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CLOSER UNIONS

A strategy for the design of a rooftop addition
to Sandhagen 6, Slakthusområdet, Stockholm

Gabriella Grönlund

CHALMERS UNIVERSITY OF TECHNOLOGY

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BSc OF ARCHITECTURE AND ENGINEERING

ARCHITECTURE AND URBAN DESIGN
SUSTAINABLE DEVELOPMENT AND THE DESIGN PROFESSIONS [HT15]
RESIDENTIAL HEALTHCARE: HOUSING FOR SENIORS [HT15]
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BUILDING DESIGN STUDIO:
MASTER THESIS
*CLOSER UNIONS, A STRATEGY FOR THE DESIGN OF A ROOFTOP
ADDITION TO SANDHAGEN 6 IN SLAKTHUSOMRÅDET, STOCKHOLM*

EXAMINER: MIKAEL EKEGREN
SUPERVISOR: BJÖRN GROSS

GABRIELLA.GRONLUND@GMAIL.COM
070-756 36 16
GABRIELLAGRONLUND.MYPORTFOLIO.COM



CHALMERS
UNIVERSITY OF TECHNOLOGY

ABSTRACT

The purpose of this thesis is to create a strategy for the design of rooftop additions and then apply this strategy to the design of an addition to Sandhagen 6, in Slakthusområdet, Stockholm, to see how an addition can be designed in symbiosis with an existing building.

The population in the cities is constantly increasing. As the city grows, places that was once far outside the city center does now need to be incorporated into the urban web. Slakthusområdet in Stockholm is one of these previously peripheral areas, which is currently undergoing a big change from industrial to residential neighborhood and the land need to be used more efficiently. One way of dealing with the demand is to continue to build upwards, by adding extensions to the rooftops of already existing buildings.

By researching existing rooftop additions and how they have been designed and then analyzing in which ways the additions are successfully integrated with its host building and the local context and in which ways they are not, a strategy can be drawn up using the principles found. The strategy is then applied, in combination with contextual and volumetric studies, to the design

of a rooftop addition to the building Sandhagen 6, in Slakthusområdet, Stockholm.

Finally, a strategy was developed based on basic principles, where mainly the exterior aesthetics have been considered, but also to some extent interior circulation and installations. The result is a rooftop addition with lightweight combined massive wood and steel construction, containing 24 apartments in different sizes. The volume of the addition is based upon design elements in the existing building, like the pillars and window sizing as well as the strategies created earlier. The circulation shafts have been moved to accommodate both new and existing building in a better way and a light well have been created in the center of the addition to compensate for the depth of the volume.

By clearly defining the existing volume, and then carefully integrating it with a new one by means of design elements as structure, windows or color, it is possible to create an addition that works in symbiosis with the existing building, where both buildings help amplify each other's strengths.

CLOSER UNIONS

A STRATEGY FOR THE DESIGN
OF A ROOFTOP EXTENSION
TO SANDHAGEN 6 IN
SLAKTHUSOMRÅDET,
STOCKHOLM



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REFERENCES

INTRODUCTION

The method for how this investigation was carried out and parameters defining the scope and aim of it.

PURPOSE

The purpose of this master thesis is to:

- Investigate different strategies for the addition of 2-3 floors to Sandhagen 6 and apply to the design of the addition.
- Investigate how new and existing architecture can be joined in an interactive relationship
- Investigate in detail the joints between materials and how to transcend the gap between old and new

QUESTIONS

- How can you design an addition to Sandhagen 6 that works in symbiosis with the existing building?
- How can you create a general strategy for the design of rooftop additions?
- How do you handle conflicting qualities in the meeting between symbiont and host? (that is between extension and the existing building?)

METHOD

The project will mainly be carried out through research by design with aid from research for design.

I will experiment and investigate the relationship between the existing building and the addition through physical and digital models and drawings to examine the effect they have on each other. Several iterations of sketches and models will be of great importance in order to achieve the desired result.

Research for design will consist of literature studies and studies of reference buildings and if possible through field trips.

DELIMITATIONS

The investigation will not consider conservation value, meaning that it will not consider which parts of the building that are more valuable than others and are therefore worth conserving but will rather focus on what features that aids the design.

For the sake of feasibility, the investigation will consider load bearing structure of both buildings, however, this will not be the focus of the project.



DESIGN PROPOSAL

The result of the investigation will be a design proposal. The main purpose of the proposal is to design an extension that works in symbiosis with Sandhagen 6, based on the strategies that are researched and developed during the investigation.

The design proposal will be set in Slakthusområdet, south of Stockholm on top of the roof of the building Sandhagen 6. The program will contain dwellings in 2 or 3 floors, either townhouses or apartments. A more detailed program will be developed when the buildings have been more thoroughly studied during the research phase of the investigation. The size of the plot and the communication shafts will be crucial when developing the program and inspiration may be taken from the program developed by Stockholm Stad.

The aims for the project is to:

- Create an addition that benefits the host building and the surrounding neighborhood aesthetically
- Incorporate sustainable design choices into the project
- Keep the historical connection with the site
- Create a more diverse and inspiring environment for the people living in the area in the future
- Enable the building to be reused for other purposes in the future
- Show in detail, the transition between the constructions and through this motivate their relationship

BACKGROUND

The basic idea for this project comes from the urbanization taking place in most cities, where one of the results is that increasingly more roof top extensions are being built.

URBANIZATION

Since the 1980s the population in Stockholm have constantly been growing and since 2008 in an increasing pace. It is estimated that by 2020 Stockholm will have 1 million inhabitants meaning that approximately 30 000 people are moving to the city every year. Because of the increasing population, and because people want to live and work close to the city center there is today a shortage of both dwellings and office space. There are long waits for rental apartments and high prices for condominiums. Due to the lack of available, centrally located and in some cases underexploited land the prices are increasing. In some places around the city this has been solved by adding extensions to the rooftop of existing buildings, with more or less successful results. The concept is a good one, if carried out properly, that enables the plots to be used more efficiently.



EXTENSIONS

Rooftop extensions are becoming more common and there are several successful examples of it around Europe. The advantage is not only that central locations can be used more efficiently but it could also result in improvements in both social and environmental sustainability if you design to attract other target groups than those currently living in the area the result will be a more mixed city. If you also consider the possibility of renovating the host building, by for example changing the energy system or adding insulation the energy consumption will decrease. Even if nothing else is done to the building, energy consumption could be decreased merely through the adding of insulation on the roof.

But the adding of a volume on top of an existing building requires a sensitive design that takes into account the effect it will have on both the building and the overall impression of the neighborhood. There are examples of extensions that are only designed to maximize profit and with an increasing number of extension there needs to be a better strategy for additions, with designs that are more respectful to the existing architecture and the surrounding context.

"SÖDERSTADEN"

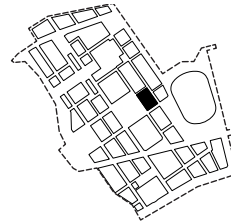
Söderstaden is a project initiated by Stockholms Stad that refers to the development of a large area south of Stockholm.

"Söderstaden will be a hub for leisure and events, a mixed city district with safe urban paths and easy access for walking, biking and public transport."

Slakthusområdet was built in the beginning of the 1900s and was then considered to be placed in a very peripheral part of Stockholm. The area has continually been developed and added on to during the whole century until the slaughtering stopped in 1990. Slakthusområdet will now be developed from a closed industrial district to a neighborhood where residences coexist with businesses and culture. It is planned to contain around 3-4000 dwellings and 10 000 workplaces. Many historically valuable buildings will be preserved and used by businesses or refurbished to dwellings. There will be a new subway station within the area along with several schools and a sports arena. The neighborhood will be linked to the surrounding areas, also within the project "Söderstaden". With its central location the interest in the area from developers has been big.

PROGRAM STOCKHOLM STAD

UTVECKLING AV BEFINTLIG BEBYGGELSE. Slakthusområdet har över tid utvecklats och anpassats för nya krav och verksamheter vilket gör det möjligt att på plats läsa områdets olika utvecklingsfaser och historiska djup. Liknande tillvägagångssätt ska ligga till grund för den fortsatta utvecklingen av bebyggelsen. Exempelkvarteret visar på olika tillvägagångssätt att utveckla kvarter med befintliga byggnader.



Plan skala 1:1 000. Illustrationsplanen visar variant 1

Utvecklingen av Slakthusområdet tar sin utgångspunkt i områdets befintliga karaktär. Bevarande och utveckling av den äldre bebyggelsen ger en historisk förankring. Innovation och nytänkande i mötet mellan nytt och gammalt ger möjlighet till unika lösningar och samtida arkitektur. Ny bebyggelse bildar nya tidslager.

Det finns förutsättningar för en del befintliga verksamheter att finnas kvar i Slakthusområdet. Genom att bygga till, bygga om och att komplettera skapas möjligheter till expansion och funktionsblandning.

När den bevarade bebyggelsen ska

Påbyggnader och nya byggnader kan bidra till funktionsblandning inom kvarteret och skapa tydligare gårdsbildningar. Ombyggnader som inte behöver förhålla sig till befintlig verksamhet möjliggör större påbyggnader och mer omfattande ingrepp i de befintliga byggnaderna. Generellt kan bottenvåningar och lastkajer levande- och tillgängliggöras genom nya, mer publika verksamheter. Lastkajerna i Slakthusområdet kan genom att ges nya funktioner fortsatt utgöra ett kännetecken för områdets speciella och karaktäristiska arkitektur.

I exempelkvarteret mellan Centrala parken och Røkerigatan kan de båda

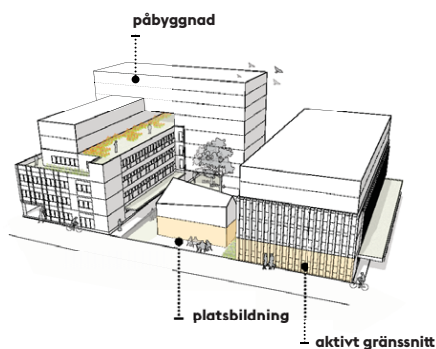
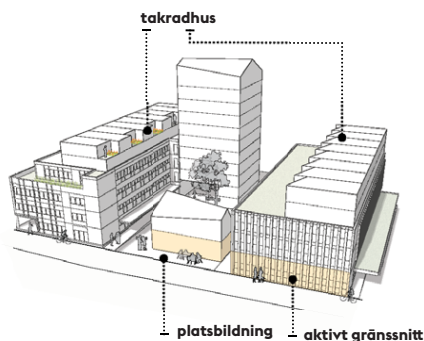
lokal i bottenvåningen placeras mot nordost och mötet med Røkerigatan. Mot parken i sydväst placeras en byggnad något indragen från gatan för att skapa en plats med möjlighet till uteservering eller liknande i koppling till en publik bottenvåning. Platsen är en förlängning av det offentliga rummet och ska upplevas som offentlig även om den ligger på kvartersmark.

Kvarterets sammantagna komposition skapar goda förutsättningar för en relativt ljus bostadsgård och möjlighet till kvalitativa och rumsligt intressanta takterasser och uteplatser. Öppningar i och släpp mellan byggnaderna skapar visuell kontakt mellan det offentliga

Nya komplement

Nya skalor och volymer tillåts som komplement till den befintliga bebyggelsen. Nya tillägg kan byggas ihop eller byggas över befintliga byggnader. Parallellt ges förutsättningar för befintliga verksamheter att fortgå genom lättare påbyggnader i form av takradhus med tillhörande takterasser och uteplatser. Tillgänglighet till bostäderna kan ske via befintlig byggnad, en tillbyggnad eller ett separat trapphus.

Den större och den mindre volymen kontrasterar i skala mot den befintliga bebyggelsen och dess lättare påbyggnader för att skapa en variationsrik helhet.



Nya angreppssätt och skalor

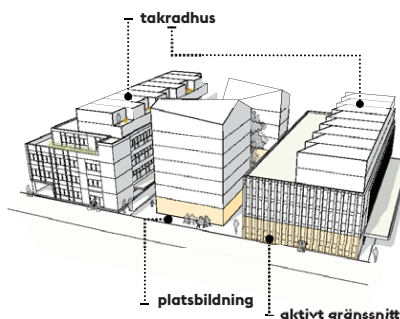
För att skapa större lokalytor kan verksamheter tillåtas växa uppåt och fortsatt bidra till områdets levande och blandade karaktär. Kraftigare påbyggnader på befintlig bebyggelse ger expansionsmöjligheter och skapar en miljö där gammalt och nytt tillsammans formar stadsdelens uttryck. Mer radikala grepp kring utveckling av det befintliga beståndet och en medvetenhet kring kontraster i volym och gestaltning kan skapa möjligheter för en för Slakthusområdet unik arkitektur.

En högre volym som tillåts gränsa befintlig byggnad tillsammans med en lägre fristående lamell kontrasterar i skala mot den befintliga bebyggelsen och dess lättare påbyggnader för att skapa en varierad och kontrastrik helhet.

Förtätning genom infill

En utveckling av kvarteren kan också ske huvudsakligen genom så kallad infill. En förtätning inom kvarteret tydliggör gränsen mellan privat och offentligt. Fristående volymer kombinerat med lättare, eller inga, påbyggnader ger förutsättningar för en varierad och kontrastrik helhet och en funktionsblandning inom kvarteret.

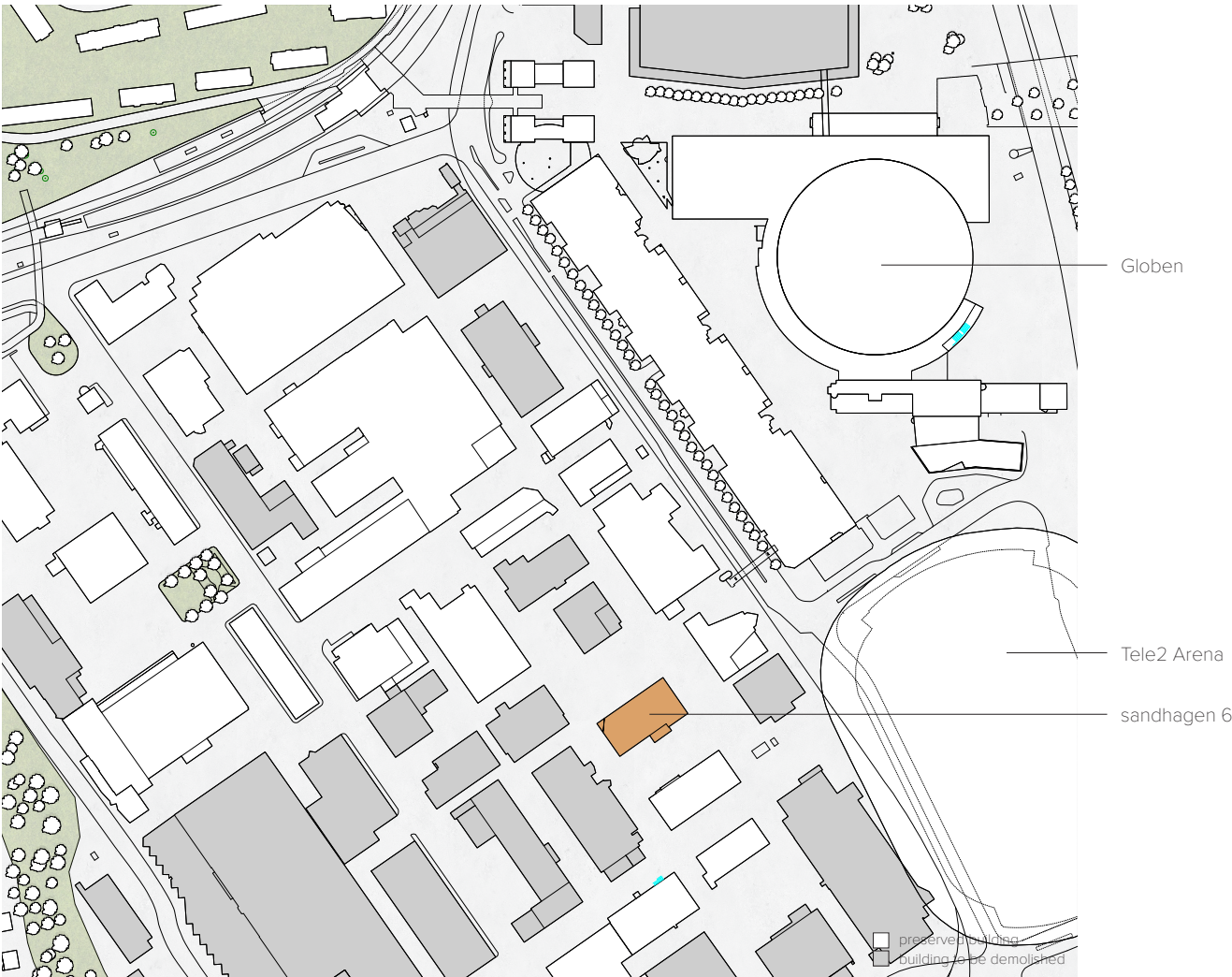
I exemplet placeras två högre volymer mot Rökerigatan i öster respektive Slakthusgatan i väster vilket ger en trängre innergård. Takradhus på de befintliga byggnaderna ges möjlighet till takterasser och uteplatser.



CONTEXT

Slakthusområdet is located south of Stockholm. The area today is a closed industrial area but will over the coming decade be transformed into a lively urban neighborhood.

THE SITE TODAY

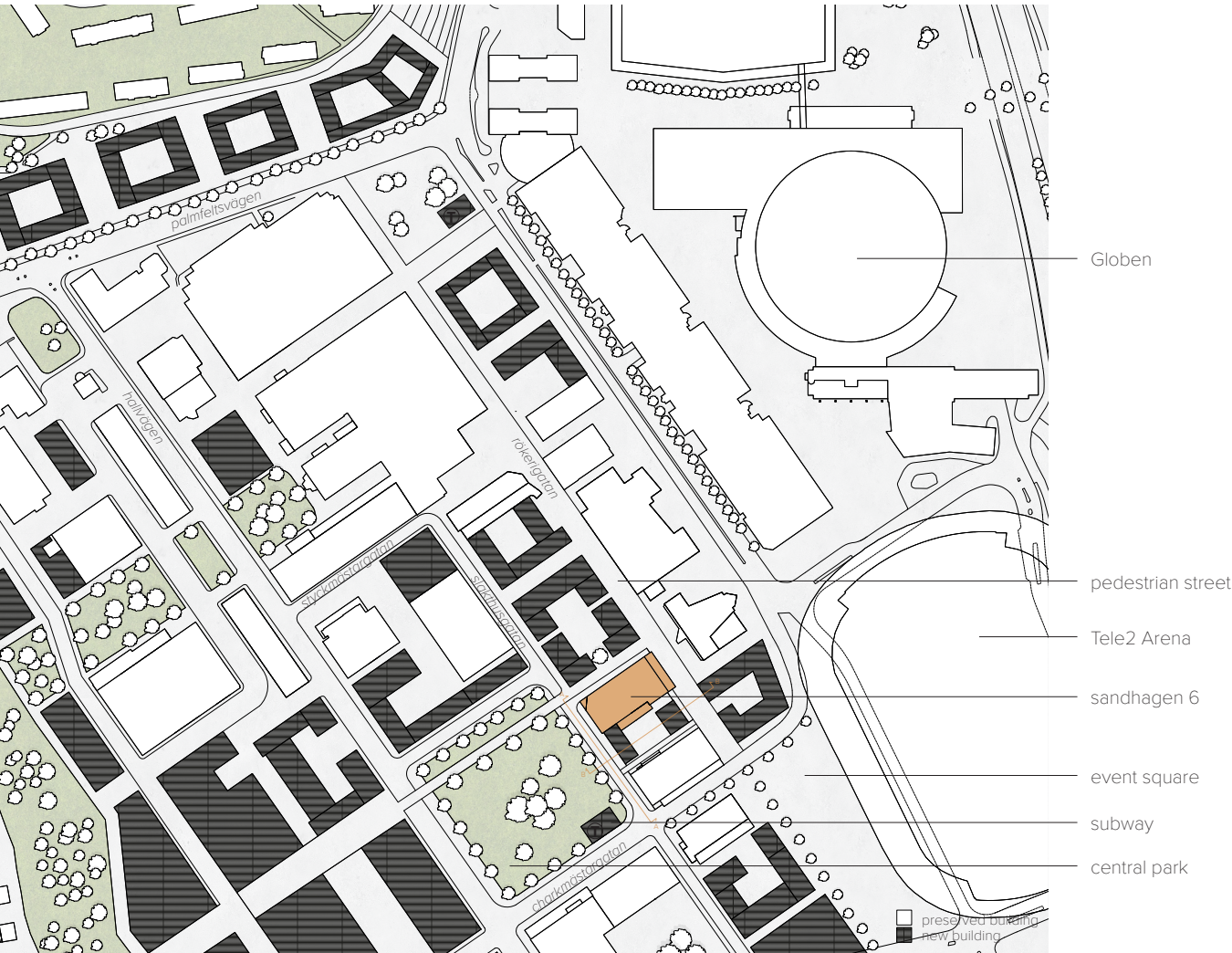


1:2000

SLAKTHUSOMRÅDET TODAY

Slakthusområdet is over 100 years old and was opened in 1912. It is located south of Stockholm, next to Globen and Tele2 Arena. The area is easy to reach by subway and tram, but despite this the area is a little bit isolated from its surroundings both due to enclosures and the specific role of the area. The actual slaughtering on the premises was discontinued in 1991. Today gastronomy is still dominant in the area, and when wandering around there are distinct smells of various foods, from freshly baked bread to smoked ham. There are few sidewalks and pedestrians share the space with cars, trucks and forklifts. Since the slaughtering was stopped several other businesses have also moved into the neighborhood, like mechanics, lawyers, a nightclub, architects and several other consultants.

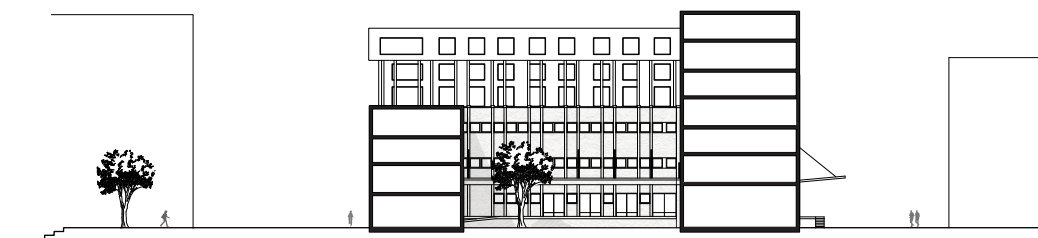
THE FUTURE SITE



1:2000



section A-A



section B-B

1:800

SLAKTHUSOMRÅDET IN THE FUTURE

As a result of the urbanization Stockholm Stad have made major plans to redevelop Slakthusområdet from a closed industrial area to an urban neighborhood with dwellings and offices. It is planned to contain around 3- 4000 dwellings and 10 000 workplaces. There will be a new subway station within the area along with several schools and a sports arena.

Many of the businesses residing in Slakthusområdet today will be relocated to facilities further from the city. Slakthusområdet was from the beginning a small area that have grown and been densified for over a century. This gives the neighborhood a unique appearance and many of the existing buildings will be preserved. The buildings that are most representative of the architecture for the decade when they were built will be preserved. There is at least one building from each decade spared but in many cases there are more. Some are more historically valuable and will only be restored, like one of the original buildings seen on the picture to the right on Palmfeltsvägen, while others are allowed to be modified or added to.



visualization of Slakthusområdet in the future



view south on hallvägen



north entrance



view east on palmfeltsvägen



view south on hallvägen



main building north of styckmästargatan



view south on slakthusgatan



view west on styckmästargatan



building of the nightclub slakthuset

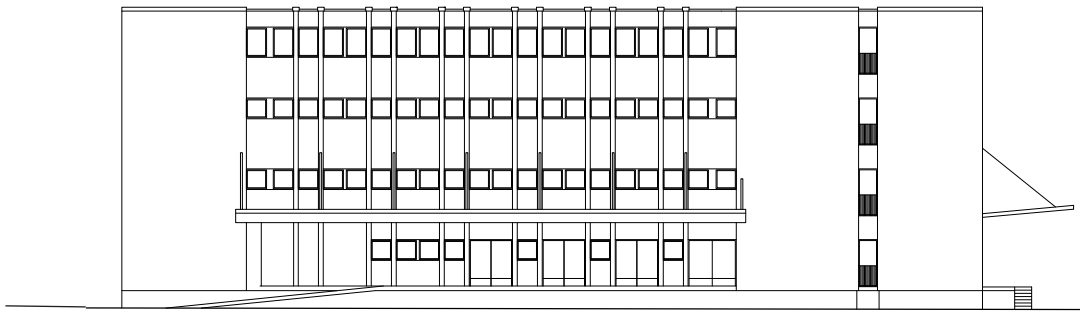


sandhagen 7

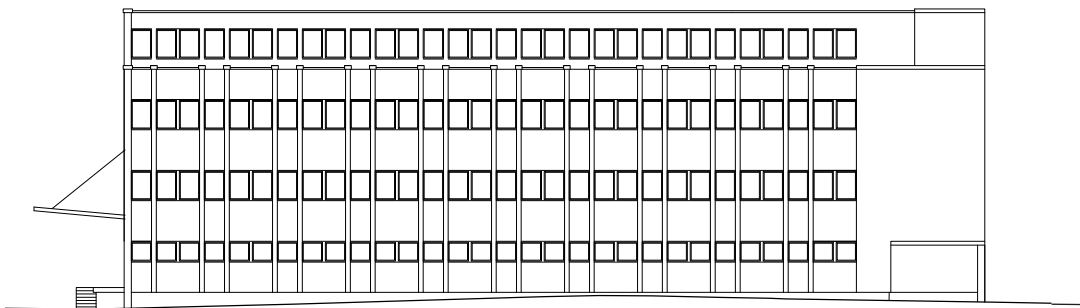


Tele2 Arena from charkmästargatan

EXISTING DRAWINGS

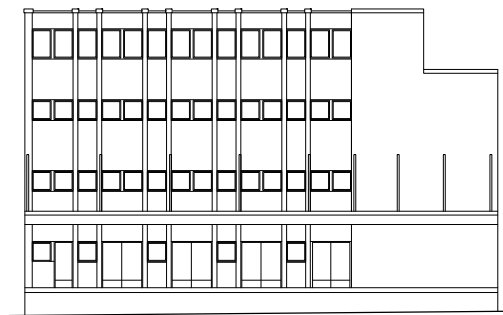


southeast facade



northwest facade

1:400

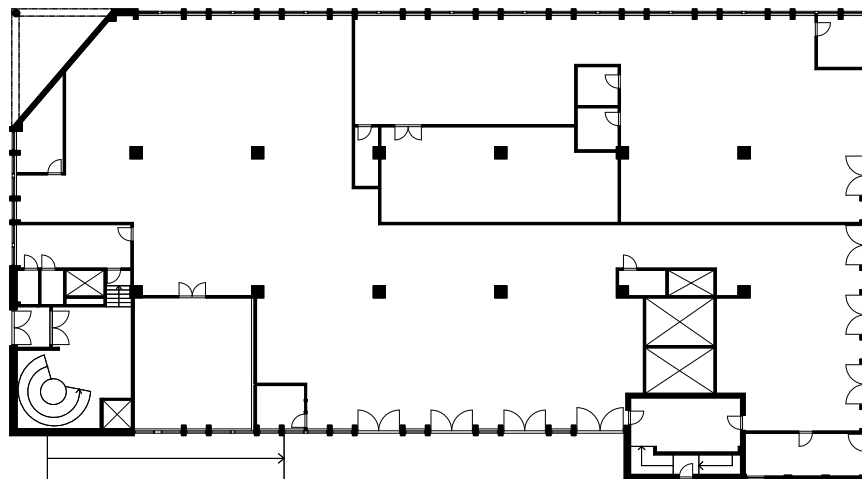


northeast facade

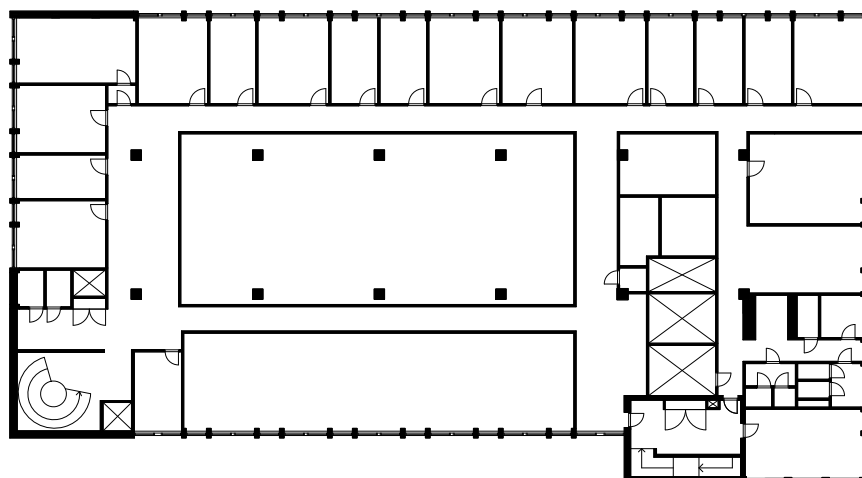


southwest facade

1:400

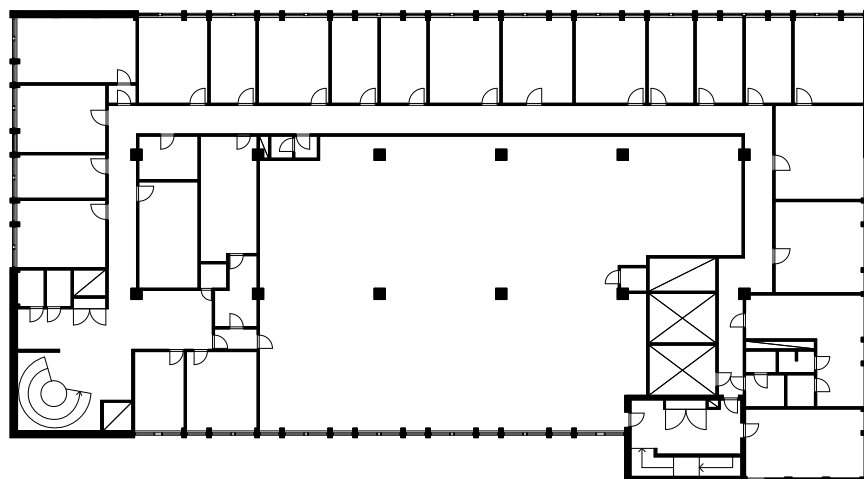


groundfloor

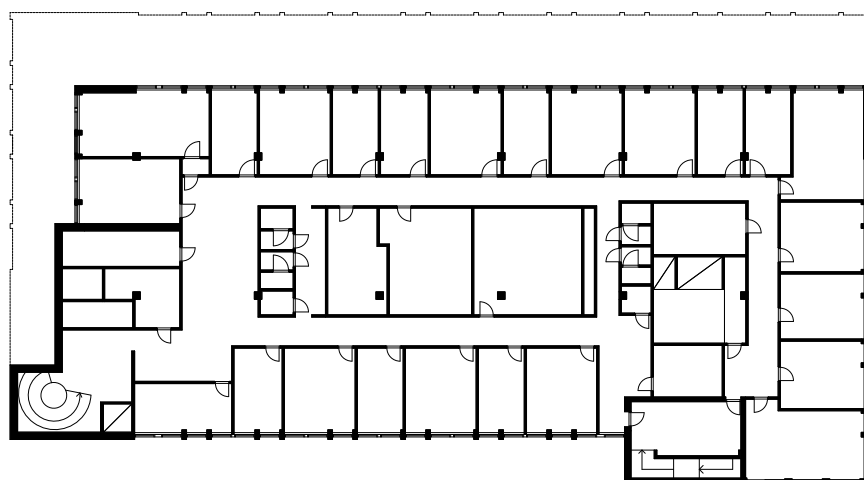


plan 1

1:400



plan 2



plan 3

1:400



northwest facade



northeast facade



southwest facade



southeast facade



current view from roof looking northwest

Sandhagen 6 was built 1965. It is one of three similar buildings from the 1960's that is being preserved. Two of the buildings share many similarities. They have uniform facades, with long ribbons of windows going around the buildings and decorative external pillars running along the exterior walls.

All three of the buildings are of similar height and are clad in red brick.



northeast loading dock

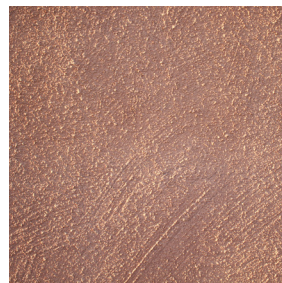
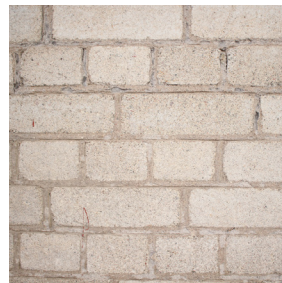


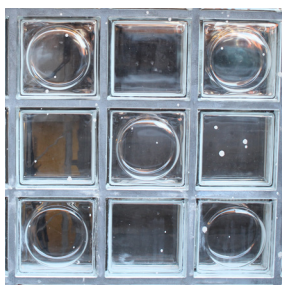
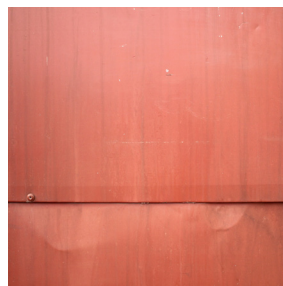
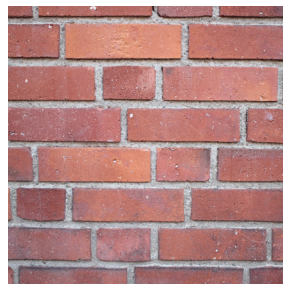
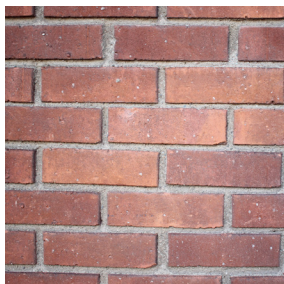
current view from roof looking southwest



detail of window

MATERIALS ON SITE





REFERENCE STUDY

Four references in different countries, with different programs, have been studied in depth as the basis for the roof top addition design strategies.

BEBELALLEE, HAMBURG

1.

Architect: Blauraum

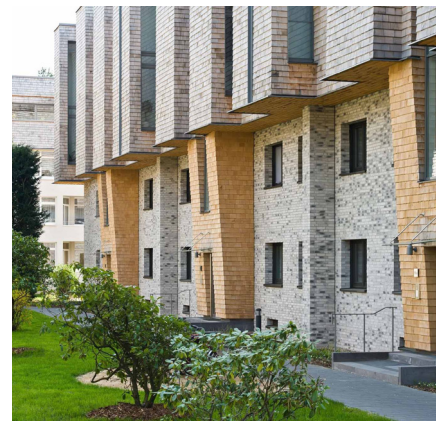
Area: 8800 KVM

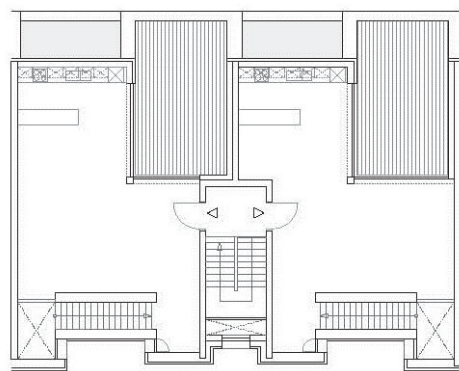
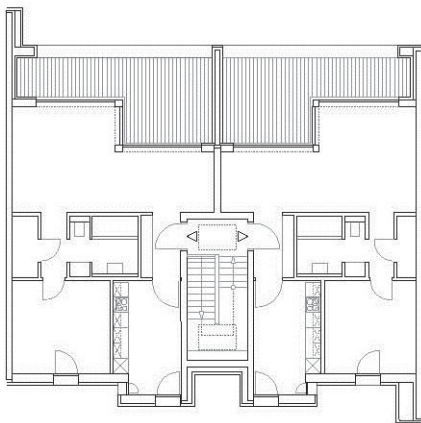
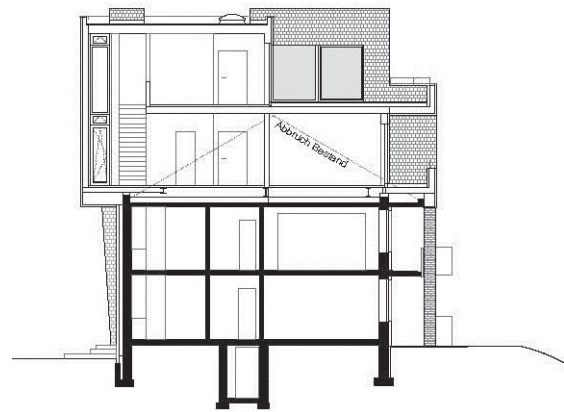
New apartments: 47 st

Original building year: ca
1950

Reconstruction: 2010

Two new floors containing
apartments have been added
in prefabricated wood. New
insulation was added to the
existing building and which
was then clad in grey bricks,
replacing the previous yellow.

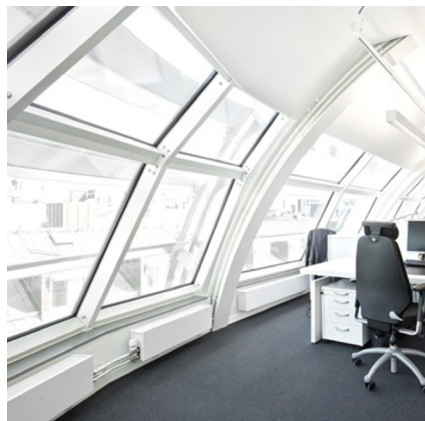


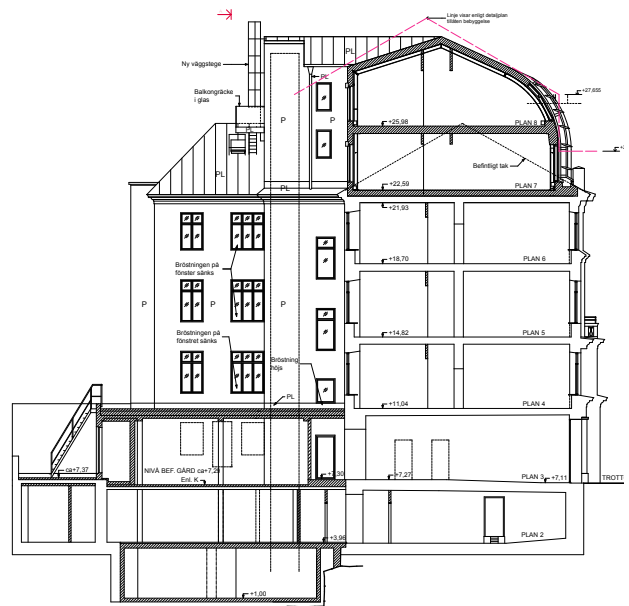
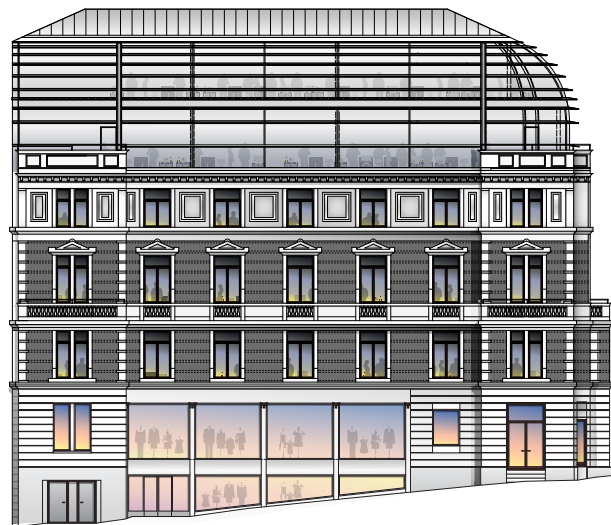
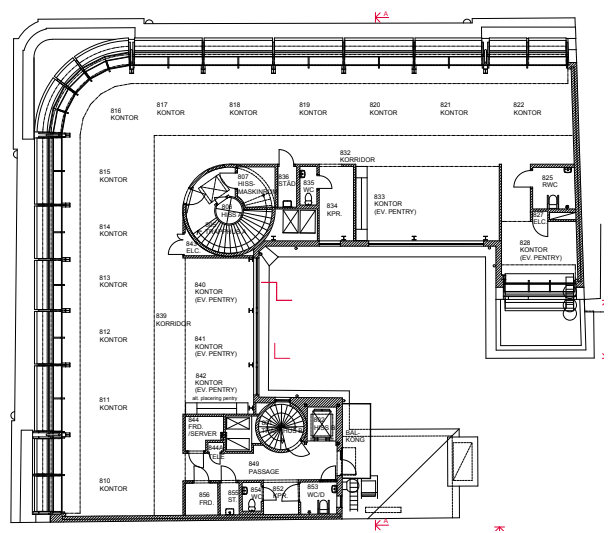
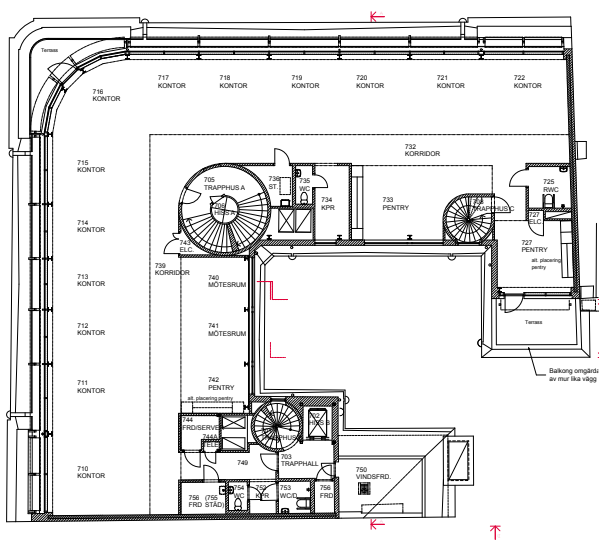


KV VILDMANNEN 10, STOCKHOLM

2.
Architect: Konzept Stockholm
Storage: 95 KVM
Commercial: 790 KVM
Office: 2 198 KVM
Original building year: 1888
Reconstruction: 2009-2010

Two floors of office space were added in a light weight construction with steel and glass. The facade of the existing building was restored and a new climate system was installed.





THE PHOTOGRAPHER'S GALLERY, LONDON

3.

Architect:

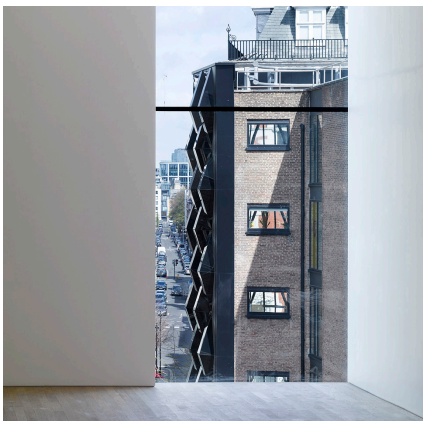
O'Donnell + Tuomey
Architects

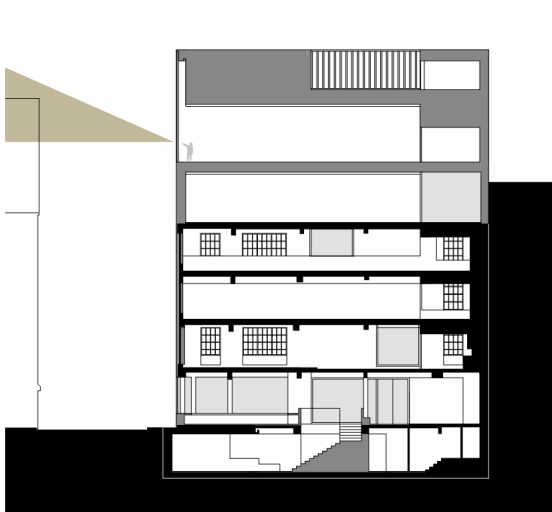
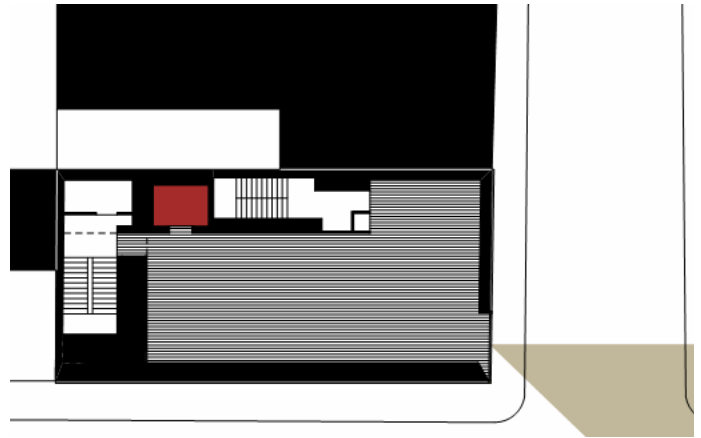
Area: 225 KVM

Original building year: ca
1900

Reconstruction: 2012

The property have
received three new floors
with exhibition area. The
addition is constructed with
light weight steel and a
plaster facade.





FAHLE HOUSE, TALLINN

4.

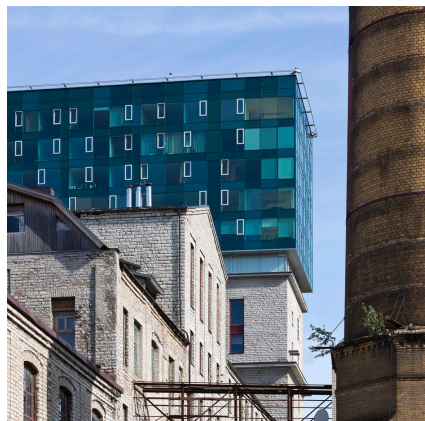
Architect: KOKO Architects

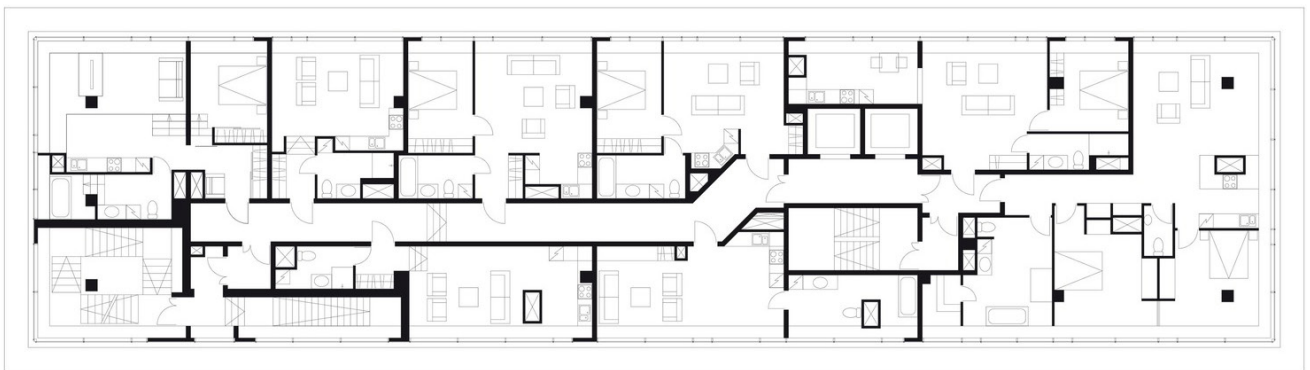
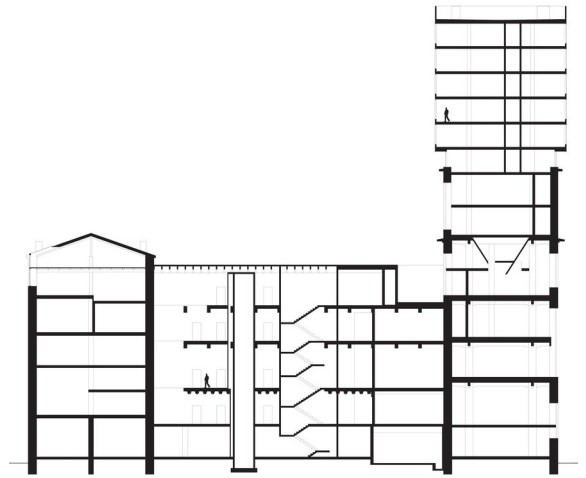
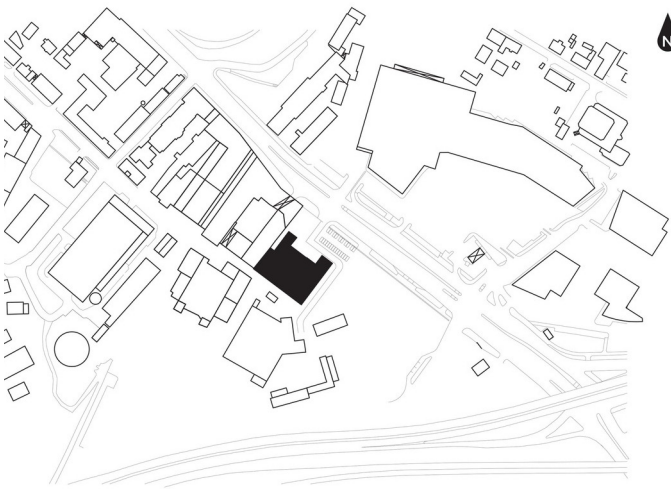
Area: 8800 KVM

Original building year: ca 1926

Reconstruction: 2004-2007

Six floors with apartments have been added to the original building. The entire building have been remodeled and renovated on the inside. The existing building now contains offices and commercial property.





STRATEGY

Based on these four references, four general strategies are created for how an addition can be handled.

MAIN ASPECTS

A lightweight structure; steel or wood

A prefabricated structure

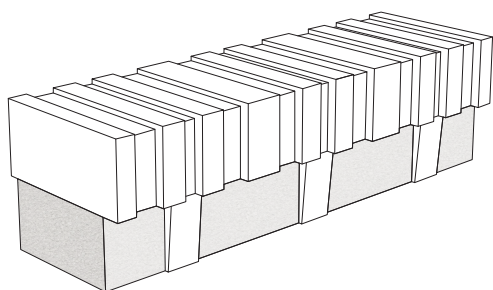
Preferably the staircases remain in the same place,
new elevators are added

Patterns are transferred from the existing façade

Conform to or break the context in a clear way

Materials and colors matched to the existing
context

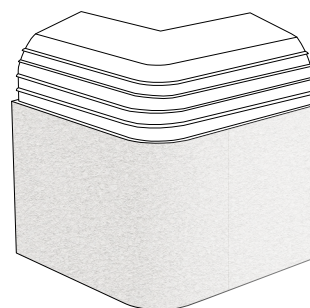
If the existing building is to be renovated, there is a
greater opportunity for modifications as well as to
create a more coherent expression



1.

Bebelallee, Hamburg

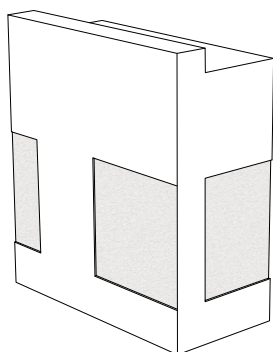
The entire building was renovated and given a new facade. The existing roof was lifted and replaced with 1-2 floors of apartments constructed in prefabricated wood elements and will with time will blend with the brick.



2.

Norrlandsgatan, Stockholm

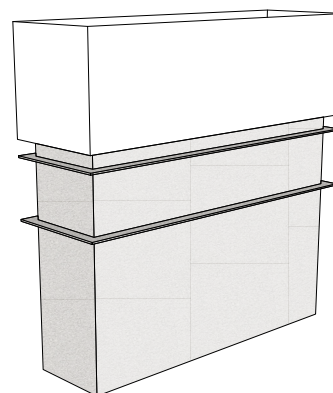
The existing facade was restored, while the attic was removed and replaced with 2 floors of office space. The addition is a glass and steel construction with inspiration from the zinc roofs in Paris.



3.

The photographer's gallery, London

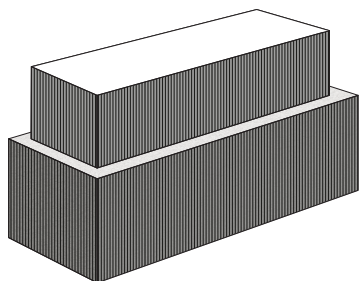
This industrial building was given a lightweight, steel construction 3 floor addition. A black plaster facade wraps around the old brick, that is left in its original state. On the inside all floors are refurbished.



4.

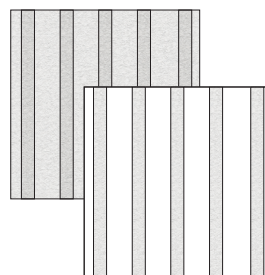
Fahle house, Tallinn

The original building was in a bad state and this 6 floor glass box could easily be added with concrete pillars, that bears the load, extending all the way to the ground.



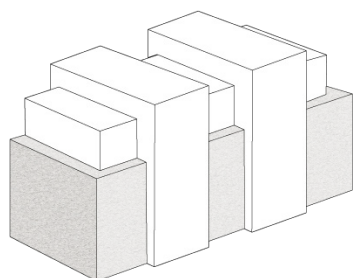
1. Combination

Bebelallee is an example of a strategy that is given more freedom of design by also renovating the facade of the existing building. This provides a wider basis for the process of creating a coherent design as it is possible to choose the both materials together. In the project above the yellow brick facade was replaced with grey bricks and the addition clad with wood, so the two will eventually have a similar color.



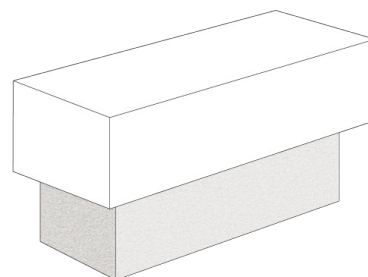
2. Transference

By creating a design that picks up on patterns, colors or materials from the existing building, it is possible to create a design for the addition that match the existing building and its surroundings despite the fact that it can be widely different in style. This strategy is used above, where the original building is from the turn of the 19th century, and the pattern of the grey brick stripes is reused in the metal rails on the addition.



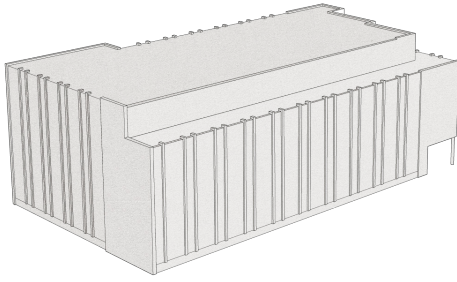
3. Fusion

As seen in the photographer's gallery, one strategy to bind the two buildings together is to extend elements from the addition down to the existing building. This enhances the impression of them as one piece of architecture while it still remains visible which is the original building and which is the extension. This is also a clever strategy when openings in the facade need to be covered due to, for example, change of function in the room.

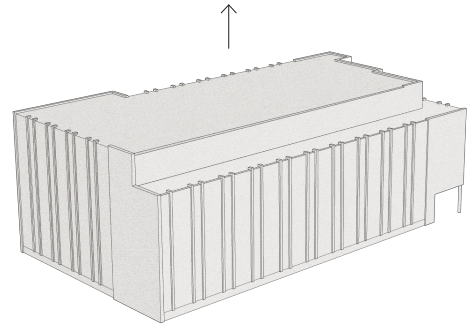


4. Independence

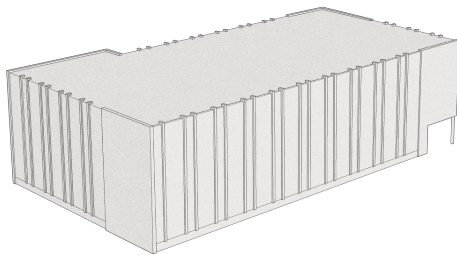
When working with a building where the interior needs to be completely renovated, there are more freedom to create an independent design, as it is possible to insert a separate loadbearing structure. Neither circulation shafts, nor structure need to be shared for this addition, resulting in a design where the expression of the both buildings can be completely independent.



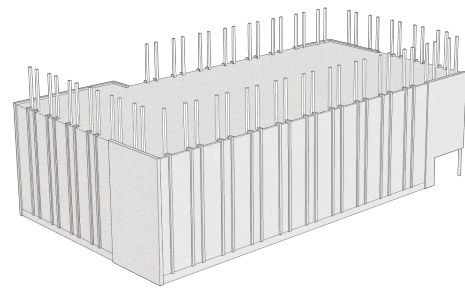
1. The original building consist of 4 floors, of which the 4th is partly pulled back from the rest of the facade, and a basement.



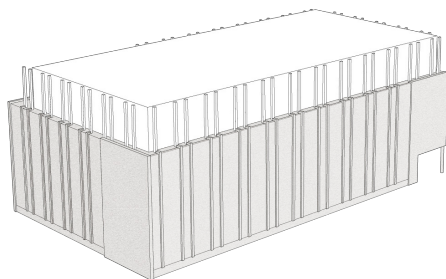
2. The 4th floor is removed to make the shape of the original building more clearly defined.



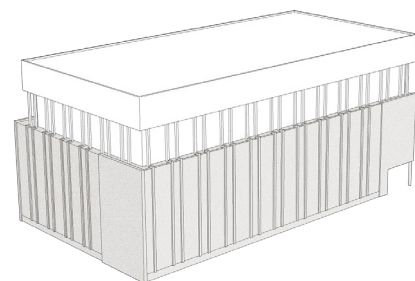
3. The volume remaining after removing the top floor also provides the addition with a better platform.



4. The pillars from the existing building are extended two floor up, bearing part of the load for the addition, and a slightly smaller volume are placed within.



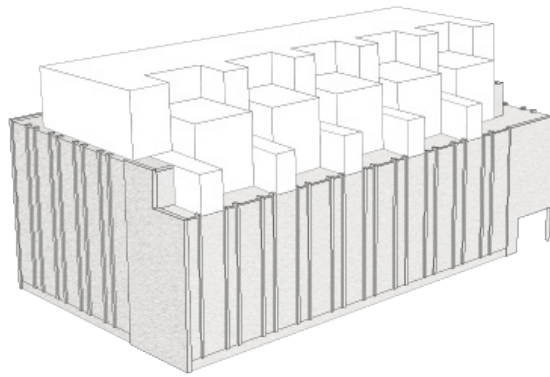
5. Two floors are added that have been pulled back from the existing facade. This highlight the transition between the buildings and the pillars.



6. A 3rd floor is added, extending outside the pillars to the existing facade.

DESIGN PROCESS

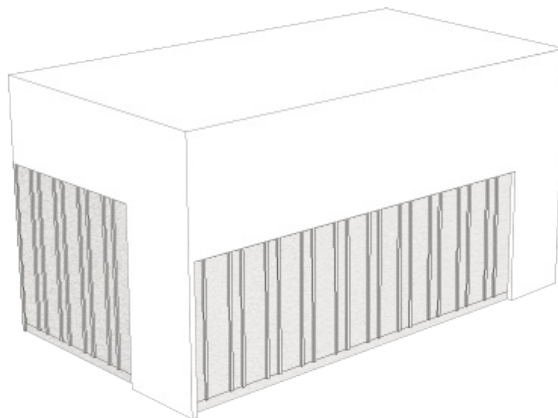
With the strategies as starting point, the design process continued with volume studies and other studies connected to the existing building.



2.

Transference

One of the examples of an addition where the transference strategy is applied. The terracing parts extending are adjusted to fit between the exterior pillars, with every other one in a thinner dimension and every other in a wider.



3.

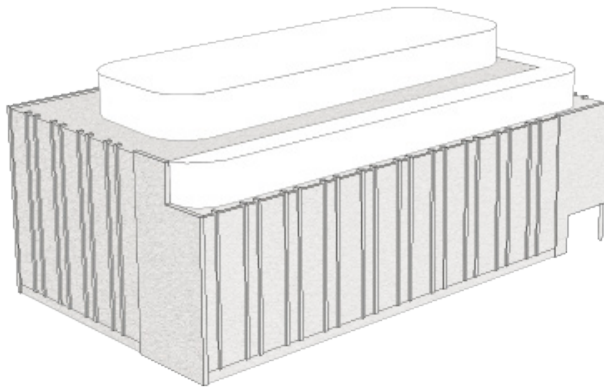
Fusion

Elements of the addition stretch down across the existing building, covering the parts that does not have any window openings. This keeps the structure that is dominating the existing building visible while binding the addition to the existing building.

After making several sketch models two main concepts for the addition were found: either a full addition extending from façade to façade, or a terraced building relating to the pulled back top floor currently in place. The process continued with studying circulation within building and placement of staircases along with division of apartments. The first option was to keep the staircase in its current place but this was difficult and created long corridors and uneven apartments regarding size and day light. Eventually the existing staircases were replaced by two centrally located ones. This ensures maximum use of the façade area, both for the existing building and the addition. The entrances are also moved to the north side of the building.

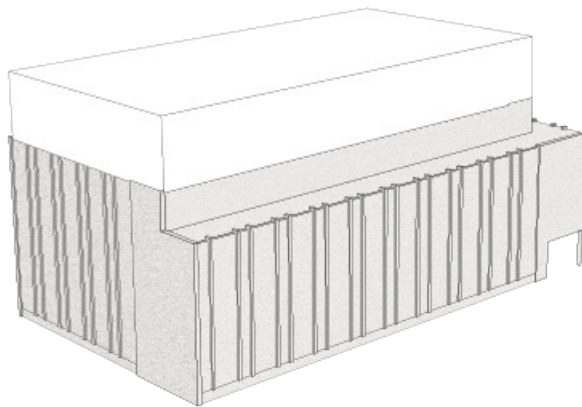
To be able to create well-structured apartments with an even quality across the floors and to use the loadbearing structure of the existing building as foundation for the addition the concept finally became a full addition extending from façade to façade.

The terraced floor of the existing building is removed to give it a more clearly defined shape as well as to provide a better platform for the addition. The first two floors have been pulled back to mark the transition between the buildings. The pillars are then extended and the top floor is extruded to the same length and width as the existing building.



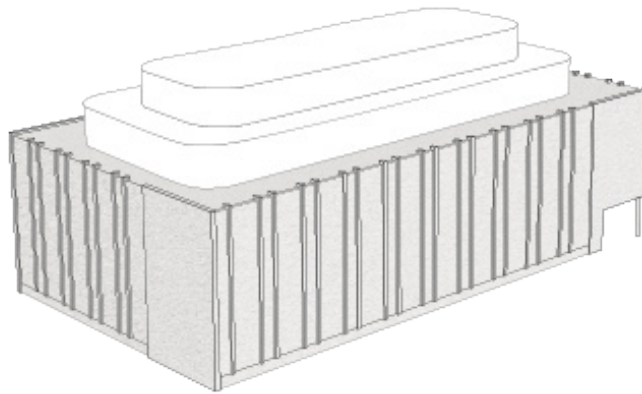
Terraced volume

Example of a terraced volume with fourth floor of existing building remaining. Part of the addition is merged with the existing building for a more coherent look. In this case the building starts to look somewhat cake-like when more than one floor can is added.



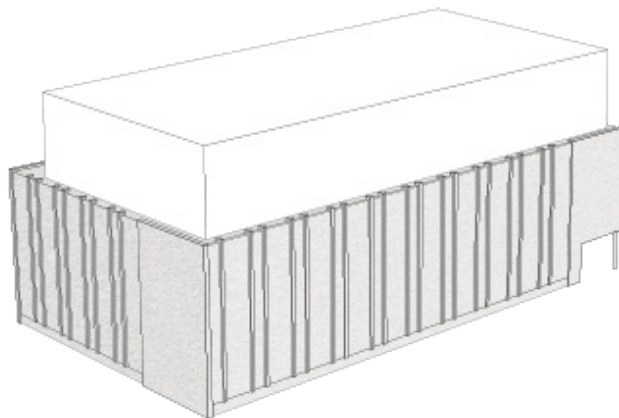
Extended volume

Example of extended volume with fourth floor of existing building still remaining. Addition is added on top of the pulled back floor, giving the building a kind of skewed expression.



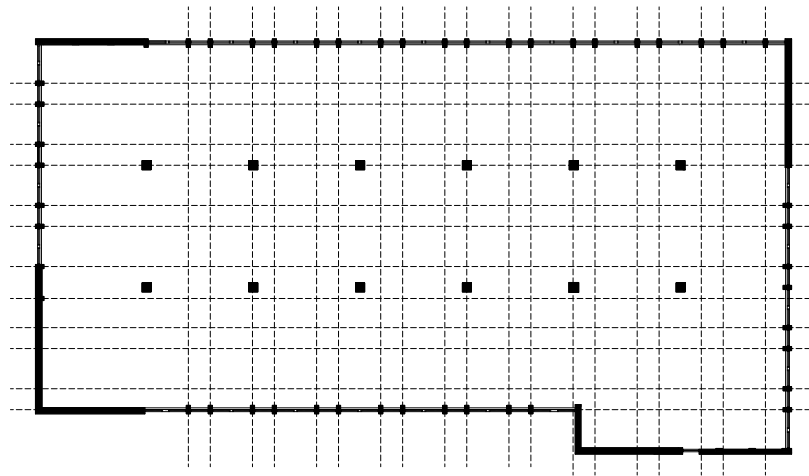
Terraced volume

A similar terraced volume is added on top of the existing building with the fourth floor removed. The existing building is more clearly defined and the structure is better suited for additions.

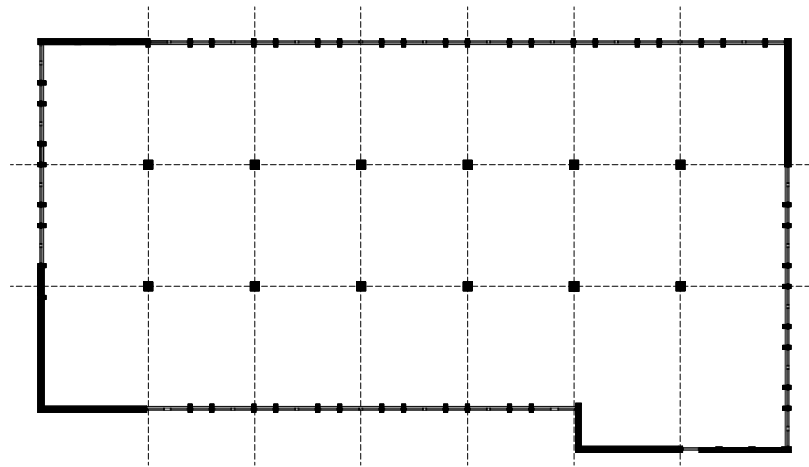


Extended volume

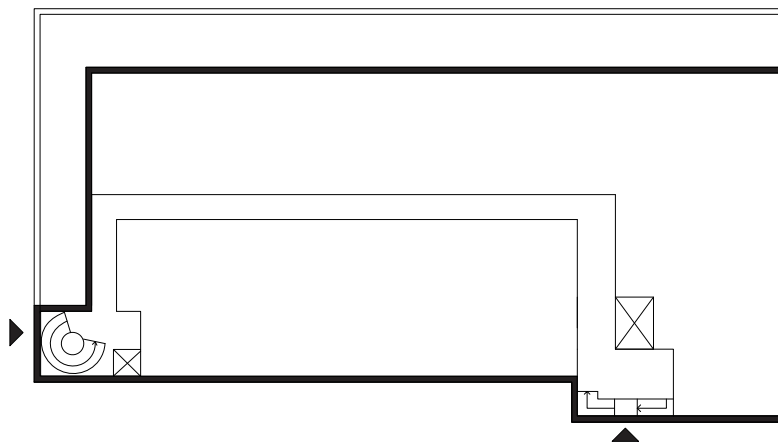
An extended addition is placed on to the more defined building. It is easy to tell buildings apart but more options are provided given the platform. The volume of this extension also compensates more for the heaviness of the existing building.



The outer pillars are placed in a regular structure around the facade. The pillars have the same dimensions all the way around the building but the width between them differs slightly between the short and the long sides.

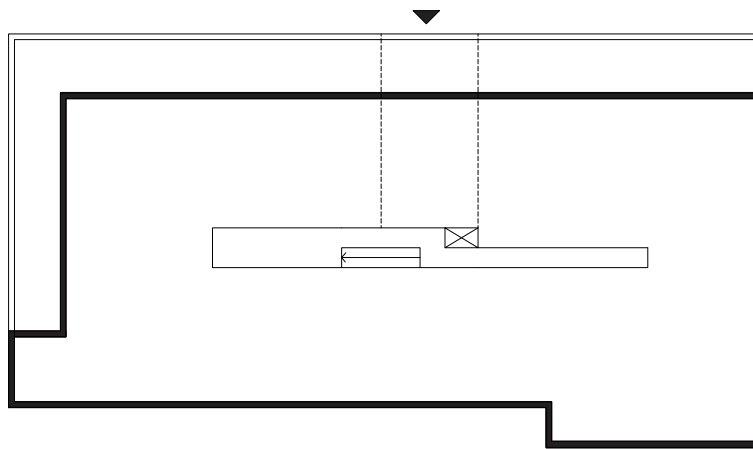


The interior loadbearing structure is placed centrally in the building. The pillars start at 650x650 mm at the bottom floor and the dimension is then decreased with 50x50 mm on each floor upwards. The internal and the external pillars does not share the same structure, and only occasionally coincide, creating some difficulties combining separating walls and window placement in an organized way.

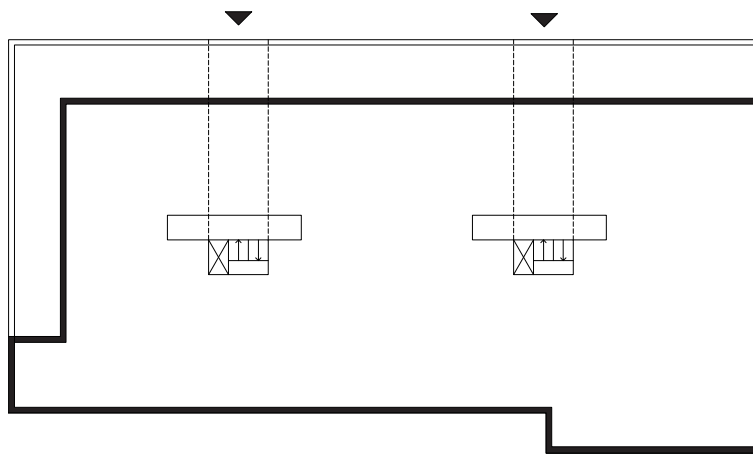


One option is to keep the existing staircases and elevators in their current position and connect them with a common corridor. Construction wise and economically this is the simplest solution.

However, this option results in a long corridor, uneven apartment sizes where some become unproportionally big, as well as making a large part of the facade area unusable for dwellings.



The second option is to have one central staircase with corridors extending towards each short end. This option requires less corridor area but creates problem with emergency evacuation with only one staircase. As in the previous option this also results in difficulties with the apartment sizes as the edge apartments have to become unproportionally big in order to be reached.



The third option is to have two centrally located stairwells. This enables the apartments to be reached easier and organized in a more structured manner while minimizing the space dedicated circulation. Like in the second option this design maximize the use of the facade area, thus creating better lighting conditions for the dwelling.



1. Pulled back facade in corten in combination with lower floor in glass. Top floor resting on pillars



5. Collage-like placement of windows
Untreated wood in the window sill for a warm feeling



2. Division of steel plates



6. Exposed steel structure in the apartments to emphasize industrial connection



3. Loadbearing structure in massive wood combined with a steel frame



7. Kitchen with glass blocks towards the light well provided with more light



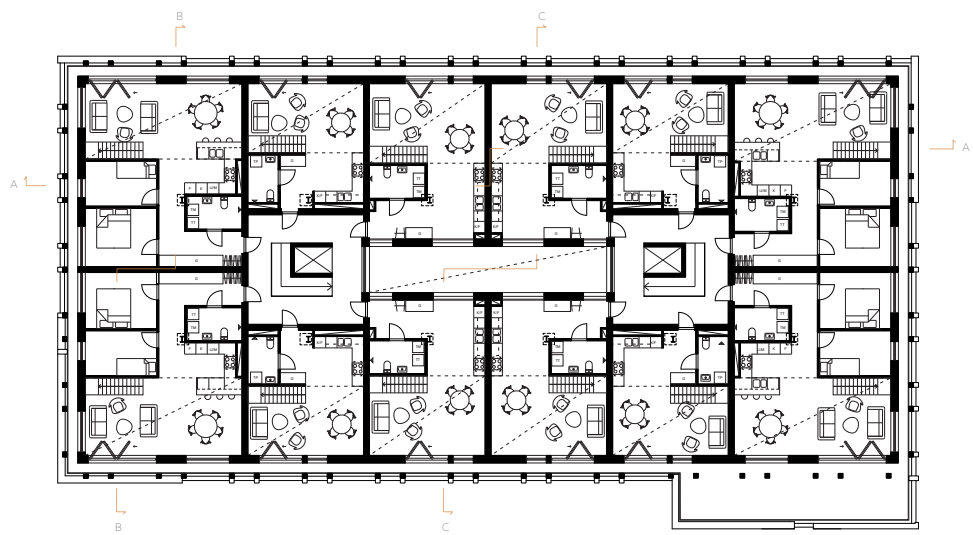
4. Light well with some greenery and glass blocks for privacy



8. Connect exposed steel structure with steel railing and staircase for coherence as well as contrast to the wood

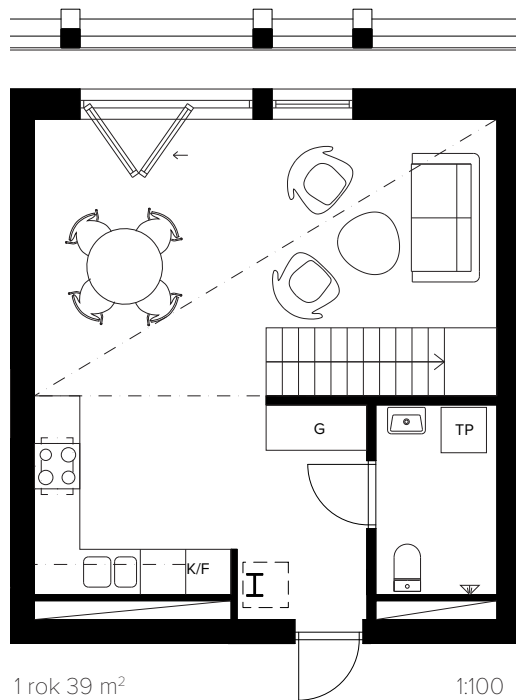
DESIGN PROPOSAL

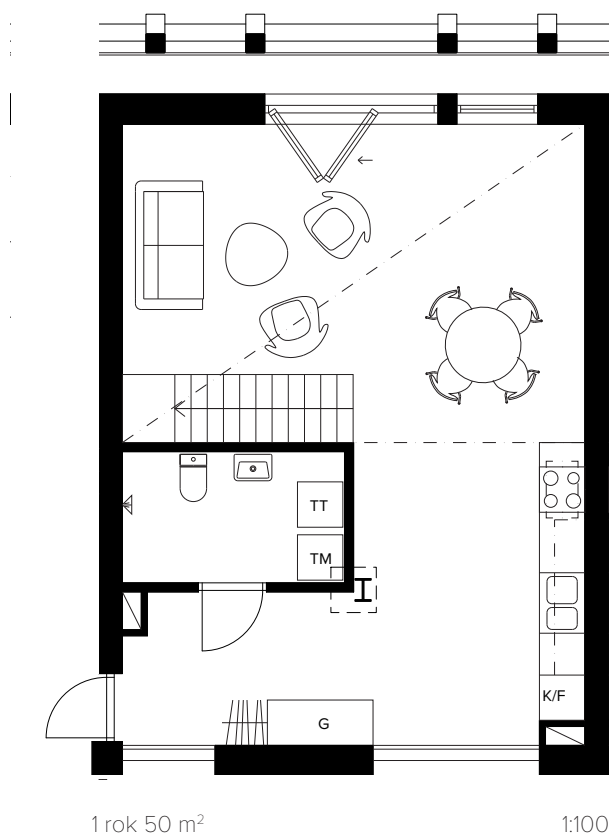
The drawings and
vizualisations of the final
result, mainly based on the
transference strategy, based
on the conditions provided by
the existing building.

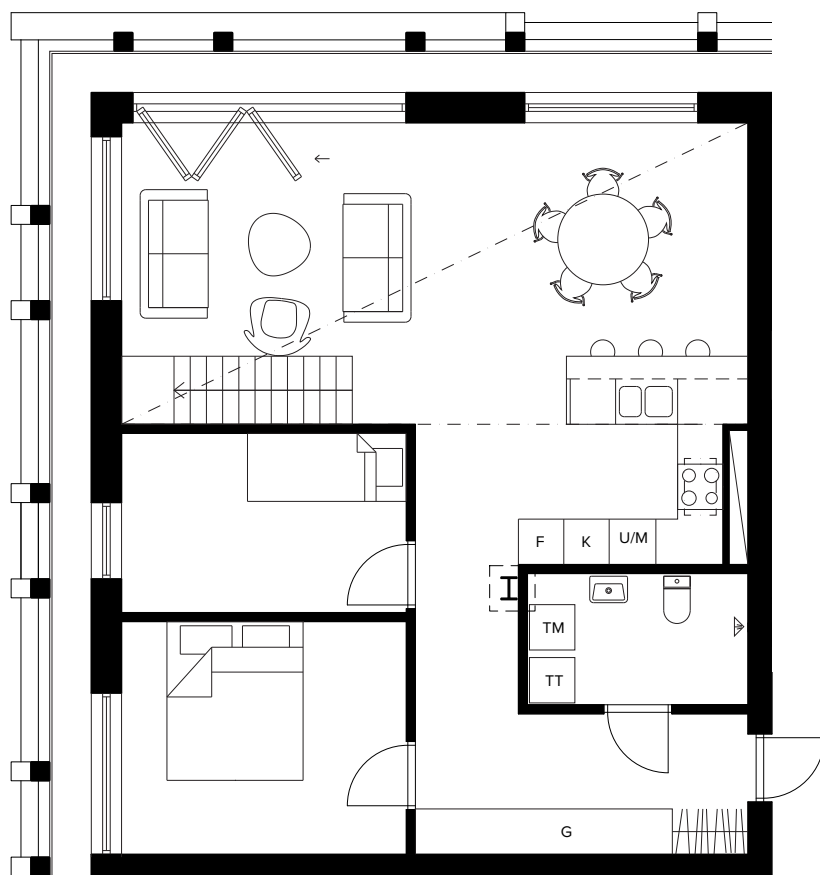


plan 4

1:400

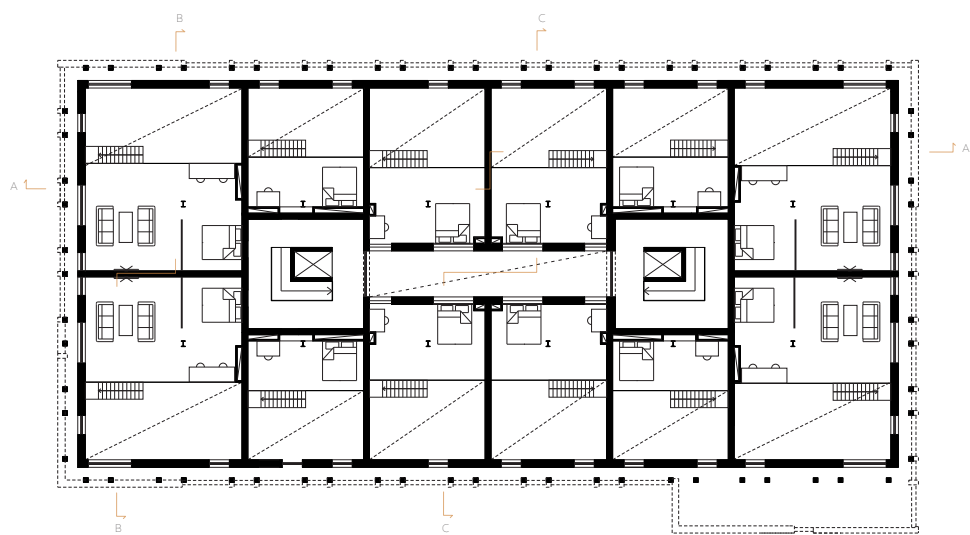






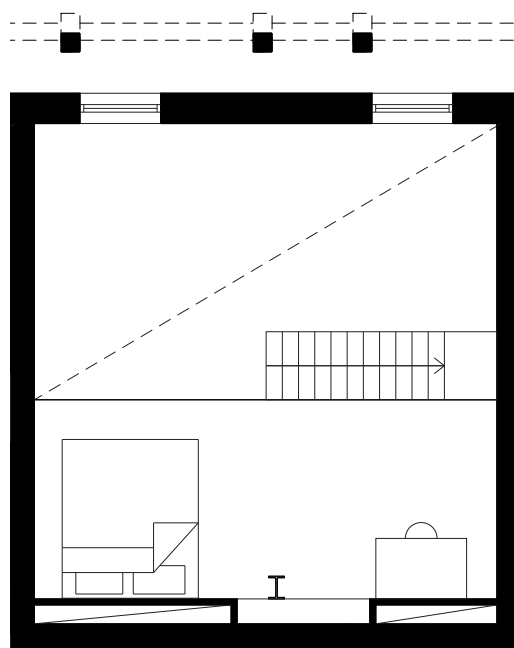
3-rök 80 m²

1:100



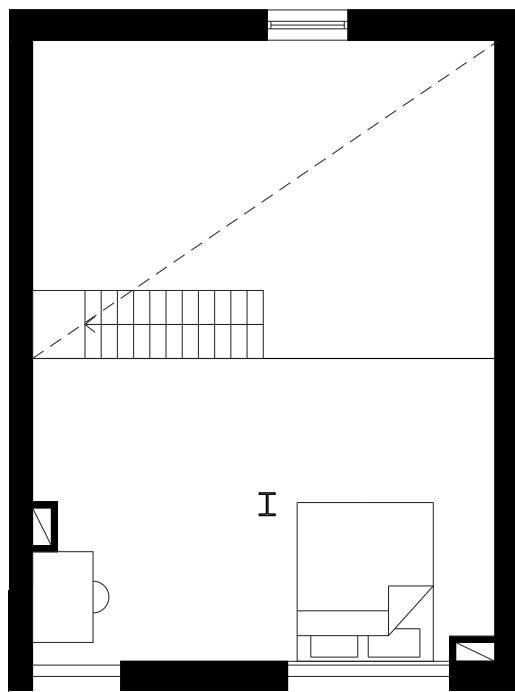
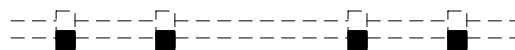
plan 5

1:400



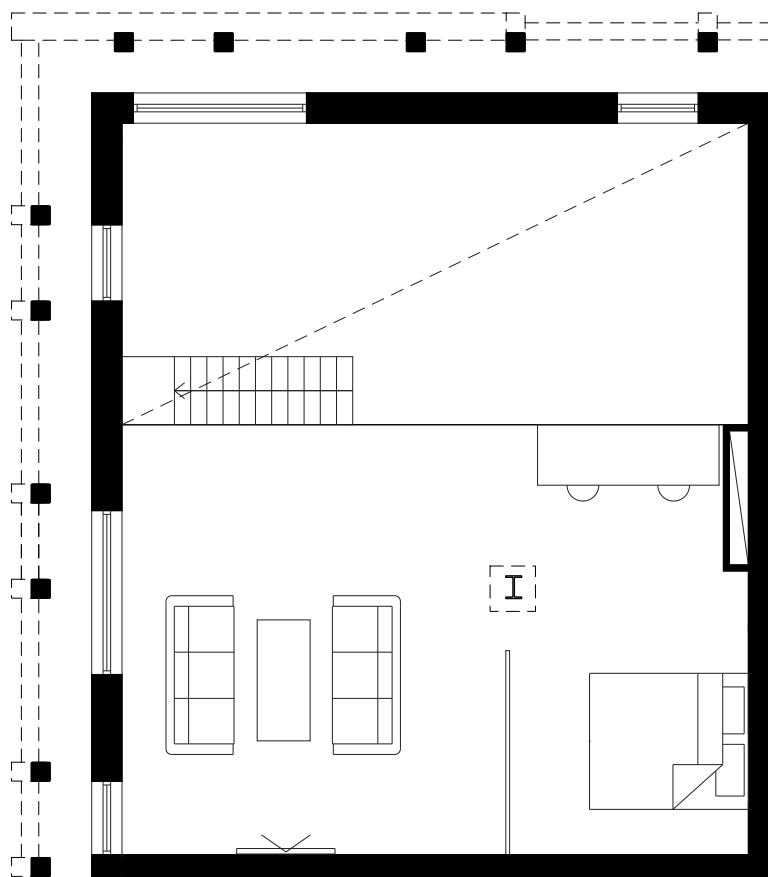
loft 16 m²

1:100



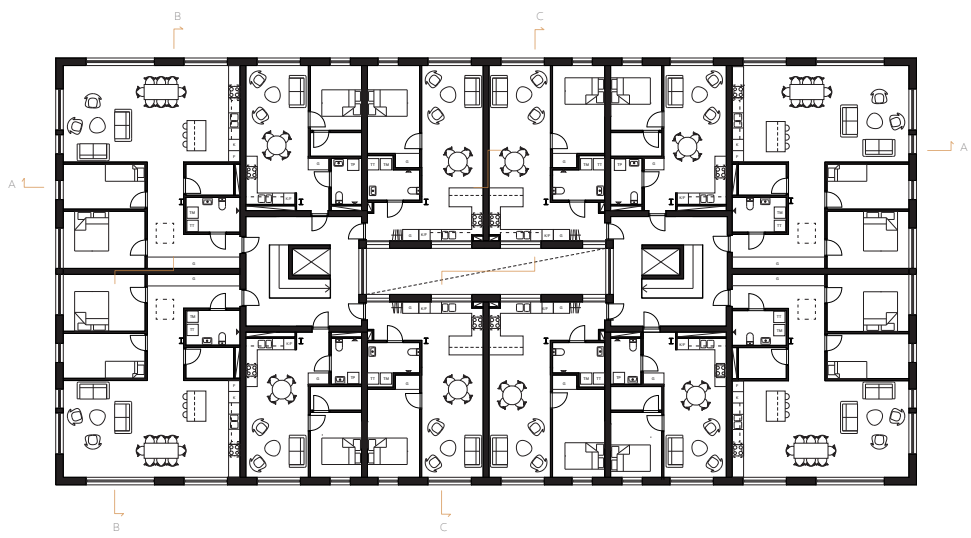
loft 24 m²

1:100



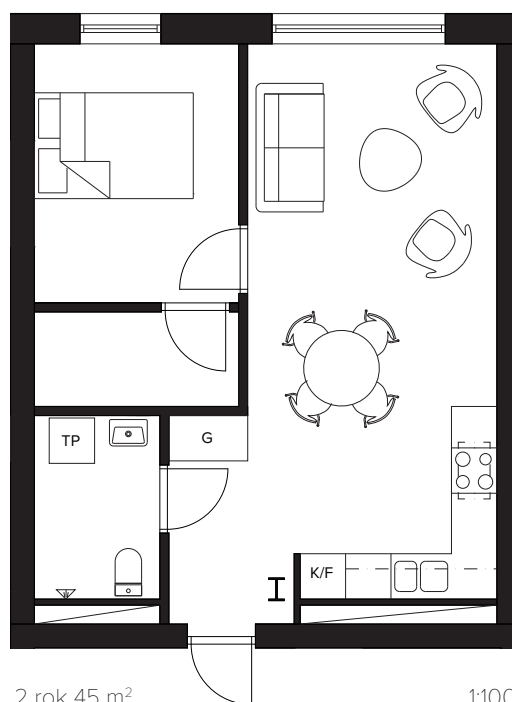
loft 45 m²

1:100



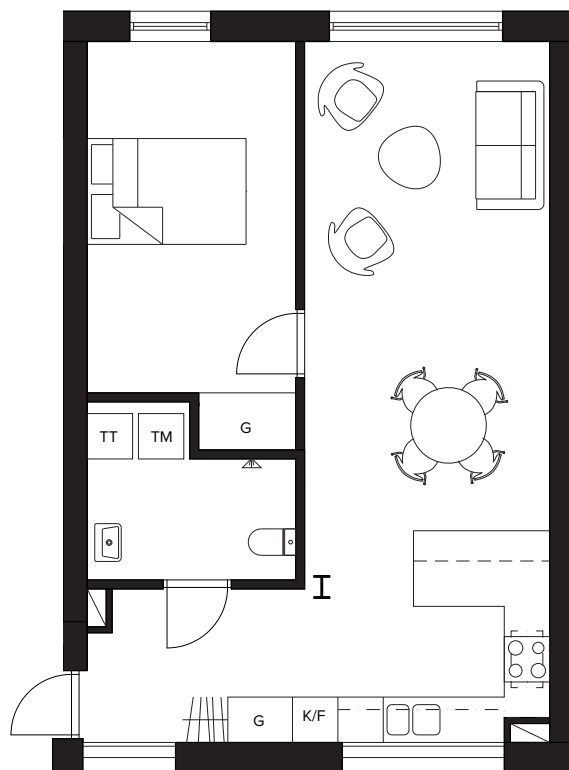
plan 6

1:400



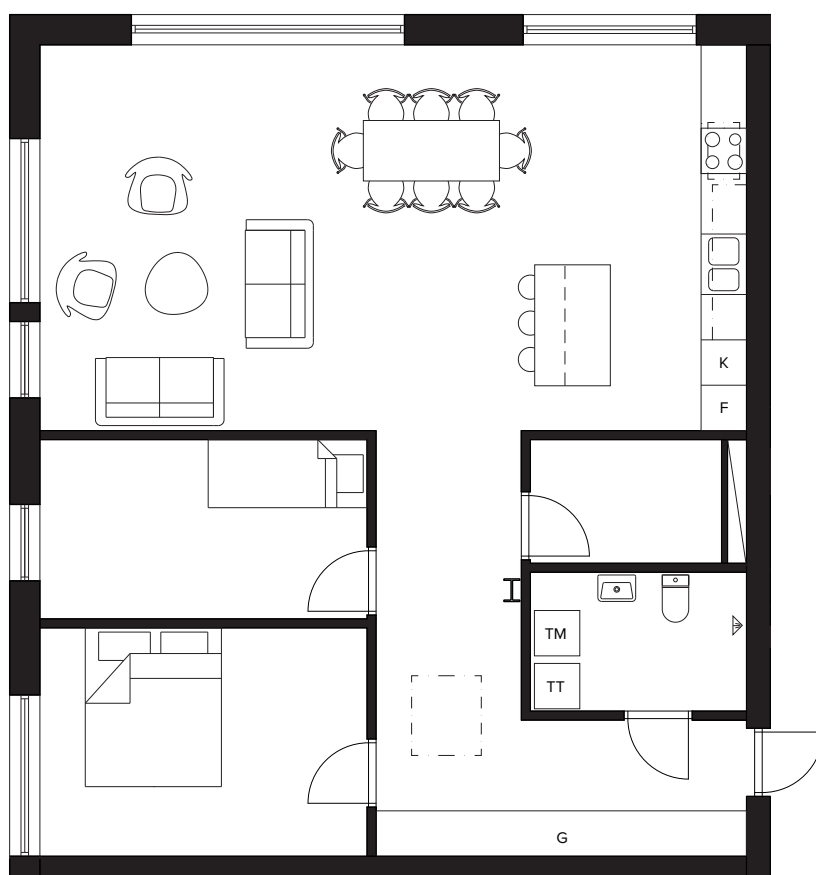
2 rok 45 m²

1:100



2 rok 55 m²

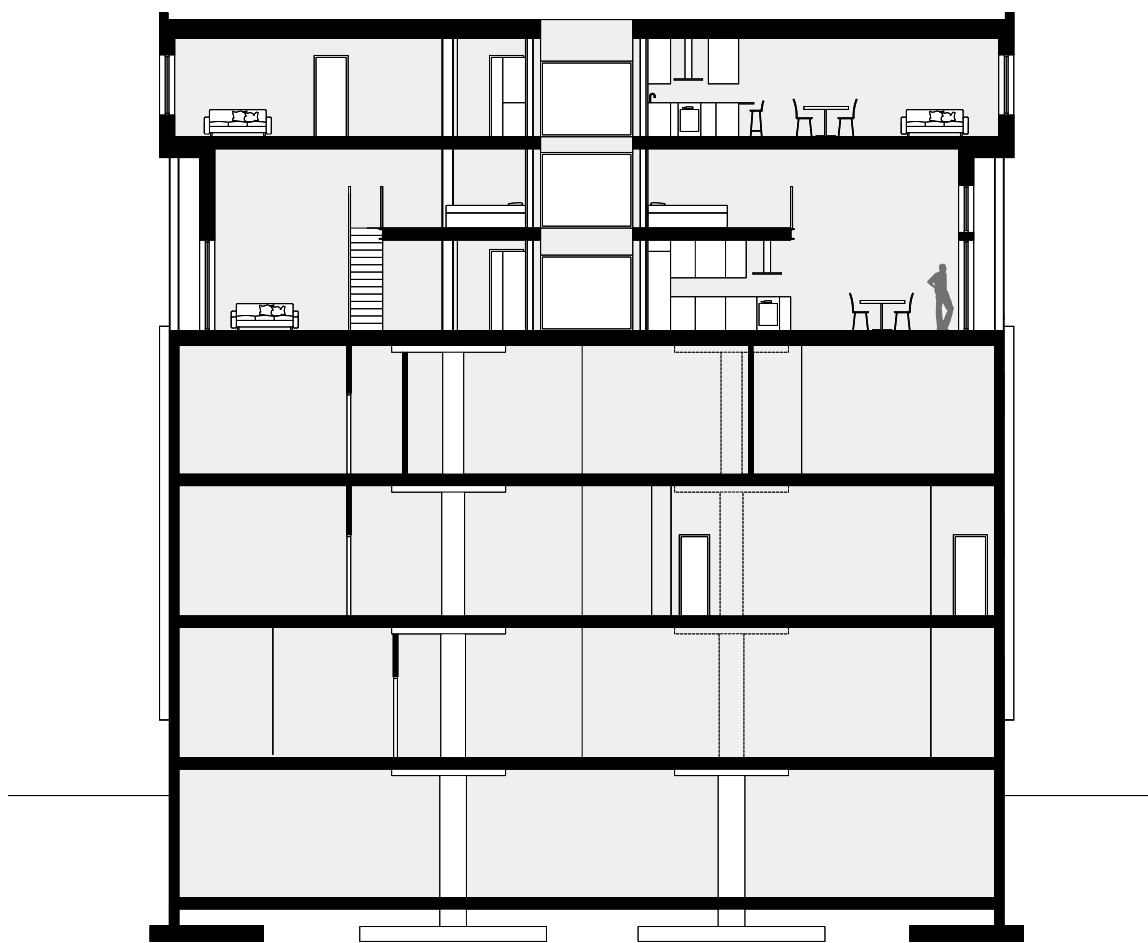
1:100



3 rok 100 m²

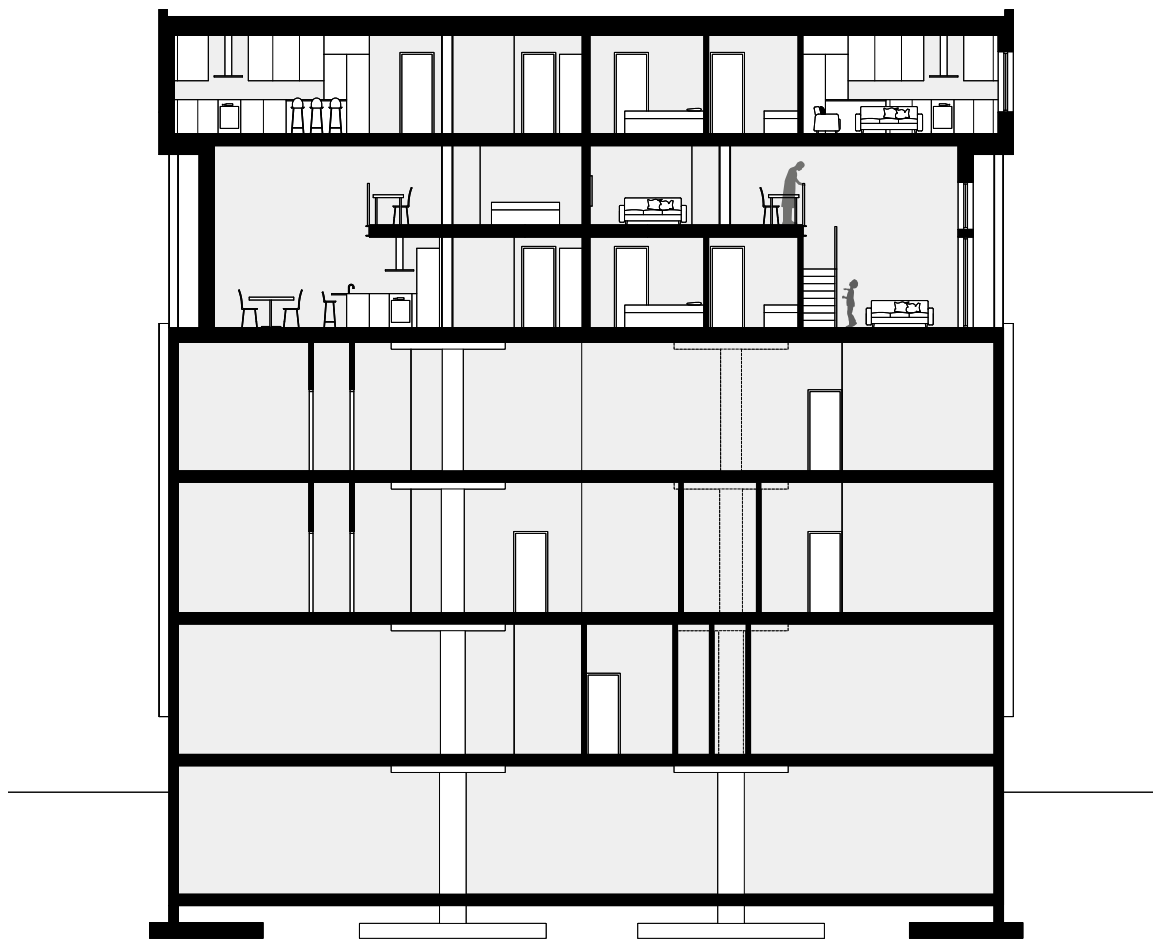
1:100

The existing building was originally planned for the food industry, with production and storage, but have with time been transformed into offices for several different companies. The building is about 22 m wide, which is not ideal for dwellings. In order to get enough light in the apartments, the lower apartments have been designed with double ceiling height. This enables the light to reach deeper into the building. As a result, these apartments are also designed with a loft. A second approach to deal with sunlight is to insert a light well in the center of the building. This also brings light in from the opposite side of the center apartments. For privacy the windows are made with glass blocks.



section C-C

1:200



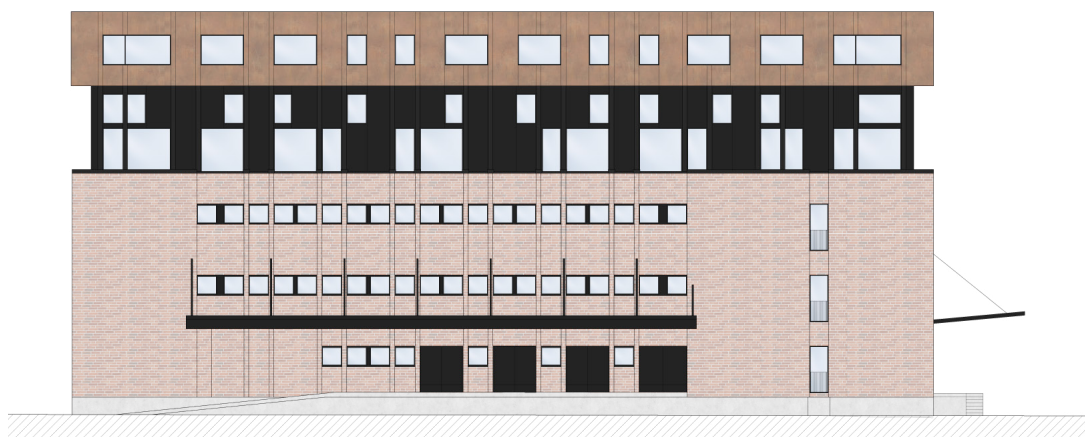
section B-B

1:200

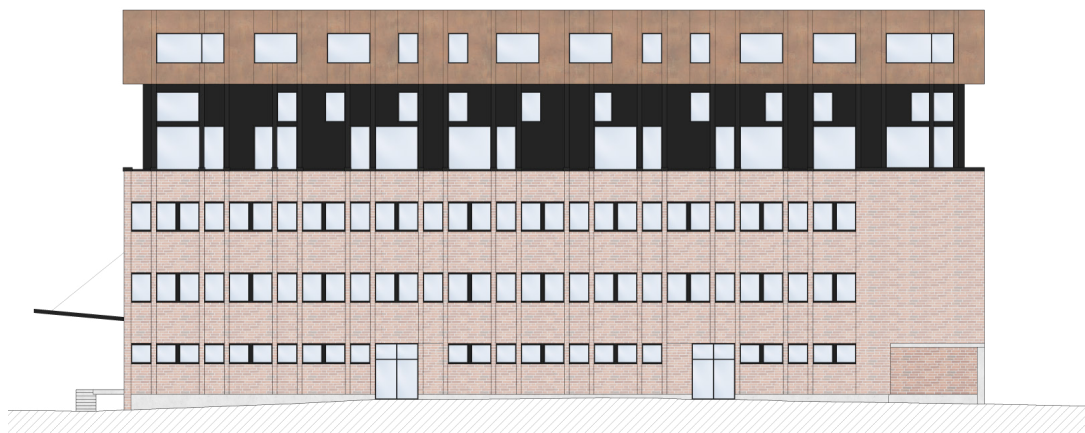


section A-A

1:400

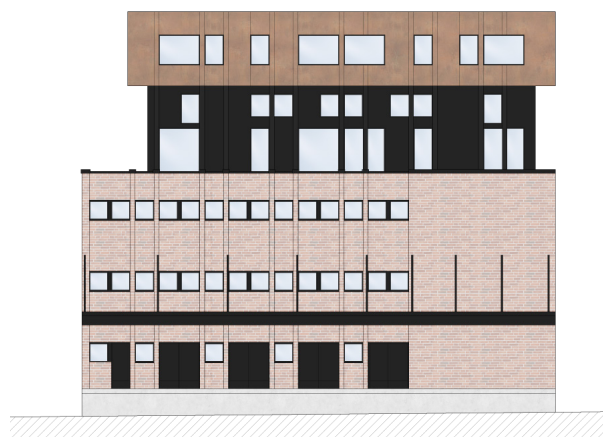


facade southeast

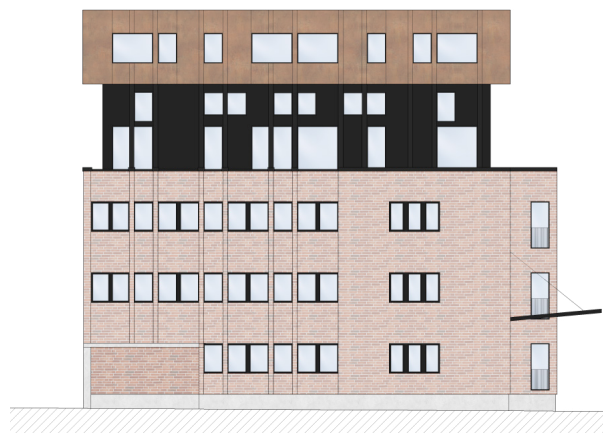


facade northwest

1:400

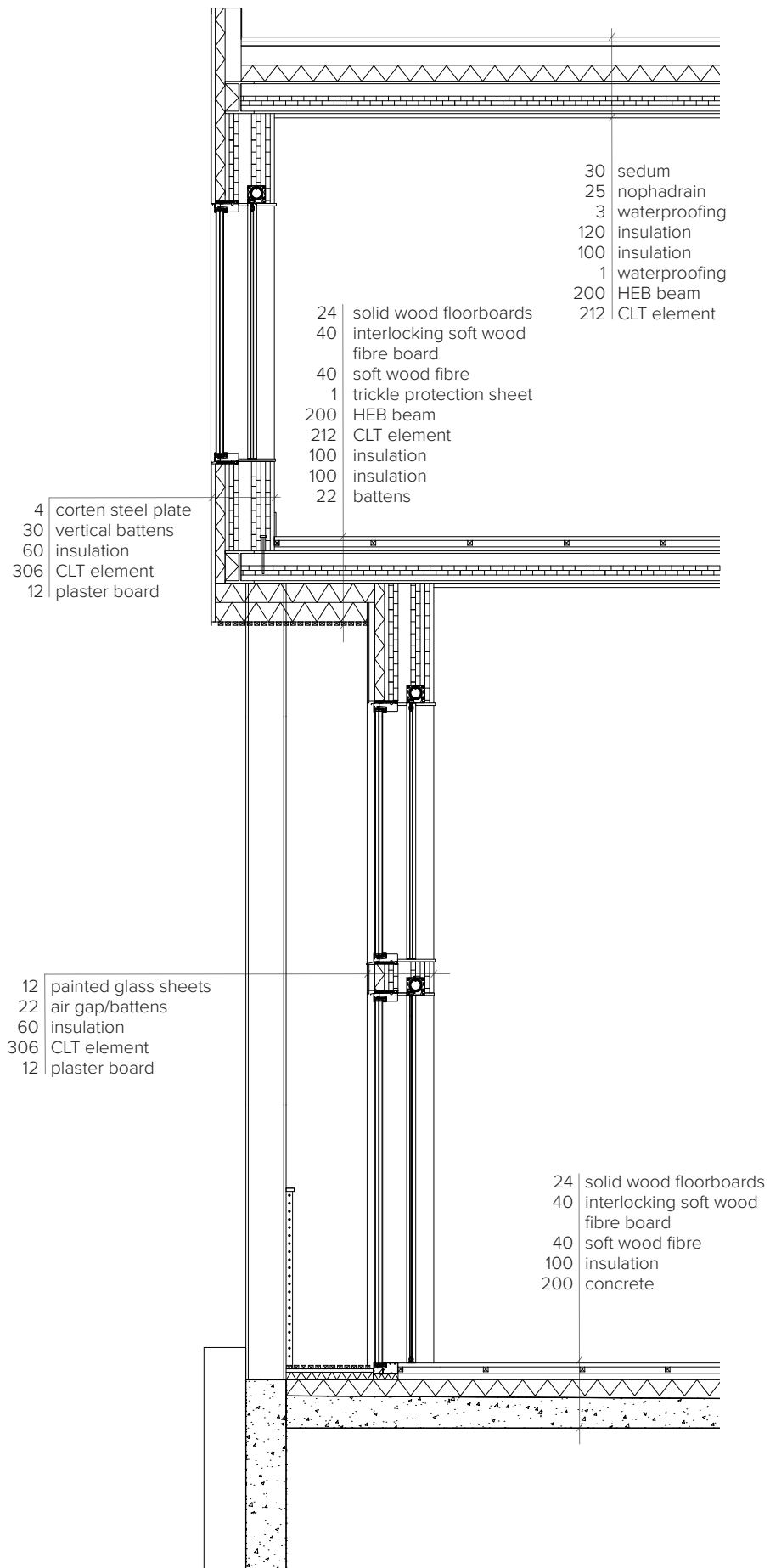


facade northeast



facade southwest

1:400



detail

1:40



facade section

VIEW OF THE SOUTHWEST FACADE FROM THE CENTRAL PARK



VIEW OF THE SOUTHEAST FACADE FROM THE OPPOSITE BUILDING. TO THE LEFT IS THE
CENTRAL PARK AND TO THE RIGHT THE PEDESTRIAN STREET



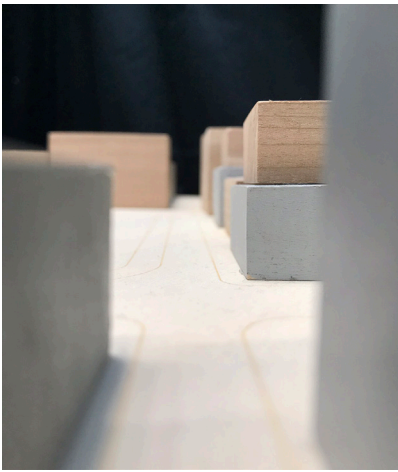
VIEW OF ONE OF THE CENTER APARTMENTS LOOKING INWARDS. IN THE BACK THE GLASS
BLOCKS ARE VISIBLE LETTING LIGHT IN FROM THE LIGHT WELL BEHIND



A VIEW OF HOW THE SOUTH WEST CORNER APARTMENT COULD LOOK. THE CLT STRUCTURE IS VISIBLE IN THE FLOOR AND CEILING, AND WOODEN BOARDS ARE PLACED IN THE CUT OUTS IN THE WINDOW SILLS



PHOTOS



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s. 23

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s. 36-37

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s.40-41

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