

Remontage of the history

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Abstract

In terms of the architectural production today, the question of architectural continuity is highly relevant, particularly in a growing city like Gothenburg where the issue has become widely debated in recent years. It is believed that architects reasonably have more knowledge than politicians about the challenges of their industry. Thus, the task of designing the city should be assigned to them. At the same time the appearance and living environment of a city affects everyone who lives in it. Architecture could be considered as an art form, but also as a social benefit where the opinions of politicians and citizens must be considered.

There are different approaches when designing a new building. Some mean that the architectural production should mimic the historical building context in order to create a cohesive city. On the other hand, it is also believed that new buildings must relate to the present. This thesis aims to reflect upon the concept of designing with historical consciousness and what it could mean for the expression of a building.

The purpose is to explore how a contemporary addition can be designed at Fjärde Långgatan in Gothenburg with the main focus of the relationship between contemporary and history. The investigation is made through research by design, where an in-depth analysis of the existing built environment forms the basis of the design proposal. The process is conducted and explored through sketches, drawings, digital modelling and with a great focus on physical models.

The proposal strives to create a sustainable architecture, both in terms of architectural robustness as well as in the choice of materials, where historic building references in nature of rhythm, proportions and details have been an important source of inspiration.

Keywords: Architectural continuity, historical consciousness, contemporary addition

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I. Introduction

Aim & purpose

Regarding the architectural production in Sweden today, there is a lack of qualitative architecture, especially in terms of the exterior design, often due to economical and time aspects. This has led to new buildings being perceived as rather monotonous, without a clear identity, compared to historical architecture with its richness of details and robust materials.

The purpose with this thesis is to explore how a contemporary addition can be designed in a historical context. The thesis examines the relationship between architecture and history, where the existing built environment is analysed to form the basis for what is added. Furthermore, the aim is to investigate how historical consciousness can be expressed in the design of the addition where modern building techniques are used in combination with traditional materials.

Research question

How can a contemporary addition be integrated in a historical context and create an architectural relationship to the history?

Background

The discussion about architecture production, especially in Gothenburg, has in recent years mainly revolved around the historical legacy. There is great disagreement about how the city should be designed and there are several alternative paths to take. Some argue that new buildings should mimic the existing, while others believe that the architectural production may well be in contrast. Contemporary architecture should reasonably reflect its time and be able to stand on its own. Regardless, one can determine that these different approaches will influence the cityscape. The question of architectural continuation is highly relevant and worth elucidating from different perspectives.

Architecture in the turn of the century style, with its richness of detail and genuine materials, is today perhaps one of the most appreciated and coveted buildings in Gothenburg. The architectural production today is often affected by limited finances and time, which affects the ability to create qualitative architecture with a sense of soul.

McEwan (2018) means that there is a crisis of knowledge in today's society which in extension has led to historical amnesia within the field of architecture. He argues that knowledge should be understood as historically and collectively produced. Today, knowledge is heavily geared towards a mindset that prioritizes individual entrepreneurship, management, and consumerism. Further he states that we need to affirm historical consciousness and see history as a foundation for projective potential.

"We need to understand the projective potential of the history of architecture as an accumulation of formal knowledge: critical principles, creative approaches, analytical strategies, spatial forms and concepts to be rethought, reframed and transformed for project thinking."

- McEwan

This thesis will try to address these kinds of questions about how architects can approach history and knowledge in a city like Gothenburg, where the concept of designing with historical consciousness is highly present in the architectural debate.

Methodology

The thesis is developed through a research by design method. In the initial phase (I), a theoretical framework is introduced through literature studies, theories and problem statement followed by an analysis of relevant reference projects in relation to the thesis question. The second phase (II), introduces the context of the project, including a site analysis that focuses on the existing built environment and a study of important historical buildings in the area. The design proposal (III) is conducted and explored through sketches, physical models, drawings and digital modelling, where the work continuously focuses on the narrative between history and contemporary. The concluding phase (IV), contains a discussion about the thesis and its outcomes.

Delimitations

The focus of the thesis lies within the aesthetics of architecture where the project prioritizes the building's design and expression above more practical solutions or economical aspects. Furthermore, the main investigations concern the design of the building in its entirety, focusing on the volume and expression in relation to the context. Physical models will primarily explore the aesthetics and expressions of the facades.

Theory - Historical consciousness

In the chapter *History as a model. Models as history* (2016) the Architectural historian Atli Magnus Seelow gives an interesting view of the problematic relationship of architecture and history. He refers to the essay *Untimely Meditations* where mankind is described as a being with the ability to remember and thereby create culture. Seelow means that architecture and art are two of the most significant testimonies from a bygone era. The experience of historical architecture allows the boundary between past and present to dissolve and develop a historical consciousness.

Violett-le-Duc was one of the most important architecture theorists of the nineteenth century. He aimed to develop the idea of architectural history regarded as a sequential development of building types derived from the original prototypes whose principles should remain unchanged. In a way, one could say that Violett-le-Duc, among other architecture theorist at this time, strived to separate principles and constants from history in order to track the forces of change in the society (Seelow, 2016).

Further Seelow (2016) states that the industrial revolution, and the urbanization and technical progress it brought, had an impact of the view of architecture history. Architecture at this time became less capable of harmonizing with the reality of time and thus a lost relationship with history. Therefore, one could argue that modernism, in some ways, was a break with history. The First World War and the revolutions in Russia and Germany had reduced the monarchies and the influence of their cultural hierarchies. This gave rise to the breakthrough of a non-historical and international type of architecture, with a main focus on function, materials and technology.

After the Second World War, the relationship between architecture and history grew stronger in Europe. Italy advocated this movement, where a strong connection to tradition, culture and history always had been evident. In the book *L'architettura della città*, Aldo Rossi describes the city as a mechanism developed through history, characterized by a continuity, with a permanence through changing areas of use (Seelow, 2016).

The question of architectural continuity and historical consciousness is highly relevant in the architectural discourse today. There is a desire to look back at the history of architecture in order to study, learn and preserve it. However, there is also a great focus on the future and the possibility of improved construction technology for a more sustainable production. In the book *Experiencing Architecture* (1964), the Danish architect Steen Eiler Rasmussen reflects upon the relationship between contemporary and history. He firmly states that it is impossible to copy beautiful architecture from a previous era, without creating something false. A new building must relate to the present time, in which it will exist.

"The beauty of the city lies in the overlapping of the fabric and image."

- Aldo Rossi

Immeuble d'angle, 18e , Paris
Armand Nouvet, 2018

The building is located on a small triangular plot of 200 square meters, at the intersection of two streets. The facade of concrete in a warm grey shade along with details characteristic of the Haussmannian architecture, naturally blend into the surrounding historic environment. The architect has also drawn inspiration from the typical Haussmann apartment and its layout. Thanks to a loggia, a heated room placed between the living room and the kitchen, double circulation is created within each apartment (Dubet, 2018).

Inspiration can be drawn from the design approach in relation to the historical context and the architecture heritage. The building structure follows the classic Parisian apartment building but with element of modernity, such as window proportions and in the choice of materials.



Figures 1. Armand Nouvet , Immeuble d'angle

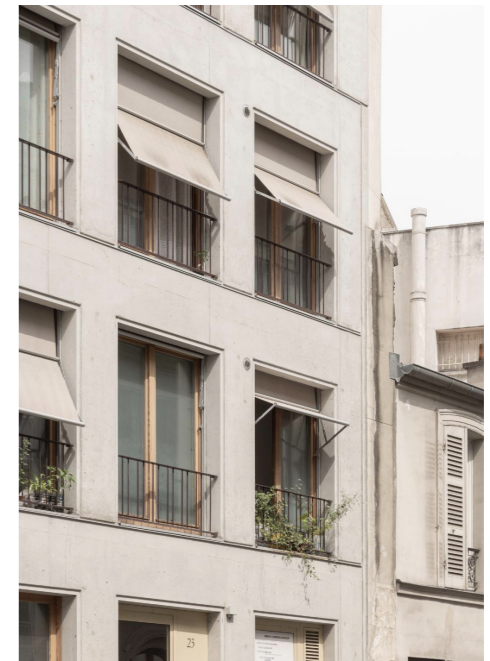


Figure 3-5. Armand Nouvet , Immeuble d'angle

Casa Albergo, Milan
Giulio Minoletti, 1965–1970

Casa Albergo of Minoletti is characterized by the experimentation of bourgeois residential architecture in the late 1960s. The design examines modern types of living spaces, the relationship between architecture and nature, and the synthesis between modernity and classicism. Three large sections of loggias, open to the Sempione Park, with a stone structure of columns and architrave rest on a robust base. The major innovation of the building includes eleven double-height apartments distributed along a central corridor on each floor (Lombardia Beni Culturali, 2019).

The building is an example of a renewed form of apartment design with an exterior inspired by the bourgeois buildings of Milan, although simplified, without any decorative elements. The proportions of the stone base can be found in nearby buildings, while the double-height apartments contributes to a different type of horizontal division.

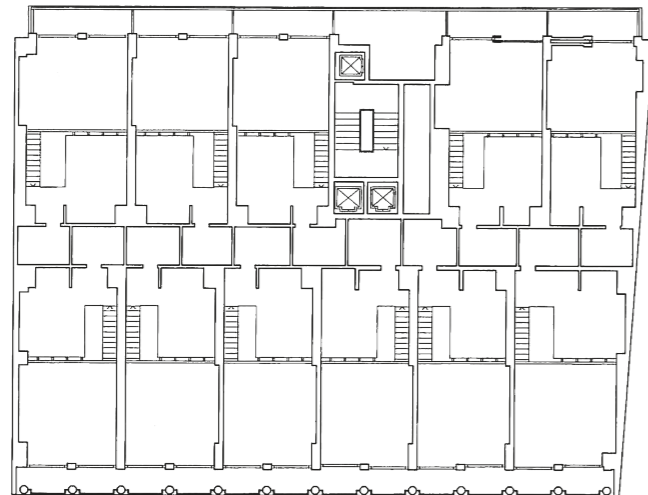


Figure 6. Giulio Minoletti, Casa Albergo



Figure 7. Giulio Minoletti, Casa Albergo

Remise Immanuelkirchstrasse Workspace, Berlin
JWA Berlin + Ralf Wilkening Architect 2020

The ruins of an old carriage house, located at the back of an apartment building in the Prenzlauer Berg district, were the starting point for the project. The architects have drawn inspiration from the typical historical building structure of Berlin; a front building, a back building, and then a remise, the carriage house, often used for artisans. It consists of a wood composite structure in combination with exposed concrete, characterized by lightness, both in the construction and in the sense of spatiality (Pintos, 2021).

Particularly interesting in the project is how the function of the building reflects the demolished structure, the carriage house, but in a modern execution, both construction and material wise. The rational building structure is clearly visible and influences both openings and room division.

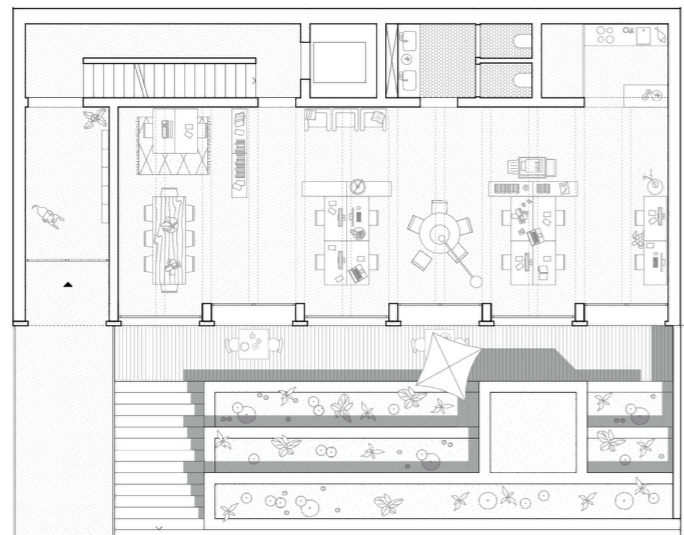


Figure 8. JWA Berlin + Ralf Wilkening Architect, Remise

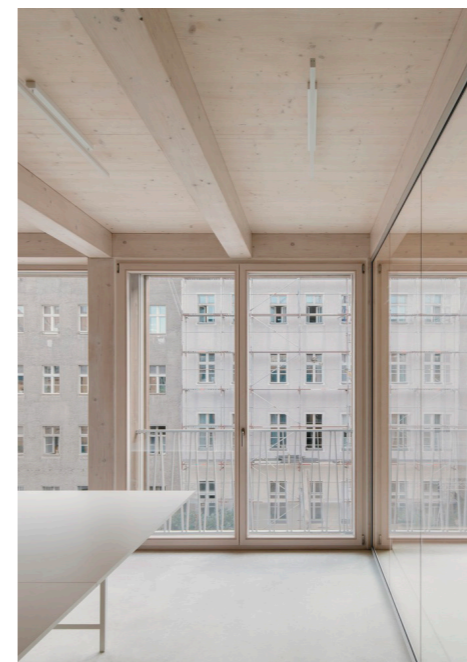
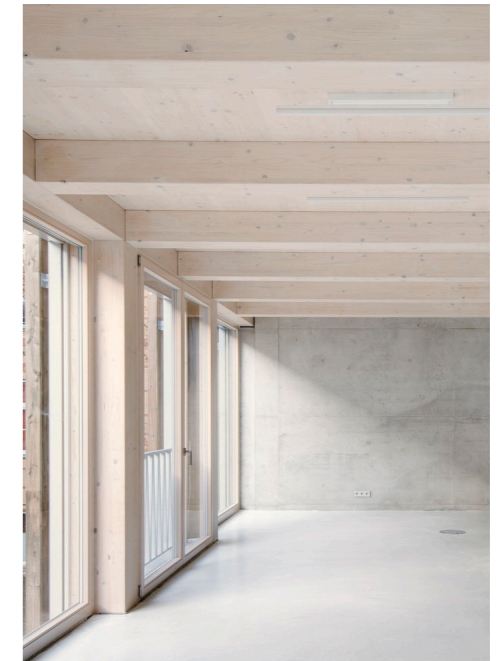


Figure 9-12. JWA Berlin + Ralf Wilkening Architect, Remise

Urban Infill, Berlin
Appels Architekten, 2022

Urban Infill is a small-scale architecture project located in the neighbourhood of Prenzlauer Berg (N113). The footprint of the former building, destroyed during the war, perfectly matches the new building to fill the previous void in the block. The contemporary addition includes 24 newly constructed apartments along with two courtyards, each with its own unique character. The building's rough materialization, in form of the plastered facade and concrete elements, harmonious with the traditional architecture of the block, in combination with elements of wood in contrast to the roughness (Lei, 2023).

This is an infill project, tailored to the site, where every situation in the building has been designed according to its prerequisite. Particularly interesting are the two-story apartments on the ground floor; designed to offer more privacy for the residents and an opportunity to create different living situations on separate floors.



Figure 13. Appels Architekten, Urban Infill



Figure 14-17. Appels Architekten, Urban Infill

II. The site



Figure 18. Demolished building, Fjärde Långgatan 9

Site analysis

The chosen project site is located in the area Masthugget, as part of a historical area from the early 1800s in the inner city of Gothenburg. In 1823, the first official plan for the expansion of the street network in Masthugget was made with a close connection to the port. Through the 1866 large town plan, the area's current structure was established with a grid street system. The expansion was carried out around 1870-1910 and the new buildings were mainly built out of stone in between three and six stories (Hultgren, 2012).

The close distance to the harbour was initially decisive for the everyday life in the area and for its identity, of which there are traces today when the area has become a central place of gathering in the city. The neighbourhood is characterized by variation of aesthetics, time layers and volumes. A dense settlement has contributed to a small-scaled and diversified architecture with a mixture of residential, commercial and industrial buildings. Sight lines through the block create a connection between the streets and enable passages. The densely built structures generate significantly small courtyards, often containing complementary buildings (Hultgren, 2012).

The project site is located at Fjärde Långgatan 9. Previously one of Linnéstaden's oldest buildings stood on the site until it was demolished in 2021. The demolition was criticized by many of the citizens from a cultural-historical point of view.

1. Fjärde Långgatan 13

2. Fjärde Långgatan 11

3. Fjärde Långgatan 9

4. Oscar Fredrik Church

5. Old Police Station

6. Hagabion - Cinema

7. Tram station - Prinsgatan

8. Järntorget

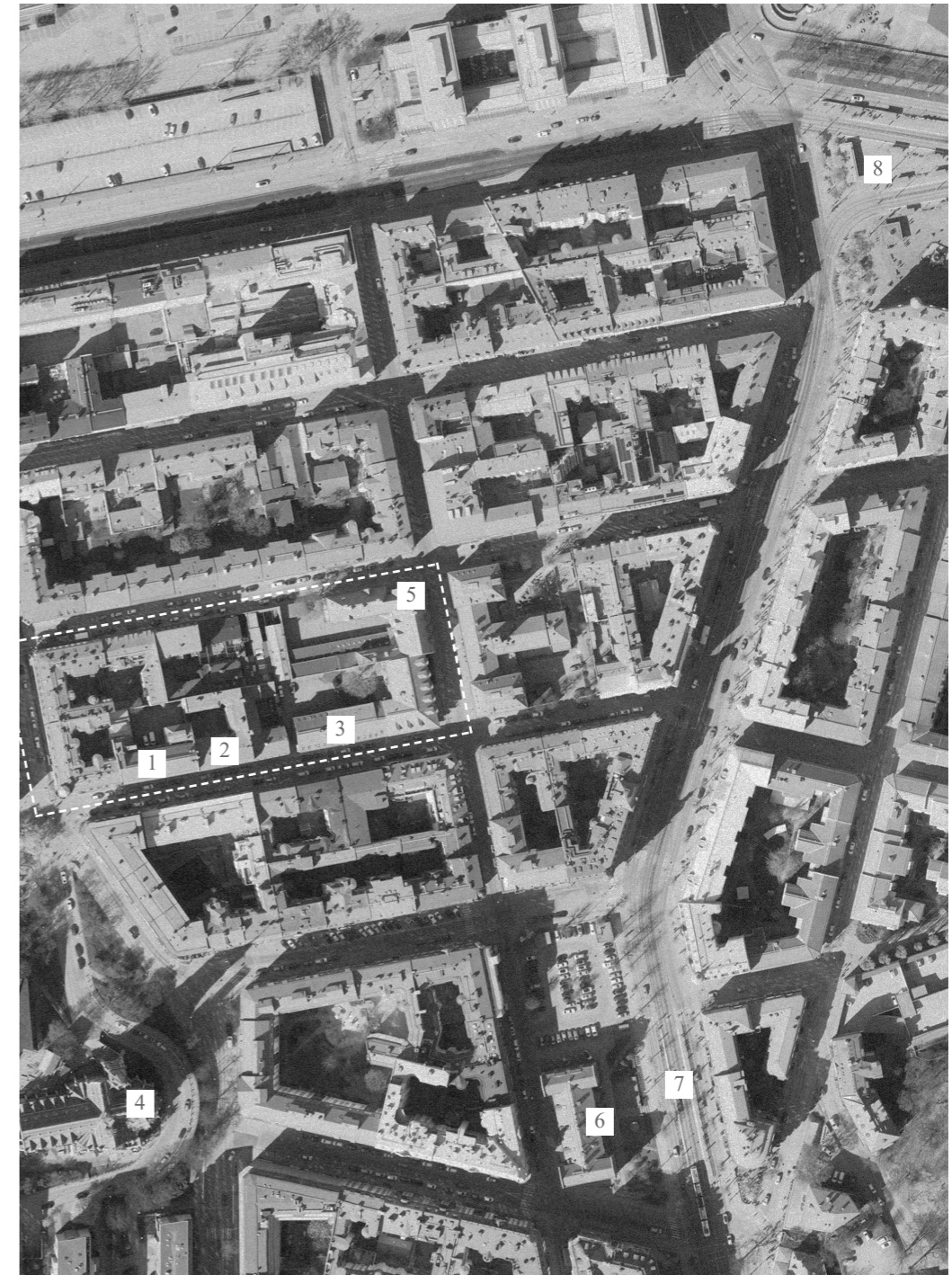
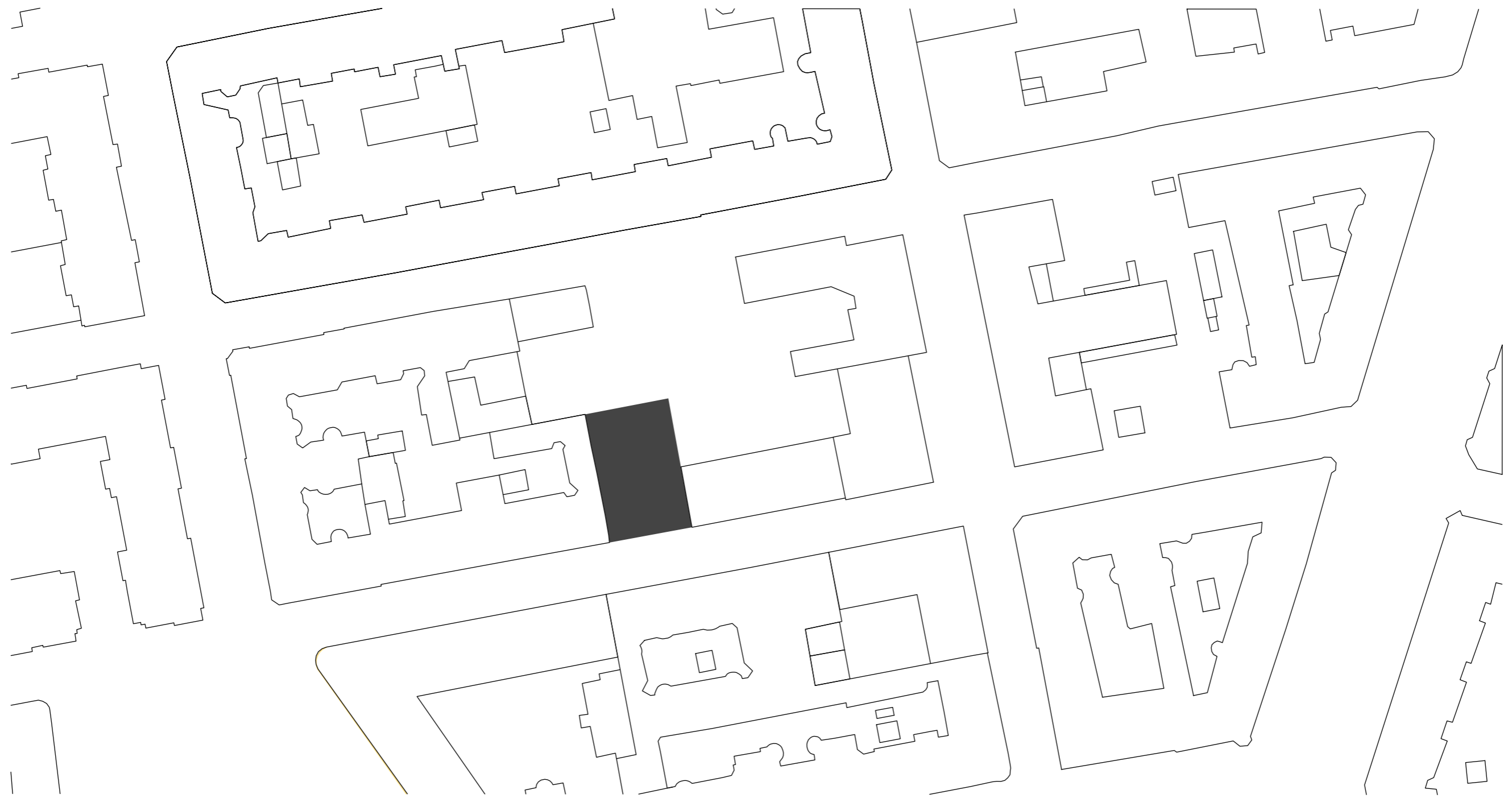


Figure 19. Orthophoto

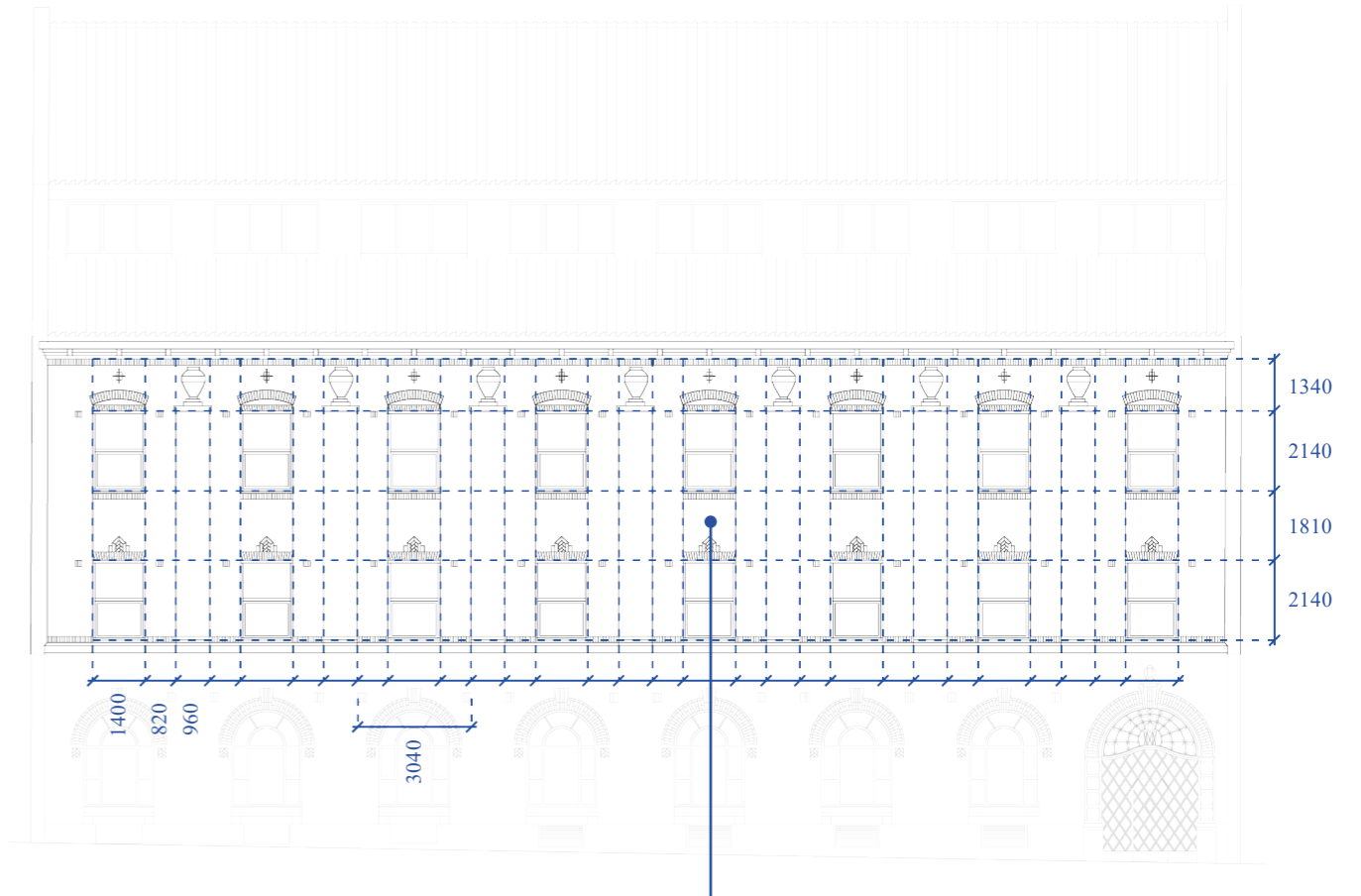
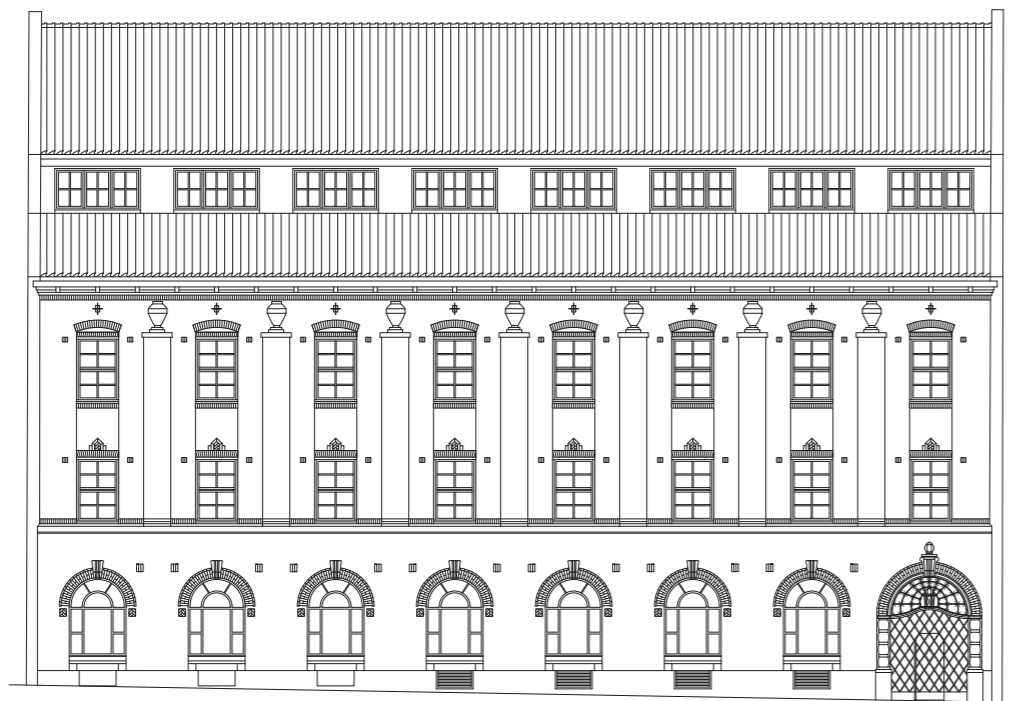


Site plan 1:1000



Fjärde Långgatan 13

The building was designed by Hans and Björner Hedlund in 1919. It was designed for its current function as a telecommunications facility and part of the public building cluster in this area of Långgatorna. This building stands out in the area for its monumental character, with a closed expression toward the street and a remarkably high ground floor. In terms of style the building has influences from both romantic nationalism and classicism. Romantic nationalism for its heavy expression and brick construction, characterized by simplicity with a plinth made of natural stone. Classicism for the marked ground floor and decorative elements, like the sculpted stones in the crest of the arches. (Lindman, 2015). The facade has a distinct rhythm and a repetitive expression, where the decorative elements frame the different sections of the facade.



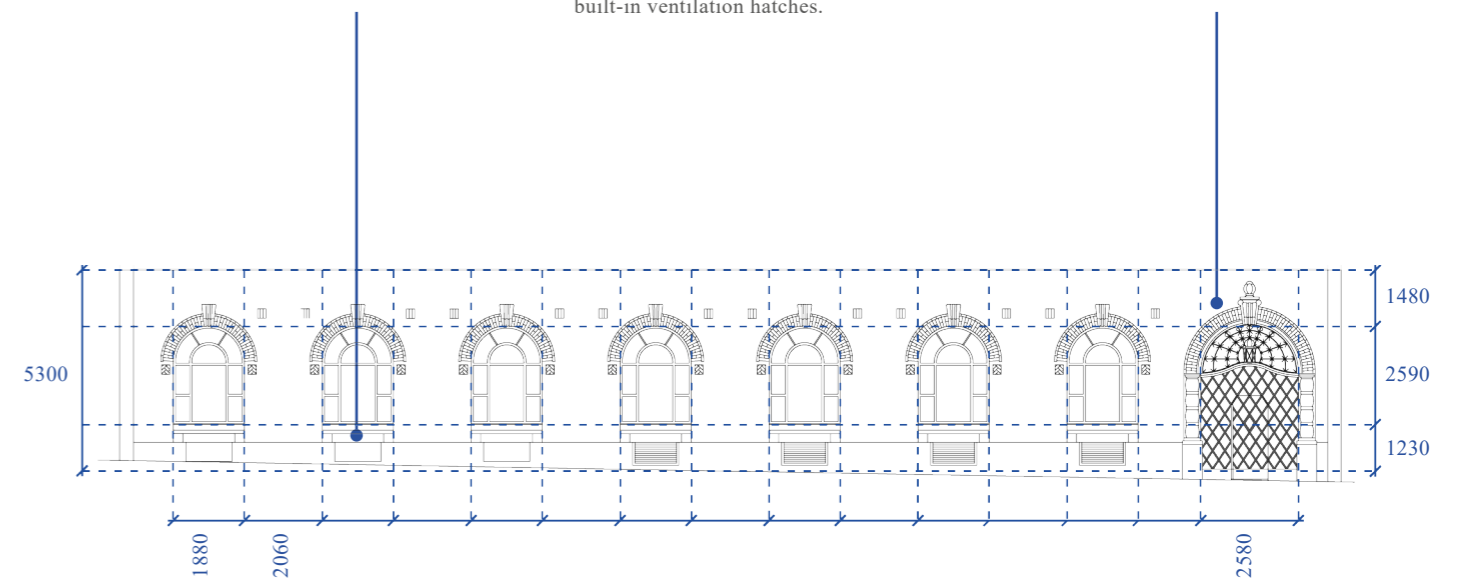
Decorations, window sill and plinth made of natural stone



A simple patterned brickwork that follows the arch forms with built-in ventilation hatches.

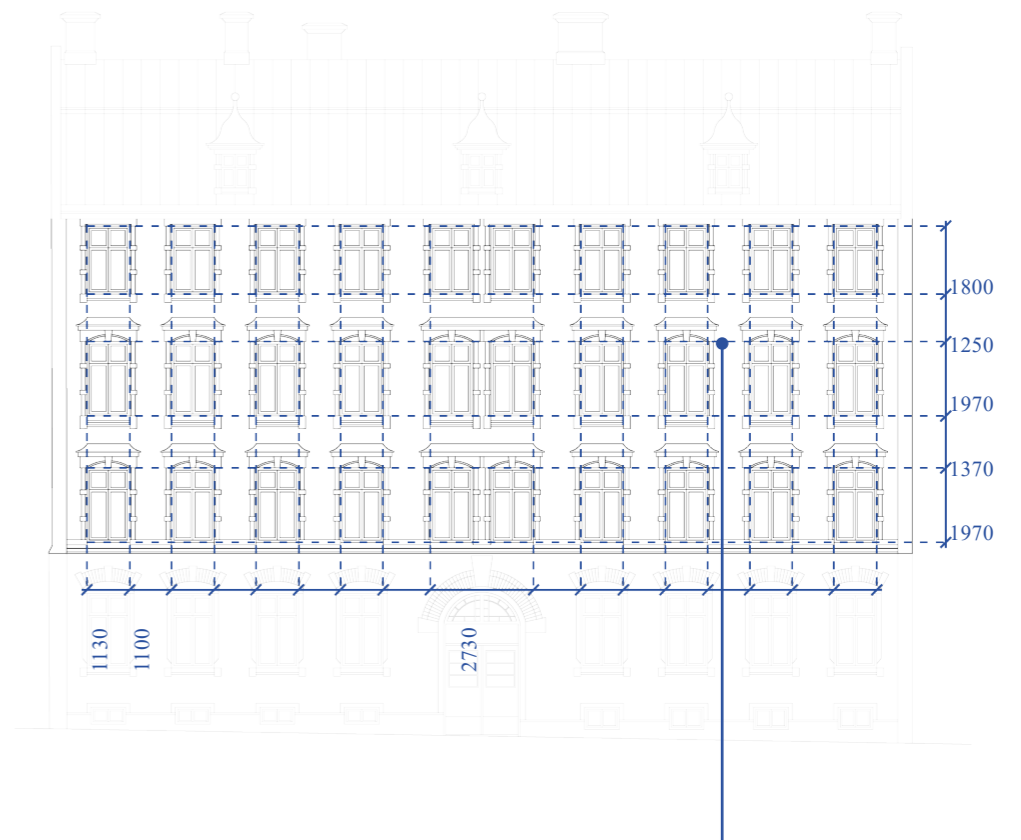
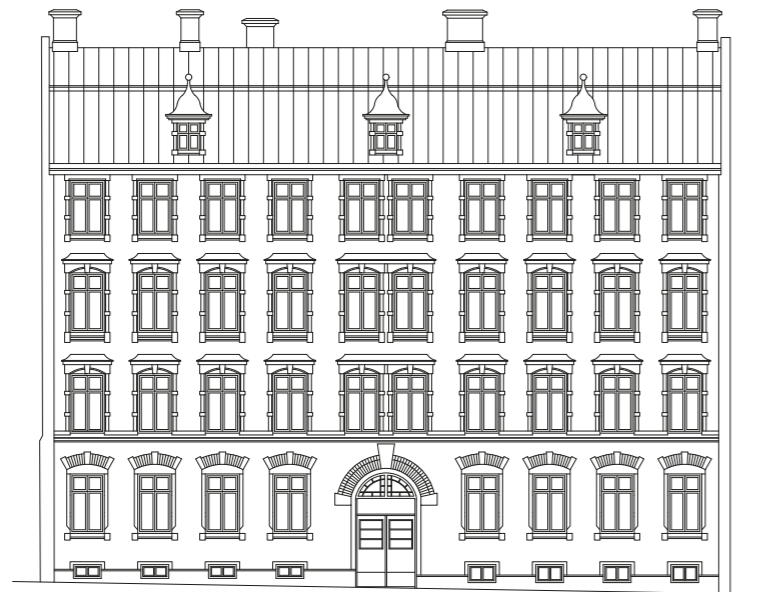


Preserved original entrance, framed by carved natural stone.



Fjärde Långgatan 11

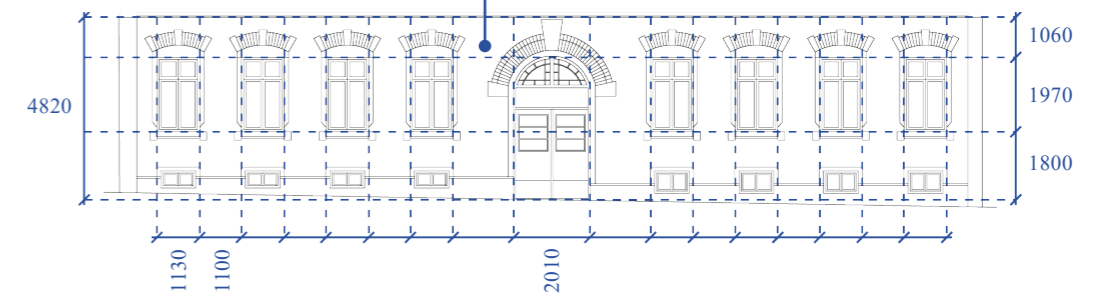
The building was constructed in 1904 by the architect A. Rydén as a residential building, but today also contains office space on the ground floor. The facade is characterized by the classicist style, with red and yellow pre-blender bricks and details in smooth plaster (Lindman, 2015). Symmetrically built, with the entrance door centrally placed, the building is both rational and elegant with beautiful details, such as the window- and door frames, carefully ornated.



The entrance with partially preserved windows and stucco in the entrance hall.

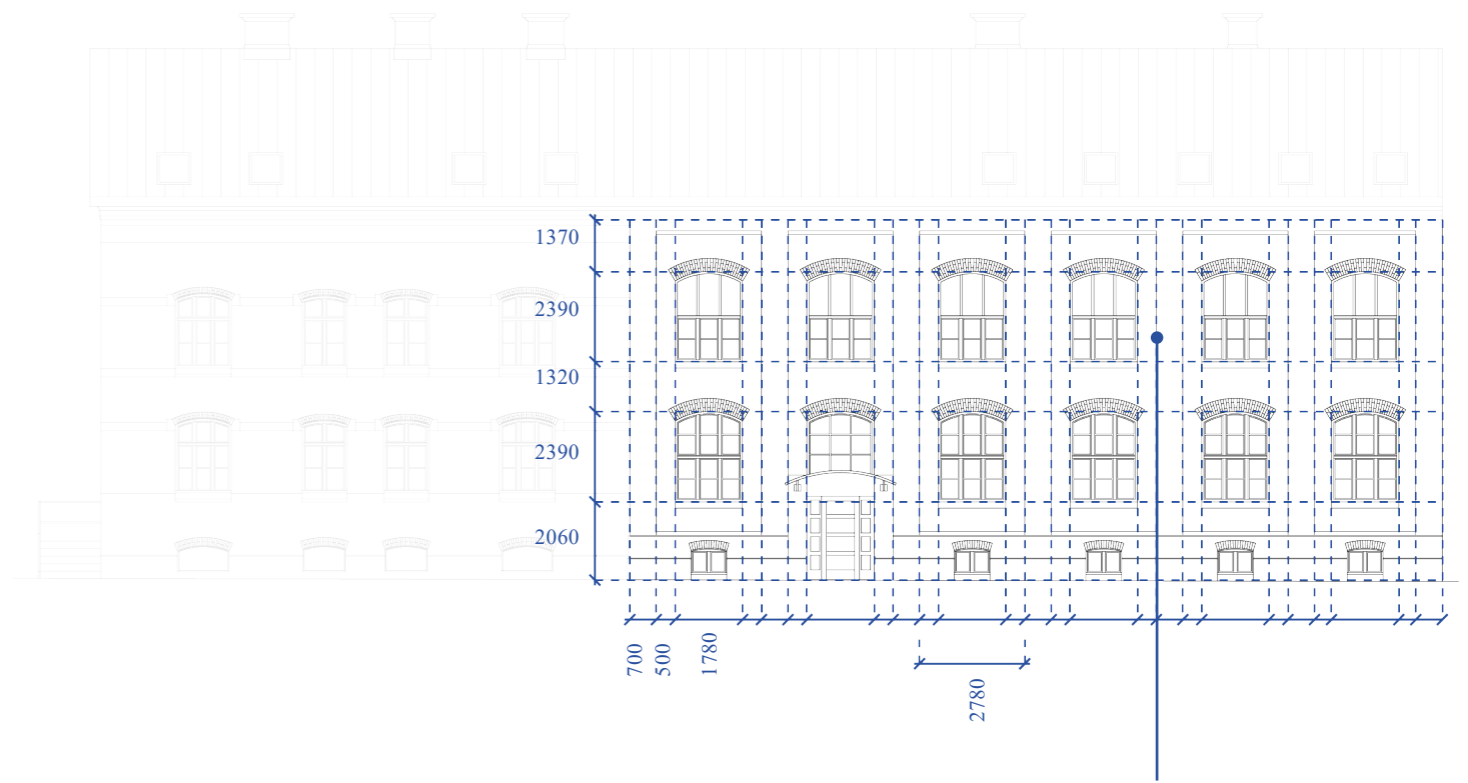


A symmetrical structure of the facade towards the street.



Fjärde Långgatan 7

The old school belongs to the early part of the construction phase of the area, designed by the office of the city architect in Gothenburg. In 1871, the western part was built and later completed with a new addition in 1903 (Lindman, 2015). The two different building parts clearly differ in their expression but still create a coherent whole. Both parts of the building have a brick facade, but the western part is largely plastered with horizontal brick bands, while the later eastern part is characterized by verticality from the moldings.



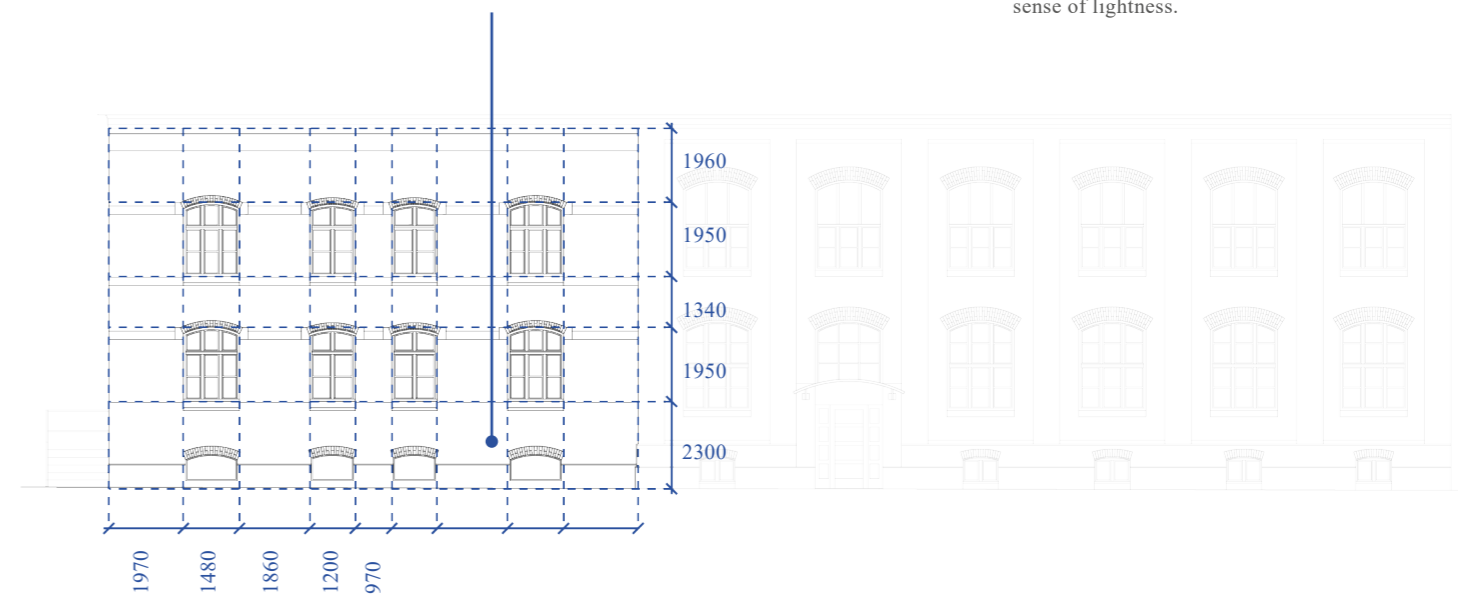
Facade in red brick and plaster, with plinth and details in natural



Variation in the exterior illustrate different construction phases.



Arched window openings in brick and thin slats create a sense of lightness.



III. Design proposal

Project description

The design proposal consists of a residential building of five floors, adapted to the context in terms of volume and in the choice of materials. Its footprint has been inspired by the building that was demolished to create a relationship to the history of the site with the possibility of preserving the passage towards Tredje Långgatan, designated as particularly valuable in the area.

Like the traditional building structure in the area, there is a public ground floor facing the street, while the rear body of the building consists entirely of housing units. A slightly raised courtyard creates a more private space for the residents, while its openness towards the passage contributes to a dynamic urban space with a sequence of different spatial experiences.

To create a cohesive impression and a backbone structure to the building in the west, a narrow building part links the volumes together visually. The design of the new addition is partly based on a new development plan for the area. Consideration has been given to planned buildings in the area and to the square that is to be located in the northern area next to Tredje Långgatan.

Program

Approx. area (lot) = 600 square meter

Building footprint = 370 square meter

-1. Basement

- Storage	156
- Technical room	16
- Bicycle storage	80

0. Ground floor

- Café	53
- Entrance hall	36
- Garbage room	22
- Common workshop	14
- 2 room apartment (inner)	70
- 2 room apartment	59

1-3. First - third floor

Staircase 1 (inner)	
- 3 room apartment	88
- 2 room apartment	59

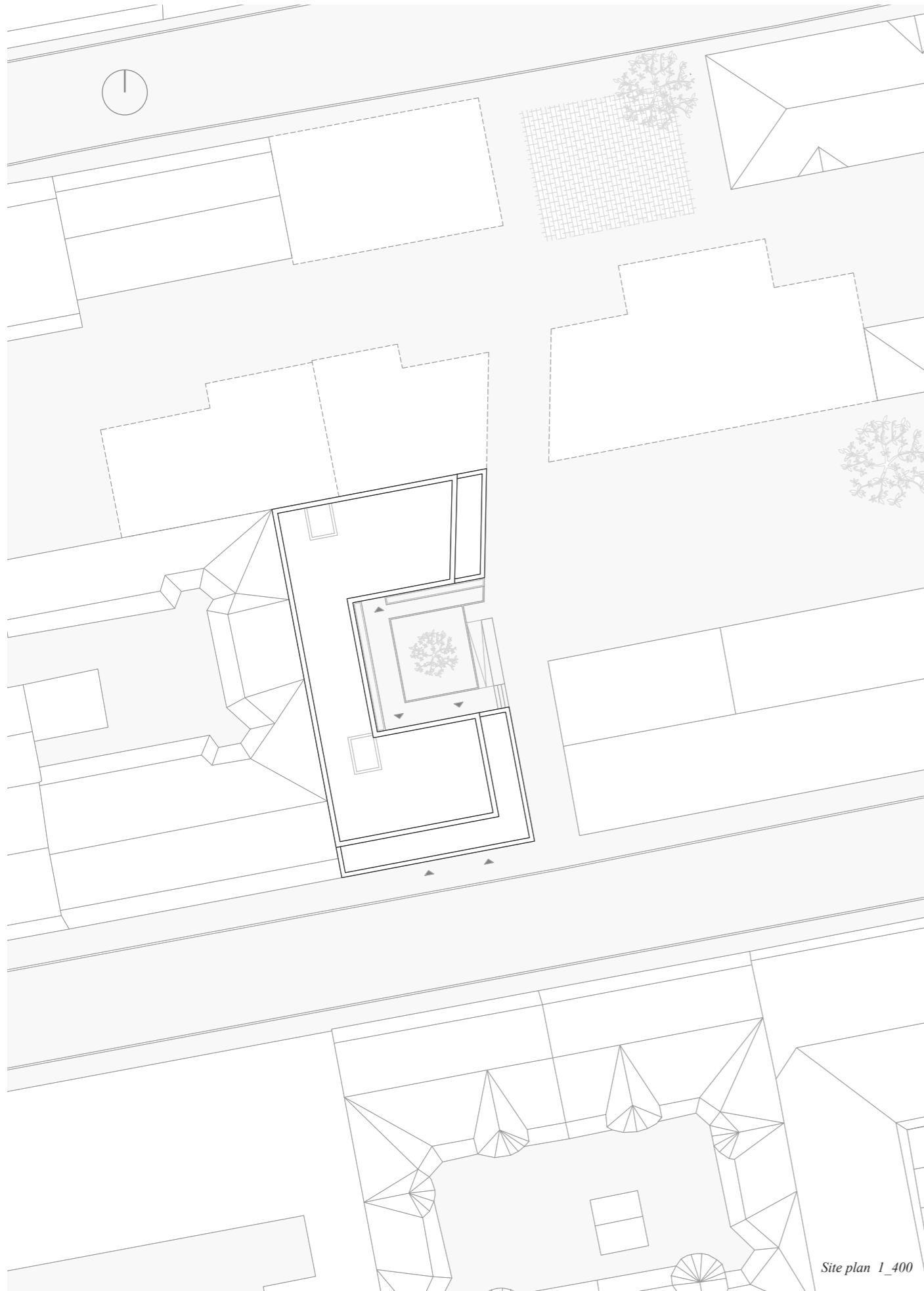
Staircase 2	
- 3-4 room apartment	90
- 1 room apartment	38

4. Top floor

Staircase 1 (inner)	
- 2 room apartment + terrace	68 + 15
- 2 room apartment	59

Staircase 2	
- 2 room apartment + terrace	74 + 50





Site plan 1_400



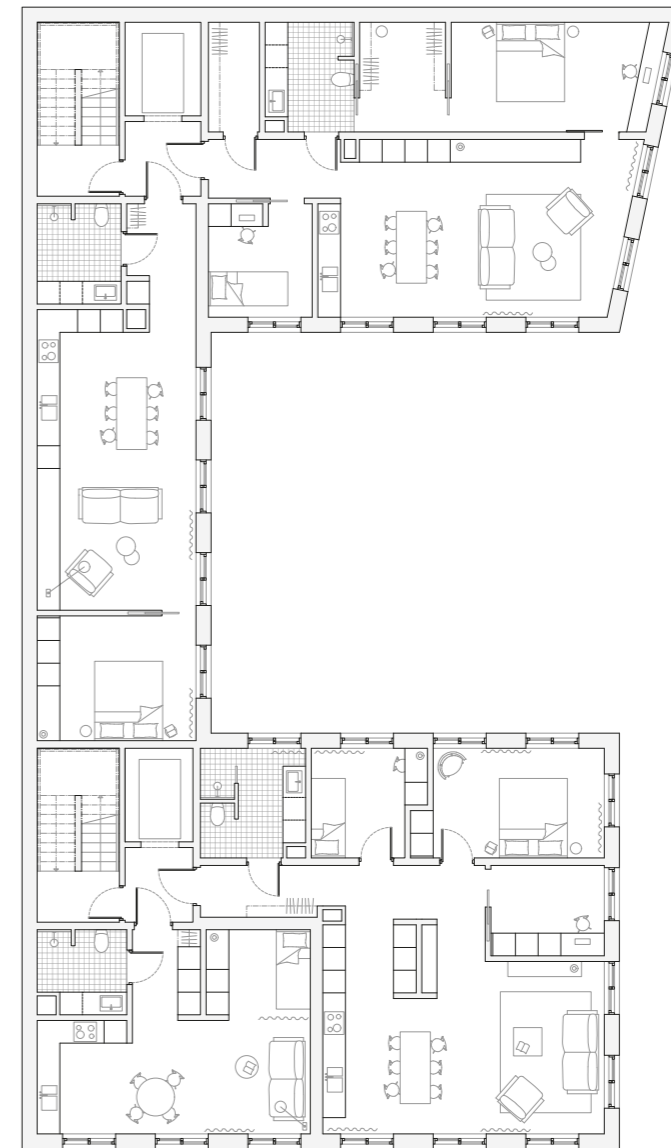
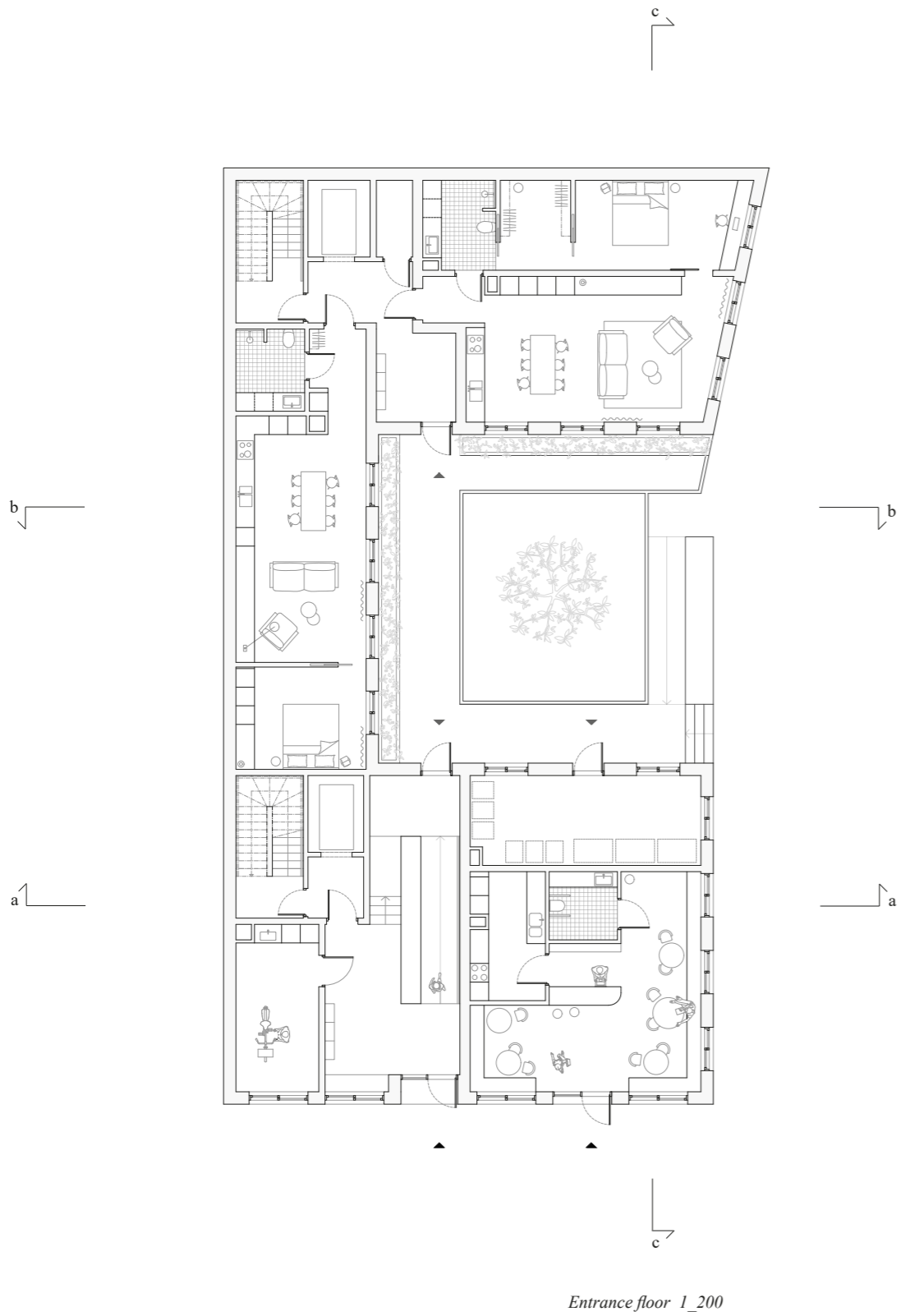
Physical model 1_200



Floor plan configuration

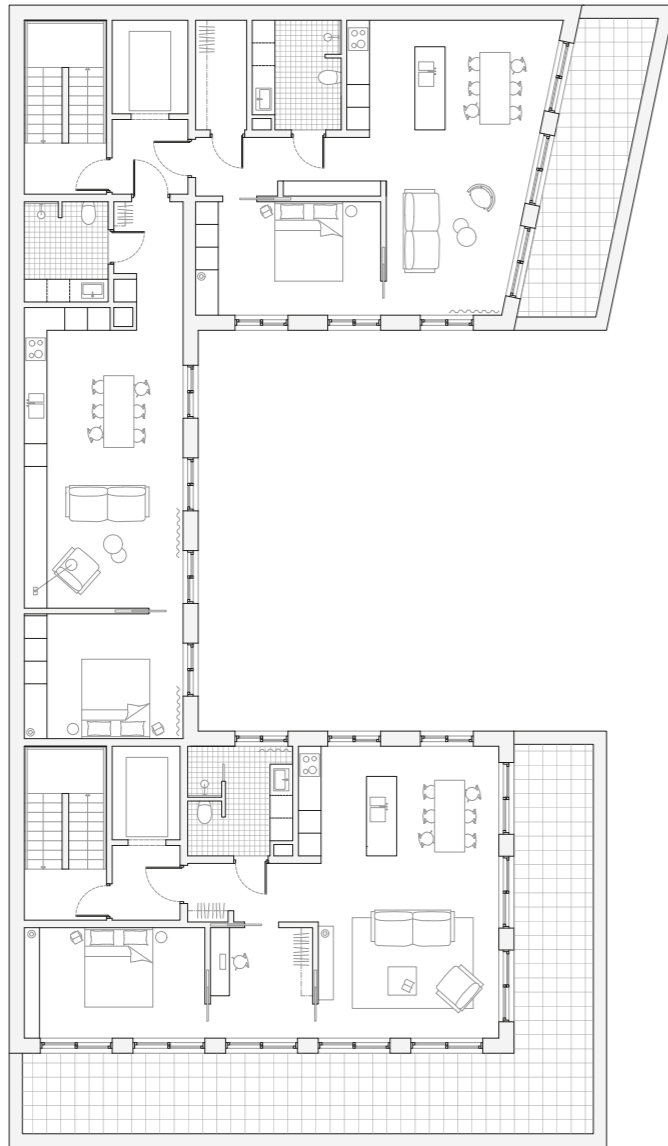
On the ground floor, there is a café in the outer corner facing the street and a workshop next to the entrance hall, where residents can, for example, repair their bicycles. These public spaces contribute to life and movement on the street, which is otherwise relatively quiet. From the entrance hall you can glimpse the courtyard and the entrance to the next staircase.

There are four apartments on each floor, except on the entrance floor and on the top floor, with a variation in apartment sizes, both for a single person or a family of four. The sightlines through the apartments are particularly noticeable in the biggest one, which extends from the street to the courtyard.

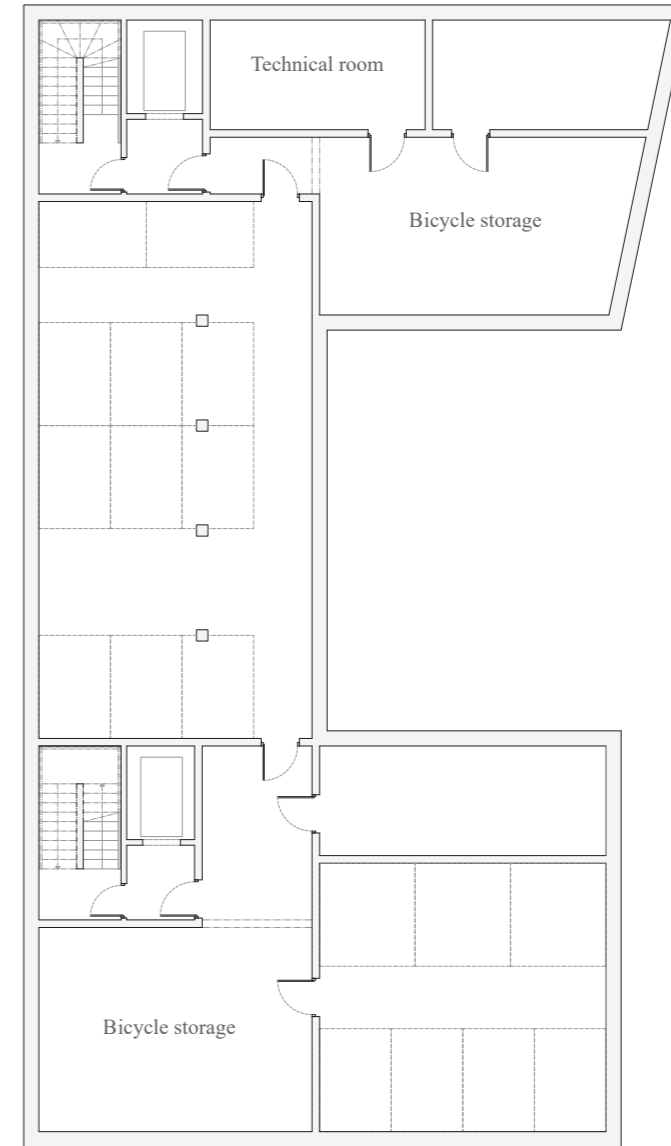


Floor 1-3 1_200





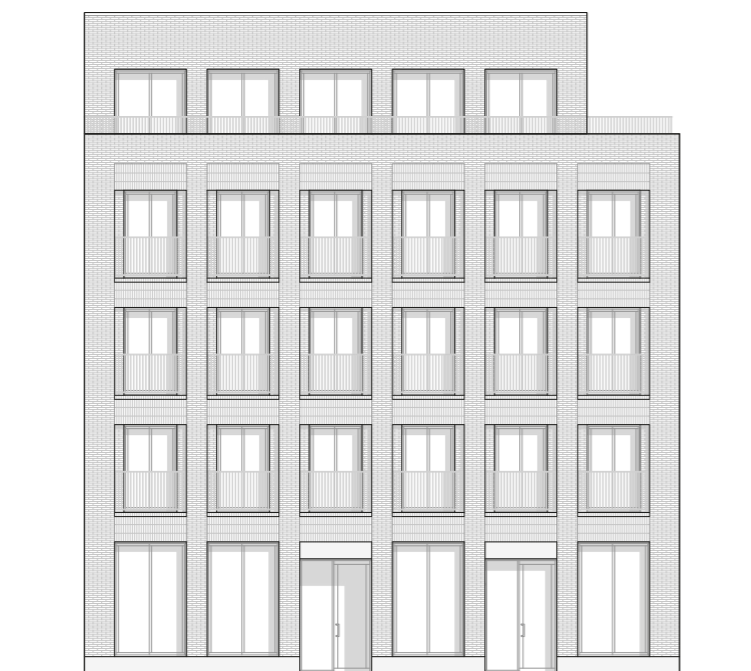
Top floor 1_200



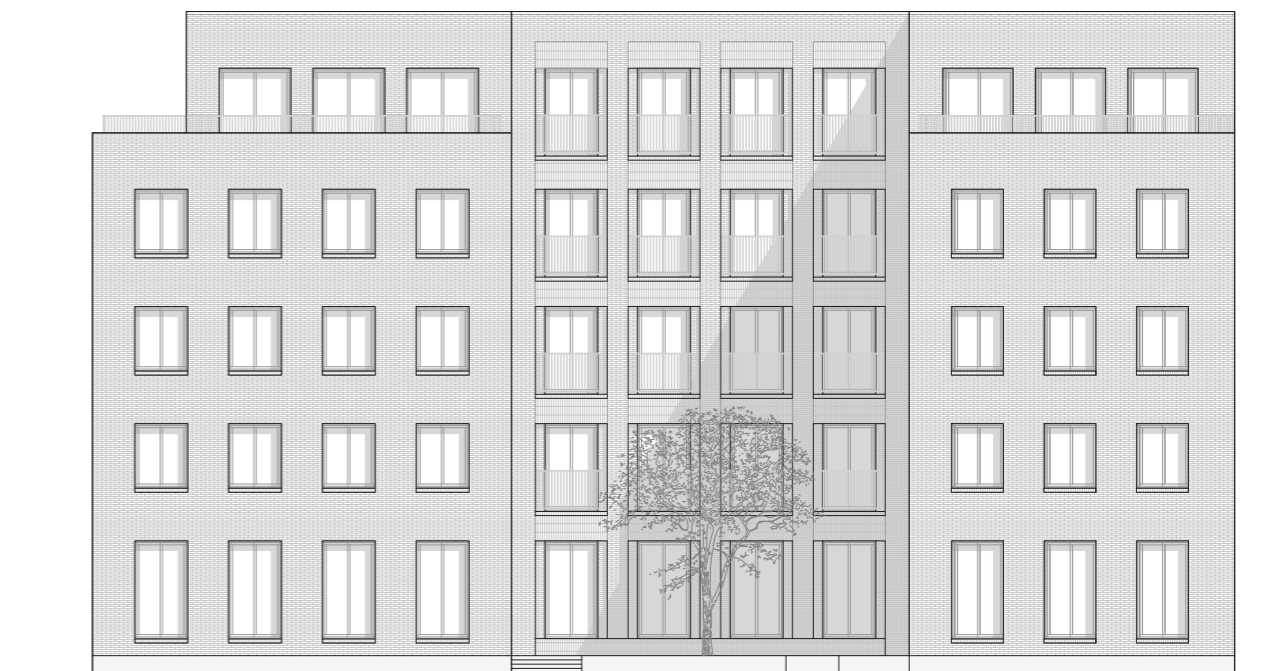
Basement 1_200



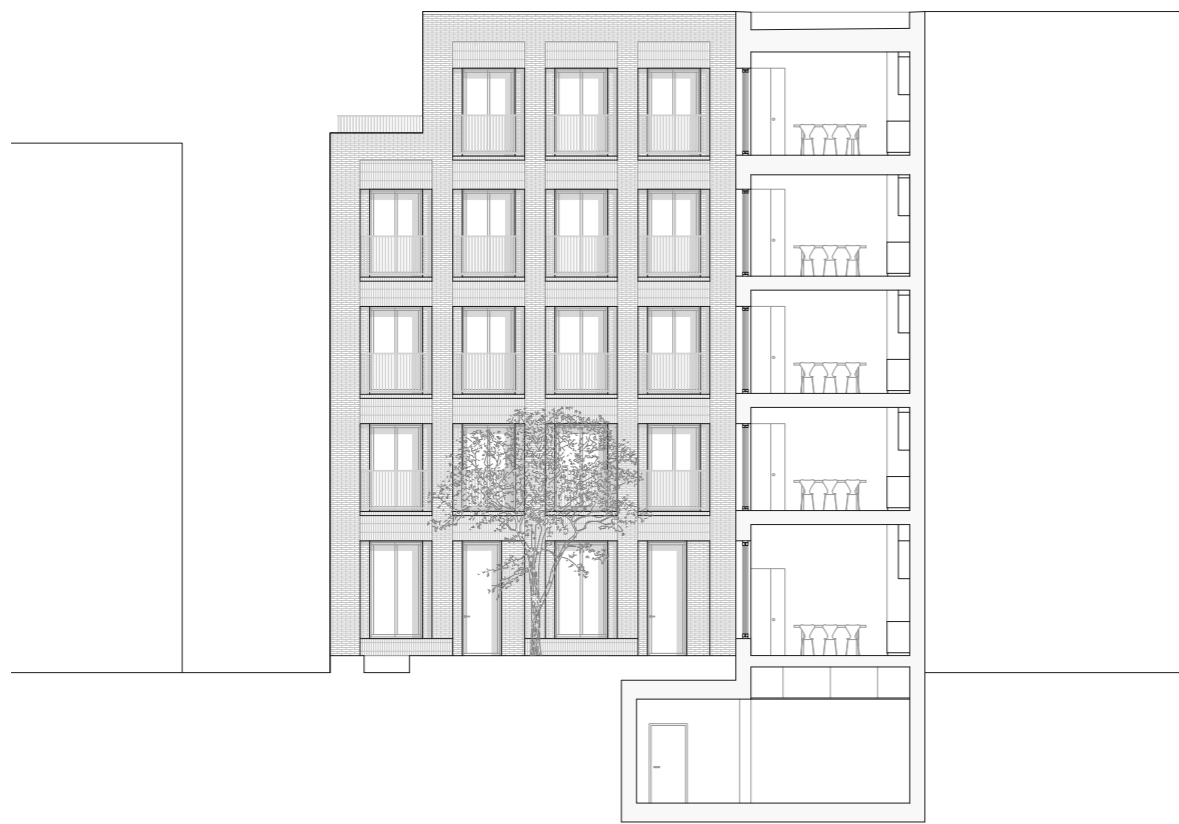
Elevation south 1_200



Elevation south 1_200



Elevation east 1_200

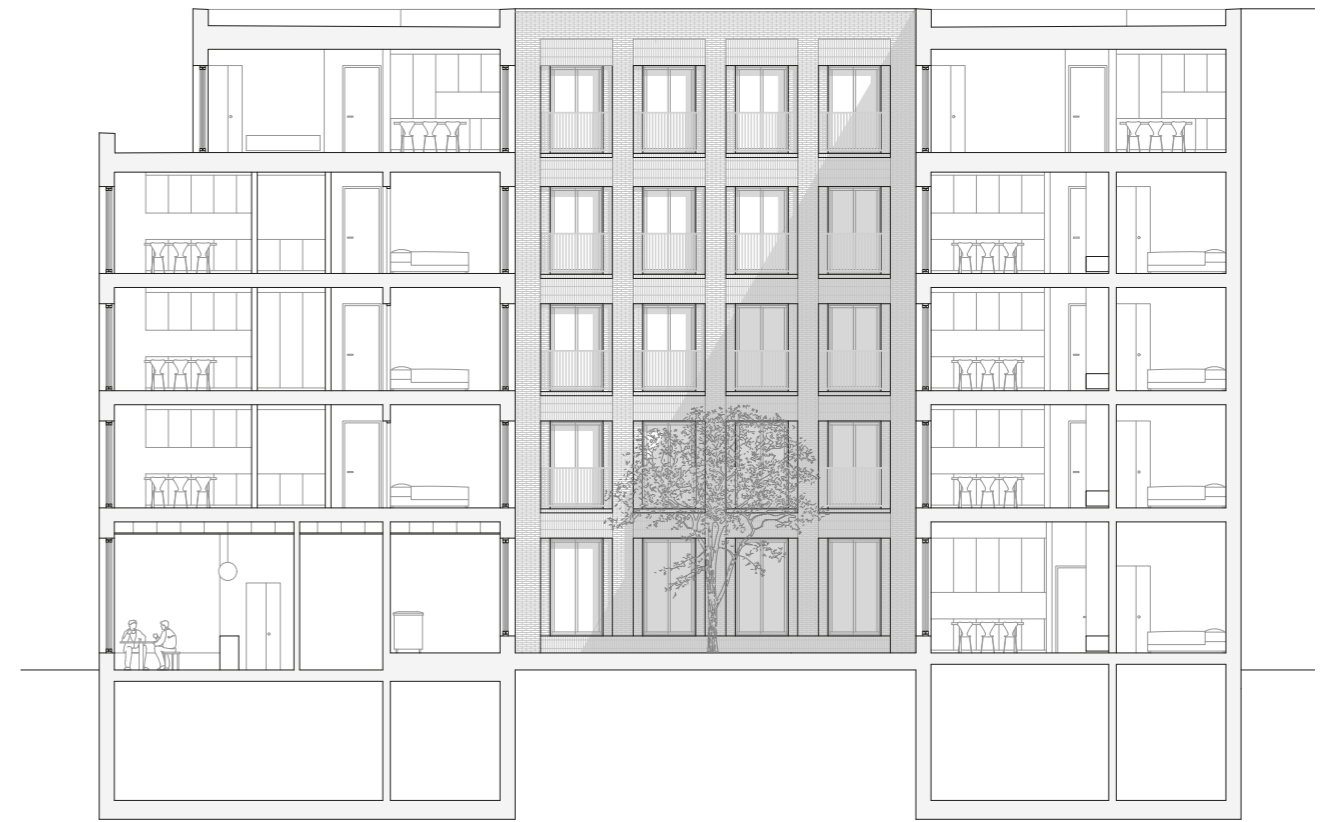


Section b-b 1_200





Section a-a 1_200



Section c-c 1_200

Material and detail

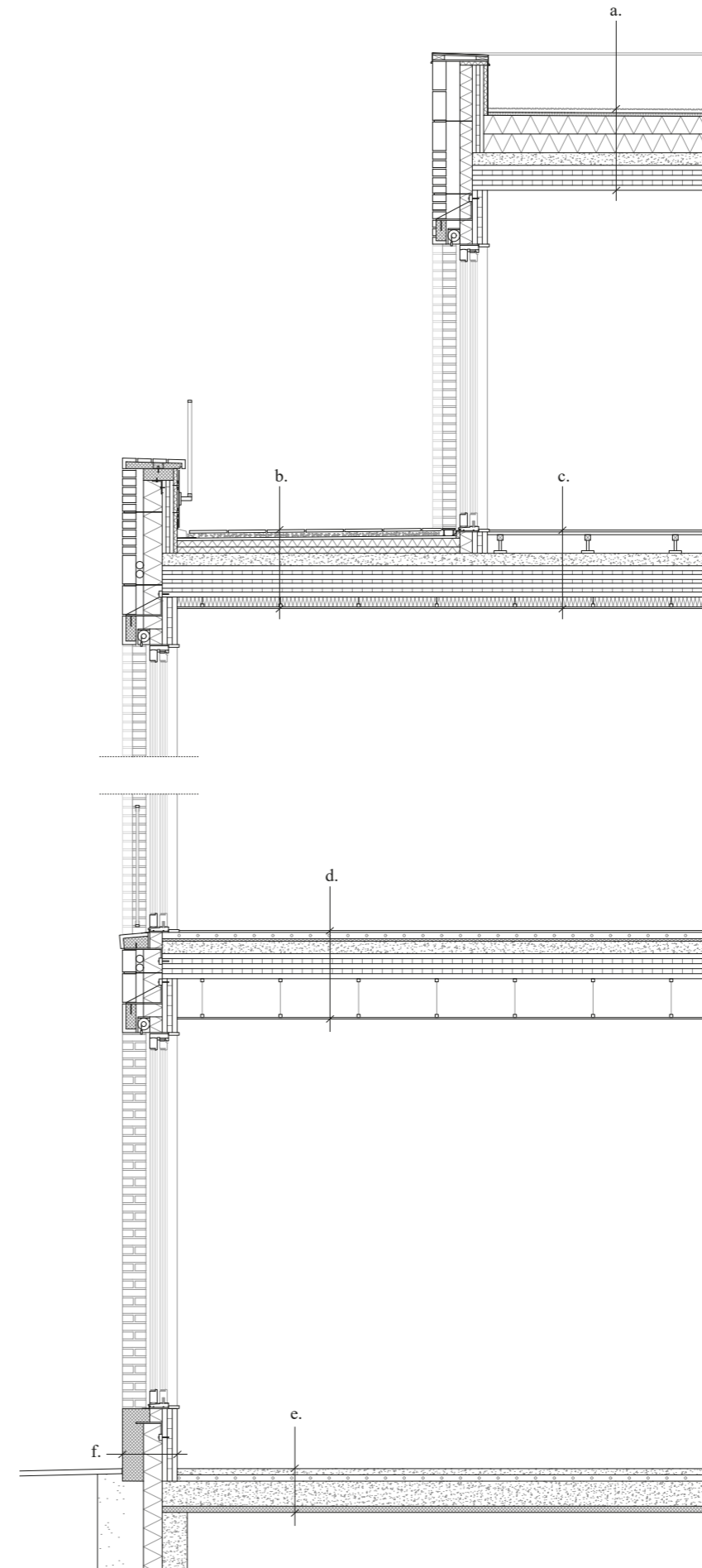
The building consists of a CLT wooden construction in combination with a brick facade. In this way, the facade reflects the traditional building materials in the area but with a clear element of modernity in the form of a sustainable wooden structure, visible on the inside. Inspiration in terms of proportions, rhythm and details has been obtained from surrounding buildings.

The brick measures 228 x 54 mm and comes from the Danish supplier Petersen Brick with a joint dimension of 14 mm. The windows are made of oak, as are the doors, which contrast with the light coloured CLT elements in wood, but at the same time create a harmonized expression in combination with the brick facade. Details such as balcony railings and door handles are made of stainless steel.



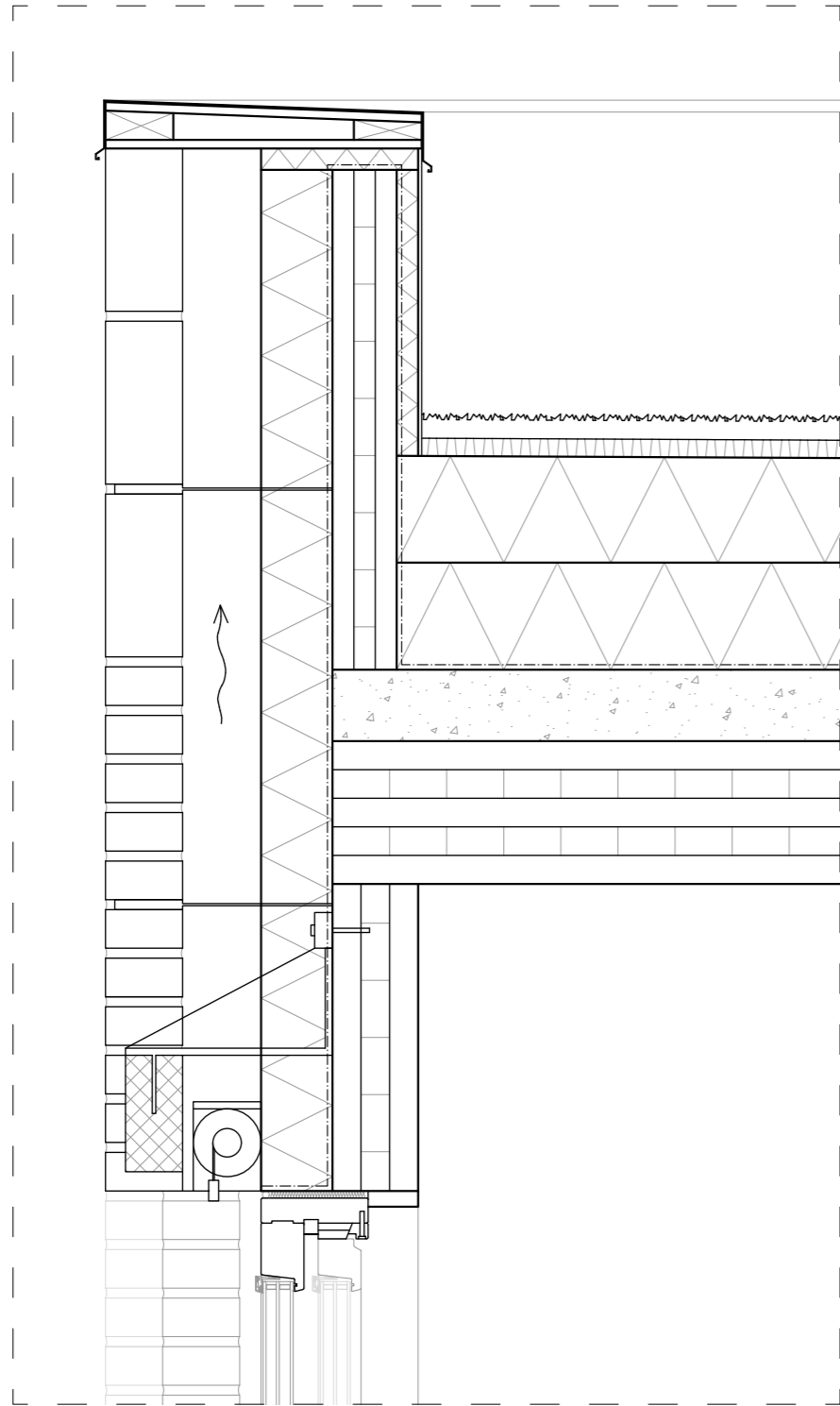


Elevation 1_50

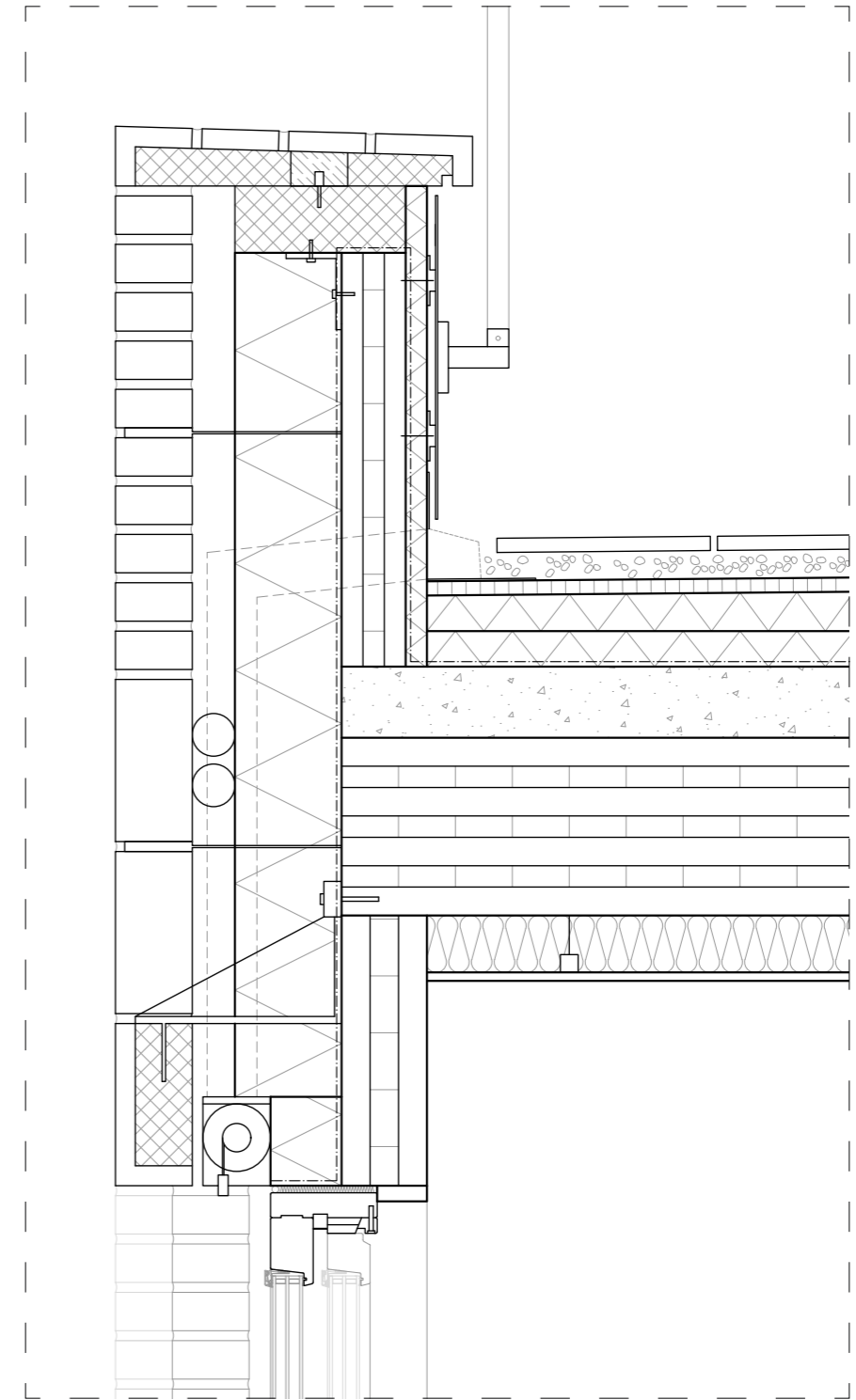


- a. Roof
green roof
vapour barrier
200 insulation
100 concrete
200 clt
- b. Terrace
20 tile
gravel
20 drainage mat
waterproofing membrane
100-120 insulation
vapour barrier
100 concrete
250 clt
80 insulation
12 wood board
- c. Floor
16 parquet
22 chipboard floor with integr.
underfloor heating
100 concrete
250 clt
80 insulation
12 wood board
- d. Floor
16 parquet
50 cement screed with integr.
underfloor heating
20 mm impact sound insulation
100 concrete
200 clt
suspended ceiling
- e. Floor
50 polished concrete
50 cement screed with integr.
underfloor heating
250 concrete
- f. Wall
54 brick
60 air gap
150 insulation
120 clt

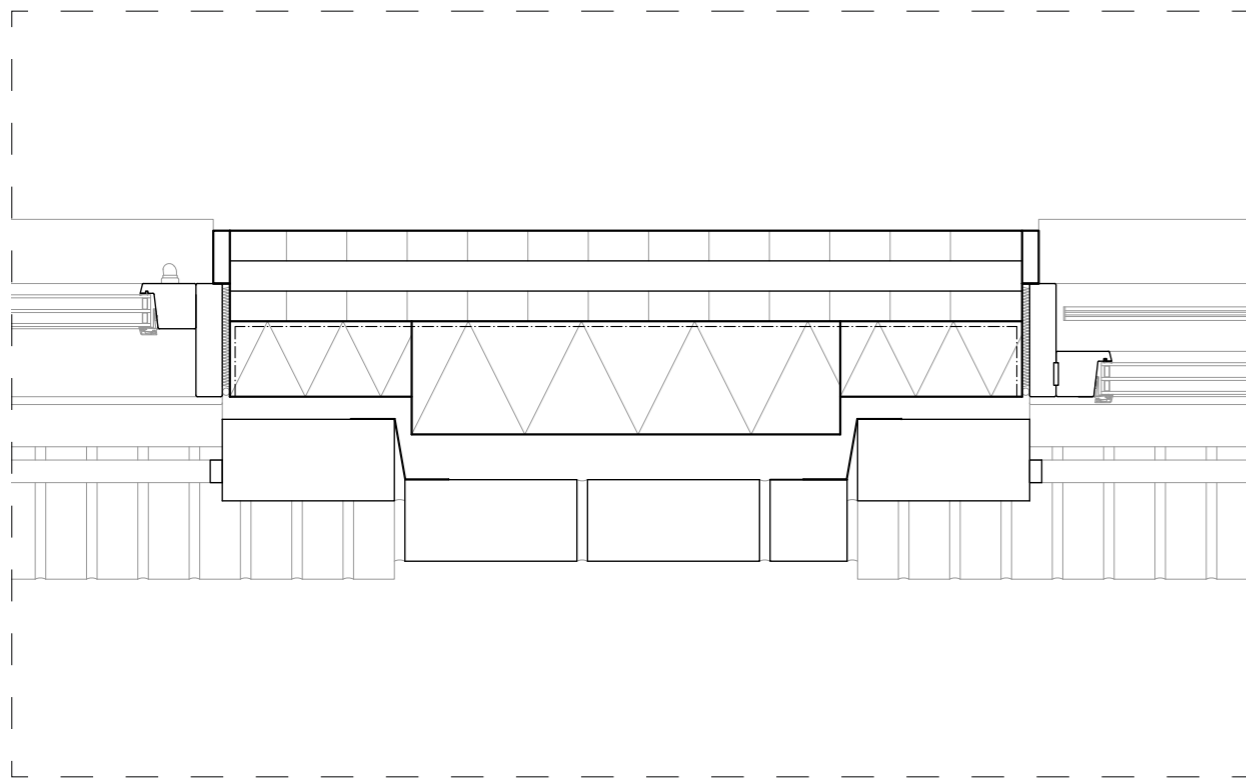
Technical drawing 1:50



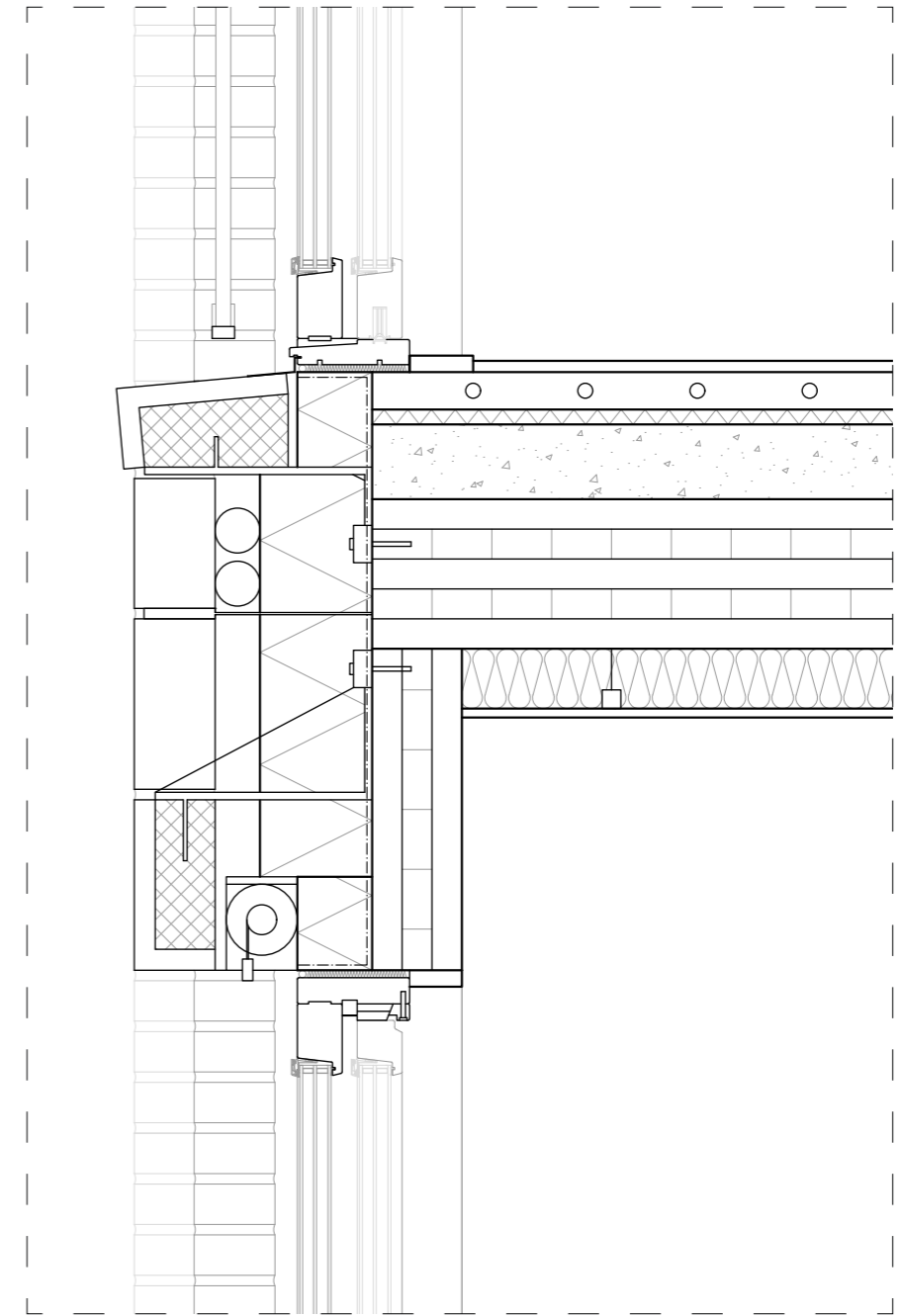
Vertical section roof 1_10



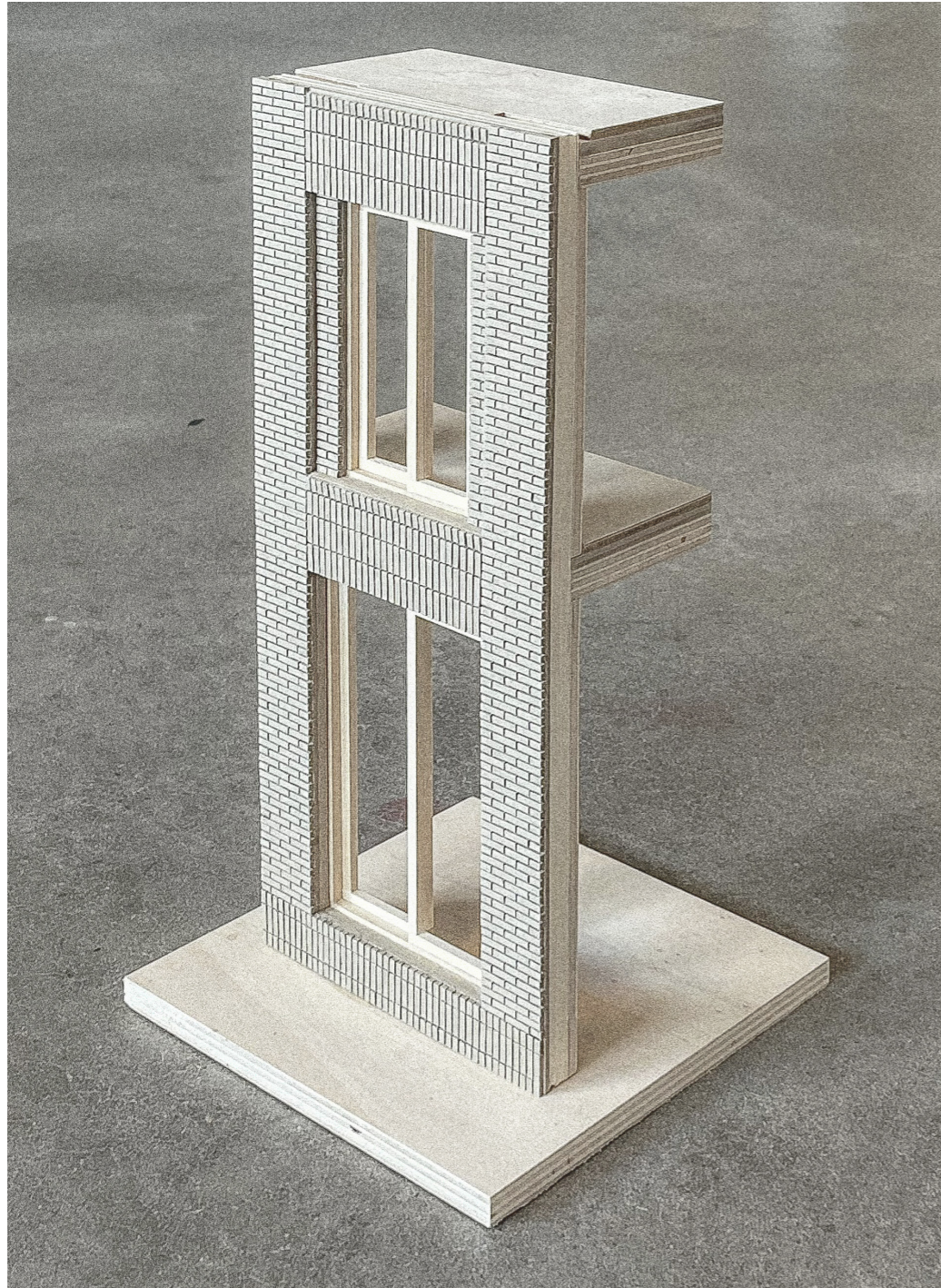
Vertical section roof terrace 1_10



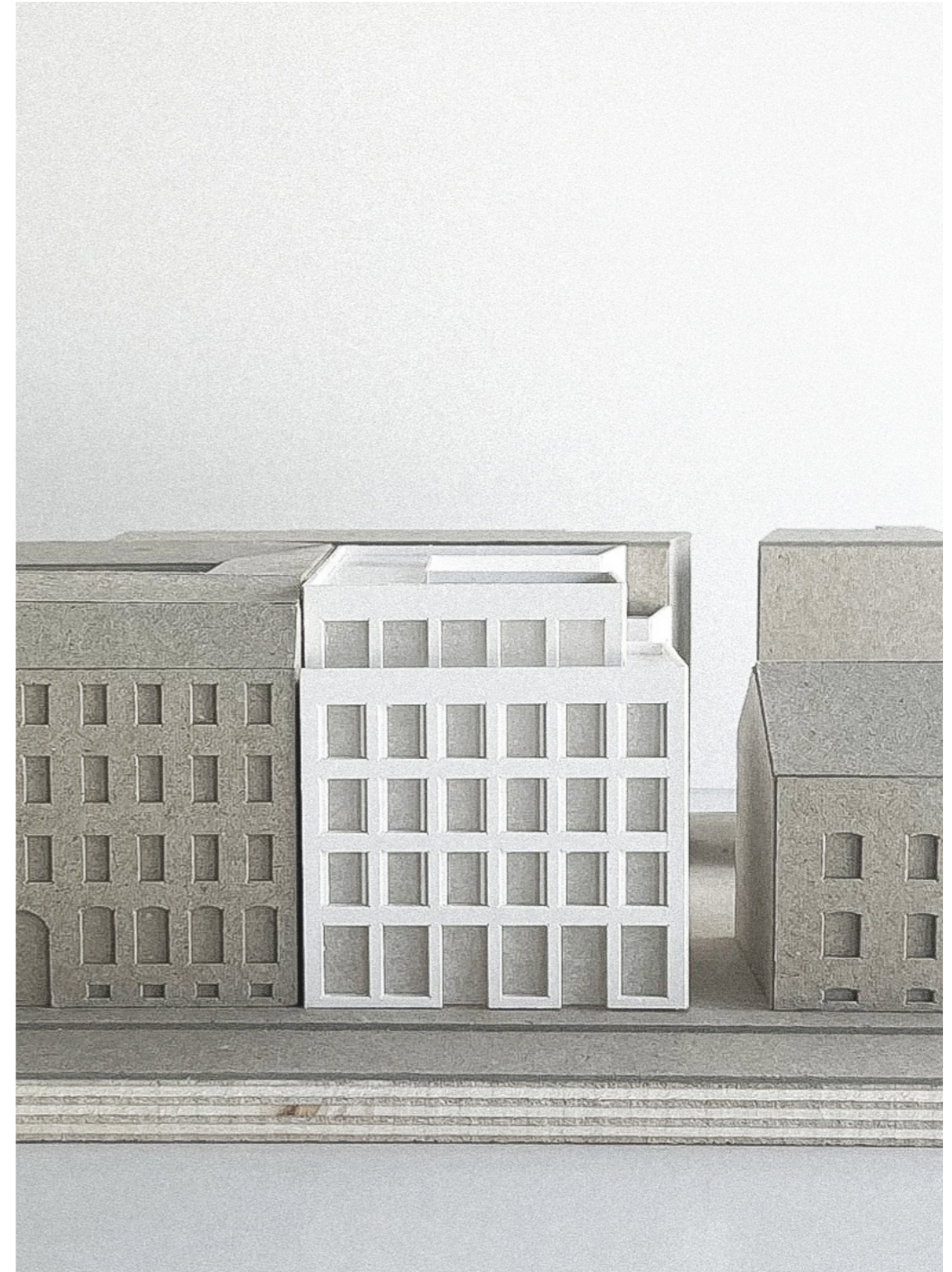
Horizontal section 1_10



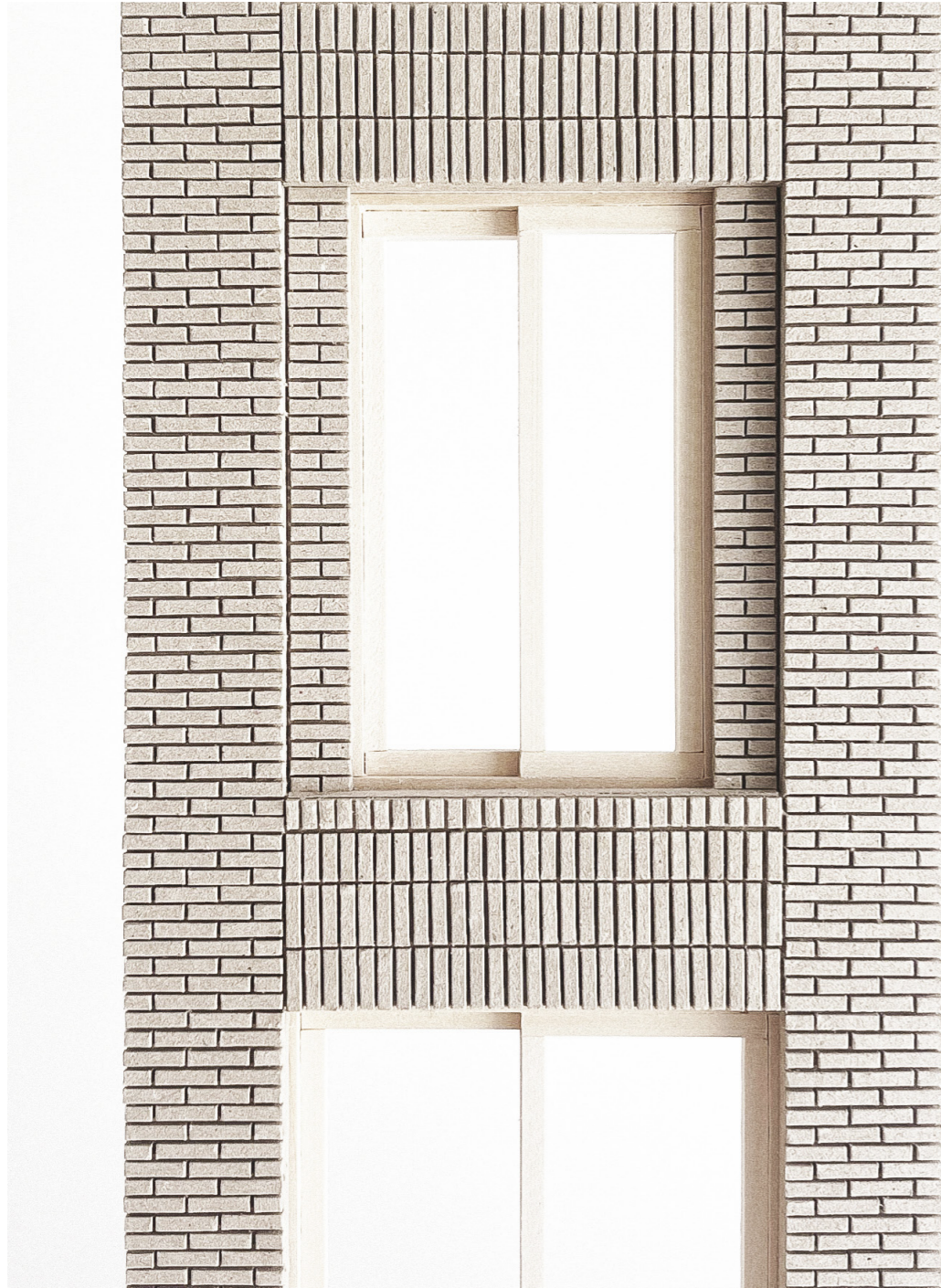
Vertical section intermediate 1_10



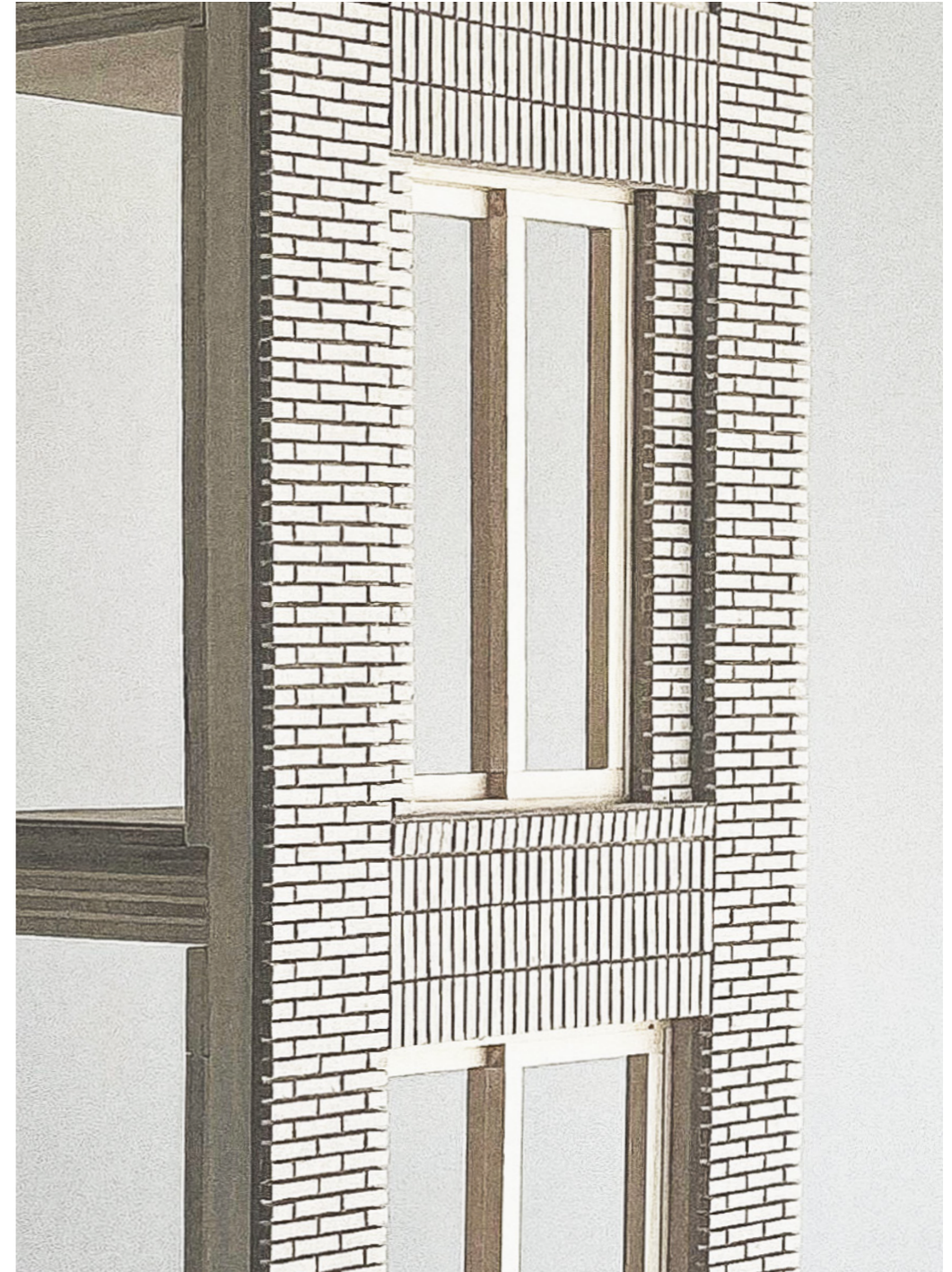
Physical model 1_20



Physical model 1_200



Physical model 1_20



Physical model 1_20

IV. Conclusion

Discussion

Through this thesis project I have explored how a contemporary building addition can be designed in a historical context. Initially the idea was to have a main focus on the southern facade facing the street, but early in the process I realized that it was necessary to work with the building as a whole. Since I decided to preserve the passage towards Tredje Långgatan, the building became more of a corner building, where each situation and its specific conditions needed to be studied.

Approaching the different situations has been challenging; the street, the passage and the courtyard, with the aim of creating a coherent expression of the building. Studying similar situations and researching historical references have therefore been crucial in the project to guide my design decisions. Understanding the architectural language of the surrounding buildings is undeniably fundamental to achieve architectural continuity, within the context of a historic area.

During the process I have worked with a main focus on the design and the construction of the facade. I have carefully studied brick as a material with its many possibilities, but also limitations. Brick has proven to be a material that, through small adjustments, such as direction changes and depth shifts, can create completely different expressions. Through these variations, the aim has been to interpret and translate characteristic elements of the historical buildings, to find a balance between historical and contemporary.

It has, throughout the work, been perceived as fairly abstract to properly define contemporary and historical architecture. The theorist Viollet-Le-Duc's idea of separating principles and constants from history in order to track the forces of change in architecture has acted as a guiding principle. The combination of a cross laminated wood structure and the brick facade creates a transition from a more traditional building material to a new type of construction technology, from exterior to interior.

To conclude, the aim was to create a new contemporary building addition with a design characterized by historical consciousness. This is what I have tried to achieve with my proposal. I believe that the building interacts with its context and naturally blends into the surroundings, but with its own identity.

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Images

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Remontage of the history
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2024