

PROJECT JOURNAL

ZWAAN VAN DER SCHEER

9 nov 2023

mentors:

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INTERIORS
BUILDINGS
CITIES

DELFT UNIVERSITY OF TECHNOLOGY
GRADUATION PROJECT MSC 3/4

5 examinations

- P1 preparation
informal exam
exhibition + presentation
conversation
- P2 moment of conception
brief analysis
establish condition
concept project with sections etc
formal, go-nogo
- P3 developing project
technology teacher
informal exam
- P4 resolve project
pass or not pass → at least 6?
- P5 how well have you passed the gear
final products
project book

an overview of the presentations P1 - P5 based on the introductory lecture

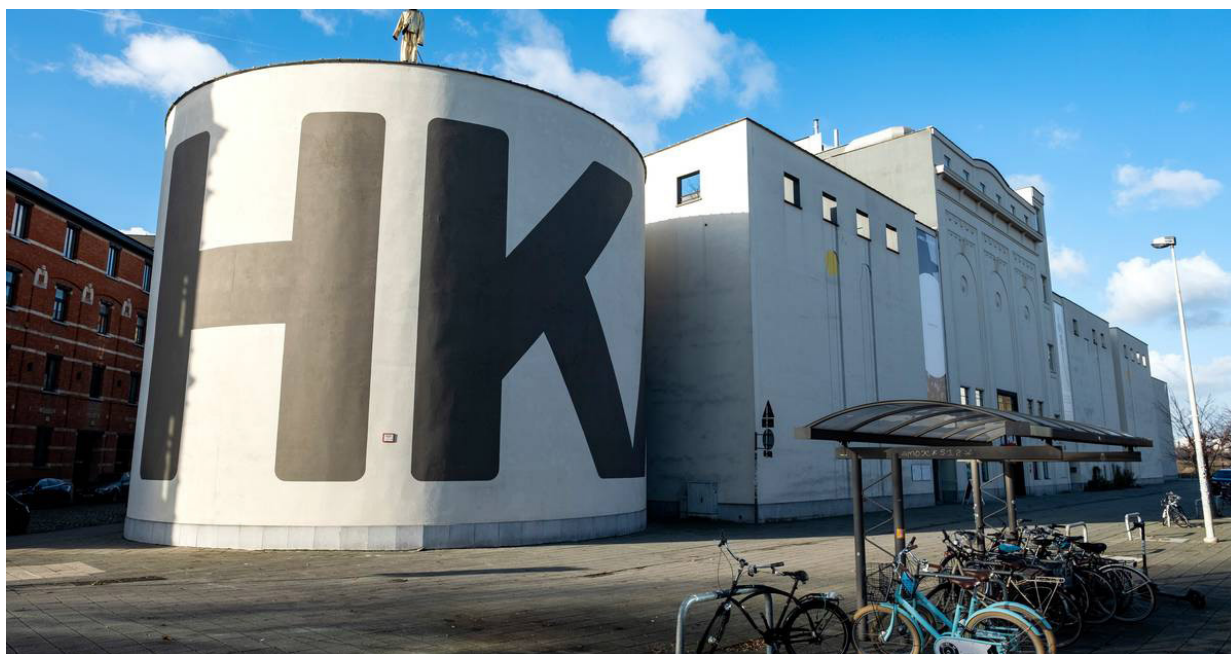
INTRODUCTION

This is the project journal for the graduation studio Interiors Buildings Cities. In this studio we will be designing a new building for the M HKA, the museum of contemporary art Antwerp.

During this year I will be keeping track of my research and process in this project journal to have as a reference for myself to look back on and the show next to my final design to support it's story.

During our graduation year we will have a couple of presentations, differencing in format and formality (image on the left). P2, P4 and P5 will be formal presentations in front of my three tutors and an external examiner, while P1 and P3 will be more informal in front of the other students.

This journal is sorted by the briefs we got and the presentations we have. The first two chapters will be sorted by week, while the other ones will also be chronological, but not week by week. In the appendix will be the literature and image sources that were used in this journal, as well as the surface table I made based on the brief provided to us.



1

Note: all the images, which were not made by me or my colleagues, are numbered and can be found in the sources chapter.

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1 POSITIONING THE MUSEUM

brief I: wk 1.1 - 1.4

These weeks we are working on our first brief: looking carefully. We will be recreating images of museums by modeling the spaces and taking pictures of those. We will be working on groups of 3 or 4 people. This assignment will make us look closely at the spaces we are recreating, while also forming a frame of reference for the our own museum designs later on.

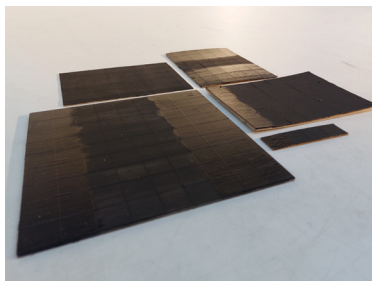
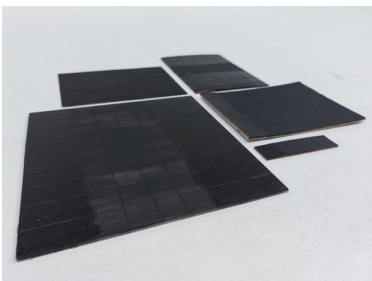
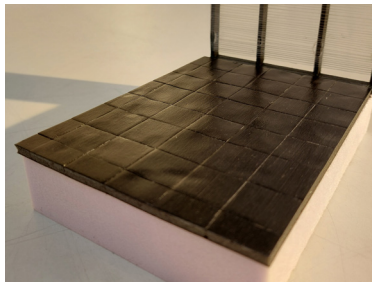
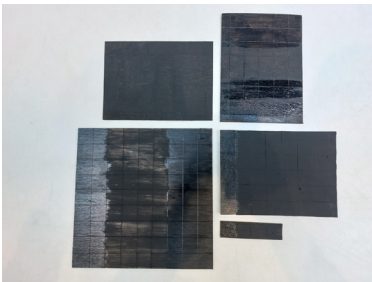
This chapter will be ordered chronologically and week by week, to show the process of the brief while also connecting it to a bigger framework of research. We have also been doing weekly readings and responding to those in groups, at the end of each week I have added my personal notes or responses to the readings.

WK 1.1

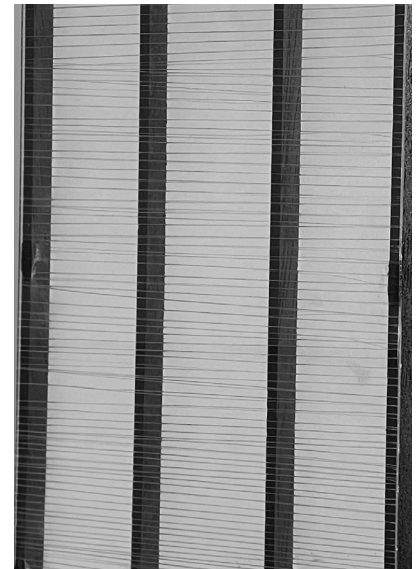
looking carefully



For the coming weeks I will be remaking a picture of the MASP by Lina Bo Bardi with Rafael Fernandes Trindade, Anna Kokot and René Damstra. We will be making a model and photographing it to recreate the image seen below.



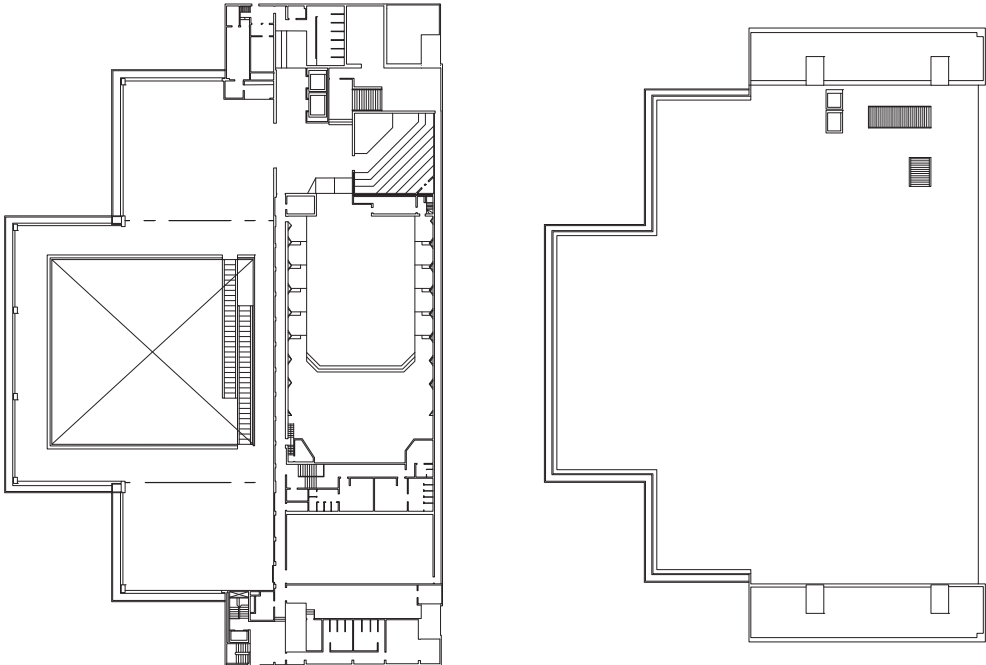
Testing some different floor options to recreate the rubber tiles. We decided to go with foamboard, which will be carved into square tiles and then varnished to create the shiny effect.



Engraving plexiglass with horizontal lines to recreate the blinds which can be seen on the right side of the original picture.

WK 1.1

looking carefully



plans of the MASP made by us

WK 1.1

response to Grayson Perry and Mark Pimlott

Response to the text Visibility, spectacle, theatricality and power: the problem of the museum by Mark Pimlott¹ and the lecture Beating the Bounds by Grayson Perry².

museum as a 'temple of art' > museum is the boundary of art:
everything inside = art (Perry)
vs
museum as a commercial institution (Pimlott)

In the lecture Beating the Bounds, Perry describes the bounds of art; where do the boundaries of art lay? He describes multiple rules that must be followed and multiple tests that must be sustained for something to be considered art. Although not all art falls within every 'bound', if something does, it is most definitely art. He admits the test isn't watertight.

Perry's lecture is less coherent than Pimlott's text. Partly because he is adding some dramatic effect and exaggerating (Marcel Duchamp - Urinal, Graham Fagen - Candy) for amusement. But because of this he goes into rants and on multiple accounts contradicts himself. [rant about photography, which is more of a personal vexation] and [contradiction: if art is too famous (like mona lisa) it is not art anymore, but if there is a queue then it is art]

Pimlott and Perry have different views on the role of modern museums. Pimlott describes the modern museum to be commercial institutions driven to that point by the neoliberal economy and creating a space for art which will mostly "serve the interest of those that drive and sustain the art market". Meanwhile, Perry, during the question round, describes the museum as a 'temple of art' serving the function of a definite boundary between what is art and what is not.

¹ Pimlott, M. (2021), 'Visibility, Spectacle, Theatricality and Power: the problem of the museum'.

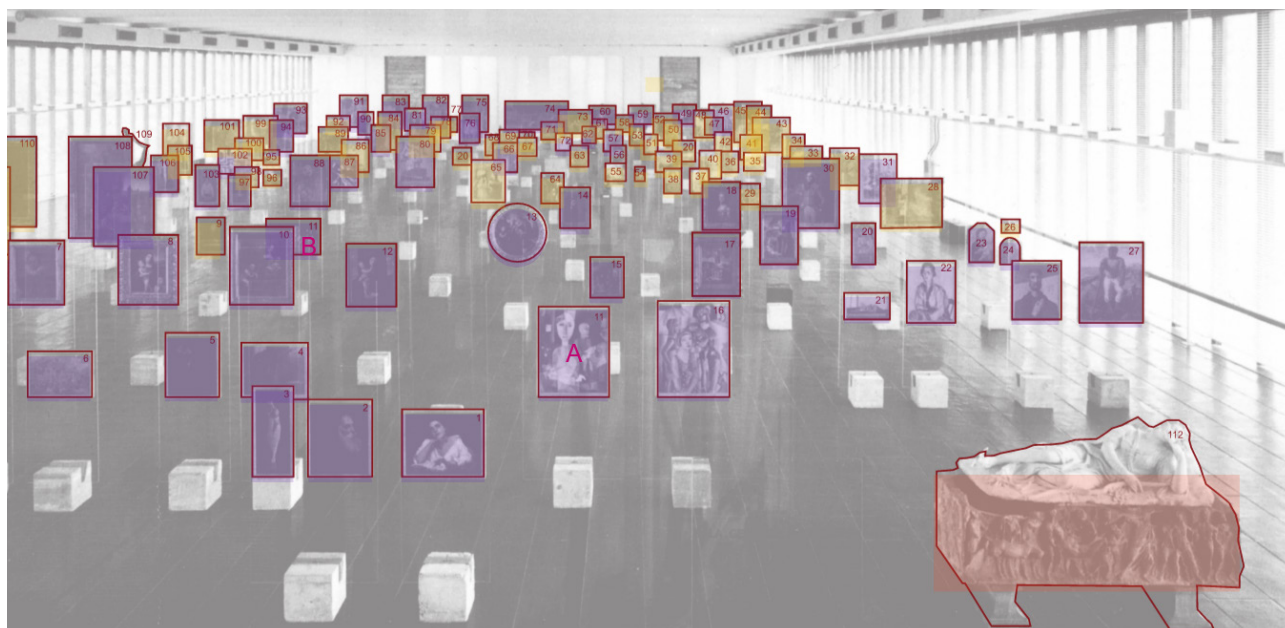
² Perry, G. (4 April 2020), 'Beating the Bounds', BBC Reith Lectures.

WK 1.2

looking carefully



test fragment of the model



List of artworks

For making the model we researched the paintings that were visible on the picture. We found out that in this exhibition space, all the paintings were placed with their middle axis at the same height on easels designed by Lina Bo Bardi herself. Also, the paintings were ‘randomly’ placed around the room, with no real order or hierarchy. This is uncommon for museums and shows the MASP’s ‘anti-museum’ characteristics.

Cinco moças de Guaratinguetá, 1930	90,5 x 70 x 2,5 cm	standard frame
Interior de indigentes, 1920	83,5 x 68,5 x 2 cm	standard frame
Sandro Botticelli, Virgin and Child	75,5Ø x 4 cm	no standard frame
Resurrection of Christ by Raphael Sanzio	56,5 x 47 x 1,2 cm	no standard frame
Pedro Alexandrino Peixe 1886	68,5 x 28,5 x 2,5 cm	?
Mr. Eugène Pertuiset The Lion Hunter	w171,5 x h150,5 cm	standard frame
Hieronymus Bosch	128 x 101 x 2 cm	no standard frame
Modigliani, Amedeo	81 x 53,5 x 2,5 cm	no standard frame
Niccolò Di Liberatore 1480-1500	73 x 39 x 2,6 cm	no standard frame
The Unequal Marriage 1525-30	54 x 89,5 x 0,5 cm	?
Renoir, Pink and Blue, Paris, 1881	74 x 119 cm	no standard frame
Giovanni Bellini Madonna Willys	75 x 58,5 x 4,5 cm	no standard frame
Maestro di San Martino alla Palma	67,5 x 40,5 x 5,5 cm	no standard frame
Pedro Américo Paz e concórdia 1895	43 x 60 x 2,5 cm	standard frame
Rosalvo Ribeiro Interior com duas crianças	60,4 x 49,5 x 2 cm	standard frame

“Once Pietro retired from the directorship of MASP, Lina’s easels were removed. Today Lina’s anti-museum, the ‘museum beyond the limits’, has been reduced to an inconceivable but all-too-intelligible simplicity in its full and partial enclosures; no longer complex, open and diverse, no longer the ‘marvelous exception to the wrong rules’ that today govern exhibition practices worldwide.”¹

1 Caffey, S. M., & Campagnol, G. (2015). Dis/Solution: Lina Bo Bardi’s Museu de Arte de São Paulo. *Journal of Conservation and Museum Studies*, 13(1), Art. 5. DOI: <http://doi.org/10.5334/jcms.1021221>

WK 1.2

de Pont and the van Abbe Museum

Notes on de Pont lecture:

where is the entrance?

no routing, a lot of open space

differently sized rooms

“it is a good thing the tiles were taken out, because they would be very distracting”

“smaller pieces of art should be placed in smaller rooms, otherwise they won't be visible”

why don't they use the flexible walls anymore? > very expensive

pont is a 'daylight museum' > problem for videos

exhibition changes 4-5 months > opportunity for the public to see the works multiple times

The two museums were notably very different museums. While at the Pont the lecturer said that the flooring tiles were taken out because they would be too distracting, at the van Abbe the architecture and curatorial interventions seemed to dominate over the art (image 3).



2



3

WK 1.2

response to Klonk and fDi

Response to the text *The Dilemma of the Modern Art Museum* by Charlotte Klonk¹ and the podcast episode *The Bilbao Effect #1* by fDi².

The text by Klonk mentions designs of modern museums being really similar to designs of shops (supermarkets and clothing stores). But this could also be the other way around, shops being designed more like museums (e.g. Prada Epicenter New York, Rem Koolhaas) putting everything on display. The first department stores were designed as an experience, not just to buy things, but also to come and just look at all the articles on display.

*"Not only did the Crystal Palace feature 300,000 panes of plate glass [...] but it was also an enormous showcase of consumer goods from around the world. Millions of people came here to window shop, gawping at marvels of contemporary design and technology that opened their eyes to what the new industrial world could offer. Ever since, [department stores] have had something of Paxton's Crystal Palace about them."*³

Klonk: 3 differentiations from traditional ('30s) modern museums:

- emphasizing the curatorial voice: more exhibitions > curator-as-hero
- museum connected to the outside world: windows
- no partition walls: artworks fill the whole rooms

The director of the Guggenheim states that the museum was built to have a global impact, not just local. For our own museum design, who do we want to reach? Locals? Antwerp inhabitants, Flemish people or Belgian people? Or foreigners?

The texts are about very different cultural events in cities, though they carry some similar characteristics and impacts. Documenta is a quinquennial event all throughout the city of Kassel. It changes (a lot of its) locations every time and is spread over multiple locations at once. The Guggenheim in Bilbao, on the other hand, is a museum in just one location. Documenta and the Guggenheim, however, both had a big impact on their respective cities. They attract visitors from all over the world and give an economic impuls to the cities.

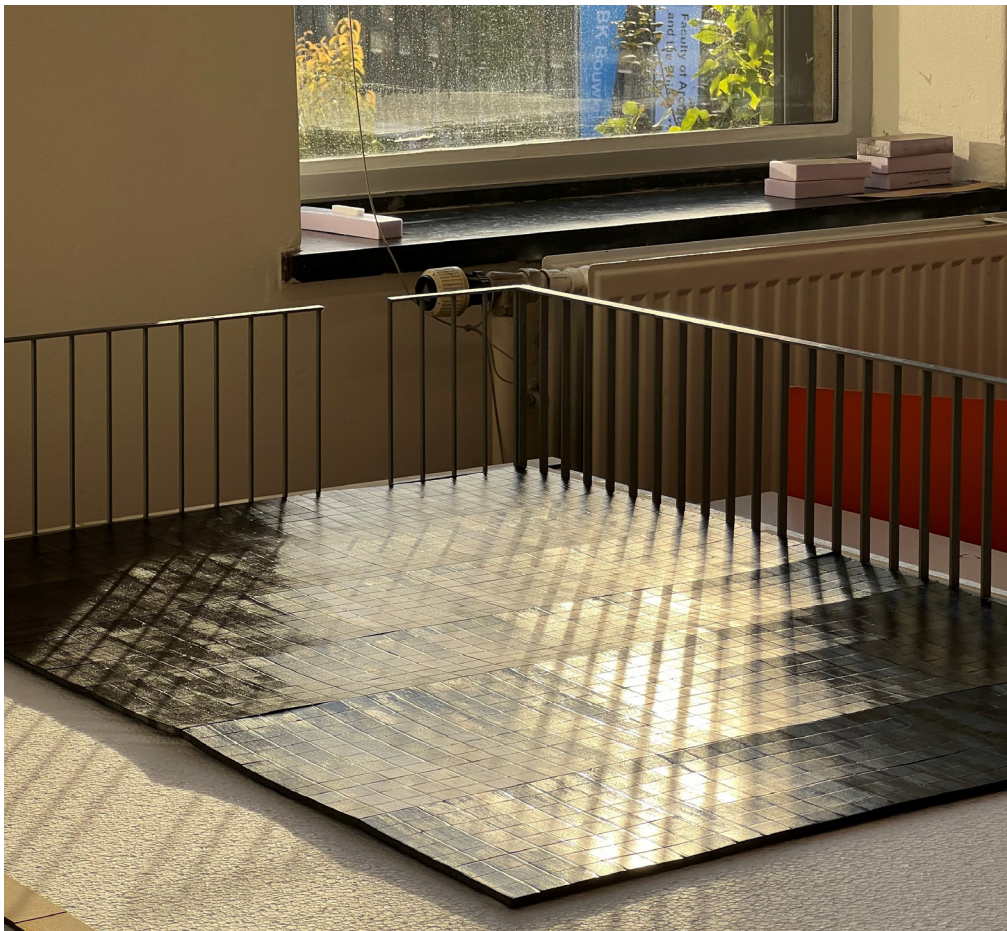
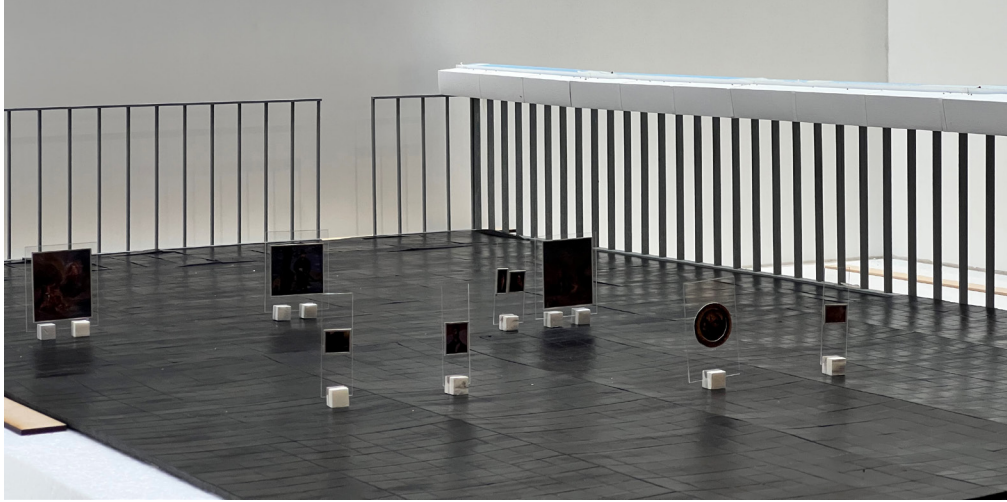
¹ Klonk, C. (2009). 'The Dilemma of the Modern Art Museum' in *Spaces of Experience: Art Gallery Interiors from 1800 to 2000*. New Haven; London: Yale University Press.

² *The Bilbao Effect #1: Bilbao, Spain* Guggenheim Bilbao's director general discusses the city's world-renowned transformation

³ Glancey, J. (2015, 15 march). *A History of the Department Store*. BBC Culture. <https://www.bbc.com/culture/be-spoke/story/20150326-a-history-of-the-department-store/index.html>

WK 1.3

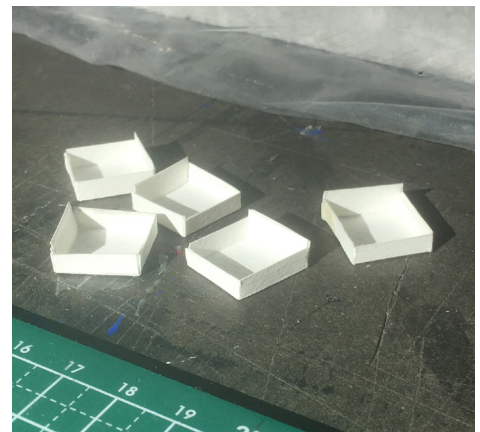
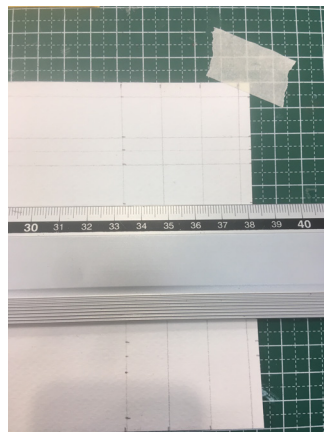
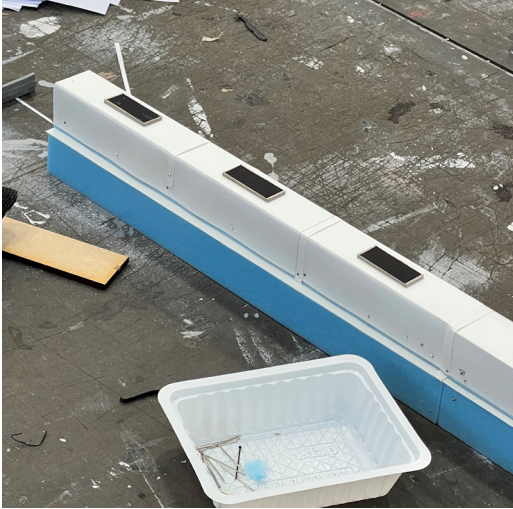
looking carefully



The floor of the MASP is made from black rubber tiles. Here we checked if the how the floor in the model would look in the right lighting

WK 1.3

looking carefully



The MASP has a lot of exposed structural and technical elements. Here we were figuring out how to recreate the lamps and ventilation ducts. These exposed elements tie into the idea of a (anti-)museum being didactic¹. Showing all of its elements and not hiding them behind lowered ceilings and raised floors.

"We didn't want the arts to be preserved by an old 18th century museum, the way we all know, but by a museum "school of life" where things should be represented by their classical content, in other words, by their true, persuasively, modern, eternal [character]... In this anti-museum, the history of painting, for instance, could instigate the same interest as a theatre spectacle and certainly the audience would be amused. ... If the intellectuals recognize that a new era opens out and that a revolution is about to happen, the revolution of culture, then the educational question will occupy a foreground position: and our museum—or counter-museum, as we like to call it—will be considered."¹

1 Moura, S. (2017). Alike, but not the Same: The Reenactment of Lina Bo Bardi's Display for the São Paulo Museum of Art (1968–2015). *Stedelijk Studies Journal* 5. DOI: 10.54533/StedStud.vol005.art04

2 Bardi, P.M. (1951), *Musées hors limites*. *Habitat*, no. 4: 5.

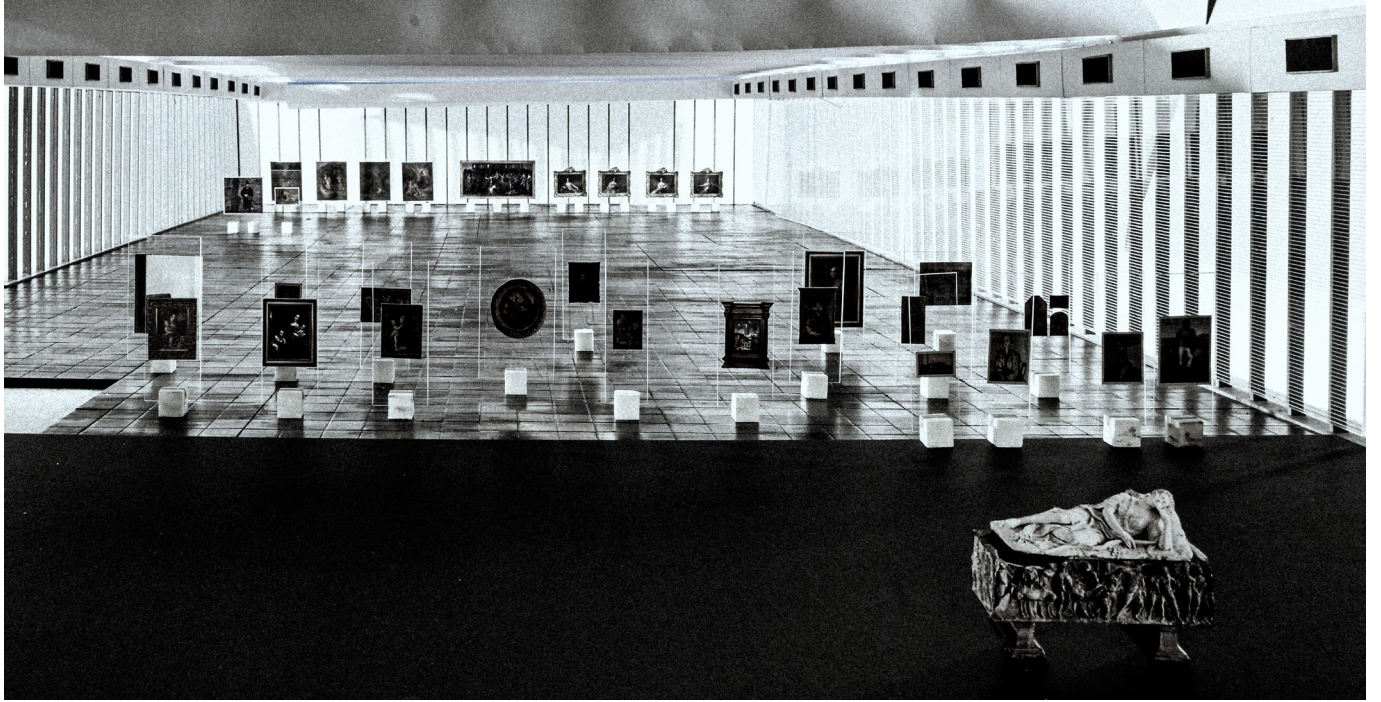
WK 1.3

looking carefully



WK 1.3

looking carefully



our first test showing our picture of the model and the original image

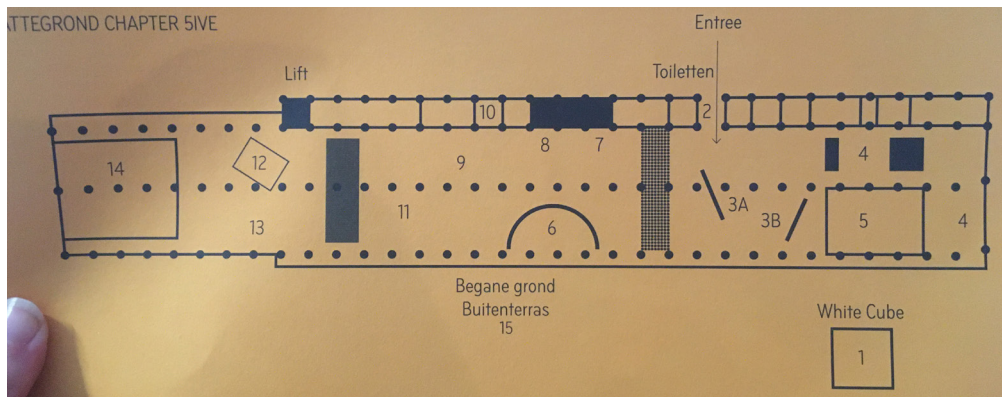
WK 1.3

het Hem

I visited het Hem in Amsterdam. Het Hem is an old industrial building renovated into a (temporary) exhibition space.



This screen where the projection was (probably) beamed from the back onto a textile so you didn't see where it was coming from. Behind the screen was a big black box which could be entered through a hidden door on the side.



the floorplan showing the temporary installations placed onto the big, open hall.



The 'White Cube' indicated on the floorplan:

- dimly lit room without windows
- not actually white, purple-ish walls with a black floor
- etchings by Rembrandt were shown so they had to be kept in very specific conditions and guarded full-time, which the big hall couldn't offer.

WK 1.3

Stedelijk Museum

The Stedelijk Museum in Amsterdam received a review by Janneke Wesseling on the 28th of september in the NRC¹:

*"Once again, there is a focus on political and societal developments and on work by female and non-western artists. But it is a mixed bag of art works whose connection, content wise or visual, can not be understood."*²

Wesseling is critical about the stance the museum has taken on diversity. According to her the art is now solely there to show the histories which have been underexposed and thereby losing its freedom of just being 'art'.

How big of a role should diversity and inclusiveness play in a museum?

Should the art be shown as 'just art' or should it be used to show the different histories and emphasise the role of minorities in the art world?

In what order should the art be displayed? Chronologically? Thematically? By nationality? By gender? By race?

1 Wesseling, J. (2022, 28 september). Propagandistisch Stedelijk wil zo veel, dat de kunst de vrijheid ontnemt [translation: propagandistic Stedelijk wants so much, that the art takes away the freedom]. NRC Handelsblad.

2 Translation from Dutch: "Opnieuw is er de focus op politieke en maatschappelijke ontwikkelingen en op werk van vrouwelijke en niet-westerse kunstenaars. Maar het is een allegaartje van kunstwerken waarvan de samenhang inhoudelijk noch visueel te begrijpen is."

Recensie Vaste collectie

Yesterday Today collectiepresentatie 1880 – 1950, Stedelijk Museum, Amsterdam, info: stedelijk.nl

●○○○



FOTO GERT JAN VAN ROOI

Zaaiopstelling 'Yesterday Today', collectiepresentatie 1880 -1950 in het Stedelijk Museum Amsterdam.



FOTO GERT JAN VAN ROOI

Picasso en Matisse als voorbeelden van orientalisme in de collectiepresentatie in het Stedelijk Museum Amsterdam.

Propagandistisch Stedelijk wil zo veel, dat kunst vrijheid verliest

RECENSIE VASTE COLLECTIE

De nieuwe collectiepresentatie 1880 - 1950 van het Stedelijk Museum Amsterdam maakt kunst ondergeschikt aan het brengen van de juiste boodschap. Dat maakt de tentoonstelling tot een saai, nietszeggend geheel.

Door onze medewerker **Janneke Wesseling**

Het Stedelijk Museum Amsterdam wil zichzelf opnieuw uitvinden en weer aansluiting vinden bij actuele ontwikkelingen in de kunst en het kunstdebat. Onder het directeurschap van Ren Wolfs zijn diverse initiatieven en postkomaan per- spectief de belangrijkste pijlers van het tentoonstellings- en verzamelbeleid. Steeds benadrukt Wolfs dat er niet één kunstgeschiedenis is, maar veel verschillende geschiednissen en dat hij recht wil doen aan perspectieven die tot voor kort in het Stedelijk onderbelicht zijn gebleven, zoals kunst van vrouwen en van niet-westerse kunstenaars.

day, van 1880 tot 1950, compleet. Eerder openden *Tomorrow is a Different Day*, met kunst en design van 1980 tot nu en *Everyday, Someday and Other Stories*, van 1950 tot 1980. In de twee eerdere deelpresentaties worden de verwachtingen op verschillende momenten in de tentoonstelling waargemaakt. In de zaal met hedendaagse werken van El Anatsui, Sigart Polke, Sheila Hicks en Willem de Rooij, in *Tomorrow is a Different Day*, komen de verschillende perspectieven bij elkaar. Dit ensemble staat als een huis. Hetzelfde geldt voor de combinatie van de sculpturen van Magdalena Abakanowicz en Lee Bontecou en de zaal met futuristische en utopische meubelontwerpen in *Everyday, Someday and Other Stories*.

kunstwerken waar van de samenhang in het beeld niet zo duidelijk is te begrijpen is. In de eerste zaal bijvoorbeeld hangen schilderijen van Kraskas door elkaar, van de negentiende-eeuwse impressonist Breithner en de modernistische stijl schilder Bart van der Leek tot aan *action painter* Jackson Pollock. Deze schilderijen hebben niet dat ze, zo blijkt uit de zaaltelst, akomstig zijn uit de verzamelingen van vrouwelijke collectieuren. Over de achtergrond van deze verzamelingen van vrouwen wordt vrijwel niets medegedeeld, dus het is een raadsel wat hiermee wordt beoogd. Dit vrouwen ook goed kunnen kijken of op de hoogte waren van ontwikkelingen in de kunst? Over de genoemde kunst zegt dit allemaal niets.

Et is zo is het niet de hele presentatie. Om te begrijpen wa om objecten bij elkaar zijn opgesteld moet eerst de toelichting worden gelezen en vervolgens is de toelichting te op te verduidelijken, laat staan uit te diepen. Bij het onderwerp 'Miasa en Macht' hangt een schilderij met half-dierlijke, half-menselijke monstervers van de surrealist Max Ernst naast een cartoon werk van George Grosz van een roetige mensennassa die wordt opgehist door een volksmenor met een hakenkruis op zijn stroplads. Tussen de twee schilderijen is geen enkele synergie. Over Grosz en Ernst wordt slechts meegedeeld dat zij met afgaven keken naar het opkomende fascisme en militarisme in Duitsland.

Picasso als orientalist

Bij het thema 'Orientalisme' wordt verwezen naar de kritische cultuurstudie van Edward Said. Volgens Said is het Europese perspectief op de Oriënt de uitkomst van een tendenteuze tegenstelling tussen de westerse cultuur als zijnde rationeel en vooruitstrevend en de oosterse cultuur als sensueel en primitief. Het remonvouw, dat begin 20e eeuw populair was, zou Said's theorie illustreren. Je zou *Odalisques* van Matisse, op deze manier kunnen interpreteren. Maar het is wel heel vreemd zocht om *Femme nue devant le jardin* van Picasso - die trouwens zijn leven lang hielden van de Oriënt - te koppelen aan de Oriënt. Het is een schilderij dat bovendat uit 1956 dateert.

Iets te zeggen over de werkelijkheid waarin we leven. Minstens even belangrijk is dat ze ook altijd gaan over zichzelf als kunstwerk en over kunst in bredere zin, bijvoorbeeld over de artistieke positie die het werk in willen nemen en welke bijk het van de beschouwer verlangt. Een kunstwerk gaat altijd over beeld, over visuele rit, en over een esthetische ervaring, esthetisch in de zin van waarneming van de wereld, een bepaalde blik daarop. Dat brengt met zich mee dat een concreet beekems of boodschap van het kunstwerk wordt opgeschoort, en dat het kunstwerk niet bruikbaar of toepasbaar is als propaganda. Er zijn altijd meer interpretaties mogelijk en de beschouwer wordt aangezet tot reflectie op de eigen positie jegens een bepaald onderwerp.

Precies deze vrijheid, die vrijheid om een kunstwerk in artistieke en inhoudelijke zin te waarderen en te bekijken, een vrijheid die essentieel is voor de kunst en voor onze omgang ermee, wordt door het propagandistische karakter van *Yesterday Today* aan de beschouwer onthouden.

WK 1.3

response English and Barat and Thinking Allowed

Response to the text Blackness at MoMA by Darby English and Charlotte Barat¹ and the podcast episode Culture and Privilege by Thinking Allowed².

MoMA's first press release, issued in August 1929 was as followed:

"The value of all contemporary art is debatable and much of it is certainly transitory, however important it may seem and be to us at present"

"Barr openly acknowledged the fallibility of the Museum's acquisition choices; MoMA "may often guess wrong in its acquisitions," he wrote in a 1942 catalogue. "When it acquires a dozen recent paintings it will be lucky if in ten years three will still seem worth looking at, if in twenty years only one should survive"

This brings up relevant questions about the consequences this carries for modern art museums. How to deal with the possibility of irrelevance of the acquired art? What is 'canon'? When to decide to 'throw' something away? Will the storage just keep growing and growing? Will every museum just become a big storage space with a small exhibition space added to it? Museums are by nature exclusive. Who chooses what should be excluded? Who are actually excluded?

How to deal with diversity in a museum? Should there be a separate wing for black or female artists or should they be mixed in with the (mostly white, male) artists that are already there (colourblind approach)?

English and Barat both work at MoMA, so their text sometimes comes off as a bit biased. They do mention times when MoMA has been on the wrong side of the debate about blackness in the modern art museums. But every time they mention one of those incidents, they immediately follow it up with an explanation why and followed by something MoMA has done right shortly after or an example of what a different museum had done at the same time, which was even worse.

The title of the book by Orian Brook 'Culture is bad for you'. They mention in the beginning that the title of the book feels counterintuitive. They bust some myths about why culture should be good for you and they explain some negative sides of the art world, but they never really explain (in this podcast) why culture is actually bad for you. The art world could be bad for people though, but that doesn't mean all culture is.

Both the text and the podcast are questioning what is art or culture and what should be shown in a museum. People thinking that the current (white, male) artists shown in a museum are the best artists, don't question the privileges of some artists over others and the sexist and racist history that has denied many artists their chance of ever being shown in a museum. Taking the 'colourblind' approach when deciding what to show in a museum, means not acknowledging what has been happening for many years and what still is happening now, allowing privileged people to be privileged. Whether a wing solely for black artists in the MoMA or an exposition ordered by the gender of the collector in the Stedelijk³ would be the best options, is hard to say. But museums should at least be conscious of the choice they make and the repercussions that choice might have in the cultural world.

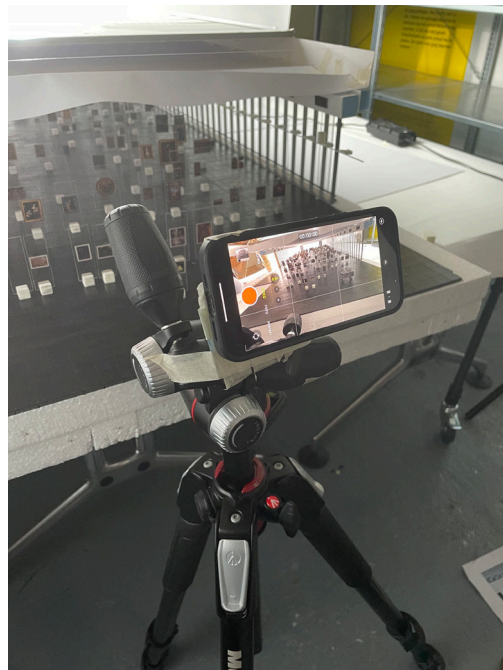
¹ English, B. and Barat, C. (2019), 'Blackness at MoMA: A Legacy of Deficiency', in Among Others: Blackness at MoMA, New York: MoMA.

² 'Culture and Privilege', (8 September 2021). BBC.

³ Wesseling, J. (2022, 28 september). Propagandistisch Stedelijk wil zo veel, dat de kunst de vrijheid ontnemt [translation: propagandistic Stedelijk wants so much, that the art takes away the freedom]. NRC Handelsblad.

WK 1.4

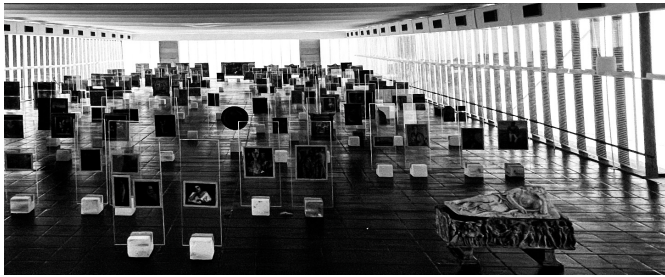
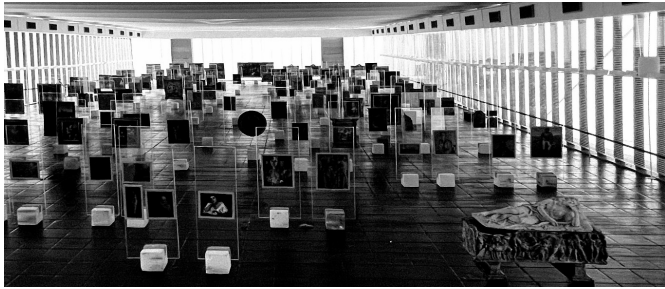
looking carefully



When testing the angle of the lens, we found out that we didn't make the model big enough. We realised that the original picture was actually taken with a very wide-angle lens. This is why we can't really recreate the image and will have to shift the perspective of the model. We placed the paintings in different places than they would actually have been to recreate the wide-angle effect. Afterwards we also tried out different filter edits on the picture to get the right lighting, contrast, etc.

WK 1.4

looking carefully



WK 1.4

looking carefully



final image of the model



original picture of the MASP

2 DESIGNING OF A GALLERY SPACE

brief II: wk 1.5 - 1.8

For the second assignment we were asked to individually design a gallery space or spaces for an assigned artist of the M HKA. These spaces could exist independently and did not need to be located within the M HKA or any existing building. This assignment presented the first opportunity for me to translate the research we had done into an actual design

I designed a space for Taus Makhacheva, a contemporary Dagestani artist who explores themes of cultural identity, tradition, and the intersection between art and everyday life. Her work often incorporates performance, video, installation, and photography, challenging conventional notions of representation and engaging with social and political issues. Makhacheva's art invites viewers to question preconceived ideas, starting a dialogue and reflection on cultural diversity and the complexities of our globalized world.

WK 1.5

first thoughts

All of us would be designing an exhibition room or a sequence of rooms for one of the artists that is being displayed in the M HKA. I will be designing for Taus Makhacheva.

A big part of Makhacheva's work is being critical about the way museums work. What work they exhibit, store and buy. I chose a couple of works which relate to this topic and I want to display this work in a way which emphasizes it surrounding of being in a museum and being part of it's story itself. I wanted to find a way in my design by which people would more actively realise that they were actually standing in the very space Makhacheva is critiquing.

"With her works Makhacheva also asks critical questions over the workings of art and museums and the art history. How are collections stored, how are collections composed, to what extent is a museum a reflection of the values of the past and the present, what can be seen as useable art?"¹



4

Tightrope by Taus Makhacheva
- video of tightrope walker and depot
- artworks represent the history of Dagestan selected, in this case, by the tightrope walker
- looks risky for paintings > museums guarantee the survival of artworks, but they apply a hierarchy



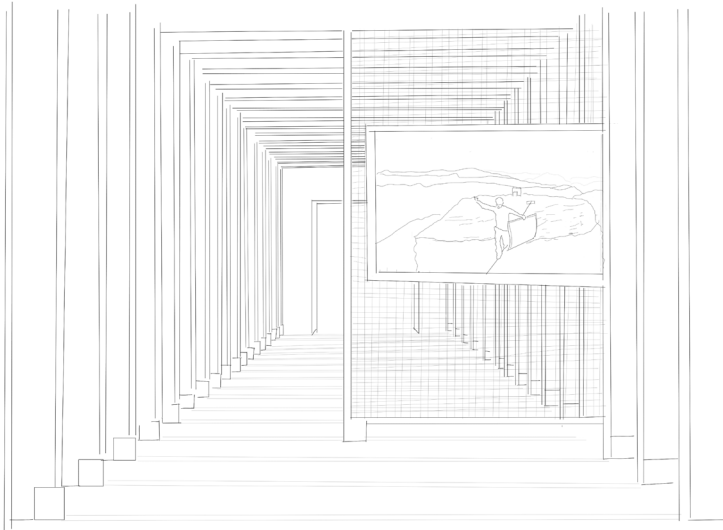
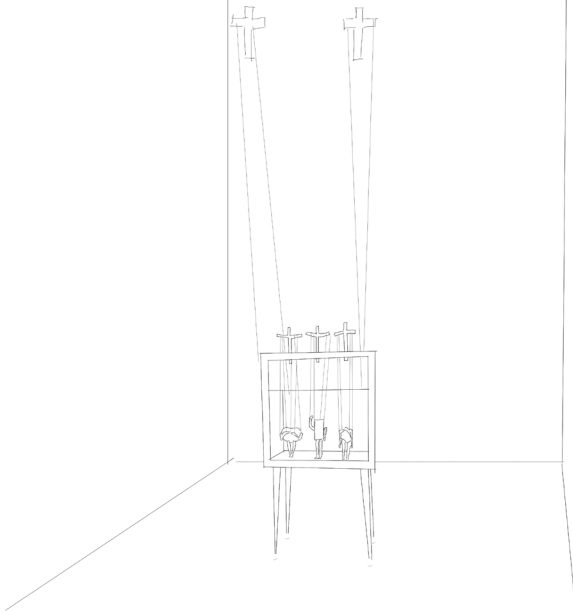
5

Way of an Object by Taus Makhacheva
- object's inability to speak > brought to life
- who is doing the talking?
- plea for a more active role of objects in a museum

¹ M HKA (n.d.). Taus Makhacheva. M HKA Ensembles. <https://ensembles.org/actors/taus-makhacheva>

WK 1.5

first thoughts



room 1

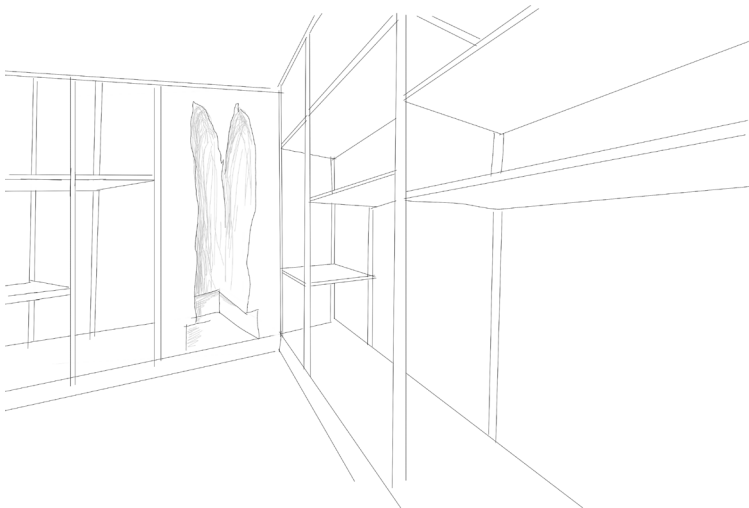
- depot-like room
- video 'tightrope' shown on extracted depot screen
- extractable screens on both sides
- super Taus shown in multiple images?

room 2

- artworks hanging from ceiling like marionettes (just like in 'why of an object')

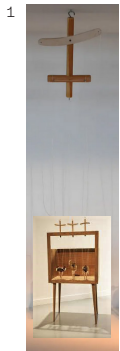
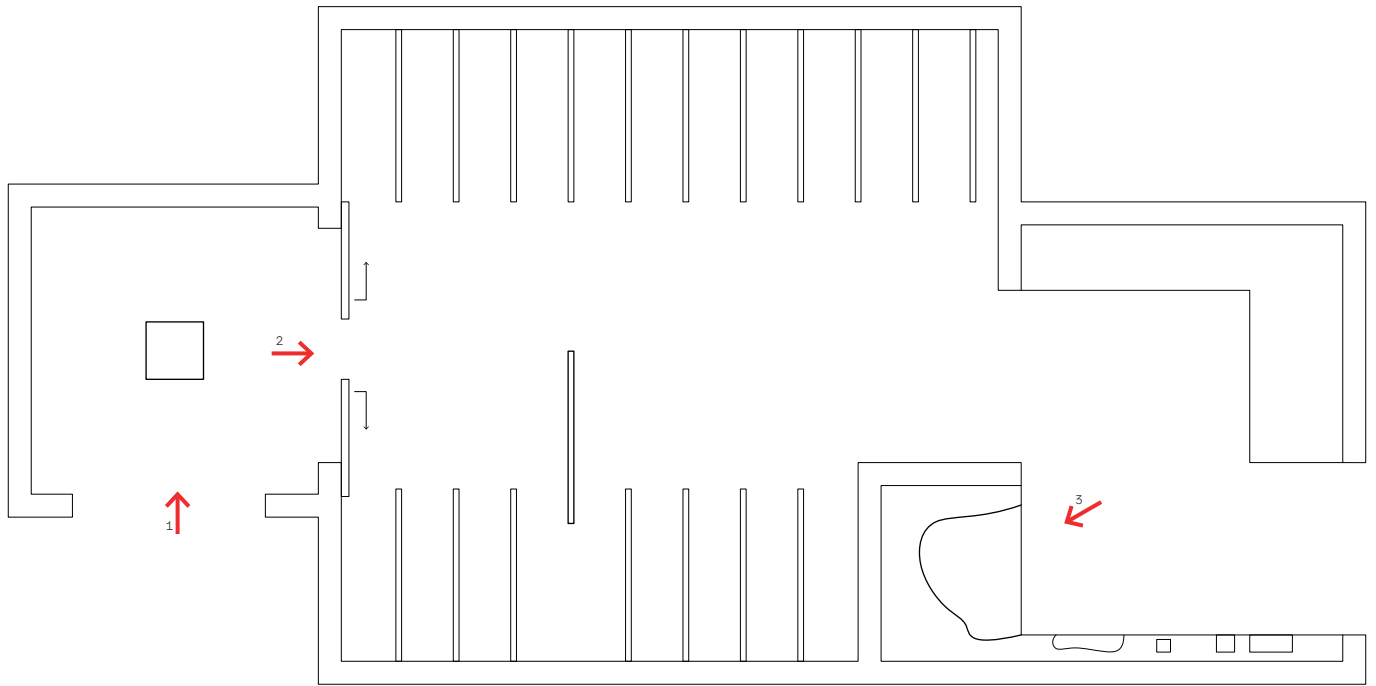
room 3

- spaces in wall for artworks
- empty space for the rock of supertaus
- ends with walking up podium for statue of supertaus



WK 1.5

first thoughts



During the research seminar, I was in the group that debated whether the M HKA should be a regional or an international museum. The debate brought up a lot of positive sides to the museum being regional instead of international which I did not expect.

The M HKA, however, will be branded as the Flemish museum of contemporary art, 'protecting the Flemish culture'. This goal of protecting the Flemish culture is also the motivation of some right-wing political groups in Flanders,¹ so 'protecting the Flemish culture' has some negative connotations.

- Regional
- preserve art → don't lose local art
 - focused on local community
 - ↳ local artists
 - ↳ local public
 - there are enough international modern museums to go to
 - more personal engagement
 - ↳ curator ↔ artist
 - people can relate to local art and topics which aren't shown anywhere else & local relevance
 - diversity → diverse artists which wouldn't be shown internationally
 - ↳ ~~intern~~ always same 'diverse' artists

¹ For example: Vlaams Belang, a conservative, right-wing political party, and Schild & Vrienden, a far-right, conservative, Flemish nationalist youth movement, both use protecting the 'Flemish identity' as their main motivation.

WK 1.6

first thoughts

After presenting my first sketches, I, like most of the students, realised I designed much too intrusive spaces. My design was overshadowing the works I was displaying, thereby appropriating Taus Makhacheva's art. I needed to adjust my design so that it could accommodate the artworks in a less intrusive way, while still resonating the ideas I had for the first design.

I looked at some past exhibitions of Makhacheva's work to see in which ways the work had already been displayed. I found *Way of an Object* displayed in front of a dark red wall and *Tightrope* in a very dark room. I used these as inspiration for my spaces and added a more typical 'white cube' space for the Dagestani art works to be displayed in.



6

pictures of the replica's of Dagestani art works and of the *Way of an Object* in front of a dark red wall

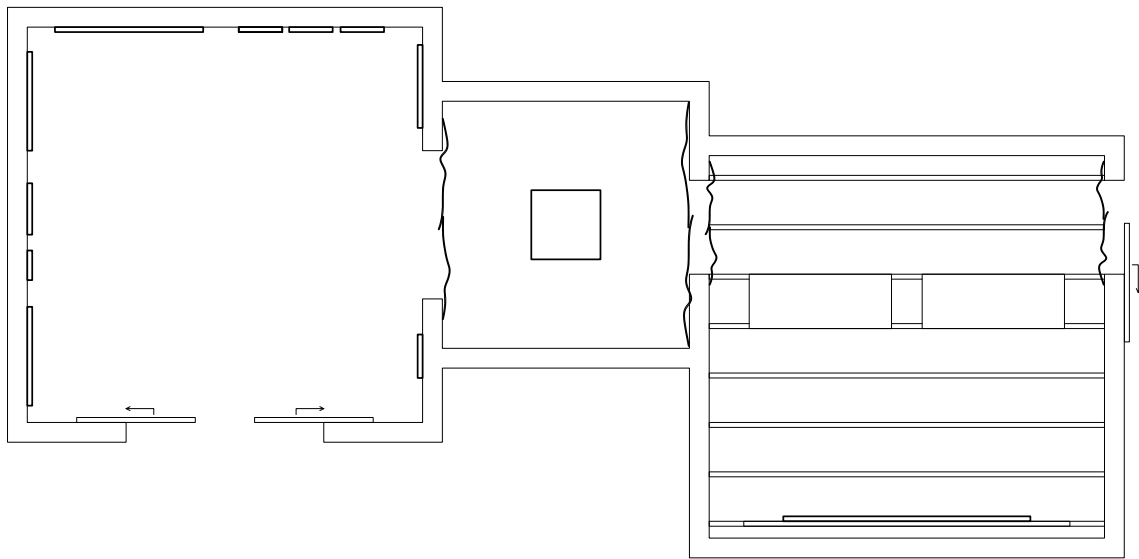


7

inspiration for the dark room showing *Tightrope*

WK 1.6

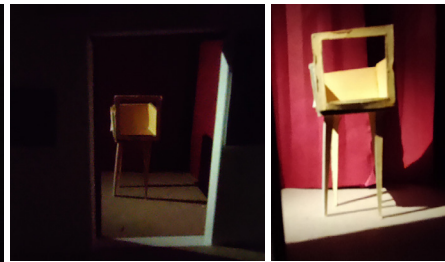
first thoughts



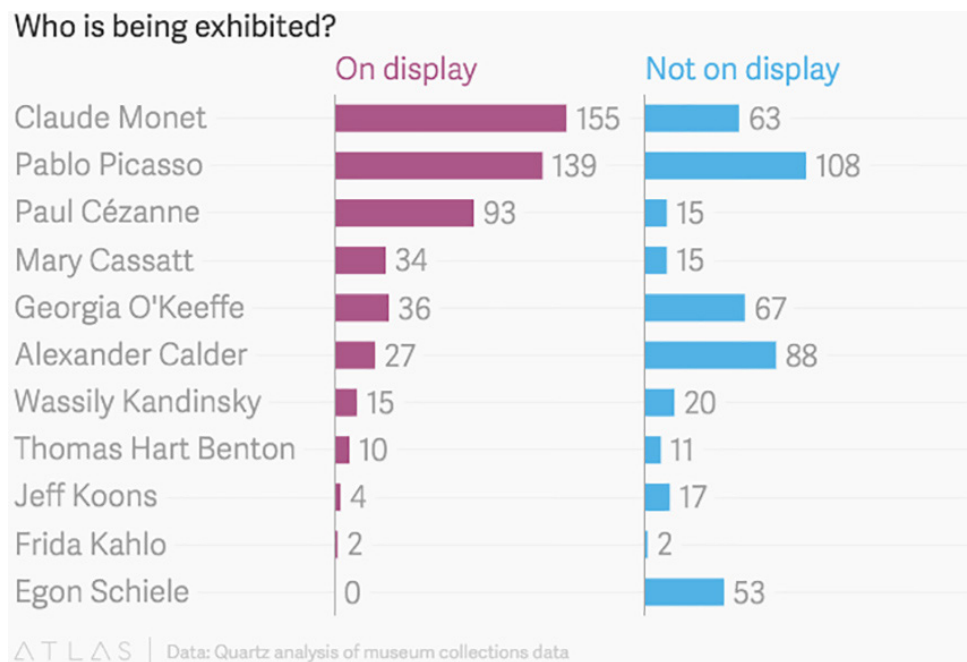
- 1 Dagestani art works shown in a 'white cube' space
- 2 Way of an Object shown in a stage setting with a dark red wall and a spotlight
- 3 Tightrope shown on a storage rack in a dark space with rails resembling a depot

WK 1.6

first thoughts



picture taken of the first sketch model: testing the spotlight on Way of an Object and my phone screen as a screen showing Tightrope



The artist Taus Makhacheva is creating a lot of her art around the topic of museum storage and display.

Tightrope shows (curated) artworks on the history of Dagestan being walked over to a depot on the other side of a ravine. This brings up the questions of which works were chosen? Will they always be kept? Will they be moved around? Will they be damaged?

Way of an Object is showing art as puppets being moved and controlled, but by whom? It is advocating for a more active role for objects in a museum, they put on a show.

I found this graph shown above of how many works, by some famous artists, are actually on display.¹ This shows a big amount of, probably very expensive, art not even being on display somewhere. Who owns this art? Who gets to look at it? Who gets to decide which art is displayed?

¹ Kordic, A. (2016, 31 january). Treasures We Never See - How Much Art is Hidden Away in Museums Storage? Widewalls. <https://www.widewalls.ch/magazine/art-storage-museum-collections>

WK 1.7

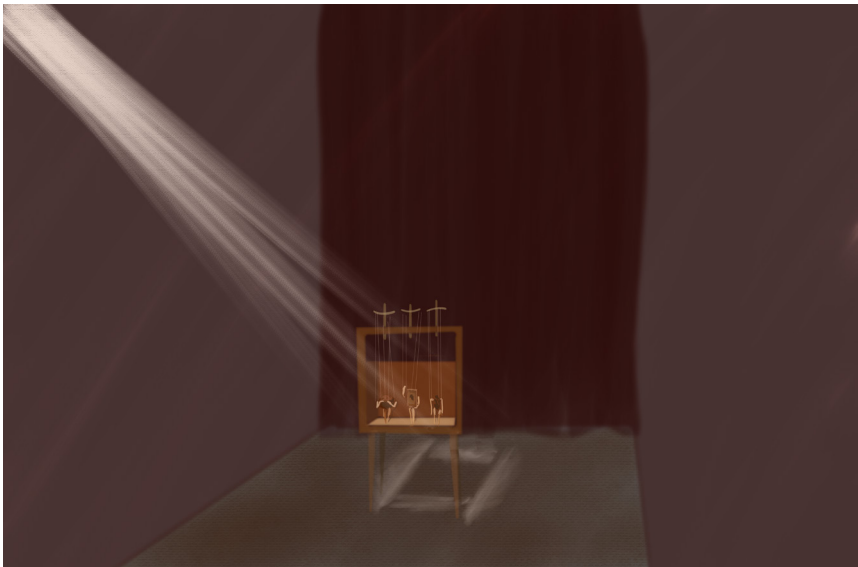
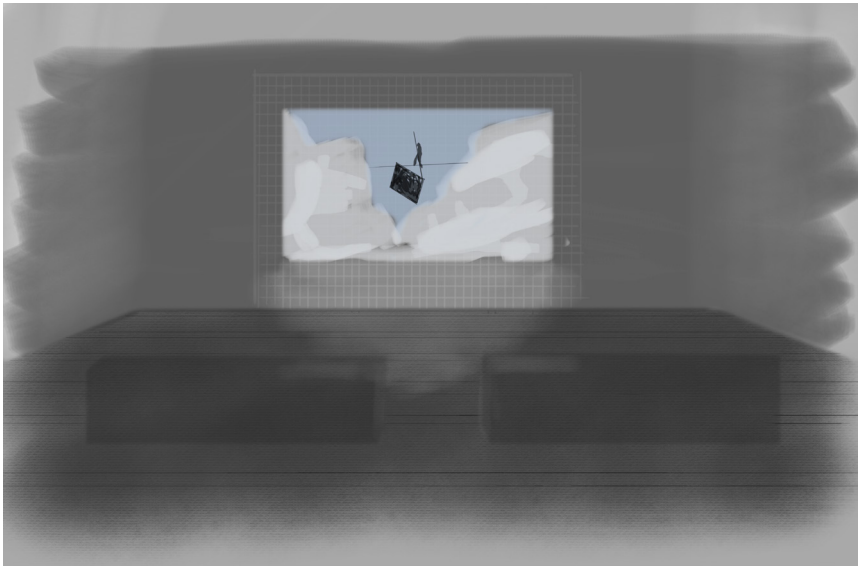
first thoughts



a collage of exhibitions

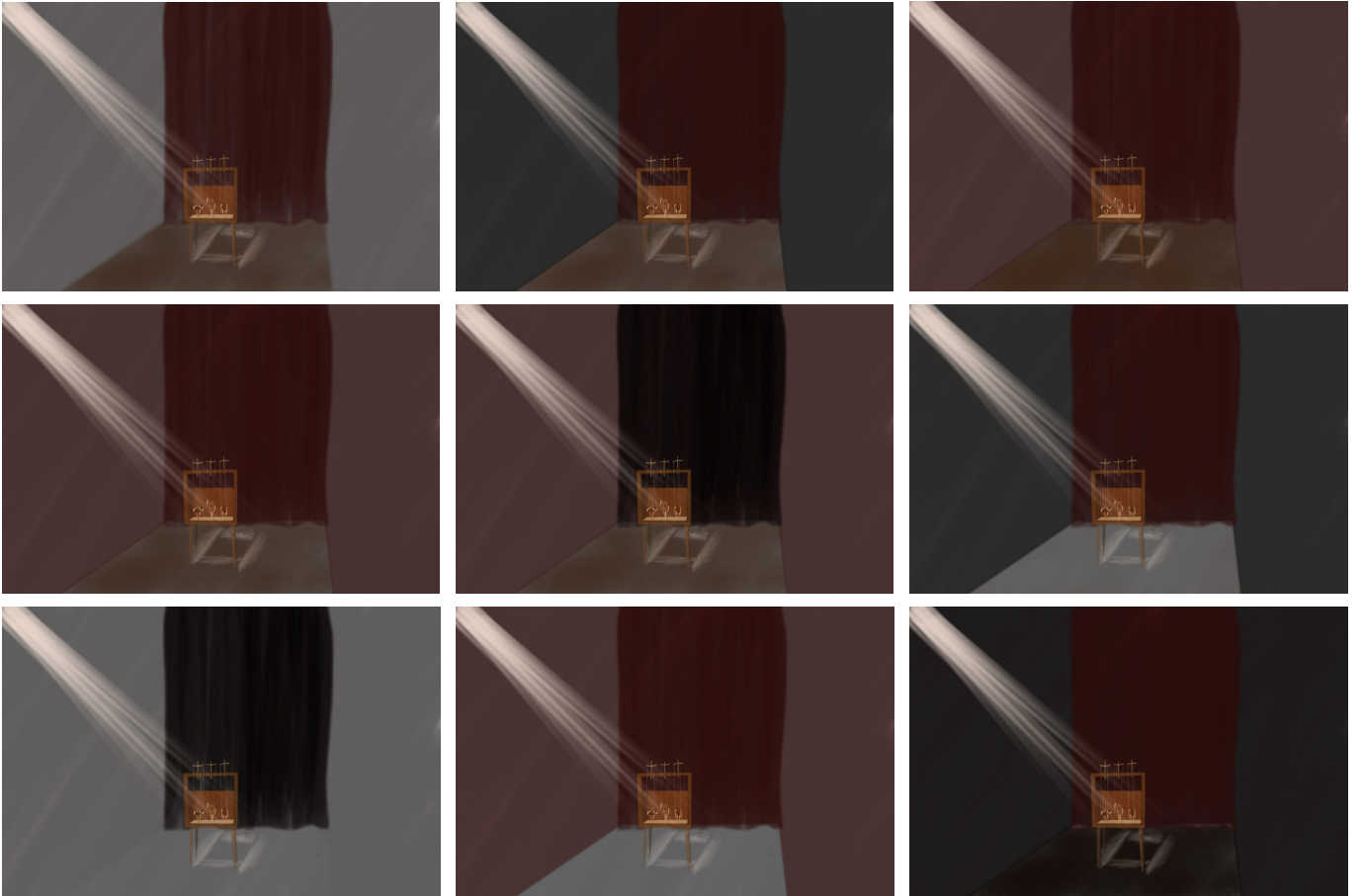
WK 1.7

first thoughts



WK 1.7

first thoughts



tests for the colours of the 'theatre' space

WK 1.7

first thoughts



picture tests

WK 1.8

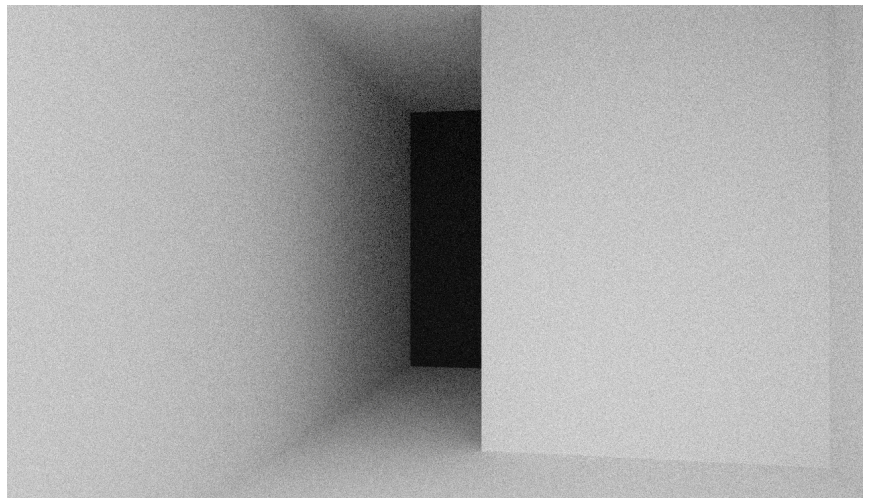
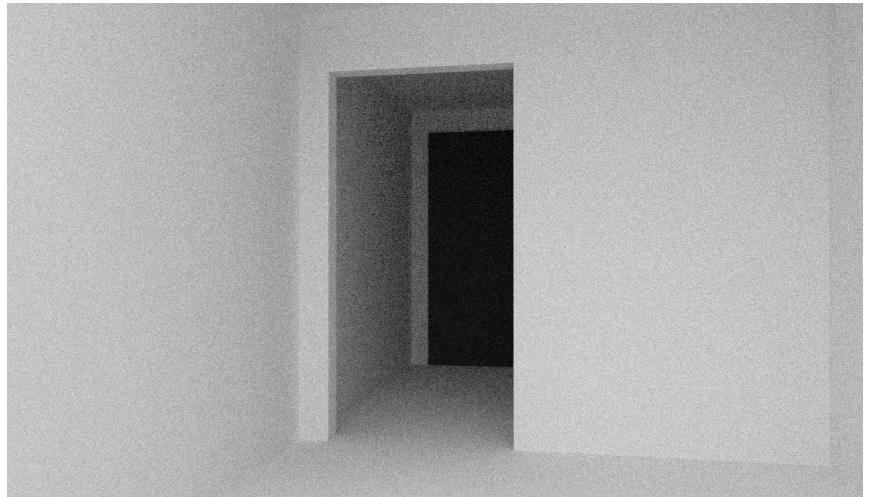
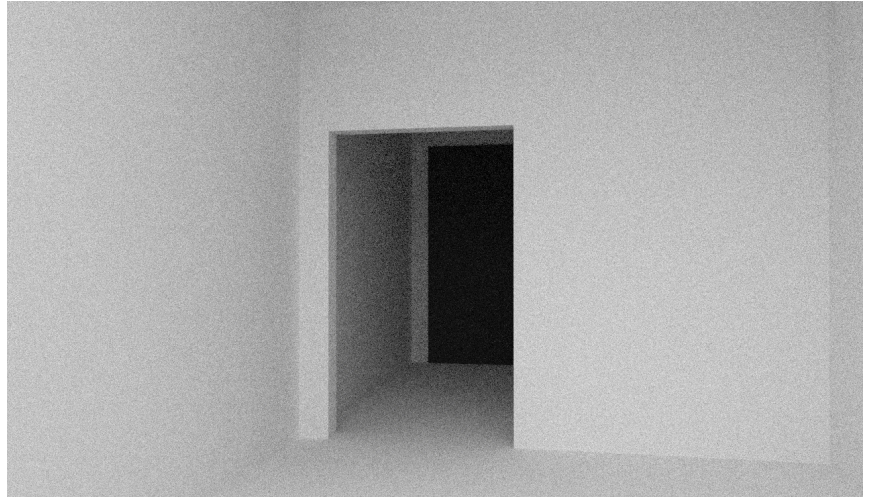
first thoughts



tests for the colouring and direction fo the construction

WK 1.8

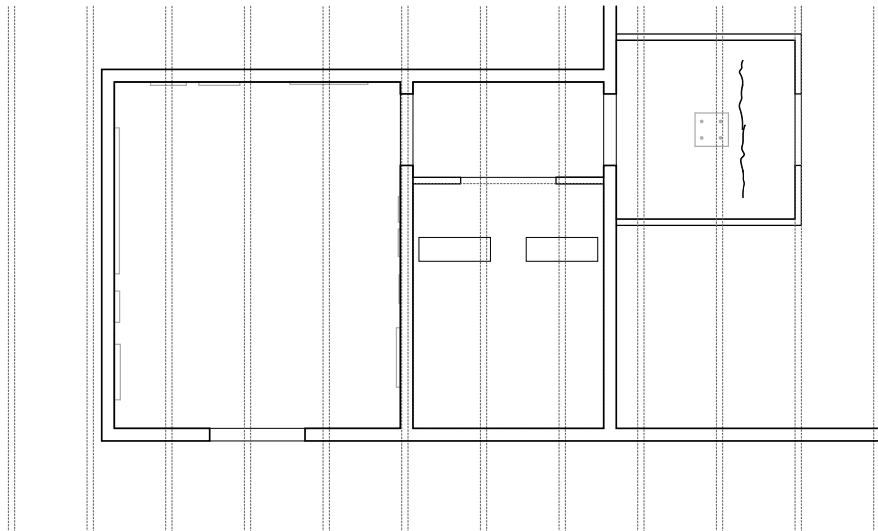
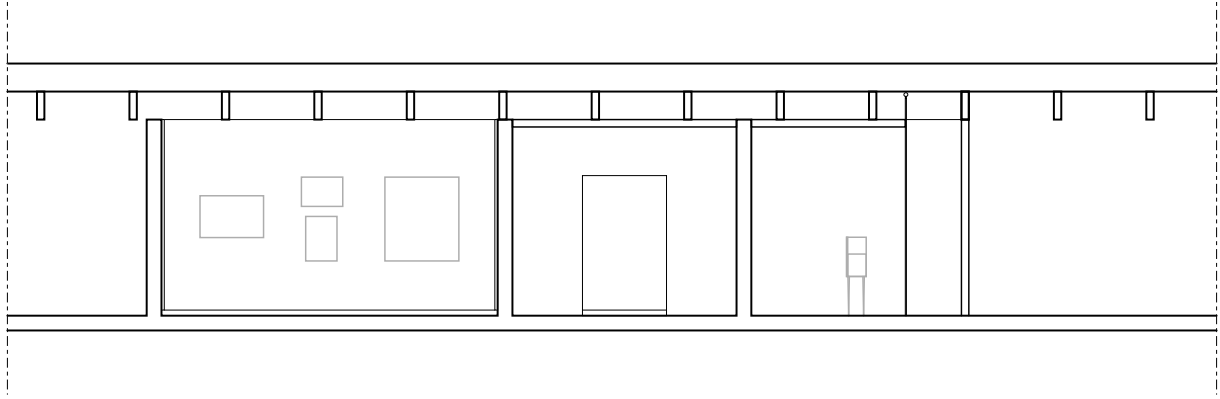
first thoughts



tests for doorway to hallway

WK 1.8

first thoughts

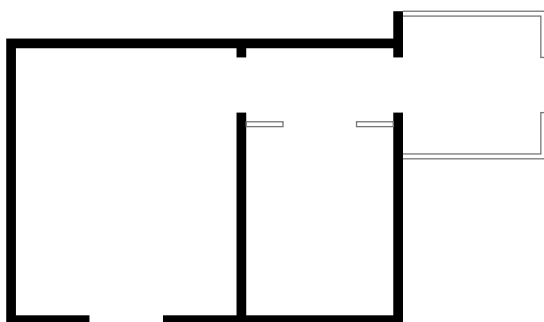
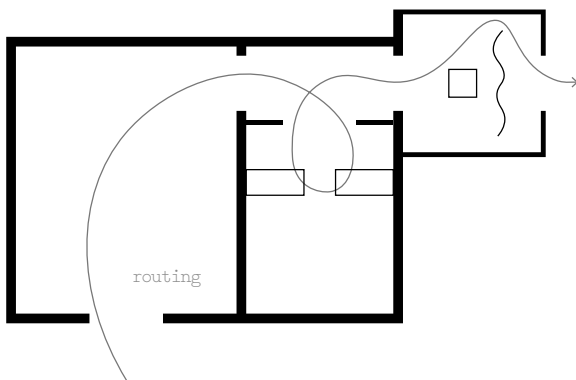
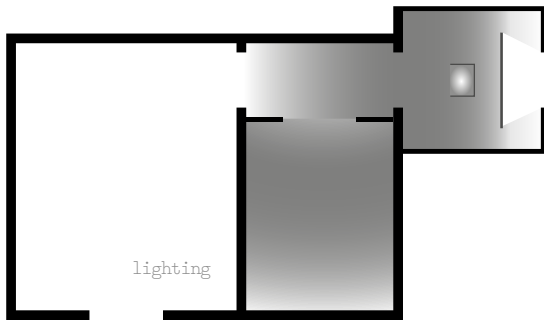


WK 1.8

first thoughts

Taus Makhacheva is a Dagestani artist who has made several works on how museums work and two of those have been used in a design of gallery spaces. The first is *Tightrope*, a film of a tightrope walker balancing Dagestani art across a ravine, choosing an art work on one side and placing it in a storage on the other. The second is *way of an object*, promoting a more active role for objects in museums.

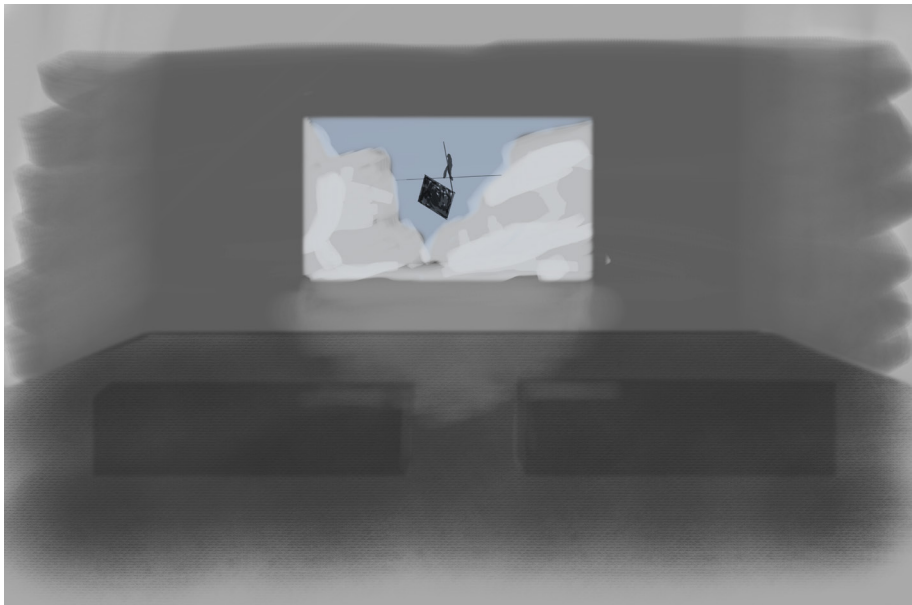
The first of the exhibition spaces is a more typical 'white cube' space, containing replica's of the Dagestani artwork shown in *Tightrope*. Then there is a small unlit hallway where *way of an object* is visible at the end, but first *Tightrope* can be seen on the right. Showing the film right after the visitors have seen the replicas of the art displayed in it. After this, the visitors moves onto the last room where *way of an object* is put in the spotlight in front of a red curtain, giving the art work a stage-like feel. Because of the unlit hallway the last two rooms are darker and in the final room light peaks through at the sides of the curtains to let visitors know they can exit the room through there.



temporary vs fixed walls

WK 1.8

first thoughts



WK 1.8

first thoughts



3 AN ARCHITECTURE FOR ART I

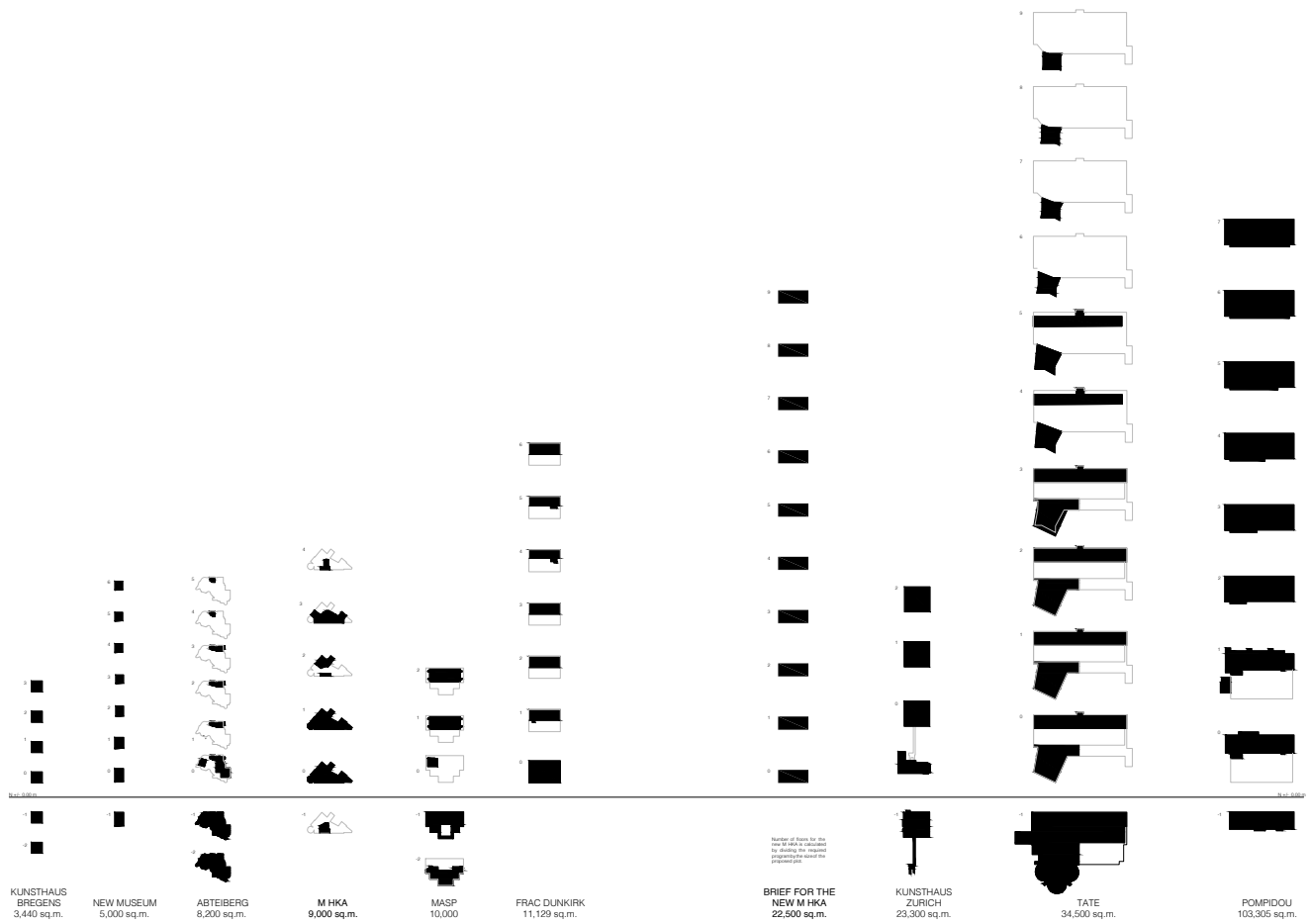
design process until P2

In this first part of the design process, we did a lot of research collectively. We made drawings of reference buildings, looked in to the history of Antwerp, the M HKA the existing court building and themes like the anti-museum. We also got the brief for the competition and analysed the documents that came with it.

Next to this research we started designing our first proposals based on this research and the assignments we did in the months before. All leading up to our P2 in the end of january.

SIZE

sqm of the brief



the size of the brief for the M HKA is compared to other museums. The M HKA would get 9 floors, the same as the Tate, and will be bigger than a lot of other prominent museums, like the MASP or the New Museum.

why does the museum have to be this big?

what is the consequence of such a high, vertical building in this context?

is there a way to prevent it from getting or seeming this big?

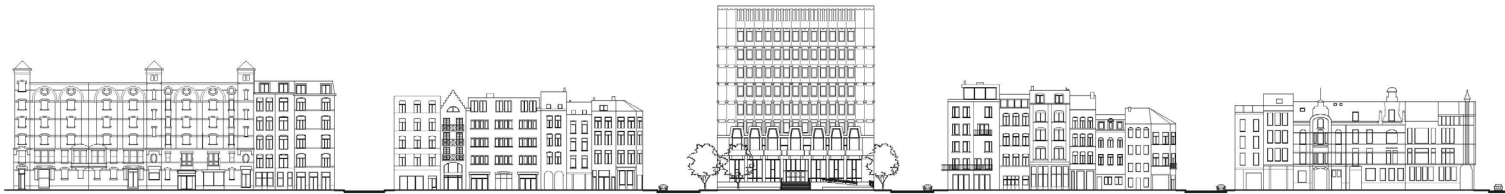
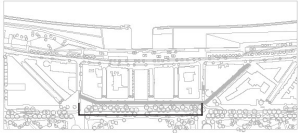
can functions be cut or reduced in size?

what happens when all the functions are stacked?

how accessible will the building be if the functions are spread vertically?

SIZE

site elevation



THE LOCK

archive images

I have been looking in to the old lock and docks that still exist underneath the court building and the current car park.



8



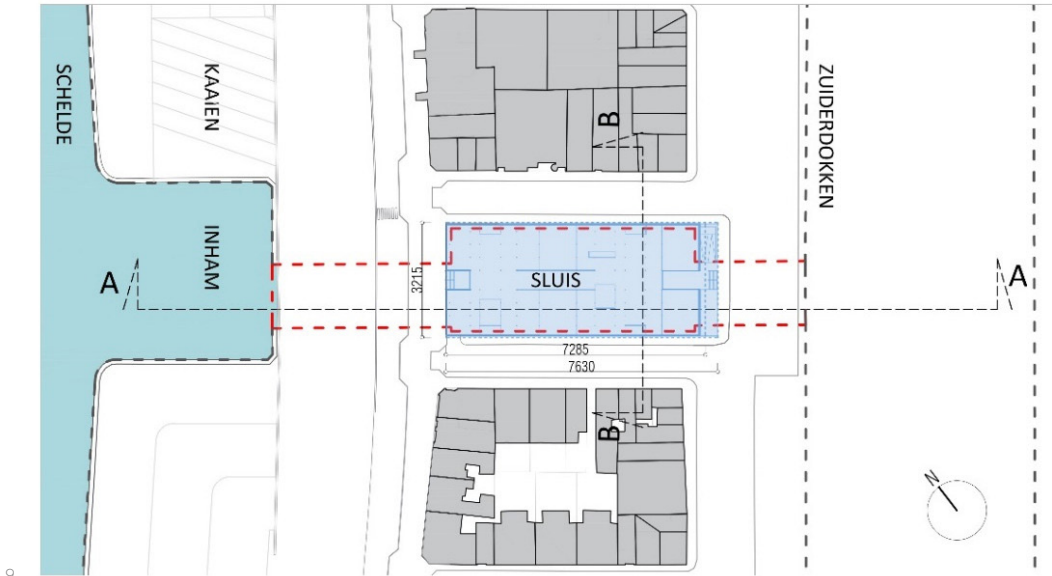
8 © Stadsarchief Antwerpen
www.felixarchief.be



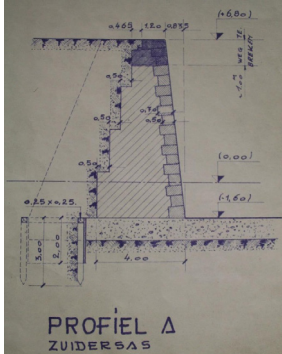
8 © www.felixarchief.be

THE LOCK

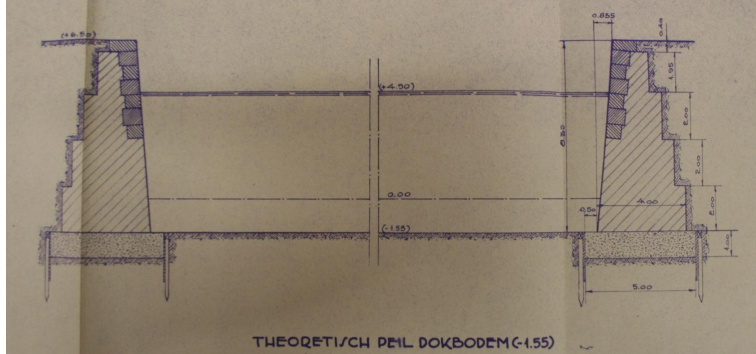
what is still there



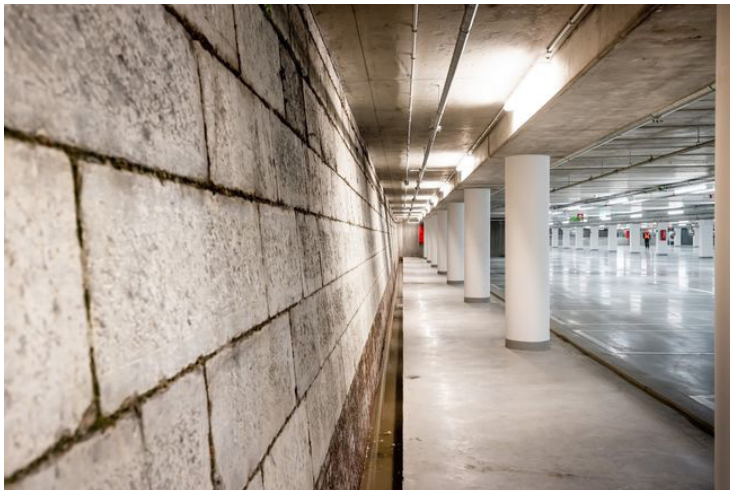
9 location of the lock underneath the current court building



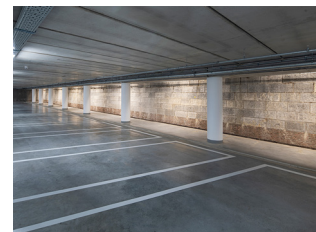
8 section of the lock



section of the dock

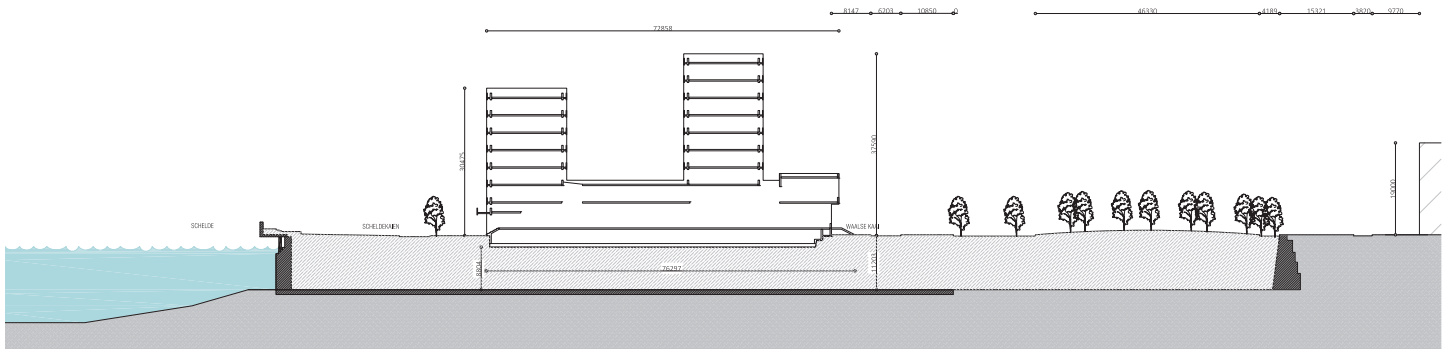
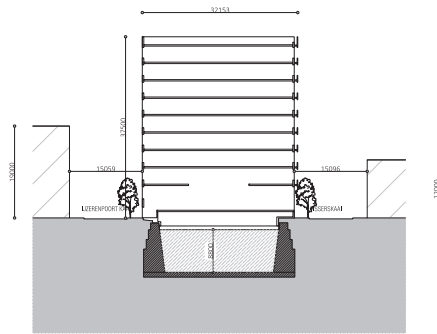
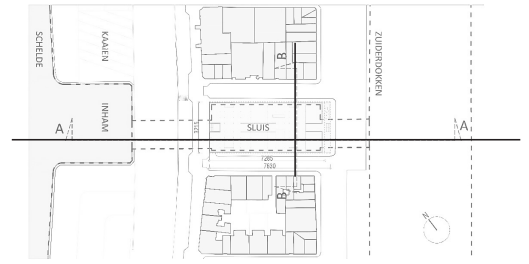


10 the exposed dock wall in the new parking garage underneath the park



THE LOCK

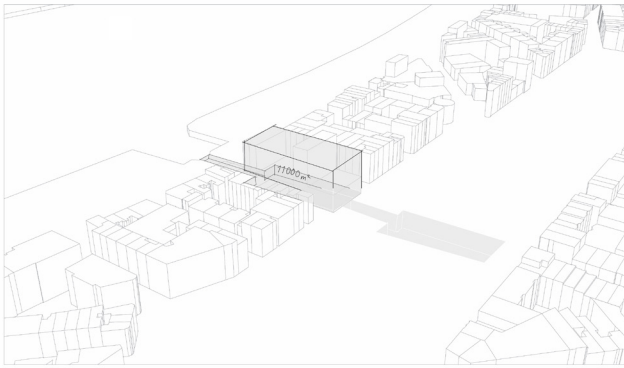
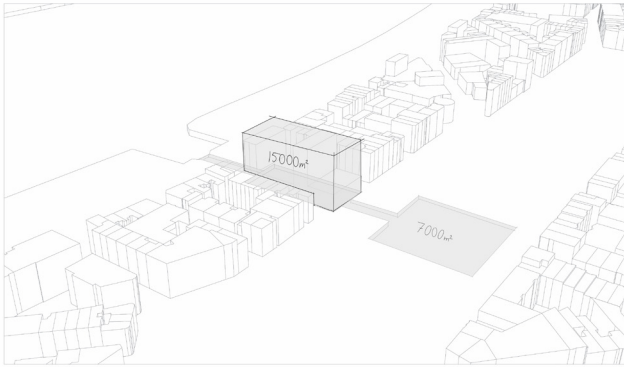
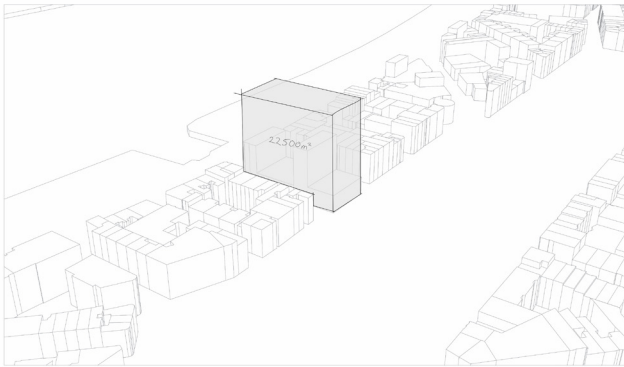
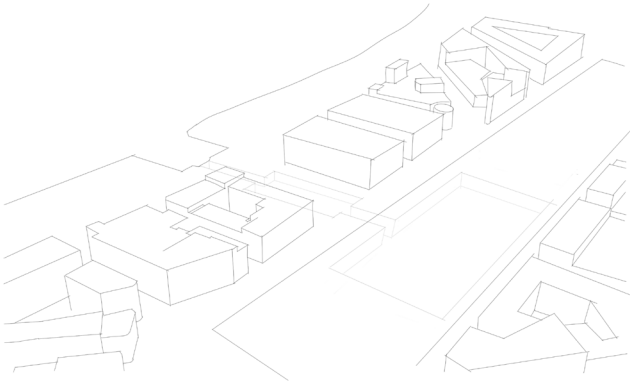
section of current situation



sections through the court building

SIZE

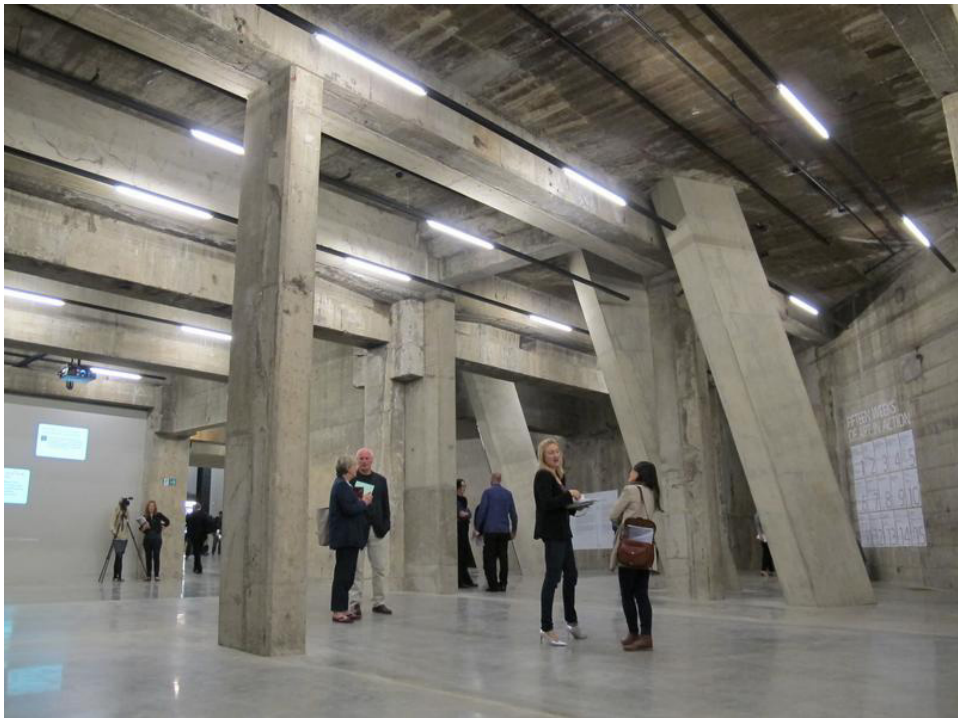
the lock



options for scaling down the building using the lock

THE LOCK

reference for the lock



11

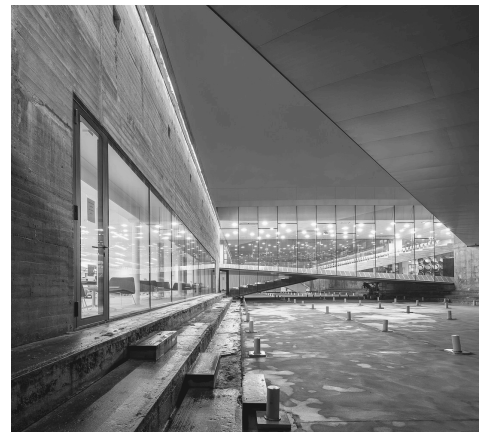
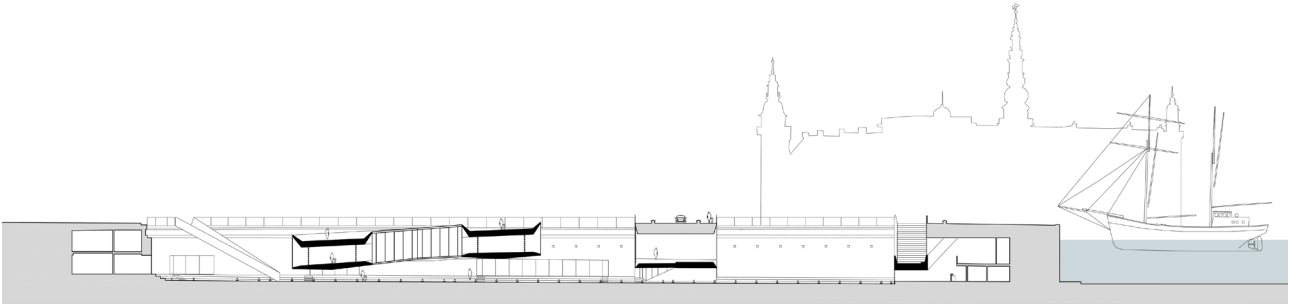


12

The Tanks in Tate Modern by Herzog and de Meuron

THE LOCK

reference for the lock



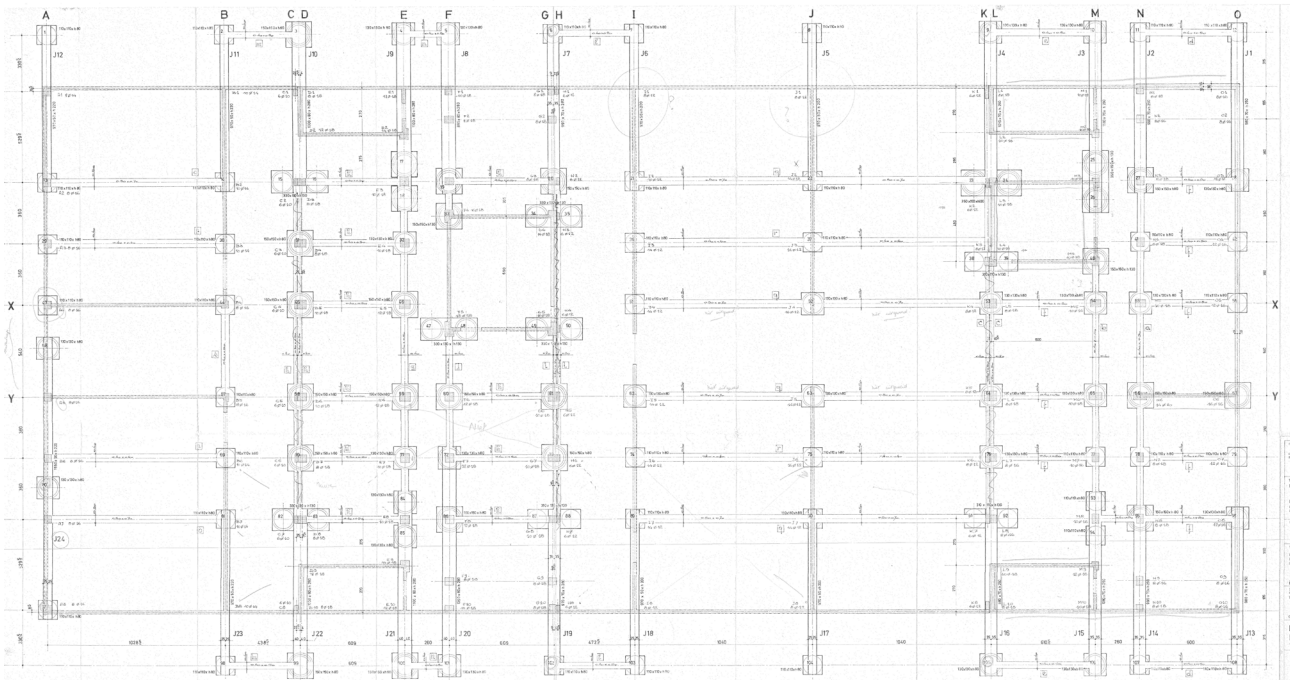
15

Danish National Maritime Museum by BIG. The museum is built around an existing dock. In my design I will be filling up the dock, while here they kept the lock empty and used the space around it for the museum. It is also an example of for having a museum close to the water and under the water level, which could be risky.

EXISTING OR NEW BUILDING

I was doing research into whether to keep the existing building or demolish it and build a new building. I found this a hard decision to make, because the existing building is made of concrete which would all have to be demolished which is a waste of material and energy. In the end I decide to demolish the existing building because of several reasons.

- the foundation plan of the existing building (seen below) shows the poles of the existing building standing within the lock. These poles can't be demolished and maybe not even excavated, so the space in the lock would be almost unusable.
- if I want to connect the lock space to the rest of the building, it wouldn't be possible to cut a big part out of the floor, so it would be really hard make the lock space part rest of the building.
- the existing building was only built to be used for 10 years and it is not flexible at all. It is also already starting to rot, because of the bad quality of the used building materials. By designing a new building I could build a better fitting museum building with more flexibility and durability.
- I could reuse the existing concrete for the new building, so the material wouldn't go to waste.



9 Foundation plan of the existing building

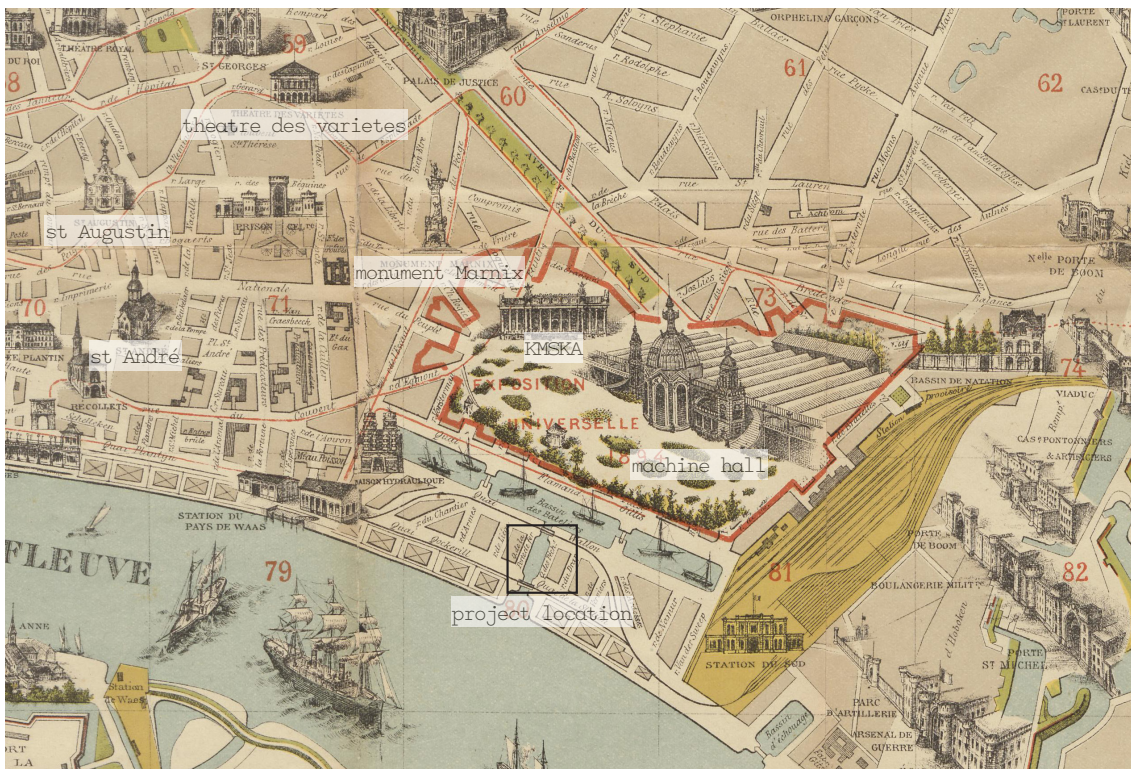
HISTORY

map of the world exhibition

This map was made for the world exhibition in Antwerp in 1894. On this map you can see the cultural buildings in Antwerp in 1894. A lot of them are around our project location.



8 map for the world exhibition in Antwerp 1894



THE M HKA

mission and vision



1

"The M HKA is a **museum for contemporary art**, film and visual culture in its widest sense. It is an open place of encounter for art, artists and the public. The M HKA aspires to **play a leading role** in Flanders and to extend its international profile by building upon Antwerp's avant-garde tradition. The M HKA bridges the relationship between artistic questions and wider societal issues, between the **international and the regional**, artists and public, tradition and innovation, reflection and presentation. Central here is the **museum's collection** with its ongoing acquisitions, as well as related areas of **management and research**"*

MUSEUM ANTWERPEN

Verbouwd Muhka wil een warm thuis zijn voor de stad

Muren werden gesloopt in het Antwerpse museum en er werd een donker labyrint gebouwd, maar de kunstenaars-wc bleef.

Door onze medewerker **Sandra Smets**

ANTWERPEN. De grootste metamorfose in het herbouwde Muhka is de entreehal. Weg zijn de witte tentoonstellingsmuren, vervangen door muurvullende houten boekenkasten. Daartussen staat een lange houten tafel die de Antwerpenaren moet uitnodigen om zich hier thuis te voelen, onder gedempt licht. „Musea missen menselijkheid”, zegt ontwerper Axel Vervoordt, die met architect Tatsuro Miki voor de verbouwing tekende. „Een museum moet ook een thuis zijn voor de gemeenschap.” Het Muhka kreeg een verbouwingssubsidie van 650.000 euro, en enkele giften.

De oude indeling was rommelig en chaotisch zegt Vervoordt, maar directeur Bart De Baere was ook aan het denken gezet door een opmerking van de invloedrijke curator Kasper König. „Hij zei tegen mij: Bart, het lijkt hier allemaal één tentoonstelling te zijn.” Dat moest anders: duidelijker scheidingen, én een vaste collectiepresentatie. Ook daar blijken de witte muren taboe te zijn. In een labyrint van donkerblauwe en grijsbruine wanden zijn ongeveer dertig kunstwerken te zien: een vliegtuig van Panamarenko, een punaiseman van Jan Fabre, een wandkleed van de nieuwe ster Otobong Nkanga.

Het levert associatieve ensembles op. Een bruut doorboord fotowerk



FOTO MUHKA

Werk van **Jan Fabre** in het vernieuwde museum Muhka.

van Lee Harvey Oswald door Cady Noland past zowel bij een portret van Cindy Sherman, als bij de perforaties van Gordon Matta-Clark. Diens uitdelen opgebouwde deur opent naast een muur die een als schuilplek ingerichte bezemkast van Ilya en Emilia

Kabakov blijkt. Open de deur en je ziet een compleet leven, servies en kleren. Dat werk lijkt een metafoor voor deze collectiepresentatie: ienemienie, intiem en mysterieus.

Dertig werken uit een collectie van zesduizend objecten is weinig, maar er waren dan ook veel wensen voor de verbouwing - meer gedefinieerde ruimtes, meer permanente collectie, een extra archief - zonder dat het pand groter werd. Toch wilde De Baere de eigen collectie centraal zetten, want van daaruit wil hij tentoonstellingen gaan maken.

De vijf openingsexposities bevatten werken uit de collectie. Hoogtepunt is de solopresentatie van Jevgeni Antoejev, uit de Russische republiek Tuva. Hij onderzoekt de actuele betekenis van lokale helden: google 'Anna Pavlova' en je komt niet alleen bij haar uit, maar ook bij toetjes, wat een sensitieve installatie oplevert van de danseres, toetjes, rozen, gemengd met een gefilmd discofeest van de Tolstoj-familieëunie. Van deze exposities blijft alleen *Dringende Gesprekken* (over dialogen en „de holistische uitleg van situaties met visuele middelen”) van het onaantrekkelijk hermetische niveau dat de laatste jaren gebruikelijk in het Muhka.

En tussendoor tref je in het museum stukjes collectie. Zoals tussen het damestoilet en het herentoilet in, de gelukkig gehandhaafde genderneutrale kunstenaars-wc, een concept van Fluxus-kunstenaar Robert Filliou, nu met een wandje Fluxus-achtige kunst om de hoek.

Muhka Heropent, t/m 30/4 in Museum van Hedendaagse Kunst Antwerpen. Exposities t/m sept. Inl: muhka.be

INDUSTRIAL ROUGHNESS AND DOMESTIC INTIMACY

the brief

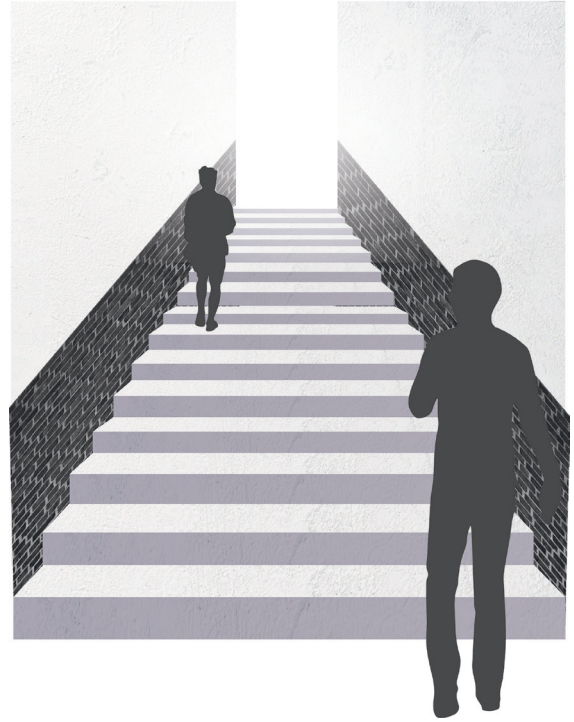
“Industrial roughness and domestic intimacy

The ‘white cube’ has become a historical trope and contemporary curatorial practices increasingly see the advantage of the specificity of settings. The user is also open to this and believes, for example, that the museum in this former port setting could partly have an industrial character, even though it concerns a connecting, warm, flowing institution. Internally, the various components have different usage regimes and are, in our opinion, each best dealt with differently, without losing sight of internal cohesion in the process.”

The brief for the new M HKA discusses the topic of ‘industrial roughness and domestic intimacy’: The M HKA could have this combination of the roughness connecting to the former port setting and a ‘white cube’, while still being a warm and flowing institution. For my design I will be excavating the former lock and docks which still exist and connecting these to a new building. How can this connection between the rough docks (showing temporary expositions) and the new building (showing the permanent collection) be done in a coherent way?

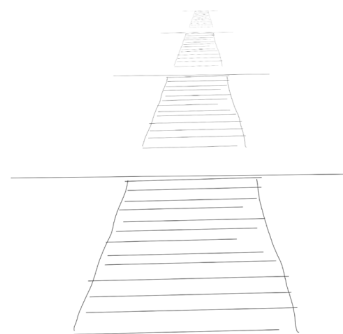
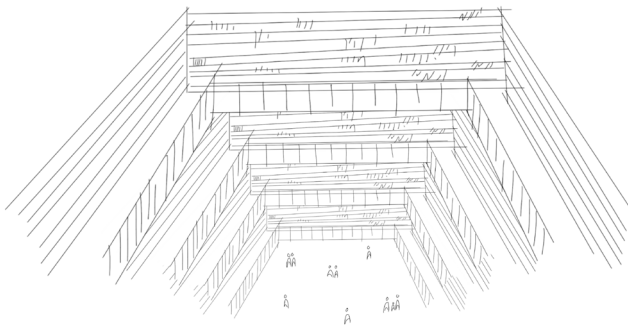
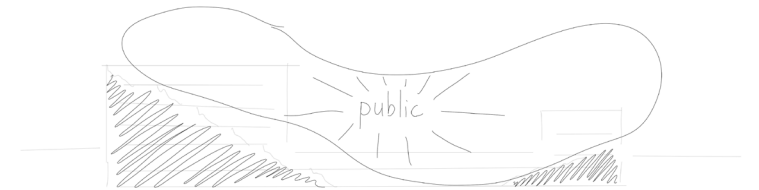
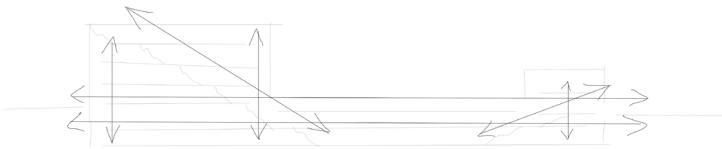
INDUSTRIAL ROUGHNESS AND DOMESTIC INTIMACY

collage of spaces



DESIGN

key elements



DESIGN

notes

Tate > buy ticket for specific exhibition > small museums within the big museum

M HKA 250% bigger

M HKA entrance: library, not cafe/gift shop

what function does the forum have?

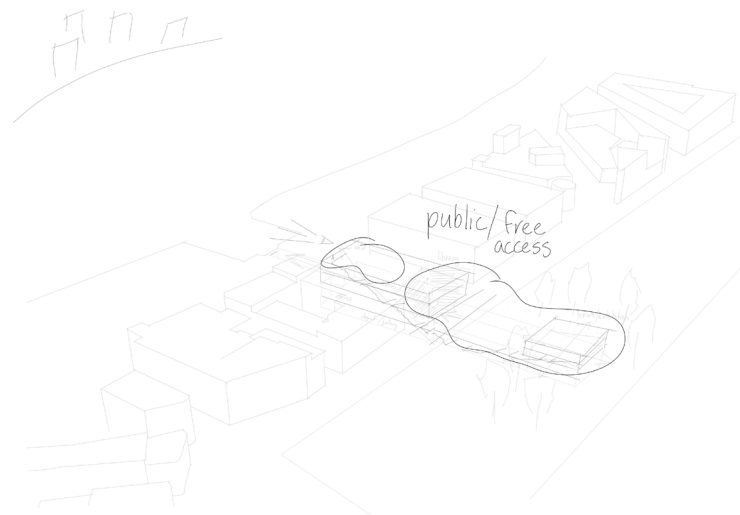
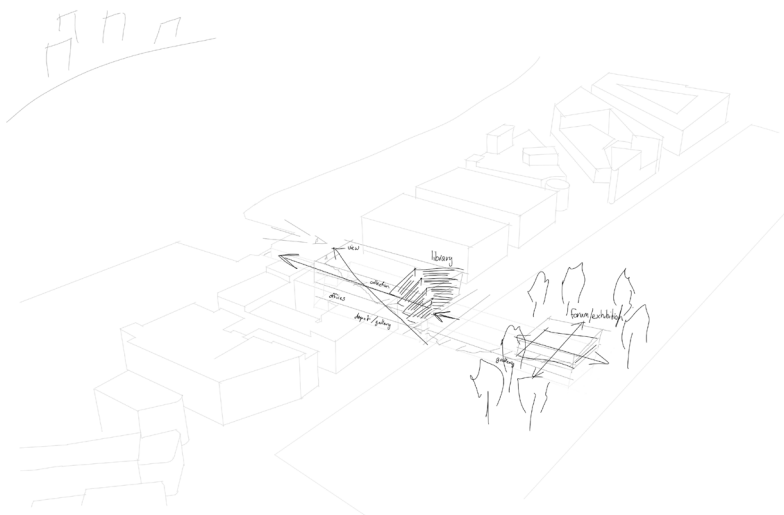
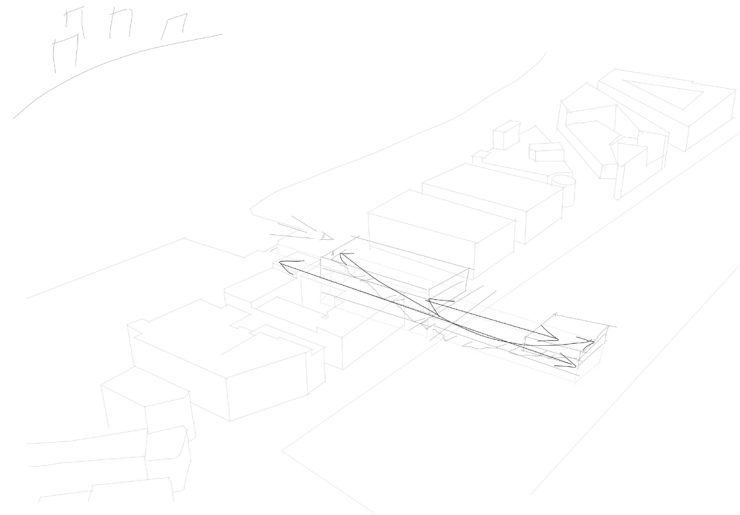
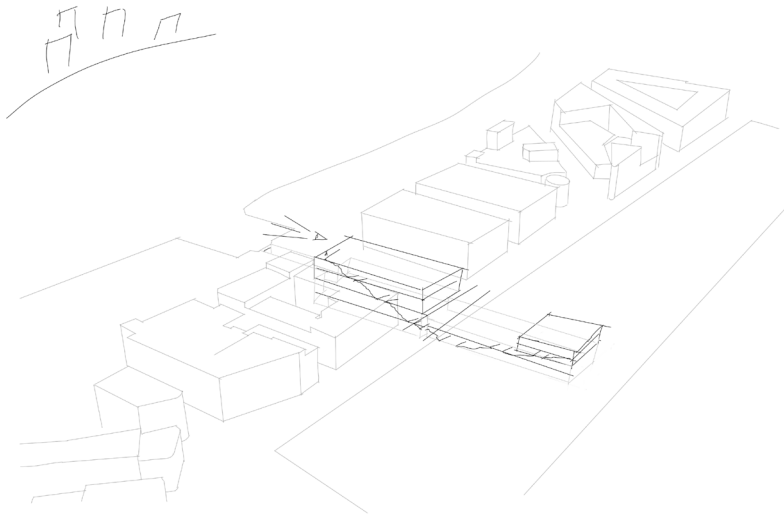
public, free exhibitions, public library

M HKA as 'knowledge hub'

> library at the entrance > more accessible

> share knowledge > more accessible > free exhibitions + clear routing (big stairs)

connect to the park



REFERENCES

reference projects and their relevance



14 Kolumba Museum - Peter Zumthor
- excavated basement
- exposed concrete



12 The Tanks at the Tate - Herzog and de Meuron
- excavated basement
- exposed concrete



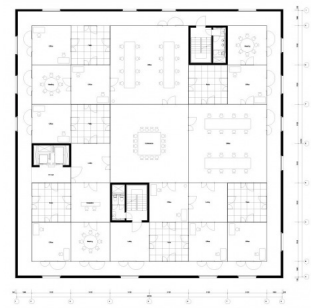
11 Maritime Museum - BIG
- underground museum in an old dock



15 M HKA entrance hall - Robbrecht en Daem
- library at the entrance



16 Centre Pompidou - Richard Rogers and Renzo Piano
- stairs going up along the building



17 Zollverein School - Sejima
- floorplan with hallway along the facade

NOTES

questions and sketches

Some questions I had and wanted to figure out/clarify before P2:

where is the entrance?

where openings in the park?

what does reused concrete look like?

why not a vertical museum?

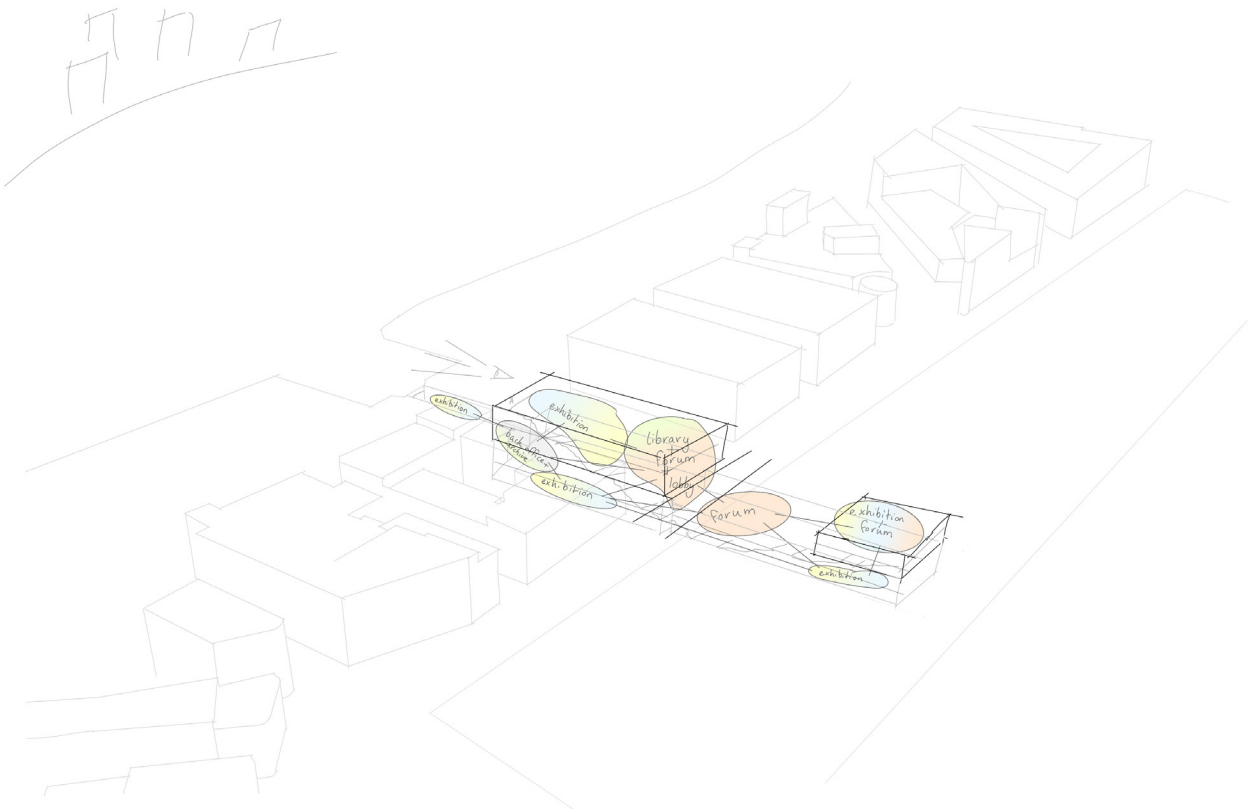
reference tiles + concrete

reference underground museum

division of functions?

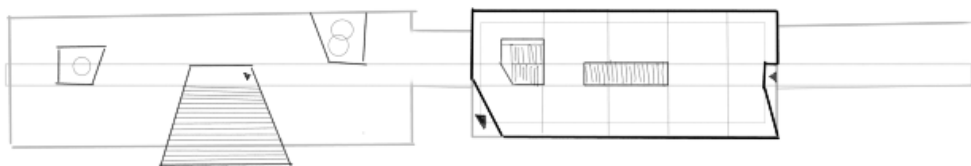
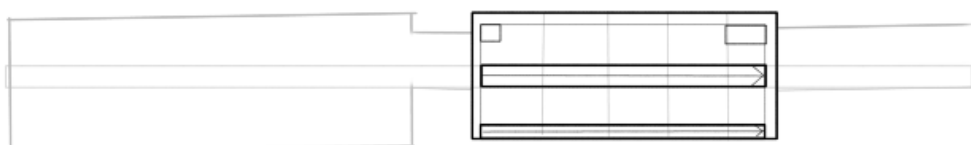
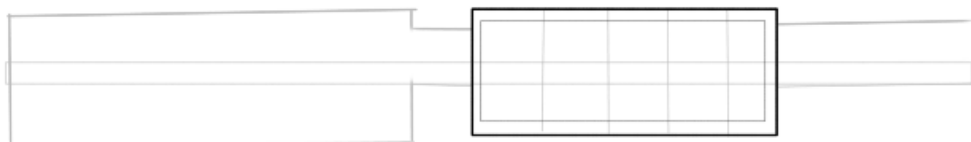
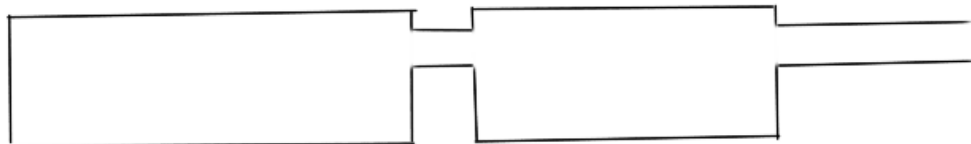
connection basement + ground floor?

why demolish existing building?



PLANS

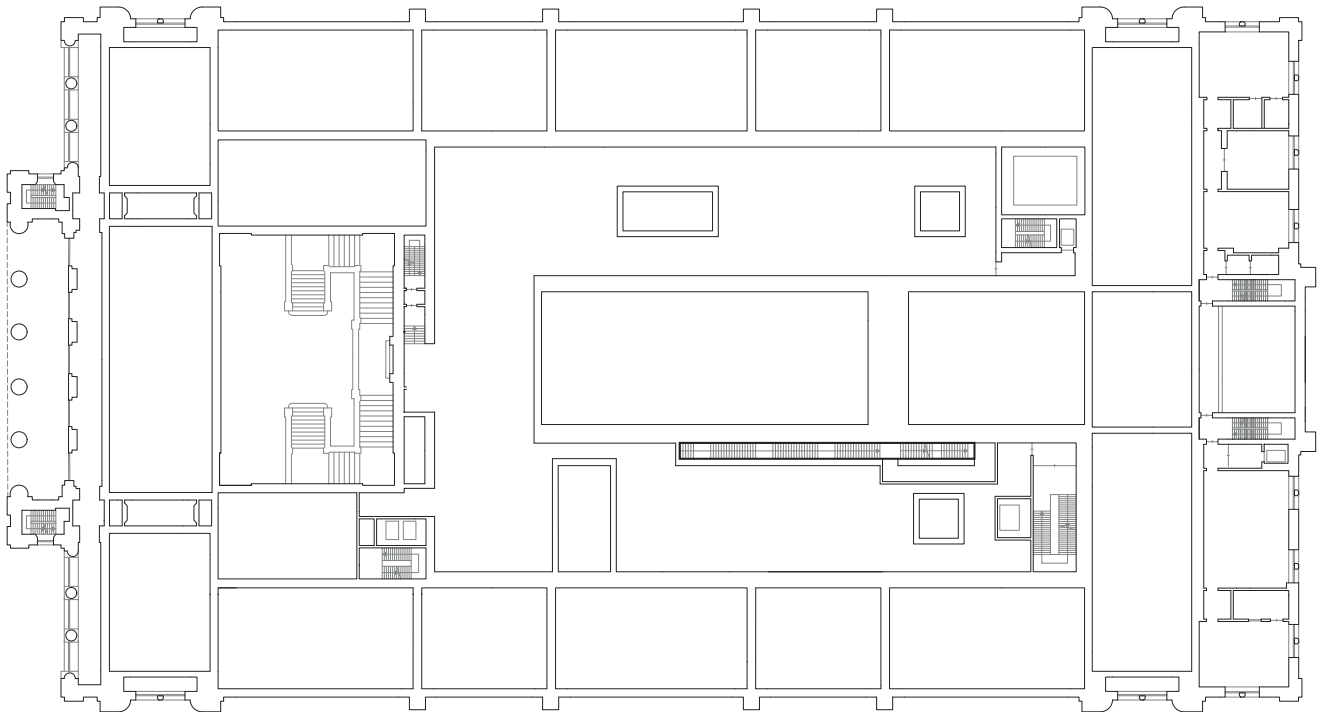
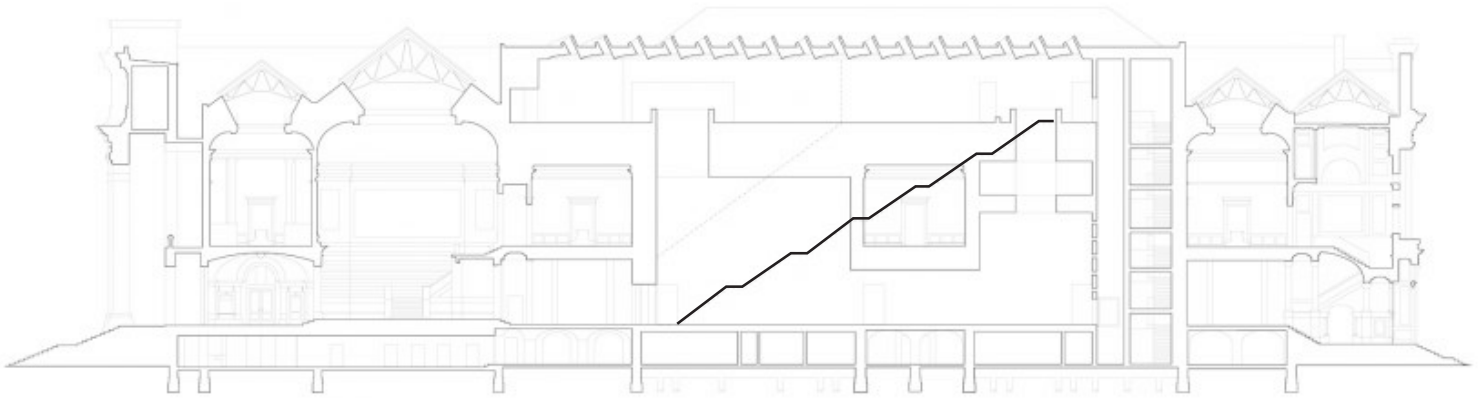
floor plan scheme



STAIRS

an analysis of stairs

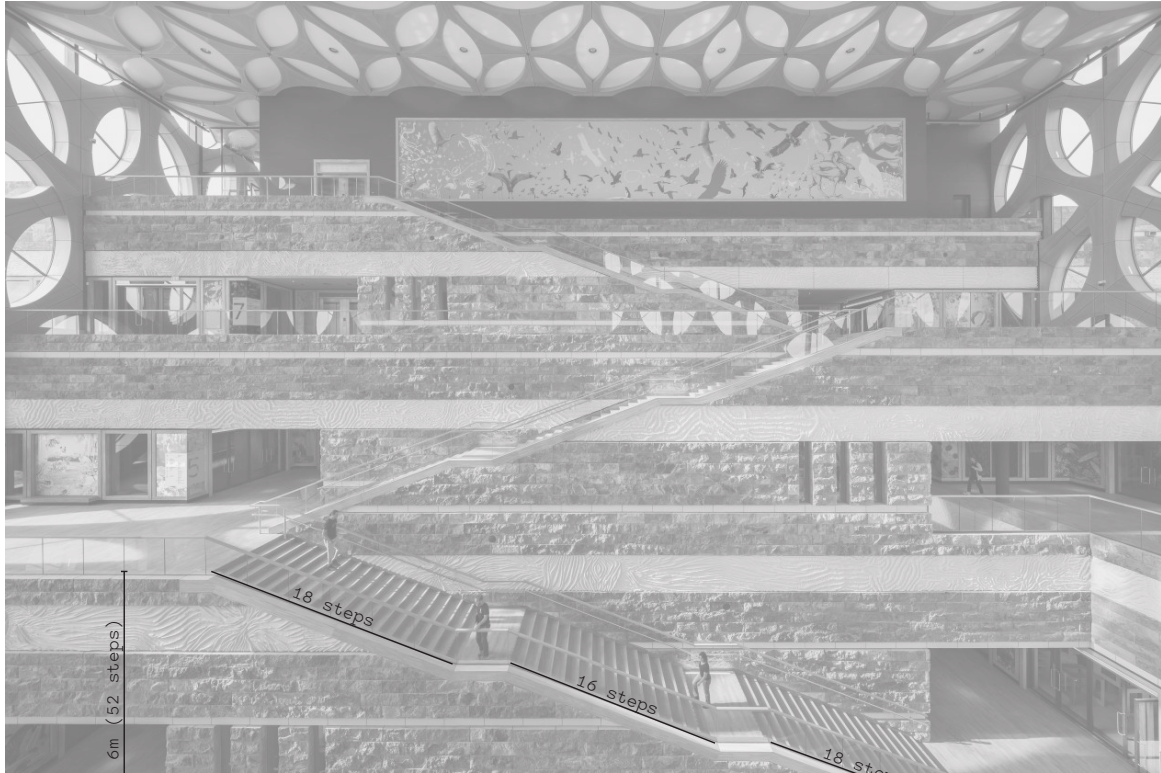
I have been looking at reference projects of stairs in Belgium and the Netherlands to figure out what the sizes for the stairs in my design could be. Looking at the steepness, the number of steps and when there is a landing.



KMSKA plan and section scale 1:500

STAIRS

an anlysis of stairs



15 stairs Naturliis in Leiden by Neutelings Riedijk Architecten



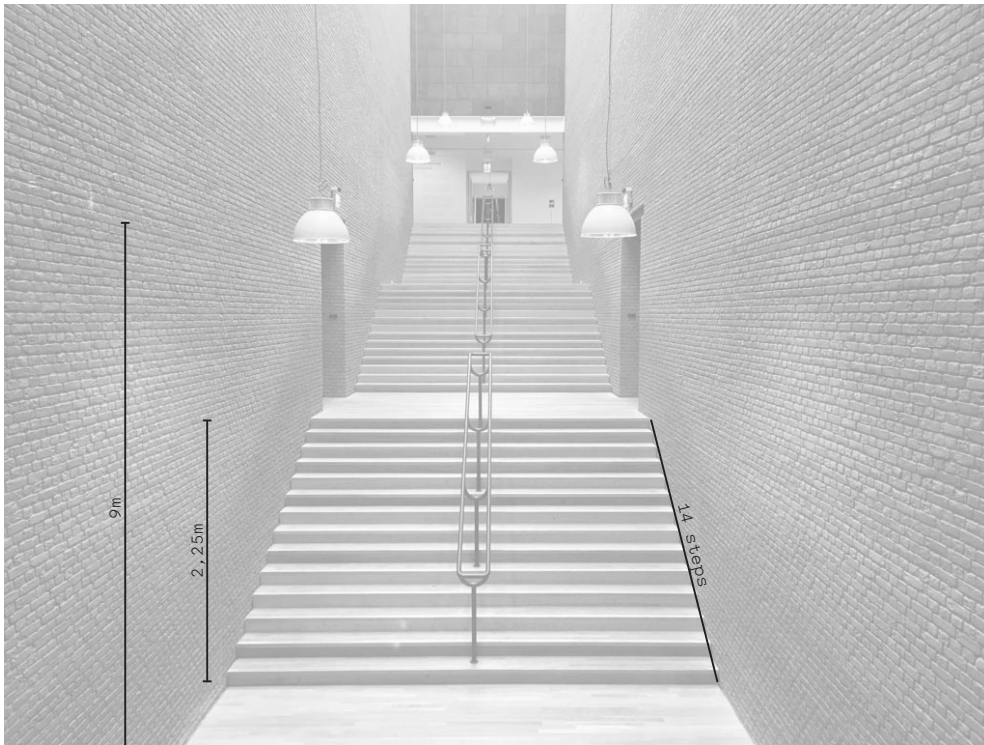
16 stairs Station Delft by Mecanoo

STAIRS

an analysis of stairs



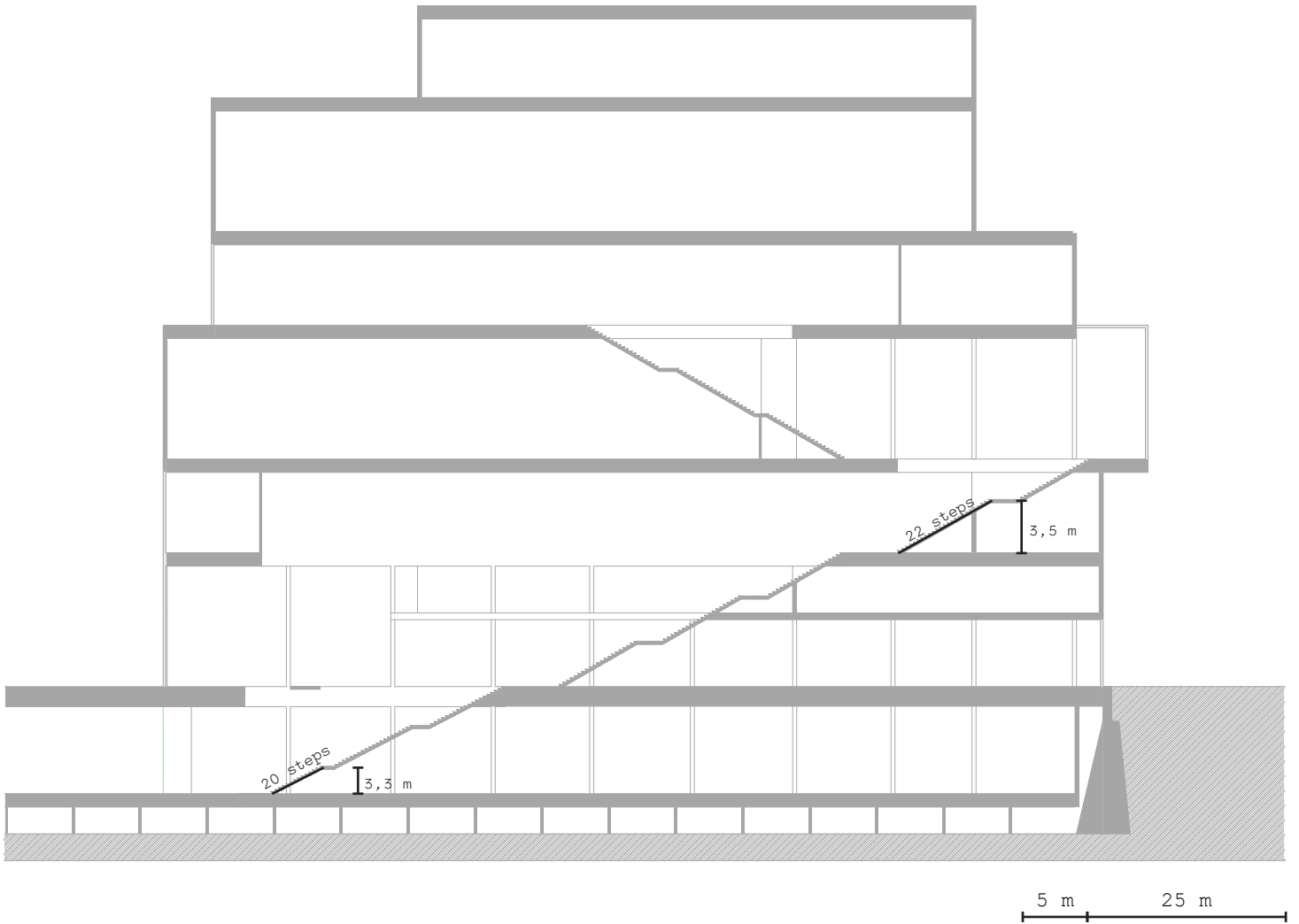
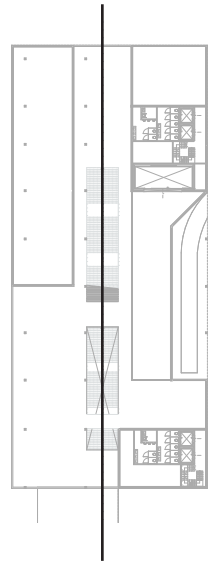
17 stairs KMSKA in Antwerp by KAAO



18 stairs Bonnefonten Museum in Maastricht by Aldo Rossi

STAIRS

an analysis of my stairs

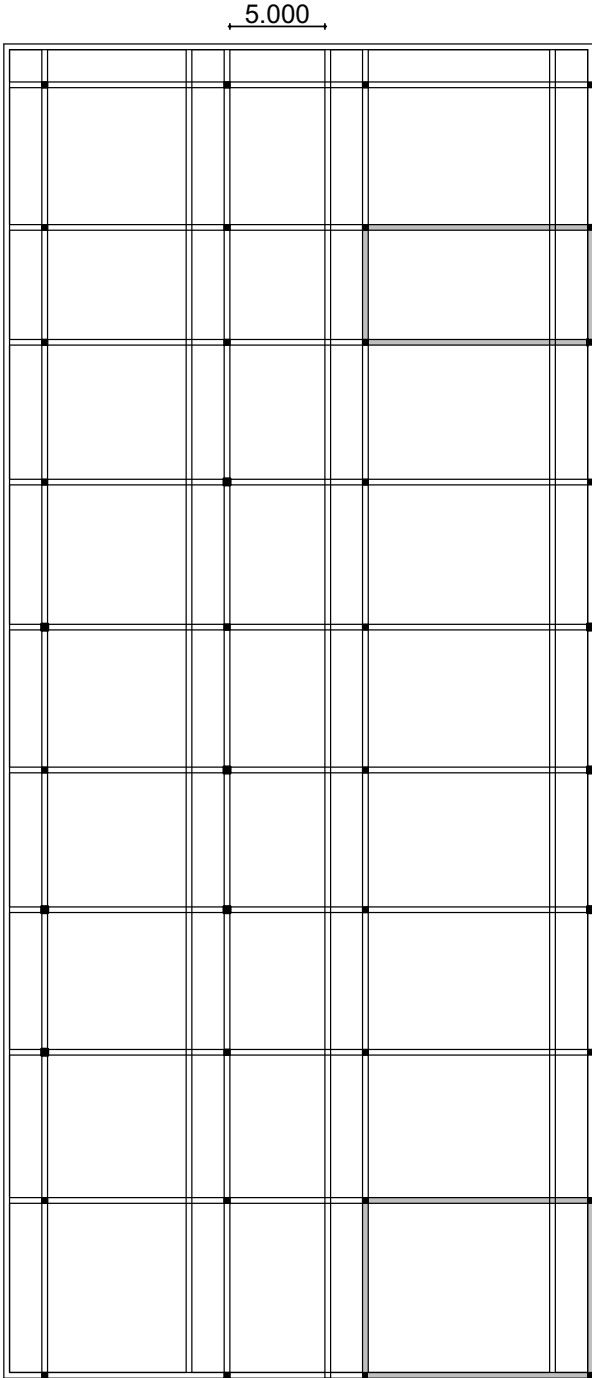


after the analysis I changed the stairs to be less steep and have more landings in between

CONSTRUCTION

a load-bearing construction plan

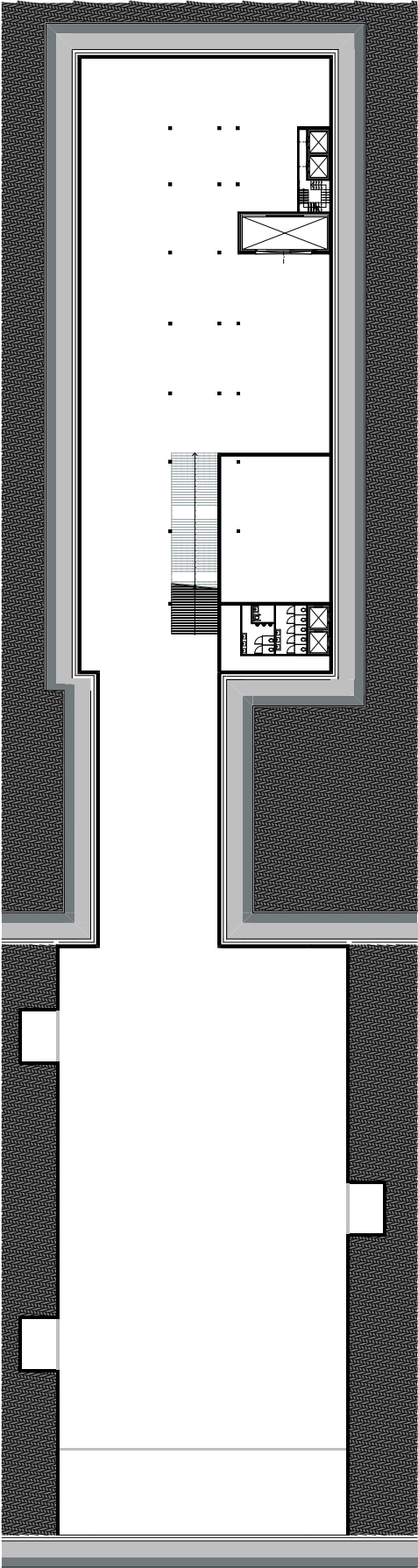
The construction consists of wooden columns and beams with two concrete cores.
The stairs in the middle of the building are 5m wide and the construction will go around these.
The concrete of the existing building will be reused for the -1 floor.



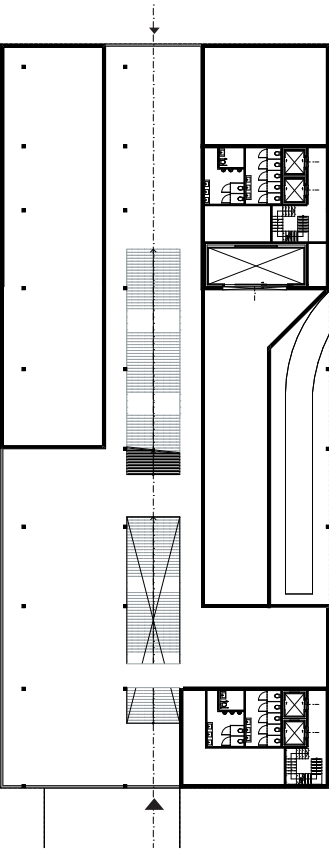
PLANS

plans of all the floors

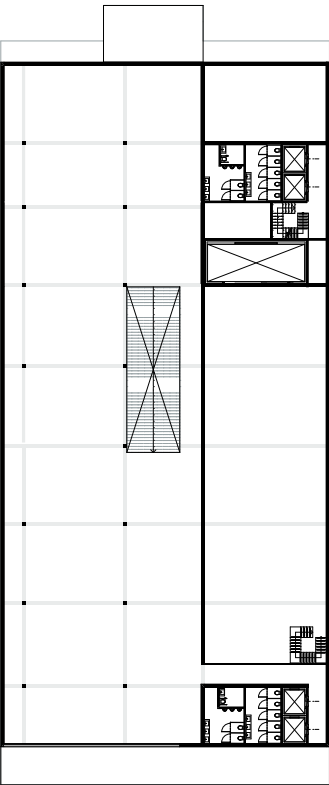
level -1 (lock)



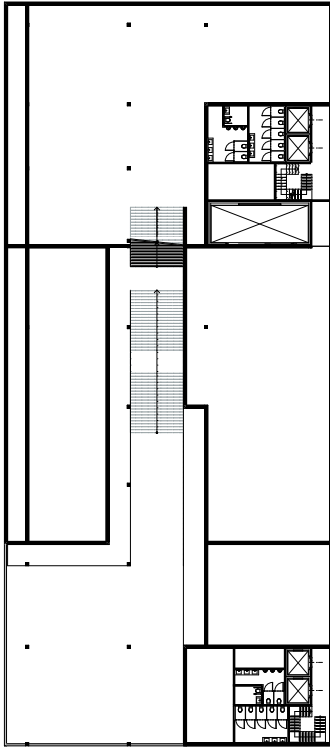
level 0 (ground floor)



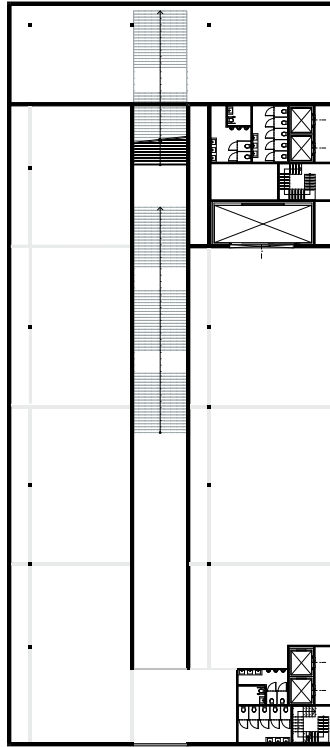
level 3



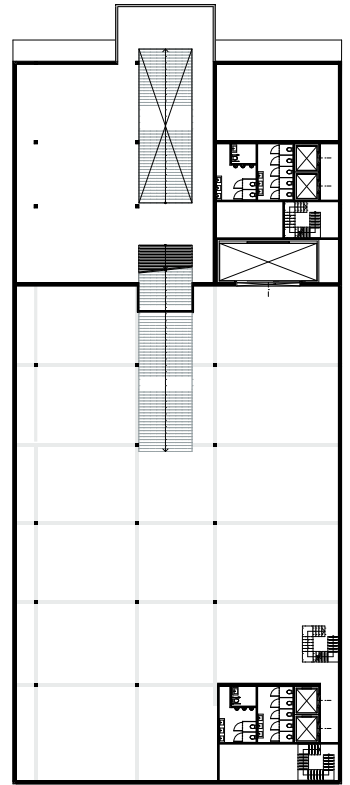
level 0.5



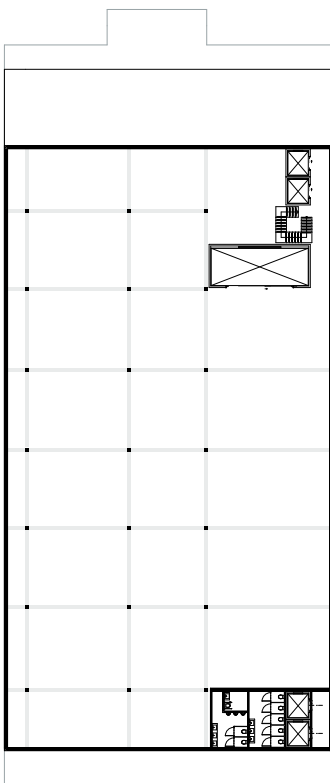
level 1



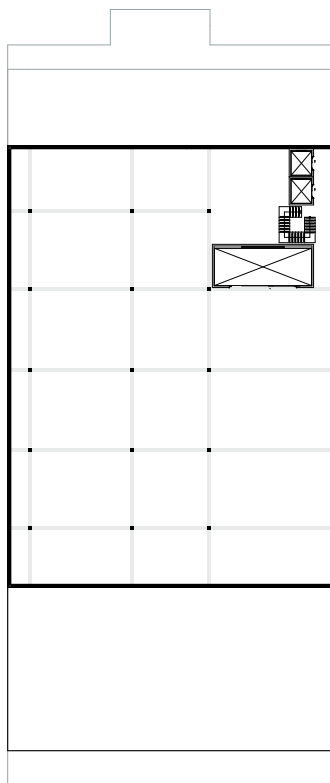
level 2



level 4



level 5

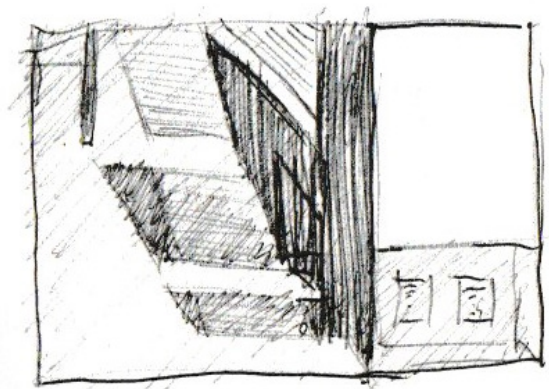
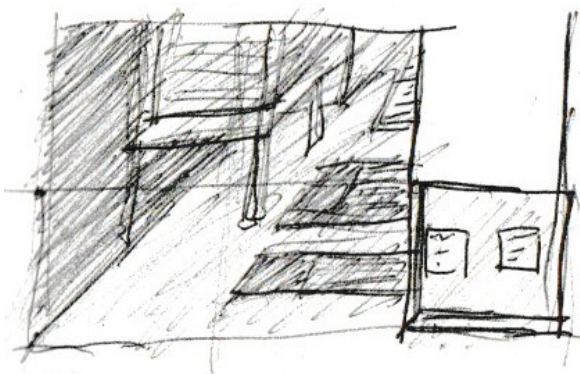
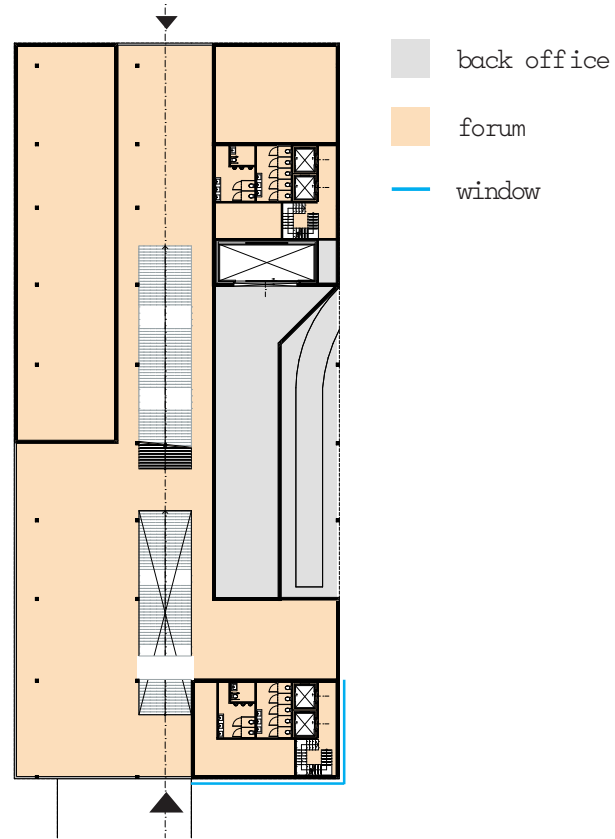


10 m 25 m

PLANS

a window to the outside showing what's on

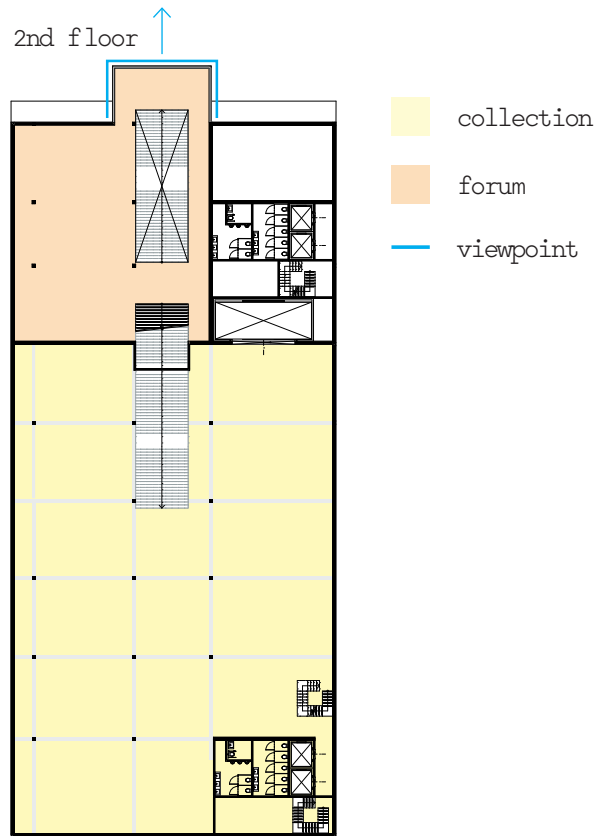
ground floor



sketches of the entrance with windows displaying posters of what is going on inside the museum

PLANS

the viewpoint at the end of the stairs



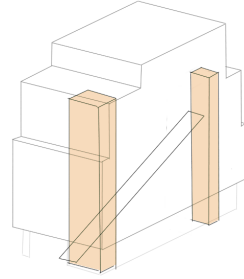
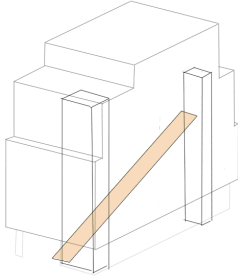
model showing the viewpoint at the end of the stairs



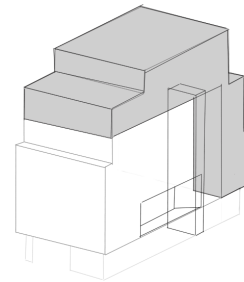
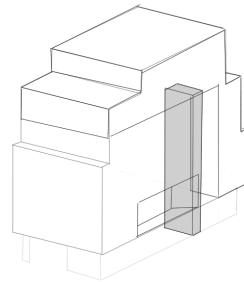
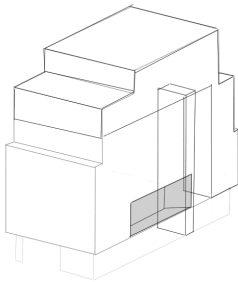
3D model showing the viewpoint 'outside' the building

ROUTING

public & art



public routing through stairs and elevators

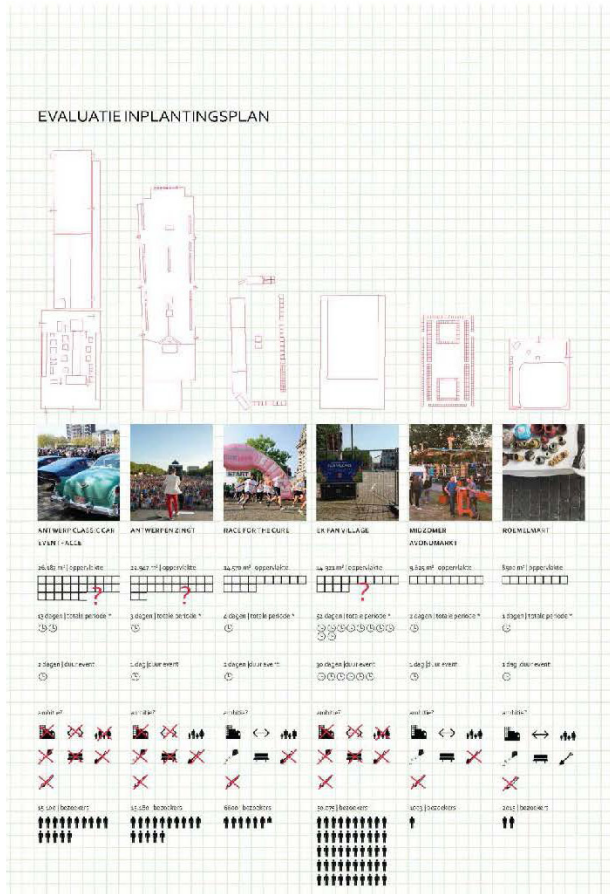


art works enter through the side entrance for trucks, then either go to the exhibition spaces or to the back-office at the top

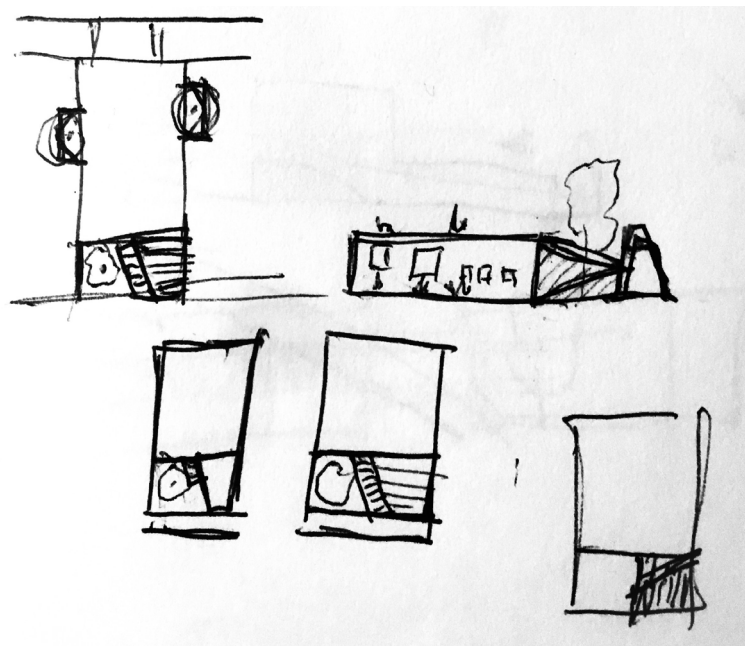
SITE

the park

In the park there will be a cutout with a stage going down. This ties into the many events that are happening in the park throughout the year. This is also connecting the exhibition spaces down below with the outside. And it is exposing the old dock wall to the open air. Showing the old history of the site to the users of the park.

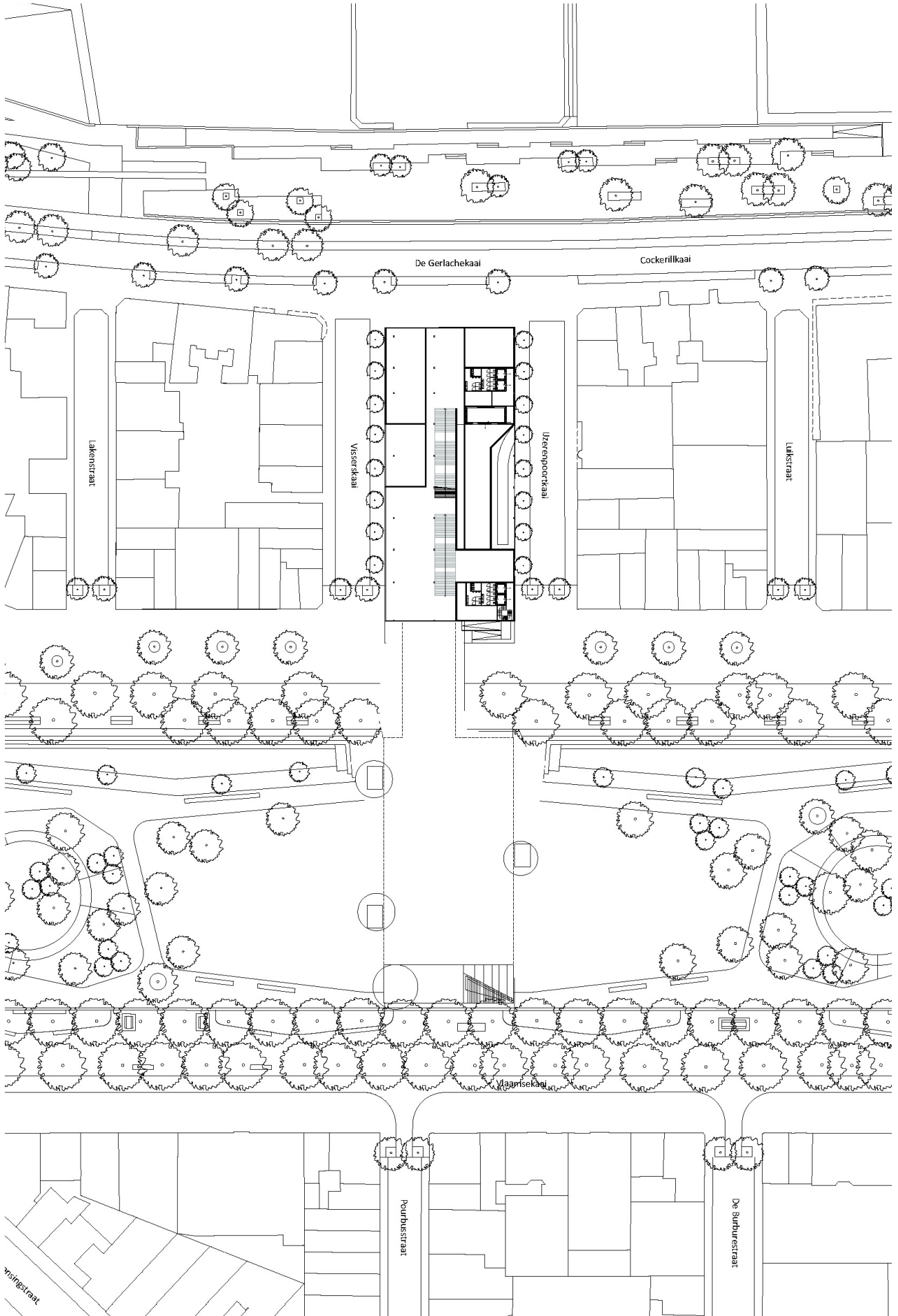


"events happening in the park"



SITE

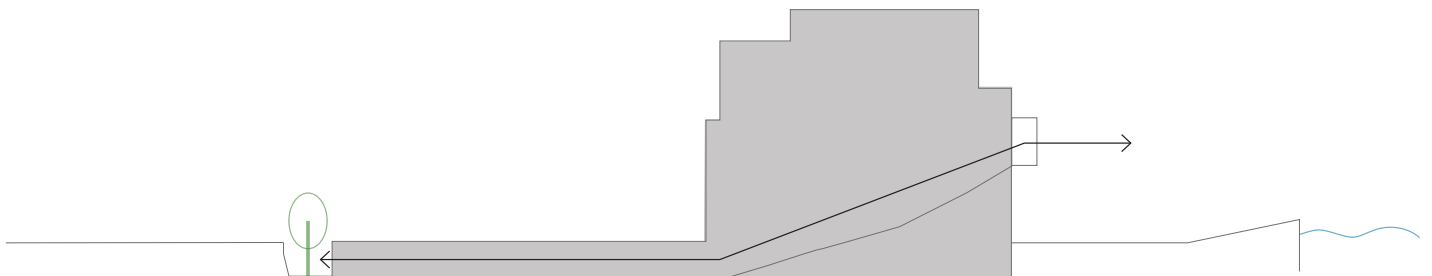
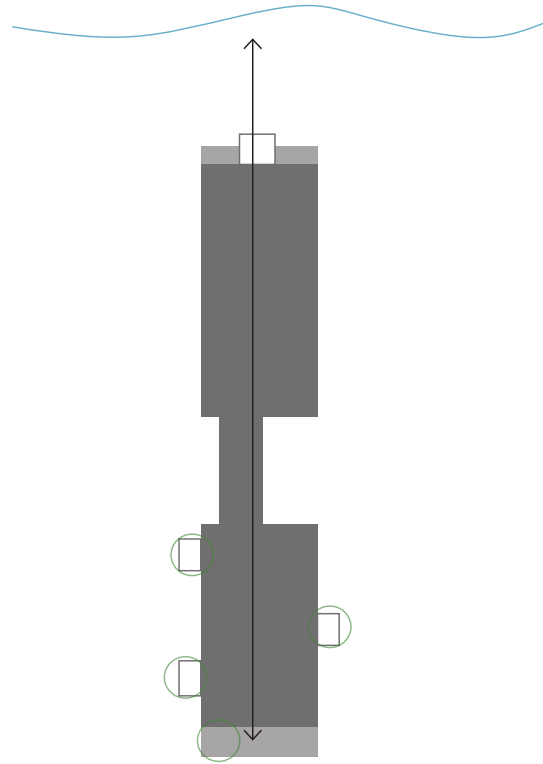
site plan



SITE

connecting the park and the water

The building is located in a unique location inbetween the park and the river. The design is connecting these two by creating a route from down in the park all the way to the view on the water.

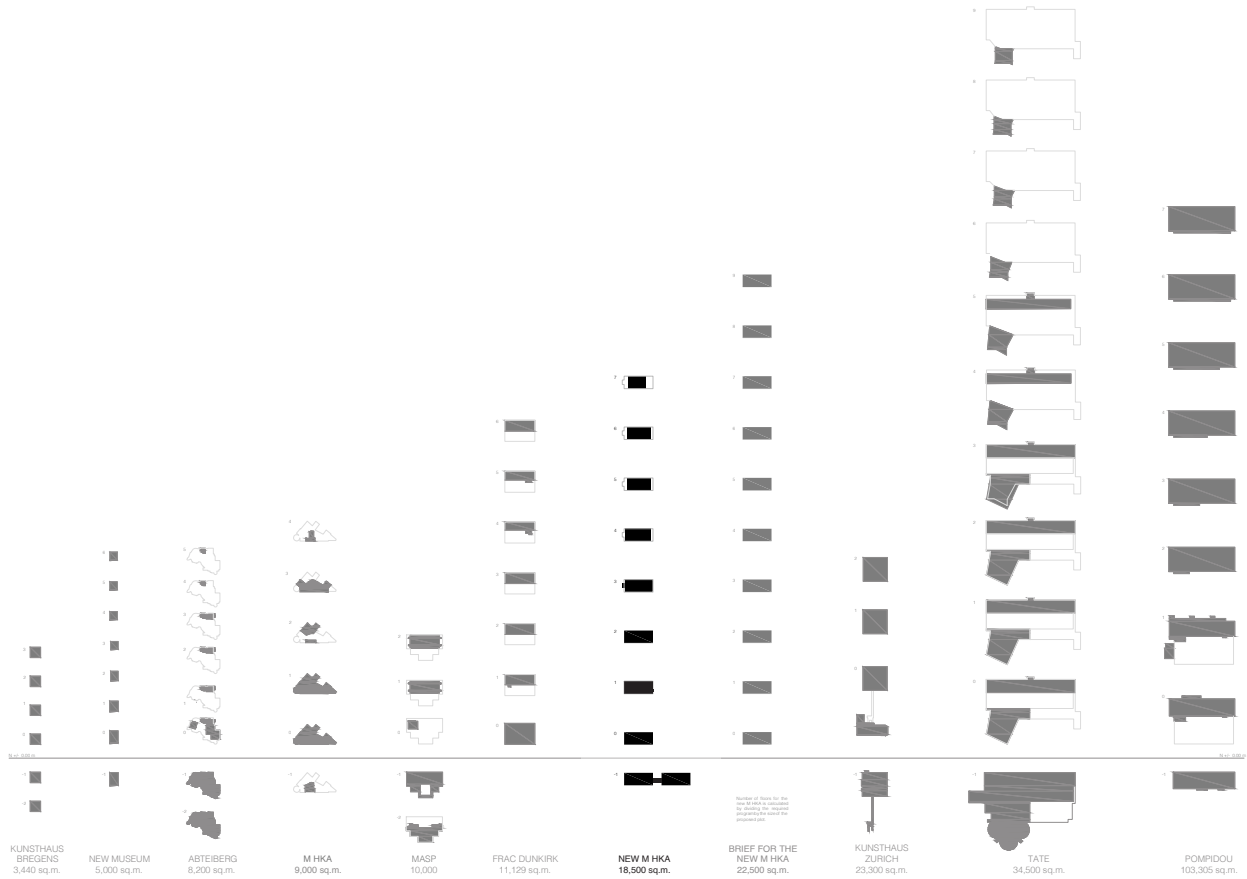


SIZE

sqm of my design

I cut and combined some of the programme of requirements in the brief.

- the 'forum main space' has been downsized
- the cinema space is cut:
 - there is already a big auditorium space and currently M HKA has a collaboration with Cinema Zuid which can continue
 - the Photo museum (a couple of blocks away) already has an auditorium and stage which can be used as a cinema
- the bike storage will be placed outside of the building (in the quay), this storage is only for employees, so they can take the back entrance of the building from there

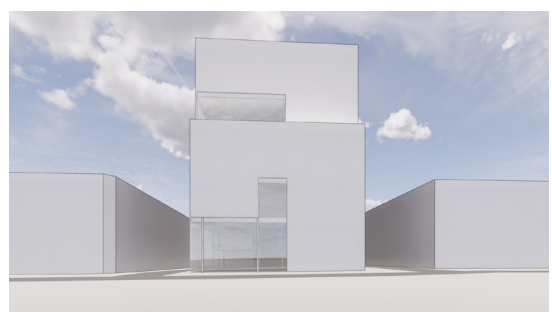
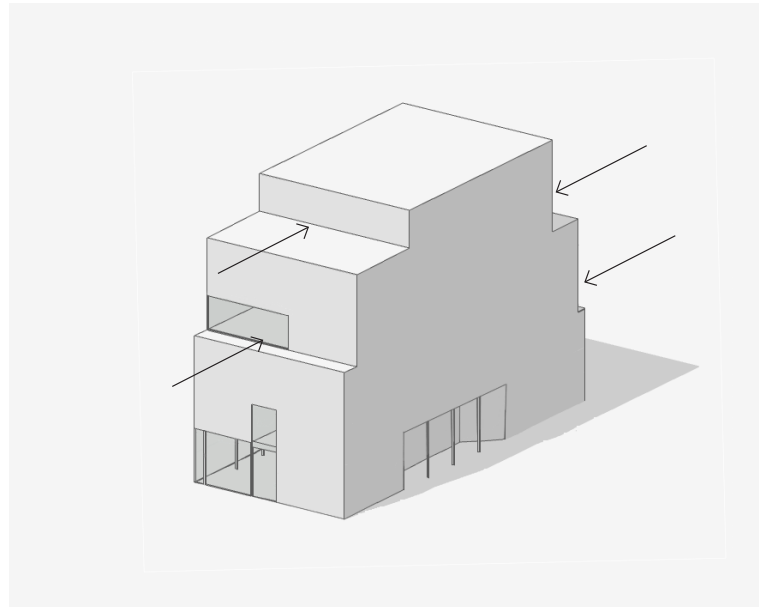


ONDERWERP		#	minimale netto oppervlakte (excl.binnen- en buitenmuren, excl. circulatie)	vrije hoogte min.	minimale netto volume (excl.binnen- en buitenmuren, excl. circulatie)	bruterings factor	minimalebruto oppervlakte (incl.binnen- en buitenmuren, incl. circulatie)	minimalebruto volume (incl.binnen- en buitenmuren, incl. circulatie)
4.2	Collectiecomponent		3 032		16 408			
	circuit 1		1 792		10 408	1,3	2 330	13 530
	hoofdzalen type 1	4	640	8,00	5 120			
	hoofdzalen type 2	6	624	5,00	3 120			
	zijzalen type 1	5	320	4,50	1 440			
	kabinetten	8	208	3,50	728			
	circuit 2		1 040		5 200	1,3	1 352	6 760
	hoofdzal type 2	10	1 040	5,00	5 200			
	ronde zaal	1	200	4,00	800	1,3	260	1 040
4.3	Tentoonstellingscomponent		3 150		19 800			
	hoofdcircuit	1	1 800	6,00	10 800	1,5	2 700	16 200
	nevencircuit 1	1	450	8,00	3 600	1,5	675	5 400
	nevencircuit 2	2	900	6,00	5 400	1,5	1 350	8 100
4.4	Bibliotheek & Archief		1 901		7 470			
4.4.1	leeszaal / bibliotheek	1	222	3,80	844	1,5	333	1 265
4.4.2	documentatiecentrum	1	700	3,50	2 450	1,5	1 050	3 675
4.4.3	studieruimte	1	40	3,50	140	1,5	60	210
4.4.4	content management / digitale werking	1	39	3,50	137	1,5	59	205
4.4.5	ondersteunende voorzieningen		20	3,50	70	1,5	30	105
4.4.5.1	sanitair medewerkers	1	incl.					
4.4.5.2	kitchenette	1	incl.					
4.4.6	archiefwerking		130	3,50	455	1,5	195	683
4.4.6.1	kantooruimte	1	incl.					
4.4.6.2	scanruimte	1	incl.					
4.4.7	technische werking archiefdepo							
4.4.7.1	ontvangst - afgesloten quarantaineruimte	1	incl.					
4.4.7.2	verwerkingsruimte	1	incl.					
4.4.7.3	depot kunstarchieven	1	750	4,50	3 375	1,5	1 125	5 063
4.5	Het forum		3 608		25 140			
4.5.1	Forumhoofdrimte	1	1 556	9,00	14 004	1,7	2 645	23 807
4.5.2	onthaalfunctie							
4.5.2.1	lobby/hal	1	570		3 420	1,7	969	5 814
4.5.2.2	ontvangstzone en vestiaire groepen	1	incl.	9,00				
4.5.2.3	vestiaire en lockerruimte	1	incl.					
4.5.2.4	balie/orientatie/ticketing	1	incl.	3,00				
4.5.2.5	berging onthaal	1	incl.					
4.5.3	specifieke forumverwante functies							
4.5.3.1	museumshop	1	180	4,00	720	1,7	306	1 224
4.5.3.2	horeca	1	370	3,00	1 110	1,7	629	1 887
4.5.3.3	multifunctionele evenementenruimte en berging	1	incl. forum	7,00				
4.5.3.4	seminarielokalen	3	160	3,00	480	1,7	272	816
4.5.3.5	auditorium / cinemawerking	1	410	9,00	3 690	1,7	697	6 273
4.5.3.6	cinemawerking - imrzaal	1	210	6,00	1 260	1,7	357	2 142
4.5.3.7	educatieve ruimte	1	incl.forum	3,00				
4.5.5	ondersteunende voorzieningen							
4.5.5.1	sanitair bezoekers	1	152	3,00	456	1,7	258	775
4.5.5.2	sanitair medewerkers	1	incl.					
4.5.5.3	EHBO-lokaal	1	incl.					
	Back-office		3 337		17 123			
4.6	Back-office werkplaatsen		375		1 688			
4.6.1	Werkplaatsen							
4.6.1.2	Houtwerkplaats	1	160	4,50	720	1,4	224	1 008
4.6.1.3	Metaalwerkplaats	1	70	4,50	315	1,4	98	441
4.6.1.4	Schilderwerkplaats	1	80	4,50	360	1,4	112	504
4.6.1.5	Audio- en videoruimte	1	30	4,50	135	1,4	42	189
4.6.1.6	Opslagruimte voor technisch materiaal	1	35	4,50	158	1,4	49	221
4.7	Back-office art handling		1 531		9 748			
4.7.2	Transport - en handlingzone							
4.7.2.1	Sluis / sas	1	129	6,80	877	1,4	181	1 228
4.7.2.2	Zone voor laden en lossen	1	120	6,80	816	1,4	168	1 142
4.7.2.3	Overslagruimte	1	260	6,80	1 768	1,4	364	2 475
4.7.2.4	Registratie, controle en onderhoud	1	incl.					
4.7.2.5	Verpakingsruimte (inpakken/uitpakken)	1	incl.					
4.7.2.6	Berging voor opslag kisten/plastiekfolie/inpakmateriaal	1	30	4,50	135	1,4	42	189
4.7.2.7	Berging voor opslag materiaal en hulpmiddelen	1	20	4,50	90	1,4	28	126
4.7.3	Ruimte voor collectiebeheer							
4.7.3.1	Quarantaineruimte	1	27	4,50	122	1,4	38	170
4.7.3.2	Werkatelier	1	234	4,50	1 053	1,4	328	1 474
4.7.3.5	Fotostudio	1	36	4,50	162	1,4	50	227
4.7.3.6	Gesloten binnendepot	1	675	7,00	4 725	1,4	945	6 615
4.8	Back-office logistiek en technieken		704		3 143			
4.8.1	Desk beveiligings- en gebouwbeheer	1	9	3,50	32	1,4	13	44
4.8.2	Hoofdserverlokaal (MER)	1	20	3,50	70	1,4	28	98
4.8.3	Kitchenette	1	6	3,50	21	1,4	8	29
4.8.4	Sanitair medewerkers (gescheiden)	2	16	3,50	56	1,4	22	78
4.8.5	Kleedruimten (incl. douches, gescheiden)	2	60	3,50	210	1,4	84	294
4.8.6	Bergruimten				0			
4.8.6.1	berging voor schoonmaak	1	100	3,50	350	1,4	140	490
4.8.6.2	centrale berging logistiek	1	250	4,50	1 125	1,4	350	1 575
4.8.7	Prisenstalling	1	162	4,50	729	1,4	227	1 021
4.8.8	Technische lokalen		volgens behoefte					
4.8.9	Toegang voor logistiek							
4.8.9.1	sluis / sas	1	40	6,80	272	1,4	56	381
4.8.9.2	zone voor laden en lossen	1	41	6,80	279	1,4	57	390
4.9	Back-office administratie		727		2 545			

VOLUME

set-backs

The building will have setbacks to be more in scale with the buildings surrounding it. In the down right image you can see the top floor not even being visible from the street because of the set-back.



P2

notes from P2

cultural buildings at the World Exhibition, but which are located there now?

look at the Alte Pinakotek by Hans Döllgast in Munich for reference on stairs

why are the setbacks on those heights? related to the surrounding buildings?

the staircase as an architectural motive > the programme placed around it

sustainability: materiality and what is my position on it?

how to compensate the demolishing of the existing building

there is a filterspace needed at the entrance

use the subjects of the brief (collection, research, ..) as a structure for the presentation

more context > present for someone that doesn't know the project

4 AN ARCHITECTURE FOR ART II

design process until P4 in May

The second part of the design process was more about individual work. After P2 we started working out our individual projects working towards our final P5 presentation in the end of June. We had two important presentations before the P5: the P3, an informal presentation in front of all of our teachers and our fellow students, and the P4 presentation, a formal presentation determining whether you could go on to graduate in June.

After the P2 we also started having weekly meetings with our Building Engineering tutors. Working on developing our project technically alongside designing it architecturally.

BUILDING TECHNOLOGY

introduction

Some notes on the introductory talk by the BT teachers:

INTEGRATION! do not present arch and BT as separate subjects

what are your goals?

circularity

position on sustainability

what is load bearing?

piece of facade 1:20 and 1:5 details

heating + cooling

diagrammatic climate: air > ventilation and temperature > ventilation/floor/radiators

1x meeting climate tutor

1x meeting structural engineer

reused concrete vs wooden structure

no climate control in forum space?

book Constructing Architecture

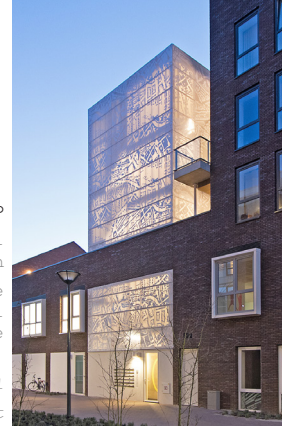
FACADE

references



Kunsthaus Zurich - Chipperfield
grid with open and closed parts

*natural stone is not a sustainable material
grid gives structure to the openings, which
are not placed in a grid and seem random*



MFC Atlas - ZEEP

*translucent facade with perforated steel
displaying a floor plan
facade is not lit by light from inside
the building, but through a technical
feature in the facade structure*

*steel is not a sustainable material
facade not actually translucent*

23

24



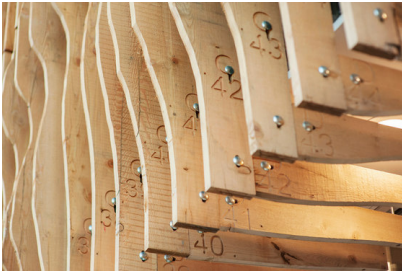
Junction 9 - MODA
wooden half-open facade

*wood is a sustainable material
not structural, so only placed on top of facade*



**Aspen Art Museum -
Shigeru Ban Architects**
perforated wooden facade

*wood is a sustainable material
still too much sunlight for art spaces*



25

26

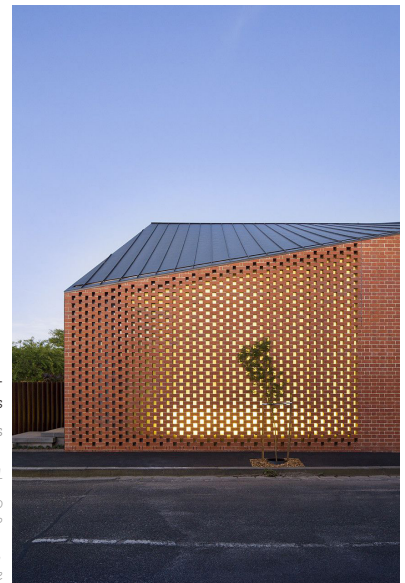


Fuensanta House - Muka Arquitectura
polycarbonate double facade on both sides
of the stairs

*polycarbonate is not a sustainable material
translucent facade gets light into the building
without have any direct sunlight. still experi-
encing lighting throughout the day
need a double facade to insulate it well enough*

**Harold Street Residence - Jack-
son Clements Burrows Architects**
brick wall with open and closed parts

*brick is a more sustainable material
openings made by hand? very work intensive to do
for a bigger building?
behind openings should be glass for insulation,
so it will need a double facade*



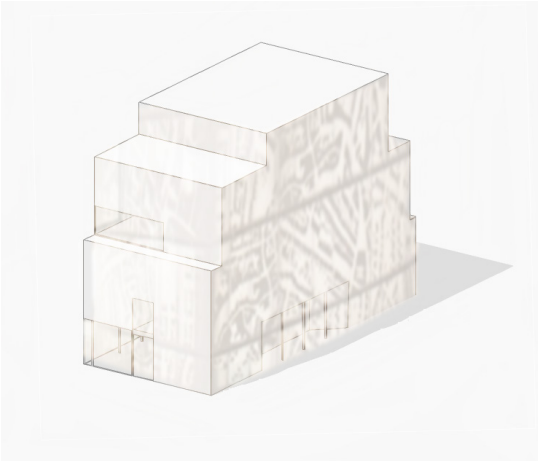
27

28

FACADE

studies

Since the building is quite big, I wanted to have a material for the facade to subdivide this surface. Also, since many of the functions shouldn't have daylight (see appendix 1), the facade will be closed for a big part. Because of this I wanted to look for a semi-transparent or translucent facade to open up the building.



study fitting the facade of the MFC Atlas onto the volume



study fitting the facade of the Aspen Art Museum onto the volume

scale is wrong, so in this image the museum looks smaller than it will be

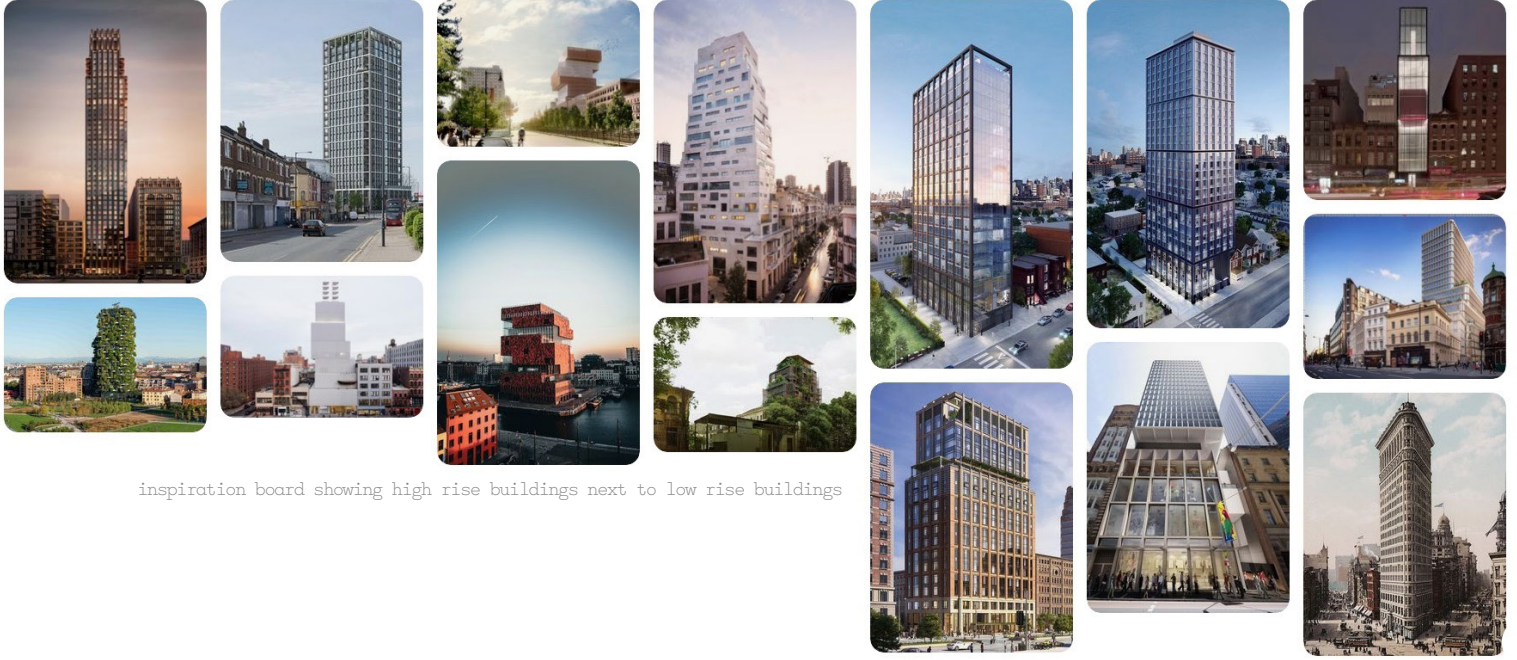
FACADE

inspiration boards

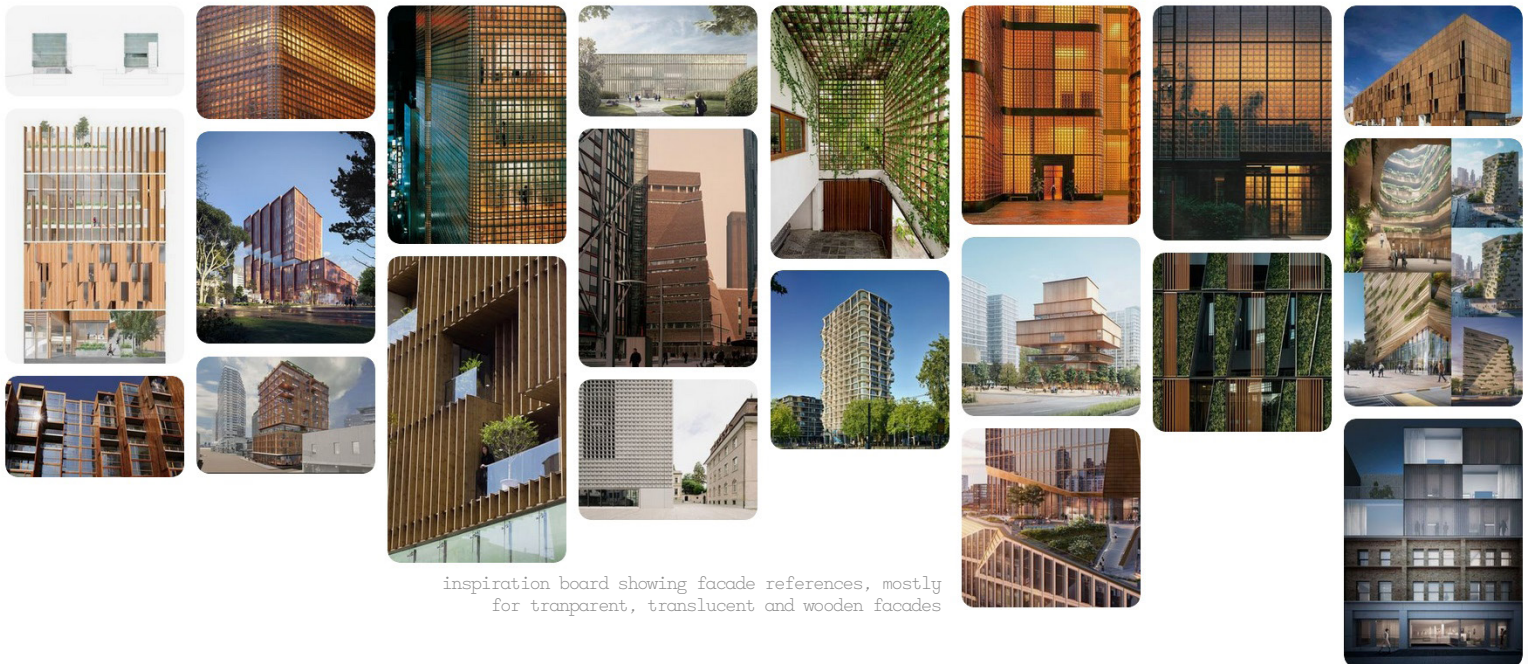
For designing the facade, I made some boards to find projects which I could look at for inspiration of the facade.

I first made one for looking at projects that dealt with high rise buildings next to low rise buildings. Seeing how they related to each other and what methods were used to convey the scale of the different buildings.

The second board was for facade references, mostly looking at transparent, translucent and wooden facades. Preferably projects where the facades consisted of smaller elements, not just big glass curtain walls.



inspiration board showing high rise buildings next to low rise buildings

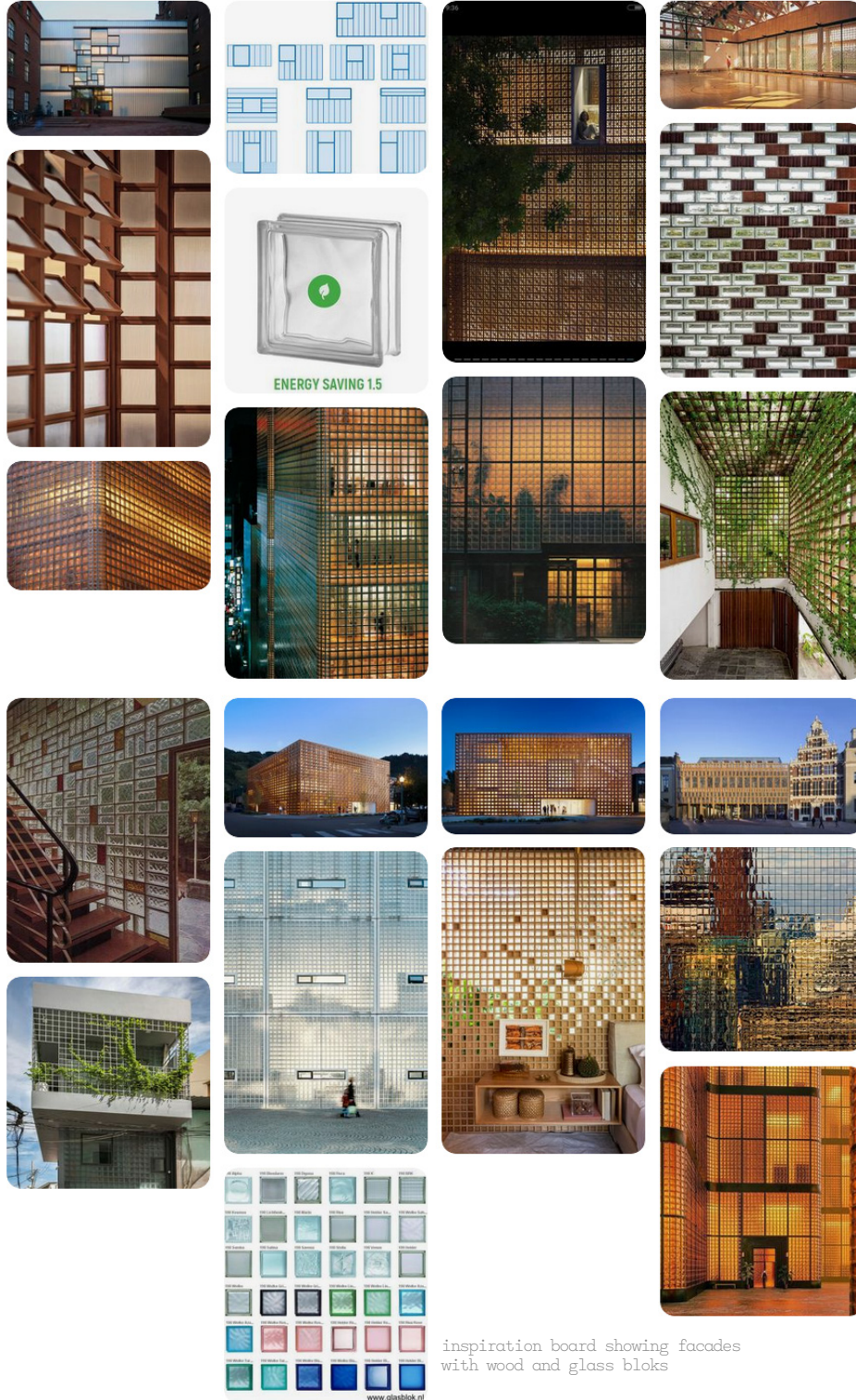


inspiration board showing facade references, mostly for transparent, translucent and wooden facades

FACADE

glass brick and wood

After looking at the references, I liked the glass blocks as a facade material. It is a smaller sized material, more human-scale, which can be either transparent or translucent. The problem is that the blocks are almost always held together with mortar, which makes the whole facade not reusable and recyclable. To prevent this, I wanted to create a system made with wood which would be demountable and makes the blocks replacable, if necessary.



glass block on a high rise facade >

< open wooden structure can be used as a barrier extending from the facade

glass block < divided up in facade elements

inspiration board showing facades with wood and glass blocks

www.glasblok.nl

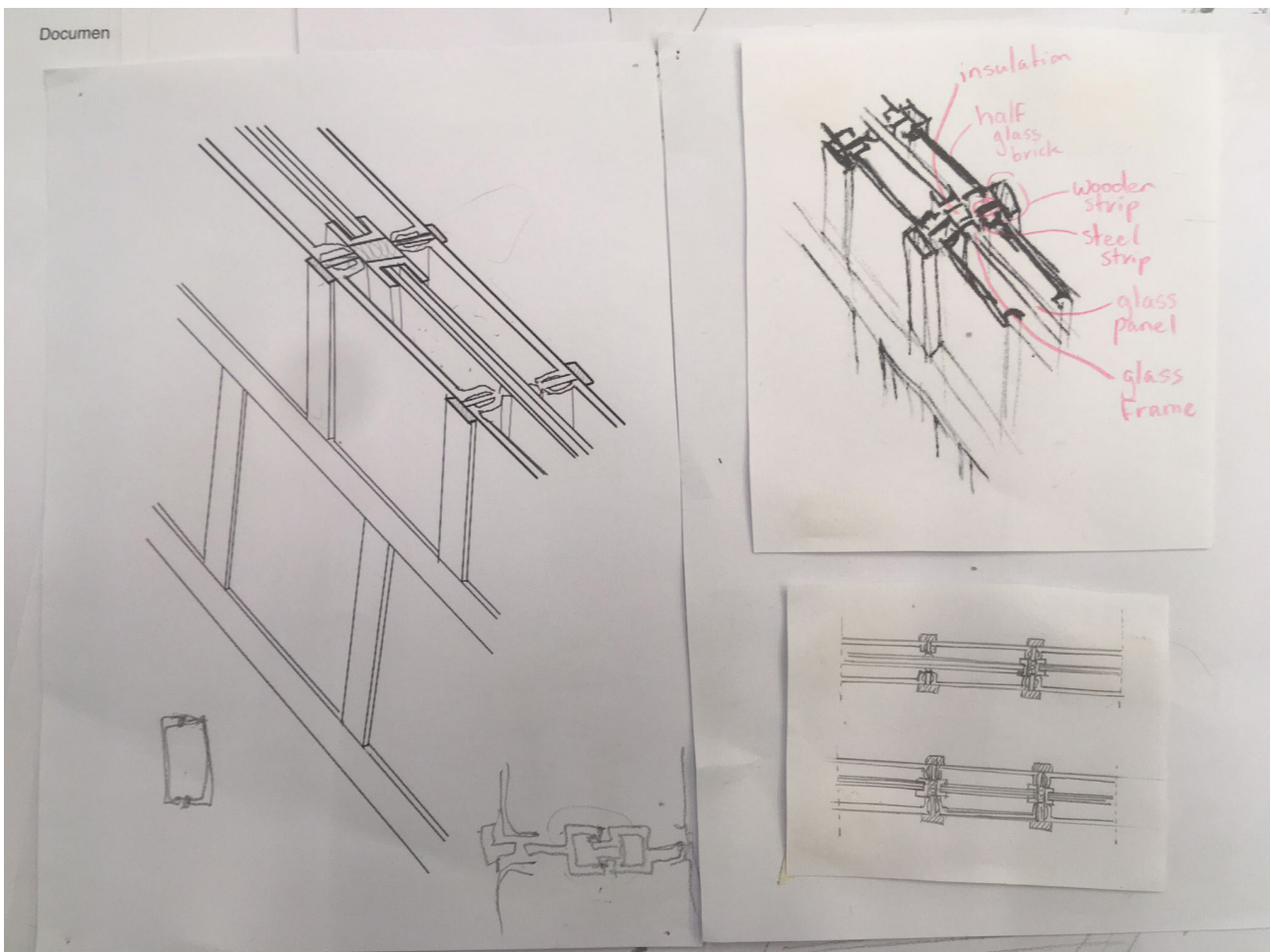
FACADE

technical questions and sketches

glass blocks:

- mortar > no maintenance?
- carry only themselves
- recycleable > recycle windows of the old building
- U-value 0,51 > more than curtain wall
- blocks light from high sun
- stores warmth?

- insulation?
- draft through construction?
- connection steel+timber+glass



FACADE

design

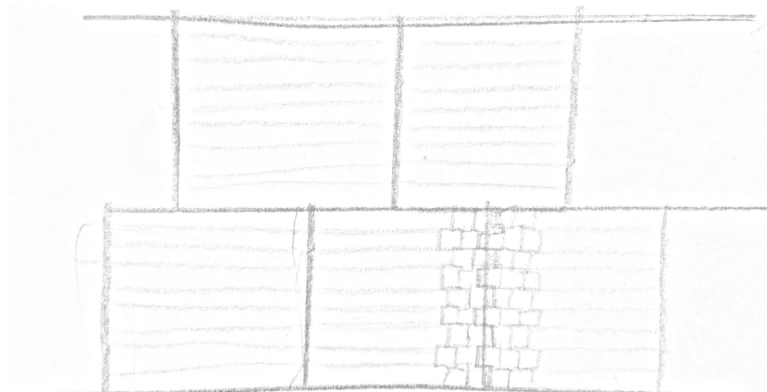
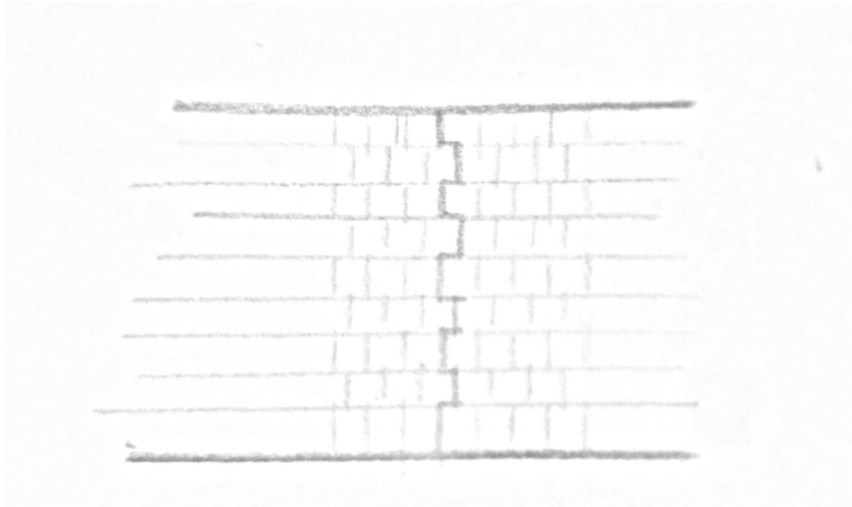
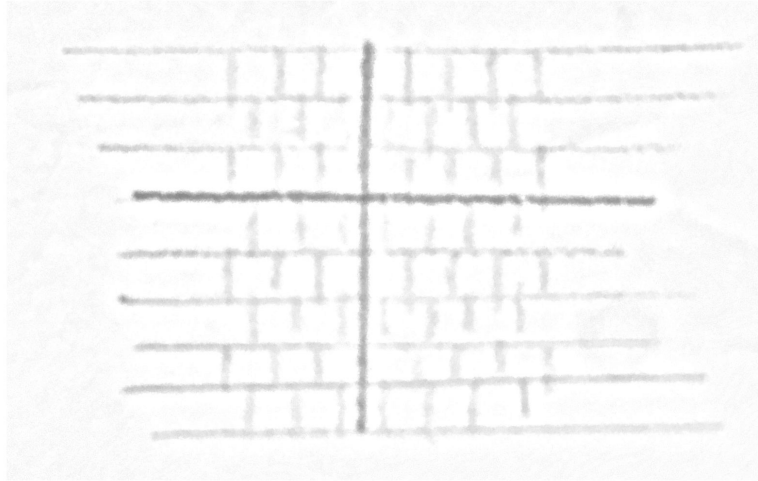


Design of the facade on the park site. The design consists of glass blocks with wooden seams. Sometimes, instead of glass blocks will be wooden blocks to close off that part of the facade. Around the entrance, the whole facade will consist of the glass blocks and will be transparent.

FACADE

panel

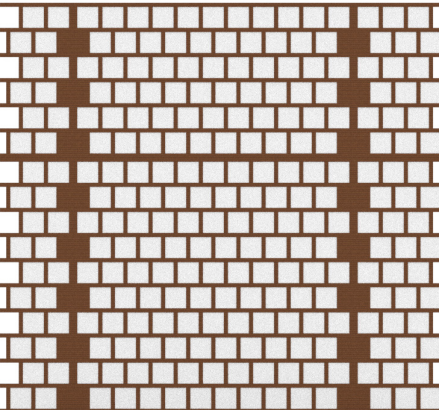
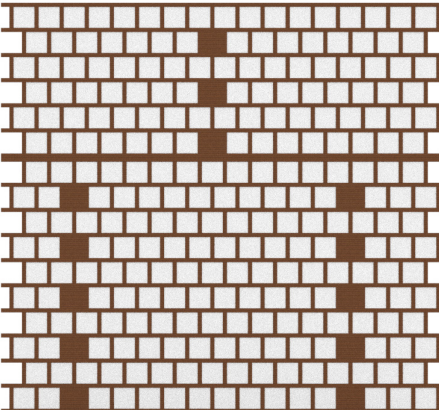
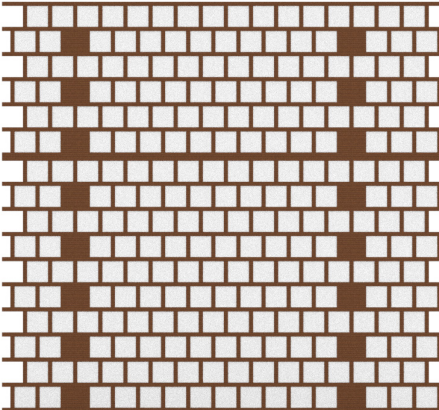
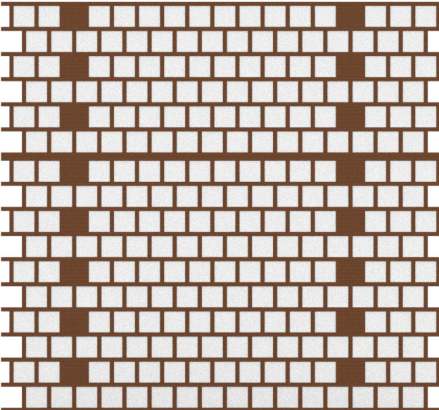
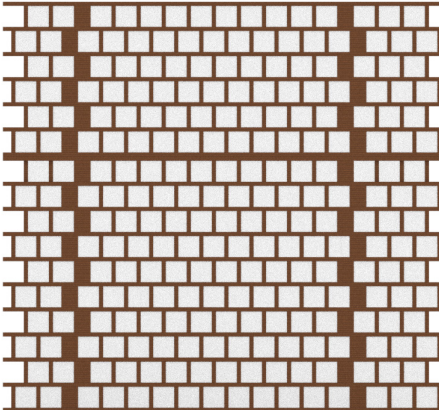
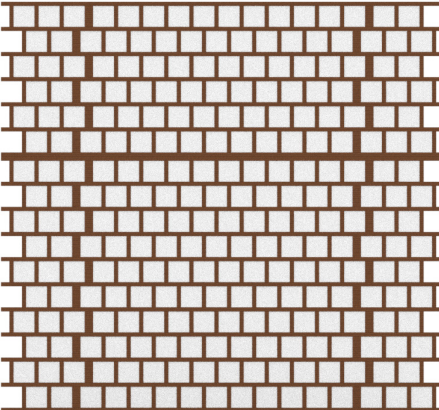
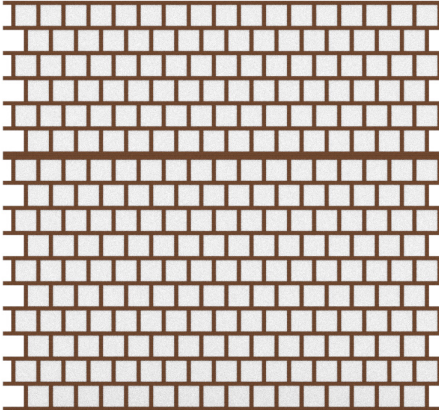
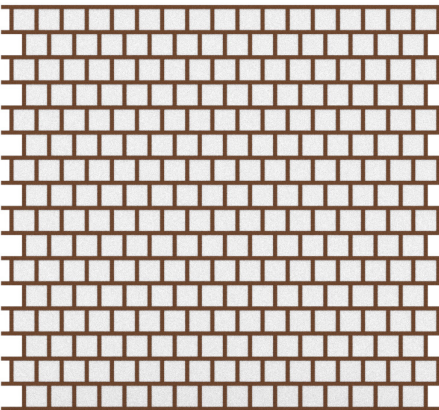
To realise this facade, it will consist of panels. Due to the horizontal offset of the blocks, where the panels connect will be visible in the facade. So the size and shape of the panel will be of importance to the appearance of the facade.



sketches of panel connections

FACADE

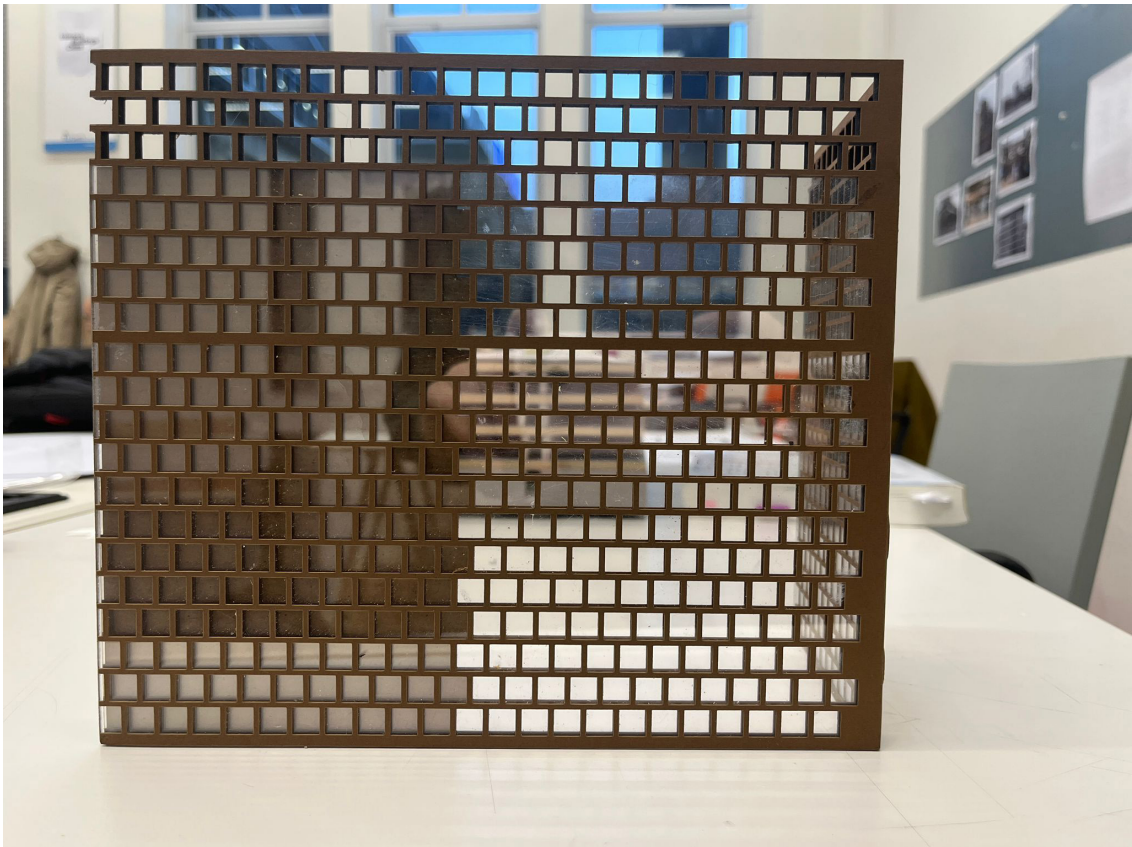
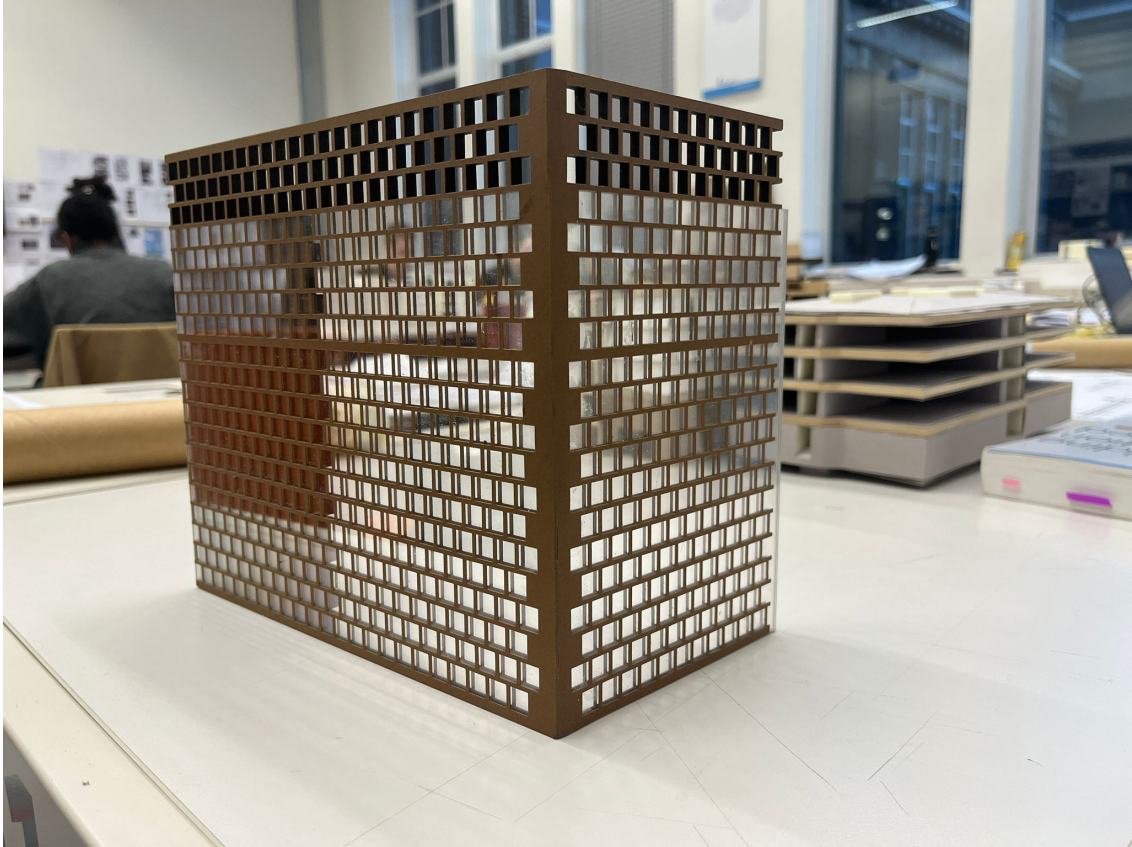
panel options



different options for the panel shape and organisation of and within the panels

FACADE

model



1:20 facade model: on the left side a wall is placed to show a closed off facade part and on the top the glass is left out to show the facade continuing on into a barrier around the roof.

FACADE

technical detail

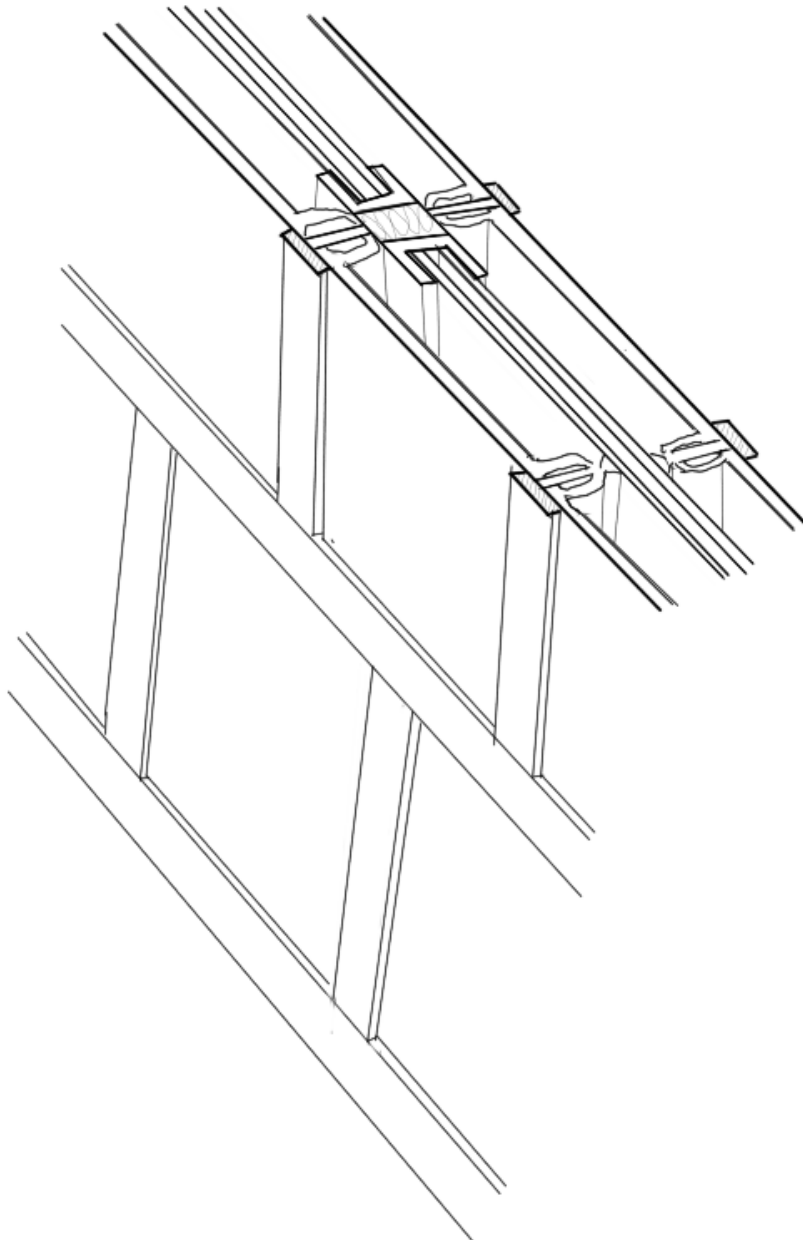
I started on designing a technical detail for the facade, but this raised more questions. Because of the structure of the facade (not having a vertical continuous structure) it is hard to make a the facade without it needing a double facade (for insulation). This would probably mean having a curtain wall on the inside of the facade. I wanted to avoid this, because it would give the facade a whole different expression from the inside of the building, having the light be reflected from a flat glass surface instead of the blocks with the wood in between. This is why I designed the facade as two half glass blocks with a glass plane in between. This was still raising some questions though.

how to clean the window on the inside?

what is holding up the facade if the first floor is at 11m?

is it insulating enough like this?

what is instulating between the two steel strips?



FACADE

impression



an impression of the facade in context

REFERENCES

interior references



Documenta IX, Aue Pavilions - Robbrecht en Daem architecten

wooden interior walls for exhibition

29



Swiss School of Engineering for the Wood Industry - Meili, Peter & Partner

wooden interior walls

30



Maison de Verre - Pierre Chareau

glass block facade

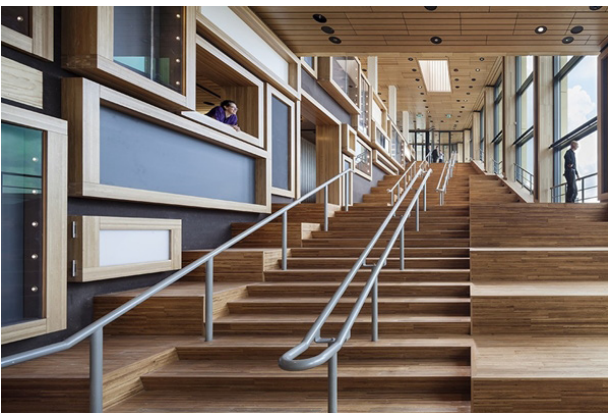
31



Courtyard Hybrid - vector architects

glass brick facade with a wooden interior

32



33

Cultural Center Rozet - Neutelings Riedijk Architects

stairs with functions

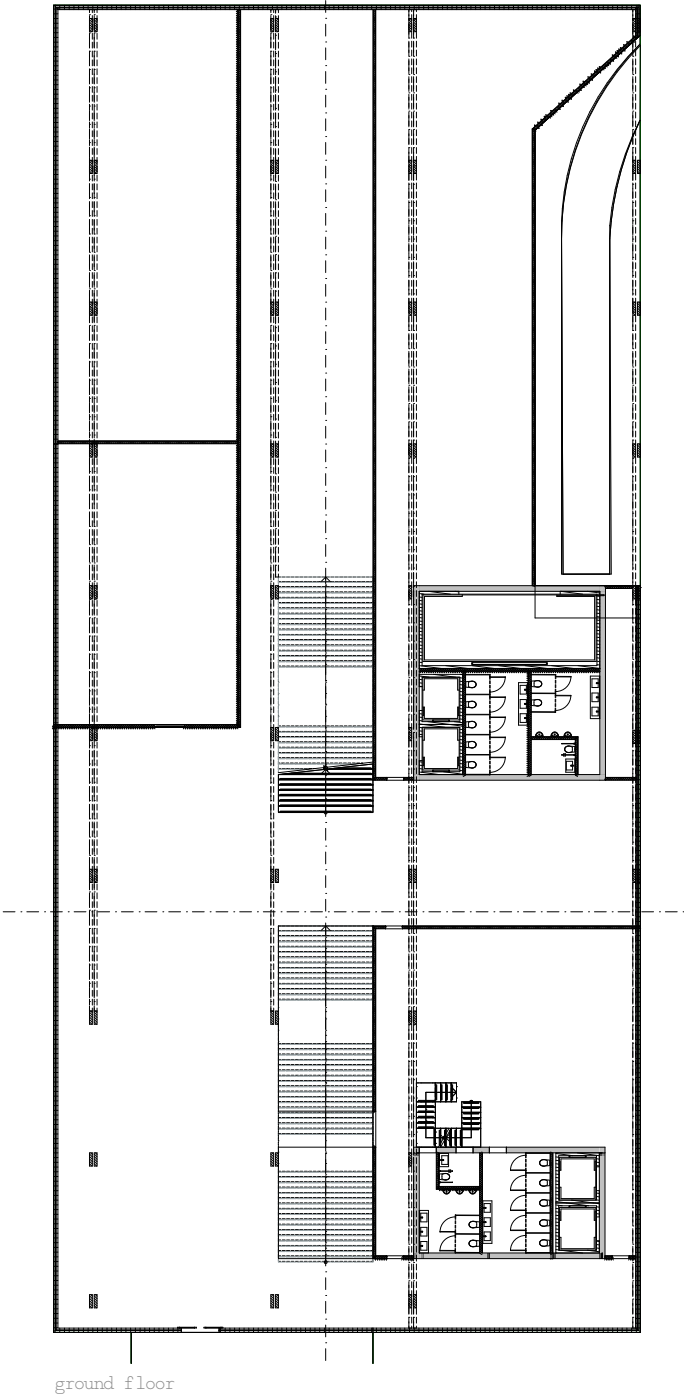


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BUILDING TECHNOLOGY

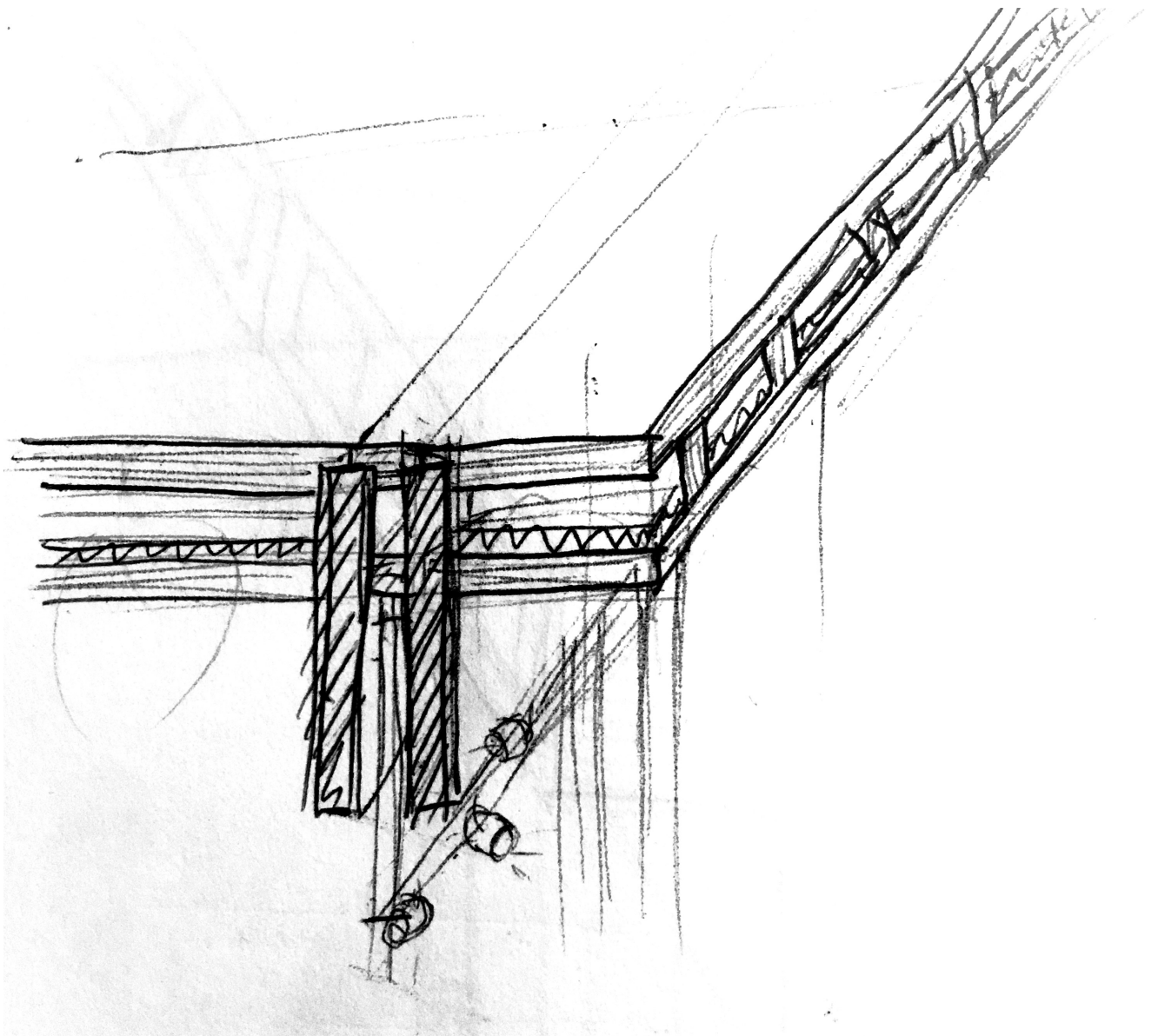
structure

The building consists of two concrete cores and a timber structure. The timber structure is placed in the length of the building, so the beams don't cross the stairs in the middle.



BUILDING TECHNOLOGY

details



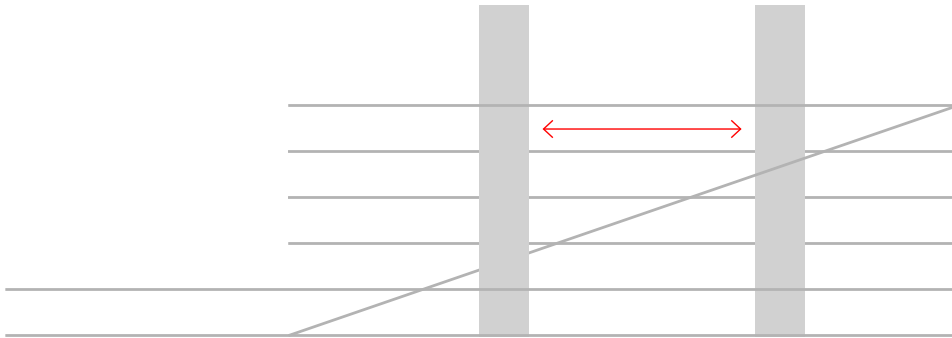
*floors are carrying in the long direction > very high
floor slabs > would it be possible to get the ventilation
channels through the floor slabs?*

STAIRS

connection elevators

How do I connect the stairs and the elevators?

Visitors who can't use the stairs, should be able to experience the building as well. The elevator should not just be a back passage far in the back of the building. How do I get these elements to connect with the stairs moving diagonally through the building and the elevators moving vertically?



STAIRS

some questions

What happens on/under/around the stairs?

Will they be visible from underneath?

What do they look like from underneath?

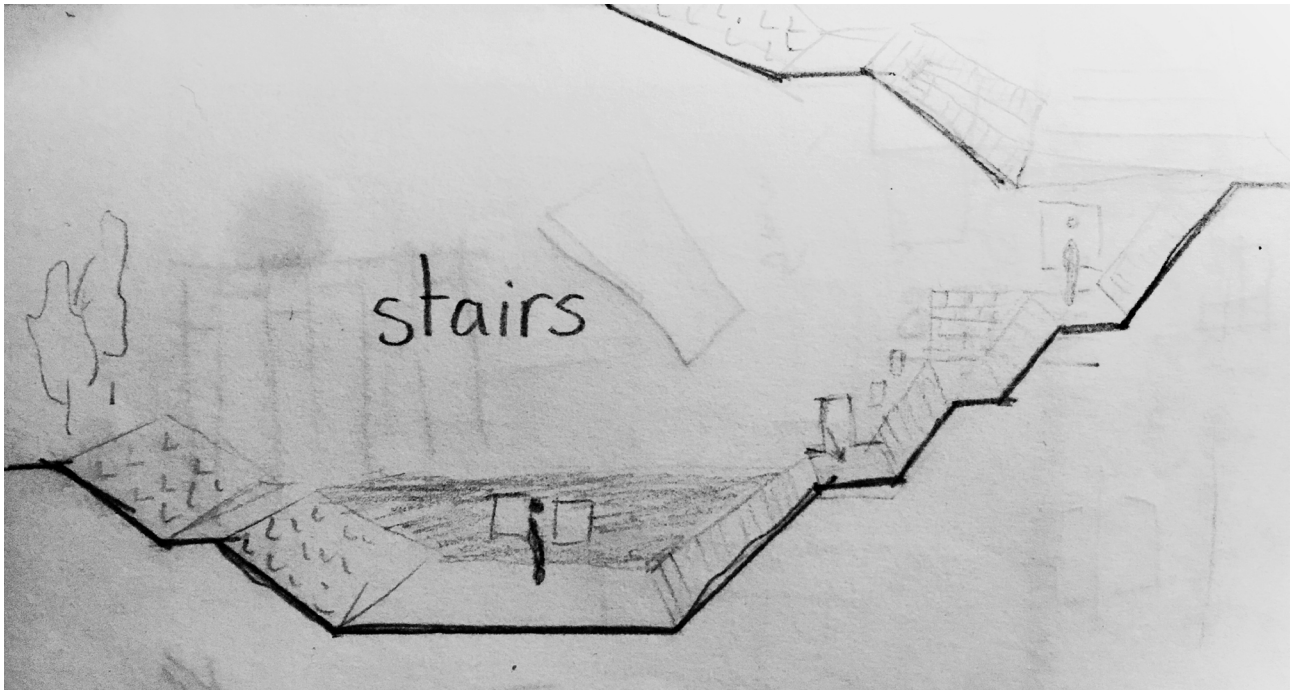
Are there exhibitions on the stairs?

What happens on the landings?

What will happen with the stairs after the viewpoint on the water?

Will the stairs just turn around?

Will they change after that point?



STAIRS

model 1:100



I made a test model 1:100 to try and design the stair and the spaces around it. It was foam and cardboard held together with pins, so I could move everything around.

STAIRS

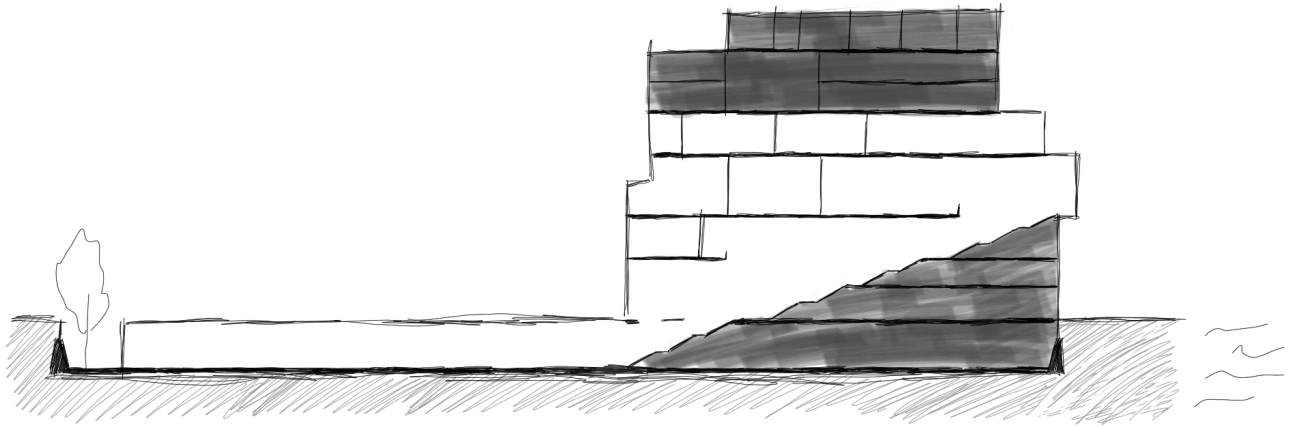
design



The stair as a wooden element in the center of the building. Along the stairs are openings, cabinets, exhibitions and passages.

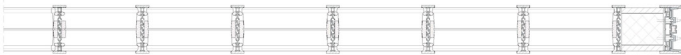
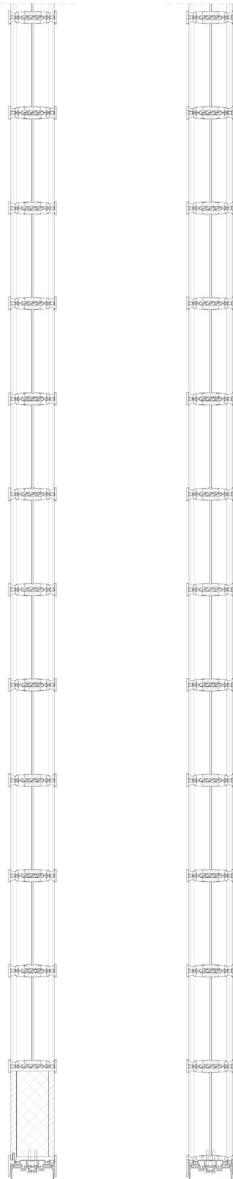
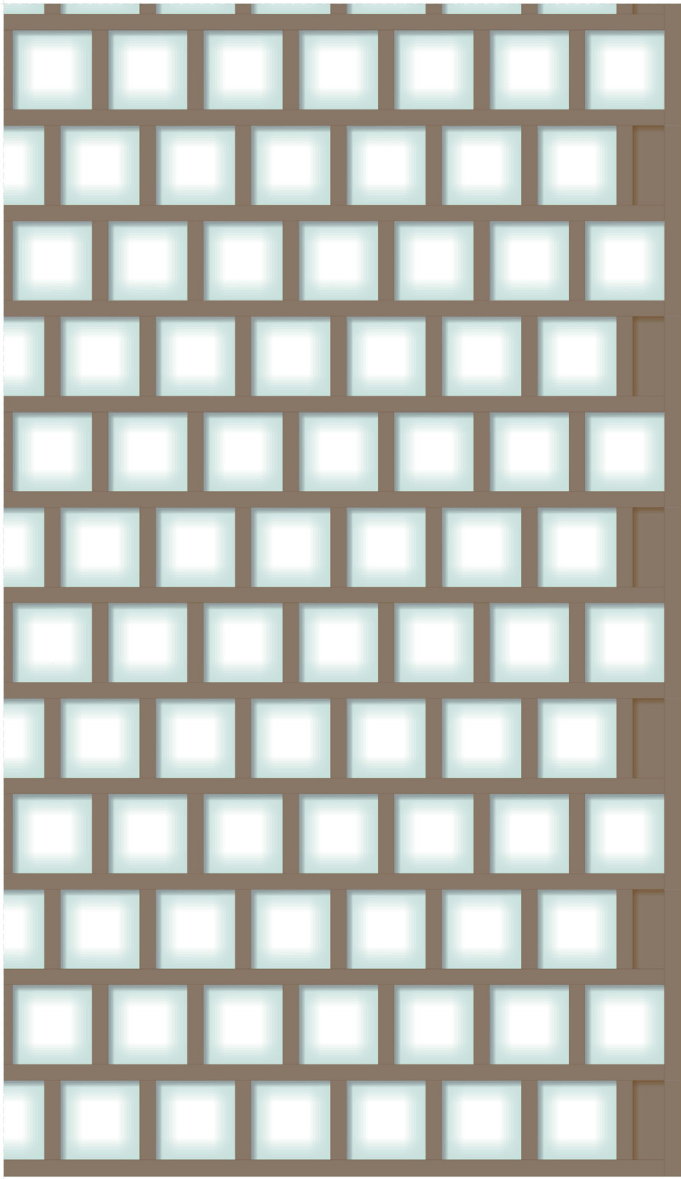
STAIRS

private-public



FACADE

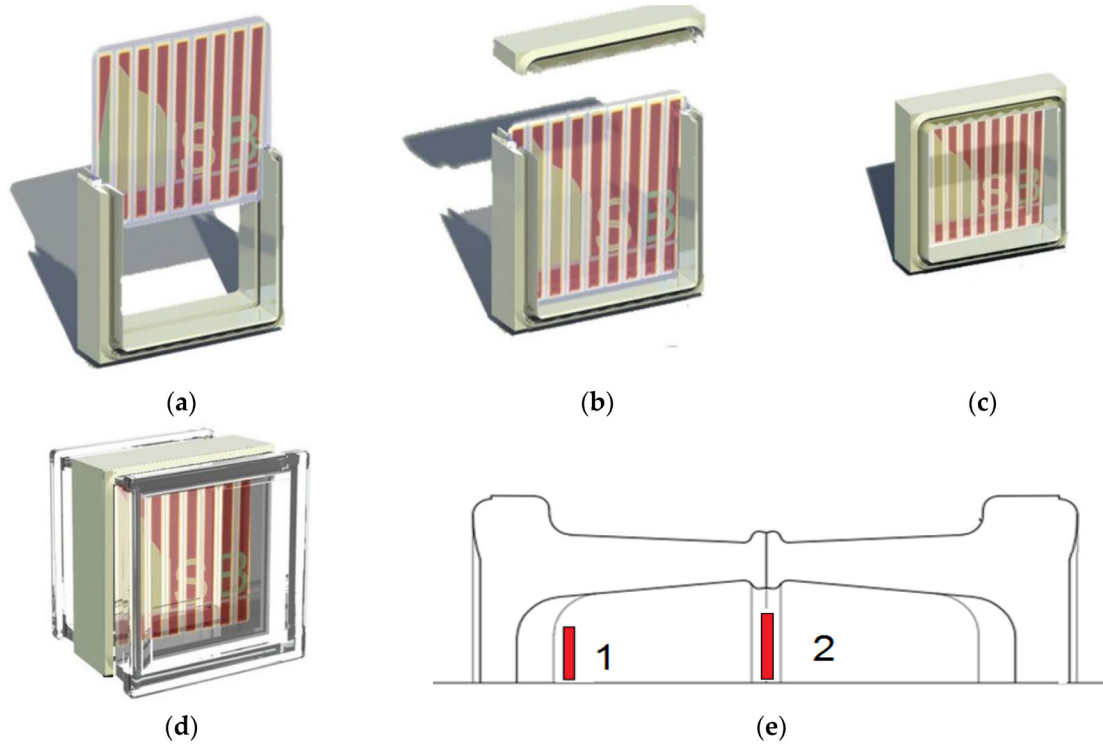
element in detail



FACADE

photovoltaic glass block

In the paper *Experimental Investigation on the Performances of Innovative PV Vertical Structures* (Acciari, G. et al., 2019), the authors describe the research they have been doing into photovoltaic (solar energy collecting) glass blocks. These blocks have not yet been fully developed, but when they will be, it is possible to replace the blocks in the facade with those due to the demountability of the facade structure.



FACADE

scale reference project

I visited the Solaris Eclips building in Amsterdam. This building also has a glass block facade so to try and compare the scale I edited it to make it twice as high and twice as wide, making the sizes in the image 32x56 with a height of 40m. In my design the building will be 30x70 with a height of 50m, so somewhat bigger.



measurements of the Solaris Eclips building in Amsterdam



photoshop edit of the Solaris Eclips building in Amsterdam

FACADE

title



the facade visible from the inside

THE GALLERY

throughout the day

*van Abbe Museum > architecture
and curation taking over the art
works*

*to avoid this a flexible wall can
be placed in front of the facade
to create a more minimal space,
a cube with four white walls. In
this way the curator can decide
what kind of space would be
appropriate for the art works.*



THE GALLERY

the MASP

The MASP was famous for its unconventional museum architecture, one of the things jumping out in the famous picture that I recreated is the amount of daylight. Most museums don't allow for this much daylight, because it can be harmful to the art works. In the picture of the MASP in 2015 can be seen how the blinds are closed and more artificial lighting is added to the ceiling. Actually, on all of the recent images of the MASP the blinds are closed. It probably isn't allowed anymore (I couldn't find a source though) to have that much daylight in a space with paintings.

In my design there are rooms which get daylight (on the left page), but I took tried to minimize the exposure of the more vulnerable art works by:

- adding blinds which can be let down if there is too much light
- using translucent, not transparent, glass blocks for the facade of the gallery spaces
- making it possible to put flexible walls in front of the facade which only allow for light to come in from the top
- only having natural light in some spaces, so those spaces can be used for sculptures or other less-vulnerable art works



The MASP in 1970



The MASP in 2015

THE GALLERY

materialisation

P1 gallery and M HKA gallery

white walls

exposed wooden structure

wooden floors

wooden plinths and door frames

I wanted to create a warm atmosphere, the materialisation plays a big part in that. Also the lighting is making it feel more welcoming.

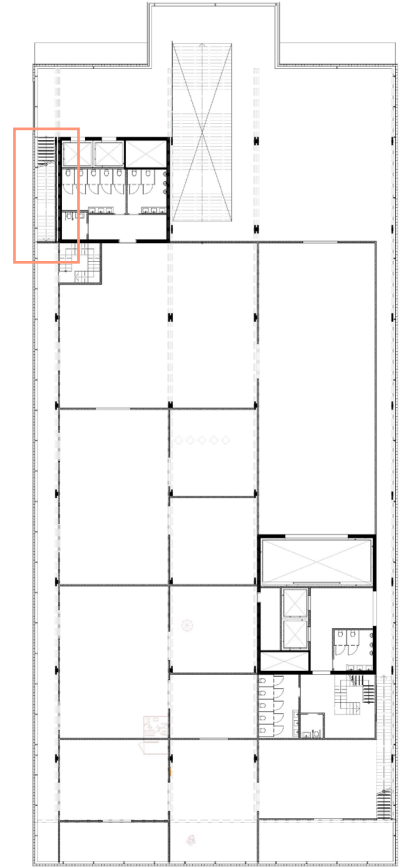


P1 model pictures

STAIRS

reference

After arriving at the end of the stairs, at the viewpoint on the second floor, the visitors turn around and either visit the gallery spaces or take the stairs on the side of the building. Earlier I found a reference image of the stairs in the Fuensanta House by Muka Arquitectura, these have polycarbonate walls on the side, making daylight enter the building. Similarly, in my design I have narrow stairs moving along the side of the building, against a translucent facade.



5 AN ARCHITECTURE FOR ART III

design process until P5

I did not pass the P4 in may, so I will be graduating after the summer holiday. This chapter starts with the notes and comments I got on the P4 in May and shows my design process after that presentation until the P5.

NOTES

notes and comments on the P4 in May

Plan

- The columns in the basement, how does it relate to the division of the rooms? How does the structural grid line up? > structural grid lining out with structure of the building?
- Routing, if you have a blockbuster exhibition, could you share how the crowd will move through the building. On the upper floor will have a big exhibition, how will people get there?
- The corridor, how wide is it? You have around the stairs, a passage, is it also 2m? I think in the floor plan you need to provide space and generosity for a huge number of people. The corridor (circulation?) should not be seen as just a necessity but more a scenography of the space.
- Asked to use colours in plan to show the program.
- how does it work? How does one know which is the entrance and which is the exit? Why can both not be both?
- Could you provide generosity in addressing the number of visitors coming to the museum? Not just a necessity but an approach to it as a scenography.
- What is the relation between main entrance and at the end of the basement with the tree? Is there only one entrance? You haven't addressed this and the circulation isn't clear.

Façade + windows

- Façade from outside the ground floor is less transparent than the floors above, why? Is this the visual result that you want to create or is it the result of the interior program?
- Why do you choose this block size for the ground floor?
- How big is a panel? It can be very interesting to show it in three dimensions.
- West window at the end of the staircase: shading, size of the glass panels, The small windows on the ground floor, what are they, what do they do?
- In a huge building, very abstract the glass blocks create a very small grid. Weil Arets, academy in Maastricht is example.
- What role do the windows play in the experience of the building? Are they randomly distributed, or are they placed where you need them?
- Model of the building on the site: glazed facade on the south side. Is this realistic?
- Does sunshade on the inside work?
- How will you make a corner?

Material

- Wood on the façade vs wood in the interior, the staircase for example?
- Specific type of wood, maybe it is too soft for flooring in a public building
- There needs to be a sense of realism for materiality and in the plan.
- About the big red wall, where does it start and stop? What is it made of? Why a red wall?
- Materiality: pine wood for the stairs and the connection between the facade and the inner walls

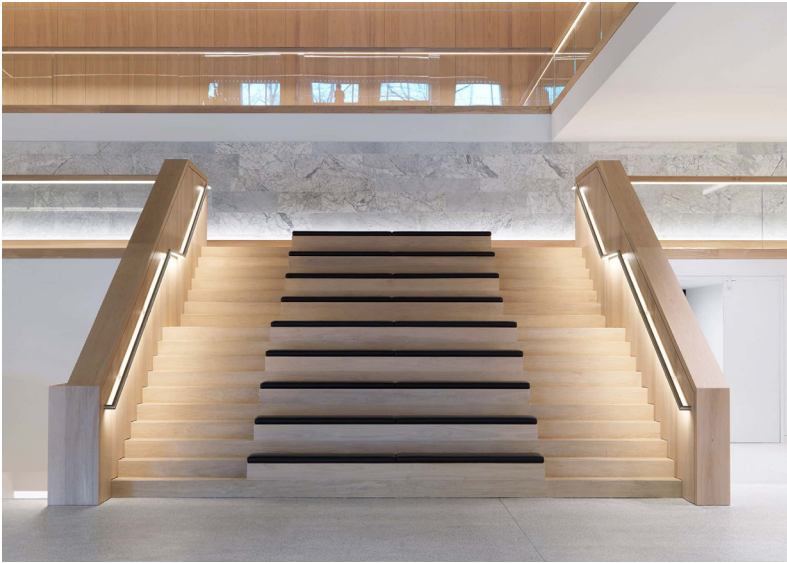
Other

- Notion of scale. You immediately zoom into the building block. What is the scale of the building in relation to the city? Is there an image which shows the building in relation to the city? The building is much larger than surroundings.
- Reflection is also part of the assessment. Please elaborate on the process. What could others learn from it?
- What did you learn from making the model of the Masp??
- P1 model: lovely photographs. Could you make some of your current design? Look at how Bartosz talks about his project through modelling.
- The plan of the courthouse's foundation about the lock would be good to see. (?)
- The courthouse building is very durable since it was meant to stay for ten years but, ultimately, state for 50 years. (?)
- When going up the main stair, the viewpoint offers a view of Linkeroever, not the city itself.
- One turns around and takes another staircase. What is the relation between the two staircases?

MATERIALISATION

stairs

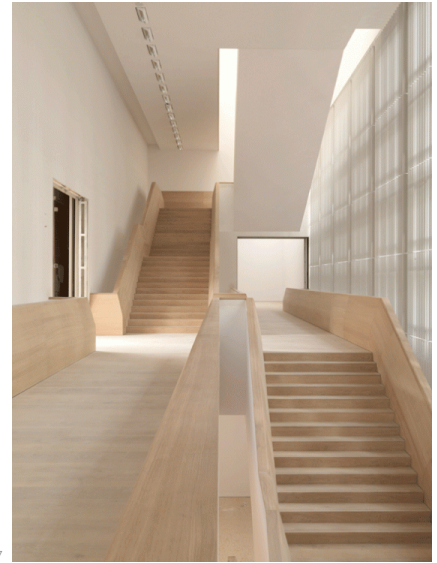
White oak seems to be used often for wooden museum stairs. It is a hardwood, so it can sustain a large amount of visitors walking on it. It can also be treated in different ways, as can be seen below, to give it a different appearance.



36

stairs in the Design Museum London

Dinesen Oak - white oak
Thickness 20-22 mm. Mixed widths 100-350mm. Length 1.2-5.6m
Finish Light Oil and Lacquer



37

stairs in the Brandhorst Museum Munich

Dinesen Oak - white oak
Thickness 22mm. Width 200-225-250-275-300 mm. Length 2,5-5m
Finish White Oil



38

stairs in the Hof van Busleyden Mechelen

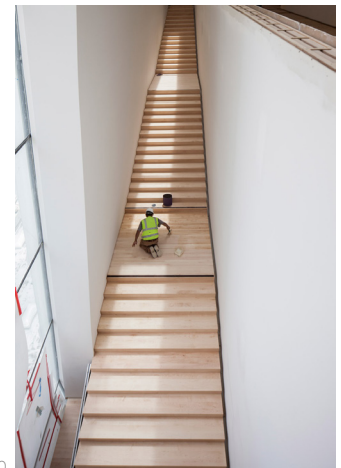
Robinson Lumber - white oak
22mm thick strips of American white oak
natural wax finish



39

stairs in the MoMA, New York

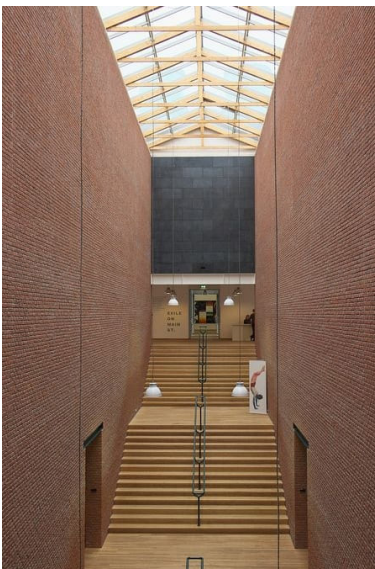
WoodCo - white oak
140 Stair Treads, Risers & Returns
to match flooring.
DuraSeal Country White Stain



40

stairs in the San Francisco Museum of Modern Art

maple wood



41

Stairs in the bonnefontenmuseum Maastricht

curing wood (a tropical hardwood)



42

Stairs in the Berkeley Art Museum

Canary Island Pine wood

MATERIALIZATION

stairs



pine wood stairs



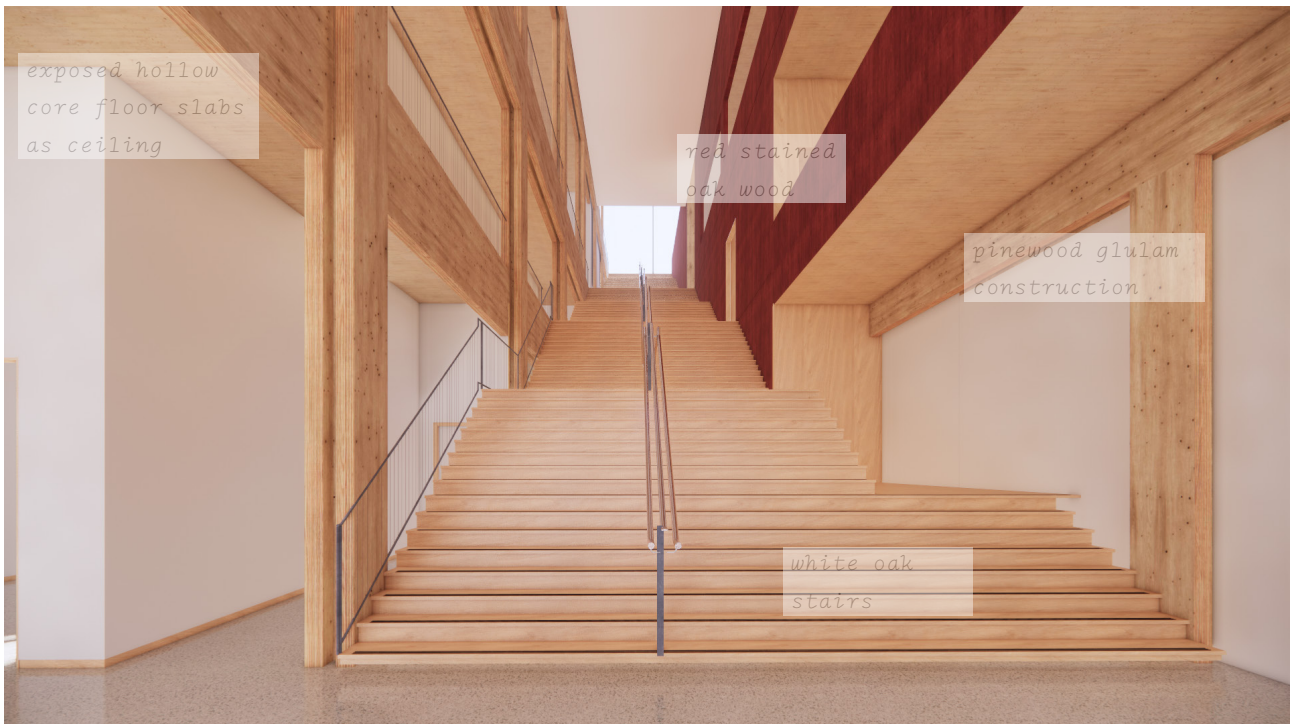
white oak stairs

MATERIALIZATION

wood



materialisation of the gallery space

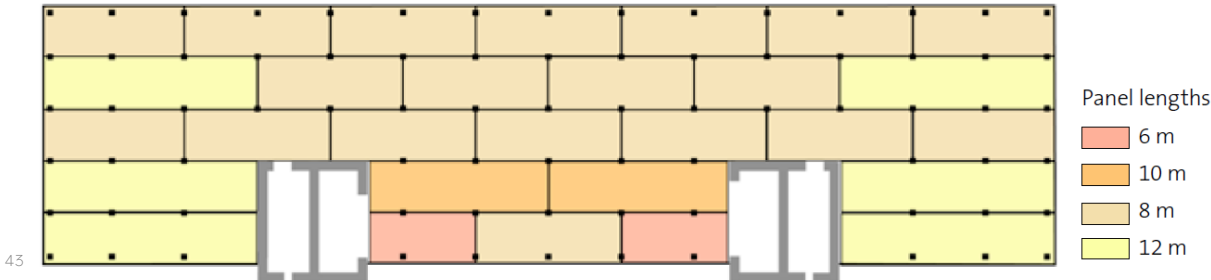


materialisation of the stairs

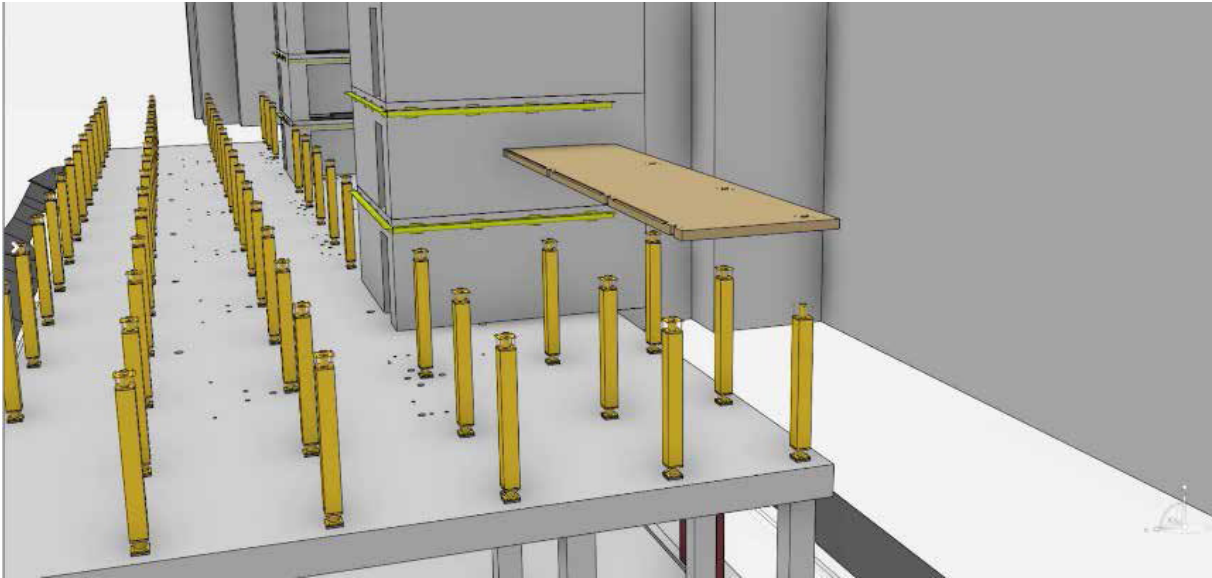
CONSTRUCTION

cores

I research reference projects to look at how concrete cores are connected to the wooden structure of the building. I found this project which show that the cores are placed in the grid with the columns and a beam is attached to the core, to be able to place the carry the floor slabs.



location of cores in relation to construction grid

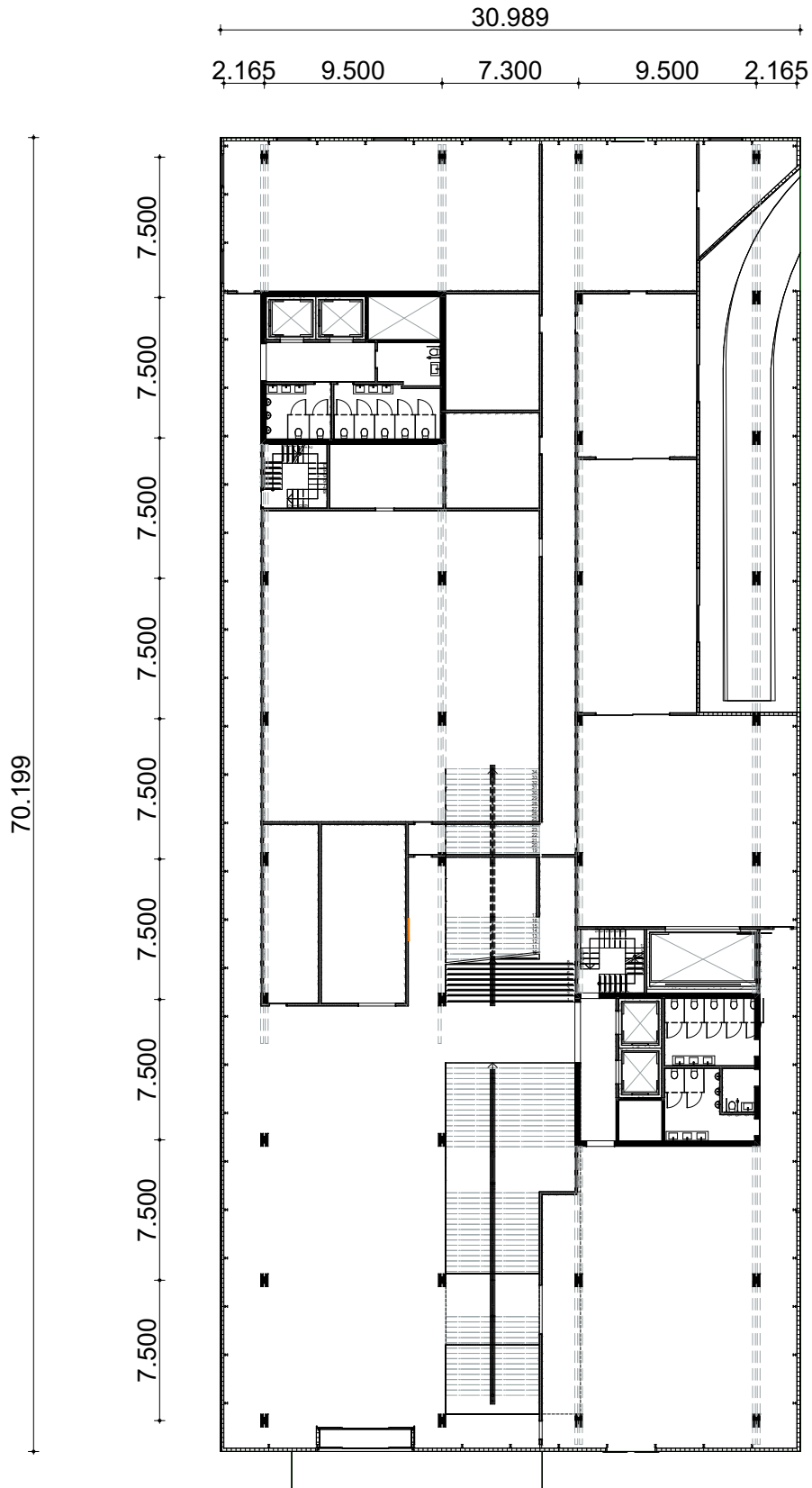


43 floor slab carried by columns and beam connected to core

CONSTRUCTION

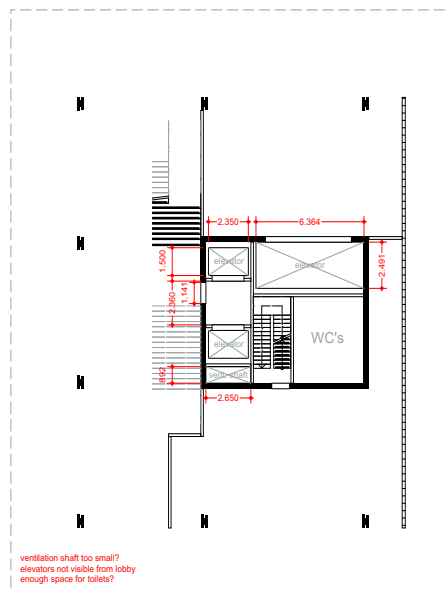
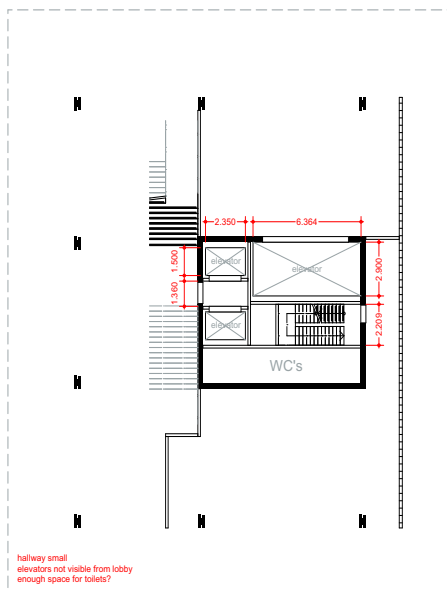
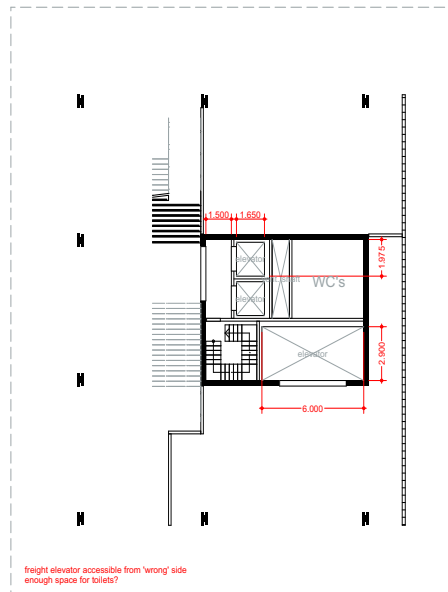
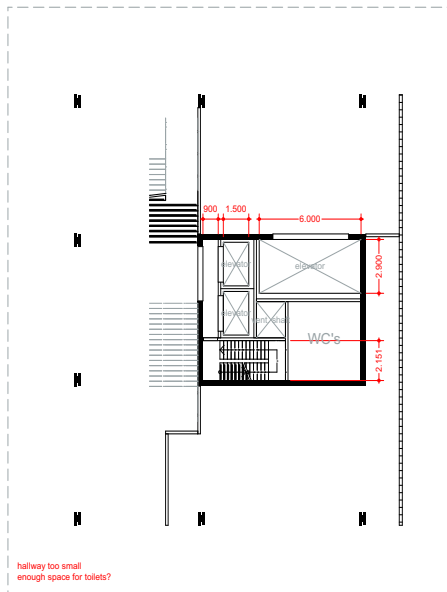
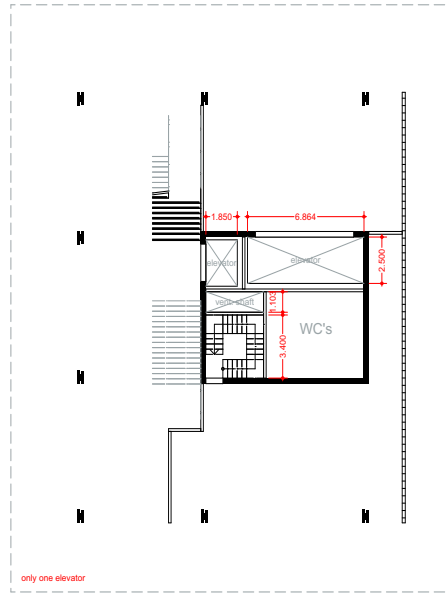
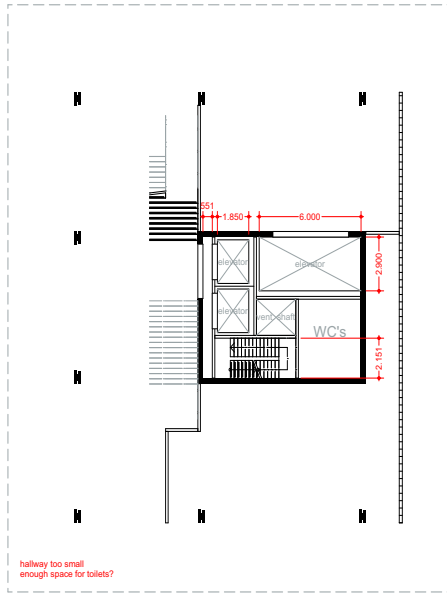
grid

I made some changes to the grid of the structure. On the long side of the building, the columns are placed on a grid of 7,5m. On the shorter side of the building, the grid has 7,3m in the center, and then symmetrical to both sides a distance of 9,5m and 2,165m.



CONSTRUCTION

core options



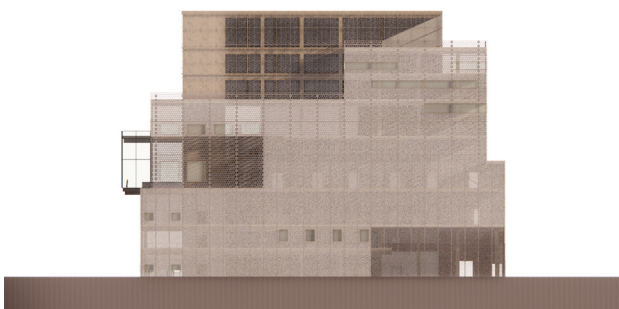
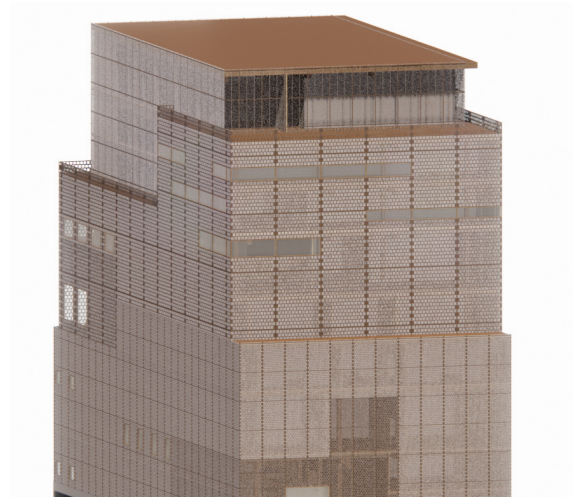
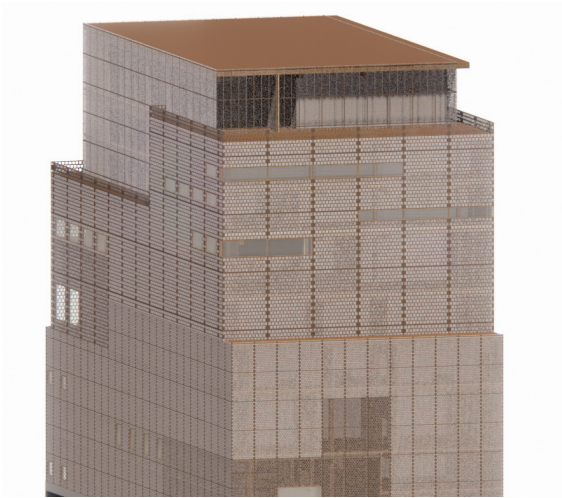
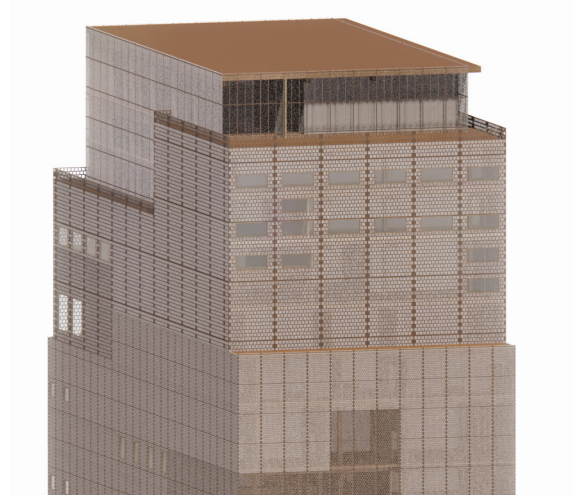
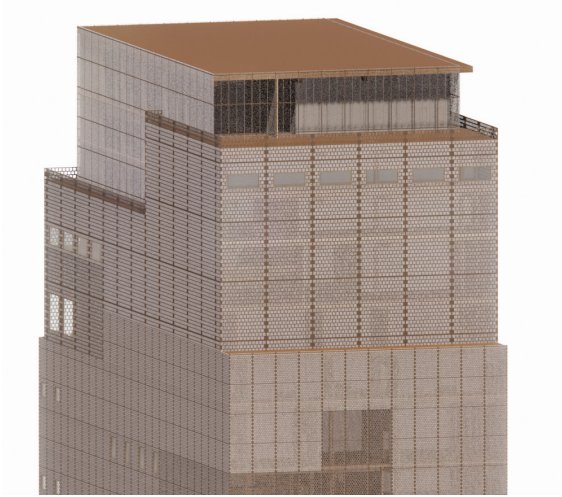
VIEWPOINT WINDOW

size and sun shading



FACADE

window study



FACADE

material

I researched the sustainability of wood compared to aluminium, to decide on the material for the facade. This article by PhD student Finch researched the difference between the two materials. Mostly the embodied energy in aluminium is much higher, so that makes it less sustainable than wood even if the wood decays faster.

*"Aluminium cladding materials and assume a lifespan of 25-40 years It would take (roughly) 750 years (that's up to 30 use cycles) for you to be 'embodied energy neutral' when using recycled Aluminium products vs. using new timber products every time."*¹

Accoya wood is a very durable and sustainable wood type. It has a 50 year above-ground warranty and the transport emissions are really low compared to other wood types.

¹ Finch, G. (2023, March 25). Is Aluminium Cladding More Sustainable than Wood Cladding? Abodo. <https://www.abodo.co.nz/resources/articles/is-aluminium-cladding-more-sustainable-than-wood-cladding>

Transportation to:

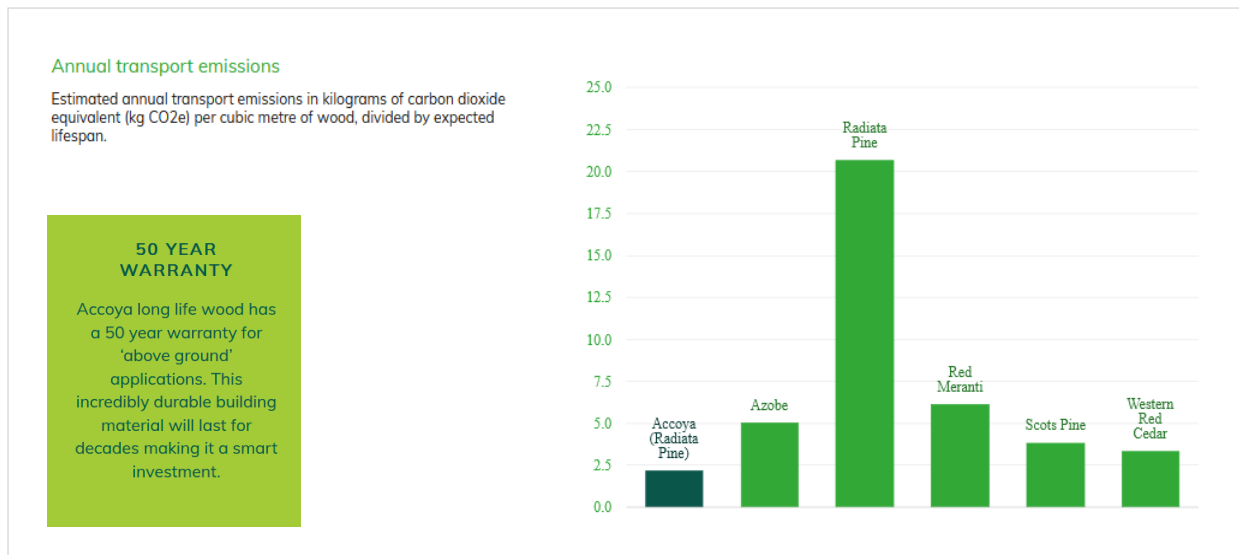
London, UK

Brisbane, AU

Rotterdam, NL

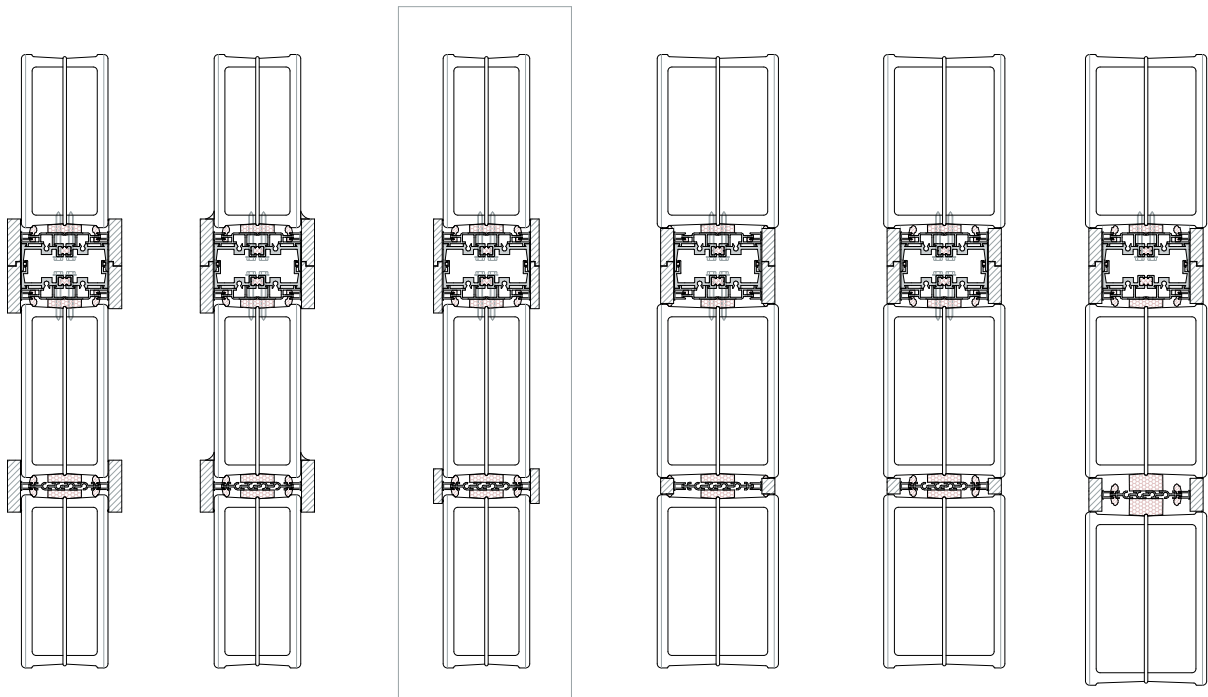
Virginia, US

EMISSION AT GLANCE



FACADE

detail



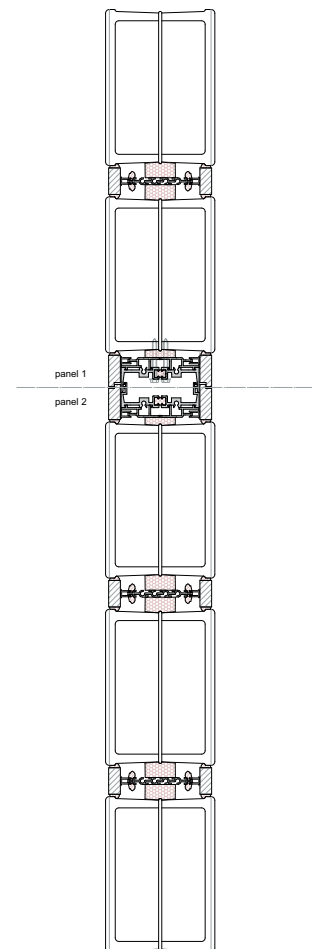
5 options for the facade detail

the middle one was the original detail

on the left the wood was made bigger so it would sustain for longer

on the right the wood is placed in between the glass, so rain water would not get stuck behind the wooden strips

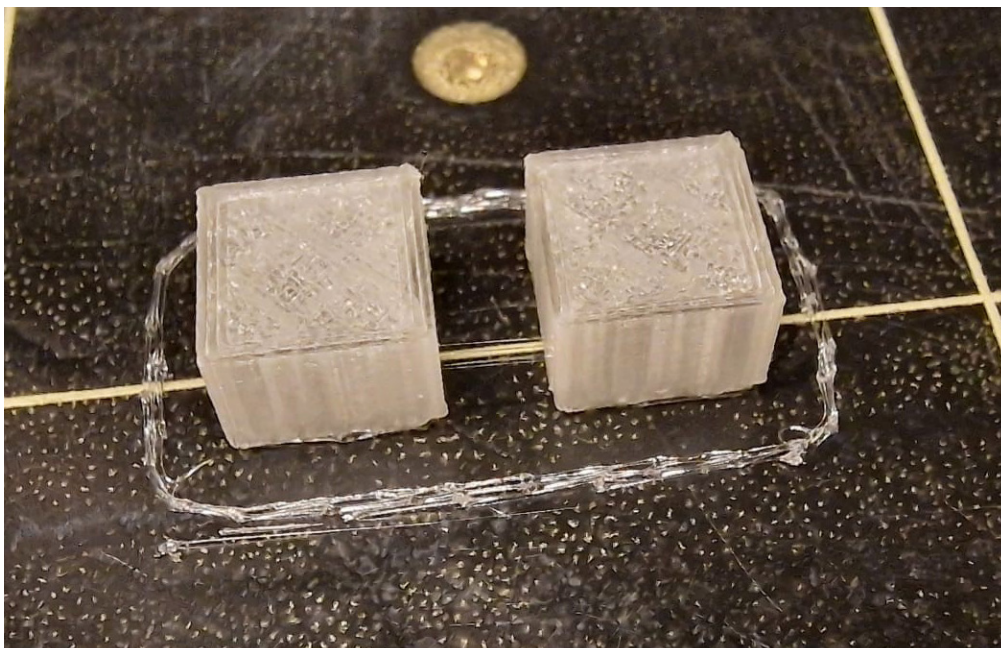
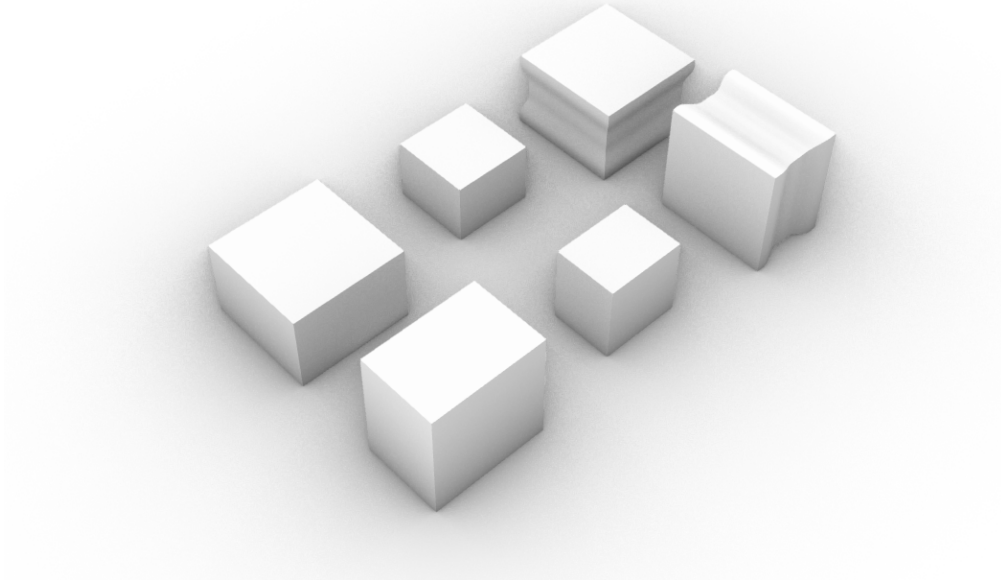
the final detail on the right shows the wood strips in between the glass blocks, making the wood last longer against rain water.



MODEL

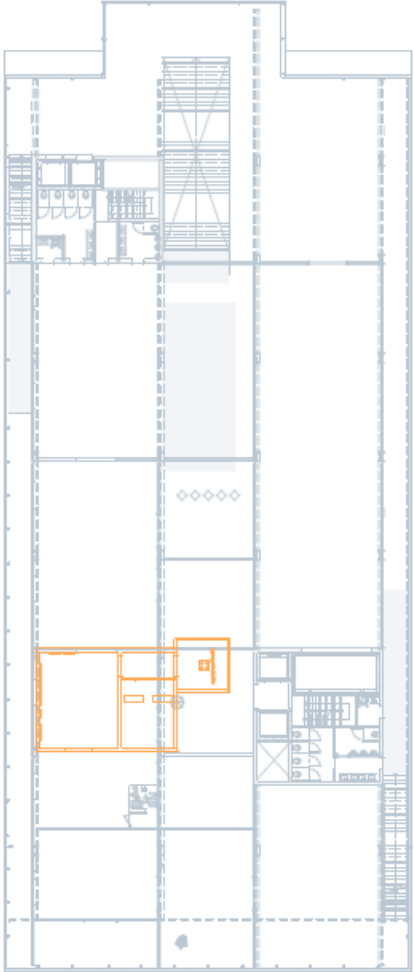
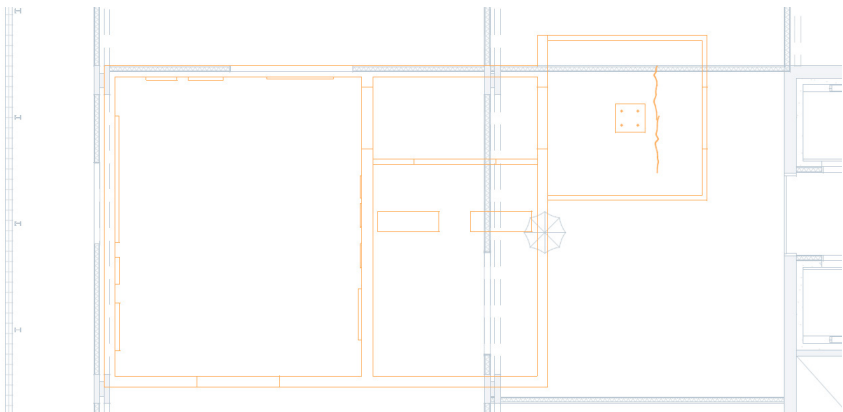
test glass blocks

I tested 3D printing glass blocks with transparent material for the model. I wanted to try it in different shapes and direction, to check what would work the best, but for now the infill made the blocks not transparent.



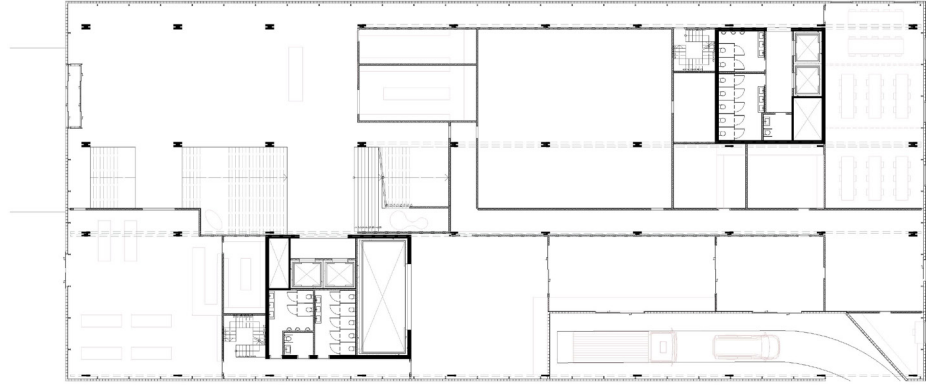
PLAN

p2 for scale

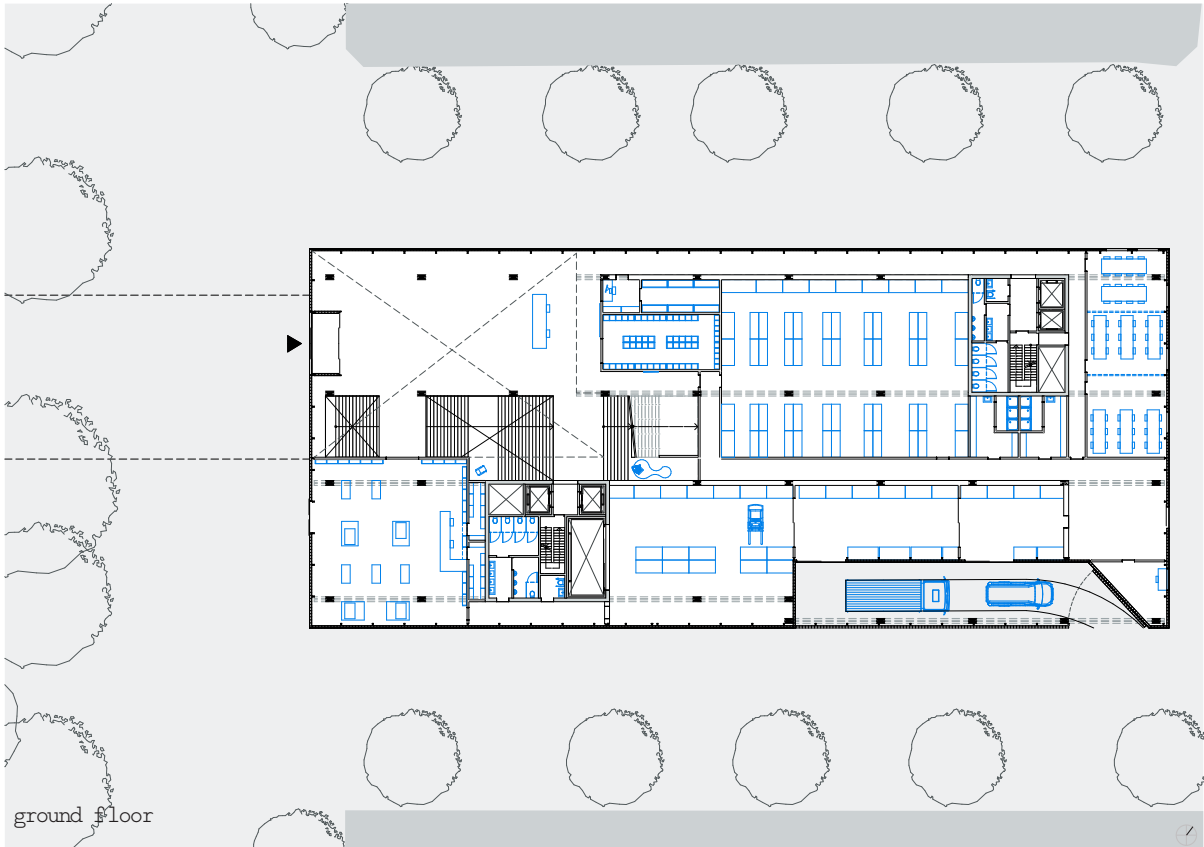


PLAN

appearance of the floorplan



ground floor

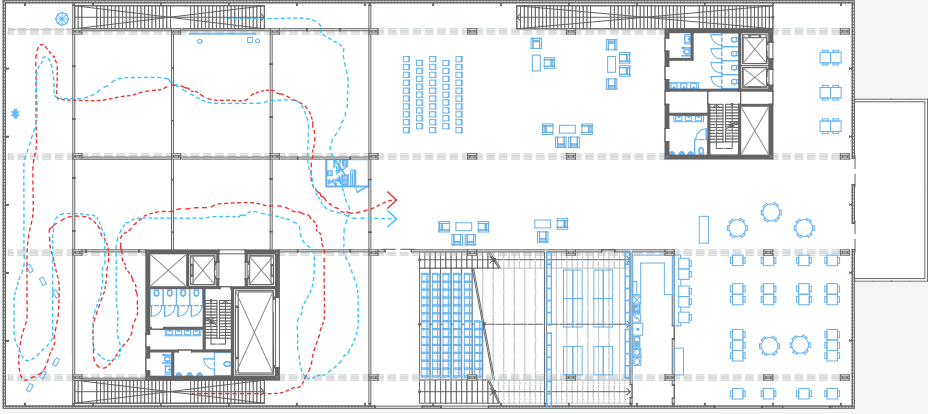
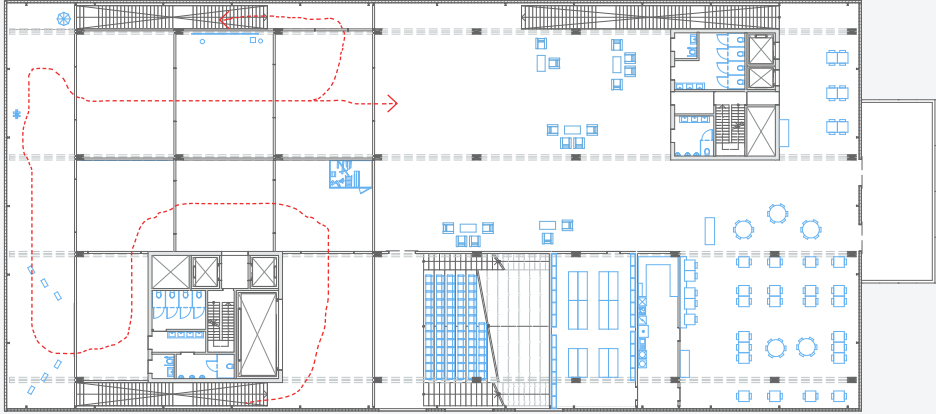
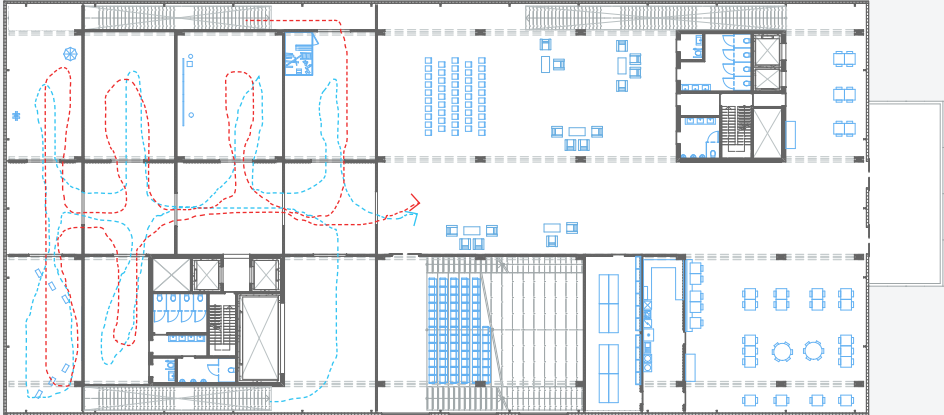


ground floor



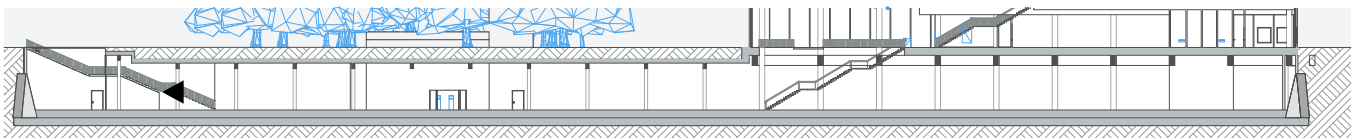
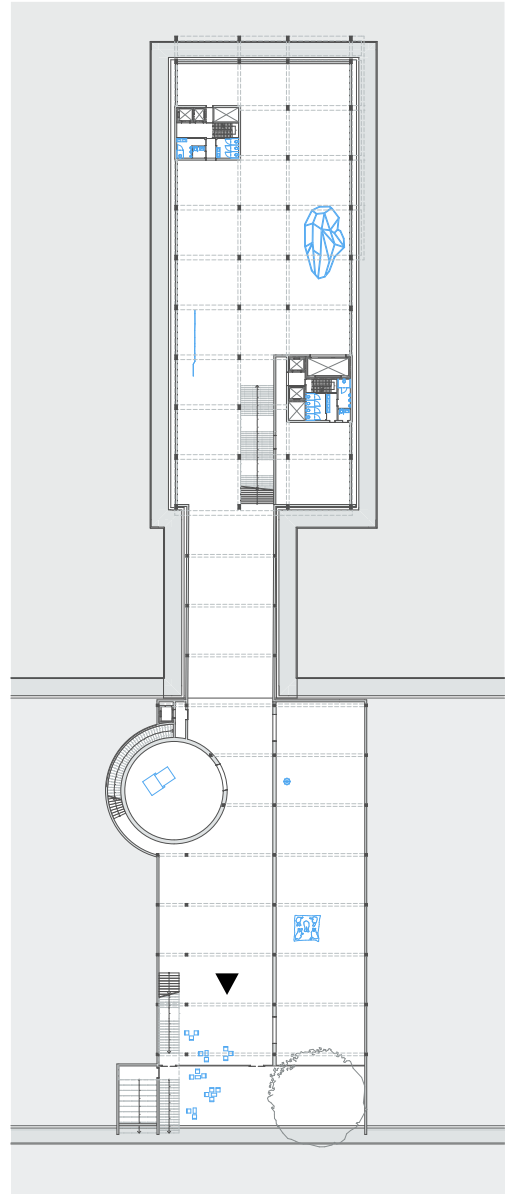
PLAN

routing collection 3th floor



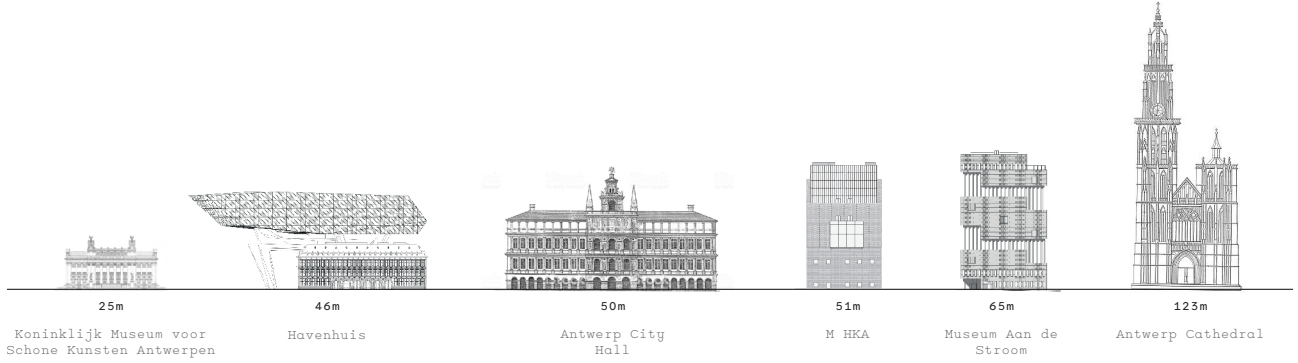
THE LOCK

function and appearance

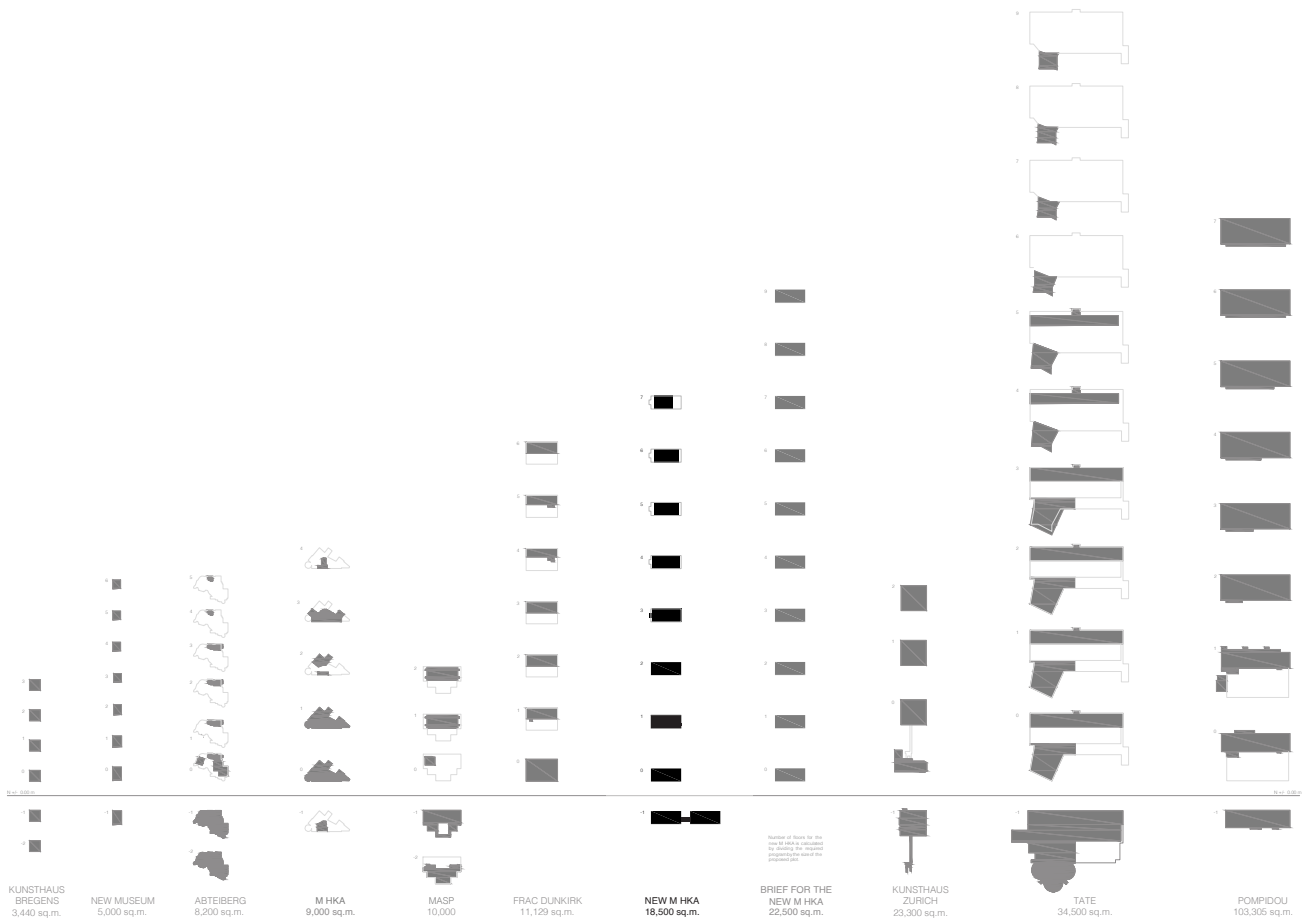


CONTEXT

scale in context



prominent buildings of Antwerp in scale. The building will be 51m in height. Which is quite large compared to the buildings around it, but it fits in with to other prominent buildings in Antwerp.

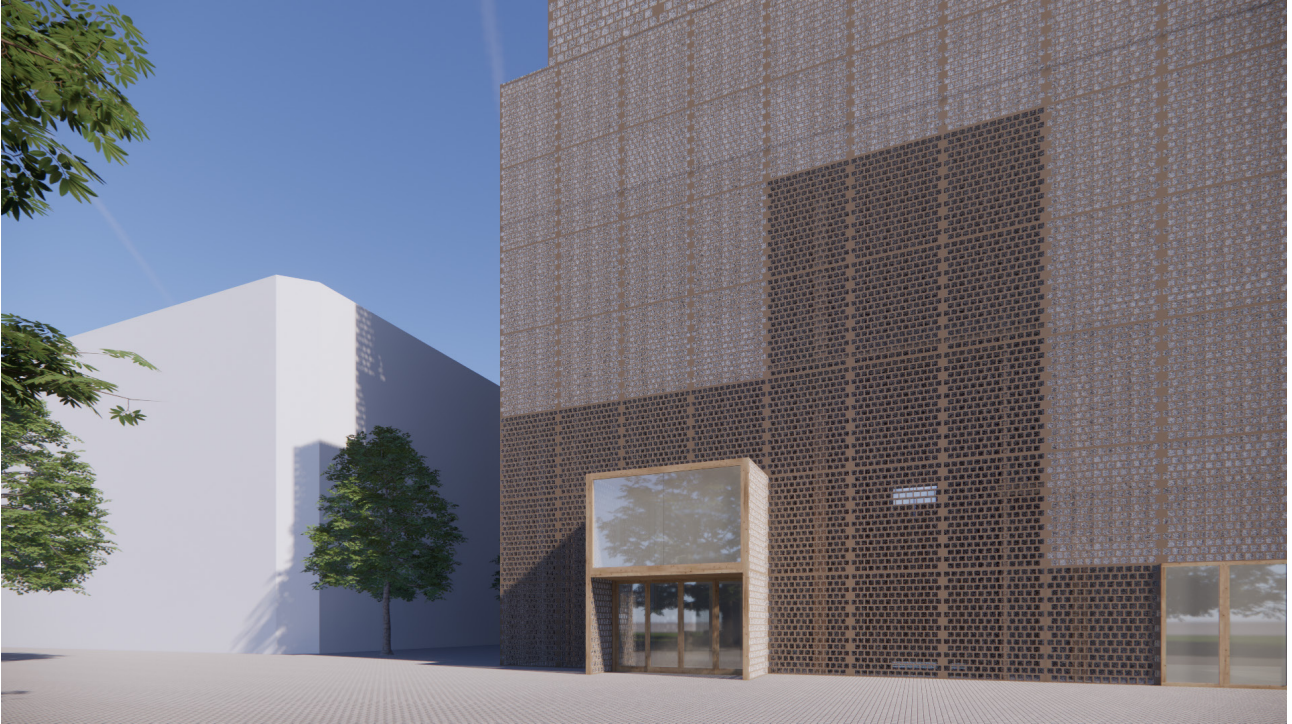


museums sqm in scale. The final design will be 18.500m2. This is bigger than the MASP AND New Museum, but still smaller than the Kunsthaus Zurich and the TATE.

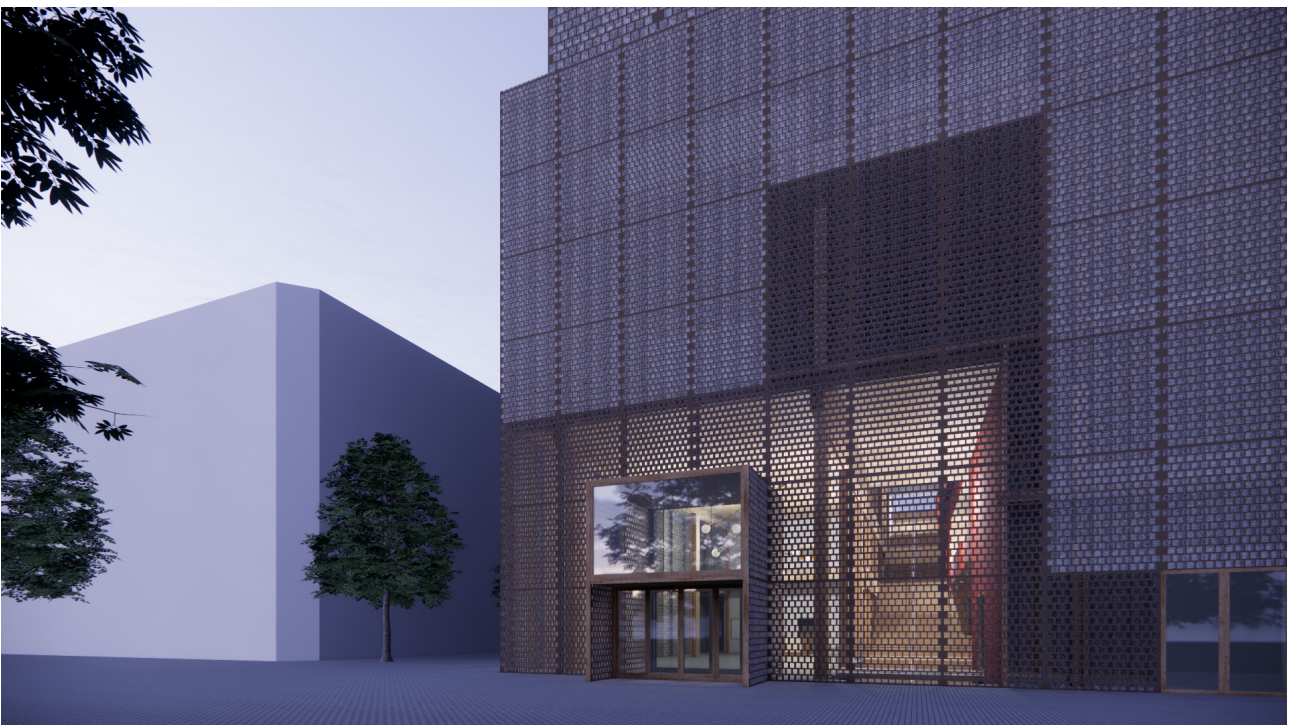
FACADE

day and night

Due to the translucency of the facade, the facade lights up at night, showing the activity going on in the evening. Not the whole building will be open at night, so only the active parts (eg. the lobby, the auditorium, the restaurant, etc.) light up.



the entrance during daytime



the entrance at night

NOTES

notes and comments on the P4 in October

Questions Sam:

- Model for the work of Taus Mackacheva, of which space in your museum do you think would you make a model alike for P5?
- Is the M HKA really located in the South of Antwerp? One that doesn't know Antwerp and looks at the map would say its in the West of Antwerp.
- Park used to be named Gedempte Zuiderdokken. The name refers to the history of the docks.
- You state: 'M HKA is about connecting atmospheres in the building.' How did you do that in your own design?
- Your façades are made of glass blocks, so daylight in more or less amount can enter the building. What happens when you have spaces that don't need daylight?
- Is sun shading your answer or can curators have walls built into the spaces you make? I then think of the Centre Pompidou that got refurbished in the eighties by Gae Aulenti.
- Library at the current mhka functions as the brain to which all is connected. Is this the case in your building?
- Lookout point with a view on the River Scheldt with one person. I wonder what happens with the thousands of visitors that come to the museum on a yearly basis at this point.
- Could you show the images of the space downstairs that connects to the park and tell us a bit about how they are used programmatically. Does one enter here or ...
- Not sure how realistic it is to replace the glass blocks in your facade with photovoltaic ones.

Questions Mauro:

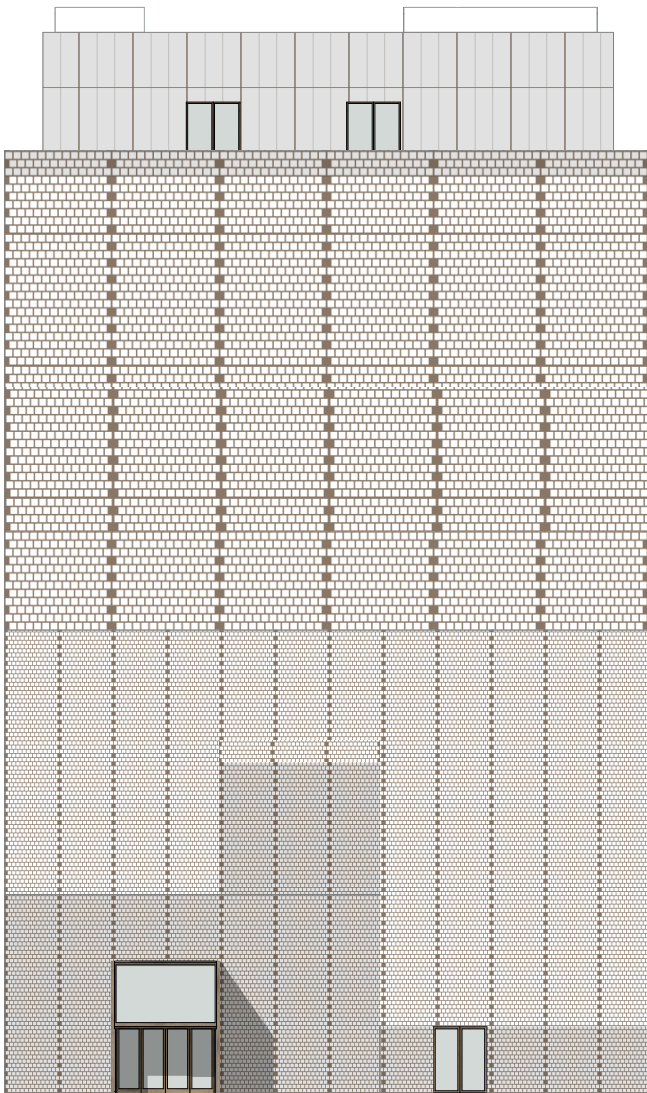
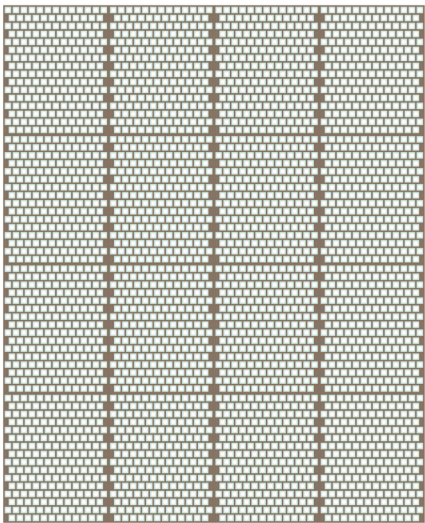
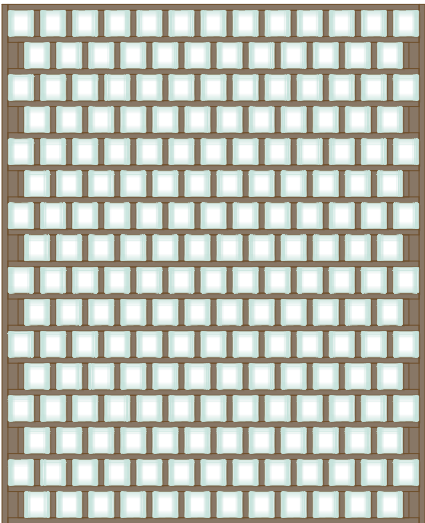
- Facade: two sizes of blocks. Can you explain why you use two dimensions? Top blocks are more exposed to solar gain?
- Shading?
- Balcony with shading on one side?
- Transparent and translucent blocks at night
- Big blocks block less daylight

Questions Jurjen:

- Three types of façades + volumetric composition is not the same as that of the use of materials. How did you decide on both compositions? And if you did study that, why didn't you include it in your project journal?
- Glass brick facade as continuous pattern. Change: panels with vertical line in wood. Enormous effect on appearance. Did you investigate size of panels, where the lines would appear etc?

THE FACADE

panel to facade



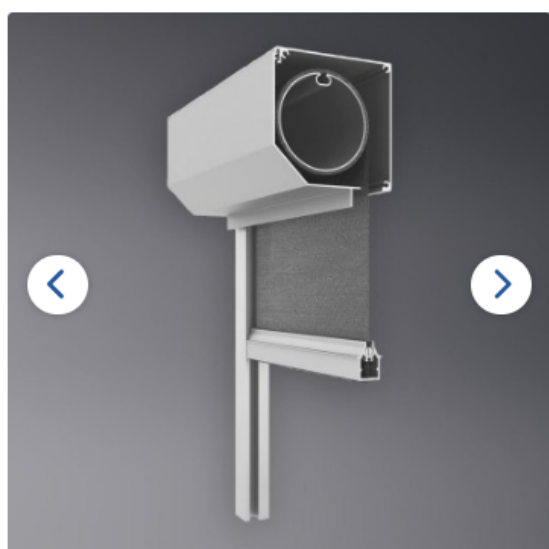
VIEW POINT

sunshading

The lookout point at the end of the stairs will be a glass protrusion, which means a lot of sun light will be entering the building there. To prevent this from happening, exterior screens will be added to the glass facade. These screens will be 5x3m big, which means the casing will be around 150mm in size.

Solano Screen standaard

SOLANO



Bereken je prijs en bestel

Stap 1 > Stap 2 > Stap 3 > Stap 4 > Stap 5

> Accessoires > Montage

Type omkasting ?

85 mm

Max. 350 x 200 cm

95 mm

Max. 400 x 340 cm

105 mm

Max. 400 x 350 cm

125 mm

Max. 500 x 500 cm

Breedte in centimeters ?

Tussen 40 en 500 cm

Hoogte in centimeters

Tussen 30 en 500 cm

Naar omkasting

✔ Levertijd circa 15 werkdagen

✔ 5 jaar garantie

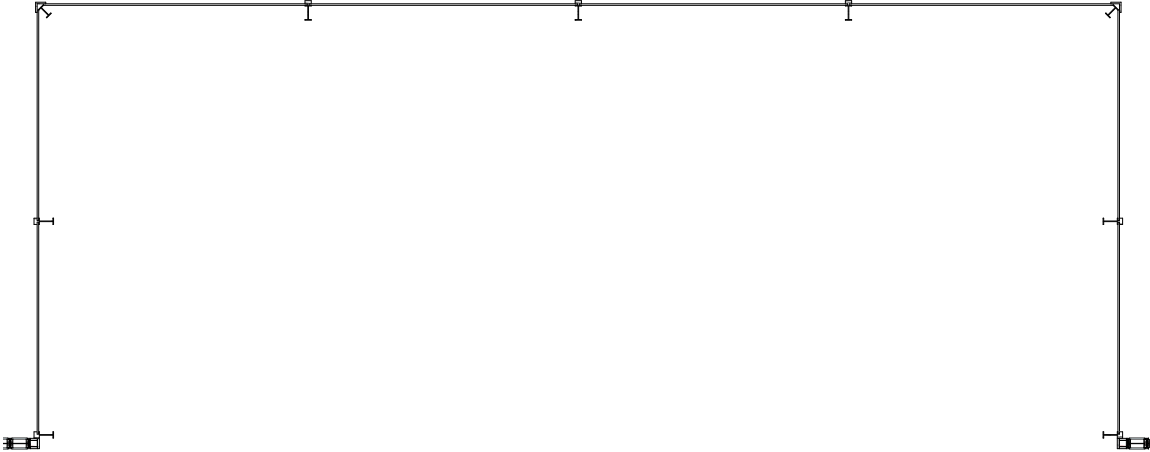
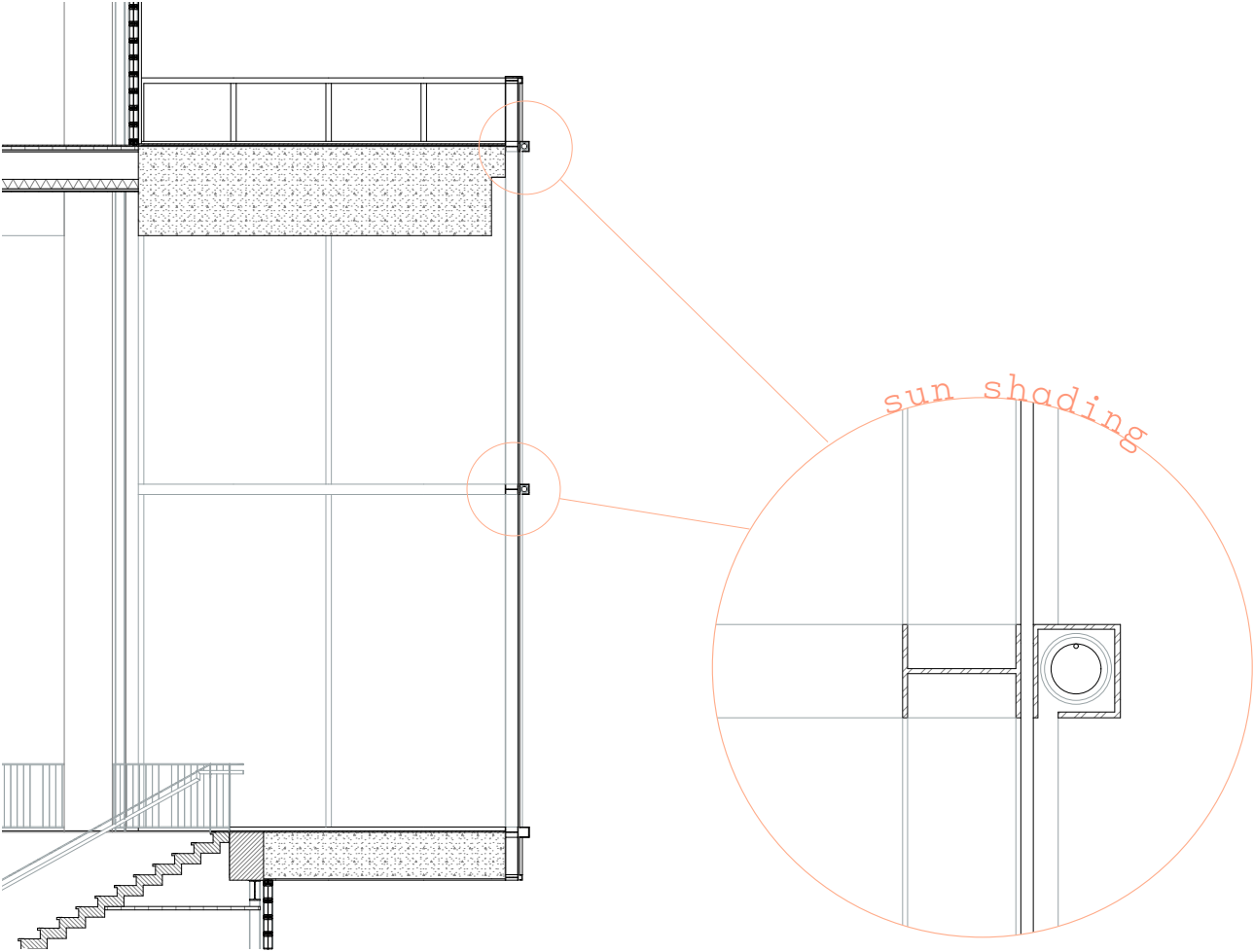
Jouw prijs **€ 258,30**

~~€ 516,60~~

50% korting op adviesprijs

VIEWPOINT

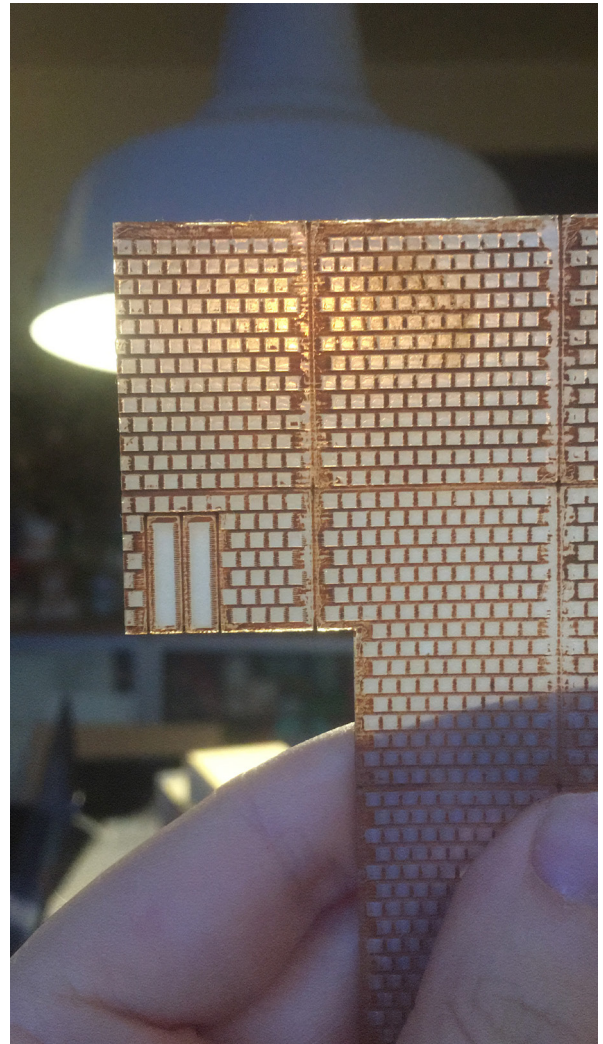
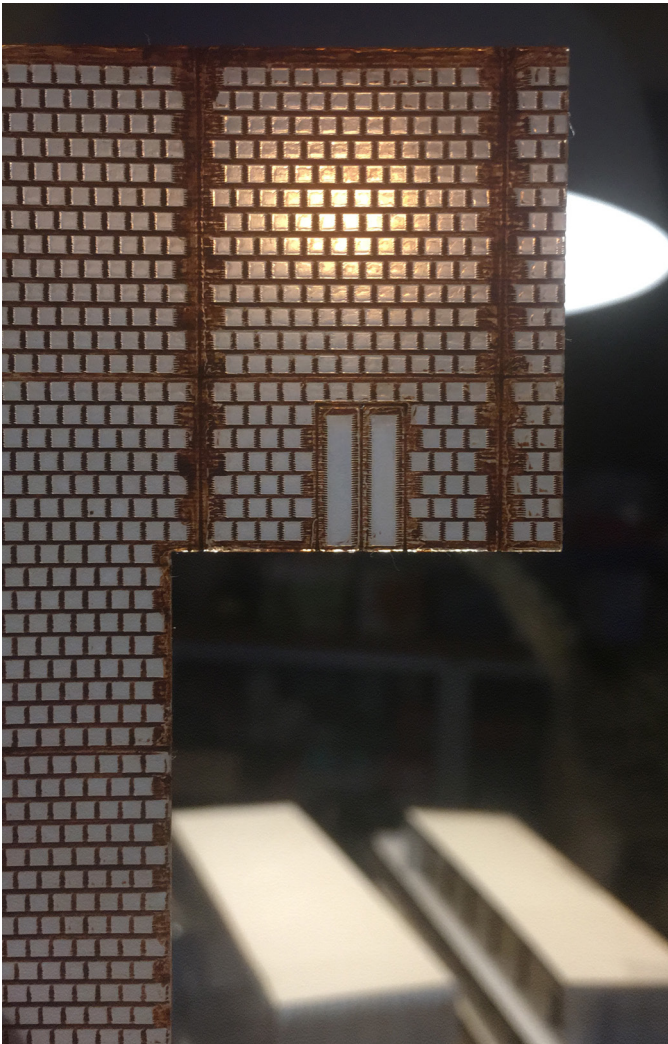
sunshading



THE MODELS

1:200 model

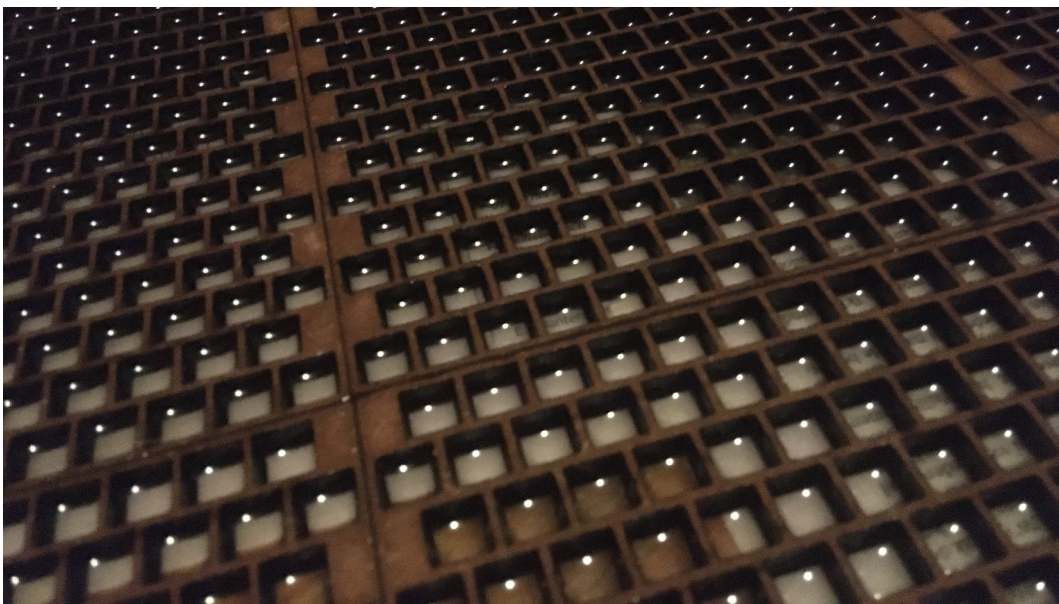
For the 1:200 model it was important that the facade was represented well. So I needed the facade to be transparent, but also show the blocks. I ended up engraving plexiglass and then painting it brown. When it dried, I removed the paint with alcohol and it would make clear the glass blocks, while the wooden, engraved, parts would stay brown.



THE MODELS

1:25 model

For the 1:25 model I wanted to try and find a way to represent the glass blocks in the facade with a thickness. So not just a flat plate of glass, but with the thick glass braking the visibility. I ended up pouring epoxy into the wooden grid of the facade panels.



REFLECTION

the process

The process

As part of our studio's project requirements, alongside designing the building, each of us was tasked asked to maintain a project journal. This journal served as a comprehensive record of my process, capturing it from the beginning of the year, where we worked on various assignments and extensively studied relevant literature to position ourselves within the broader realm of modern art museums, and my design process up to the graduation presentations. I sometimes found it hard to keep up to date with my journal. The task of organizing and compiling all the work I had done, making it coherent and comprehensible for others, posed a challenge. It was (and still is) a lot of work, but I am also glad I could use the journal as a guideline for my presentation and I could keep track of all the work I had done. Furthermore, the journal proved to be a valuable resource for reflection and reference.

At the beginning of the studio, our weekly readings delved into diverse subjects relating to modern art museums, which prompted me to think about the position of contemporary art museums. We discussed concepts like the 'white cube' and the 'anti-museum'. I found it fascinating, yet initially challenging as I sought to position my design idea within these frameworks. Later in the process I realised that I didn't have to choose one side or the other. I could take different elements of these concepts and implement them in my design.

While researching and reading the literature, we were also working in groups on analysing a variety of museums. In a group of four, we meticulously recreated an image of a gallery space from Lina Bo Bardi's MASP, the museum of modern art in Sao Paulo, by building a model and photographing it (see chapter 1: positioning the museum). This assignment was a good way to get me to think about the appearance of gallery spaces, including materiality, atmosphere, but also fixtures and construction. It also provided a valuable framework of references that proved instrumental in guiding the subsequent design process.

For the second assignment we were asked to individually design a gallery space or spaces for an assigned artist of the M HKA (see chapter 2: design of a gallery space). This presented the first opportunity for me to translate the research we had done into an actual design. The elements of the spaces we had previously analysed served as references to use in my design. I started thinking about circulation, lighting, materialisation, etc. It was good to see how we could already translate our previously established framework into practice.

Then we started with research into our final assignment: a new building for the M HKA. We researched this collectively with our studio and looked into the city of Antwerp, the site, the M HKA and the project dossier for the new M HKA. We divided up tasks and I took on the research into the lock and the docks that were located underneath the project location. I had an interest in this topic because of its heritage value and the potential of the spaces, as well as its potential to address the challenge of reducing the building's height described in the brief. Because simultaneously, I was reading the project dossier and noted that the building would be 22.500m² which, on the given plot, would translate into 10 stories and would be 80 meters tall.

>>

REFLECTION

the process

>> After all of these assignments we started on our first design proposals for P2. The main focus was **how to design a new building for the M HKA?** This design would be different for everyone according to the questions they were asking during the design process.

As mentioned before, according to the project dossier the museum would be really big, so this brought up the next question, **how to handle the size of the building?** I don't mean this just in the sense of designing the building, but also in the sense of figuring out how to deal with such a big building. I would never be able to design all of it, on my own, in the given time. Mostly after the P2 I was getting overwhelmed by the size of the building. I needed to start really designing it, but where to start? And where to stop? During the whole design process I have been struggling with these questions. It would feel like I was making progress one week, but then I would get a question about something I hadn't thought of in a while and would have to look into that, but then the next there would be another topic I hadn't thought of and would move on to that. I had a hard time dealing with all the questions and all the things I still had to do. In the end I had to really just take it one week at a time. Just see what I could do in a week and accept that I couldn't work on everything all the time.

For the design I was trying to downsize the building envelop. I cut and downsized some functions in the programme of requirements. I also added set backs to the volume related to the surrounding buildings, to make it feel more in scale with them and to add more of a human scale to the building, I made the façade out of glass blocks, with these smaller elements breaking up the façade and the wooden seams adding a tangible feel to the building. Lastly, I decided on excavating the historic lock and docks, to use the potential of those unique spaces, while also making it possible to accommodate part of the programme underground.

The project dossier for the new M HKA discusses the topic of '*industrial roughness and domestic intimacy*': The M HKA could have this combination of the roughness connecting to the former port setting and a '*white cube*', while still being a *warm and flowing institution*. For my design I would be excavating the underground lock and docks and connecting these to a new building. So an important question for me became **how can this connection between the rough docks and the new building be done in a coherent and connecting way?**

In the centre of the building, I designed a staircase going all the way from the basement floor to a captivating look out point on the second floor. Along these stairs I designed one continuous wall to make it feel as one coherent building. However, visualizing the staircase proved to be a challenge, and I sought feedback from tutors to refine its appearance. Creating a digital 3D model provided some insight, yet shaping the staircase remained a complex task. Things needed to happen along this stair - exhibitions, cabinets, events - so people would actually use it, but how could I visualize this? To clarify this, I created a 1:100 sketch model which could be used to move and carve out walls. This approach enabled me to explore different variations and ultimately shape the stairs.

Lastly, I did a lot of research on the technicalities of the façade. I tried to not only answer the question of what it would look like, but also **how would the façade work?** After careful consideration, I decided on using glass blocks stacked with an offset and a finished with wooden strips. This unique system effectively fragmented the imposing scale of the building's exterior while delicately introducing subtle nuances from the interior through the offset in smaller elements.

I wanted to use a system which is demountable, allowing for the replacement of glass blocks if necessary and promoting the reusability of the facade structure. It was hard to find any references for this structure. At first I wanted to try to make it a double façade system to enhance insulation performance. After I did a lot of research into glass blocks and glass block systems, I found well insulating glass blocks (Sevess glass blocks) which I could use for the transparent blocks. I also decided on using translucent, insulated blocks in other parts of the building, I could focus on designing a system for a single glass block façade. Developing a system for a single glass block facade still proved challenging, given the prevalence of mortar-based or non-offset structures in existing glass block facades. After doing more research into glass block systems, I found one glass block system (the Matrix Wall by Extech) which I could base my detail on and I modified it to realize my envisioned architectural expression.

REFLECTION

the project in context

After the P4 in May

I did not get a green light after the P4 in May, so I had more time to refine my design. I looked into types of wood and reference projects to get a better idea of the materialisation. Given the significant presence of wood in both the interior and exterior of my project, it was imperative to look into the specific wood types that would be used. For the façade, I decided on using Accoya wood, a very durable and sustainable wood, but I also worked on the detailing, ensuring the wood's longevity. I positioned the wooden strips in between the glass blocks, instead of on top, minimizing the potential impact of rainwater exposure in the long term.

I have also dedicated my time to refining the floorplans, ensuring they were logical and readable. Having the stairs as the centre of the building and designing the routing around that. Furthermore, working on defining the continuation of the big stairs; the lookout point and the smaller staircases continuing the route. Alongside the plans I designed the façade, adding windows where they were needed and applying different kinds of facades to the different functions. Really find a way to structure the façade coherently.

I tried to look into all of the points that were mentioned at the P4 in May. Some of which were more straightforward, while others were more conceptual. During the last couple of months, a significant portion of my time was dedicated to being really precise in the plans. Not having too many small mistakes in them was not the only challenge, but also the task of translating my design decisions into the plans. My architecture teacher had pointed out to me on multiple occasions that I had overlooked some details of the plan or that certain elements I had drawn weren't easily comprehensible to others. In the end, I had to work on creating better clarity in my design documentation.

The project in context

My graduation project focuses on the design of a new building for the M HKA, which serves as an exploration of architectural concepts within the context of the built environment, it is a museum within a city, in between a park and a quay. This project is part of the master track in Architecture, but encompasses various elements of the other master tracks. By delving into the technical intricacies of designing the museum, I have collaborated with the BT teacher to ensure a comprehensive understanding of the project's technical aspects. Overall, my project bridges the disciplines within the broader MSc AUBS program, emphasizing the multifaceted nature of architectural practice.

In the city of Antwerp, the new M HKA is set to become a significant public and cultural landmark. Its influence will extend far beyond its immediate surroundings, encompassing the entire Antwerp Zuid neighbourhood and leaving a lasting impact on the entire city. While my design of the building may not be realised, the design of the new M HKA holds immense importance. Its envisioned form and character will shape its role and significance. As part of my research, I aim to contribute to the broader framework by exploring various possibilities and considerations for this iconic building. By delving into what it could be, I seek to provide valuable insights that will contribute to the vision and impact of the new M HKA building and the city of Antwerp.

6 SOURCES

The last chapter contains the literature and image sources which were used in this project journal. The literature sources are ordered alphabetically, while the image sources are ordered by appearance.

SOURCES

literature

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SOURCES

images

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- 2 <https://www.museum.nl/nl/de-pont-museum>
- 3 <https://www.visitbrabant.com/en/locations/3565764443/the-van-abbemuseum>
- 4 <https://www.tate.org.uk/visit/tate-modern/display/taus-makhacheva>
- 5 https://www.internationaleonline.org/research/decolonising_practices/29_a_salt_box_and_a_bracelet_conversing_with_a_painting_decolonising_a_post_soviet_museum_in_the_caucasus/
- 6 <https://www.e-flux.com/announcements/222666/taus-makhachevastoreroom/>
- 7 <http://www.redbrickartmuseum.org/exhibitions/rituals-of-signs-and-metamorphosis/?lang=en>
- 8 Felix Stadsarchief Antwerpen
- 9 Project Dossier M HKA
- 10 <https://www.gww-bouw.be/artikel/parkeerplaatsen-aan-gedempte-zuiderdokken-verhuizen-ondergronds-%EF%BB%BF/>
- 11 <https://www.dw.com/de/tate-modern-kunst-im-tank/a-16102190>
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- 13 <https://www.archdaily.cl/cl/02-302270/museo-maritimo-nacional-danes-big>
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- 17 <https://www.metalocus.es/en/news/zollverein-school-management-and-design-sanaa>
- 18 https://fr.wikipedia.org/wiki/Gare_d'Anvers-Sud
- 19 <https://www.architectuur.nl/nieuws/naturalis-is-weer-open/>
- 20 <https://www.mecanoo.nl/Projects?c=146>
- 21 https://www.nieuwsblad.be/cnt/dmf20201016_96613305
- 22 <https://kidseropuit.nl/bonnefantenmuseum-maastricht-met-kinderen/>
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- 24 <https://www.zeep.eu/projects/mfc-atlas/>
- 25 <https://www.architonic.com/en/project/moda-modern-office-of-design-architecture-junction-9/5104388>
- 26 <https://www.archdaily.com/546446/aspens-art-museum-shigeru-ban-architects>
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APPENDIX

This appendix contains the surface table I made based on the brief. I looked at which functions should be connected to each other and some requirements of the spaces. I also analysed the functions on accessibility and the amount of daylight needed/wanted.

PvE

component	function	type	amount	min netto srf (m2)	height (m)	min netto vol (m3)	bruterings factor	min bruto srf (m2)	min bruto vol (m3)	next to	
4.2	collection	circuit 1		1.792		10.408	1,3	2.330	13.530		
			main room type 1	4	160/r	min 8 m					
			main room type 2	6	104/r	5 - 6 m					other rooms in circuit 1 in
			side room type 1	5	64/r	4,5 - 5 m					
			side room type 2	8	26/r	min 3,5 m					
			circuit 2		1.040		5.200	1,3	1.352	6.760	other rooms in circuit 2 in
			main room type 2	10	104/r	5 - 6 m					
	round room		1	200	4 m	800	1,3	260	1.040		
				3.032		16.408					
4.3	exhibition	main circuit	main room	3 - 4	1.800	5 - 6 m	10.800	1,5	2.700	16.200	
		sub circuit 1	exhibition room	1	450	min 8 m	3.600	1,5	675	5.400	main circuit
		sub circuit 2	exhibition room	2	450/r	5 - 6 m	5.400	1,5	1.350	8.100	each other
				3.150		19.800					
4.4.1	library / archive	reading room / library		1	222	3,80	844	1,5	333	1.265	connects to the forum and documentation centre and
4.4.2		documentation centre		1	700	3,50	2450	1,5	1.050	3.675	easily accessible from stud
4.4.3		study room		1	40	3,50	140	1,5	60	210	easily accessible from docu
4.4.4		content management / digital work		1	39	3,50	137	1,5	59	205	close to toilets and kitchen
4.4.5		supporting services			20	3,50	70	1,5	30	105	
		staff toilets		1		incl					close to library, study room
		kitchenette		1		incl					centre and digital work
4.4.6		archive work			130	3,50	455	1,5	195	683	
		office space		1		incl					connects directly to the sca
		scan room		1		incl					connects directly to the off
4.4.7	technical working archive depot									work	
		reception - closed quarantine room	1		incl					close to the freight elevato	
		processing room	1		incl					and to the processing room	
		depot art archives	1	750	4,50	3.375	1,5	1.125	5.063	connects directly to the de	
										close to the quarantine roo	
										directly connected to the v	
										quarantine room and easily	
										transport zone to the depo	
				1.901		7.470					
4.5.1	the forum	main forum space		1	1.556	9,00	14.004	1,7	2.645	23.807	well connected to the freig
4.5.2		reception									backoffice art handling, eas
		lobby / hall		1	570	9,00	3.420	1,7	969	5.814	reception and other forum
		reception zone and cloak room groups		1		incl					toilets, easily accessible fro
		cloak room and locker room		1		incl					museum is closed
		desk / orientation / ticketing		1		incl	3,00				easily accessible from the
		reception storage		1		incl					toilets
		specific forum related functions									directly accessible from the
4.5.3			museum shop	1	180	4,00	720	1,7	306	1.224	toilets
			horeca	1	370	3,00	1.110	1,7	629	1.887	connects to or is part of th
		multifunctional event space and storage	1		incl forum	7,00				reception storage	
										easily accessible from rece	
										preferably accessible from	
										forum function which can b	
										the space has its own entra	
										accessible from the street,	
										function which can be open	
										connection the the forum i	
										preferable	
										easily accessible to toilets,	
										accessible for deliveries, di	
										the main forum space	

	accessibility	daylight	extra info	amount of daylight	level of accessibility
enfilade	accessible to visitors for free/paid	in the main rooms there should be filtered daylight from the ceiling, starting 1m from the walls	large works should be able to get in directly from outside - the rooms should be easily accessible from the entrance - easily accessible from transport zone through a wide logistical hall - accessible by freight elevator		
enfilade					
	accessible to visitors for free/paid		every main room needs it's own entrance - parts need to be able to be closed of without distorting the flow - the whole interior needs to be changeable - the main circuit functions as one whole - large works should be able to get in directly from outside - the exhibition rooms should be easily accessible from the entrance (at least three directly) - easily accessible from transport zone through a wide logistical hall - accessible by freight elevator - at least one alternative entrance into one of the rooms from the outside would be preferred		
close to the the toilets	freely accessible to visitors	daylight preferable	books are in an open cabinet - 3 workspaces (6,5m2 / work space) - capacity of 50-60 visitors - stores 3500 books		
y room, close to	visit on appointment only	preferably no daylight	back office of the reading room		
umentation centre toilets	visit on appointment only	preferably daylight	max 10 work spaces of 3m2 - possibility to give presentations		
ette	not accessible for visitors	daylight needed	office space in landscape setting		
n, documentation	not accessible for visitors				
	not accessible for visitors				
an room, close to the archives and the toilets		daylight needed	office space in landscape setting		
office space archive		no daylight needed	separate closed room - 1 work space		
or and/or logistical hall n	only accessible for qualified people	daylight is allowed, but not needed (from north)	the quarantine room is a closed room		
pot art archives , om	only accessible for qualified people	preferably daylight (from north)	a work space - only accessible through sas (?)		
workshop, close to the y accessible through ot art archives	only accessible for qualified people		it is a closed, secured room - it is split up in a standard archive (550m2) and a audio-visual archive (150m2) - accessible through sas (?) - accessible by freight elevator		
ht elevator and sily accessible from functions, close to om the outside when		direct daylight necessary	good acoustics - view to outside necessary - should be able to host multiple functions and routes at the same time		
he reception, the obe, the group ng connection to the tion to the main			good readability of the space for routing - should be able to have 30 ppl look at a screen/presentation - acoustics are very important - flexible seating objects - integrated screens		
e lobby, close to			groups preferably not mixed with other visitors - lockable storage spaces		
e lobby, close to			at least 200 smaller lockers of different sizes - at least 25 bigger lockers of different sizes - storage space for wheel chairs and portable seats		
e lobby, close to the		enough daylight for employees	the desk has space for 3 employees, that need to be able to oversee the whole space and not feel the wind from the doors - acoustics are important - (possibly) in case of overcrowding a second desk can be opened		
ption					
outside or part of the be open till later	everyone and after hours		preferably a seperate entrance so the shop can be open after hours and is also accessible to people that are not visitors of the museum		
ance, preferably or part of the forum n till later, direct s not required but	after hours		toilets and garderobe can be shared with the museum - insulated from the museum (heat and moisture from kitchen could damage the art works)		
close to horeca - easily rectly accessible from	after hours		part of the main forum space - seperate entrance so a part can stay open after hours (preferably) - capacity of min 250 (seated) to 500 (standing) ppl - 35m2 logistic storage space		

PvE

component	function	type	amount	min netto srf (m2)	height (m)	min netto vol (m3)	bruterings factor	min bruto srf (m2)	min bruto vol (m3)	next to	
4.5.5		seminar rooms	3	160	3,00	480	1,7	272	816	easily accessible for employees, back office, close to visitor forum space - connected to forum	
		auditorium / cinema	1	410	9,00	3.690	1,7	697	6.273	visitor toilets easily accessible and small cinema, well connected to part of forum	
		cinema room	1	210	6,00	1.260	1,7	357	2.142	visitor toilets easily accessible, restaurant, well connected to forum	
		educational space	1	incl forum	3,00					visitor toilets easily accessible from reception, close to the connected to the storage area	
		supporting services									
		toilets visitors	1	152	3,00	456	1,7	258	775	easily accessible from reception	
		staff toilets	1	incl							
		first aid room	1	incl						easily accessible from the reception and the workshops	
				3.608		25.140					
4.6	back office workshops	workshops								preferably ground floor, close to other, close to exhibition space, handling zone and freight elevators, toilets	
		wood workshop	1	160	4,50	720	1,4	224	1.008		
		metal workshop	1	70	4,50	315	1,4	98	441		
		painting workshop	1	80	4,50	360	1,4	112	504		
		audio and video space	1	30	4,50	135	1,4	42	189	preferably between museum workspaces, close to office (production/collection)	
		storage for technical material	1	35	4,50	158	1,4	49	221	directly accessible from the	
				375		9.748					
4.7	back office art handling	transport and handling zone									
		sluis/sas	1	129	6,80	877	1,4	181	1.228	connected to the zone for unloading, directly connected	
		zone for loading and unloading	1	120	6,80	816	1,4	168	1.142	connected to the sluis and	
		transfer space	1	260	6,80	1.768	1,4	364	2.475	connected to the zone for unloading and the logistical hallway	
		registration, check and onderhoud	1	incl						close to the spaces for collection, the transfer space, the zone for unloading and toilets	
		packing room (packing/unpacking)	1	incl						close to the transfer space and unloading, the work studio	
		storage for chests/plastic foil/wrapping material	1	30	4,50	135	1,4	42	189	close to packing space	
		storage for material and tools	1	20	4,50	90	1,4	28	126	close to the packing space	
		space for collection management									
		quarantine space	1	27	4,50	122	1,4	38	170	close to the work studio and	
		work studio	1	234	4,50	1.053	1,4	328	1.474	close to the depot space, toilets and toilets	
		photo studio	1	36	4,50	162	1,4	50	227	close to the depot space, toilets and toilets	
		closed off interior depot	1	675	7,00	4.725	1,4	945	6.615	preferably not placed against spaces with very varying climate, directly and safely accessible for management	
				1.531		3.143					
4.8	back office logistics and technicalities	desk security and building management	1	9	3,50	32	1,4	13	44	good view on entrance space	
		main server space (MER)	1	20	3,50	70	1,4	28	98	preferably close to the desk building management	
		kitchenette	1	6		21	1,4	8	29	not close to open workspaces, workshops, backoffice art handling, library and archive and back office	
		toilets employees	2	16	3,50	56	1,4	22	78	easily accessible from the reception, close to the offices, workshops and dressing room	

	accessibility	daylight	extra info	amount of daylight	level of accessibility
employees and close to the toilets and main entrance to after-hours part of	after hours	daylight is required	1 room for 40 ppl and 2 rooms for 20 ppl - for external and internal use - view to the outside is required		
able, close to the reception area, connected to after-hours part	after hours	daylight is not required but preferred	in front space for stage - in the back a closed projections room / director room - acoustics important - max 300 seating places - modular space		
able, close to the main entrance to after-hours part	after hours		contains projection cabin of min 5m2 (preferably shared with auditorium) - acoustics important - 80 seatings - sizes: 10m x 12m (ideally 10m x 16m)		
able, easily accessible exhibition spaces, reception and kitchenette			part of the main forum space - contains a storage space (4m2) and a kitchenette - capacity of 75ppl		
reception and the forum			separate mens and womens toilets - separate space for baby care - storage of 4m2		
reception, the forum			8m2		
connected to each other, transport and elevator, close to	only accessible for employees	daylight preferred in workshops	workshops will be used by 5 employees - big flexible spaces - square or rectangular - entrance height of the room - high floor load		
			74m2 necessary machines and 85m2 free workspace - machines: flat sawing machine (21m2), miter saw with table (7,5m2), lenthils (16m2), of thickness saw (15m2) - closet dust extraction 4m2 - racks for storage sheets 7,5m2 - racks for storage beams and planks 3m2		
			25m2 free workspace - machines: welding post and table (6m2), drill press (2,25m2), miter saw (12m2), folding bench (4m2), mobile welding extraction (2,25m2) - racks for storage metal 6,5m length along wall		
			68m2 free workspace - space for storage dangerous products - storage paint 4m2 - space for waste paint bin 6m2		
workspaces and studios			contains small editing studio - one workspace for employee (6,5m2) - storage for small and big electronic material - full darkening of space should be possible		
the workshops		no daylight needed	storage for technical material for the workshops		
loading and unloading, access to outside	only accessible for employees		fully closed, secured and climate controlled space - no two doors open at the same time - height based on truck height - 1 truck (max. 19x2,55m) and parking spaces for delivery vans		
the transfer space			take into account the turning circle of lifting gear - one entrance to the transfer space - no height differences in floor - 9m x 4,5m		
loading and unloading	only accessible for employees	no daylight needed	space for object to climatize and wait for further handling - no height differences in floor - contains free workspace of 90m2		
reception management, office for loading and unloading	only accessible for employees	daylight preferred (from the north)	art works will be registered and checked - darkening of spaces should be possible - contains one work space for employee (6,5m2) - not visible from the outside		
zone, zone for loading and unloading, studio and toilets	only accessible for qualified people	daylight preferred (from the north)	darkening of spaces should be possible - not visible from the outside		
	only accessible for employees	no daylight needed			
and work studio	only accessible for employees	no daylight needed			
and the packing space	only accessible for qualified people	no daylight needed	workspaces for 1 to 2 employees - hermetically closed off with separate air treatment - wide spectrum of lighting necessary		
the handling zone	only accessible for qualified people	daylight preferred (from the north)	darkening of space should be possible - not visible from outside - separate climate control - min 4 work spaces		
the work studio and	only accessible for qualified people	daylight preferred (from the north)	carrying load of the ceiling important - 6m x 6m		
against outside wall or in good time conditions, visible from the collection	only accessible for qualified people	no daylight allowed	square or rectangular space with no coves or slanted walls - entrance through sas - very climate controlled - no pipes going through this space		
office	only accessible for qualified people	daylight preferred	1 workspace for administrative work		
work security and	only accessible for qualified people		should be actively cooled - acoustically separated		
offices, close to the main entrance, cluster office administration		daylight not needed			
backup office zones, storage, reading room			if necessary toilets employees and visitors can be combined - separate toilets men and women		

PvE

component	function	type	amount	min netto srf (m2)	height (m)	min netto vol (m3)	bruterings factor	min bruto srf (m2)	min bruto vol (m3)	next to	
4.9	dressing rooms (incl showers)		2	60	3,50	210	1,4	84	294	easily accesible from workspaces, close to toilets	
	storage spaces										
		storage for cleaning	1	100	3,50	350	1,4	140	490		
		central logistical storage	1	250	4,50	1.125	1,4	350	1.575	close to the logistical entrance, loading and unloading	
	bike storage		1	162	4,50	729	1,4	227	1.021	easily accessible from the entrance	
	technical spaces			?							
	entrance for logistics										
		sluis/sas	1	40	6,80	272	1,4	56	381	connected to the zone for loading, directly accessible	
		zone for loading and unloading	1	41	6,80	279	1,4	57	390	connected to the sluis, close to logistical storage	
					704		2.545				
	back office administration	office space for administration									
			office work places	1	429	3,50	1.502	1,4	601	2.102	close to their relative workspaces, facilities, close to toilets
			multifunctional conference room / quiet work places	3	36	3,50	126	1,4	50	176	close to the other offices
			conference rooms		incl seminar						
			reception visitors and employees	1	incl forum	3,50					
			locker rooms employees	1	14	3,50	49	1,4	20	69	
			copy and print room / storage	2	30	3,50	105	1,4	42	147	close to the workspaces
			archive administration	1	75	3,50	263	1,4	105	368	close to the offices
			kitchenette	?	20	3,50	70	1,4	2	98	
			toilets	1	23	3,50	81	1,4	32	113	
	personnel refter with cooking possibility										
		refter personnel	1	100	3,50	350	1,4	140	490	close to toilets, preferably easily accesible from office, easily accessible	
		kitchen		incl						connected to refter	
		storage for kitchen		incl						connected to kitchen	
				727							
	back office			3.337							
4.5.4	outside terrace forum		1	300							
4.9.3	Outside spaces	outside space employees	1	50						connected to refter, close to	

	accessibility	daylight	extra info
shops and entrance,	accessible for employees, volunteers and external people		seperate for men and women - personal locker for employees (app. 20) - dressing room for 15 people - min 30m2 per dressing room
ance and the zone for			
outside	only accessible for qualified people		min 88 bikes
loading and ble from the outside	only accessible for employees		for deliveries cafe/restaurant - deliveries cleaning, machines, details, chemicals office supplies.. - garbage pickup 5 times a week - big delivery van (7x2,5m)
se to the central	only accessible for employees		4 garbage containers, 4 recycling containers - no height difference in floor
<hr/>			
onment, close to	only accessible for employees and on appointment	direct daylight necessary	flexible concept, with changeable plan - view to the outside necessary - visible throughout the building - can be accessed seperately and outside of opening hours - 59 fixed workspaces - 27 workspaces throughout the building: 3 ticketing, 3 library, 8 archive, 1 audio/video, 1 workshop, 6 contentmanagement,, 4 collection, 1 security - min 6,5m2 per workspace
	only accessible for employees and on appointment	daylight preferred	space is visible and inviting - 3 conference rooms, each for 6 ppl - 12m2 per room (2m2 pp)
			no seperate conference rooms
			no seperate reception for employees
	only accessible for employees and on appointment	daylight not needed	can be one central room or multiple throughout the building - every employee has a personal locker and mailbox - 70 lockers
	accessible for employees		close to the workspaces without causing noice disturbance - min 15m2
	accessible for employees		floor should be able to carry the racks with documents
			a seperate kitchen if the offices are not close to the refter see 4.8.4
<hr/>			
connected to terrace, es, garbage storage			should be able to have presentations - preferably connected to outside terrace - 70 ppl - min 50m2, pref. 100m2
<hr/>			
to offices			should be (partly) covered from rain

