UNDER THE SAME ROOF // UST // UNDER SAMMA TAK



BUILDING CO-HOUSING IN GOTHENBURG PROCESS AND DESIGN

Thoughts from the architect

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This is about a group of people who deselected the housing stock offered on the housing market and instead formed an association to build the house of their dreams.

They dreamt of a welcoming and beautiful house. A house that inspired to spontaneous meetings between people of all ages, from different places and with varying conditions. They also wanted an energy efficient and environmentally friendly building, supporting a sustainable lifestyle.

They could move into Riksdalergatan 8 in Högsbo Gothenburg, during the summer of 2020. Three years later, the house is buzzing with life, and the atmosphere is welcoming in this cohousing community.

How did the vison about the building come to realization? This is an architect's personal story.



The plot is situated in a nice, green area southwest of Gothenburg city.

Introduction

The special thing about the building on Riksdalergatan is that the initiative for the project was taken by a group of people in the association Under Samma Tak, (Under the same roof, here called UST). Furthermore, they participated in the planning process and greatly influenced the design of the building. The association organised this participatory process through working groups and meeting routines and management of communication and information. The relationship and collaboration with a private housing company is also special, in that the association gave the housing company the role of developer and landlord.

Together with my colleagues Catarina Bodin Svensk, Lollo Dahlsten and Lennart Gustavsson at ferrum architects ab, I was entrusted with the task of designing the house. The members of the association worked together to form an organisation from the very beginning in 2009 until moving in in 2020, formulating the value base of the community, finding more members, looking for a suitable building site and many more tasks, but that's another story.

Gothenburg municipality made a reservation for a plot for the association in a new detailed development plan, thereby giving the association the mandate to seek partners to collaborate with. The collaboration grew in trust between all partners- the association, the developer and us architects. What were the success factors, and what difficulties were there? What can other initiative groups and other actors in the housing industry learn from this story? I will share some thoughts about that at the end of this article.



The small green house at the kitchen.

The association chose the developer and architect

The association wanted to avoid taking the financial and legal risks that are inherent in a construction project. They sought instead for a housing company that would build and be the long-term owners of the house, which the association members would then rent. The association sent out a detailed program to six housing companies in 2014. The programme contained social, economic, and ecological aspects and other requests regarding the house, the shared garden, the flats, the shared indoor spaces, and with a set level for the rent. The project was of interest for the housing companies. Trollängen Bostad AB gave a very positive response to the association and was accepted as the developer – the company that would build the house for the association. Trollängen agreed to take on all costs up to when the house was ready for the tenants to move in. Trollängen took over the plot reservation from the association and bought the land from city of Gothenburg.

In connection with the agreement made between UST and Trollängen in the early months of 2015, an architect was chosen. UST and Trollängen agreed that ferrum architects was a suitable partner. The office had experience and knowledge in housing planning, interior- and kitchen design, passive house technology, and they also had experience of collaboration and planning together with future users. I had previously had assignments for Trollängen, and for a housing co-operative in Karlstad. ferrum architects gave a presentation for some of the board members of UST in autumn 2014. We received the assignment from Trollängen to start working on drawings for the building in March 2015, and after that, to make the building permit documents and request documents, the drawings, and descriptions that Trollängen needed to get a building permit and procure a builder. I was selected to be the responsible architect for the assignment.

part a // the association participated in the planning process



The facade towards northwest.

The association influenced the detailed development plan

In 2014 the association got a building site for UST in a new detailed development plan. It was one of three plots reserved for co-housing groups at Riksdalergatan in Högsbo. The municipality of Gothenburg had at the time a goal that 10% of all municipally owned land should be reserved for co-housing. Several other developers/housing companies were invited to build within "The Detailed plan for housing by Guldmyntsgatan in the Järnbrott district in Gothenburg". UST followed the municipality's work with the detailed development plan for a couple of years by participating in meetings with officials, consultants and the builders that were invited. Some of the members of the association put in a lot of commitment during this phase to make sure that the conditions for their co-housing project would be the best possible.

User participation in the planning process

Work on drawings and request documentation took place between March 2015 and June 2016 in close collaboration with UST. ferrum's architects made drafts which were presented to the association's building group, consisted of three members of the association, and Trollängen's project manager. The drafts then went from the board of the association to the association's various task groups to get their input. The task groups gave their viewpoints, relevant to the focus of the group, back to the association's board and the building group. This gave that, for example, the kitchen group gave input and viewpoints about the design of the kitchen. Two weeks later, ferrum architects got the feedback and we continued to work on the drafts. Meetings with the building group from the association, Trollängen's project leader and us architects were held roughly once a month at our office from August 2015 until April 2016. We presented regularly how far we had come at meetings with the association's membership. All the members and others interested in the process then had the opportunity to ask questions and give their views on parts of the suggestions or the totality of the drafts. As architects we also took part in the meetings of the various task

groups, for example the kitchen group.

There were also meetings held at the district administration office dealing with the BmSS flats (housing for residents with special support needs) which were to be integrated into the building. In addition we met with, among others, a fire safety consultant and an accessibility specialist to get the correct conditions for the building.

There were many issues to clarify and research. When the request documents were completed by the summer of 2016, the house was presented in detail: the shape of the building, the facade with the window placement, balconies, colouring scheme, floor plan of the shared spaces, floor plan for all the flats, communication areas etc. For me, this was a very intense and exciting period. To get a direct reaction from the future residents was both unusual and fun. To integrate the future residents' experiences and ideas and shaping a building for a lifestyle that I believe in, was stimulating.

Construction documents on behalf of Tornstaden.

The private company Byggnads AB Tornstaden was assigned to build the house on a turn-key contract, meaning that they were responsible for the totality of the build, and hired sub-contractors. Tornstaden paid the consultants for finishing off the construction documents during spring and summer of 2018. After some prodding from the association and Trollängen, ferrum architects were accepted as the assigned architect by Tornstaden.

Four members of staff at ferrum were at this time busy with the construction documents. Several consultants were at the same time working on various aspects: HVS (Plumbing, heating, ventilation and sanitary), electricity, acoustics, fire safety, energy, accessibility and so on. Our documents were detailed with all measurements and code markings, layout of all doors and windows, descriptions etc. This period was strenuous for me, I was anxious that something would go wrong, including communicating in English with the Polish engineers who drew the concrete elements in detail, with holes marked out for electric cables, water- and sewage pipes and more. It was a critical situation and time, and our drawings gave the basis for everyone else's drawings. There was no longer any time for hesitation or afterthought.

The detailed development plan was appealed and won legal force in May 2017. Trollängen had negotiations with Tornstaden, and their own calculations led to a re-assessment of the building, adding five more flats. Trollängen applied for a building permit in February 2018, which was granted in the summer of 2018. Construction started in August 2018, and the residents could move into the house in April 2020.

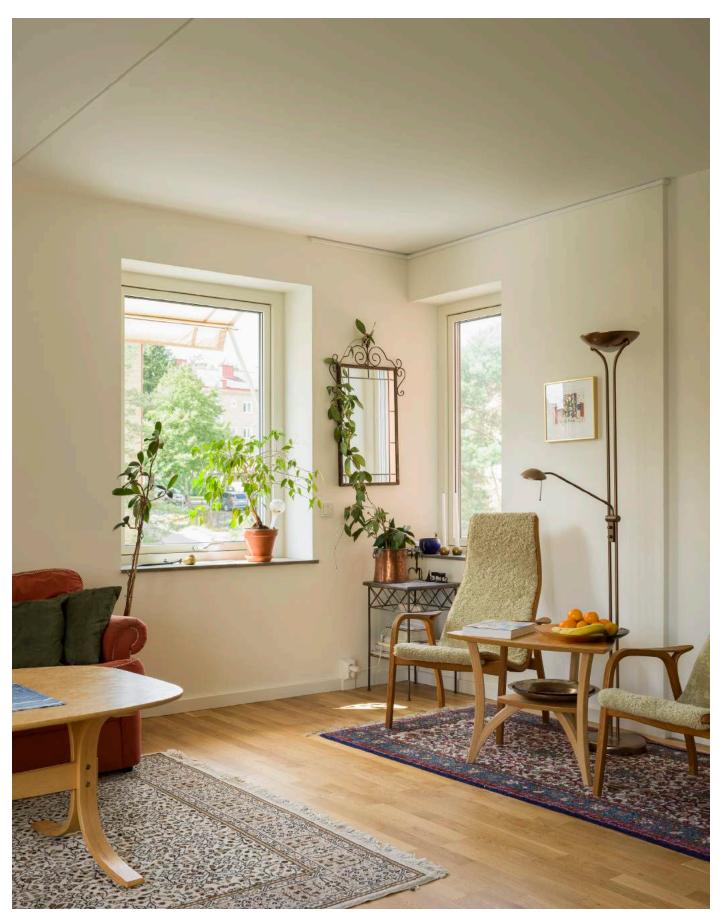
part b // the translation of the association's program into a building

The conditions set by the plot

In addition to the detailed development plan, there is a quality program, which describes the specific qualities of the district of Högsbotorp. In it, the municipality lays down important starting points for design of the new development within the detailed development plan area. We took heed of the following motifs in the quality program: the house gable facing the street, plaster as material for the façade, light earth colours, gabled roofs, neat balconies, the front doors in oak.

The plot has a very good location on Riksdalergatan. It is unobstructed to the south-west, with good light conditions. The only possibility to enter the building is from Riksdalergatan, on the west side of the site. It seemed natural to try to use the sunny courtyard for play, socializing and gardening that the association had wanted. This could be achieved by placing the building at an angle as far as possible towards the northern corner of the site.

The site had a difference in the ground level to the northeast, making it possible to create a semi-subterranean floor with an entrance facing the path that was planned within the area. We also considered energy and economy when we chose to give the



A house for a variety of households and ages.

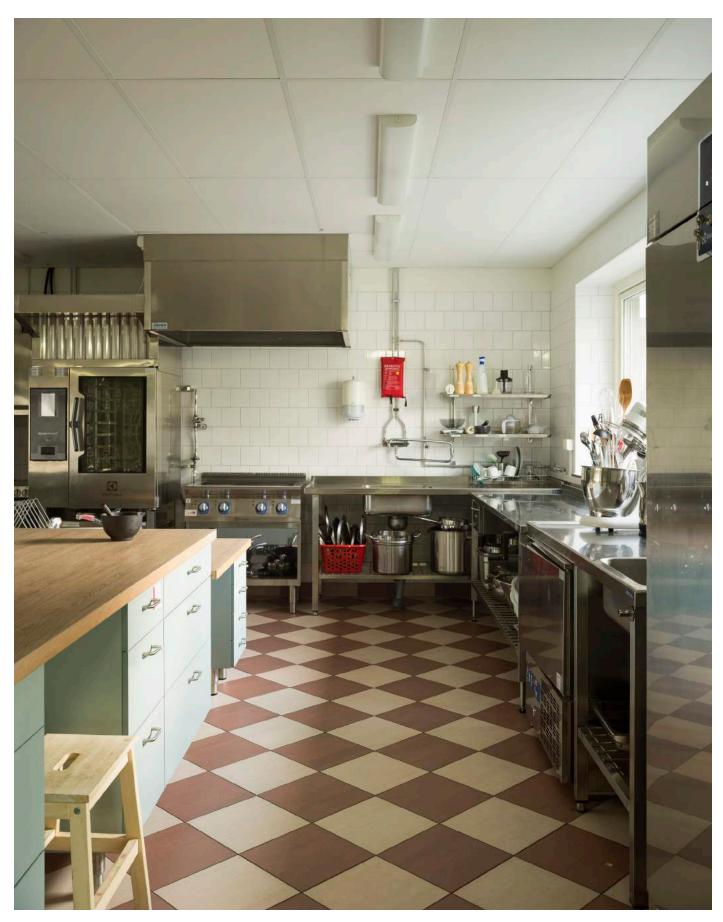
house a simple geometry. One of the goals of the association was to take care of environmental aspects and to build an environmental sound house, as well has having low rental costs. Large internal area in relation to the total area of the outer walls gives low energy consumption. We also took social aspects into consideration. Nearly all the balconies were to face the courtyard and the main entrance.

Flat variations

It was the intention of the association that a variety of households and people of all ages could live in the house. We needed flats to accommodate for people in different life situations. Some wanted smaller flats so that they would be cheaper to rent, made possible by the house having guestrooms to be used by the residents and to host parties in the shared spaces. There also needed to be larger flats for growing households with children, or for groups wanting to have a flat-share option within the co-housing building.

In its detailed program, the association stated that they wanted a minimum of at least 40 regular flats. People with various disabilities usually live in group flats, without contact with other tenants in the building. The association meant that these individuals could contribute to diversity within the total residents group. The detailed program stated that there should be at least six flats built with consideration of special needs. This means that there are always assistants for these residents in the building, who need a place to stay when they work nights. Therefore, a small flat for this need is included, as well as room for the assistants to use during the day and a room for the meetings they need to have in privacy. All in all, there are now 59 flats, ranging from bedsit/studio to 5 rooms (all flats have kitchens), in the range from 28 sqm to 107sqm. Seven flats are for BmSS residents, and they take part in the shared activities in the house.

The distribution of the flats that the association proposed in its program, was discussed with Trollängen, and has largely been realized. Three flats for students were added in the semi-subterranean floor. The flats were distributed among the members of the association during the construction period, whilst the floor plans had been decided a couple of years earlier. It was therefore



A pleasant kitchen for amateurs.

no longer possible to make individual additions or adjustments. Trollängen had presented its standard for interior fittings (bath, kitchen) for the association's board before the contract between the parties was agreed upon.

The kitchen and the dining room

To prepare food and eat together is the heart of many co-housing communities, and in UST as well. It was important to create a large, easily workable, and pleasant kitchen for amateurs. We did not build a "restaurant kitchen" where health and safety regulations would dictate the design of the kitchen. We wished to have a kitchen island that several people could work around together, even children or a person in a wheelchair.

The kitchen is equipped to cater for cooking for 100 people. Apart from being used as a dining room, the space can also be used for meetings, concerts, showing films, and for parties. Advanced equipment used to show films has been installed. Lighting and furnishing support a flexible use of the space. A "restaurant ambience" has been created through colour design, furnishing and a fireplace. Large windows in both kitchen and dining room give daylight and transparency. You can walk straight from the dining room to a small outdoor seating area facing northwest. From the kitchen you can go to a little green house where a smaller group can be seated.



The dining room with the outdoor seating area.



Prefab concrete elements painted with silicate paint.

Other shared spaces

A living room is adjacent to the dining room and the main entrance. A room for hobby activities, table tennis, yoga and more is by the central hall on the ground floor. On the semi-subterranean floor there are two guest rooms with a shared bathroom. On this floor there is also a large workshop which also can be reached from the outside, storage room for bicycles, private storage space for each flat and more. On the top floor there is a large glass room for parties, for socialising, yoga and much more. The house has two roof terraces.

Construction

The house is designed to meet the requirements for Miljöbyggnad Guld, Environmental Building Gold, and the environmental program for the city of Gothenburg. Therefore, the building is better than the normal standard from several aspects: indoor environment (acoustic, air quality, dampness, thermal climate, and daylight) energy (energy use, power demand, and energy source) and material (documentation of construction material and outphasing of hazardous substances). There are solar panels on the roof which are estimated to yield the energy needed for the kitchen and the common areas. The building is certified as Environmental Building level Gold, the highest level according to the Swedish Green Building Council.

The house is built with prefabricated concrete elements. This was a condition and prerequisite for managing the finances in the project according to Trollängen in the initial meetings. The facades are painted with silicate paint. The top floor with a pitched roof, is constructed in wood, partially with sheet metal as façade covering.



A large green house on the top floor used for common activities.

part c // factors for succes, difficulties along the way & conclusions

The land reservation agreement gave power in negotiations

The association has had a large influence over vital parameters concerning their house, without owning the building. Due to the land reservation given to them from the city of Gothenburg, they had a trump card which enabled them to have the power to choose the developer. They could also influence the detailed development plan due to the land allocation, which saved them from having 30 parking lots on the plot. The original program designed by the association has by and large been implemented.

The association was able to choose the form of grant, lease form and the extent of self-management. The developer gave the association several options for lease, such as co-operative rental with a deposit, to block rent (when the association itself collects the rent from the tenants and sends it to the housing company), or individual contracts. The association chose to have individual contracts to avoid having to go after their neighbours if the rent wasn't paid on time, and they also did not want to need to pay a deposit to be able to move in.

It is not common for the city of Gothenburg to grant land allocations for associations. It was the red/green political majority at that time who had the power to do so, and they wanted to support co-housing initiatives. Through UST being able to team up with a collaborating developer with financial prowess, the municipal housing department agreed to the land reservation being changed into a land instruction, thus opening up for Trollängen to buy the land from the city.

Good collaborators

The choice of taking on Trollängen as developer and landlord was a good decision. The company is seen as serious, engaged, and generous by the association. The collaboration with us architects has also been positive.

Members of the association were skilled in facilitating group processes

Several of those who lead the work of achieving the UST cohousing, were skilled facilitators for leading group processes. The group had ample time to develop the organisation of the co-housing community before moving in. The members got to know each other at the meetings, shared weekends and in all the different task groups.

No deposit was needed during the planning phase.

The private developer took all costs, including for the architects, up until the residents could move in. The members of the association paid with their own time and commitment but did not need to put in large sums of money during the planning phase and before they saw the finished building. The first expenses came with the first rental payment note that arrived when they moved in.

Difficulties along the way: the lengthy planning period

Eleven years between the envisioning of the house to moving in, is a long time. Circumstances change for people during such a long period of time. Only two people made the whole run. It took five years for the association to get a plot reservation making it possible for them to start to plan properly. The detailed development plan was appealed, which added yet another year before the residents could move in.

Did the projecting process for the architects take longer time because of the user participation? My conclusion is that it has not to any large degree been significantly prolonged because of this. The meetings held and contacts taken with the association, would also have been needed with any other developer. The drawings that had to be made and the steps that were needed to be taken are basically the same regardless of what kind of building that is to be built. This was a complicated building with two stairwells, semi-subterrain floor and many different floorplans for the flats. The adaption of

the Environmental Building Gold gave additional work for us architects.

Rental cost

We did not end up with the rent level that the association had requested several years earlier in negotiations with Trollängen. The rent was negotiated by the Swedish Tenants Organization, Trollängen and UST. The rent was set according to the utility value and the comparative rent in similar new-build flats in the neighbourhood. The association was given a discount for self-management of the building. The rent is not related to the cost of the construction of the building. The rent is based upon the size of the flat. The shared common spaces (430m2) are included. Many tenants chose to have a smaller flat due to all the possibilities given in the building. The rental cost has been a large factor during the planning process as well as after moving in, and some members decided to leave the project. This is, after all, a new-build rental in a relatively central location in Gothenburg.

My conclusions

It is possible for a group to gain influence without taking on the role of developer/landlord. It is vital that the initiative group can find partners who are willing to try new approaches. To collaborate with a smaller company, such as in this case, might be easier to do. It is a great advantage if the group can get a plot that is desirable for a developer. The municipality can encourage and support co-housing by giving initiative groups land reservations.

When looking at the difficulties co-building groups in Sweden face financially today, collaboration with a partner taking on the role as developer could be an easier path to take. It requires a developer who can invest the finances needed and who can wait several years for repayment. There are large costs in the beginning of the process: purchase of the site, costs for all the required drawings, a project leader etc, all which would be difficult for the initiative group to manage. The Swedish building legislation (PBL) places a large responsibility on the developer to ensure that all rules and regulations are followed. It is therefore necessary that someone

can take the legal risk that is inherent in a construction project. The ability to organise and skills in dealing with group dynamics are also needed. If the initiative group does not have these skills, a project coach should be consulted.

My belief is, that there is a great demand and need for cohousing, not least as a way of reducing involuntary loneliness in society. I also think that there are great opportunities for creating more such co-housing projects on a larger scale through collaboration between initiative groups and other parties, for example developers, housing companies and foundations, trusts, and institutions.

Summary of advice to an initiative group who wants to achieve co-housing:

- Write down a value base shared by all and a detailed plan/program of your vision.
- Get help from a project coach if the group does not have the skills needed.
- Try to get a good starting point for negotiations. Take control of the land. Try to get a land reservation. Apply for grants that make the project interesting for potential collaborators.
- Be specific and careful with the organisation of the association.
- Information and communication management is vital so that all members and parties are informed and preferably engaged in the work. Make clear distinctions of roles between task groups and the board.
- Make clear common ground rules for influence. Clarify which phase and what aspects people can influence.
- Make collaborating partners present their value base.
- Be fastidious when deciding upon form of tenure.
- Look for alternatives within an adopted detailed development plan, or an existing building that can be converted into a co-housing building.

timeline // from idea to a house to live in

2009 A group af four people gets the idea of co-housing on a journey. 2009 Non-profit association starts. Work with the value base of the community, finding more members, looking for a suitable building site, visits to other co-housing projects etc. 2011 A public housing company offers a plot. UST rejects it. 2012 UST write to all Politicians in the commune of Gothenburg for support and a plot. 2013 The municipality starts work on the Detailed development plan for the area. 2014 UST get the reservation of the plot at Riksdalergatan. UST send their detailed programme to six companies/developpers and have meetings with several of them. 2015 UST sign agreements with Trollängen Housing Company. ferrum architect office sign agreements with Trollängen. Work with the request documents starts at the office. User participation in the planning process. 2016 The request documents completed in June. 2017 The detailed development plan was appealed and won legal force in May 2017. 2017 The private company Byggnads AB Tornstaden was assigned to build the house on a turn-key contract. ferrum architects sign agreements with Tornstaden. The work with the construction documents starts. Trollängen applied for a building permit in February 2018. which was 2018 granted in the summer of 2018. 2018 Construction started in August 2018.

The residents moved into the house in April 2020.

2020

