

## MASTER

NL <-> NOR : an act of giving one thing and receiving another  
a new Dutch embassy in Norway

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# NL <-> NOR

*'An act of giving one thing and receiving another'*

A new Dutch embassy in Norway

*'An act of giving one thing and receiving another'*

*keywords*

embassy, residence, Dutch identity, wood  
architecture, sustainability

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# before we begin

Three years ago, I started the M Architecture, Building and Planning program at the Technical University of Eindhoven with full dedication. At the age of seventeen, I started studying building technology at the University of Applied Science in Arnhem. During that period, mainly during internships, I got possessed by the beauty of the architectural discipline. Back then, I had one dream: becoming an architect. Looking back, all these years of studying went so fast; now I'm already presenting my graduation project with this thesis.

This thesis is part of graduation studio No@way, in September 2014 this studio started. Belonging to the chair of architectural design and engineering, eventually the goal of this graduation studio was designing a (new) Dutch embassy building in Norway.

During a period of twelve months I was supported by my studio tutors, Ir. Maarten Willems, dr.ir. Faas Moonen and dr.ir. Jos Bosman. With their dedication to the architectural discipline, they have criticized me, motivated me and inspired me during this project. By this, they have had a vital contribution to the development of the final architectural design. Therefore, I would like to take the opportunity to thank them in this way.

Furthermore, I also would like to thank the other members of the studio, for the mutual support and interests. With pleasure I look back on the trip to Oslo. Which was a great success, as well for the project itself but also because we got to know each other much better and that was great fun.

Finally, there are a lot of other people that supported me during this project which I would like to thank. Of course all my family and friends for the overall support and their patience while I was studying.

Leonique Winnen

## summary

The eventual goal of this project was designing a (new) Dutch embassy in Norway. Prior to the design a research is done on the Dutch identity and the aesthetics of sustainability. The researches formed a position on both topics. This research consisted out of the design of a Dutch promotional gift and an essay on the aesthetics of sustainability related to vernacular architecture. These themes, are therefore also integrated in the design research for the embassy.

During the study trip to Oslo came out that the main task of the embassy is encouraging exchange between the Norwegians and the Dutch. The current embassy building didn't support these goals. Therefore, a new design was created. Furthermore, the residence and embassy are two separate buildings now, were no exchange is encouraged. A combination of the representational tasks (residence) and the functional tasks (embassy), should be made in the new design.

Related to the main goal of the embassy, is the problem statement of this project: This project will investigate how the exchange between the Netherlands and Norway can be stimulated by means of architecture in the form of a new Dutch embassy. The expression of the Dutch identity, sustainability, the living/working atmosphere and the relationship with the host country are central themes of this research.

During the design research a reaction on this statement is substantiates. The differ-

ent themes are further explored and investigated, resulting in the design for a new embassy. The challenge of this design study was the combination of creating an open and public building that encourage exchange on a public spot in relation with the more private function of the residence. Different types of exchange were explored and reflected into the design.

Furthermore, the goal of the embassy also influence the choice of the location and the strategy that goes along with it. The choice for a public atmosphere, where the architectural intervention gives something to the city, in exchange the Dutch can built on such prominent spot in the city center.

Another important aspect of the design is the relationship with the host country and with the surroundings. A need for creating a sustainable design, as explored on the essay on the aesthetics of sustainability. It's also important for the encouragement of exchange, in the end it's not only a building for the Dutch but also for the Norwegians. Due to the use of materials and detailing this relationship is made in the architectural expression, providing an architectural quality. Inspired by Norwegian principles, but executed in a Dutch way. In the end it is still a Dutch representation abroad.

The detailing of this building is the one of the most important aspects of the Dutch representation. Although it's a building for both, the Norwegians and the Dutch, but the detailing makes it specific.

On light and climate, also Norwegian principles were used in Dutch way. Norwegian (vernacular) architecture can gives insight on these aspects. Using this you make sure the building fits in its circumstances. This information was used as inspiration on these themes. The execution of these aspects is done in a 'Dutch' way. Both integrated into the architectural design, and in terms of climate also in the daily life of the users. Creating simple sustainable solutions.

So different aspects play a role in the design of this new Dutch embassy in Oslo that encourages exchange between the Norwegians and the Dutch in various fields.



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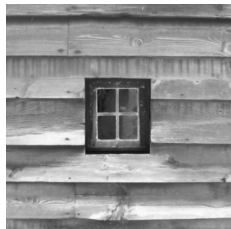
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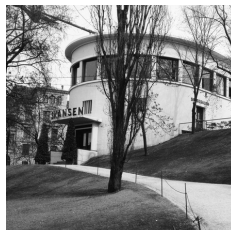
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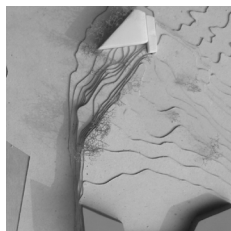
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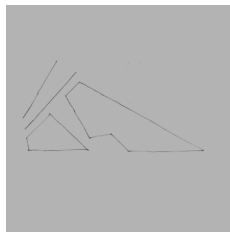
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21°C

Coca-Cola  
classic

introduction

## theme

The eventual of this graduation thesis is designing (new) Dutch embassy building in Norway. This thesis describes both the design decisions leading to the final proposal and some of the most important stages of the research prior to the design decisions made, the M4 and the M3 part.

The M3 project consisted out of research into the two main themes of this graduation studio, Dutch identity and the faces of sustainability. The research on Dutch identity, with as goal designing a Dutch promotional gift, focused on how Dutch identity could be translated into a design. All members of the graduation studio designed and made a promotional Dutch gift, these were exhibited at the faculty of architecture of the TU/e. This translation of Dutch identity into a promotional gift, formed a position on the translation of Dutch identity to be translated into a (architectural) design.

The second theme of the M3, about the aesthetics of sustainability, eventually resulted in a booklet which contains a collection of essays on this topic. Sustainability is an important aspect of architecture in our contemporary society. This research doesn't focus on the quantitative aspects of sustainability, or one could say technical performance of sustainable solutions. It rather focusses on the qualitative aspects of sustainability, the esthetical appearance and performance. The subjects for the essays were collectively determined, the execution was individually organized.

My theme related to sustainability and the expression of it, was vernacular architecture. *"The urgent quest for sustainability has given new relevance to the study of vernacular buildings, both local and distant."*<sup>1</sup> An interesting subject because these types of architectures can provide different sustainable solutions related with their architectural expression. Furthermore are these kind of architectures also related to a specific culture or locality and could therefore may be linked to a kind of identity.

In the M4 part the design for the Dutch embassy building in Norway was further developed individually. The findings of the M3 project were further explored and investigated to integrate them eventually in the architectural design.

# problem statement

During the study trip to Oslo and while visiting the current Dutch embassy in Oslo, the main tasks of the embassy became clear. Generally speaking you could say that encouraging exchange is the main goal of the embassy, in this case exchange between the Netherlands and Norway. For different reasons, see the chapter *The Dutch in Norway*, the current embassy building and residence building don't encourage this main goal. Therefore, this project will investigate how the exchange with Norway can be stimulated by means of architecture in the form of a new Dutch embassy.

One of the aspects which doesn't contribute to reach the optimal exchange, is the fact that the residence and embassy building are now separate buildings. Combining living and working atmospheres, demand for further architectural research on how these atmosphere could be achieved. And further, because the embassy building will be located in Norway, more research about building in Norway is required. Research on how to build optimally with regard to sustainability, in the typically climate of the Nordic region. But also on how to reflect the relationship of the host country into the architectural design. This because in encouraging exchange both, the Norwegians and the Dutch, should be involved. The themes of the M3 research, the faces of sustainability and Dutch identity, will be further explored with regard to the architectural design of the embassy.

*This project will investigate how the exchange between the Netherlands and Norway can be stimulated by means of architecture in the form of a new Dutch embassy. The expression of the Dutch identity, sustainability, the living/working atmosphere and the relationship with the host country are central themes of this research.*



# structure

The layout of the thesis roughly consists out of two parts. First a literature research into of different important aspects related to the problem statement of this study. After that, the eventual design of the embassy will be further explained and underpinned.

Because this project will investigate how exchange between the Netherlands and Norway can be encouraged by means architecture, the literature research therefore investigates these two stakeholders. In the chapter the Dutch, a more detailed research is executed on the Dutch identity, the expression of Dutch identity into a design, references projects, Dutch policy on diplomacy and about the Dutch in Oslo. Out of this research an opinion on how to deal with the expression of Dutch identity occurs. Furthermore there were several design focuses resulting from the inquiry. In logical manner after this first part of the Dutch, will follow the second part of the literature research on the Norwegian. This chapter will conduct research on building in Norway, where different aspects play a role. Also the sustainable part of the thesis will be treated here, linked to the vernacular architecture of Norway. This vernacular architecture together with a chapter on the specific climate of Norway could provide us insight on how to build in this region. In the end, in the design, these two researches come together.

After this literature research the next chapter will be committed to the location of the embassy. This chapter consists partly out of literature research on this

partly out of literature research on this specific location and further an analysis of the current tendencies and characters of this spot. In the end these two parts will result into a site strategy where the embassy is part of.

Before the elaboration of the design, the concept of the building is introduced. This concept is the result of the literature research prior to the design research and will further explain the position on the different themes of the problem statement of the project.

In the following chapter the design will be further explained, referring to the themes of the problem statement. Different drawings, renders and sketches will support this explanation.

At the end in the reflection, the problem statement will be discussed based on the design decisions made.



the Dutch

## Dutch identity

*“The Netherlands are too diverse to summarize them in one cliché. “The Dutchman” does not exist. As a consolation I can tell you that “the Argentine” does not exist either.”<sup>3</sup>*

This well-known citation of Queen Maxima argues that the Dutch identity cannot be described in one solid term and may even doesn't exist in the contemporary society. Talking about Dutch identity I feel same. You can't describe it in one solid term, there are a lot of aspects related to the Dutch identity, but the collection of these aspects is different for everyone.

The writers of the book *Discovering the Dutch: On culture and society of the Netherlands*, wrote about these aspects the following: *“Yet Dutch national identity cannot be captured in such anthropological observations or examples of folklore and traditions, even if they offer a rich source for emotional identification – or differentiation. Nor can a demarcation be drawn around “Dutchness” that represents it as a sheltering haven against the modern forces of globalization, Europeanization, individualism or multiculturalism. If nothing else, the Netherlands is a highly modern, densely populated county that is interconnected with the world by a myriad of trade relationships, migratory movements, cultural exchanges, international networks and collaborations. As a result, Dutch national identity is not static, but rather the outcome of a continuous process of identification, negotiation and exploration.”<sup>4</sup>*

And this process of identification, negotiation and exploration is influenced by the society today and the history we have all in common. That background also shaped the Dutch identity. Out of these processes there are a lot of aspects which have a strong connection with the Dutch identity. In the book, *The Netherlands: practical guide for the foreigner and a mirror for the Dutch*, foreign people who lived in the Netherlands wrote about typical aspects of the Dutch culture.

On this page there is a collection of the most striking words found. These words, or you could say aspects, are related with the Dutch identity in a way, connected neither by the history we have in common nor they are part of the contemporary society we are in. The view of foreign people on the Dutch culture is refreshing, because they reflect different aspects on their own culture. The collection made doesn't describe the Dutch identity as whole. The Dutch identity is a collection of different terms, and this collection is for everyone different. This collection describes what's most striking to me about the Dutch identity.

Some striking words about the Dutch identity:

Sober, practical and fugal...;  
 Bone and hard;  
 Multicultural, sometimes forced kindness?;  
 'Doofpot';  
 What happened to the notion of retaliation?;  
 Dutch people live in a happy comfortable snooze...;  
 Consensus;  
 Bureaucratic;  
 Open-minded;  
 Unpopular weather;  
 'Don't mind he is from Barcelona.';  
 Birthdays;  
 Culture of consensus;  
 Directly;  
 'Degelijkheid'  
 Feels sometimes bone and hard;  
 You can buy everything there;  
 Skill-based education;  
 Making appointments;  
 'How a small country still can be great';  
 Not spontaneous;  
 Tolerance?;  
 Not so discrete, directly;  
 Arrogance is crime  
 'Doe maar normaal dan doe je als gek genoeg';  
 Assertively;  
 Cold and wet;  
 'Gefeliciteerd';  
 Anyone can criticize anyone;  
 'Zuinig' but big charity givers;<sup>5</sup>  
 .....

## Dutch gift

During the M3 research, prior to this project, Dutch identity was translated into a promotional gift. This to find out how Dutch identity can be translated into a design. Since Dutch identity cannot be described in one solid term and a lot of aspects are related to it, as described in the previous paragraph. For designing a Dutch gift it's about what you personally want to emphasize of the Dutch identity.

Mark Kranenburg stated the following about the Dutch culture, in *The Netherlands: practical guide for the foreigner and a mirror for the Dutch*: *"...without compromise and consensus, it would be impossible for the Dutch to live together on a small strip of land that is largely below sea level."*<sup>6</sup> For me personally, he captured a very important aspect of the Dutch culture, the culture of consensus. In one way this culture of consensus is related to the Dutch history in for example the *'poldermodel'*, the history we all have in common. On the other hand, it also says something about the contemporary problems of the Netherlands we live in nowadays and the need of this culture of consensus in our contemporary multicultural society. Furthermore, a lot of other aspects are related to the Dutch identity and also have a connection with this culture of consensus, like for example open-minded, directly, assertive, tolerance, etc.

The design of the Dutch promotional gift is based on the quote mentioned above, in the appearance of a water jug. As water plays an important role in the Netherlands.

11 Dutch promotional gift: tapping water





In positive ways, for instance recreational and the exceptional clean tapping water the Netherlands has. On the other hand it also shows the vulnerability of the Netherlands with the water above the flat surface. Where the law of communicating vessels, which represent the culture of consensus, makes the tapping work. A lot of cultures living together, they are different, but within a certain structure, as there is no strict image of the Dutch identity. That's why the gift exist out of different bottles, they can be all different but structured in a way, making use of qualities that were already there. The object makes you think about how it works, and thereby a connection with the Netherlands is made.

This is my personal way of expressing Dutch identity into a promotional Dutch gift. Conceptually the design of an Dutch embassy or a Dutch gift are related to each other, it's about what you personally want to translate of the Dutch identity into a design. The design of the promotional gift, refers to my view on the Dutch culture, to design an embassy the translation of the Dutch identity should be linked to the goals of the embassy itself, in order to achieve an optimal result in representing a nation. As described before, there is no strict definition of the Dutch Identity, but a lot of aspects are related with it. These aspects are rooted in our contemporary society or linked with the history we all have in common. The design of the embassy building will therefore be linked with several aspects, all supporting the main goal of the embassy building.

2l tapping water



# the Dutch in Oslo

NL <-> NOR  
 Economical  
 Artic  
 Energy  
 Defense (all nordic countries)

NL <-> NL  
 Consular tasks

## *"Groei in het Noorden!*

Why is the Nordic region interesting for me?

- 25 million Northerners living in a sustainable, accessible and dynamic region;
- The countries are in the top in terms of competitiveness, innovation, research and education;
- The societies are characterized by high social standards and the Nordics are leaders in diversity policy;
- The region has a well-developed traditional and digital infrastructure;
- The Nordics are well advanced in green technology and energy, ICT, healthcare and creative industries;
- The region as a whole ends up in the top 5 of the main export destinations of Netherlands." <sup>7</sup>

Currently the Dutch are already represented with an embassy building in Norway. The Dutch have different reasons to be represented in the Nordic regions. By visiting the current Dutch embassy in Oslo, during the study trip, the two main tasks of the embassy became clear. One of these tasks is the consular task of the embassy, a service for Dutch people in Norway. They support Dutch people in Norway with administrative services, like for instance passports and visa. But also in cases of emergency and if needed to support detained people in Norway. Furthermore, the embassy forms a bridge between the Netherlands and Norway. This bridge has the function to improve and encourage exchange, on different fields, between Dutch and Norwegian companies, government, institutions and individuals. This exchange which they encourage can be divided into different fields, namely: economical, artic, energy and defense.

Roughly speaking we can conclude than encouraging exchange is one of the main tasks of the Embassy. Exchange in different fields between the Norwegians and the Dutch, but also between the Dutch in Norway and the Dutch in the Netherlands. Currently the Dutch are not only represented with an embassy building in Oslo, but also with a residence. The role of an embassy building and accompanying residence is to encourage these main tasks. The current buildings don't facilitate these goals.

According to Ramon Tout, senior real estate advisor from the ministry of foreign

affairs, the residence and embassy can be divided into two goals, were the embassy mostly is used for functional tasks and the residence for more representational tasks. So the residence has mainly a representative function, these functions are located on the ground floor of the building. On this ground floor a kitchen and a representative room is located. Representative events of the embassy, such as dinners, will usually be hosted in the residence. The residence can also be used by companies and organization who have strong ties with the Netherlands, the embassy is even promoting this way of exchange to create more connections on different fields. They are not allowed to make profit with this facility, the only ask for a small fee. The main reason to facilitate these events is to get involved in different processes of exchange. On the first floor of the building is the living area of the ambassador's family is located. Unfortunately, we haven't seen the inside of the building, but for an ambassador residence the division between private atmosphere and representative atmosphere is very important. Because in the end you don't want to live in your work.

It's sensible to organize different events in the representational part of the building, so that the embassy can get involved. However, it's strange that the representational tasks and the functional tasks of a national representation in another country are not combined in one building. If they are combined, than the inside organization and functioning of the building could encourage exchange. A balanced

combination of these different tasks can create new opportunities for the Dutch to get more involved, also by facilitate space for different events hosted by companies or institutions that have strong ties with the Netherlands like they already do.

Furthermore, from the outside, the embassy building doesn't reflected an aspect of the Dutch Identity. This because the embassy is hosted in a 19th century villa built in a basic Italian renaissance style<sup>8</sup>. So the goal of the embassy, encouraging exchange, is not reflected in the expression of the architecture outside, neither in the organization of the buildings inside. The current layout consists out of a lot of small offices, where people work individually. This doesn't encourage any exchange between the employees of the embassy mutually. Another negative aspect of all these small offices, is that they can't be used multifunctional if the number of employees of the embassy increases or for other functions.

Another important aspect is to make sure that the embassy is an inviting building, so that Norwegian people will get involved. The current layout of the embassy building doesn't provide an inviting atmosphere to get the Norwegians involved, this could offer new opportunities for the new embassy building. Furthermore, also a relationship with the host country arises. In a process of exchange two parties are involved and therefore the new embassy building should offer opportunities for both.

31 the current Dutch residence in Oslo



4| the current Dutch embassy in Oslo



## Dutch exchange

As described before, the main task of the embassy is encouraging exchange, in this case between the Netherlands and Norway. Encouraging exchange and exchange itself both have a connection with the Dutch identity and history. Even though, we cannot describe Dutch identity in one static way, as described before. The historical background that we all have in common together with the tendencies of the current society shapes the Dutch identity<sup>9</sup>.

Exchange is connected with the Dutch identity in both ways. It's rooted in the trading history of the Netherlands and the culture that goes along with it. *"As a constitutional monarchy with a long democratic tradition, the Netherlands is known for its internationally oriented economy which is organized around well-established welfare arrangements and consensual political culture that is sometimes affectionately described and even promoted as "polder-model"."*<sup>10</sup> Furthermore, the Netherlands is interconnected with the outside world in this contemporary society and tendencies. *"If nothing else, the Netherlands is a highly modern, densely populated country that is interconnected with the world by a myriad of trade relationships, migratory movements, cultural exchanges, international networks and collaborations."*<sup>11</sup>

These aspects explain the relation of exchange with the Dutch identity, the Dutch focus on the outside world. The Dutch way of exchange is focused and connected with the outside world, innovating, assertive and adjusting if needed. As Harry de

Wit, vice ambassador of the Dutch embassy in Oslo, stated '*The Dutch willingness to trade*'. That connection with the outside world and the willingness to collaborate, should be the approach of the embassy and should be reflected in the approach of the architecture. Combined with the different aspects which are related with Dutch identity mentioned in the first chapter. These aspects should be linked with the architectural decisions, to create a 'Dutch' embassy.

51 first stock exchange in the world, Amsterdam 1611





## Dutch embassies

In 1991 the Dutch Ministry of Foreign Affairs decided to promote more Dutch architecture abroad. Several prominent Dutch architects were given the opportunity to design various Dutch embassies spread all over the world. In the documentary *Het uur van de Wolf: Mission statements*, four of these embassies were examined as showcases for Dutch architecture and diplomacy abroad. These showcases are interesting examples on how Dutch identity can be translated into an embassy building, how the functioning and organization of an embassy building could work, how a separation between living and working areas could be made and how the relationship with the host country is reflected.

*Addis Ababa by Bjarne Mastenbroek and Dick Van Gameren -> See architectural reference 1, at the back.*

### *Relationship with Ethiopia and location*

The Dutch embassy in Addis Ababa, on the immense five-hectare site, consists out of an elongated horizontal volume hosting the embassy and residence. Furthermore, on the site are also three staff dwellings located, a refurbished historical villa and a gatehouse at the entrance of the site. "Located at the centre of the site are the chancery and ambassador's residence, both housed in an elongated horizontal volume that looks as if it was carved out of the landscape like a traditional Ethiopian rock temple."<sup>12</sup> The link towards the home country is mainly visible in how the building sensitively was placed into the landscape and in the used material of the

facade. The concrete of the facades was executed into a red color, the same as the earth<sup>13</sup>. A clearly visible relationship with the host country was reflected in the expression of the building, so that the building would fit in the surroundings.

#### Dutch identity

*"The Embassy roof is a shallow pool, an element that combines Dutch tradition in water management and landscape technology, with the natural craggy countryside of Ethiopia. As in the Netherlands everyone lives and works under water. The building is visible at both ends and as the landscape slopes gradually upwards it disappears temporarily, transforming into a pool among the eucalyptus trees."*<sup>14</sup>

The expression of the Dutch identity is reflected into this roof. Furthermore, a more literally aspect of the Dutch was used for the gatehouse of the complex, namely the Dutch flag over the whole facade. The connection of the Dutch and the Ethiopian expressed in the roof, is a nice and gently expression. The gate house is a too expression to the Dutch identity because of colors used, also in comparison with the nice embassy building.

#### Functioning and organization

In the front of the buildings the chancellery is located. This part of the building has a simple arrangement with a central corridor in the middle, connected with offices at both sides. The entrance of the embassy part is located at the lowest point of the corridor. This corridor continues towards the residence part into a stairs.

#### Living/working

*"The landscape cuts through the building and separates the two functions. At this point the road sunk into the landscape intersects the building and descends to the covered visitor entrance to the ambassador's residence."*<sup>15</sup> So between the living and working part of the building a physical and visual separation was made. Furthermore, the residence is separated into a representational and more private area. This representational area is located on the first floor of the building, on the ground floor the private rooms are located. These rooms can be reached by hidden staircases. The division between working and living areas can provide enough privacy. Only maybe too much privacy was created. In the documentary, *Het uur van de Wolf: Mission statements*, they explained that sometimes in the residence you experience an insulated feeling. This because the site is so wide and therefore no connection with the 'real world' was created.

*Berlin by OMA See architectural reference 2, at the back.*

#### Relationship with Germany and location

The relationship with the surroundings of the Dutch embassy in Berlin is connected to the concept of the Design. *"Koolhaas explains that the sought to realize a building which would allow us to 'understand Berlin better'..."*<sup>16</sup> The embassy part of the building exists out of one block, in this block a 200m architectural promenade is located. This path, 'trajectory', underscores several aspects, architectures and

ambiances of the city<sup>17</sup>. In the design several elements of the historical context and political situation of Berlin are reflected. Hereby, a relationship with the surrounding context arises. So a strong connection with the Germans and the location of the embassy was made.

#### Dutch identity

The design of the embassy represents the identity of two nations. The Dutch, in the idea of openness, of modernity and of transparency which is reflected in the expression of the building<sup>18</sup>. The Germans, as a response to a political situation and a historical context, reflected in the irregularities of the block and 'the trajectory'<sup>19</sup>. These two representations of the design are contrasting to each other, the collection of both is therefore a complex whole. The representation of both nations, into one building, improves the quality of the building. In this case mostly reflected in 'the trajectory', because here the connection with the environment and the Dutch openness and transparency comes together. The connection of these both representations into one building, provides an interesting cohesion.

#### Functioning and organization

Besides that the trajectory has a relationship with the surroundings, it has also an organizational function. *"Inside the cube, the sense of security and stability required for an embassy co-exists with the free circulation provided by a 200m path that zig-zags up through the eight storeys, determining the arrangement of the building's spaces."*<sup>20</sup> This trajectory, gives the

building from the inside a very spatial atmosphere, because it's a continuing space through the building. All different functions are connected to this trajectory, arranged from more public functions towards more private functions. This structure from public towards more private spaces, is a logical structure to arrange the different functions of the embassy.

#### Living/working

*“The embassy cuts the single, contiguous structure implied by Berlin’s regulations into two parts: a cube accommodating offices, and a wall - the same height as the cube (27m, as regulations dictate) and only semi-opaque - surrounding the cube on two sides, accommodating embassy residences, and creating a protected internal courtyard. Four pedestrian bridges span the courtyard and link the cube with the wall at varying levels.”<sup>21</sup>*

So in the building a physical division is made between the living and working part of the building. There is still a strong visual connection between the living area and the offices. In the documentary, *Het uur van de Wolf: Mission statements*, came across that during the day always the vitrage of the residence dwelling was closed, to provide some privacy. Otherwise, people sitting at the office space, could look into the residence. So creating a separation between the working and living atmospheres is very important, to make sure the design will work out.

#### Conclusion

Both examples express a certain relationship with the home country, in materials,

lay-out or concept. Creating a certain relationship is necessary so that the building would fit in their surroundings. Especially if you want to create exchange, the architecture should fit in the structure it is in. It should also be attractive to both parties, the Dutch and Norwegian.

The Dutch Identity is in both designs differently expressed. In the Dutch embassy in Berlin it's more overall integrated, in ‘the trajectory’ and overall expression outside. The embassy in Ethiopia expresses the Dutch in several aspects, for instance the design of the roof. An integrated approach of the reflection of Dutch Identity is required to make sure the goal of the embassy could be achieved. Also in the functional layout of the building. The structure of from public spaces towards more private spaces, could be a useful layout to open up the building in order to achieve exchange.

The separation between living and working in the case studies are contrasting to each other. Both, in Berlin and Addis Ababa, a physical division was used. In Berlin there was still a visual connection with the working atmosphere, in practice this didn't work out. In Addis Ababa, the residence sometimes was experienced too isolated. So in the design of a residence and embassy building, the right balance between the working and living atmosphere needs to be achieved. A physical division could be used, but the visual connection should be used gently.

## Dutch policy

In 2011 a new nota on the Dutch policy of diplomacy was introduced, the theme of this nota was the modernization of the Dutch diplomacy. This nota contains measures to achieve a smaller, more flexible and cheaper network of Dutch embassies and consulates abroad<sup>22</sup>. This policy will highlight the main tasks of an embassy building. These tasks could be divided into different zones, namely: economical diplomacy, the consular tasks, defense, securing strategic resources (energy, raw materials) and international law (fight against international crime and terrorism). An embassy building should always have at least one of these goals, or more<sup>23</sup>. The importance of being represented abroad was also highlighted in this nota, because the Netherlands is highly interconnected with the outside world. And a relative high percentage of our BBP is earned outside the Netherlands. Our prosperity and well-being are served with security and stability beyond our borders. Furthermore, international trading rules and agreements are important for a small country like the Netherlands.

The most important changes for the diplomatic service of the Netherlands, which will also influence the architecture of the embassy building from the nota:

- Dutch interests are central in the change policy of the embassy buildings. Also our economic interests. This means a substantial intensification of economic diplomacy and business corporation;

- Flexibility, workspace outside the embassy could also be used or flexible space. Fte 0.7;
- The different fields where an embassy is active on, should be more integrated. No division any more between the different sections of the embassy, to create more cohesion;
- To reduce costs, also the consular tasks of the embassy have to change the layout of their services. There will be more opportunities to request consular services online and the validity of passports will increase to ten years<sup>24</sup>.

So the economic activities of the embassy will increase on the coming years, in contrast to the consular tasks of the embassy. Furthermore, all the tasks of the embassy should be more combined, to improve the mutual exchange. After the introduction of this Nota in 2011, followed a Final Report from the commission advisory modernization diplomacy in 2013. This because the ministry needed to increase the cost of the diplomacy abroad even more<sup>25</sup>. Creating more involvement with less budget is one of the themes of the report. To achieve this different types of diplomacy will be necessary, like silent diplomacy, cultural diplomacy, parliamentary diplomacy, public diplomacy, etc. With a more broad approach and definition of diplomacy, more involvement will be achieved<sup>26</sup>.



the Norwegians



# (faces of) sustainability (in norway)

During the M3 research, together with all the graduation studio members, a re-search into the faces of sustainability was executed. Different aspects of sustainability and their influences on the expression were examined, including vernacular aspects. This research doesn't focus on the quantitative aspects of sustainability, like for example the technical performance of different sustainable concepts. Rather, this research focusses on the qualitative side of these vernacular aspects with regard to sustainability, exposed in the architectural qualities. The faces of sustainability.

Vernacular architecture is not directly an expression of sustainability. Vernacular architecture is about the range of available resources related within a specific context based on evolving experiments and knowledge, as a respond to specific needs, reflecting local traditions. And this knowledge in relation to sustainability could be very useful in creating a contemporary architectural design, both in qualitative and quantitative aspects. Regarding to sustainability it is necessary to create a certain relationship with the environment, providing a context for a design<sup>27</sup>. To achieve this materials should be implemented in the right way, connected to a certain locality, due culture and aesthetics. In traditional vernacular architecture this relationship is reflected. So by using vernacular principles for the design of the embassy a relationship with the environment and context could occur. Because the goal of the embassy will be exchange, it should be a building for both parties, the

Norwegians and the Dutch. A combination of these Norwegian (vernacular) aspects and the Dutch execution should be made in the design of the embassy building. This is also a form of exchange.

### Wood

The aesthetics of a building play an important role in providing a qualitative relationship with the environment. Applying this will encourage us to treasure our built environment<sup>28</sup>. The use of natural materials can help to create a relationship with a building, by the need of maintenance and the socio-economical aspects that could be involved<sup>29</sup>. This doesn't mean that only natural materials can be adapted, aesthetically also unnatural materials can provide this relationship with the context the building is in. The range of resources in our era has increased, in compare to the traditional vernacular architectures. It is up to architects to adapt this range within the right estimation of the context they are in, to create a sustainable design. Using local materials could offer a quantitative sustainable solution with regard to the choice of materials.

Because the embassy building will be located in Norway and is also accessible for Norwegians, further research is done on building with wood. Maybe in urban areas this connection with wood isn't that strong anymore, but in more rural areas it characterizes the landscape<sup>30</sup>. Furthermore, is wood readily available in Norway, which also could offer opportunities from quantitative point of views. Building with wood can create a natural connection with the

building and it also refers to the Norwegians in a way. But again, in the end it will be a Dutch embassy, therefore the execution of the material will be done in a Dutch way. And the choice for wood should also fit to the character of the surrounding where the building is in.

### Climate

Furthermore, does vernacular architecture possess some quantitative advantages, like being energy efficient, the use of passive climate systems and local materials<sup>31</sup>. Of course this doesn't count for all vernacular architecture, we have to be critical with our available methods to find out if this knowledge will satisfy our (comfort) requirements, and reflect on them. The indoor climate of vernacular architecture is mostly regulated by natural passive systems, probably due to the limited technological range. In contemporary architecture passive systems are also used, but with more intervention of technology. In these modern passive systems optimal use of energy is achieved by closing, as Harald Røstvik formulated it: the tight box system<sup>32</sup>. This system is often been associated with sustainability in contemporary architecture, maybe from quantitative point of view it is. Seen from a qualitative point of view this system is not sustainable, because there is no connection anymore with the environment, context and the seasons. The indoor climate becomes a matter of course and the effort of achieving this constant climate is invisible. It's not a part of our daily concerns and it doesn't provide a relationship with the environment. Traditional vernacular

architecture can provide simple solutions on the organization of the indoor climate. These solutions are mainly based on the basic elements, this makes them easy to understand. Furthermore, these solutions are connected with the context they are in. In embassy building should the exterior context of the building be experienced from the inside. Visually and also by the choice of a natural climate system.

For the adaption of these systems in Norway is it important to notice that through the whole year mainly heating systems are used, instead of cooling. Of course both are important, but the main focus goes to the heating. Furthermore, can provide these simple solutions of heating or cooling the involvement of the building users. Hereby, the indoor climate doesn't become a matter of course. These systems should be easy to understand, connected to the basic elements.

### Light

Another important aspect for building in Norway is the specific character of light which is present there. Different architectural implementations for these light characters could be found in Nordic architecture. *"The Scandinavian countries have developed great buildings that resonate with both the scarce light in winter and the long summer days."*<sup>33</sup> For the design of a new Dutch embassy in Norway these implementations should be further investigated, to create a comfort light atmosphere.



# Oslo

In the past a lot of industry was located at the waterfront of Oslo, very close to the city center. In the 1990s, because of the changing industries, different plans started to improve the urban structure and public spaces. Currently, Oslo is a growing city under construction within a green border. The city cannot be expanded in surface, because of the green border set by the government. Along with this green border, the population of Oslo will increase with 33.2 percent by 2030<sup>34</sup>. The surface of the city therefore will be more densely populated. However this doesn't mean that the city will be too densely immediately. The current city structure is very spatial. Before this green border was set, the city could expand in any direction. Besides that, Norway was also very sparsely populated. The result of this is a wide-scaled city, with large lanes and squares. In contradiction with the Dutch planned cities, where urban planning as a profession was also a need to deal with the limited arable surface. Because the city is changing and will be more densely populated in future, there are different goals set by the government to improve the city.

Two main developments that go along with the goals above, is the waterfront promenade and the cultural axis. These projects along with the plans above are mostly about improving public space and redesigning former industrial area for the general public. The city even has a committee for it, 'Levende Oslo'. Gehl architects executed a research for this committee, to find out how public spaces in the city are

General goals for 2030 by the municipality:

- Oslo Will Grow Through Compact Urban Development;
- The Blue-Green Structure of the City Will Be Protected and Developed;
- Oslo Will Be an Attractive City with Safe and User-Friendly Urban Spaces;
- Oslo Will Become an Internationally Leading Climate-Friendly City;
- The National Cultural Axis Will Create Attractive Meeting Places and Make Areas Publicly Accessible.<sup>35</sup>

used. Different public spaces are now not that often used, because their quality is low. An architectural intervention should also improve the surrounding in which it's located. With the plans of the municipality of Oslo, different opportunities arise. Also because the goal of the embassy is exchange, the building could mean something for the people in Oslo as it contributes to the plans of the municipality. On the other hand, then it could be possible to locate the embassy in the city center, close to important institutions and the general public.

Cultural axis:

*"The area along the fjord was previously closed off for the public, and was characterized by harbor and transportation activities. In developing the overall planning of the Fjord City, the municipality has since 2002 developed the National Axis of Culture. By using culture as an urban development strategy, and placing cultural institutions along an "axis" between the east and the west, the areas are made accessible and attractive for the citizens."*<sup>36</sup>

Waterfront promenade:

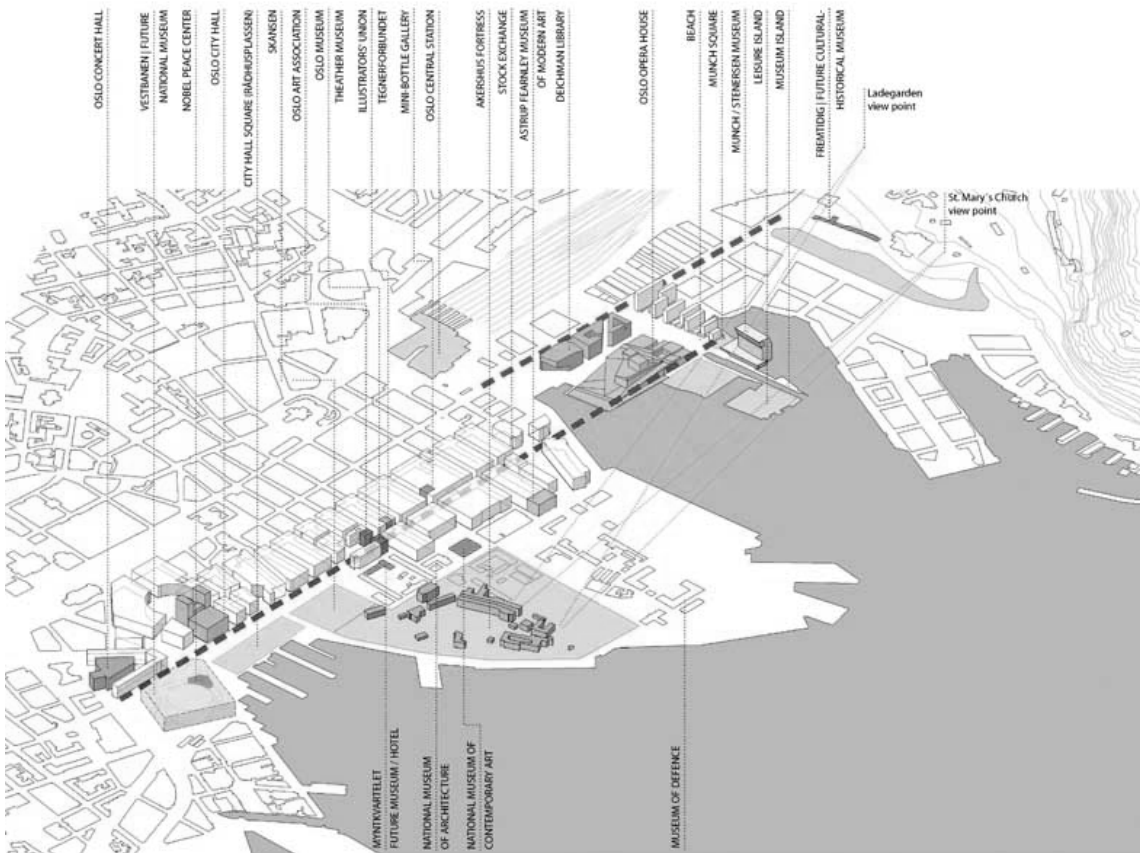
*"The main goal for the waterfront promenade development is creating a promenade for the people."*<sup>37</sup>

*"The harbor promenade is going to become one of Oslo's most visible icons"*<sup>38</sup>

Along with these projects above, the city also focuses on sustainability. A project that goes along with the future built program. This project consist of different case study projects on sustainability. One of the goals of the municipality of Oslo is to reduce parking space in the city and thereby encourage to travel by bike, foot or public transport. In the waterfront promenade plan is also a bike routed included. A new Dutch embassy in Oslo should fit in this goal and could be a sustainable prime example of how to deal with transport in the city by encouraging the use of these transportation methods. Therefore, the location of the embassy should be easily accessible by bike, foot or public transport.

*"Future Built pilot projects are to be localized in the urban centres or nearby public transport hubs. Green mobility requires fewer motorists and more pedestrians, cyclists and people who use public transport. The amount of parking spaces will be reduced with 50%, while facilities for cyclists and pedestrians will be of higher quality."*<sup>39</sup>

6l cultural axis



71 waterfront promenade







SKANSEN

location

# Kontraskjæret

On the axis of the two most important plans of the city of Oslo, Kontraskjæret is located. In the research of Gehl architects, see the previous chapter on Oslo, came out that the current park is relatively not that often used. And also during the trip to Oslo, the layout of the location was striking in negative ways. This because of the weird relieve of the location and the messy collection of different characters. Speaking of exchange, the goal of the embassy, the architecture should contribute to the main city plans and be an improvement of its surroundings. Therefore, this location was chosen in the end, because exchange can be achieved in different ways. By improving the urban layout of the location by means of an architectural intervention, the embassy can give something to the Norwegians. On the other hand, a prominent spot for the embassy building in the city center is given back. Furthermore, the location is close to the general public, important if you want to achieve exchange on different fields with the Norwegians.

8I location in city center



# history

Kontraskjæret is a Norwegian bastardization for the French Contrescarpe, which is the name of the outside of a fosse around a fortress, the inner side of a fosse is called escarpe. Throughout history this location outside the fortress has served different functions:

- 1686 Living area for ordinary craftsmen, destroyed by a fire in 1686;
- 1818 Building prohibition Kontraskjæret was abolished in 1818 when the castle lost its function, plans were made to place the new buildings of the university there;
- 1836 The fortress was put back into use, the terrain in front was used for military storage;
- 1916 The land came into possession of the municipality, it was used for different events;
- 1927 The northwestern part of the plot of Kontraskjæret, named Skansen, was initially sold to Christoffer Hannevig, who would give an opera house to the city. In 1925 the property was sold because of bankruptcy, to the Schous brewery. They wanted to return the plot back to the city, by building a restaurant. This restaurant was the first functionalistic monumental building of Norway, designed by architect Lars Backer and completed in 1927;

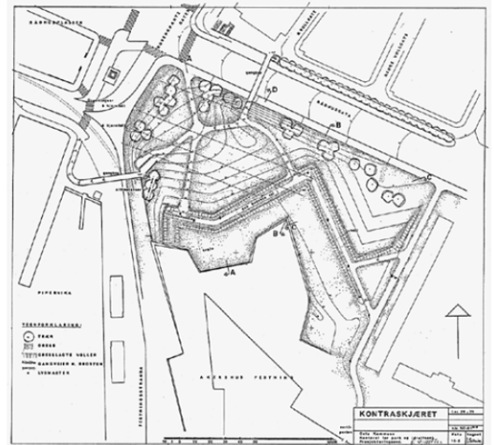
10I Skansen and bus parking in front of Akershus



9I Skansen



11I redesign park/not executed



12I Skansen terrace



- 1950 Eastern part of Kontraskjæret was used for storage of buses;
- 1953 In 1953 the foundation for Cultural Heritage and the committee of the Municipality of Oslo started a competition for the redevelopment of the Skansen area. This also caused a turning point for the plans and opinion on Kontraskjæret. Several plans were presented to change the current situation of Kontraskjæret;
- 1970 Eventually, the Skansen restaurant was demolished in October 1970. The main reason for the demolition was to connect the old Akerhus fortress with the city again, because now it was blocked by the restaurant and bus parking. The Cultural Heritage committee and the committee of the Municipality of Oslo initiated these plans. They wanted to create a green sloping space at Kontraskjæret towards the fortress, to make the fortress visible again from the center and to make sure it would be part of the city structure again. In the beginning the building was well received by the public, as a forerunner of functionalism. Forty years later, the enthusiasm cooled down. Some people were satisfied with the demolition of this modernist building next to Akershus, while others found it just terrible. In the meanwhile different plans were made for the redevelopment of Skansen and Kontraskjæret.
- In the end was decided to turn it into a park, a proposal was accepted but never completely executed. They demolished the Skansen restaurant, they sowed grass, and left the old paths as they were. At the biggest part of them plot soil was removed to create the sloping green structure. But not on the upper west side, the formal location of the restaurant;
- 1994 Before 1994, the square at the west of Kontraskjæret could also be entered by car. Because the area changed from an industrial function towards a public space, cars weren't allowed anymore from that momenton<sup>40</sup>.
- The design of creating a sloping green structure in front the Akershus fortress, could connect the fortress with the city again. Because the plans for this spot weren't fully executed, a strange type of space arose, which you experience as a kind of left over space. At one-half of the park the soil was removed to create this sloping green structure, but not at the west side of the park. In the original plan there were also different paths planned to connected this park with the city structure, neither these paths where executed too. The old paths towards the Skansen restaurant remained. So now there is no path connected to the city center.

13| view location 1937, Skansen  
14| view location 2014, location embassy





# Analysis and strategy

As described before in the chapter on the history of the site, there were plans to connect the fortress with the city again. This by transforming the park into a green sloping structure and to connect it with different paths towards the city. In the west side of the park these plans weren't completely executed. This has great consequence for the experience of the place. An architectural intervention should always increase the quality of the environment in which it is located. That also fits with the goal of the embassy, exchange. An architectural intervention in this west upper side of Kontraskjæret, should improve the relationship with the city center at the north and the park itself. Seen from this upper North West corner of the park you will get the best view towards the fortress, because standing there you could see it as a whole. The architectural intervention that is going to be made should enhance this best view, since the fortress is one of the most important buildings of the surroundings.

Furthermore, this corner is adjacent to the main flow of traffic in this area<sup>41</sup>. Therefore, the opening from the fortress towards the city in the park, as an architectural intervention, could also function as the entrance for the embassy. This entrance could also function as an entrance for itself, as a connection with the city in the north.

The location is only accessible by public transport, foot or bike. Creating the embassy building here, could fit in the future goals of Oslo, mentioned before. This

because they aspire to reduce the amount of parking spaces in the city center and to encourage other more sustainable types of transport. Furthermore, is at the north of the spot also a tram stop located. That is why it was chosen to locate the entrance of the embassy at the north of the chosen spot.

15| location analysis



At the west side of the spot, underneath the high trees, an 'elephant' path is located. This path is located in the extension of the Rosenkrantz' gate in the north, towards the only path from where you could enter the park from the west. In the future this path will be located in between the main public developments plans of the municipality of Oslo, the waterfront promenade and the cultural axis. Because the elephant path is already there, it should be improved to function as a link between these two development plans.

16| view to fortress



17| blocked view



18| elephant path



19| blocked view 2

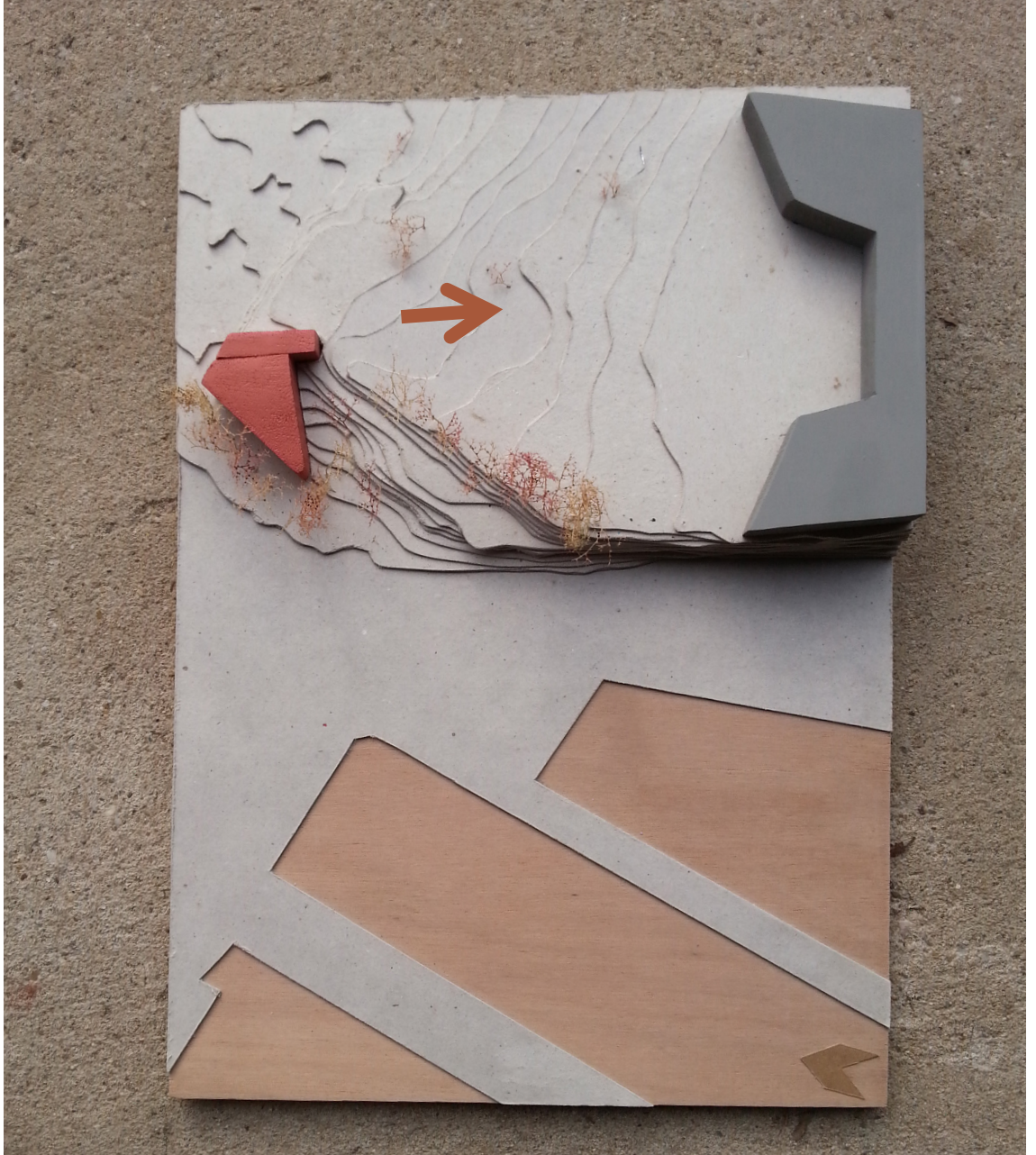


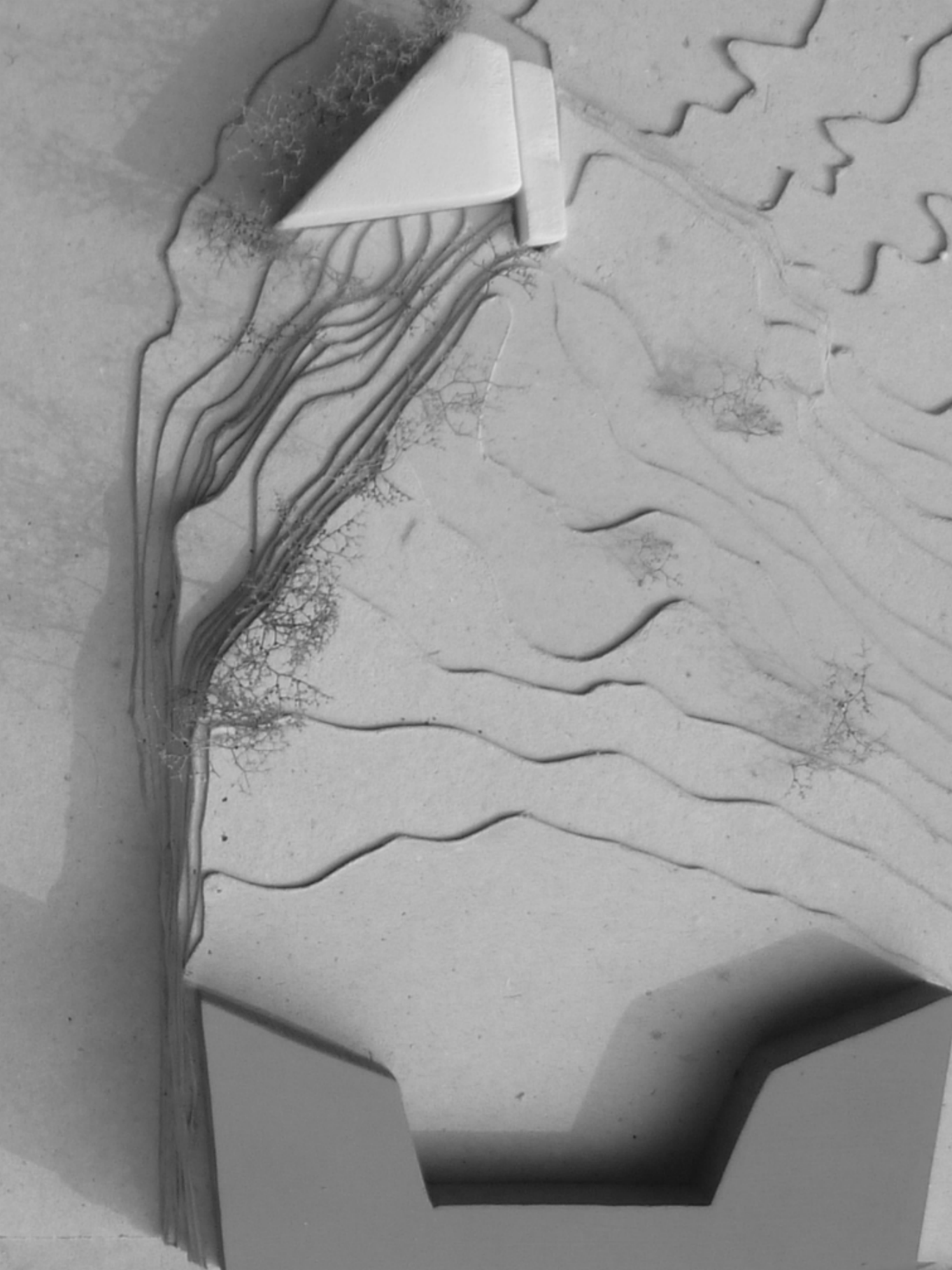
The fortress is one of the most important neighboring building of the spot. Therefore, the new embassy should emphasize this building, the embassy itself should not be too prominent. Seen from the fortress therefore, the embassy should not be visible except maybe for the public part of the building. At the west side of the spot a lot of trees are located, so the building could be hidden a bit on that site. The appearance of the embassy therefore is modest. Only at the north side, towards the city, more exposure of the building is eligible.

The building will be located on the same spot as the demolished Skansen restaurant. From this spot you can get a nice view towards the fortress, but also towards the square and docks in front of the building. Only at the places where you can experience this view, seats are located. Therefore, the use of the park now, as researched by Gehl architects, mostly consist out of using secondary seats . During the different seasons the park is not that often used, compared to other squares and parks in the city. The embassy therefore, can improve the usage of the park and the quality. Also because more public space will be required in the future as described.

The architectural intervention of the embassy building on this spot, could improve the quality of the surroundings. In this way the Dutch can give something back, for building on this public spot. The functions of the embassy are related to this type of exchange.

20l conceptual model





the concept



## NL <-> NOR

Definition of exchange: *'An act of giving one thing and receiving another'*<sup>142</sup>

Referred to the main goal of the embassy, and therefore also the problem statement, the concept of the building will be exchange. The architecture of the embassy should encourage the exchange between Norway and the Netherlands. The goal of this project. This exchange between Norway and the Netherlands could be encouraged in different ways through the architecture. Out of the literature research, prior to the coming design research, different types of exchange arose. All these types of exchange will create a new Dutch embassy, which fits to its goals.

The functional layout of the building will refer to this encouragement. In the end the building should host both, the Norwegians and the Dutch, to create the optimal exchange. In an embassy building several function are required. Some of these functions could be shared with the Norwegians, so that they get involved in the process of exchange. In this functional layout also a relationship with the host country should be created in the public accessible parts. The Dutch parts of the building should be connected with the Dutch in a way.

Creating a private and public atmosphere in one building, the residence and the embassy part, should be done in a balanced way. Exchange should occur between both and its surroundings, but in a gentle way.

Another type of exchange could occur in the position on the chosen site. The architectural intervention of the embassy building should improve the surrounding it is in. This improvement could be made by adding different routings and volumes, as explained in the chapter on the location. Because the building gives in this way something to Oslo, an exchange could be made by building on this public spot. And this public spot has several advantages for the Dutch.

The characteristics of the spot and the reflection of the relation with the host country together with sustainable principles, influences the choices for material and detailing. The building should fit in its surroundings and climate. Typical Norwegian architecture can give insight on these aspects. Although, in the end should the building represent the Dutch. Therefore, will the detailing of the building been made in a 'Dutch way'.



NL <-> NOR  
receiving <-> giving

	users	positive involvement which incites exchange	functions/activities	time/season	security level	
<b>node</b>	<p><b>public</b> </p> <p>Everyone (in Oslo)</p> <p>Rosenkrantzgata Rådhuspasser/Rådhusgata Rådhuskella Akerhusstrada Kornisveipen</p>	<p>positive involvement which incites exchange</p> <p>embassy on this spot exposition starts NOR</p>	<p>public office public office kitchen space for events exposition outside spaces in summer</p> <p><b>public improvement of the surroundings, contributing to the development of the city and the city's contribution to urban development of Oslo</b></p> <p><b>sharing facilities embassy</b> exposition starts NL public events bars</p> <p>A lot of public spaces available, but not of a great quality. (Super union architects, municipality Oslo, research Gehl architects for Leivende Oslo) Growing population 40% in the next 30 years. Cultural area and the water promenade are projects related to this development.</p>	<p>office hours, public office occasionally in the evening.</p>		
<b>node</b>	<p><b>embassy</b> artistic defence economics</p> <p><b>embassy</b> artistic defence energy economics</p> <p><b>guests</b></p> <p><b>consular tasks</b></p>	<p>Dutch stakeholders Employees embassy Dutch companies Dutch government ...</p> <p>Norwegian stakeholders Norwegian companies Norwegian government Norwegian ...</p> <p>Dutch people in Norway</p>	<p>knowledge goods contacts image ...</p> <p>workspace conferences events <b>sharing facilities embassy</b></p> <p>knowledge goods contacts image ...</p> <p>involvement in exchange</p> <p>knowledge goods contacts image ...</p>	<p>offices hospitality room server room storage server room safe room toilets</p> <p>during office hours, built proof glass? emergency of occasionally in the evening</p> <p>desk CA office CA waiting space</p> <p>representational dining area/combination with embassy</p>	<p>only with an appointment, daily from 10:00 to 18:00 hours</p> <p>consular section bullet proof, if safe, another level of entering</p>	
<b>node</b>	<p>residents guests</p>	<p>residents guests</p>	<p>informal dinner</p>			
<b>node</b>	<p>living</p>	<p>some exchange, but a secured feeling needs to be achieved</p>				



the design

# criteria

Summary of criteria which needs to be include in the embassy building eventually, derived from the literature research prior this design research.

## dutch identity

The connection with the Dutch identity in the design should be related with the main goal of the embassy, exchange The Dutch focus on the outside world and the willingness to collaborate should be reflected in the architectural approach, combined with different Dutch 'aspects' which influences the design decisions.

## functional

- Combination of representational tasks, residence and embassy;
- Multifunctional space for different events;
- No division between different sections;
- Inviting facilities for both parties;
- Flexible workspaces;
- 11 employees, 0.7fte;
- Bike storage.

## design

- Relationship with the host country, creating a building for the Norwegians and the Dutch;
- Relationship with the environment is necessary in achieving a sustainable design;
- Achieving visual and physical balance between embassy and residence ;
- Implementation of wood in a Dutch way, connected with Norway;
- Indoor climate is not a matter of

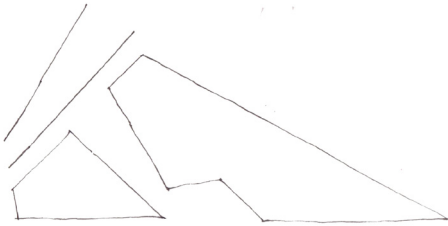
- course, should be interactive implemented;
- Focus on natural light;
- Implementation of routings and views in architectural design, as an improvement for it's surroundings;
- Achieving visual and physical balance between embassy and residence;
- Implementation of wood in a Dutch way, connected with Norway;
- Indoor climate is not a matter of course, should be interactive implemented;
- Focus on natural light;
- Implementation of routings and views in architectural design, as an improvement for it's surroundings.

embassy policy

- Focus on diplomacy and business corporation
- Reduce CA tasks



## form study

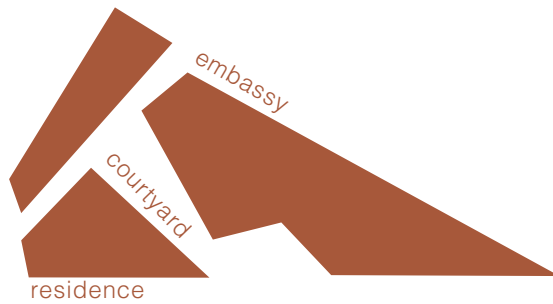
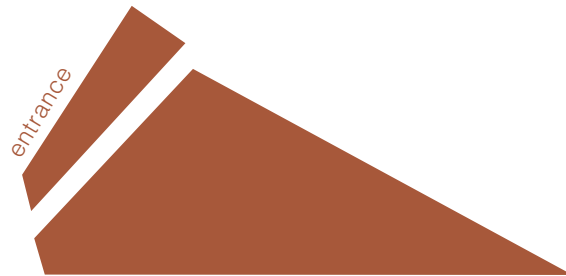
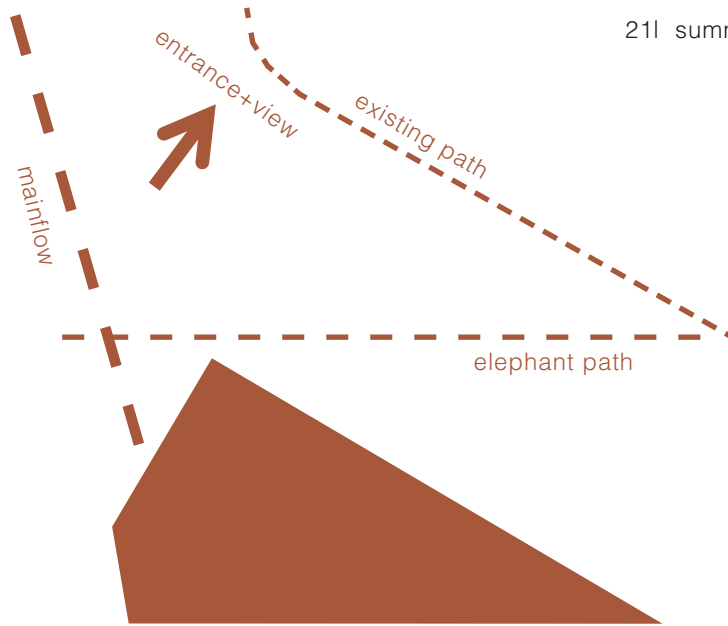


The location of the embassy already made some decisions on the layout of the building in a way. This because of the routing, slopes and trees. The building should not be too expressive as seen from the park and fortress. Therefore, will the building be located on the lowest spot of the park. The mass of the building is adapted to the slopes of the site and only the entrance of the public part of the building will be visible from there. The architectural intervention of the embassy should improve the surroundings it is in, an opening towards the fortress therefore is created. This opening functions also as entrance path towards the embassy and frames the view. The angle of the roof is parallel to the slope of the site, seen from the existing path. The highest point of the building will be the entrance.

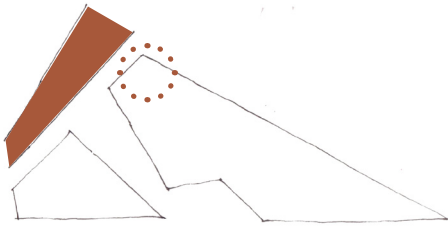
Between this entrance and the embassy volume, a small path was created, in this way the spaces beneath this path could also be used and an entrance for disabled people could be made. Furthermore, also between the residence and the embassy some space was kept open, a courtyard. The shape of the courtyard explains the relationship between both, this is further-explained in the chapter on the residence.

The building will be partly below ground level. At the west, the largest facade, will be covered by the trees in front. Only the small north façade is fully exposed and changes the structure of the location, pointing towards the fortress and connects fortress with the city again. In this way, the building is a gently intervention of the location.

211 summary form study 2D



## public café



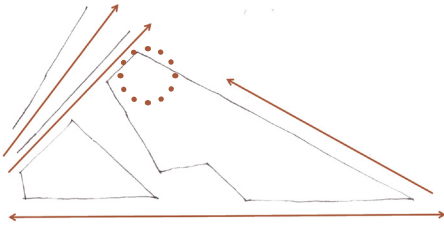
### Exchange

To encourage exchange between the Netherlands and the Norwegians, the embassy should encourage the involvement of both. Therefore, the embassy should not only host the Dutch, but also the Norwegians. As described before, in the chapter on the location, the architectural design of the embassy could improve the quality of its surroundings. The public atmosphere of the spot could be improved by this and could be combined in the encouragement of exchange. Therefore, the embassy also includes a public café and functions also as an entrance for the park behind.



23| model overall view





### Routing

The routing around the building and also the entrance of the embassy, result in a positive improvement for it's surrounding. As described in the chapter on the location, different aspects could be improved in the public routing and use of the spot. One of the most important interventions is the entrance of the embassy. A stairs, leading to the embassy and public café, but also an opening towards the best view of the Akershus fortress. In this way the entrance is also an entrance for the park behind. After passing the entrance of the embassy, it's connected with the current paths of the park.

Furthermore, in front of the building another route was added. This route, the former elephant path, was improved and integrated in the district structure. This path connects the two most important city plans, the water promenade and the cultural axis.

The park Kontraskjæret, was currently not that often used. In the park where not a lot of seats located. Therefore, the walls and balustrades of the embassy also function as seating places. Made out of concrete they also function as a kind of front yard, a safety buffer. Due to the other materialization, in comparison with the surroundings, you also get the feeling that you are already inside. An open approach, connected with the open attitude of the Dutch way of exchange.

*"And suddenly there's an interior and exterior. One can be inside or outside. Brilliant! And that means – equally brilliant! – this: thresholds, crossings, the tiny loop-hole door, the almost imperceptible transition between the inside and the outside an incredible sense of place, an unbelievable feeling of concentration when we suddenly become aware of being enclosed, of something enveloping us, keeping us together, holding us – and the public, for the private and public spheres."* <sup>43</sup>

24| model routings



### Bikes

Underneath the stairs of the entrance, the bike storage is located. This bike storage fits to the sustainable goals of the municipality of Oslo, for reducing parking spaces in the city center and the encouragement for the use of greener transport methods. And it also fits to the Dutch Identity in a way. The embassy building is easily reachable by bike, foot or tram.

### Entrance

The entrance of the embassy is as well the entrance for the public café. The entrance is marked by the Dutch emblem in front. The door marks the café area. Furthermore, seen from the outside, its clear were the embassy part starts, also marked by text. This text is made out of wood and functions as heck. For disable people another entrance is located on the ground floor, after passing the bike storage. When you reach this point, in front of the entrance you will get a nice view towards the city fortress. In winter, if the trees lose their leaves you also have a nice view towards the square in front of the embassy.

25l render entrance





26l render east facade



271 render entrance kafé



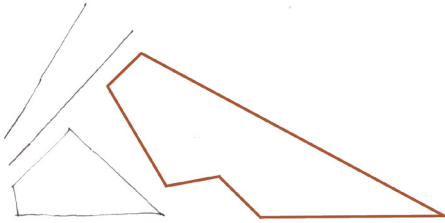
### Kafé

After entering the building, the entrance hall will at same time function as a café. The kitchen of the canteen offers food to both the public and the employees of the embassy. The public café connected with the kitchen are located on the first floor of the embassy building. Same as the canteen and multifunctional workspace of the embassy, which is also connected to the kitchen. From upon this café you can enter the embassy part of the building. This part of the building is separated by a glass wall and door, so a visible connection will still be possible. This café, maybe together with the canteen of the embassy can also be used for different kind of events. Besides the link toward the concept of the embassy, another reason to have a café on this spot is linked to the history of the spot. From the café you can get nice views into the park and towards the square in front.

28l kafé



# embassy



## Entrance block

The entrance of the embassy part is located in the public café. The entrance of is partly explained in words on the door, made out of the same material as the inner walls. Behind this door, which is mainly made out of glass, the hallway of the embassy starts. This hallway also functions as a kind of separation between the public recreational area and the working area of the building. This hallway is visible from the outside and from the public café, it marks the entrance of the embassy. The floor of this space points towards the stairs, which will direct you down to the consular desk and offices. This part of the floor is made out of vertical sheet material, which structurally functions as a kind of thin wooden beams. In the hallway is a wardrobe located in a kind of block. In this block, like in the residence part, are all different facilities located. The wardrobe provides space for the visitors and employees of the embassy to store their coats, hats and even shoes. The storage of those shoes is what struck me during the trip to Norway and probably also necessary in the often snowy climate. This also refers to the fact that the building is made for both, the Norwegian and the Dutch. On the other side of this block on the same floor is the kitchen located. This block can integrate all cabinets of the kitchen. Eventually this block will continue on the ground floor, therefore it will also function as a shaft.

29I hallway



### Exchange

To encourage exchange, the embassy will share the facilities of the embassy with different stakeholders. After passing the hallway one of these sharing facilities is located. This multifunctional space can be used as canteen, because it's also connected to the kitchen. Furthermore, it can also be used to host people for a meeting, as flexible workspace, or if larger groups are visiting as representative room. These flexible workspaces could also be used by Dutch people working in Norway or interesting Norwegian stakeholders. This part of the building was inspired by the office

30l multifunctional space, view towards hallway



of Snøhetta architects. During the trip to Oslo, we also visited the office of Snøhetta architects. Besides their impressive presentation, also their office layout was very inspiring. Their office consist out of one big space, with on one side a working area with personal workspaces and on the other side a canteen which also functions as multifunctional meeting space. This kind of flexible space will also be included in the embassy. Besides all these functional aspects, is the multifunctional use and simplicity of this solution also related to the Dutch identity.

311 multifunctional space, view towards stairs

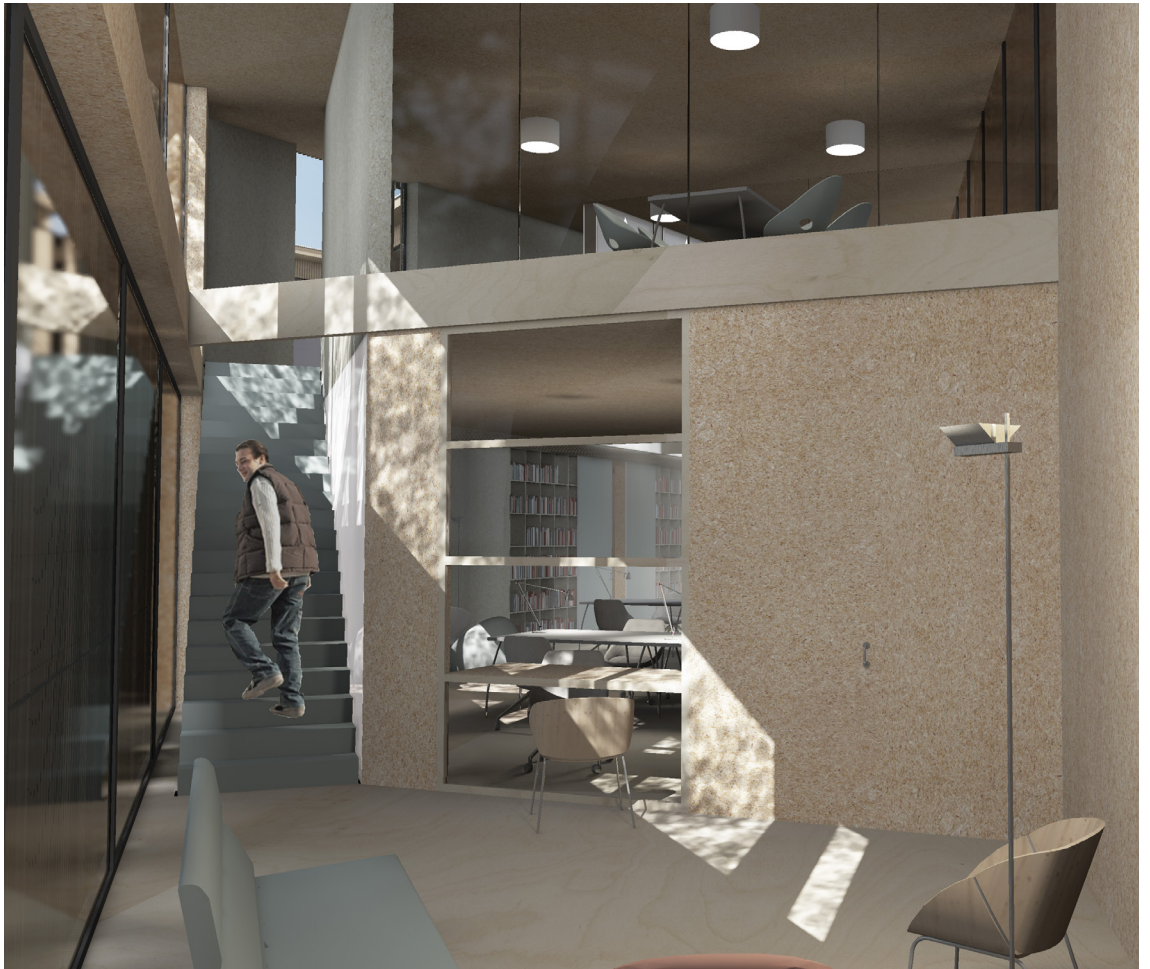




### Consular area

If you go further downstairs, you will enter the consular area. Like the Dutch embassy in Berlin, are the different spaces of the embassy organized from public towards more private atmospheres. This part of the embassy is more private, because it should only be entered by Dutch people in Norway and the employees of the embassy. The consular area is opened from 10:00-14:00, you can only visit when you have an appointment. The consular area of the embassy will in future be less used. Therefore, the office of the consular part is connected with the other offices of the embassy. So that the employees of this section could interact with other employees and maybe also could work on other aspects in case the consular area is not busy. People that visit the embassy for consular tasks could wait in the small waiting space in front of the consular desk, or have a coffee in the multifunctional space at the first floor.

32l consular area



### Mutual exchange

Behind the consular desk, the offices are located. These offices are designed with an open approach. One multifunctional space is created. The open offices refer to the layout of the office from Snøhetta architects. Furthermore, it also refers to this graduation studio, where we worked together with the other participants of this graduation studio. I enjoyed working together and exchange information and help if needed in this open space. The open office layout refers also to the equality and open approach of the Dutch. From the offices on the ground floor a visible connection is made with the public café on the first floor and the hallway. This is functional, so that the employees can see who is visiting the embassy. And furthermore, it's also a form of exchange. This visual connection is also made between the representative multifunctional room.  
-> See architectural reference 3, at the back.

331 offices



### Block with books

In the extension of the wardrobe block vertically, downstairs this block will function as a book cabinet. This because the workspaces could be used multifunctional, in that way individuals still have a place to store their personal possessions and other work material. In the middle of this book cabinet the sliding door to the small meeting room is located. This sliding door can be used during the night to close a part of the cabinet. During the day it can be used as a projecting screen at one side or as memo board because of the white color. This small meeting room can be used to host more private meetings, but if necessary also as a multifunctional workspace.

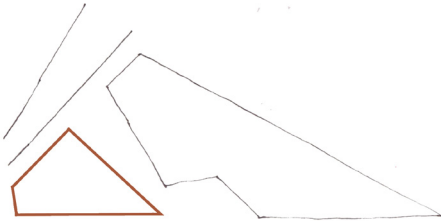
### Safe room

To provide the necessary safety in cases of emergency, a safe room was located at the back of the embassy. It was located in the volume of the embassy, which is partially put into the ground. Together with this safe room also other necessary function, which don't require daylight, were located here.

34| view towards the offices from the hallway downstairs



# ambassadors residence



## Exchange

The location of the embassy may not have a residential character. Therefore, the design of the residential part of the building should not be too expressive from the outside. Seen from the outside the embassy, including the residential area, looks like a whole by using the same materials in the façade and for the overall structure outside. The living area of the building is hidden in the shape of the building and the expression of the facade. The main functions of the building, living and working, cannot be distinguished from the outside. However, this doesn't mean that there won't be any exchange possible from the residential part of the building with its surroundings. This residential part should have a private character as experienced from the inside. From the inside out you would like to enjoy the nice views of the surroundings, but on the other hand, you also want you to feel secure and private. Seen from the outside you would like to achieve that it's lively, so some activities of the residents should be visible. Therefore, the design of the residential part of the building is a constant dialog between open versus enclosed and private versus public.

35| residence in model



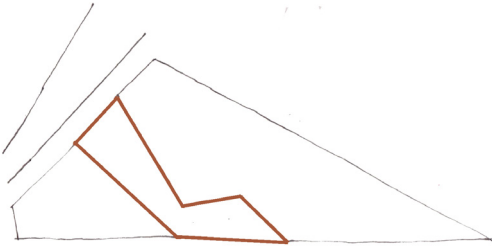


### Entrance

The entrance of the residence is located at the east façade of the building. This is the only façade which is completely exposed towards the surrounding, others are either hidden by trees or partly covered by ground at the sides. Because the living atmosphere of the residence part should not be too expressive on the outside, is the entrance hidden in the façade in new path next to the entrance towards the park. Only people that should be there know where to enter. After passing this you will get to a kind of front lawn. This front yard is completely enclosed by the wooden semi-closed facades, so movement inside and outside is still visible. Adjacent to this front lawn, another the inner façade of the residence is located. With a window on each floor, so you can who would like to enter the residence. The first door, towards the front lawn, covers these windows on the first two floors when it's opened for privacy reasons.

36| hidden entrance





*"My house is only interior"*<sup>44</sup> This is what Mart van Schijndel wrote about the house that he designed in 1992 for himself located in Utrecht. An example of a house which doesn't focus on the outside expression, but mainly on the connection with the outside as seen from inside out. The building itself is completely enclosed from the outside and even not visible from the street. Van Schijndel found that intimacy and privacy are extremely important for the design of his house<sup>45</sup>. This type of living, which excludes the unpleasant aspects of the city life, he called 'bunkering'<sup>46</sup>. To create a pleasant relationship with the environment van Schijndel used courtyards. Traditionally, for instance in Mediterranean countries, courtyards are located in the middle of a building, with all different functions connected to it. Mart van Schijndel designed a living space in the center of the building with two courtyards on the side, to create a space which connected to the outside world<sup>47</sup>. By using these courtyards he also provides more daylight into the building, especially because the position of the sun in the Netherlands is relatively much lower, it's more effective to located two courtyards on the side<sup>48</sup>. -> See *architectural reference 4, at the back.*

### Courtyard

in the design of the embassy, including the residence, a courtyard is been used. The courtyard is been used to create a distance between the living and working atmosphere of the building, but because of the triangular shape of this courtyard this separation is not directly visible as seen from the front of the building. The inner façade of the residence can therefore be a different one than the west façade exposed to the square in front. This inner façade of the residence mainly consist out of glass. And this glass façade can be opened in summer, so the living spaces of the residence turn into a kind of balcony. The façade across the residence, from the embassy part, is mostly closed. Only in front of the building, where the shape of the courtyard increases in line with the shape of the embassy, those parts of the inner façades are more transparent. Hereby, a visual controlled connection between the embassy and residence part can be made. This connection can only be experienced in the transport zone of the residence. This all to connect the two buildings in a gently way and still secure the feeling of privacy. By adding a courtyard in the building several qualities where added or enhanced. Just as the building of Mart van Schijndel the courtyard provides more light and also a connection with the outside world. In the end by using this courtyard an interplay arises between public and private sections of the building.

371 courtyard



38l residence seen from the embassy



39| embassy seen from the transport zone of the residence



Transport zone

The shape of the courtyard provides enough privacy for the south facade of the residence. Also the west and north facade are faced to public atmospheres. To provide enough privacy from the inside out, the transport zones of the residence are located at these facades. They create a kind of buffer to the more secured spaces of the residence. Two different transport zones were added in the design. One in the north, which appear like a kind of front garden when you enter from the public part of the building. This first buffer is still outside. Then afterwards you enter the second transport zone located at the west facade of the building. This second transport zone is divided by two stairs. The first will lead you to the first floor of the residence, the kitchen and dining area. The entrance to these spaces is hidden in the wall and by the continuing balustrade of the stairs. Because of this appearance this door functions like a kind of informal 'backdoor' and will only be used by the residents itself. The second stairs continues upstairs to the second floor, which is the living area. This space can also be used to host guests and could have a more formal atmosphere if necessary.

From the outside you would like to achieve that the building appears lively and not completely enclosed like a kind of 'bunker'. Therefore, are the facades of these transport zone semi enclosed. So that still some people are visible as seen from the outside, but also a secured atmosphere could be achieved by placing the transport zones at the sides. The outlines of people moving in the transport zones are visible on the outside. Furthermore, also a subtle visual connection with

An example of a building which offers maximal transparency and privacy by the design of the transport zone in the front facade of the building, is the Narrow house by Bassam el Okeily. Seen from the outside movement and live is visible, however not that detailed only by outline. -> See architectural reference 5, at the back.

the spaces behind these transport zone has been made. The inner wall, between the living spaces and transport zone, is translucent. Seen from the outside live will be visible and the building wouldn't appear like a bunker.

40l transport zone





### Blocks

Even though the inner facade of the residence is mainly transparent, towards the courtyard, from that side a bit more privacy can be experienced because of the layout of the building. A continuous block was used on every floor to locate different facilities and as a kind of privacy screen. On the second floor this block consists out of a wardrobe and a toilet, because it's also the formal entrance to the living area. This block creates a kind of hallway. On the first floor, the kitchen and dining area, in this block the kitchen and storage is located. This storage spaces function like a kind

41| kitchen block



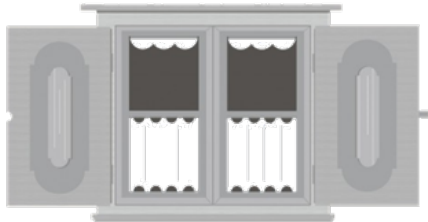
of scullery. On the ground floor the sleeping area, the block is connected to the bathroom. This block can also contains all the necessary pipes and installations.

42l wardrobe block, second floor



### Organization by daylight

Because of the climate and the amount of daylight in the different seasons in Nordic countries, it's most efficient to locate the sleeping area of the residence on the ground floor. In Nordic countries shutters are used to darken sleeping spaces in summer. In winter there is only natural light for a short period during the day. These sleeping spaces are often not used during the day. Therefore, it makes sense to locate them in a part of the building with the least daylight. Other spaces, with a more frequently used and where daylight is required, should be located on top. The other advance of this lay-out is that the space where you spend most of your time, like the living room, also gets nice views because of the floor height.



*“ The long days in summer and the short daylight periods in winter are characteristic for the Nordic countries of Scandinavia. During the summer exterior shutters facilitate sleep, with a night-like atmosphere inside the homes. The lower illuminance values in comparison with the Mediterranean or tropical regions demand openings which maximize daylight in the interior. However, people appreciate privacy. Therefore the windows are separated into two zones: the clear top part transmits as much light as possible from the sky. In contrast, the lower part with curtains or other translucent screens eliminates a direct view into the house. ”<sup>49</sup>*

43l living area on top



# structural design

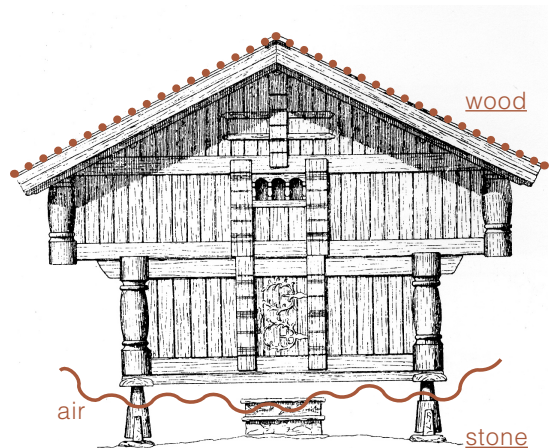
Because of the layout of the building, which is partially in the ground, a sheet piling structure is required. There are different types of sheet piling structure available. Due to the fact that a sheet piling structure necessary anyway, there is chosen to execute them in concrete so it could fulfill the function of foundation. In this way the necessary material of the foundation could be saved. This optimal use of material and the double functionality fits to the Dutch efficiency and 'degelijkheid'. Instead of completely enclose all spaces which are partially in the ground, some facades locally are transparent so that a relationship with the environment arises. Therefore at some places this sheet piling structure will be visible on the inside.

The concrete sheet piling has a very rough surface, because the ground will function as casting. The structure on top of these sheet piling structure will be made out of wood. First of all, because of the green environment the building is in, where natural material better fit in. Furthermore, it is also a nice contrast to the rough concrete sheet piling structure. In the end the overall structure will consist out of the sheet piling structure with wooden columns on top. All horizontal elements, from the roof and floors, will also be made out of wood and connected neither with the sheet piling structure or the wooden columns. In the end only the wooden columns will be on the outside of the envelope of the building. Because these structural elements are visible on the outside, they also determinate the expression of the facades. Expression focus on the outside world, like the Dutch approach of exchange. The distance between the portals matches with the size of standard sheet material.

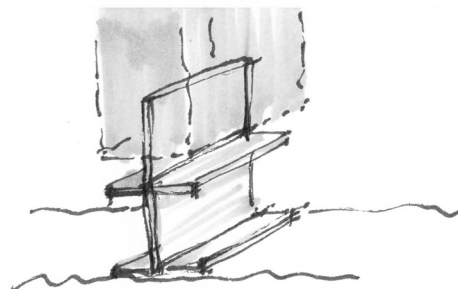
The layout of stone in the ground, with the wooden structure on top also refers to the traditional wooden log cabins. In these type of structure is the wooden structure tilted from the ground to provide enough ventilation under the construction to make sure it could dry if needed. Furthermore, the vertical wooden structure will be covered by a slight overhang of the roof, so the wood can't get wet on the top. This type of structure provides insight in how to deal with this type of wooden structure to make sure it wouldn't rotten. Inspired on this basic structure of the logs, the horizontal parts of the structure will be on the inside, and the vertical on the outside. In between those structures and underneath, there is a cavity needed to ventilate the whole structure. A relationship with these kind of structure is not only functional, but also connects the Dutch and Norwegians. A form of exchange.

In this cavity gap the junction to the horizontal and vertical parts are located. Because the wooden horizontal part couldn't be on the outside, the junction to connect the horizontal and vertical parts of the structure needed to be extended. Since the junction of wooden structure are project specific already, this different kind of junction wouldn't costs that more. That doesn't mean that the junction should be a simple solution for the problem. There was chosen to use a standard HEA profile, which can extend the junction. With a strip of steel in the extension of the flange, which could be connected to the beam inside. This same junction was used to connect the wooden column to the sheet piling structure, in order to create a whole because these junctions will still be visible from the outside.

44l Norwegian vernacular house



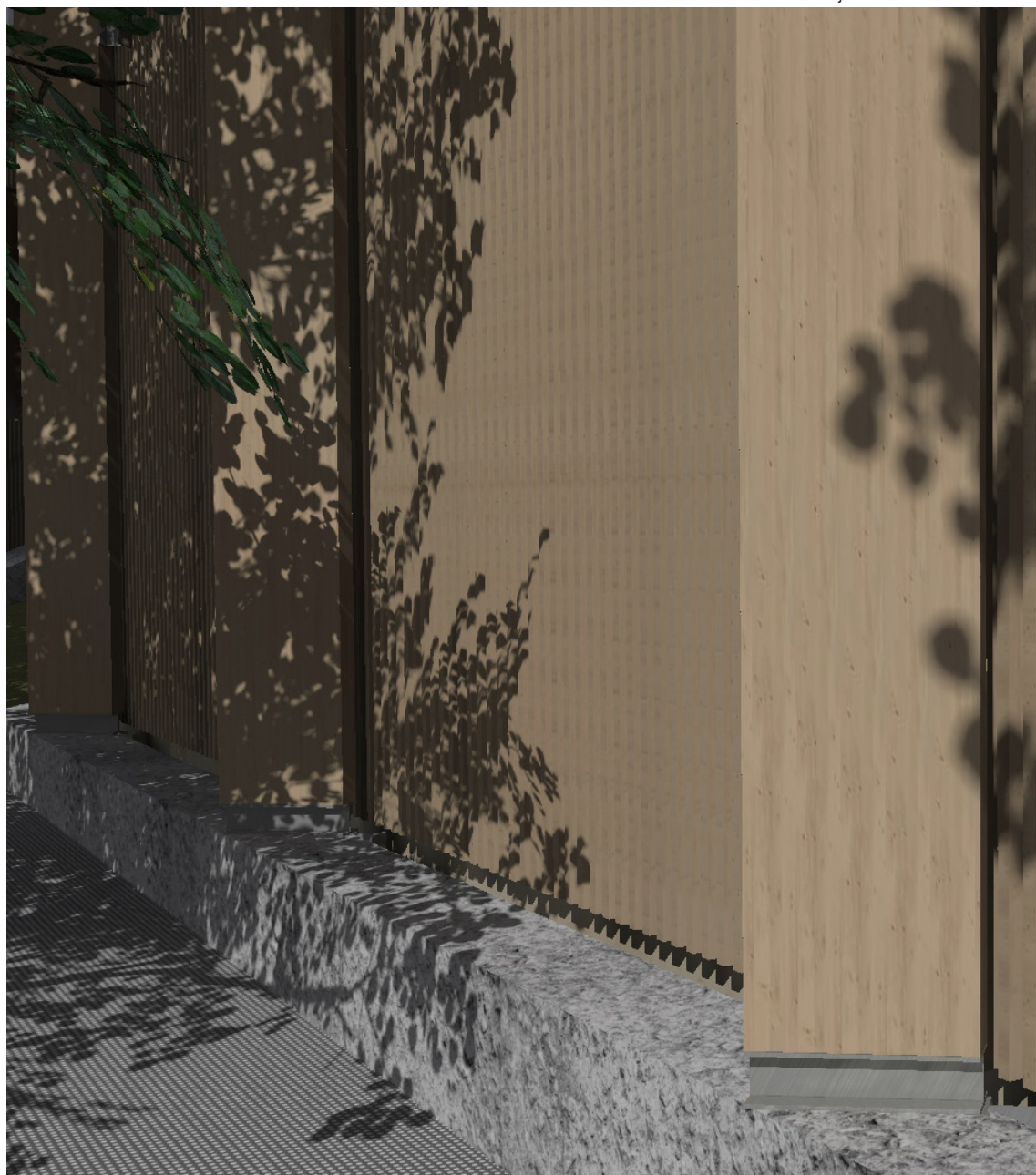
46l sketch principle



46l facade

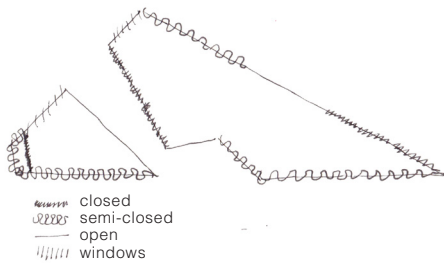


471 junction foundation





## facades



Different kind of façade elements were used: open (glass), closed (vertical wooden facade), partially covered glass (glass covered with vertical wooden elements). At the open elements a direct visual connection with the surroundings could be made. The open elements neither enhance a view to the outside or towards the inside. The semi-closed elements still have a visual connection with the surrounding back and forth, but also hide a bit in a way. Not everything needs to be visible as seen on the outside. However, on the outside it should look lively. Furthermore, provide these kind of elements also a playful effect on the inside, due to the sunlight coming in.

De overall expression of the facades fits in the surrounding and the trees in front of the building, which are also vertical elements. The façade is a playful combination of the different kind of façade elements together with the structure outside.

The choice for wood is related with the Norwegians, as explained in the chapter on the Norwegian, and fits to the natural character of the location.

The dark color of foil behind the elements outside, make sure the elements are better visible. The window frames are made in the same dark grey color, to make sure the blend in nicely. On the inside this grey color frames the views. The façade elements are made out of wood which thermally modified. The detailing of the façade is explained in the eponymous chapter.

48l facade



## interior

There was chosen to create the structure of the embassy building out of wood. The walls and floors will be made out of timber frame elements, because those light weight structure elements can be installed quite fast and could be prefabricated. These timber frame elements mostly consists out of the following structure: cladding, a structure to adjust the cladding to the timber frame structure, foil, sheet material, wooden timber frame structure and insulation, foil again, sheet material and in end the finishing layer. This finishing layer often exists out of a plasterwork. This finish layer is mainly used for esthetical reasons. Usually it will be adjusted on to a plasterboard or other sheet material. Sheet materials could also have esthetical qualities and hereby they could make the finish layer of plaster superfluous. Which also fits to the Dutch soberness, practical altitude and 'degelijkheid'. Like the overall structure of the embassy, where sheet piling walls where functionally required and also made into an esthetical quality, the sheet material of the interior which is also functional could turn into an esthetical quality.

During a research on different kind of sheet materials and their possible top layers, I've found a very interesting material: namely chipboard. Chipboard is one the most inexpensive sheet materials, with the adjustment on top it can look great and is still cheap. A wash or lacquer on top is necessary to make sure won't get smutty during the years. With this kind of detailing the sheet material still should be visible. Different kind of transparent washes

were tested. Also with colors in it, which causes a special effect. All walls and ceiling will be covered with the special treated chipboard. A combination of different colors and tints was made. At the residence warm colors were used and at the embassy part green fresh colors, also to separate different atmospheres in a way. The blocks and adjacent walls will be treated with the tinted colors. The tint varies, dependent on the use. The other walls and the ceilings are covered with a white washed chipboard, also to make sure it would get to dark inside. The flooring will be made out of a stronger sheet material, a veneered panel, this also because this is easier to clean. The standard sizes of the sheet material was used in the layout of the building. This because in this way it's easy to montage and to replace. The overall structure of the building was adapted on this.

-> See architectural reference 6 at the back.

49| material palette embassy



50l color and material palette embassy



blocks, lacquer

blocks, green wash vernish

walls/ceiling, white wash vernish

flooring, lacquer

51| color and material palette residence



# detailing

## Interior

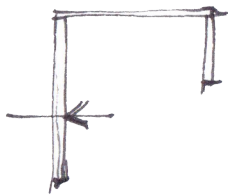
The interior detailing of the sheet material is determinate by the assembly method. Different kind of nails could be used for the assembly of these sheets. In the design for the embassy and residence was determinate to use the sheet material also as finishing layer. The nails could also be used as an aesthetical and functional quality, like the sheet material. Inspired by the hardware of Droog design. A new type of nail was designed. Normally you need to use nails all around one sheet, vertically with a center to center distance of 300mm. The designed nail could cover to rows of nails, so less of them are needed. The head of the nail was enlarged, with a metal O-ring, in this way the nail can cover two sides of sheet materials. With the use of a mold, they can be assembled alternately. The aesthetical appearance of the nail and the optimal functional use refers to the Dutch 'degelijkheid' and 'nuchterheid'. -> *See architectural reference 7, at the back.*

The blocks, as described before in the chapter on the residence and embassy part, are also detailed with the principle of this nail. A family of different hardware derived from the nail arises. Handles and hooks, for the kitchen and wardrobe block.

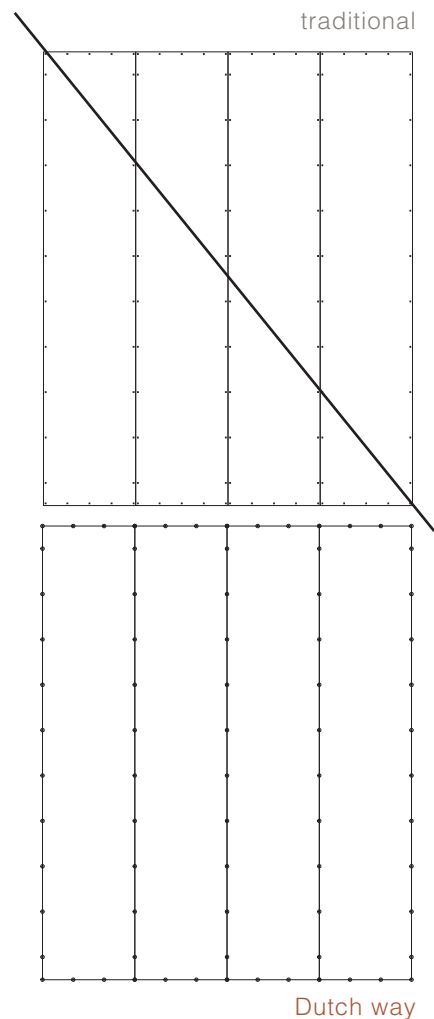
Another important element inside, especially at the residence, are the stairs. In the residence these stairs are exposed at the façade and play organizational an important role, see the chapter on the residence. Since the whole interior is will

made out of sheet material, the stairs also will be made out of sheet material. In this case not out of wood, but steel. For the residence in a more reddish color and for the embassy in a mint green, like the sheet material. These sheets of stairs are easy to assembly. By using a small gap between the wall and the stairs, an audible and small visible connection with the spaces downstairs could be made. The balustrade of these stairs at the transport zone of the residence also have a double function. Made in the same color as the stairs, this balustrade function also as a handle for the 'back door'. This balustrade is also made out of sheet material, shaped in the form of a balustrade. The stair outside are made in the same way, only with perforated steel, so that it won't get to slippery in winter.

#### 52| balustrade



#### 53| saving of nails





53l Dutch nail



54l nails assembled



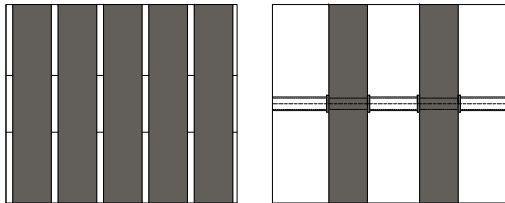
### Exterior

The detailing of the exterior part is mainly already explained in the part on the façade and structural design. This part explains the detailing of the façade elements itself. Generally, three types of facades are used: open, semi-open and closed. The semi-open and closed facades consist out of vertical wooden baths. Prefab elements of 1.22m were made, so they are easy to assemble. The closed facades are connected with L-profile at the back. The semi-open facades are connected with a threaded end, which is covered with a round profile.

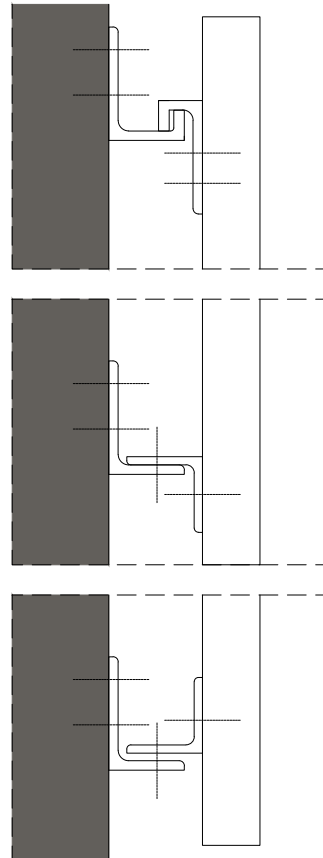
In some cases the windows are covered with the semi-open façade elements. In this it's important that they could be removed if necessary, for example to replace the glass. Therefore, a demountable system for hanging the façade elements was designed. Also made out of L-shaped profiles. At the top the façade panel is hanging. Down below they are fixed, by tighten the bolted connection. All covered glass which is used, is also self-cleaning glass, so it won't get dirty that easily.

A special kind of façade was used for the residence part, at the east façade. At this façade, which is facing the park behind, small broad windows were placed. These windows were covered by the wooden vertical baths, also for privacy reasons. Although, these façade elements could be opened, if the residents would like to broaden their view. With the use of a conus shaped rail, they could be moved and partially opened.

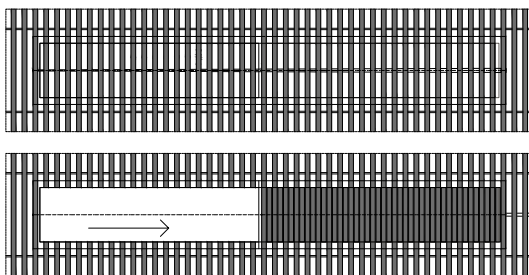
55l junctions panels



57l wall assembly system



56l openings residence east facade



# natural light

*“The Scandinavian countries have developed great buildings that resonate with both the scarce light in winter and the long summer days.”*<sup>50</sup> This specific sequence of light of the Nordic region, influence the approach of light into architecture. Henry Plummer, Professor Emeritus at the University of Illinois, did research into various daylight characteristics in architecture of the Nordic countries by photography and writing. *“The extreme changes in weather and daylight have led to unique light situations in Scandinavia, where architects have played with white surfaces to counterbalance the long and dark winter days.”*<sup>51</sup> One of the methods which is often used in these delicate architectures is the use of ‘whiteness’. *“Without doubt, white surfaces offer a high reflectance in order to maximize interior brightness for dark winter periods, but for Plummer the affection for whiteness is also linked to the beauty of snow-covered landscape.”*<sup>52</sup> Plummer argues that early examples of white architecture already could be found in medieval churches in Denmark, but also in contemporary architecture. For example the Dybkær Church by Regnbuen Arkitekter, the pictures show the influence of the reflection of light which occurs by the applied ‘whiteness’. -> See architectural reference 8, at the back.

The reflective character of the ‘whiteness’ used in Nordic architecture is also adapted in the embassy. First of all in the light white wash on the sheet materials. However, to achieve more efficiency from this reflective characters of materials solatubes where used. They also use the reflective character of materials in an optimal way. The reflective features of these elements, which is about 99%, make it possible that one element could achieve enough daylight for about 20 square meters<sup>53</sup>. These solatubes will not directly light up different spaces as a kind of lamp, but will be integrated into a translucent wall. This wall will function as an extra illuminating element, and also as a separation element, both in the embassy and residence. The wall will be the separation between the transport zones and the other functions of these buildings. Especially in the residence this wall will create an interesting effect, because this transport zone is visible from the outside and by using the translucent material contours of the live inside will be visible on the outside.

These principles that were used to increase the indoor light are all low tech principles, which are referred from vernacular and contemporary local architecture from this specific region. The advantage of these principles is that they are easy to understand and simple, just based on the basic elements. This approach doesn’t only fit to the Dutch ‘nuchterheid’, but also have sustainable benefits.

Besides the need of light in architecture in regard to functional aspects, light plays

also an important role in other aspects. The constant change of light creates a constantly altered image of shade and lighting inside the building. This effect is strengthened by the glass covered wooden facade and the rhythm of the structure outside, which reflected in this play of light on the inside. And this play will change during the day and season and bring the building to live.

58| render light elements





59| effect light in model





# climate

Due to the typical climate of Oslo, as to the indoor climate we should focus on heating instead of cooling. The indoor temperature should not be a matter of course, seen from sustainable points of view, as explained in the chapter on the Norwegians. In this way the users of the building will appreciate it more. Therefore, there was chosen to use a pallet stove as heating source. The efficiency of these stoves are quite high and it should be controlled by the users of the building itself.

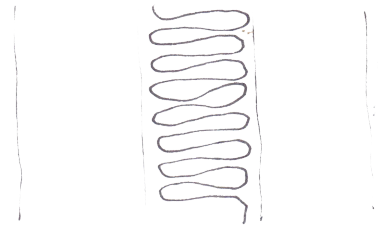
In the residence this pallet stove was placed in the kitchen and dining area. The liveliest place in the house. With the use of air ducts, also the second floor could be heated. At the embassy part, the same kind of air duct system was used, only here the pallet stove is located in one of the utility rooms. The embassy part of the building is much bigger, one stove wouldn't be sufficient. Seen from the office area the activity of the stove is visible, due to the vide this is also visible seen from the multifunctional space.

To still create some radiant heat, a pipe system was connected to one of the pallet stoves. This system transports heated water through the building, like a central heating system. This pipe system consists out of copper pipes, connected on top of the interior sheet material.

During winter times mechanical ventilation was used, input and output. During summer periods cooling can be achieved by natural ventilation. Air vents are made at

the lowest points of the windows, because these are located mainly below base level, were cooler air circulates. Mechanical ventilation for output will still be used then. In this way the building can still cool off.

60l pipe system



61l pallet stove



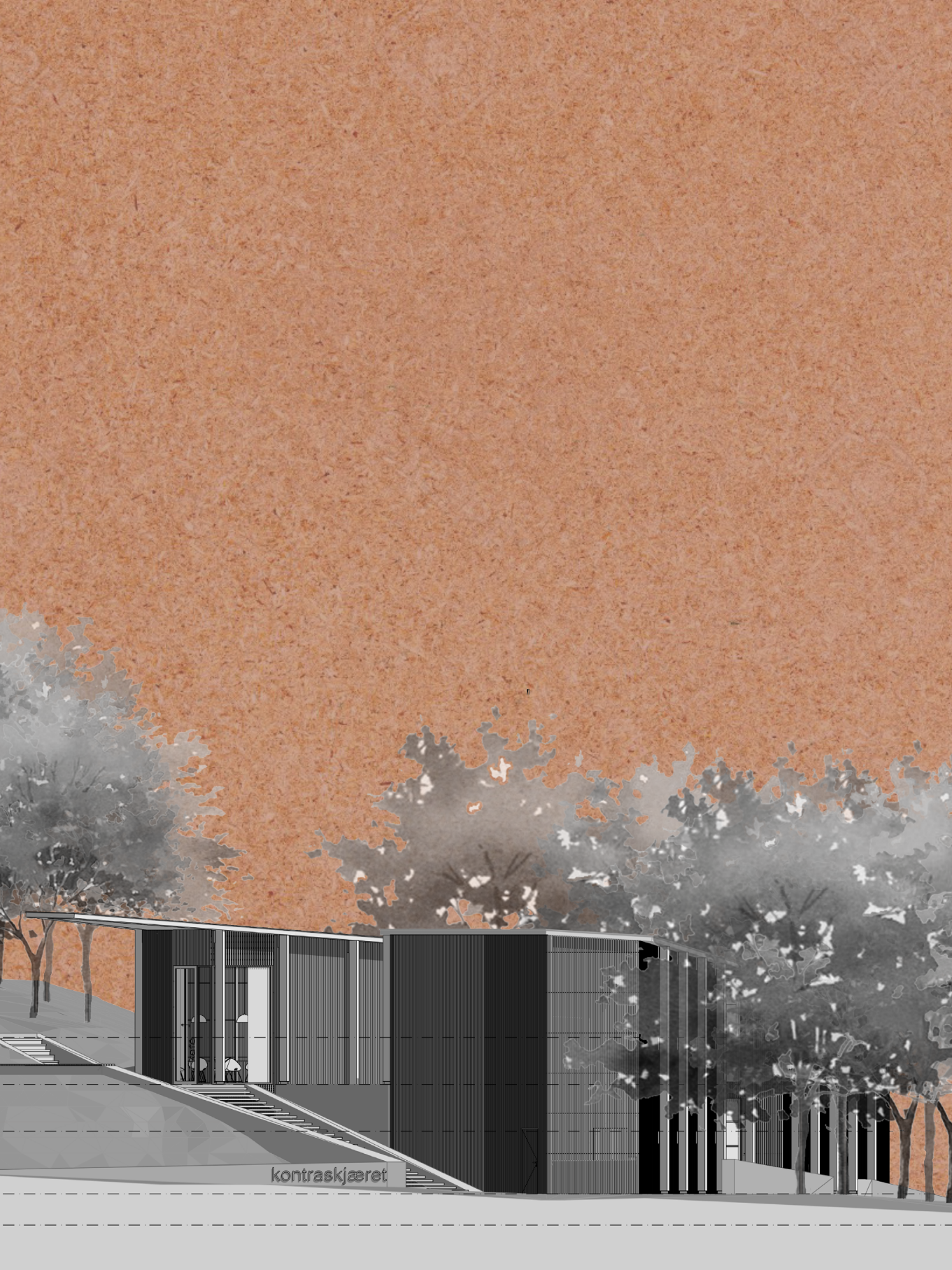
# sustainability

Sustainability is may not the main concept of the building, although it's still integrated in the architectural design in several ways. Speaking about sustainability, it could be divided into two aspects, quantitative and qualitative aspects. The architectural quality is necessary for us to treasure our built environment. These aspects are mainly expressed in the approach of the buildings towards climate, transport and materials.

The indoor climate of the building is not a matter of course, it's integrated in the design and part of the daily life. The pallet stoves are sustainable from a quantitative point of view. The way they are adapted in the architectural design, influences the users. It provides a qualitative aspect of sustainability to the design. The most important aspects of building in Norway are integrated, light and heating. With simple solutions, based on the elements, they are integrated in the design. The use of natural materials, which are connected with its surrounding, also contribute to the qualitative aspects of sustainability.

Furthermore, is the embassy an example of how to deal with sustainable transport methods. As described before, the city of Oslo encourage to used bikes or public transport instead of car, in the city center. Placing a bike storage in front is not only a functional, but also a Dutch show-off for a sustainable behavior.

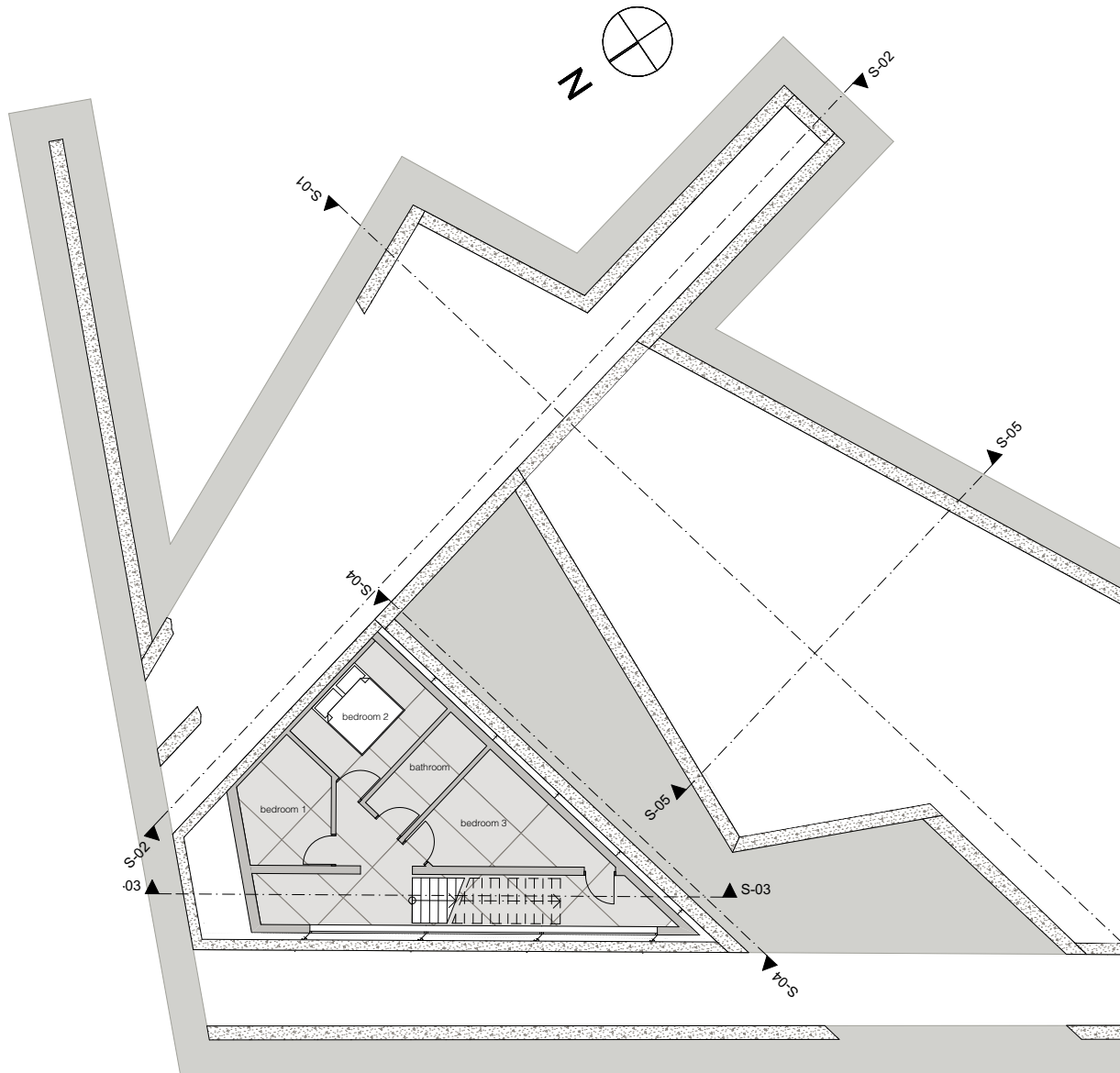




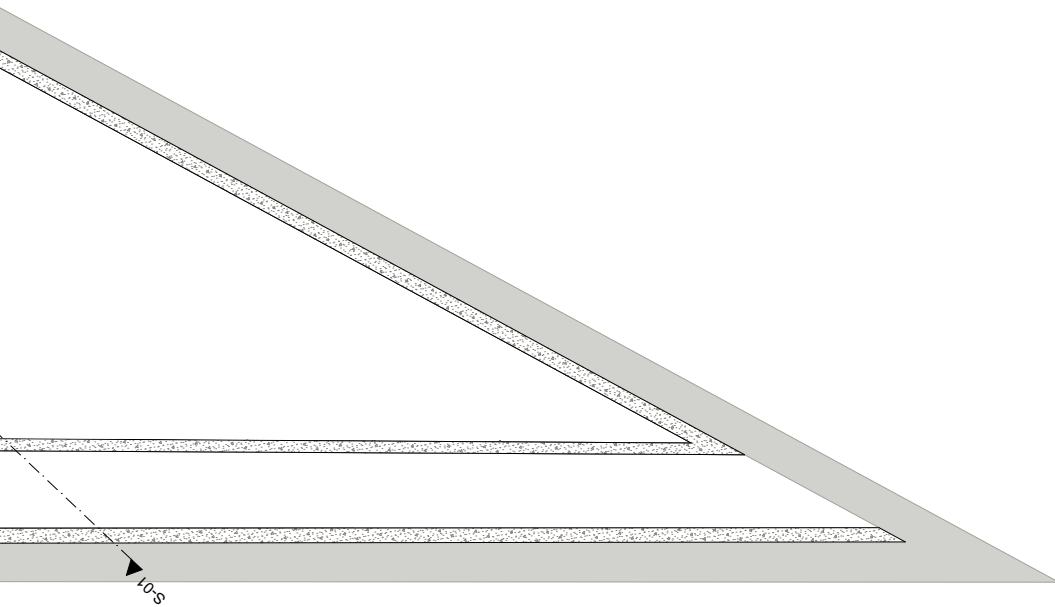
kontraskjaeret

drawings

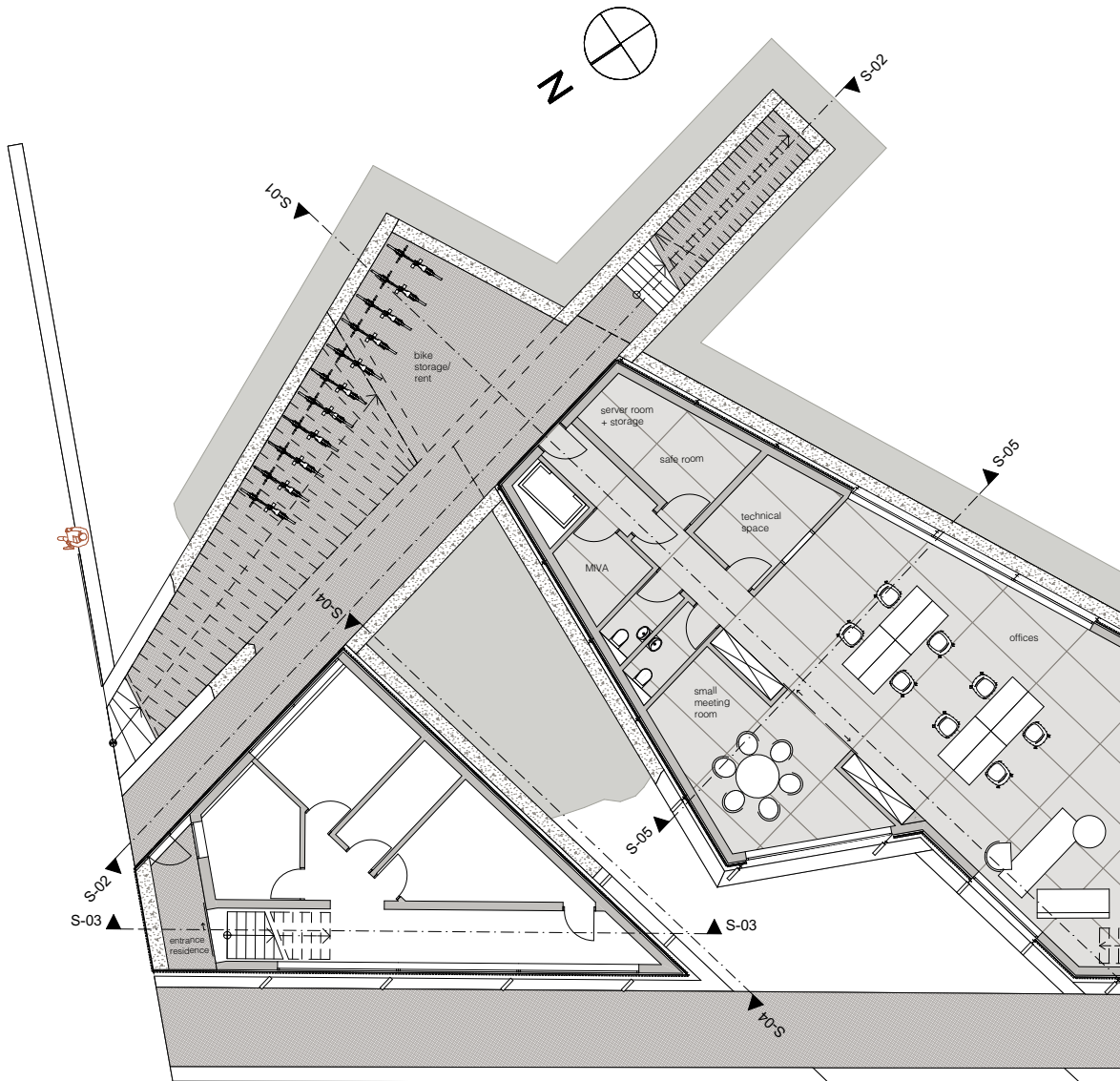
# plans



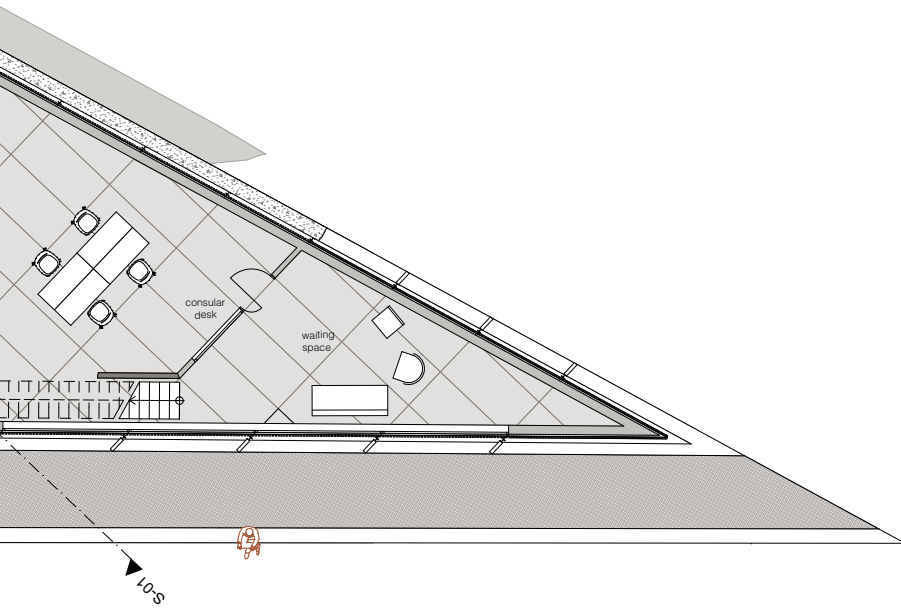
ground floor residence, -1000  
1:200

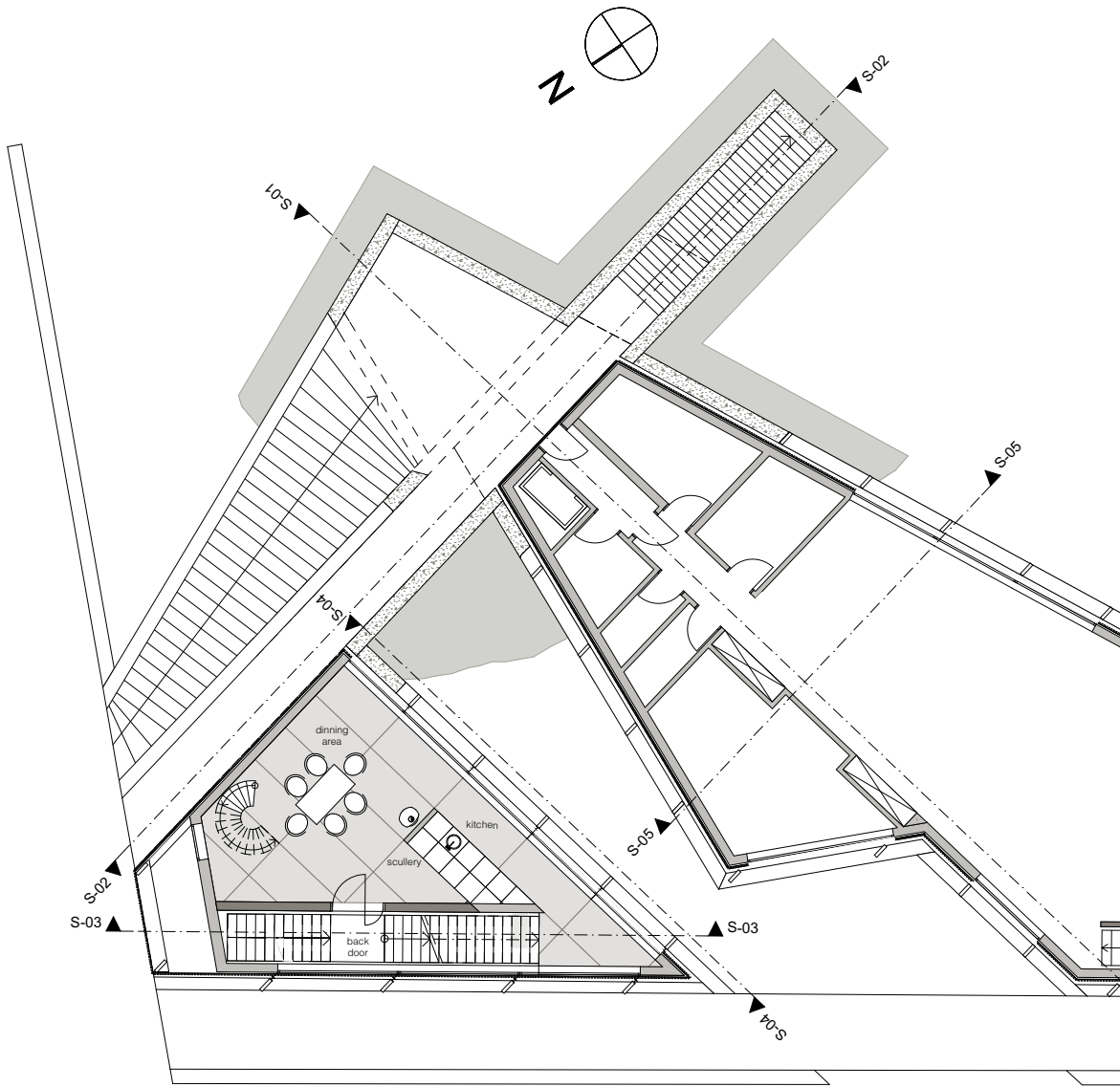




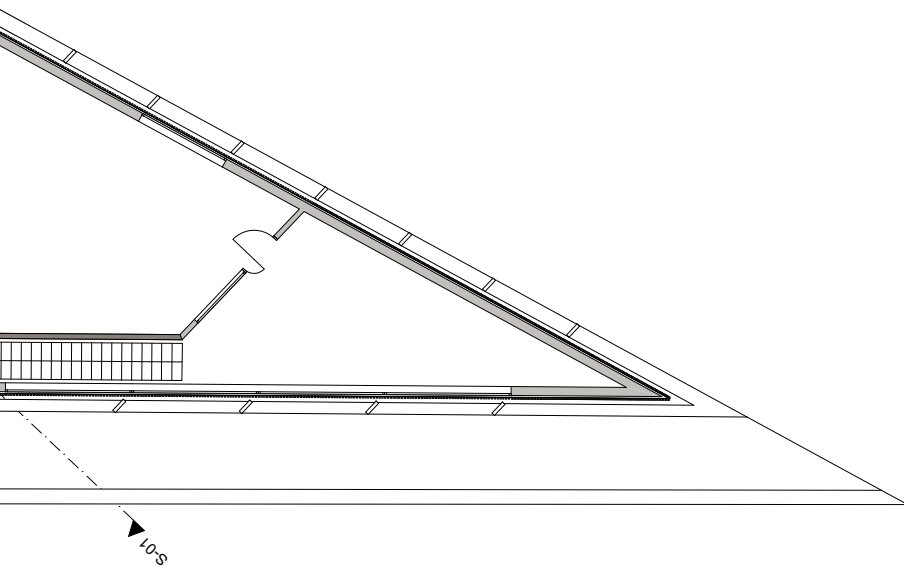


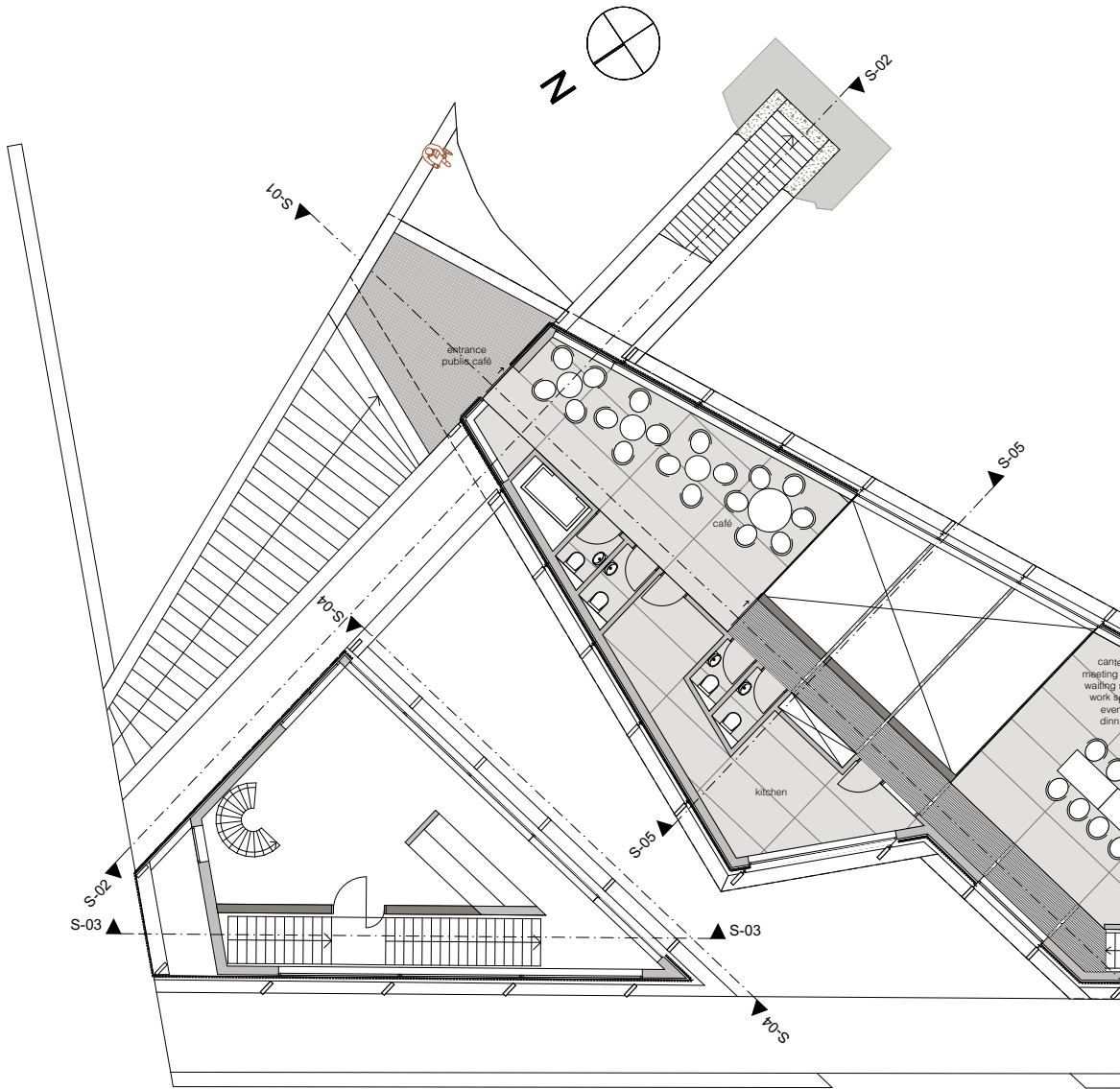
ground floor  
1:200



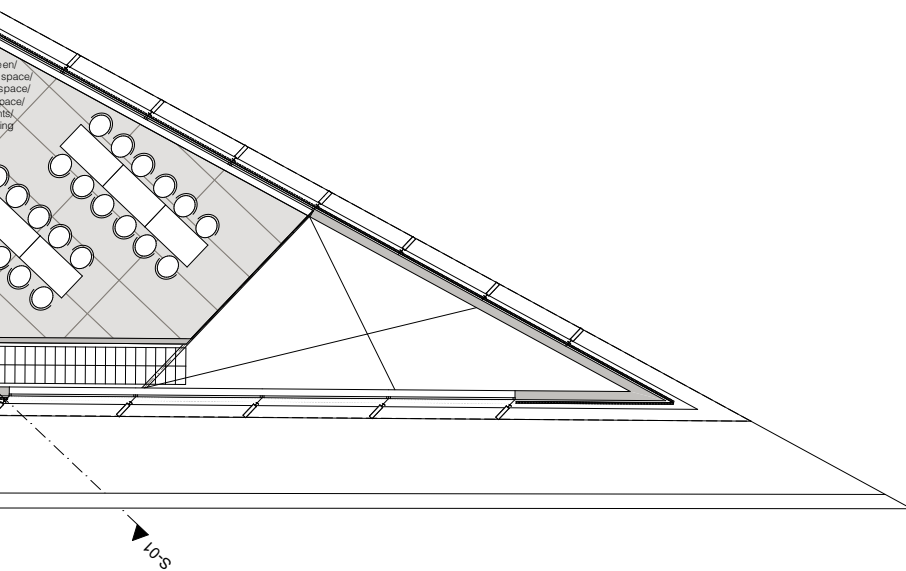


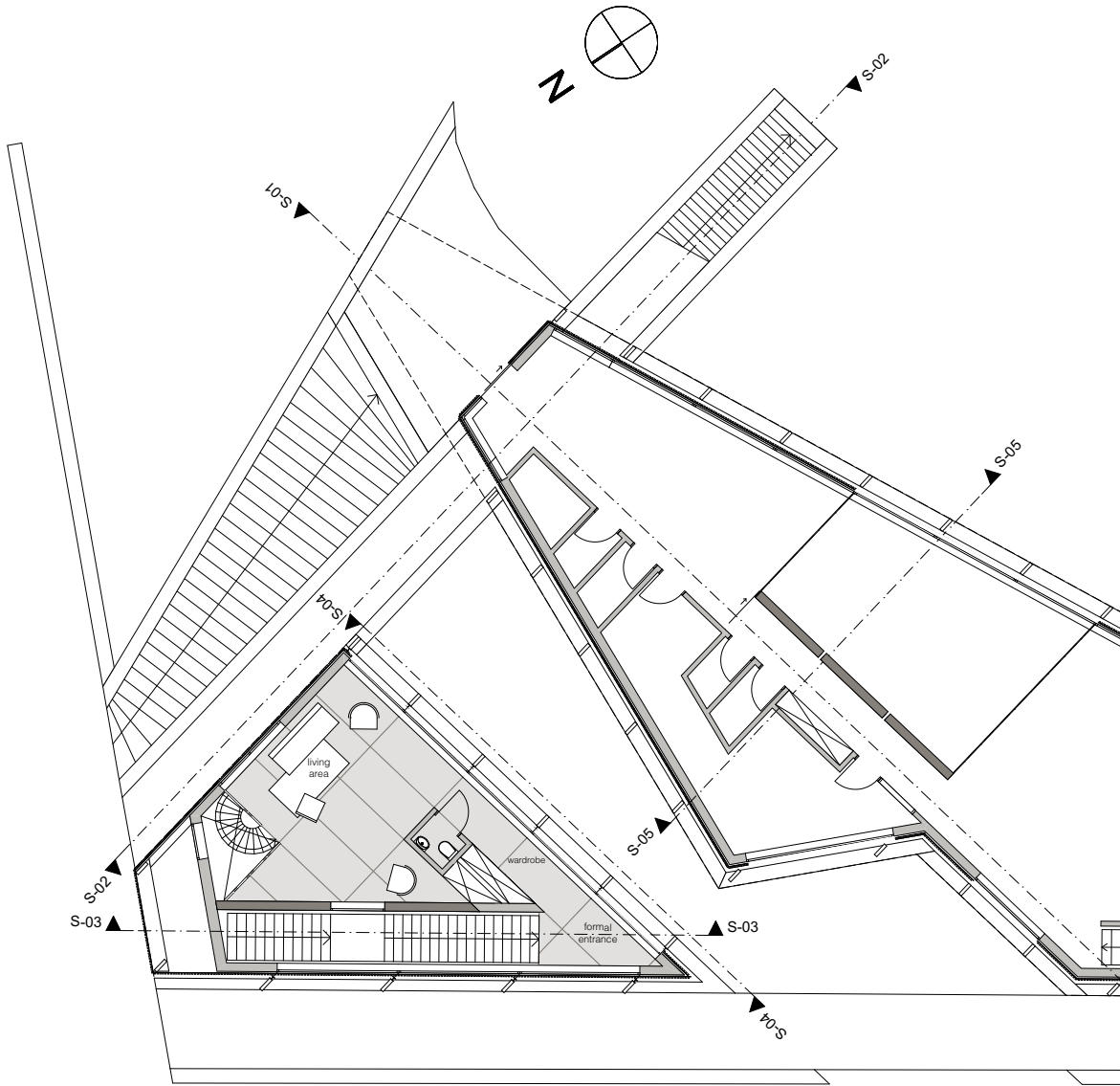
first floor residence, +2000  
1:200



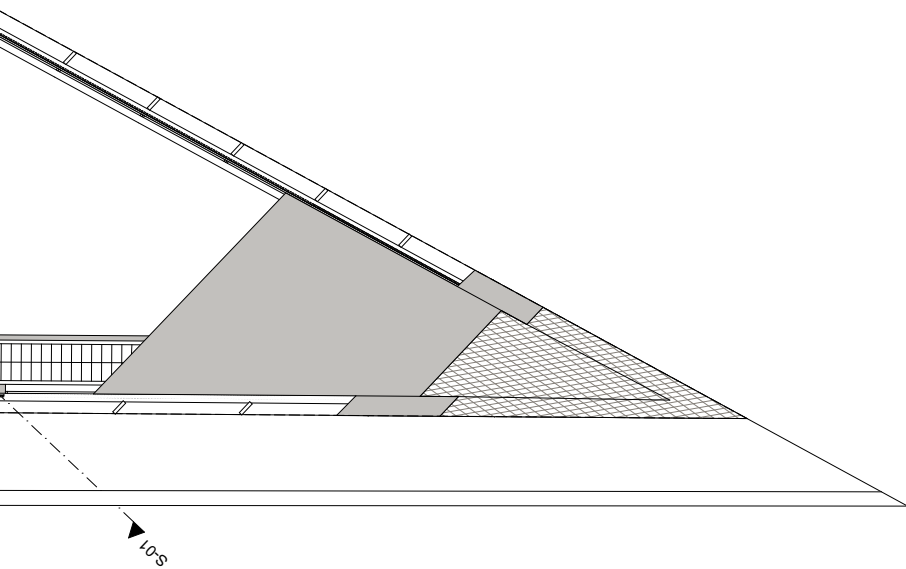


first floor embassy, +3500  
1:200



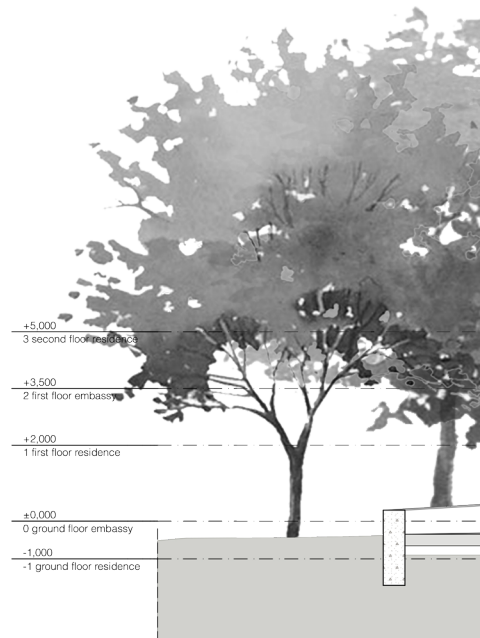


second floor residence, +5000  
1:200



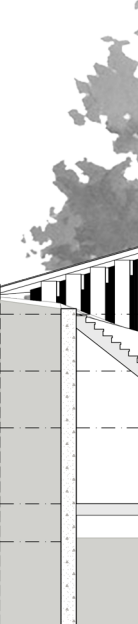


# sections

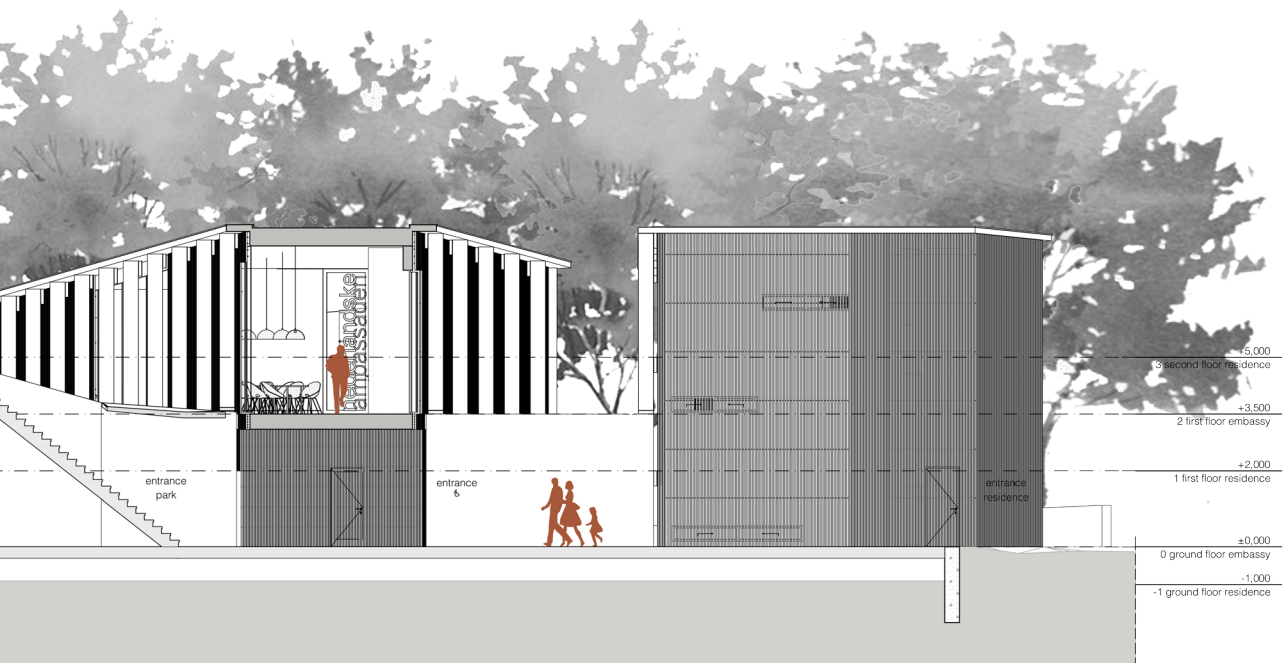


section S01  
1:200

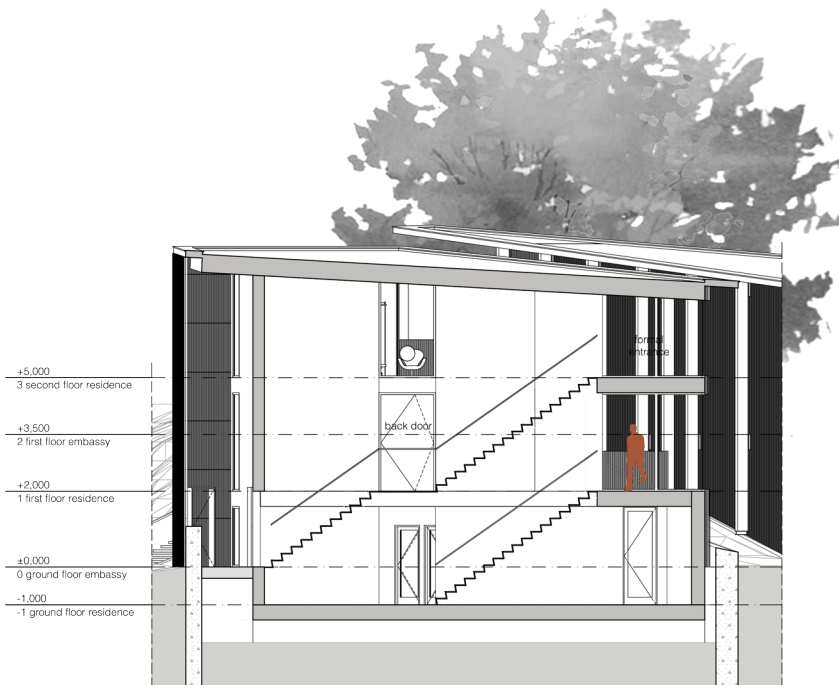




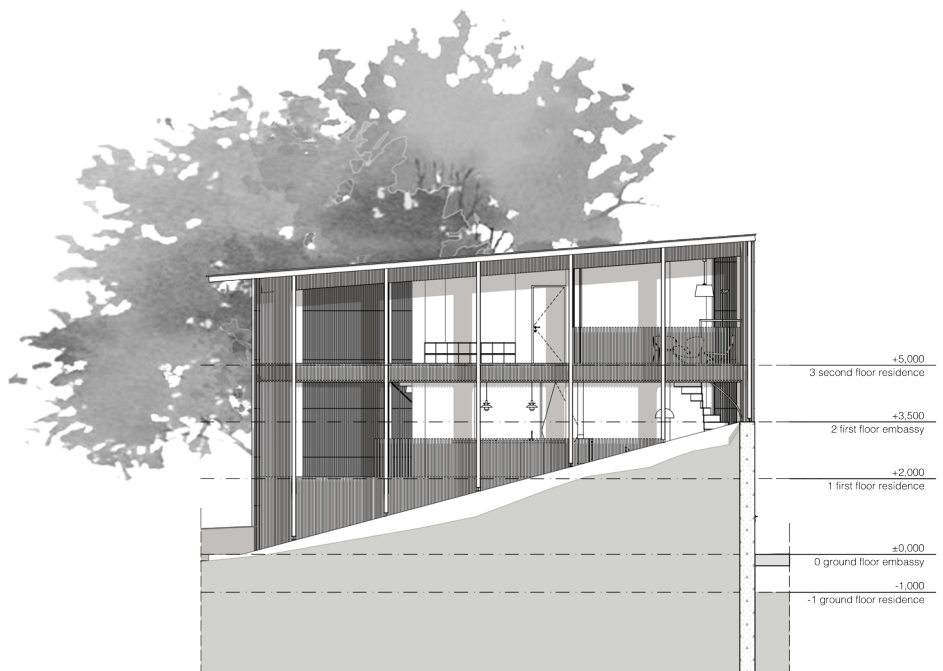
section S02  
1:200



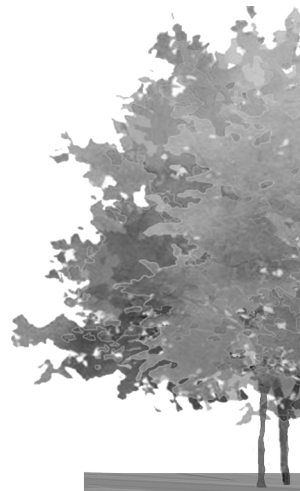
section S03  
1:200



section S04  
1:200



# elevations



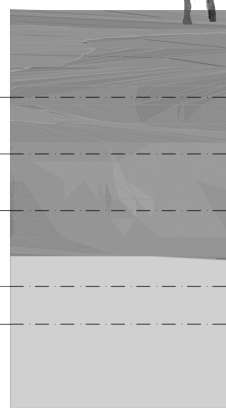
+5.000  
3 second floor residence

+3.500  
2 first floor embassy

+2.000  
1 first floor residence

+0.000  
0 ground floor embassy

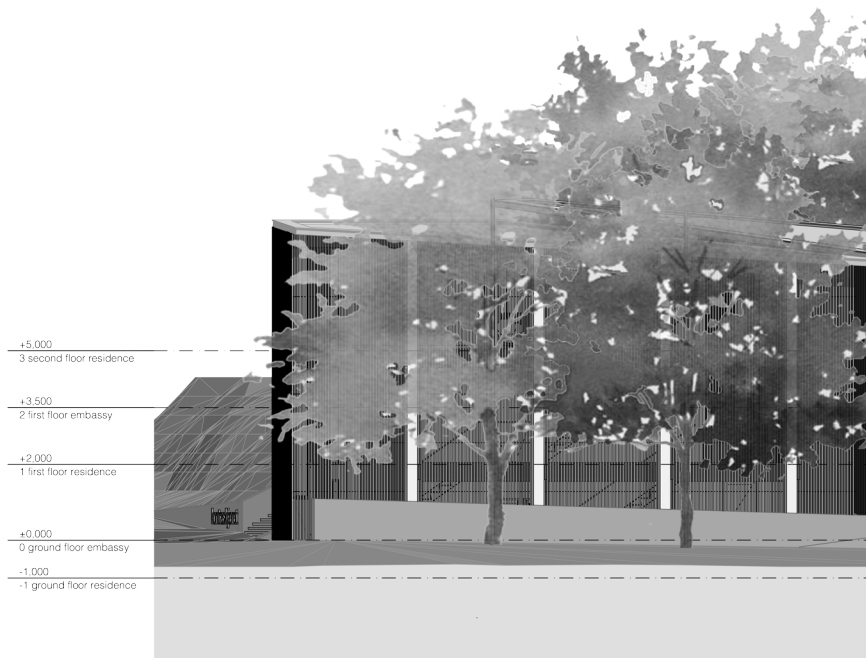
-1.000  
-1 ground floor residence



north elevation  
1:200

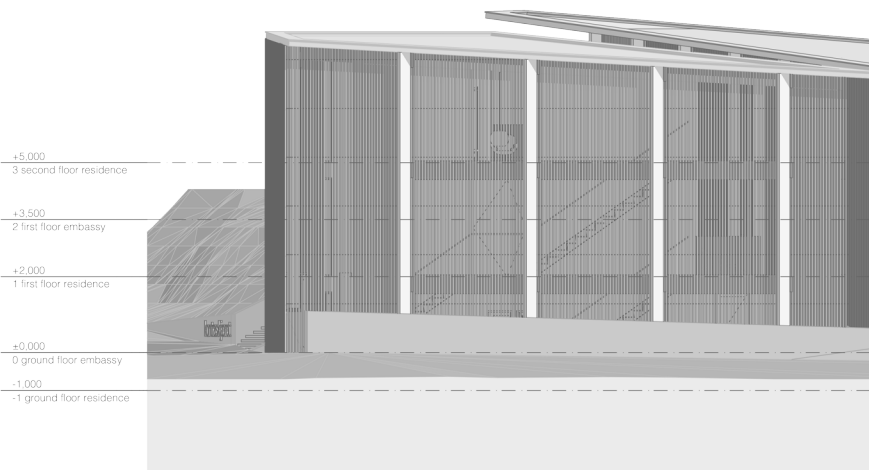




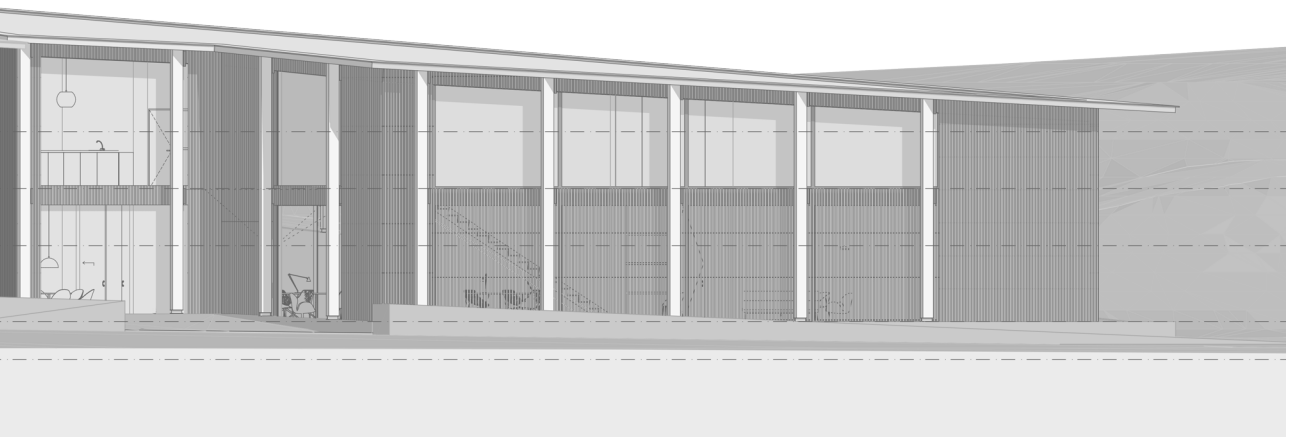


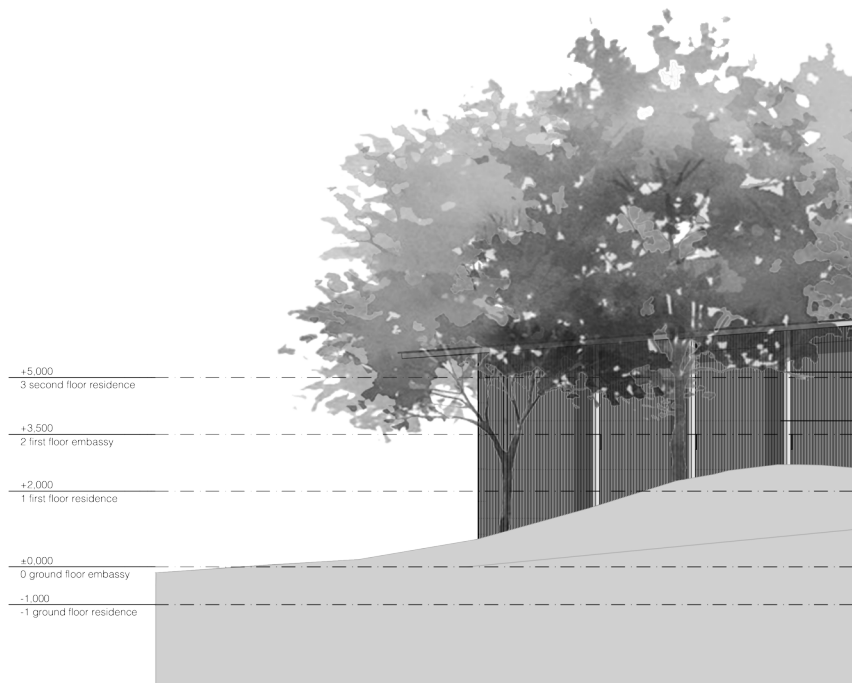
west elevation  
1:200





west elevation, whitout trees  
1:200



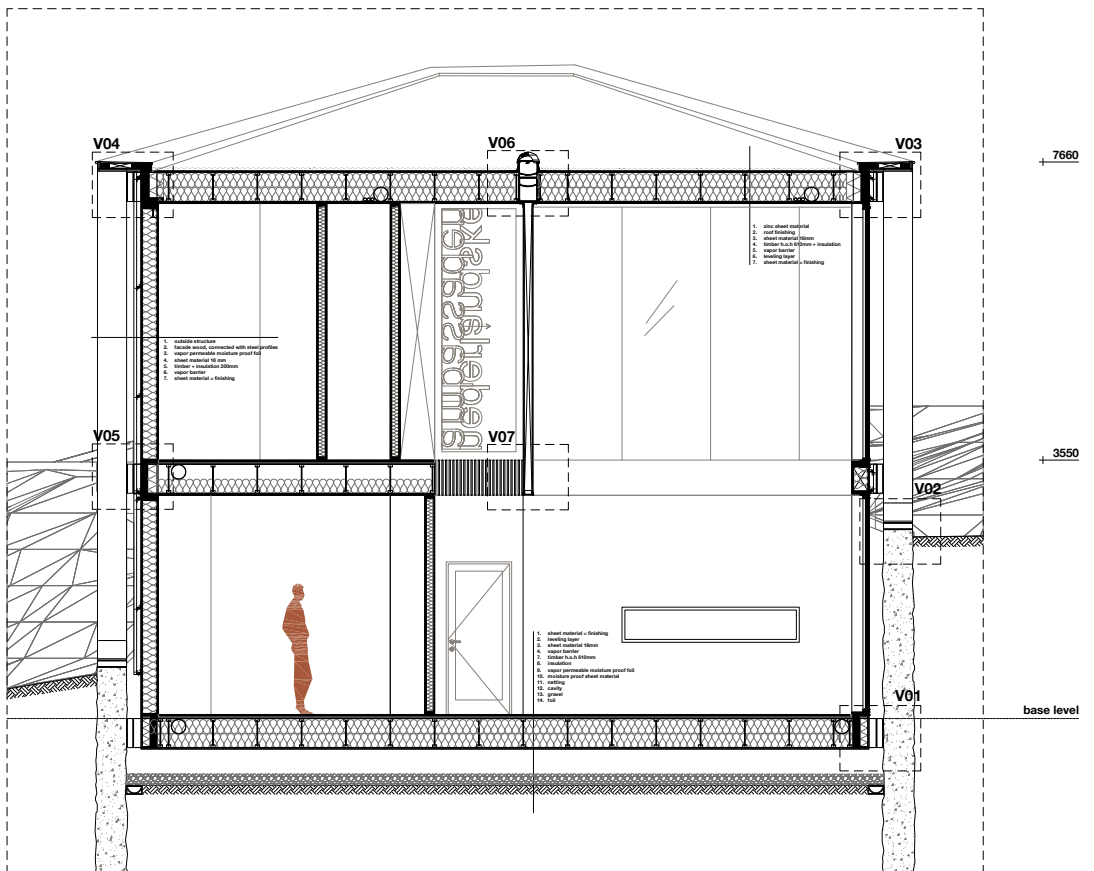


south elevation  
1:200



# technical section

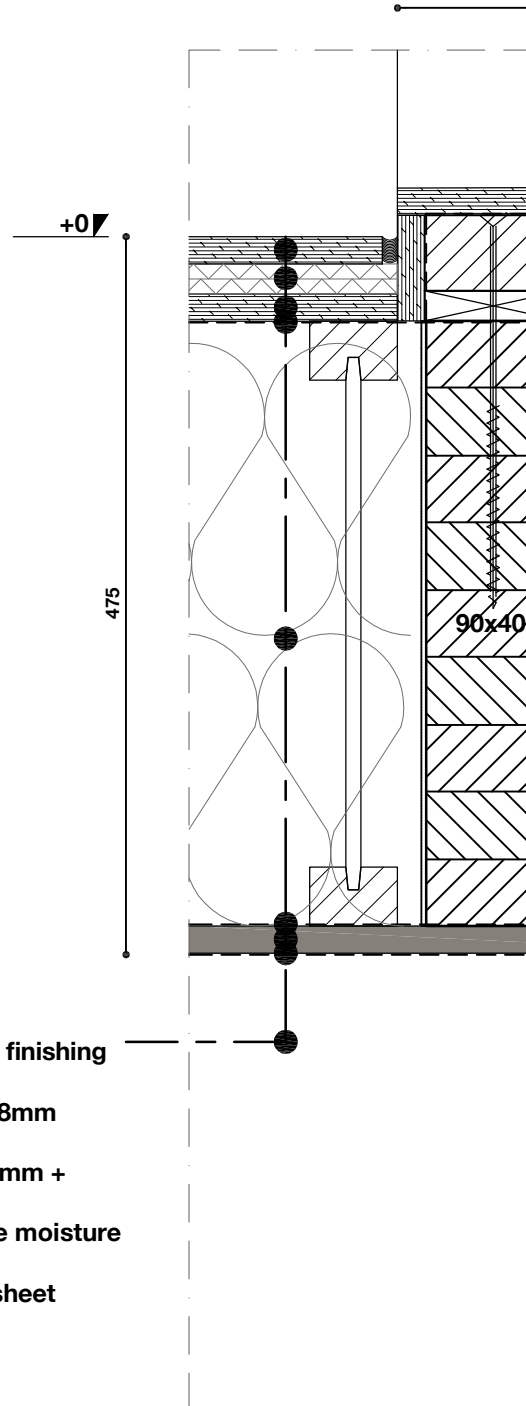
technical section  
 (scale to fit)





# details

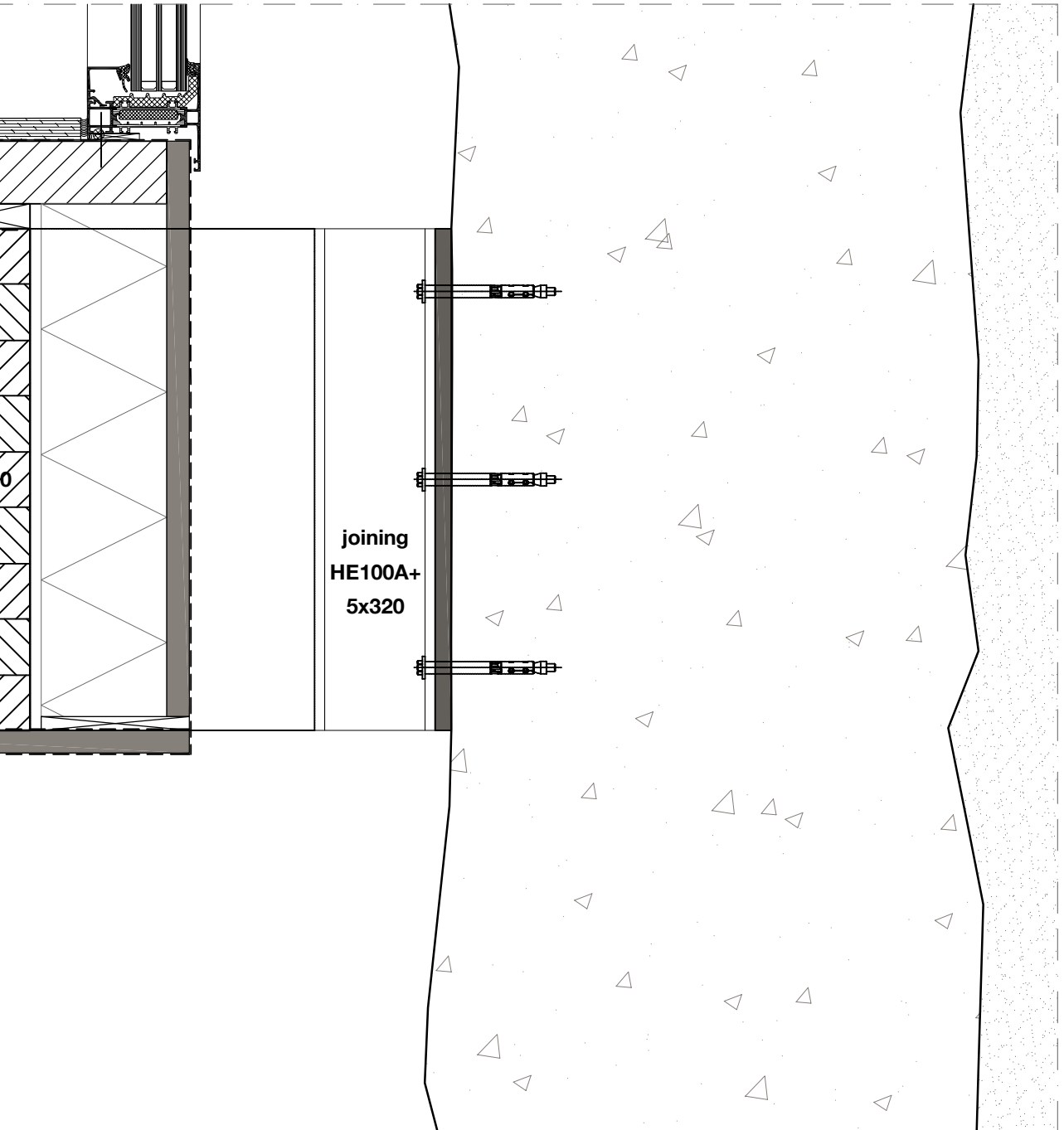
V01  
1:5



245

191

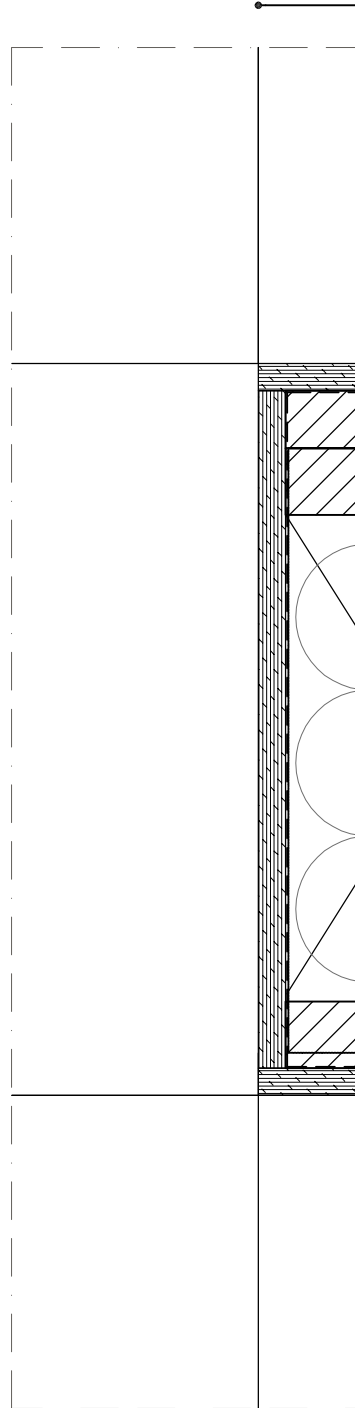
+/-400



V02  
1:5

+3550

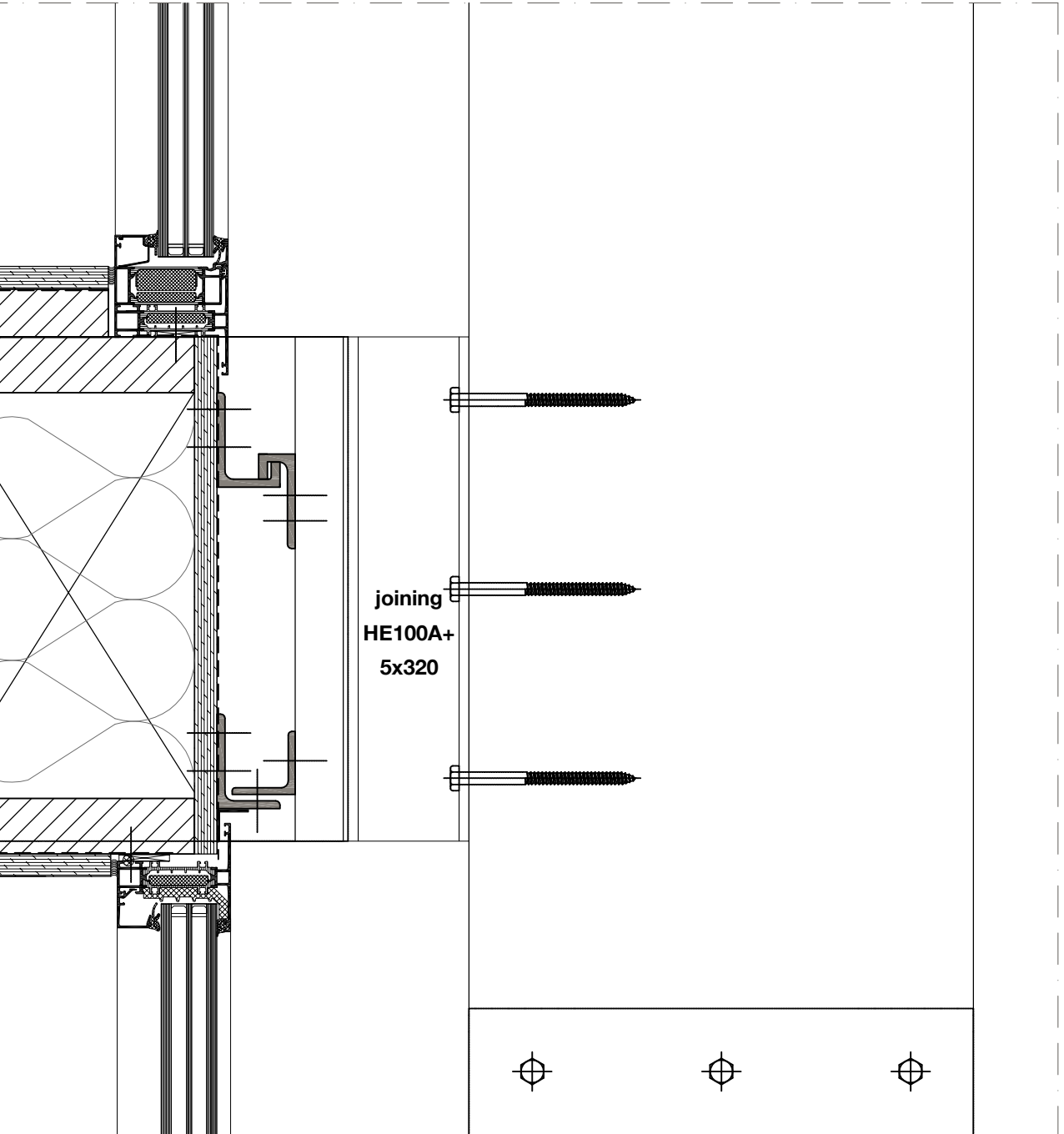
485



245

191

400

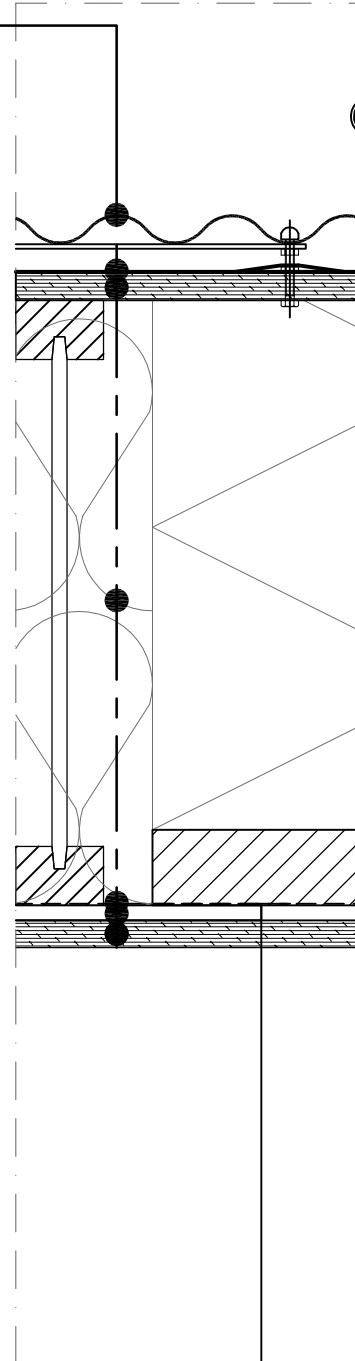


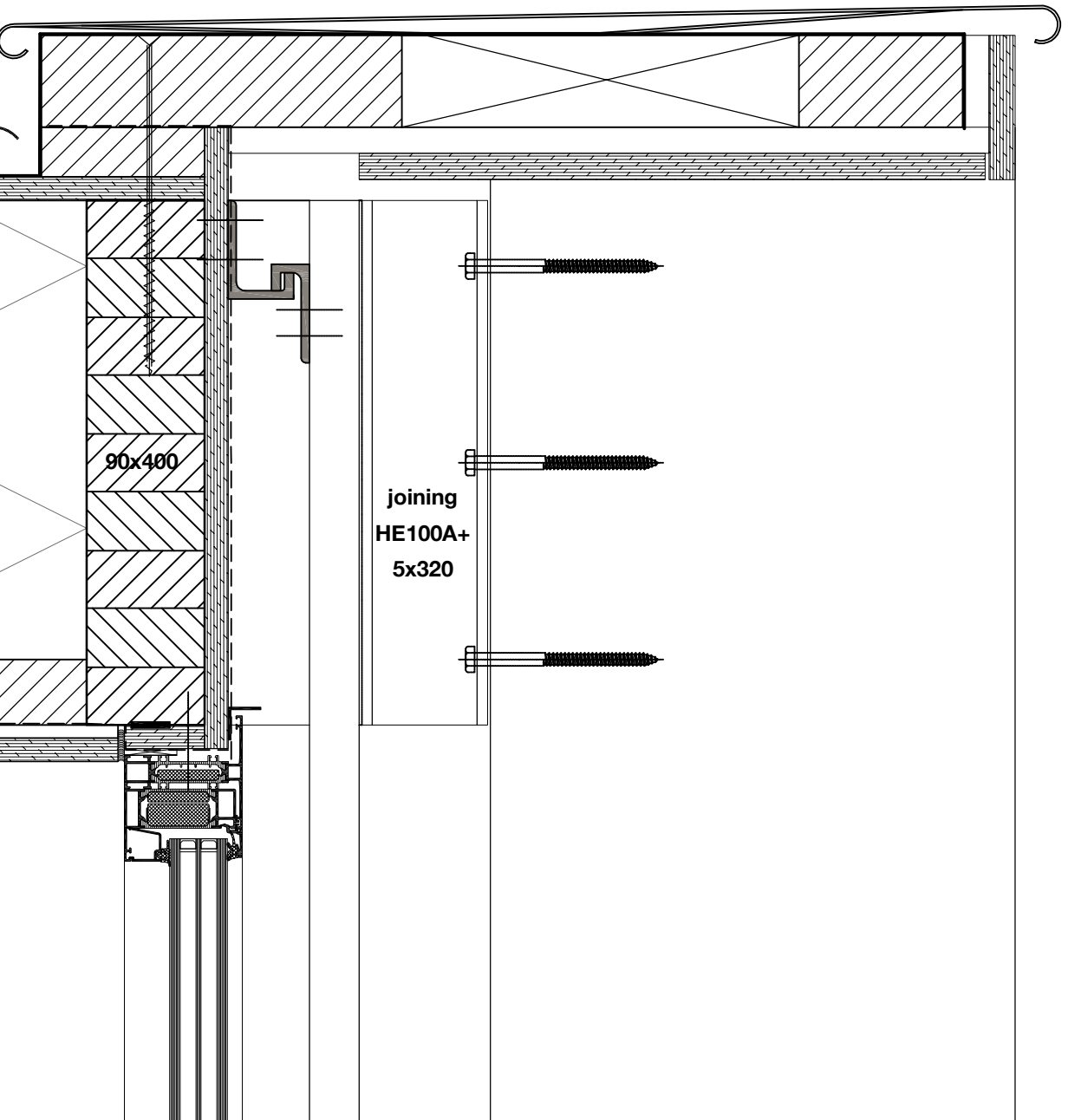
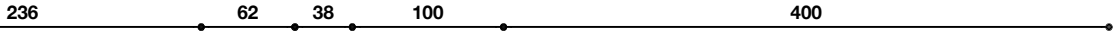
V03  
1:5

1. zinc sheet material
2. roof finishing
3. sheet material 18mm
4. timber h.o.h 610mm + insulation
5. vapor barrier
6. leveling layer
7. sheet material = finishing

+7550 ▽

447





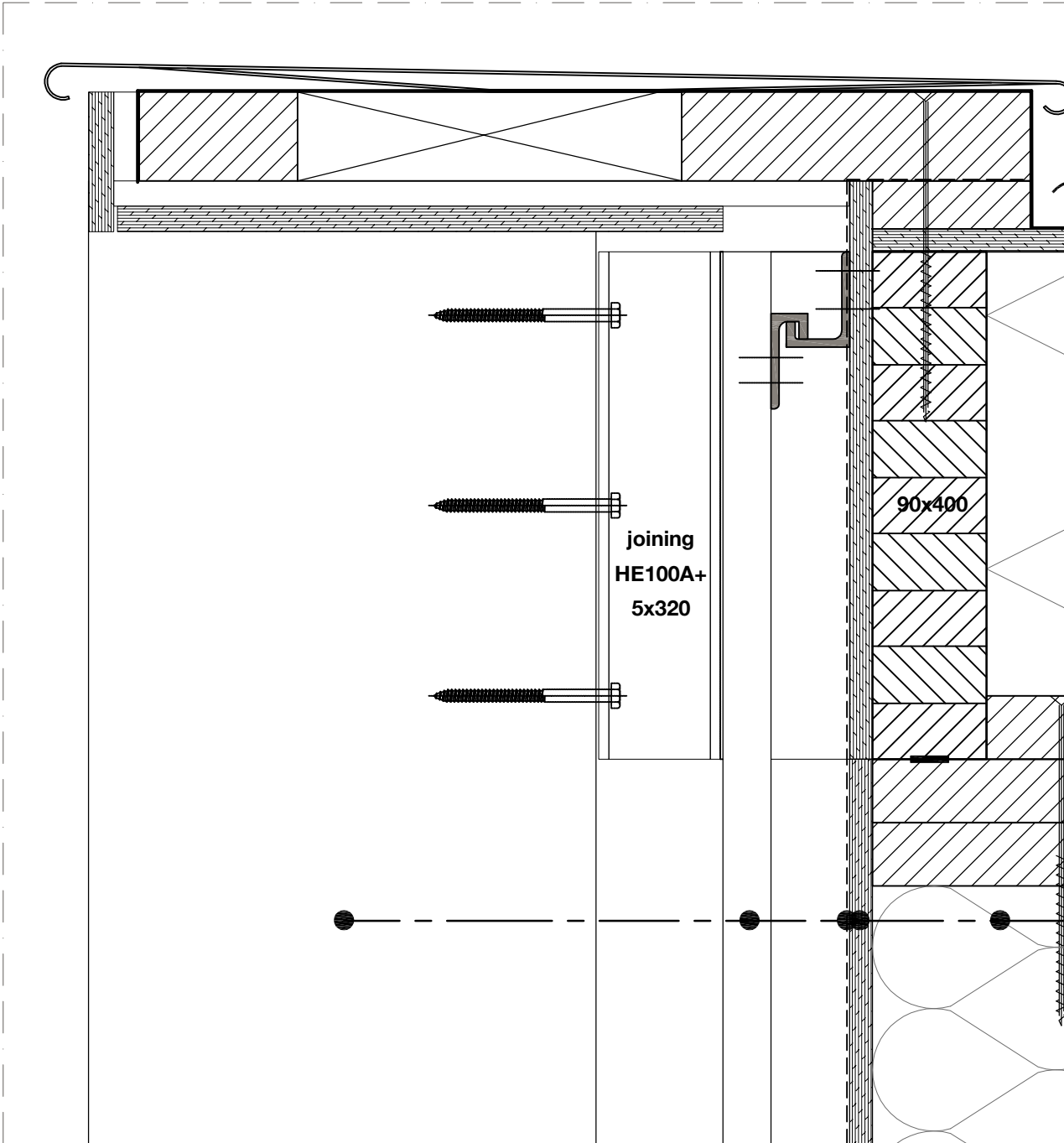
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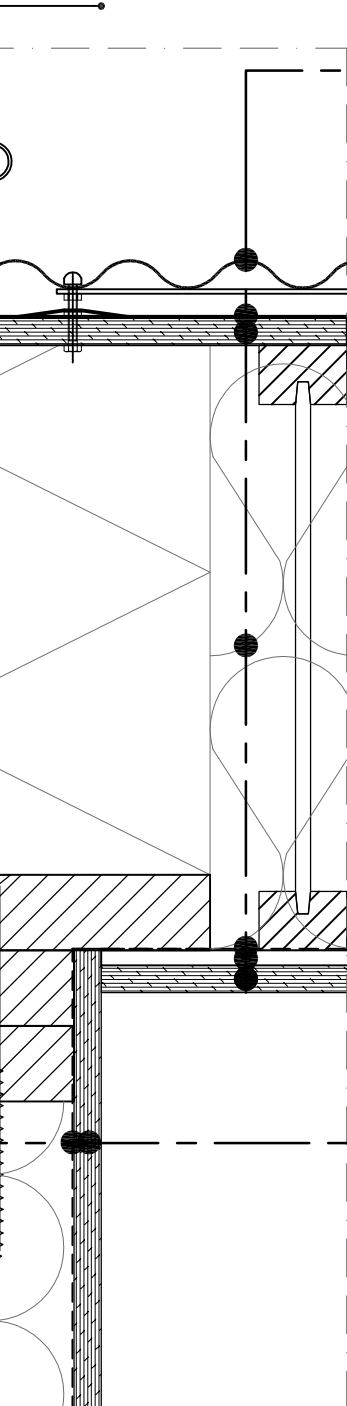
100

38

62

236





- 1. zinc sheet material
- 2. roof finishing
- 3. sheet material 18mm
- 4. timber h.o.h 610mm + insulation
- 5. vapor barrier
- 6. leveling layer
- 7. sheet material = finishing

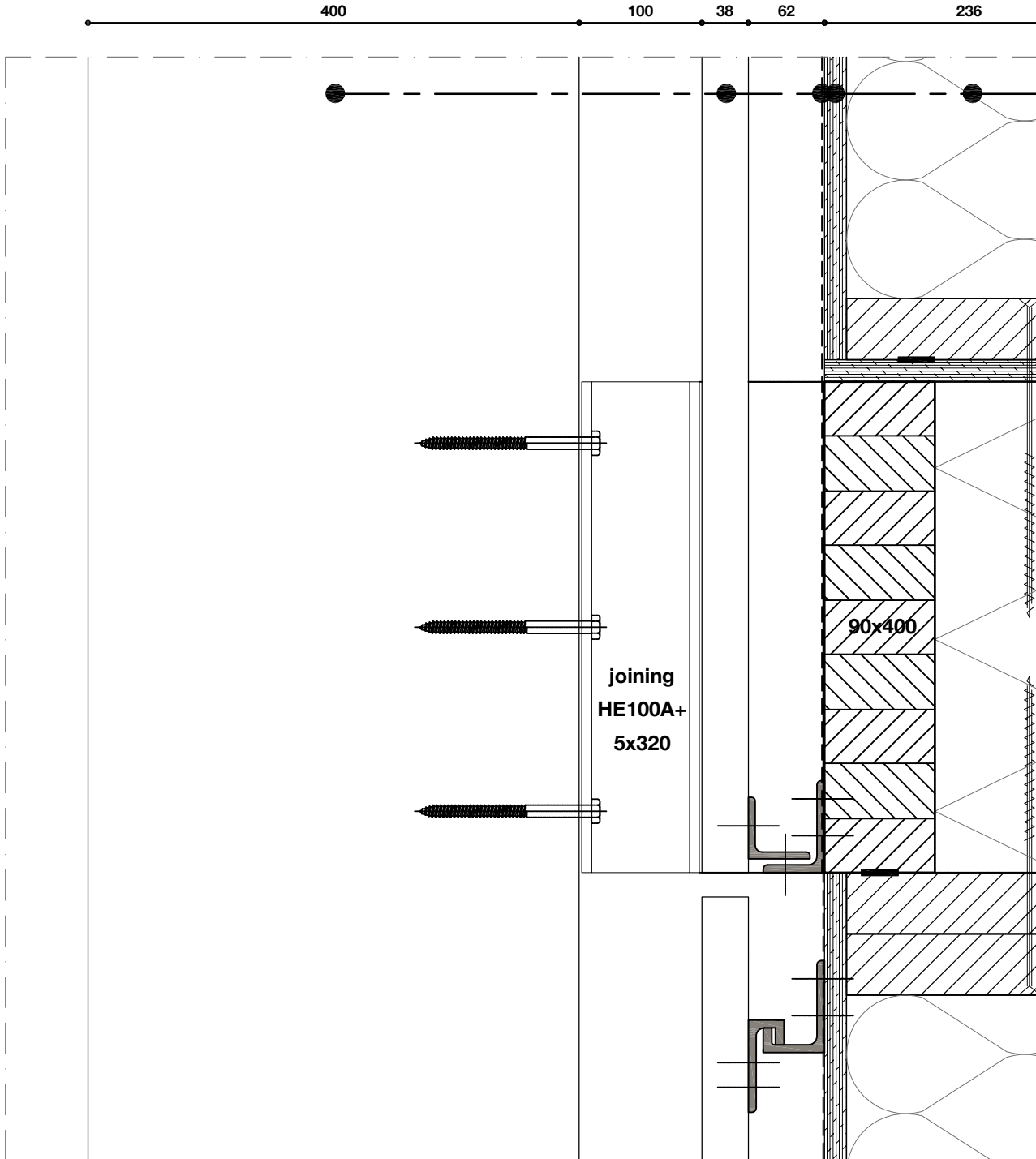
▼+7550

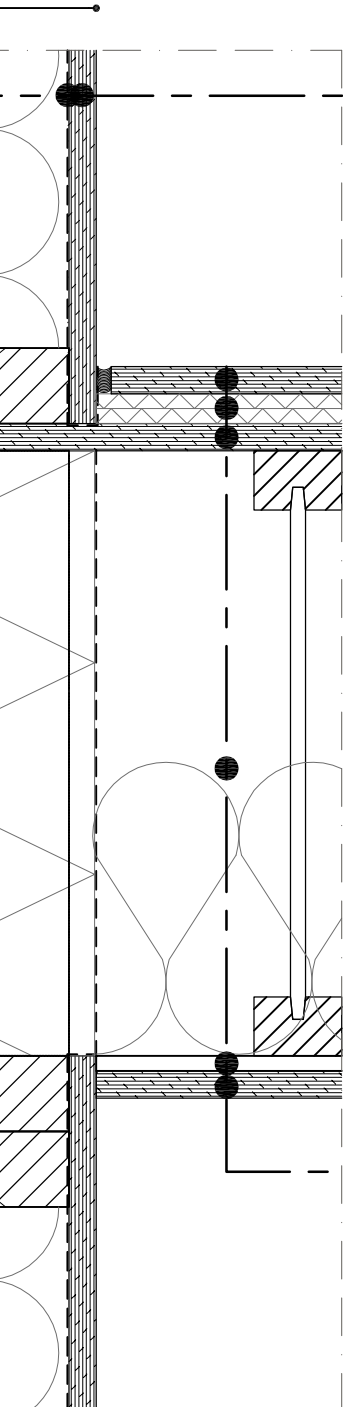
447

- 1. outside structure
- 2. facade wood, connected with steel profiles
- 3. vapor permeable moisture proof foil
- 4. sheet material 18 mm
- 5. insulation 200mm
- 6. vapor barrier
- 7. sheet material = finishing

V04  
 1:5







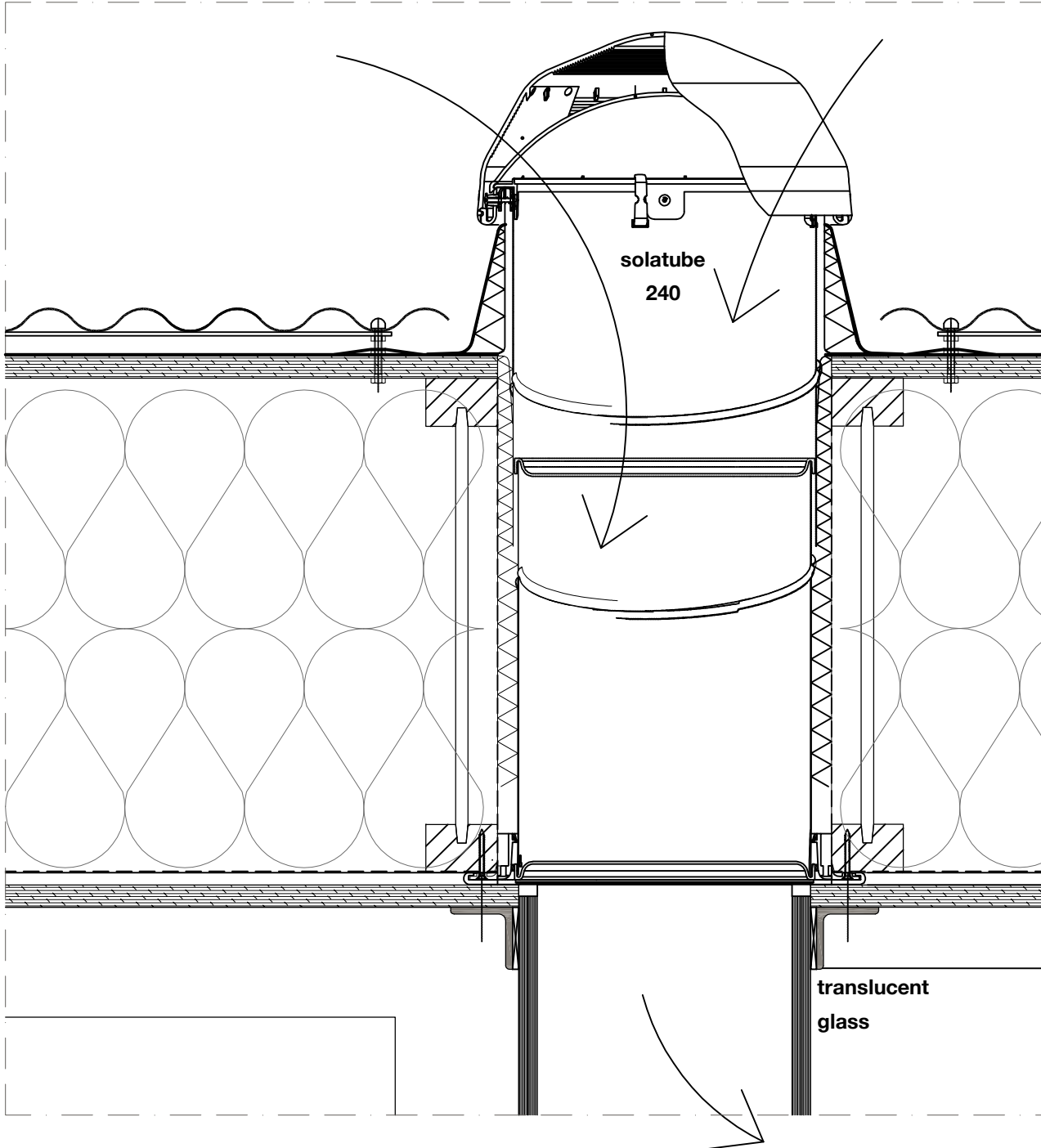
1. outside structure
2. facade wood, connected with steel profiles
3. vapor permeable moisture proof foil
4. sheet material 18 mm
5. insulation 200mm
6. vapor barrier
7. sheet material = finishing

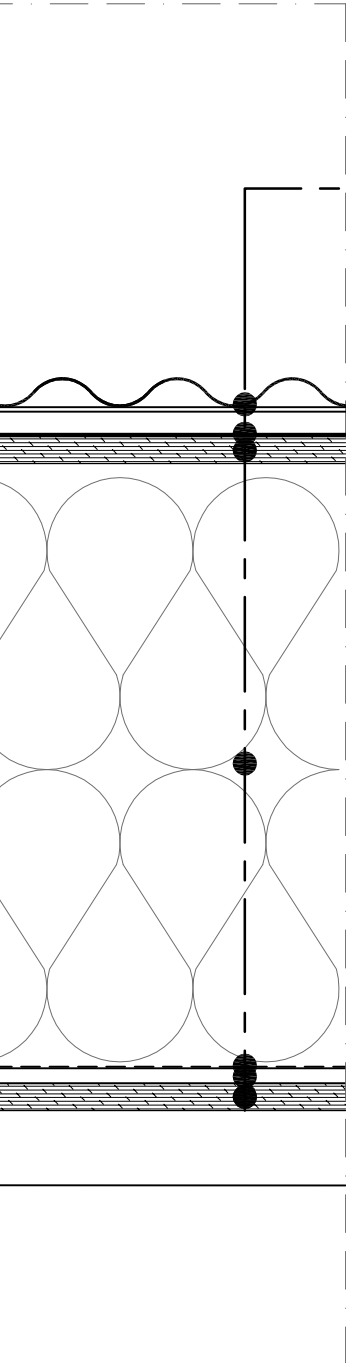
▼+3550

485

1. sheet material = finishing
2. leveling layer
3. sheet material 18mm
4. timber h.o.h 610mm + insulation
5. leveling layer ceiling
6. sheet material = finishing

V05  
1:5



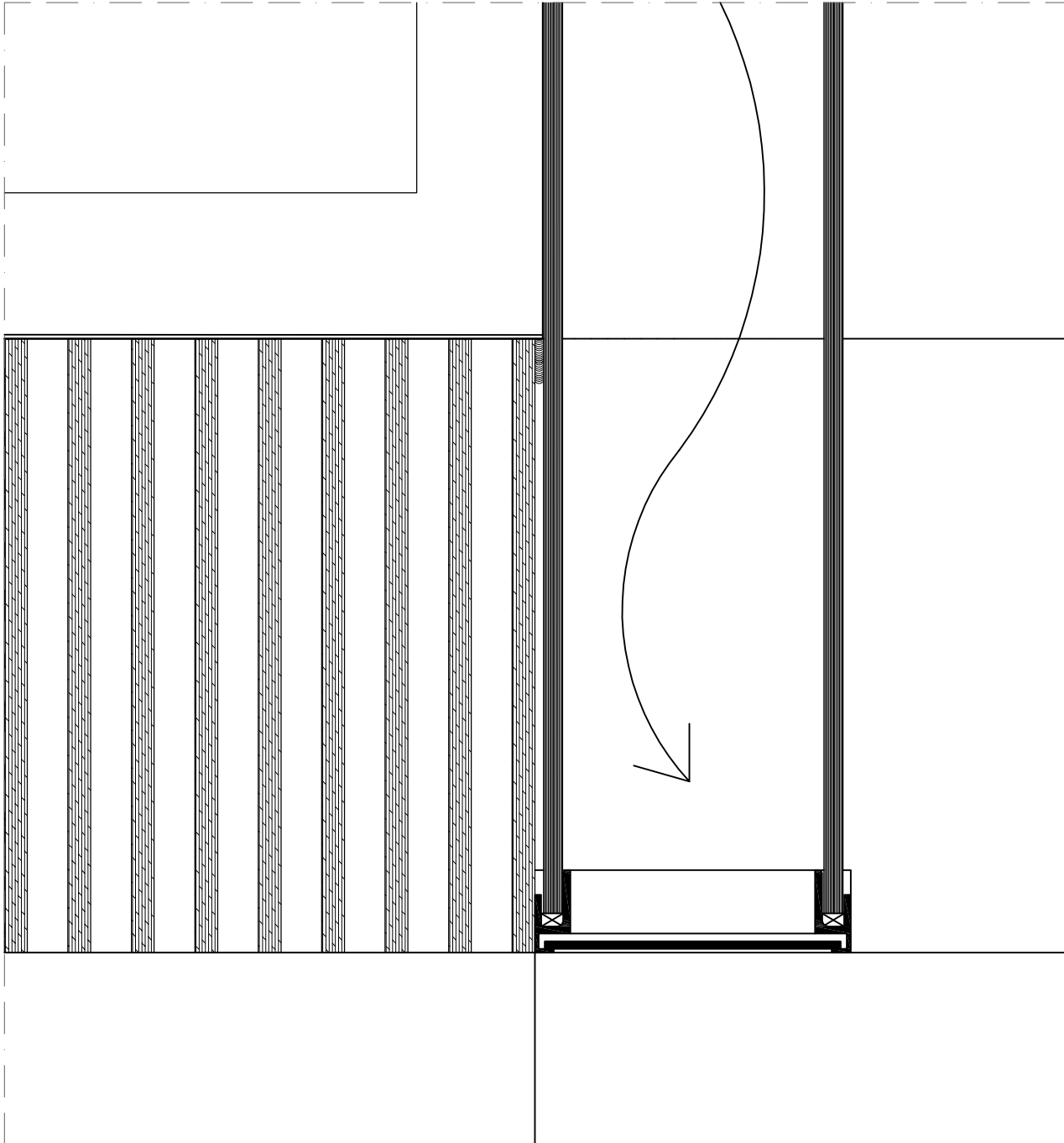


1. zinc sheet material
2. roof finishing
3. sheet material 18mm
4. timber h.o.h 610mm + insulation
5. vapor barrier
6. leveling layer
7. sheet material = finishing

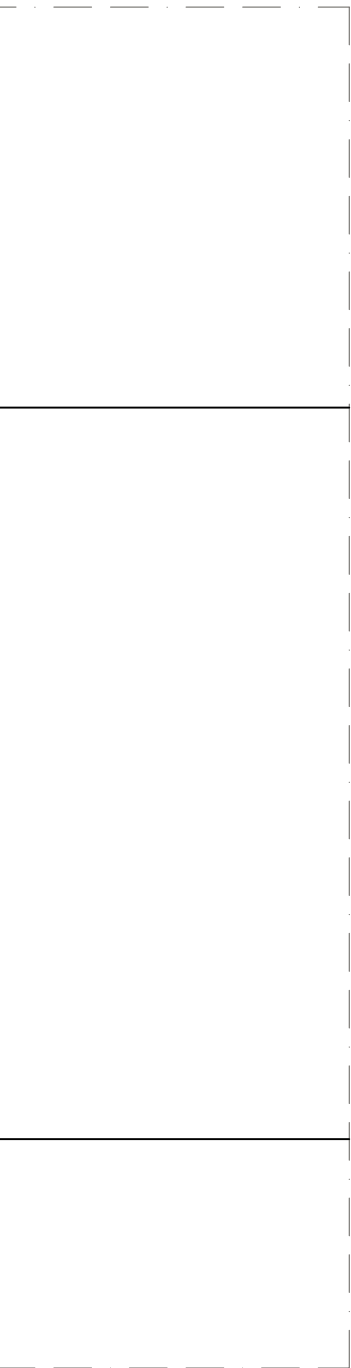
▼+7550

447

V06  
1:5

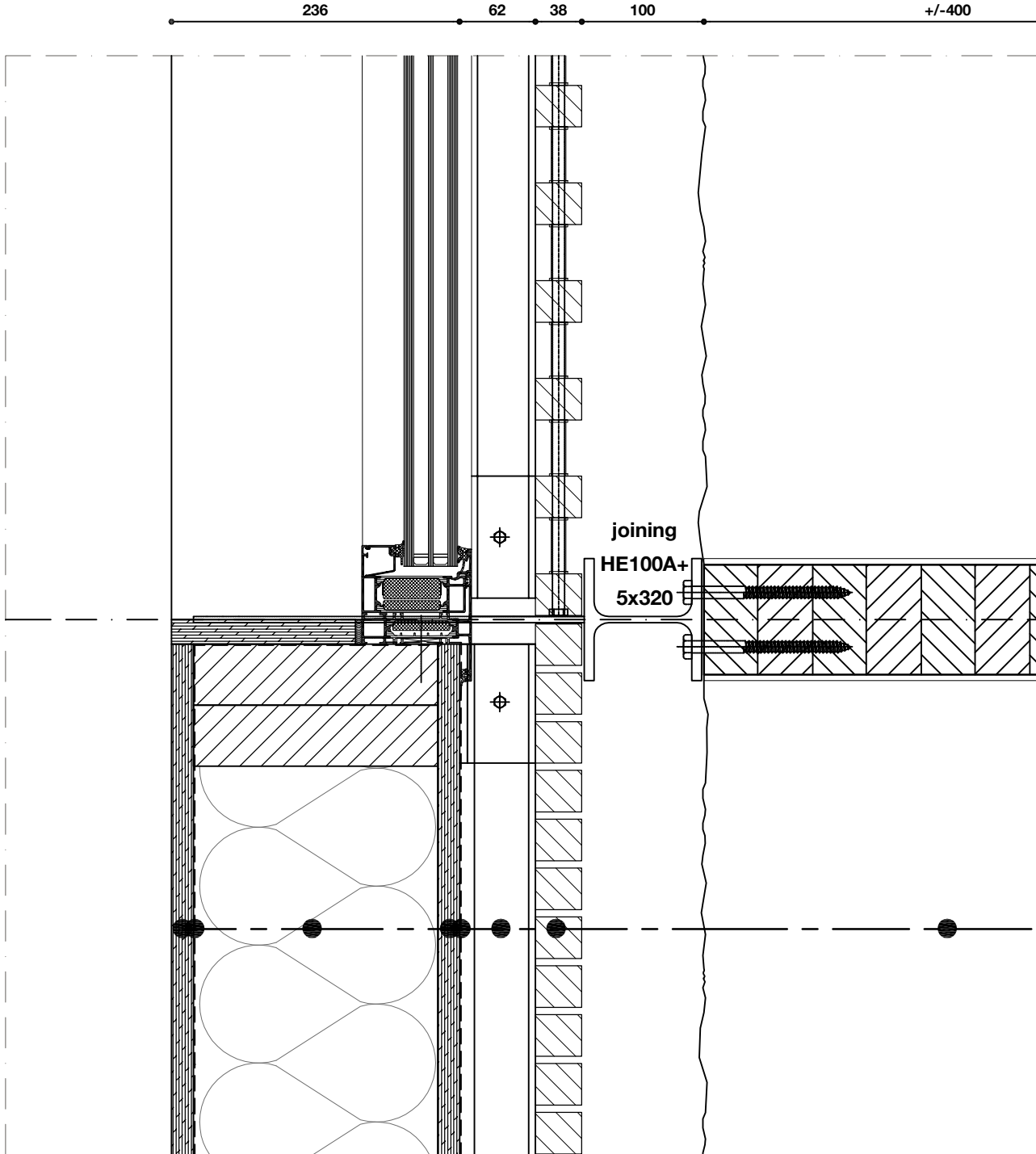


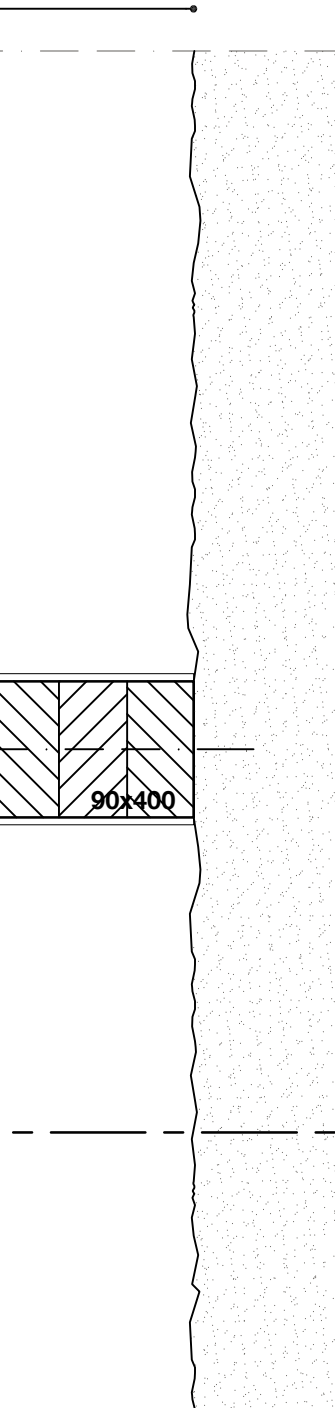
V07  
1:5



▼+3550

485





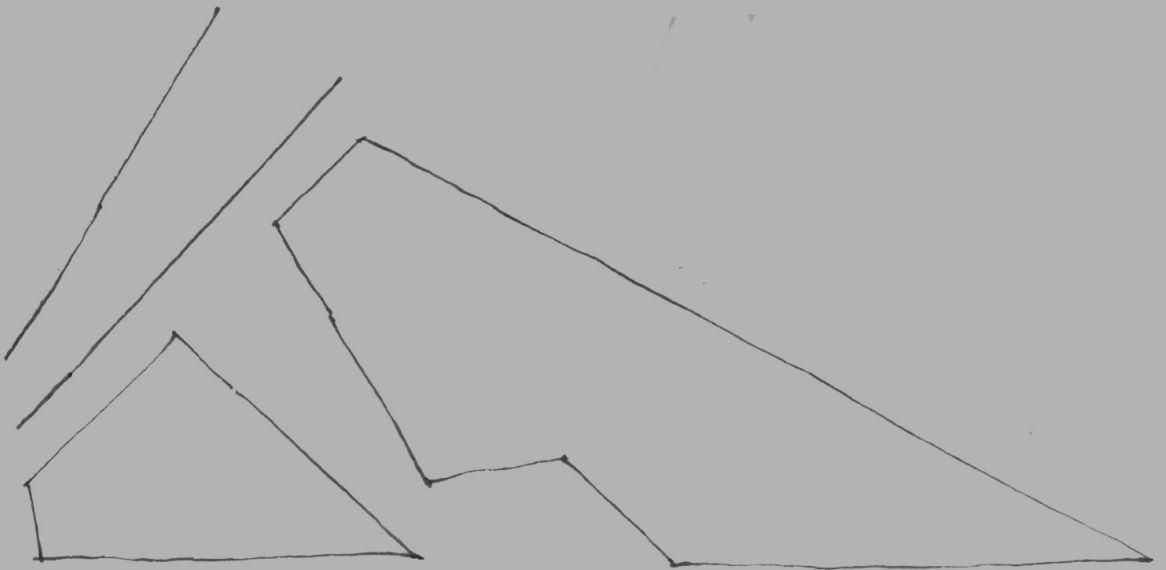
H01  
1:5

1. sheet material = finishing
2. vapor barrier
3. timber+insulation
4. sheet material
5. vapor permeable moisture proof foil
6. steel profiles, joining facade
7. wooden facade
8. sheet piling structure









conclusion/reflection

In this chapter we will reflect on the problem statement introduced in the introduction: *This project will investigate how the exchange between the Netherlands and Norway can be stimulated by means of architecture in the form of a new Dutch embassy. The expression of the Dutch identity, sustainability, the living/working atmosphere and the relationship with the host country are central themes of this research.*

Creating a 'Dutch' embassy could be done in different ways. Dutch identity is a broad understanding. There is not one explanation of the Dutch identity, but different aspects are related with it. Therefore, the expression of the Dutch identity is linked to these different aspects, the design decisions are inspired by them. However, the most important connection with the Dutch identity that was made is linked with the concept of the embassy, exchange. This concept influenced the architectural approach of the building. Since there are many ways to express and link Dutch Identity with the architectural expression, using the goal of the building as guideline is the most sufficient.

Exchange. Also linked to the problem statement of this thesis. Different types of exchange were used in the eventual design. Encouraging exchange is the goal of the new embassy building. To achieve this, both parties should get involved. The choice for the location and the corresponding strategy are influenced by this. In different ways the building gives something to the Norwegians, to make

sure they will get involved with the Dutch. Furthermore, also the functional layout of the building is influenced by this. Several spaces were added or flexible made, as the café and the multifunctional space. Due to these spaces the building gets others function. It's not only an embassy, it should be inviting. This approach, towards the outside world also strikes with the goal of the building.

The relationship with the host country in the design is also influenced by the location and functional layout. This relationship is necessary to get the people involved. It's also influenced by the way the design is executed on materials, detailing and light. Norwegian principles were used, executed in a Dutch way. Due to this, the building fits on the spot and is still Dutch in a way. The detailing of the building is the most important expression of the Dutch identity, combining Norwegian principles in this make them a unique combination. Also a type of exchange.

On light and climate, also Norwegian principles were used in Dutch way. Norwegian (vernacular) architecture can give insight on these aspects. Using this, you make sure the building fits in its circumstances. The execution of these aspects is done in a 'Dutch' way. Both integrated into the architectural design, and in terms of climate also in the daily life of the users. Creating simple sustainable solutions.

The combination of the representative and functional tasks of the embassy into one building, the residence and embas-

sy, was not an easy job on the chosen location. The location may not have had a residential character, but that made this project even more interesting. By adding different architectural elements a private feeling could be achieved, where a connection with the surroundings remained. A courtyard is such an element, and was in this project the most important division between working and living. Furthermore, at the residence itself, transport zones were used to create a privacy buffer. By using different kinds of materials for the inner walls and façade, translucent walls and semi-covered facades, the connection with the surroundings remained. An interesting balance between public and private occurs. In this way, a type of exchange between the surrounding and the private atmosphere is still possible.



references



# architectural references

1



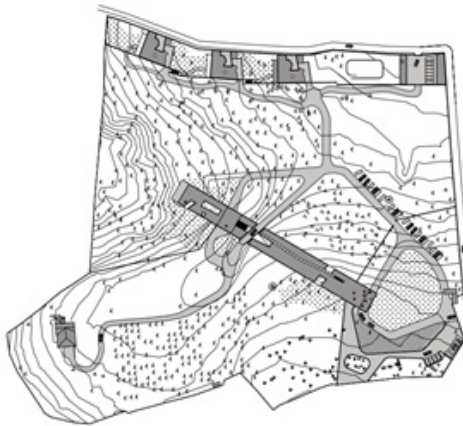
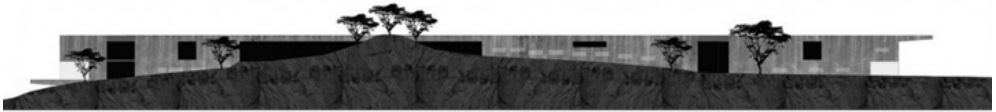
*Dutch embassy Ethiopia by Mastenbroek  
and van Gameren*

entrance embassy

[http://www.archdaily.com/198254/  
embassy-ethiopia-bjarne-masten-  
broek-and-dick-van-gameren/](http://www.archdaily.com/198254/embassy-ethiopia-bjarne-mastenbroek-and-dick-van-gameren/)

roof of the embassy

[http://www.archdaily.com/198254/embas-  
sy-ethiopia-bjarne-masten broek-and-dick-  
van-gameren/9814\\_cr\\_lr\\_01-755-x-565/](http://www.archdaily.com/198254/embassy-ethiopia-bjarne-masten-broek-and-dick-van-gameren/9814_cr_lr_01-755-x-565/)

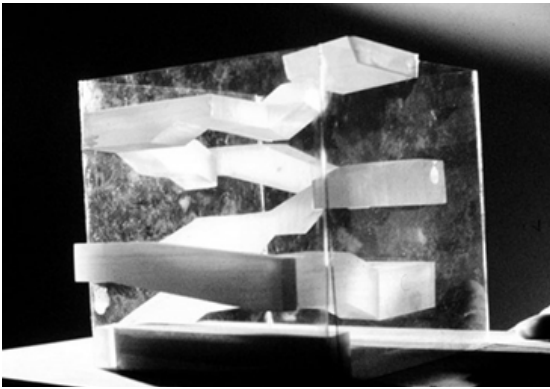
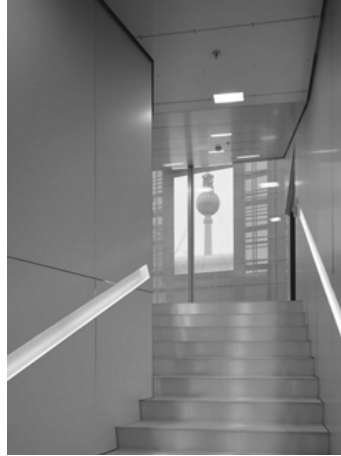
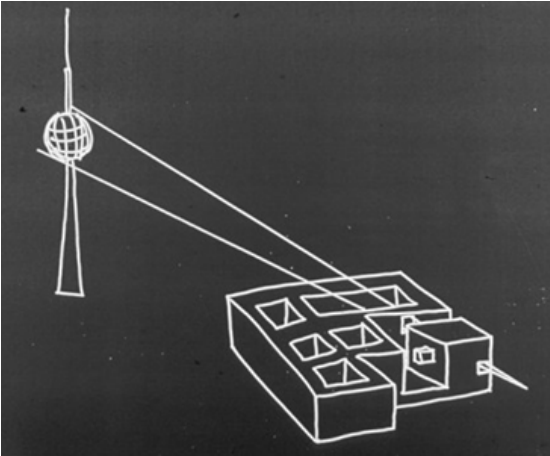


situation

elevation, left residence and right the embassy, separated by the shape of the landscape <http://www.archdaily.com/198254/embassy-ethiopia-bjorne-mastenbroek-and-dick-van-gameren/render-elevation/>

situation  
<http://www.dickvangameren.nl/downloads/Ambassade.pdf>

2



*Dutch embassy Berlin by OMA*  
visual connection with the fernsehen  
toren. [http://www.oma.eu/projects/2003/  
netherlands-embassy/](http://www.oma.eu/projects/2003/netherlands-embassy/)

trajectory  
<http://www.oma.eu/projects/2003/netherlands-embassy/>

connection with the surrounding, seen  
from the trajectory  
<http://architizer.com/projects/netherlands-embassy-berlin/>

office block and L-shaped residential area  
[https://www.flickr.com/photos/25857257@  
N08/4582298934](https://www.flickr.com/photos/25857257@N08/4582298934)

3



*office Snøhetta, Oslo*  
 canteen/meeting place Snøhetta  
<http://www.nenyheter.no/25130>

office Snøhetta  
<http://snohetta.com/contact>

4



*Mart van Schijndel house Utrecht, by Mart van Schijndel*  
 collection pictures Mart van Schijndel  
 house <http://www.martvanschijndel.nl/nl/van-schijndelhuis>

5



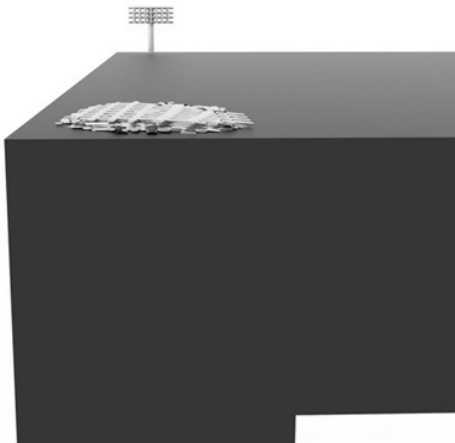
*Narrow house by bassam el okeily*  
<http://www.archdaily.com/87368/narrow-house-bassam-el-okeily/>

6



*chipboard ceiling in cafeteria by niji architects* <http://www.dezeen.com/2013/12/01/cafeteria-with-exposed-timber-structure-by-niji-architects/>  
*Holiday house fiscaviag*  
<http://openbuildings.com/buildings/fiscav-aig-the-hen-house-profile-535>

7



*Construct me.* droog design  
<http://studio.droog.com/studio/all/hardware-collection--construct-me/>

8



*Dybkær Church, Silkeborg, Denmark.* Architecture: *Regnbuen Arkitekter.*  
Image Henry Plummer, 2010. [http://www.archdaily.com/542503/light-matters-whiteness-in-nordic-countries/54006005c07a8003e1000097\\_light-matters-whiteness-in-nordic-countries\\_40-jpg/](http://www.archdaily.com/542503/light-matters-whiteness-in-nordic-countries/54006005c07a8003e1000097_light-matters-whiteness-in-nordic-countries_40-jpg/)

# literature

## Books

Besemusca, Emmeline and Verheul, Jaap. *Discovering the Dutch: On culture and society of the Netherlands*. Amsterdam: University Press, 2010.

Garret, Sam, Remy Chavannes and John Kroon (Ed.). *The Netherlands: practical guide for the foreigner and a mirror for the Dutch*. Amsterdam: Prometheus, 2001.

Koolhaas, Rem, Kayoko Ota, Duc Boorsma, François Chaslin and Ton van Zeeland. *The Dutch Embassy in Berlin by OMA/Rem Koolhaas*. Rotterdam: Nai Uitgevers, 2003.

Kuper, Marijke. *Mart van Schijndel: kleurrijk architect*. Rotterdam: NAI Uitgevers, 2003.

Lee, Sang. *Aesthetics of Sustainable Architecture*. Rotterdam: 010 Publishers, 2011.

## Articles

Anselmo, Francesco and Mardaljevic, John. "Vernacular windows." *Daylight and architecture magazine by Velux*, no. 13 (2015): 25-33.

Buchanan, Peter. "The big rethink part 5: Transcend and include the past." *Architectural review*. Accessed 11 January, 2014. <http://www.architectural-review.com/essays/the-big-rethink-part-5-transcend-and-include-the-past/8629373.article>

Edwards, Sarah. "Vernacular Architecture and the 21st Century." *Archdaily*. Accessed November 11, 2014. Retrieved from <http://www.archdaily.com/155224/vernacular-architecture-and-the-21st-century/>

Roede, Lars. "Raseringen av Kontraskjæret." *Om;bymuseet* volume 1, no. 56 (2011): 24-39.

Righton, Natalie. "Nederlandse diplomatie moet drastisch hervormen." *Volkscrant*. Accessed June 2, 2015. <http://www.volkscrant.nl/binnenland/nederlandse-diplomatieke-dienst-moet-drastisch-hervormen~a3449615/>

Schielke, Thomas. "Light Matters: Whiteness in Nordic Countries". *Archdaily*. Accessed August 29, 2015. <http://www.archdaily.com/?p=542503>

#### Websites

"Embassy Ethiopia / Bjarne Mastenbroek and Dick Van Gameren." *ArchDaily*. Accessed June 10, 2015. <http://www.archdaily.com/?p=198254>

"Nederlandse Ambassade Addis Abeba, Ethiopië." *Archined*. Accessed June 10, 2015. <http://www.archined.nl/oem/reportages/addis-abeba/addis-abeba.html>

Fiskum, Vidar. "PLANNING FOR THE FUTURE WATERFRONT TRANSFORMATION." Accessed March 25, 2015. <http://landskapsarkitektur.no/arrangement/foredragsmaterieel?id=228238&pid=NLA-Artikkel-Filer.Native-Inner-File-File&attach=1>

"Gebruik de Residentie." *Nederlandse ambassade in Oslo*. Accessed December 20, 2014. <http://noorwegen.nlabassade.org/producten-en-diensten/use-the-residence.html>

"Groei in het Noorden." *Nederlandse ambassade in Oslo*. Accessed December 20, 2014. <http://noorwegen.nlabassade.org/zaken-doen/groei-in-het-noorden.html>

"Het ambassade gebouw." *Nederlandse ambassade Oslo*. Accessed June 1, 2015. <http://noorwegen.nlabassade.org/organization/het-ambassadegebouw>

"Netherlands embassy, Germany, Berlin, 2003." *OMA*. Accessed June 12, 2015. <http://www.oma.eu/projects/2003/netherlands-embassy/>

"Modernisering Nederlandse diplomatie - een tijdloos vak op eigentijdse leest geschoeid." *Rijksoverheid*. Accessed April 4, 2015. <http://www.rijksoverheid.nl/documenten-en-publicaties/notas/2011/04/08/nota-modernisering-nederlandse-diplomatie.html>

"Toespraak van Prinses Máxima, 24 september 2007." *RVD*. Accessed 28 May, 2015. <https://www.koninklijkhuis.nl/nieuws/toespraken/2007/september/toespraak-van-prinses-maxima-24-september-2007/>

"van Schijndel huis Utrecht." *Mart van Schijndel*. Accessed June 10, 2015. <http://www.martvanschijndel.nl/nl/van-schijndelhuis>

"Solatube® 160 DS - Ø 25 cm." *Solatube*. Accessed June 1, 2015 <http://www.solatube.nl/producten/solatube-o-25-cm>

"Oslo harbor promenade." *White Architects*. Accessed March 25, 2015. <http://www.white.se/en/project/272-oslo-harbour-promenade>

#### Documentary

NPS. *Het Uur van de Wolf: Mission statements*. [http://www.npo.nl/het-uur-van-de-wolf-mission-statements/14-04-2013/NPS\\_1225216](http://www.npo.nl/het-uur-van-de-wolf-mission-statements/14-04-2013/NPS_1225216)



## references

1. Peter Buchanan, "The big rethink part 5: Transcend and include the past," *Architecture review*, accessed 11 January, 2014. <http://www.architectural-review.com/essays/the-big-rethink-part-5-transcend-and-include-the-past/8629373.article>
2. "Exchange". *Oxford dictionaries*, accessed April 20, 2015. <http://www.oxford-dictionaries.com/definition/english/exchange>
3. "Toespraak van Prinses Máxima, 24 september 2007," RVD, Accessed 28 mei, 2015, <https://www.koninklijkhuis.nl/nieuws/toespraken/2007/september/toespraak-van-prinses-maxima-24-september-2007/>
4. Emmeline Besemusca and Jaap Verheul, *Discovering the Dutch: On culture and society of the Netherlands* (Amsterdam: University Press, 2010), 12.
5. Sam Garret, Remy Chavannes, John Kroon (Ed.), *The Netherlands: practical guide for the foreigner and a mirror for the Dutch*, (Amsterdam: Prometheus, 2001), different pages.
6. Mark Kranenburg, "The political wing of the Polder Model" in *The Netherlands: practical guide for the foreigner and a mirror for the Dutch*, by Sam Garret, Remy Chavannes, John Kroon (Ed.) (Amsterdam : Prometheus, 2001), pag 39.
7. "Groei in het Noorden," *Nederlandse ambassade in Oslo*, accessed December 20, 2014, <http://noorwegen.nlambassade.org/zaken-doen/groei-in-het-noorden.html>.

8. "Het ambassade gebouw," Nederlandse ambassade Oslo, accessed, June 1, 2015. <http://noorwegen.nlambassade.org/organization/het-ambassadegebouw>
9. Emmeline Besemusca and Jaap Verheul, *Discovering the Dutch*, 11-14.
10. *Ibid.*, 33-34.
11. *Ibid.*, 11-14.
12. "Nederlandse Ambassade Addis Abeba, Ethiopië," Archined, accessed June 10, 2015. <http://www.archined.nl/oem/reportages/addis-abeba/addis-abeba.html>
13. *Ibid.*
14. "Embassy Ethiopia / Bjarne Mastenbroek and Dick Van Gameren," ArchDaily, accessed June 10, 2015. <http://www.archdaily.com/?p=198254>
15. "Nederlandse Ambassade Addis Abeba, Ethiopië."
16. Rem Koolhaas, Kayoko Ota, Duc Boorsma, François Chaslin and Ton van Zee-land, *The Dutch Embassy in Berlin* by OMA/ Rem Koolhaas, (Rotterdam: Nai Uitgevers, 2003), 23.
17. *Ibid.*
18. *Ibid.*
19. *Ibid.*
20. "Netherlands embassy, Germany, Berlin, 2003," OMA, accessed June 12, 2015. <http://www.oma.eu/projects/2003/netherlands-embassy/>
21. *Ibid.*
22. "Modernisering Nederlandse diplomatie - een tijdloos vak op eigentijdse leest geschoeid," Rijksoverheid, accessed April 4, 2015. <http://www.rijksoverheid.nl/documenten-en-publicaties/notas/2011/04/08/nota-modernisering-nederlandse-diplomatie.html>
23. *Ibid.*
24. *Ibid.*
25. Natalie Righton, "Nederlandse diplomatie moet drastisch hervormen," Volkskrant, accessed June 2, 2015. <http://www.volkskrant.nl/binnenland/nederlandse-diplomatieke-dienst-moet-draastisch-hervormen~a3449615/>
26. "Modernisering Nederlandse diplomatie - een tijdloos vak op eigentijdse leest geschoeid,"
27. Daniel Jauslin, "Landscape Aesthetics for Sustainable architecture" in *Aesthetics of Sustainable Architecture*, ed. San Lee (Rotterdam: 010 Publishers, 2011), 111-112.
28. *Ibid.*

29. Peter Buchanan, "The big rethink part 5: Transcend and include the past," *Architecture review*, accessed 11 January, 2014. <http://www.architectural-review.com/essays/the-big-rethink-part-5-transcend-and-include-the-past/8629373.article>
30. Ingerid Helsing Almaas, "Norwegian architecture?", *Arkitektur N*, accessed 23 January, 2014.
31. <http://www.architecturenorway.no/questions/identity/almaas-norwegian-arch/>
32. Sarah Edwards, "Vernacular Architecture and the 21st Century," *Archdaily*, accessed November 11, 2014. Retrieved from <http://www.archdaily.com/155224/vernacular-architecture-and-the-21st-century/>
33. Harald Røstvik, "The vernacular, the iconic and the fake" in *Aesthetics of Sustainable Architecture*, ed. San Lee (Rotterdam: 010 Publishers, 2011), 173-174.
34. Thomas Schielke, "Light Matters: Whiteness in Nordic Countries," *ArchDaily*, accessed August 29 2015. <http://www.archdaily.com/?p=542503>
35. City of Oslo Agency for Planning and Building Services. *The Urban Development of Oslo*. 2013
36. City of Oslo Agency for Planning and Building Services. *The Urban Development of Oslo*. 2013
37. City of Oslo Agency for Planning and Building Services. *The Urban Development of Oslo*. 2013
29. Peter Buchanan, "The big rethink part 5: Transcend and include the past," *Architecture review*, accessed 11 January, 2014. <http://www.architectural-review.com/essays/the-big-rethink-part-5-transcend-and-include-the-past/8629373.article>
30. Ingerid Helsing Almaas, "Norwegian architecture?", *Arkitektur N*, accessed 23 January, 2014.
31. <http://www.architecturenorway.no/questions/identity/almaas-norwegian-arch/>
32. Sarah Edwards, "Vernacular Architecture and the 21st Century," *Archdaily*, accessed November 11, 2014. Retrieved from <http://www.archdaily.com/155224/vernacular-architecture-and-the-21st-century/>
33. Harald Røstvik, "The vernacular, the iconic and the fake" in *Aesthetics of Sustainable Architecture*, ed. San Lee (Rotterdam: 010 Publishers, 2011), 173-174.
34. Thomas Schielke, "Light Matters: Whiteness in Nordic Countries," *ArchDaily*, accessed August 29 2015. <http://www.archdaily.com/?p=542503>
35. City of Oslo Agency for Planning and Building Services. *The Urban Development of Oslo*. 2013
36. *Ibid.*
37. *Ibid.*
38. Vidar Fiskum, "PLANNING FOR THE FUTURE WATERFRONT TRANSFORMATION," accessed March 25, 2015.

39. <http://landskapsarkitektur.no/arrangement/foredragsmateriell?i-id=228238&pid=NLA-Artikkel-Filer.Native-InnerFile-File&attach=1>
40. “Oslo harbor promenade,” White Architects, accessed March 25, 2015. <http://www.white.se/en/project/272-oslo-harbour-promenade>
41. City of Oslo Agency for Planning and Building Services. The Urban Development of Oslo. 2013
42. Lars Roede, “Raseringen av Kontraskjæret,” *Om;bymuseet* volume 1, no. 56 (2011): 24-39.
43. *Streets autumn winter summer Rosenkrantz’ gate (road in the north towards city center) 11370 6540 17190 Rådhuskaia (south of square in front) 11796 9270 19032 Rådhusgata (road parallel at location in north) 4986 3396 4602 Rådhusplassen (north of square in front) 12684 7014 30132 Akershustrada (waterfront promenade) - -*  
<http://gehlarchitects.com/blog/face-to-the-fjord-a-look-at-oslo-on-the-release-of-their-new-pspl/>
44. “Exchange”. Oxford dictionaries, accessed April 20, 2015. <http://www.oxford-dictionaries.com/definition/english/exchange>
45. Zumthor, Peter. *Atmospheres: Architectural Environments Surrounding Objects*. Basel: Birkhäuser, 2006.
46. “van Schijndel huis Utrecht,” Mart van Schijndel, accessed June 10, 2015. <http://www.martvanschijndel.nl/nl/van-schijndelhuis>
47. Marijke Kuper, Mart van Schijndel: kleurrijk architect (Rotterdam: NAI Uitgevers, 2003), 110.
48. Ibid.
49. Ibid.
50. “van Schijndel huis Utrecht”
51. Francesco Anselmo and John Mar-daljevic, “ Vernacular windows,” *Daylight and architecture* magazine by Velux, no. 13 (2015): 28.
52. Thomas Schielke, “Light Matters: Whiteness in Nordic Countries,” *ArchDaily*, accessed August 29 2015. <http://www.archdaily.com/?p=542503>
53. Ibid.
54. Ibid.
55. “ Solatube® 160 DS - Ø 25 cm,” Solatube, accessed June 1, 2015. <http://www.solatube.nl/producten/solatube-o-25-cm>

# images

All images are out of own work unless mentioned.

## Thesis

1| Dutch promotional gift: tapping water

2| tapping water

3| the current Dutch residence in Oslo  
<http://www.artemisia.no/arc/historisk/oslo/bygninger/gyldenloves.gate.51.html>

4| the current Dutch embassy in Oslo  
<http://sustainovate.com/>

5| first stock exchange in the world, Amsterdam 1611  
[http://www.isgeschiedenis.nl/nieuws/aandelenbeurs\\_in\\_amsterdam\\_oudste\\_ter\\_wereld/](http://www.isgeschiedenis.nl/nieuws/aandelenbeurs_in_amsterdam_oudste_ter_wereld/)

6| Cultural axis  
<http://www.e-architect.co.uk/norway/munch-museum>

7| Water promenade development design by white architects  
<http://www.white.se/en/project/272-oslo-harbour-promenade>

8| location in city center

9| Skansen  
[http://www.oslobilder.no/OMU/OB.F11837b?query=%22R%C3%A5dhusgata+34+Kontraskj%C3%A6ret%22&count=182&search\\_context=1&pos=93](http://www.oslobilder.no/OMU/OB.F11837b?query=%22R%C3%A5dhusgata+34+Kontraskj%C3%A6ret%22&count=182&search_context=1&pos=93)

10| Skansen and bus storage in front of Akershus  
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- 11l redesign park/not executed  
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- 12l Skansen terrace  
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- 31l multifunctional space, view towards stairs
- 32l consular area
- 33l offices
- 34l view towards the offices from the hallway downstairs
- 35l residence in model
- 36l hidden entrance
- 37l courtyard
- 38l residence seen from the embassy
- 39l embassy seen from the transport zone of the residence
- 40l transport zone
- 41l wardrobe block, second floor
- 42l kitchen block
- 43l living area on top

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47| junction foundation

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49| material palette embassy

50| color and material palette embassy

51| color and material palette residence

52| sketches details

53| saving of nails

54| Dutch nail

55| nails assembled

56| junctions panels

57| openings residence east facade

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