Dutch Housing Graduation Studio
“Between Standard and Ideals”

A3 Booklet

CITY > HOME
Young Professional Living

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Date: 13-12-2018

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Before you is laying the A3 booklet of the project CITY>HOME. In this booklet drawings are found with the most important drawings. Initially are some explanatory drawings as an introduction to the building in helping to understand the design decisions that were made. The project consists out of two buildings. Both almost identical to each other apart from the ground floor organizations. The reason is that the buildings design offers some not standard curved surfaces. Through repeating the building these elements are easier and more economic to produce. When it came to the design of the massing of the building neither any benefit was found in making changes to the building volumes. The both two masses fit perfectly together and align with each other on the corners. In presentations and in documentations there is often referred to building one and two and the illustration shows which of the two buildings is referred to.

The building is specially designed for Young Urban Professionals and houses micro-units. The way the target group lives is different then the traditional manner. That is why the building houses a lot of communal spaces that extend the house further into the city. It creates a space where interactions with like-minded people happen and friendships and communities can built. It allows for shared meals and mutual activities. It is a mix of an apartment building, hotel and student housing. A refreshing look on housing perfectly suitable for the Compact City of tomorrow for better cities that are available for a larger group of people then it is currently.
Amsterdam has a relatively young population and the group of 20-34 years old is making up almost 30% of the demography of Amsterdam. This makes designing for this group attractive. Most people in this age group are responsible for the high amount of single person households, as people marry later and have children even later than in the past. The most interesting group out of this age group can be identified as ‘Young Urban Professionals’. This group has finished their studies and had a job. They are generally highly educated and have jobs with higher salaries. They enjoy living in the city where they see the city more as an extension of the house. It means that activities like meeting friends are often happening outside of the house, having a cup of coffee or tea in the city, or going out and spend the evening in café instead of inviting them at home. The home becomes more the private realm in the home that is called the city. Even in the way they work the office is not a set place anymore. First of all the set desk is disappearing and flexible working places are taking over the office. Also, there is a trend of working from home. Young Urban Professionals, however, are more ambitious and tend to work more freelance. This has become possible through the emergence of the internet. All that you need as an entrepreneur is a laptop. Business meetings can just as well happen in a trendy café and is no longer bound to a formal office. In short, we are no longer stuck in one place, and the YUP has the freedom to choose where to live and where to work.

This new way of living also has had a significant influence on our cities. Cities always used to be crowded with people moving in the urban spaces for work, and travel. The public realm was a trading place, and always full of activities. This began to change when the workshop and industries were moving to the outside of the city and we started to live in larger houses. The public space became then the place for tourist and shopping and shopping was till recently the main activity why people would go to the city. However, in an age where it is easy to order anything you like from the internet, where we can communicate on the internet, and we can make our cappuccino from home, the city remains to take in an important rule. We want to be in the city and this ‘being in the city’ has become the primary activity. Jan Gehl revered to it as the ‘cappuccino culture’. When someone is standing in the city for hours that is strange and suspicious, so we need to have a cappuccino, and we are okay to stay in the city as long as we wish so. The amount of terraces has exploded in recent years, making the city a place for leisure.

The YUP enjoys the city also for a different reason. It is the services and amenities that are in close proximity. A service culture is emerging. We pay a fee, and we get all the movies right at are nose via services like Netflix, the same is with music, Spotify offers you plenty of songs to choose from. There is no longer a need for a private CD or Blue-Ray collection. The same is going on with many other aspects of life. HelloFresh is offering you your dinner, which you only need to prepare according to a recipe, supermarkets deliver at home, your car is leased, your bicycle maybe comes from Swapfiets, where you have a bicycle for a monthly fee. The list can go on and on and on, but what is important is that this lifestyle is being preferred over having personal ownership. Having services makes it easy to spend time on the things that matter most and creates flexibility. Especially for young people that do not have a lot of saving it is easy to pay a low monthly fee and have a lot of services this way.

The most suitable way of living for Young Urban Professionals would then also be to have a dwelling as service. To have a unit that is half or fully furnished and that is having all the comforts that a Young Urban Professional can image.

1 Jan Gehl et al., New City Life (Copenhagen: Arkitektens Forlag, the Danish Architectural Press, 2006).
SOCIAL INTERACTION

Plus windows in the doors and type A has an extra window towards the hallway.
This patch doesn’t only serve an aesthetic purpose, but is on most places fitted with solar panels for the production of energy. This instead to the solar-panels on the roof as visible from the street to make the energy production visible. At the places where it doesn’t make sense to have solar panels there will be look-a-likes installed.
High insulation values are important to save energy. Therefore the facade comes with triple glazing and wooden window frames to achieve the highest possible insulation values. The facade are made from prefab elements and the layers of the wooden boarding and different layers of insulation makes that the structure has a high airtightness, so that there is no escape of energy which goes to a heat exchanger via the ventilation system.

Integrated sunscreens for maximal comfort to keep the sun out in the summer and prevent the sun to shine into the dwellings. By making this screens available with a sensor they can be lowered automatically. Ideally for a target group that spends a lot of time from home, so that additional cooling energy can be saved.

Also important is that the structure is made so that the sunscreen is serviceable in case of any failure, via removing only one piece of trim that is now screwed in place. Alternatively a more invisible click system would be preferred if possible.

Dry Floor Heating system for better responds time. The Target Group spends a lot of time outside of the dwelling, so having to be able to have a bit faster reaction time is preferred. Also this system can be easily adjusted when the layout of the floorplans change, being able to reuse materials and save time.
FLEXIBILITY

X
60m²

X
60m²

A
30m²

A
30m²

A
30m²

A
30m²
FLEXIBILITY
LOAD BEARING STRUCTURE
CIRCULATION SPACE
These schemes show the emergency routes in case of a fire. This whole system has been a thorough study. The stepped design in combination with the small narrow dwellings made it very hard. The Dutch building code does not allow that the only route of escape takes you past another front door. This problem would be solvable, but it would mean that there would be loads of staircases leading down. Which is not desirable. After reshaping the building mass and the introduction of the big atrium in the building it was therefore logically to introduce a sprinkler system which is not common in apartment buildings. To introduce still some good routes to escape there is a waterfall staircase that is one fire compartment. That you need to flee past a few others doors in this case is helped with the help of the sprinkler system. In this way the building is not only safe, but also have this amazing staircases that are surrounded by fire resistant glass providing for more transparency and a beautiful architectural element.
COLLECTIVE SPACE
This building features an automated parking garage for 50 cars, giving the complex a parking rate of 0,2 places per dwelling. The target group and the location make that there will not be a lot of car ownership. Ideally in reference of the Compact City there would be none.

Yet, due to todays demands there is a parking garage of which about 12 are reserved for shared electric cars. With a simple app a car can be reserved and will be handed over to you simply at the pick-up point. The docks have a facility to be able to charge the car when unused.

The remaining 38 parking places can be used for persons having a need of a car and they can use that. The waiting time for a car to be picked up is a stimulus to get a bicycle. When the demand for parking finishes the whole system can be easily sold and transferred somewhere else as it doesn’t need any special structures.

You step out and the robots do the rest for you. The entrance of the parking garage looks like a two car garage. The car can be driven in nose first and sensors check if the car is correctly parked on the platform. The cars are all parked on simple platforms and stored away. The robot fits perfectly underneath and lift the platform up slight to maneuver it. Source: https://bit.ly/29pMC4b

Robotized trolley collecting a car. The Robot can rotate on his axis so the turning radius is therefore the same as the length of the trolley itself. Source: https://bit.ly/29pMC4b

The cars are all parked on simple platforms and stored away. The robot fits perfectly underneath and lift the platform up slight to maneuver it. Source: https://bit.ly/29pMC4b
D W E L L I N G  T Y P O L O G I E S
There are 240 dwellings with in total 6 different typologies in the buildings. The typologies with their sizes and amounts are as follows:

- 72x Type A: 29.1m² - micro-apartment
- 72x Type B: 19.1m² - micro-apartment
- 24x Type C: 34.6m² - micro-apartment
- 24x Type D: 23.0m² - micro-apartment
- 24x Type E: 26.3m² - micro-apartment
- 24x Type F: 28.2m² - micro-apartment

Distributed as follows:
- Building 1: 120 (A:36x; B:36x; C:12x; D:12x; E:12x; F:12x)
- Building 2: 120 (A:36x; B:36x; C:12x; D:12x; E:12x; F:12x)

There are six different types of micro-apartments in the building. The main types are A and B into which A is the main type meant for one or two person households. B is meant for one person only. Type C is on the corners on the sides of the terraces. It has a double sided orientation with a window going around the corner of the building providing with a nice panoramic view. Type D comes together with type C and is a derivative of type B but with the bathroom extended. It gives the main space a more space and holds the kitchen really nice. On the north side of the building there are types E and F and type F features a very nice corner window. Type E by fitting around the elevator has a really nice seating area and a larger bathroom compared to the B type.
ELEVATIONS

B1.G1 - BUILDING 1 - WEST FACADE
1:200

7.800 7.800 7.800 7.800 7.800 7.800 7.800
ELEVATIONS

B1.G4 - BUILDING 1 - EAST FACADE
1:200
SECTIONS

B1.A1 - BUILDING 1 - SECTION A-A
1:200
ELEVATIONS

B2-C1- BUILDING 2 - SECTION C1-C1
1:200
DETAILS

VERTICAL DETAIL 3 - WINDOWS

1:5

GSEducationalVersion

Triple Glazing

Integrated Sunscreen

Holonite Element

Stone Strips 60 mm

I-Beam Insulation

2x120mm Plaster

Viber 2x12,5mm

Waterproof Cement - Fiber 20 mm

Damp-Proofing Foil

Holonite Window Sill

Wooden Window Frame

Guide Rail for Sunscreen

Wooden Window Frame

Guide Rail Sunscreen 10mm Spacing

7560209514513

1315 50 180 70 30 20

DETAILS
DETAILS

HORIZONTAL DETAIL 1 - WINDOW FRAMES 1:200
IMPRESSIONS

CZAAR PETERSTRAAT
IMPRESSIONS

ATRIUM FROM FIRST FLOOR
IMPRESSIONS

BIRDS EYE CENTRE FACADE