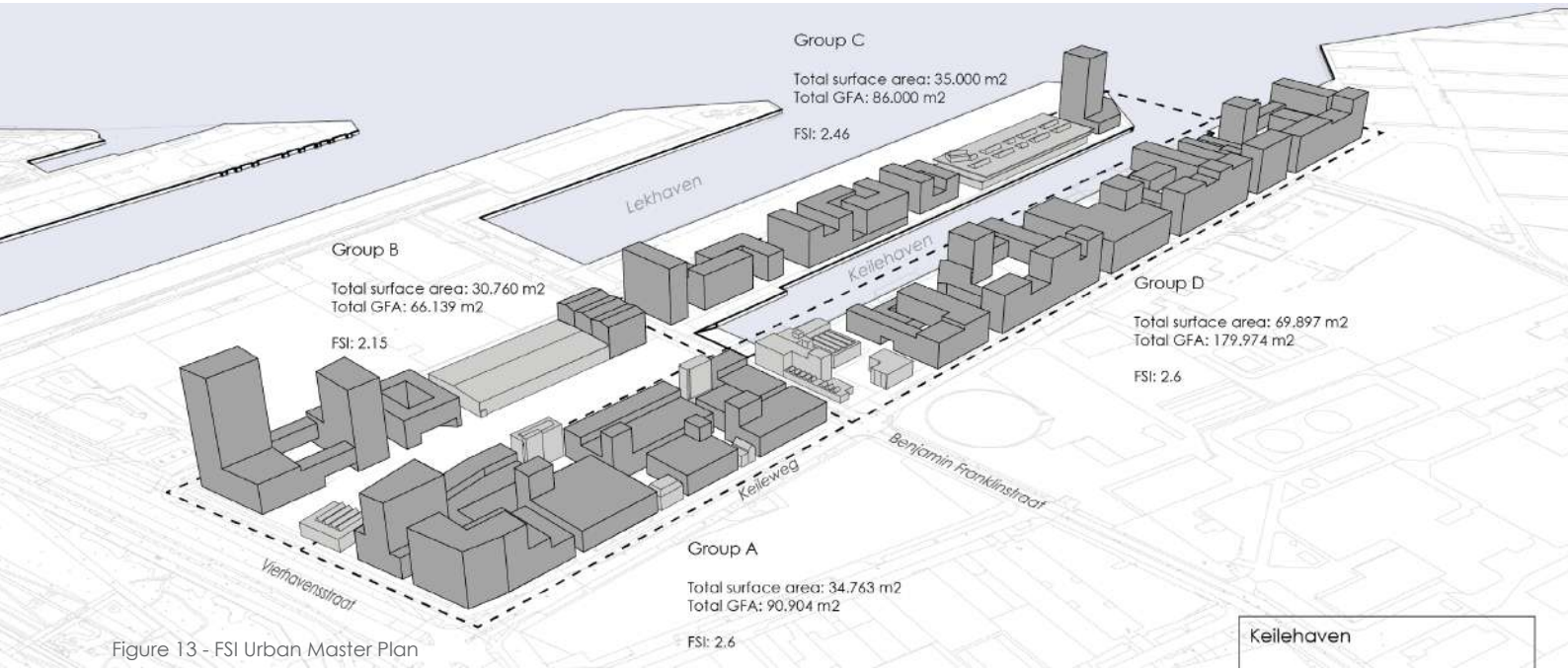


Figure 13 - FSI Urban Master Plan

KEILEKWARTIER

For the Keilekwartier the muncipality is aiming on a FSI of 2.5. All quadrants worked together in the urban paster plan to meet this requirement (Figure 13). Because of the most free space to built, Quadrant D contains larger building blocks with a total FSI of 2.6.

All the building blocks differ in shape to create a mixed variety of buildings as the Makers District is aiming for in 'Ruimtelijk Raamwerk M4H'. We tried not to exceed the maximum building height of 40 meters (Figure 14). Space for the makers is mostly reserved in the plinth of the buildings up to a height of 6 meters or higher. On top of these plinths rise the potential live-work apartments. Futhermore the total plan is blocking the car, the focus is on cyclists and pedestrians. Therefore a few parking hubs are created to park the car and explore the area by foot or bike.

QUADRANT D

Together with Maarten, Isabel and Teun I worked on quadrant D, which is also the quadrant of the chosen plot for the building. In the beginning it was quite hard to fill in the plan, because there were almost no reference buildings in the plan.

Our plan is existing out of five building blocks and a parking hub in the center. These blocks are opening up towards the water. The Makers street wil have an industrial look, where the waterside is more focussed on green.

All building blocks have an industrial plinth of at least 2 stories high (Figure 15). These plinths form the outline of the building block. The building blocks on top can have a setback and are more informal blocks. The plinths provide space for large workshops with possibly large machinery.

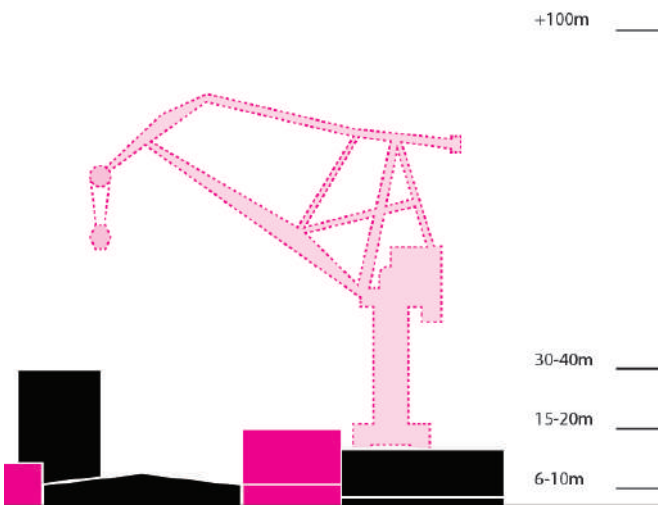


Figure 14 - Building Height according to 'Ruimtelijk Raamwerk M4H'

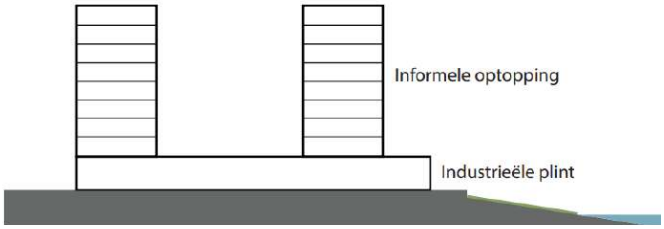
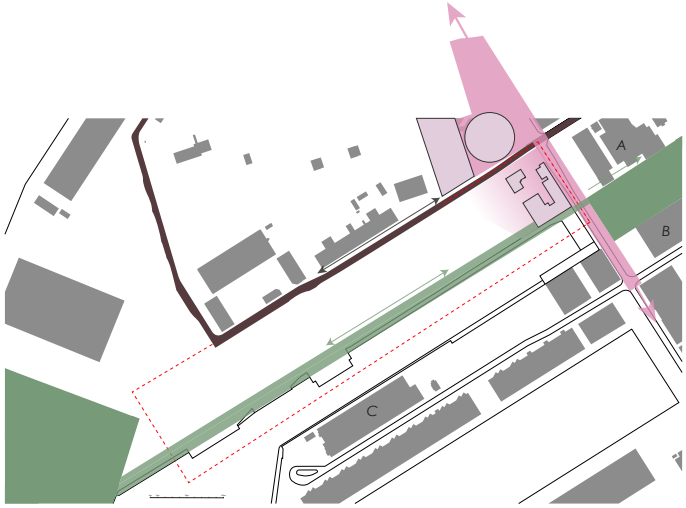


Figure 15 - Informal Blocks on Industrial Plinth

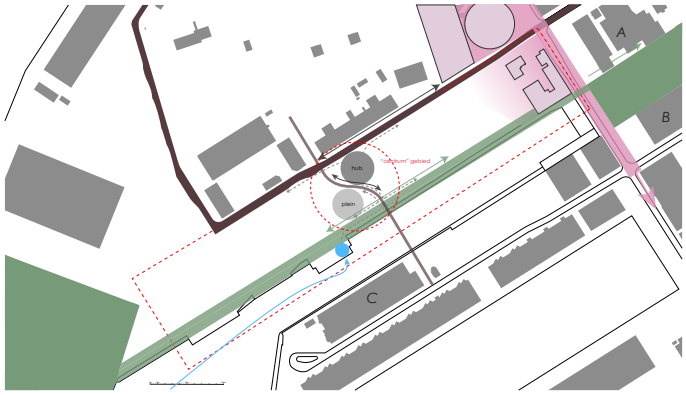
ROUTES

The routes are forming the basis of the plan, which include the culture route, the makers route and the green route. Quadrant D will make a connection to the cultural route, the old building on the corner will have public functions which facilitate the cultural area. The street 'Keileweg' which forms the ringroad of the area, will remain an important street in the future and is called the Makers street. Functions that suit the industrial area will be added to this street. This is the place in the area were high building could be done to strengthen industrial character. A green route will created along the water to connect the tip of the area in the West with the greenery in between quadrant A and B.



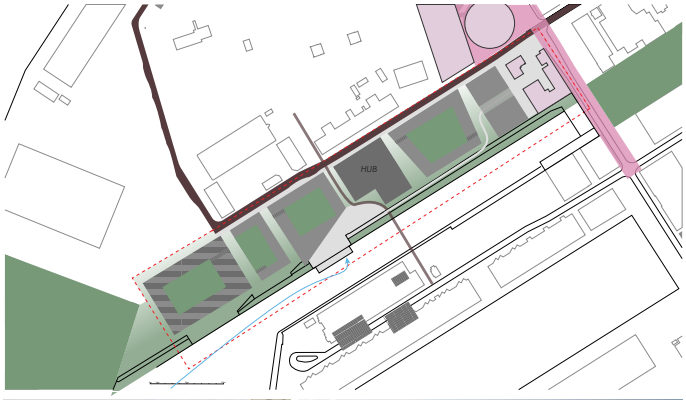
MOBILITY

The center of the area has the potential to become a smaller center. This is the center where al mobility is coming together. A new bridge connects quadrant C with D. A parking hub will be placed centrally in the area, at the intersection of the Makers street and the route over the water. Residents and employees can park their car here and then walk to work. The plinth of this hub can be given a different function that is more in line with the rest of the area. The location is part of an old harbour and it is therefore logical that the area is accessable from the water. A watertaxi stop is located in the centre, so people coming with the watertaxi are within wlaking distance form their home or work. This reduces the amount of cars in the area.



COLLECTIVE

The public space at the center opens up by cutting of certain skirting boards at an angle. We do this to improce the human experience in these spaces. Buildings will stay closer together along the Maker street to give a formal industrial look. On the ohter side the buildings are 'opening up' towards the water. This space offers design space for an attractive route. To connect quadrant D with the cultural route we make a passage through the building on the right. Various public functions can be included in this passage. Raised open spaces are created between the buildings. These spaces are collective of the resident, but can also be accessible with stairs in between the streets.



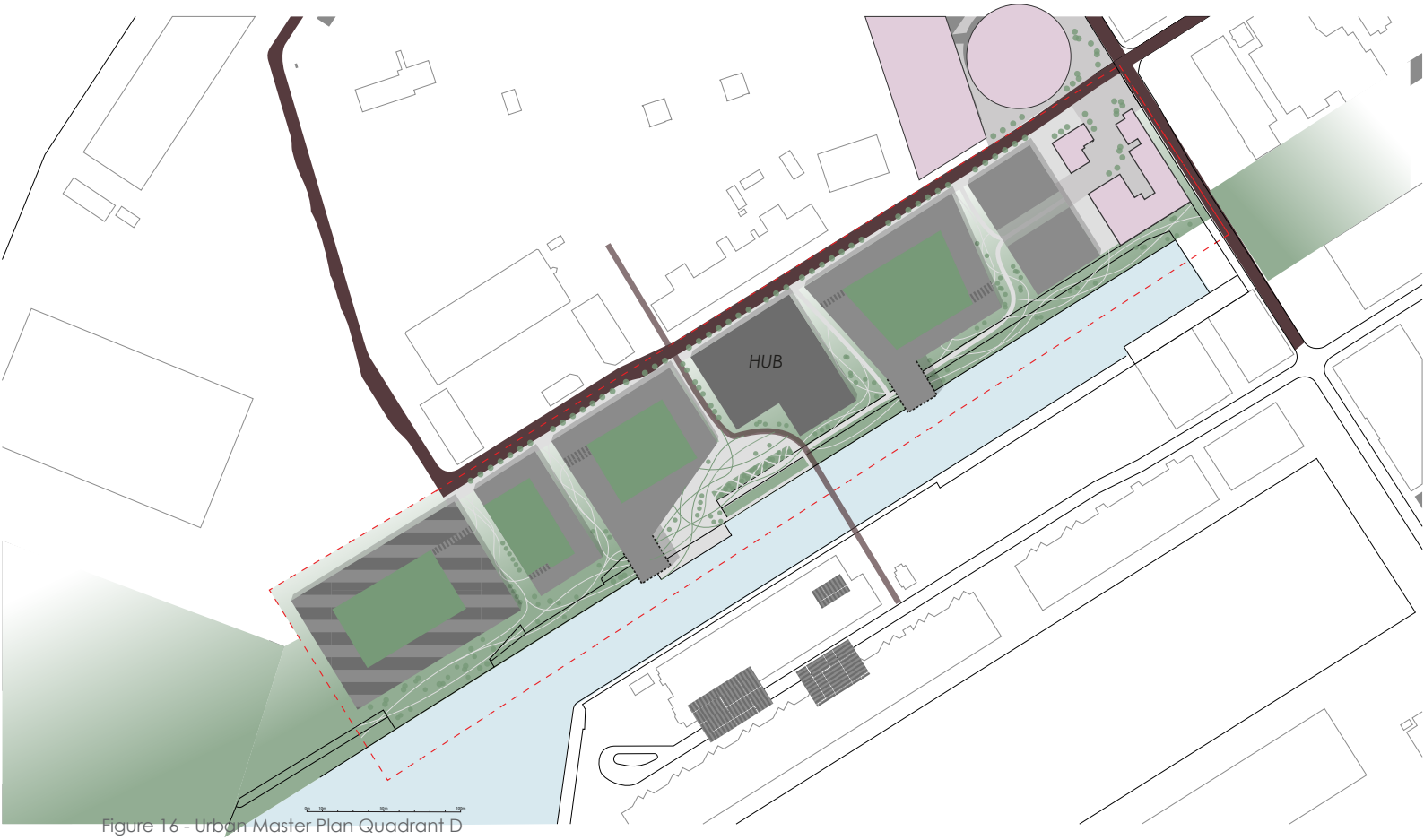
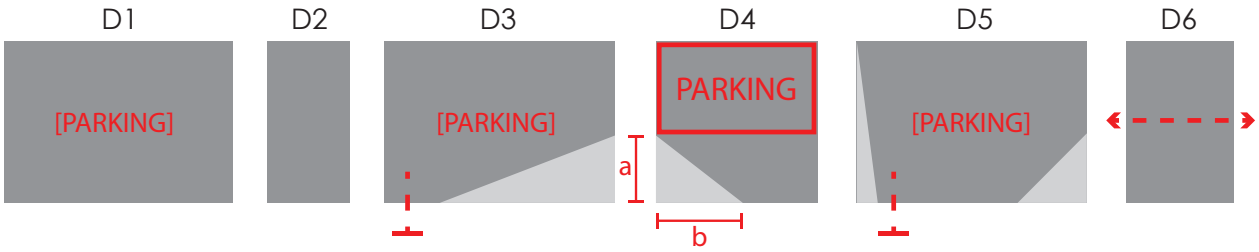


Figure 16 - Urban Master Plan Quadrant D

ARCHITECTURE

The architecture of the building blocks is based on the old harbour with a modern twist. The basis is formed by an industrial plinth with enough space reserved for the makers and public facilities. The plinth may vary in height between 6 and 12 meters. The plinth forms the outline of the building block.

On top of the plinth building blocks arise in a more informal way. They can have setbacks and may differ from the plinth. Inner court-yards are created by the blocks, which are collective. The buildings may not exceed the maximum height of 40 meters.



D1

Dimensions: 108 m x 72 m
Minimum GFA: 42000 m²

Parking: 6000 m²

D2

Dimensions: 47 m x 72 m
Minimum GFA: 16000 m²

Parking: N/A

D3

Dimensions: 115 m x 72 m
Minimum GFA: 36000 m²

Parking: 5500 m²

On the east side there is a section cut off the footprint of the plot. The depth a is 28 m. The minimum surface area removed from the footprint this way is 1000 m². The shape of this cut is up to the architect.

On the west side of the block is an element to visually divide the public space on the waterside into two areas.

D4

Dimensions: 72 m x 72 m
Minimum GFA: 25000 m²

Parking: 18000 m²

On the west side there is a section cut off the footprint of the plot. The depth a is 28 m. The width b is 36 m, so that the public space created connects to the bridge. The minimum surface area removed from the footprint this way is 600 m². The shape of this cut is up to the architect.

D5

Dimensions: 115 m x 72 m
Minimum GFA: 38000 m²

Parking: 5500 m²

On the west side there is a section cut off the footprint of the plot over the depth of the plot. This is minimal at the side of the makersstraat and widens towards the water. The minimum surface area removed from the footprint this way is 250 m². The shape of this cut is up to the architect.

On the east side there is a section cut off the footprint of the plot. The minimum surface area removed from the footprint this way is 450 m². The shape of this cut is up to the architect.

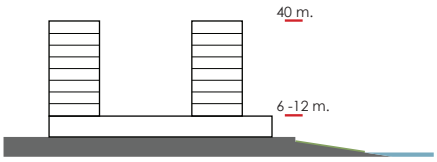
On the west side of the block is an element to visually divide the public space on the waterside into two areas.

D6

Dimensions: 58 m x 72 m
Minimum GFA: 14000 m²

Parking: N/A

In the plinth there is a passage to connect the cultural axis into the the neighbourhood.



General Rules

- The ground floor has a minimum height of 6 meters with the possibility of a mezzanine floor.
- The plinth floors fill out the building line. Their total height is 6-12 meters.
- Above the plinth floors the maximum height is 40 meters. The building mass no longer has to follow the building line.

Figure 17 - Set of Guidelines

GUIDELINES

Although the plan looks already too much designed, the idea is still that the architect can design the building blocks. Therefore we provide a set of guidelines where the architect can stick to (Figure 17). This says something about the dimensions and minimum GFA (Gross Floor Area). Also, if the building should contain a inside parking garage, the minimum square meters is indicated.

We tried to integrate all the functions the municipality was aiming for (40% dwelling, 32% working, 8% facilities and 20% parking).

Parking is not only integrated in the parking hub, but also in some blocks to spread the surface. With our plan we build in total around 180.000 m² on a plot of 70.000 m². With that we reach a FSI of 2.6, in which we accommodate the following percentages of functions:

- 46% Dwelling
- 20% Parking
- 17% Working / Dwelling
- 14% Makers
- 3% Facilities

Figure 18 - Functions Quadrant D

Figure 19 - Functions Quadrant D

THE BUILDING BLOCK

RESEARCH TUTORIAL

At the same time of the graduation studio we started with research tutorial. In this course we discovered the possibilites in designing with virtual reality (VR). Being able to walk in the model is a very realistic way to form an analysis of the dimensions of the building block.
I used the Samsung Gear VR together with my smartphone as a tool to analyse what the volume does to our perception.

This part shows the results of this course where we started with shaping the building block. On the basis of different eye-height perspectives the volume is created.

THE PLOT

CHOICE FOR THE PLOT

For the choice of the plot I was looking for an envrionment where young people with MID would feel comfortable. Because they can be very sensitive for impulses, it is quite important the environment is not too overwelming. Furthermore, I am aiming for an intimate environment for the user group, so it seems logical not to design a huge building.

My eyes fell on the plots D6, B3 and D2 which all have their pros and cons. D6 was interesting because of the connection it has with the cultural axis and the older existing buildings. B3 is a smaller building in between two larger buildings. This can be a bit too overwelming for the residents, so eventually and in consideration with the group is chosen for block D2. This building block is in a quite serene environment with a nice overview over the water. The building blocks next to D2 are quite the same height, which is a positive thing according to the sunpath and shadows.

Figure 20 - Plot Choice - © Martijn van Leeuwen

APPROACHING THE BUILDING

From the eye of the actual dweller it is interesting to analyze how he or she will approach the building. This is done by creating multiple possible routes in approaching the building. All the routes are beginning at the Vierhavenstraat (Figure 21) and approach the building in a different way. When something is changing in the perception of the environment, this is marked with an eye-height perspective.

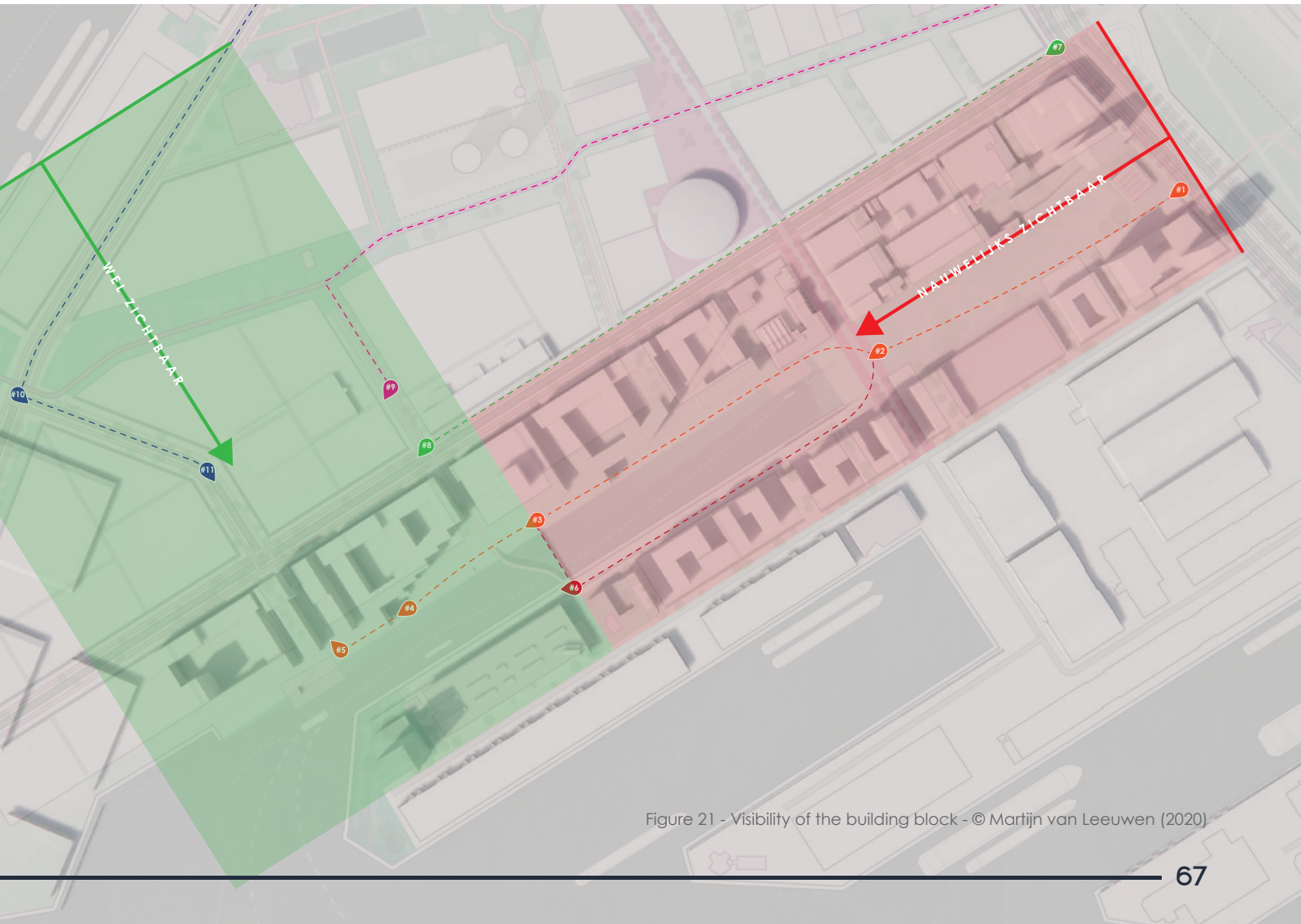
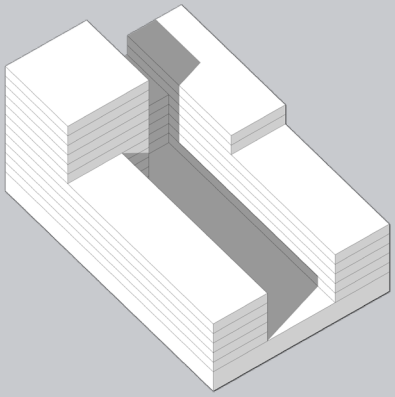


Figure 21 - Visibility of the building block - © Martijn van Leeuwen (2020)

One of the most important issues adressed in figure 12 is the visibility of the building block. The block D2 is quite small in relation to the overwhelming neighbours. All the blocks are quite large and have distinct shapes. In particular the visibility from West to East suffers from these massive blocks. When approaching the building from the other side, along the ringroad 'The Keileweg' the building block is much more visible.

MODEL VARIATIONS

During the studies on VR, the massing block has evolved from the starting point towards the final concept. Every block has its own characteristics and guidelines. All massing studies are based on own guidelines, which are shortly represented on these pages. The final model (D2.7) is partly based on the concepts D2.2 and D2.4.



D2.1

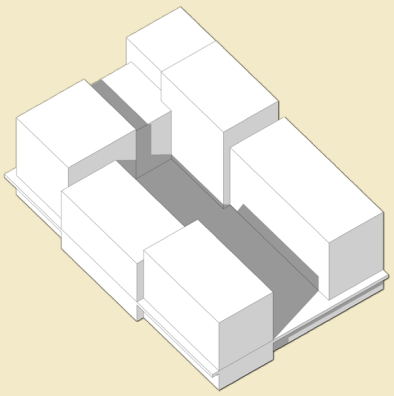
GUIDELINES

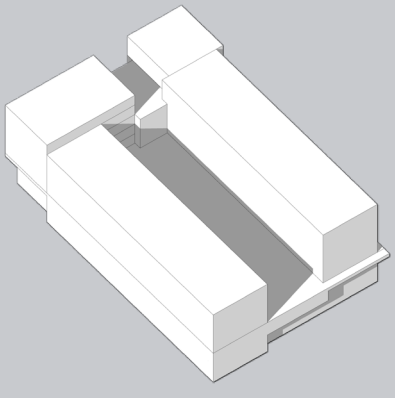
+ Variation in height of blocks
+ Building shape follows the plinth
+ 14,4 Meters deep blocks
+ 5 - 11 Levels on top of the plinth
+ Plinth 6 meters high

GUIDELINES

+ Variation in height of blocks
+ Building shape differs from the plinth
+ Setback building blocks of 1,8 meters
+ Sunken plinth of 1,8 meters
+ 14,4 Meters deep blocks
+ 4 - 7 Levels on top of the plinth
+ Plinth 6 meters high
+ Identifying own block

D2.2





D2.3

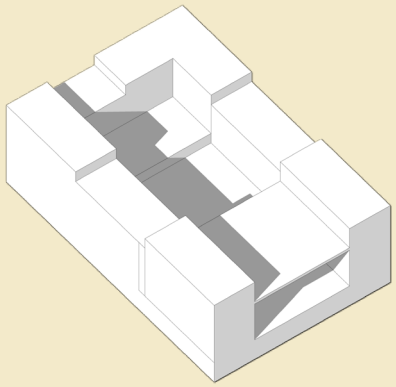
GUIDELINES

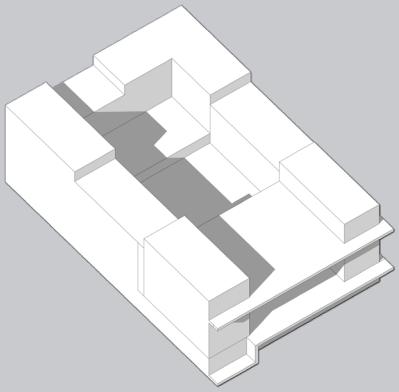
+ Same height of blocks
+ Building shape differs from the plinth
+ Sunken plinth on corners of 1,8 meters
+ 14,4 Meters deep blocks
+ 4 - 5 Levels on top of the plinth
+ Plinth 9 meters high

GUIDELINES

+ Inner courtyard 2, 3 and 4 levels high
+ Max. 1 level difference in height
+ Building shape follows the plinth
+ 10,8 Meters deep blocks
+ 'Four Story Limit'
  Max. 4 levels on top of the plinth
+ Floating deck as extra courtyard

D2.4

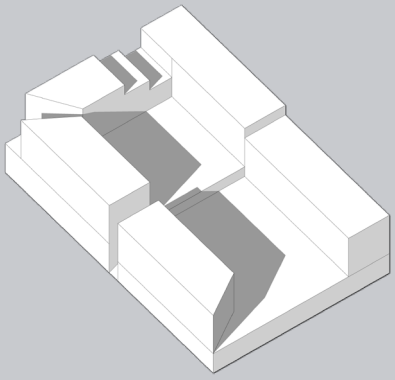




D2.5

GUIDELINES

+ Inner courtyard 2, 3 and 4 levels high
+ Max. 1 level difference in height
+ 10,8 Meters deep blocks
+ 'Four Story Limit'
  Max. 4 levels on top of the plinth
+ Floating deck as extra courtyard
+ Plinth has its own shape



D2.6

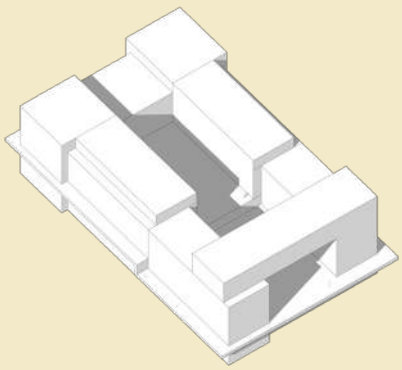
GUIDELINES

+ Inner courtyard 2 and 3 levels high
+ Cutted building blocks
+ 10,8 Meters deep blocks
+ 'Four Story Limit'
  Max. 4 levels on top of the plinth
+ Plinth 6 and 9 meters high

GUIDELINES

+ Inner courtyard 2 and 3 levels high
+ Setbacks based on 1,5 meters
+ 10,8 Meters deep blocks
+ 14,4 Meters
+ 'Four Story Limit'
  Max. 4 levels on top of the plinth
+ 'Positive Outdoor Spaces'
+ 'Hierarchy of Open Spaces'
+ Floating block as extra deck
+ Shed is raising 1,5 meters over building line

D2.7



VIRTUAL REALITY

SHAPING

The first step in improving the visibility along the waterside affected the plinth. In the urban master plan, block D3 has an overhanging part which reaches to the waterside (#4). This is is extremely harmful for the view of D2, because it is totally blocked. Only the plinth is visible. By deepening the plinth, the block attracts the eye's attention. Also the small shed of the plinth gives it more definition in contrast with the overwhelming overhang of D3.

Seen from the Keileweg (#11), the block is quite large in relation to its neighbours and does not really fit in its context. To align it more with the blocks on the Keileweg, it is lowered and is not higher than D1 and D3. Although it is quite a small block, it looks very monolithic. Therefore the block is cutted into smaller blocks, so it gets a more human scale.

The inner courtyard (#5) on top of the increased plinth as an U-shape. The higher blocks cause a lot of shadow in this courtyard. Lowering the blocks and cut them in more pieces gives the space a more human scale and has a positive effect on the insolation. The studies on the next page are using VR to shape the inner courtyard and provide dimensions which contribute to more intimacy.

EXPERIENCE

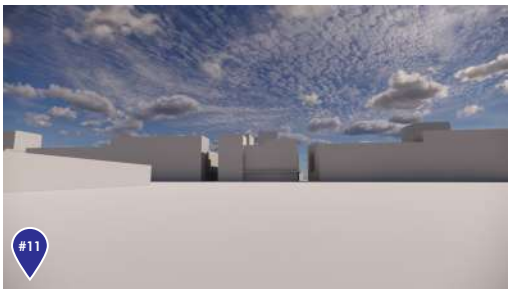
The inner courtyard is the core of the building, where people should be comfortable. VR was a great tool to experience what the building blocks do to your perception, see the next page for the process. Starting at Version D2.2 the inner couryard was quite large and dominated by the high building blocks. In Version D2.4 the width is maximized and a floating deck is placed on top of the building. But it was that large it caused a lot of shadow. Also the courtyard felt quite big, because all the building blocks were in one line. In the final Version D.7, the couryard is more in proportion, where the increased deck together with the shifted blocks create two smaller spaces. Walking around in the courtyard gives a comfortable experience to me.

Also the plinth was a major component in shaping with VR. In D2.2 the plinth has a setback, so it gets the eye's attention and people are attracted to the building.

Version D2.1

Version D2.2

Version D2.1



Version D2.2

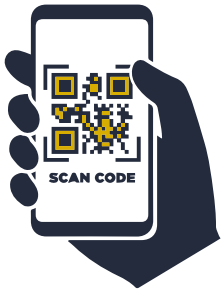
Version D2.1

Version D2.2

You can experience the difference in contrast to D2.4, where the volume becomes monolithic. Especially the corners are deepened, to create a soft edge. D2.7 is the final version where the building block on top complete the building to one volume instead of two separate buildings with a floating deck (D2.4).

PRO TIP!

Scan de QR-code with you smartphone & use your Google Cardboard or Samsung Gear VR to experience the model in Virtual Reality!

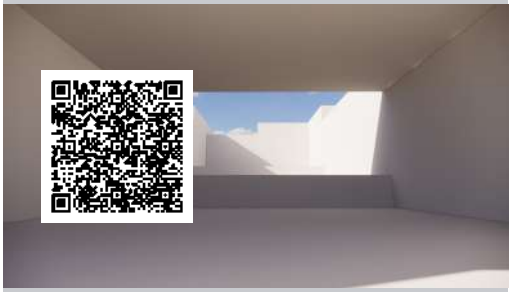


Version D2.2

Version D2.4

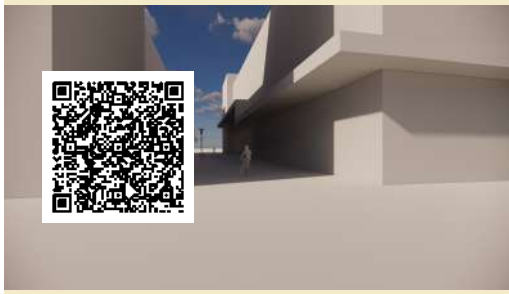
Version D2.7

Inner Courtyard



Waterside

Left Corner Waterside



Right Corner Waterside

CONCEPTUAL DESIGN

D2.7

The building block is shaped with the use of VR, as shown in the previous chapter. Version D2.7 was the final version, which was the starting point for the conceptual design.

The concept behind version D2.7 will be explained in this chapter, whereafter this will lead to the conceptual design. Herein is clarified how young people with MID will live in this collective building and which design tools are focussed on creating an inclusive building.

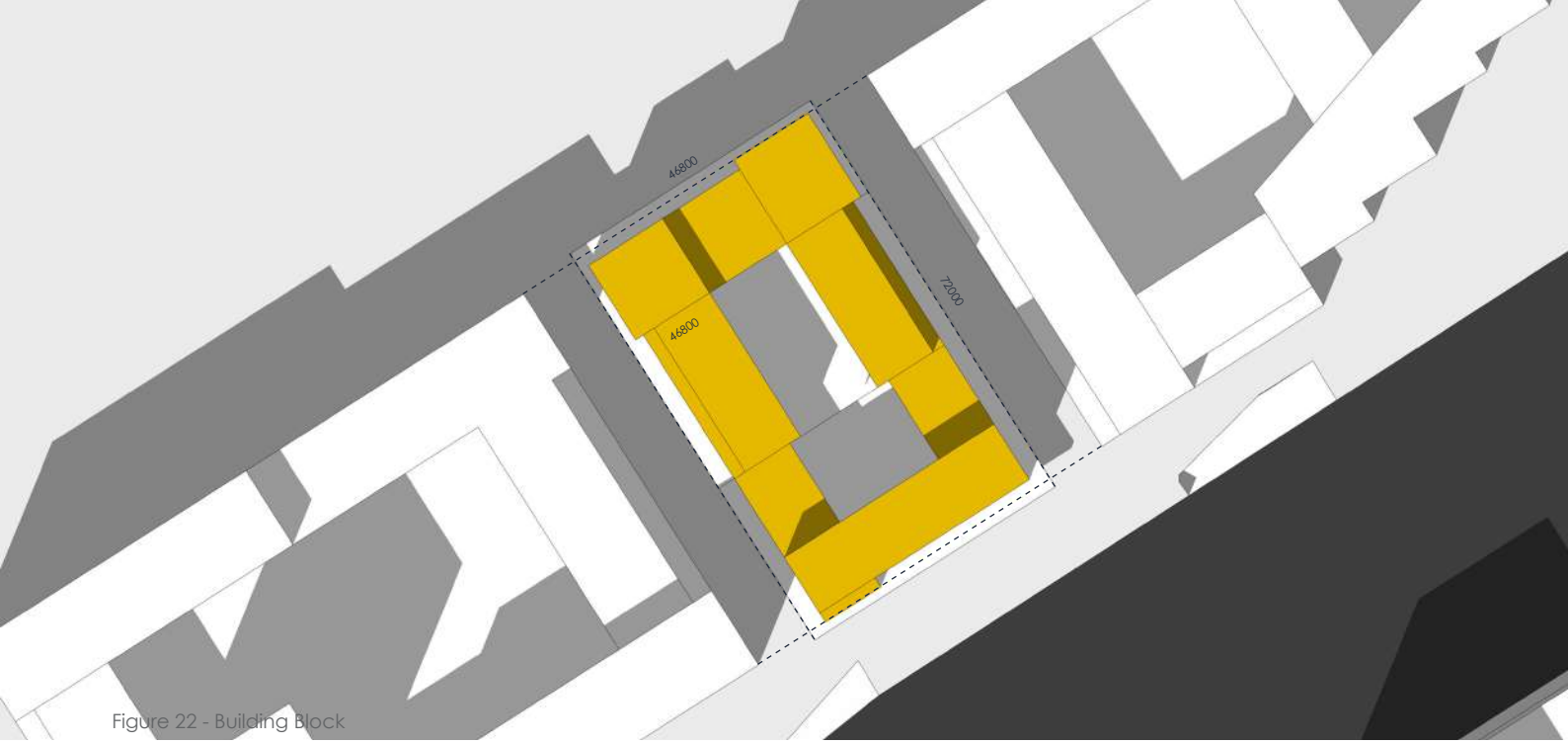


Figure 22 - Building Block

DIMENSIONS

Out of the urban master plan arises a depth of the block of 72 meters. The plot measures 46,8 meters in width. The building is following the building lines of the neighbours. Especially in the corners and the narrow streets in between the building, a setback of 1,5 meters is creating more intimate space.

The top of the plinth is constructed out of six building blocks who are aligned above and down the plinth. The idea is that this blocks can all have their own appearence, which create a divers environment instead of a monotome one (Figure 23).

Early in the design fase a grid is introduced to align the blocks with. The grid is based on a optimum and mostly used span of 7200 mm. Not everywhere this can be implemented, but most of the diverging dimensions are also based on this grid. The building block on the north site is measuring 14400 mm (Figure 24), where the blocks on East, West and South measure 10800 mm, which is 1,5 x 7200.

SAFE EVIRONMENT

The community who is going to live in the building is a vulnerable user group. Out of research appears they need a safe residential environment. To offer them some protection of our society, the building is lifted. All dwelling blocks are arranged on top of the increased ground level, which forms the inner courtyard. The plinth will consist out of working spaces for the makers group: the creatives. On top of the plinth the building blocks arise for dwelling.

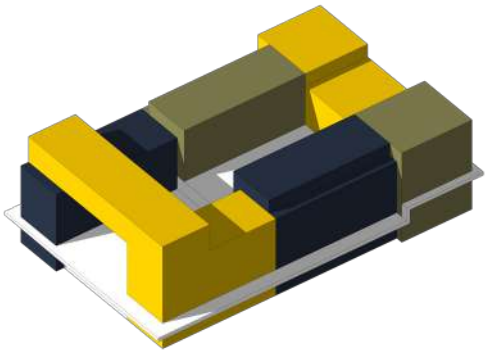


Figure 23 - Building Complex

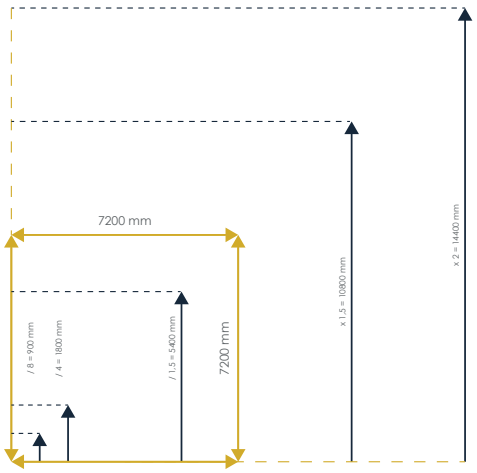


Figure 24 - Dimensions & Deviations

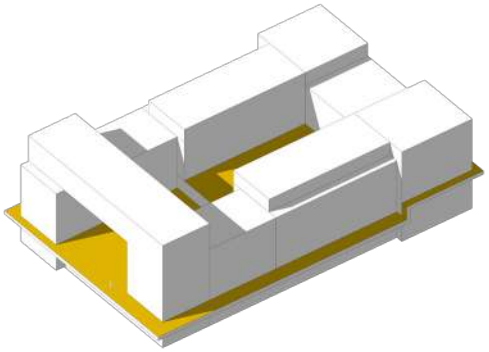


Figure 25 - Increased Ground Level

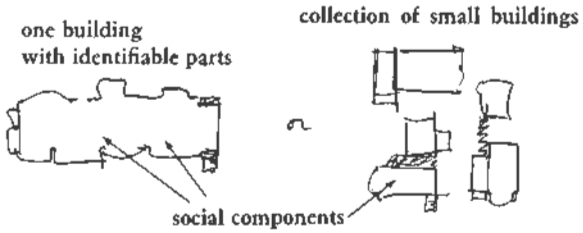
A PATTERN LANGUAGE

For people with MID it is important they feel safe and comfortable in their residential environment. Furthermore with a view to the inclusive neighbourhoud, stimulating social contacts are essential. The concept block is created on the base of 'A Pattern Language' (1977), where Christopher Alexander comes up with a set of patterns to create an human environment. These patterns form the basis of the conceptual design.

BUILDING COMPLEX

One pattern is already mentioned on the previous page, that of the Building Complex (Figure ??). It says a building has to be identifiable, otherwise it will be a inhuman monolithic building.

"A building cannot be a human building unless it is a complex of still smaller buildings or smaller parts which manifest its own social facts." (Alexander, 1977, pp. 469).



Identifiable Building, from: Alexander (1977, pp. 472)

This pattern is rising from our social relations. Humans are constantly dealing with social groups. Identifying with social groups is on of the characteristics of human behaviour. Alexander is advocating to translate this to the design of the building complex, and where possible try to represent the actual social facts of the situation (Alexander, 1977).

This is implemented in the design by creating six building blocks with all a slightly different shapes and sizes. Setbacks are given to cut them out of the monolithic building. These blocks will contribute to the social cohesion, which will be further explained under 'Design Tools'. In the final phase of the design, these blocks will al materialized different.

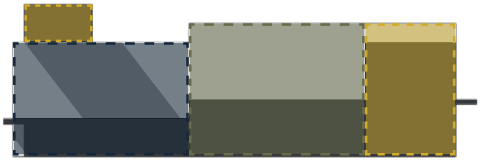


Figure 26 - Identifiable Blocks in Building Complex

FOUR STORY LIMIT

Based on a study of the correlation between mental disorder and the height of people's apartments in 1967, Alexander is advocating not to build too high in housing (Alexander, 1977). *"In any urban area, no matter how dense, keep the majority of the buildings four stories high or less. It is possible that certain buildings should exceed this limit, but they should never be buildings for human habitation."* (Alexander, 1977, pp. 163).

This does not mean every building should not exceed 4 stories, there are different creative solutions to deal with this pattern. At a height of three or four stories it is still possible to see details in the street scene and feel connected to the street. Four stories is seen as the maximum where you can get attention if you yell to the streets. Above four stories these connections get loose. (Alexander, 1977).

Feeling involved is one of the most outstanding goals for the user group, therefore this pattern has become very important. The maximum amount of stories in relation to the inner courtyard is set to 4 stories. The extra level of the increased inner courtyard, makes it possible to build up to 7 stories in total (Figure 28). It looks like one building block is exceeding this rule, but on top of the building blocks are some communal courtyards / terraces. These relate to the major inner courtyard and are also set tot a maximum distance of 4 stories high (Figure 27). In this way, all terraces are involved in the inner courtyard, which forms the centre of the building.

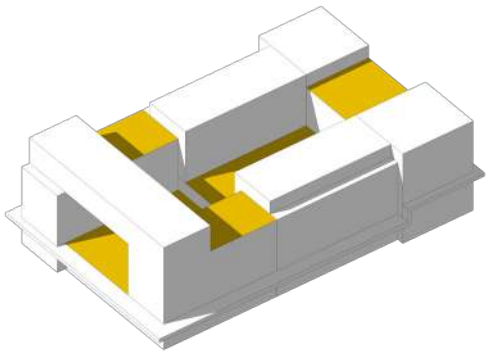


Figure 27 - 4 Stories between Communal Courtyards

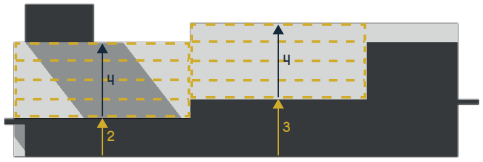
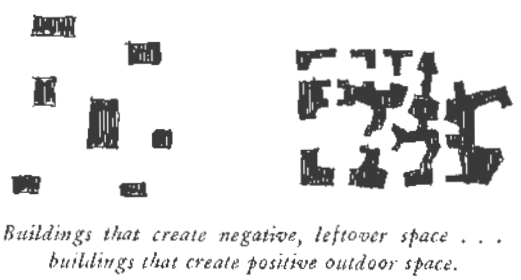


Figure 28 - Four Story Limit

POSITIVE OUTDOOR SPACE

Creating a safe residential environment is one of the other goals. People should feel safe and comfortable in the building. The shape of the building affects the feeling of a space; either positive or negeative. *"Outdoor space is negative when it is shapeless... An outdoor-space is positive when it has a distinct and definite shape."* (Alexander, 1977, pp. 518).



Buildings that create negative, leftover space . . .
buildings that create positive outdoor space.

Negative and Positive Space, from: Alexander (1977, pp. 518)

Positive spaces are partly enclosed, this means there can be open parts, but the areas seem bounded, called convex spaces. Negative spaces are that much poorly defined, you cannot define the boundaries, which is called nonconvex.

This space can be felt: it is distinct:—a place . . . and it is convex. This space is vague, amorphous, "nothing."

Convex and Nonconvex, from: Alexander (1977, pp. 519)

This principle is used in shaping the building block. The inner courtyard exists out of a smaller and larger space, with one story difference. Both are definite space with the same depth, but differ in width (Figure 29, Left). On level 7 the blocks separate, but the space in between remains its shape (Figure 29, Right).

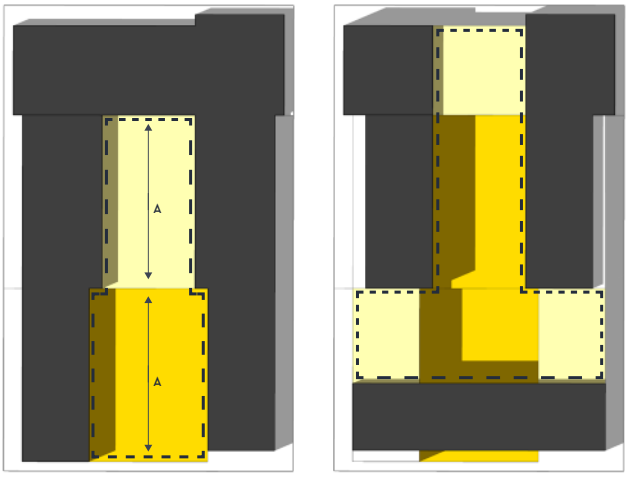


Figure 29 - Positive Outdoor Space

Positive outdoor space is mostly created in line with other patterns. Enclosure of spaces also has to deal with having a back. This can be traced back to our primitive instinct, we do not have eyes in our back. So we cannot oversee the situation. But when we have a back, nothing can happen behind us. The increased inner courtyard is split into two spaces, shifted with one level. Hereby every space gets its own back to feel safe (Figure 30).

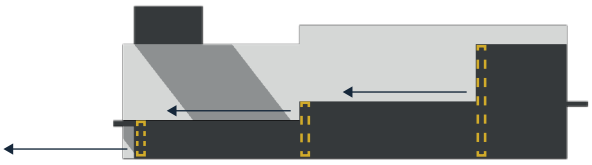
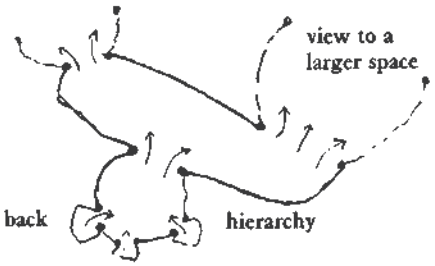


Figure 30 - Having a Back in Positive Outdoor Space

HIERARCHY OF OPEN SPACE

Another pattern which goes further into this protection from the back is the 'Hierarchy of Open Space'.

"Whatever space you are shaping... First, make at least one smaller space, which looks into it and forms a natural back for it. Second, place it, and its openings, so that it looks into at least one larger space." (Alexander, 1977, pp. 559).



Hierarchy of Open Space, from: Alexander (1977, pp. 604)

This hierarchy of open space shows to me the inclusion of people with MID in our society. The building forms the safe environment with the increased inner courtyard, from where these people have the possibilities to fully participate in society. They are literally looking out of our society (Figure 31), with a gradient of increasing spaces. Stimulating them to get the best out of them!

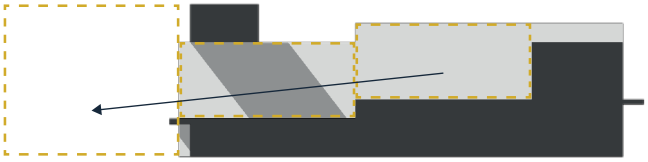


Figure 31 - Hierarchy of Open Space

SOCIAL INCLUSION

THREE LEVELS

According to the building complex, each of the 6 building blocks tries to form a basis of social inclusion. Social inclusion of the building will take place in three different levels: dwell, work and live (Figure 32). These levels are all connected by architectural elements.

Every level in an building block will contain the three different user groups; young people with MID, starters and the essentials. They will form the neighbours who watch eachother. They are connected in horizontal direction with a gallery where they can meet each other.

Each two blocks will share a communal laundry room. This communal laundry can be a space with several collective functions. This services are meant for the two building blocks, where also the creative makers can do their laundry. This collective space is the connection between the living and the working envrionment, where people meet each other.

All dwellings are positioned towards the inner courtyard,this inner courtyard connects al the six building bloks on top of the plinth. This will form the basis of the neighbourhood. All collective spaces are connected to this area too.

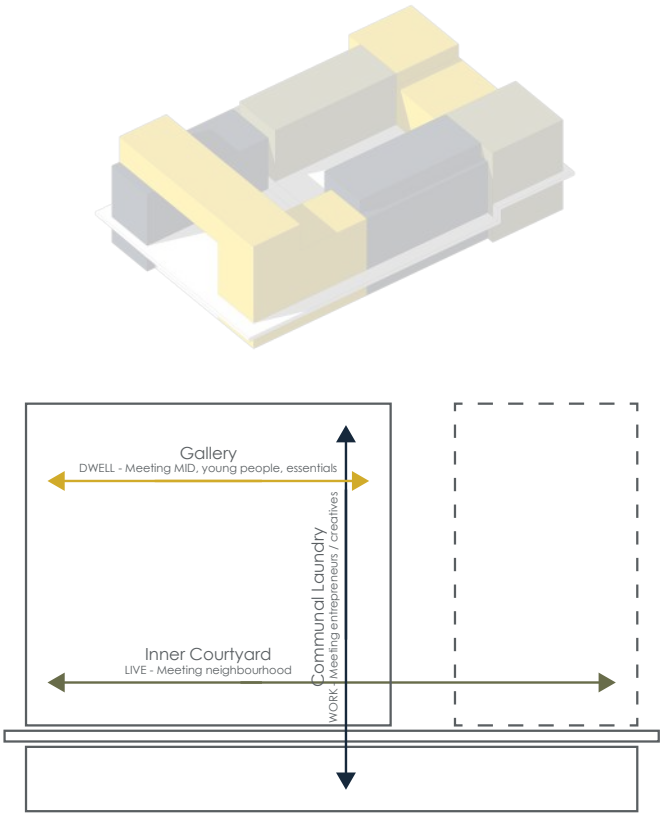


Figure 32 - Social Inclusion per Building Block

DWELL

The conceptual design is shaped from the eye of the actual dweller. Something that is important to people with MID is the ability to isolate themselves in more private spaces, when they get too many stimuli. Therefore, all 'open rooms' are facing the inner courtyard, the heart of the building. On the boundaries are the more 'closed rooms' positioned, these room are the spaces to rest, like the bathroom and bedroom (Figure 33).

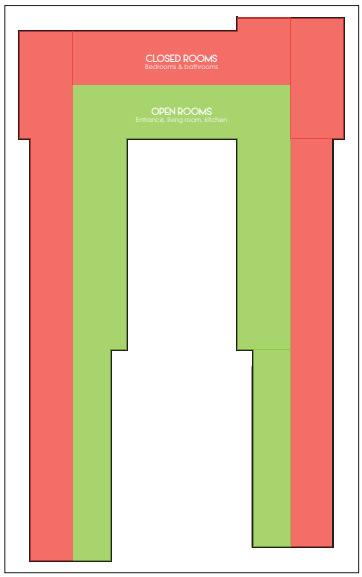


Figure 33 - Open vs. Closed

All open rooms are looking out over the inner courtyard. Open rooms are the kitchen and living room. The idea is that when someone is walking by over the gallery, you make some eye contact. Hereby you recognize your neigbours. Especially when the doors of the living room are opened to the balcony, people will move between the outdoor space and their living. When someone crosses your outdoor space, a very informal and approachable way of social interaction is stimulated (Figure 34). People get easily in contact.

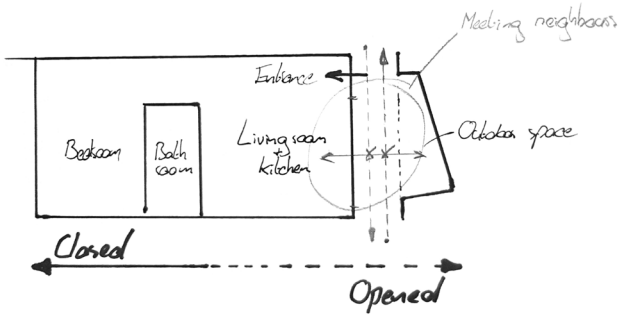


Figure 34 - Concept Social Ineraction

Figure 35 - Concept Neighbours

The gallery will form the connection between the differnt user groups. Each level of a building complex contains out of at least these 3 groups (Figure 35). The gallery stimulates to getting known to your neighbours (Figure 36).

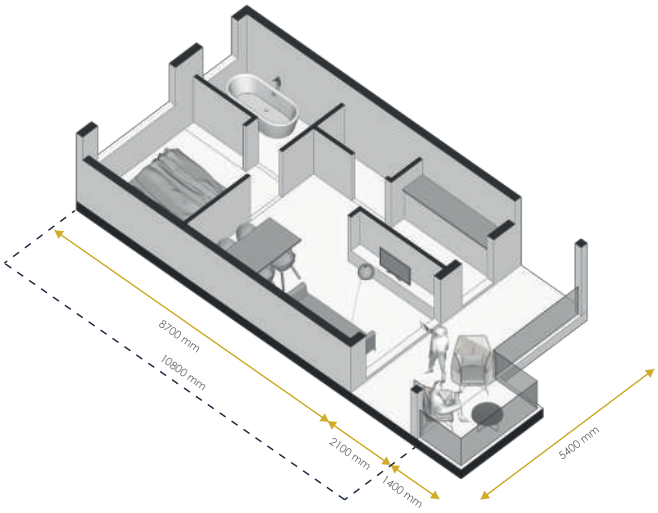


Figure 36 - Concept Dwelling

The concept dwelling (Figure 36) is based on a grid of 5400 mm. This should be enough to fit in an entrance, kitchen and livingroom at one side. Still this can be a bit to small. In the case study Kramatweg (pp. 21) they used 5150 mm to fit in an entrance and living room of 2950 mm at one side. To provide a wider living, the entrance and kitchen are melted together, so the workspace of the kitchen functions also as an entrance.

The depth of a total block is set to 10800 mm in the building block. The gallery has a width of 2100 mm, wide enough to pass each other and extend your balcony if you want. This leads to a depth of the dwelling of 8700 mm. The total surface is now 48 m^2, what is really close to the 52 m^2 of the reference dwellings out of Westkaap (pp. 52).

The layour of the dwelling is based on the requiremtents which followed out of the research. Little distraction was one of the key aspects, therefore all the rooms are separated. Futhermore other important aspects were clarity, structure, recognizability and clean. These aspects should be implemented in the design of the dwelling.

The gallery is connecting the different building blocks to each other. Not only on the same side, but also across. All galleries cross the inner courtyard in the middle, where they form a kind of slats between the two open spaces in the inner courtyard. This can be seen as a membrane between the spaces (Figure 37).

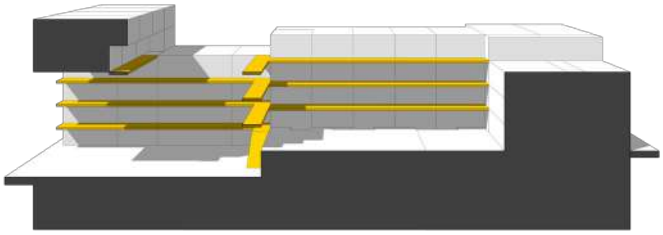


Figure 37 - Galleries

Every dwelling is getting his own balcony to have an outdoor space. These balconies are important for making social contact on the gallery. But they also create social visibility with the other levels. The position of balconies will shift each level, whereby it is possible to see the neighbours who live above (Figure 38).

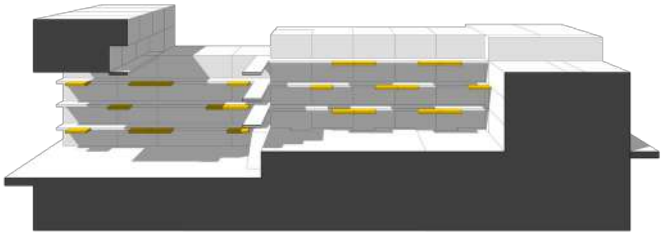


Figure 38 - Shifted Balconies

WORK

In vertical direction, all the levels are connected by stairwells with elevators (Figure 39). These stairwells are directly connected to a collective space. This collective space can be a combination of functions, like a bar, a support point, but also a communal laundry.

The communal laundry is the ideal lube in stimulating social interaction and improving the social self-reliance of people with MID. A collective space only works if people are attracted to it. For instance, when a communal living room is created and everyone stays at his own home, this will not work. But you need to do your laundry a couple times a week.

People with MID can have difficulties in doing their laundry, with a communal laundry they can be helped by others. This improves their social self-reliance and creates new social contacts. Also the makers of the building will have access to this laundry, so this will be the place where makers and residents will meet.

The communal laundries are visible on the next page from 'Typology'.

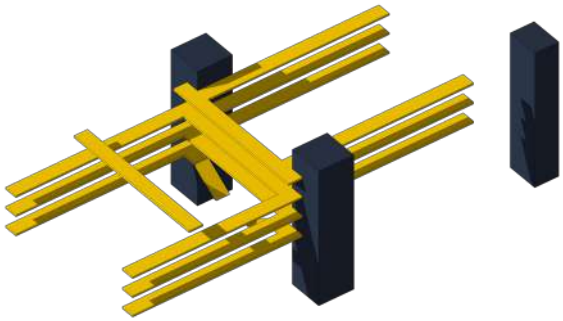


Figure 39 - Stairwells

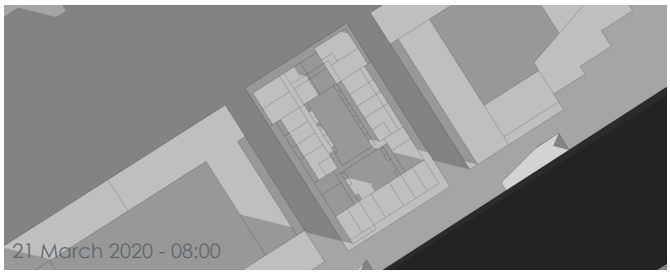
Wasbar in Antwerpen - © TripAdvisor

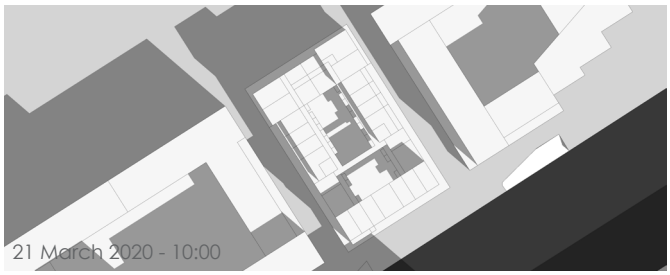
LIVE

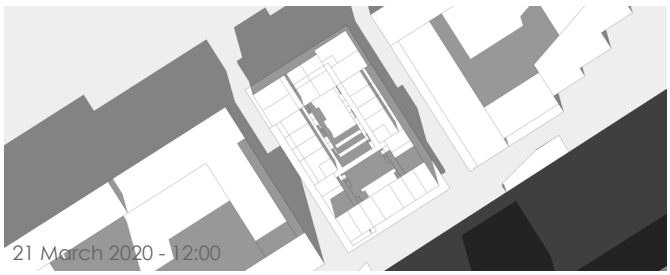
All apartments are looking out over the inner courtyard, what will be the heart of the building. Here people come together in their communal garden. The area will be green and furnished to provide places to meet.

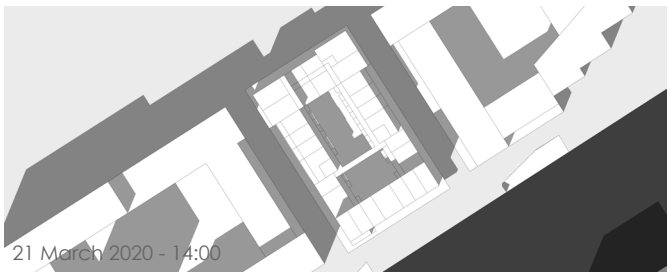
NPD Overvecht, Utrecht

Because of the increased inner courtyard and the maximum of 4 stories on top of the plinth, daylight will penetrate into the courtyard.









TYPOLOGY

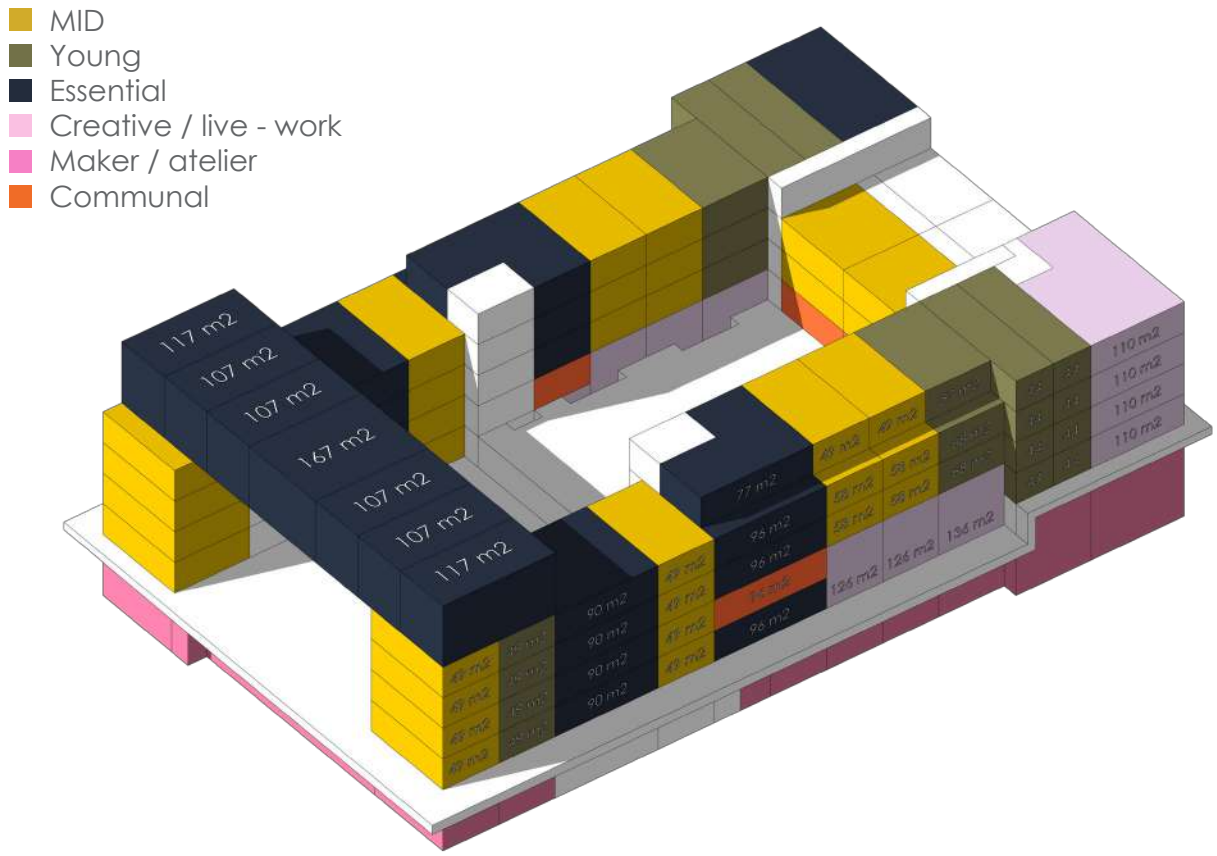


Figure 40 - Typology

MID
The main user group is spread over the building, living in between others. Their apartments vary around 50 m^2. Some of them are quite larger, which gives the possibility to design another kind of dwelling for maybe a couple.

YOUNG
The apartments for starters / young people are quite the same as for MID, only the layout of the dwelling can differ because there is no need for separate rooms between the kitchen and living room as it is for MID.

ESSENTIAL
The dwellings for the essentials are larger, mostly 3- or 4-rooms apartments. The apartments are around 86 - 87 m^2. The great overhang on top of the building exists out of maisonettes, also meant for the essentials.

CREATIVE
The creatives have a few live-work dwellings which mostly consist of 2 levels. They vary between 110 and 136 m^2. This gives the possibility to integrate an atelier / studio.

MAKER / ATELIER
The makers are all in the plinth can have their ateliers in the plinth. These ateliers are 6 meters heigh, but offer the opportunity to split them in two layers of 3 meters heigh. This depends on the kind makers process.

COMMUNAL
The collective spaces are all next to the stairwells and have directly access to the inner courtyard.

FLOORPLANS

REPRESENTATIVE FLOOR

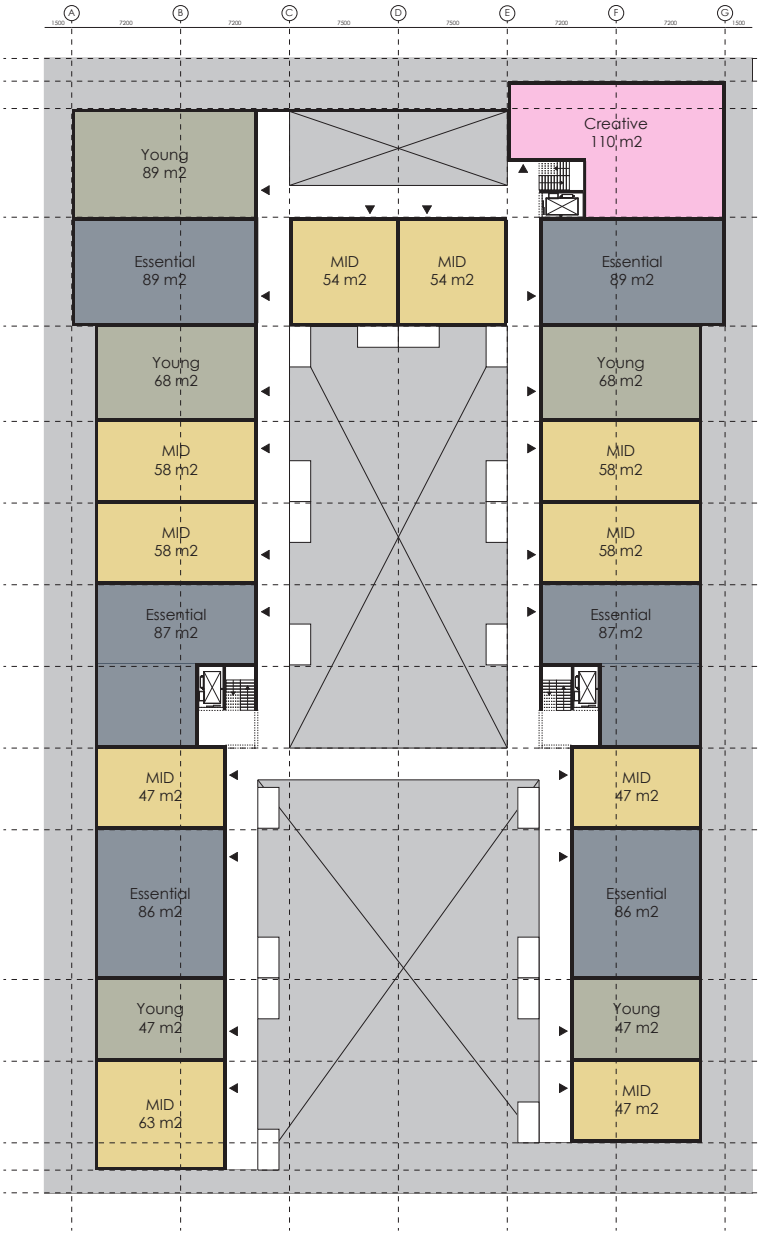
This floorplan is representative for the floors 3 to 5, but only the balconies will be shifted each level. The different user groups are mixed as explained before. Three central staiwells give access to the galleries of the building.

Most dwellings are meant for MID, young people or the essentials. But at the Keileweg there is one apartment meant for the creatives. Here it will be possible to create a live-work apartment with an integrated studio.

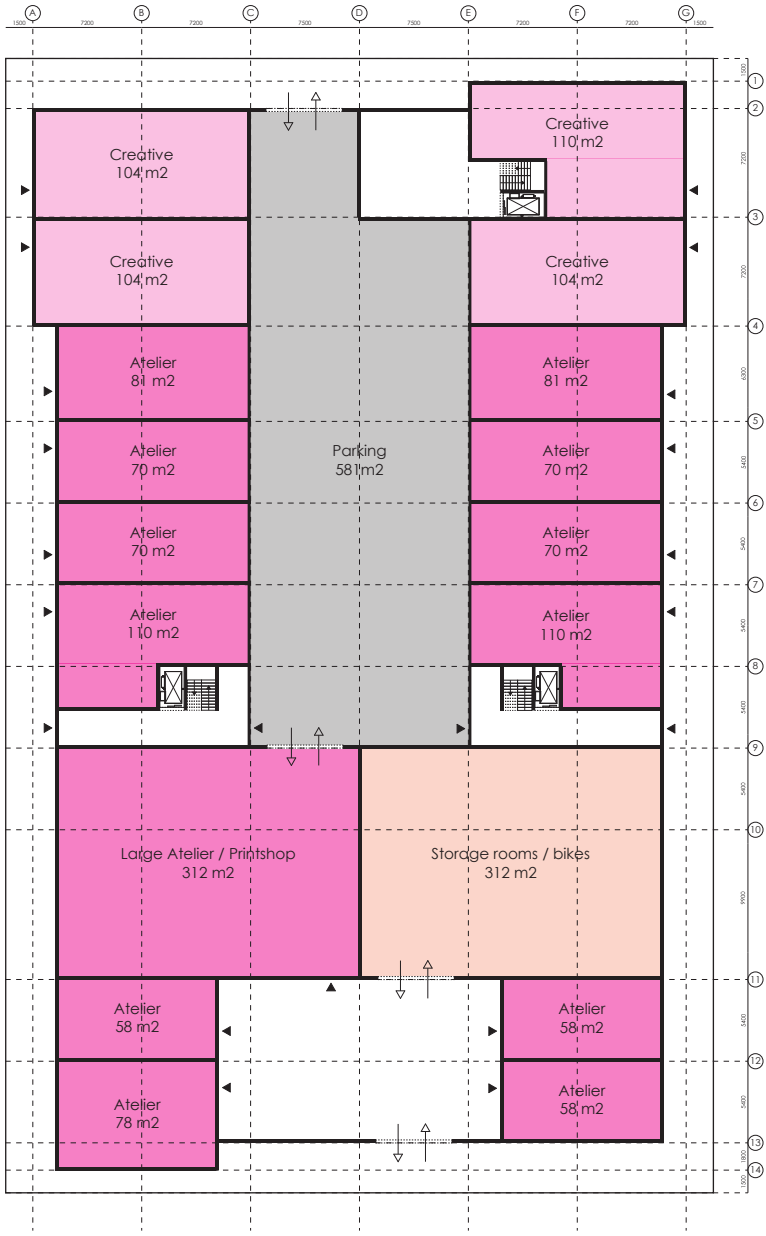
The grid is dimensions of the dwellings are all based on the grid of 5400 mm width. The total building block measures 46800 x 72000 mm.

GROUND FLOOR

The ground floor is meant for the makers. Ateliers differ in size for the different professions. A large atelier is included, for instance for a printshop. This printshop will have access to the parking garage, where loading can take place. At the other side will be space for the storage rooms and bikes. The building has a main entrance at the Keileweg and the waterside. Two side entrances give access to the stairwells with elevator.



Plan Representative Floor 3 - 5 - Scale 1:500



Plan Ground Floor - Scale 1:500

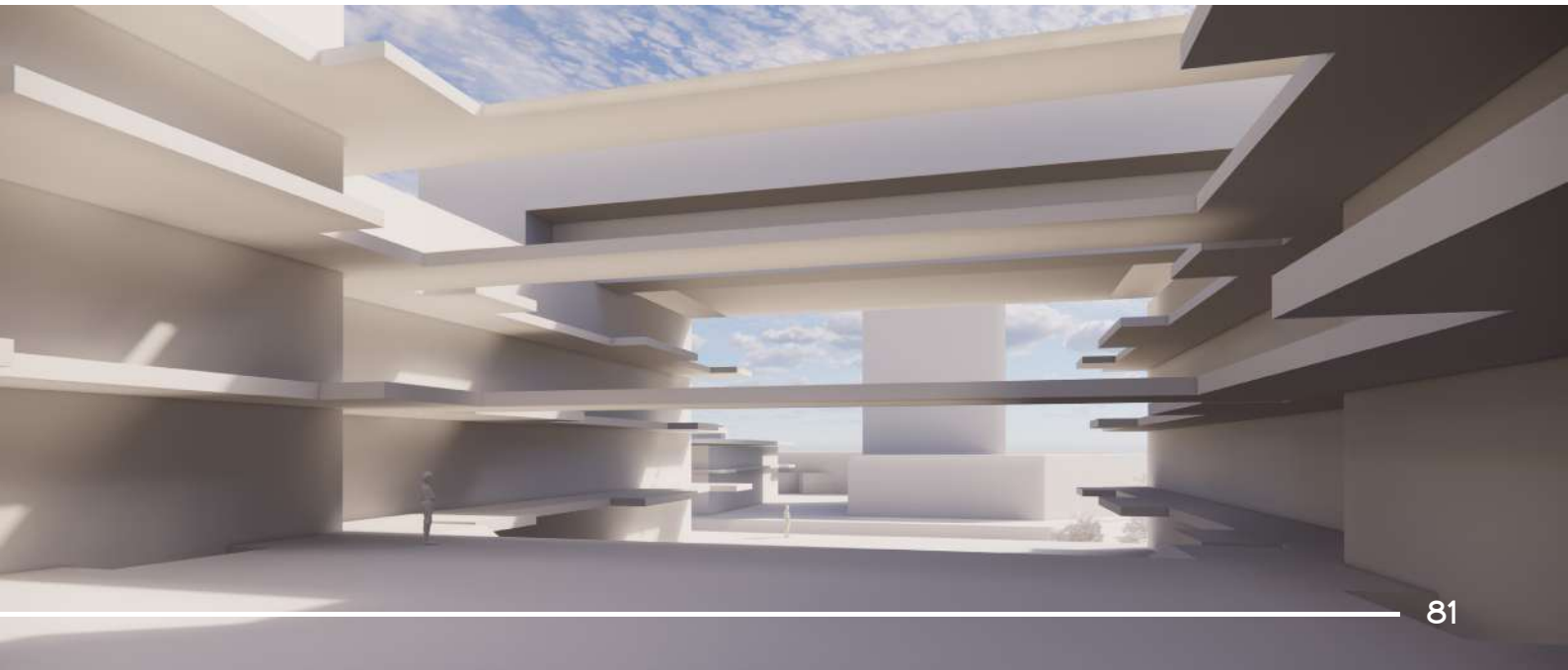
PERSPECTIVES

When approaching the building from the waterside, its shape directly attracts the eye's attention. One of the building blocks is in line with the already existing building line, but the other blocks have a setback. Because the shed is also extending the building line, emphasis is given to the plinth.

With his enormous opening in the building block, the building makes a statement. Richard Sennet says in his book 'Building and Dwelling - Ethics for the City' that a city needs statements to open up the city. Sennett calls this the 'punctuated form' (Sennett, 2018). It's used as a reference point in the urban environment. But for me this approach is also a reference point in our society. The pronounced shape of the building makes it slightly different form the other buildings, just like the user group is slightly different.

From the inside of the building the residents are looking out over society. From the hierarchy of open spaces you are looking into a larger space, which is looking out over the water. This transition of spaces reflects the 'membrane' of Sennett (2018). He is talking about borders and boundaries. At a boundary things will end, but a border is an edge where different groups interact. The overhanging gallery in the design forms such a porous edge, it is deviding the inner courtyard in two spaces, but the view is not interrupted.

The transition of spaces, visible from the inner courtyard reflects the aim of the design; improving the social self-reliance of young people with a mild intellectual disability so they can fully participate in our society.



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Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Martijn van Leeuwen
Student number	4354168
Telephone number	
Private e-mail address	

Studio		
Name / Theme	Dutch Housing Graduation Studio	
Main mentor	Theo Kupers	Architecture
Second mentor	Sjap Holst	Building technology
Third mentor	Pierijn van der Putt	Research
Argumentation of choice of the studio	It all started at elementary school. There was a little boy in the middle of the class, called Martijn, always drawing facades of dwellings. Mostly freestanding villas where he dreamed of. After school he went home to continue drawing on the facades and complete them with the floorplans. During the weekend he built models of his drawings to finish his ideas. This was the starting point of the willingness to become an architect. That view never changed, neither during high school. Not surprising I am in the chair of Architecture & Dwelling now, participating in the Dutch Housing studio, for me this was the only right option. During the bachelor's projects ON1, ON3, ON4 and TE5 my interesses in Dutch Housing were confirmed. These interesses arise from my view that the dwelling forms the basis of everyone's life. Where everyone's life is personal, each dwelling should that be too. I want to create what the actual dwellers really need, providing customization is of one of my most important values. The MSc1 Dutch Housing showed me already the relevant housing problems in the Netherlands. MSc3 and MSc4 combines all practices I learned over the years and are for me the next step in my willingness to become an architect in the architectural field of Dutch Housing.	

Graduation project	
Title of the graduation project	Onbeperkt Wonen – Living independently in a stimulating residential environment for young people with a mild intellectual disabilitiy.
Goal	
Location:	Merwe-Vierhavens, Rotterdam
The posed problem,	In the Netherlands there are around 1,1 million people with a mild intellectual disability. This means they have an IQ between 50 and 85 and are not social self-reliant in several aspects. Since the entrance of the 'Wet Maatschappelijke Ondersteuning' (WMO) in 2015 these people can no longer apply for their housing via the care for disabled people. They have to follow the regular route just like others. But because of their cognitive and also financial disabilities they have often little or none perspective on a own dwelling. Due to the changed WMO they now have to stay longer at home, because of their need for support. This is for the parents and caregivers a huge task. But also for the young people, where they have the willingness to live independently just like others. The government policy on healthcare is built on an inclusive society and neighbourhood, but our residential environment is not yet ready for this kind of inclusiveness.
Research questions and sub-questions	*In which way can the design of the residential environment contribute to the social self-reliance of young people with a mild intellectual disability?* Some of the sub-questions: + What is a mild intellectual disability? + What exactly changed in the care of people with MID due to the entrance of the WMO? + How can the direct neighbourhood contribute to the well-being of people with MID? + What kind of residential environment do people with MID prefer? + How can people with MID be supported in their social self-reliance?
Design assignment in which these result	Designing an inclusive residential environment for young people with a mild intellectual disability. The main focus is on independently living with a little support. The design of the building should contribute in this little bit of support. Stimulating social contact between other user groups is essential for an inclusive residential environment. Young people with MID should feel safe and comfortable in their residential environment where it forms a fundamental basis in life.

Process

Method description

During the research several methods are used to get a deeper understanding of the real problem and the possibilities to solve this with a design. At the beginning the site visit formed the framework for the location. With the help of notes and photographs we created an overall view of the building location. Literature studies helped a lot during the research process, especially in defining the problem, the definition of MID and the changed views of the society according intellectual disabilities. Because the policy and care on people with MID is that much complex, I also contacted a few people who deal with this every day for an interview by phone. These people were a policy advisor of an housing corporation and a mentor of an institution for people with intellectual disabilities.

For me it was important to create a specific user profile, because the complexity of the problem asks for a specific approach. Therefore I watched an documentary series about six young people with mild intellectual disabilities and the willingness to live independently. Because of the eye for the actual dweller I wanted to get in contact with people with MID. Unfortunately because of corona times, most institutions were not available for visiting. Still I want to try to come in contact with some people with MID, this process will continue after P2.

During the design phase is the model evolved with shaping the 3D-model in SketchUp. Virtual Reality used a tool to understand what the modifications in the 3D-model do to the eye-heights perspective. Finally to get grip on the dimensions and also the requirements of dwellings for people with MID, three case studies are analyzed and used as reference projects.

Literature and general practical preference

During the research a lot of articles and literature are consulted. Some of the most important literature to the research is shown below. For the full list of used articles and literature please consult the bibliography on pp. 80 from the research report.

Articles

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Wottiez, I., Putman, L., Eggink, E., Ras, M. (2014). *Zorg Beter Begrijpen. Verklaring voor de groeiende vraag voor mensen met een verstandelijke beperking.* The Hague, The Netherlands: Sociaal en Cultureel Planbureau.

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Reference projects

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Received plans after mailcontact with the institution.

Westkaap - Retrieved from: https://www.philadelphia.nl/locatie/westkaap
Received plans after mailcontact with the housing corporation.

Kramatweg - Retrieved from: https://www.ana.nl/portfolio-item/kramatweg/

Reflection

The graduation project literally rises from our changed view according to inclusiveness, the main topic of the studio. Over the years, our view on vulnerable and disabled people changed from exclusion to inclusion and we still need to work on this. During my research someone asked me: "Why should people with intellectual disabilities live in the city, aren't they better off outside the city?" This should not be the question, the question should be "Who are we to decide who has the right to live in the city and who not?" That is the beginning of our inclusive society. We are all equal and do not have to earn a place in society, we are already in it. It all starts with the right mindset.

To give young people with a mild intellectual disability the equal start as others we need to start at the beginning. Housing is on of the fundamental needs of someone's life. Especially for people with MID this means a safe place in society, from where they can build up their life and work on their social self-reliance. Architecture can shape this environment in a way social contact is provided.

For my research I contacted several organizations which are dealing with housing of people with intellectual disabilities. Most of these organizations have several institutions where people can live with 24/7 support. But for all these housing-options you need a WLZ-indication. With a WMO-indication you do not have the right on care for many hours in a week. The policy of the healthcare system is on independently living, what makes it hard for people with MID to fully complete the regular housing process. I could not find reference projects which are focused on independently living between other user groups with a little bit of support. Currently, because there is need for this kind of projects, parents are joining their forces in parent-initiatives.

I think my graduation project is the start of a more inclusive approach in architecture and hope it will contribute to a safe environment for all of us.

Notes Interview Ipse de Bruggen - *Vrijdag 29 mei 2020 van 14:24 tot 15:17*
Linda de Groot - Begeleidster Ipse de Bruggen

Er zit een verschil in de Wet Langdurige Zorg (WLZ) en Wet Maatschappelijke Ondersteuning (WMO). Bij Ipse de Bruggen wordt voornamelijk hulp verleend aan mensen die recht hebben op WLZ. Stichting MEE bijvoorbeeld focust meer op het traject van de WMO.

Als er andere gebruikersgroepen tussen mensen met een licht verstandelijke beperking komen te wonen, moeten deze wel gemotiveerd zijn om deze mensen te helpen? Wat hebben zij eraan?

Recent in het nieuws gezien dat studenten hulp verlenen aan ouderen in ruil voor goedkopere woningruimte. Zou interessant kunnen zijn.

Bij WMO biedt de gemeente hulp aan, dit kan in twee vormen:
- ***Natura*** -> de gemeente houdt zelf het budget in handen en geeft dit uit in samenwerkingen -> goedkoper voor de gemeente.
- ***Persoons Gebonden Budget (PGB)*** -> je ontvangt zelf het geld, maar moet ook alles zelf regelen -> duurder voor de gemeente en meer werk (administratieve verplichtingen) voor jezelf. Dit kan lastig zijn voor iemand met een licht verstandelijke beperking.

Beleidstechnisch is het allemaal heel ingewikkeld. Verschilt maar net per indicatie waar je recht op hebt. Een paar uur in de week extra kan al heel veel verschil uitmaken. Er zijn zelfs mensen die weten hoe je beleidsregels zo moet volgen om van een WMO naar LWZ indicatie te gaan.

Als je een gebouw ontwerpt voor mensen met WMO-indicatie, hebben ze geen recht op continue begeleiding. Dus een steunpunt in de wijk waar 24/7 begeleiding is, wordt dan heel lastig.

Eisen aan de woonomgeving voor iemand met een licht verstandelijke beperking:
- Overzichtelijk -> praktisch ingericht, alles wat je nodig hebt dichtbij.
- Structuur -> dezelfde plekken om spullen op te bergen of lijst met instructies.
- Herkenbaar -> felle kleuren bijvoorbeeld.
- Opgeruimd -> veel kasten om alles op te bergen.
- Weinig afleiding -> gescheiden kamers. Heel concreet voorbeeld dat je iets laat aanbranden als je staat te koken en in dezelfde ruimte staat de tv.

Referenties zelfstandig wonen
- Ouderinitiatieven (WMO), zetten met elkaar een woongroep op en besteden gezamenlijk de zorg uit omdat er geen recht is op WLZ.
- Westkaap Philadelphia (WLZ), wonen tussen andere mensen.
- Craeyenburch Nootdorp (WLZ), zelfstandig wonen.

Notes Interview Waterweg Wonen - *Dinsdag 2 juni 2020 van 09:01 tot 09:47*
Ingrid Aaldijk - Beleidsadviseur Waterweg Wonen

Stichting Timon zet zich in voor mensen die zelfstandig willen wonen. Hierbij komt een vrijwilliger in de buurt te wonen die zorg draagt voor de mensen.

Heel specifiek zijn in gebruikersgroep! Heeft allemaal te maken met beleid en de indicaties die worden afgegeven op basis van de beperkingen.

Jongeren in de leeftijd 18 tot 23 jaar met een beperking hebben recht op een huurtoeslag, tot een max. huurprijs van €431,52. Dit zegt wel iets over het aantal vierkante meters van de woning. Toch erg belangrijk voor deze gebruikersgroep!

Bekend met ouderinitiatieven, niet op basis van een licht verstandelijke beperking. Wel in het licht autistisch spectrum. Een hele vergelijkbare doelgroep, ervaren een beetje dezelfde problemen. Hebben de wil om zelfstandig te wonen. Ouders hebben zich verenigd in een wooninitiatief. Hierin zit bijvoorbeeld een steunpunt met zorgbegeleiding wat volledig wordt gefinancierd vanuit het Persoons Gebonden Budget (PGB). Geld wordt bij elkaar gelegd om financiering mogelijk te maken.

Kijken naar Stichting Odysseus.

Probleem met woningen met een heel specifiek PvE is, dat ze zo specifiek zijn ontworpen dat ze bijna niet meer verkocht kunnen worden. Het is dus van belang dat de woningen flexibel zijn ontworpen, zodat ook andere doelgroepen hier gebruik van kunnen maken. Wellicht meer naar standaardwoningen toe?

Let ook op levensloopbestendigheid. Jongeren worden op een gegeven moment ouder en zullen dus moeten doorverhuizen? Waar gaan ze dan heen? Dit is tegenwoordig ook een groot vraagstuk. Mogelijkheden tot doorgroeien naar een andere woning binnen de woonomgeving? Door betere zorg te bieden worden mensen ouder, maar nemen dus ook fysieke problemen op latere leeftijd toe. Als ze ouder worden, wellicht recht op ambulante zorg?

In Stadsleven, beschreven als inclusief wonen, wonen mensen hun hele leven met zorgbegeleiding. Hier zitten dus ook gemeenschappelijke ruimtes in. Wel zijn de woningen gericht op zorg vanuit (WLZ). Dus grote badkamers bijvoorbeeld.
Wellicht meer een vorm van integraal wonen?