The New Design Museum in Tibro

Master's Thesis Project by Ísak Toma

Building Tectonics Studio

Chalmers University of Technology

Spring 2020

The New Furniture Museum in Tibro

Master's Thesis Project by Ísak Toma

Chalmers University of Technology - MPARC

Building Tectonics Studio

Tutor: Björn Gross
Examinor: Mikel Ekegren

Spring 2020

Abstract

Tibro has a strong and important history of furniture design in the history of furniture making in Sweden. In the 18th century farmers who lived in Tibro started to make furniture products in order to gain more income alongside farming. With developing a mechanism to produce furniture and the arrival of the railway Tibro moved from cottage handicraft into an industrial business of mass production. Many furniture companies in Tibro today are positioned on the outskirt of the central area where they focus mainly on logistics.

However, nowadays most of the existing buildings that showcase this furniture from Tibro are very hidden or detached from the central area which makes it difficult for visitors or nonlocal people to access and notice the craft heritage. This issue made think of what is an appropriate way to showcase furniture?

There has been a discussion of one area in the central town of Tibro which is the old railway area, an area that once was a vital place for people to commute from one municipality to another. Since the railways have not been in use for a time people wonder what they should do with the remaining infrastructure. My idea for the site is to propose a new Design museum that displays the old and the new furniture in one place.

This thesis aims to investigate how furniture design can influence the materiality and detail of contemporary architecture.

Keywords: Furniture, Railway, Industry, Linear.

Table of content

1. Background

Student background on the subject

In the autumn of 2019 when I was a student in a studio called Planning and Design for Sustainable Development in a Local Context. The purpose of the studio was to learn about rural areas in Sweden to investigate its situation and implement a Design proposal with a sustainable solution. The rural area that was chosen for investigation was Tibro.

Starting the studio by listening to lectures from people working for the municipality of Tibro I thought it was interesting to get to know the character of the town. There were two things that interested me about Tibro; one is the history of the furniture making and the other is the situation of the old railway area.

However, after spending more time in Tibro and investigating the area, I realized that it is difficult to feel for the history of the furniture design in Tibro because most of the active design-related buildings are all positioned on the outskirt of the central area. Tibro has a Museum called The Furniture Museum (Möbelmuseet) positioned near the central area however that museum is now positioned in big storage like building and is very hard to access it since it's not owned by the municipality of Tibro.

These issues made me think of what if how can these furniture designs be more activated and more seen to the public? Both for the local people and the visitors of Tibro. With the discussion on what to do with the old railway area of Tibro, I started to imagine if that area could be activated with design-oriented public building

Research question

How can furniture design influence the materiality and detail in contemporary architecture?

Other question

How do you implement a public building on a narrow site?

Aim

My aim in this project is to propose a new design museum that displays both old and newly made furniture from Tibro.

Method

To start with I would like to investigate the existing furniture design Museum in Tibro and it's the current situation. I also want to investigate what was produced before and what is produced nowadays and how has the design of the furniture changed through time in Tibro.

As a second phase, I would like to investigate a site and use the elements and structures on the site as a tool to shape up the volume of my design.

As a third phase, I would like to investigate what materiality is relevant for the building to interpret the furniture design.
By using the usual approach if mine to draw and making physical models this project would be useful as a research-by-design. method.

2. Tibro and Furniture Design

Tibro

Tiro as a small municipality in Sweden with a population of 11.000 people. It is in the southern part of Västra Göteland County which is the second-largest county in terms of population of Sweden's counties. Tibro is located on the east side in its county and is near other municipalities such as Skövde, Töreboda, Karlsbo, and Hjo. Many people commute from Tibro to Skövde to go to work or school on road 49.

The nature around Tibro is a woodland with a fertile soil which has been used for agriculture for a long time. The river Tidan is estimably 187 km long river that flows through many municipalities, including Tibro. Farmers back in the days used the flow of Tidan to activate sawmills to cut wood for furniture making. (Wikipedia, 2019)

The first thing people would notice when they enter Tibro is the big factory-like buildings which many of them are headquarters for one of the biggest furniture companies in Sweden such as Offect, Mio, and SA Möbler AB. Once you enter the central town you would notice how peaceful the neighborhoods are with small private villas in their own back garden.When you are walking between streets and public gardens you will probably notice a sculpture of furniture placed on a roundabout or in the middle of a river. This is a symbol of the pride and heritage of Tibro which is the Furniture Design.

Nowadays Tibro is facing one problem, which many smaller municipalities are facing which is young people moving away to bigger municipalities. Despite younger people moving away from Tibro, the business side looks good for the near future.

Figure 1. Tibro Geographical postition

Tibro Analysis

This analysis, I designed alongside other students in autumn 2019, shows some of the vital functions of Tibro. It is clear that industrial companies are a big part of town and are close to the road that is connected to other municipalities.

Companies

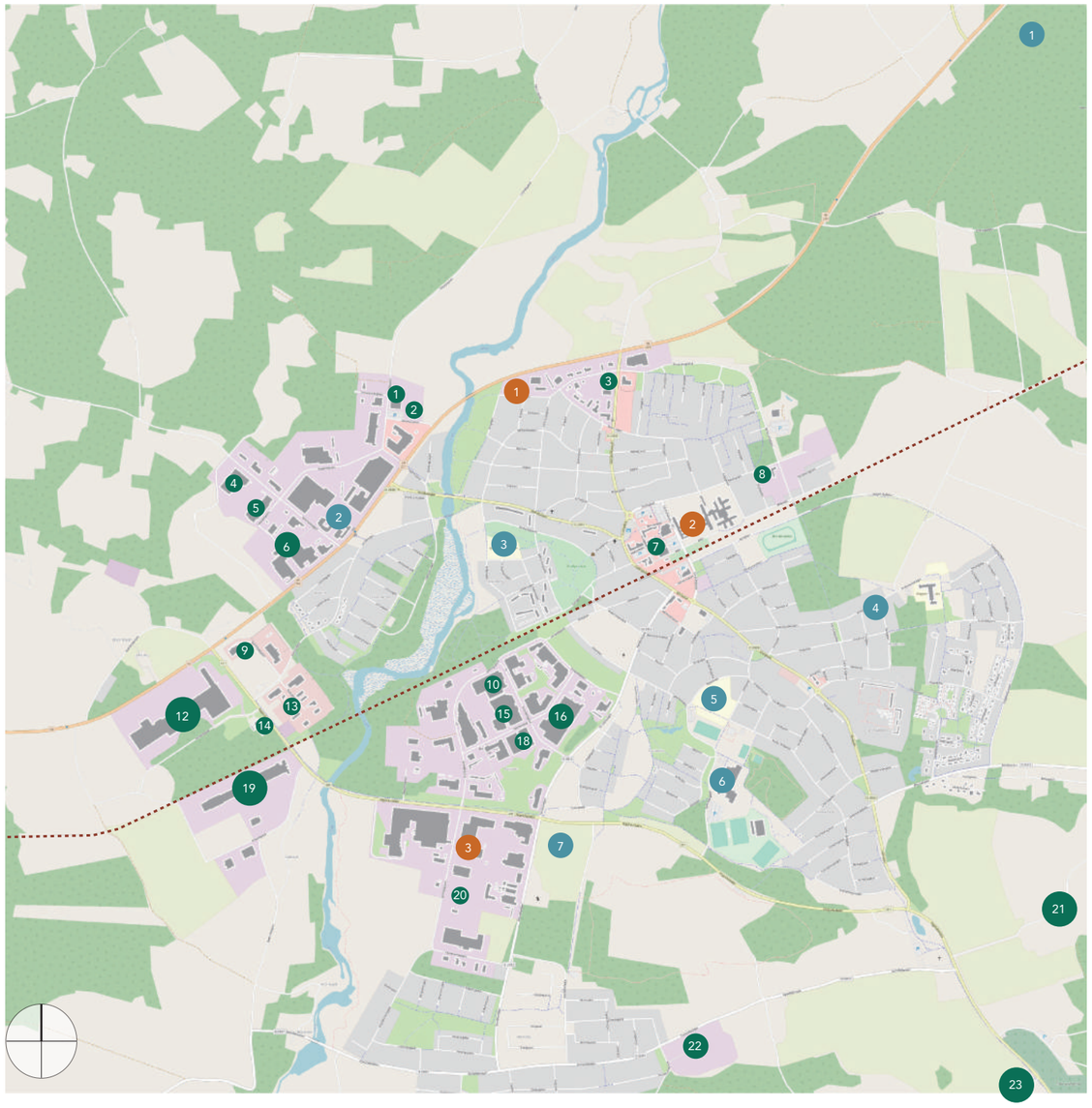
1. Olssons Fiske
2. Billigamobilskydd.se
3. Förr & Nu
4. CC pack
5. Lundbergs Möbler
6. Offect
7. Ica Supermarket
8. Klingström Svarveri AB
9. Tibro MC service
10. Tre Sekel
11. Moas Snickeri
12. MIO
13. PG Larssons Bildelar
14. Tibro skog- och trädgårdsmaskiner AB
15. Tibrokök
16. Gateretail
17. Tibro Möbelindustri
18. Ire Möbel
19. LGT
20. Prisma Tibro
21. Kyrkefalla Prästgård
22. SA Möbler
23. Ruders.

Education

1. Ransberg skola
2. Hantverksakademin
3. Smulbergsskolan
4. Häggetorpsskolan
5. Nyboskolan
6. Fågelviksskolan (Closed)
7. Baggeboskolan (Opens in 2020)

Municipality

1. Inredia
2. Municipality Offices
3. Näringslivets hus



Industrial Area

Road 49

Residential Area

Main roads in Tibro

History of Furniture Design

In 1850 local farmers started to make a small hut and furniture out of the near forest as a way to gain some money alongside farming. In 1920 workers started to use machines for their crafting which led to the beginning of the furniture industry in Tibro. With the technology of machine, in 1930-40, large automated factories were built and moved from the central areas to where they are positioned to this day. Around the millennial age some companies started to move their brand to low-wage countries which led to high unemployment in Tibro. In 2019 more than 60 different companies are working on the design industrial market. Furniture Design from Tibro has always ha a reputation for their quality of handcraft. (Inredia, 2019)

Furniture Design Activity

Once in every year, people in Tibro hold an event called "Möbel Dagarna" where most of the furniture related programs such as companies and craft schools celebrate and showcase on their own designed furnitures. One of the most active Design related programs in Tibro is Inredia, a design center for world furniture makers to come and meet up to present and talk about interior design.

Tibro Furniture Museum / Tibro Möbelmuseet

Tibro Möbelmuseet was originally a foundation that was established by local people who wanted to compete with the museum owned by the Municipality, which displays the general history of Tibro but not specifically on furniture. However, most of the founders of Tibro Museum has most of them are pensioneers or passed away which means that there is no one taking care of the museum properly.

The museum is today it is positioned in a big wharehouse on a place where people generally are not walking by. If someone wishes to enter the museum they have to call someone to come and open for them to enter. When the visitors enter the building the first thing that they will see is an area where pensioners are practicing boccia and from that area visitors enters the Museum. The display of the furniture is framed in a small room in which each one is supposed to showcase furniture from different eras in Tibro.

In my opinion, it is unfortunate how the museum is displayed because it does not have a proper place to be displayed. Also, it only shows furniture from an era that has longly passed and does not display anything new or something that represents what has been designed in recent years. The current museum keeper says that it is important that these furnitures would be displayed more appropriately.

Figure 2. Tibro Möbeluseet Corridor

Figure 3. Tibro Möbelmuseet Storage

Figure 4. Tibro Möbelmuseet Chairs

3. The Site

The Railway Area

The Railway Station was a revolutionary system that changed the lives in Tibro in 1876. With the possibility to travel faster between towns led people to move more near the railway station. With the passage of time and new ways of commuting between places, the railway station was shut down. The area around the railways was owned by the Trafikverket (The Swedish Transport Administration) for a long time and because of it, the municipality was not able to do anything for the area because of ownership rights. However, recently the municipality of Tibro has agreed to buy the railway station from Trafikverket for a low price. Today there has been speculations on what to do with the site and the municipality of Tibro have been working with with Stockholm based firm Anders Berensson Architects to plan a non-official urban planning for the site. Anders Berensson Architects also include the citizens of Tibro to make some collage imagaes for the future of the railwaystation (Anders Beransson Architects, 2019). Looking throught those pictures there are many ideas on what to do with the site, from unrealistical to realistical images. However it seems the most common thing people would like the place to be is that it would become a new pathway that almost has the function as a garden to walk by.

In my proposal I follow mostly the schematic plan from Anders Berensson Architects, that there would be a new walking path alongside the existing rail tracks.

Figure 5. The Railway Area

Stationmagasinet

This building called Stationmagasinet was used as a storage room for goods to load and unload on to the train that once went through Tibro, it is one of the oldest buildings in the town. Today the building is used as rental storage rented for a cheap price.

The construction of the building is made of wood and it is not insulated which makes it cold storage. The North and the South facade of the building has each a five 2,4x2,4m big sliding doors which were used to load and unload onto the train.
On the inside the columns and the loading beams are made with untreated wood, some beams are supported with a steel wire hanging from the roof. According to my measurements, the size of the columns and the placement of it are most of the uneven and sometimes feels randomly placed. It is also interesting to see that one of the train catenaries goes straight through the roof of the building and to the ground.

Conclusion:
After measuring up and taking photos of the existing building I liked the character of the building of how long the volume is and how uneven the placement of the sliding doors and the placement of the columns are. I saw some potential in the size of the sliding doors that it could become a frame that can display something or take a look at what is inside.

Infrastructure

When coming to the railway station the first thing that everyone would probably notice is the large and thin train catenary and the long railway that is connected to other municipalities. All of the Train catenaries have the same height which is about 7 meters from the ground to the top horizontal steel beam. It's hard to tell how long the railways are since they are connected to many municipalities in Västra Göteland County. On the railway station, the railways start with two railway tracks which broaden to four tracks near the Stationmagasinet. As the railways are today there is no one taking care of it which makes a lot of wild plants growing between the tracks.

Conclusion:
It is a unique experience to walk between the tracks and see the train catenary above framing the linear space. For my project, it was tricky to understand what should be kept and what should be demolished. After some thoughts, I wanted to keep most of the infrastructure as possible. The only infrastructure I would demolish is the train track that is most near to my design proposal in order to propose a garden that includes benches and outside sculptures.

Figure 6. Stationmagasinet

Figure 7. Train Catenary

Figure 8. Train Tracks

4. Concept and Process

Materiality - Wood, Steel, fabric, and plastic.

When it comes to the question of how furniture design can influence the materiality and detail of a building I was only going to use wood as the main materiality since that has been the materiality that has always been used to build furniture. However, during the design process, what about other materials that are used for furniture making?

After taking a look at what furniture companies in Tibro and what materiality they are using for furniture design I decided to work with materials that are used for furniture making which are wood, steel, fabric, and plastic.

Since my building is long and separated in parts I wondered if each part could represent each materiality of materials that are used for furniture making. With this concept, each building would have its characteristics and different recognition by visitors, almost like each building is a piece of different furniture.

It was tricky to realize which materiality should be used for each materiality. The warmness of the wood, the coldness of the steel, the softness of the fabric, and the glossiness of the plastic. In my sketch process, it is more clear what my conclusion is.

Fabric

Metal

Wood

Plastic

Reference Project 1

Project: Vandalorum Museum
Designer: Renzo Piano
Location: Värnamo, Jönsköping County, Sweden.

About:
Vandalorum Museum was designed by the Italian architect Renzo Piano and the interior of the museum was designed by the Icelandic architect Sigurður Gústafsson in consultation with Sven Lundh. The inspiration of the building takes from the typical Swedish Rural barn with the Kåra red color on its facades. Each exhibition hall brings in a lot of natural lighting from the ceiling. originally there were supposed to be 12 exhibition halls but as it is today there are 4halls. (Vandalorum, 2019)

Conclusion:
What I seek inspiration from this project is the barn-shaped exhibition hall that is separated like units from one and another with glass corridors that connects them.

Figure 9. Vandalorum Museum

Figure 10. Exhibition Hall in Vandalorum Museum

Reference Project 2

Project: Ypenburg Housing
Designer: MVRDV
Location: Ypenburg; The Hague, Netherlands

About:
This housing project is located in Ypenburg in the Netherlands and was designed by MVRDV in 2001-2005. Part of a suburban planned neighborhood consisting of 7000 new houses the Waterwijk area has a special row of social housing. Because of economic constrains one of the methods that was used for this project was to avoid detail by using only one material, the same type of door, and no gutters that extend from the roof which gives each house a strong and noticeable look. (MVRDV, 2020)

Conclusion:
The inspiration that I take from this project is how the cladding of the roof goes all the way down to the wall which gives each building its own character. This method is something I could use for my project on how different materiality of furniture making can be used in an architectural way.

Figure 11. Ypenburg Housing

Figure 12. Ypenburg Housing, materiality

Reference Project 3

Project: The High Line
Designer: James Corner Field Operations
Location: New York City, USA.

About:
Located in Manhattan, New York an abandoned railway was transformed into a park. Originally the long infrastructure in New York was supposed to be torn down but thanks to a nonprofit organization called Friends of the High Line fought against the idea to tear it down and later on proposed an international competition on what to do with the existing railway. This lead to a conversation starter that led one to another to start a project to revive the railways in four different phases. Today The High Line Park is one of the most Icon attractions in New York City. (Wikipedia, 2019)

Conclusion:
This project has motivated me to see what potential abandoned infrastructure can bring to its society. Even though there is a big scale difference between New York City and Tibro I can relate this project is how a linear structure will influence the design itself.

Figure 13. The High Line, before renovation

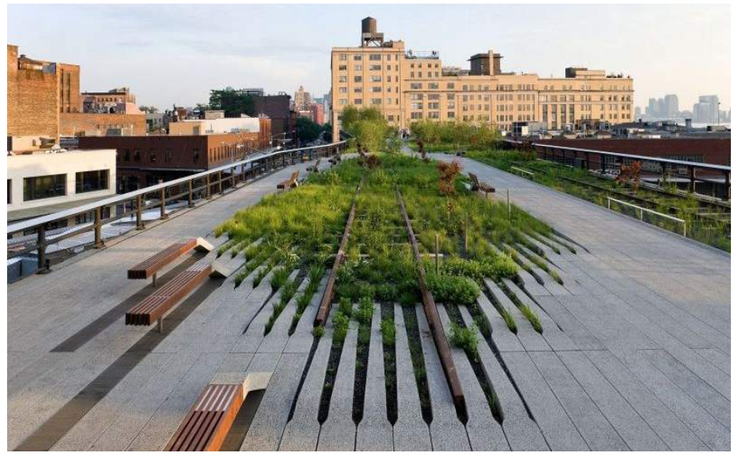
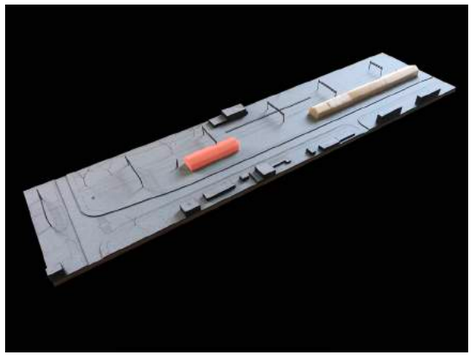


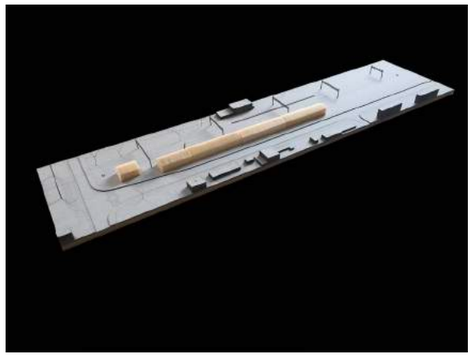
Figure 14. The High Line, after renovation

Volume Sketch Process

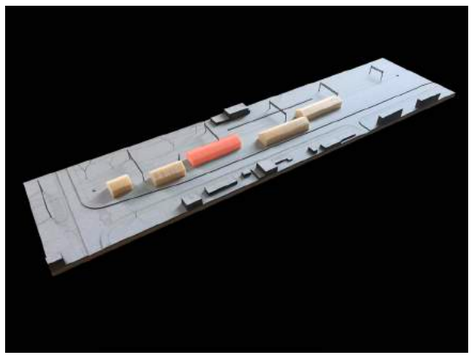
Looking at the site as it is it was clear for me that the mass of the building would follow the linear structure of the existing storage house. It was challenging to find the right rhythm and placement of the program but after some iterations, I came to a conclusion where the program of the building would be split to leave space so the building won't block for people who wants to pass to the walking path.



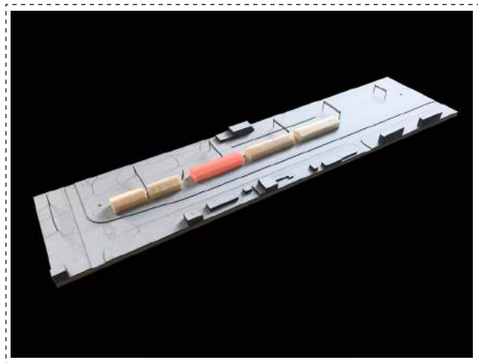
Sketch 1. Put my program away from the Station-magasinet to have more freedom to design but it feels hidden from the main street.



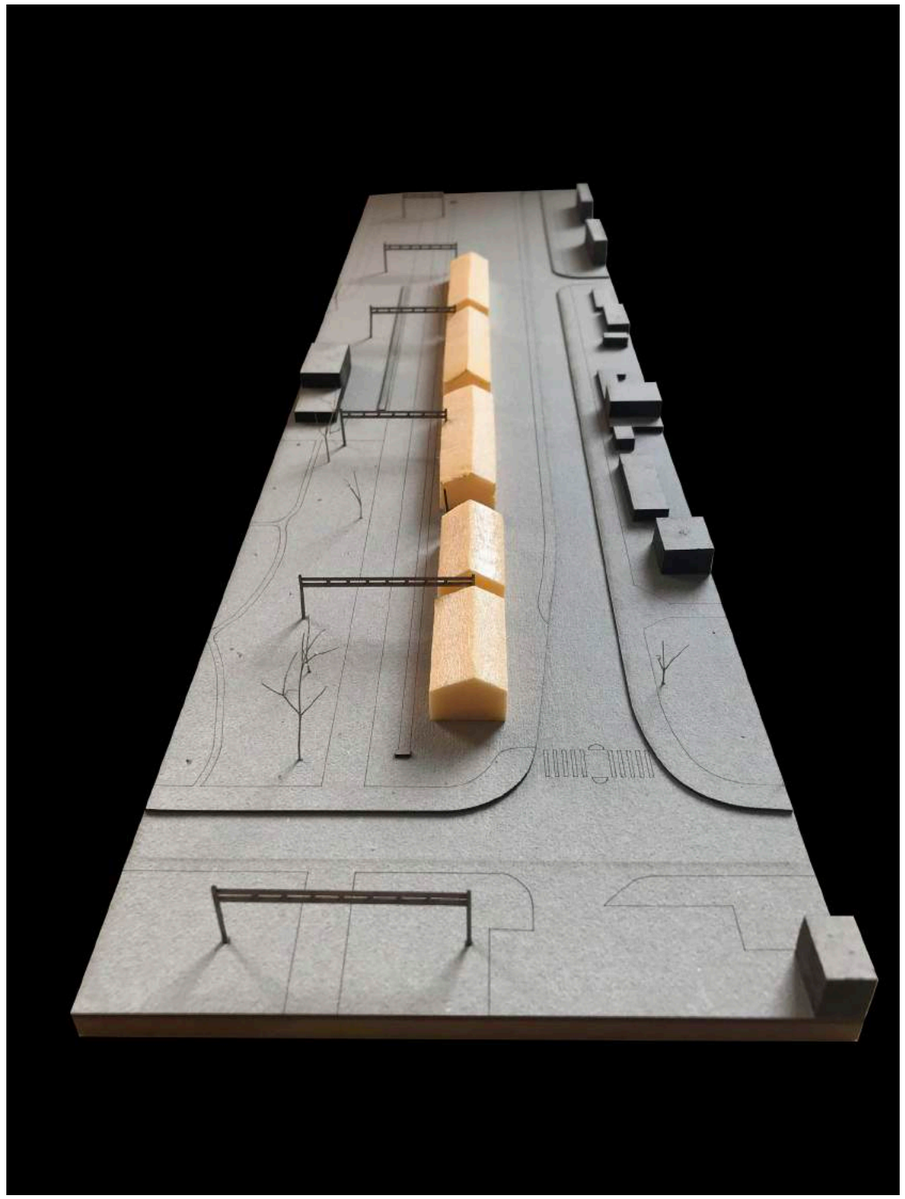
Sketch 2. Demolish Stationmagasinet to have space. I have more freedom to design but it feels wrong to demolish a building that has strong characteristics. This long volume with no space feels brutal.



Sketch 3. Try to split the function irregularly around the Stationmagasinet. It feels right to split the function but it is difficult to feel the building as a whole.



Sketch 4. Split the volume and follow the linearity of the rail with equal space between each unit felt right, the building reminds almost like a train that has been put to the side.



Materiality Sketch Process, facades.

To realize which furniture design materiality should represent each house I did different facade studies within mind that the roof and the wall should be classes with the same material.
In this study, it was easy to find materiality that suits steel but realizing what could interpret wood, plastic, and specially fabric was difficult due to it can withstand a Swedish climate.

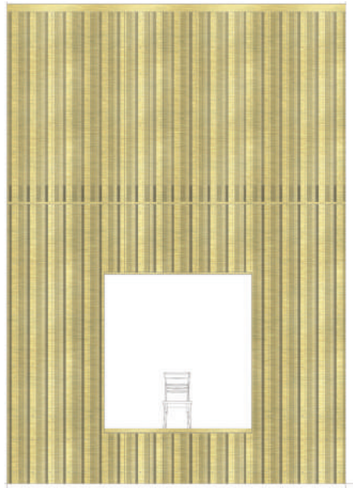
Conclusion:
After some sketches and drawings, The cladding that I decided to use for each materiality is the following materials.

Wood - 60x50mm, vertical weatherproofed pine boards.

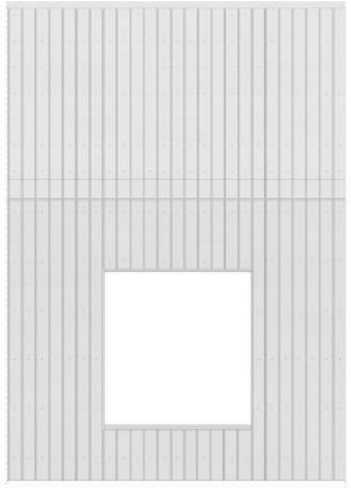
Steel - 1,5mm, galvanized steel cladding.

Plastic - 1mm, corrugated polycarbonate cladding.

Fabric - 5mm, roofing felt.

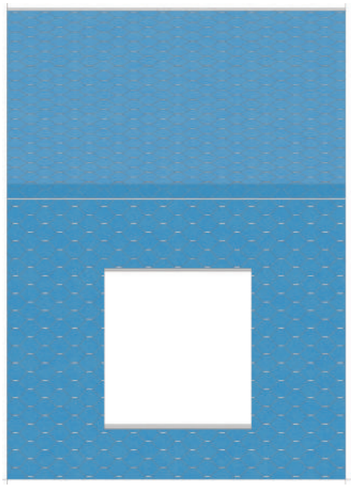


Gold Brass Sheet



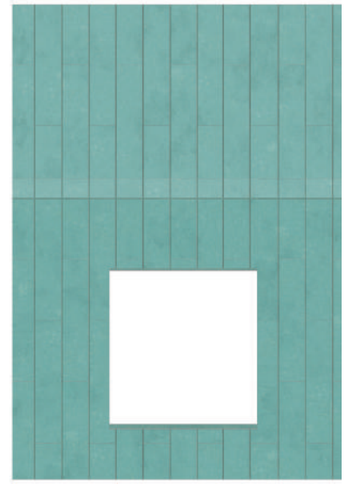
Aluminium Lock Cladding

Vertical Wood (weatherproofed)

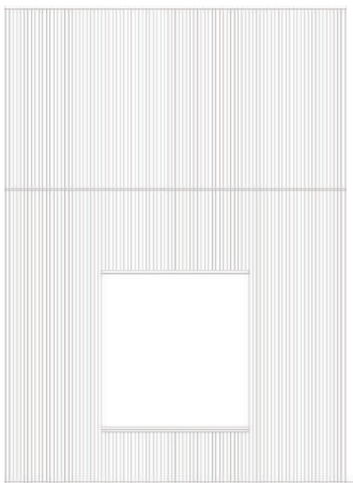


Adeka Cladding

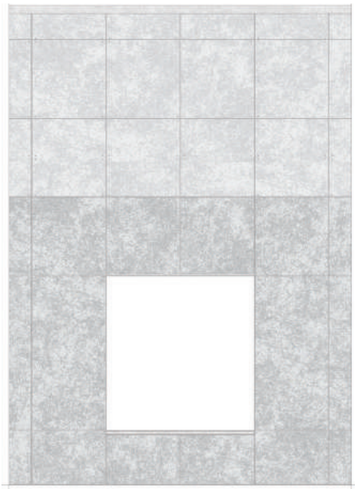
Corten Steel Cladding



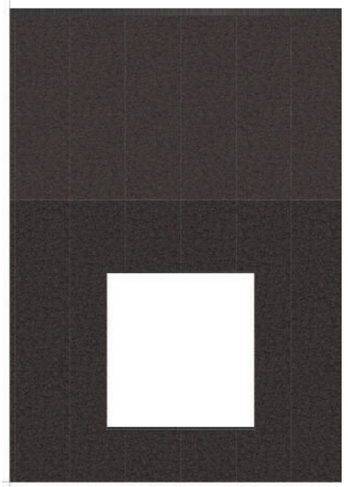
Copper Cladding



Polycarbonate Cladding



Galvenised Steel Cladding



Roofing Felt

Materiality Sketch Process, interior.

Sketching and experimenting with different materiality for the interior was easier than the outside cladding. However, during the process, I realized that the materiality on the inside should not be too different than the

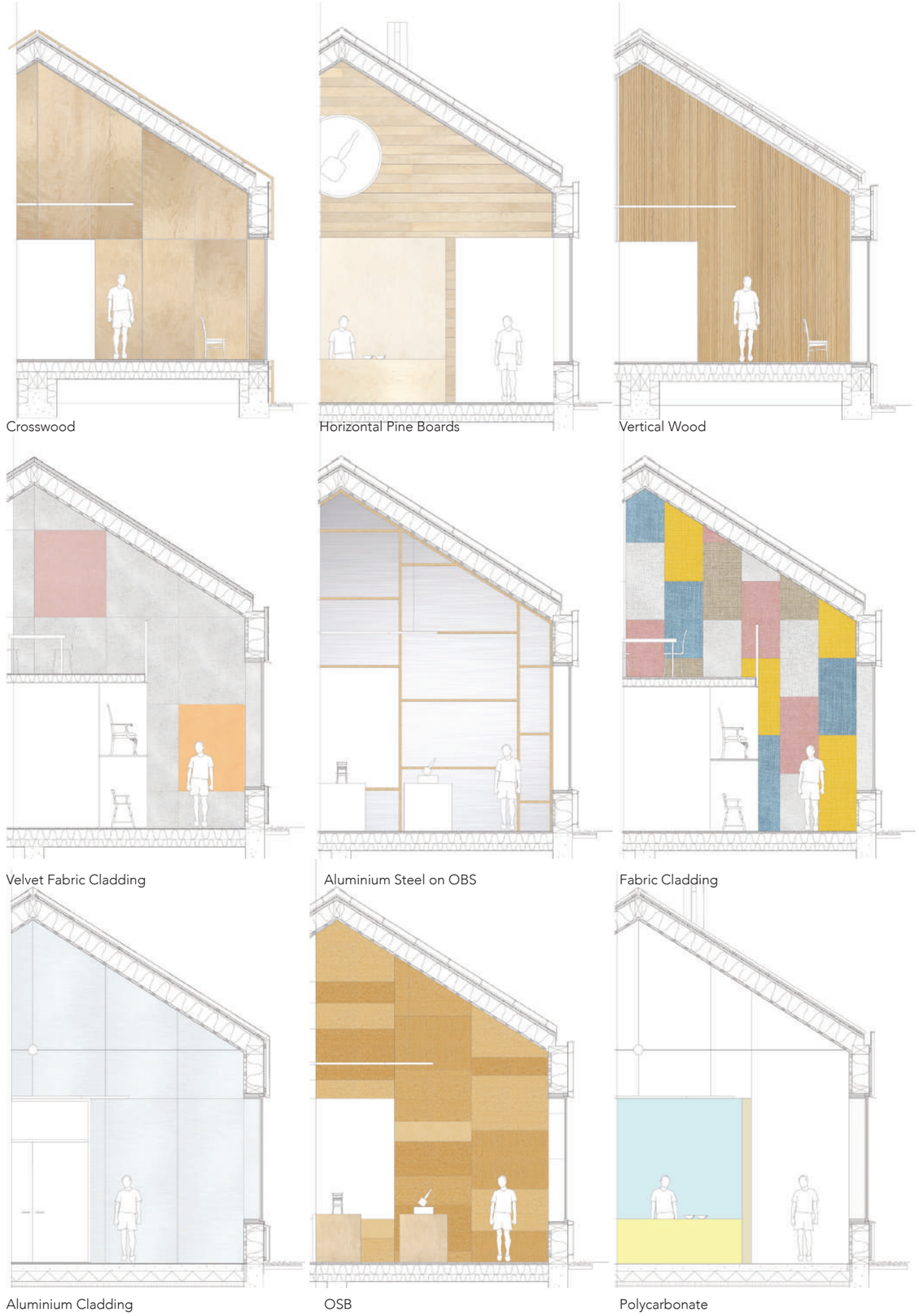
Conclusion:
After some sketches and drawings, The cladding that I decided to use for each materiality is the following materials.

Wood - 30mm, wood glue.

Steel - 11mm, OSB plate with brushed aluminum sheet, glued.

Plastic - 1mm, polycarbonate sheet.

Fabric - 5mm, plush carpet.



5. Proposal

Building description:

After my volume sketch, my building will be linear alongside the rail tracks and the volume of the building would be separated into 5 different parts, including the Magasinstation. The building is accessible from almost all sides but to get a ticket to the exhibition hall the visitors must enter building 2 where the ticket sale is placed and borrow swipe keys to access the exhibition halls and the archive. Since there are no tunnels that connect one exhibition hall to another there are no cloaking room and visitors must take their clothes with them. All of the staff areas are placed on the second floor for each building except for the two exhibition halls.

Outside area:

On the north side of each building, there are gardens where the visitors can interact with outdoor sculptures or take a sit on a bench to enjoy the view on the rail tracks.

Program

Building 1, *The Plastic house*

1st floor	
Seating area	112 m2
Kitchen	48 m2
Corridor	40 m2
2nd floor	
Staff Room	48 m2

Building 2, *The Steel house*

1st floor	
Ticket Sale & Shop	112 m2
Reception	9 m2
WC & Cleaning Room	39 m2
Corridor	40 m2
2nd floor	
Staff Area	48 m2

Building 3, *Magasinstation (Existing building)*

Cold Exhibition Hall	335 m2

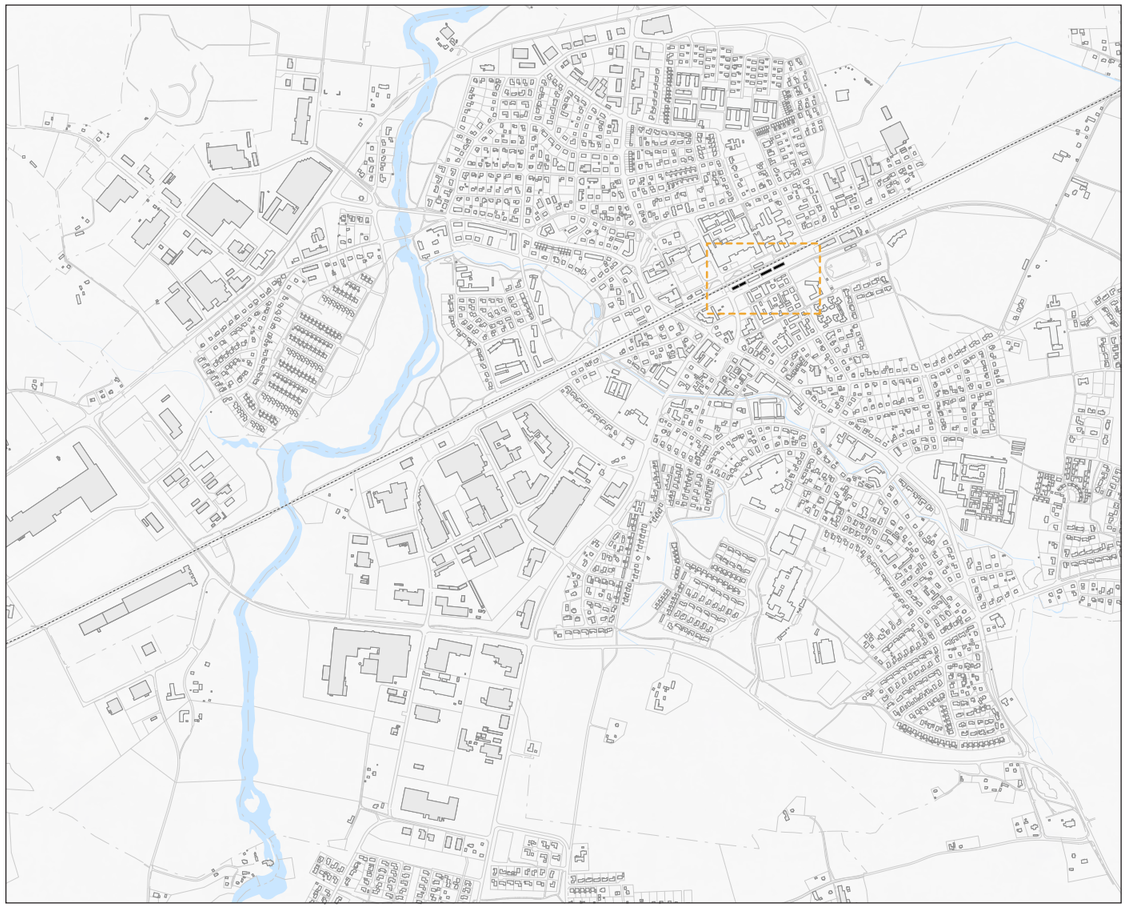
Building 4, *The Wood house*

Heated Exhibiton hall	335m2

Building 5, *The Fabric house*

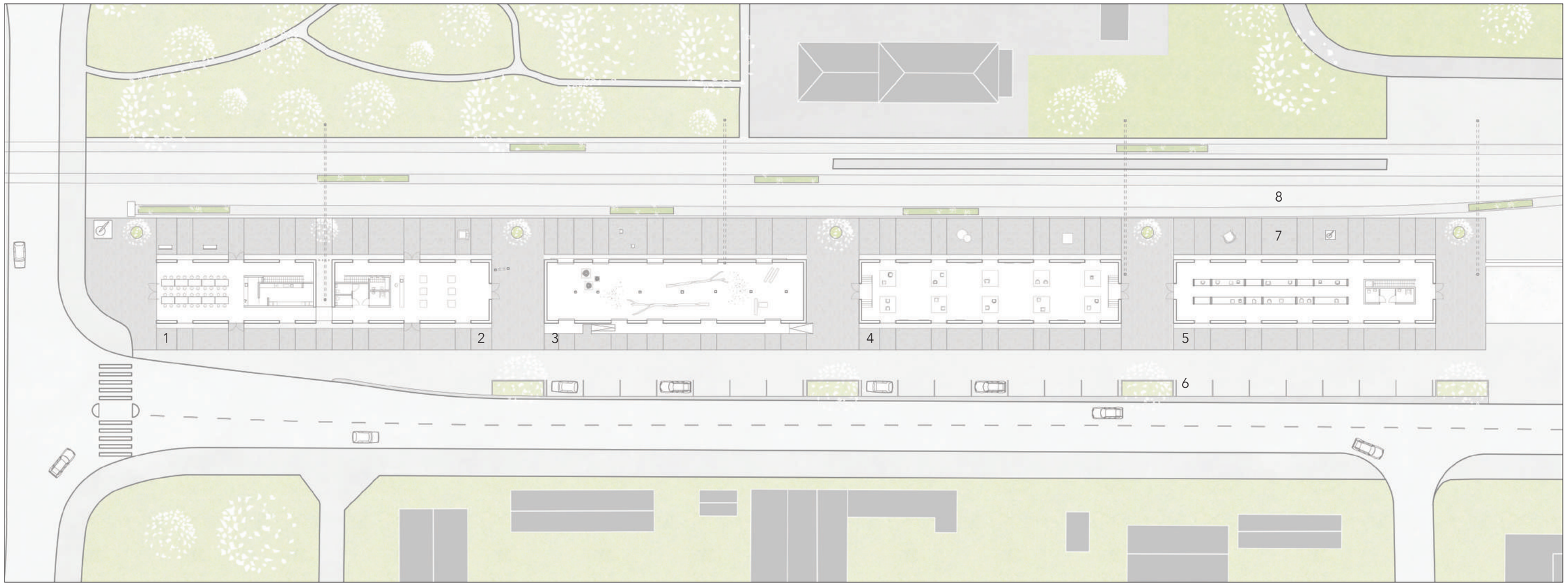
1sr floor	
Furniture archive	307 m2
WC	28 m2
2nd floor	
Flexible Offices / Staff Area	123 m2

Total	**1500 m2**



Site Plan 1 : 10000
(1 : 20000 on A3)

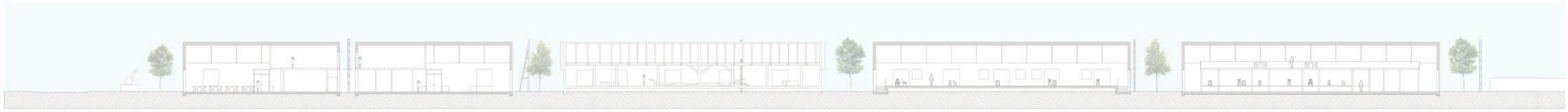
Site Plan 1 : 1000
(1 : 2000 on A3)



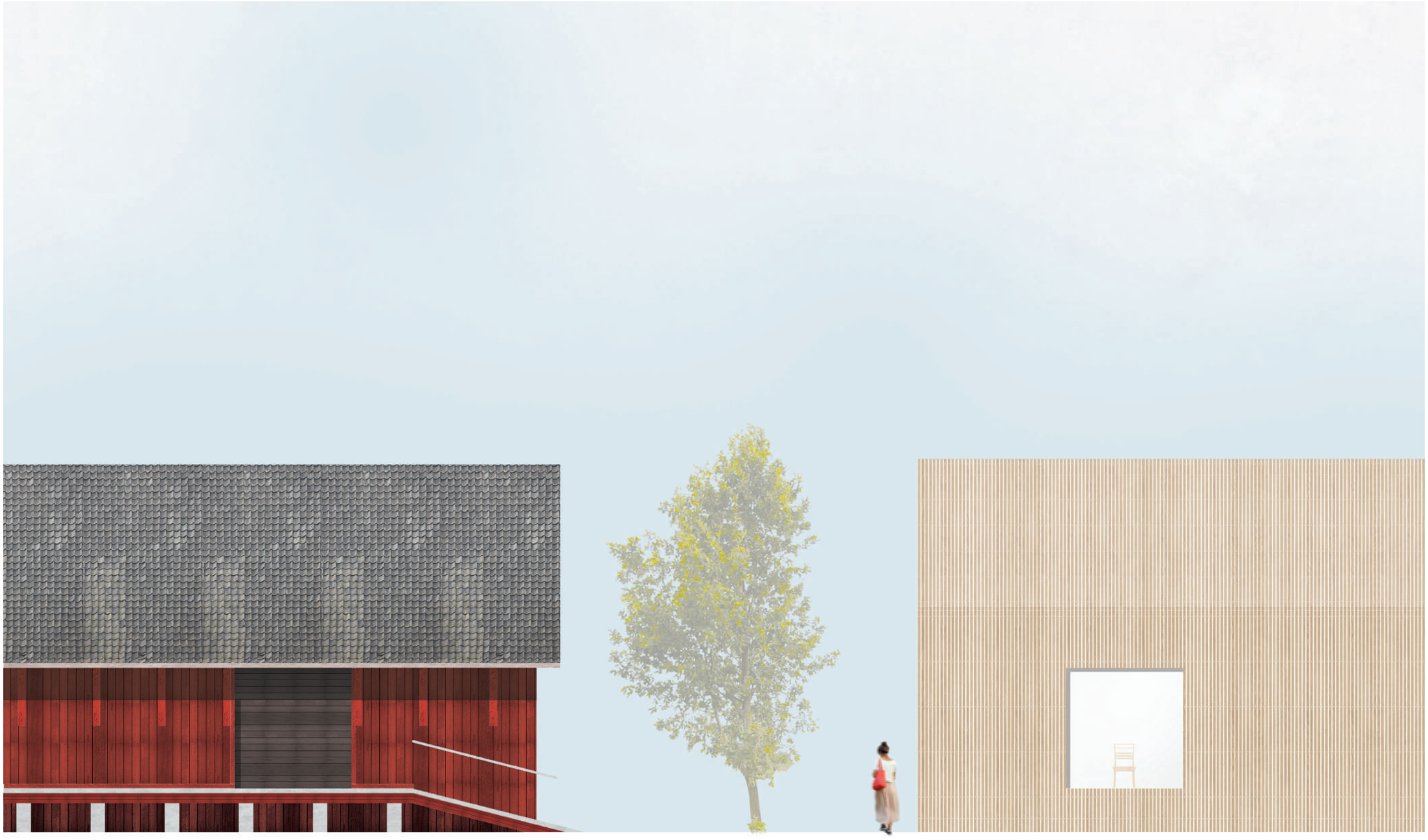
1. Coffee place
2. Ticket Sale and Shop
3. Cold Echibiiton Space
4. Heated Exhibition Space
5. Furniture Archive and Offices
6. Parking Lot
7. Sculpture Garden
8. Rail pathway

Floor Plan 1 : 300
(1 :600 on A3)

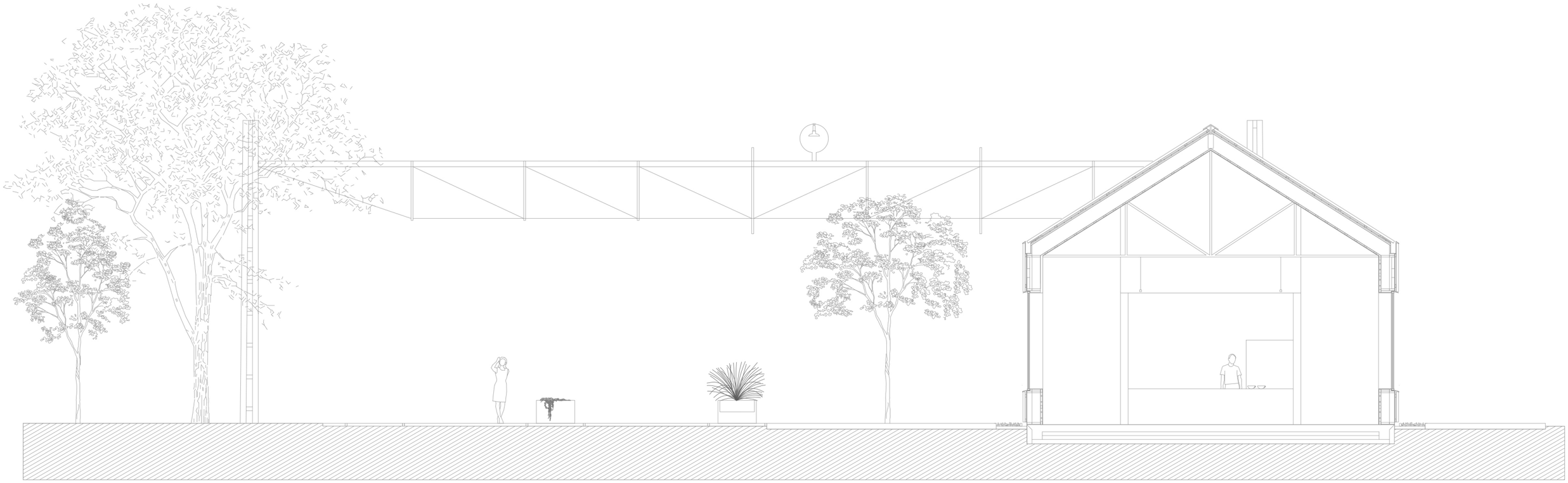
Elevation 1 : 300
(1:600 on A3)

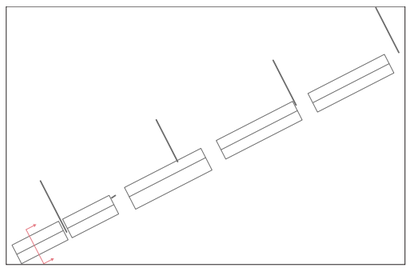


Section 1 : 300
(1:600 on A3)



Elevation 1 : 70





Section A - 1 : 100

Detail Section and facade in1:30 - Coffee House

Roof (From outer to inner)

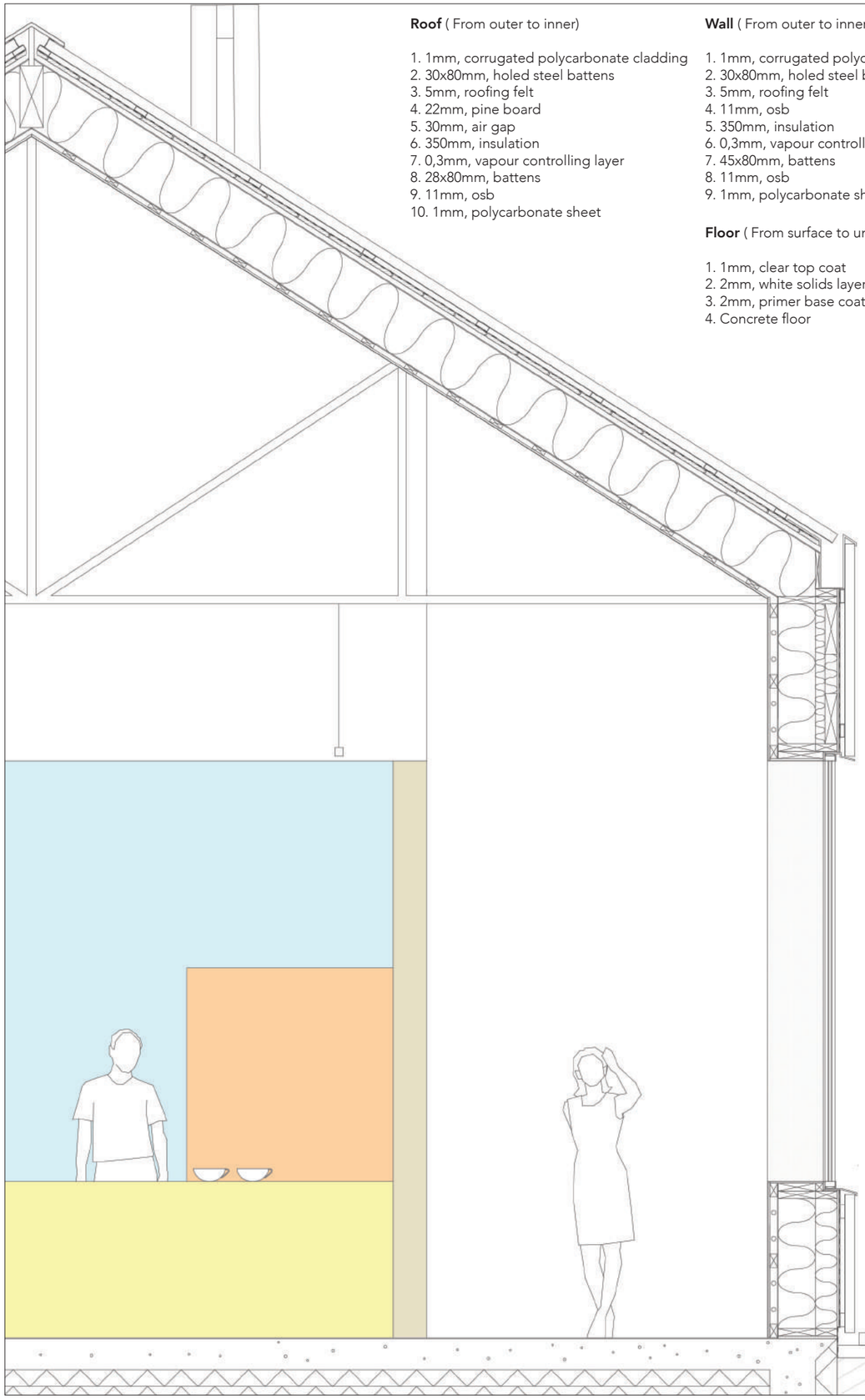
1. 1mm, corrugated polycarbonate cladding
2. 30x80mm, holed steel battens
3. 5mm, roofing felt
4. 22mm, pine board
5. 30mm, air gap
6. 350mm, insulation
7. 0,3mm, vapour controlling layer
8. 28x80mm, battens
9. 11mm, osb
10. 1mm, polycarbonate sheet

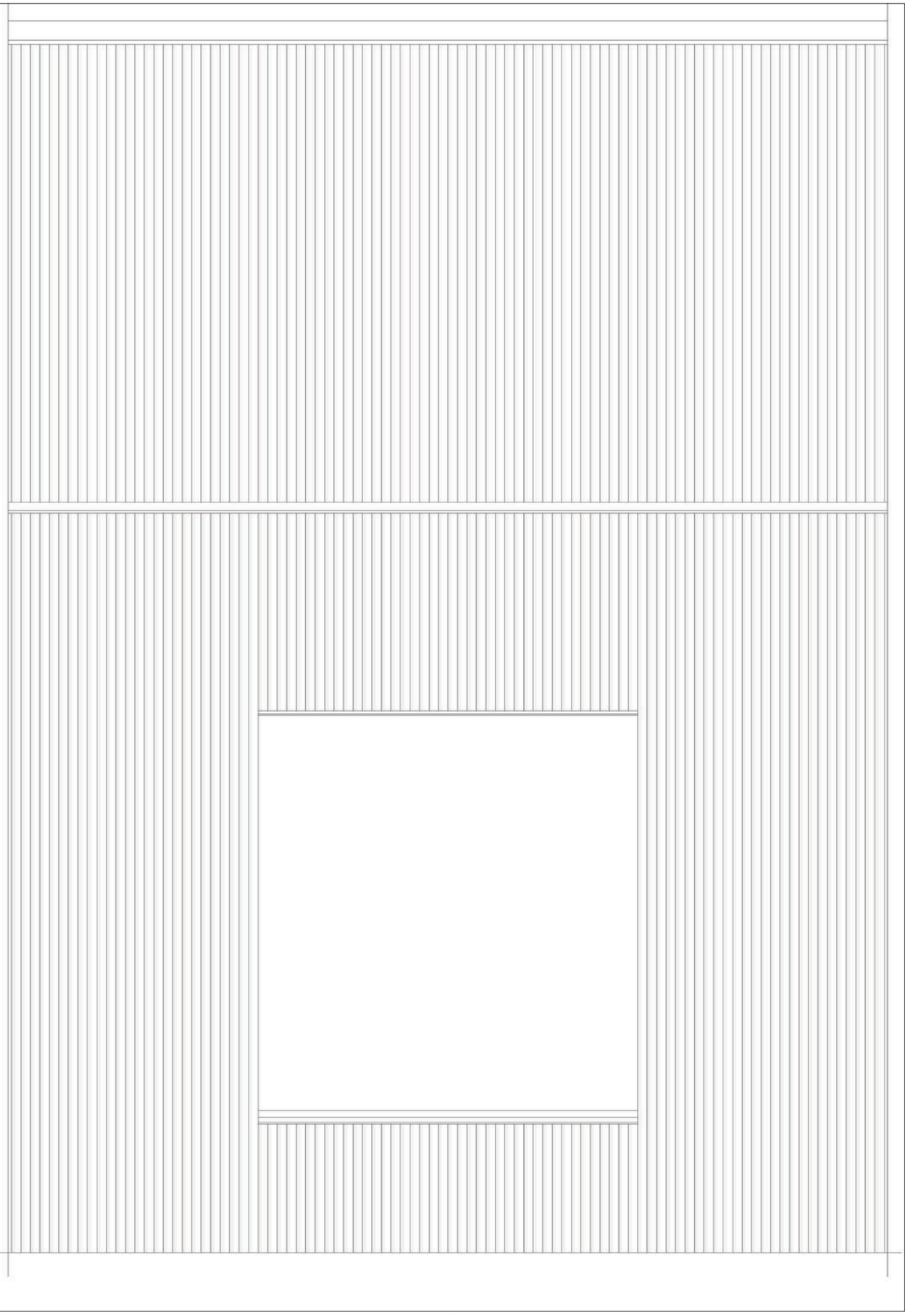
Wall (From outer to inner)

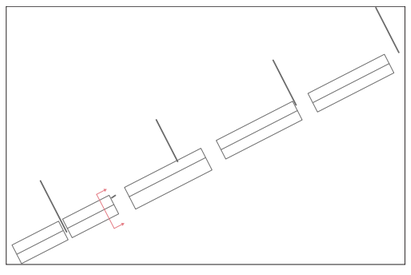
1. 1mm, corrugated polycarbonate cladding
2. 30x80mm, holed steel battens
3. 5mm, roofing felt
4. 11mm, osb
5. 350mm, insulation
6. 0,3mm, vapour controlling layer
7. 45x80mm, battens
8. 11mm, osb
9. 1mm, polycarbonate sheet

Floor (From surface to under)

1. 1mm, clear top coat
2. 2mm, white solids layer
3. 2mm, primer base coat
4. Concrete floor

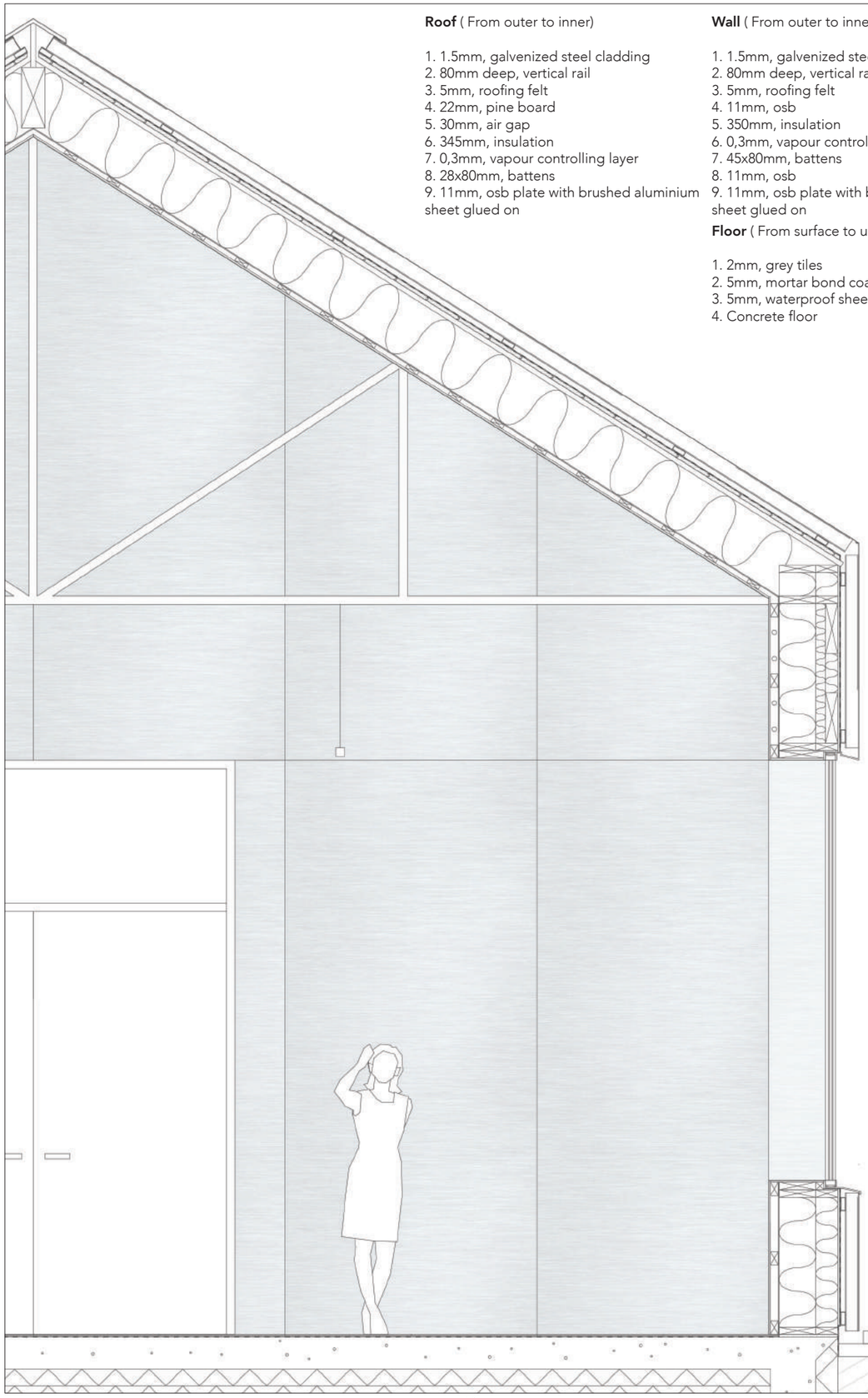






Section B - 1:100

Detail Section and facade in1:30 - Ticket Sale and Shop



Roof (From outer to inner)

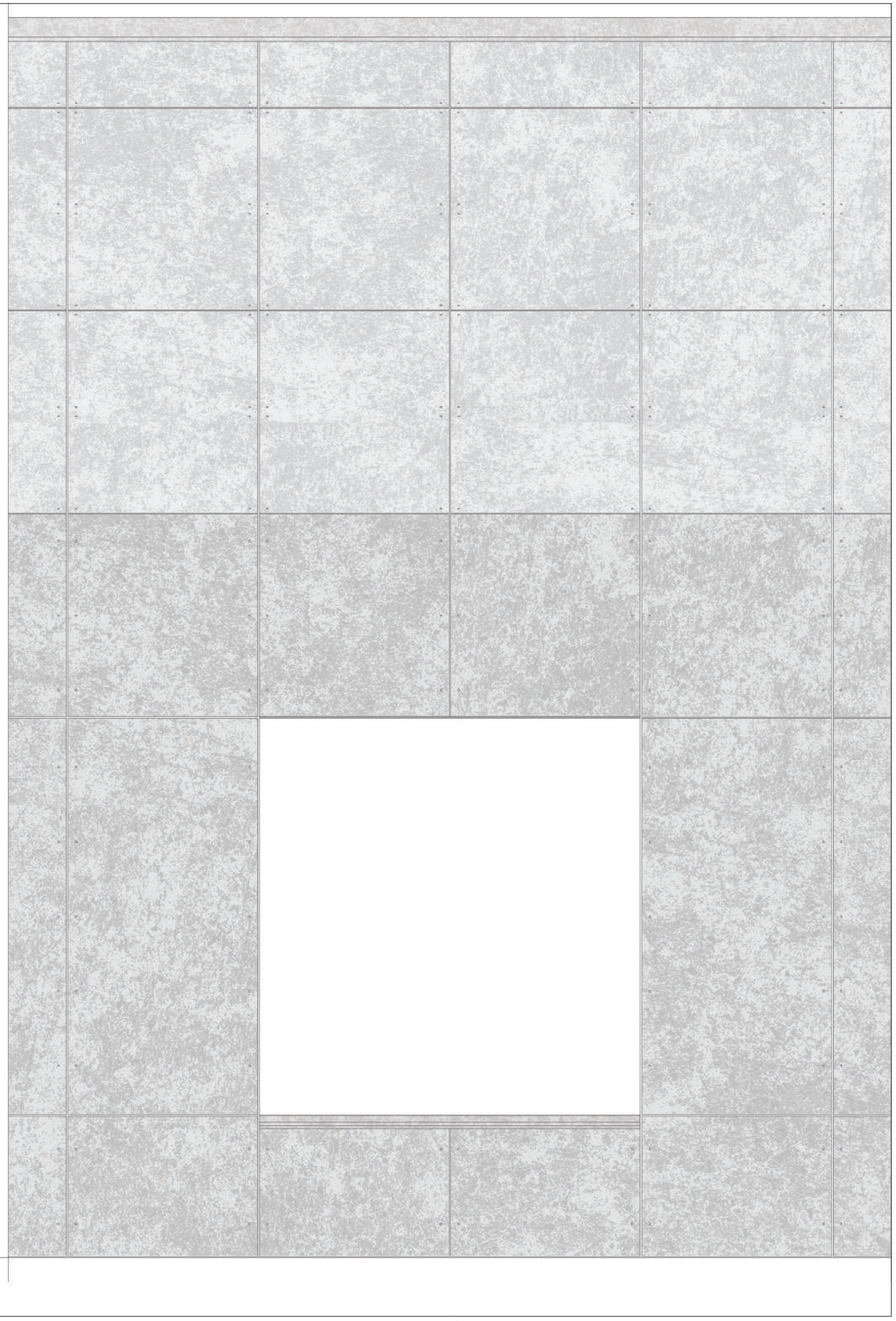
1. 1.5mm, galvenized steel cladding
2. 80mm deep, vertical rail
3. 5mm, roofing felt
4. 22mm, pine board
5. 30mm, air gap
6. 345mm, insulation
7. 0,3mm, vapour controlling layer
8. 28x80mm, battens
9. 11mm, osb plate with brushed aluminium sheet glued on

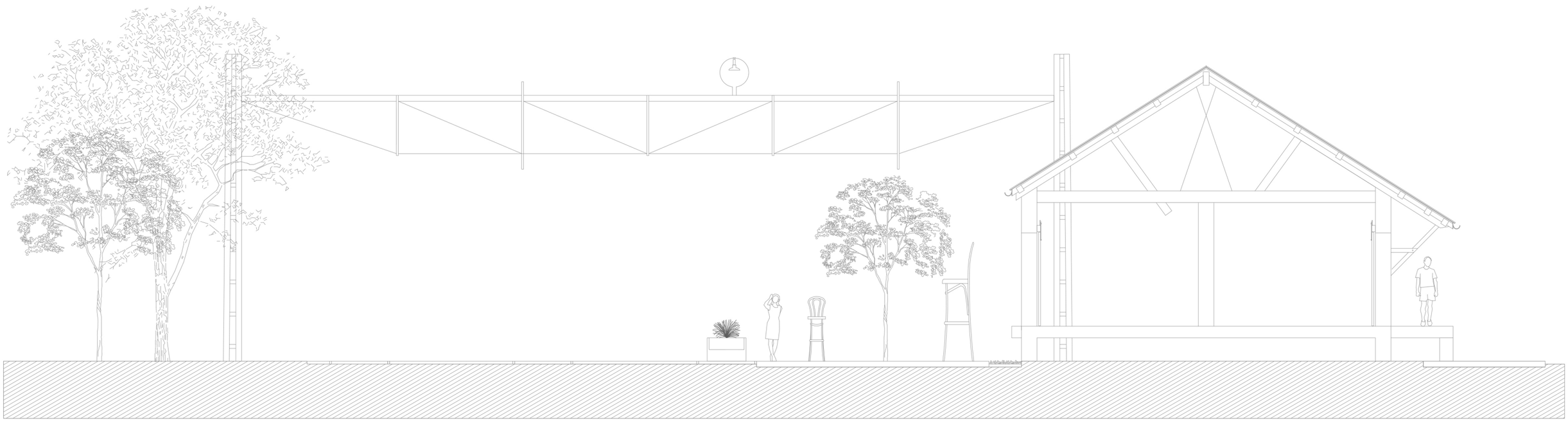
Wall (From outer to inner)

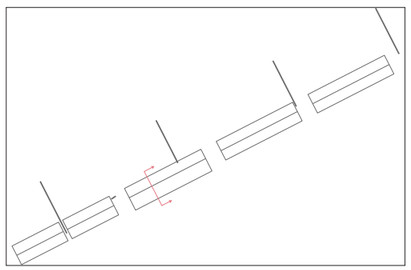
1. 1.5mm, galvenized steel cladding
2. 80mm deep, vertical rail
3. 5mm, roofing felt
4. 11mm, osb
5. 350mm, insulation
6. 0,3mm, vapour controlling layer
7. 45x80mm, battens
8. 11mm, osb
9. 11mm, osb plate with brushed aluminium sheet glued on

Floor (From surface to under)

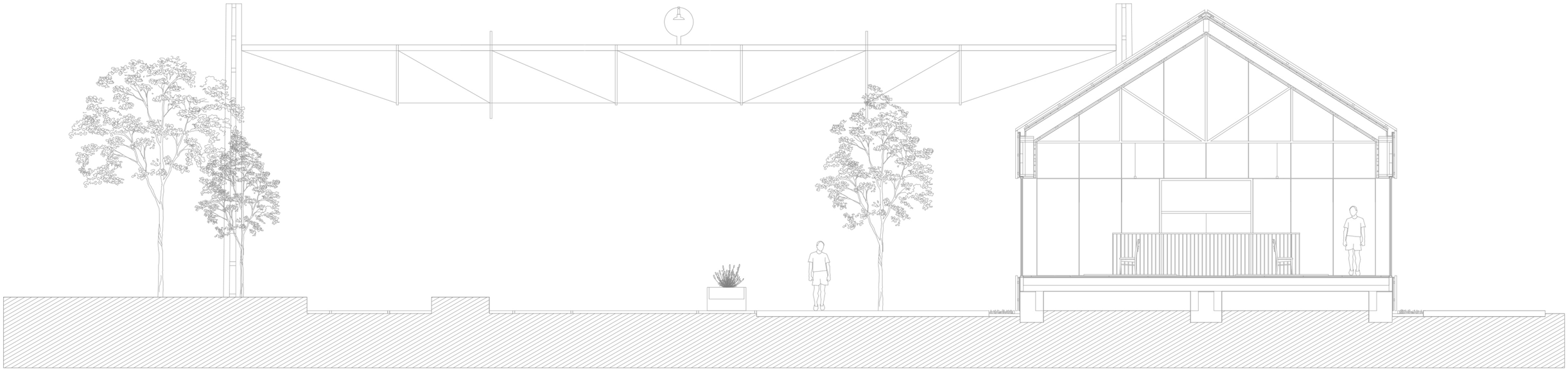
1. 2mm, grey tiles
2. 5mm, mortar bond coat
3. 5mm, waterproof sheet
4. Concrete floor

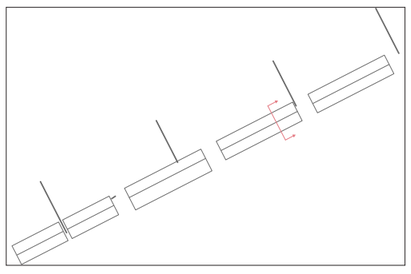






Section C - 1:100





Section D - 1:100

Detail Section and facade in1:30 - Exhibition Space

Roof (From outer to inner)

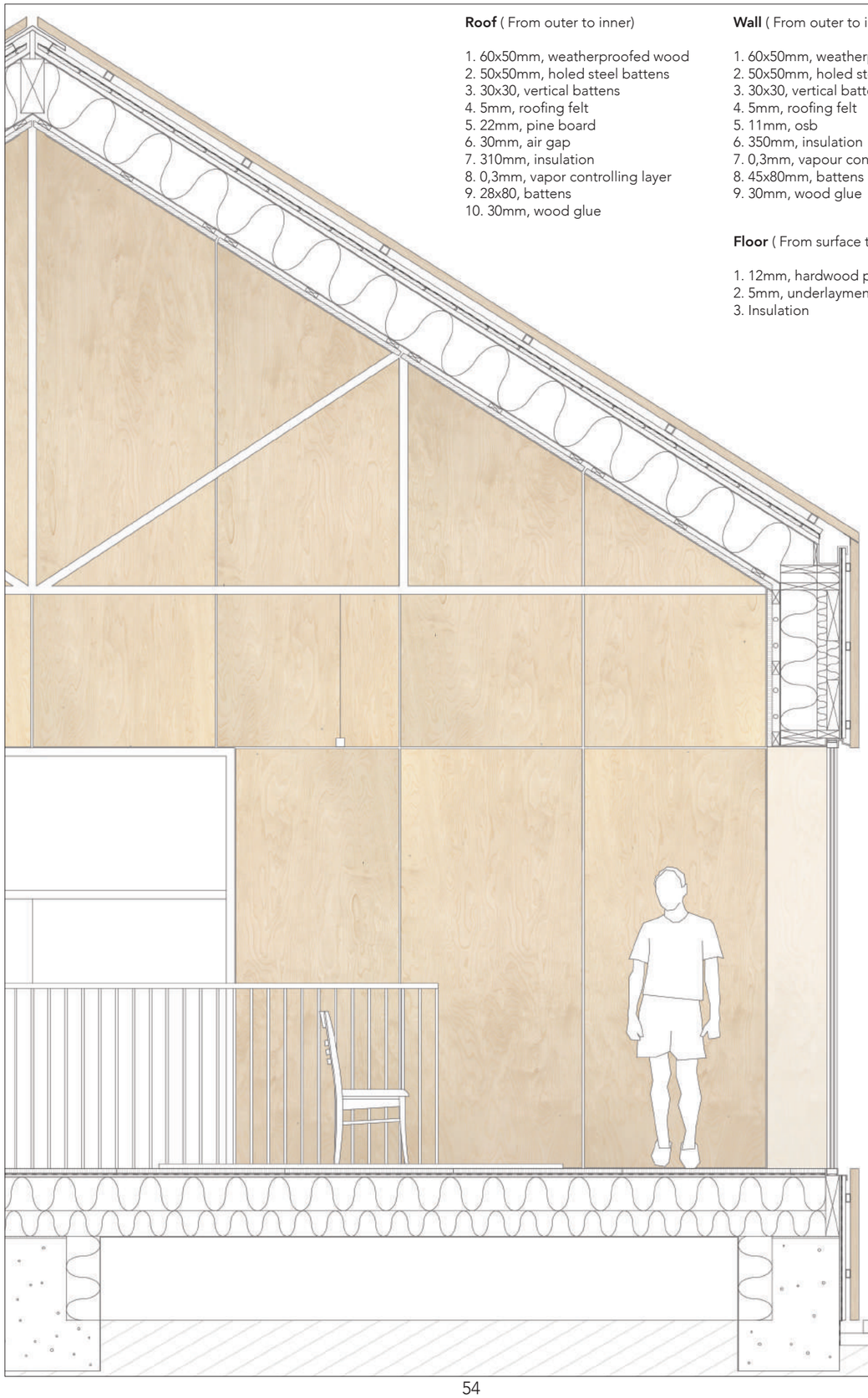
1. 60x50mm, weatherproofed wood
2. 50x50mm, holed steel battens
3. 30x30, vertical battens
4. 5mm, roofing felt
5. 22mm, pine board
6. 30mm, air gap
7. 310mm, insulation
8. 0,3mm, vapor controlling layer
9. 28x80, battens
10. 30mm, wood glue

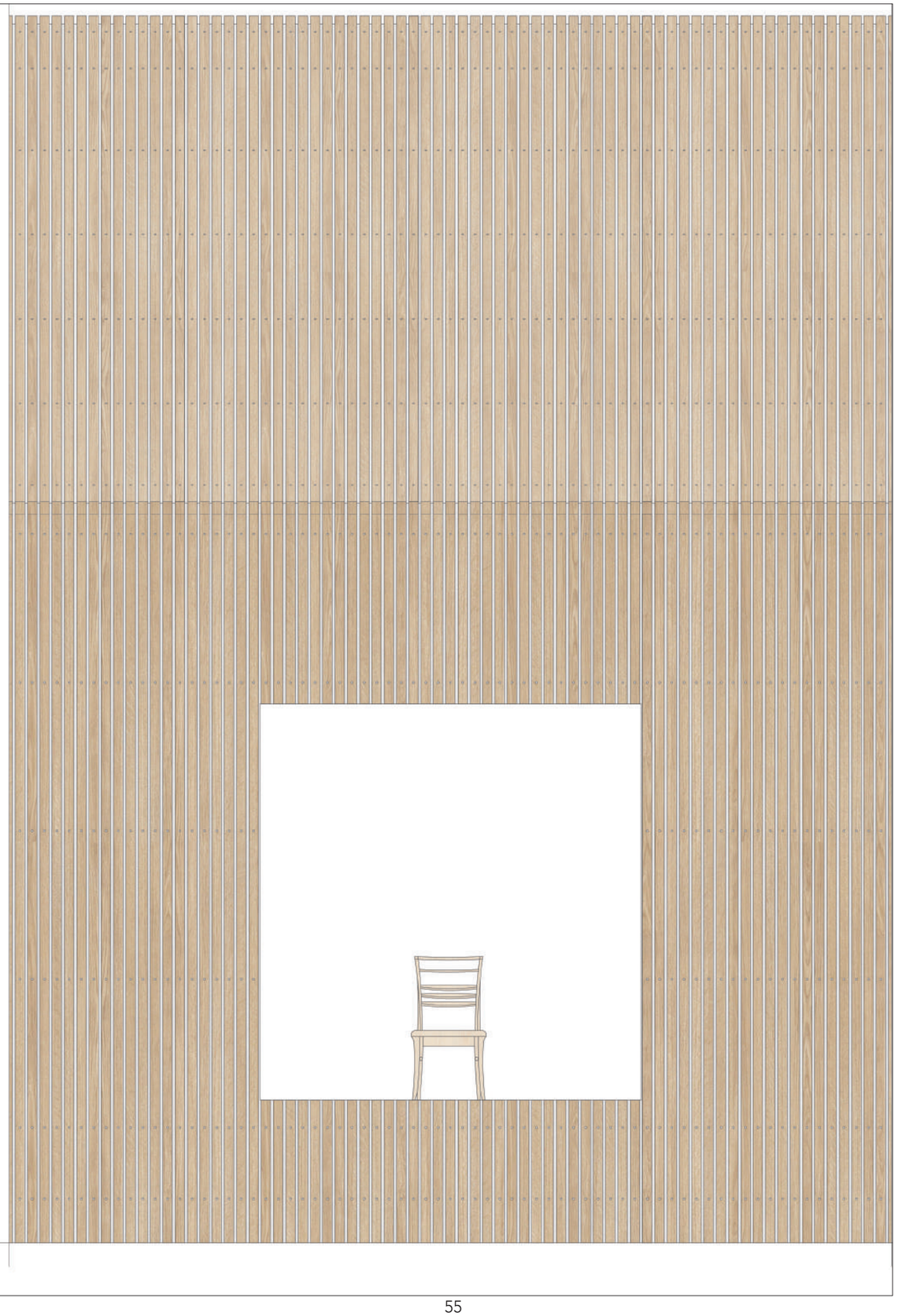
Wall (From outer to inner)

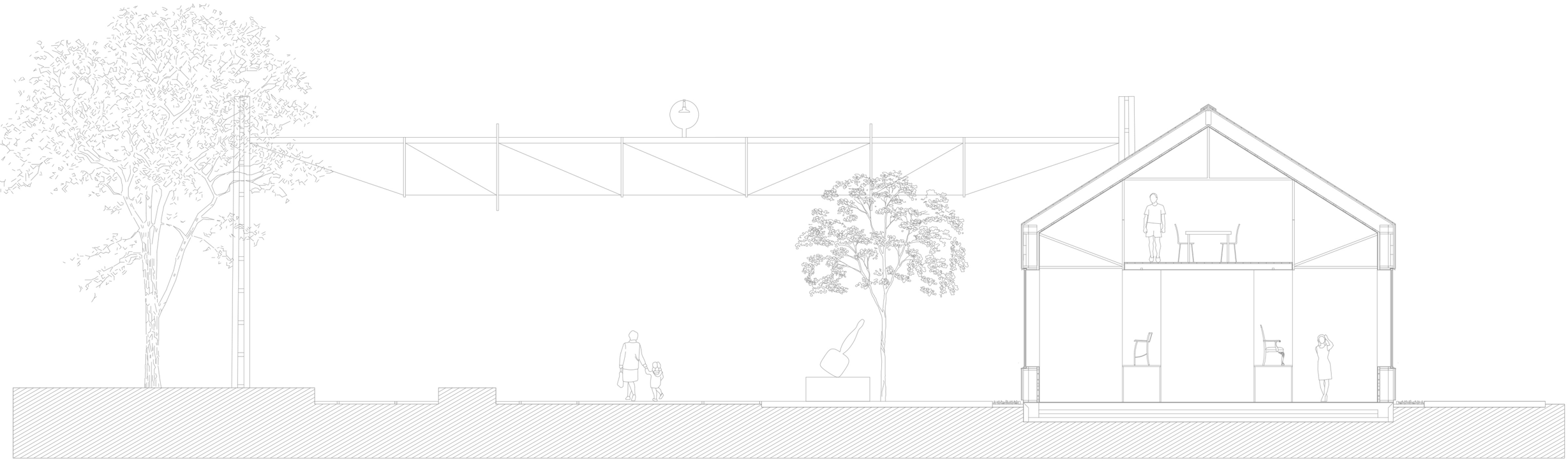
1. 60x50mm, weatherproofed wood
2. 50x50mm, holed steel battens
3. 30x30, vertical battens
4. 5mm, roofing felt
5. 11mm, osb
6. 350mm, insulation
7. 0,3mm, vapour controlling layer
8. 45x80mm, battens
9. 30mm, wood glue

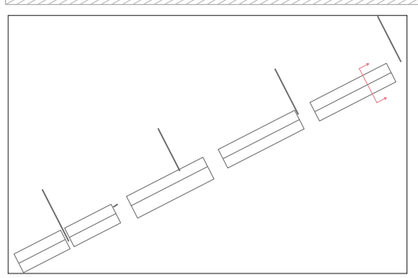
Floor (From surface to under)

1. 12mm, hardwood parquet
2. 5mm, underlayment and vapor barrier
3. Insulation









Section E - 1:100

Detail Section and facade in1:30 - Exhibition Space

Roof (From outer to inner)

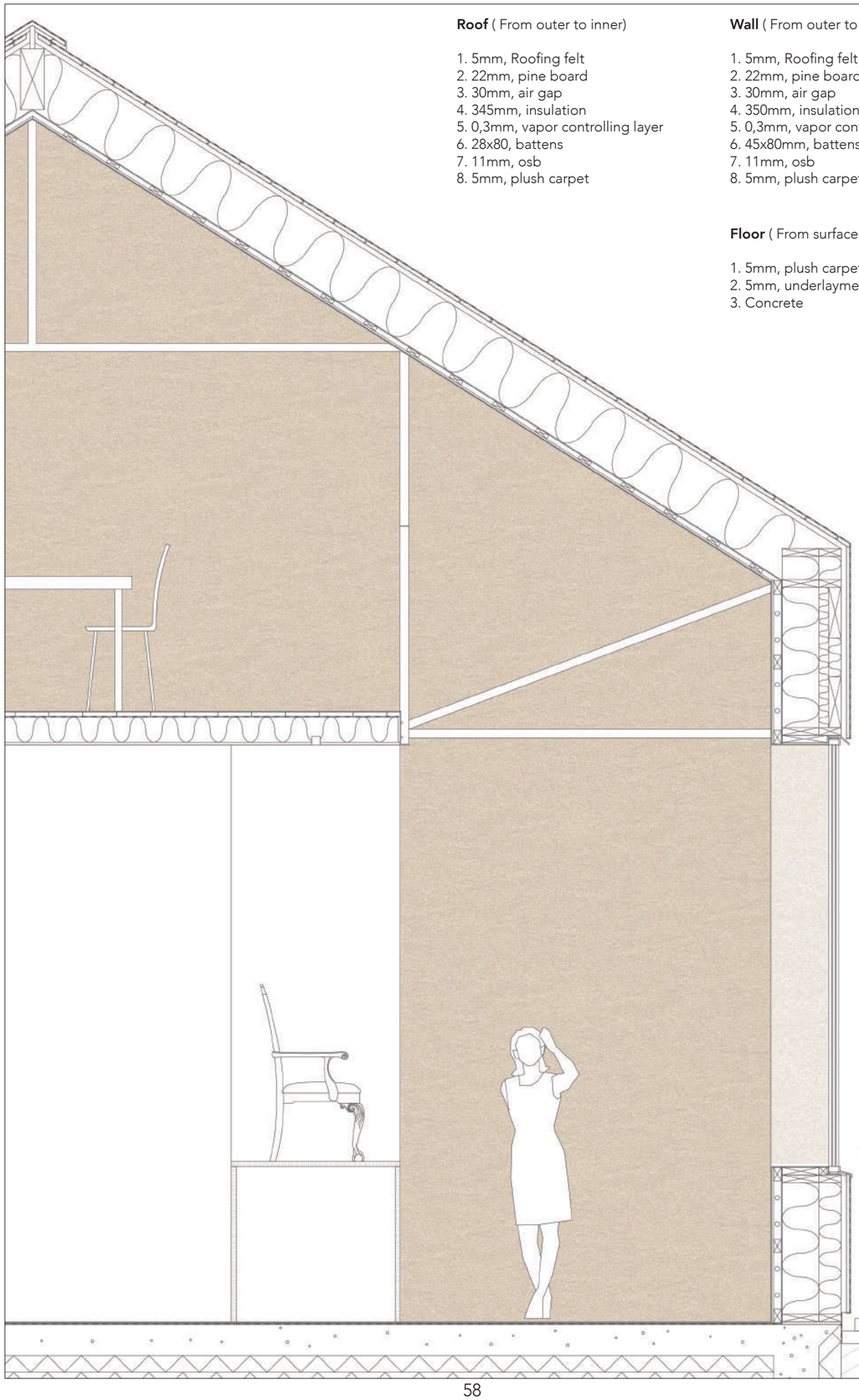
1. 5mm, Roofing felt
2. 22mm, pine board
3. 30mm, air gap
4. 345mm, insulation
5. 0,3mm, vapor controlling layer
6. 28x80, battens
7. 11mm, osb
8. 5mm, plush carpet

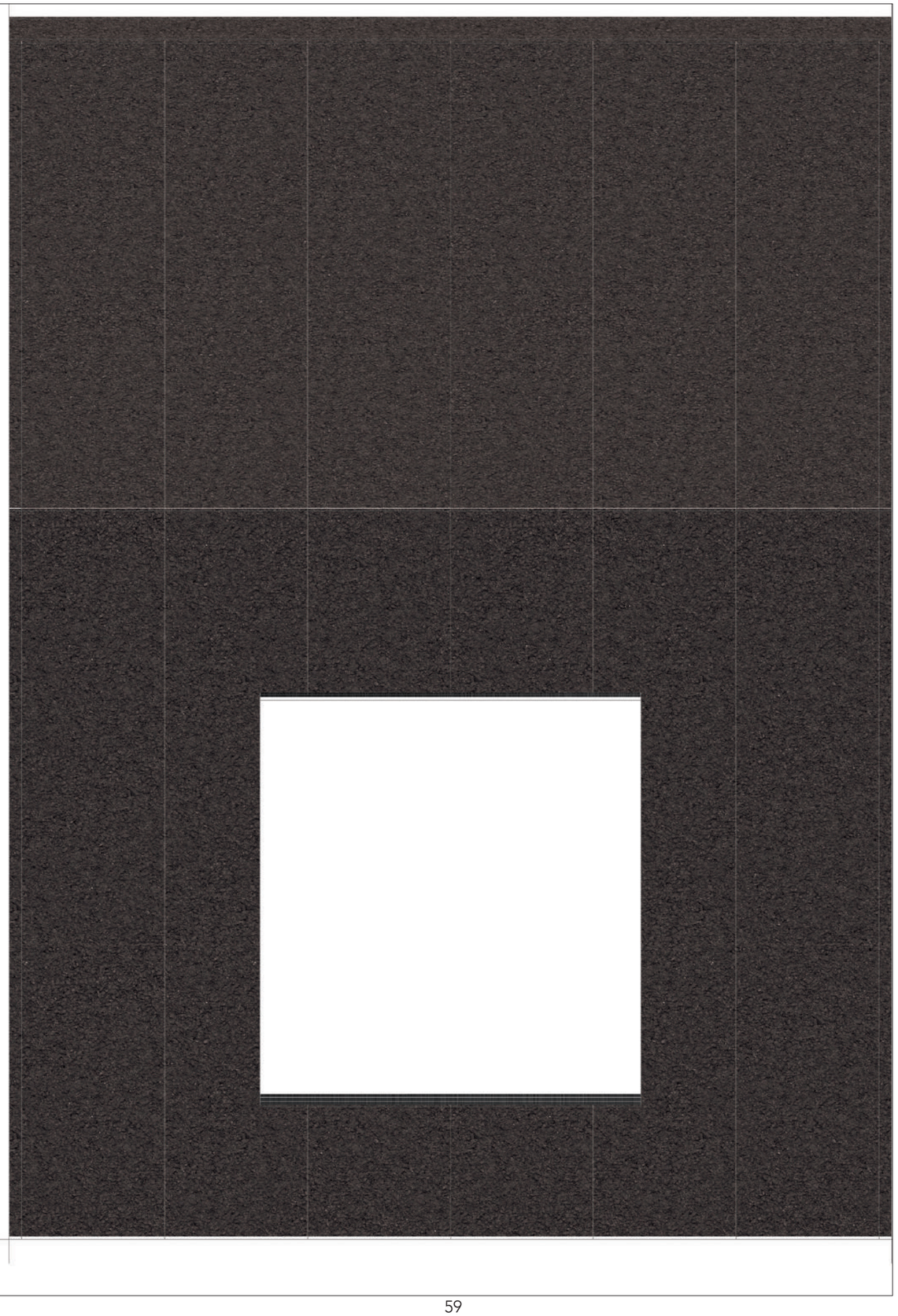
Wall (From outer to inner)

1. 5mm, Roofing felt
2. 22mm, pine board
3. 30mm, air gap
4. 350mm, insulation
5. 0,3mm, vapor controlling layer
6. 45x80mm, battens
7. 11mm, osb
8. 5mm, plush carpet

Floor (From surface to under)

1. 5mm, plush carpet
2. 5mm, underlayment
3. Concrete





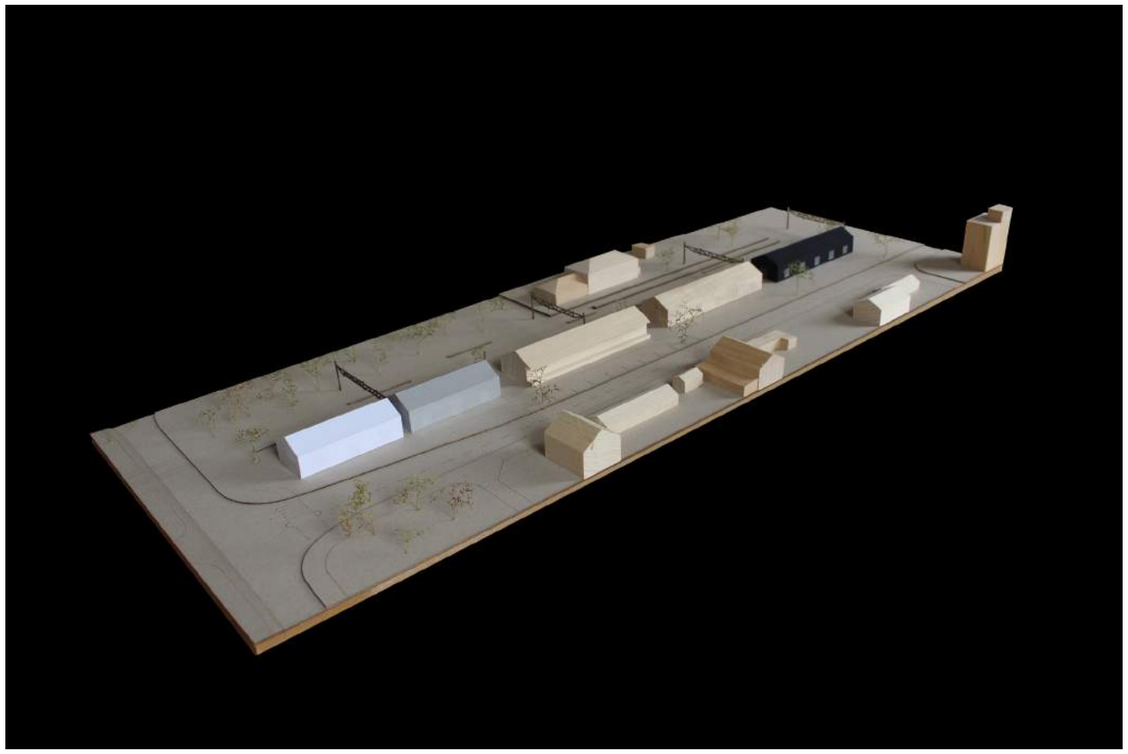
Perspective View from Rail Pathway

Interior Perspective from the Exhibition Hall

Perspective

Perspective

Pictures of physical model in scale 1 : 300



Pictures of physical model in scale 1 : 300

6. Conclusion

The project:

It has been interesting to see how the project has evolved during the process. As mentioned before my building was supposed to be only made with wooden materiality, however after thinking more of other materials that are used in making furniture I made a decision that my building should consist of more than one material. It was a bit risky do take that decision in regard if it would be too extreme to have that kind of materiality on a building that has not been used before in Tibro. In regard of characteristics of Tibro where they are open for spontaneous design, In my opinion, I think it might be suitable to have such building that has a strong character which would give a decayed area a new face which would activate and attract its inhabitants and outside visitors to stay on the place.

Personal conclusion:

The site that I chose was tricky to work with since it was narrow and placing a volume on it took time to realize. It was also hard to get fully convinced to do a project on a site that is abandoned, but it helped me to get motivated to look at projects such as The High Line and see how it looked before it's a renovation and understand the quality of the infrastructure. It was also tricky to design a pitched roof and design in detail how to protect the building from the rain and how to control the rainwater down to the ground in a "smooth" way.
I have learned a lot in this project, especially in terms of thinking and drawing four different variations of materiality and draw them in detail. In the end, I am happy to have chosen this unique site for my project and design a unique looking building.

7. References

Online References

Anders Bernedsson Architects, 2019. *Tibro Train Tracks Phase 1.* Retrieved November 7, 2019, from http://andersberenssonarchitects.com/work/first-60-thoughts-on-tibro/

Inredia, 2019. *Tibros möbelhistoria.* Retrieved September 8, 2019, from https://inredia.se/inrediahuset/tibros-m%C3%B6belhistoria/

Miesarch, 2020. *Ypenburg.* Retrieved April 8, 2020, from https://www.miesarch.com/work/2152

Mvrdv, 2020. *Ypenburg.* Retrieved April 8, 2020, from https://www.mvrdv.nl/projects/152/ypenburg

Vandalorum, 2019. *Vandalorum.* Retrieved Octobe r9, 2019, from http://www.vandalorum.se/en/about-vandalorum

Wikipedia, 2019. *Tibro.* Retrieved October 9, 2019, from https://sv.wikipedia.org/wiki/Tibro

Figures

Figure 1. *Tibro Geographical Position*, screenshot retrieved May 18, 2020, from https://www.google.com/maps

Figure 2. *Tibro Möbelmuseet Corridor*, photo taken by author, February 18, 2020.

Figure 3. *Tibro Möbelmuseet Storage*, photo taken by author, February 18, 2020.

Figure 4. *Tibro Möbelmuseet Chairs*, photo taken by author, February 18, 2020.

Figure 5. *The Railway Area*, drone photo received from Leif Ahnland, February 12, 2020.

Figure 6. *Stationmagasinet*, photo taken by author, March 24, 2020.

Figure 7. *Train Catenary*, photo taken by author, March 24, 2020.

Figure 8. *Train Tracks*, photo taken by author, March 24, 2020.

Figure 9. *Vandalorum Museum.* Retrieved February 27, 2020, from https://upload.wikimedia.org/wikipedia/commons/thumb/9/9a/Vandalorum_foto_John_Nelander.jpg/800px-Vandalorum_foto_John_Nelander.jpg

Figure 10. *Exhibition Hall in Vandalorum Museum.* Retrieved January 9, 2020, from https://imgs.aftonbladet-cdn.se/v2/images/adfaf70e-3419-4a44-a76a-bba2579759dc?fit=crop&h=550&q=50&w=1100&s=23551108f3b8aa42fa1e7b930b85d230438a55dd

Figure 11. *Ypenburg Housing.* Photo retrieved May 10, 2020, from *http://api.mvrdv.boerdamdns.nl/media/uploads/project/152/ypen04.jpg?width=1920*

Figure 12. *Ypenburg Housing, materiality*. Photo retrieved May 10, 2020 from *https://live.staticflickr.com/7134/7023514977_3b15954744_b.jpg*

Figure 13. *The High Line, before renovation*. Photo retrieved March 11, 2020 from *https://blog.buildllc.com/wp-content/uploads/2014/10/Highline-010.jpg*, March 11, 2020.

Figure 14. *the High Line, after renovation*. Photo retrieved March 23, 2020 from *https://images.squarespace-cdn.com/content/5890247f6a496349b23ac2a5/1496124788480-W74N1DKKP8H8OKPT9Z2S/Highline+NY.jpg?content-type=image%2Fjpeg*