



VILLA KJELVIK
CALM AND SIMPLE SPACES

Natalie Isaksson
Examiner / Mikael Ekegren | Supervisor / Björn Gross

Building and Tectonics
Department of Architecture and Civil Engineering
Chalmers University of Technology

2023



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ABSTRACT

The sensory experience of architecture and its effects on the quality of life and well-being serves as background and inspiration for this thesis. In today's fast-paced and often stressful society, there is a growing need for calm and peaceful environments that allow individuals to disconnect from distractions and connect with themselves.

This thesis aims to research how to design architecture to create a home that addresses the resident's needs and well-being rather than simply serving as a means of artistic expression.

The research has used a combination of methods, including research by design, site explorations, and the study of reference projects and literature on topics such as *atmosphere, phenomenology, and soft minimalism*.

This thesis follows guidelines and wishes, to some extent, from the clients – the three families who own the site today. The strategy for the design proposal has been to design a new flexible and adaptable home with two complementary buildings. The new home also has the potential to serve as a holiday home or a multi-generational home shared by different families. While following the guidelines and wishes of the clients, the main focus lies on the experience of architecture in a home environment, with a particular emphasis on closely studied architectural attributes, qualities, and junctions that contribute to a sense of calm and simplicity.

Through the research, this thesis aims to contribute to the understanding of how to design architecture to provide residents with experiences of harmony to enhance their quality of life and well-being. By creating homes with calm and simple spaces, individuals may be better able to live in the present moment and find respite from the stresses and distractions of modern society.

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Residential healthcare - housing for seniors

2021 Autumn

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CHAPTER I
INTRODUCTION

AIM & PURPOSE

BACKGROUND

The experience of architecture is not just limited to the visual sense. It is a multi-sensory phenomenon that has the potential to impact our quality of life and sense of self (Pallasmaa, 2012). Despite this, the visual experience of architecture is often prioritised in architectural representation and discourse (Lee, 2022).

In today's society, where high levels of stress and distractions are prevalent, it is even more critical for architecture to address all of the senses and create spaces that promote well-being and allow individuals to live in the present moment.

Pallasmaa (2012) highlights the lack of atmospheric perception in architecture. It could especially be meaningful within the realm of housing. As we spend so much time in our homes, they must provide calm and relaxing atmospheres.

AIM

There may be endless different answers on how to design architecture to serve its users and address all senses, the mind as much as the body. But the question remains essential, why this research aims to contribute with one example of how to design architecture to provide calm and simple spaces for experiences of harmony free from distractions. It aims to contribute to the discourse surrounding architectural design for the human senses. By exploring how people experience architecture, this research strives to stress the importance of designing calm and simple spaces allowing individuals to escape the stress and distractions of modern society.

The research focuses on and explores architectural attributes, qualities and refined junctions, intending to create visually and mentally calming spaces.

With this research, the hope is to highlight the value of architecture in promoting well-being and creating harmonious living environments. When putting the users at the forefront of the design process, architecture can play a vital role in promoting a calm and present lifestyle.

RESEARCH QUESTION

“How can architecture be designed to create a soft minimalistic home providing calm and simple spaces for experiences of harmony free from distractions?”

Soft minimalism & calm and simple spaces:

Soft minimalism is a design philosophy that focuses on refining spaces and designs to their purest form. It involves reducing design elements to their essential components while maintaining a soft and honest feel and incorporating significant haptic qualities (Norm Architects, 2022).

Soft minimalism & calm and simple spaces involve supportive but not distracting architecture, including spaces where the eye and mind can be at ease, a close connection to nature, and subtle and muted palettes using neutral colours. Natural materials contribute to the feeling of a healthy environment and authenticity, and the elimination of unnecessary objects creates a warm, comfortable, and inviting atmosphere.

Rich materials, details, and handcrafted elements add depth and interest to the design, while precision and balance in proportions, surfaces, and connections create a refined and cohesive aesthetic. The junctions are resolved with care, and the design centres around people and their needs, with clear zones for meaningful experiences, social interactions, or quiet reflection (Madden, 2018; Zumthor, 2005).

Soft minimalism & calm and simple spaces involve architecture that is easy to maintain, warm and comfortable, focusing on creating meaningful experiences.

Authentic architecture: “...the bringing together of walls, light and land, with scope to refine the resulting space through details of proportion, materials and junctions” (Morris, 2019, p.15).

ACADEMIC FRAMEWORK

METHODOLOGY

To reach a trustworthy result from a creative process this thesis has been carried out by an iterative process with a combination of parallelly used research methods;

PHASE I

Literature studies

A study of literature to find a theoretical framework and understanding of existing theories relating to the field of research. Subjects such as *atmosphere*, *phenomenology* and *soft minimalism* were studied by previous work from recognised authors and architects such as Peter Zumthor, Christian Norberg-Schulz, Juhani Pallasmaa and John Pawson.

PHASE II

Site explorations

Even though the subject of atmospheric architecture, calm and simple spaces mostly may revolve around the interior and building itself, the relation between architecture and the site is essential for the experience and the sense of place. The site has been studied through investigations of conditions and qualities like sun, wind, sound and view. The mapping of the site has been carried out through photographs, sketches, diagrams and text.

PHASE III

Reference projects

For the research of architectural attributes creating calm and simple spaces with atmospheric presence, some built projects have been analysed and studied.

PHASE IV

Design proposal

The design proposal has been conducted with phases 1-3 as a base of research for design and with continued explorations of research by design.

Throughout the process of creating material and designing focus has been on mediating and capturing the atmosphere and essence created by the built entirety together with the site's presence.

DELIMITATIONS

This project primarily deals with and researches aspects of experiencing architecture and its atmosphere in a home environment to get a broader understanding of how architecture can create calm and simple spaces which allow individuals to escape the stress and distractions of modern society.

This thesis follows guidelines and wishes, to some extent, from the clients – the three families who own the site today. The strategy for the design proposal has been to design a new flexible and adaptable home with two complementary buildings. The new home also has the potential to serve as a holiday home or a multi-generational home shared by different families. While following the guidelines and wishes of the clients, the main focus will be on the experience of architecture in a home environment, with a particular emphasis on closely studied architectural attributes, qualities, and junctions that contribute to a sense of calm and simplicity. The main focus does not lie on the most practical and economical solutions.

This thesis does not intend to solve or focus on problems like de-population or lack of housing. Sustainability does not work as the only governing factor even though it impacts the design choices as the focus on healthy and sustainable materials and the desire for minimal intervention on the site using existing infrastructure and leaving all trees untouched.

This thesis mainly strives to contribute to the discussion and understanding of the importance of architecture and its relation to and impact on people's experiences and well-being by providing a visually pleasing and pictorially descriptive story.

READING INSTRUCTIONS

PART I

Introduction

The first part of this thesis provides the reader with its background, purpose and aim. Subjects concerning the experience of architecture in a home environment are presented.

PART II

Reference projects

The second part of this thesis presents references of significance for the research and design proposal.

PART III

Context

The third part of this thesis presents the site and its conditions.

PART IV

Design proposal

The fourth part of this thesis presents the design proposal.

PART V

Epilogue

The last part of this thesis provides the reader with a discussion and conclusion.

THEORETICAL FRAMEWORK

ATMOSPHERE

Atmospheric architecture, its beautiful and natural presence, is perceived instantly through our many senses. It has the ability, similar to music, to move us emotionally and elicit physical reactions. Zumthor (2006) describes architecture as a material presence that one can touch and that touches us in return. It involves movement, and for it to be more than just an artistic expression, it is up to the architect to design architecture with the quality of seducing motion rather than directing it.

There are different levels of intimacy in architecture. Zumthor (2006) calls them something more bodily than scale and dimension and refers to various aspects as the contrast between the building's mass and a person's body. When components of a building are much larger than ourselves, we feel a sense of freedom and can breathe easily. Zumthor (2006) gives the example of a slim, enormous door that makes everyone passing through look great or proud. The relationship between size, mass, and gravity creates different levels of intimacy. A common criticism of some architecture is that it lacks a human scale, but Zumthor (2006) explains that it is more complex than that; a larger scale is not always negative.

How daylight incorporates into the architecture and touches and illuminates surfaces can create a spiritual quality and a sense of something beyond our understanding (Zumthor, 2006). It also applies to the coherence of architecture – when everything in the building refers to and relies on each other and when there is no way of removing anything without damaging the spiritual quality of the whole. Atmospheric architecture seeks to create a cohesive and harmonious environment that engages the senses and enhances the user's experience.

"Place, use and form. The form reflects the place, the place is just so, and the use reflects this and that." (Zumthor, 2006, p. 69).

PHENOMENOLOGY

"The authenticity of architectural experience is grounded in the tectonic language of building and the comprehensibility of the act of construction to the senses. We behold, touch, listen and measure the world with our entire bodily existence, and the experiential world becomes organised and articulated around the centre of the body" (Pallasmaa, 2012, p. 69).

Pallasmaa (2012) sees the body as a collection of sensory experiences, thoughts, and consciousness. He explains that phenomenology is a multi-sensory experience and emphasises the importance of the senses in allowing us to articulate, store, and process sensory responses and thoughts. *"Every touching experience of architecture is multi-sensory; qualities of space, matter, and scale are measured equally by the eye, ear, nose, skin, tongue, skeleton, and muscle"* (Pallasmaa, 2012, p. 45).

To enhance the spatial experience of a space, elements like an integrated body and materiality are essential. Lee (2022) explains materiality as *"a medium to connect with the body and the interior space"* (p. 4). By engaging with materiality, people can better relate to the interior space. It is a communication between the space and the body that can evoke memories and stimulate emotions.

Our experience of the world and ourselves integrate through our senses. For architecture to improve the quality of life and help us experience ourselves as complete embodied and spiritual beings, it needs to address all the senses simultaneously (Pallasmaa, 2012).

Pallasmaa (2012) explains that we experience architecture through our senses in its complete, integrated material, embodied, and spiritual essence. He also emphasises the exchange of emotions and associations between a space and its atmosphere. In the experience of architecture, the atmosphere helps to free our thoughts and perceptions by providing pleasing components moulded for the touch of the eye and other senses. Architecture strengthens the coherence and significance of our experiences by incorporating and integrating physical and mental structures. Our bodies and bodily activities constantly interact with the environment, and it is in our bodies that our sensory experiences integrate.

SOFT MINIMALISM

"If you get the quality right, you can do whatever you want in it." - John Pawson (Schires, 2019).

John Pawson describes minimalism as; *"The minimum could be defined as the perfection that an artefact achieves when it is not possible to improve it by subtraction. This is the quality that an object has when every component, every detail and every junction has been reduced or condensed to the essentials."* (AA School of Architecture, 2010).

Soft minimalism involves spaces with no unnecessary objects included. It is a space centred around people designed for meaningful experiences such as social interactions or quiet reflection. Soft minimalism is warm, comfortable and inviting. It includes rich materials, details and handcrafted elements in subtle and neutral colours (Madden, 2018).

"It is said that one of the most impressive things about the music of Johann Sebastian Bach is its "architecture". Its construction seems clear and transparent. It is possible to pursue the details of the melodic, harmonic, and rhythmic elements without losing the feeling for the composition as a whole - the whole that makes sense of the details." (Zumthor, 2005, p. 10)

Zumthor (2005) explains construction as an art of, by many parts, creating a meaningful whole. There is something beautiful and significant with a refined resolution of junctions in architecture and how the details work together to create an atmospheric built entirety.

This challenge of creating a built whole with countless details, materials and dimensions is constantly facing architecture. An essential task for the architect is to look for rational constructions and forms for points where materials meet and where surfaces intersect – for the junctions – as Zumthor (2005) explains; *"These formal details determine their sensitive transitions within the larger proportions of the building. The details establish the formal rhythm, the building's finely fractionated scale."* (p. 15).

Successfully designed details – details that do not distract and are more than a decoration – create an understanding of the whole space, the space that they are an important part of (Zumthor, 2005).

Soft minimalism also involves a soothing connection to nature between indoor and outdoor spaces. It can occur in many different ways and parts of the architecture. It can be through a distant view or an outlook over a garden. It can also be a connection through sunlight pouring in through a window or a connection through a close relation to natural materials you can reach and touch (Madden, 2018).

Materials in themselves are not poetic, but if the architect can use materials specific to the context of an architectural object and generate meaningful situations for them, they can assume a poetic quality, shine and vibrate (Zumthor, 2005).

STRESS AND DISTRACTIONS

An inescapable reality in modern society is days filled with high levels of stress and distractions from the moment we wake up until the moment we fall asleep. Stress has been labelled the *"health epidemic of the 21st century"* by the World Health Organization (Smith & Perez, 2018).

The desperate need for calmness and relaxation is a reality for many people. The constant pressure to perform and meet expectations from society can affect our mental and physical health. With the consistent influx of information and stimuli from technology and social media, one can have difficulties disconnecting and finding moments of peace.

This constant state of stress and distractions can lead to adverse health effects. It can also negatively impact our ability to focus, think clearly, and make decisions. By consciously trying to minimise stress and distractions and taking charge of our own lives, we can improve our overall well-being and quality of life.

A HOME IS MORE THAN A HOUSE

"We are a product of our environment. The spaces we inhabit and the objects we live with influence the way we feel, think, and behave, while they create the framework for our lives to unfold within." (Norm Architects, 2022).

Feelings of belonging could also be described as feelings of being *"at home"* and often connected to a house for many people – the dwelling in which they live and the ascribed meanings. At least, this was the case until relatively recently, when the concept of a house effectively coincided with a home, when people tended to stay more or less in one place during a lifetime. The difference between physical and metaphysical ideas has become clear as it has become more common for people to move around more frequently (Morris, 2019).

Blunt and Dowling (2006) argue that a home is more than a house. They mean that *"...home is constructed at multiple scales and takes material from beyond that of a physical shelter, and house-as-home is dynamically created."* (p.92).

Most people spend their time indoors, especially in their homes - where they enact the rituals of their everyday life. It could, in many ways, be the perfect example to show the importance of designing architecture to improve the quality of life and provide environments for de-stress and harmony. Pallasmaa (2012) describes that *"There is a strong identity between naked skin and the sensation of home. The experience of home is essentially an experience of intimate warmth."* (p. 63).

CHAPTER II
REFERENCE PROJECTS



Image 1-3: Lac-Brome Residence
 Note. From *La Résidence du Lac-Brome* [Photograph], by Maxime Brouillet, 2022, Atelier Pierre Thibault (<https://www.pthibault.com/project/residence-lac-brome/>).

LAC-BROME RESIDENCE

ATELIER PIERRE THIBAUT

📍 Lac-Brome, Canada

The Lac-Brome residence designed by Atelier Pierre Thibault is a beautiful example of contemporary architecture. The house consists of two angular volumes connected by a glazed walkway creating a courtyard on either side. The holiday home overlooks Quebec's Brome Lake designed to provide beautiful views over the surroundings while still protecting the resident's privacy (Brillon, 2021).

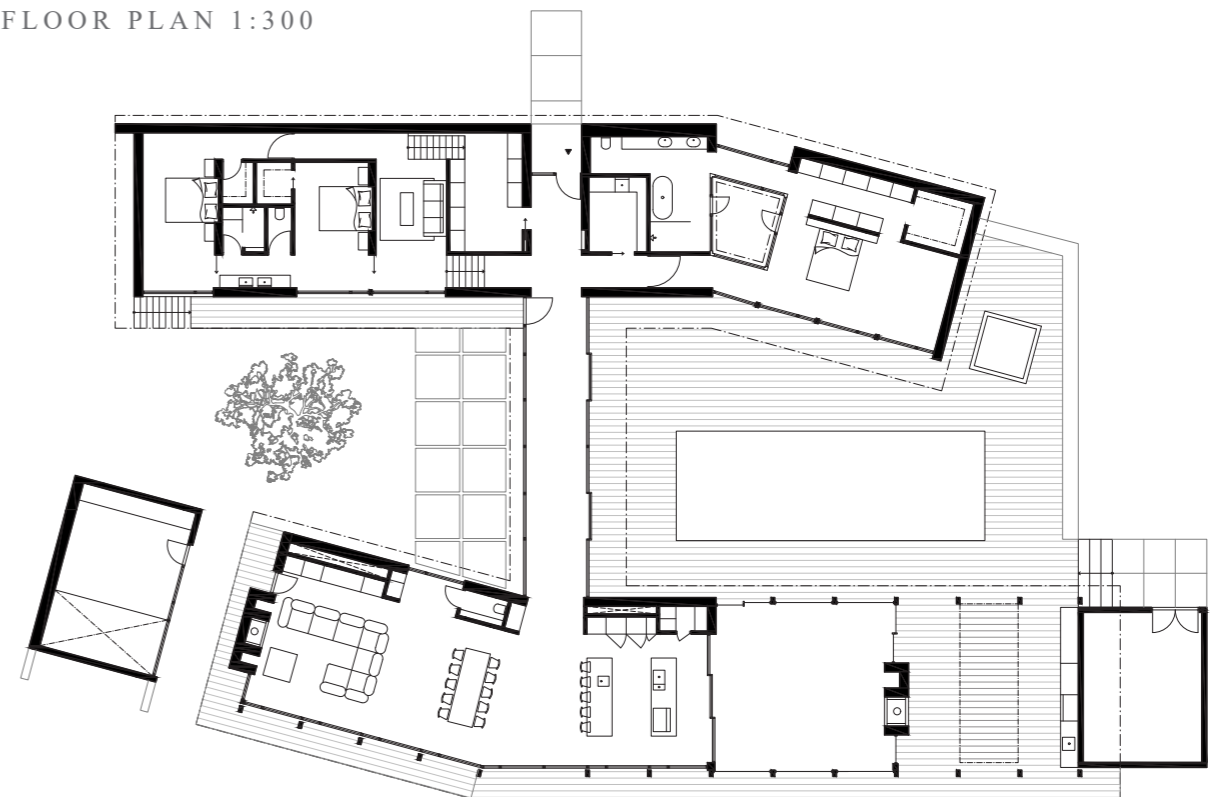
The design of the house is characterised by its clean lines and simple, yet elegant, aesthetic. Its high-quality materials, including wood and glass, give it a modern and sophisticated feel and integrate in a refined, elegant and modest way into its environment (Brillon, 2021).

The interior is spacious and open, with large windows allowing plenty of natural light. The furniture is a part of the building carefully chosen to match the balanced colour tones of the interior spaces and achieve a harmonious balance in the perceived amplitude of the space (Brillon, 2021).

The glass walkway connecting both parts of the house, the private and social, brings down the pace and allows one to be present and breathe while walking around the building.

The house also has several outdoor spaces, including a deck and a courtyard, which provide additional areas for residents to enjoy the surrounding area and its natural beauty. It provides an experience of the shifting seasons with elements to enjoy both during summer- and winter.

FLOOR PLAN 1:300





ATRIUM HOUSE

Tham & Videgård

2014-2021

📍 Gotland, Sweden

Atrium house was designed as a vacation home for a family of three generations, built on an edge where the land met the sea thousands of years ago. The family members have their respective rooms, located diagonally in two corners with a common living room and kitchen meeting (Tham & Videgård, n.d.).

The design of Atrium House is an example of how architecture can create a sense of place and provide a connection to the surrounding environment. The use of natural materials, such as masonry blocks and oak, and the interior varying levels and heights create a unique and dynamic space.

The house is narrow and built around an enclosed atrium and courtyard but has a connection to its surrounding landscape through wide openings. The atrium and courtyard serve as a central gathering space, while the diagonal placement of the private rooms offers a sense of individual space within the communal living area (Tham & Videgård, n.d.).

The attention to detail, such as the surface-mounted interior doors, adds to the overall atmosphere of the house and enhances the experience of living there.



CONSTRUCTION SECTION 1:50

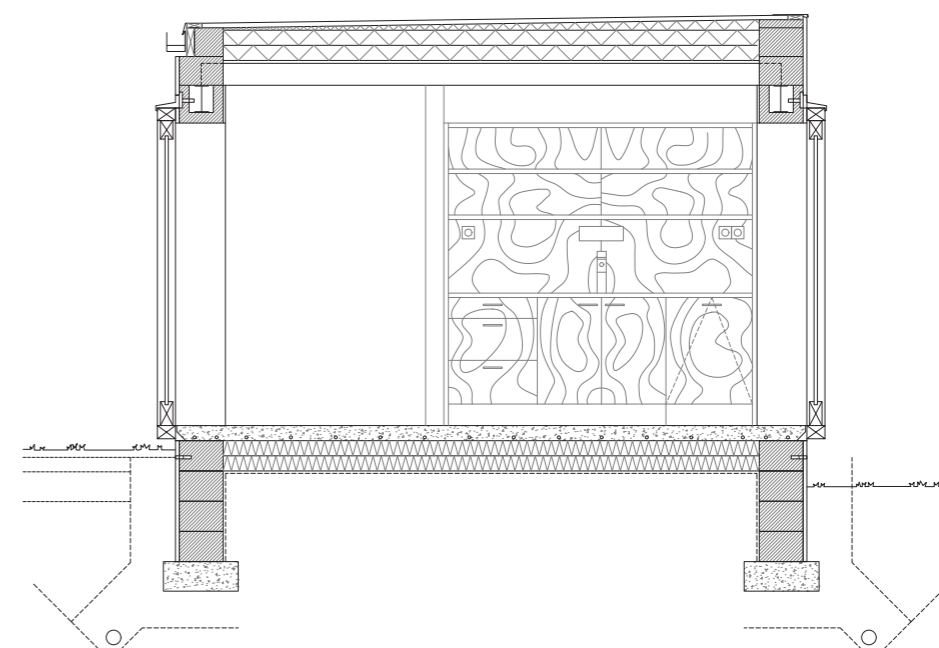


Image 4-6: Atrium house.

Note. From *Atrium House* [Photograph], by Åke E:son Lindman, 2022, Tham & Videgård (<https://www.thamvidegard.se/work/houses/atrium-house/>).



PALMGREN HOUSE

John Pawson

2006-2013

📍 Drevviken, Sweden

The design of Palmgren House is a perfect example of minimalistic architecture, with its simple and elegant forms seamlessly blending into the natural surroundings. Its monochromatic colour palette, rich proportions, and refined resolution of junctions create an atmosphere of tranquillity and calmness. The house is oriented towards the east, with the living spaces and private rooms all facing the lake, allowing for an uninterrupted view of the water and the surrounding landscape (Morris, 2019).

John Pawson's use of the concept of minimum and the Swedish word *lagom* perfectly captures the essence of the house. *Lagom* refers to the value of a perfectly judged sufficiency, and the house embodies this notion with its simple and understated design. The house acts as a quiet presence in the landscape, with its clean lines and refined details creating a sense of harmony and balance (Morris, 2019).

The timber elements add warmth and texture to the interior, contrasting beautifully with the cool tones of the white and grey palette. The strict floor grid and strong inward focus create a sense of order and clarity, while the open aspects of the house provide a sense of spaciousness and openness (Morris, 2019).

FLOOR PLAN 1:200

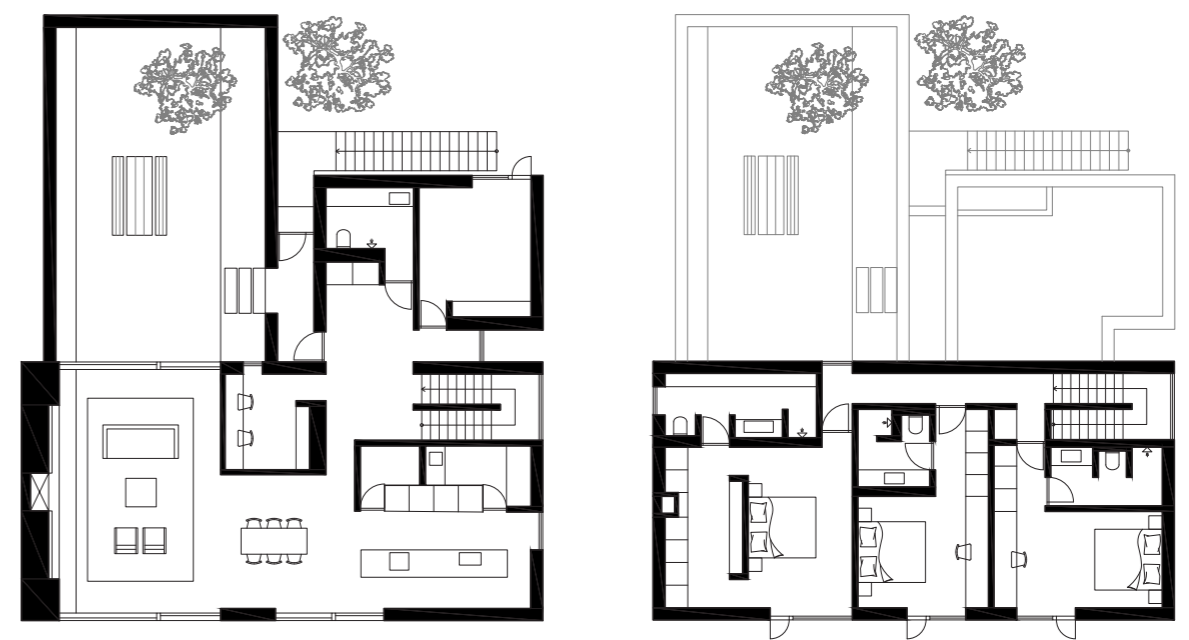


Image 7-11: Palmgren house.

Note. From *Palmgren House* [Photograph], by Åke E:son Lindman, 2022, John Pawson (<http://www.johnpawson.com/works/palmgren-house>).

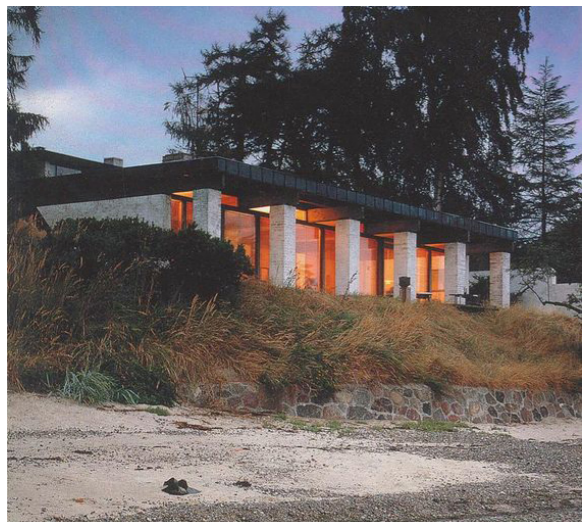


Image 12-13: Villa Kjørholm physical model
 Note. From *Villa Kjørholm* [Photograph], by Martin Skredsvik, 2022, Chalmers (<https://projects.arch.chalmers.se/2022/02/04/villa-kjaerholm/>)

Image 14-16: Villa Kjørholm
 Note. From *Scandinavian modern houses Vol.1 The spirit of nordic light* [Photograph], by Per Nagel, 2003

VILLA KJÆRHOLM

Hanne & Paul Kjørholm

1962

📍 Rungstedt coast, Denmark

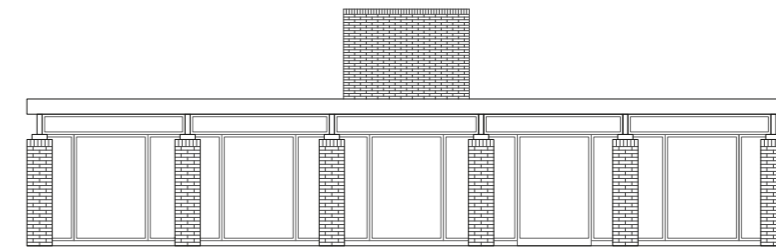
The exposed brick and wooden construction in this 145 sqm villa creates a unique expression with a simple and minimalistic aesthetic. The contrast between the warm stained wood and the cold white bricks creates a balanced and minimalistic atmosphere throughout the house.

The house follows a strict grid which acts as a guide for directions and the position and size of each room. The grid and location of rooms

create a distinct division between the private and social zone and enable the choice of social interactions or if one wants to be alone in a quiet atmosphere.

The social zone and its large glass partition wall face the ocean and provide a spectacular view throughout the entire space (Nagel et al., 2003).

FACADE EAST 1:150



FLOOR PLAN 1:150

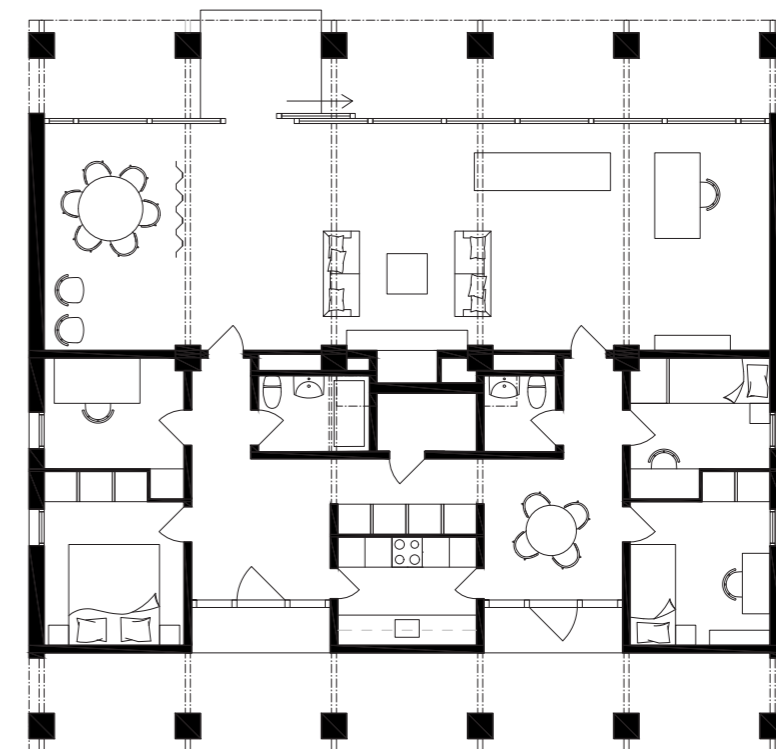
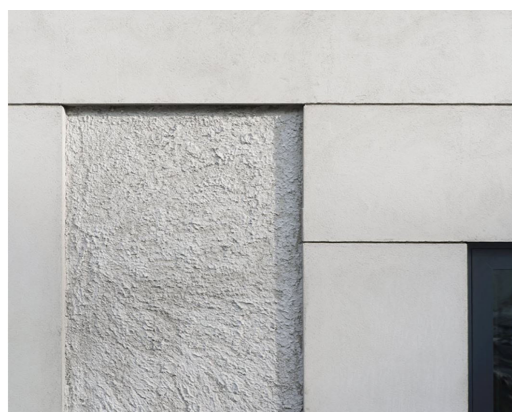




Image 17-20: Villa Skuru
 Note. From *Villa Skuru* [Photograph], by Mikael Olsson, 2022, Hermansson Hiller Lundberg (<https://www.hhl.se/projects/skuru/>).



DETAILS
 Image 21: Detail Villa Skuru
 Note. From *Villa Skuru* [Photograph], by Mikael Olsson, 2022, Hermansson Hiller Lundberg (<https://www.hhl.se/projects/skuru/>).

VILLA SKURU

HERMANSSON HILLER LUNDBERG

2014

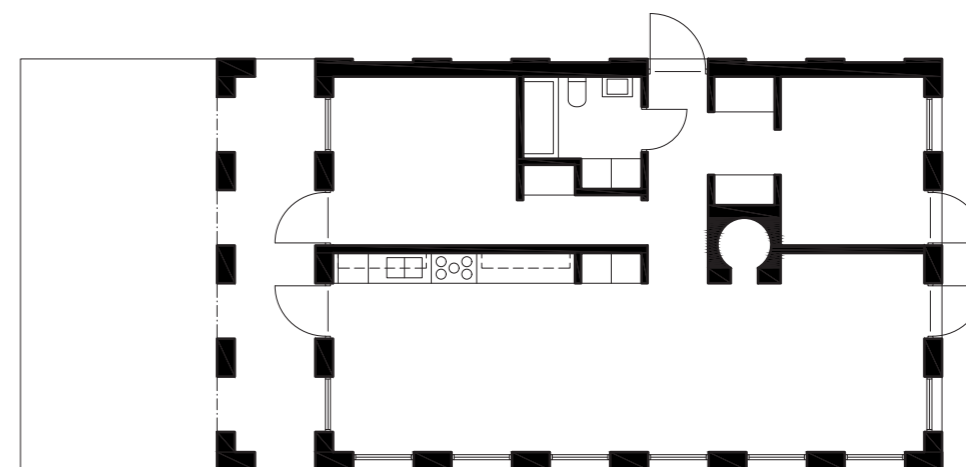
📍 Nacka, Sweden

Villa Skuru is an architectural design influenced by classical influences and modern minimalism. With its construction of standard expanded clay masonry blocks, the building features an elaborately designed plaster surface, creating a tectonic order and a sense of symmetry and juxtaposition in the facade (Hermansson Hiller Lundberg, n.d.).

The thoughtfully designed elements, from the layered textures to the non-distracting contrasts, create a space that is simple yet rich in subtlety. Villa Skuru is rich in subtle layers and effects, designed for the possibility of the mind and eye to be at ease.

Inside, the villa takes on a monolithic expression, with smooth render walls and a polished concrete floor. Large windows and doors allow for an easy connection to the outdoors, and the open, spacious layout is flexible and inviting.

FLOOR PLAN 1:150



CHAPTER III

CONTEXT

SITE

ÖBERGEN 145, ÖDSMÅL

Öbergen 145 is a highly situated plot located in the northern part of the municipality of Stenungsund in Västra Götaland County, Sweden, offering an almost 180-degree view of the ocean. Several older holiday homes have undergone renovation and expansion in the surrounding area over the years. However, some buildings are in poor condition, and many owners wish for larger accommodations, leading to the emergence of newly built villas in the area. The plots' location near the water and nature creates a private and high-quality character that many desire to preserve.

Even though the plot is accessible by car the transportation of longer or bigger construction elements or vehicles can be challenging. Hence, such challenges have been considered in the design process.

Presently, the plot features an older holiday home and two complementary buildings that provide additional bed spaces. Three siblings and their respective families shares the holiday home. They desire to build a new and larger house, preserving and strengthening the existing qualities. It should primarily serve as a residence or a larger holiday home with the potential to be shared by different family constellations.

Given the plot's stunning view of the sea and surrounding pine forest, a bold but respectful design that integrates with the natural surroundings could be ideal for the new building. The design should aim to enhance and amplify the area's natural beauty while providing a comfortable and functional living space for the family. The new structure will also incorporate sustainable building materials and energy-efficient solutions.



ÖBERGEN 145, ÖDSMÅL

Main cabin I



Cabin II



Cabin III



Ocean view from main cabin



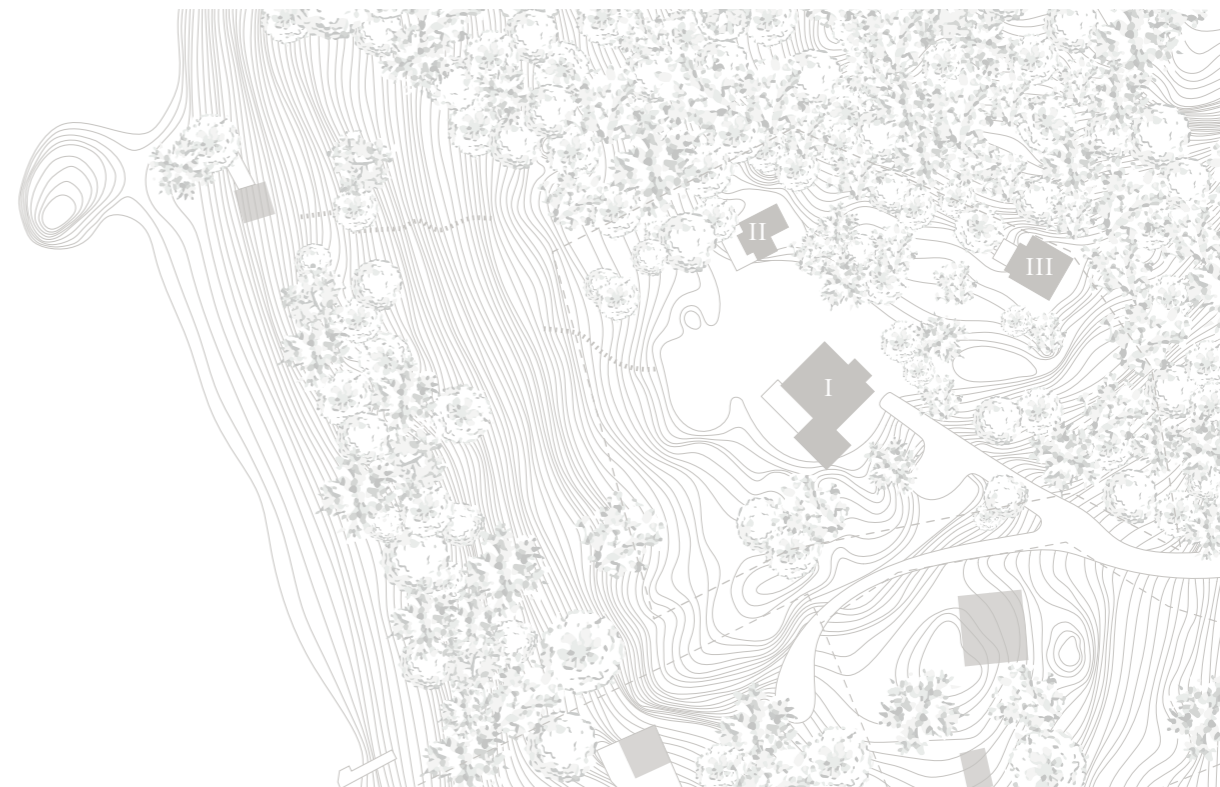
Ocean view from cabin II



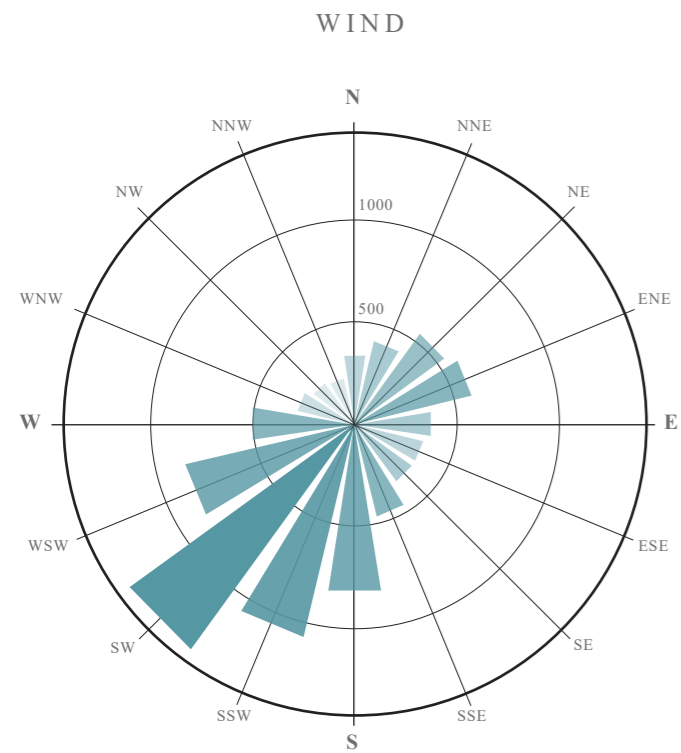
Forest view from cabin III



Existing buildings



SITE CONDITIONS



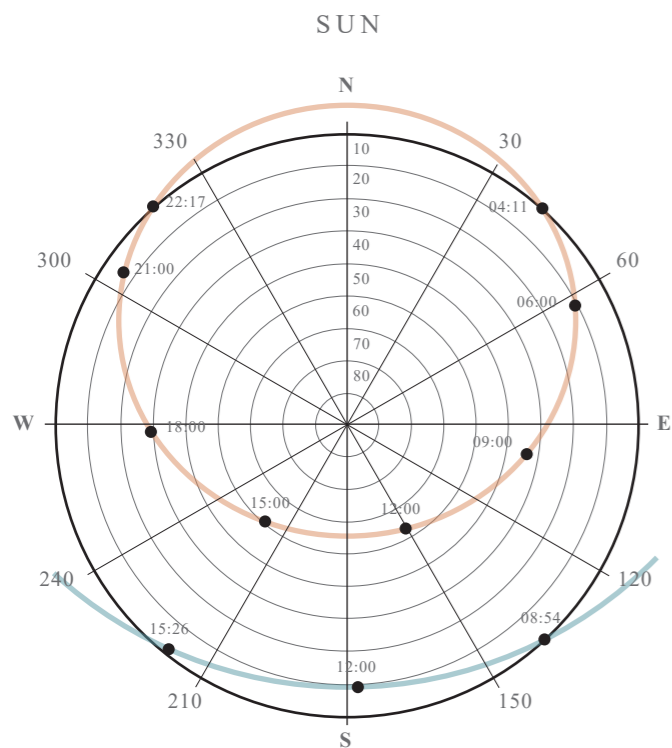
(Meteoblue, n.d.)

Despite the high position of the plot and its exposure to the south-westerly winds, it feels protected. The tall and dense pine forest that surrounds the site offers a shield against the wind, and the northeastern part of the site has a remarkable character and atmosphere, where the high crowns of the trees create a large and dense canopy above one's head. A feeling of protection and embrace heightens in this area, and the spatial quality feels open and spacious.

The plot enjoys sun exposure throughout the day, with the tree canopies providing just the right shade and offering a sunset over the water in the evening.

Noise and sound pollution are non-existent on the site, with the only sounds being the sweet melodies of birdsong, the rustling of the tree crowns in the wind, and the gentle lapping of the waves.

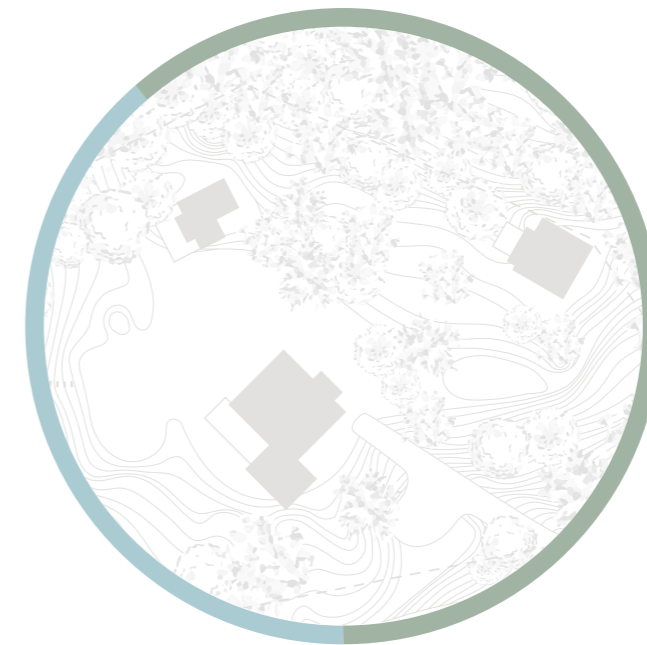
This location is perfect for a home with calm and simple spaces, promoting serenity and a better quality of life.



(Gaisma, n.d.)

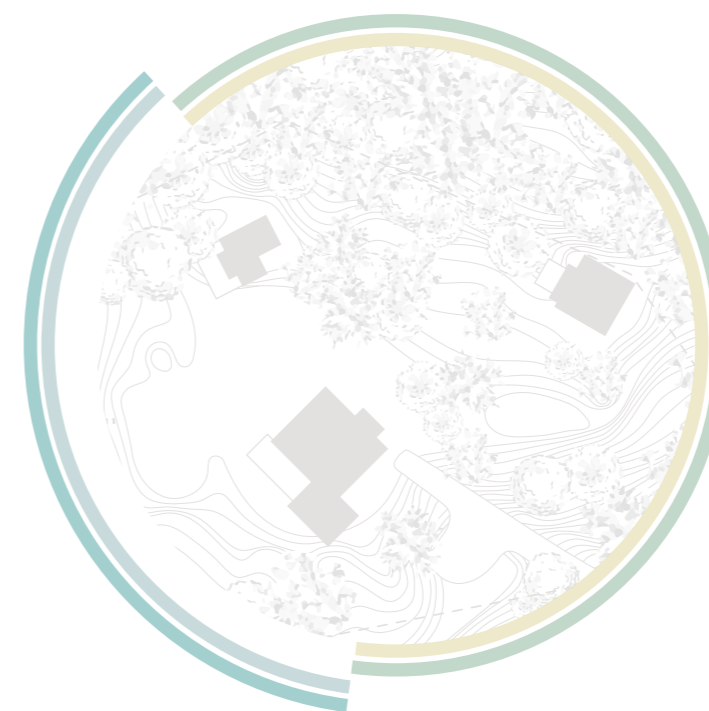
| Summer solstice | | Winter solstice | |
|-----------------|------------|-----------------|------------|
| Time | Elevation° | Time | Elevation° |
| 04:11 | 0° | 08:54 | 0° |
| 06:00 | 10° | 12:00 | 10° |
| 09:00 | 33° | 15:26 | 8° |
| 12:00 | 53° | | |
| 15:00 | 50° | | |
| 18:00 | 29° | | |
| 21:00 | 6° | | |
| 22:17 | 0° | | |

SIGHTLINES



-  Forest view
-  Ocean view

SOUND



- 
- 
- 
- 

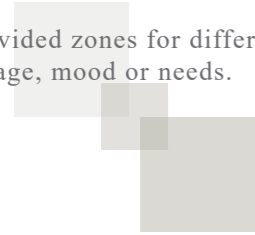
CHAPTER IV

DESIGN PROPOSAL

DESIGN STRATEGIES

I. ZONES

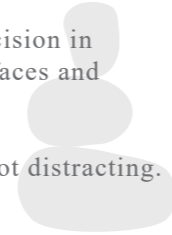
Divided zones for different usage, mood or needs.



II. BALANCE & PRECISION

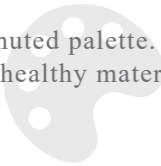
Balance and precision in proportions, surfaces and connections.

Supportive but not distracting.



III. SUBTLE & NATURAL

Subtle and muted palette. Neutral and healthy materials.



IV. NATURE

An instant and persistent connection to nature.



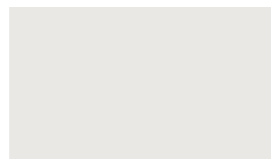
ZONES

Social



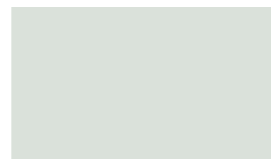
Social interactions

Neutral



Connections & Directions

Private



Stillness & Quiet reflection

The home is thoughtfully designed to consist of three distinct zones - the social zone, the neutral zone, and the private zone. This clear division of zones promotes a sense of calm and security, allowing one to choose whether to socialise or withdraw. It also ensures movement and designated spaces based on mood or well-being.

To further emphasise and reinforce the unique characteristics of each zone, the social one is situated in the more open and exposed part of the site, offering a panoramic view of the ocean. This zone is for social interactions and features spacious areas for gathering.

The neutral zone acts as the link between the two other zones and maintains a neutral character with the task of welcoming, directing and holding the space together.

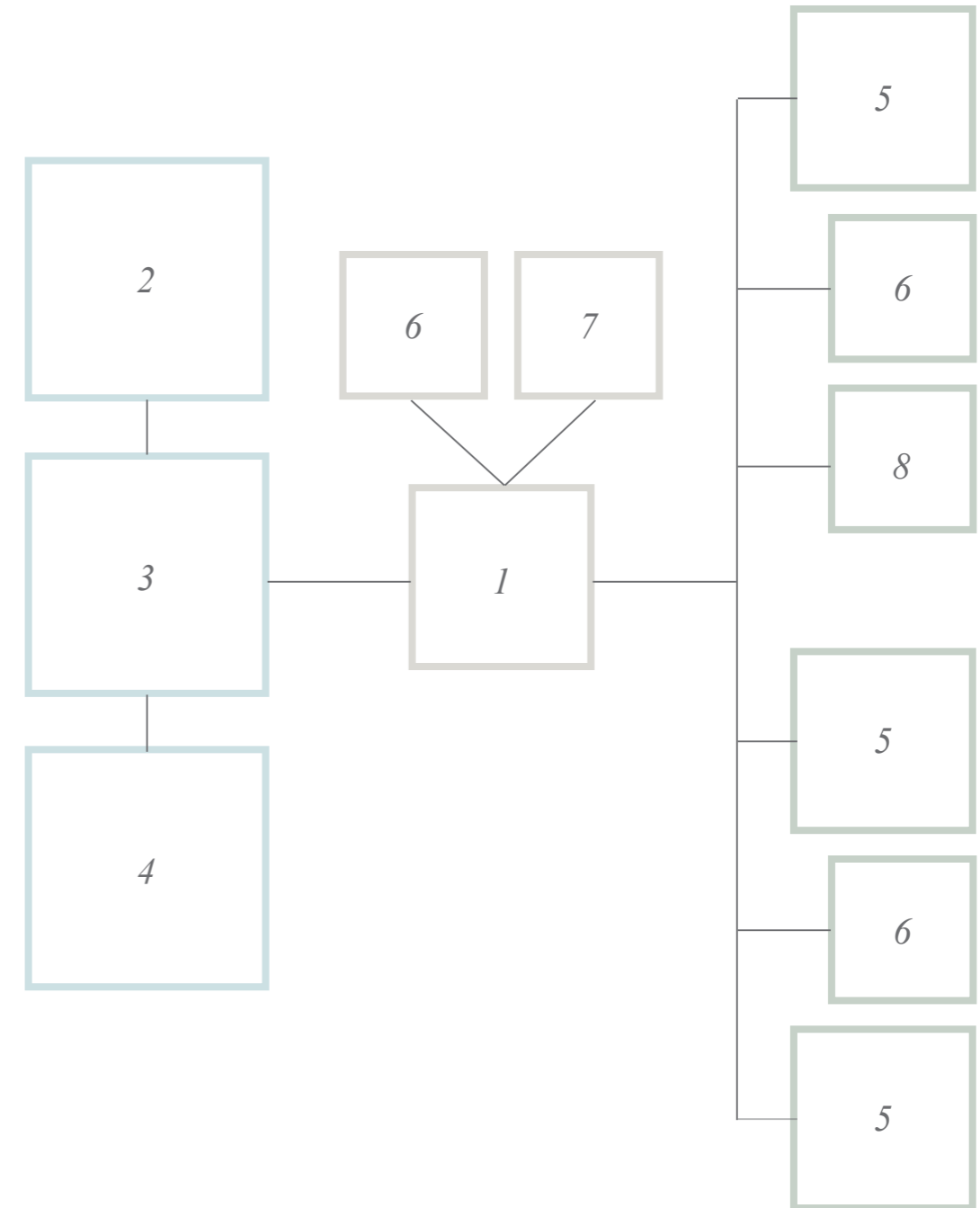
The private zone is located in the more protected part of the property and primarily orientates towards the trees and nature. This zone is meant for stillness and quiet reflection, offering spacious but cosy rooms for those who prefer to spend time in a more introspective atmosphere. By turning towards nature, this zone provides a space for personal retreat, where the only sounds one hears are those of birds, rustling trees, and the calming ebb and flow of the water.

Overall, the home offers an ideal setting with calm and simple spaces for serenity, relaxation, and better quality of life. The three zones work in harmony to provide a comprehensive living experience.

PROGRAM

- Social zone
- Neutral zone
- Private zone

1. Entrance
2. Living room
3. Dining area
4. Kitchen
5. Bedroom
6. WC
7. Storage
8. Laundry



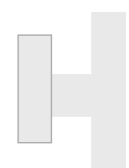
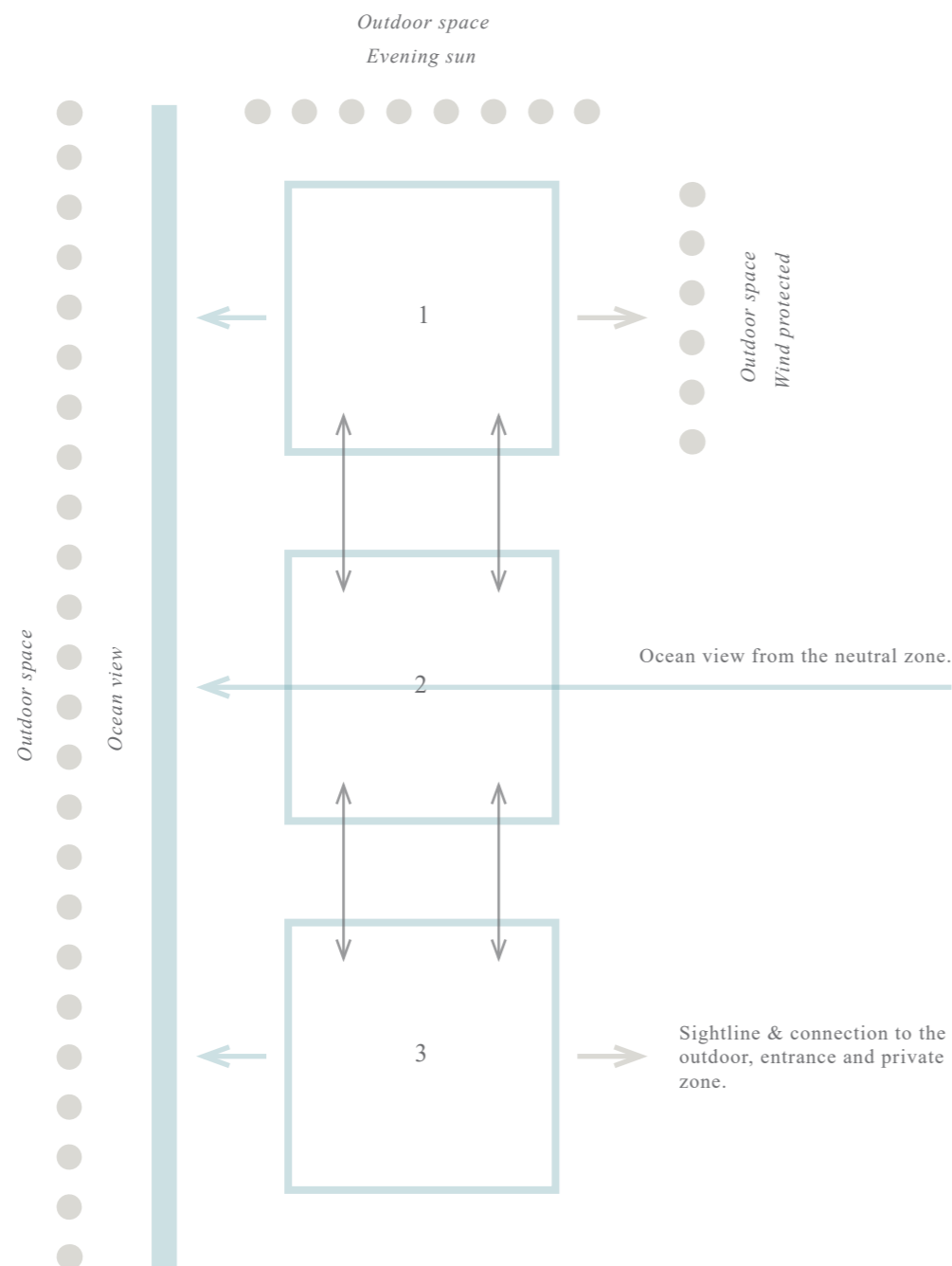
ROOM ORIENTATION

SOCIAL ZONE - SOCIAL INTERACTIONS

- 1. Living room
- 2. Dining area
- 3. Kitchen

Equal-sized rooms are positioned to create an open space and maximise the view over the ocean.

↕ = Movement & connection

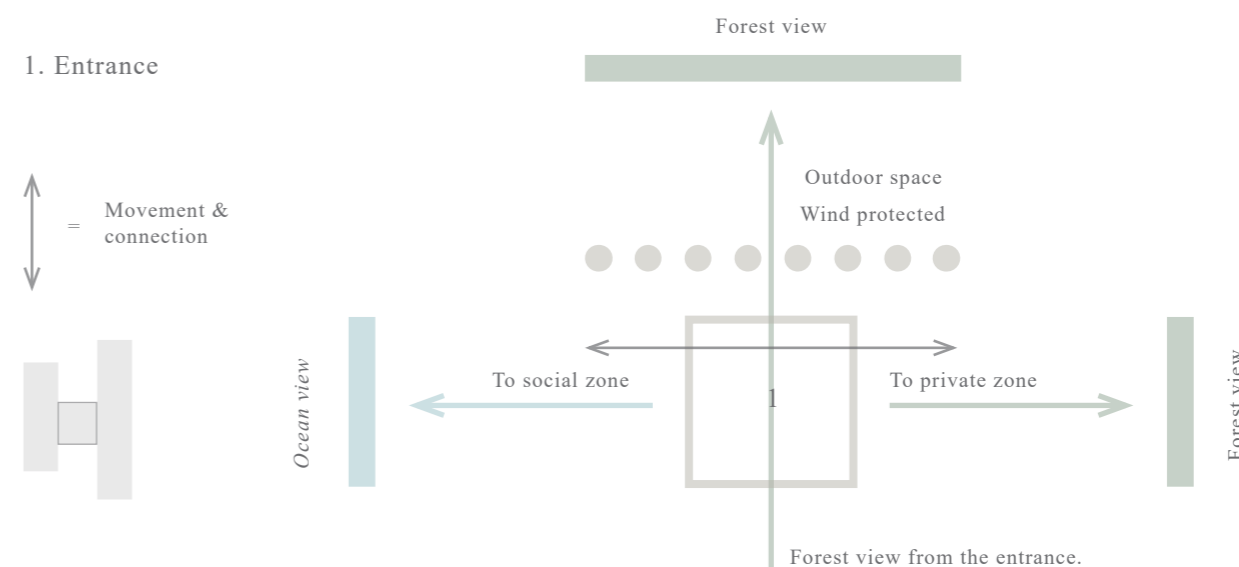


ROOM ORIENTATION

NEUTRAL ZONE - CONNECTIONS & DIRECTIONS

- 1. Entrance

↕ = Movement & connection

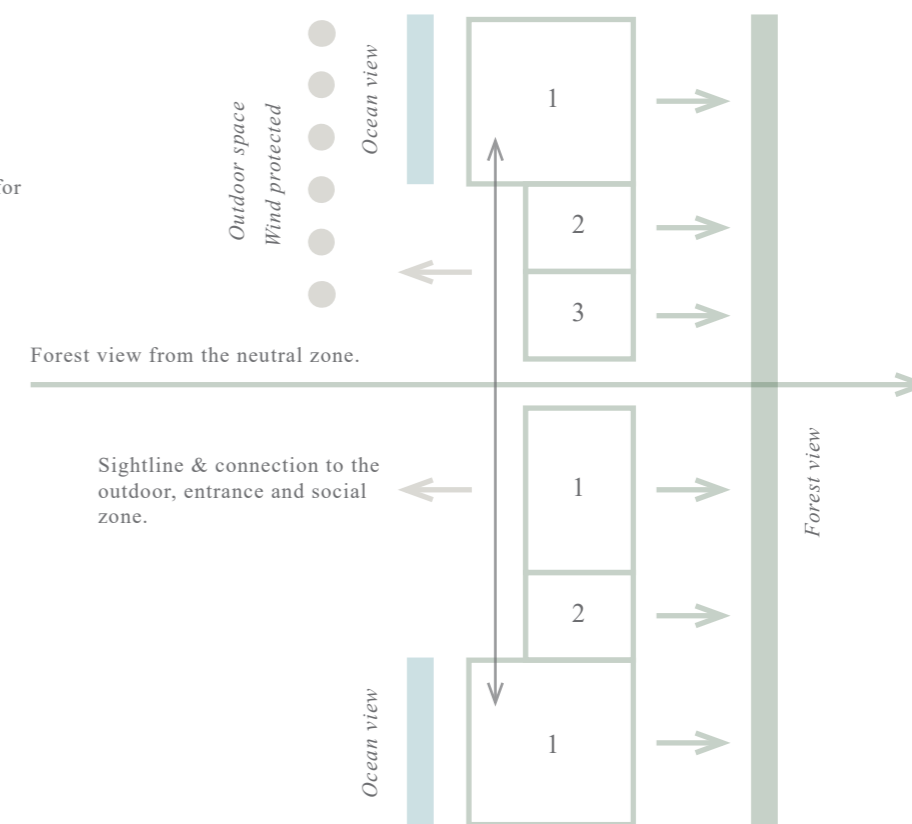


PRIVATE ZONE - QUIET REFLECTION

- 1. Bedroom
- 2. Bathroom
- 3. Laundry/Tech

Equal-sized rooms but divided at different ends of the house for additional privacy.

↕ = Movement & connection

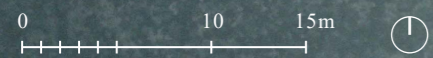




SITE PLAN 1:400

ÖBERGEN 145, ÖDSMÅL

4112 m²

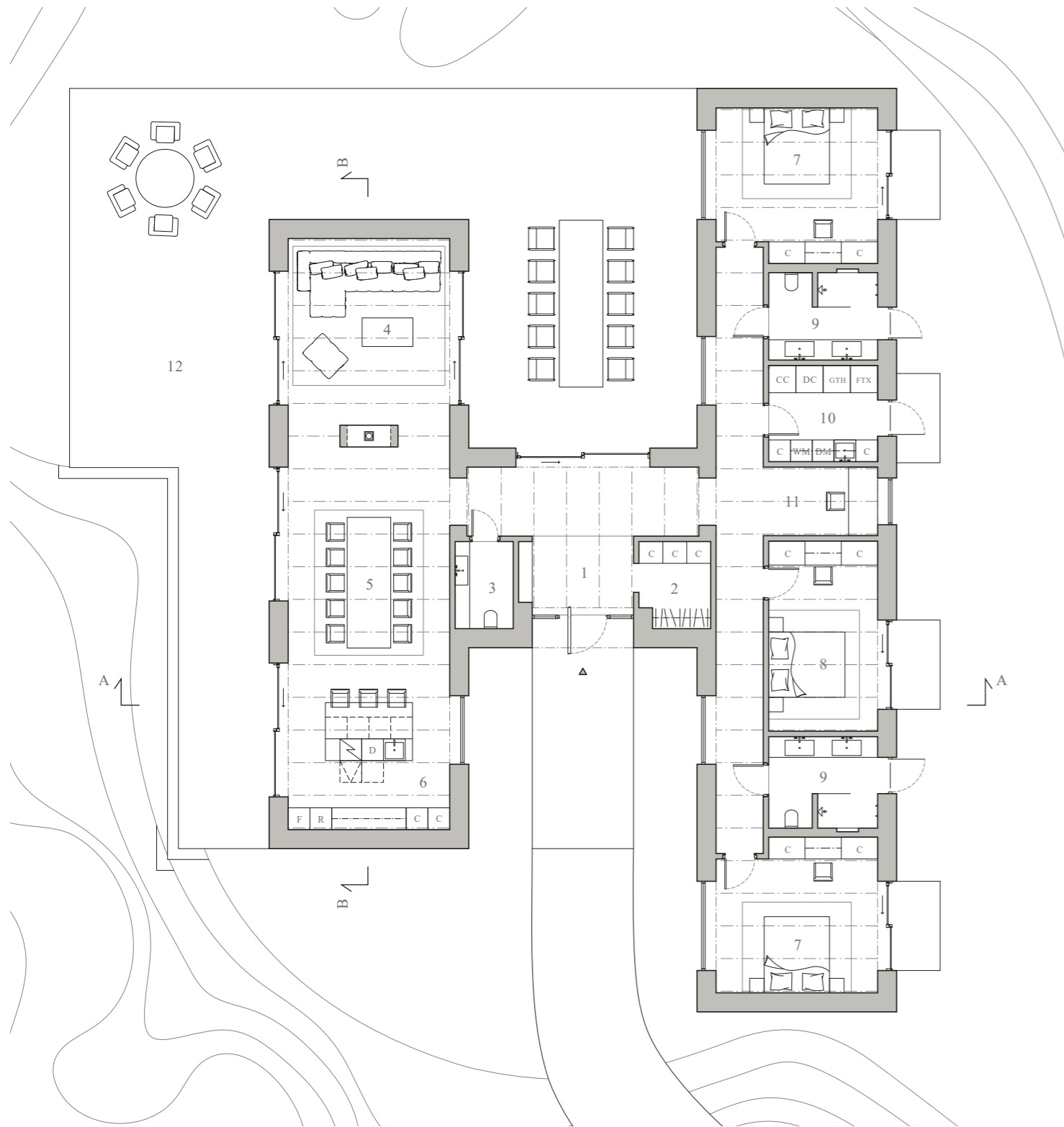




FLOOR PLAN 210 m²

1:150

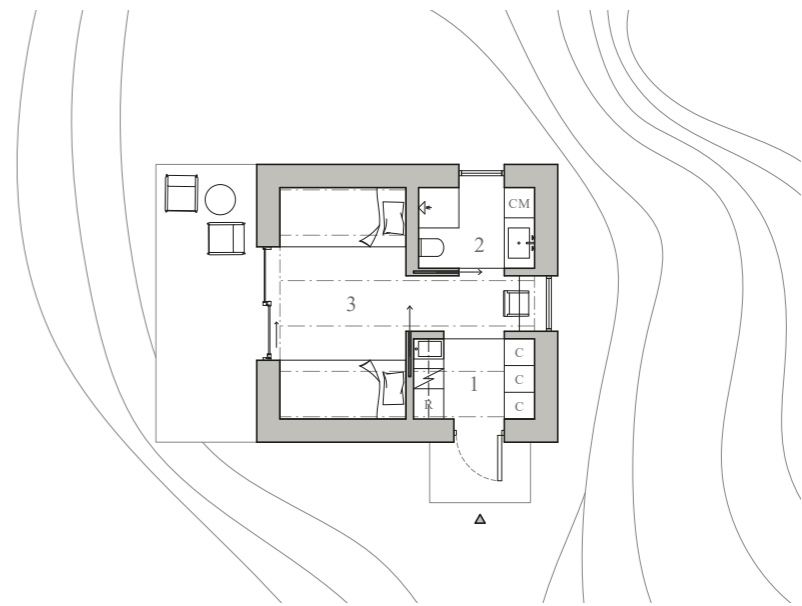
- 1. Entrance 6m²
- 2. Walk-in closet 4 m²
- 3. Guest toilet 3,8 m²
- 4. Living room 20m²
- 5. Dining area 20m²
- 6. Kitchen 20m²
- 7. Bedroom 17m²
- 8. Bedroom 14m²
- 9. Bathroom 7,5m²
- 10. Laundry/Tech 8m²
- 11. Study/Extra room 6m²
- 12. Terrace



FLOOR PLAN - COMPLEMENTARY BUILDING 23 m²

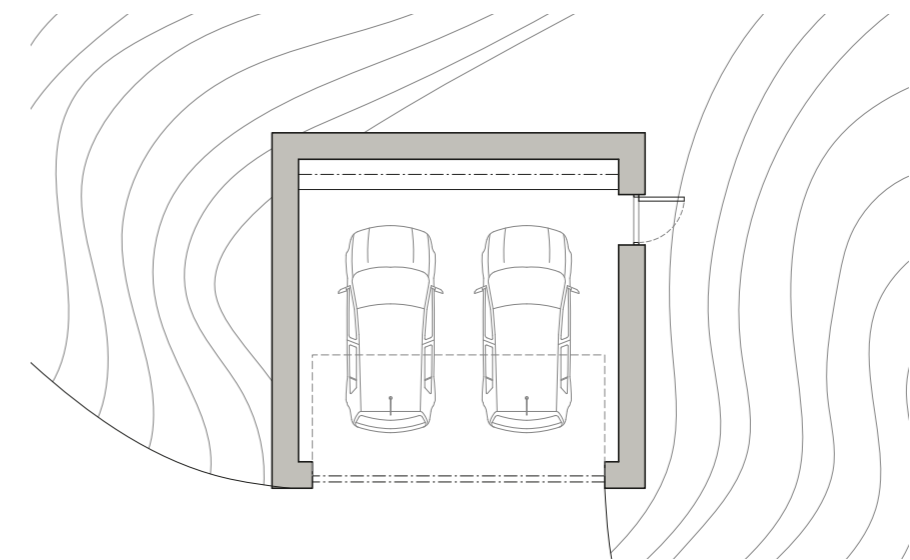
1:150

- 1. Entrance/Pentry
- 2. Bathroom
- 3. Bedroom/Living room/Office



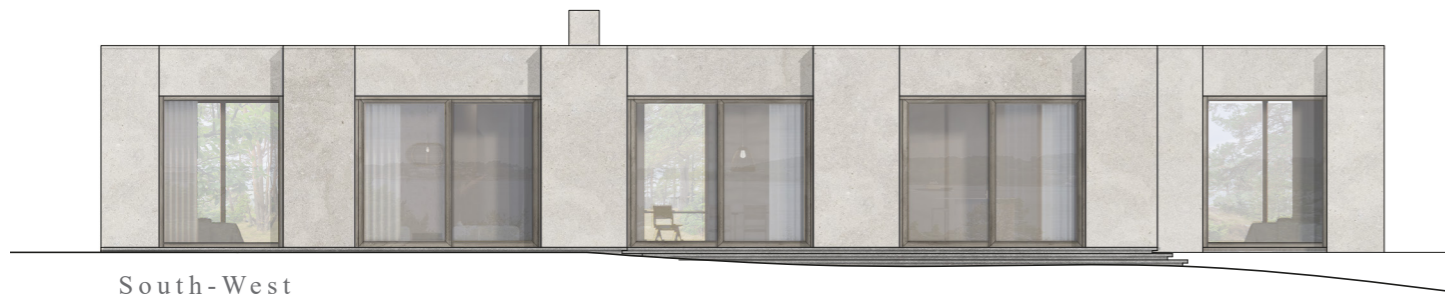
FLOOR PLAN - GARAGE 36 m²

1:150



ELEVATIONS

1:150



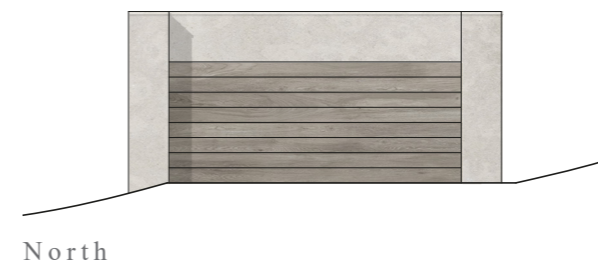
ELEVATIONS - COMPLEMENTARY BUILDING

1:150



ELEVATIONS - GARAGE

1:150





THE ENTRANCE



As you open the oak pivot door, your gaze immediately rises to the sight of the surrounding tall pine forest. Beyond the large glass partition, you notice the seating area where the family can gather.

The calmness within the home leaves a lasting impression on you. You take in the soft, subtle colours and the rich textures of the natural and healthy materials.



At the entrance, you can take a seat and remove your shoes while glimpsing into the walk-in closet. The custom-built storage furniture is arranged neatly, and the simple mirror in the centre of the wall stands out for its elegance.

The placement of the light sources, carefully executed details and the visible construction create an inherent understanding of spatiality and volume. The exposed ceiling beams and the oak floor draw your attention forward, inviting you to venture further into the house.



THE NEUTRAL ZONE



At the entrance, you find ample storage space. Despite its simple and sleek expression, you get to step in with your muddy shoes after a walk in the woods. The opening to the walk-in closet makes it easy to put away your shoes or hang your coat as soon as you enter through the door. The entrance facilitates and serves its users with a constant calm and orderly aesthetic.

As you step out of the entrance, clearly marked by the tiled floor, and look to your left, you are immediately aware of the beautiful view of the ocean. The corridor creates a clear and direct axis that maintains a connection to nature outside no matter which direction you turn.



THE KITCHEN



In the social areas, is a constant view of the ocean and plenty of space for socialising. The kitchen allows for social interactions while cooking and extra space for an expanded dining table if necessary.

As in the rest of the home, you feel a sense of calm and harmony. The careful curation of natural elements and thoughtful design choices create a home that feels serene and calming.



THE DINING AREA



A wide fireplace stands as a centrepiece in the space and screens off the living room without fully closing it off.

The layout of the social zone is designed for a maintained connection between the kitchen, dining area and living room but with a persistent calm atmosphere for experiences of harmony.



THE LIVING ROOM



The size of the living room enables different seating arrangements and provides intimate but spacious qualities due to its position and large glass partitions.

On the right side of the living room, you can step out onto the wind-protected outdoor space that offers both shade and sun during the day. Through this window, one can catch a glimpse of the other side of the house.



THE NEUTRAL ZONE



After you have spent some time in the social zone, you decide to turn around and walk towards the other side of the home for some quiet time. Looking down the corridor past the neutral zone and the entrance, you notice the line of sight that offers a view of the tall trees. The various directions of the ceiling beams amplify the division of the different zones, while the materials, colours and textures follow the theme seamlessly throughout the building, creating a cohesive atmosphere.

Upon reaching the large window down the hallway, you spot a small workspace. The room offers a view overlooking the backyard and functions as an extra room that can be closed off if needed.



THE CORRIDOR



Making a left turn at the workspace, you continue down the corridor to one of the bedrooms. The thin oak trims, recessed in and flush with the plaster wall, create a minimalistic and harmonious meeting point between the wall and floor.

You continue walking down the corridor, noticing a window to your left providing a glimpse into the living room on the other side.



THE BEDROOMS



As you walk through the home, you come across three spacious bedrooms, each carefully designed to provide a tranquil and peaceful atmosphere for moments of stillness and reflection. The larger scale of the bedrooms also means room for extra beds if needed.

The two bedrooms located at opposite ends of the house offer views of the ocean and the forest. The third bedroom, located in the middle, is designed to maximise the overview

of the forest with its large glass sliding door in front of the bed.

No detail has been overlooked in these bedrooms. Each one provides built-in wardrobes and desk space, ensuring you have everything you need to feel at home.



The curtain rails have been built into the oak window frames, ensuring the curtains hang perfectly and seamlessly.

As you gaze up at the ceiling, you notice that the size of each bedroom follows the visible wooden beams, accentuating the thoughtfully planned layout and attention to detail. And if you want to step outside and breathe in the fresh air, the glass sliding doors in each room offer access to a small outdoor space.

Whether it's the views, functional design or attention to detail, the bedrooms in this home offer a harmonious and calming environment for moments of peace and reflection.



THE LAUNDRY ROOM



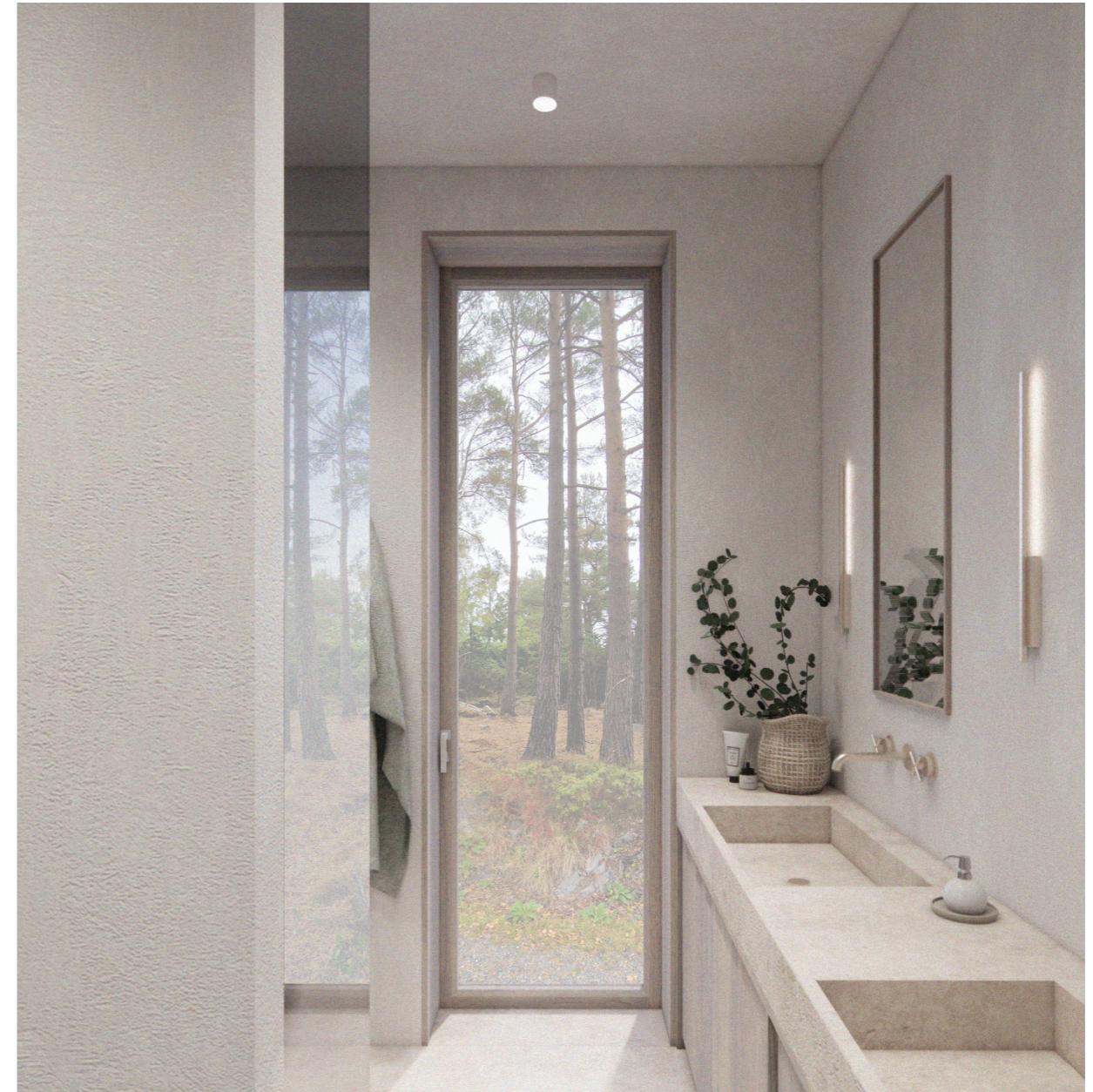
You open one of the seamless oak wooden doors in the corridor and step into the laundry room.

On the left side, custom-built oak doors conceal technology such as geothermal heating and the FTX system. There is also a drying cabinet and a cleaning supplies cabinet.

Straight ahead, a door leads directly out to the garden, where you can step outside and hang your laundry. This room also follows the theme of calm and simple, with the same soft and neutral colours that dominate the rest of the house.



THE BATHROOMS



As you open one of the other seamless oak wooden doors in the corridor, you step into one of the bathrooms.

The first thing that catches your eye is the view over the forest through the glass door straight ahead.

The two sinks, seamlessly placed on the right side of the window, offer plenty of storage space for your toiletries and essentials.

The position of the shower offers a view of the forest. The design of the bathroom makes you feel protected while still being able to experience the beauty of nature outside.



THE COMPLEMENTARY BUILDINGS



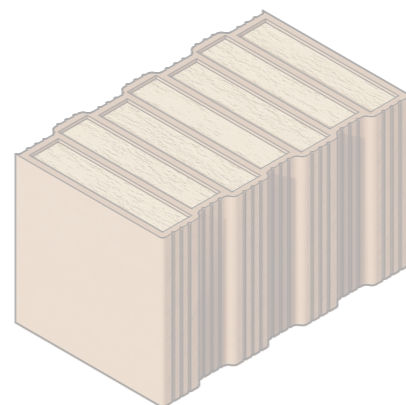
The new complementary buildings offer the residents extra living space. The space provides opportunities for different furniture arrangements based on need and usage. In this smaller living space, you find a bathroom with a shower and combination washer and dryer machine, room for a small desk and a kitchenette. Built-in wardrobes offer a good amount of space for storage. One of the two complementary buildings faces the ocean, and the other faces the tall pine tree forest.



CLAY BLOCKS

WALL CONSTRUCTION

Clay blocks in construction are an increasingly popular choice for builders looking to create high-quality, eco-friendly buildings. The use of clay blocks in construction offers a range of benefits. Clay blocks have superior thermal performance, high durability, and a reduced environmental impact compared to traditional building materials such as concrete and steel. The sustainability of clay block construction is a significant advantage, as it offers a way to create durable eco-friendly buildings that are time- and cost-effective. With their low thermal conductivity, lightweight nature, and sound insulation properties, clay blocks are a good choice for different construction projects (Porotherm UK, n.d.).



ENERGY EFFICIENCY & COMFORT

Clay blocks are known for their excellent thermal insulation properties, making them an energy-efficient choice for construction projects. With a low thermal conductivity of just 0,09 W/mK, compared to concrete blocks (0,15 W/mK) or traditional bricks (0,18 W/mK), clay blocks can significantly reduce the amount of energy needed to heat and cool a building. The dense nature of clay blocks and their high thermal mass allows them to absorb and store heat from the sun during the day and release it slowly during the night, providing a comfortable and stable internal temperature throughout the year. It also leads to lower energy costs and a reduced carbon footprint. Clay blocks also have excellent sound insulation properties, which can reduce noise pollution from outside sources and improve overall comfort levels in the building (Porotherm UK, n.d.).

TIME & COST EFFICIENCY

The clay blocks are precast and delivered to the site ready for installation. Their lightweight makes them easy to transport, manoeuvre and work with on-site, as they can be cut, drilled, and shaped using standard tools. The workers can easily manipulate the blocks to fit any design specifications. Altogether this can make them a cost-reducing and time-saving choice for construction projects (Porotherm UK, n.d.).

SUSTAINABILITY

Clay blocks are an environmentally friendly building material made from natural materials containing no harmful chemicals or pollutants and produced using a low-energy manufacturing process that produces minimal waste. The manufacturing process for the clay blocks produces 50% less CO2 emissions than the production of concrete blocks, making them a sustainable and renewable resource. They are 100% recyclable, reducing their environmental impact further (Porotherm UK, n.d.).

DURABILITY

Clay blocks are highly durable and resistant to fire, extreme weather conditions, and pests such as termites and rodents. They can withstand heavy rainfall and high winds, making them a reliable choice for construction projects in areas prone to severe weather conditions. Their durability also makes them cost-effective, as they require less maintenance and have a longer lifespan of more than 150 years than traditional building materials (Porotherm UK, n.d.).

MATERIAL AND DETAIL

Villa Kjelvik is a home built with sustainable and healthy insulated monolithic clay blocks.

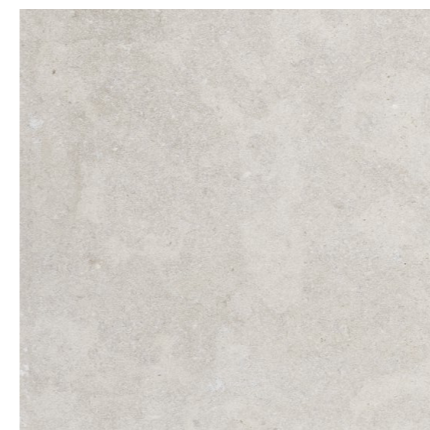
A light beige hydraulic lime render covers the exterior and merges seamlessly with the interior, creating a cohesive and serene atmosphere with the softly contrasting elements of stained oak. The raw and genuine materials are within reach, enhancing the phenomenological experience of the space.

Every building element, like the glulam beams resting on the monolithic walls, stands exposed yet woven together to create the rooms that embrace you. The visible construction enhances an understanding of its structure and strengthens the feeling of authenticity and trust.

The chosen materials in neutral and natural earthy colours enhance the sense of calm and simplicity. The materials must continue consistently throughout the building to avoid distraction.

The focus lies on architectural attributes and qualities, refined junctions, materials and colours to achieve experiences of harmony to allow the residents and visitors to escape the stress and distractions of modern society.

EXTERNAL HYDRAULIC LIME RENDER



Exterior walls in a light beige hydraulic lime render.

INTERNAL CLAY PLASTER



Internal walls in warm white clay plaster.

STAINED OAK



Furniture, details, floor, roof, doors and windows in stained oak.

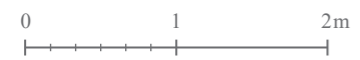
LIMESTONE



Countertops, floor and details in limestone.

CONSTRUCTION SECTION A-A

1:50



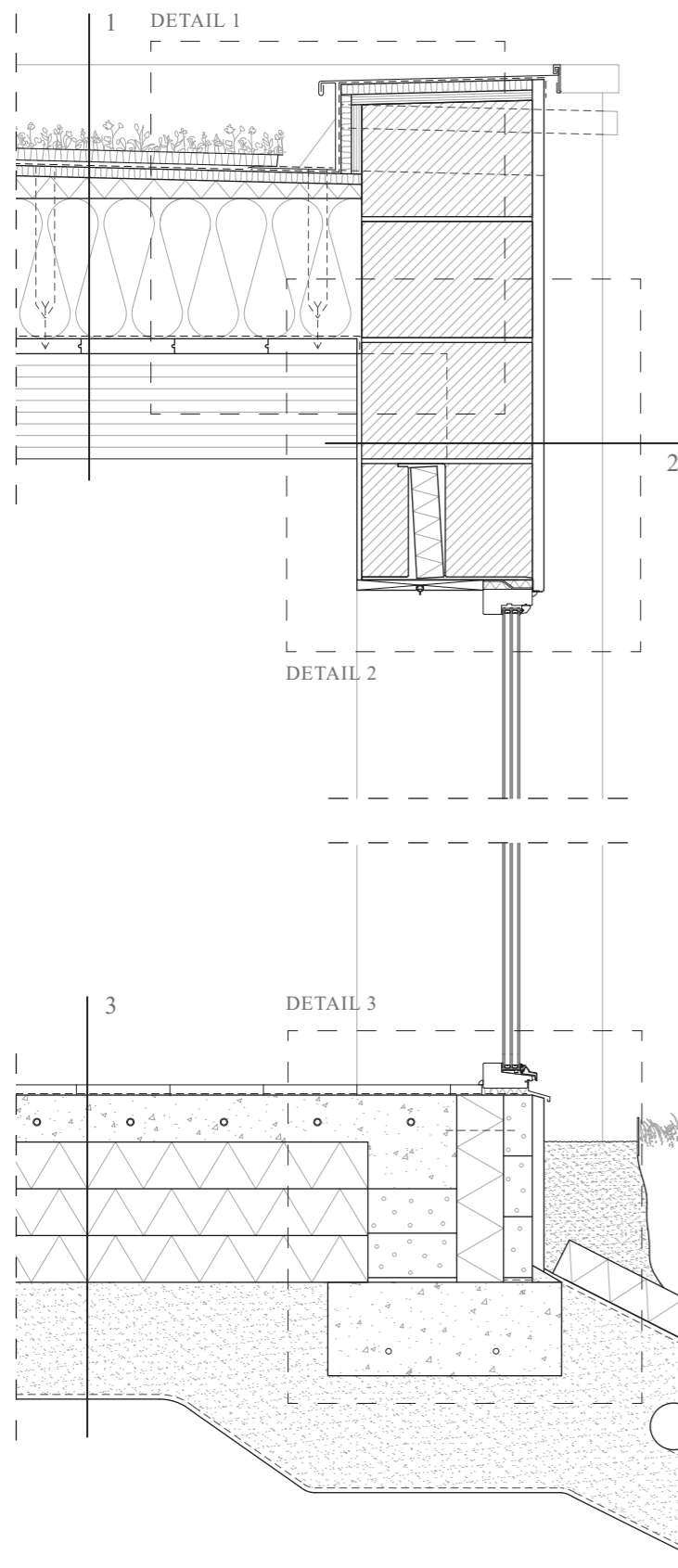
CONSTRUCTION SECTION B-B

1:50



CONSTRUCTION SECTION A-A

1:15

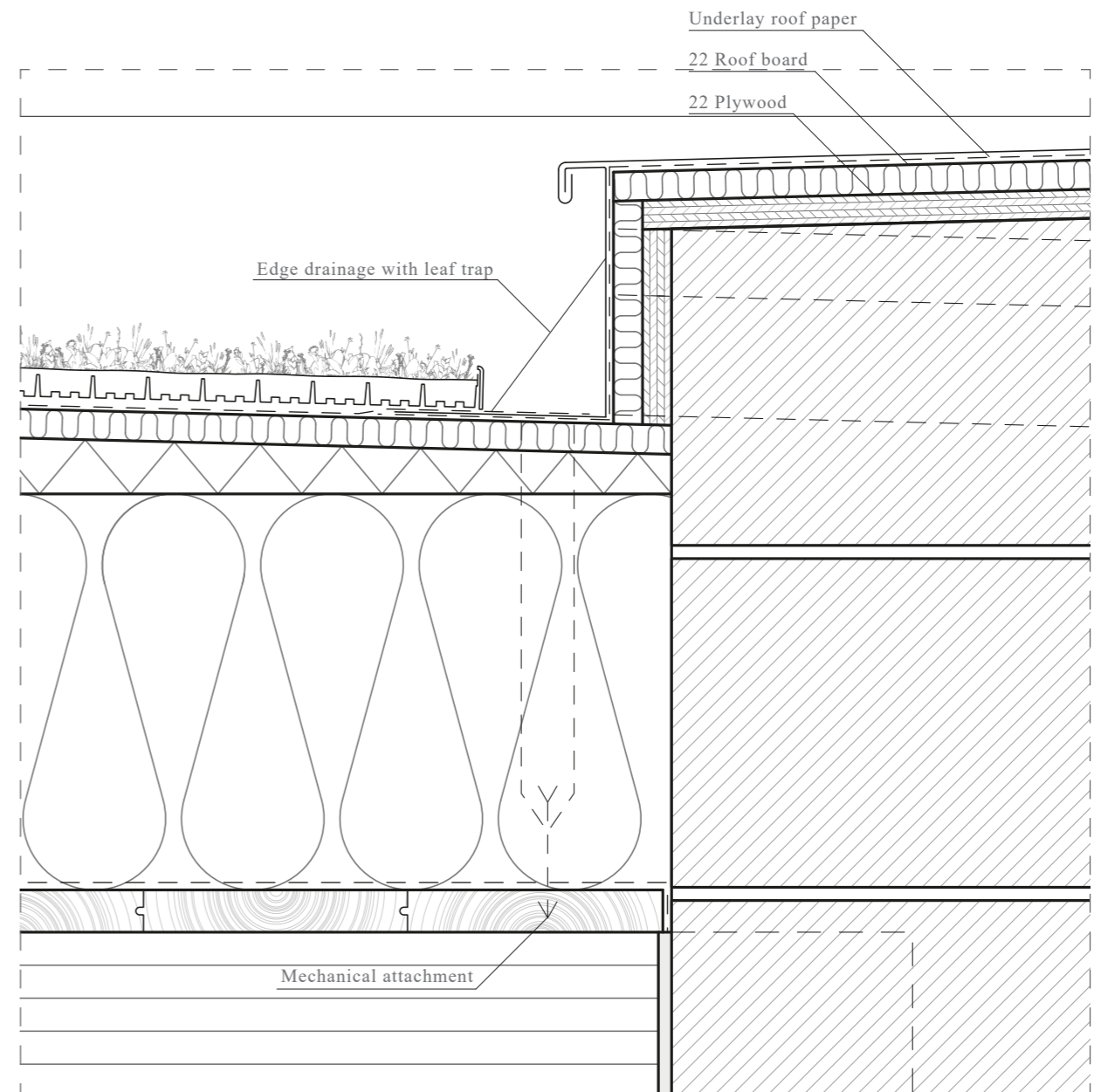


- 1 30 Veg Tech sedum
27 ND5+1 (water retaining drainage system)
Underlay roof paper
22 Roof board
Min 30 insulation slope board 1:40
300 Insulation
Vapor proof foil
32x200 planed, tongue and groove ceiling panel covered with stained oak veneer
90x225 Glulam beam, stained to match the pigment of the oak
- 2 25mm Hydraulic Lime render, built-up in 3 coats:
 - Gun-applied harled stipple coat,
 - Straightening coat, toothed with serrated straight edge
 - Gun-applied finishing coat, trowelled smooth or with rough harled finish
 - Top coat finished with light beige lime wash paint
 Porotherm 365 mm monolithic clay block
Wienerberger approved 'parge' coat
Clay plaster finish:
 - 3mm coarse lime mix stipple coat
 - 5-8mm clay backing coat with mesh embedded
 - 2-4mm clay plaster top coat
 - 2 coat micro-porous glaze
- 3 22 x 200 Oak hardwood floor
3 Underlay foam
Vapor layer
100 Concrete with heating
3x100 Insulation
250 Macadam
Non-woven vapor barrier fabric



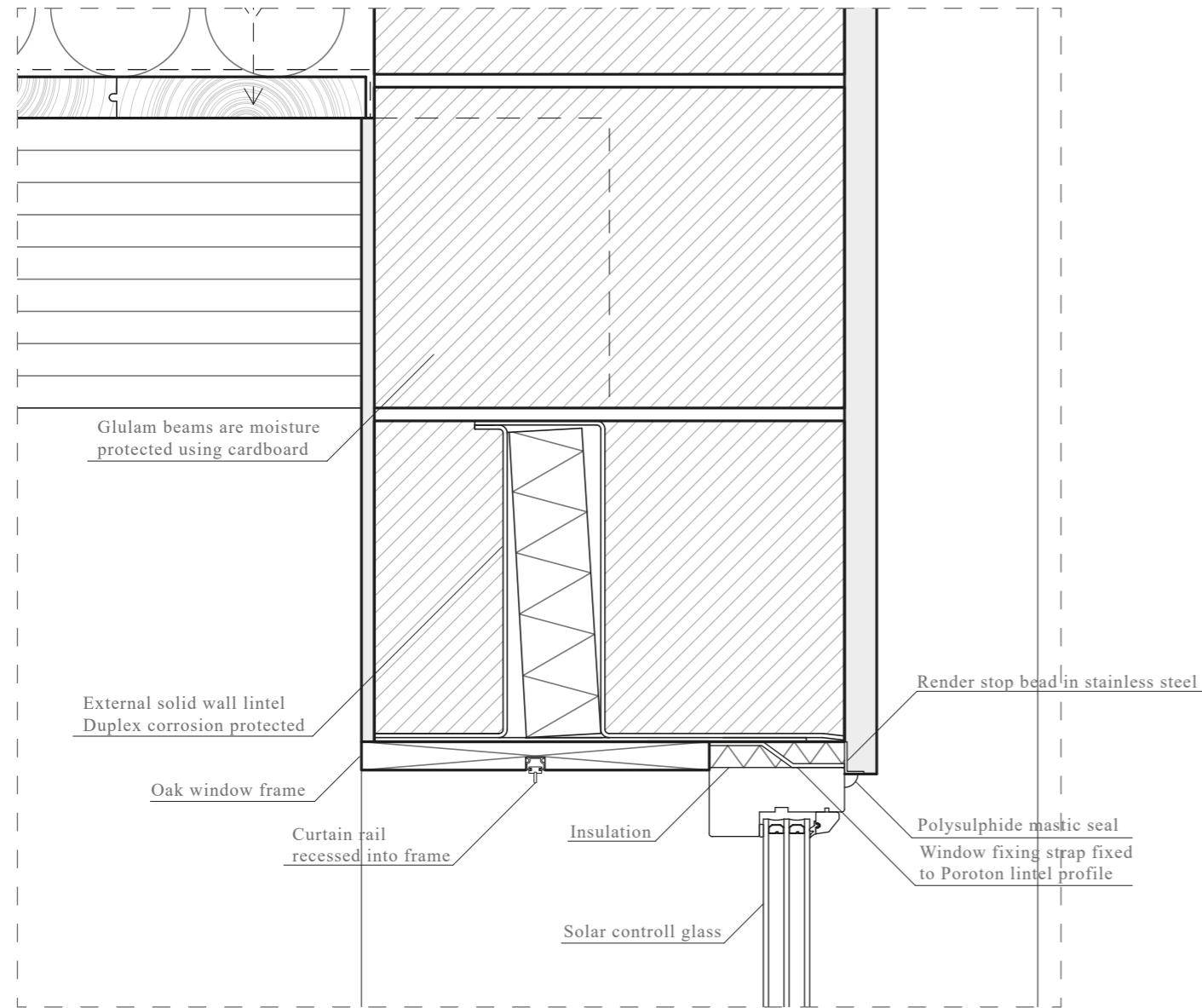
DETAIL 1

1:5



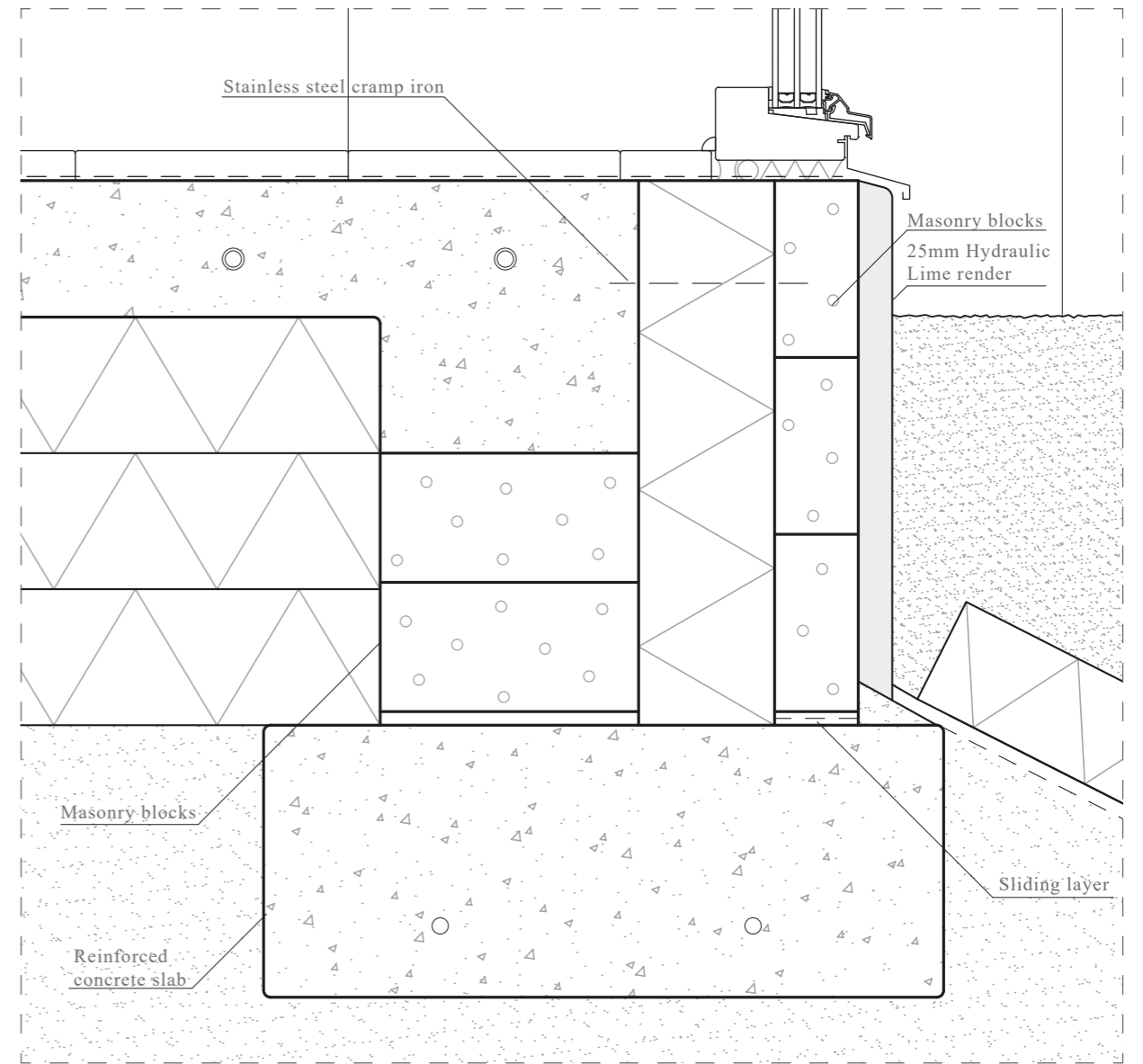
DETAIL 2

1:5



DETAIL 3

1:5

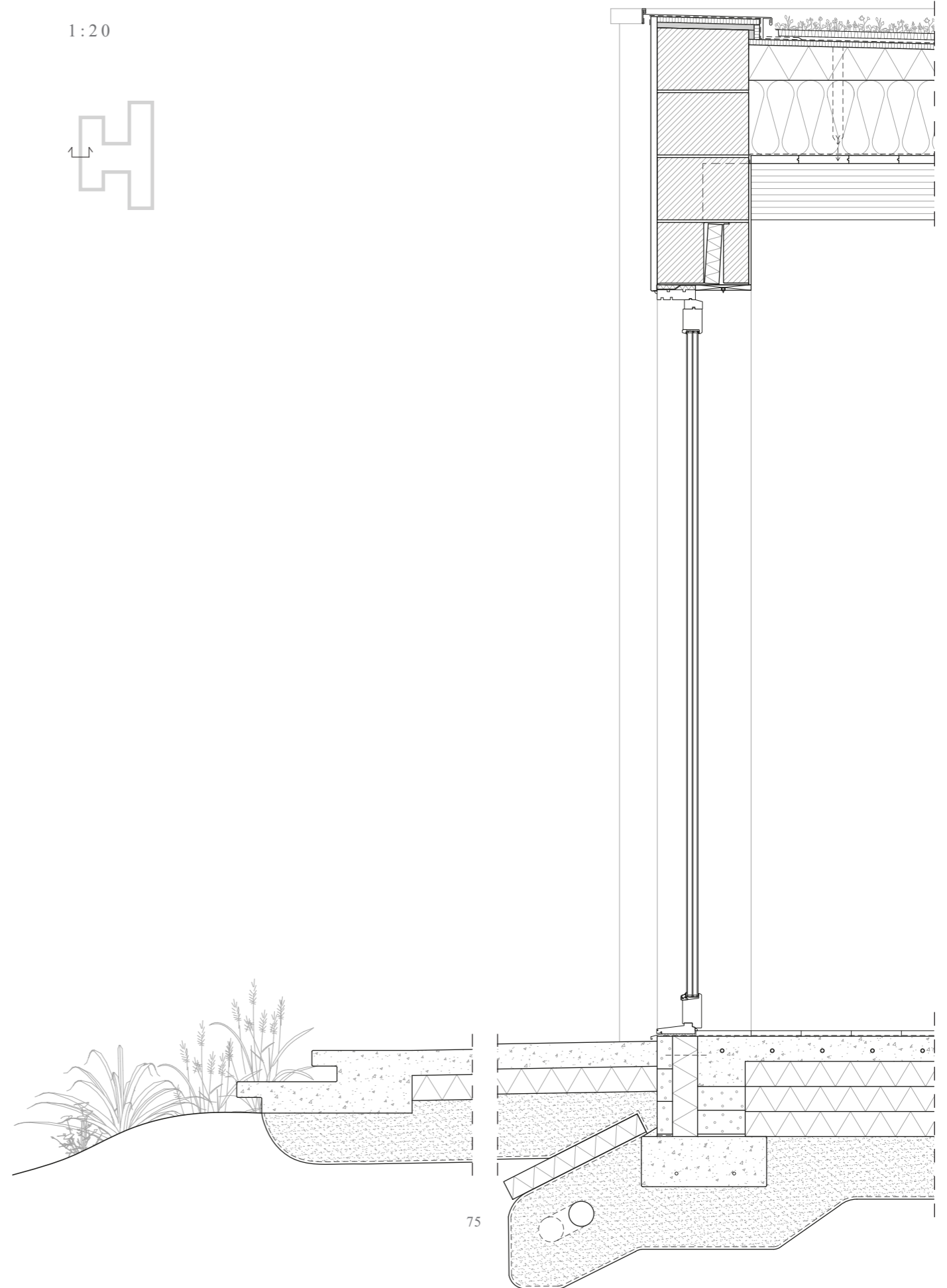
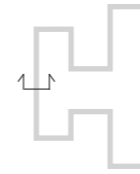


FACADE 1:20



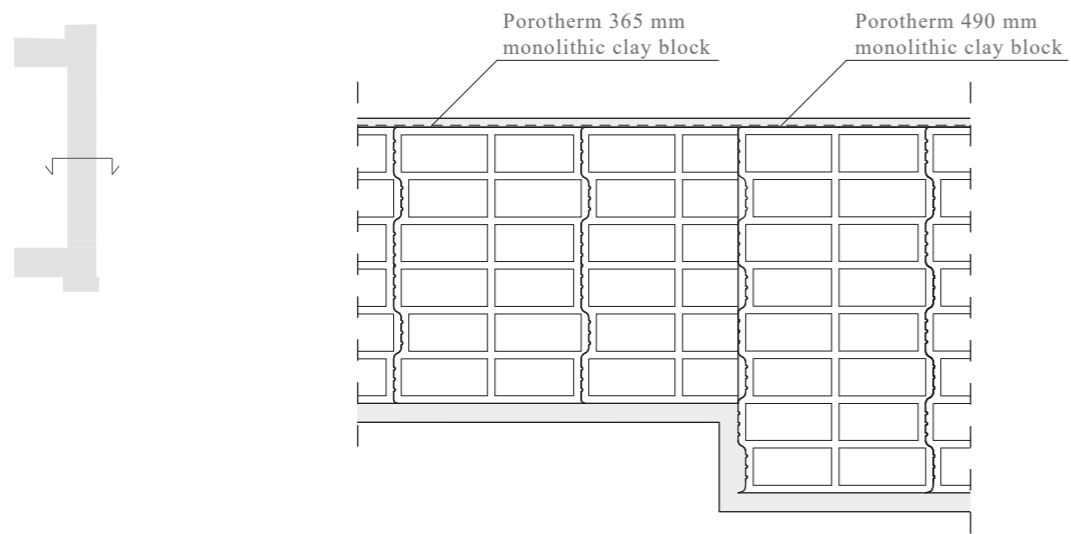
CONSTRUCTION SECTION B-B

1:20

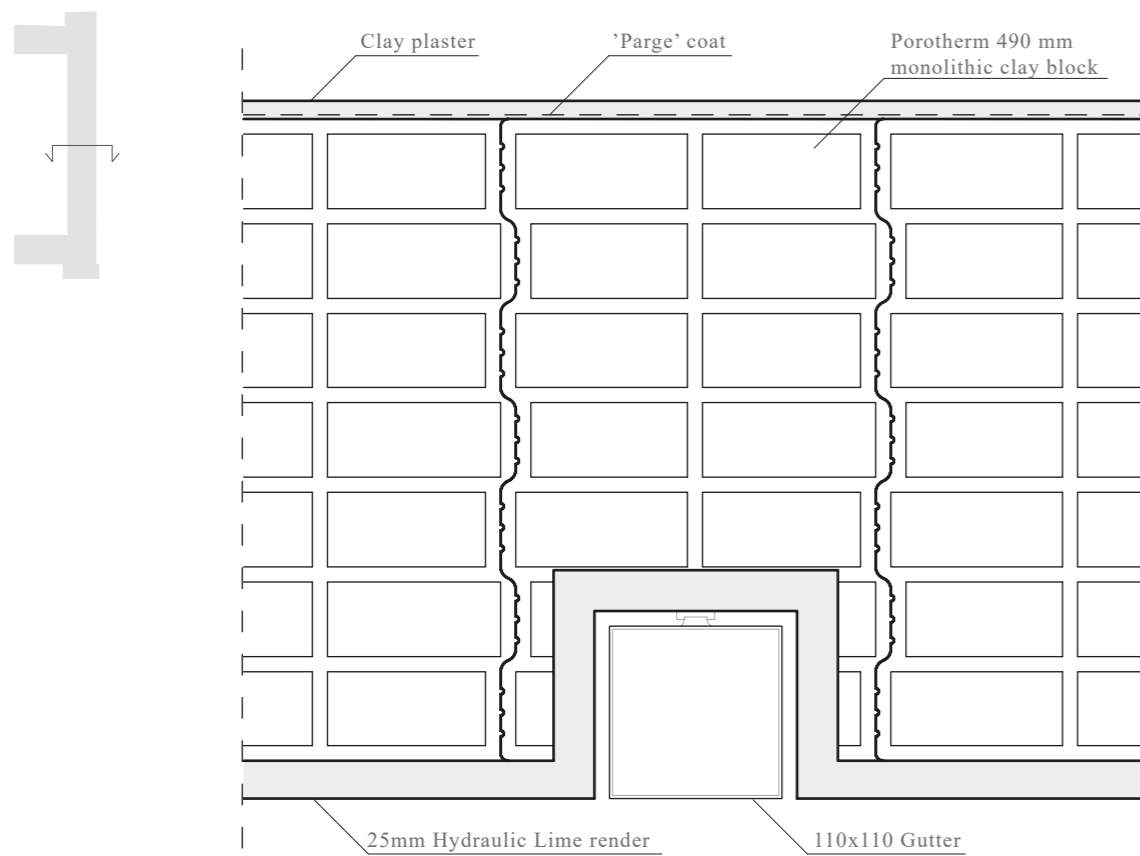


HORISONTAL DETAILS

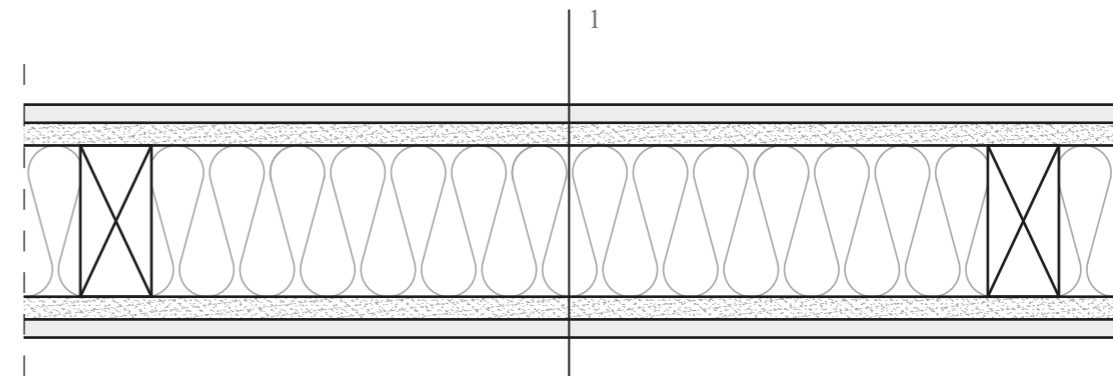
EXTERIOR WALL 1:10



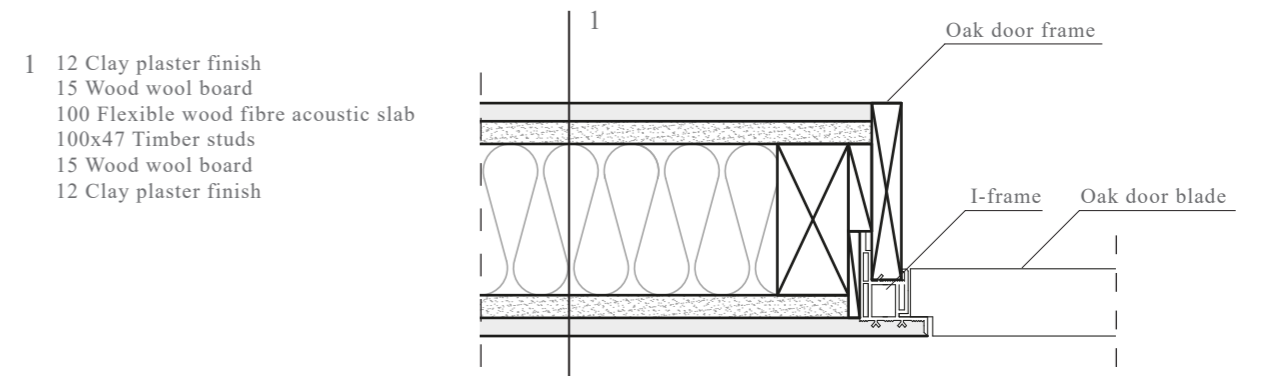
GUTTER 1:5



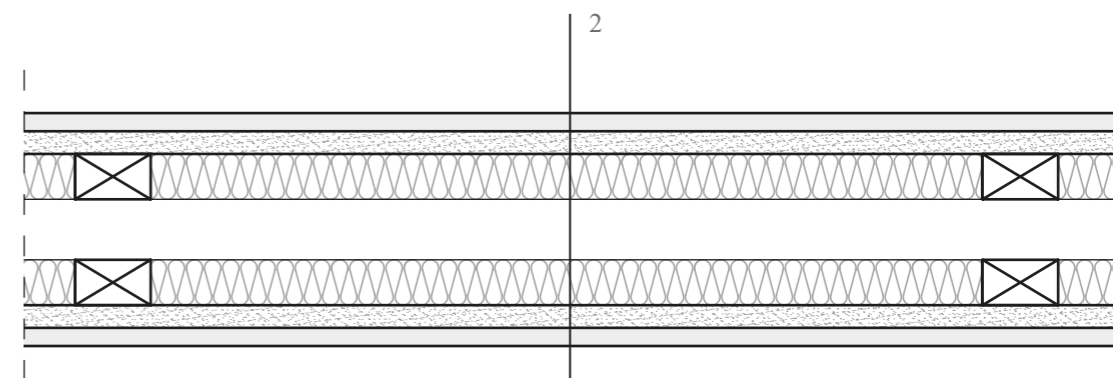
INTERIOR WALL 1:5



I-FRAME DOOR 1:5



SLIDING DOOR 1:5



- 2 12 Clay plaster finish
15 Wood wool board
30 Flexible wood fibre acoustic slab
30 Timber studs
40 Ceiling mounted sliding door, Ekstrands
30 Flexible wood fibre acoustic slab
30 Timber studs
15 Wood wool board
12 Clay plaster finish

PHYSICAL MODELS

DETAIL 1:20



PHYSICAL MODELS

BUILDING 1:100



LANDSCAPE 1:400



CHAPTER V
EPILOGUE



DISCUSSION

My fascination with how we experience architecture and its effects on our quality of life and well-being has been with me for many years. During my education, I have noticed that, consciously or not, I always returned to and worked with the concept of designing calm spaces for experiences of harmony, as a contrast to the busy and distracting outside world. I wish to contribute to the experiences of harmony and peace with calm and simple spaces, and with this research, I wanted to understand what that could be or look like. The concept applies to various spaces and buildings, but I wanted to research an environment that is the closest to us, where we spend most of our time and where it is essential we feel safe and calm - in our home.

Achieving a soft minimalistic simple expression, conveying a sense of weight and stability, the idea of a monolithic brick wall emerged as a design concept. Previously studied reference projects with similar aesthetics were often built with unsustainable materials like concrete blocks. Although sustainability is not the main focus of this thesis, it has been an important and carefully considered aspect. Monolithic clay blocks as the construction material became a natural choice early. Not only because of its environmental sustainability benefits but also because of its many other benefits such as energy, time and cost efficiency, comfort and durability. The absence of knowledge is still noticeable in Sweden about the building material and construction methods, which can lead to higher prices and the need for longer importation and transportation. Fortunately, this is starting to change as information about the material and construction methods spreads.

I decided early that the main focus would be to achieve the aesthetics of calm and simple spaces and to hold on to my design strategies. They were always my prioritisation when decisions needed to be made, before other aspects as more common, practical or economical solutions. The principle of prioritising my design strategies has had some limitations, which have been educational and benefited the outcome but also affected the project's realism to some extent.

Design strategies such as divided zones and a strict grid have benefited the process of creating calm and simple spaces. However, they have also posed many challenges regarding room sizes, the position of rooms and their relation to each other or the surrounding nature, sightlines, sizes of openings and more.

The experience of architecture is a multi-sensory phenomenon and has the potential to impact our quality of life and well-being. When asking how to design architecture to address all our senses and provide experiences of harmony free from distractions it is essential to remember that the answer would vary depending on who is answering. Taste and style are deeply personal and can evolve with time and trends.

Even though there may be endless different answers, the question remains important. This research deals with soft minimalism and the principle of designing calm and simple spaces to create architecture that promotes experiences of harmony free from distractions.

Despite some difficulties when holding on to my visions and design strategies, I am glad I did. I believe that the knowledge I have gained about the subject and how to convey it through text and illustrations is something I will be able to use in my future work as an architect. It also ties the knot quite beautifully as I have been able to explore my persistent interest that has otherwise discretely emerged in my previous projects.

I am satisfied with the result and how it highlights the importance of incorporating qualities in the design process that provide experiences of harmony and allows individuals to escape the stress and distractions of modern society. I hope that this research can inspire others to address the subject in their own way and work, or in the process of finding out what makes them feel calm and harmonious in their home environment.

BIBLIOGRAPHY

LITERATURE

- Blunt, A., & Dowling, R. M. (2006). *Home*. Routledge.
- Jenette L. Smith, & Miguel A Perez. (2018). *The importance of stress management in today's society*. REVISIA, 7(1), 1–4. <https://doi.org/10.3623/revisa.v%.n%.p296%>
- Lee, K. (2022). *The Interior Experience of Architecture: An Emotional Connection between Space and the Body*. BUILDINGS, 12(3), 326. <https://doi.org/10.3390/buildings12030326>
- Morris, A. (Architecture and design writer), Pawson, J., & Sudjic, D. (2019). *John Pawson : anatomy of minimum*. Phaidon Press Limited.
- Nagel, P., Udsen, V., & Faber, T. (2003). *Scandinavian modern houses*. Living Architecture.
- Norm Architects. (2022). *Soft Minimal - A Sensory Approach to Architecture & Design*. <https://normcph.com/creative/soft-minimal-book/>
- Pallasmaa, J. (2012). *The Eyes of the Skin : Architecture and the Senses* (3rd ed.). John Wiley & Sons, Incorporated.
- Schires, M. (2019). John Pawson on Making Calm, Simple Spaces. Archdaily. <https://www.archdaily.com/918121/john-pawson-on-making-calm-simple-spaces>
- Zumthor, P. (2006). *Atmospheres : Architectural environments ; surrounding objects*. Birkhäuser.
- Zumthor, P. (2005). *Thinking architecture* (2nd expanded ed.). Birkhäuser.

WEBPAGES

- Brillon, J. (2021, October 19). *Two angular wings form Quebec chalet by Atelier Pierre Thibault*. Dezeen. Retrieved November 11, 2022 from <https://www.dezeen.com/2021/10/19/lac-brome-residence-quebec-chalet-atelier-pierre-thibault/>
- Gaisma. (n.d.). *Gothenburg, Sweden - Sun path diagram*. Retrieved November 16, 2022 from <https://www.gaisma.com/en/location/goteborg.html>
- Hermansson Hiller Lundberg. (n.d.). *Skuru Nacka Private House*. Retrieved November 16, 2022 from <https://www.hhl.se/projects/skuru/>
- Madden, G. (2018, December 29). *What is soft minimalism & why is it trending*. Houzz. Retrieved January 15, 2023 from <https://www.houzz.in/magazine/what-is-soft-minimalism-and-why-is-it-trending-stsetivw-vs~117275660>
- Meteoblue. (n.d.). *Simulated historical climate & weather data for Viddesgårde*. Retrieved November 16, 2023 from https://www.meteoblue.com/en/weather/historyclimate/climatemodelled/viddesg%c3%a4rde_sweden_2663214
- Porotherm UK. (n.d.). *Why Porotherm?* Retrieved April 5, 2023 from <http://porothermuk.co.uk/why/>
- Tham & Videgård. (n.d.). *Atrium House*. Retrieved April 5, 2023 from <https://www.thamvidegard.se/work/houses/atrium-house/>

VIDEO

- AA School of Architecture (2010, December 10). *John Pawson - Plain Space* [Video]. Youtube. <https://www.youtube.com/watch?v=PfqybDqebY4>

IMAGES

- Image 1-3: Brouillet, M. (2022). *La Résidence du Lac-Brome* [Photograph]. Atelier Pierre Thibault <https://www.pthibault.com/project/residence-lac-brome/>
- Image 4-6: Lindman, Å. (2022). *Atrium House* [Photograph]. Tham & Videgård. <https://www.thamvidegard.se/work/houses/atrium-house/>
- Image 7-11: Lindman, Å. (2022). *Palmgren House* [Photograph]. John Pawson. <http://www.johnpawson.com/works/palmgren-house>
- Image 12-13: Isaksson et al. (2022). *Villa Kjaerholm*. Chalmers. <https://projects.arch.chalmers.se/2022/02/04/villa-kjaerholm/2/>
- Image 14-16: Nagel, P., Udsen, V., & Faber, T. (2003). *Scandinavian modern houses*. Living Architecture.
- Image 17-21: Olsson, M. (2022). *Villa Skuru* [Photograph]. Hermansson Hiller Lundberg. <https://www.hhl.se/projects/skuru/>

If not otherwise stated images are photographs taken by me.

The presented reference project drawings are made by me.

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