Sälgen 4 – Adaptable housing in Stockholm

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View from Birger Jarlgatan
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### Intro

Siting the intended to be an eye center of Stockholm's living and urban Panorama, the project is located in the heart of Södermalm. The room is recognized as a questionable part of the site, which offers unique opportunities for creating a new building. The project is based on the premise that the current building regulations and urban planning are not sustainable in the long term. Therefore, the project aims to present a new vision for the future of Stockholm's living and urban Panorama by proposing a new development model that can be adapted to various urban contexts.

### My design, part 1

My design shows the typical rhythm of blocks of houses and provides the context of the surrounding urban environment. The house is designed as a single-family house with an integrated garage, which can be used for various purposes such as a workshop or a home office. The facade is designed to be adaptable to various urban contexts and can be adjusted to different heights and orientations. The house is designed to be energy efficient and can be certified as a green building.

### Figure-ground diagram of the site with surroundings 1:3000 (A0)

The figure-ground diagram of the site with surroundings 1:3000 (A0) shows the relationship between the site and its surroundings. The diagram highlights the importance of the site's location and its potential for development. The diagram also shows the existing buildings and open spaces around the site, which can be used as a reference for the design of the new building.

### Siteplan 1:1000 (A0)

The siteplan 1:1000 (A0) shows the layout of the site and its surrounding areas. The site is located in a residential area and is surrounded by other buildings. The site has a good view of the city and is close to public transport. The siteplan also shows the existing buildings and open spaces around the site, which can be used as a reference for the design of the new building.

### Diagram, view

The diagram, view shows the relationship between the site and its surroundings. The diagram highlights the importance of the site's location and its potential for development. The diagram also shows the existing buildings and open spaces around the site, which can be used as a reference for the design of the new building.

### Diagram, the site situated in the block "Muraren"

The diagram, the site situated in the block "Muraren" shows the relationship between the site and its surroundings. The diagram highlights the importance of the site's location and its potential for development. The diagram also shows the existing buildings and open spaces around the site, which can be used as a reference for the design of the new building.

### Reference images:

- **View from Birger Jarlsgatan**: Current state of the site
- **Reference project Flundran 1**: exterior view
- **Reference project Flundran 5**: possible source for inspiration?
Entrance level with surroundings 1:200 (A0)
Example 1: An office
Two rooms with working spaces for six employees and a separate room for the manager. The kitchen and central space are used as common space. The meeting room is located by the entrance with the possibility to be shielded off from the rest of the office. Generous room for storage.

Example 2: A couple
Taking advantage of enfilade and possible circle movement with a set of common rooms opened to each other. The dining table is placed in the central space of the apartment with the possibility of expanding when larger gatherings are taking place. By the entrance is a home office located, whilst the bedroom and private bathroom create an intimate inner zone.

Example 3: A co-operative living arrangement
Maximized use of private rooms. Doors between the rooms are closed or less frequently used in favor of the doors connecting to the central part of the apartment. Private rooms are equipped with beds, with the possibility for a sitting area in the bedroom or a sofa in the living room.

Example 4: A family with children
Two children sharing the same room in favor of a generous common space. Separate areas for bedrooms with a home office. The possibility of separating the children’s space with a separator wall, with the possibility of transforming into a temporary living space with a part-time room.

Floor 2-6, furnished 1:50 (A0)
- Parquet flooring 15 mm
- Screed 60 mm
- Plastic sheet 1 mm
- Impact sound insulation 20 mm
- Concrete Slab 250 mm
- Plaster 10 mm
- Coloured concrete with texture 120 mm
- Ventilated cavity 40 mm
- Thermal insulation 140 mm
- Reinforced concrete 150 mm
- Plaster 10 mm
- Water canal
- Wooden window frames
- Horizontal joint
- Ceramic tiles 10 mm
- Tile adhesive 5 mm
- Inclining screed 70 - 80 mm
- Reinforced concrete 250 mm
- Plaster 10 mm
Flexibility

Buildings today are built to last for about 100 years. During that period of time many of us will live in the same space, change our needs, or use the space in different ways. This makes it necessary to have adaptable and flexible spaces in our buildings.

There are many ways to build flexibility in housing, i.e. not restricting them to one single person. Every city has different ways of building to serve different functions. Flexibility in housing has always been an important aspect of buildings. Flexibility is the ability to change the space, whether for social or technical reasons. The ability to make the space adaptable to living for different users over time makes it possible to create spaces that are both usable and durable.

Our answer to this issue could be a small set of rules. These would set limits to the building organization and would leave flexibility for the inhabitant. This would allow them to use the room as either a private space or as part of a larger suite of connected spaces. This would allow for more dynamic floor plans and greater furnishing possibilities, making them more sensible for different kinds of users.

An equal set of rooms, similar in their sizes, with shapes close to the square for example of enabling zones is through dividing rooms with more than one wall, limiting the risk of noise leakage. This can be accomplished for example through enabling a great number of furniture layout. With hard flexibility multiple use of space without architectural or structural modifications, for example through moving gates is not possible. With soft flexibility these changes can be made.

There are ways to categorize different types of flexibility. Tatjana Schneider and Till, Jeremy have divided flexibility into three types: alterability, alterability with alterability, and extendability. Alterability refers to the ability to change the space through moving walls or other enclosures. Alterability with alterability refers to the ability to change the space through moving walls or other enclosures and through enabling a great number of furniture layout. Extendability refers to the ability to change the space through moving walls or other enclosures and through enabling a great number of furniture layout and through enabling a great number of furniture layout and through enabling a great number of furniture layout.

I have chosen to focus on this project on the principle of soft flexibility or the so-called "neutral spaces" like a hall or kitchen. These are spaces that are not specifically defined for a single use and can be used for multiple purposes. This makes them ideal for adapting to changing needs over time.

When creating a building, the possibilities for the inhabitants to create areas of different intimacy is an important aspect of organizing space. To limit the potential range that one part of the building could reach, the spaces of the building are divided into two parts: the inner rooms and the outer rooms. The inner rooms are connected to the central core, while the outer rooms are connected to the courtyard.

The inner rooms are used as private spaces, while the outer rooms are used as semi-private or public spaces. This division helps to create a sense of privacy and seclusion, as well as allowing for different levels of social interaction within the building.

The outer rooms are also used as entry spaces, connecting the building to the street and other buildings. These spaces are used for social interaction and can be adapted for different uses.

One important aspect of creating a flexible building is the design of the space, or rather the ability to create different spaces within the same building. This can be achieved through the use of flexible materials, such as shelves, walls, and floors, which can be moved or adjusted to create different spaces. This flexibility allows the building to adapt to changing needs and requirements over time.

My design, part 2

Floor 2 to 6 contain apartments and are repeated throughout the building. The building is divided into three parts: apartments, technical equipment and storage areas.

The apartments are divided into three parts: living rooms, bedrooms, and bathrooms. The living rooms are located in the middle of the building, while the bedrooms are located on either side. The bathrooms are located in the corners of the building.

The apartments are made accessible from the core, which is located in the center of the building. The core contains the technical equipment and storage areas. The core is divided into three parts: a dark core, a light core, and a central core.

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Fixed functions

Possible usage of space

Possible private spaces

Possible living or dining space

Possible public zone

Possible extendable space

Loggia, ventilated

Enfilades

Longitudinal axes

View from room

View from kitchen
Photos physical model
Presented panels, booklets and models
Reference list

Nylander, Ola et al. (2007) Bostadens rum, Stockholm
Leupen, Bernard (2006) Frame and generic space, Rotterdam
Christ, Emanuel et al. (2012) Typology – Hong Kong, Rome, New York, Buenos Aires, Zürich
Bermejo Pascuala, Carlos (2011) Floor plan manual housing, Basel
Holm, Lennart et al. (1991) Från bostadsnöd till önskehem
Siebel, Walter, Zukunft des Wohnens, Archplus 176/177, pp. 44-47
Kaltenbach, Frank, The balcony is dead […], Detail 2006/3, pp. 162-164
Askergren, Mikael, En pizza i Kärrtorp, Kritik 2013:21, s. 28 - 43