



“The reintroduction of the Katoenveem  
complex as an open infrastructure for  
contemporary culture”

KATOENVEEM , KEILEWEG 39 ROTTERDAM

Adapting 20C Heritage

Lars van Straalen

25 -jan -2021

Committee:  
Nicholas Clarke  
Frank Koopmans  
Herman de Wolff







Cultural values

Heritage approach

Design proposal

Reflection





*Katoenveem along the waterfront -*

Cultural values

Heritage approach

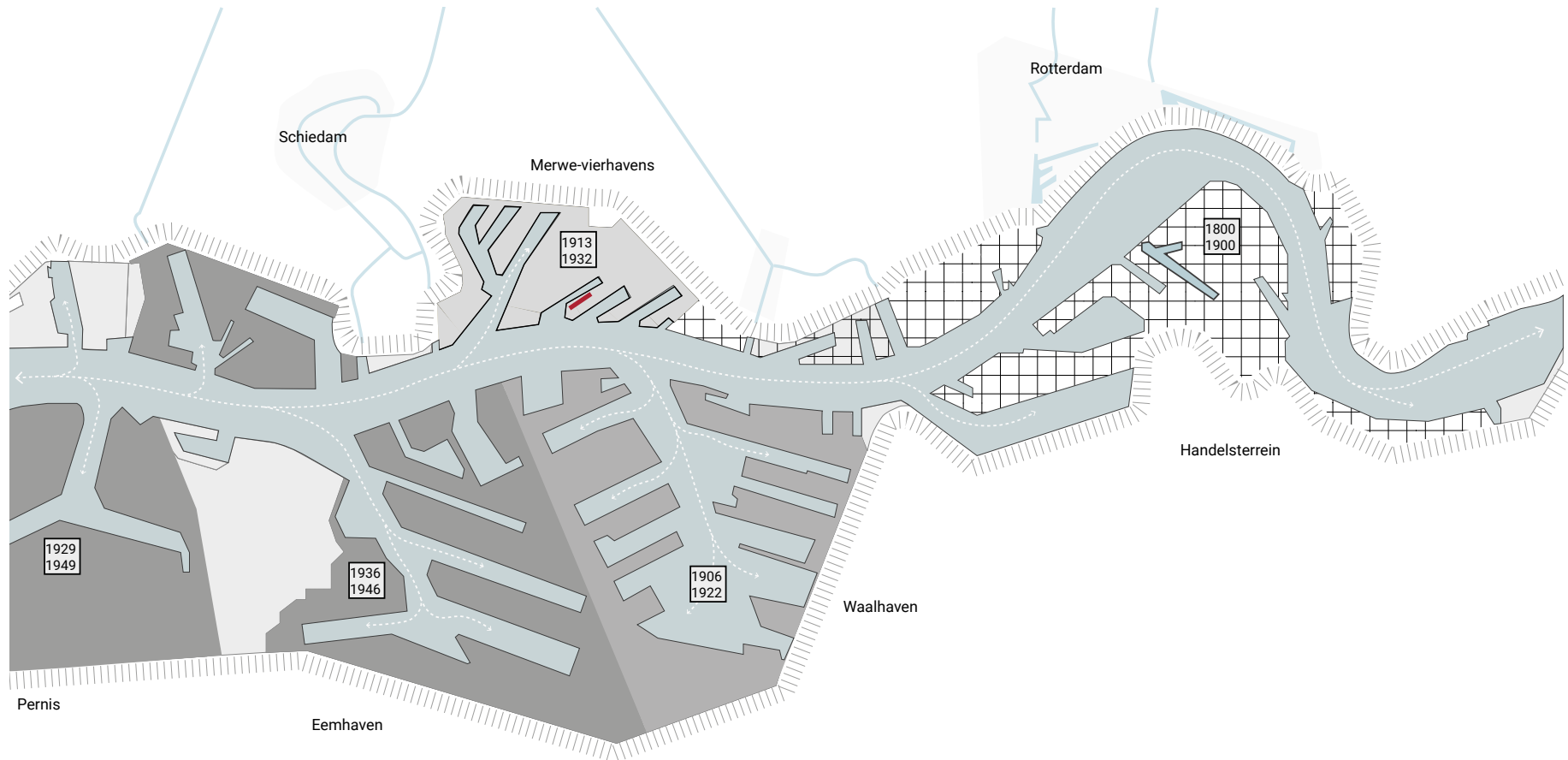
Design proposal

Reflection

Context









*Katoenveem along the Keilehaven*



Cultural values

Heritage approach

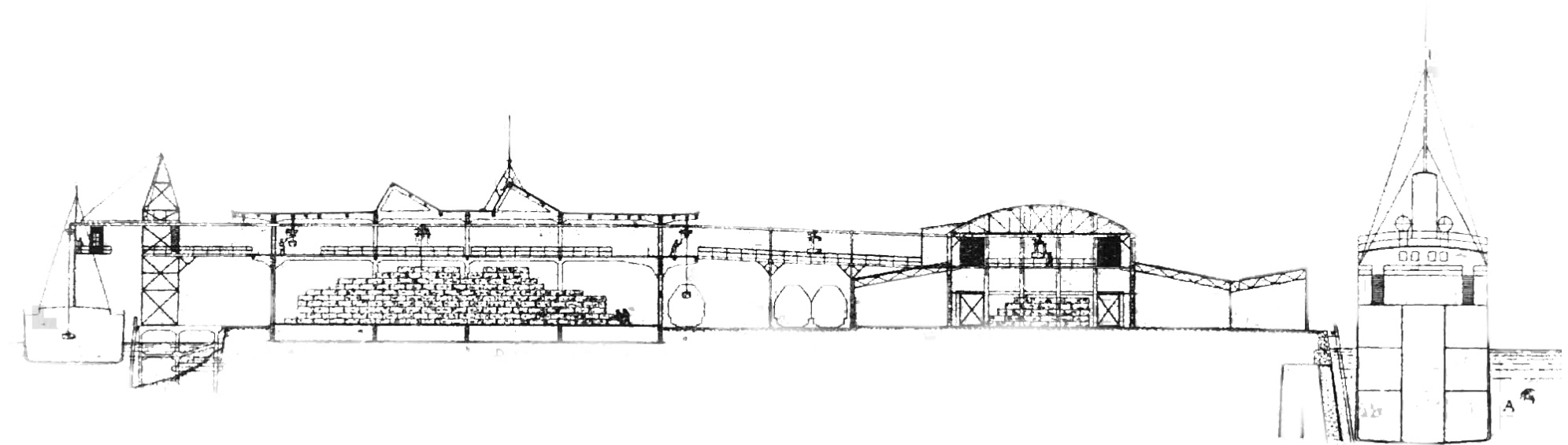
Design proposal

Reflection

Interior storage spaces



*Handling of the conveyor system*



*National water transport*

*Katoenveem storage*

*Train transport*

*Storage*

*International water transport*

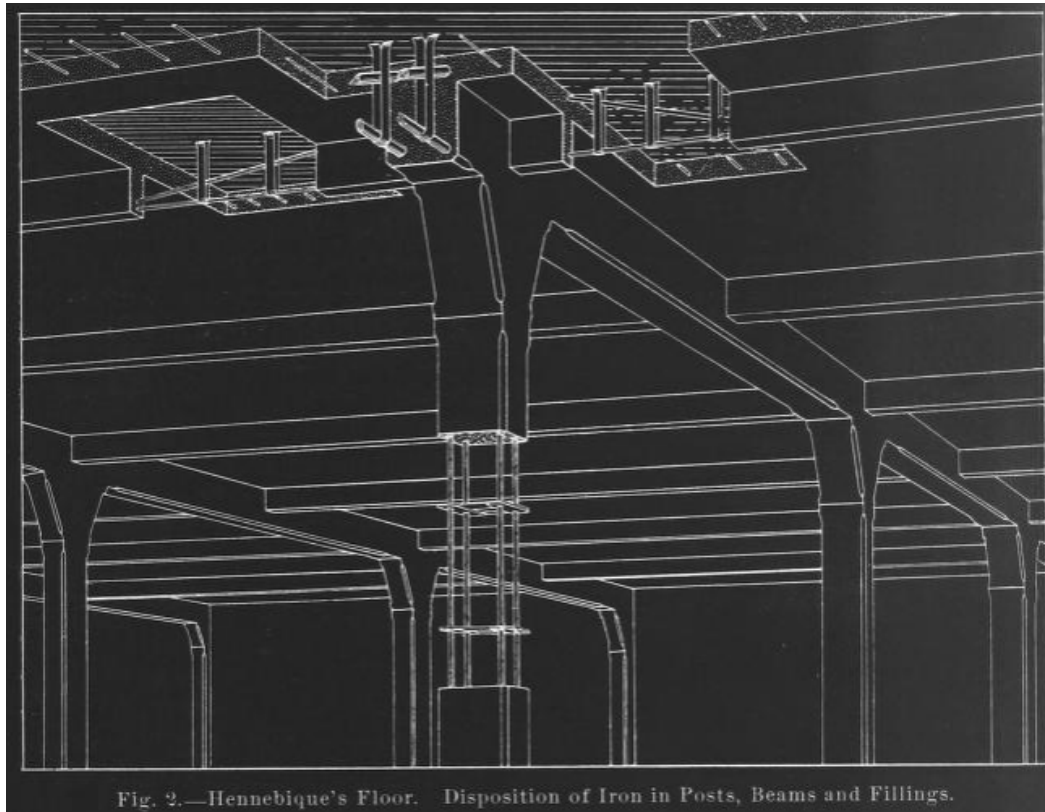




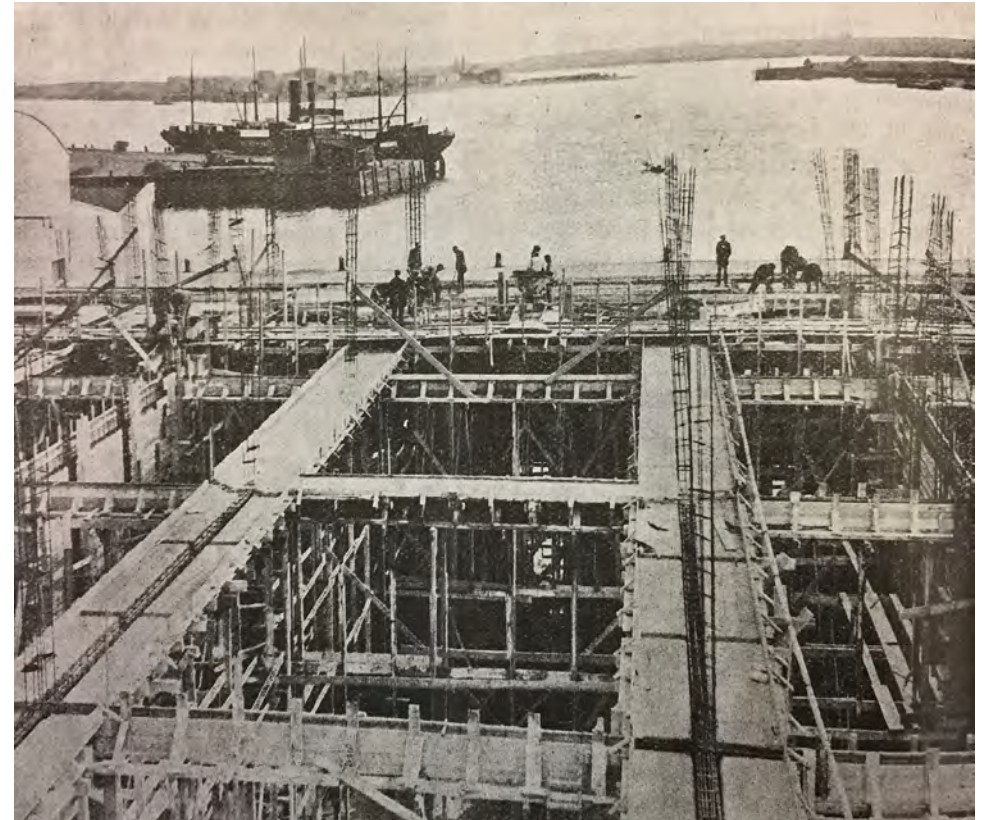
*Connecting bridges to warehouses*



*Cranes on the north side of the building loading a ship*



Hennebique system



Building site of Katoenveem 1920





*North East corner - Office and sample room added to storage facilities*



Katoenveem interior

*'The concrete Warehouse 'Katoenveem' with pumpstation, built in 1920 according to a functional design of J.J. Kanter, is of significance because of the **CULTURAL HISTORICAL, ARCHITECTONIC HISTORICAL, TYPOLOGIC and BUILDING HISTORICAL** value and in addition of significance with the **(WAREHOUSE)OEUVRE** of the architect J.J. Kanter.'*

*Monumentdescription Katoenveem*

Cultural values

**Heritage approach**

Design proposal

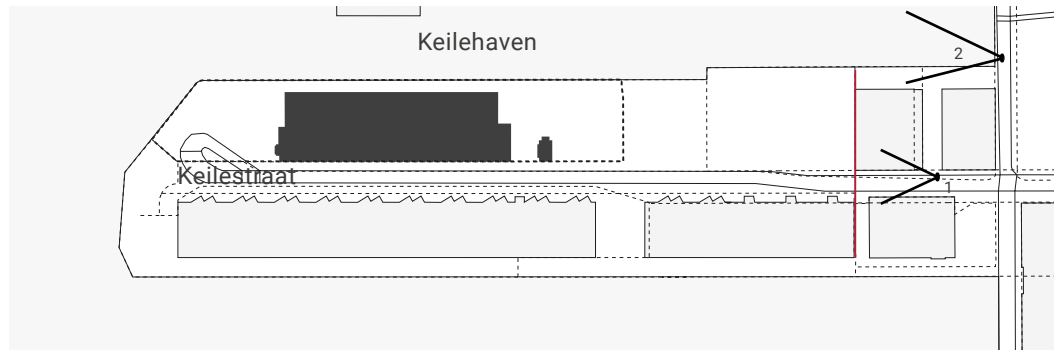
Reflection

Problem statement



*Current state of the facade*





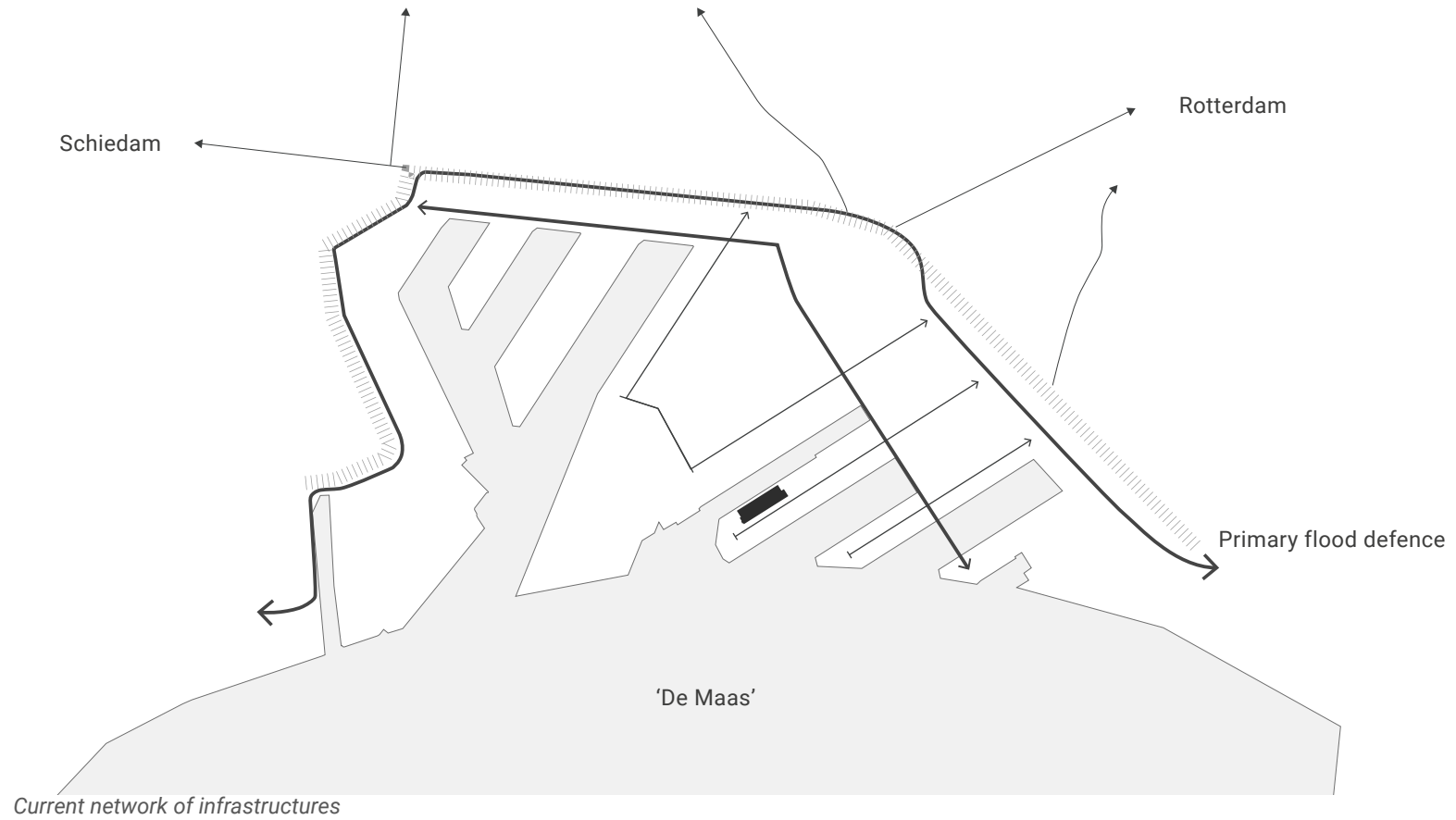
Urban model 1:2000 - Current situation



1. Fences in the Keilestraat

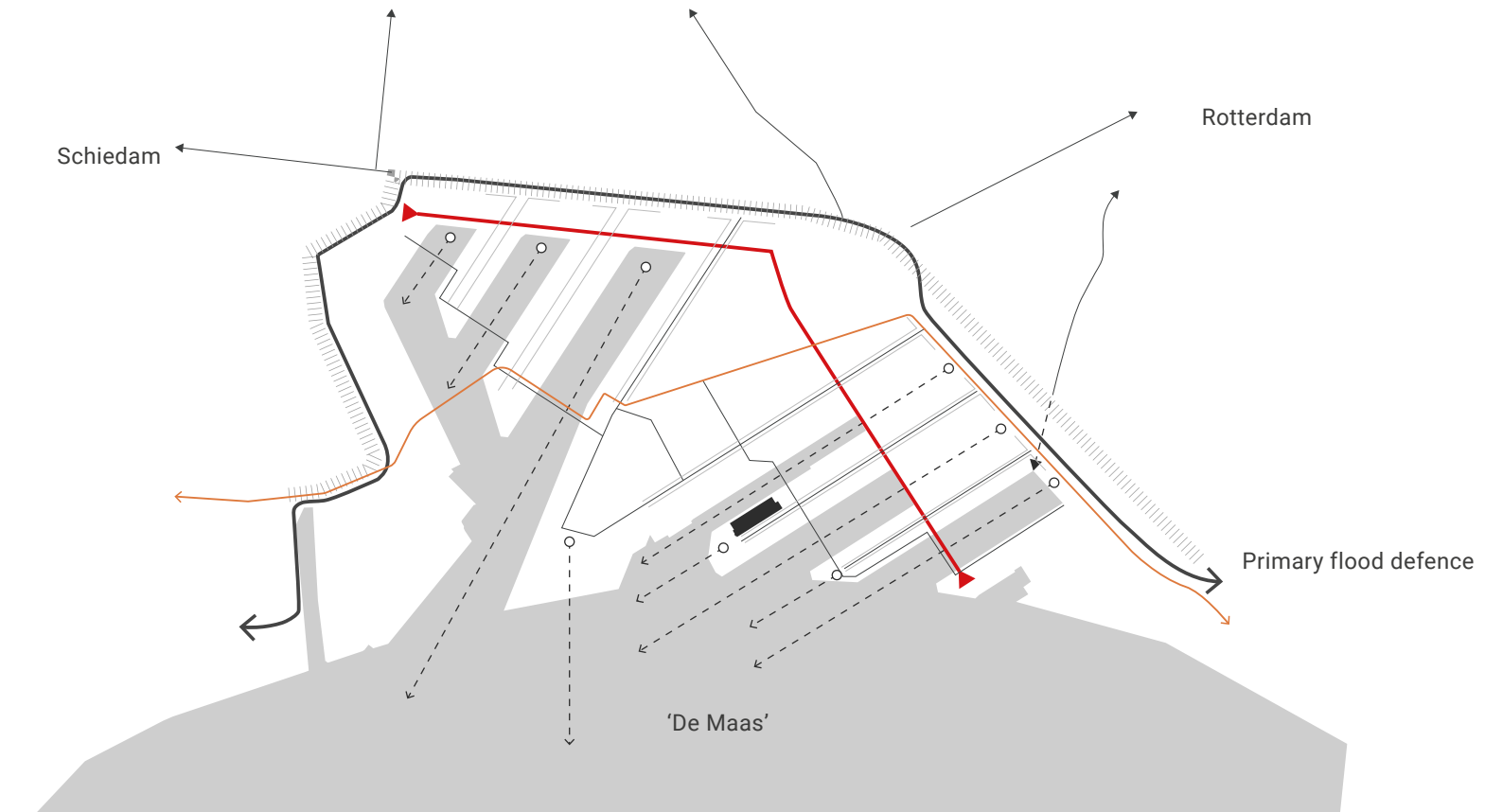


2. Keilehaven

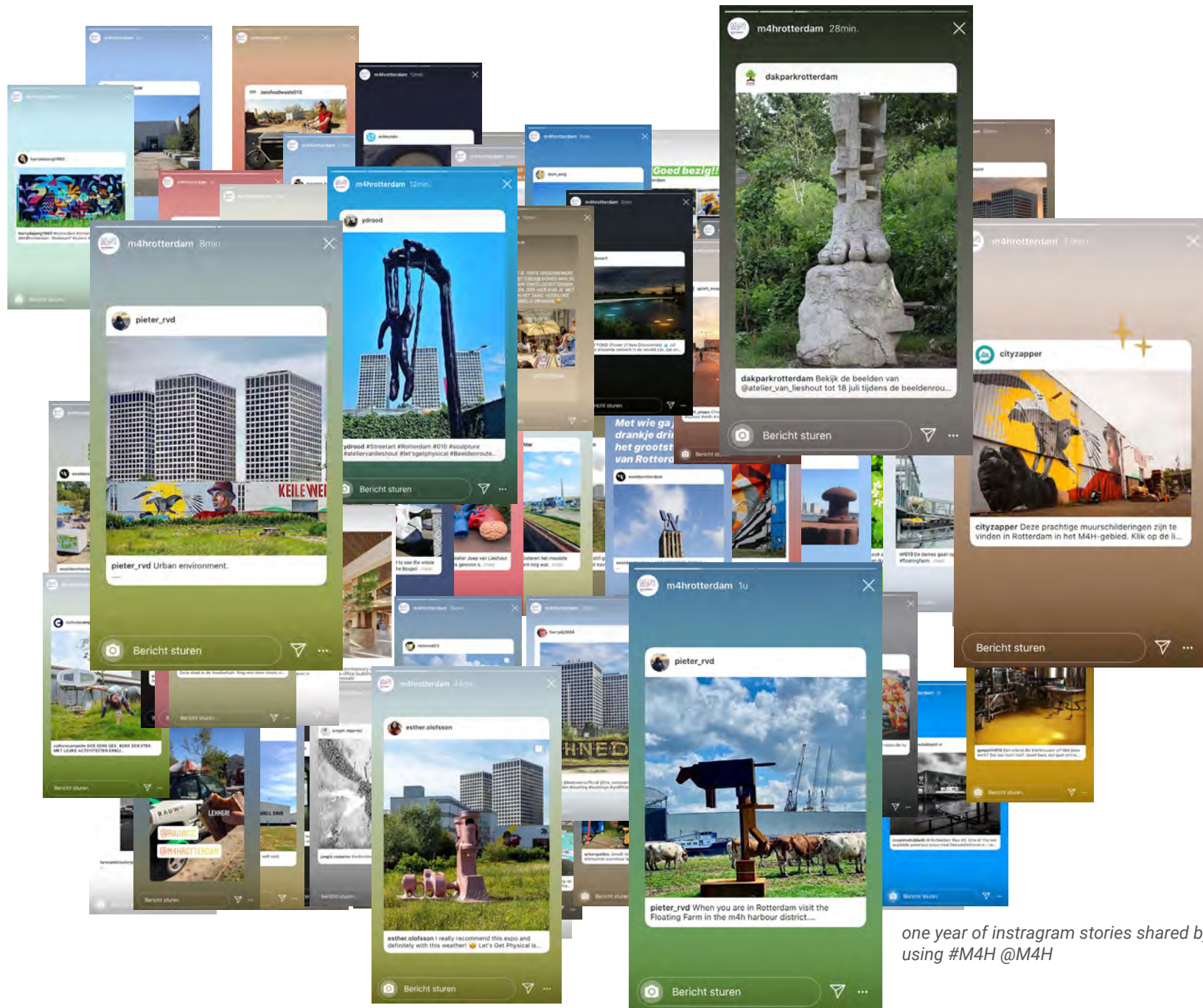






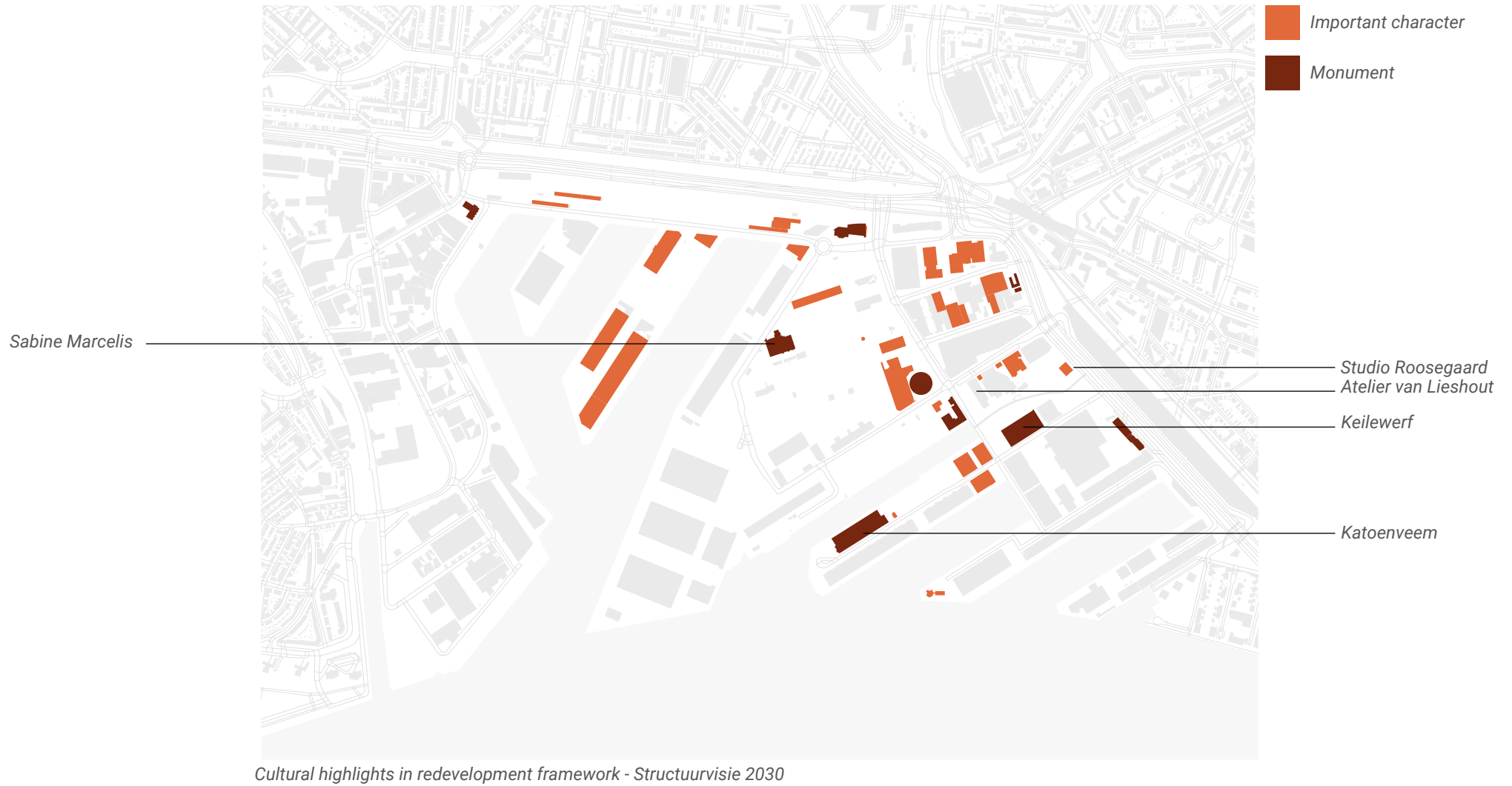


Structuurvisie Merwe-vierhavens 2030 - Municipality of Rotterdam



one year of instagram stories shared by visitors  
using #M4H @M4H







*Sculpture by Atelier van Lieshout*



*'Cloud' by Berndnaut Smilde*

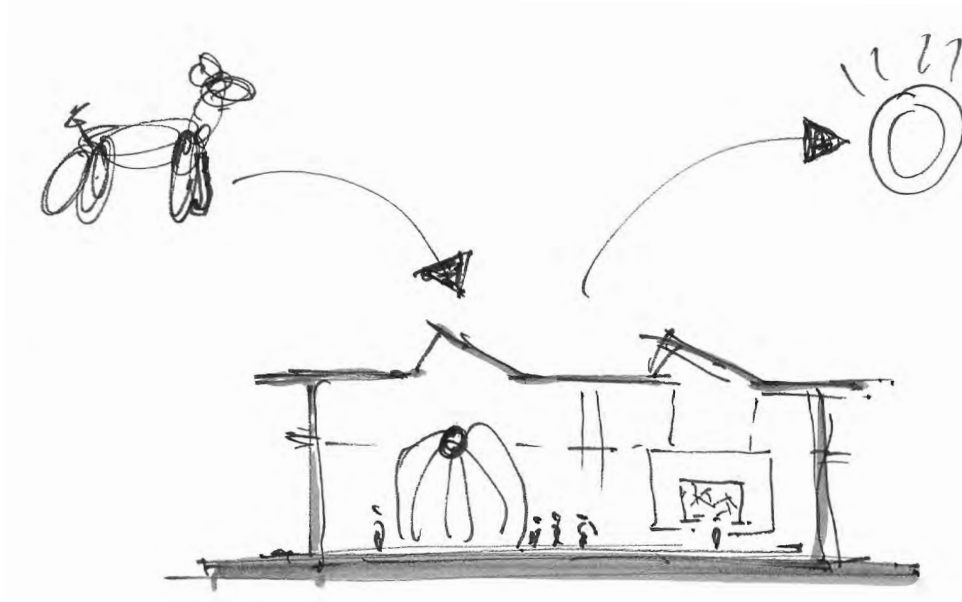
**Research question:**

How to re-design the Katoenveem into a contemporary art space with a adaptive creative climate?

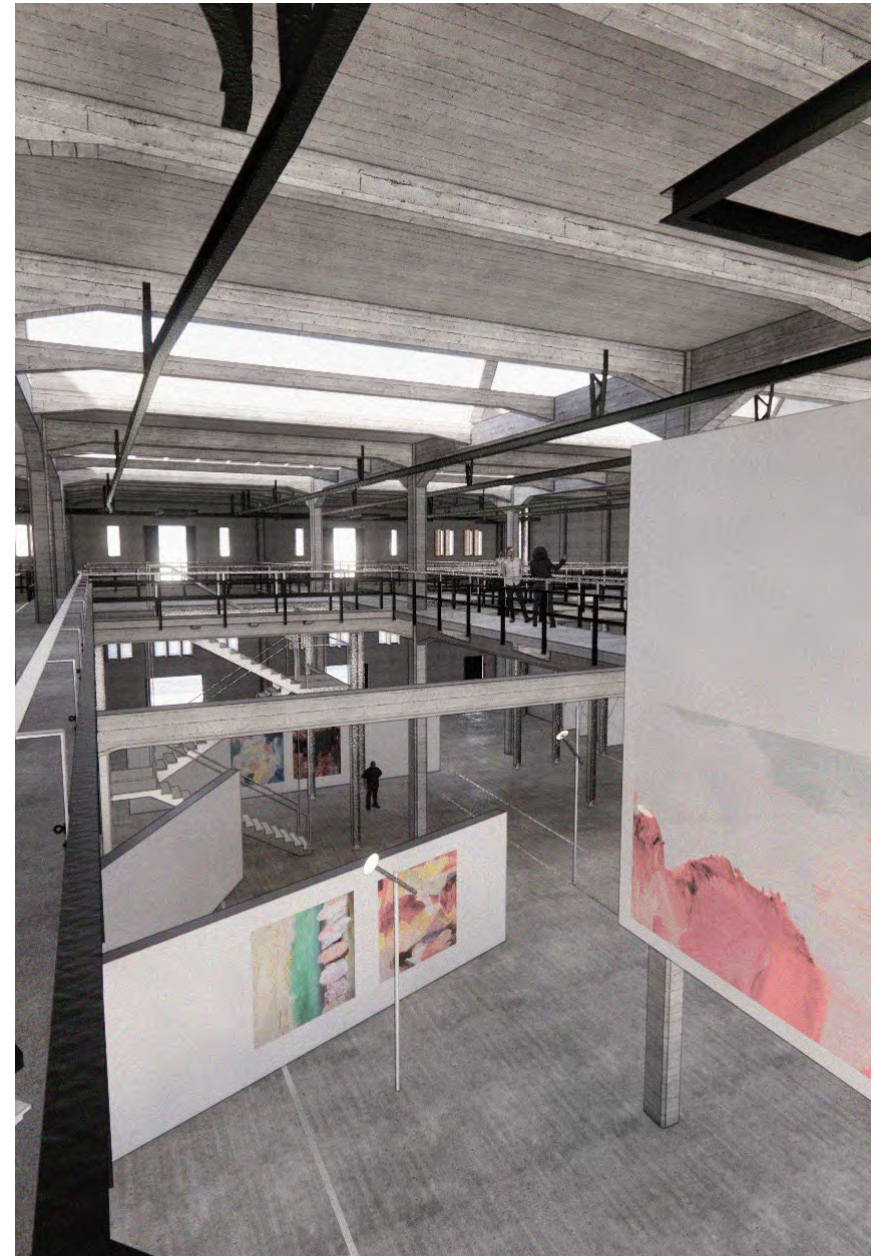
**Personal heritage position:**

Clarify the image of the monument with a careful approach of changing as little as possible.





- Adaptability
- Functional character of the architecture
- Architecture as a background



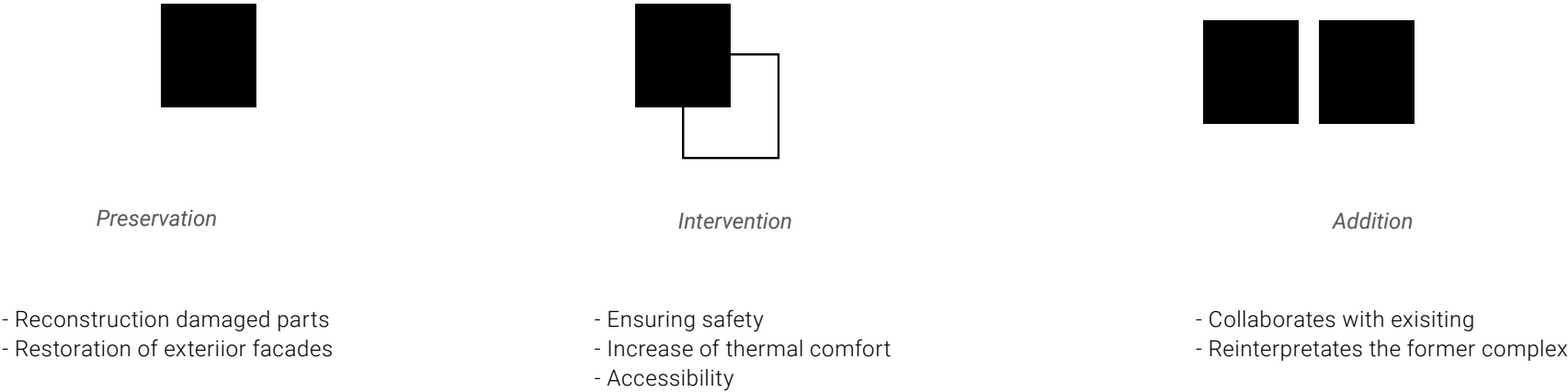
*Impression exhibition spaces - 1st floor Katoenveem*



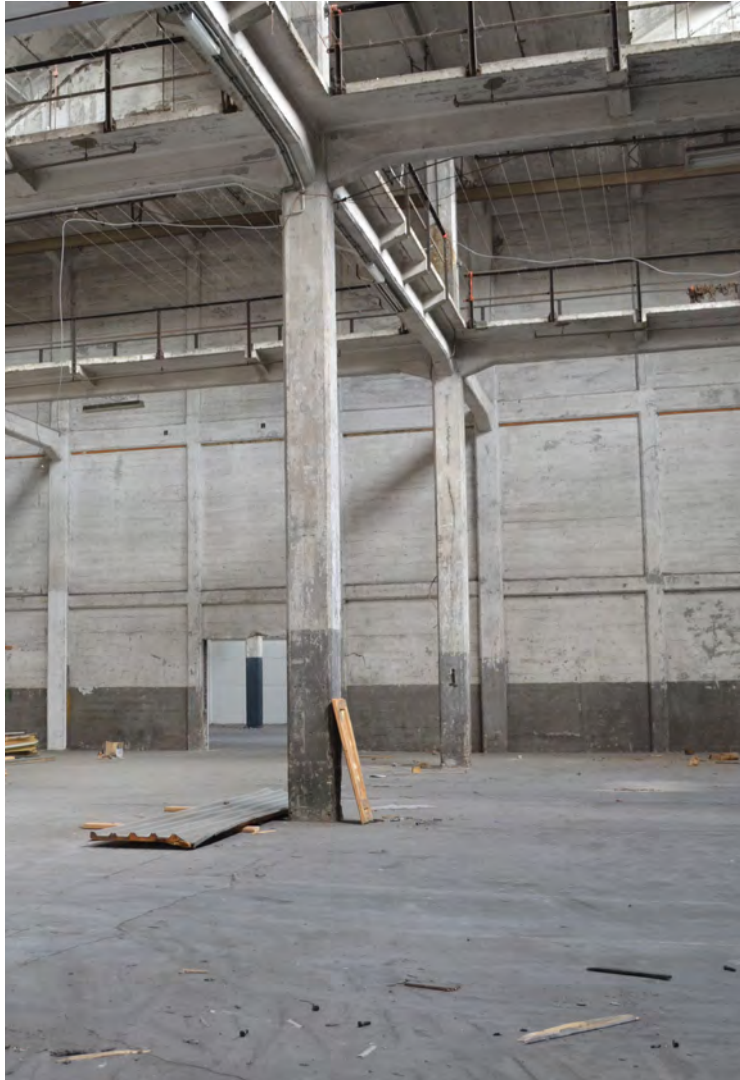
Cultural values



Architectural method



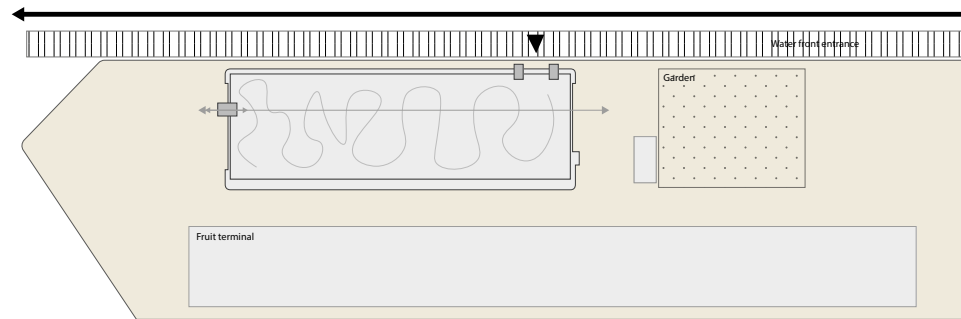




*Image - current situation*



*Impression - new situation*

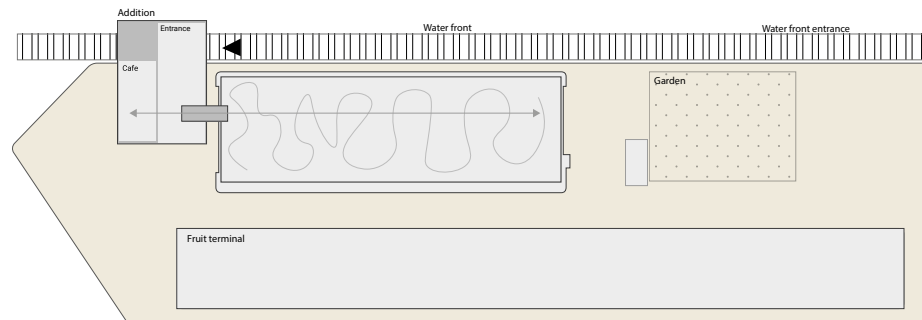


2021



Urban model 1:2000



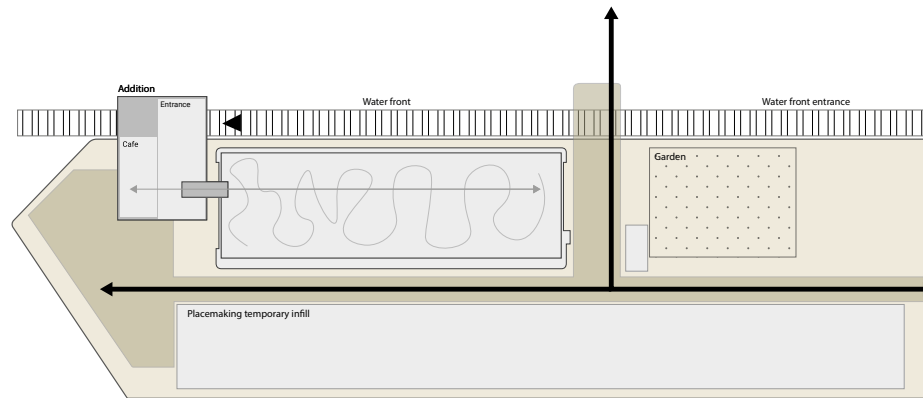


2025



Urban model 1:2000

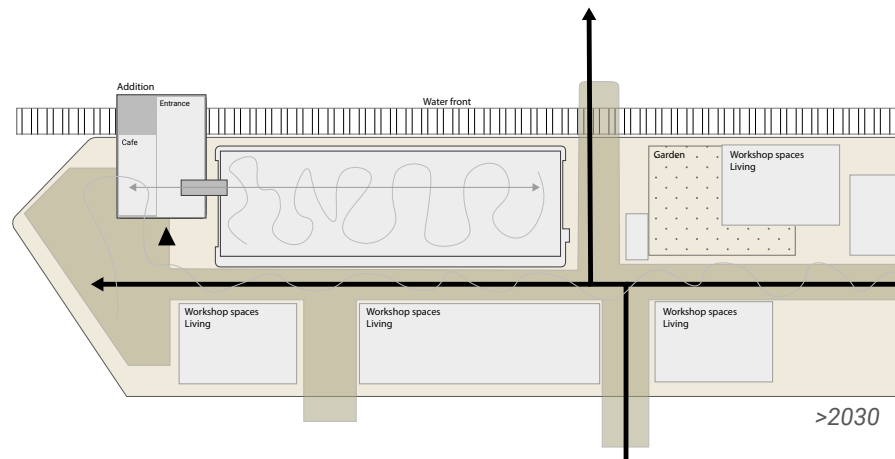




2030



Urban model 1:2000

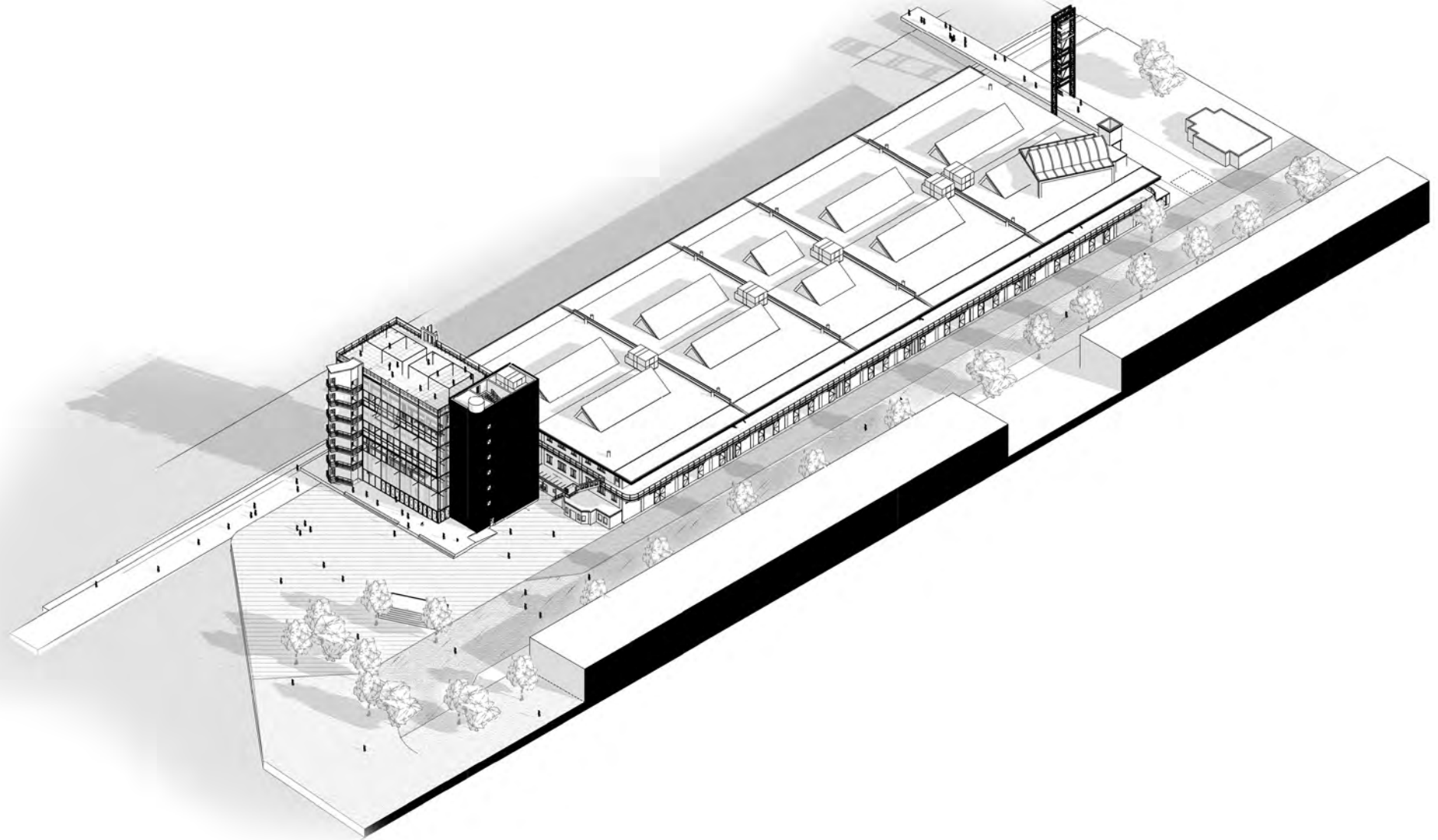


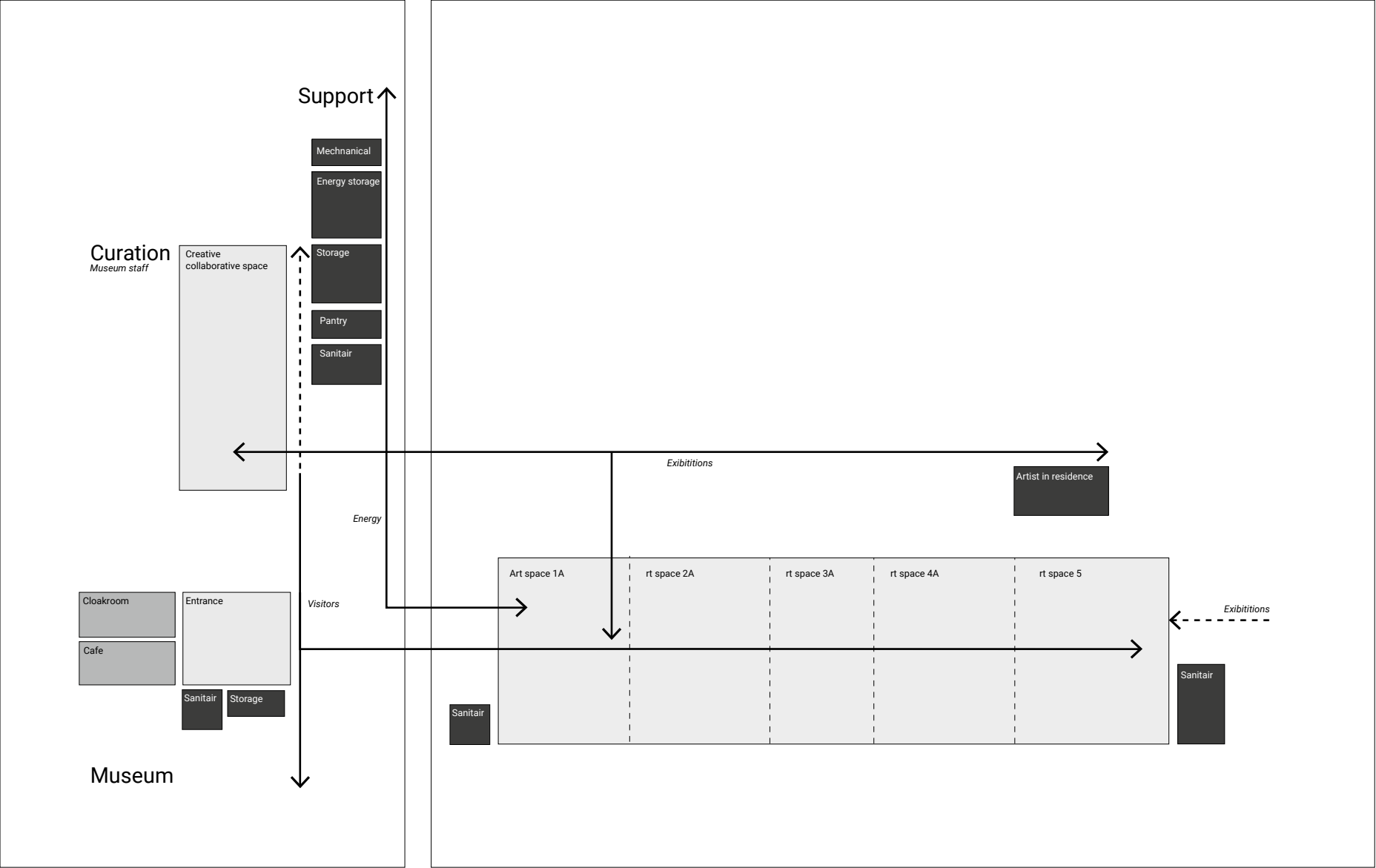
Urban model 1:2000

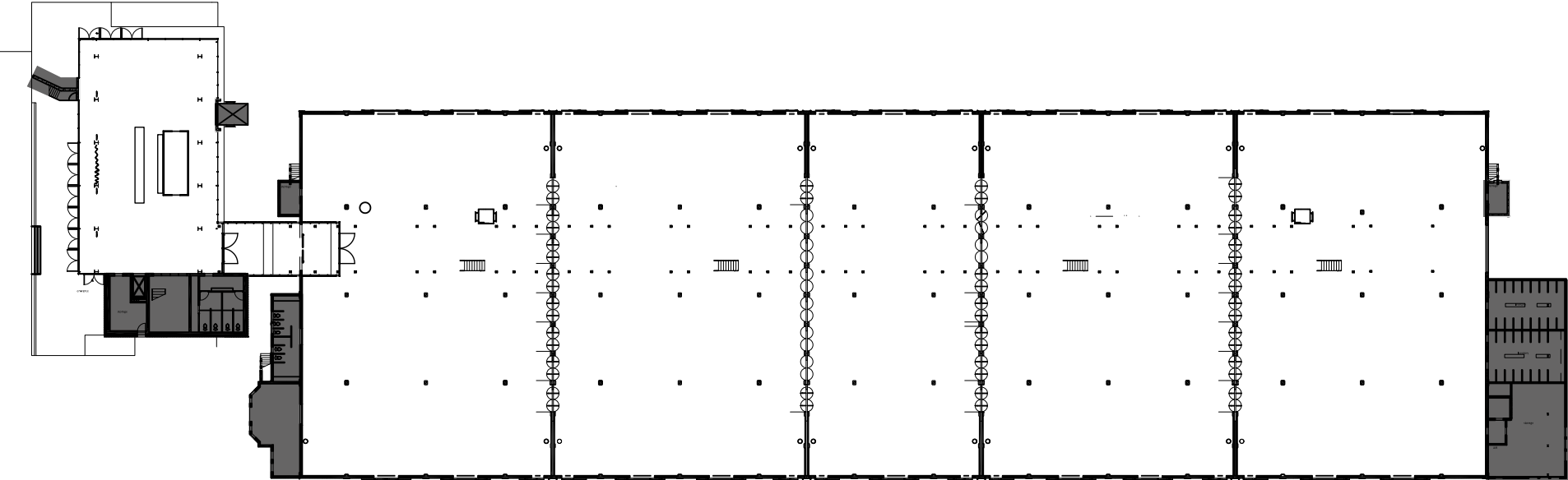


*South east facade elevation*



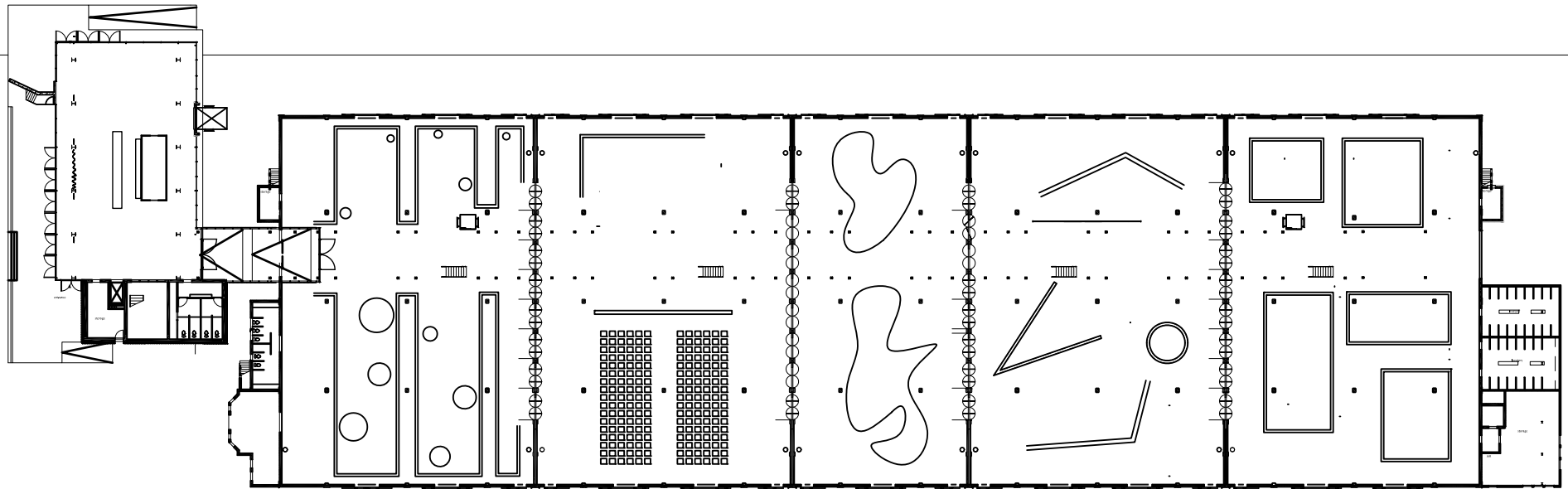




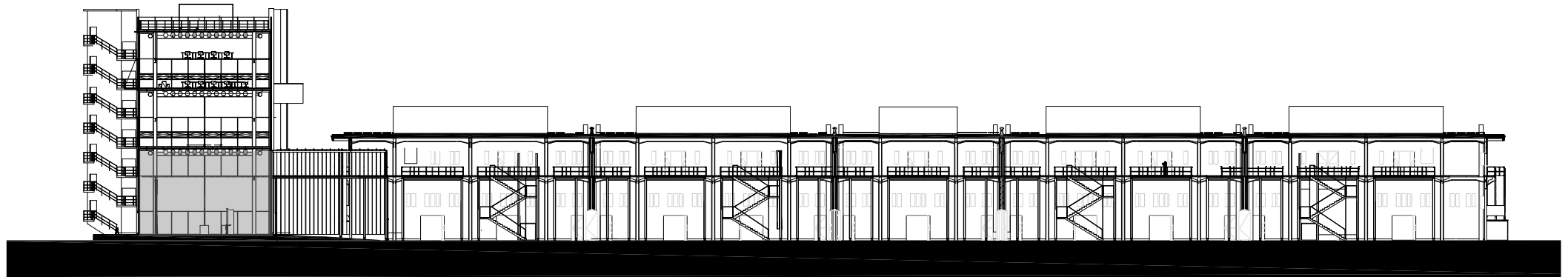


Ground floor plan (+0)

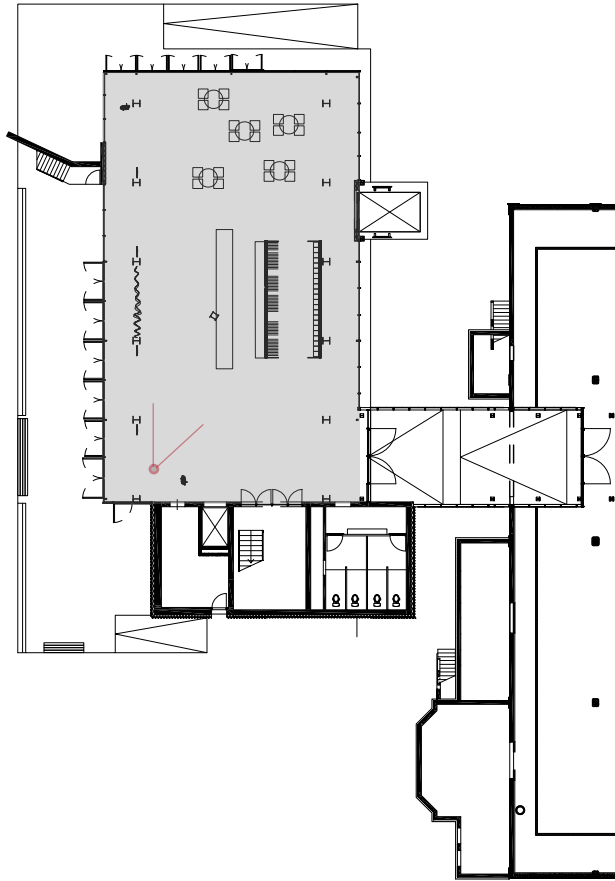




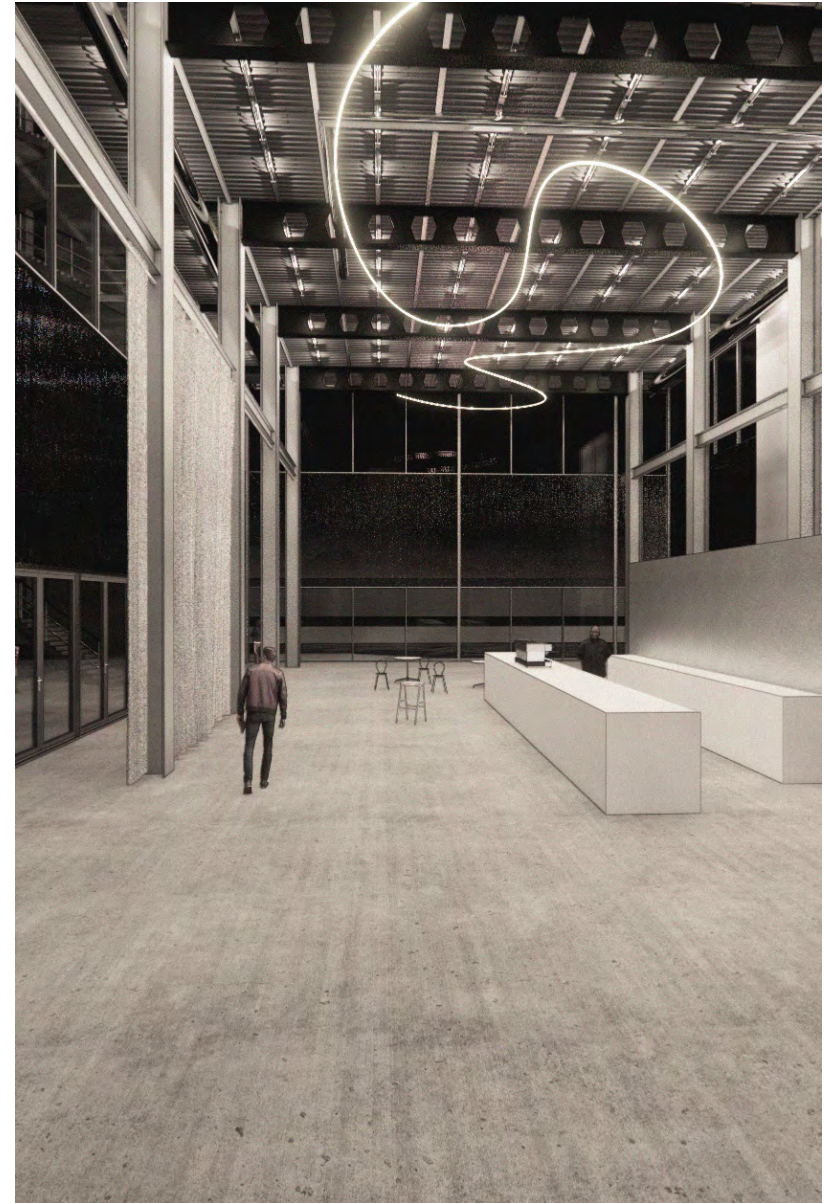
Ground floor plan (+0)



*Longitude cross section*

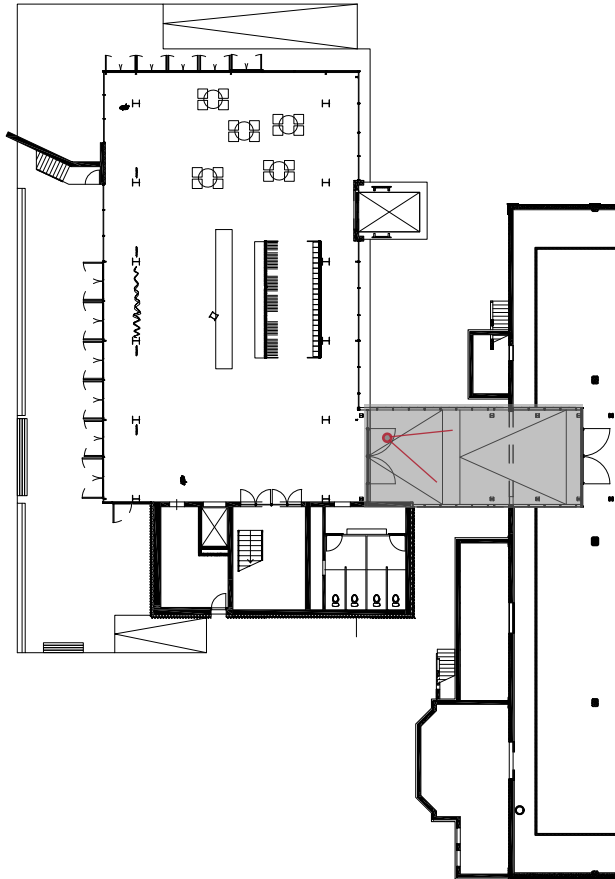


Ground floor plan - addition (+700)

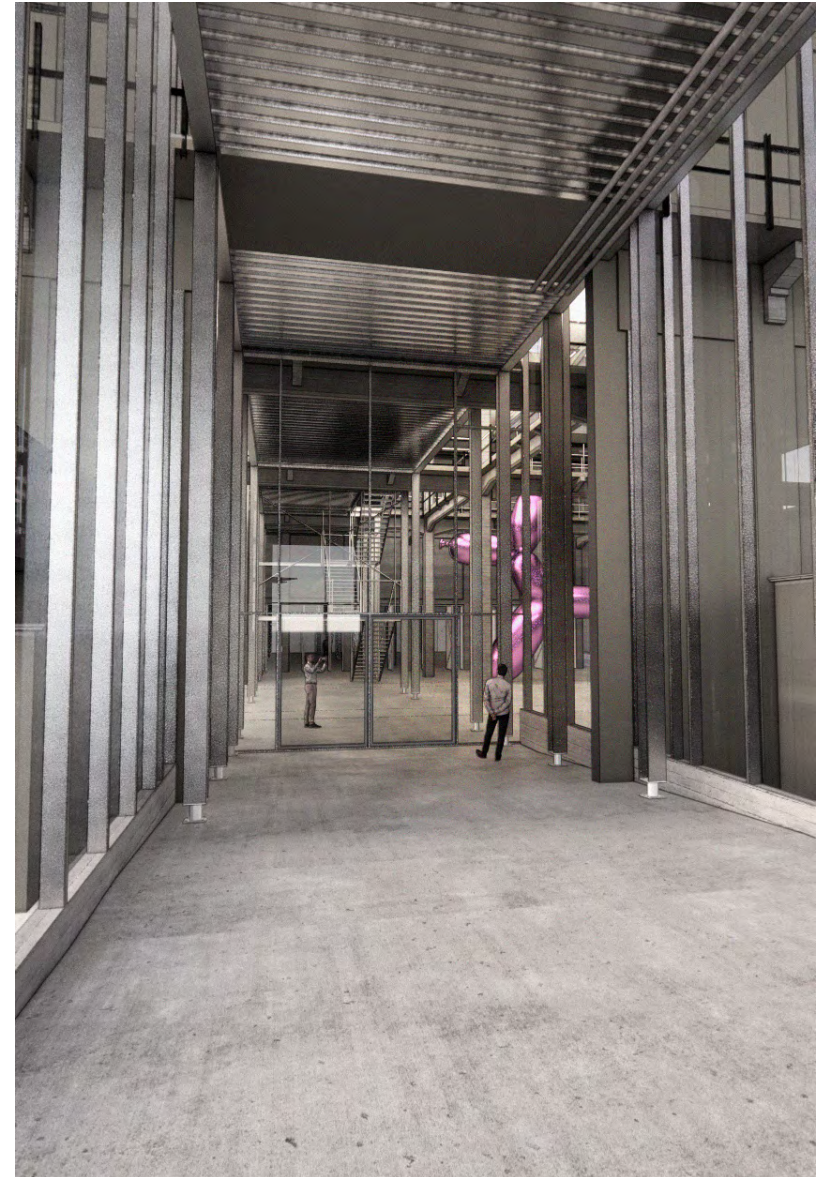


Impression entrance space - Addition

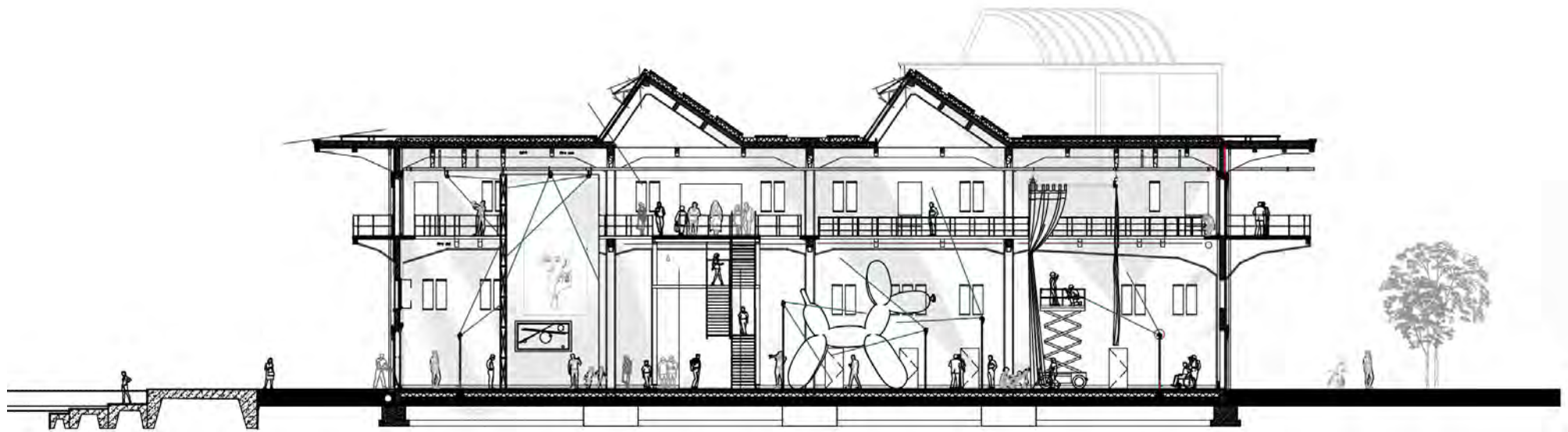




Ground floor plan - addition (+700)

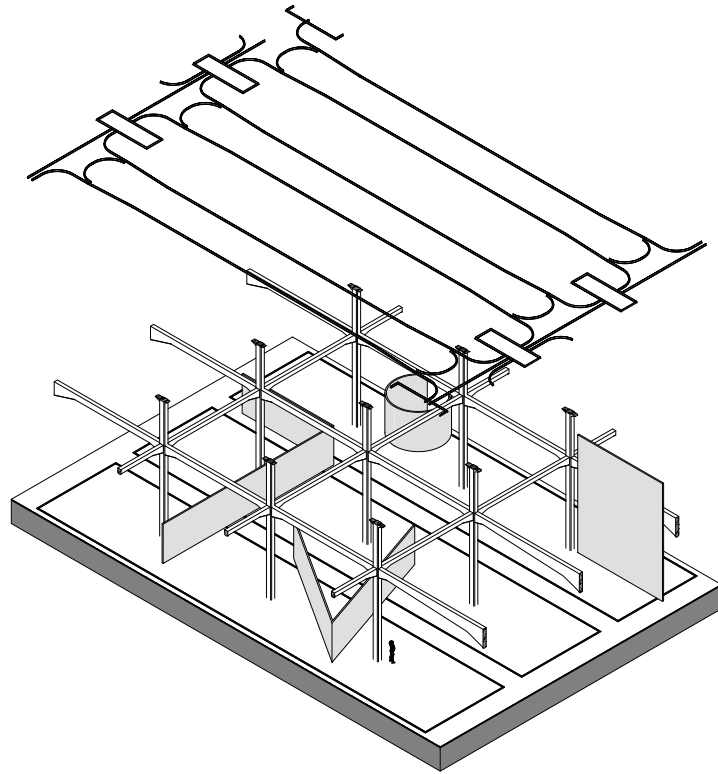


Impression entrance hall

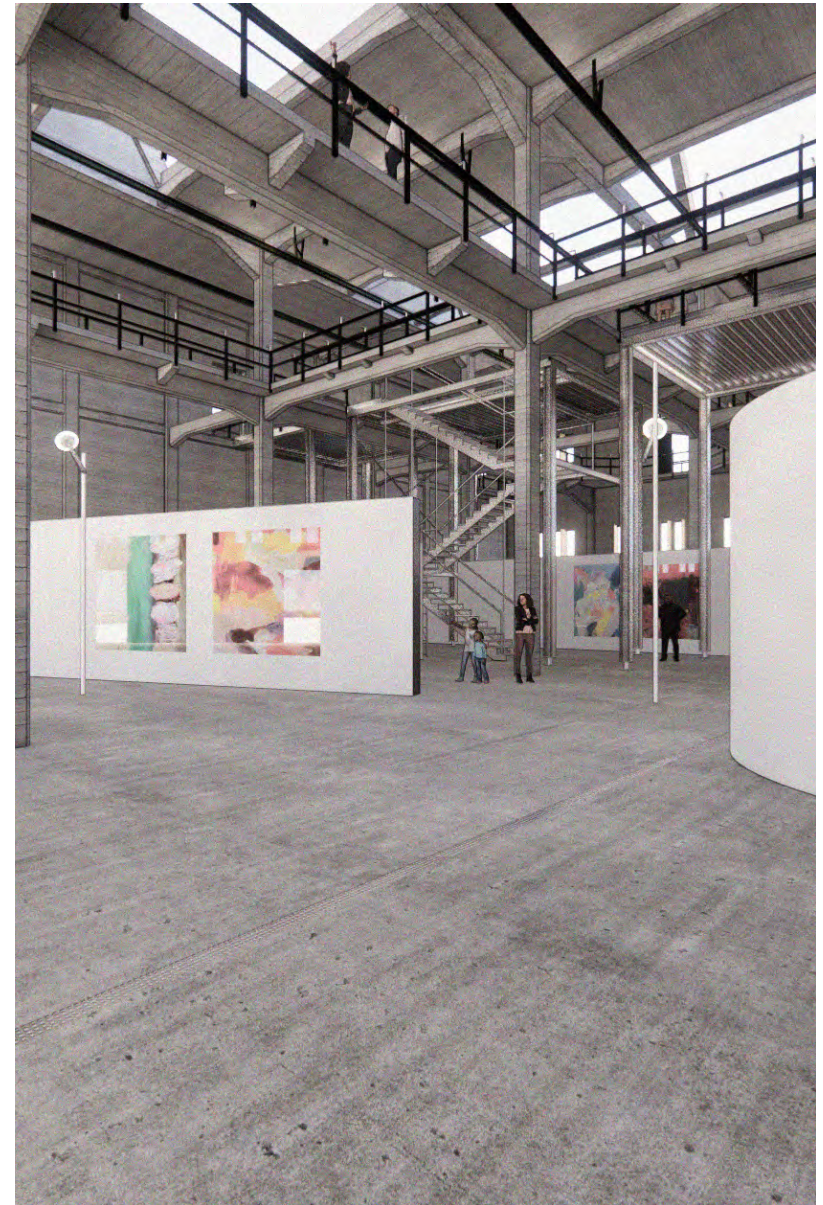


*Cross section Compartment Katoenveem*



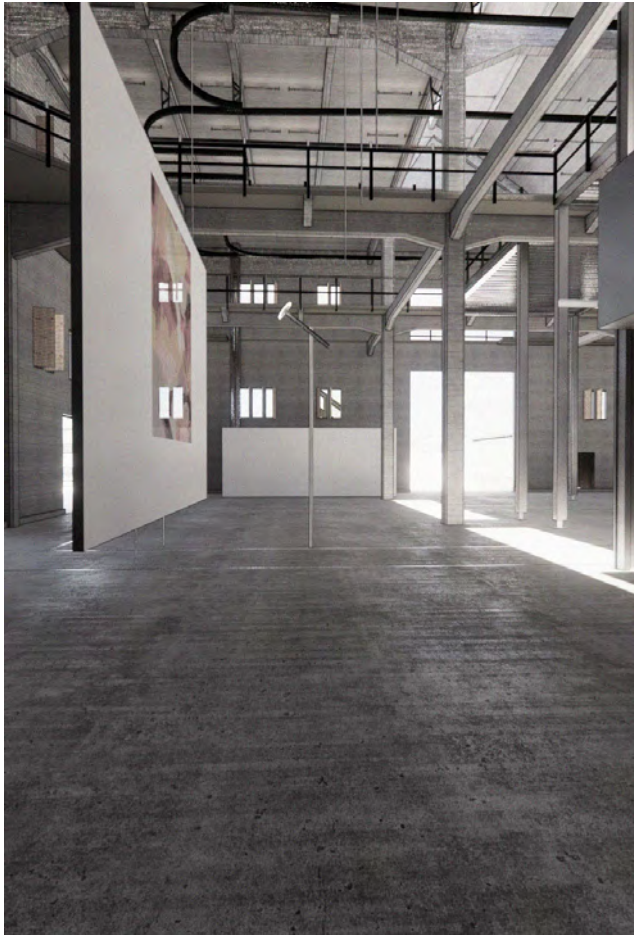


framework for temporary infill  
-Spatial boundaries  
-Electrical utilities  
-Hanging system by conveyer system



*Impression exhibition spaces Katoenveem*





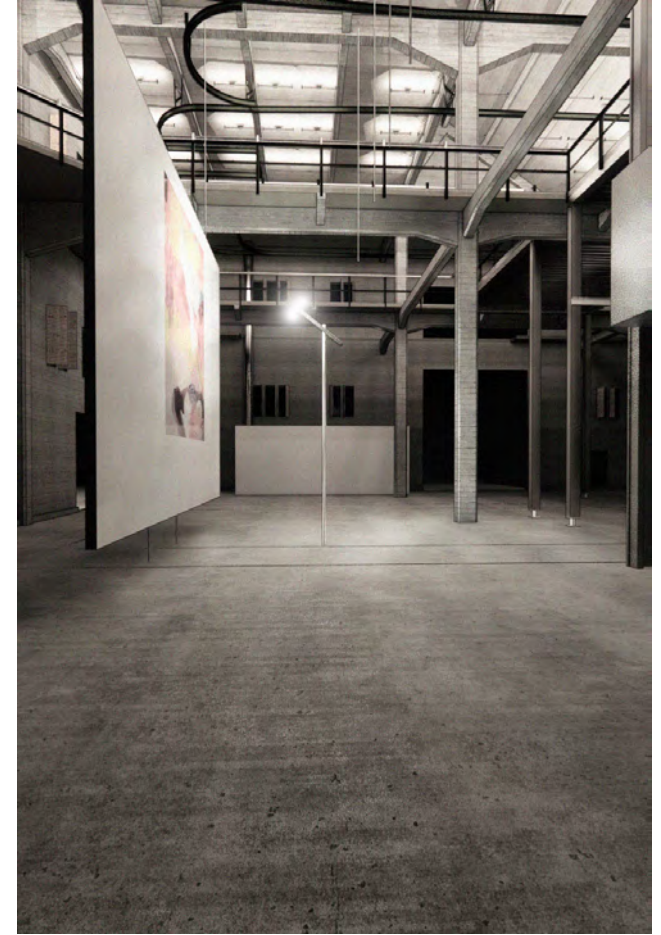
*Spring 12:23*

Natural light  
-diffuse



*Spring 17:20*

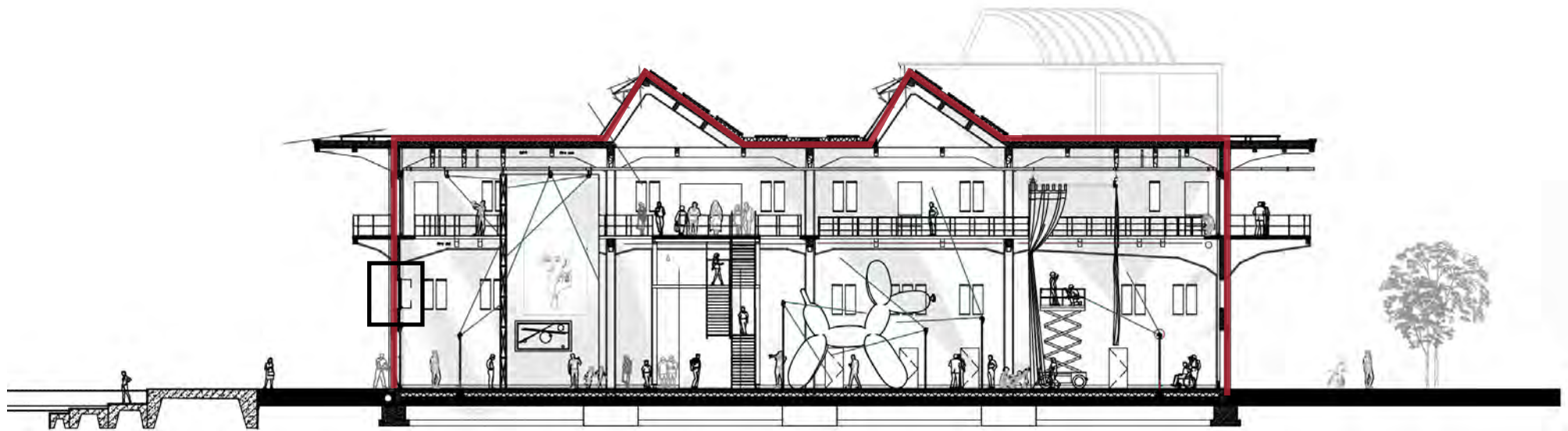
Natural light

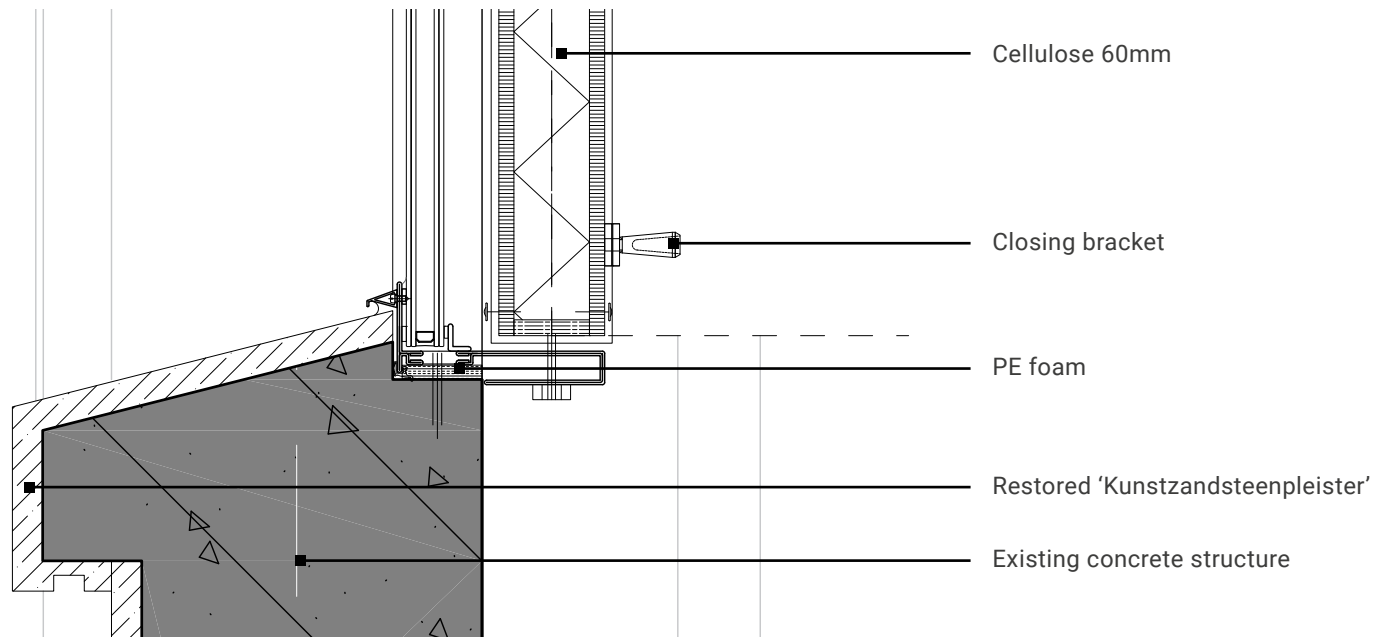
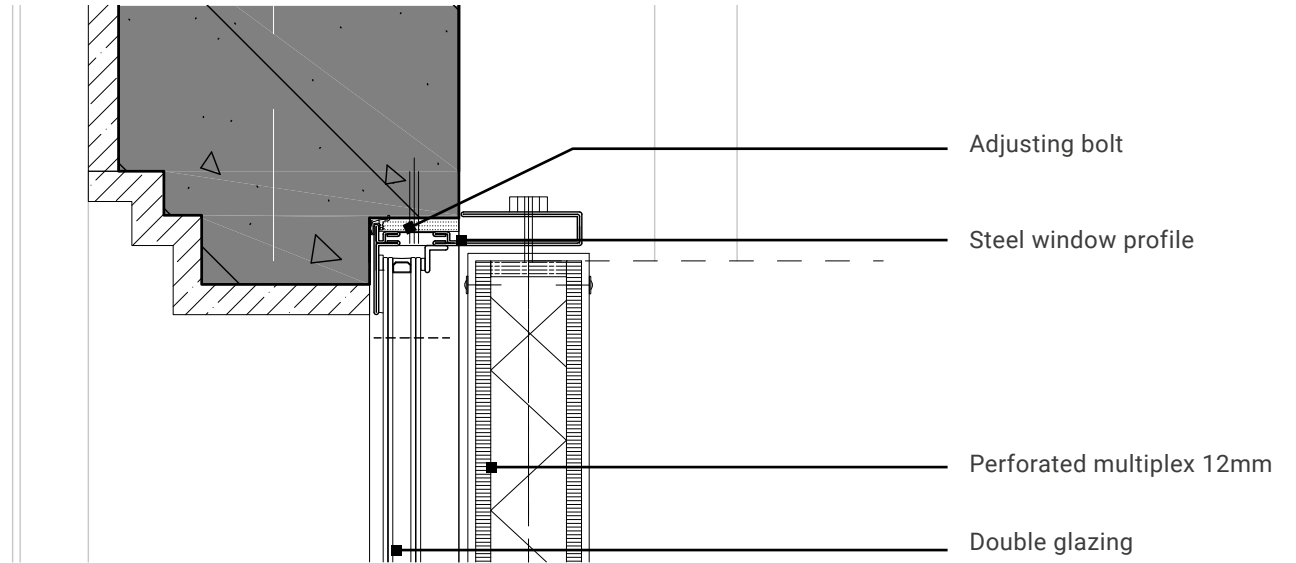


*Spring 23:04*

Artificial light  
-primary  
-specific





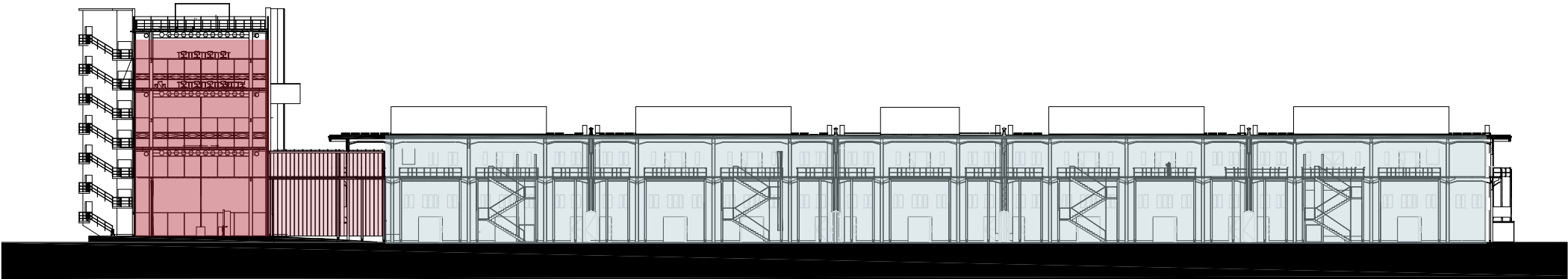




*Exposed concrete in interior*



*'Kunstzandsteenpleister' rendering on South-West facade*

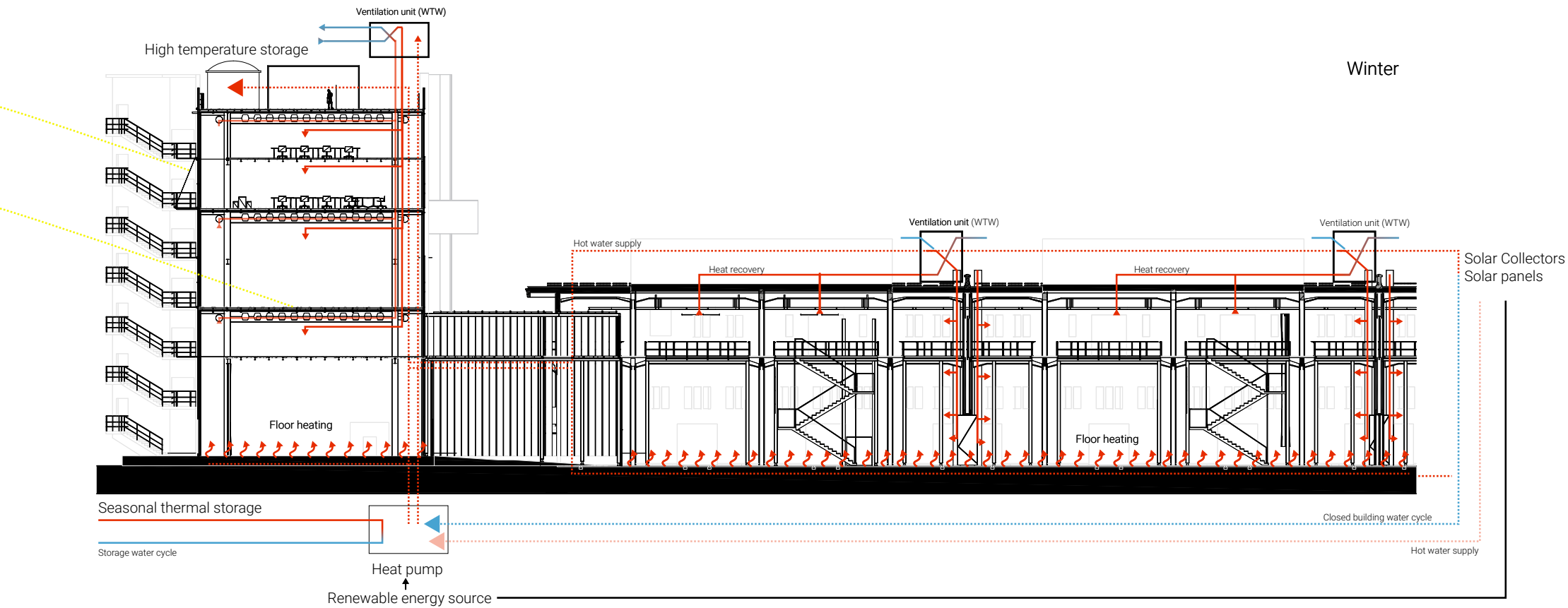


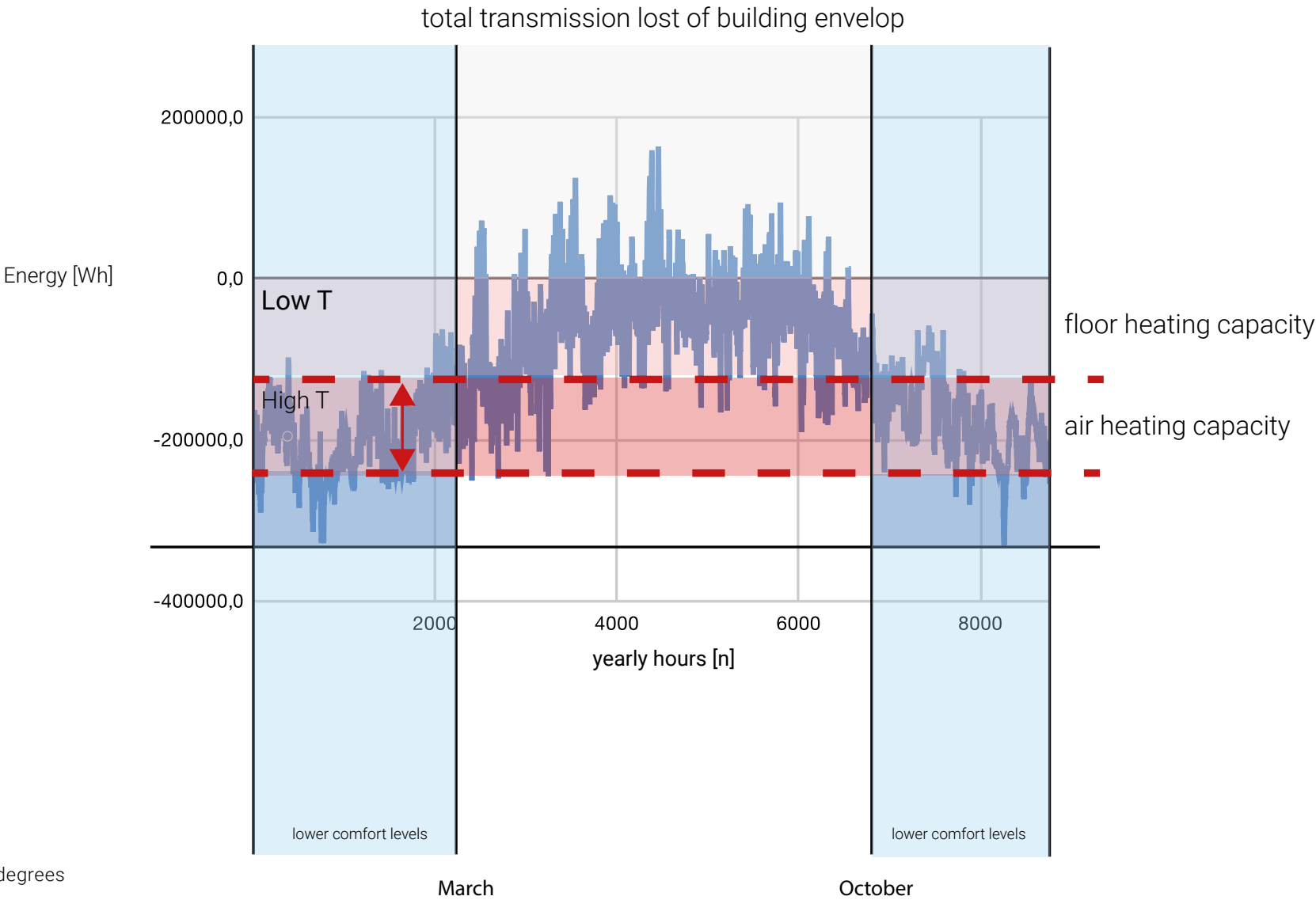
Exhibition climate set to [18-22C]  
Adapts to outdoor climate

Buffer zone

Climatized  
Set to [18-22C]







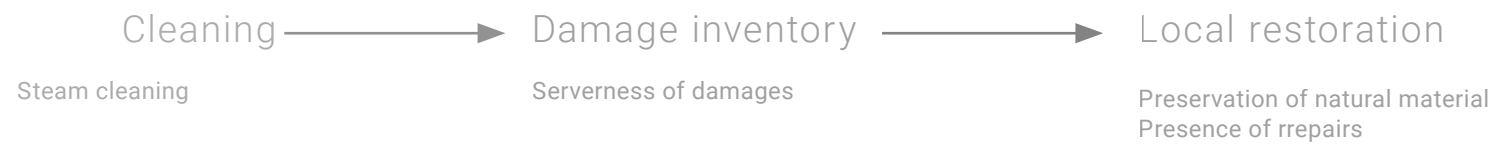
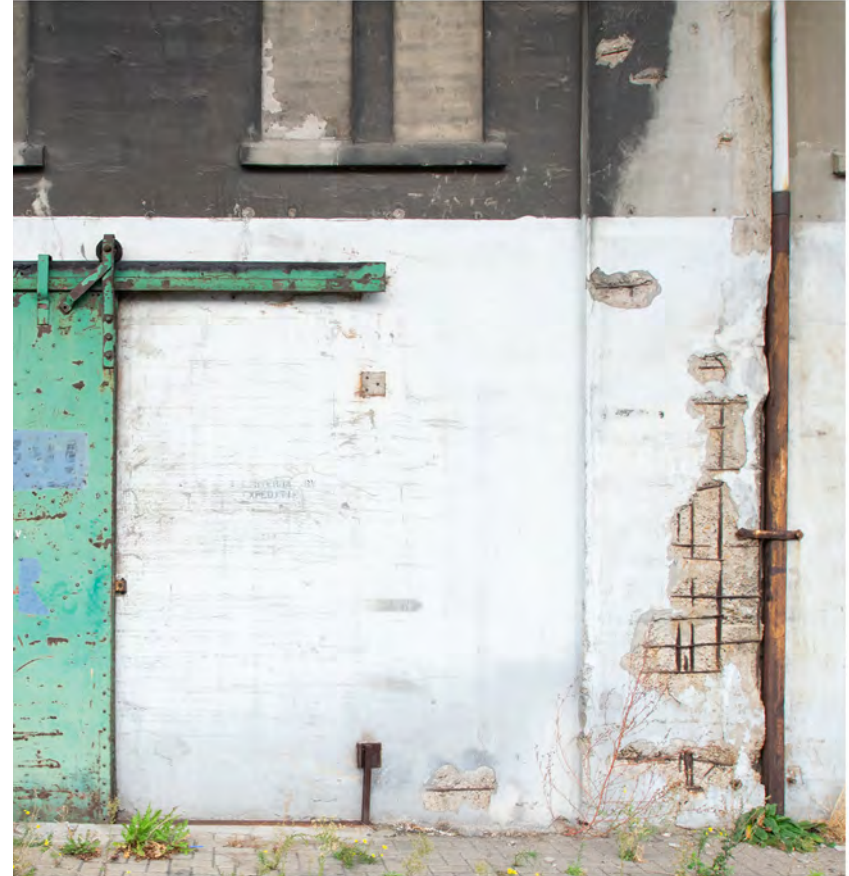
Input parameters:  
Set indoor temperature: 18 degrees  
Rc values;  
Roof (intervented): 7  
Wall (preserved): 0,145  
Floor (intervented) 7



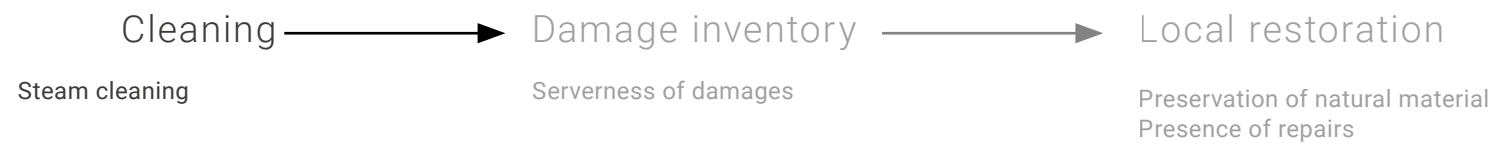
*Exposed concrete in interior*

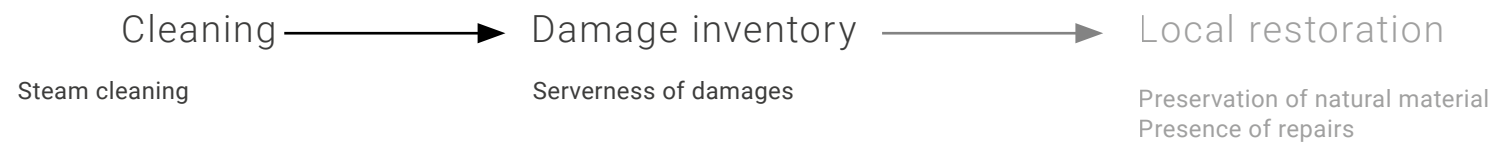


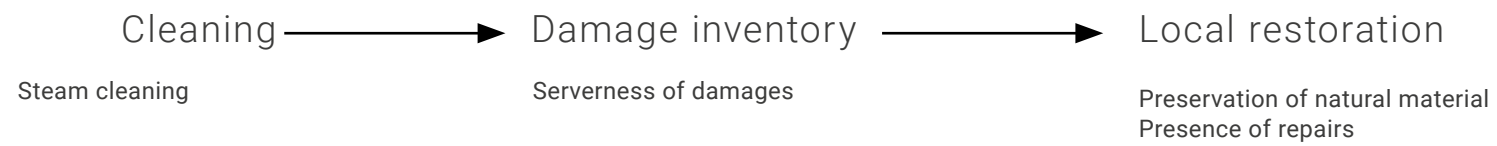
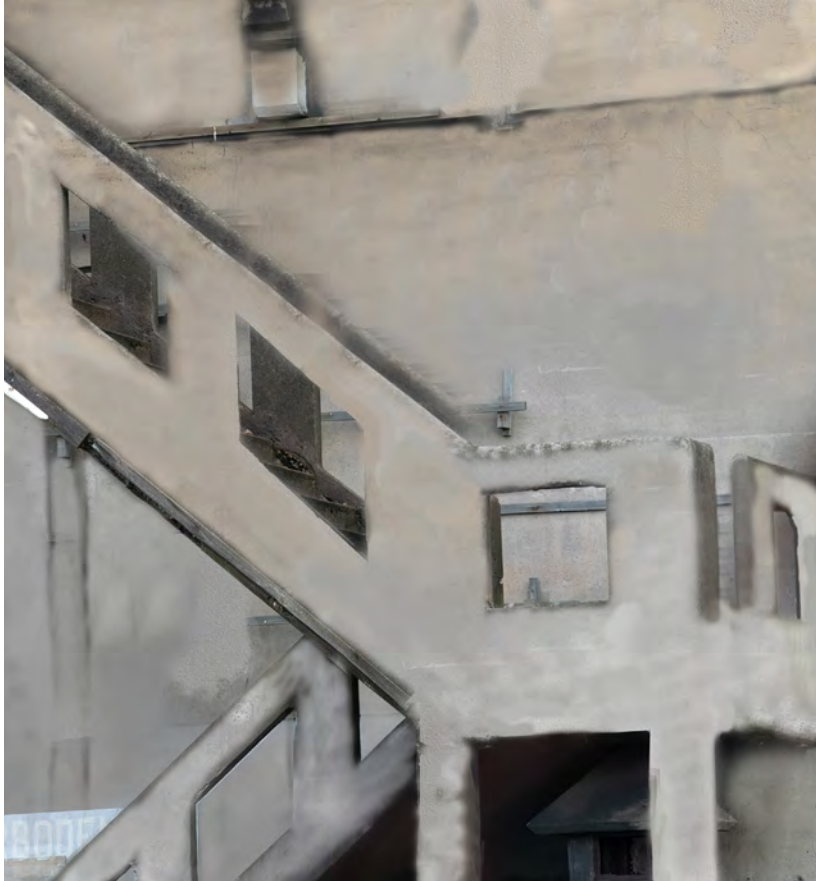
*'Kunstzandsteenpleister' rendering on South-West facade*



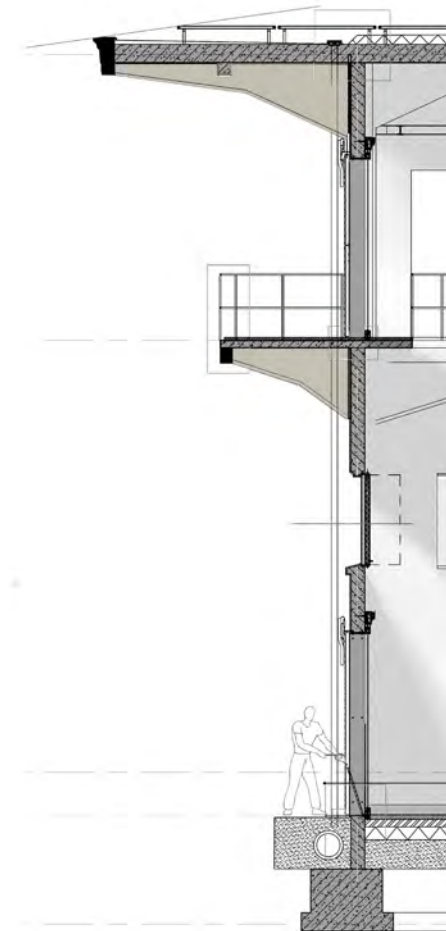






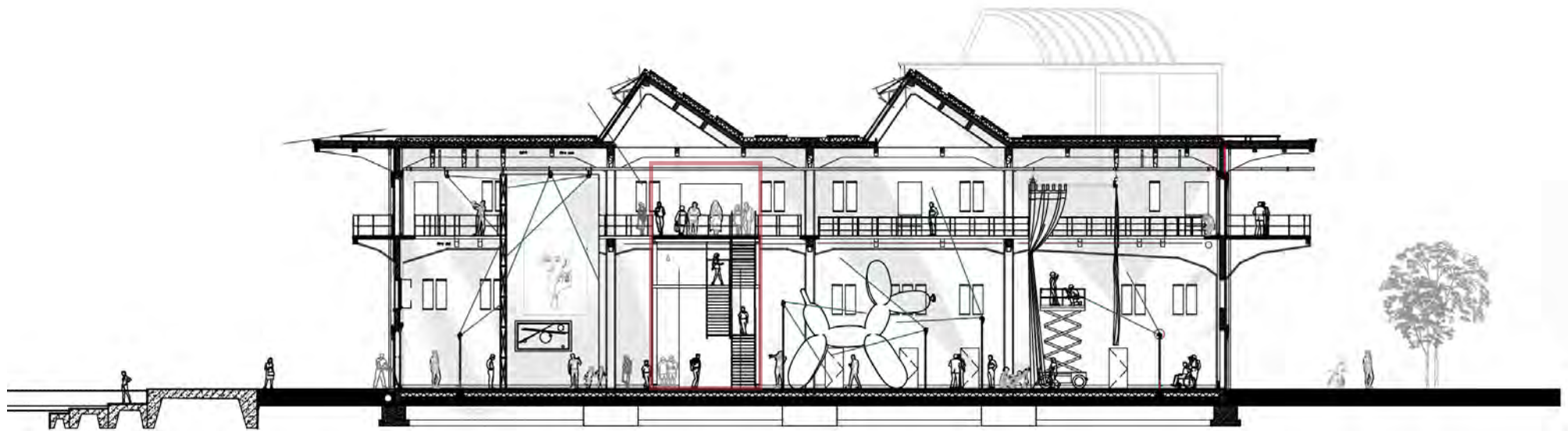






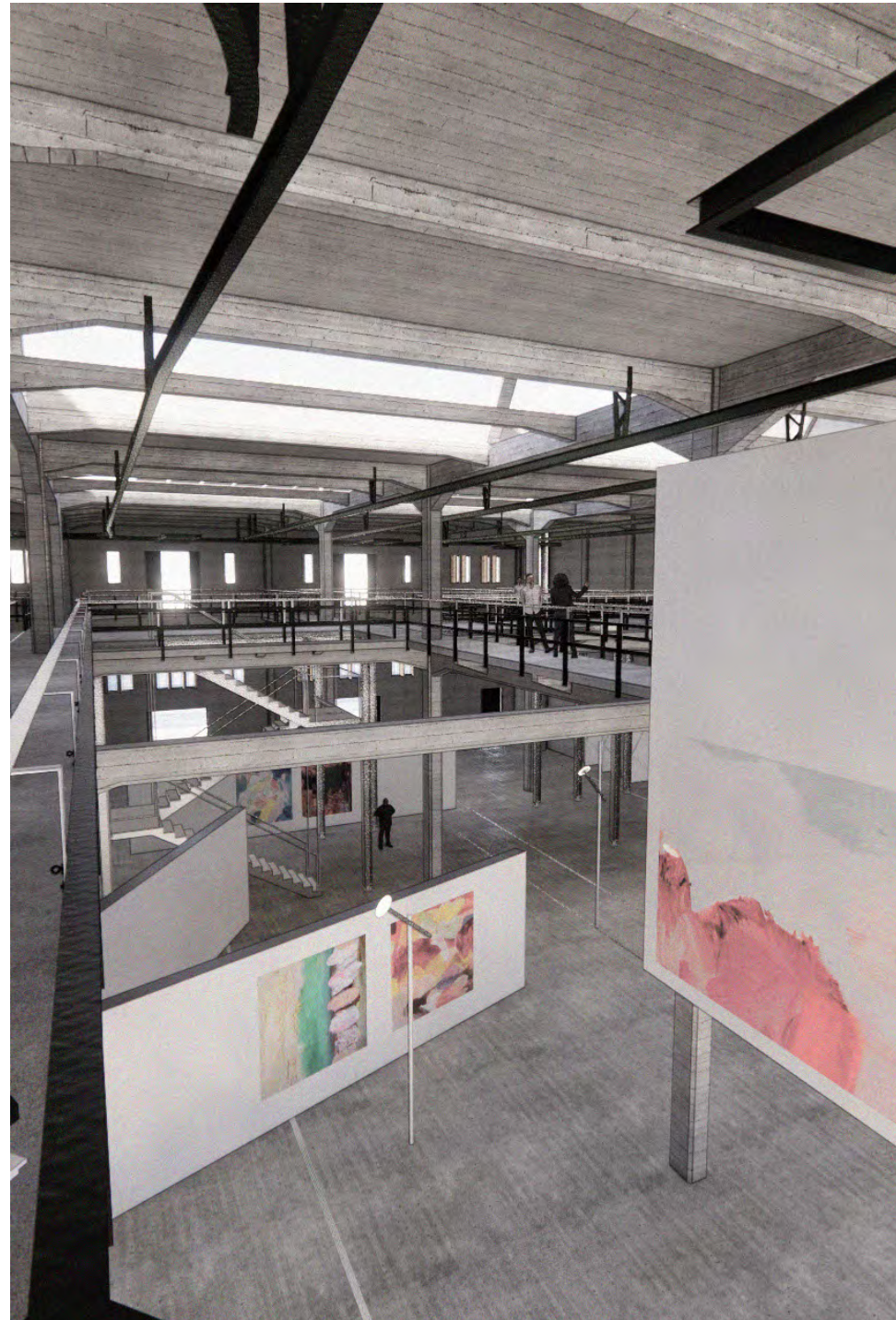
*North east facade - detail*

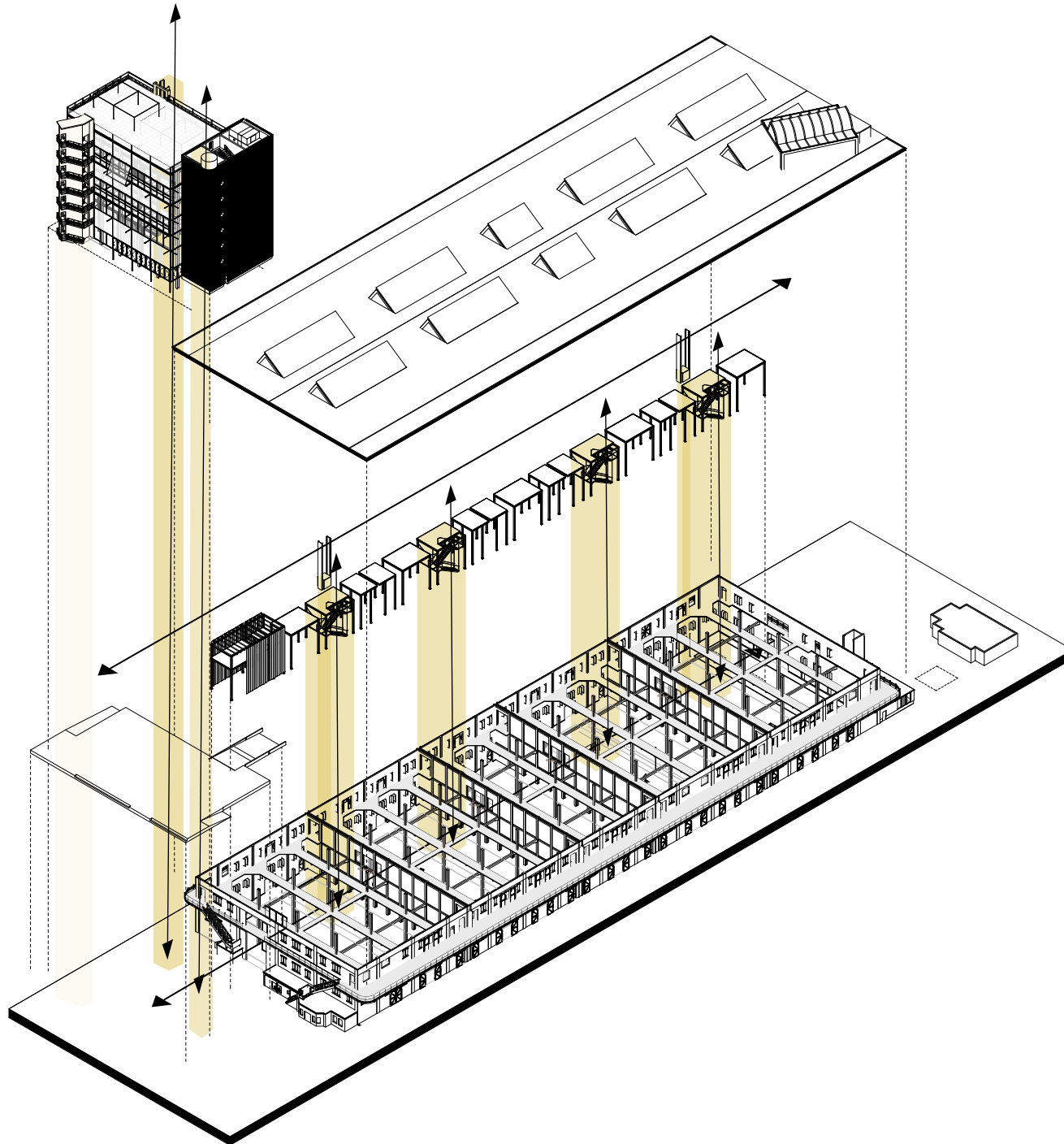


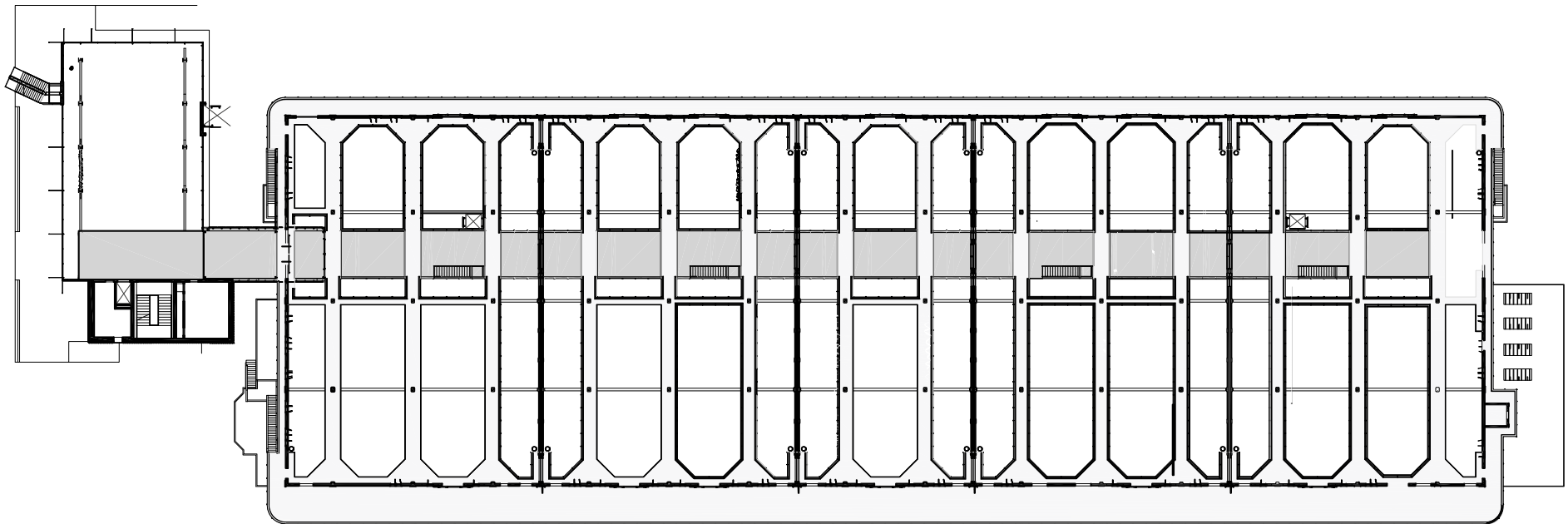


Cultural values  
Heritage approach  
**Design proposal**  
Reflection

Art experience

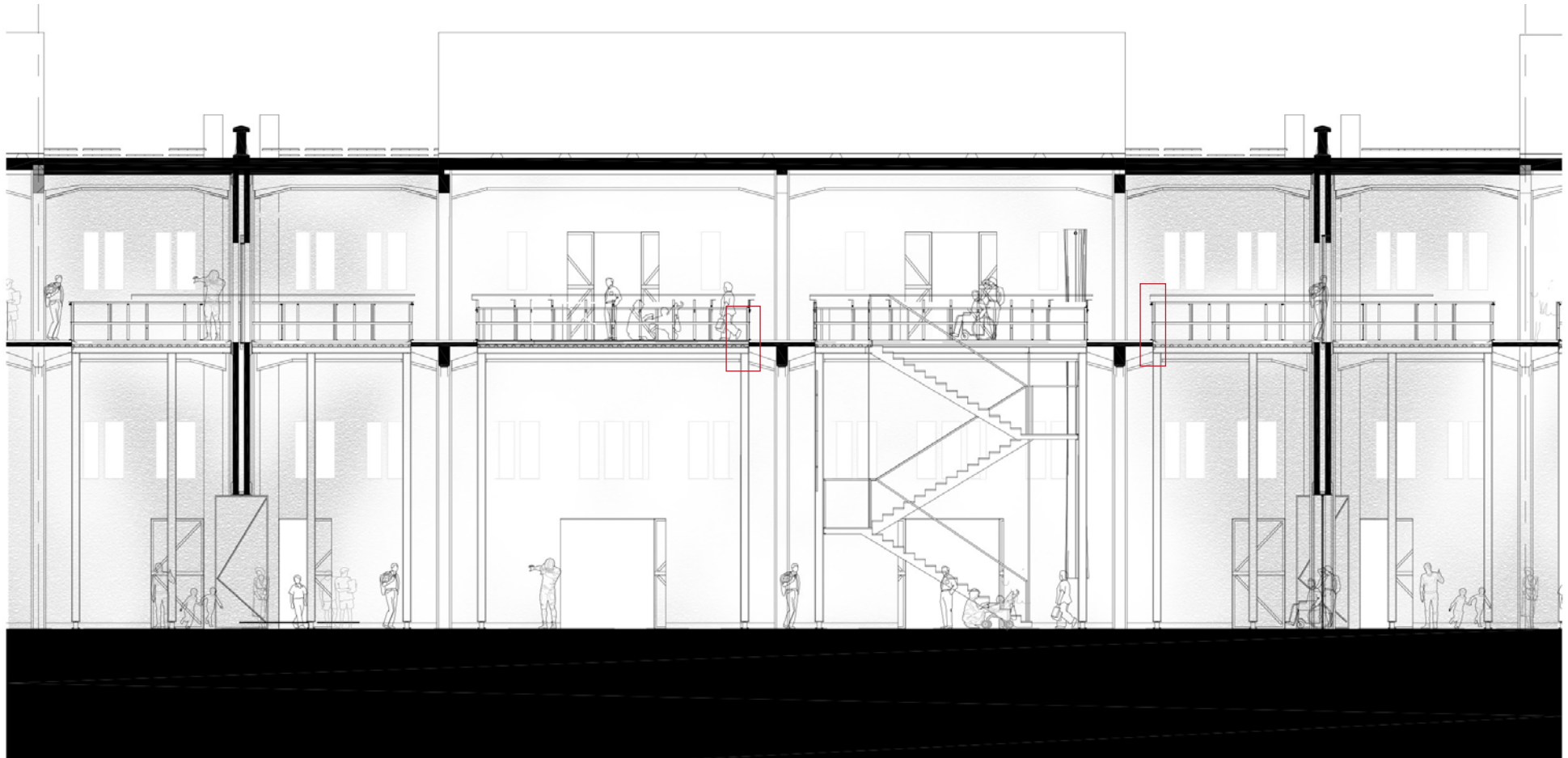


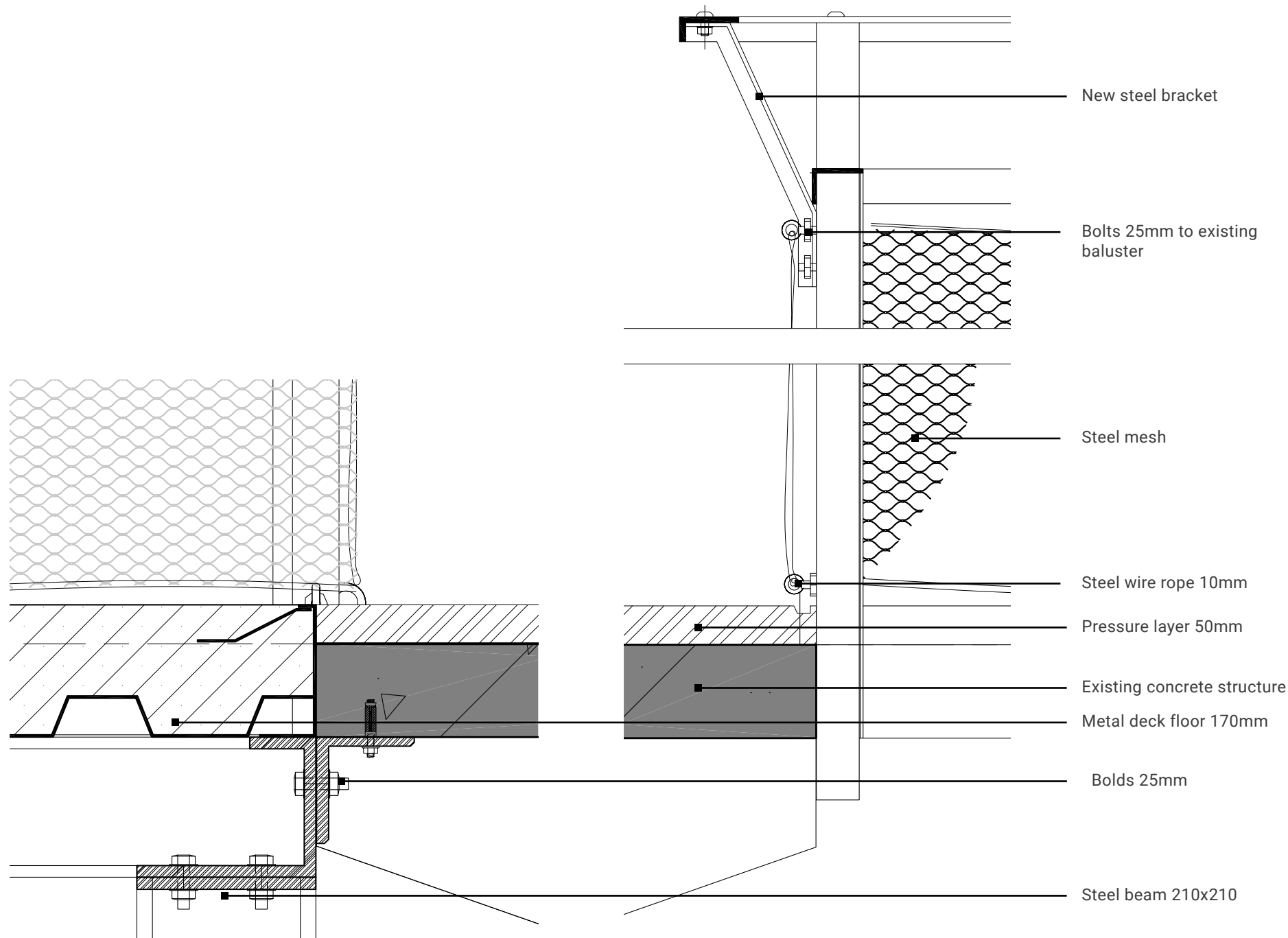


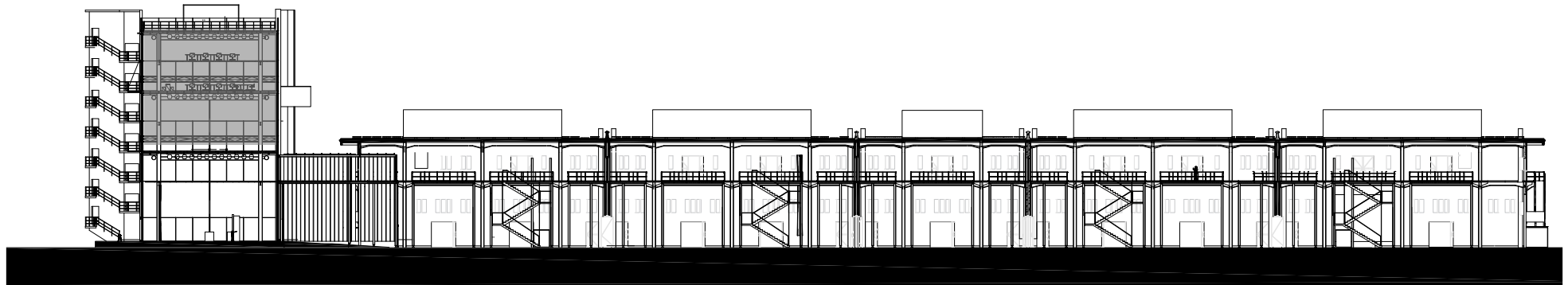


First floor (+7800)



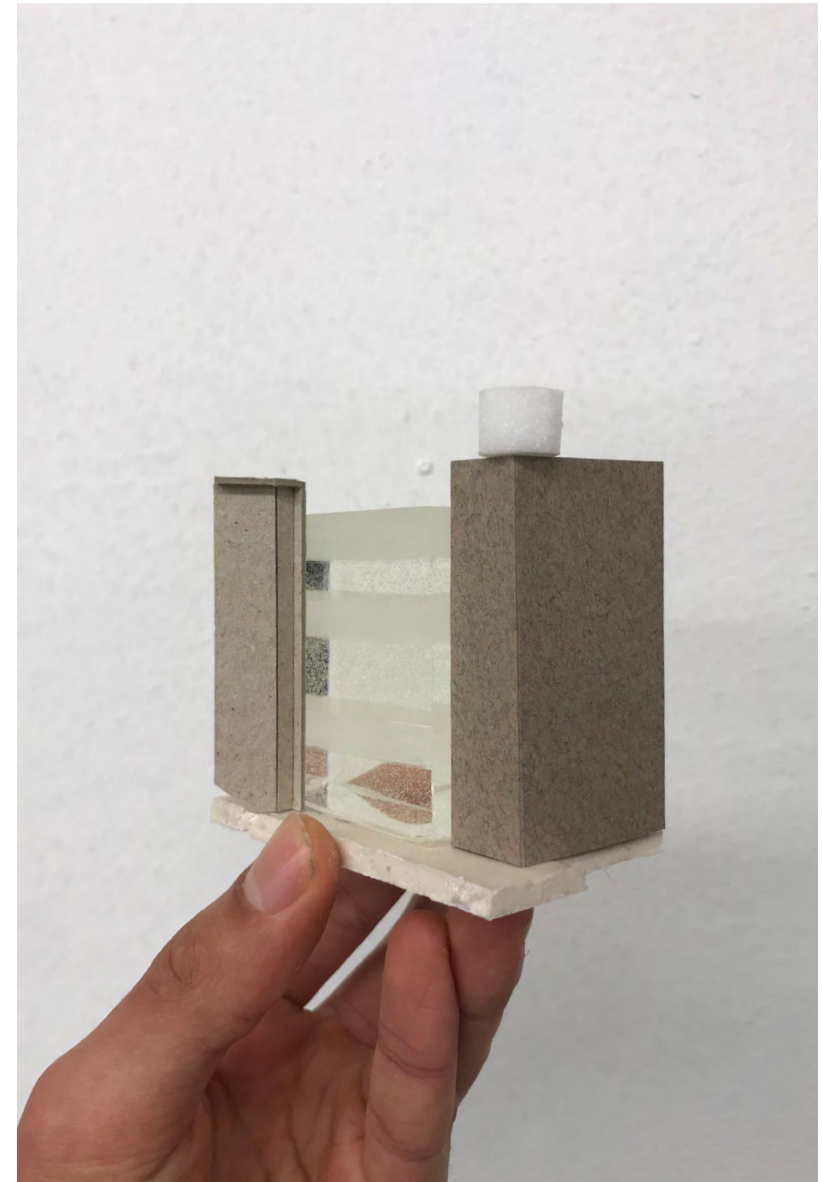
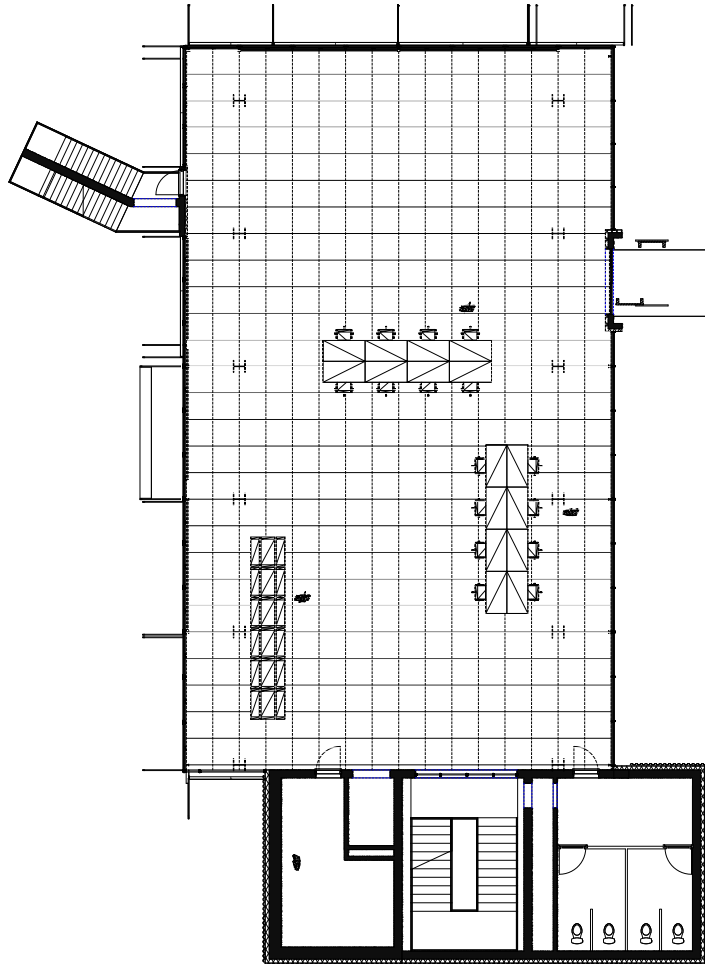




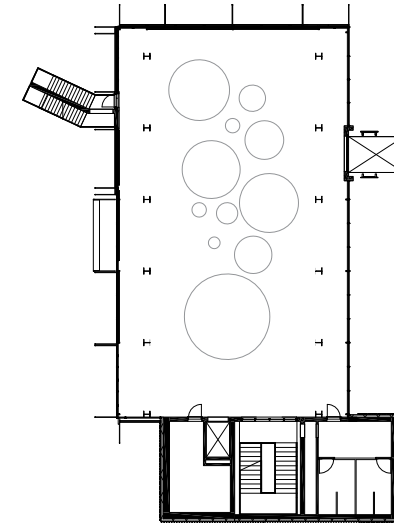
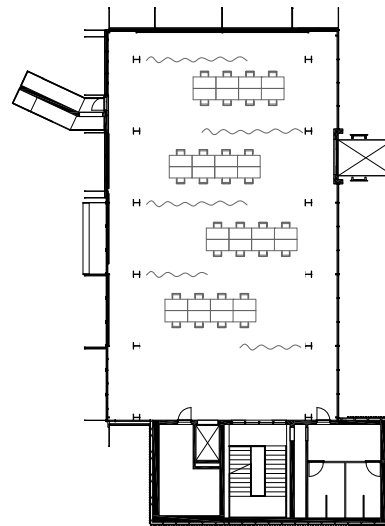
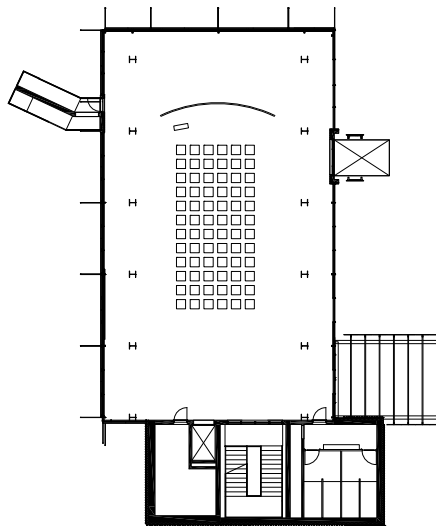
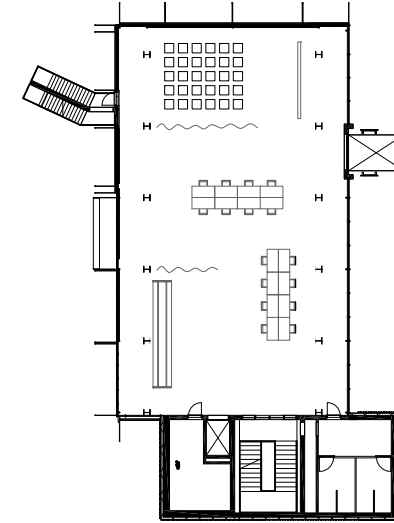
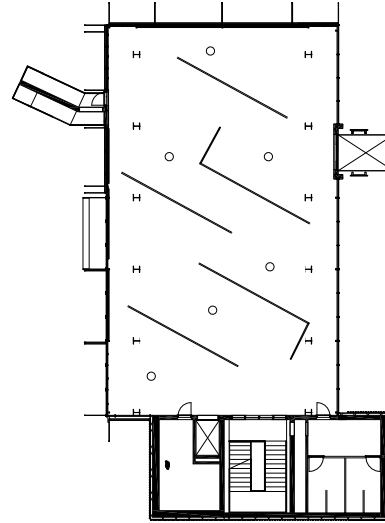
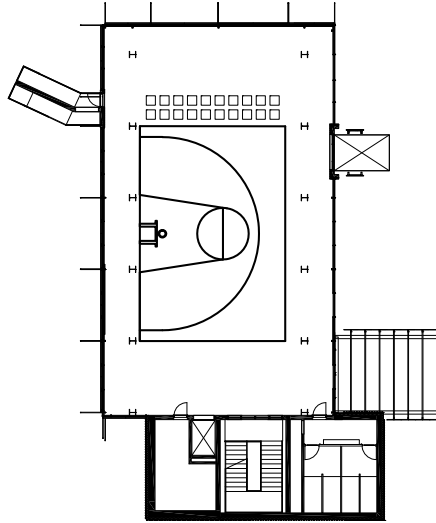


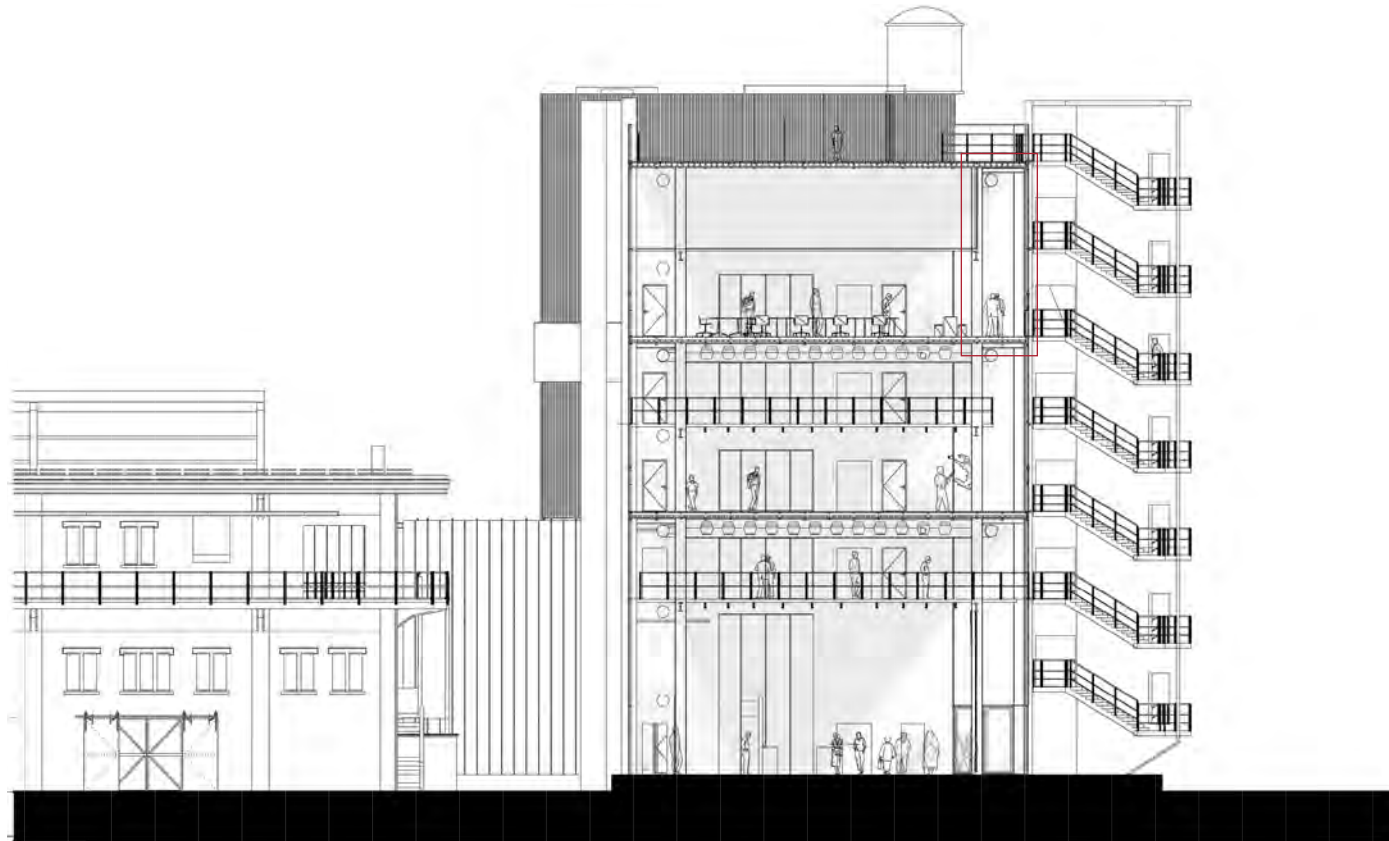
*Longitude cross section*





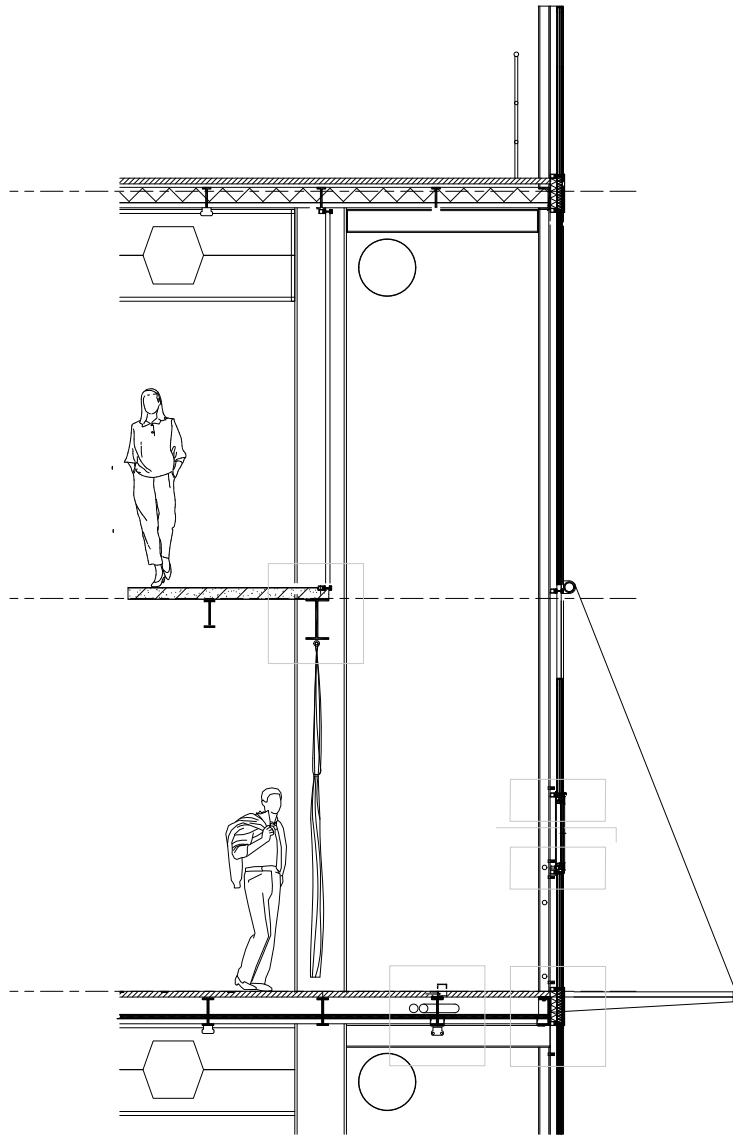
Mass model 1:500



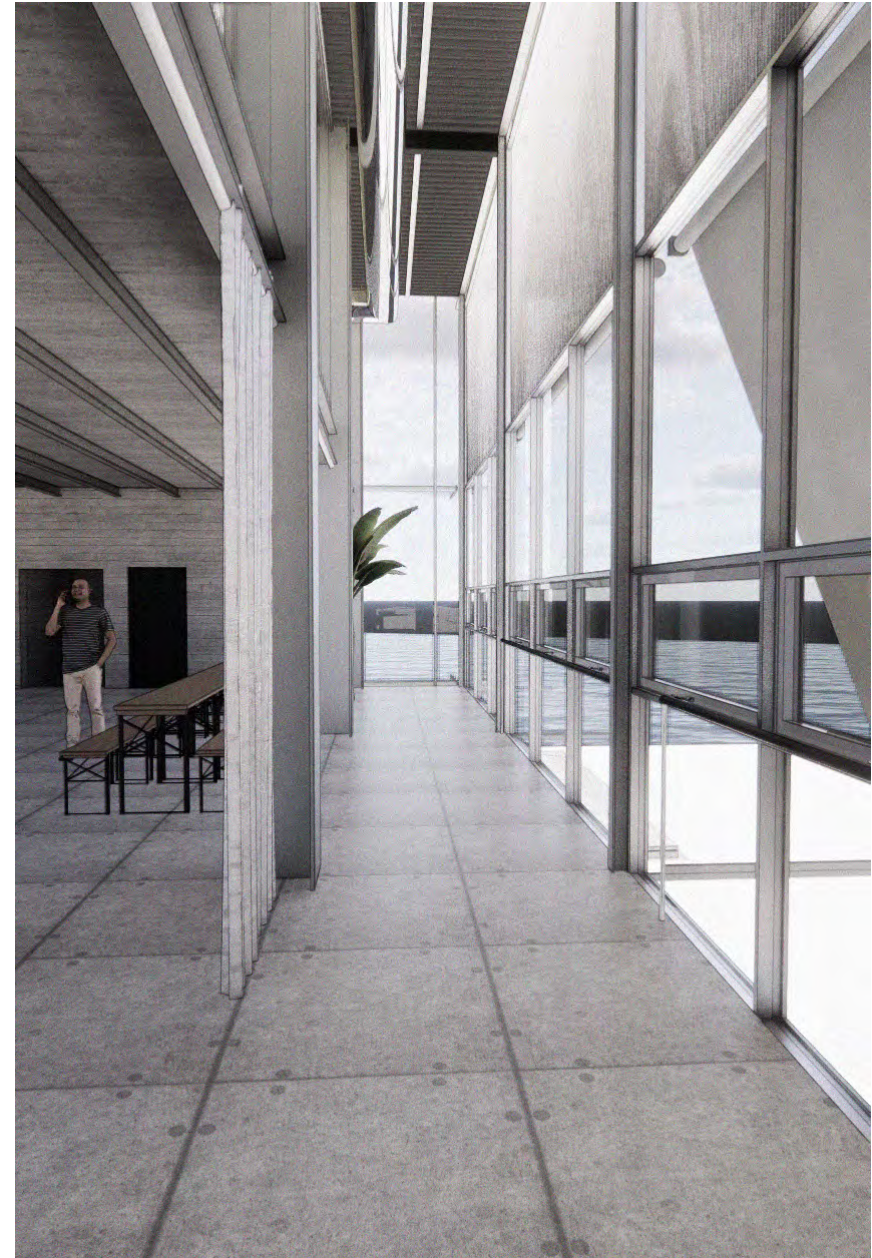


*Section addition*

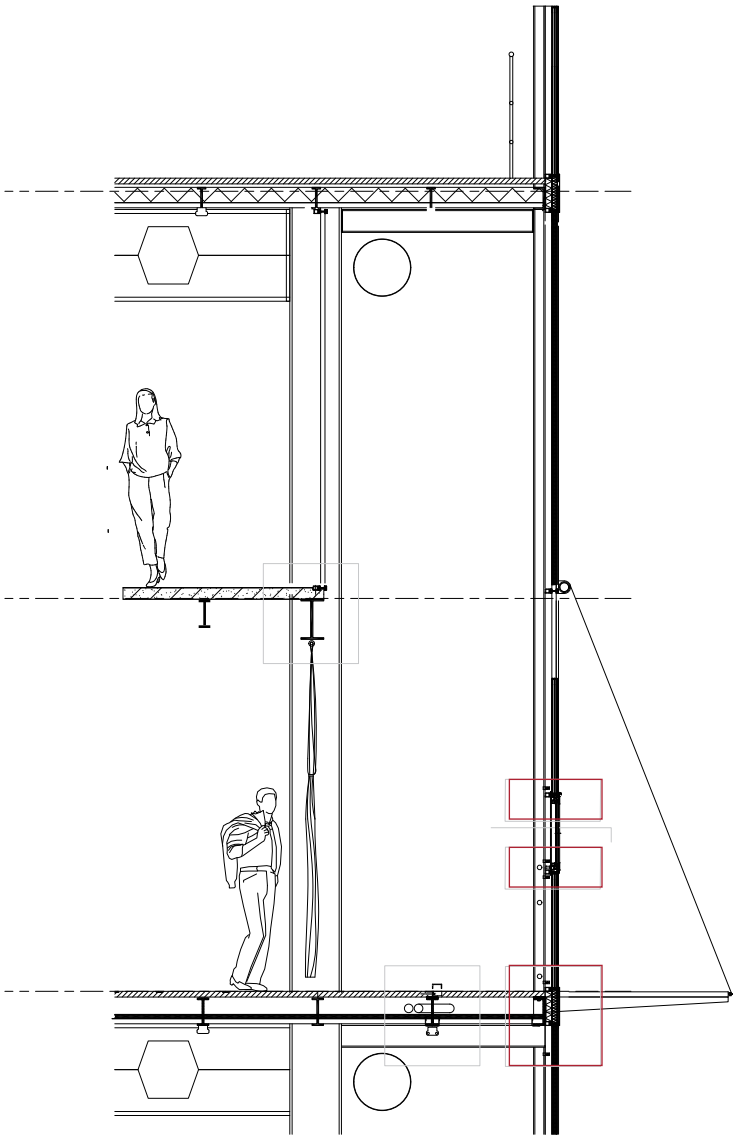




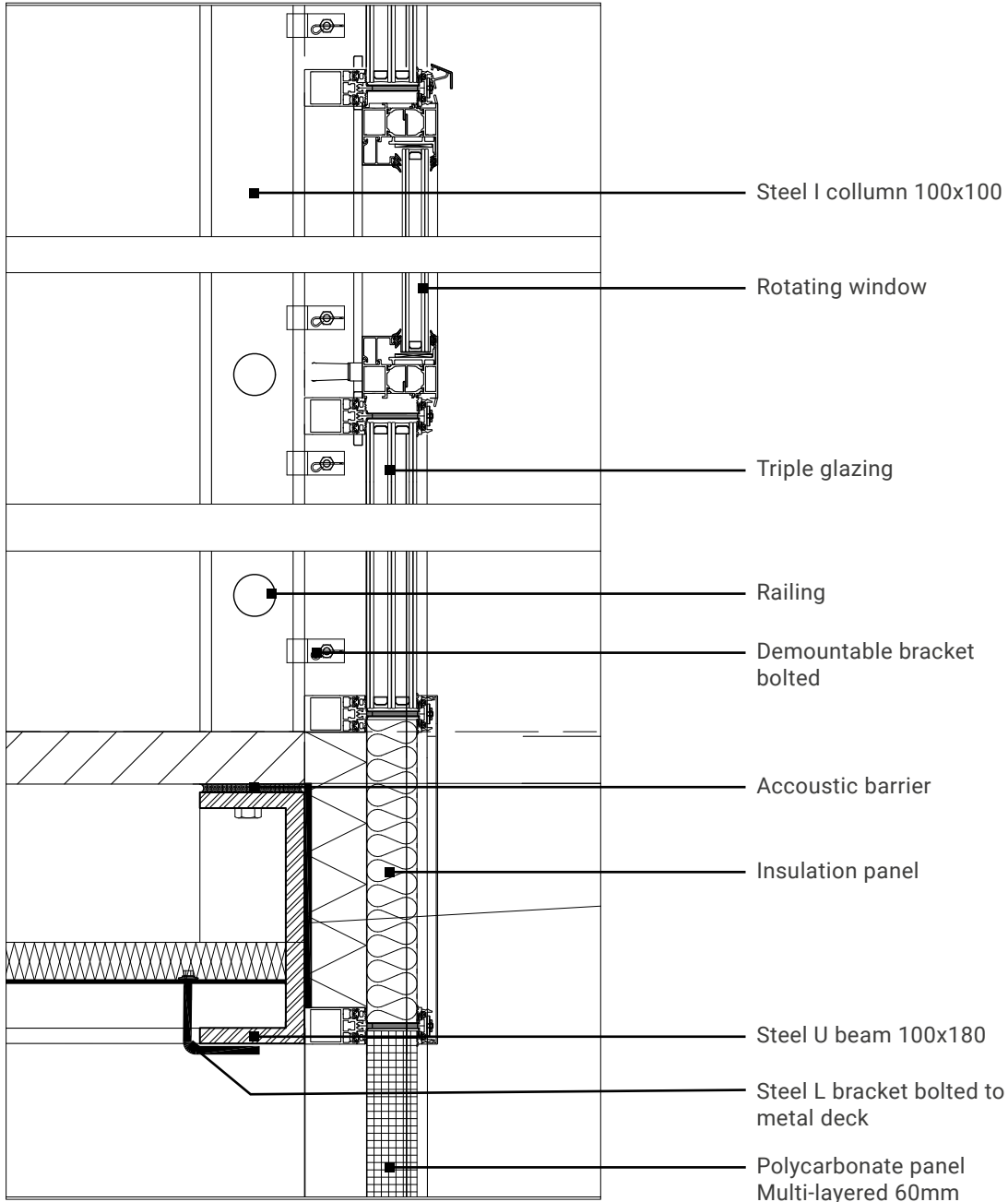
*Detail section*



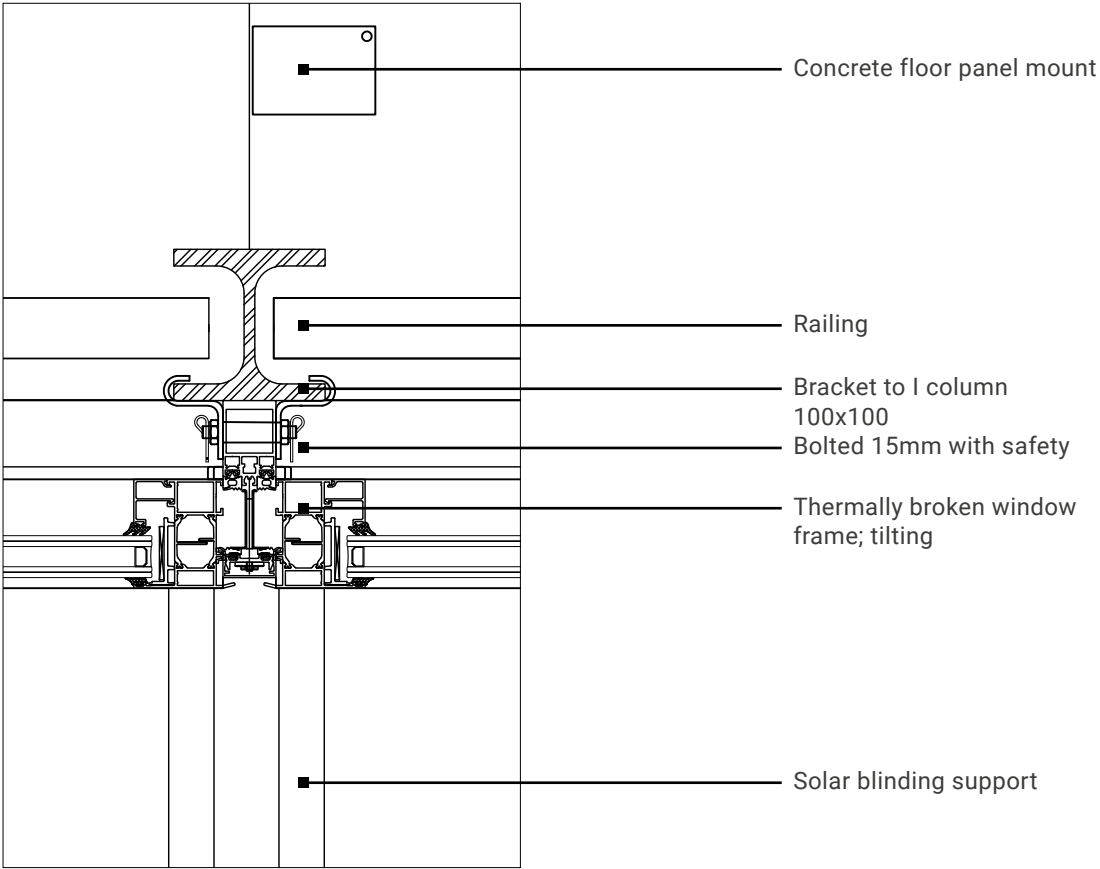
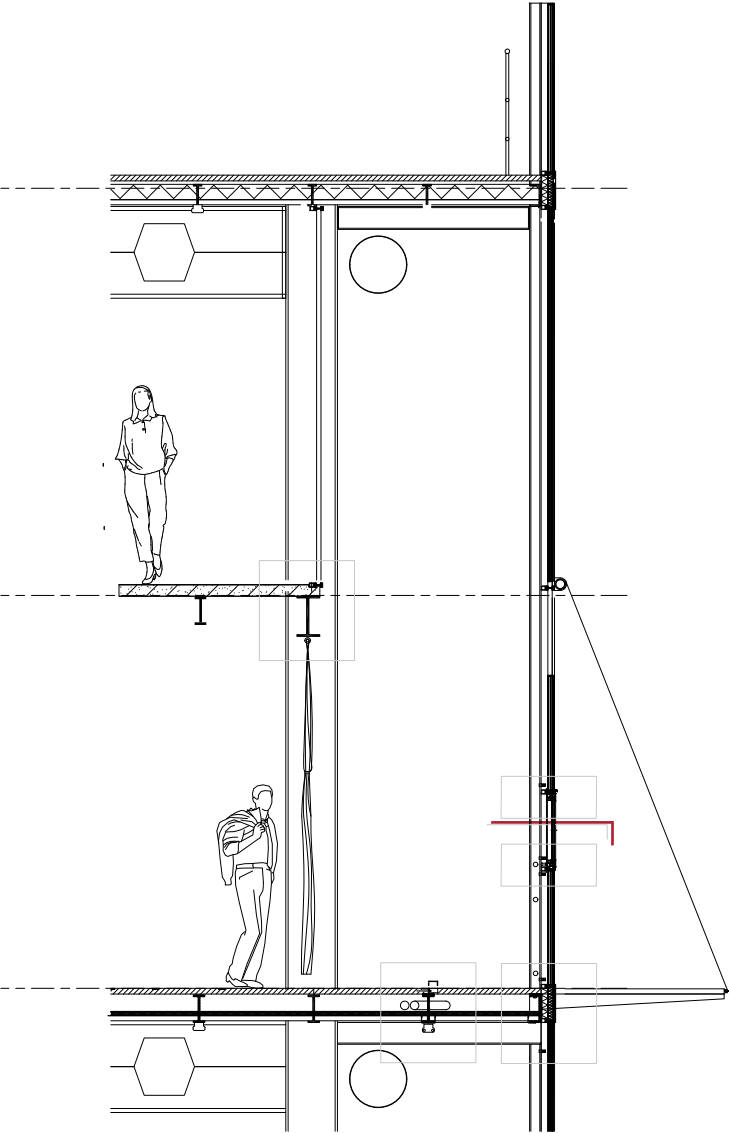
*Impression - addition*



Detail section



Detail curtain wall 1:5







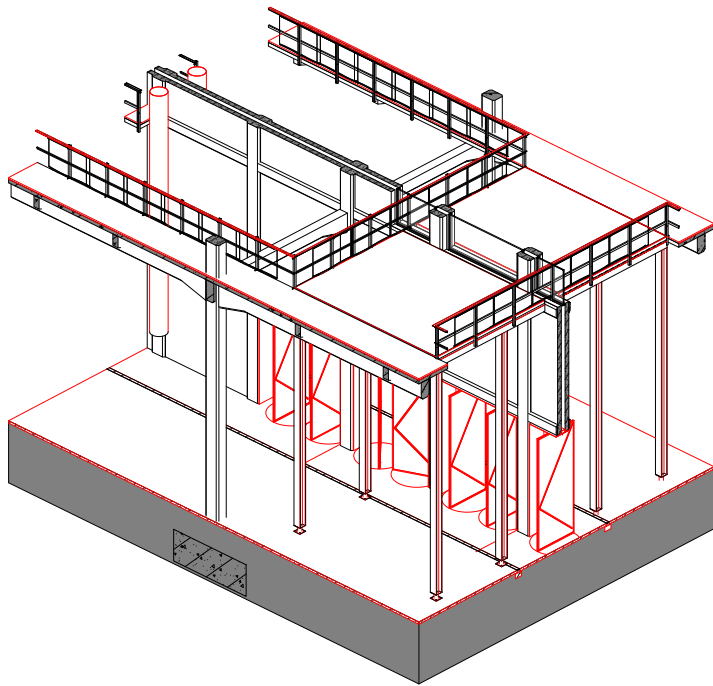
*North East facade along the Keilehaven*



*Addition section*



*Katoenveem section*



*Impression - interventions*

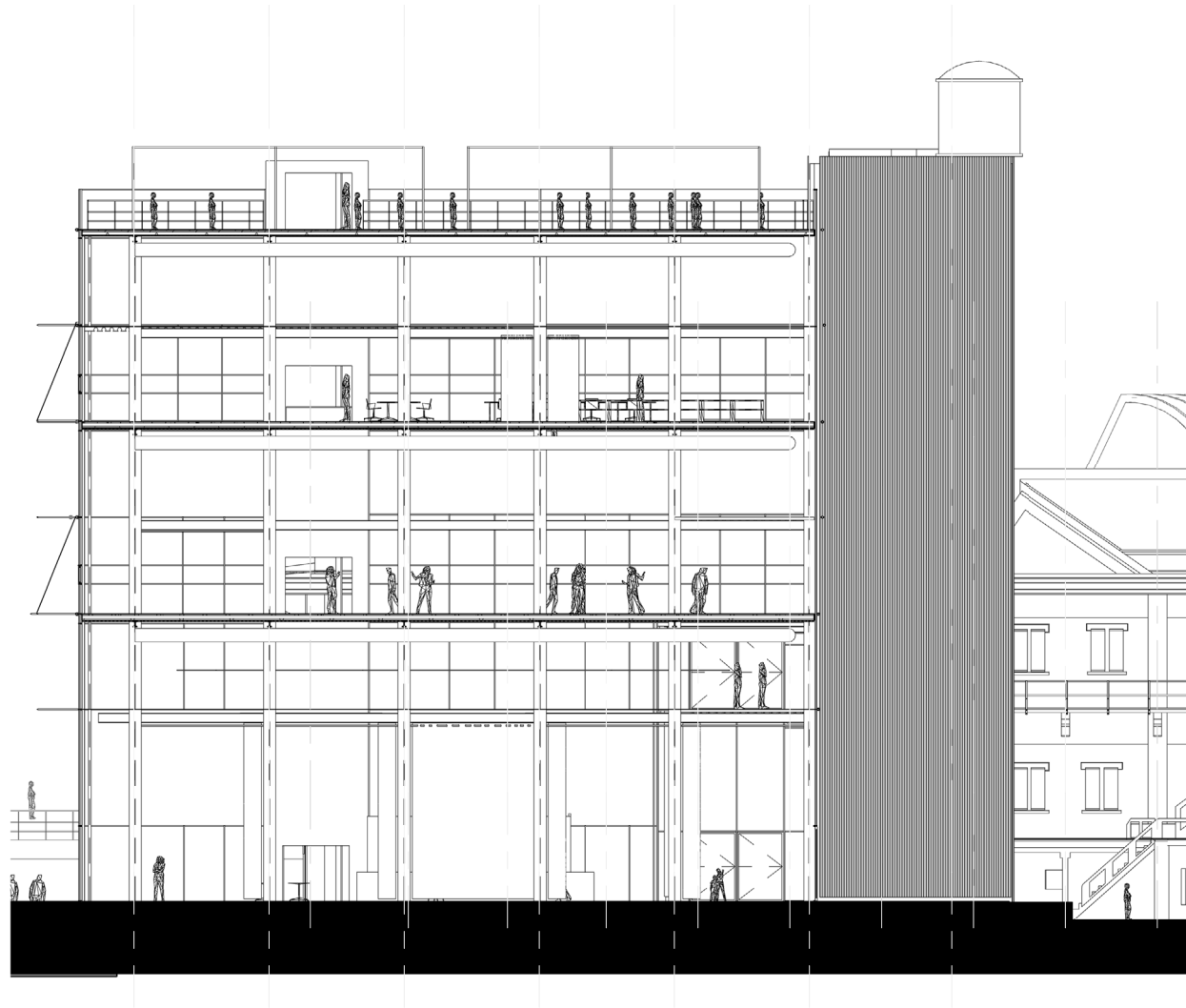


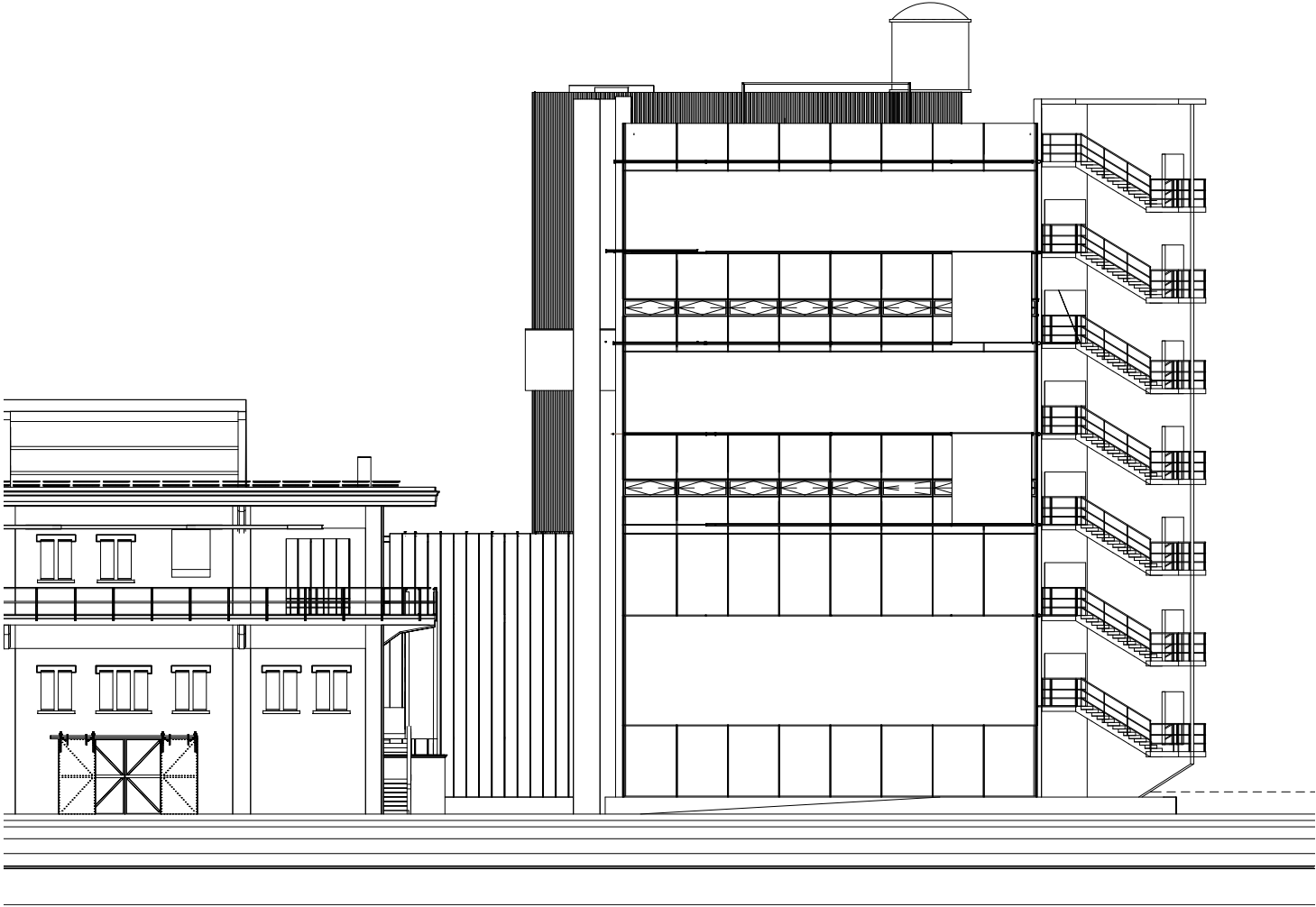
THANK YOU!

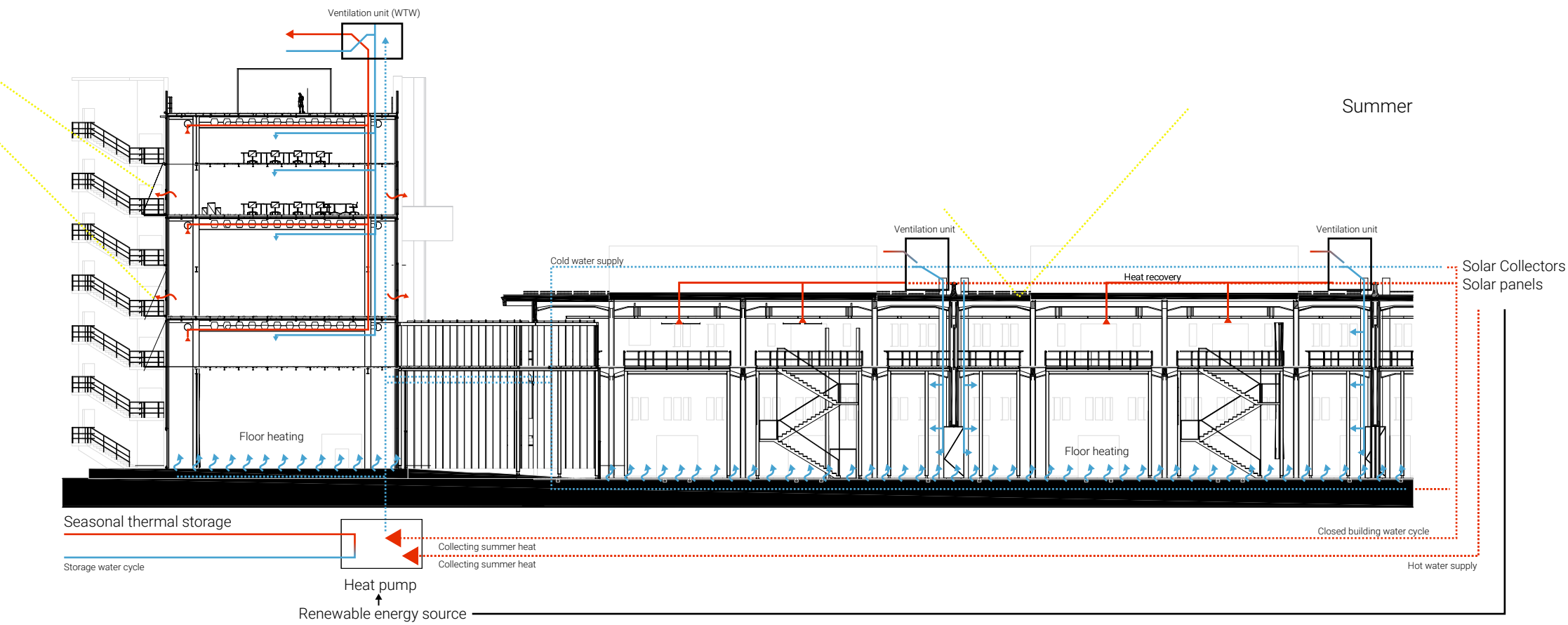






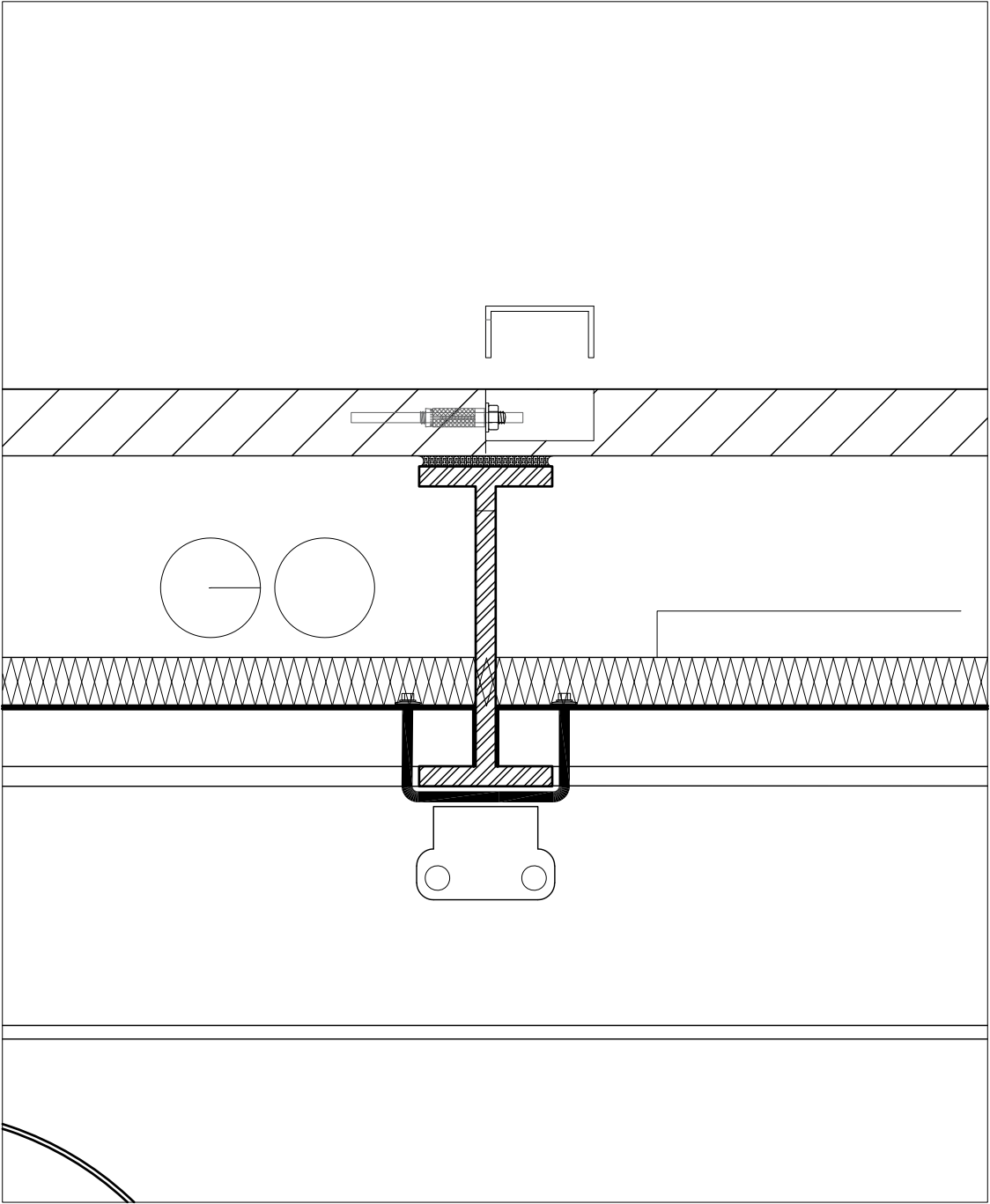




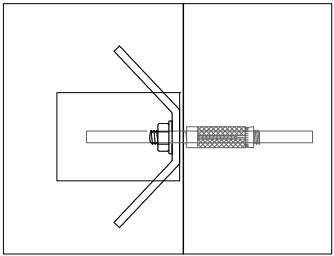
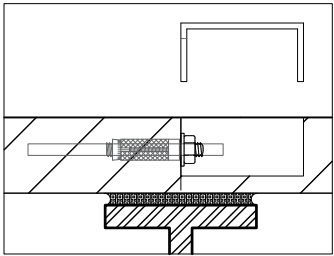
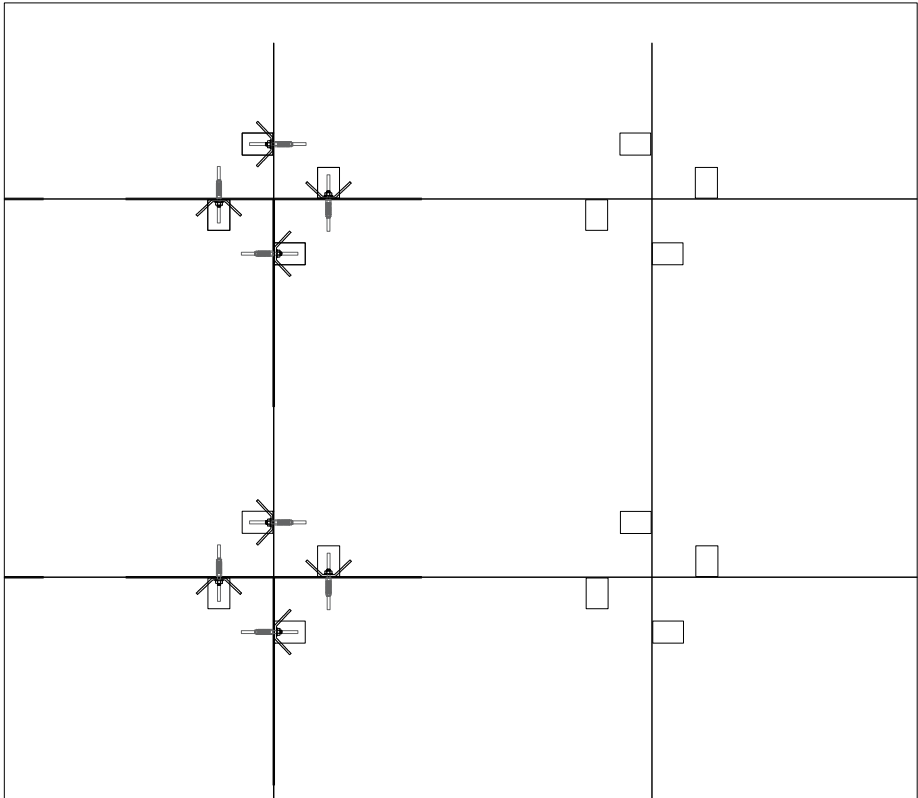








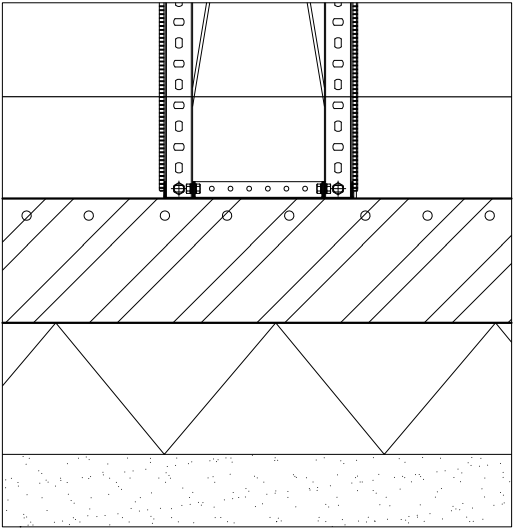
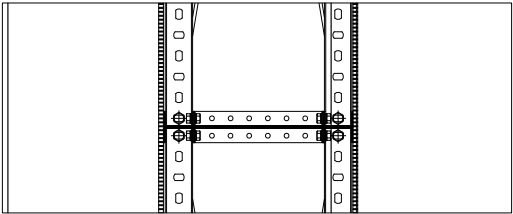
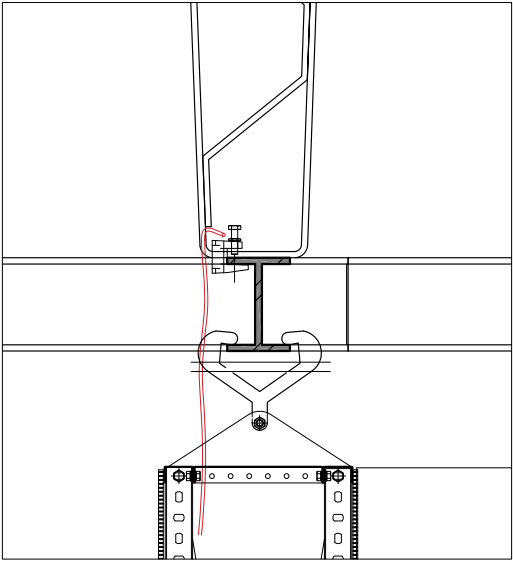
Cultural values  
Heritage approach  
Design proposal  
Reflection



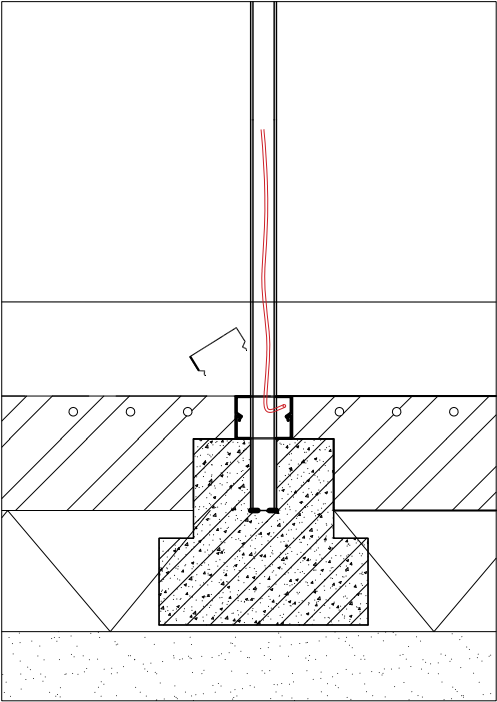
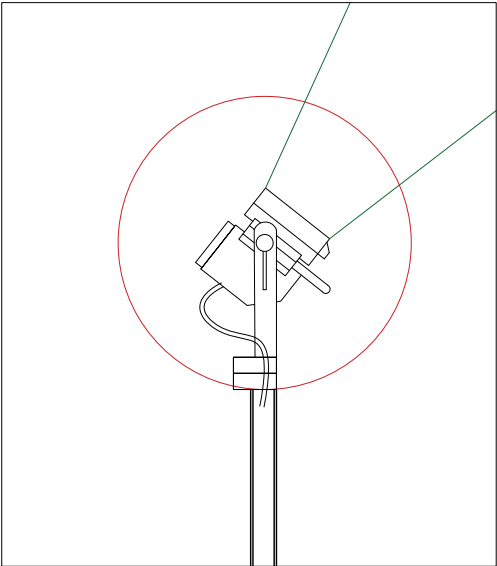
- Cultural values
- Heritage approach
- Design proposal
- Reflection

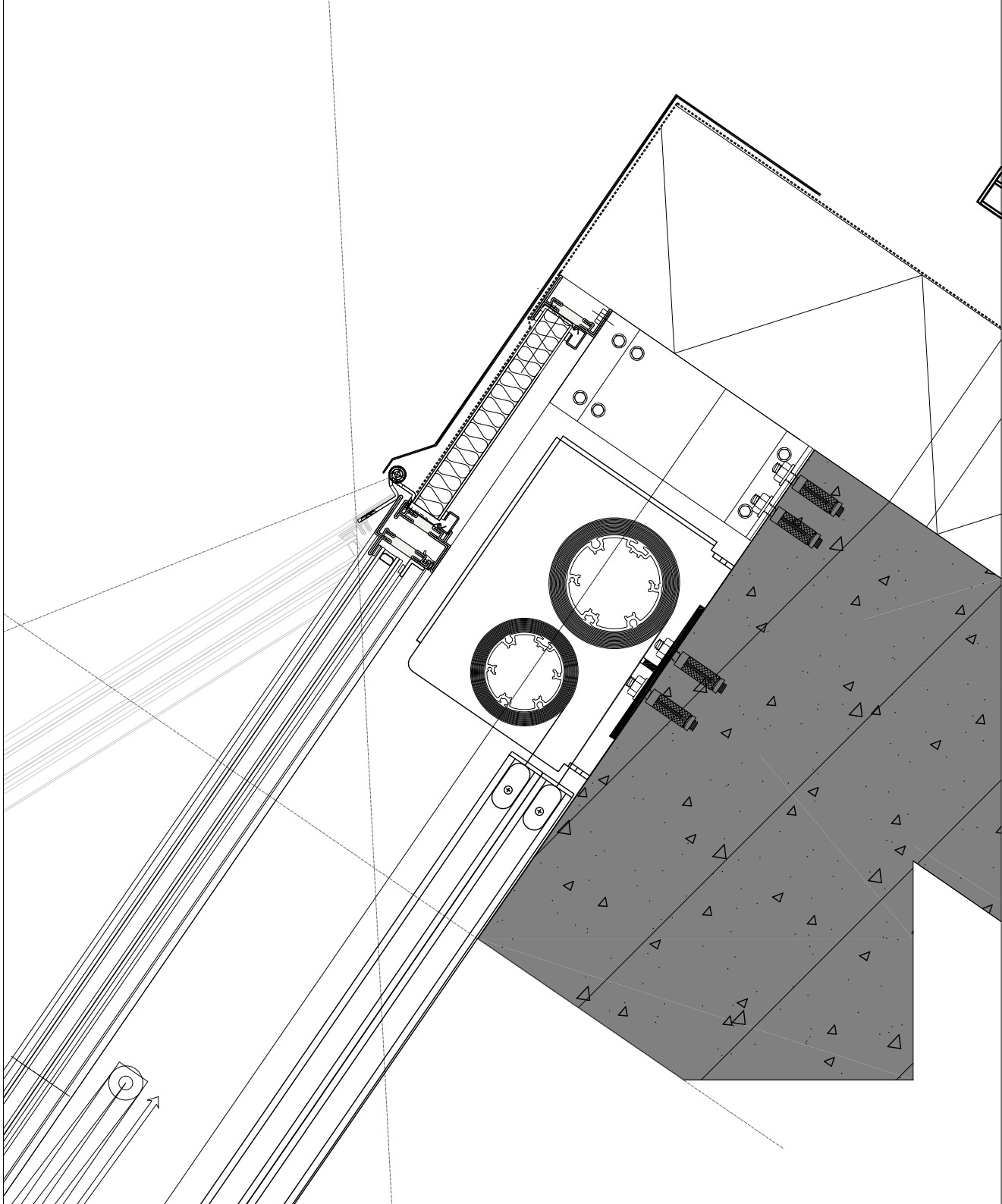


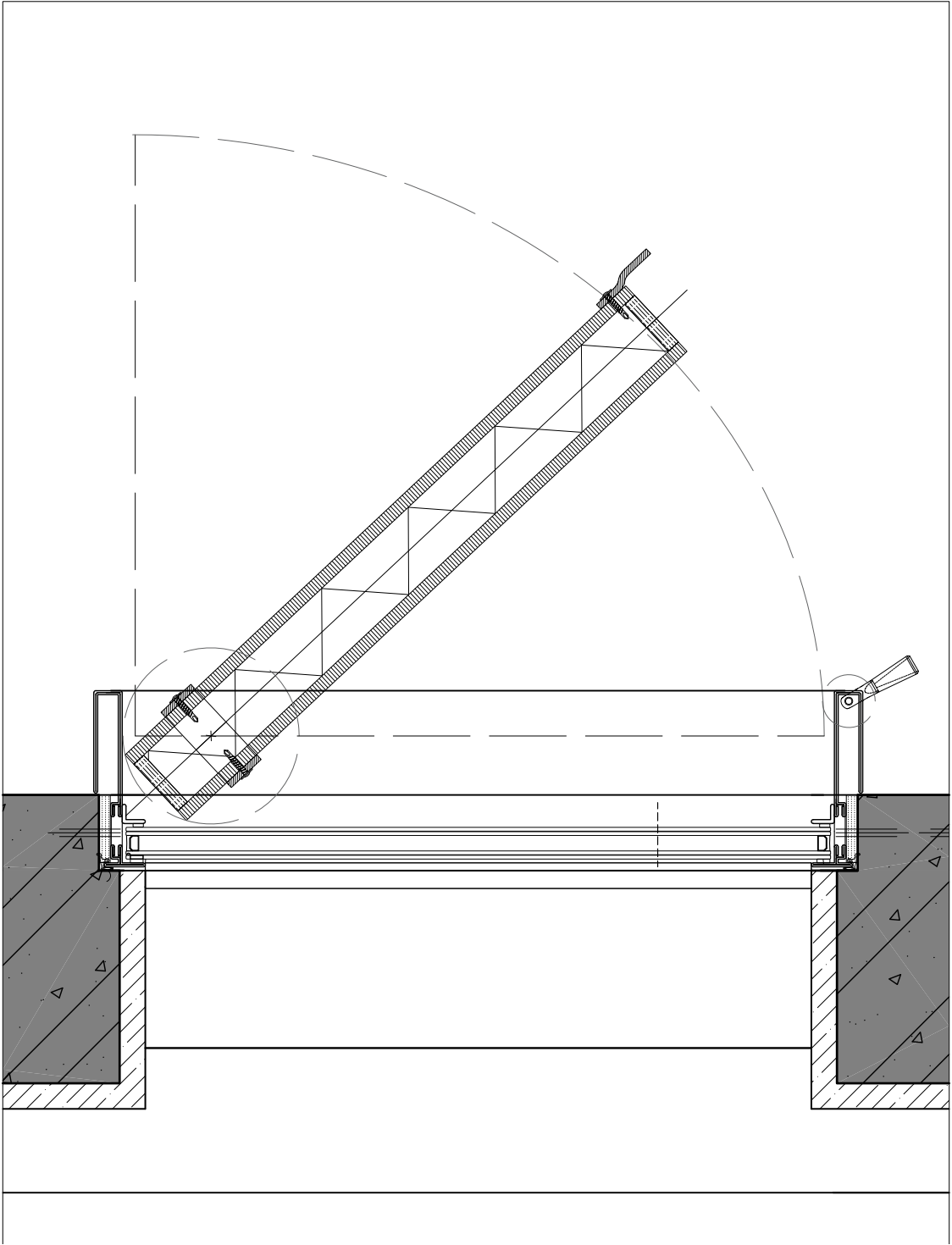
Cultural values  
Heritage approach  
Design proposal  
Reflection



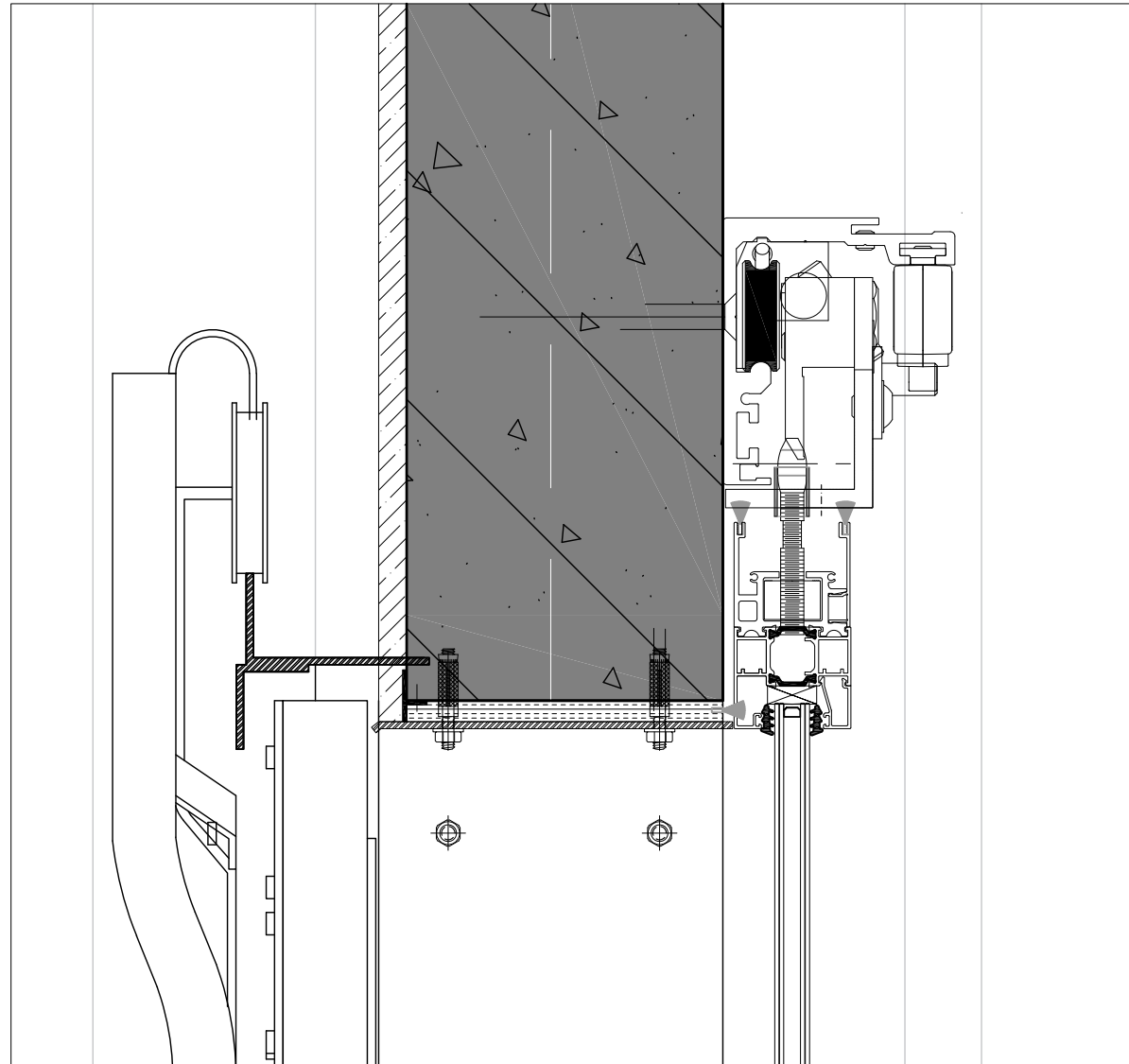
Cultural values  
Heritage approach  
Design proposal  
Reflection



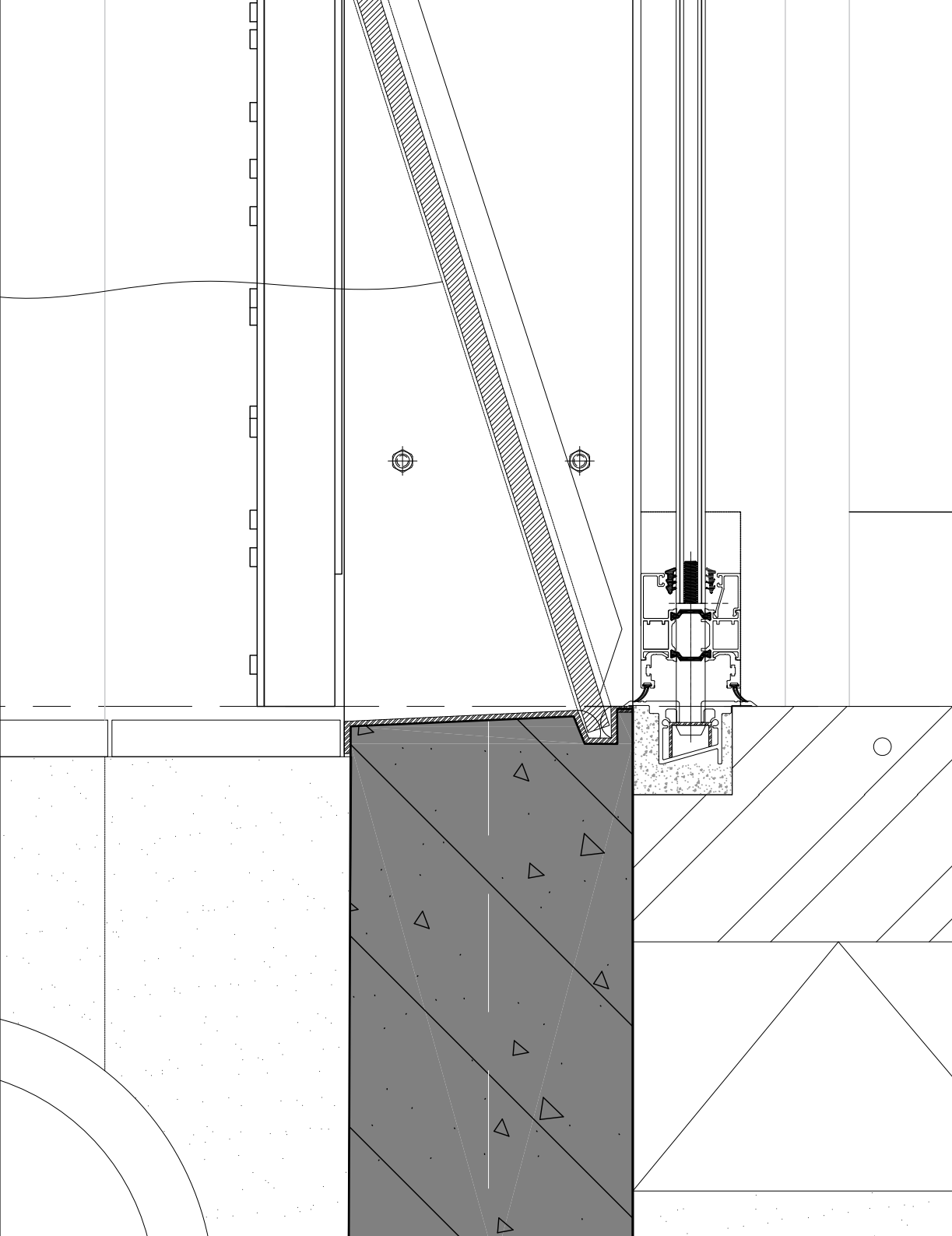




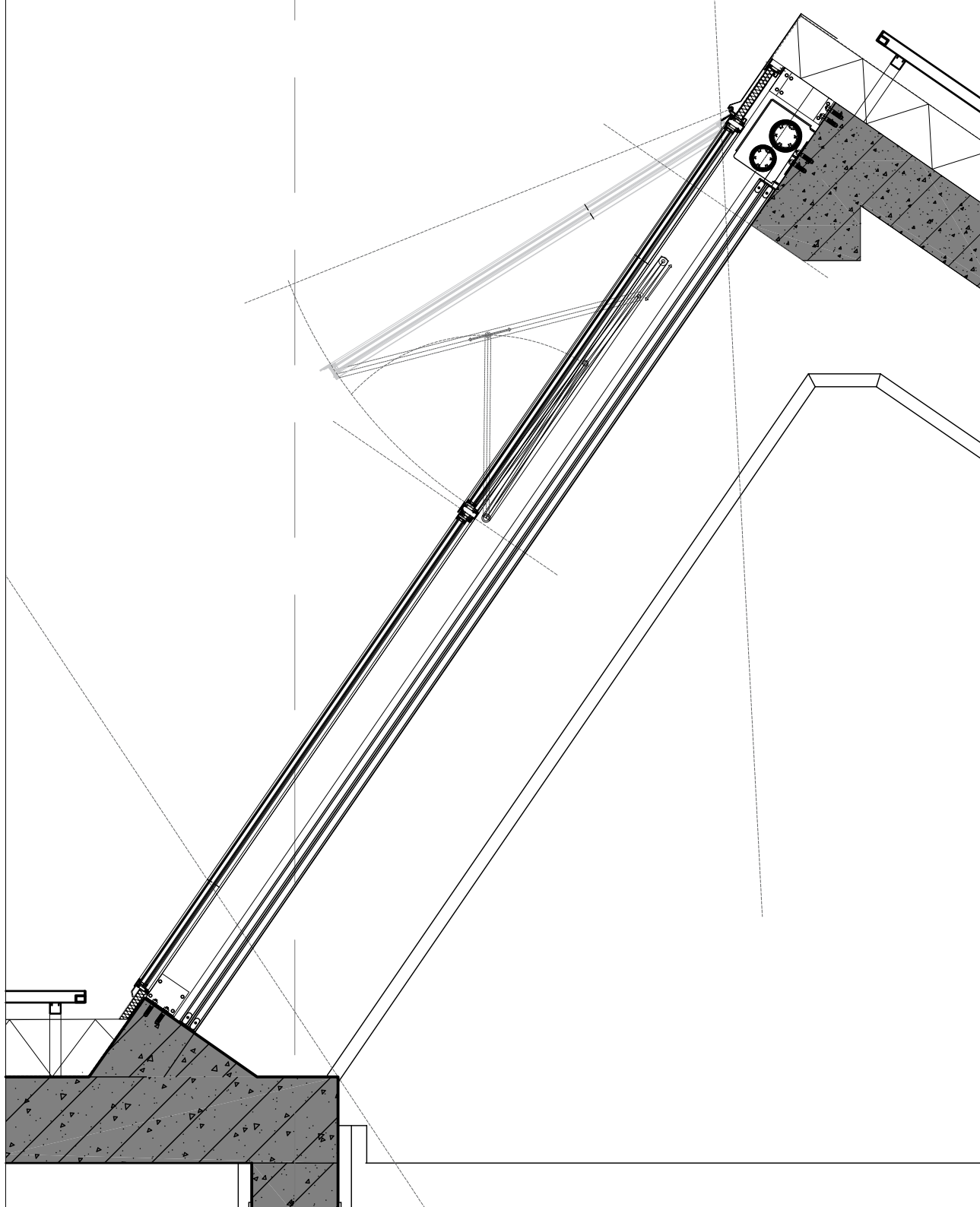




Cultural values  
Heritage approach  
Design proposal  
Reflection



Cultural values  
Heritage approach  
Design proposal  
Reflection



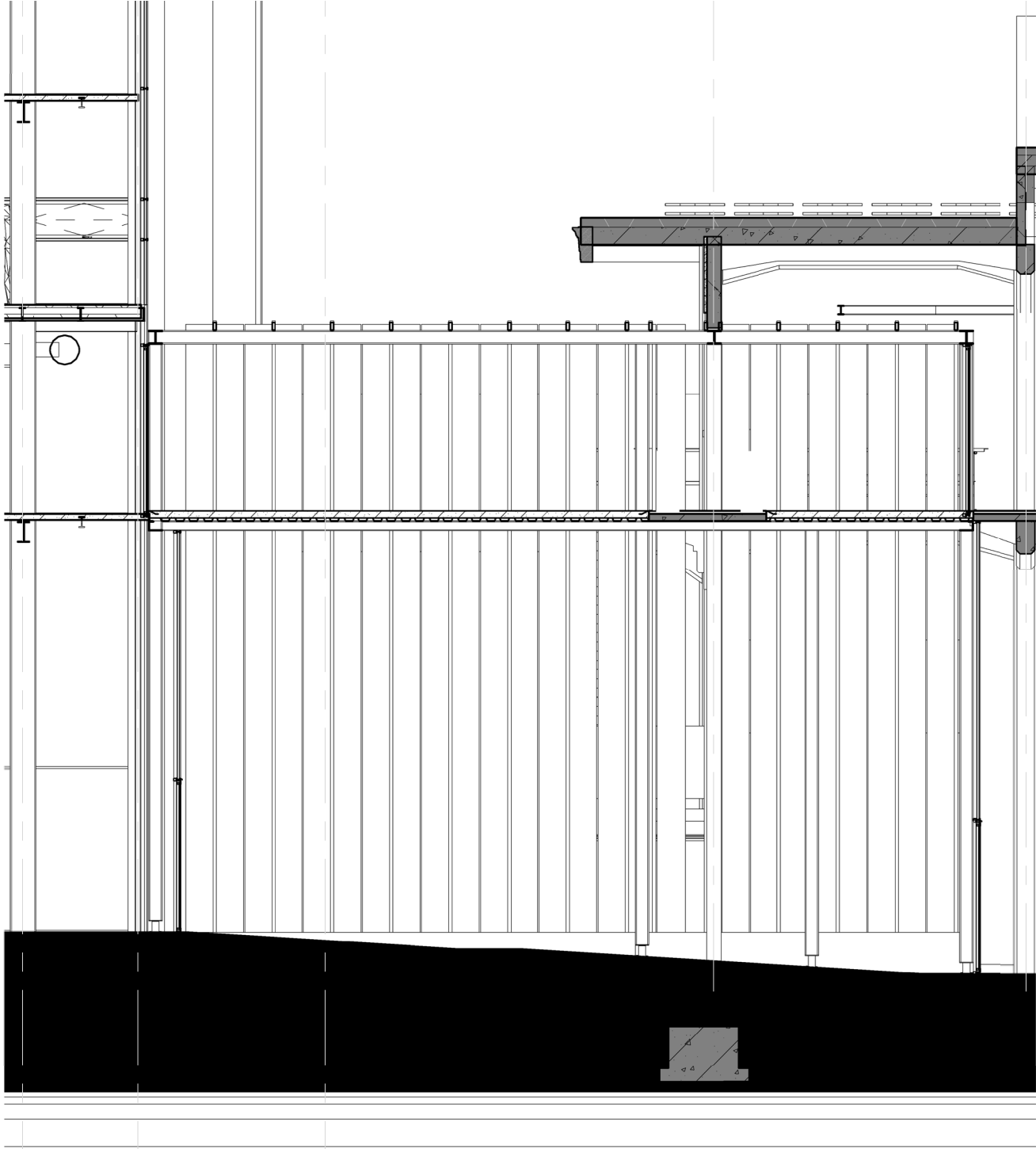
Cultural values  
Heritage approach  
Design proposal  
Reflection



Virgil Abloh (fashion designer) 2020 - *'To Frank Gehry, Museum's are what we make of them.'*

*CLAIMS: Artists make museums not architects*





Cultural values

Heritage approach

Design proposal

Reflection