

project journal

learning | understanding | reflecting

AN ARCHITECTURE FOR ART

Antwerp, Belgium

AR3AI100

Interiors Buildings Cities
Graduation Studio
PALACE
MSC 3/4

Rutu Chandan Kelekar
5527988
r.c.kelekar@student.tudelft.nl
2022|23

Studio Mentors

Daniel Rosbottom | Susanne Pietsch | Mark Pimlott |
Sam De Vocht | Jurjen Zeinstra | Amy Thomas

Architectural Engineering and Technology

Mauro Parravicini | Matthijs Klooster

The project journal is used to as a document to cumulate the various inquiries and concerns that I had through the entire course of designing a Contemporary art museum in a Courthouse building. It brings together the various references I followed as well as my thoughts and responcees on them.

01

introduction

brief

lectures

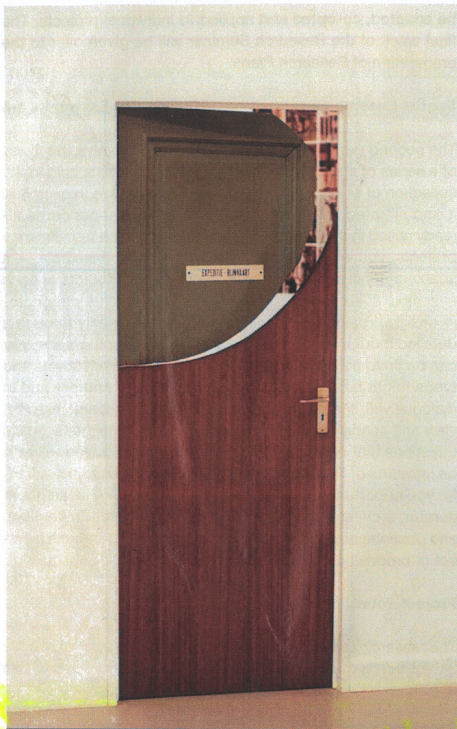
podcasts

readings

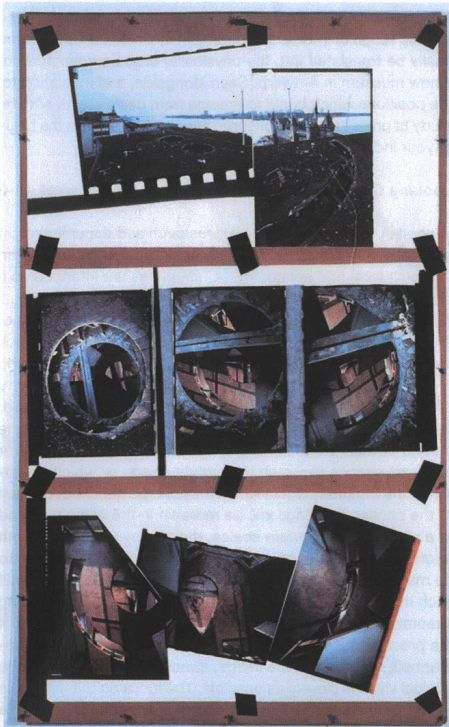
reflection

An Architecture For Art

2022-23 MSc3 AR3A100



Office Baroque: Doors Crossing, 1977, from the Gordon Matta-Clark Ensemble, M HKA



Office Baroque: #669, 1977, from the Gordon Matta-Clark Ensemble, M HKA

PREPARATION

Brief 1: Thinking an doing

weeks 1-8

The opening weeks of the Graduation Studio engage in a collective period of design research, as preparation for the main project; establishing the contexts in which it will develop, through a process of thinking and doing, across design studio and research seminar. Themes, questions and your developing positions will oscillate between these two spaces, with each informing the other. These weeks are critical in establishing the terms through which we engage with one another and from which individual projects will emerge. This is emphasised through the shared teaching and in group work. The conclusion will be a set of drawn and modelled outcomes, which are situated in a body of thinking, articulated through collective research documents and individual research plans that, together, begin to establish the concerns and ambitions of your individual project thesis. Previous examples of each will

be available for consultation and discussion.

The period up to the P1 will be arranged as two phases of work in both the research seminar and design studio respectively, with the outcomes of the first phase in one crossing over to inform the second phase of the other.

PHASE I

Reading Around Research Seminar: weeks 1-5

The first weeks of the Research Seminar will encompass a series of lectures, readings, podcasts and films that will explore the varied contexts, through which the contemporary art museum might be addressed. Through reflective and collective discussion and writing, you will develop your own understandings of the social, political, cultural and physical concerns that have defined the history, development and current conditions of such buildings and the institutions they house. The various

Interiors
Buildings
Cities

Palace

The definition of Art has constantly been reinterpreted. This resulted in a multitude of spaces where art has been displayed. From churches to palaces, public museums to warehouses and abandoned factories became places from where one could critique the purpose of art.

In the latter half of the last century, the white cube established a controlled, almost sanctified sensory context for its display. Although many contemporary artists sought to resist it, even the most radical forms of artistic endeavour became commodified and subsumed to the service and control of the market.

In the backdrop of this context, this year's graduation studio looks at the competition brief for the redevelopment of M HKA, the contemporary art museum in Antwerp, on a site close to its existing one in the south of the Belgian city. Originally housed in a grain silo, the next phase is intended to be a move into a new, purpose built museum building.

The brief for Interiors Buildings Cities acknowledges M HKA's counterpointing of anti-museum fascinations versus technical museum requirements. of a contemporary art space, its desire for an atmosphere of both industrial roughness and domestic intimacy, and its requirements to be, at once, a robust skeleton and a volatile space of experimentation. The course includes an analysis of the museum/anti museum context, exploring the idea and form of contemporary art and who its protagonists might be, examining elements of the collection itself, considering both their nature and the spatial contexts in which they might be displayed, before looking at the brief of the new museum and developing individual projects in relation to it.

- Snippets from 'An Architecture for Art' Brief

Gordon Matta-Clark
155 Wooster Street
New York, N.Y. 10012

July 28, 1976

Inter. Cultureel Centrum
Meir 50 B-2000
Antwerp, Belgium

Dear Florent Bex,

Thank you for your letter. I am, of course, interested in visiting Antwerp and working out a project within whatever limitations and means are available. First, I do not make exhibitions in the conventional sense so your full schedule is of no concern to me. My approach is to make do with whatever is possible while stretching our notions of the possible. I use the urban fabric in its raw, abandoned state transforming unused structures or spaces into revitalized areas. The actual space in its final stage is the "exhibition" and hopefully will have a life of its own within the community. Money should not be a deciding factor since I have worked rather inexpensively in all past projects. The Paris work done last fall cost only \$1500.00 including a short 16mm color film of the project. Besides some money provided by the Biennale of Paris the majority of funds came from private sources in exchange for documentation.

The one aspect of my "staging" of these projects with which your organization can be of the greatest assistance is in securing locations in the city on which to work. After an initial visit, this would involve winning some support and enthusiasm from the city authorities or from whoever has jurisdiction over the space in question. Once the place to work has been set, I will do the rest. My special hopes for a project in Antwerp would be to complete a "non-u-mental" work that the city could go on enjoying for a certain period after its realization.

To give you some background on my recent works I have enclosed some articles, etc. As a post script I would like to fill you in on my work here in New York this summer and next. I will be collaborating with a well organized, very aware and integrated group of ghetto youths on envisioning and funding a large scale "take-over" of derelict property for their rehabilitation into community owned alternatives to a substandard environment. That is quite a long winded way of saying, a neighborhood based job training program for aggressive self-improvement.

Looking forward to seeing you when I come to Europe this fall.
Keep in touch,



Gordon Matta-Clark

- Letter from Gordon Matta-Clark to Florent Bex,
28.7.76

inquiries

What is contemporary art ?

Why did it divert from modern art ?

Who were the artists ?

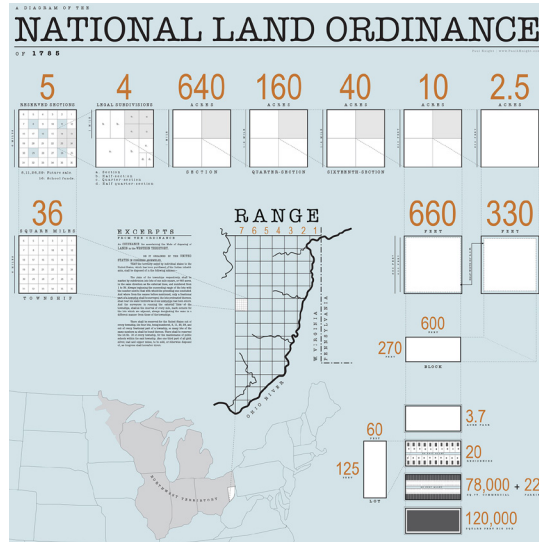
What were they trying to do ?

How do people interact with contemporary art ?

Where was contemporary art shown ?

Mark Pimlott, About Looking

Mark Pimlott, Contemporary Art



Thomas Jefferson's - land of Ordinance of 1785.

"The Land Ordinance was a system that allowed the entire unknown territory to become part of an interior, whose spaces and resources could be owned and exploited."

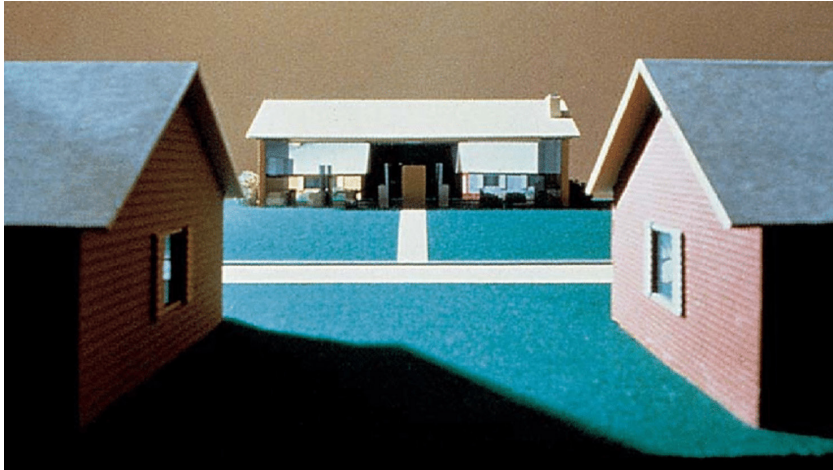
This notion of reform, even in the service of social liberation, tended to the erection of institutions whose physical forms were intended to elicit ideal and predictable behaviour. - relation to the museum? PALACE

Is that a good thing or a bad thing?
Is it the program of the institution or the physical form itself?



Charles Garnier. Opéra, Paris 1861-75

The Society of the Spectacle - Guy Debord
Collective experience of the spectacle - public interior - goes beyond typologies of buildings



Dan Graham, Alteration of a Suburban House

These artists wanted to create spaces for the mind of the viewer (and for the imagination of viewer and artist) that opened a critical space, in which one could see the ideological structures that conditioned art and daily life, and posit other possibilities.

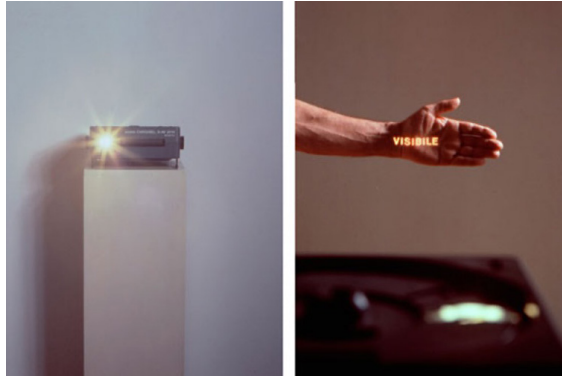


*Thomas Struth. Dallas Parking Lot,
Dallas, 2001*

Contemporary art as
a means for people to
relate to and question
their everyday.

"A city is, after all, an artefact that is marked by ideas, by other places and dreams of them, by circumstances that have befallen other places, by ideas that have been only roughly stated, by mistakes, errors, or hopes fallen short. All of it offered by people."

Designing with empathy - know of your own position and therefore how you read / design



Giovanni Anselmo - Invisible
1971

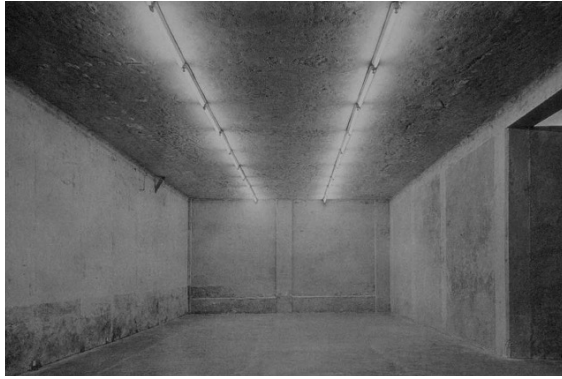
an age of questions, crisis, protest, partially realised utopias--which attest to its difference, its propositions, and often, its advocacy for new ways of looking at the world and the potential role of art in a renewed sensibility.



Shapolsky et al. Manhattan Real Estate Holdings, a Real-Time Social System, as of May 1, 1971 (Shapolski... sociální systém v reálném čase, sta

[Hans Haacke] Shapolsky et al. Manhattan Real Estate Holdings, a real-time socio system as of May 1, 1971

Conceptual Art: it is impossible to avoid Marcel Duchamp for his pointed notion of what the artist did, could do, and what the viewer might be expected to do: to understand that context was central to the act of conceiving art and the visibility of the work of art.

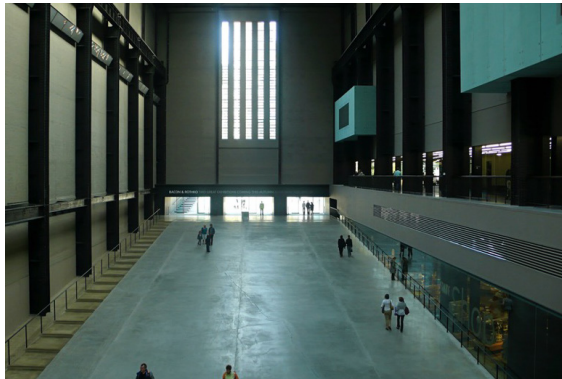


*Michael Asher, Galerie Toselli,
Milan, 1973*

What kind of space? Space as found? Industrial? Institutional? Historically loaded? Generic? urban? Natural?

The demand is that the viewer must do work, to engage with the work that the work of art does. Or, in the words of Marlene Dumas, who on first look would seem to make 'traditional' work, says: "Contemporary art requires time to be seen".

look up references
from the artists-
as to what kind
of space they
wanted - TATE
competition



*Tate Modern, Turbine Hall
London, 2000*

Contemporary art needs every kind of space, every kind of contingency, in order to exist, in order to make visible what it wishes to.

They were imperfect, they were inviting. And they allowed the art installed there to seem to be wrong (and right) for the spaces.

Kunstmuseum or Kunsthallen, which they regarded as 'found' environments, attached to their cities and local culture. They were imperfect, they were inviting. And they allowed the art installed there to seem to be wrong (and right) for the spaces.

inquiries

Who is an artist ?

Can anyone be an artist ?

What is the value of art ?

How do spaces enhance the value of artwork?

What does it mean to create an aura around artw?

Finances of an Art Museum

Role of Art Museums in creating image of the city

Effect of art museums on the economy of the city

Relevance of art museums in the 21st Century

Grayson Perry, 'Beating the Bounds'

fDi's Seth O'Farrell, 'The Bilbao Effect #1'



The French Dispatch, Wes Anderson, 2021

Creating an 'aura' with the artwork.
Can anyone be an artist ?

Cadazio convinces a reluctant Rosenthaler to let him represent him—"It's what makes you an artist. Selling it"—and quickly turns him into an art-world sensation, irresistible not only for his groundbreaking artistic vision, but also for his mental illness and violent tendencies.

What is art? What is contemporary art? Can everything become art?

while some view art as an object, an entity;
some argue it's more than its physical embodiment and extends to become an experience.

Conceptual art - intuitive, provocative, narrative behind it
Boundary of 'context' - need not be spatial.

Caitlin Moran's husband - Caitlin Moran, the writer and journalist, her husband - when he's doing something that he knows he might fail at massively like tiling the bathroom or worming the cat, he calls it his "art project." (LAUGHTER) This is a worrying trend because I think it shows ... it's a wider trend.

They (boundaries) are not formed by what art can be, but where, who or why - but I think the boundaries are sociological, tribal, philosophical, and maybe even financial.

Relation between the art and viewer.

Duchamp seems to suggest that the whole creative act is only completed with the engagement of the viewer, and the artist is merely the creator who sets the creative act in motion.

Values are given to artwork - people themselves give narratives.

By deciding to make site-specific work outside of the market and directly into the urban or rural landscape, they established an engagement with the immediate relations between subject and object, viewer and art work.

artwork is about something, has a point of view, you know a style, and it uses rhetorical ellipsis - i.e. that it engages the audience to sort of fill in the gaps.

"And I like the idea when art works are somehow challenged as to their artiness."

inquiries

- How / Why did the white cube emerge ?
- The effect of White Cube Interiors on the visitors
- The meaning behind the white Cube
- White cube and its relevance to creation of value
- The role of the public in contemporary art museums
- What can / can't be constituted as art gallery
- Effect of commercialisation of artwork on gallery spaces

Mark Pimlott

Sarah Swan

Abigail Cain

Charlotte Klonk

Mark Pimlott, 'Visibility, Spectacle, Theatricality and Power: the problem of the museum'

Readings

Rise of the White cube and the translation of its ideals

art museums presented to impress, inculcate and educate its visiting public, and to express and reinforce the authority of its possessor,

These images, supplemented by the atmosphere of spectacle and publicity cloud the viewer's attention and surround them with messages that reinforce the museum's aura and authority.

Rather than pursuing and affording true specificity--central to the viewer's genuine relation to the work of art--contemporary art museums trade in the currency of repetition, type and sign, maintaining the systems that create the aura of value, preserving the appearance of their authority within a (still) neoliberal economy and ecology.

Relation between publicness of artwork and its visibility

Artists challenged, at first, the status or function of the work of art in relation to the viewer, and then the condition of the visibility of the work of art.

art museum in particular, depends upon its engagement of the public,

the creation of value was tied to the workings and representational schema of the institution that created the artwork's condition of visibility.

White cube paradox

"Never," argues O'Doherty, "was a space designed to accommodate the prejudices and enhance the self-image of the upper-middle class, so efficiently codified." The gallery, he continues, is designed to suggest "eternal ratification of a certain sensibility, but only for the caste or group that shares that sensibility."

White cubes promote the myth, he says, that we are primarily spiritual beings with the eye as the centre of the soul.

a higher, cleaner, contemplative place

What constitutes a gallery?

Big River displays local art next to tables of greasy-lipped folks chowing down on fried chicken. As my eyes shift between expert carvings and slices of pizza congealing under heat lamps, I realize this gas station, amidst its perpetual swirl of horseflies, is, at least philosophically, close to a decolonized gallery. There is no socio-economic threshold to cross. It is warm, communal.

Is there a possibility to arrive at a balance between the white walls and the rundown found spaces?

But since they (museum interiors since MOMA) have not changed,
the ideal of the consumer-spectator has not been seriously challenged.

Instead of simulating the permanence of museum, the Documenta did everything
could
to highlight the nature of an event, organising lectures, concerts and
film screenings to go along with it.

Bode's arrangements were more purely visual; his object was to create form of
sensual, intuitive experience, not to advance intellectual comprehension.

Bode : The result of our effort must be a freer, lighter, happier form
of our immediate environment: the human interior.

On the obverse side, he was also deliberately contaminating the tasteful and
tidy enclosed world of the contemporary art gallery by inserting it into the
messy and chaotic reality of modern urban life.

Where the Documenta was fashionably stylish and modern, The Weather Project
allowed its participants to escape into another realm.

Hozler, was able to respond to the space, a space whose individuality and
dramatic quality could easily overwhelm any work displayed in it. Apart from
this, however,
**most of the rooms in the Guggenheim Bilbao are not at all
experimental.**

has become commonplace to that what makes an object into work of art the
institutional fact that placed museum, and the drama of architecture highlights
that fact and confronts the spectator with it more vividly than does Tate
Modern.



98 Arnold Bode, display of a sculpture by Gustav H. Wolff and paintings by Giorgio Morandi at the *Documenta 1* in Kassel, 1955.



101 Arnold Bode, display of work by Pablo Picasso at the *Documenta 1* in Kassel, 1955.



102 Arnold Bode, display of work by Fritz Winter at the *Documenta 1* in Kassel, 1955.

Art in the age of capitalism - more shop like interiors. - Andy Warhol
Critic of museum being a super market - consumption of goods

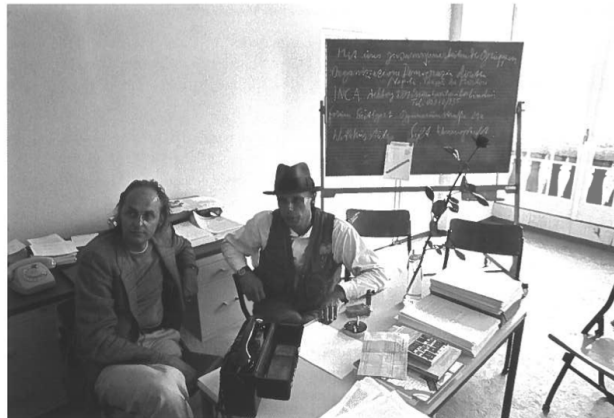
Performance and Painting - Symbol of Liberation
Art no longer became representational
Art - overwhelming visual experience

Idea of tastemaking - creating spectators
Moma - taste makers - American art lost political context of Europe
Creation of Art Tourist
Art in the age of Mechanical Reproduction

Importance of Kassel, 'Stage Sets'
Everyday life and art space - mirror each other
Forcing "experience" in every room - "educating the visitor"



112 Andy Warhol, *Campbell's Soup Cans* at the Ferus Gallery in Los Angeles, 1962.



111 Joseph Beuys, *Office for Direct Democracy through Plebiscite* at the Documenta 5 in Kassel, 1972.

- + Does Antwerp NEED the Bilbao effect ?
- + How could/would Bilbao effect work in Antwerp?
- + Who would be the public ?
- + Inclusive vs Exclusive - Museum as a place/platform for young artists
- + Effect of International vs local Artist and Audience
- + What position can new MHKA have ?
- + Is it the right location ? What does it do for the people ?
- + How do you treat people that come into the museum? As spectators or consumers ?
- + What part is visibility playing in the museum?
- + Idea of 'collection' - performance -
- + Role of the museum to bring art to the 'public'
- + How do you display constantly changing artwork?
- + Museum(conservate/preserve) vs event (ephemeral)
- + Level of Intimacy between viewer and artwork
- + Power struggle - artist/curator/institution
- + What is the ideal balance ?
- + What kind of spaces promote certain kind of artwork ?
- + Who are the stakeholders ?



Several concerns came out of the introductory lectures and readings on Contemporary Art Museums.

1. The Role of Contemporary Art - it wanted to question the boundaries of art form
2. The visibility of Contemporary Art - it wanted to appeal to the masses
3. Found Environments as spaces of Display - moving away from institutions that Art Museums had become
4. The privatisation of artwork (Only 2% of Tate Modern's collection is on display at a time)
5. Relation between the Art and the Viewer
6. White Cube Interiors - Evolution of artwork into a sanctified object that could only be viewed in pristine environments devoid of context -
7. Economics, Insurances and the whole ecosystem of backend of Art World

These readings and lectures were really helpful to highlight the context in which we would be working. They opened up my view of art museums and compare the workings of various art museums around the globe from MoMA to Kunsthall to Tate to various Brand Foundation Museums like Guggenheim, Prada Foundation etc.

They helped me understand that it is an extremely political, social and cultural decision to show certain artists, to not show certain artists within the boundaries of the museum, the effects and meaning behind the curation of exhibition spaces (readings on Documenta 15 in Kassel), the changing role of Museums in the 21st century, their relevance and responses to various cultural awakening moments that art was responding to and the role of the director in positioning the vision of a museum in the global scene.

02

looking carefully

brief

initial study

experiments

parallel questions

reflection

The project starts from recreating an interior space for art within the New Museum in New York in the form of a physical model to be photographed, reproducing the given image as closely as possible.

In doing so, attention is then given to recreating the atmosphere of the image which requires close inspection of light quality (in case of this particular image) not only emitted by the fixtures but the dependence of reflective and absorbing properties of the floors and walls and their glossiness in order to create an overall glow within the space.

Quite contradictory to Sanaa's ethereal projects of floating roofs on thin metal columns, this project interprets the white cube in relation to the industrial character of the neighbourhood it situates itself in, in Bowery. It translates the essence of the institution of New Museum which wants to move away from the treatment of art as a pristine, higher power to provide a space where new upcoming artists feel comfortable to display their work.

An enquiry into the image eventually led us to inquire about not only the physical qualities and structure of the museum but also intangible aspects of its collection policy and the role of the museum in the city.



New Museum | Sanaa

"Every image is a propoganda"

- Daniel Rosbottom

inquiries

Where is the museum in the context of the city ?

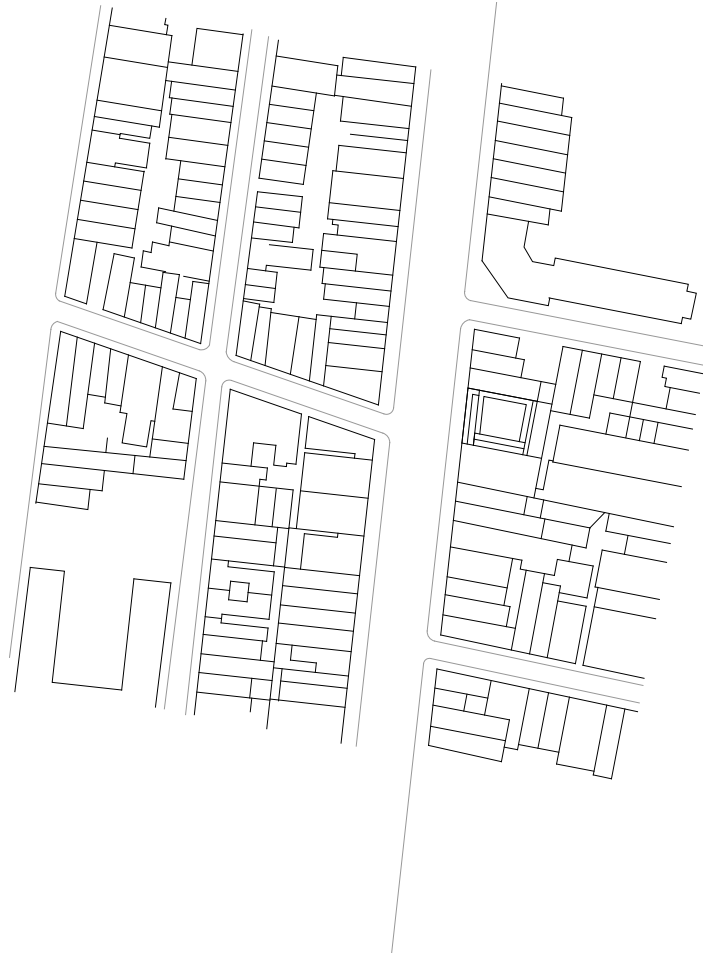
Who is it open to ?

How does one read the artwork?

What kind of shows are displayed in your gallery ?

Where is the fire extinguisher?

What is the people density at New Museum ?



urban level plan

building isnt a square (imperfection ?)
shift in the grid comes from the city layout
each floor similar but not same
dont want it to become an office building

total floor area = 5000 sq.m
= 58,700 sq.ft



Museum is between a gallery space and an event space

- SANAA

space as tension ; interval that binds and relates two things
Japanese space - not a fixed but temporal thing ; always in relation to other
elements

seeing one element one column in relation to the floor, ceiling ..

values on variation, alteration, unevenness and off centeredness in arrangement and
presentation



opening on north elevation

scrappy and stylish building



west side elevation

design inspired by the changing nature of contemporary art

mesh playing with light and reflection
mesh reflects all colours and angles of the sky and cityscape
industrial feeling



182 seat theater

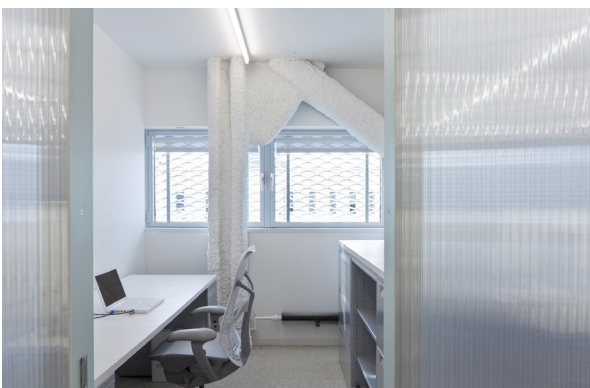
130 sq.m

theatre space in basement



one gets a sense of how one moved
through the building with its clear layout

gallery 01



program based on contemporaneity and
experimentation

"enough sunlight is coming through"

photo of workspace



photo of education and research section on fifth floor

filtered sunlight through the mesh



photo of lobby with the street

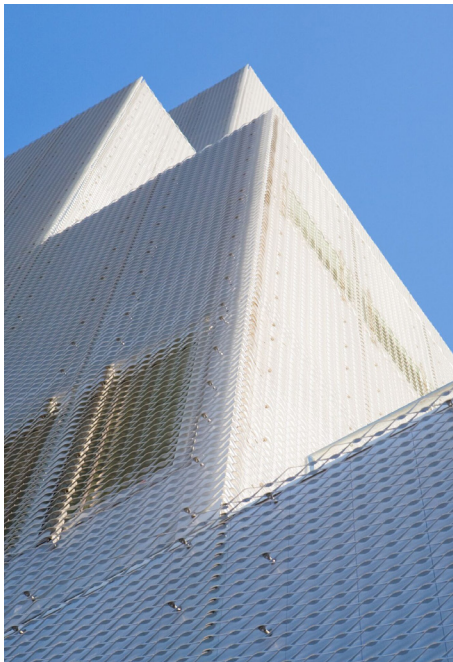
opening up to the sky and the city
"openess" connection through its walls - glass walls or skylights.



photo of lobby with the street

visible loading bay / storage from the street

texture as a means to avoid elevation from
looking flat too plain esp on windowless walls



NEW Museum, SANAA

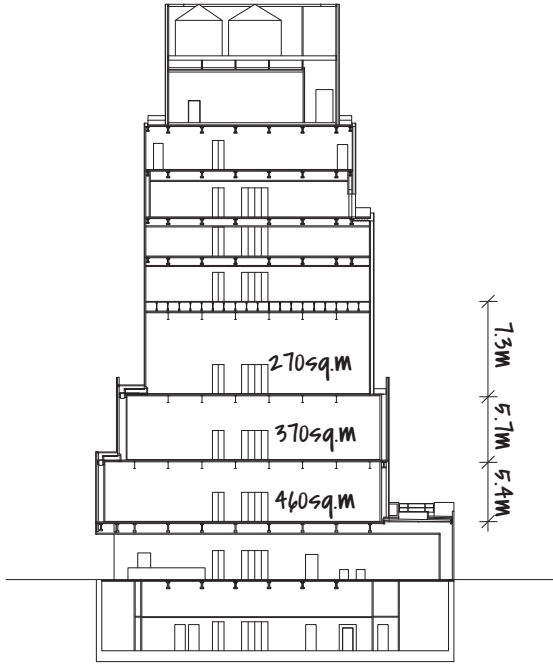
using two layers - to give different impression as
you move - feeling of transparency - gives depth
skylight lights the facade from the outside

ss - more black, dark and heavy
al - bright, white and transparent



*City Theater Jyväskylä,
Alvar Aalto*

using tiles to create texture and shadow play
within the facade, rhythm of tiles also changes
to break the monotony



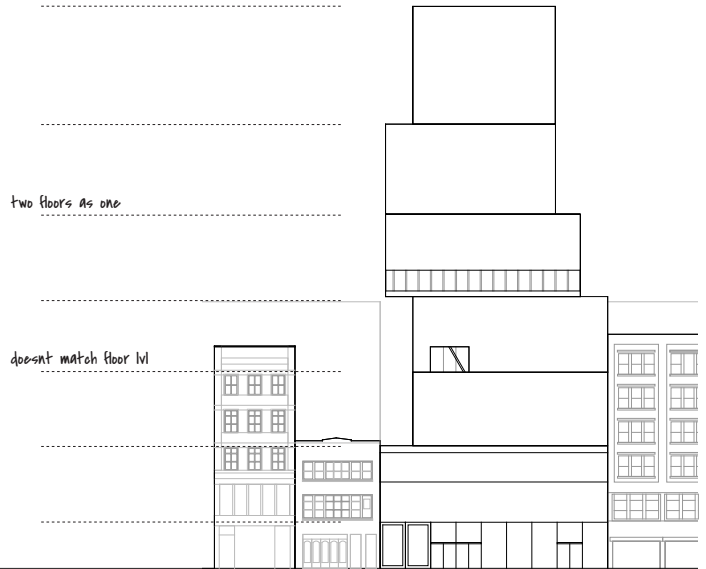
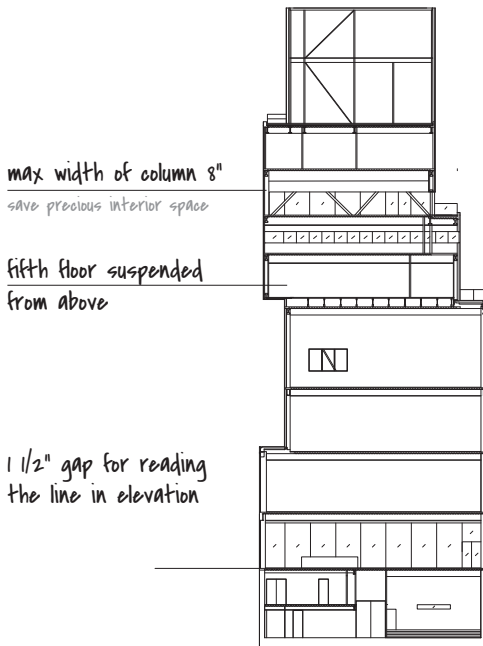
WEST

Its kind of systematic of SANAA to not want to stick to a grid until you know what your grid is

three underlying grids
the step, dividing it vertically
the diamond on the facade
and the beam in the plan (spacing)

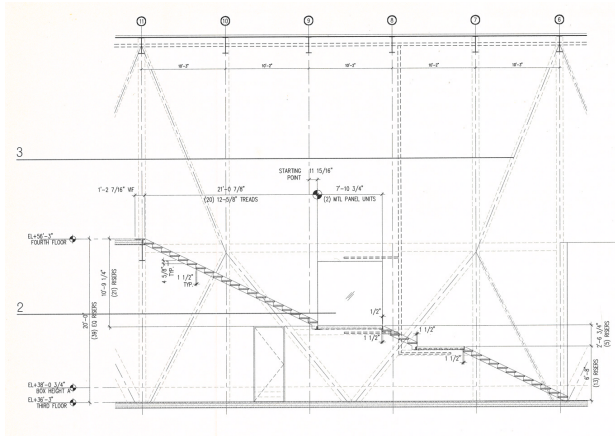
masking mechanics of utility and placing of functionality away from view

600 - 1000 ceiling depths

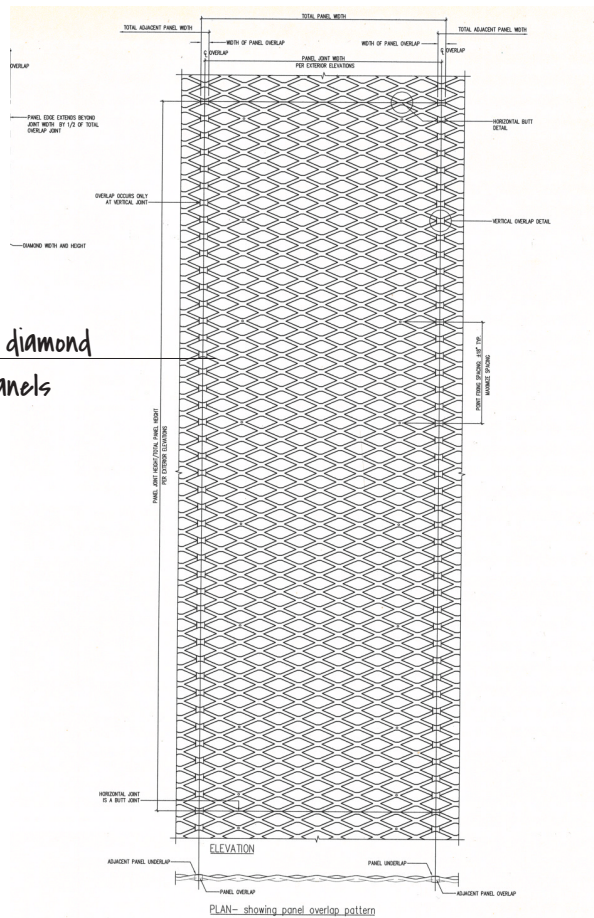


SOUTH

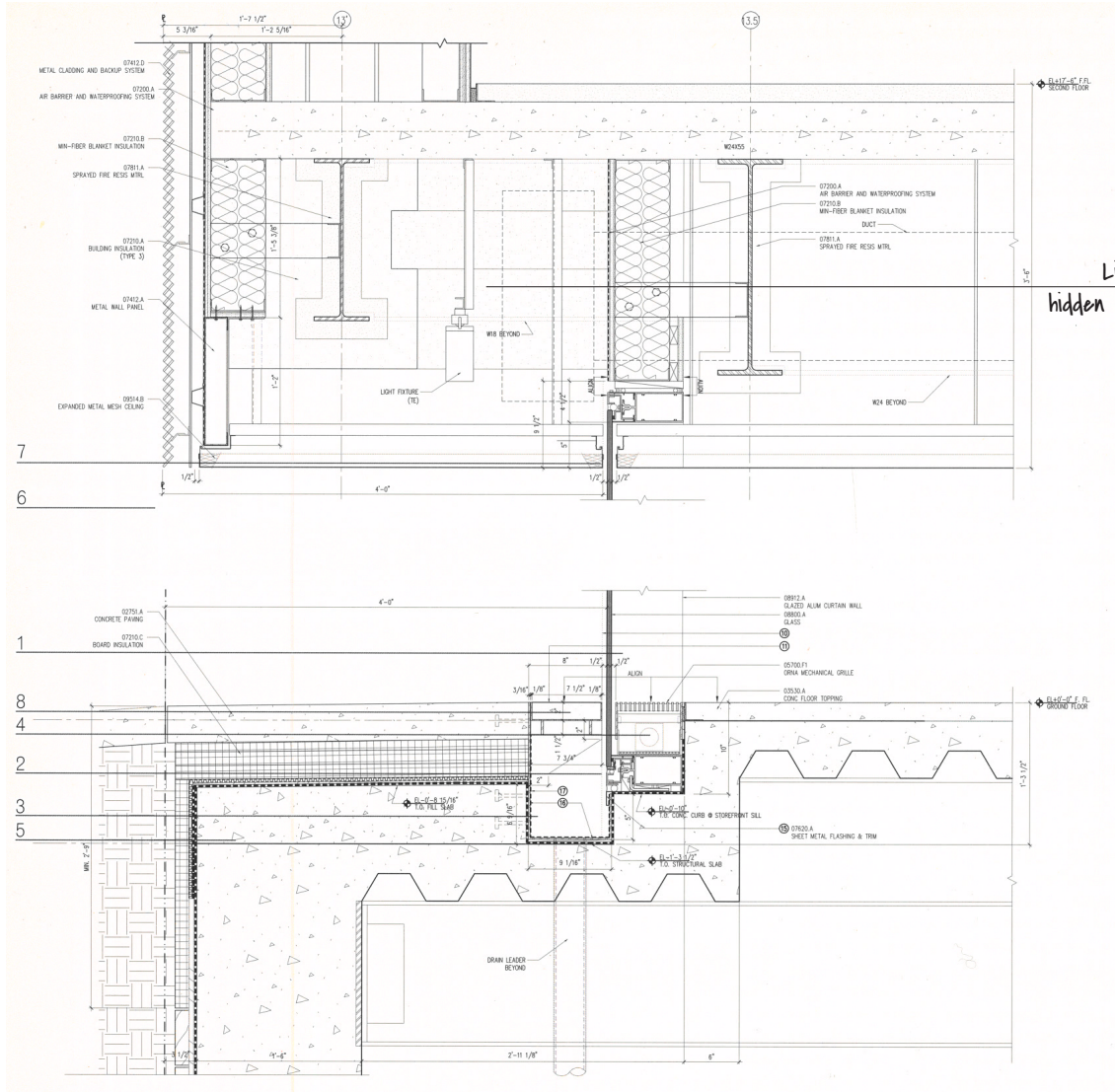
lines expressed in elevation



structural steel - core - stairs - window - openings - exterior mesh



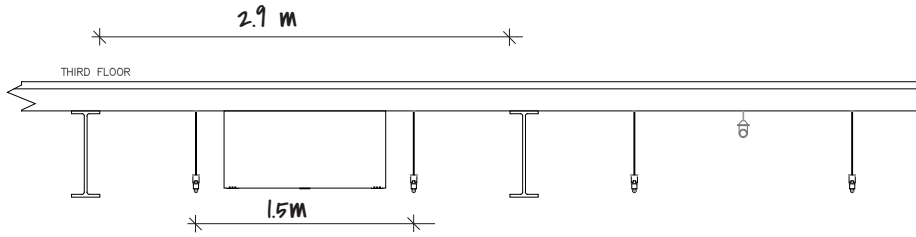
87 x 199 mm diamond
4 ft wide panels
1200mm



Light fixture hidden inside mesh

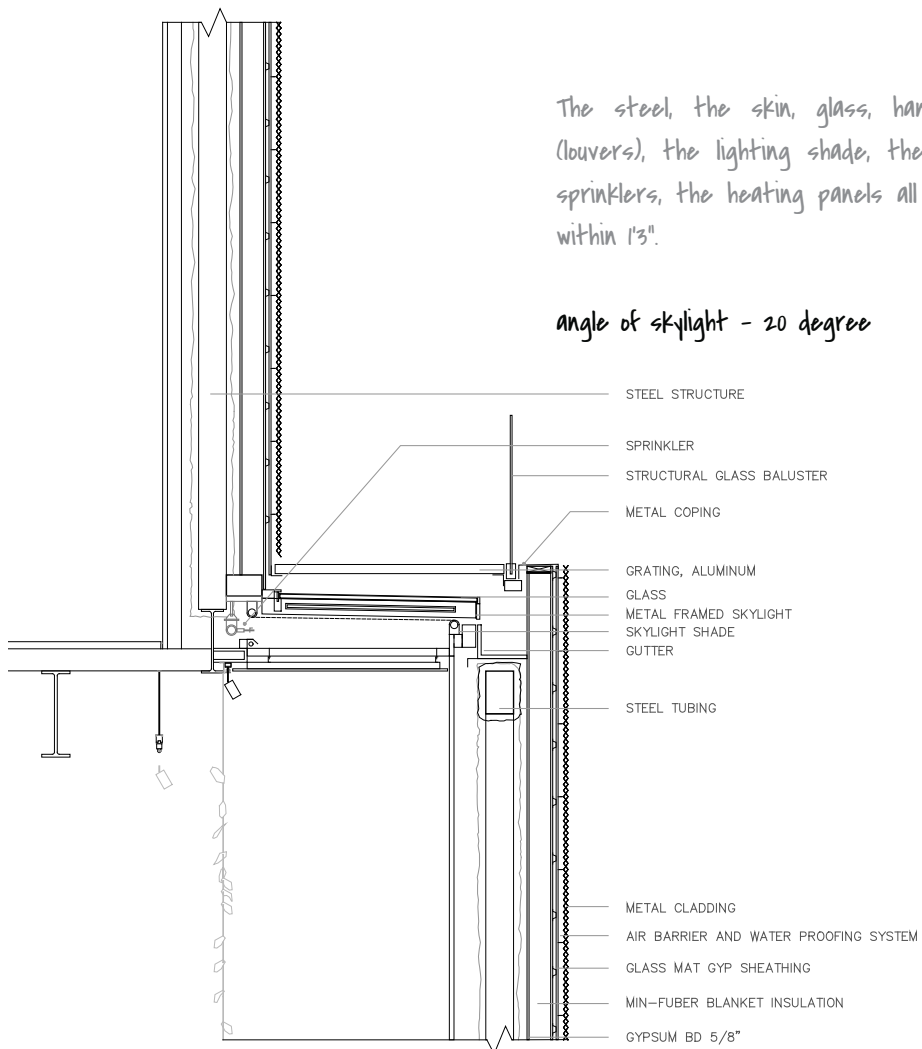
- 1- glass
- 2 - glass support
- 3 - trench drain
- 4- electrical wire for heating
- 5- storefront boundary edge
- 6- second box aligned with basement
- 7- continuous mesh ceiling
- 8- trench paver cap

special details taken for glass to merge into the footpath



light source is 30 mm
above beam bottom

ceiling section



detail of the skylight above
gallery 01

for a museum that wanted to
deviate from the institutionalised
art museums ; new museum still
works under secrecy

	TOTAL	MUSEUM	CITY	% change from 2020	% change from 2019
1	2,825,000	Musée du Louvre	Paris	5%	-71%
2	2,260,231	State Russian Museum	St Petersburg	88%	-6%
3	2,242,405	Multimedia Art Museum	Moscow	421%	<1%
4	1,958,000	Metropolitan Museum of ...	New York	84%	-68%
5	1,704,606	National Gallery of Art	Washington, DC	133%	-58%
6	1,649,443	State Hermitage Museum	St Petersburg	70%	-67%
7	1,643,108	Reina Sofia	Madrid	32%	-63%
8	1,612,530	Vatican Museums	Vatican City	24%	-77%
9	1,580,819	State Tretyakov Gallery	Moscow	77%	-44%
10	1,501,040	Centre Pompidou	Paris	64%	-54%
11	1,327,120	British Museum	London	4%	-79%
12	1,262,562	National Museum of Korea	Seoul	63%	-62%
13	1,175,296	Museo Nacional del Prado	Madrid	38%	-66%
14	1,168,821	Royal Castle, Warsaw	Warsaw	80%	-7%
15	1,160,686	Museum of Modern Art	New York	64%	-42%
16	1,156,037	Tate Modern	London	-19%	-81%
17	1,049,183	Tokyo Metropolitan Art M...	Tokyo	106%	-63%
18	1,044,365	Musée d'Orsay	Paris	20%	-71%
19	984,978	Somerset House	London	36%	-65%
20	969,695	Galleria degli Uffizi	Florence	47%	-59%

*List of visitors to Art Museums
-art newspaper; Visitor Figures 2021: the 100 most popular art museums in
the world—but is Covid still taking its toll?*

Q: Can you provide attendance numbers?

A: The New Museum does not provide visitation numbers. However, we often participate in the Art Newspaper's yearly attendance surveys so you are welcome to reference them.

Q: Can you provide the museum's annual report?

A: The New Museum does not have an annual report.

- Press release FAQ by New Museum

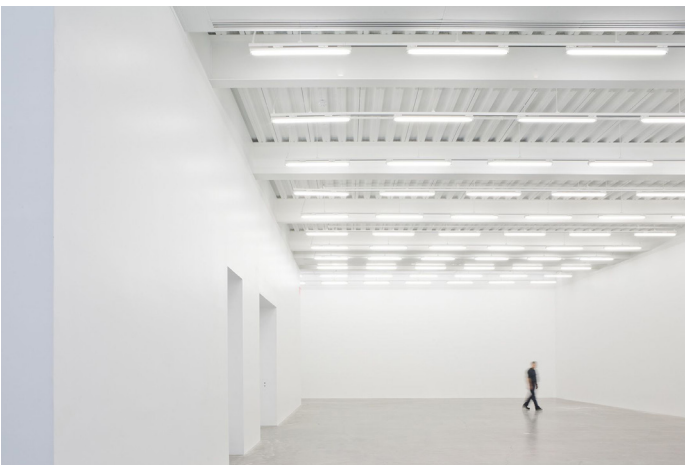


gallery 01



gallery 01

understanding the high contrast in the given image as against the white washed ceiling in reality.



gallery 01



Given image to recreate

inquiries

- + What do modern art gallery sound like or smells like
- + Interdependence of various elements of art gallery on one another (structure/services/materiality)
 - + Seriality
 - + 'Anti space' - no circulation
- + Expression of the floor materiality



Initial experiments with recreating the lights and floor



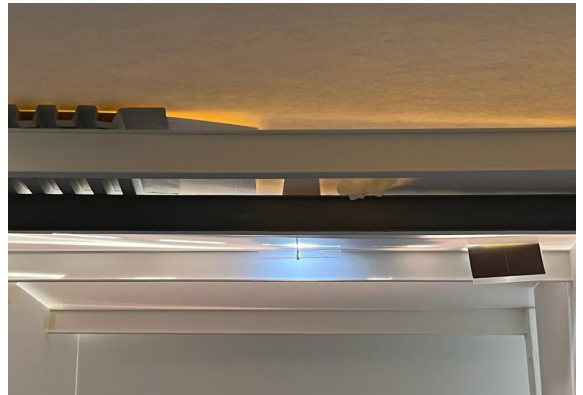
making holes in the ceiling



working with grey vs. white beams



white lights to reflect lights



*using transparent sheet to refract light.
creating darkbackground for transparent
light*



using grey ceiling with white lights



seeing lights in perspective



*experimenting with light source
from outside*

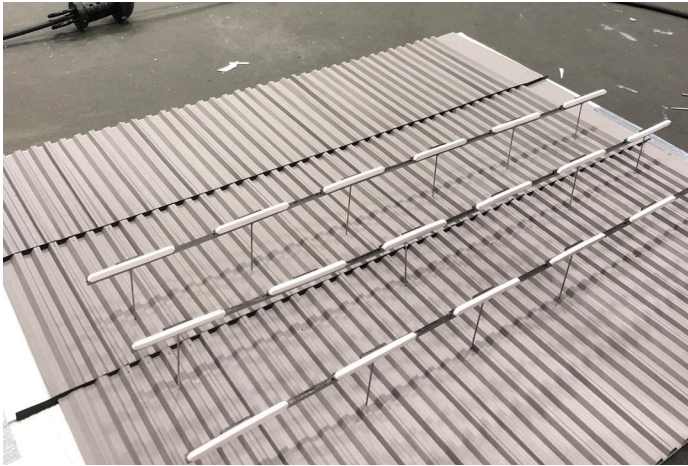


*getting familiar with studio light
for end output*

We decided to scrap using actual lights, in order to recreate the image.
Instead decided to use white lights against dark ceiling as it looked similar to our final output.
Also realised foam walls were ideal in order to get light from the walls as well.



Trying reflected mirror as ceiling lights



Trying White profiles as ceiling lights



Placing artworks wrt one another

Final Comments :

Atmospheric Phenomenology - is so much about construction of an image

Alot about perception - more about experience

Zumthor - not natural almost - highly curated

Technical details of chipperfiled museum
light / sequence / art on wall / techtonics / materiality

using lift as a vision

reflection of white walls, floor ceiling

colour the ceiling lighter

white cube - objectified status

essen, david chippertiled - city comes in

how do you look at paintings bigger than the cone of vision

department stores = museum

yamma gotto , antwerp

herz-gog - prada store - rma

sterling gallery - hans hollein gallery

what is the visual focus of the room ?

lamps vs grills as design objects



Working on Final Touches



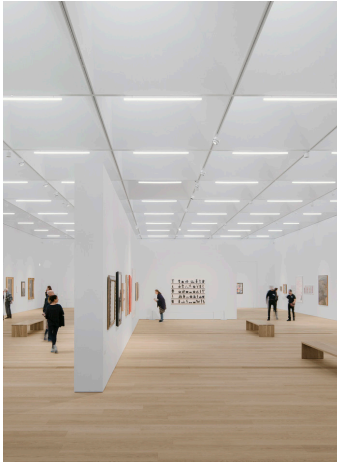
Reproduced Image



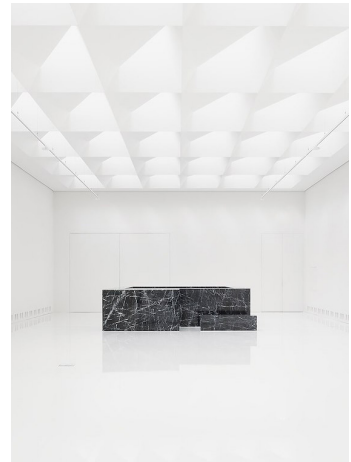
Given Image

inquiries

- + What do you choose to express in an art gallery
 - + how do you play with the perspective
 - + How do you design with the perspective
- + Dependence of materiality of museum with its attitude towards artwork (FRAC – Art is not special)



- Contrasting white with wooden/dark floors+ furniture



- Adding texture within ceiling + inturn creating shadow play



- Adding grey to add subtle gradation

- *Comparing Whites by different architects*

1. *Barozzi Veiga*
2. *Alvaro Siza*
3. *Aalvar Aalto*
4. *Francesca Torzo*
5. *Barozzi Veiga*
6. *Kees Kaan*
7. *Richar Mier*
8. *Sanaa*
9. *Juniya Ishigami*



Zumthor : How far can light go in the interior ?
Positioning the museum such that reflections of the mountains
come on the lake
notion of time passing with the help of light



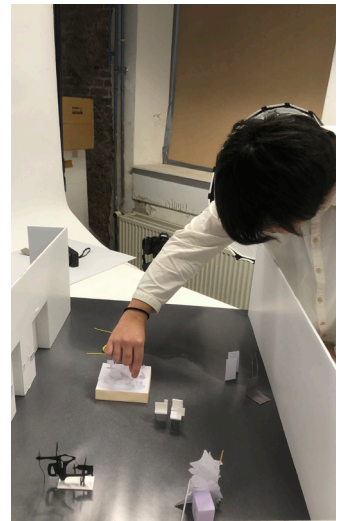
Lacathon Vessel - Contrast of Two languages @ datum
Where you display artwork - building becomes a white cube
skin wrapped around the structure

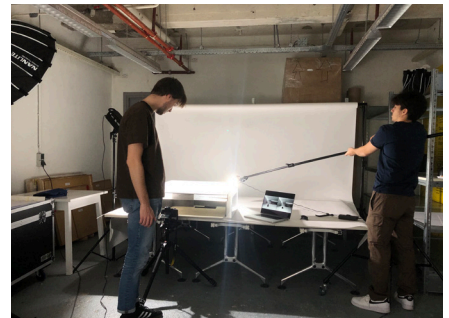
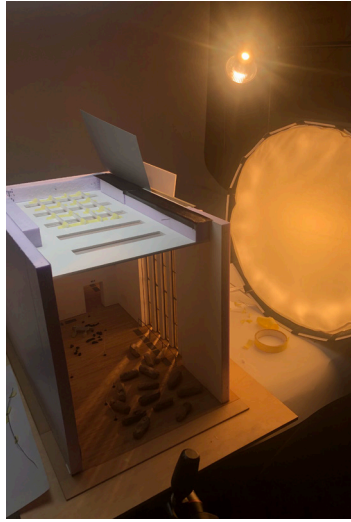


Lina Bo Bardi - Looking at people, its real life, rhetorical,
Idea of Museum Network



- Herzogog - Double windows, new layer added to structure
- Roof Lights - Artificial skylights
- What temperature does artwork need ?
- How do you 'read' art ?
- Energy usage of your museum ?
- Idea of "scenography" - much more happening behind the walls





Understanding the working of other groups to achieve the light quality within their spaces

Making models and studying examples of built contemporary art museums helped to correlate concerns of contemporary art with the various environments that museums were providing. Lina Bo Bardi's Museu de arte Sao Paulo was revolutionary to imagine a open ground space under the museum as a space for everyday but also a space for protest as against Peter Zumthor's KunsthauB Bregenz that creates a inward looking artspace with highly controlled environmental conditions. It helped me understand the decisions of spatial planning, materials and tectonics of a museum to the meaning and ideologies they wanted to convey, how they were functioning, their visions, their curation as well as how they had fared overtime.

In the process of making the models we tried to understand the backends of designing a museum. Attention was given to recreating the atmosphere of the image which requires close inspection of light quality not only emitted by the fixtures but the dependence of reflective and absorbing properties of the floors and walls and their glossiness in order to create an overall glow within the space. Drawing out the details brought my attention to various tolerances that are required in an art gallery and in turn helped me to constantly use them as guides while designing my own proposal.

03

first thoughts

brief

initial study

spaces of display

formal exploration

materiality

reflection

The second brief, First Thoughts involved a study of a series of Ensembles of work, by various artists held in M HKA's Collection. Task was to design a spatial ensemble - a space or small series of spaces in which artefacts of each ensemble collection becomes curated.

Focus was on questions of interaction and confrontation not only between the viewer and the artwork but also within the artworks themselves. Questions of scale, light and material, view and spatial sequence were explored. The project was an opportunity to consider the boundaries of an archivist, a curator, architect and audience while designing a space for art.

Chosen Artist : James Lee Byars



inquiries

Who was James Lee Byars?
Artworks from Ensemble Collection

Who was James Lee Byars ?

Initial Study

He was an American born but a nomadic international artist, who lived America, Japan, Europe and died in Cairo, Egypt. He was this all raved-dazzle artist like Greyson Perry, who was largely working with :

Three broad themes of the philosophical questions, perfection and death.

He strived to achieve the idea of Perfection not only notionally by titling artworks like The Perfect Kiss perfect epitaph, perfect gold sphere , but also trying to get this through materiality, gold or marble or through shapes - star, sphere. He toiled with the concept of divine through death being influenced by Japanese Zen meditation, rituals.

Byars aimed to explore social behavior, explaining, "I want people to come and develop an awareness about their perceptions, their behavioral cycles, what they eat, their lifestyle."

There was a lot of contradiction in his work. Monumental sometimes minuscule, universal things, poetic narratives, of extravagance and of simplicity, of materiality - fluid as silk or marble, mixing spirituality with something as flamboyant as gold.

As Byars put it, "I create atmospheres"—and not, he suggested, mere objects.

The purpose of the artwork was not just to produce objects, but also to kind of ask questions where answers don't really matter as long as you're kind of thinking and contemplating on them. What does the physical qualities of such a space look like ?



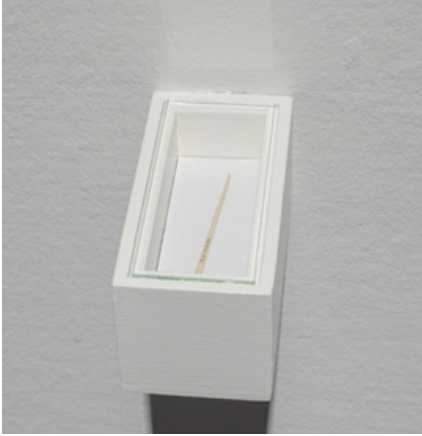
The Intellectual Murderer Shoes

23 x 33 x 13 cm

1975

Materials: fabric, shoes

James Lee Byars' art is a cerebral art, an aesthetic of thought bathed in an atmosphere of the immaterial. He expressly rejects the idea of interpreting works of art in function of what is already known, as this stands in the way of the free thought process. Even for *The Intellectual Murderer Shoes* that thought arises. The reality of the object in combination with the title can conjure up images of murder scenes with detectives in wrapped shoes, or of Byars as a mystic and alchemist who was regularly dressed in a golden suit with black wizard hat and shoes. Yet works of art are images in themselves for Byars. However, Byars' personal vocabulary and imagery are unmistakably present in this work. The monochrome blackness, the sense for materiality and the simplicity of the whole expose the paradox between Byars' extreme pursuit of perfection and the ephemeral character of his work.



TH FI TO IN PH (The First Totally Interrogative Philosophy)
5.6 x 0.2 cm

Materials : wooden toothpick
1975



The Perfect Philosophy
4.8 x 7.4 cm, 2.7 x 2.7 cm

Materials : Gold
1975

The letters James Lee Byars wrote in pencil on the toothpick stand for: The First Totally Interrogative Philosophy. His work opens up a space for reflection, a place where asking questions is more important than providing answers. Byars sees answers as ideological constructions, as solutions that make new questions disappear. With TH FI TO IN PH he always answers independent questions with different questions. In this way, the artist wants to free conceptual images from their limits and create an openness to the absolute.

This gold pin and toothpick can also be seen as symbols of the absolute. Byars liked to work with everyday objects, but placed them in a mystical atmosphere. In other words, he combined earthly matters with spirituality. Against the dark background, the pin and toothpick emerge as mysterious entities. This allows us to experience moments of unexpected perfection. The latter is a characteristic that Byars has often pursued: one of his unfinished projects is a 333 meter long needle, which he wanted to place in Berlin. This gigantic work should reach into the clouds, but at the same time could be regarded as a beam of light descending from heaven on us. James Lee Byars' motto "announce the perfect until it happens" can therefore certainly also be applied to these objects. With these objects - of which the pin is the smallest object in the collection of the M HKA - he tried to make the impossible possible.

In 1977 the Marian Goodman Gallery in New York showed The First Totally Interrogative Philosophy (a correlate of the "presuppositionless" philosophy of the Pyrrhonists and phenomenologists): a golden chair is concealed inside a silken tent; as a visitor approaches, Byars whispers (in "abbrev") "Hear the Fi' To' in' Ph," pulls aside the tent flap and shines a flashlight on the golden chair. The empty chair, around which the First Totally Interrogative Philosophy was to be heard in the air, corresponds to elements in Eastern traditions whose influence Byars has felt: the empty throne signifying the Buddha in the realization of not-self; the empty chair of the ghost in Shinto rituals.



HEAR THE FI TO IN PH AROUND THIS CHAIR and it knocks you down
1977

chair, silk carpets, silk tent
(geïnstalleerd kunstwerk / installed artwork) ca. 357 x 355 x 368
cm

Two gold-coloured rugs with patterns of plants woven into them lie inside a cube-shaped tent of black silk. An antique Spanish chair stands on the rugs. This wooden chair is upholstered with a golden material with patterns of plants woven with white thread. The front of the tent has an opening through which the public can look in, and the chair faces the opening.

The scene that he created invites reflection. The space you look into is bordered with black and golden materials. Gold glitters and reflects the light best, while black is the opposite and absorbs light. Both are symbols of the absolute. The chair is the place for a writer, a scholar, someone who thinks. The way in which Byars positioned it is reminiscent of a place where someone can sit for an interrogation or instruction. However, the chair is empty. Questions can be asked, there is room for reflection, but there are no answers.

inquiries

How do you design for a dead performance artist ?

How do you design for rich materials ?

How do you design for glamour ?

How was the artwork placed? On walls? On stands in other galleries?

What does it mean to view a picture of actual event ?

How do you avoid from looking like a storefront ?

Can you club certain artworks together ?

Which artwork needs its own room?

Do the pedestals have glass ?



*"The Intellectual Murderer Shoes"
BNP PARibas Fortis, Belgium*

Artwork displayed almost like an ornament on a pedestal drawing parallels with Rene Magritte : Le Modele Rouge



*"The Monument to Language"(left)
MACBA, Barcelona*



*"The first totally interrogative
philosophy"(right)
Mendes Wood DM, South America*

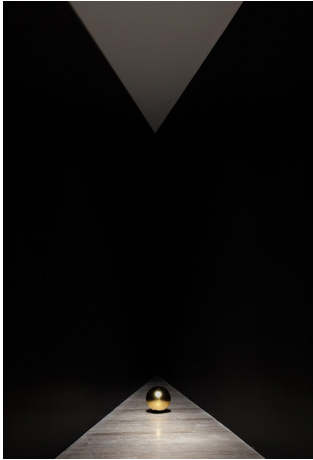
Artwork displayed like a monumental sculpture; dominating the room irrespective of scale of the art piece.



*"James Lee Byars 1/2 An Autobiog-
raphy"
Museo Jumex, Mexico City*

Artwork displayed together as part of a collection helping the viewer correlate within the collection.

Analysing the variety of ways James Lee Byars artworks are displayed. They range from showcasing on a pedestal to occupying the entire room or showcasing on a raised platform. In terms of lighting too various galleries displayed them in a variety of ways that either created dramatic atmospheres around a certain artwork or an evenly lit space that moved away from creating a hierarchy amongst them.



James Lee Byars, Is, 1987, gilded wood, 33 cm diameter

Artwork is shown in dramatic lighting to enhance the artwork



"Life, Love, and Death : The Work of James Lee Byars "
Schirn Kunsthalle Frankfurt , Germany

Artwork is shown in an evenly lit space



"James Lee Byars: The Milky Way and The Star Man"
Michael Werner Gallery, London



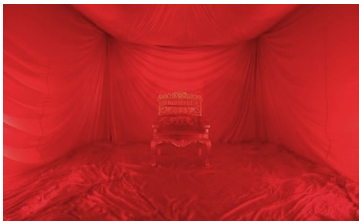
"The first totally interrogative philosophy"(right)
Mendes Wood DM, South America

Artwork is shown with spot lights



"The Chair for the Philosophy of Question" (1996), gilded teak, 63 x 63 x 46"

*OVERDUIN & CO.
6693 Sunset Boulevard
April 8-May 12, 2012*



*MOMA PS1
22-25 Jackson Avenue at 46th
Avenue
June 15-September 7, 2014*

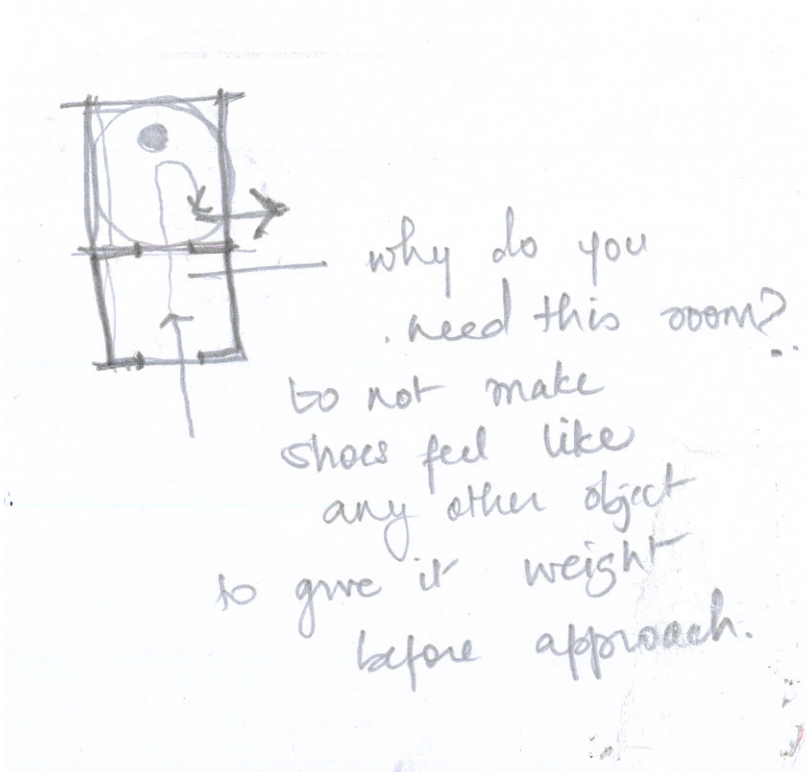


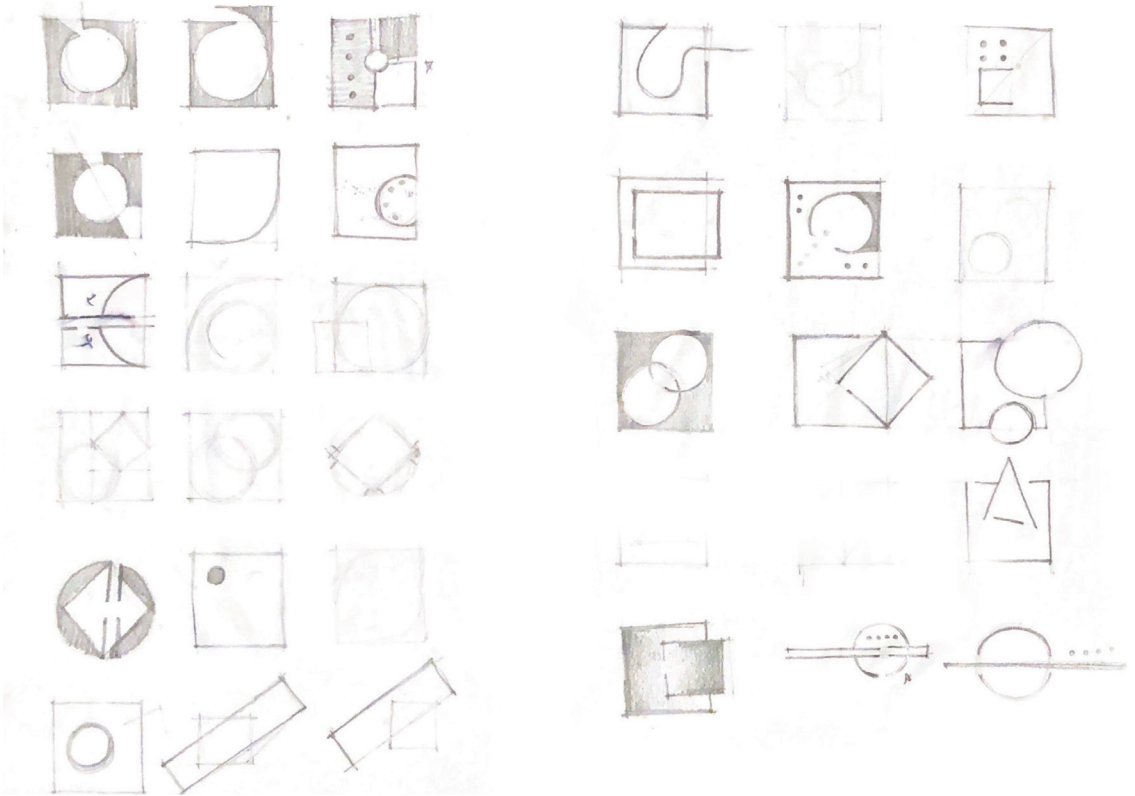
*"James Lee Byars 1/2 An Autobiography"
Museo Jumex, Mexico City*



*Michael Werner Gallery NY
Apr 7-May 31, 2022*

This specific artwork has not only been shown in a variety of ways in different art galleries, but it has also been constantly reinterpreted and changed by the artist during the course of his life. It was a very performative artpiece where viewers were required to listen, contemplate and to question power, life and death. Sometimes one approaches the tent like an object in the case of Red Brick Art Museum or sometimes people experience it like a door front in case of Micheal Werner gallery. Sometimes the tent isnt a free standing object but its presence is behind a museum wall, (Museo Jumoz). Light is another variable affecting the viewing of the artwork. Sometimes projected on the chair, but also from behind (Sunset Boulevard) this brings out the translucency of the fabric but in the case of





INITIAL PLAN DIAGRAMS EXPERIMENTING WITH GEOMETRIES



personal reflection- 10 10 x 10- worked in theory not in the actual space
 like the idea of contemplation - seating not in front - what are you looking
 at

order of object - first see the shoes
 clubbing of certain art works
 negative space that people are not really entering

How do you photograph the model ?

5.5 m - optimum gallery Height

Relation from room - humans, artwork - skirting - proportions

Villa Rotunda - ideal proportion size

Anti Room - you keep coming back to one space

how many rooms do you need actually ?

Perfection - ideal Proportion

each room think about spatial experience

there is something beautiful about a small artwork in a large space

relook at classical architecture

chapel like space - connected

Du Pont - winding disorienting space

you find little works in nooks and crannies

one opening towards outside

one of niches - becomes artwork - large room - small room - only 5

people allowed - creating varied experiences - artworks can be

switched later

Robin Evans - corridors, figures, doors, and passages

proportions of each room, room as experience - with a connecting room,

do you want it chapel like ? what are acoustics like?

How are defining a perfect space ?

How does the space differ between 3 people - 20 people

What is the light quality like ?

How are you choreographing the way?

Du Pont - you enter a large room - then choose how you want to go

?

make model more realistic

light affecting the quality of white - making it grey

How do you hang certain portraits ?

What is architecture in the space and what is scenography?

Louisiana Museum - garden against the garden

ruben's house = belgium

how do you relate artwork to the city if needed

what context would you place it on?

how would people relate to it ?

Would they be able to see from outside ?

protest - who is listening? How vast is your audience ?

what is behind me ?

you can distinguish elements in the room

can the works talk to each other ?

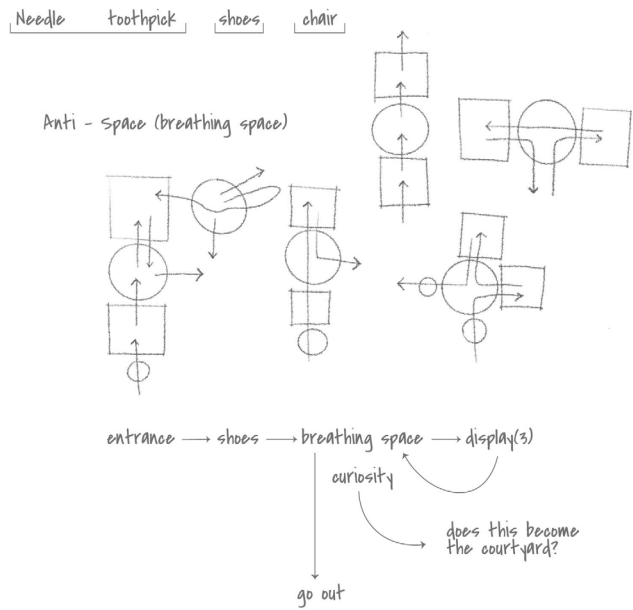
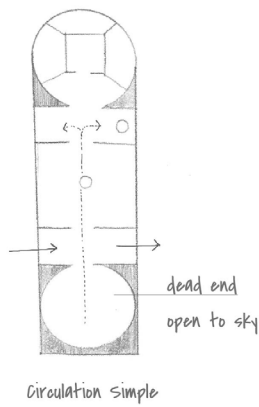
start trying with structure

scale / proportion/ materiality/ relation between artwork and human

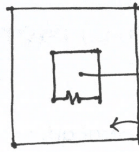
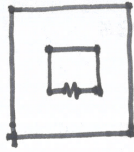
door - is it a domestic door? how wide does it need to be

how tall / how light comes in , where does it come from?

what is the structure and what is standing within it.

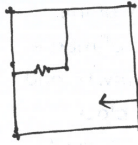


CIRCULATION DIAGRAM STRATEGIES

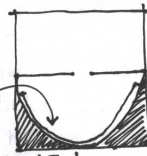


Tent in CENTER OF ROOM.

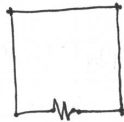
walking space around.



approach from one side. & then peep into it.



seating to contemplate look at Gold chair.



BENCH to sit & look at.
← - - - - - → CIRCULATION PATH.

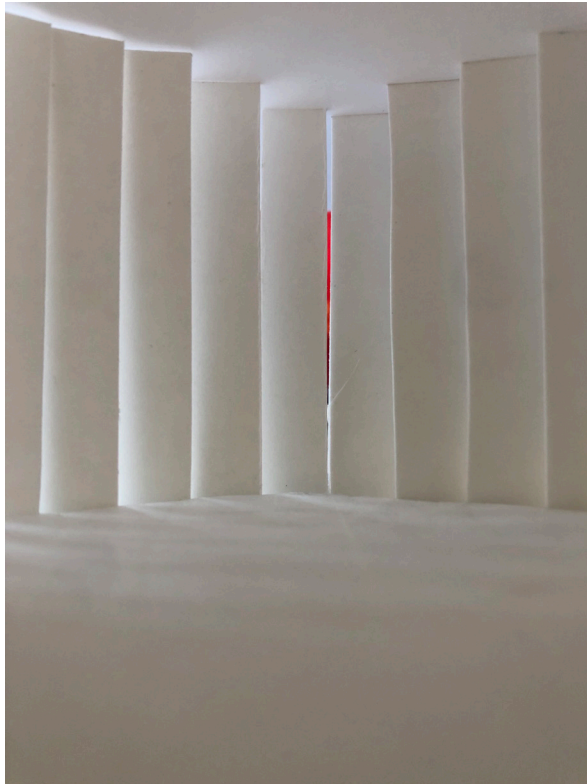
No where else are you sitting to observe. Do you need to sit?

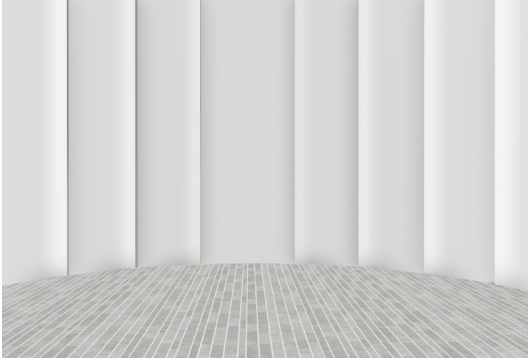
Tent exterior - would you want to see/show?

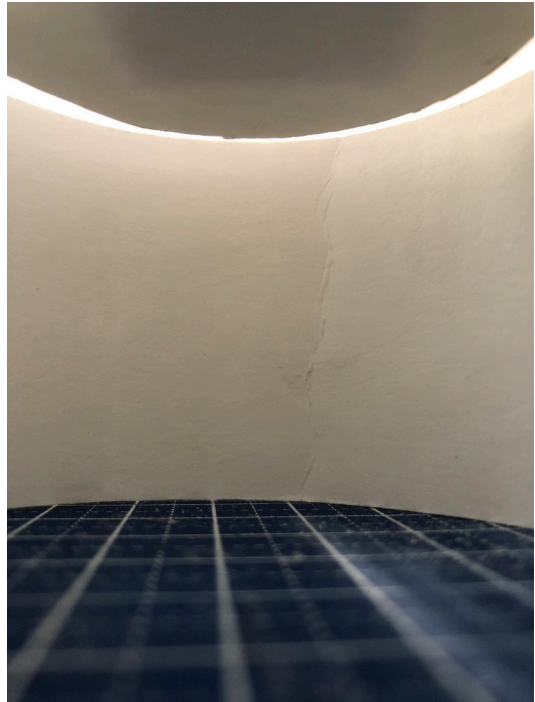


inquiries

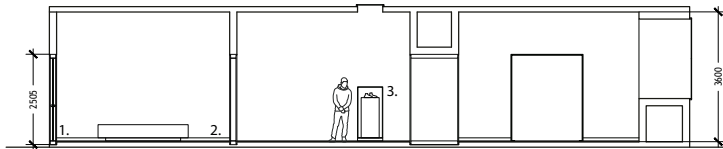
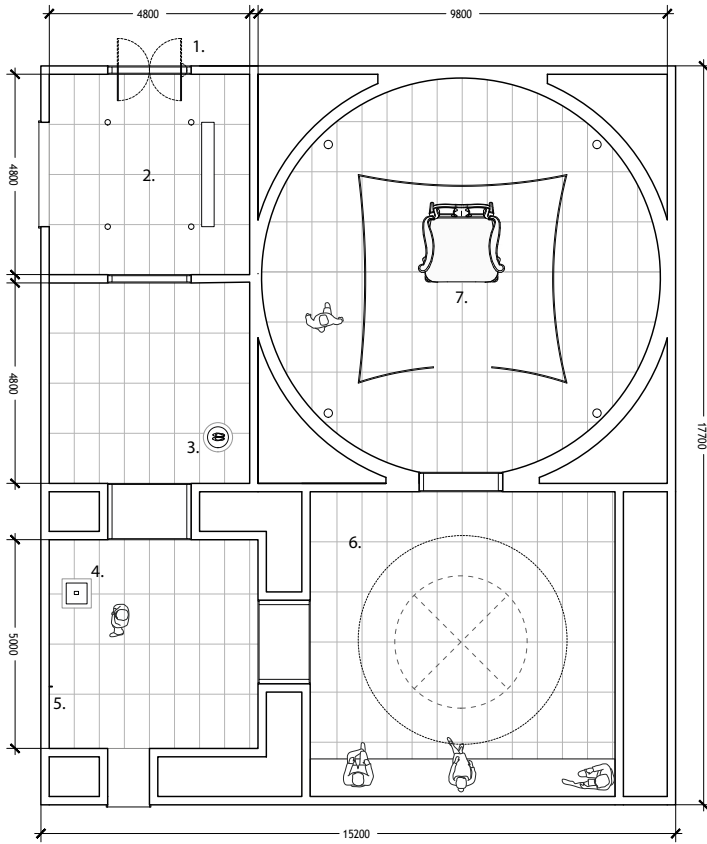
What is the materiality like ? Warm / cold ?
How do you bring razed dazzle in architecture ?
DO you bring razed dazzle in architecture ?
What is the light quality like ?
What is the view outside?



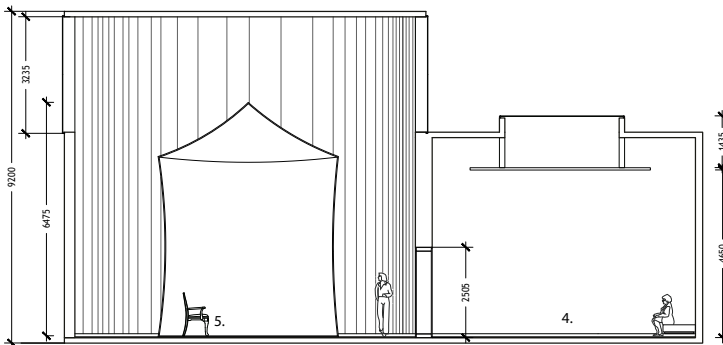








SECTION AA'



SECTION BB'









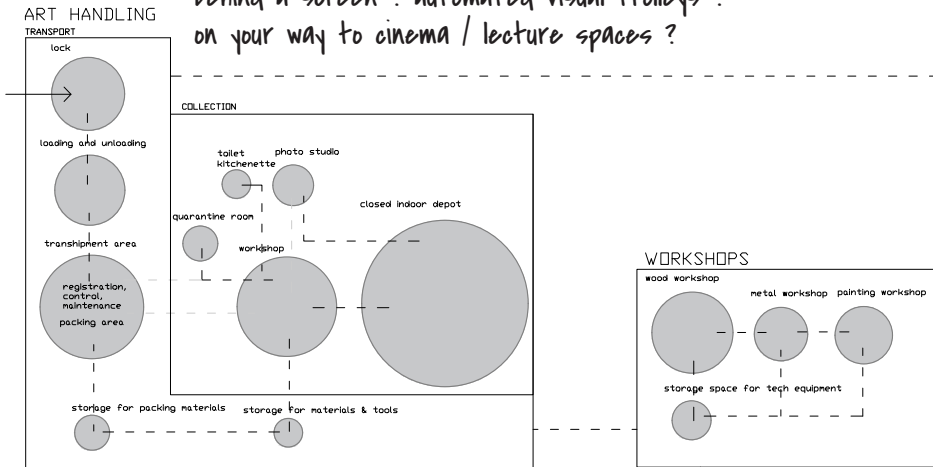
Reflection :

Working through readings about the artist and the artwork he created made me question the conditions of an environment that would be appropriate to showcase his pieces in the M HKA collection. This exercise was useful to understand the boundaries of an architect in designing a space for the artwork. Providing a blank canvas felt like I was under designing and was constantly coming up with scenography that would ideally be the role of a curator. Thinking naively that I only had walls to play with, I started designing forms that were extremely sensory and failed to be neutral. Looking at other colleagues work in PI, helped me bring my attention to the finishes, light fixtures, floorings, visibility of the outdoors and scale of spaces that are required to display various artworks. This exercise also helped me to be sensitive to the artworks and meaning they embody to make correlations while displaying them. It helped me understand the various other decisions an architect needs to take to create rooms for an artwork. For eg. the proportion of the room with respect to the size of the artwork; how the artwork is displayed either on the table or the wall or the floor; what is the light quality required to view the artwork ; how does a person move through the space or what is the threshold like between these gallery spaces. Having highlighted these decisions and concerns they helped me during my design stage to start by placing these ensemble projects throughout my museum to therefore provide a diverse background that contemporary artworks require.

04

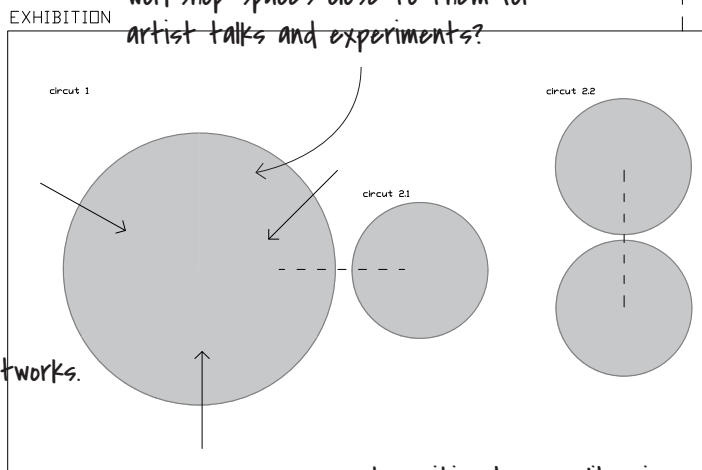
program overview

visibility like depot?
behind a screen? automated visual trolleys?
on your way to cinema / lecture spaces?



changing exhibitions - can one have workshop spaces close to them for artist talks and experiments?

outdoor movie experience?

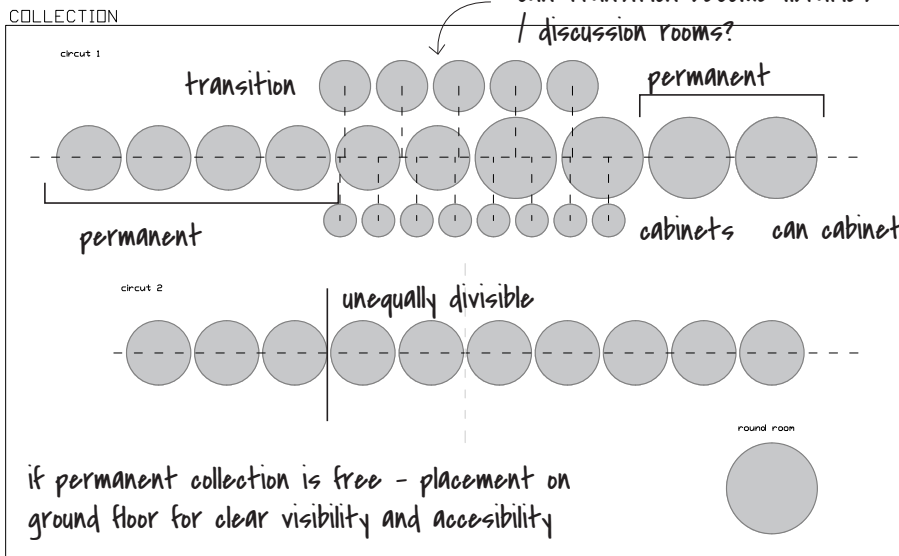


how different for adults? children? elderly?

Adaptable space?
cinema - performance - dance - parties - debates

brought from outside exceptionally large artworks.

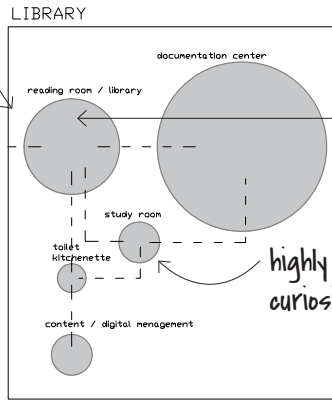
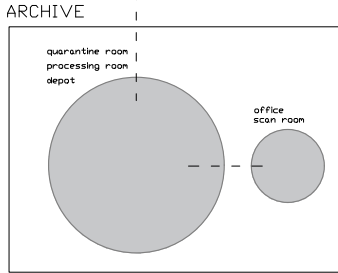
can transition become libraries / discussion rooms?



if permanent collection is free - placement on ground floor for clear visibility and accessibility

completely transparent
passer by can see and join
merger with DE studio - Mechelsplein

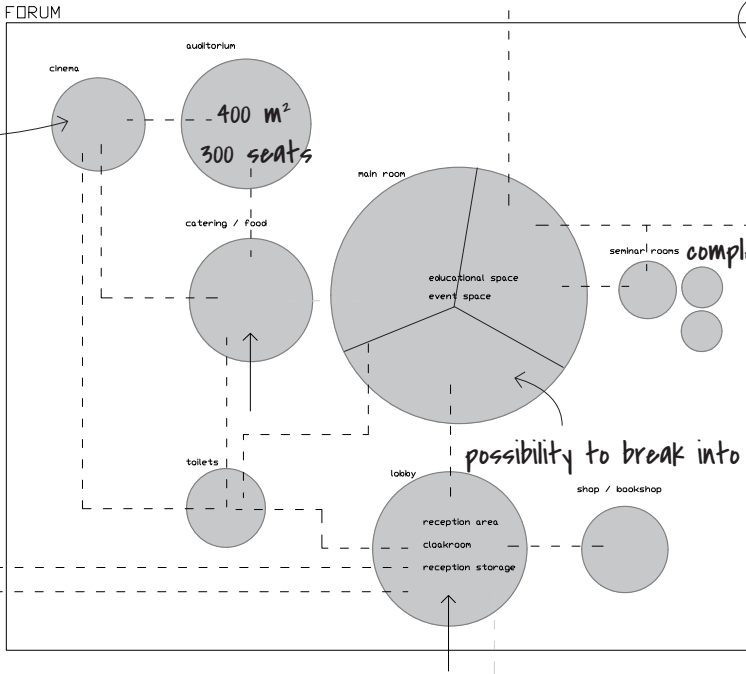
divide into zones according to
age groups / children's books /
artist novels /



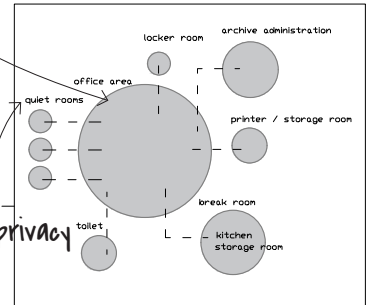
can there be two types of
libraries?
quite + noisy (OODI)

highly visible space - generate
curiosity among passer by

what can MHKA offer that FOMO can't?
outdoor movie experience?

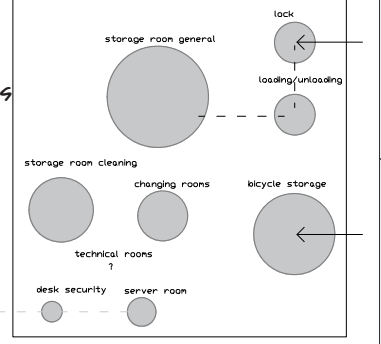


partial privacy
OFFICE ADMINISTRATION

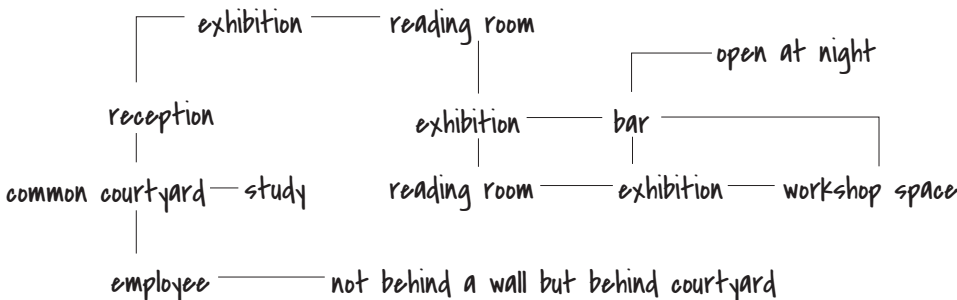


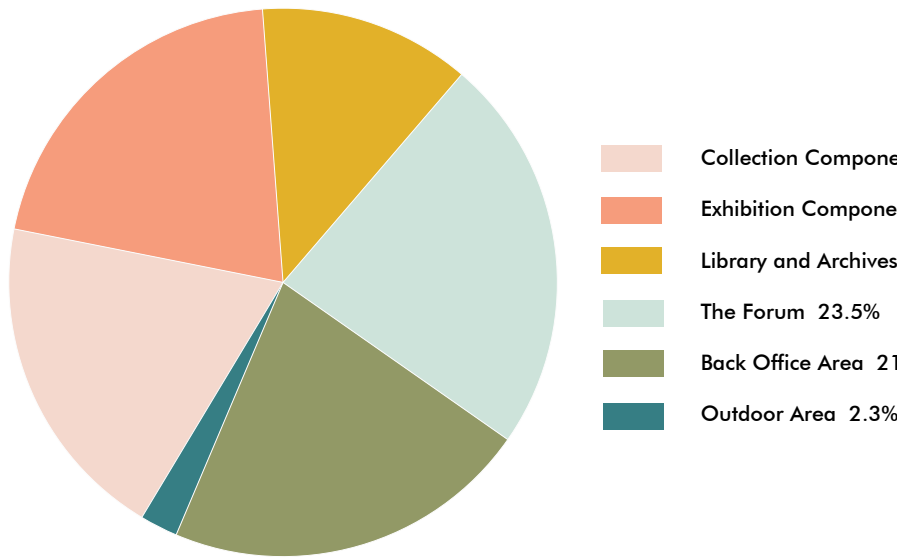
complete privacy

LOGISTICS & TECHNIQUES

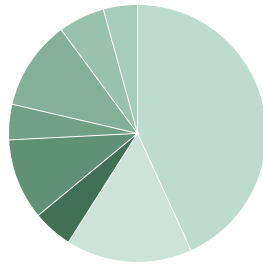


complete privacy for security
reason



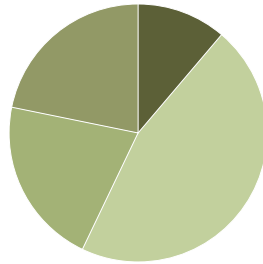


Total Area Division



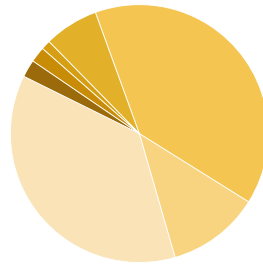
- Museum Shop 5%
- Catering 10.3%
- Seminar Rooms 4.4%
- Auditorium 11.4%
- Cinema 5.8%
- Sanitary - Visitors - 4.2%
- Main Room - 43.1%
- Lobby 15.8%

The Forum



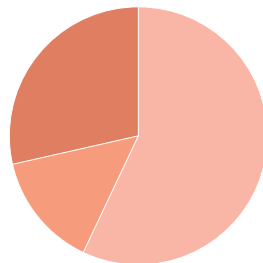
- Workshop 11.2%
- Administration 21.8%
- Logistics 21.1%
- Art Handling 45.9%

Back Office



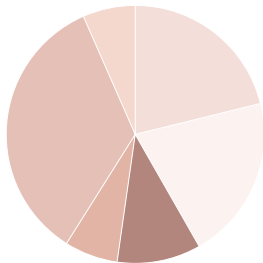
- Study Area 2.1%
- Content Management 2.1%
- Support Facilities 1.1%
- Archiving 6.8%
- Technical Function 39.5%
- Reading Room 11.7%
- Documentation Center 36.8%

Library and Archives



- Main Circuit 57.1%
- Secondary Circuit 1 14.3%
- Secondary Circuit 2 28.6%

Exhibition Component



- Circuit 1 - Side Room - Type 1 10.6%
- Circuit 1 - Cabinets 6.9%
- Circuit 2 - Main Hall - Type 2 34.3%
- Round Room 6.6%
- Circuit 1 - Main Hall 1 21.1%
- Circuit 1 - Main Hall 2 20.6%

Collection Component

Subject	#	Min Net area per room	Minimum Net Area (excl internal and external walls, excl.circulation)	Grossing Up Factor	Minimum Gross surface area (Inc.inner and outer walls, inc. circulation)	Updated Areas
					22324	17029
4.2 Collection Component			3032		3942	3500
Circuit 1			1792	1.3	2330	
Main Room - Type 1	4	160	640			
Main Room - Type 2	6	104	624			
Side Room - Type 1	5	64	320			
Cabinets	8	26	208			
Circuit 2			1040	1.3	1352	
Main Hall Type 2	10	104	1040			
Round Room	1		200	1.3	260	
4.3 Exhibition Component			3150		4725	5500
Main Circuit	1		1800	1.5	2700	
Secondary Circuit 1	1		450	1.5	675	
Secondary Circuit 2	2	450	900	1.5	1350	
4.4 Library & Archives			1901		2852	1377
Reading Room / Library	1		222	1.5	333	333
Documentation Centre	1		700	1.5	1050	700
Study Area	1		40	1.5	60	60
Content Management / Digital Operation	1		39	1.5	59	59
Support Facilities	1		20	1.5	30	30
Sanitary Staff	1		Incl.			
Kitchenette	1		incl.			
Archiving	1		130	1.5	195	195
Office Space	1		incl.			
Scanning Room	1		incl			
Technical Functioning of the Repository						
Reception - enclosed quarantine area	1		incl.			
Processing Area	1		Incl.			
Art Archive Dept	1		750	1.5	1125	0
4.5 The Forum			3608		6134	2424
Forum main room	1		1556	1.7	2645	660
Reception Function						
Lobby / Hallway	1		570	1.7	969	600
Reception area and cloakroom groups	1		incl.			
Cloakroom and locker room	1		incl			
Counter/ orientation / ticketing	1		incl			
Storage Reception	1		inc			
Specific Forum Related Functions						
Museum Shop	1		180	1.7	306	306
Catering	1		370	1.7	629	Zuiderpershuis
Multifunctional Event Room and storage	1		incl. forum			Zuiderpershuis
Seminar Rooms	3	53	160	1.7	272	200

Area wise :

Collection = Exhibition

Holding it back from being a constantly evolving exhibition

Response : reduce collection

3942 - 3500 sqm

Exhibition

4725 - 5500 sqm

more than library - archive
documentation acc to aims and
aspirations

- more of documentation center
no requirement of library in the
neighbourhood

therefore, 2852 - as it is

+ research from 1050 to 700 m²

archive - too much - 1125 - reduce to
700 m²

Forum Main Room

To be used by Front Room Area,
Community Kitchen Area
and Workshop Rooms adjoining
exhibition spaces.

Subject	#	Min Net area per room	Minimum Net Area (excl internal and external walls, excl.circulation)	Grossing Up Factor	Minimum Gross surface area (Inc.inner and outer walls, inc. circulation)	Updated Areas
					22324	17029
Auditorium / cinema	1		410	1.7	697	Foto Museum
Cinema - cinema	1		210	1.7	357	Foto Museum
Educational area	1		Incl. Forum			400
Support facilities						
Sanitary Visitors	1		152	1.7	258	
Sanitary Staff	1		incl.			
First aid Room	1		incl.			
Front Room						160
Community Kitchen						200
Workshop Rooms						200
Back - Office			3337			
4.6 Back - Office Workshops			375		525	525
Workplaces						
Woodworking shop	1		160	1.4	224	
Metal workshop	1		70	1.4	98	
Painting Workshop	1		80	1.4	112	
Audio and Video Room	1		30	1.4	42	
Technical equipment storage	1		35	1.4	49	
4.7 Back -office art handling			1531		2143	1699
Transport and handling area						
Lock / Lock	1		129	1.4	181	181
Zone for loading and unloading	1		120	1.4	168	168
Transfer Space	1		260	1.4	364	364
Registration, control and maintenance	1		incl.			
Packaging area (packing/unpacking)	1		incl			
Storage room for boxes / plastic film/ wrapping materials	1		30	1.4	42	42
Storage Room for materials and tools	1		20	1.4	28	28
Room for collection management						
Quarantine Room	1		27	1.4	38	38
Workshop	1		234	1.4	328	328
Photo Studio	1		36	1.4	50	50
Close Indoor Depot	1		675	1.4	945	500
4.8 Back - office logistics and techniques			704		986	986
Desk security and building management	1		9	1.4	13	
Main server Room	1		20	1.4	28	
Kitchenette	1		6	1.4	8	
Sanitary Staff Separated	2	8	16	1.4	22	

library and archive already have
documentation center

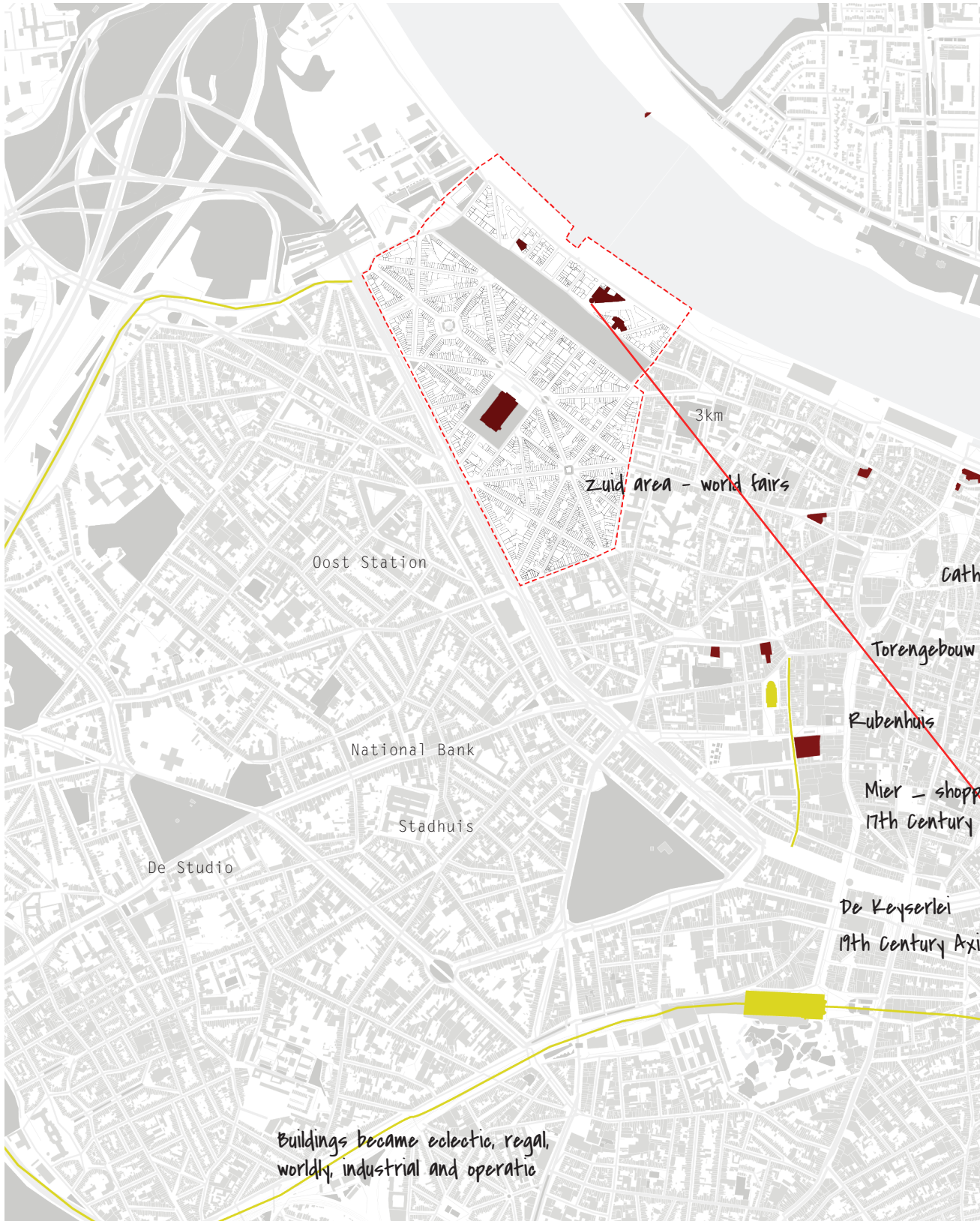
closed indoor depot = smaller - just to
note whatever artworks have arrived.
registration work.

945 - 500m²

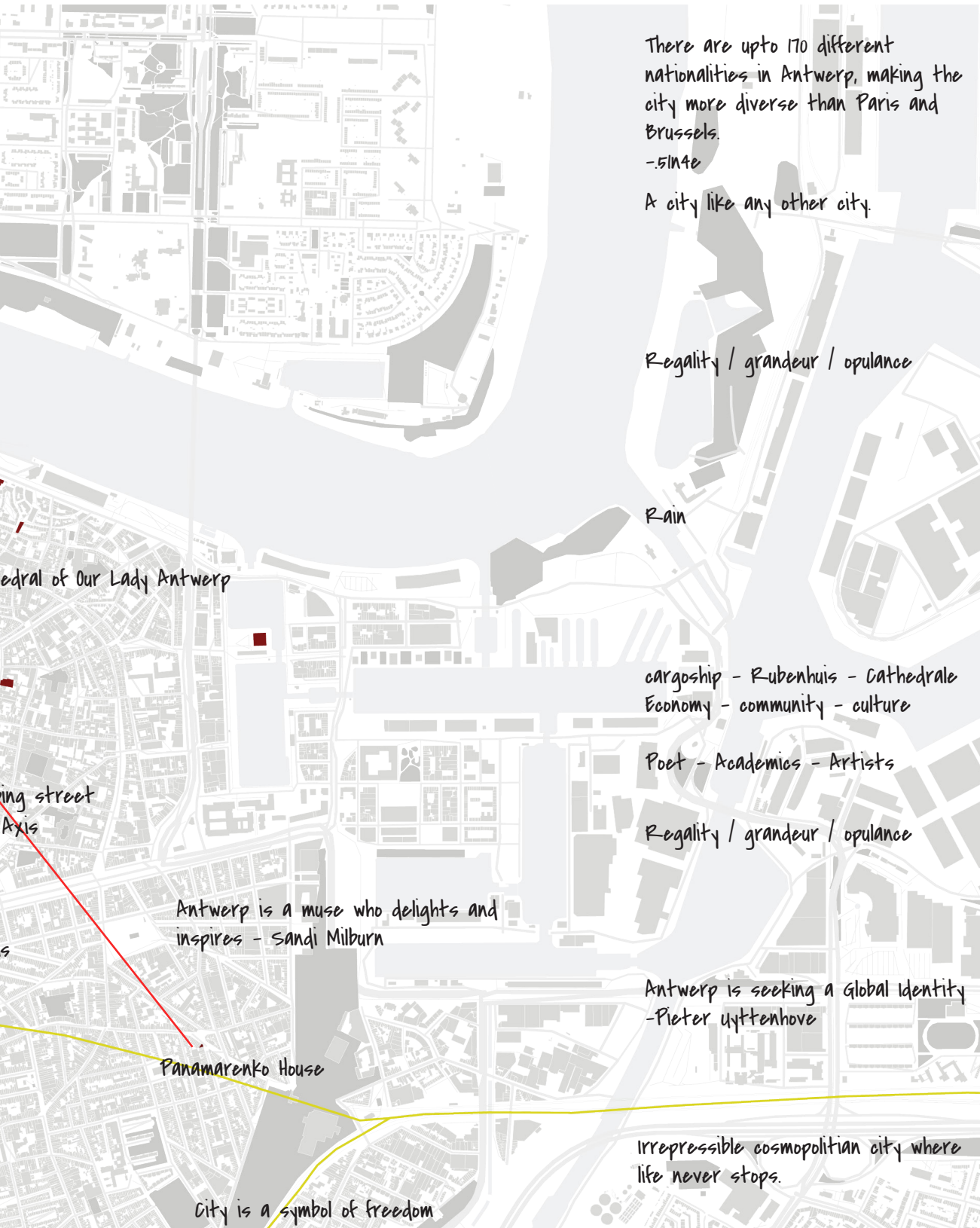
Subject	#	Min Net area per room	Minimum Net Area (excl internal and external walls, excl.circulation)	Grossing Up Factor	Minimum Gross surface area (Inc.inner and outer walls, inc. circulation)	Updated Areas
					22324	17029
Sanitary Staff Separated	2	8	16	1.4	22	
Changing Rooms (incl. shower, separate)	2	30	60	1.4	84	
Storage Rooms						
Storage room for cleaning	1		100	1.4	140	
Central storage logistics	1		250	1.4	350	
Bicycle Shed	1		162	1.4	227	
Technical Rooms			As req.			
Access for logistics						
Lock / Lock	1		40	1.4	56	
Zone for loading and unloading	1		41	1.4	57	
4.9 Back - Office administration			727		1018	1018
Office space for administration						
Office workplaces	1		429	1.4	601	
Multifunctional consultation area/ quiet workplaces	3	12	36	1.4	50	
Meeting Rooms			incl. seminar room			
Reception area for visitors and staff	1		incl. forum			
Locker room staff	1		14	1.4	20	
Copy and printer room / storeroom	2	15	30	1.4	42	
Archive administration	1		75	1.4	105	
kitchente	As req.		20	1.4	28	
Sanitary staff (separated)	1		23	1.4	32	
Staff Dining room with cooking facilities						
Canteen Staff	1		100	1.4	140	
Kitchen			incl			
Storage Room near kitchen			Incl			
Outdoor Areas			350			
Outdoor forum	1		300			
Outdoor Area Staff	1		50			

ZUIDERPERSHUIS (total building area = 4000 sq.m)					
NAME OF ROOM	PRIMARY FUNCTION	SECONDARY FUNCTION	AREA	Capacity	
GROTE ZAAL	Multifunctional Theater and Concert Hall	Suitable for lectures, debates, seminars, conferences, presentation or fairs.	420 sq.m	380 - seated places 680 - standing	High Ceiling
KLEINE ZAAL	Small Concerts	Used for reception	160 sq.m	100 - seated places 160 - standing	Expansion into courtyard possible
HANGAR	Multi Purpose Room	Workshops, exhibitions, rehearsals, lectures	360 sq.m	230 - seated places 380 - standing	Duplex room with Glass walls
ATERLIER ZAAL	Workshop Room	Smaller Performances, Workshops, receptions, Meetings, Lectures, Rehearsals	160 sq.m	80 - seated places 160 - standing	
POLYVALENTE ZAAL	Multi Purpose Room	Exhibitions, lectures, receptions	200 SQ.M	60 people	
ATELIER 13	Office space for JEF (animation company)			230 - seated places 380 - standing	
VERBANDHUISJE	Dressing Room		100 sq.m		
FOYER	Catering Hub				

FOTO MUSEUM (total building area = 4000 sq.m)			
NAME OF ROOM	PRIMARY FUNCTION	AREA	Capacity
EXHIBITION	Multifunctional Theater and Concert Hall	1800 sq.m	380 - seated places 680 - standing
PERMANENT COLLECTION	Small Concerts	400 sq.m	100 - seated places 160 - standing
FOMUcafe	Multi Purpose Room	200 SQ.M	
MUSEUM SHOP	Office space for JEF (animation company)	180 sq.m	
CINEMA LUMIERE	2 Halls	170 sq.m	Room 01 - 87 People
		230 sq.m	Room 02 - 147 People
LIBRARY	Catering Hub	200 sq.m	



Buildings became eclectic, regal, worldly, industrial and operative



There are upto 170 different nationalities in Antwerp, making the city more diverse than Paris and Brussels.

-51N4E

A city like any other city.

Regality / grandeur / opulance

Rain

Cathedral of Our Lady Antwerp

carriage - Rubenhuis - Cathedrale
Economy - community - culture

Poet - Academics - Artists

Regality / grandeur / opulance

King street Axis

Antwerp is a muse who delights and inspires - Sandi Milburn

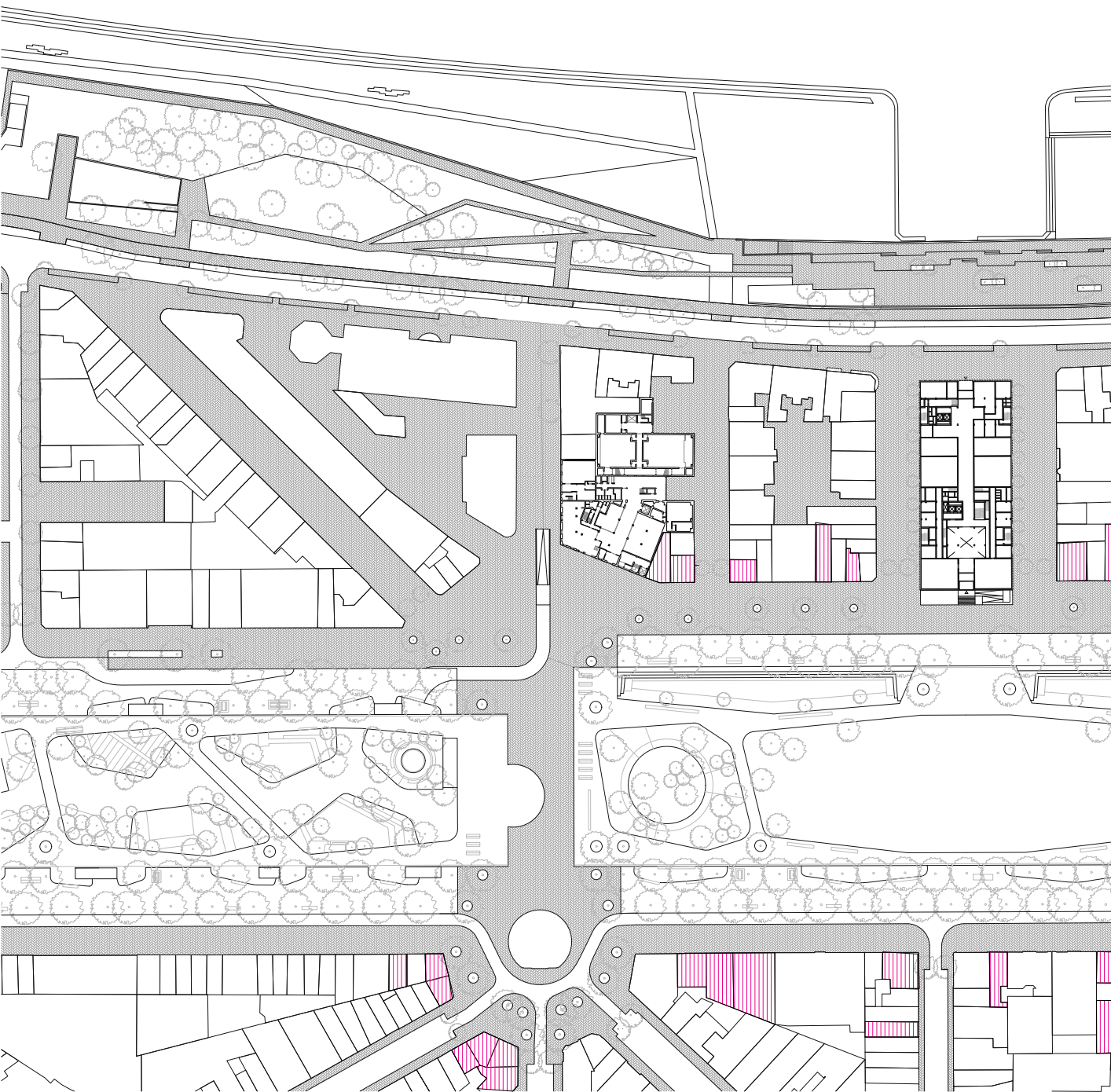
Antwerp is seeking a global identity - Pieter vyttenhove

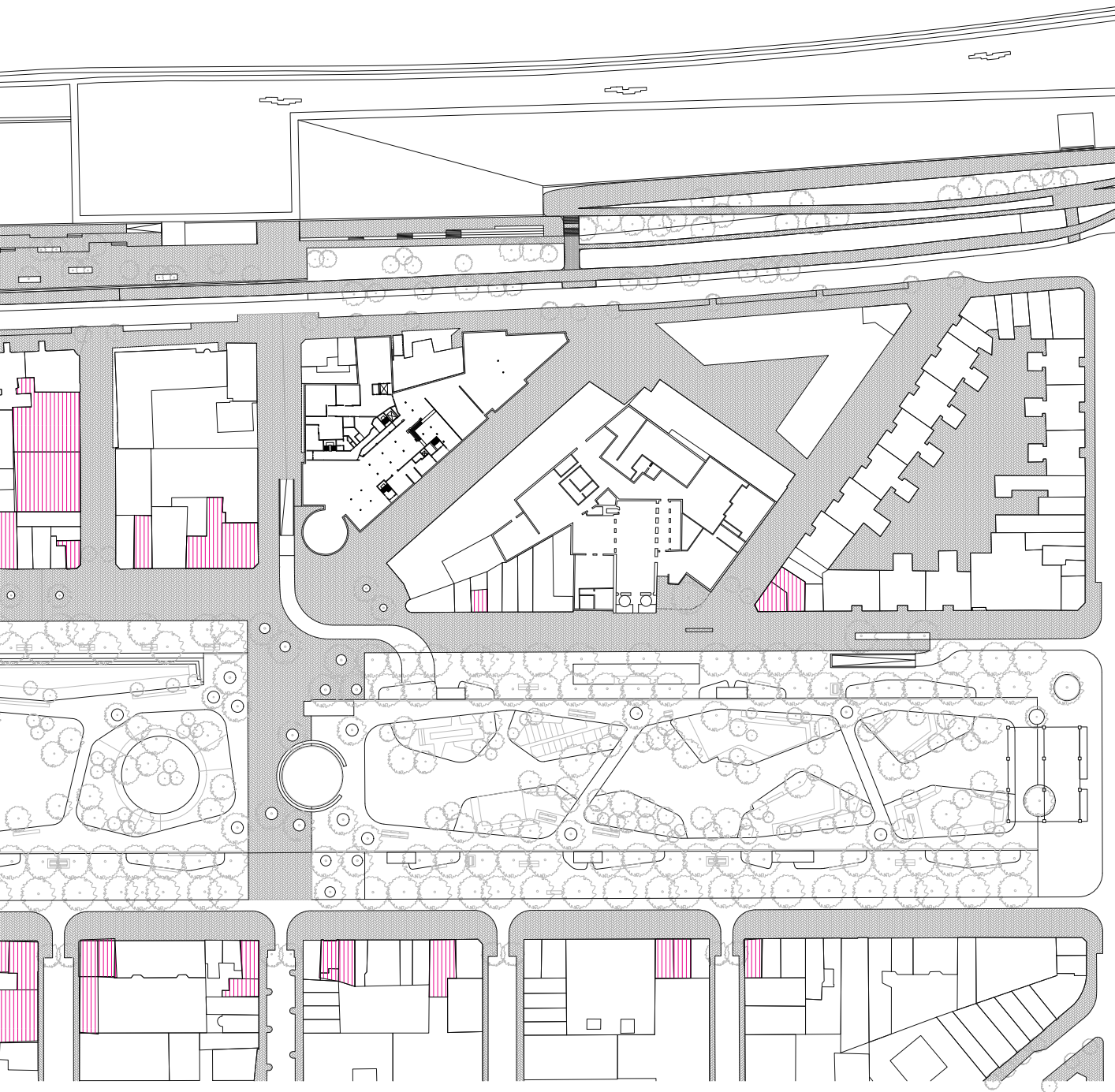
Panamarenko House

Irrepressible cosmopolitan city where life never stops.

City is a symbol of freedom

One can improve the public space by emphasizing the strong points present in the street pattern.





Art Basics for Children, Brussels, Belgium

- + Largely an extra curricular art space for children, that extends out as a creche, workshop spaces, libraries, space for movie screenings and kitchen modified to the heights of children.
- + They also host new skills required for the world of 21st century like meditation and body awareness are integrated in quite rooms.
- + Another exploratory program in ABC are the experiments and installations by various artists that combine music with colour, light, film, acoustics and digital technology.
- + Workshop could include drawings or painting with music, creating sound figures or building music machines by themselves.
- + Simultaneously it also opens out to adults, researchers, teachers, educators, scientists as a place to spend an afternoon finding inspiration, preparing lessons, working on internship projects and meeting each other.

Possible Outcomes :

Multiple kinds of workshop spaces for children that can run parallelly with exhibition spaces, quite rooms, screening room - adjusted for children; community kitchen - as a space for researchers to book, gather and just meet.



HUB Architects
site - 1.723 m²

Baltic's Center for Contemporary Art , Gateshead, Tyne and Wear, England

Housed in a former flour mill, it is a centre for contemporary art in England. Baltic's website is filled with affirmations that showcase its inclusivity through various programs that it hosts. It understands that today's cities are not just a certain type/kind of people but occupied by multiple ethnicities, race and social backgrounds brought together in the hopes of earning a living. Baltic tries to break down the social barrier and understands the needs of migrant communities (who are still largely ignored by the art museums). The following programs fascinated me. They are something I could translate in the scene of Antwerp; another growing cosmopolitan city.

Possible Outcomes :

Front Room - open space to do nothing ; Warm space - provide warm space for homeless; language cafe : interchanging space with workshop spaces for skill building. Workshop spaces for all ages. Help desk on every floor.

Community Kitchen : Initiative to bring people together through food and providing a space to create friendships.

Help Desk on every floor :

usually exhibition spaces are guarded with people who are available to make sure artwork isn't damaged or trifled with. This addition of a person who knows the background of the artist; their working style and the artwork seems to be a friendlier move in making people understand art through interaction.

Workshop Possibilities :

Baltic hosts multiple workshops for all ages. For teenagers ; zine making workshop with artists not only engages them in artwork but also builds on skills of narration and story telling capabilities.

Skills Matching Workshop :

I felt this workshop was a new interpretation of workers club aimed at improving the skill level of average citizens of the place. New age skills like the ones required to build professional pursuits. Building confidence, improving English and establishing friendships and networks are taught.

Art Mix Workshop :

Inclusive space to create, connect, chat about art and the world around us. Working with professional artists, you'll have the chance to develop new skills, meet like-minded people and create art that represents your voice and the things you care about.

Engaging with Neighbourhood Communities :

Supporting people seeking sanctuary in creative and practical ways, sharing conversations, food and recipes and taking approaches to food insecurity.

Gallery of Sanctuary :

It organises events which aim to deliver welcoming, enjoyable and useful activities ; opportunities for friendship and solidarity to support people with refugee and asylum seeking experience.

Language Cafe :

Free, fun and friendly place to meet new people and informally practice English speaking and listening. It is monthly on the first Saturday of each month for 3.5 hours. One just needs to turn up. Free tea, coffee and soft drinks provided. Family friendly sessions also having special guests to meet and chat with to cover topics like community resources that might be useful, skills, opportunities and employability.

Art Lab :

Program where families come together during school holidays to make art from recycled, found and natural materials Art Lab artist in residence at the time. Activities focus on the environment and natural world, imagining sustainable futures and supporting youth voices for climate change advocacy.

Front Room :

A free space to pause and chat, eat your own packed lunch. There's no pressure to move on after a certain time. This co-relates to Kultur House by Peter Celsing - a space to just be, a space to do nothing.

Warm Space :

They open their doors to the public, no questions asked to support the local community through the harsh winter months.

With the rising energy bills, alongside rising cost of food and other essentials - it remains unaffordable. Therefore Baltic offers areas for work and play with offering free Wi-Fi and charging spots and pay what you can tea and coffee. Venues also have baby changing facilities and accessible toilets.

Learning Lounge :

Offers educational games, toys and books for one to use. Families can also take part in self-led creative activities on weekends. They emphasised on usage of soft seating, tables and chairs as well as comfortable matting in this area.

Possibility to hire venue for weddings, social events, private dining, children's parties and corporate events.



Ellis Williams Architects
site - 13,200m²

Kultur House, Stockholm, Sweden

Program : Libraries, theatre, debates, art exhibitions, film, dance and music. The idea was that this new culture centre was to be opened 24 hours a day without any entrance fees. There should be no boundaries between, theatre, museum and library and people could become actors, and artists rather than passive consumers.

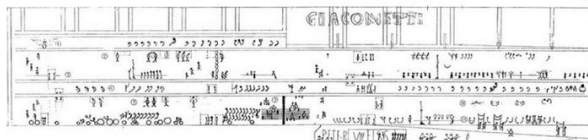
Kulturhuset, which was the only place at the time with a wide variety of international newspapers also became a meeting place for refugees from Latin America who wished to know about the situation in their home countries.

Kulturhuset has more commercialised spaces than originally intended but a large part of the building is still uncommercialized space for people who wish to get away from the cold weather and talk, relax, or just do nothing.

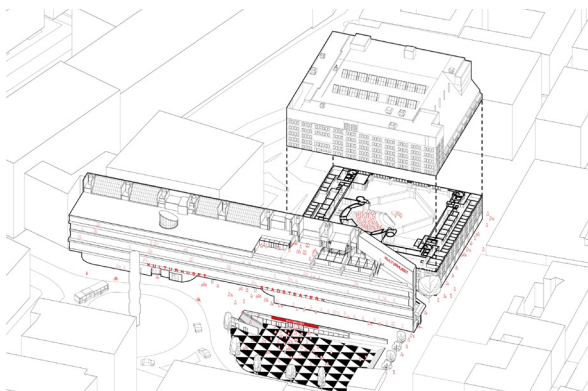
In Kulturhuset, you find people without a permanent roof over their heads, groups of teenagers, parents with children using the children's library as an interior playground, people who want to see exhibitions and lectures or just somebody who want to sit in the comic book library reading magazines and comic books. The shelves are the central area for the unprogrammed public space of the building.

The building offers the same possibilities today with the difference that a bigger part is devoted to cafes and bars where you have to spend money to sit. You find homeless people without a place to stay, teenagers sitting in group on the floor, families watching an art exhibition or at the children's library and old men playing chess.

People (almost exclusively men) also come from the whole of the greater Stockholm area to play chess.



Tävningförslaget, fasad mot Sergels Torg.



Create a framework of culture that would allow people to be real citizens. To develop themselves, to explore themselves, to take on responsibility for the common good.

(lecture by Christophe Grafe, September 6, 2012)



Peter Celsing
site - 44000 m² (roughly)

Possible Outcomes :

The use of glass helps to open up the activities within the structure; especially at night time the transparency helps to enhance the idea of a shared common space/

The design of the building is inspired by a book stack which manifests itself in concrete balconies connected to a wall which created a framework for Sergels Torg, the new central square of Stockholm.

The location and the openness of the building was to symbolise the view of the public space and bring the culture to the city and the people. Kulturhuset was to be a building for the making of culture and where every strata of society could be a part. The flexibility and transparency was the quintessence of this building.

Another aspect of the building that I want to bring with me is the interesting layering of spaces between unprogrammed to programmed. Between and on the floors (shelks), you move through the unprogrammed space, free of charge.

The program of simple adding newspapers that were relevant at the time for inviting people indoors could now be replaced with the provision of Wifi that allows people to similarly explore the space while they work, play, cook, read . It places importance on unprogrammed public spaces in today's lifestyle, a space to just be, a space to do nothing. Is it then possible to have unprogrammed spaces in a art museum, a space to just exist in the presence of art, a space to loiter.

Arkdes, Sweden

Boxen in Arkdes is a part of museum space which the curator described it as the front page of the museum," Long says, "a frequently changing platform for emerging work in our field, which has been missing in Sweden".

Possible Outcomes :

This sort of space visible to the passer by could help spark an interest to bring them inside the museum.

Design Strategy : Cantilevering from the primary structure, the ramp begins at the main opening, passing by a viewing platform at a large circular opening, and ending with a balcony that stretches the entire length of the gallery. From this balcony, a concealed stairway allows visitors to re-enter the gallery proper.



Peter Celsing
site - 44000 m² (roughly)

Chinati Foundation

Chinati Weekend : started as an initiative to provide free access to the gallery viewing, special exhibitions, talks, music and meals to the local community, it has since then become a much anticipated cultural event.

Artist Residency :

Artist-in-residence programs give artists the opportunity to live and work outside of their usual environments, providing them with time to reflect, research, or produce work. During a residency, artists can explore new locations, different cultures, and experiment with different materials.

Possible Outcomes:

However, the context of Chianti is completely different than that of a museum in Antwerp in the middle of the trading city. What I rather like from it, is the idea of enjoying music and meals together as a community, which could be related again to a community kitchen where people are not just eating together around a table but with the act of cooking one is more likely to mingle with ease with the community.

Can MIKA provide an artist residency? Can it team up with Air bnb so that they dont have to provide a space to stay but workshop to work ?

Chinati Weekend 2018

Chinati Weekend 2018 was hosted from Friday October 5 to Sunday October 7, in Marfa, Texas. All exhibitions, performances, and talks were free of charge.

Friday October 5

Made in Marfa
Open studios, gallery exhibitions, mercantile events, and performances
5:00 – 10:00 PM
Throughout Marfa

Artist in Residence
Michael Williams
Open Studio
5:00 – 8:00 PM
The Locker Plant

Donald Judd
untitled (U channel and V channel)
5:00 – 8:00 PM
The Ice Plant

Performance
Richard Maxwell, *Ads*
8:00 PM and 10:00 PM
The Ice Plant

Saturday October 6

Chinati Foundation Permanent Collection
10:00 AM – 3:00 PM

Special Exhibition
Bridget Riley, *Royal Liverpool University Hospital, 1983*, as wall painting, *Bolt of Colour, 2017*
11:00 AM, Remarks
10:00 AM – 3:00 PM
Special Exhibition Gallery, Chinati Foundation

Talk
Rupert Deese on Bridget Riley
3:30 PM
Crowley Theater

Benefit Dinner
Support the Chinati Foundation
5:30 – 8:30 PM, Cocktails and Dinner
7:00 PM, Remarks
The Arena

Performance
Richard Maxwell, *Ads*
8:00 PM and 10:00 PM
The Ice Plant

Music
presented in collaboration with Hotel Saint George
Rosanne Cash
9:00 PM
Saint George Hall



Peter Celsing
site - 44000 m² (roughly)

05

circulation

The reference projects we looked at, not only offered a series of curatorial positions, they also address different scales of museum, and provide useful information about how they work and the facilities and infrastructures of space, movement and servicing that such buildings contain.

It might also be good to think about the scales of these references in relation to the project you are being asked to develop.

- * Programmatic relationships that are important for the good functioning of the building

- * The different movement systems for people and art. In particular you should have an attitude to the strategy and systems of public movement through the building. Think about how people will be able to understand what they are supposed to be doing and where they are going. You should remember the requirements for fire escape and universal access.

- * Delivery and storage of refuse (this might seem banal but often has a very large impact on the ways in which buildings are organised). If the brief does not state the size of the truck required you should consider the needs of an articulated truck and its turning circles and movement swings as well as where it can arrive from and leave to.

Circulation Analysis

Area Analysis

Overall Analysis

inquiries

how does circulation differ from a courthouse to a museum?
what are the possible distances between systems for art,
public and staff?

What are their respective proportions and sizes?
what percentage of the floor plate do they allot for function,
circulation, toilets and services?

how do they compare to your existing building?
does it change for different floors?

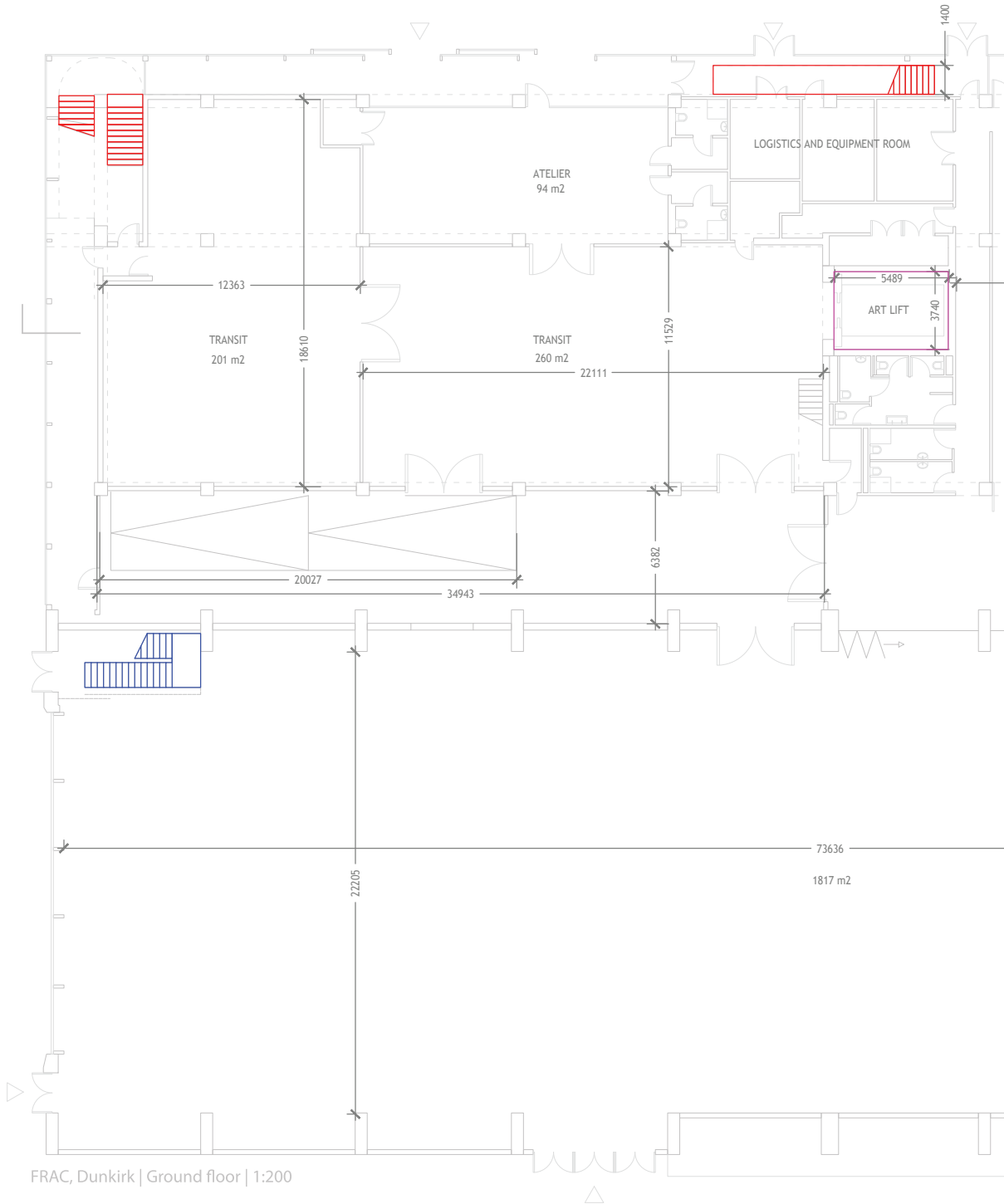
Frac, Dunkirk

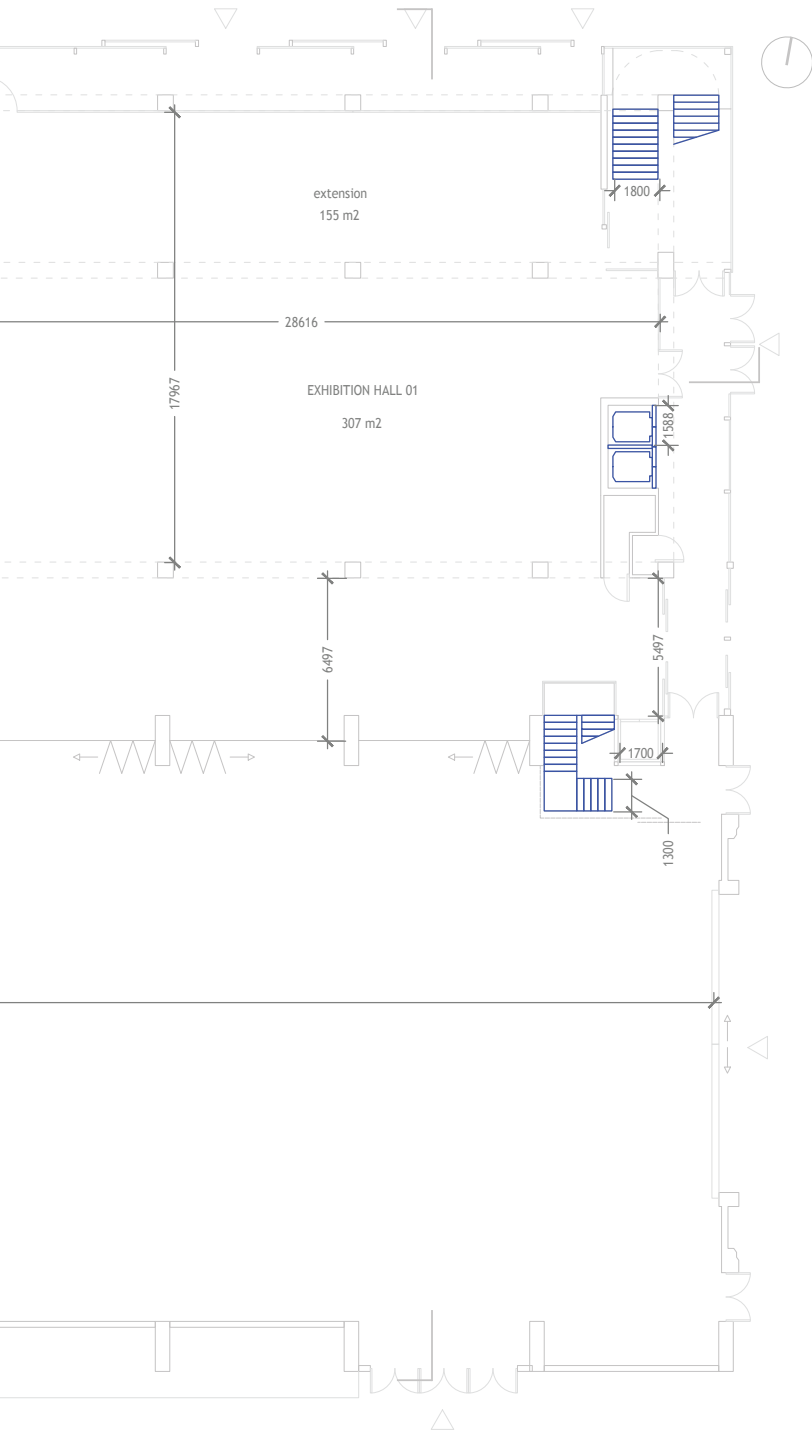
New Museum, New York

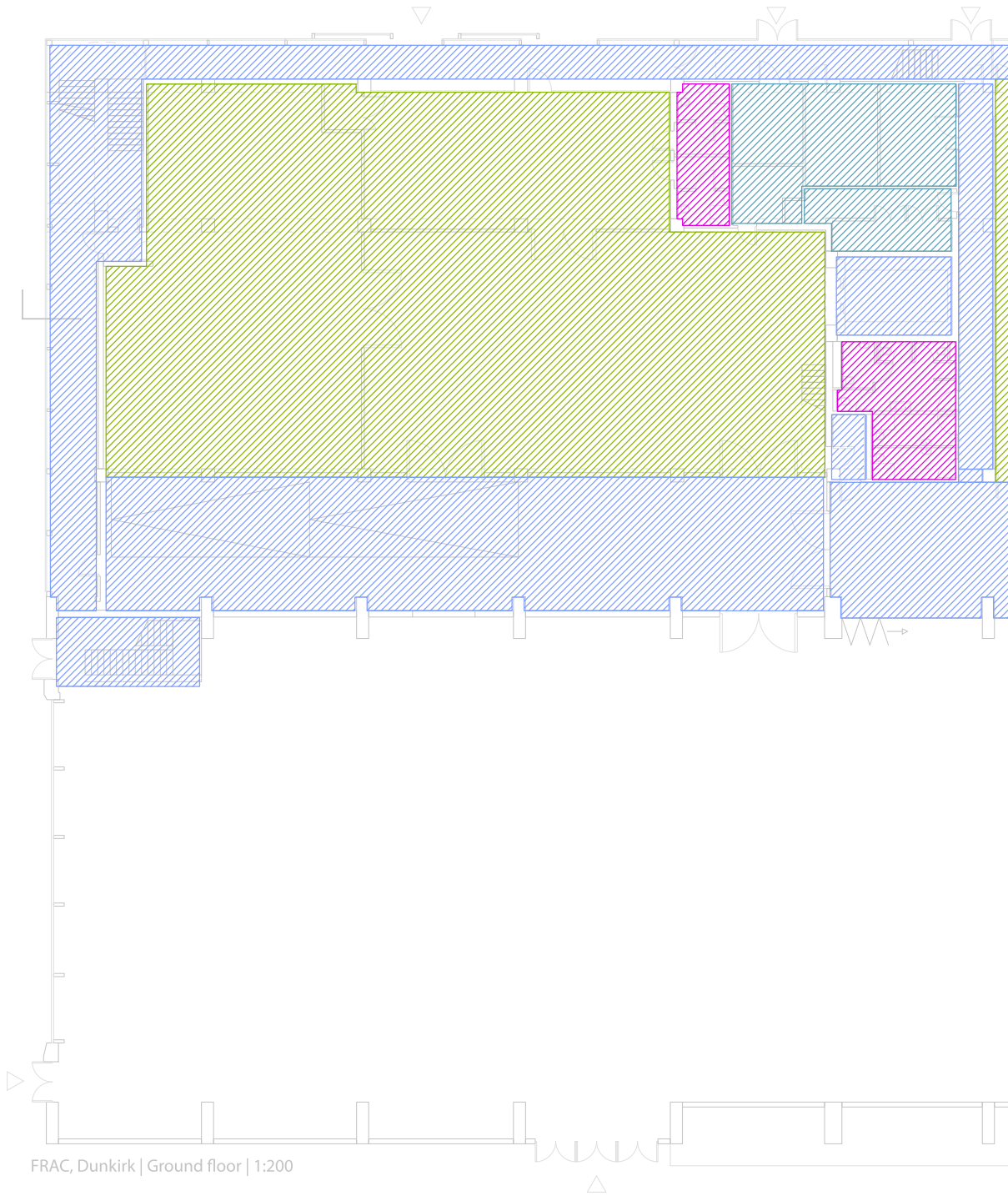
Kunstmuseum, Zurich

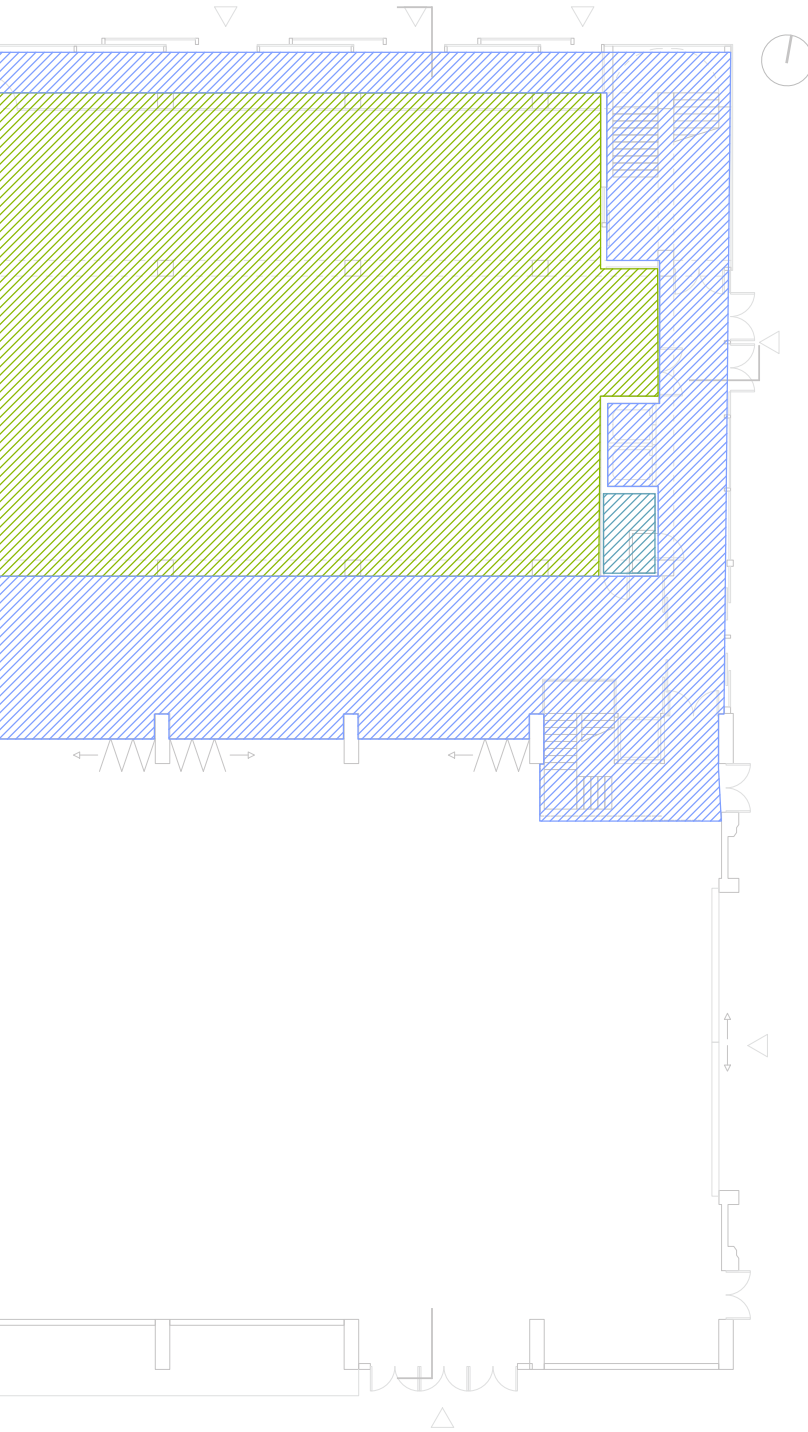
Existing Courthouse, Antwerp

Proposed Design, Antwerp









FUNCTION = 1056 sq.m
CIRCULATION = 826.7 sq.m
TOILETS = 47 sq.m
SERVICES = 83.5 sq.m
TOTAL = 2013.2

FUNCTION = 52.45%
CIRCULATION = 41.05%
TOILETS = 2.3%
SERVICES = 4.1% sq.m

GROSSING UP FACTOR = 1.9

Learnings :

Program Analysis:

The halle AP2 can work either with the FRAC, in extension of its activities, (exceptional temporary exhibitions, creation of large scale works) or independently to welcome public events (concert, fairs, shows, circus, sport) and which enriches the possibilities of the area.

Back Office more/equal = Exhibition Space

Even though they dont have permanent collection - considerable area for storage

The large hall space is only used / opened when there is an event or art work displayed.

Toilet cubicles on every floor

Circulation Analysis :

Always easy access from back office to exhibition spaces

CIRCULATION LIFT - DOESNT OPEN DIRECTLY INTO EXHIBITION SPACE

No additional lift for staff

Design Analysis :

use of Natural Light as main source of lighting in almost all gallery spaces against New Museum

MAKING OF STREET between two halls to distance from the older facade

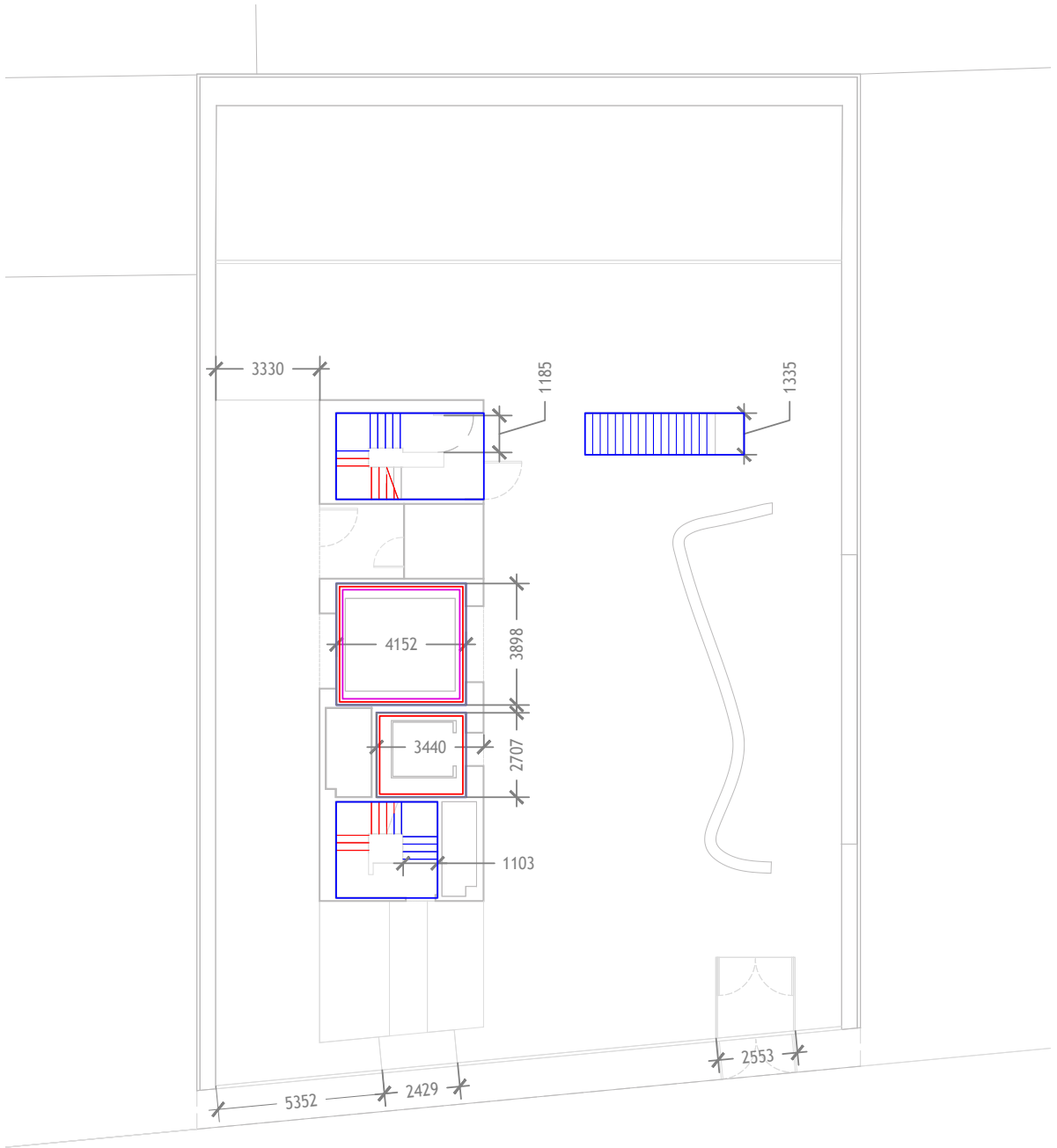
Really thick internal walls ...is it only to cover columns ?

Dark room has really low ceiling.

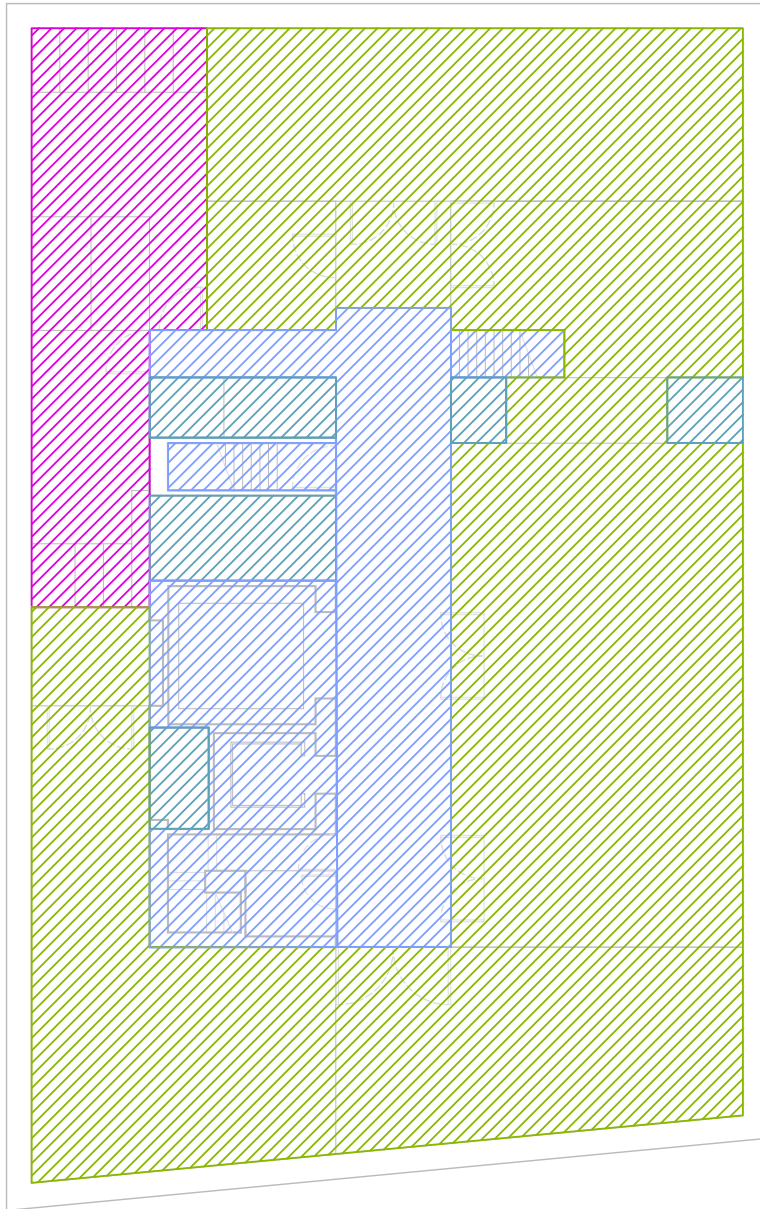
Combining Art Lift wall with Toilet wall

Toilet doors arnt hidden from main exhibition space nor an attempt to hide

Different kinds of wall thicknesses



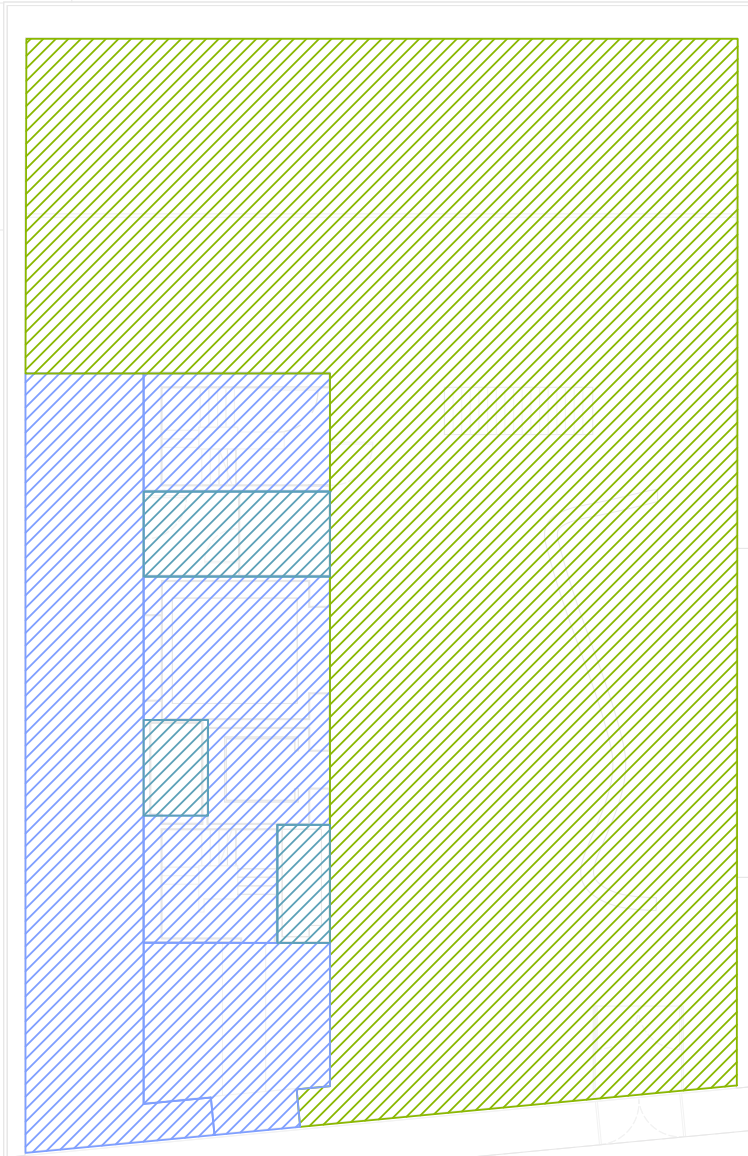
- ART
- PUBLIC
- STAFF



FUNCTION = 405 sq.m
CIRCULATION = 125 sq.m
TOILETS = 68 sq.m
SERVICES = 33 sq.m
TOTAL = 631 sq.m

FUNCTION = 64.1%
CIRCULATION = 19.8%
TOILETS = 10.7%
SERVICES = 5.2%

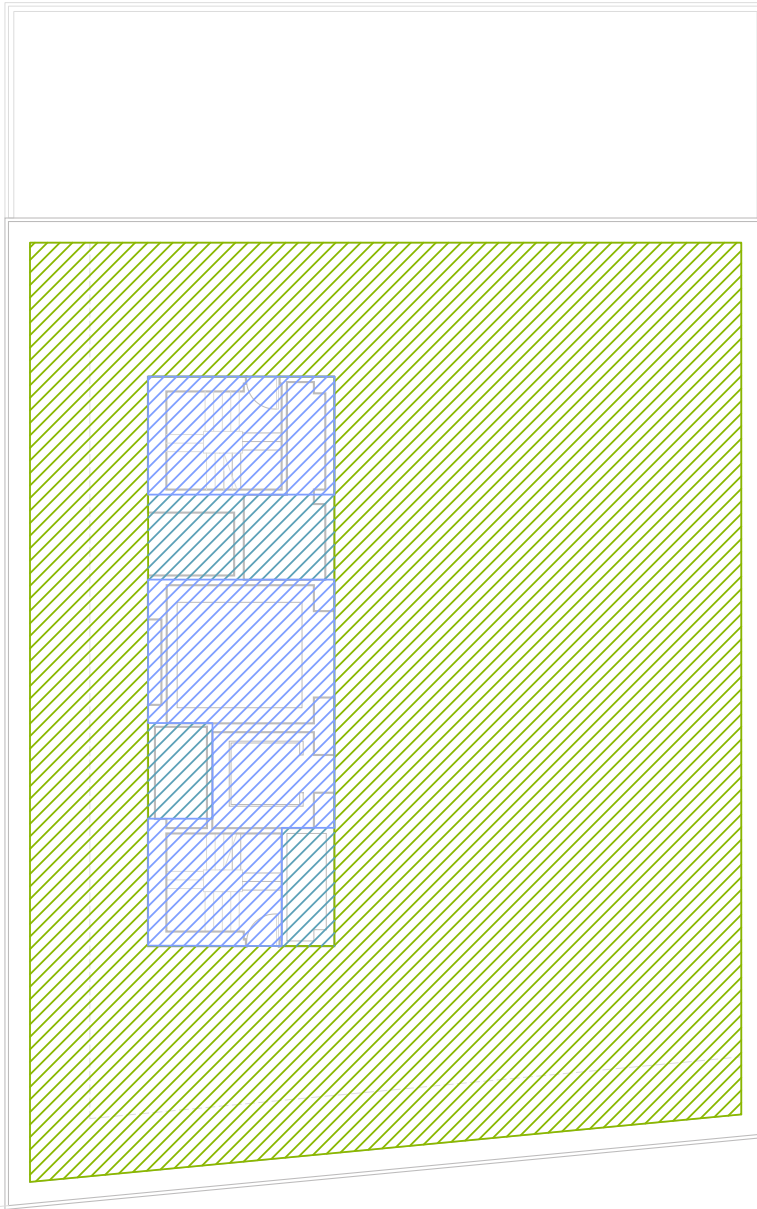
GROSSING UP FACTOR = 1.6



FUNCTION = 427 sq.m
 CIRCULATION = 161.6 sq.m
 TOILETS = 0 sq.m
 SERVICES = 22.4 sq.m
 TOTAL = 611 sq.m

FUNCTION = 69.8%
 CIRCULATION = 26.4%
 TOILETS = 0%
 SERVICES = 3.6%

GROSSING UP FACTOR = 1.3



FUNCTION = 428 sq.m
CIRCULATION = 61 sq.m
TOILETS = 0 sq.m
SERVICES = 22.4 sq.m
TOTAL = 511.4 sq.m

FUNCTION = 83.69%
CIRCULATION = 11.9%
TOILETS = 0%
SERVICES = 4.3%

GROSSING UP FACTOR = 1.1

Learnings :

Program Analysis:

Being a verticle museum, floor wise distributions of programs for clear circulation

No space for storage as they dont work with collections.

Toilet cubicles concentrated in the basement.

Circulation Analysis :

Being a verticle museum, circulation spaces are concentrated in the core. Exceptions being in two places with additional non-hidden staircases for easy public access.

Art Lift = Public Lift

Services also incorporated in the same core for a clear floor plate.

Circulation also changes drastically ever floor plate

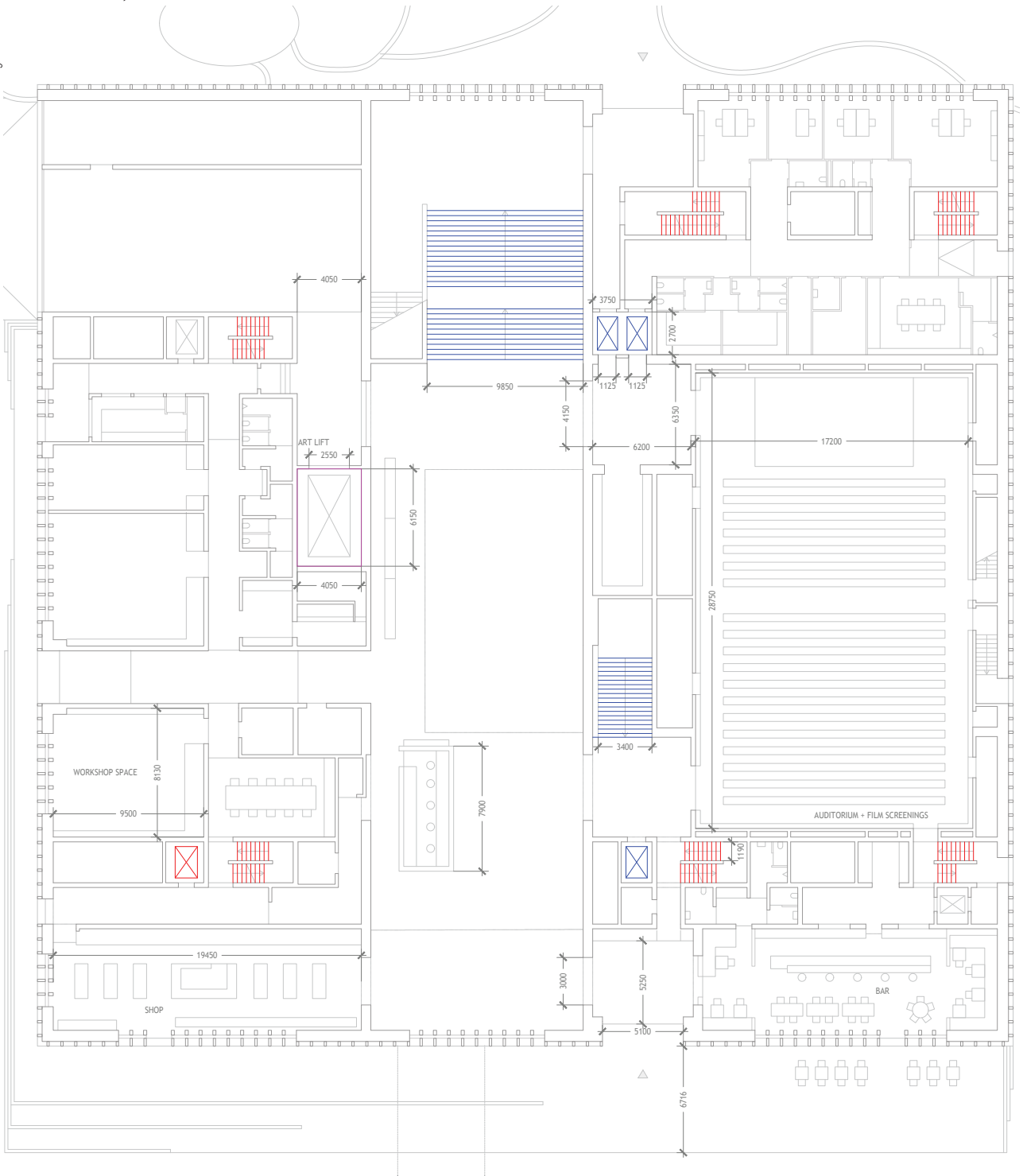
Design Analysis :

use of Natural Light to give a sense of direction in contextless galleries without taking away from the art.

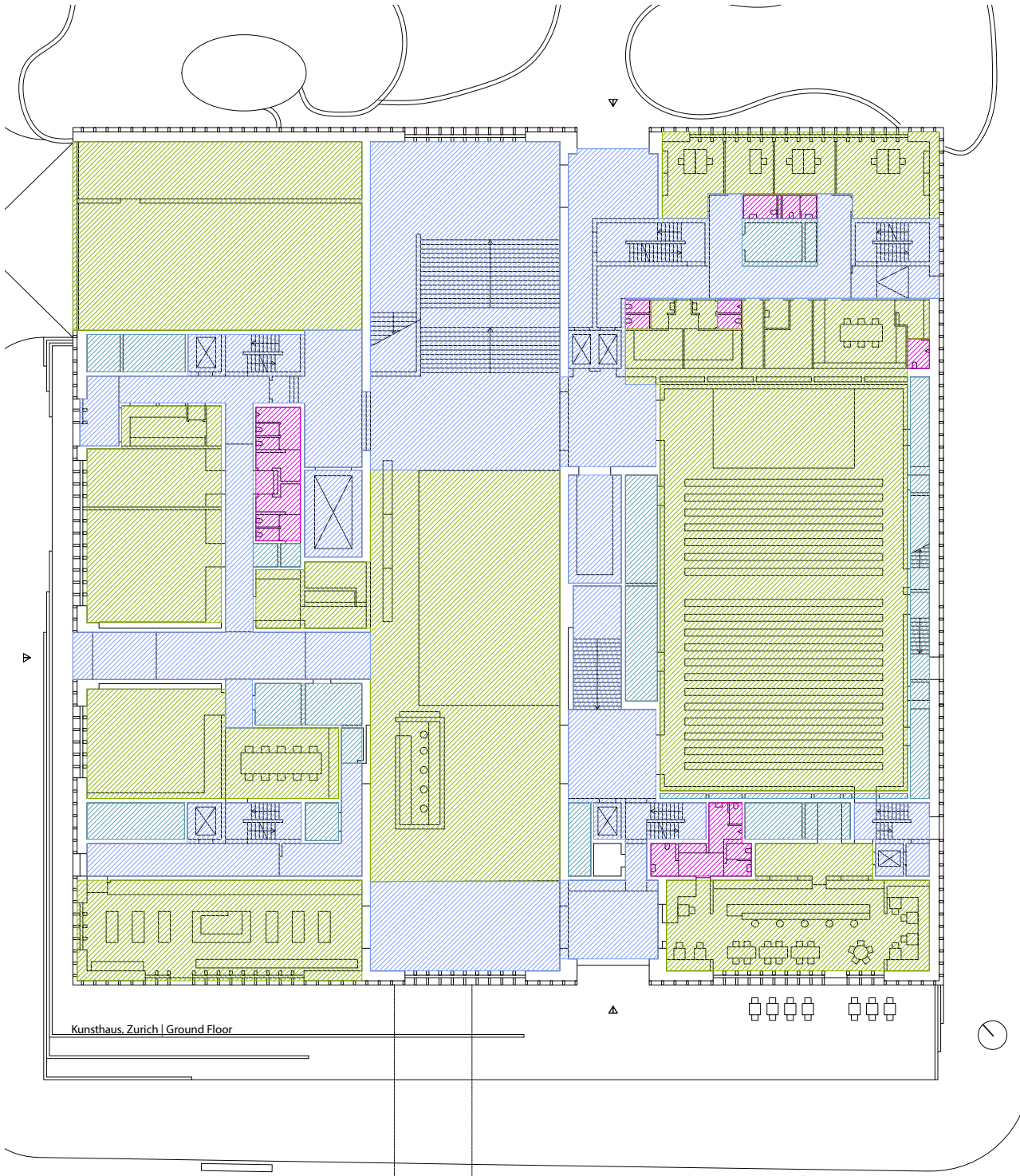
Girder used as principle structural members to provide different floor heights.

Clean floor plate in case of exhibition spaces

Floor plate planned around the Core to not have waste space. Changing floor plate allows for sometimes an exhibition space or circulation path on the other side.



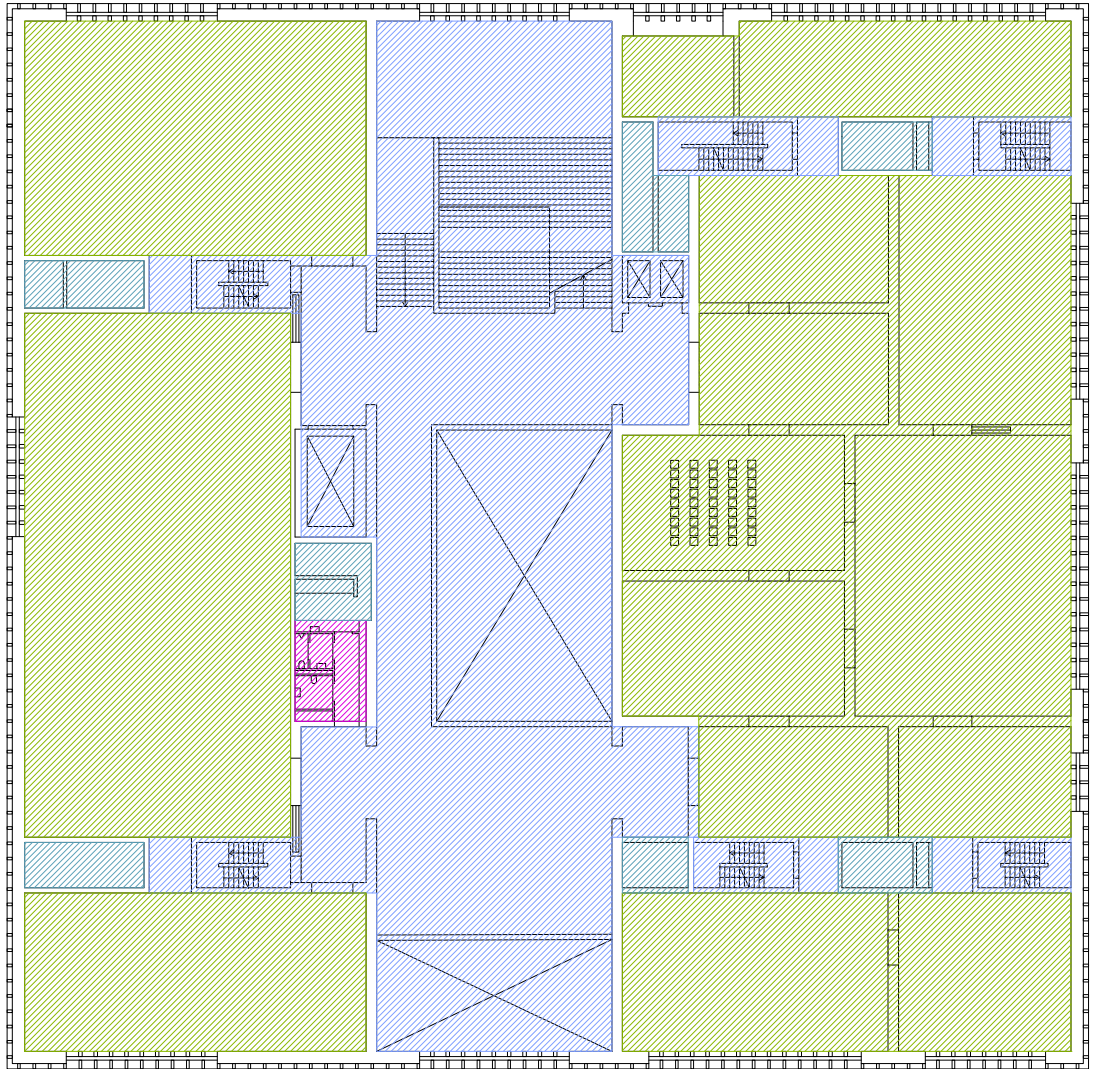
ART
PUBLIC
STAFF



FUNCTION = 1961 sq.m
CIRCULATION = 1104 sq.m
TOILETS = 73 sq.m
SERVICES = 195 sq.m
TOTAL = 3333 sq.m

FUNCTION = 58.8%
CIRCULATION = 33.1%
TOILETS = 2.1%
SERVICES = 5.8%

GROSSING UP FACTOR = 1.5



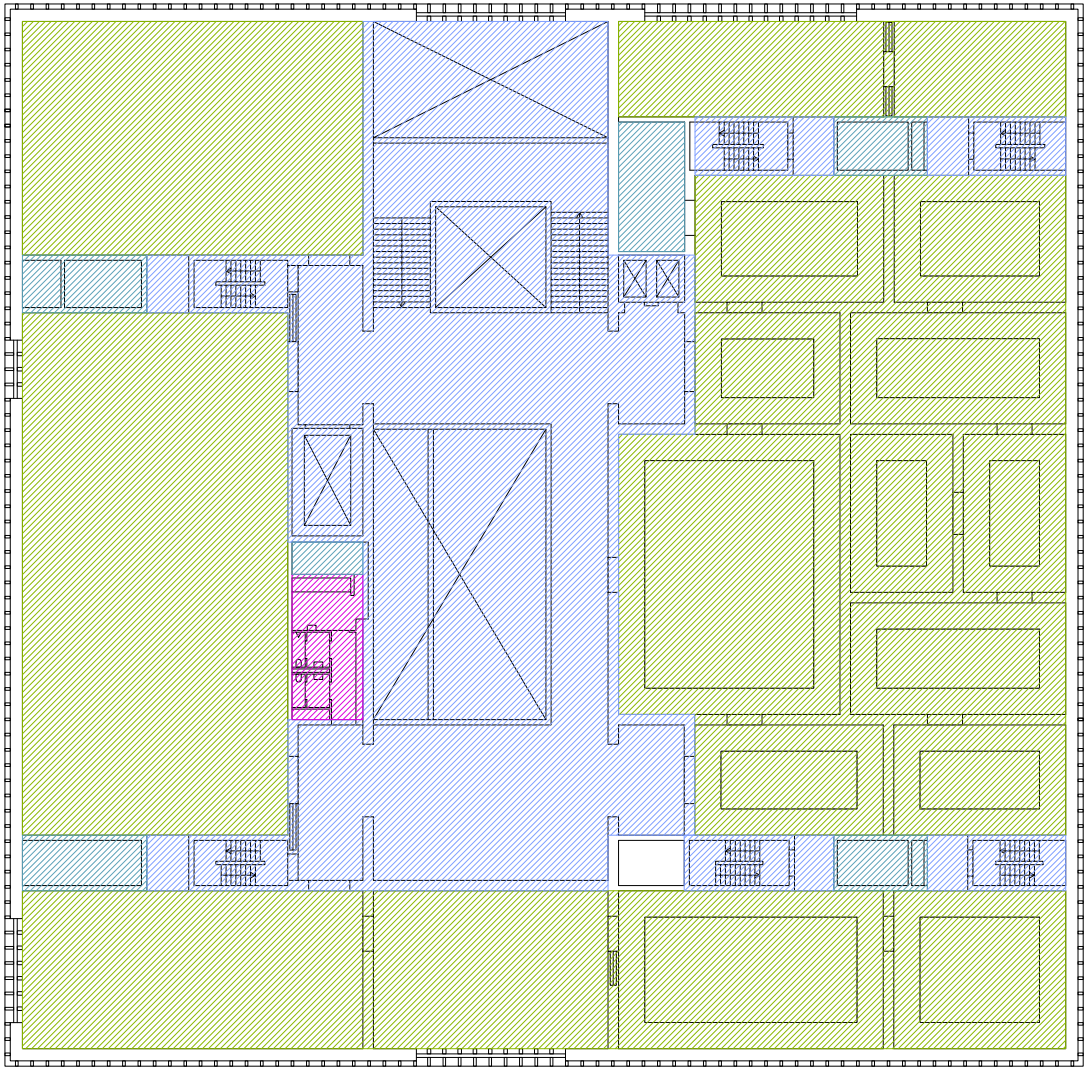
Kunsthhaus, Zurich | First Floor



FUNCTION = 2119 sq.m
CIRCULATION = 1137 sq.m
TOILETS = 23 sq.m
SERVICES = 119 sq.m
TOTAL = 3398 sq.m

FUNCTION = 62.3%
CIRCULATION = 33.4%
TOILETS = 0.6%
SERVICES = 3.5%

GROSSING UP FACTOR = 1.5



FUNCTION = 2257 sq.m
CIRCULATION = 1060 sq.m
TOILETS = 33 sq.m
SERVICES = 116 sq.m
TOTAL = 3466 sq.m

FUNCTION = 65%
CIRCULATION = 30.5%
TOILETS = 0.9%
SERVICES = 3.34%
TOTAL = 100%

GROSSING UP FACTOR = 1.5

Learnings :

Program Analysis:

Ground floor focuses on parallel functions of workshop spaces as well as auditorium to keep above floors free for exhibition spaces

Services close to lift cores

Toilet cubicles on every floor of varying proportions

Circulation Analysis :

Clear circulation zone that repeats every floor for ease in movement

One grand circulation space that becomes heart of movement with tucked away stairs for fire

Instead of lifts – focus shifts to the main staircase

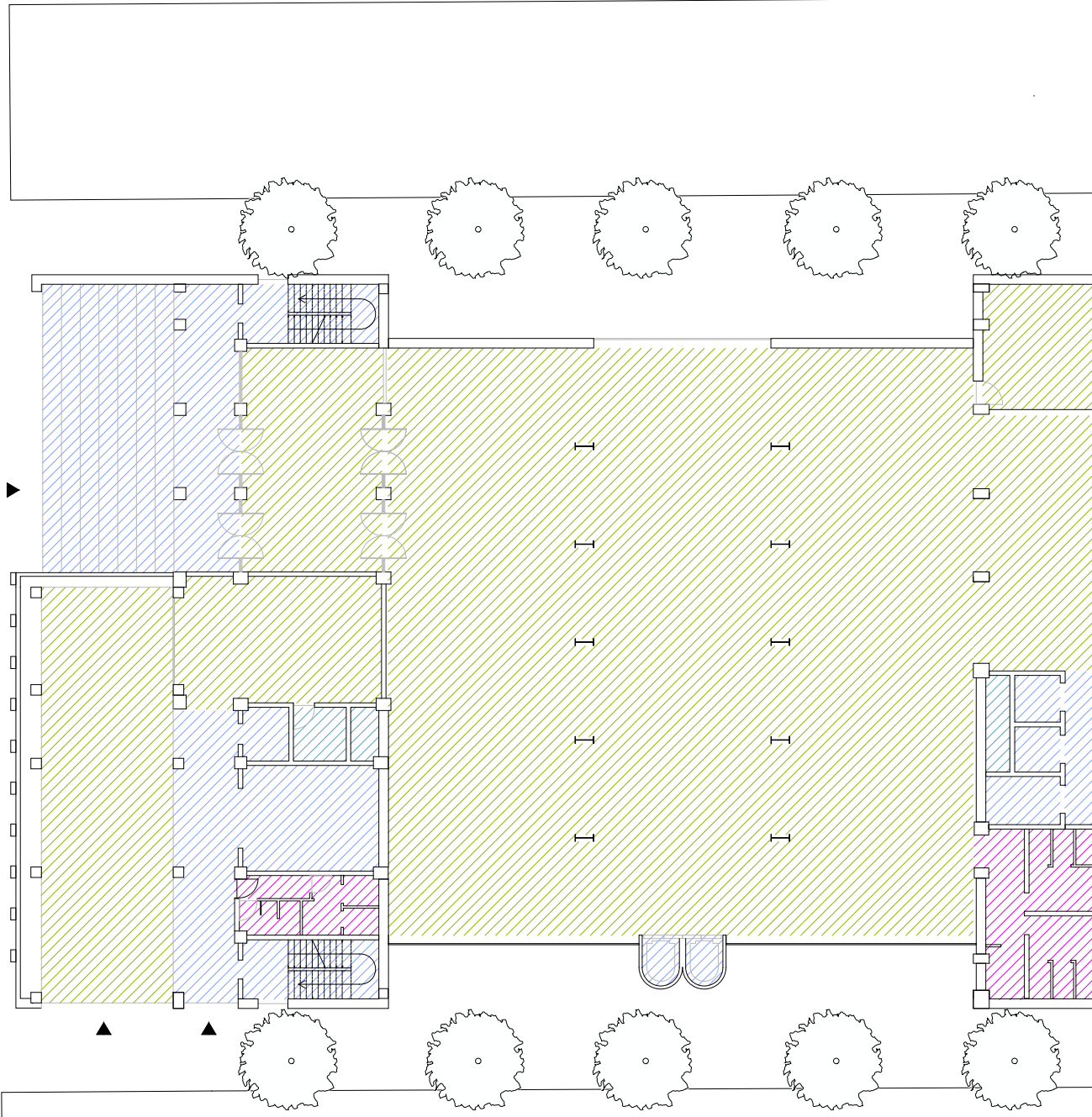
Back end easy access to the art lift on loading space

Circulation of 18% similar to the ground floor of New Museum, however it remains constant and doesn't reduce like New Museum on subsequent floors.

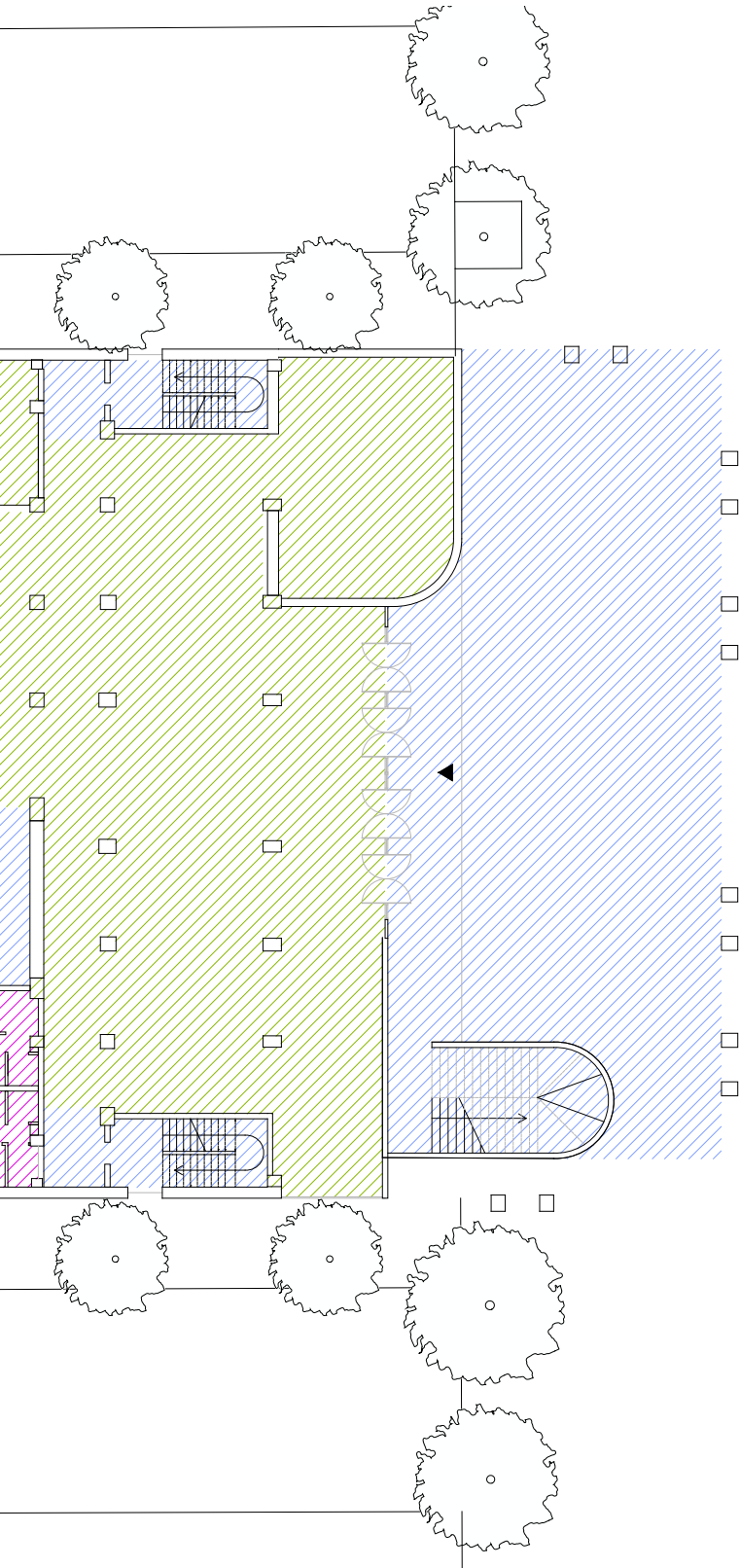
Circulation embedded within galleries to give maximum exterior facade to the galleries.

Design Analysis :

Various kinds of exhibition spaces provided, some with natural light some with controlled lighting



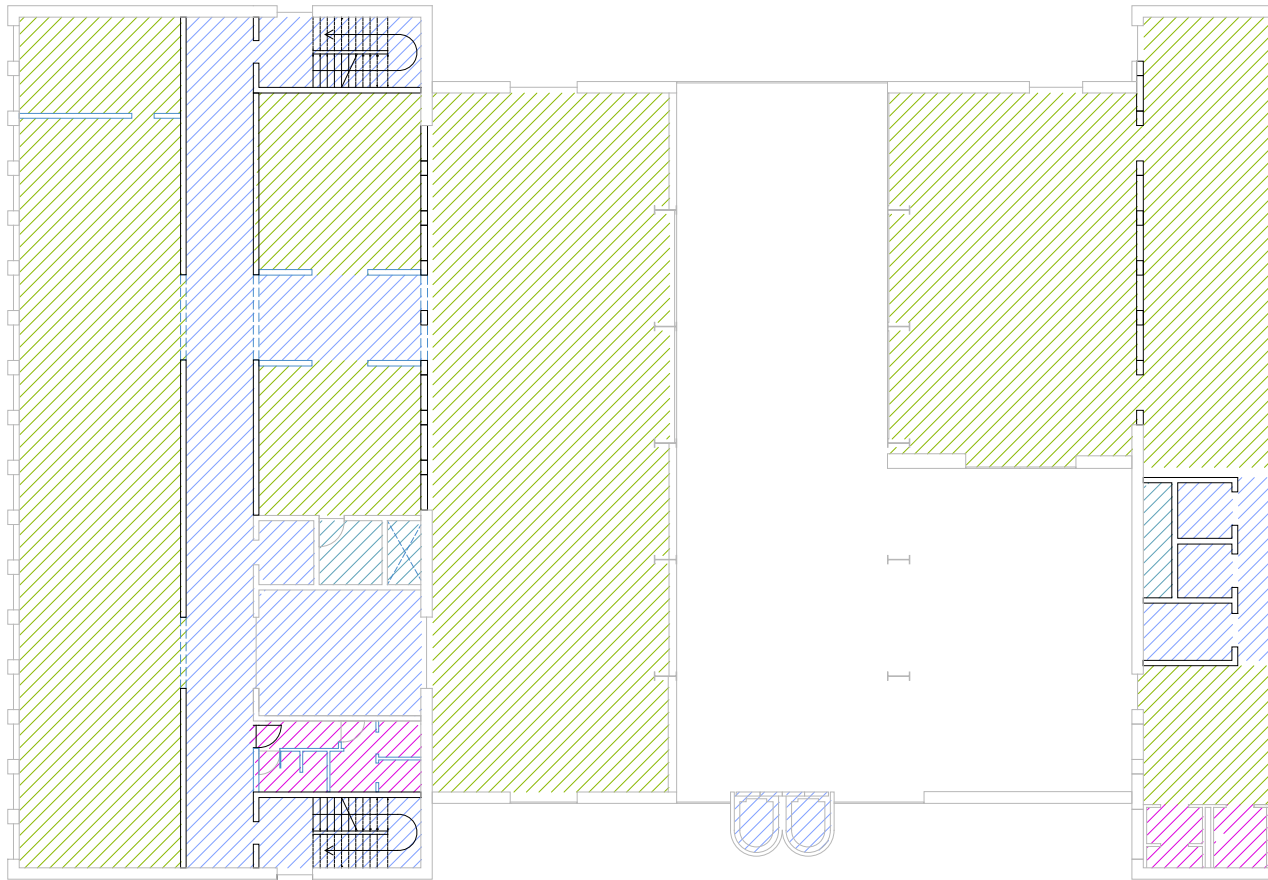
Proposed Design, Antwerp | Ground Floor



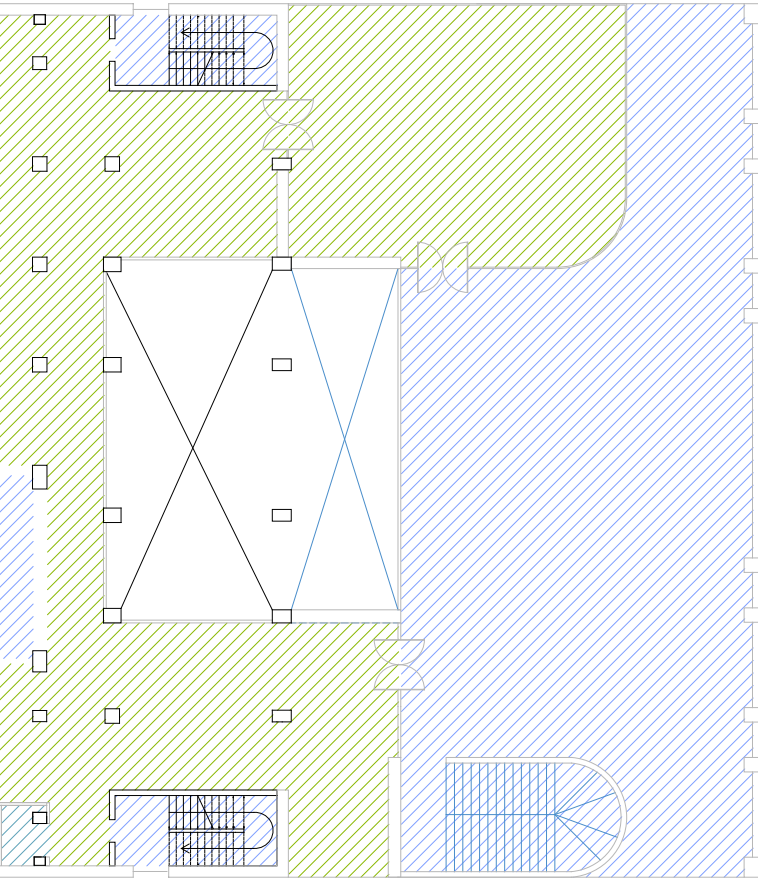
FUNCTION = 1705 sq.m
CIRCULATION = 190 sq.m
TOILETS = 54.2 sq.m
SERVICES = 11.9 sq.m
TOTAL = 1961 sq.m

FUNCTION = 87%
CIRCULATION = 10%
TOILETS = 3%
SERVICES = 1%

GROSSING UP FACTOR = 1.5



Proposed Design, Antwerp | First Floor



FUNCTION = 1295.1 sq.m
 CIRCULATION = 236.1 sq.m
 TOILETS = 22.6 sq.m
 SERVICES = 15.1 sq.m
 TOTAL = 1568.9 sq.m

FUNCTION = 83%
 CIRCULATION = 15%
 TOILETS = 1%
 SERVICES = 1%

GROSSING UP FACTOR = 1.5

06

massing + form

climate considerations

plan strategy

section strategy

entrance resolution

facade strategy

inquiries

Water vs. Air Cooling / Heating

Mechanical Room Placements

Intake fresh air - ground vs. terrace

Radiator heating - optimum through walls? Ceiling? Floor?

Any preference from retrofit perspective?

Need for Buffer space?

Any considerations for designing for flexibility?

Metal vs. Fabric Ducts

	<p>Class A is the optimum for most museums and galleries. Two possibilities with equivalent risks are given: a larger gradient and short-term fluctuations, or a larger seasonal swing. Stress relaxation is used to equate ±10% relative humidity seasonal swing to a short ±5% relative humidity. A major institution with the mandate and resources to prevent even tiny risks might move toward the narrower fluctuations of Class AA. However, design for very-long-term reliability must take precedence over narrow fluctuations.</p>				
	ROOM AIR TEMPERATURE	RADIATION TEMPERATURE	AIR VELOCITY	RELATIVE HUMIDITY	
DEFINITION					
GALLERY SPACE	15 -25 °C			50% RH	
	with allowable fluctuations of +/-2°C per 24 hours with allowable fluctuations of +5/-10°C seasonally			with allowable fluctuations of +/-5% per 24 hours with allowable fluctuations of 10% seasonally	
COLLECTION					
EXHIBITION					
LIBRARY					
READING	22-26 °C			40-60% RH	
DOCUMENTATION	15 -25 °C with allowable fluctuations of +/-2°C per 24 hours with allowable fluctuations of +5/-10°C seasonally			50% RH	
FORUM					
LOBBY/RECEPTION	22-26 °C			40-60% RH	
WORKSHOP/ SEMINAR SPACES	22-26 °C			40-60% RH	
BACK OFFICE					
WORKSHOPS	15 -25 °C with allowable fluctuations of +/-2°C per 24 hours with allowable fluctuations of +/- 5°C seasonally			with allowable fluctuations of +/-5% per 24 hours NO Change, seasonally	
ART HANDELING	15 -25 °C with allowable fluctuations of +/-2°C per 24 hours with allowable fluctuations of +/- 5°C seasonally			with allowable fluctuations of +/-5% per 24 hours NO Change, seasonally	
OFFICE LOGISTICS	15 -25 °C with allowable fluctuations of +/-2°C per 24 hours with allowable fluctuations of +5/-10°C seasonally			50% RH	
OFFICE ADMIN	22-26 °C			40-60% RH	

	HIGHEST	LOWEST	NOTES	
TEMPERATURE	14°C to 23°C (Augst)	1°C to 6°C (Feb)	April - Sept (Hot Months) Oct - March (Cold Months)	
DAYLIGHT				
AT NOON			VERNAL EQUINOX	AUTUMNAL EQUINOX
ALTITUDE	58.75° (Summer Solstice)	15.30° (Winter Solstice)	38.39	36.95°
AZIMUTH	-34.31° (Summer Solstice)	-2.61° (Winter Solstice)	-6.55°	-20.63°
	NOT DESIRBALE	DESIREABLE	Roof lights at Library, Viipuri based on Summer Solstice	
SUNSHINE	9.4 hrs (June)	3.7 hrs (Dec)		
DAYLIGHT HOURS	16.5 hrs (June)	8 hrs (Dec)		
RAINFALL	2.1inch (Dec)	1.2 inch (April)		
PRECIPITATION	52 mm (July)	27.4 (April)	Wet Season - 9 Months (May - Feb)	
HUMIDITY	87% (Dec)	73% (April)		
DEW POINT TEMPERATURE	14°C (July - Aug)	1°C (Jan)		
OTHER				
LATITUDE	51.2213° N			
LONGITUDE	4.4051° E			
SUMMER SOLSTICE	June 20 or 21 : longest day of the year, marking the start of summer.			
WINTER SOLSTICE	December 21 or 22: shortest day of the year, marking the start of winter.			
VERNAL EQUINOX	March 20-21: day and night of equal length, marking the start of autumn.			
AUTUMNAL EQUINOX	September 23: day and night of equal length, marking the start of autumn.			
ALTITUDE	Angle of the sun			
AZIMUTH	Horizontal Angle of the Sun from the North (N = 0, E = 90, S = 180, W = 270) OR the angle is positive if the shadow is east of south and negative if it is west of south.			
LINKS ACCESSED :	https://weatherspark.com/s/51236/3/Average-Winter-Weather-in-Antwerpen-Belgium https://www.weather-atlas.com/en/belgium/antwerp-climate#climate_text_1 https://www.timeanddate.com/weather/belgium/antwerp/climate https://sun-direction.com/city/6217,antwerp/			

		Organisation	Furniture	Lighting	Air	SOUND	Flooring	Other Design Considerations
4.2	Collection Component							
	Circuit 1							
	Main Room - Type 1							
	Main Room - Type 2							
	Side Room - Type 1			Filtered Natural Daylight through ceiling, 1m away from walls.			Part of the flooring to have bearing capacity for transport.	Possibility to bring exceptionally large artworks. Doors that are demountable for max ceiling heights.
	Cabinets							
	Circuit 2							
	Main Hall Type 2							
	Round Room							
4.3	Exhibition Component							
	Main Circuit							Possibility to bring exceptionally large artworks.
	Secondary Circuit 1							Doors that are demountable for max ceiling heights.
	Secondary Circuit 2	At least 3 exhibition spaces must be directly accessible, without passing other exhibition spaces One alternative entrance that opens directly onto an outdoor space is desirable.					Part of the flooring to have bearing capacity for transport.	a basic technical infrastructure must be provided that can accommodate this flexibility with due attention to the placement of the fixed parts of the technical equipment.
4.4	Library & Archives							
	Reading Room / Library		Open Bookshelf.	Daylight desirable option for complete blackout.				
	Documentation Centre		Books not on display are kept.	Daylight not desirable.				
	Study Area	Possibility to give presentation		Daylight desirable option for complete blackout.				
	Content Management / Digital Operation			Daylight desirable option for complete blackout.		Sound Proof		
	Support Facilities							
	Sanitary Staff							
	Kitchenette							
	Archiving							
	Office Space			Daylight desirable option for complete blackout.		Sound Proof		
	Scanning Room			Daylight not desirable.				
	Technical Functioning of the Repository							
	Reception - enclosed quarantine area	Vicinity of processing area		Daylight allowed but not necessary				
	Processing Area	Authorized Personnel		Daylight to North, people working for long hours.				
	Art Archive Dept	One for paper, audio visual archive						

4.5 The Forum							
	Forum main room			Daylight Necessary		Good acoustics with limited reverberation, for large crowds.	
	Reception Function						
	Lobby / Hallway		Flexible seating elements Screens				
	Reception area and cloakroom groups						
	Cloakroom and locker room						
	Counter/ orientation / ticketing		Desk - 3 people,	No Glare		Sound absorbing materials	
	Storage Reception						
	Specific Forum Related Functions						
	Museum Shop						
	Catering						
	Multifunctional Event Room and storage						
	Seminar Rooms						
	Auditorium / cinema						
	Cinema - cinema						
	Educational area						
	Support facilities						
	Sanitary Visitors						
	Sanitary Staff						
	First aid Room						
	Back - Office						
4.6 Back - Office Workshops							
	Workplaces	Large flexible spaces, square and rect floor plan Passages as wide as entrance		Daylight Necessary		Part of the flooring to have bearing capacity for transport.	Entrance height = ceiling
	Woodworking shop						
	Metal workshop						
	Painting Workshop						
	Audio and Video Room			Daylight Necessary			
	Technical equipment storage						
4.7 Back-office art handling							
	Transport and handling area						
	Lock / Lock	1 truck (L x W): max. 19.00 mx max. 2.55 m.			Highly secured, air conditioned, dust - free		
	Zone for loading and unloading					Floor surface barrier free, no level difference	
	Transfer Space				Circulation space free of pipes, cable trays, lighting fixtures	Finish is smooth and non-slip. Carpet prohibited.	

	LIGHTING		MATERIALITY	
	DAYLIGHT	ARTIFICIAL LIGHT	THERMAL MASS	INSULATION
DEFINITION			The thermal capacity indicates the quantity of heat required to warm a material by one degree Kelvin.	
BASIC PROCESS/ SYSTEMS		Things to look for while choosing fixture : + Correlated Colour Temperature Warm White Light - 2700 - 3200 K + Colour Rendering Index (90 -100)		
	Roof lights, (lantern) Clerestory (In the traditional top-lit art gallery the golden rule is to place the rooflight outside the cone of vision of the viewer. This is to avoid visual glare when regarding the work of art.)	Types of Fixtures : + Wall Washing + Accent Spotting + Frame Spotting + Lighting for Free Standing Displays + Ambient Lighting + Diffused Ceiling Lights		
		Type of Lights : LEDs - possibility to dim; without changing tonality of light OLED ? Tungsten Lights		

AIR			
HEATING	VENTILATION	COOLING	DEHUMIDIFICATION
		Air-conditioning is the typical means of removing heat from interior spaces and is accomplished using the principles of conduction and the use of a fluid compressor.	
Convection (electric heaters, radiators) Forced convection (fan coils, forced air over a heat exchanger in furnace) Radiation heat transfer (radiators, electric radiative heaters)		When a fluid is compressed it releases heat, and when it is at a low pressure it absorbs heat. A refrigerant fluid at low pressure is allowed to circulate within coils that are on the interior side of the building. A fan is then used to pass building air across the coils. Through convection the warm interior air transfers heat energy into the metal that forms the coil, and the metal in the coil transfers its heat energy to the fluid. This fluid is then run through a compressor and passed into the coils on the outside of the building where it releases the heat to the outside air. The cycle continues until the space reaches the desired temperature and the building thermostat signals the air-conditioning unit to shut off.	Desiccant dehumidification systems may be appropriate as an energy efficient means of removing moisture from outside air in larger systems in humid climates and therefore taking load off the chilled water system Fine dehumidification control will likely still be necessary via chilled water coils. Dessicant systems are particularly economically viable where a waste heat source exists to regenerate the desiccant medium (e.g. waste heat from onsite electricity generation – cogeneration or trigeneration systems).
Room air comes in contact with the elements of the heater and receives heat energy. The hot air then rises within the space and creates a circulation pattern within the room. Mechanical means may also be used to force convection to occur -- such as the use of forced air heating in homes and buildings. In this case, heat is generated using a furnace, which employs a fan to force the heated air throughout the building and into individual rooms via duct.			
Water :Use hydronic (Low Temperature Hot Water or Medium Temperature Hot Water) heating systems where possible (i.e. hot water from a boiler or other heat source). Water-based systems enable good controllability if appropriately designed and should therefore result in much more stable temperatures within critical spaces.		Consider variable speed compressors or chilled water storage/buffer vessels as well as dedicated low load chillers on larger systems. Use chilled water (6 degree)systems for cooling where possible as these systems enable stable off coil air temperatures and therefore stable temperature and humidity control	
Gas : In most instances, gas-fired boilers result in significantly lower carbon emissions than electricity generated by coal-fired power plants, particularly when transmission losses are taken into account. Gas is also currently cheaper than electricity.			
Electric : If electric heating systems must be used, ensure they are thermistor controlled (i.e. have infinitely variable rather than stepped control) so as to ensure more stable conditions.			
Planting deciduous trees that shade the north and west facing walls of the museum or gallery in summer will minimise heat gains through those walls during hot periods	natural ventilation economy cycles/night purge/exposed thermal mass/hygroscopic buffers/performance glazing/shading devices).	In winter these plants drop their leaves and allow the sun to warm the north and west facing walls. This will reduce heat loss through those walls during cold periods.	
	Mixed Mode Systems (hybrid)	Passive Cooling :	

PASSIVE METHODS				
DESIGN CONSIDERATION (The building works with topography and orientation, form and material, opacity, translucency and transparency, natural and artificial light, fabric and plant)	Angle of Sun during Summer and Winter Solstice to get daylight.	A 10:1 ratio of exhibit luminance to the luminance of the surrounding should not be exceeded.	Exposed Thermal Mass Hygroscopic Buffers	The thermal mass and hygroscopic capacity(ability to react to moisture content) of building in its walls, floor and roof acts as a buffer between the internal environment and external temperature and humidity fluctuations.
	North Facing windows for unchanging light. Different strategies of openings for north and south wing.	For areas such as large storage spaces where only particular and limited areas will be in use at any given time, appropriate controls and circuiting will ensure only the relevant areas are lit.	We therefore need components with high heat flow resistance and a high thermal capacity of the building could be.	The addition of ceiling and wall insulation (in the right place in composite constructions) will reduce the impact that external conditions have on the internal environment.
	When light reaches the book from different angles	Similarly office spaces should be zoned to max 100sq.m to ensure areas that do not need to be lit or that require lower lighting levels are not lit unnecessarily.		Building envelopes play an important role in controlling moisture migration into the space. Architectural design should include heavy insulation, and consider possible vapor barriers. Control of openings, window materials, and floor slab insulation are critical in the design.
	A balance had to be found between maintaining an optimum of daylight and solar radiation in the winter and a minimum of solar radiation in the summer.			

Planting deciduous trees that shade the north and west facing walls of the museum or gallery in summer will minimise heat gains through those walls during hot periods	natural ventilation economy cycles/night purge/exposed thermal mass/hygroscopic buffers/performance glazing/shading devices).	In winter these plants drop their leaves and allow the sun to warm the north and west facing walls. This will reduce heat loss through those walls during cold periods.	
	Mixed Mode Systems (hybrid)	Passive Cooling :	
In summer, night ventilation can be used. Cold air from outside is directed into the building through vents without mechanical aid. The relatively cold air temperature reduces the surface temperature in the ceilings and walls. It is a good passive way to cool rooms during the day.	Economy Cycle : involves using 100% outdoor air to supply air to the space . This occurs at times of the year when the outdoor conditions are cooler than the return air temperature in cooling mode. This allows the plant to turn off the cooling coils and reduces chiller energy consumption.	Awnings and additional solar shading could also be used if plants are deemed inappropriate for the building.	
	Night Purge : is a strategy that uses the natural fall in temperature that occurs overnight to maximise the efficiency of a building's ventilation, refreshing internal spaces ready for the next day		

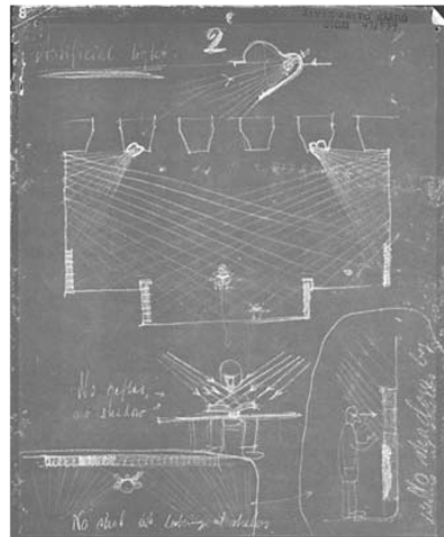
The vents inside the rooms are typically located near floor level, which allows the hot air to rise towards the ceiling and displace the colder air.	Ventilation Control Parameters - internal temperature, relative humidity, co2 concentration and external temperature	Face and Bypass arrangements around AHU (Air Handling Unit) chilled water cooling coils should be considered where physical space is available within AHU plant rooms so to remove (or significantly reduce) the requirement to reheat air back up to supply temperatures after it has been overcooled for dehumidification purposes.	All dehumidification equipment should be effectively and efficiently drained, with drains located outside of exhibition or storage areas.
Solarium Space, if needed	ISSUE of cross ventilation since most of the building is one mass.	+ Day Time / Night Time Mode Strategy + After Hours Set Back	Rainwater runoff design should be considered in the HVAC relationship to collection storage and display areas.
Organise exhibitions to suit level of conditions required Tailor exhibitions where possible so that those requiring higher levels of environmental protection are together and/or consider display cases/local conditioning, therefore providing the potential to limit the number of highly conditioned large exhibition/storage volumes.	On larger systems consider dedicated outside air units that supply the required quantity of outside air onto recirculation units serving gallery/museum spaces at a set temperature and humidity. With this approach, the recirculation units will not be subject to the constant fluctuations of the outside air thereby aiding stable control of internal space conditions.	The southern two like space is, in effect, a giant sun filled window equipped with layers of timber louvered screens to control the sun. Here the warmth of the sun maybe enjoyed on clear, cold days and in summer, with the windows thrown open it may become a verandah.	Dew Point Control : Generally AHU used relative humidity, but hard to get uniform results/ Changes in dry bulb temperature across a room means that relative humidity varies widely throughout a building (remember that RH is a function of temperature rather than an absolute), which makes the air conditioning system constantly 'hunt' to achieve control within a defined range of relative humidity. In contrast, when the temperature/ relative humidity signal is converted to dew point and used as the control value, the system will not be hunting up and down as sensible loads change in the space. The absolute humidity will stay near constant, so the system as a whole will operate in a more stable manner.
Position of collection items Locate items requiring tighter environmental controls in areas that have good passive control and away from sources of solar gain etc.	Nostrils for intake of fresh air away from exhaust sub towers.		For example, in a museum or gallery space with high ceilings and a ceiling supply system, it may be quite common to have a dry bulb temperature difference between the floor and ceiling (higher relative humidity at low level due to 'cooler' air and vice versa for the ceiling) potentially creating conflicting relative humidity readings in the space and unnecessary calls for

DESIGN EXAMPLE/ STRATEGY (Environment to Fit the purpose of the room)	<p>Using White painted walls to diffuse reflector and distributing light throughout the room</p>	<p>Soane used coloured glass directly to modify the tonality of the light that entered a building, false or mysterious light.</p>	<p>Concrete ceilings and thick homogenous exterior walls - very low heat conduction in the exterior walls (u value) . A very high heat storing capacity in the exterior walls as well as the ceilings and the floors.</p>	
	<p>Metal louvres are fixed above the rooflights to provide solar control</p>	<p>Electrical lights were often suspended on pulley systems, to get light exactly where needed.</p>		
	<p>Two skins of translucent glass define a wide cavity, which contains artificial light fittings and motorised blinds; the void also acts as an extract plenum for the air conditioning system. At Walsall, the layers of diffusing glazing and the intervention of the white adjustable blinds are designed to keep the relative brightnesses of the picture wall and the light source within comfortable limits.</p>	<p>Lamps with parabolic reflectors are set flush into the ceiling and spread light widely onto the white walls above the bookcases.</p>		
EQUIPMENT SPECIFICATION				

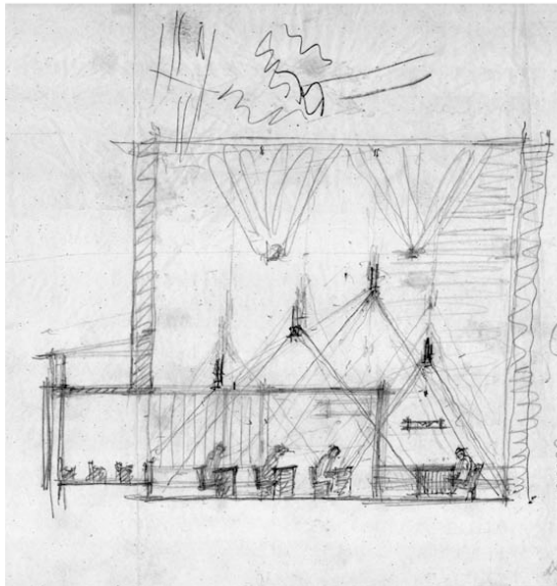
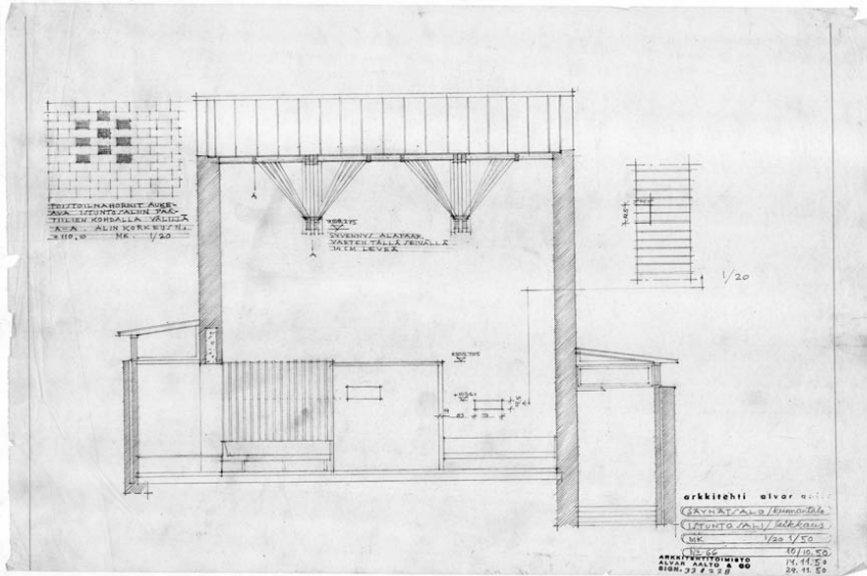
			relative humidity readings in the space and unnecessary calls for dehumidification and humidification. In addition to this, as another example – if a large group of patrons congregate in a concentrated area of the gallery, creating a heat gain and thus rise in dry bulb temperature in the space, the system will read a drop in RH and call for the system to add moisture to the supply air. In these cases, under dew point control, the dew point temperature (or moisture content) in the space would be relatively stable and would have only a requirement for sensible heating or cooling.
Zone systems so that only areas requiring higher levels of environmental control are receiving it.			

The window head houses retractable roller blinds to shade the glass and interior from unwanted solar heat gains. The whole of the glazed wall could be covered at night by full-height silk curtains	Two entire sections of the glazing can be mechanically lowered below the sill line to open the entire space to the elements on summer days.	Temperature control in the building utilises the thermal mass of the concrete structure. Coils of water pipes are encased in the in situ concrete of the floor slabs and enclosing walls and these circulate water drawn from deep in the ground beneath the building - from a depth of 27 metres . This provides cooling in the summer and a gas boiler is used to raise the water temperature to provide heat to the building in winter.	
Brick paviors extend part way across the floor and absorb heat from the radiators to extend the sense of the warm perimeter. The rear wall is exposed brick and this absorbs direct sunlight to retain its heat.	Bregenz, The ventilation system introduces air through a gap at the junction of the floor and the enclosing concrete walls and this is extracted through the ceiling void into the slab of the floor above.		
Mixing hot water and warm air distribution systems to meet the differing requirements of diverse spaces.		Kahn at Yale Center, The soffits of the V-shaped beams at roof level contain the diffuser grilles of the air-conditioning system, but the beams also function as splayed reveals to the rooflight	

<p>Elements of Heating System Gas Boiler / Heat Pumps Piping in each room (In concrete slab, secondary topping slab, radiator panels, towel rails) Boilers fuelled by gas, electricity, wood, biofuels. https://www.hydronic.com.au/what-is-hydronic-heating/</p> <p>Plant rooms in the basement house boilers, ventilation plant and controls.</p>		One (1) centrifugal <u>chiller</u> of 320 ton capacity provides chilled water as cooling medium to air system unit coils and to perimeter induction unit coils. The original system consisted of one major loop around the chiller with two supplemental loops; one to the basement boiler room and one to the tower <u>ventilation systems</u> of the 11th Floor.	
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*Alvar Aalto, Vipurii Library
Lighting Analysis*



Alvar Aalto, Saynatsalo Town Hall
Lighting Analysis

How is fan coil unit more energy efficient than air conditioning

Fan coil units (FCUs) are not inherently more energy-efficient than air conditioning systems. The energy efficiency of a cooling system depends on various factors, including the specific technology used, the design, and the operating conditions. Both fan coil units and air conditioning systems can be designed to be energy-efficient, but the efficiency will depend on the specific configuration and components used.

That being said, FCUs have certain characteristics that can contribute to energy efficiency in certain situations:

1. **Zoning:** FCUs are often used in multi-zone systems where each unit serves a specific area or room. This allows for individual temperature control in each zone, which can help reduce energy consumption by conditioning only the spaces that require cooling. In contrast, traditional central air conditioning systems cool the entire building or large areas, even if some zones require less cooling.
2. **Localized cooling:** FCUs are typically installed in close proximity to the areas they serve, which can reduce energy losses associated with long ductwork in central air conditioning systems. The shorter distance between the FCU and the conditioned space can result in less energy waste during air distribution.
3. **Reduced air leakage:** FCUs often have simpler ductwork configurations compared to central air conditioning systems, which can help minimize air leakage. Air leaks in ductwork can lead to significant energy losses, reducing the overall efficiency of the system.

However, it's important to note that FCUs also have some potential drawbacks when it comes to energy efficiency:

1. **Increased fan energy:** FCUs use fans to circulate air, and these fans consume energy. In some cases, the fan energy required for FCUs can be higher compared to central air conditioning systems, especially if the FCUs are operating at higher static pressures.
 2. **Limited capacity:** FCUs are generally used for smaller areas or individual rooms, so they may not be suitable for cooling larger spaces efficiently. Central air conditioning systems can handle larger cooling loads more effectively.
- In summary, while FCUs offer certain advantages in terms of zoning and localized cooling, their overall energy efficiency depends on various factors. It's crucial to consider the specific requirements and characteristics of the building or space when determining the most energy-efficient cooling system.

Energy Systems at Tate Modern, London

It uses ground water pumped from river gravel below the site, desiccant dehumidification and even waste heat from electrical transformers to create the ideal environmental conditions for the Tate's priceless works of art, while ensuring millions of visitors are comfortable.

A displacement ventilation system supplies conditioned air to the newer construction spaces. conditioned air would be supplied through ceiling mounted grilles and extracted from the ceiling as well.

This is a similar strategy to the one used in the original Tate Modern building. The main difference is that air is ducted to the floor grilles in the extension, whereas conditioned air in the power station reaches the floor-mounted grilles through a pressurised, raised-floor void.

'The problem with floor voids in galleries is that they can get dusty, so by ducting the air, it makes the system easier to clean,' Nutley explains.

Ducting the air you are also making sure it remains clean

the extract ducts are would be hidden above a suspended ceiling.

Each gallery has a dedicated air handling unit (AHU). In an unusual low-energy solution, the engineer has pioneered the use of ground water trapped in a five-metre-deep bed of river gravel beneath the site as a source of cooling for the AHUs

Heat rejected by the chillers is removed by the borehole water and returned to the gravel via three boreholes sunk into the landscaping to the north of the gallery. 'Compared to using air-cooled chillers, it is a very efficient solution,' says Nutley.

<https://www.cibsejournal.com/case-studies/the-art-of-cooling-services-design-at-the-tate-modern-extension/>

inquiries

Do you still need the walkway in the park towards MHKA ? If

MHKA is shifting

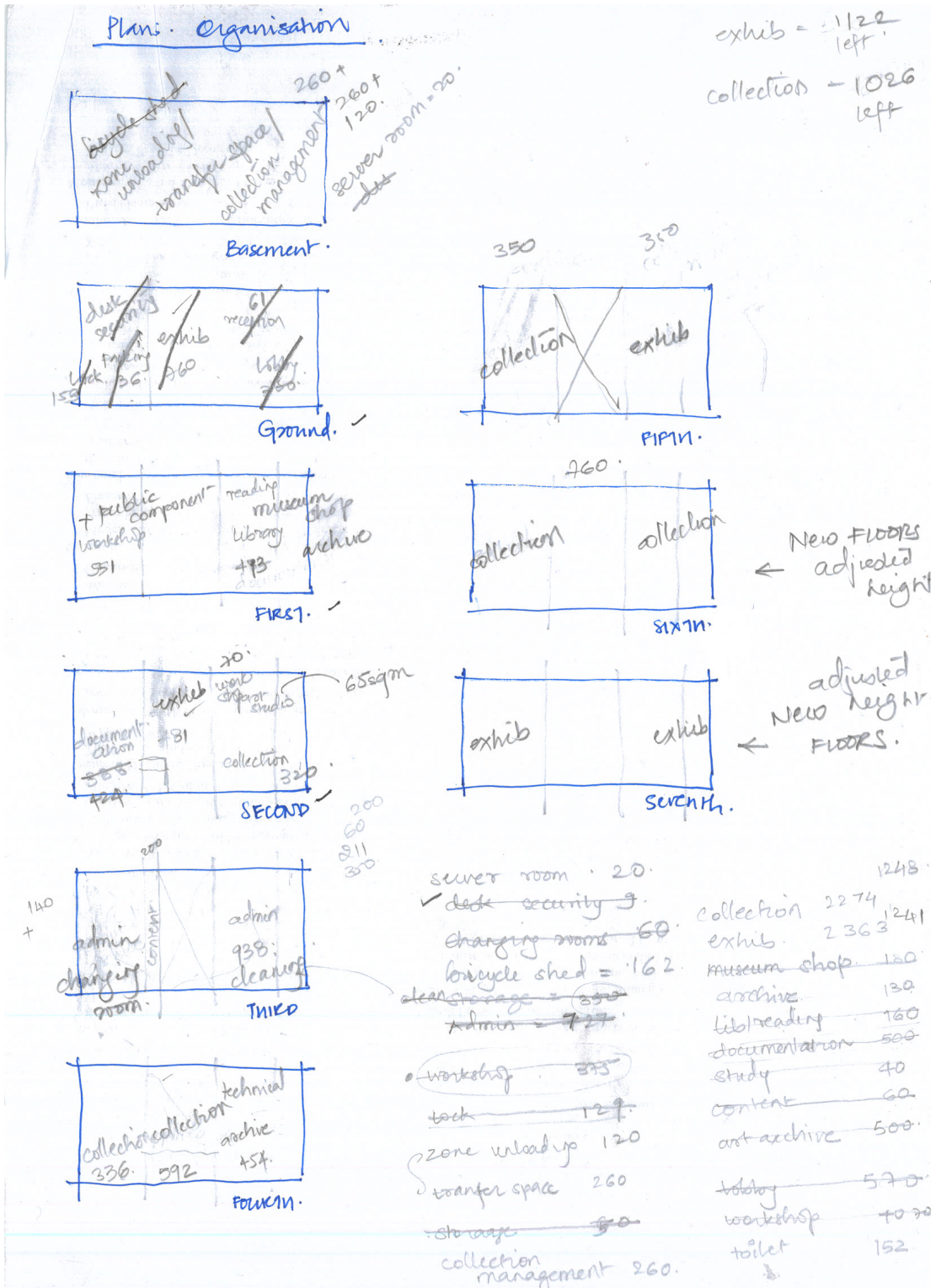
How does one arrive from KMSKA to MHKA

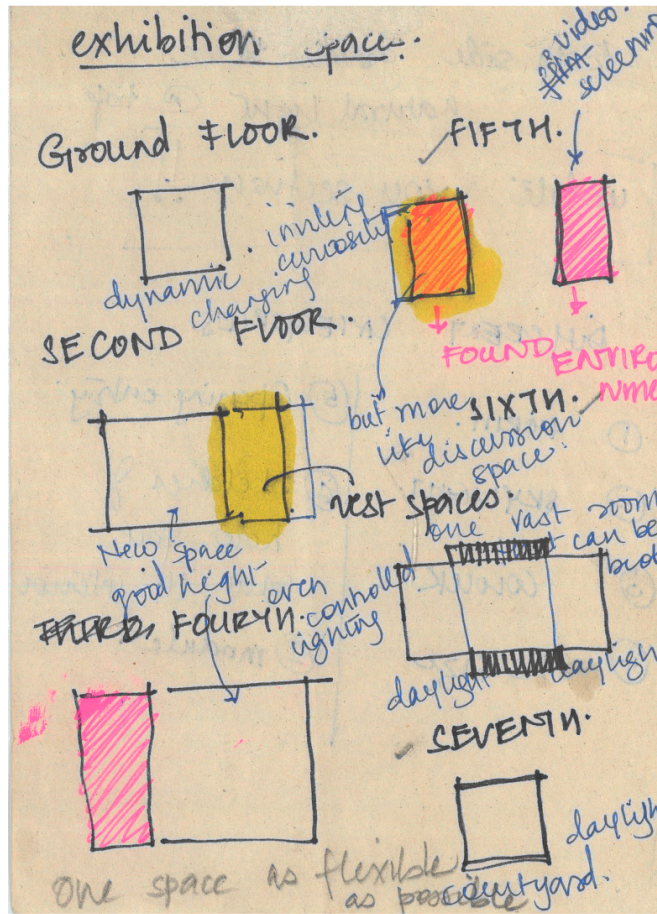
Multiple corridor spaces

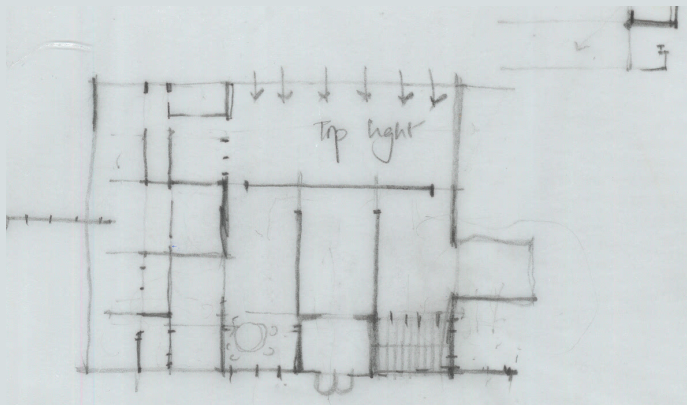
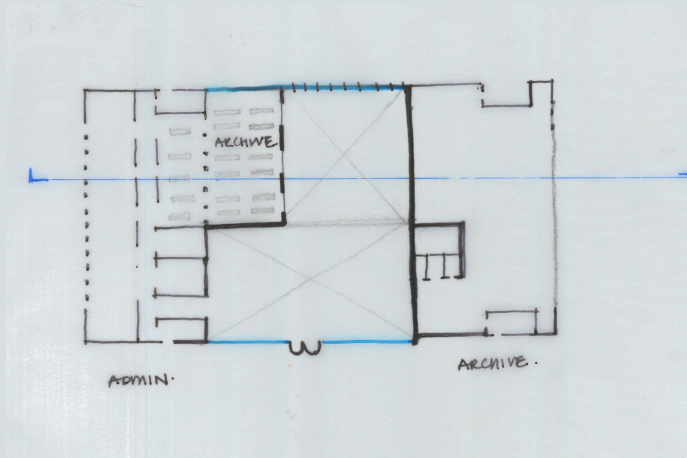
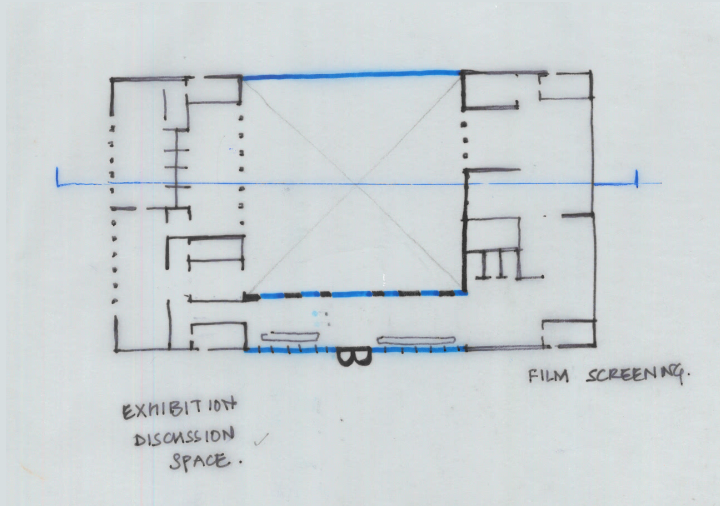
Is it possible to partially restrict the movement of cars so

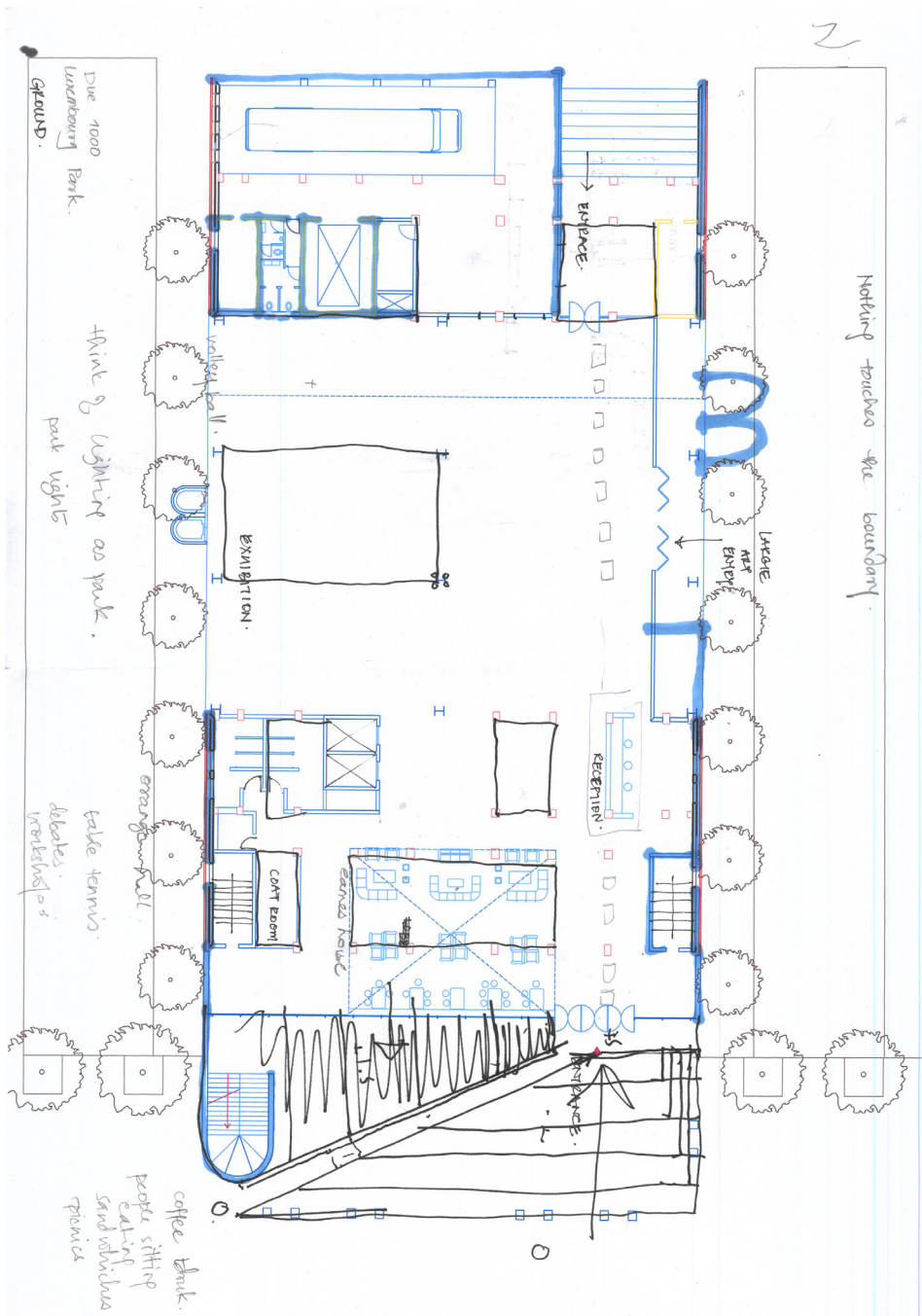
that heater can extend out

How do you incorporate new elevator sizes ?

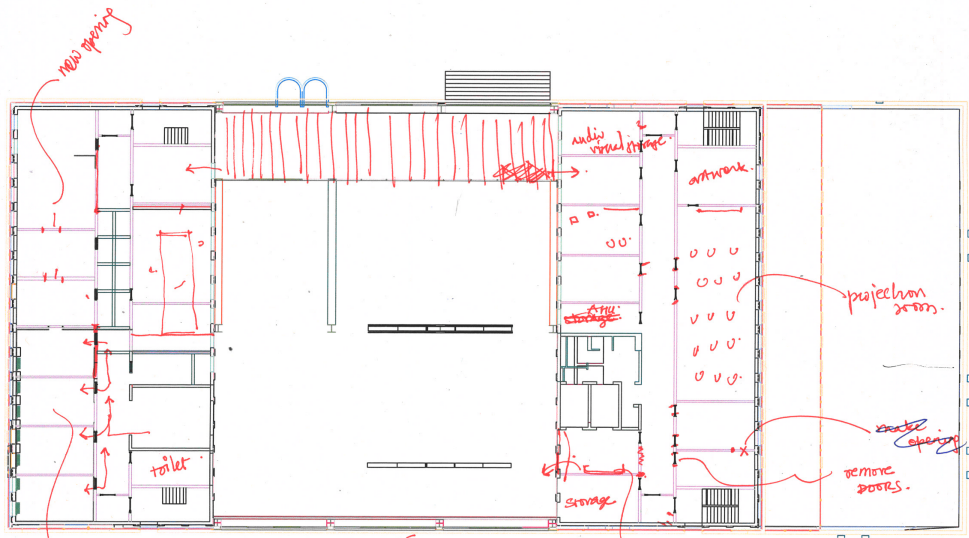








18/08/23



5th

Dagnal's plan.

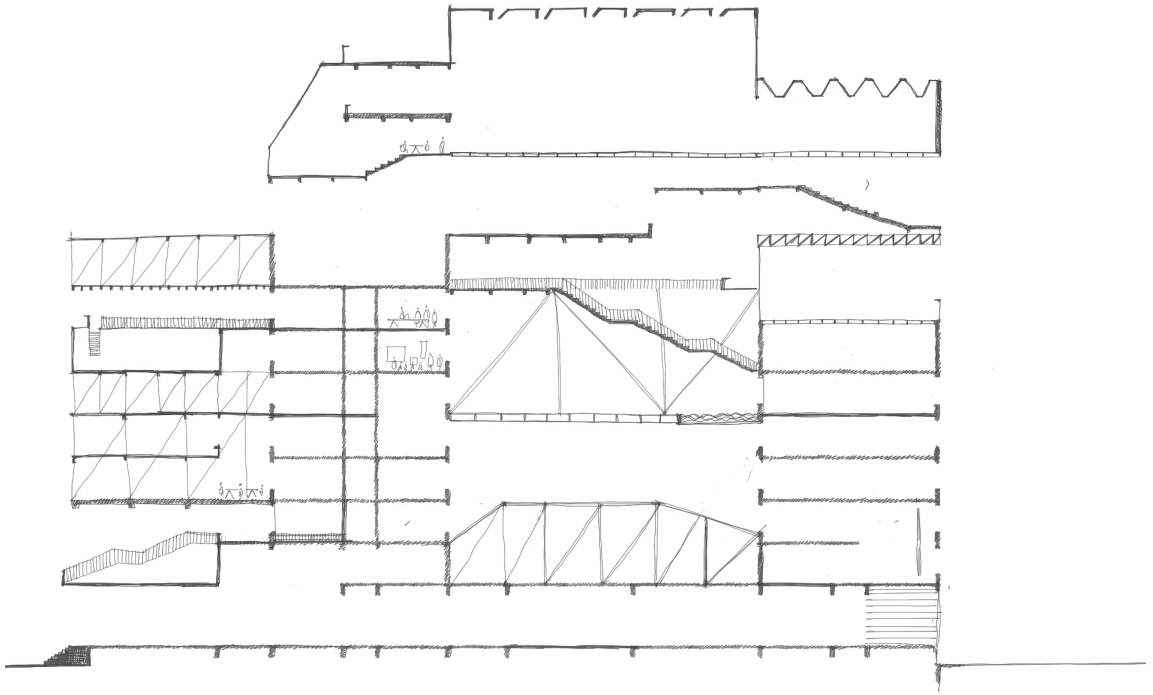
- remove steps
- change staircase
- grey out central area.

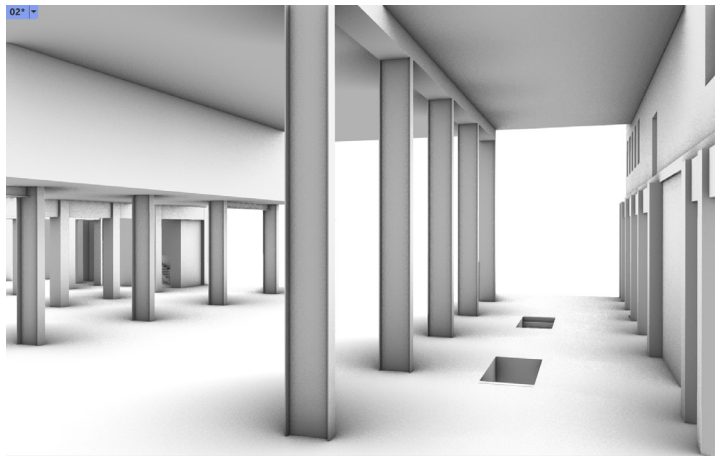
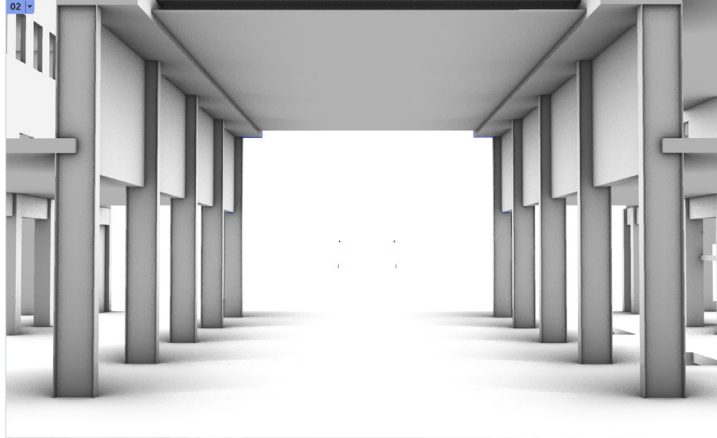
- steps
- walkway hatched.
- seating.

projection room.

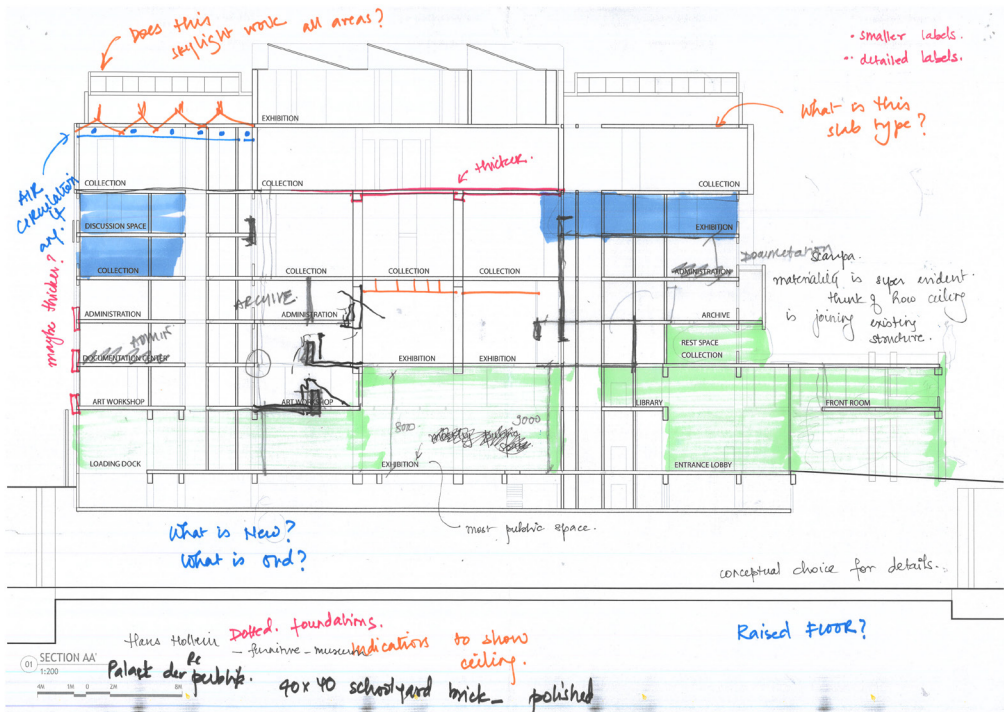
remove steps.

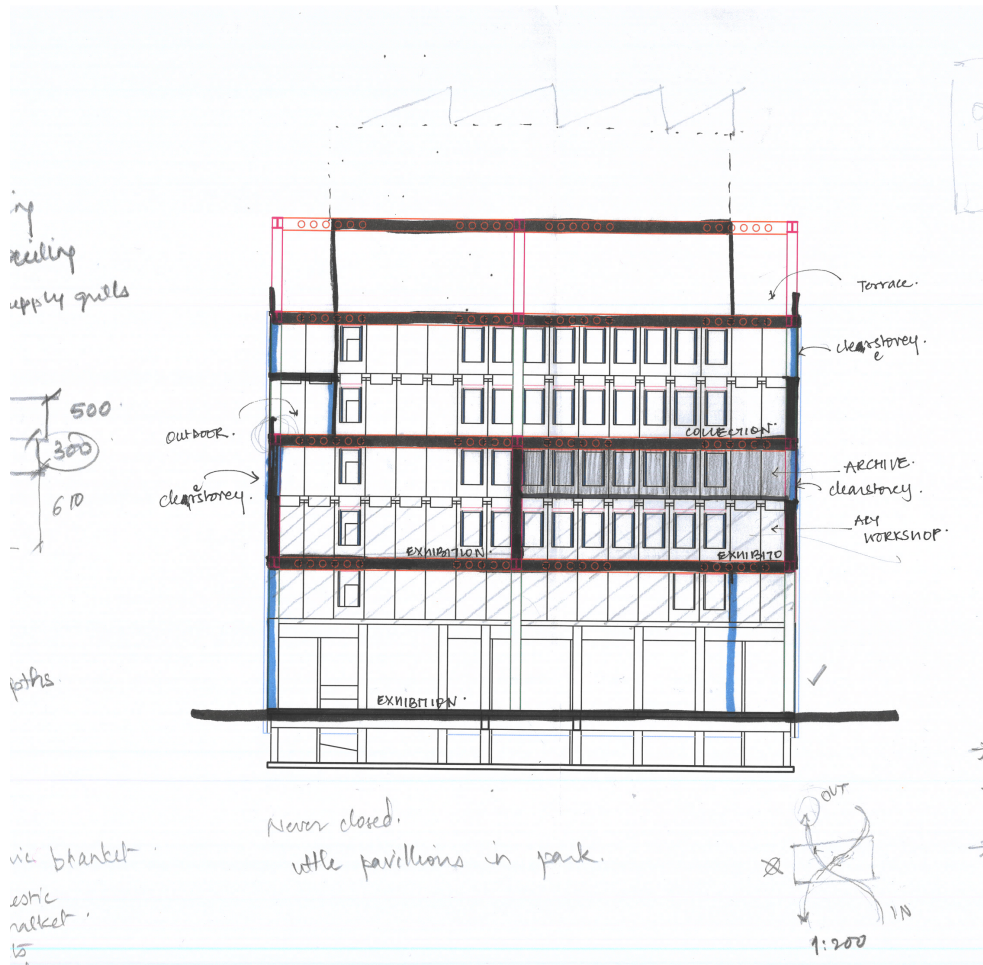
inquiries



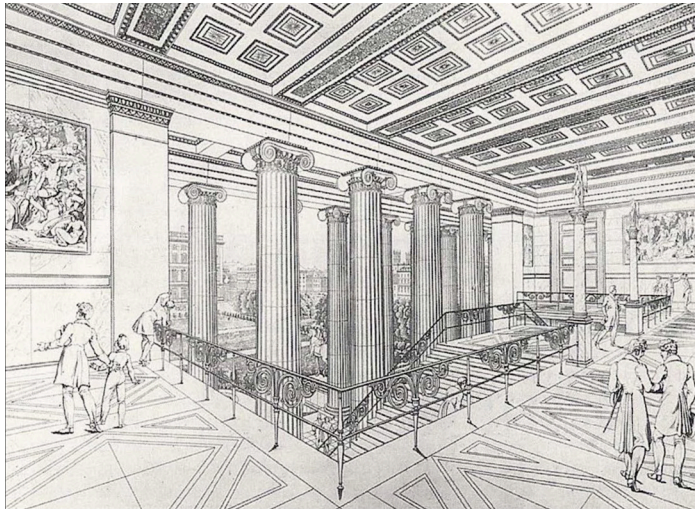


simultaneously modeling spaces to understand the scale of the structure as well as the volume in relation to the existing building





inquiries



Karl Friedrich Schinkel , Altes Museum



BC Architects, U Square



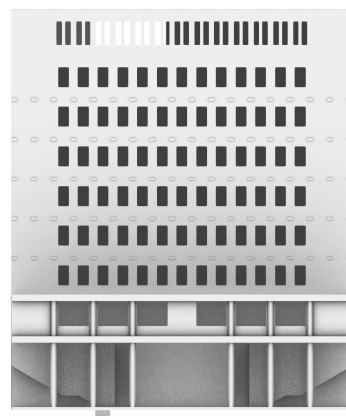
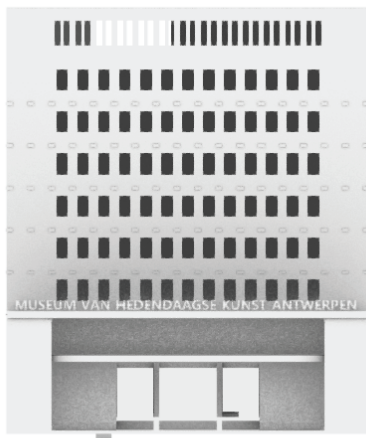
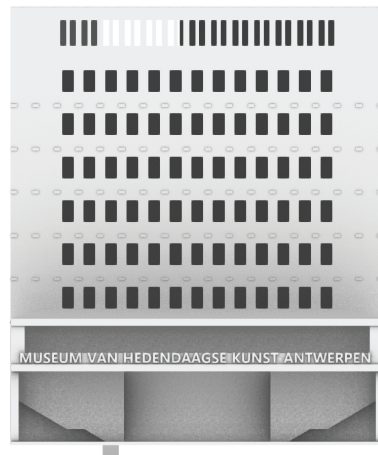
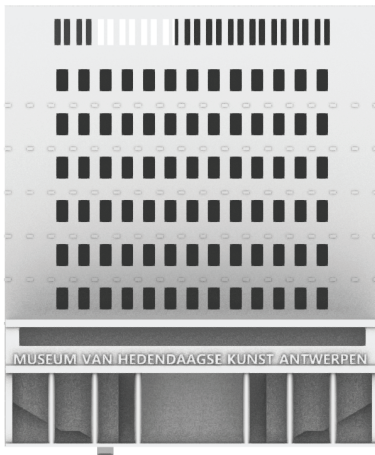
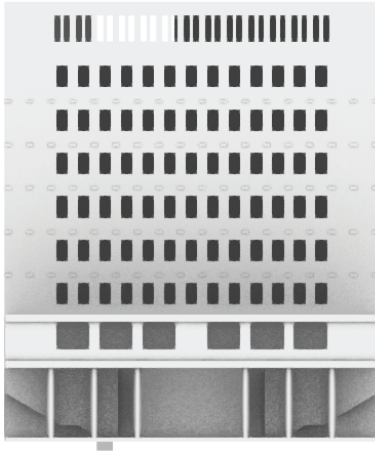
Pei Cobb Freed- Mengzhu Jiang National Gallery of Art

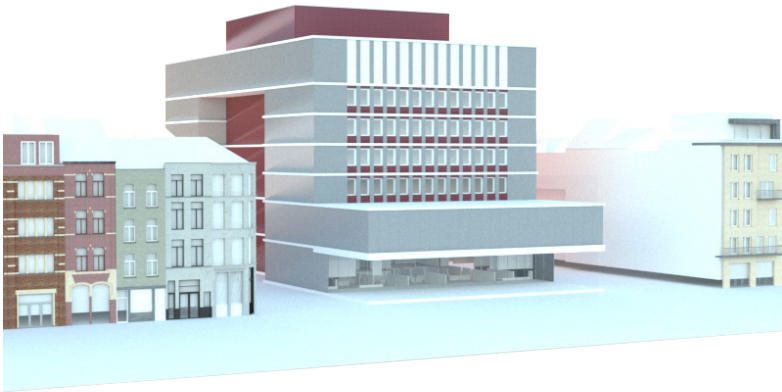
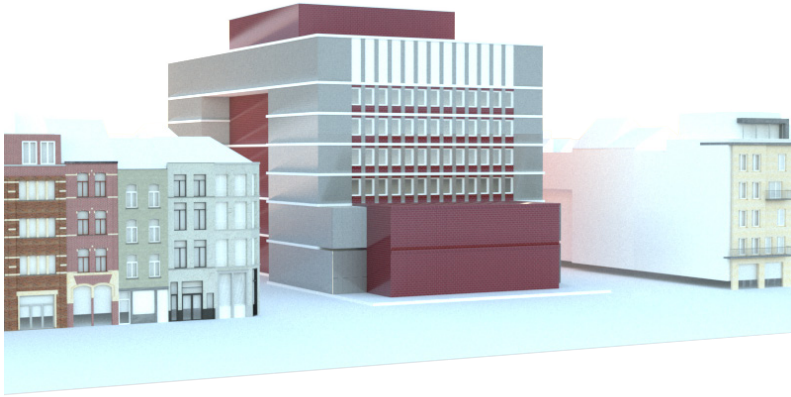




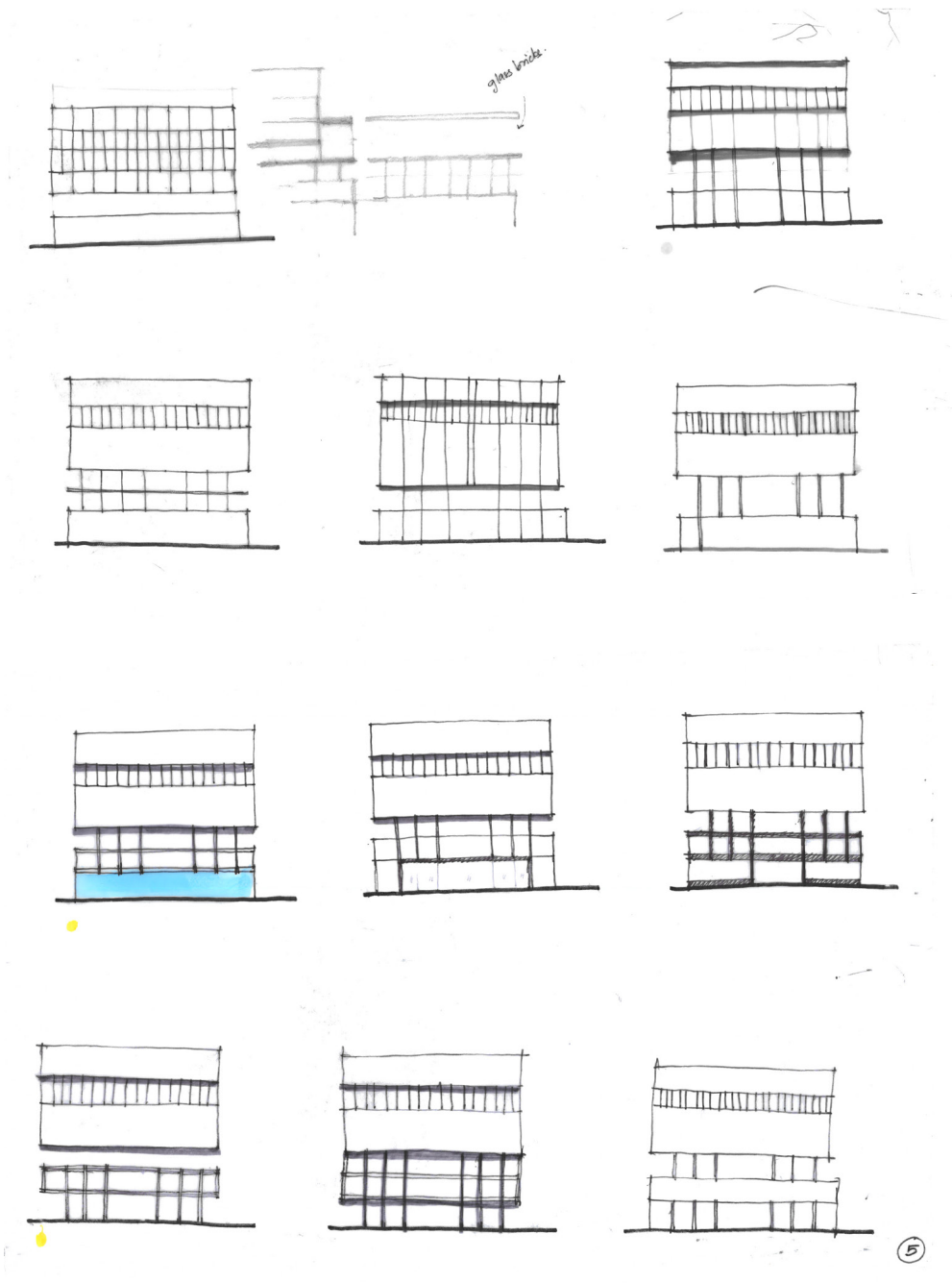


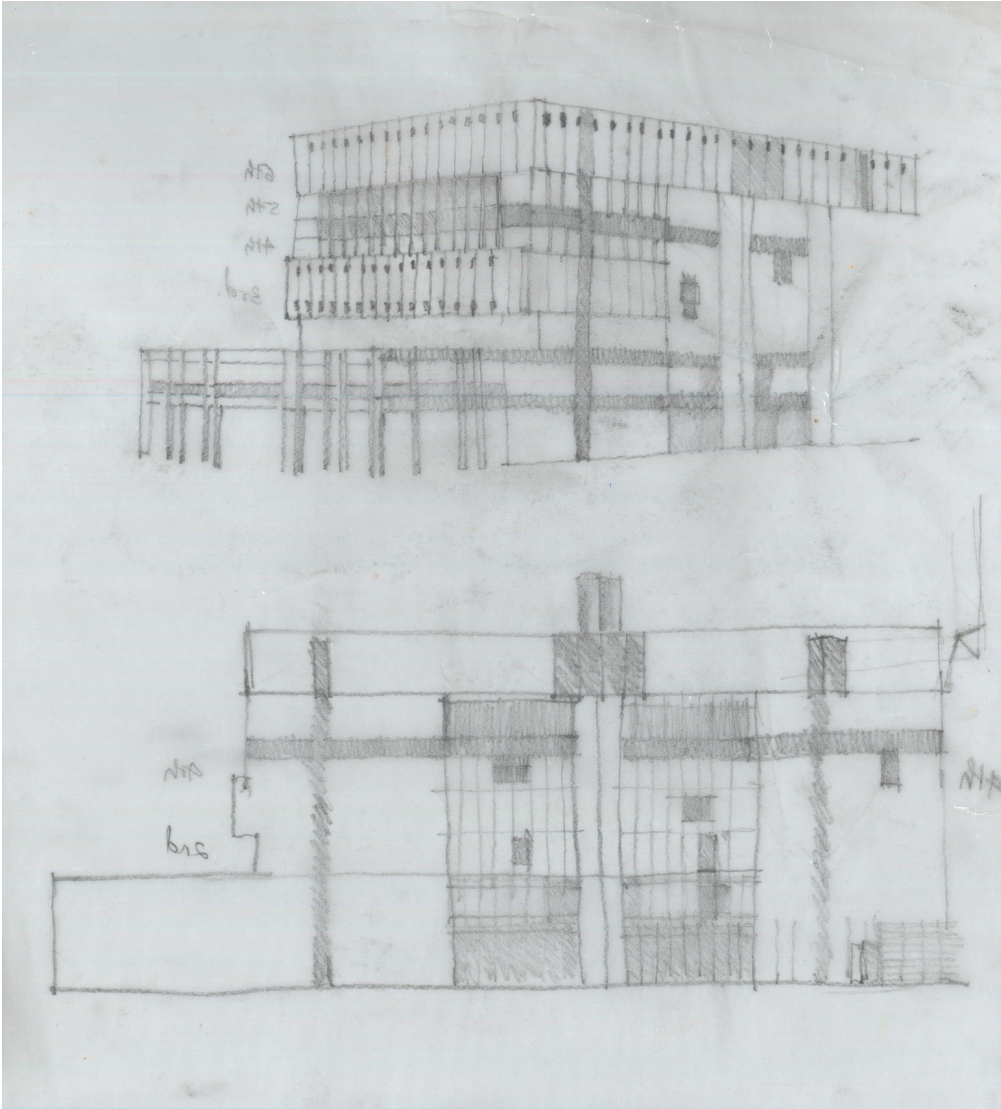
entrance resolution





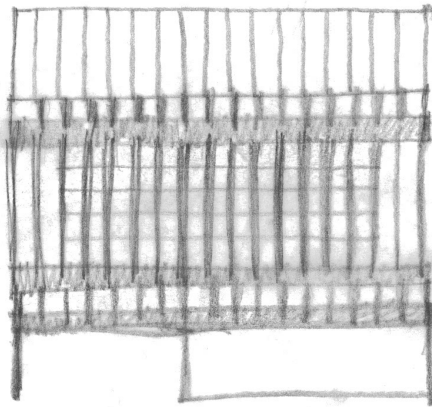
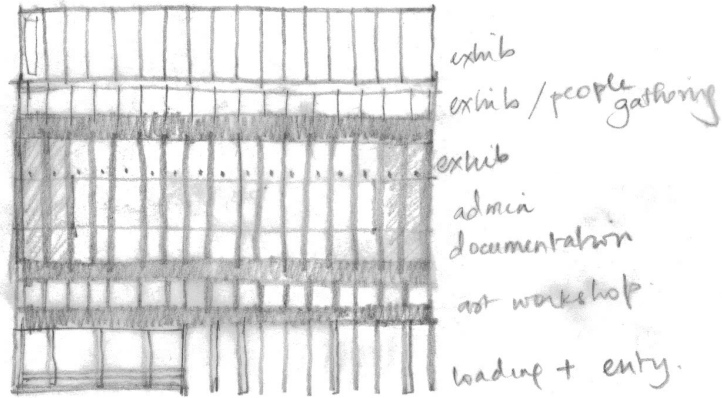
elevation strategy

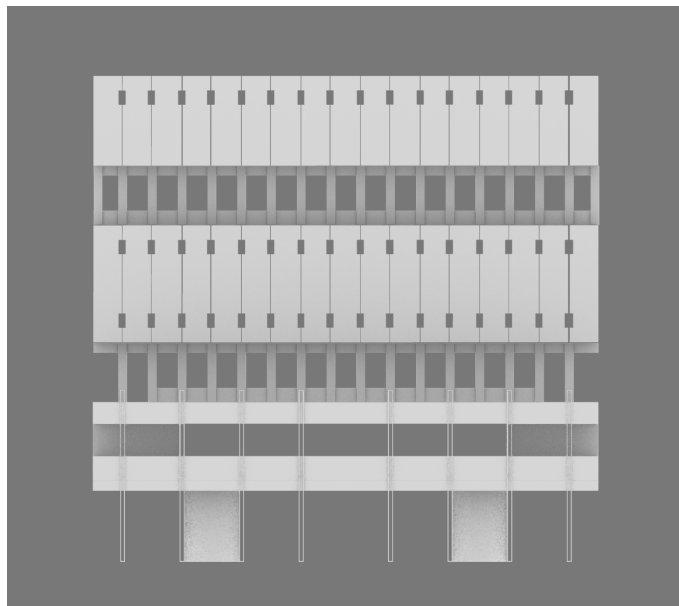
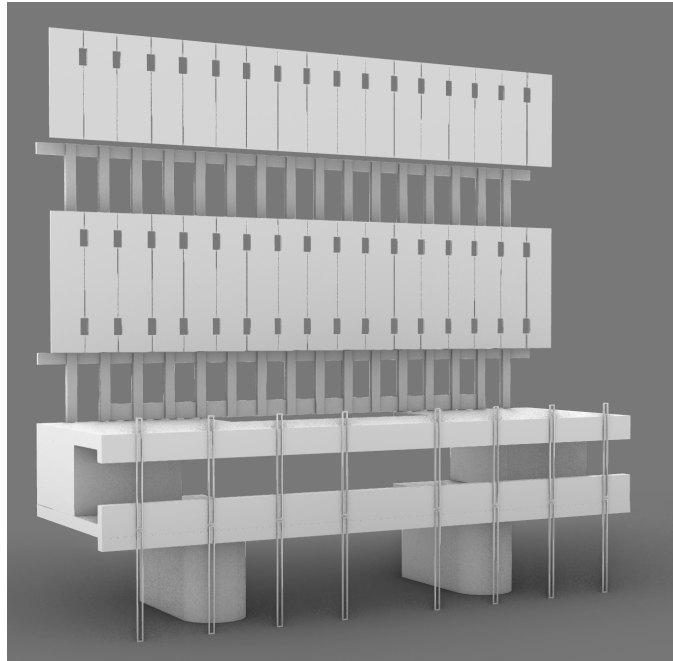




Trying to work out the geometry in coordination with the existing facade proportions

elevation strategy

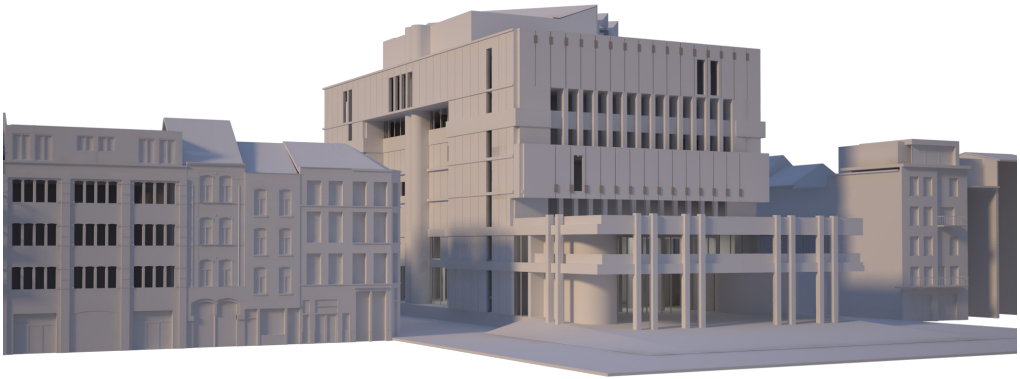
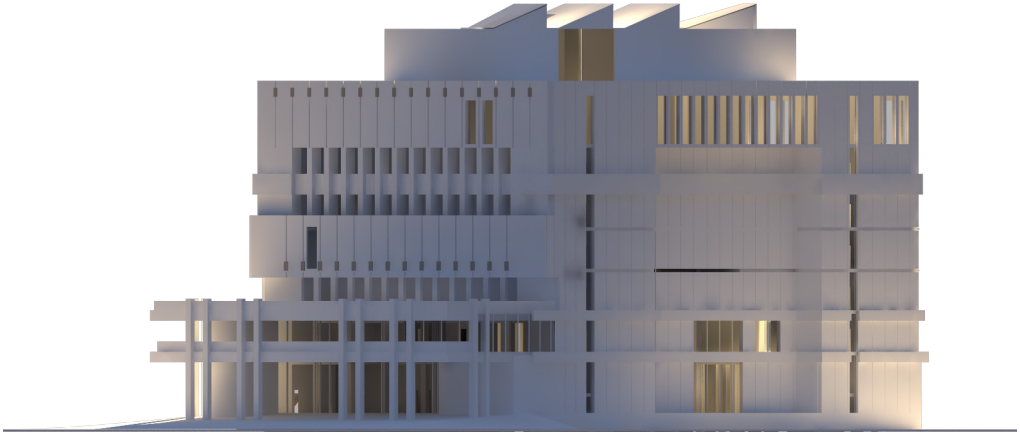




Trying to work out the geometry in coordination with the existing facade proportions

elevation strategy



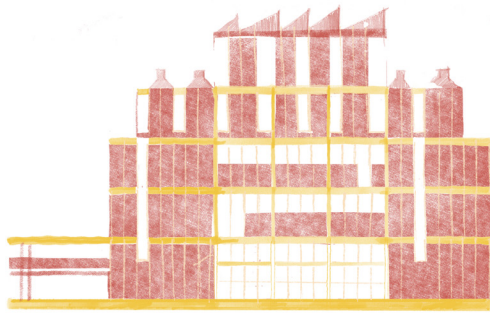


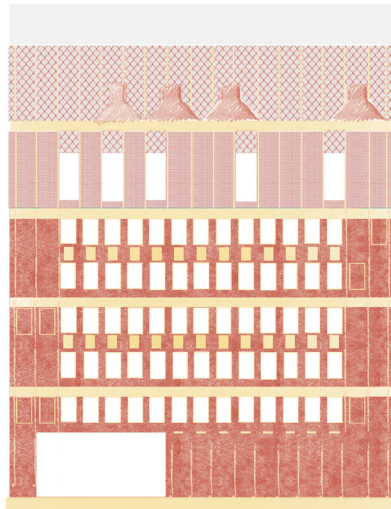
Using abstract rendering to arrive at facade materiality

elevation strategy



Student Project - A.Caruso Studio, ETH





07

materiality

managing energy in museums

ceramic

facade

finishes

interior resolution

inquiries

Is it possible to use river water for heating and cooling?

how do you replace services in an existing building?

can you put HVAC system in basement?

how do you adjust for technical flexibility?

How does the climate strategy change in the summer and winter months?

Would the collection component be colder than the exhibition component as artworks would stay for longer duration in collection galleries?

Heating

* use hydronic (Low Temperature Hot Water or Medium Temperature Hot Water) heating systems where possible (i.e. hot water from a boiler or other heat source). Water-based systems enable good controllability if appropriately designed and should therefore result in much more stable temperatures within critical spaces. In most instances, gas-fired boilers result in significantly lower carbon emissions than electricity generated by coal-fired power plants, particularly when transmission losses are taken into account. Gas is also currently cheaper than electricity.

* If electric heating systems must be used, ensure they are thermistor controlled (i.e. have infinitely variable rather than stepped control) so as to ensure more stable conditions.

Correlated Colour Temperature

Correlated colour temperature (CCT) of a light source is a measure of the hue of the white light output of that source.

Colour temperatures of less than 3500 K are commonly referred to as "warm white". The range between 3500 K - 4500 K is "neutral white" and above 4500 K is "cool white". 1

As a general rule, the lower the CCT of a light source, the warmer the appearance; and the higher the colour temperature, the cooler the appearance of the light source.

Incandescent tungsten light sources, which used to be the dominant source of light in museums and galleries, have warm white colour temperatures typically ranging between 2700-3200 K, unless manipulated using a filter to appear warmer or cooler.

Energy Hierarchy

One of the greatest challenges for today's museums and galleries is to reduce their energy consumption, while maintaining their specific functional needs. Typically, these buildings consume energy, principally in the process of environmental control in mediating between the external climate and the internal environment. Lighting and equipment also consume a significant proportion of energy.

A possible optimum approach to reducing a museum or gallery's energy usage is outlined below:

- * Minimise energy consumption - through high efficiency building envelope (passive initiatives);
- * Efficient energy use - through high efficiency systems and smart operation;
- * Maximise on-site renewable energy production - solar hot water, thermal, photovoltaics, wind;
- * Encourage operational training and education - by providing building user guides.

CLIMATE CONTROL

Organise exhibitions to suit level of conditions required

Tailor exhibitions where possible so that those requiring higher levels of environmental protection are together and/or consider display cases/local conditioning, therefore providing the potential to limit the number of highly conditioned large exhibition/storage volumes.

Zoning

Zone systems so that only areas requiring higher levels of environmental control are receiving it.

Position of collection items

Locate items requiring tighter environmental controls in areas that have good passive control and away from sources of solar gain etc.

- Practical Guide

Temperature and humidity have to be kept stable, otherwise they can damage the art works. The KMSKA has installed a high-quality air-conditioning system, the advanced features of which include object environment control, which uses an air curtain to keep the air clean. We're testing it out for a full year - vital given that each season is different.

Through this roundtable process, the team concluded that a seasonally adjusted relative humidity setpoint could be used while still maintaining acceptable conditions for artwork and still maintaining a Class A rating! Concurrent temperature control was specified to be $72.5^{\circ}\text{F} \pm 2.5^{\circ}\text{F}$ ($22.5^{\circ}\text{C} \pm 1.4^{\circ}\text{C}$).

This relaxation in humidity control allowed the design team to consider centralized, rather than zonal, humidification systems. Zonal humidity controls can handle wide variations in humidity loads from people and infiltration, but they cost more, have higher maintenance costs, and are less energy efficient. Centralized humidity control, on the other hand, relies on low zone humidity loads from infiltration, but the relaxed humidity setpoints in along with a tight envelope, allows it to provide acceptable control because the infiltration loads tend to vary in the same way as the humidity setpoints.

The concept behind central humidification is to maintain a nearly constant supply air condition: saturated air with a dew-point temperature just above that at the lowest acceptable space temperature and lowest acceptable relative humidity, in our case 70°F (21.1°C) and 45 relative humidity, where RH is adjusted based on time of year as discussed above. For zones that are unoccupied with low cooling loads, the resulting space condition is the "unoccupied" point in Figure 2. For spaces that are fully occupied, the room temperature is allowed to rise to 75°F (23.9°C) and, with the moisture added by people, the resulting condition is the "Fully Occupied" point. Thus, with a single supply air condition, all spaces can be maintained in the required humidity range provided humidity loads from infiltration, especially of cold, dry air, are small. Where they are not expected to be small, e.g., at entries, local humidifiers can be added to augment the centralized system.

In order to correct external imbalances, air needs to be heated and humidified in the winter, and cooled and dehumidified in the summer. Such conditions not only put high demands on the HVAC system, but present the design team with additional factors to consider when selecting system components.

It is always ideal to plan for a larger mechanical room to locate all terminal variable air volume boxes, heating coils, humidification coils, condensate pumps, etc. This will lead to equipment that is easy to access and can be cared for properly.

In fact, here are 4 major benefits of properly located and easy-to-access HVAC equipment:

Reduced maintenance effort, which leads to;

Continuously acceptable indoor air quality in gallery spaces

Reduced risk of system failure and possible damage to valuable artifacts

Improved longevity and total lifecycle cost of your system

Finally, one more important consideration when locating variable air volume terminal units in a central location, is that all distribution ductwork will be low pressure ductwork from the mechanical space to the occupied spaces. This equipment will be larger than typical medium pressure duct shaft, which means it must be coordinated with the architecture team for space planning while also ensuring that all dampers in and out of shafts are accommodated and remain accessible.

To summarize, equipment accessibility, equipment behavior, spatial needs, and malfunction consequences should all be carefully considered when planning the HVAC design for a museum space. Each of these factors can influence the ease and cost of system maintenance and repair, as well as avoid costly shutdowns and disruptions to the museum itself.

However, this had been installed which could be switched over automatically by the building management system for runtime balance and during failure mode

Critical to them was the creation of a stable environment around 20°C and 50% relative humidity.

International Position on Environmental standards

- * Temperature - typically between 15-25°C with allowable fluctuations of +/-4°C per 24 hours;
- * Relative humidity - typically between 45-55% with an allowable fluctuation of +/-5% per 24 hours;
- * Where storage and display environments experience seasonal drift, relative humidity change to be managed gradually across a wider range limited to 40-60% to minimise stress on collection items.

Environmental Guidelines - IIC and ICOM-CC Declaration

- Museums and collecting institutions should seek to reduce their carbon footprint and environmental impact to mitigate climate change, by reducing their energy use and examining alternative renewable energy sources.
- Care of collections should be achieved in a way that does not assume air conditioning (HVAC). Passive methods, simple technology that is easy to maintain, air circulation and lower energy solutions should be considered.

Rate of change

For museums that utilise seasonal adjustments to save energy, adjustments should be made very slowly over a number of days to ensure conditions within the space do not fluctuate outside of the above limits.

- Practical Guide

3.2.1 Ventilation

Minimise outside air quantities as far as possible whilst taking account of statutory requirements for occupants and pressurisation requirements. On larger systems consider dedicated outside air units that supply the required quantity of outside air onto recirculation units serving gallery/museum spaces at a set temperature and humidity. With this approach, the recirculation units will not be subject to the constant fluctuations of the outside air thereby aiding stable control of internal space conditions.

* Cooling and Dehumidification

All dehumidification equipment should be effectively and efficiently drained, with drains located outside of exhibition or storage areas.

Face and Bypass arrangements around AHU (Air Handling unit) chilled water cooling coils should be considered where physical space is available within AHU plant rooms so to remove (or significantly reduce) the requirement to reheat air back up to supply temperatures after it has been overcooled for dehumidification purposes.

- Practical Guide

inquiries

Balance between any mundane facade and museum facade ?

How do you make it dynamic , without making it gimmicky ?

how do you balance between a office/courthouse building and a
museum building ?

Do you reinterpret tiled facade in any way ?

How is the facade of existing buiding different than your new
additions ?

How id the office space facade different from exhibition facade
vs. library

how demonstrative does it need to be ?



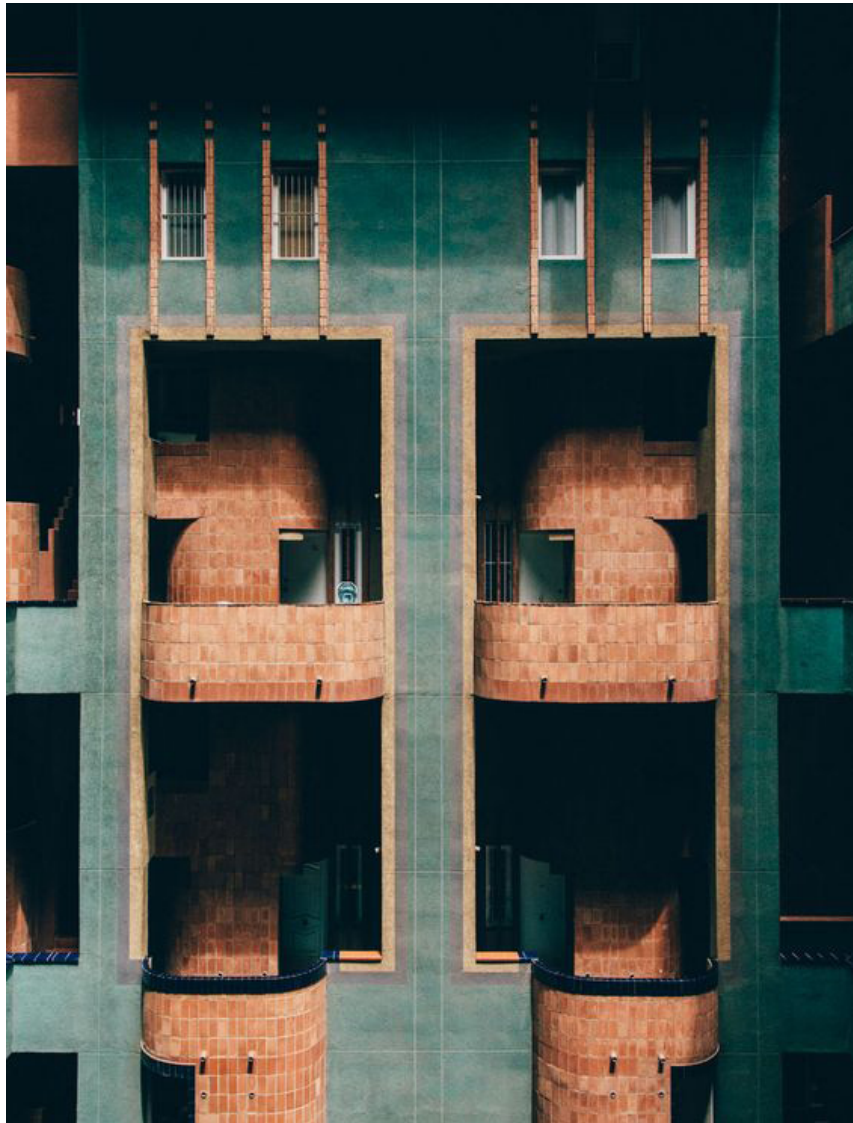
Dawid Roszkowski - Synagogue for Jewish Liberal Community

subtle gradation of ceramic is used to avoid looking like bland mass; window shades added to create a contrast with the tiled facade



Aldo Van Eyck - Hubertus House

Window frames with varying colours are used to indicate the program within the building
Sun shades again chosen to stand out from the existing facade.



Ricardo Bofill - Walden 7

The primary mass of the building relates to the colour of familiar brick facade but the green tiles add another depth not only through colour but also shading created within the facade



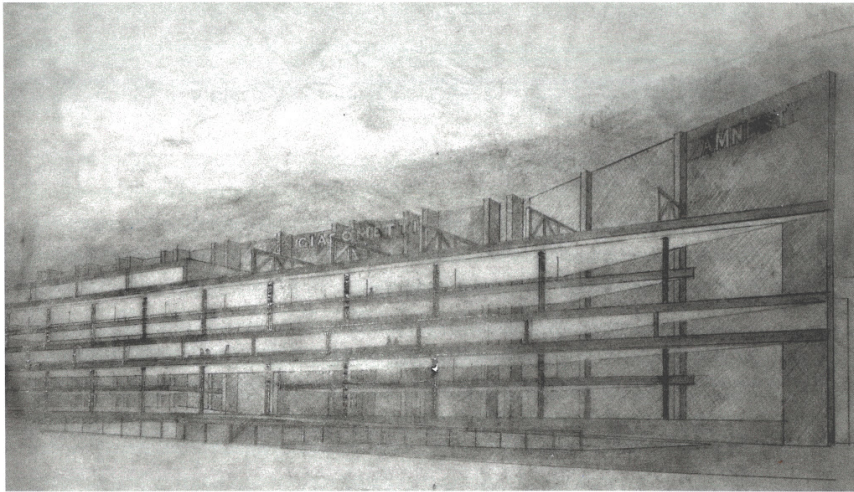
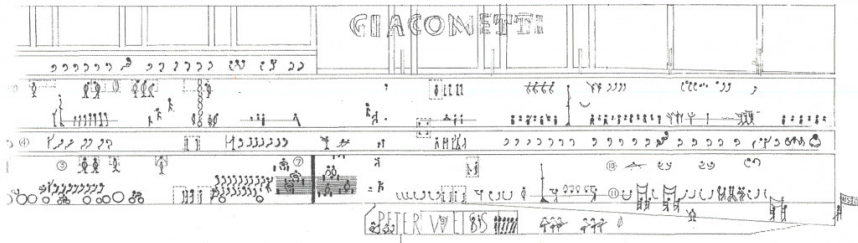
James Sterling - Galería Estatal de Stuttgart

Bold fun colours are used through the structure to add an element of play



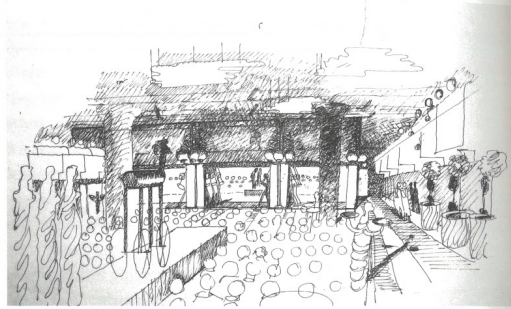
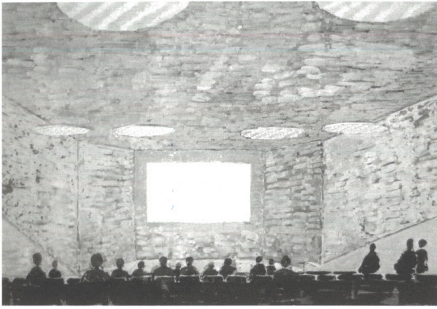


rhuis as musical
etch wall
ete wall, Celsing
1



drawings, but a series of bars which are set against it like giant, vertical buttresses renders it into a huge, deep, concrete element supporting the floors of the building. The spacing of the buttresses creates a rhythm of alternating wide and narrow bays repeated along the whole length of the wall, and as these elements extend to the top, they form part of the silhouette, appearing as crenulations and breaking the horizontality, allowing the building to weave itself into the sky above the square.

There are two incidents that break the relentless repetition of verticals. Where the wall crosses a pedestrian passage connecting Sergels Torg with the alley (leading to Brunkebergstorg) between the bank and the theatre, the alternation of bays is interrupted, and two successive wide bays establish a joint, or a centre, between the western and eastern stretches of the wall. Towards the western end, where the building meets Drottninggatan, the wall suddenly changes direction leaving a small triangular square on its south side. Here, the buttresses become piers that merely indicate the repetition of bays, whereas the thick wall becomes a thin sheet of concrete cutting through the corner of the street and the square. The main wall and the infinite repetition of walls along the plane turn into a definite object, its extensive nature powerfully and brilliantly concentrated in an intense urban moment: a line terminating in a point. At the eastern end, the wall simply



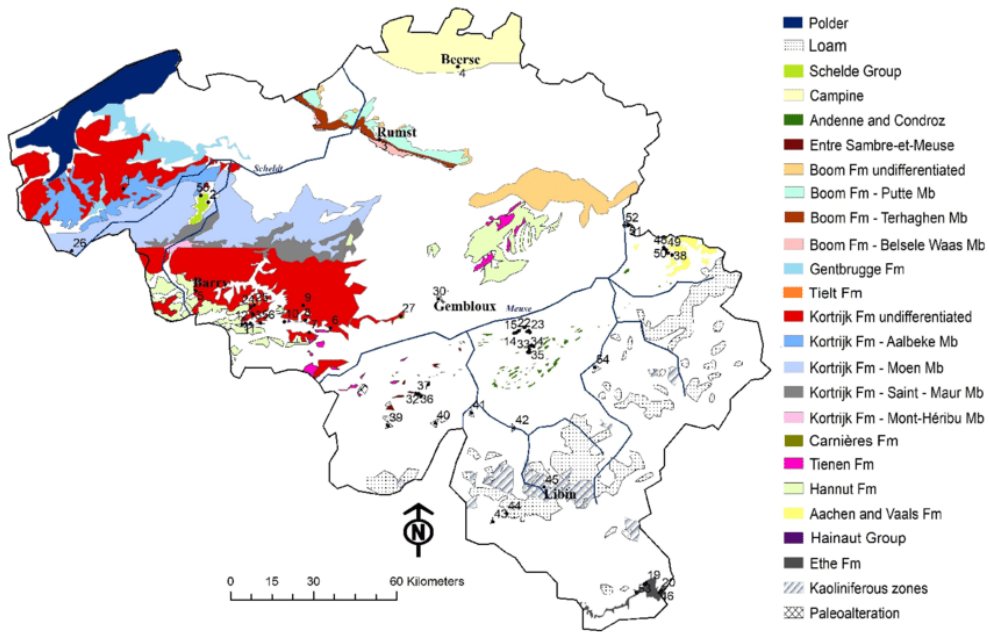
Drawings by Peter Celsing; Kultur huset ;

inquiries

what are the varying kind of ceramic facades ?
How is glazed ceramic different than matt one ?
how does the building read with ceramic facade ?

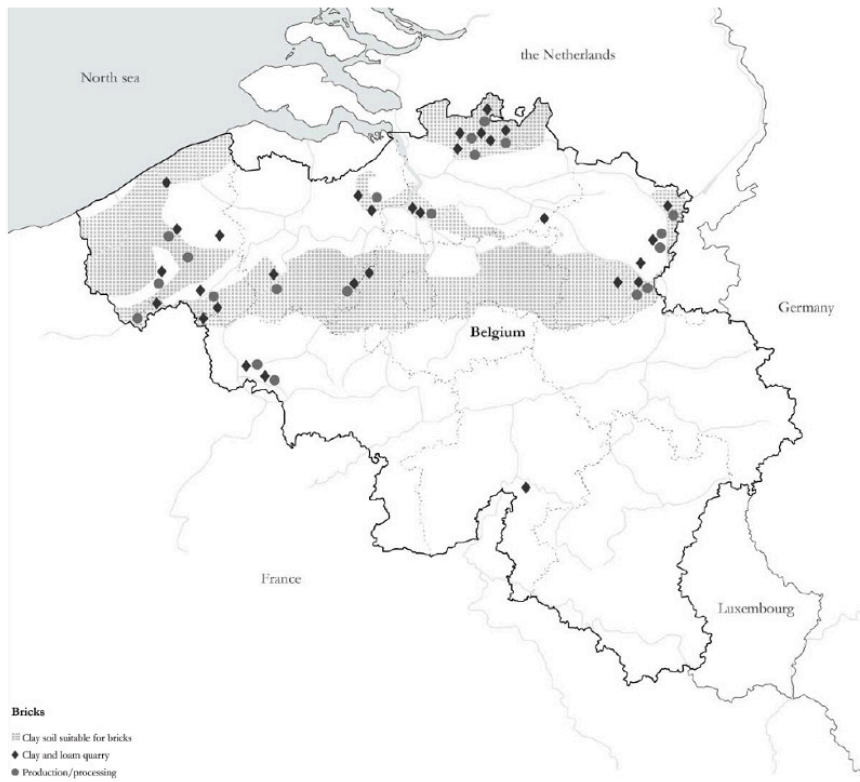
why ceramic ?

ceramic



clay deposits within Belgium

-: https://www.researchgate.net/publication/337776317_Evaluation_of_Belgian_clays_for_manufacturing_compressed_earth_blocks [accessed Mar 01 2023]



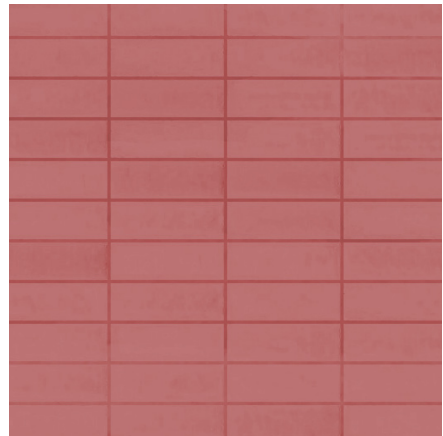
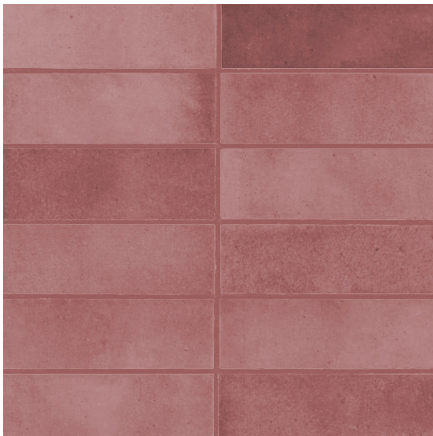
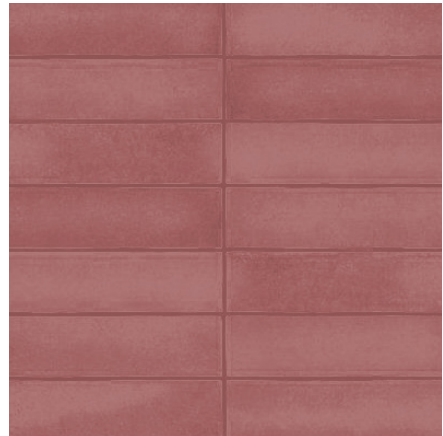
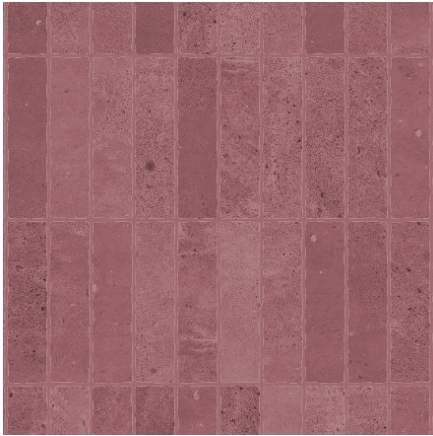
*Map of Belgium, showing the locations where clay is mined and manufactured into bricks
- Produced during collective research as part of studio*

Ceramic Cladding ADVANTAGES

- Rear ventilated facade - air pocket that acts like insulation
- Dry construction
- No maintenance
- Doesn't fade
- Reusable after demolition

Rear-ventilated facades with rainscreen cladding achieve considerably smaller heat losses in the winter as well as reliable heat protection in the summer. In addition, they have a positive influence on the sound-insulating effect of the outer wall: the degree of sound insulation is increased

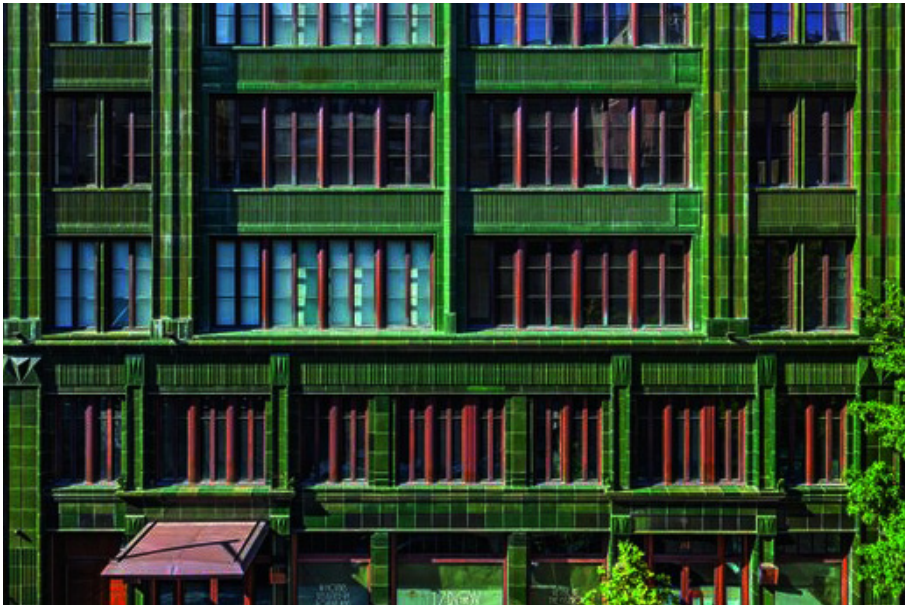
if you put dark ceramics next to each other because of the light and reflectivity, you don't really notice the joint in the texture if you do it in the same ceramic, in a pale color. Mm-hmm, you notice the joint as a shadow.





Marge Arkitekter AB- Sergelhuset Building

Ceramic tiles used ornamentally to add depth within the facade; however these are not dry cladded therefore would require skilled labour to dismantle in the future



Roman Williams - The Fitzroy

inquiries

What does it mean to build an exhibition space in found environments ?

What is the environment you have found ?
How do you then decide finishes based on the environment?

understanding how architects have responded to certain building materials to create a specific environment

Tate Modern -

Industrial Look : Metal grates on the floor - ventilation

Rough Wooden flooring - impression of a normal - non white room

Spaces of Rest and Spaces of Movement

There is Art of various scales/ Availability of Turbine Hall allowed artists to produce certain art works; but also to note that it is in London and not Antwerp

There is unity in Gallery spaces.

Architects make clear statements.

"The walls have to be solid (and not sound like a woodpecker hammering every time they are touched). The walls have to stand on the floor and not be floating objects cut off from it by a horizontal slit running around the space. The floor and the ceiling should be presented as undivided spaces and be seamlessly connected to the four walls. Although grids and screens are many architects' favourite children, they are annoying in exhibition spaces."

Palais de Tokyo

Bourriaud's theory on Relational Aesthetics guided the script

of Palais de Tokyo which art in Palais de Tokyo should try to set up intersubjective experiences in which importance is explained on the whole instead of in the privatised space of individual utilisation.

They expected the minimised work to maximise the economy, and the maximised capacity of the building to maintain the potential freedom.

Palais de Tokyo also need to perform itself to achieve a large group of visitors.

Bourriaud is making careful effort to distinguish contemporary work from that of past eras. The major difference, as he sees it, is the shift in disposition toward social change: rather than an "utopian" plan, today's artists look for just to discover temporary arrangements in the without further ado; rather than attempting to change their surroundings, artists today are basically "figuring out how to occupy the world in a better way"; rather

than anticipating a future utopia, this art sets up working "microtopias" in the present.

The columns were left untouched if they are still stable, only the place where structural failure might happen were reinforced, fire safety of the building was secured and technical services were improved.

architects should have the vision to look further on the building
Every existing situation has its own special quality and you have to take your time and be curious in order to understand it.

There are no absolute boundaries between the building itself, circulations, public spaces and exhibition spaces.

Considering the recent changes in the museums' societal role Kenneth Hudson's words seem to hit the nail on the head: "One can assert with confidence, that the most fundamental change that has affected museums... is the now almost universal conviction that they exist in order to serve the public". Due to this paralyzed state, where museums became totally dependent on masses of public in order to function, the broadening of their missions, extending their agenda and applying complex marketing strategies became crucial.

Pompidou

. Art and architecture reacted to that political scenario at the time/
Indeed, social movements used art to express their ideology, and to a certain extent, governments got engaged in shaping buildings without manifesto if not the one addressing the new technologies.
In architecture, particularly, this was possible also for the epistemic changes occurred in the way the form-finding approach got less signified, making room for exploration in technology of construction propelled by the megastructure fascination. That's the literal case of the Centre Pompidou, sprout out from the idea of informational technology and the engagement of the state in generating a machine for culture, addressing a publicness never seen before.
Art also got on the street exiting the realm of the formality and the elitism of the Museum space to bond and inform the Masses.

Their works draw attention to the often hidden connections behind society, politics, business and art.

Dan Graham

His artistic interventions took place on a variety of places such as the gallery space but also the magazine, on a stage, in a movie theatre, on television or on the streets.

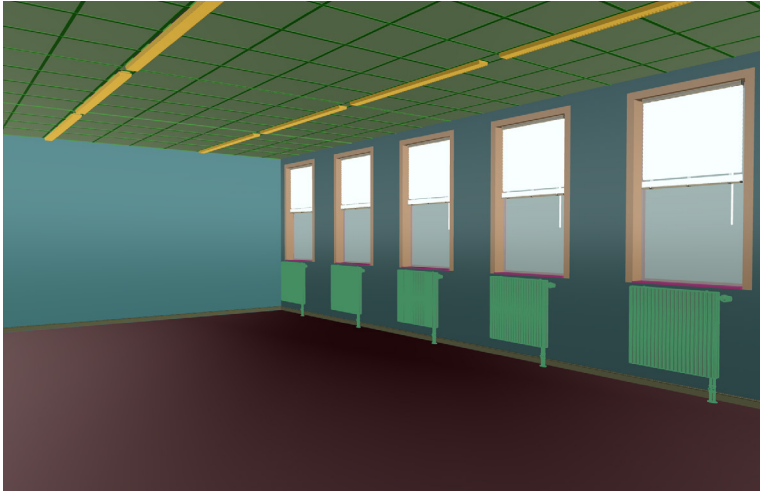
Abteiberg

This entrance hall has a wide variety of forms that do not close off or limit the space, but allow it to flow into the adjoining rooms. Side rooms open up at the edges of the open space like small pockets. Columns and neon lights order the structure. The marble floor flows through the adjoining rooms, without thresholds.

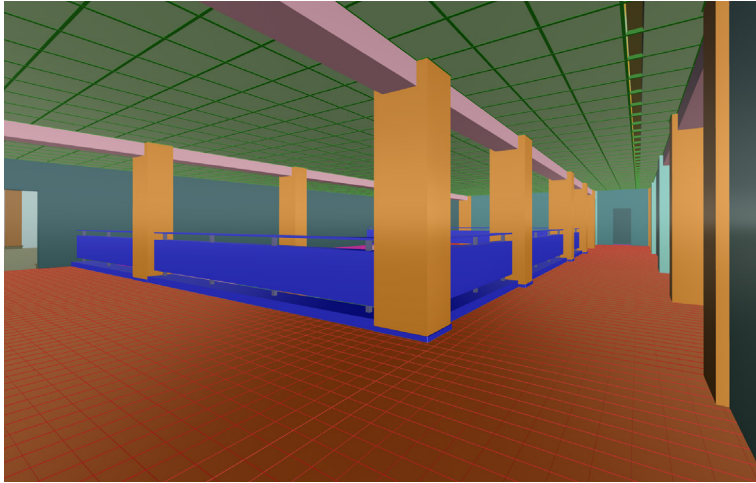
The skirting along the walls, stairs and their balustrades resembles a in stone that winds through the entire house.

Digressions arise when, with the help of surprising turns, detours become possible. These turning points are marked by sculptural threshold objects.

Especially in the exterior arrangement of the volumes or the building and in the language or materials and symbols, hollein's strategy or deliberate heterogeneity can be felt



Modeling existing towers to take precise decisions



Modeling existing towers to take precise decisions



Found environment reference : Images of WEST Den Haag; former American Embassy by Marcel Bruer turned into an art gallery

art is shown in a very corporate office building as is. This makes one question about the limits of art pieces shown with the space



David Chipperfeild - AM KUPFERGRABEN 10

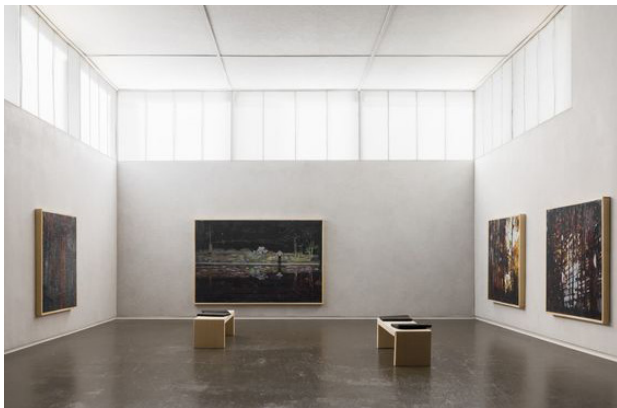


David Chipperfeild - Folkwang Museum



Examples from Studio A.Caruso at ETH

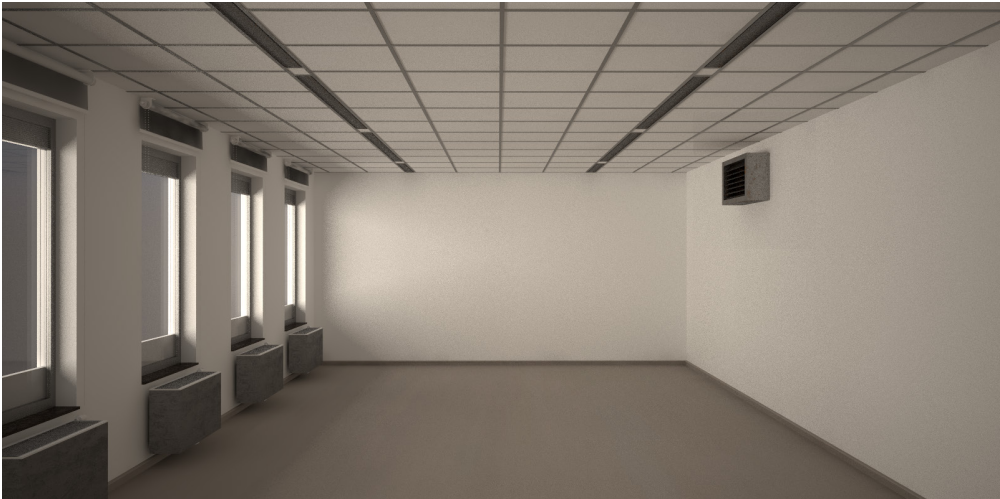
references to understand the broad variety of museum spaces in terms of lighting, finishes, scale.



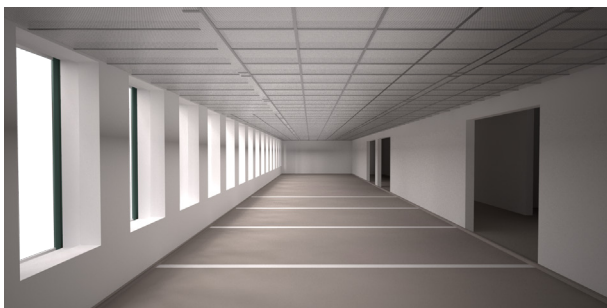
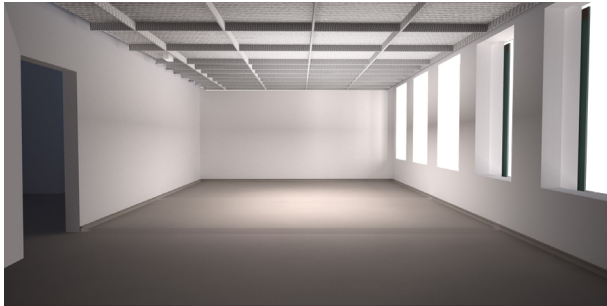
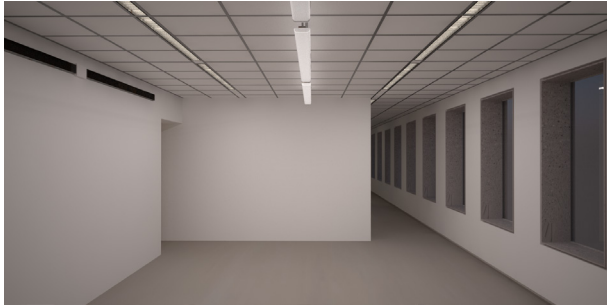
inquiries

Experimenting with light fixtures, flooring and ceiling options
where the main concern was how much does one intervene in
found environments ?

how much do you keep the existing grudge ?
How do you quantify the bare minimum ?



Existing office room in the North Tower



Trying out ceiling finishes ,
option 01 - existing fiber tiles with
altered light fixtures

Option 02 - Wooden ceiling painted over

Option 03 - Painted gypsum board

Option 04 - Metal mesh ceiling

What does a space for co-production look like ?



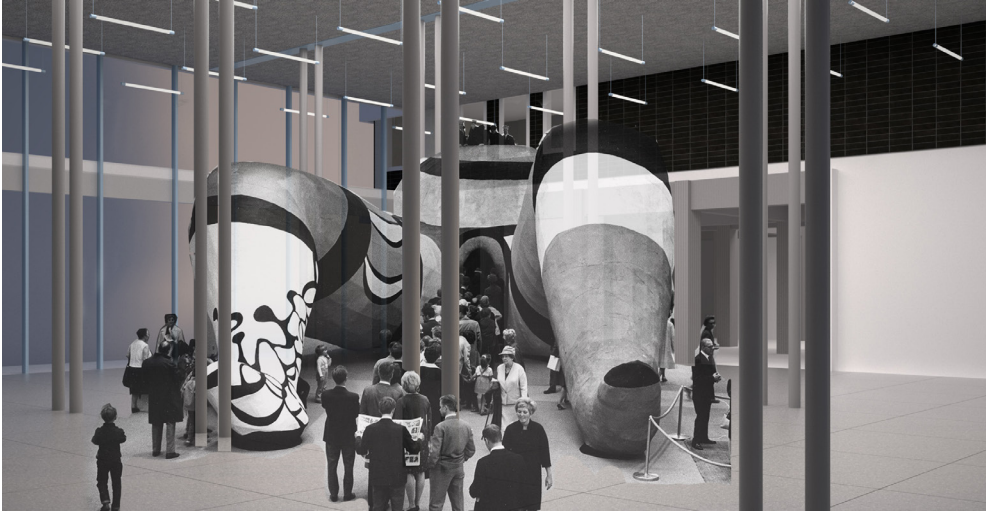


many contemporary art museums trying to reach out to different publics host multiple workshops within the gallery spaces.

There is a very informal character to these spaces, the furniture is moveable by single person, there is familiarity within these furniture pieces, there is a sense of casualness.









Lina Bo Bardi , SESC Pompeia



Peter Celsing, Kultur Huset



51N4E, Skanderbeg Square



51N4E, Skanderbeg Square



51N4E, Zin



51N4E, Skanderbeg Square



Textures from Antwerp's Pavement patterns

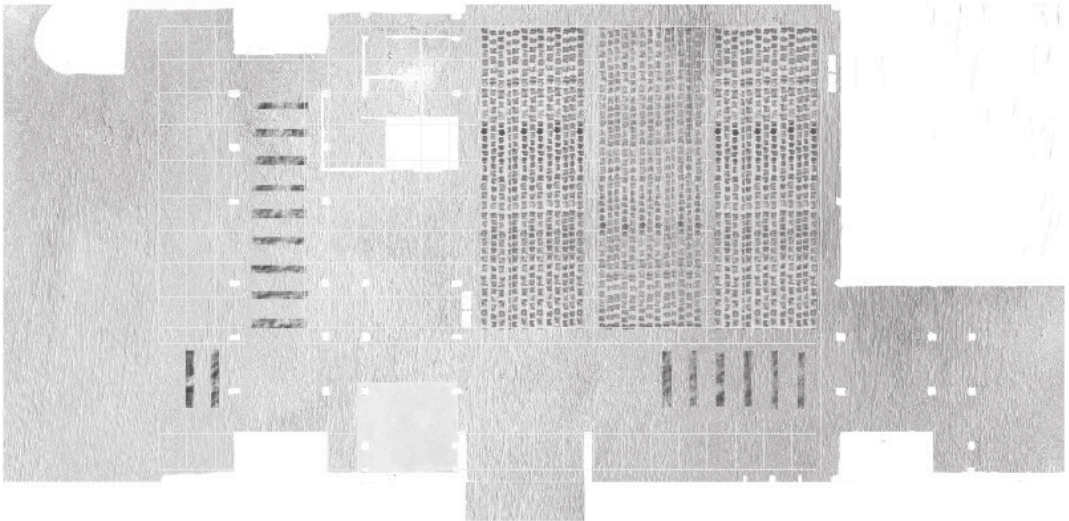
Floors: durable beauty

The success of museums brings with it an enormous responsibility: to guarantee uninterrupted access to art works in the best possible conditions. A large museum may attract many thousands of visitors every day, subjecting all the surface coverings, particularly the floors, to intense wear and tear. Is it desirable to have to close a room because it needs to be refloored? The answer is obviously "no". So along with wear resistance, further important requirements include ease of maintenance and accessibility. A floor must be easy to wash, where necessary with the aid of industrial equipment. It must also have non-slip characteristics and be completely safe for visitors. All of these characteristics are found in ceramic surfaces, as evidenced by the UPEC standard which specifies the parameters of trampling wear, punching, maintenance frequency and chemical resistance. This classification is specific to France, but each European country has its own version. Durability is crucial to the choice of a ceramic tile, but it is not the only consideration. Aesthetic issues are also important, particularly size. Large or small? Ever since they were first launched onto the market about ten years ago, large porcelain stoneware tiles have demonstrated excellent levels of strength and stability. Given the small number of joints, the choice of 320x160 cm size tiles can create the illusion of a poured resin floor. However, 60x60 cm tends to be the most popular size for floors as it guarantees ease of installation while maintaining a sense of proportion between the dimensions of the tiles and the size of the room. The architect may opt for smaller tiles if he wants the opportunity to experiment with the layout of the joints.

Other technical aspects must be taken into account when laying ceramic tiles, such as compatibility with underfloor heating systems which emit heat uniformly while remaining out of sight. Ceramic tiles offer almost unlimited aesthetic potential. Surfaces imitating stone, concrete, steel or wood allow for seamless integration with an existing building, for example when adding an extension to a museum with stone floors or concrete walls. The use of different gloss levels can also offer interesting design opportunities. And due to their non-porous nature, many porcelain tiles proposed for interiors are also suitable for use on terraces and verandas, blurring the distinction between interior and exterior - a key aim of modern architecture - provided of course that the substrate is capable of compensating for the differences in level between adhesive and floating installation.

<https://www.parkside.co.uk/product/technical-stone-marble/>

<https://www.parkside.co.uk/product/urbanconcrete/>



Flooring Plan, Ground Floor



Exhibition space, Ground Floor



Reception lobby , Ground Floor



Library, First Floor

08

structure

why steel?

incorporating the structure

skylight details

inquiries

- + what material would be ideal ?
- + what things to consider while retrofitting
- + how do you add floors on top of existing building ?
- + how can you remove a structural wall and add columns ?
- + how can existing buildings be refurbished so that they use less energy and can be supplied from cleaner energy resources ?
- + how to reduce carbon emissions ? (decarbonisations playbook)
- + what structural system can accommodate different heights?
- + what is the load bearing capacity - museum vs. courthouse
 - +are you stripping down to the structure ?
 - + inventory?
- +what is the most convenient structure for adaptability?

The versatility of steel gives architects the freedom to achieve their most ambitious visions.

Its strength and durability coupled to its ability to be recycled, again and again, without ever losing quality make it truly compatible with long term sustainable development.

Building owners value the flexibility of steel buildings, and the value benefits they provide, such as the light, open, airy spaces that can be created, making it ideal for modernisation, reconfiguring, extending or adapting with minimal disruption, and without costly and sometimes harmful demolition and redevelopment.

Even without these benefits, steel is often the first choice on the basis of cost alone.

Acoustic performance

Steel-framed buildings can comfortably satisfy the acoustic performance requirements for residential buildings, as set out in Approved Document E[1]. As with any framing material, including concrete, careful detailing is needed for floor finishes, walls, service penetrations and flanking. Robust Details are available for these elements, providing proven and reliable acoustic performance. Details are available for:

Light steel framing systems

Composite floors

Acoustic details in SCI guidance (e.g. P372) are available for:

Light steel framing systems, including infill walls

Composite floors

Steel columns in blockwork walls

For external walls, where both acoustic and thermal insulation must be provided, infill steel-framed construction is the perfect solution. Insulation is provided within the frame, giving excellent thermal properties. In addition, infill solutions provide a robust wall with no gaps between the wall and main structure, which can be a problem with blockwork walls.

Structural steel solutions

Steel-framed structures offer the benefits most prized by designers and building owners, enabling large column free floor areas to be created along with minimum floor construction depths. Steel-framed buildings also require smaller foundations than concrete alternatives and can be erected in a fraction of the time.

The columns supporting steel-framed buildings are relatively small and can be easily hidden within the width of partitions. Composite floor slabs deliver significant advantages, enabling shallow floor depths to be achieved. Up to 400m² of composite floor decking can be installed by a single team in one day, with no requirement for extensive shuttering, propping, on site storage of materials and time-consuming striking of shuttering associated with concrete construction.

Broadgate.jpg

Composite construction, Broadgate Tower, London
Simplicity and adaptability

Steel-framed buildings provide safe working areas for other members of the build team and follow-on trades during the construction process. The fixing arrangements for services and ceilings are straightforward too, and simple connections to floor decking provide the flexibility to install new service arrangements during a building's lifetime[6].

Integrated services

In many modern commercial buildings there is a need to incorporate air-conditioning ducts and extensive wiring for IT equipment within the floor depth using false floors and ceilings. Steel-framed buildings are the ideal, cost-effective solution in these situations, since services can be integrated within the supporting steelwork. Steel can provide several long span solutions, all incorporating integrated services. Where service integration is not a factor, steel floors as shallow as 200mm can be supplied, using bespoke fabricated floor beams.

Future-proofing

Choosing a steel frame is a good way to ensure a long life for your building. Steel is durable and easily adaptable, particularly in comparison to the inflexibility of concrete structures. Steel-framed structures provide 'future-proofing' against changing service requirements, changes in technology or in building use. Over-provision of perforations in beam webs facilitates this future flexibility, allowing entirely new service arrangements to be accommodated within the structural steelwork.

Environmental Concern

Steel can be multicycled endlessly with no detrimental effect on its properties. When a steel-framed building is demolished, its components can be reused or returned to the steelmaking process to create brand new components. In the UK, 96% of steel construction components are recovered in this way. Globally, recycled steel accounts for 50% of new steel production.

Composite steel floors are given the highest (A+) environmental rating in the BRE's Green Guide to Specification[2].

Because steel structures are significantly lighter than concrete equivalents, they require less extensive foundations, which reduces the environmental impact of the build. If steel pile foundations are used, these can be extracted and recycled or reused at the end of a building's life, leaving no waste material on site.

Long-span steel solutions provide flexible clear span spaces that future-proof a building, offering an increased lifetime. Steel structures are durable and can be readily adapted, improving their economic viability as they can easily be updated or modernised.

Producing steel from secondary source steel scrap uses mainly electricity and emits significantly less. In fact, producing steel from secondary source steel scrap with clean electricity results in a very low-emitting circular material.

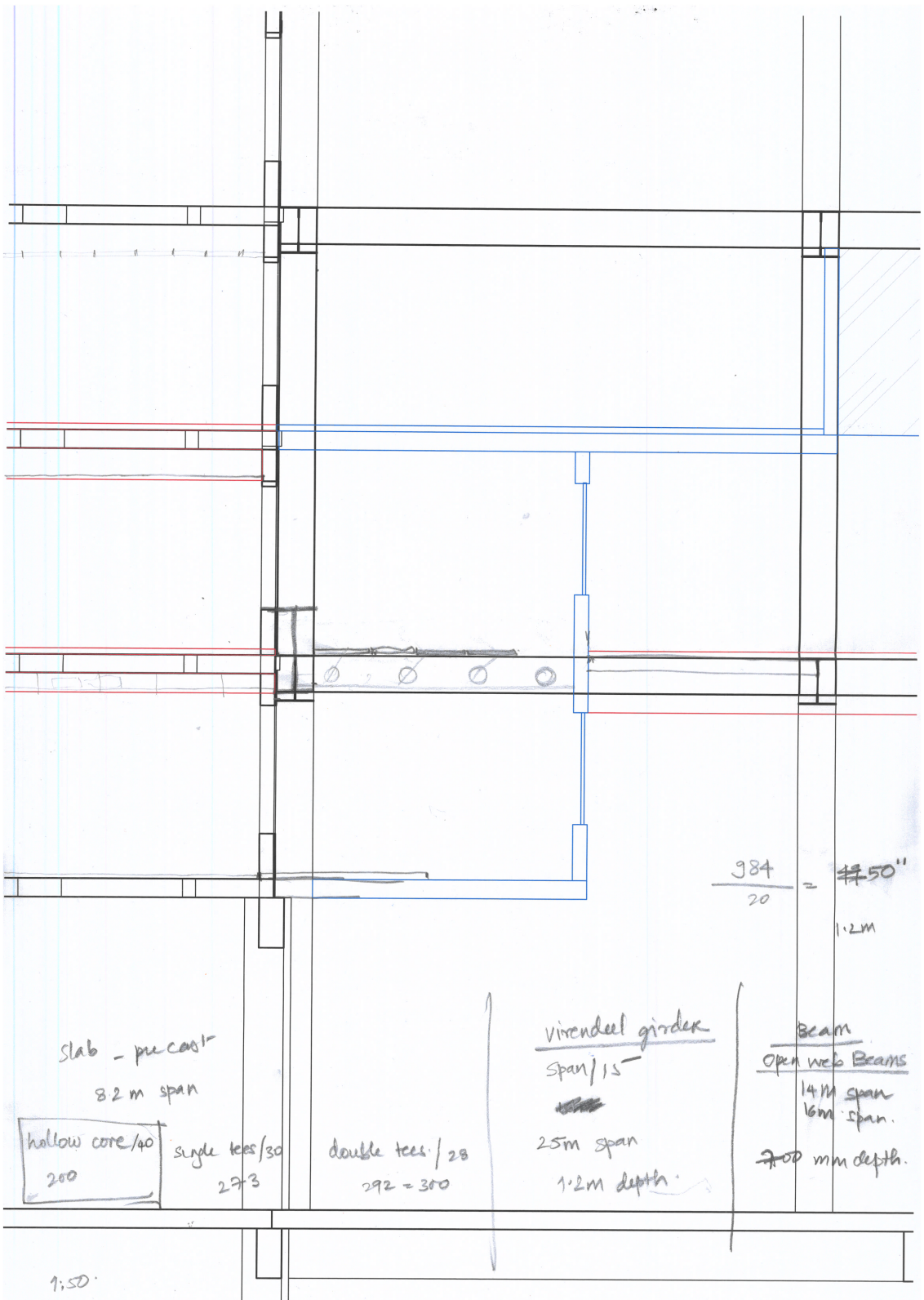
Economic Benefits

Fabrication in controlled factory conditions results in high quality, defect free components that produce very little waste during the construction process. Furthermore, steel structures are durable and require little maintenance, extracting maximum value from the resources invested in the structure and minimising its whole-life costs. Long span steel sections enable large open plan, column free spaces to be created inside buildings, providing flexible areas that can be set out in an endless variety of configurations. Such 'future-proofing' means that the building's use can be changed and the layout adapted many times - extending the lifetime of the structure. Short construction periods leads to cost savings in site preliminaries, earlier return on investment and reduced interest charges. Time related savings can easily amount to 3-5% of the overall project value, reducing the client's requirements for working capital and improving cash flow.

inquiries

8. What structural system can accommodate for different heights ?
 - What is your treatment for the extension ?
 - DO you want the building to be demountable ?
 - Do you want the building to be flexible for future use ?
 - Recycled steel ? How true ?
 - How carbon intensive ?

incorporating the structure



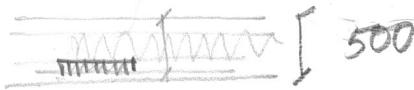
SECTION CALCULATION

Option 01

precast + open web beam
14m c/c.

1) floor finish = 100mm
+ heating
+ insulation +

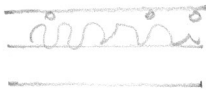
2) precast hollow core slab = 300mm.



14m span = 460 depth

30m span = 9m slab.

25m span =



Advantage
- choice of floor/ceiling finish

Disadvantage

→ 14m span

→ limited services movement.

Option 02

hollow slab.

70 - 120 cm.
↓ span.
30m.

25m → 1m

$$120 = 30$$

$$1m = 25$$

$$\frac{120 \times 25}{30} = 1m.$$

Disadvantage

Rigid floor-slab.

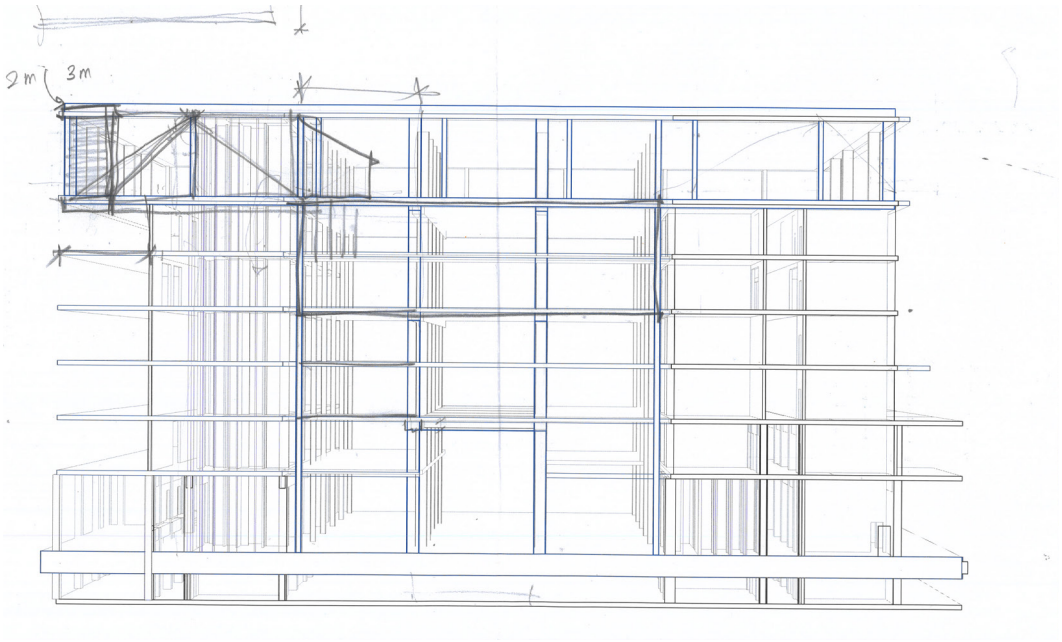
↓
concrete

can't have illuminated ceiling.

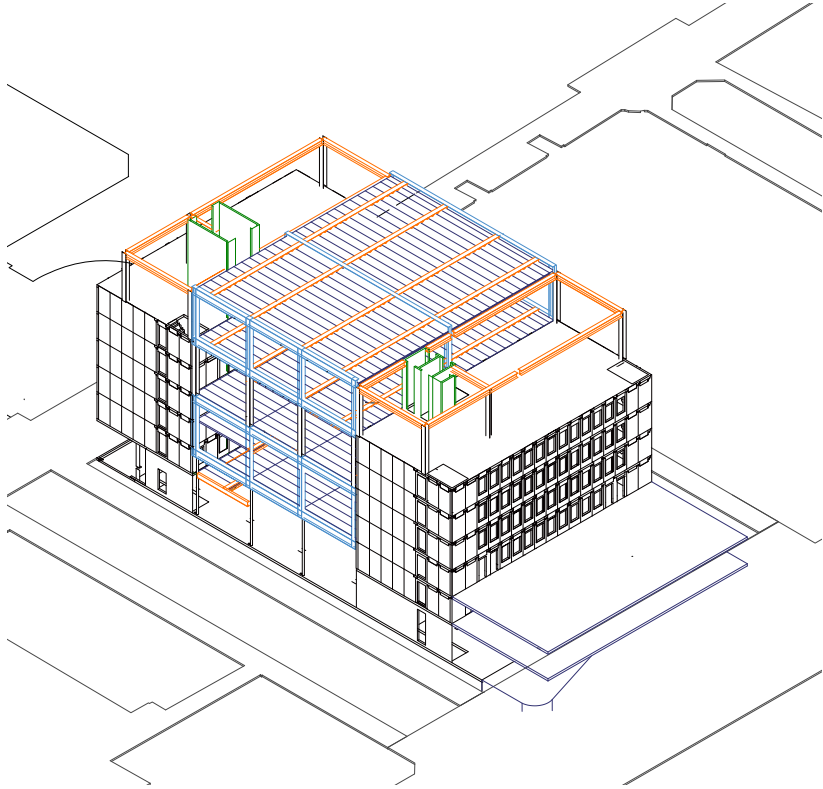
→ Noise cancellation X

Advantage

① free service moments.
② 20m span.

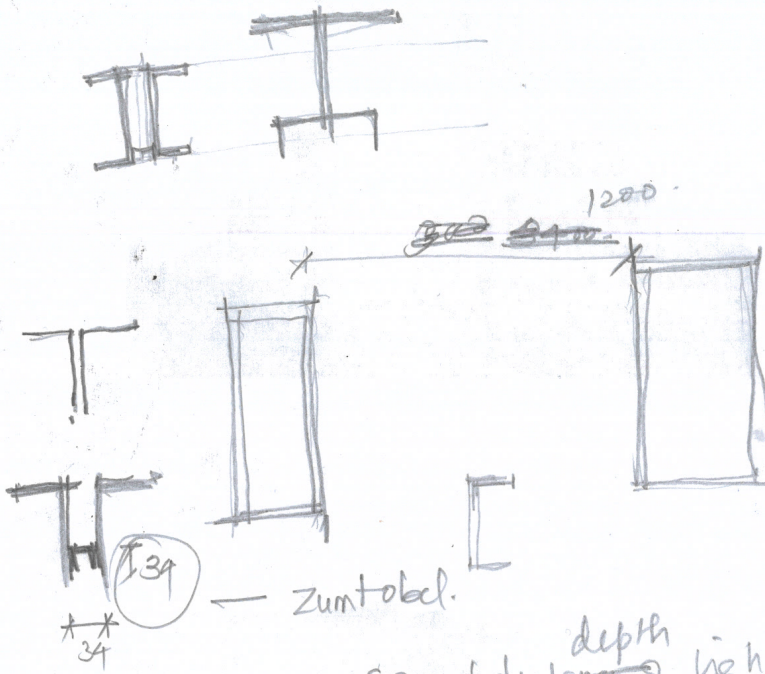


<p>3m - 4m</p> <p>130mm 0.9 - 1.2</p>	<p>Span - 6.5 - 7.5</p> <p>70 225</p>	<p>Span - 10 - 18m</p> <p>140 740 opening 400</p>	<p>4.5 - 7.5 - 10m</p> <p>slab 100 - 16m 200 - 2.5m 260 - 300 - 9m</p>	<p>10 - 15m</p> <p>130 533</p>	<p>6 - 9m</p> <p>15 700 solid</p>
<p>ices - under.</p>	<p>150mm raised floor 300 slab + beam 150 ceiling + lighting</p> <p>600 overall</p>	<p>150 raised slab 740 - Beam 100 - ceiling 50 - lighting</p> <p>1200</p>	<p>600 - 100mm</p>	<p>1300 - decking + 150 - raised 150 - ceiling</p> <p>1000mm - 13.5 1200mm - 1.5m</p>	<p>900mm</p>
<p>effective ht weight inner</p> <p>protection ge no. of columns ge floor thickness</p>	<p>- leveled soffit - thickness lesser.</p> <p>350 - 400 - slab thickness for 14m.</p>	<p>- large area - lightweight - cast effective</p>	<p>- no fire protection</p> <p>heavy steel work extra fab. great connection details. more work.</p>	<p>large area.</p> <p>3-5??</p>	<p>- smaller no of secondary beams.</p> <p>cautious detailing backlog of beams transport</p>



inquiries

David Chipperfield, St Louis Museum.



21 = 600.

300 = 530 (distance ^{depth} of light spreader)

90 = 160 (distance of glass from beam)

35 = 61.7 (thickness light spreader)

340 = 600

680 = ? 1200 (between beams)

170 = 300 (beam ¹²⁰⁰ width)

670 = 1100 (beam depth)

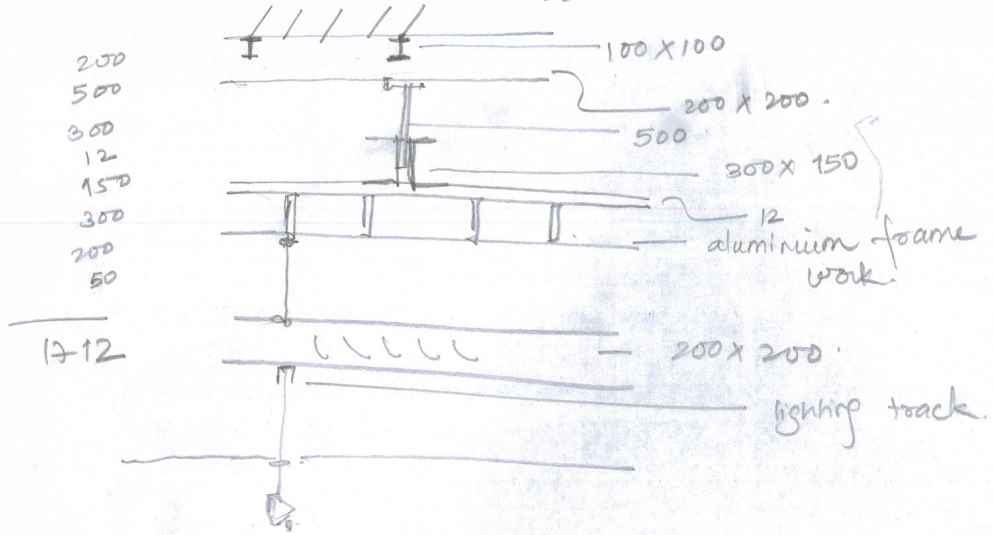
500 = 880 (glass screen)

630 = 1100 (above beam)

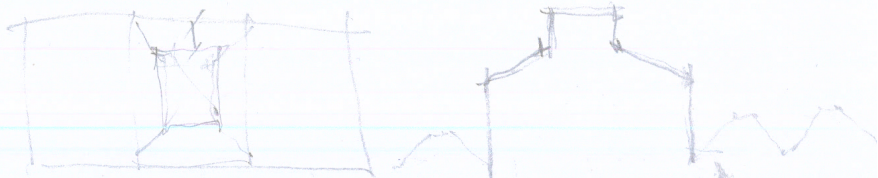
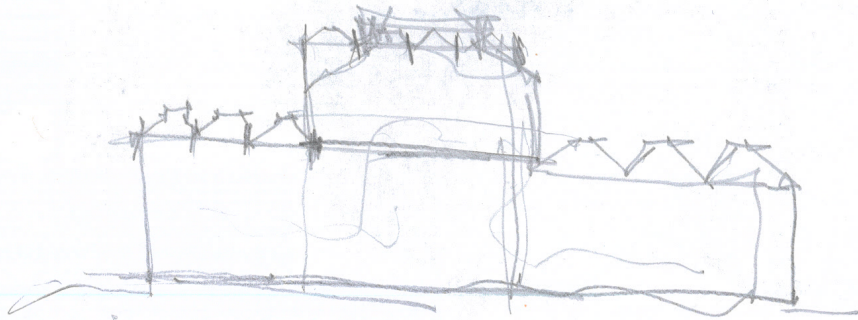
2400
| total

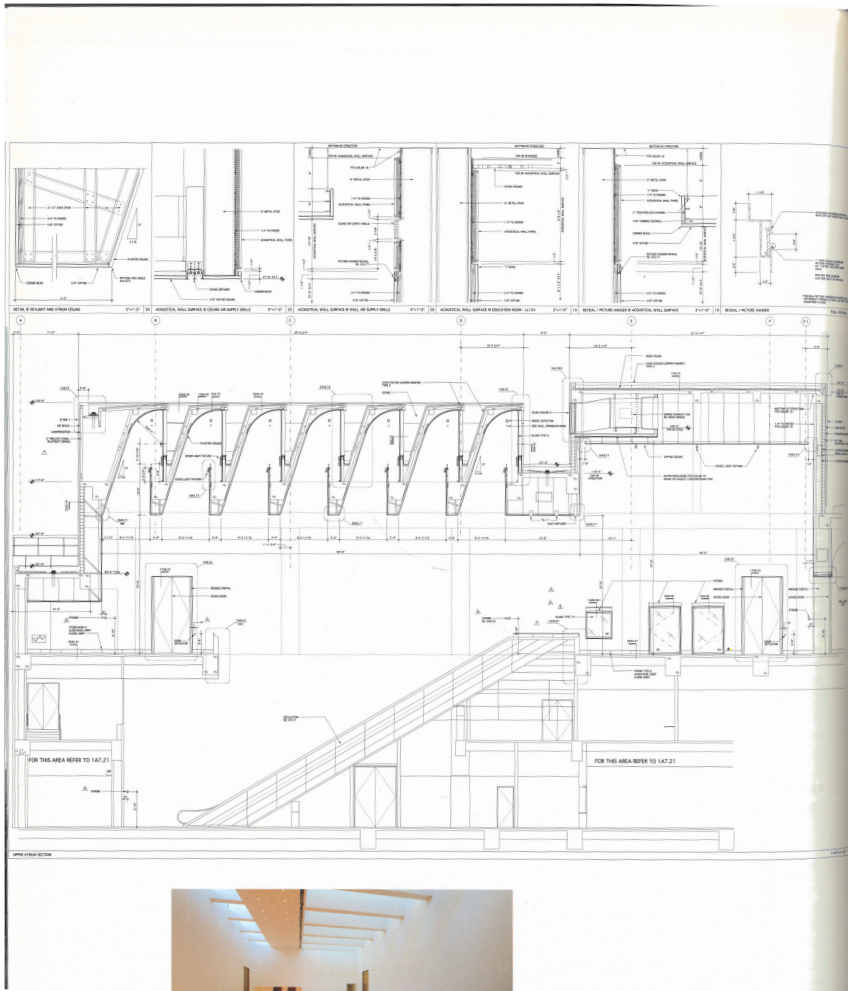
Skylight Detail - essen - chuppargfeld. Kimbell Rand Pavillion.

Art Institute Chicago. Menil foundation
↳ Paris.

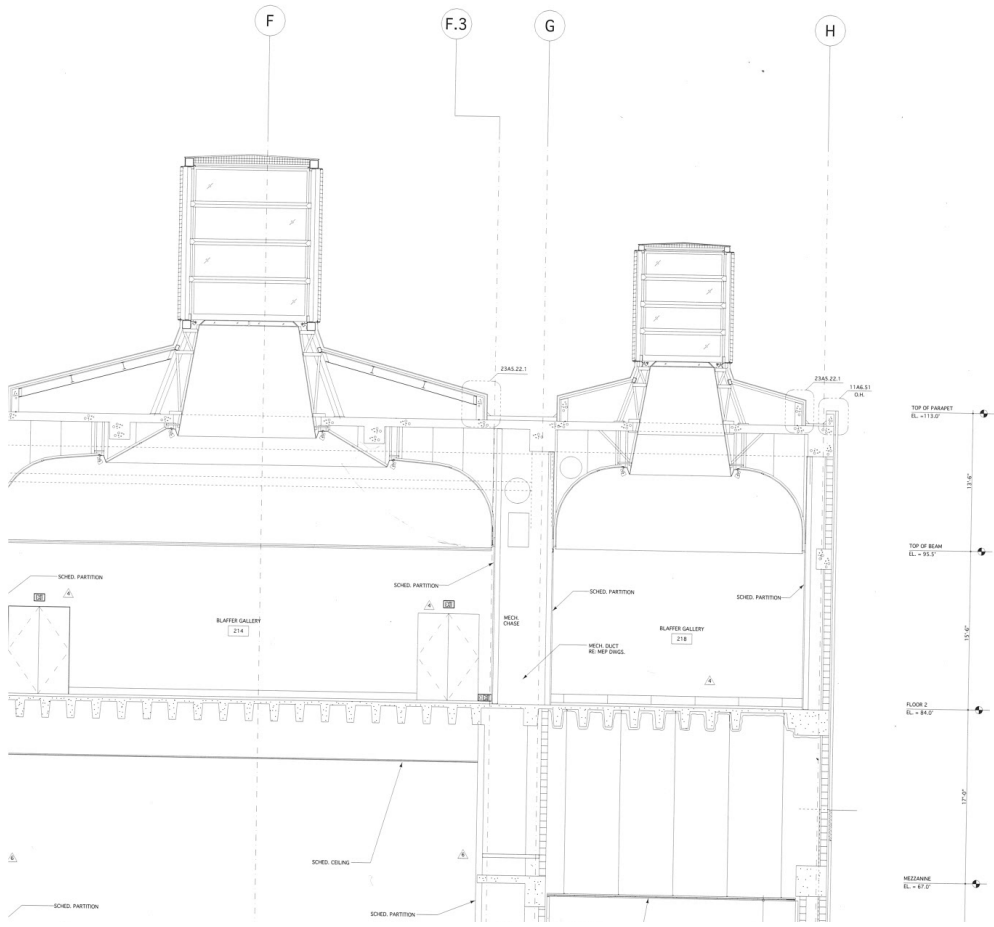


Voorlinden.





Rafael Moneo, Moderna Museet
Skylight Details



Rafael Moneo, Moderna Museet
Skylight Details