

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

KATOENVEEM, KEILEWEG 39 ROTTERDAM

Adapting 20C Heritage

Lars van Straalen

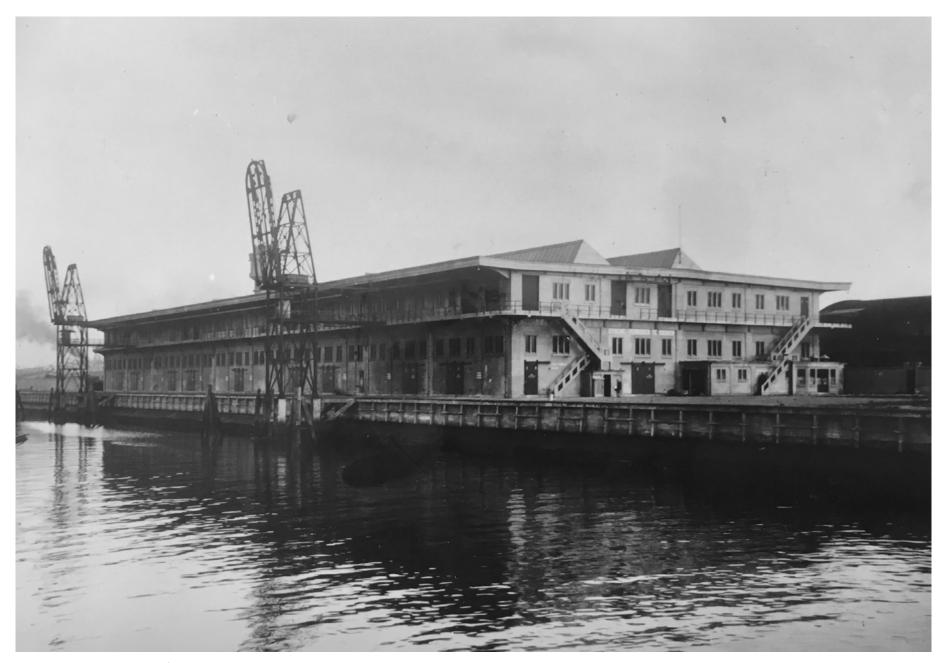
25 -jan -2021

Committee: Nicholas Clarke Frank Koopmans Herman de Wolff

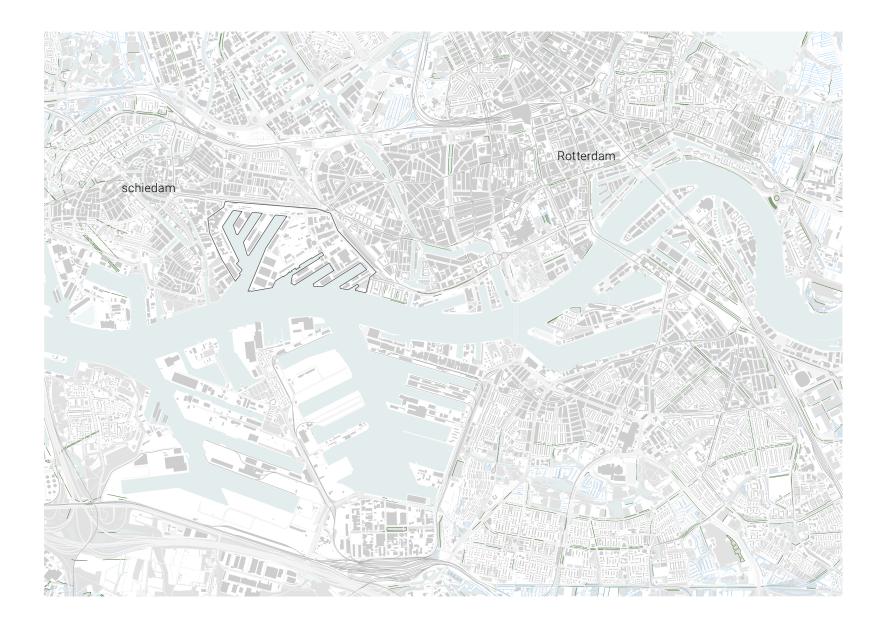




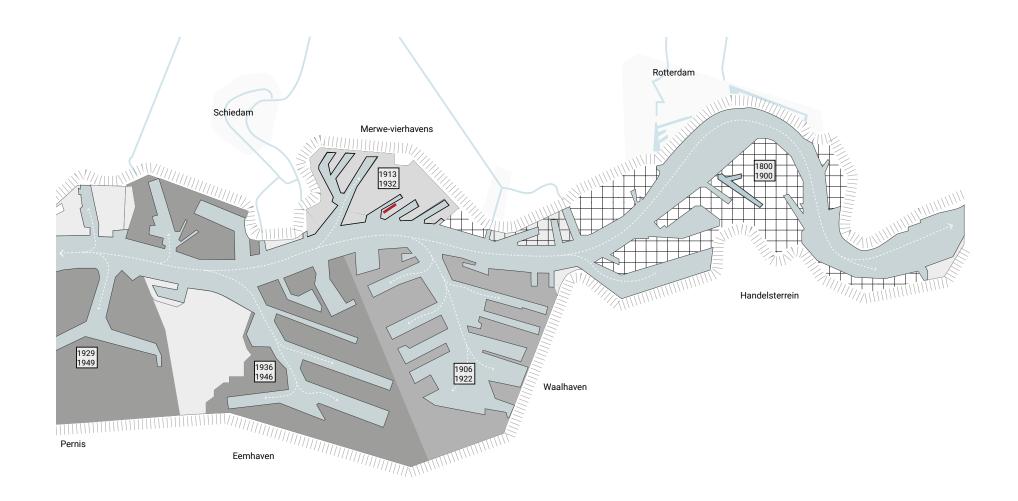
Cultural values
Heritage approach
Design proposal
Reflection



Katoenveem along the waterfront -



Heritage approach Design proposal





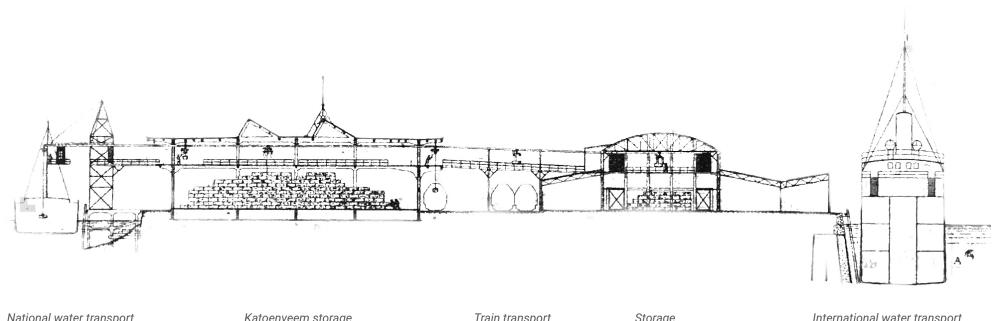
Katoenveem along the Keilehaven



Handling of the conveyor system

Logistic system **Cultural values** 

Heritage approach Design proposal Reflection



National water transport Katoenveem storage Train transport International water transport Storage

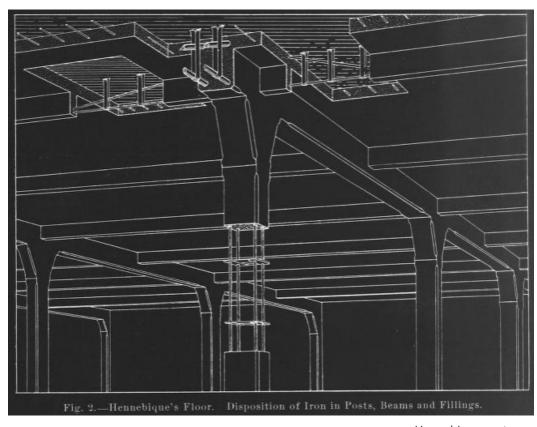
Cultural values Conveyor system



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

Heritage approach
Design proposal
Reflection



Katoenveem interior

'The concrete Warehouse 'Katoenveem' with pumpstation, built in 1920 according to a functional design of J.J. Kanters, 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. Kanters.'

Monumentdescription Katoenveem

Cultural values Problem statement

# Heritage approach

Design proposal Reflection





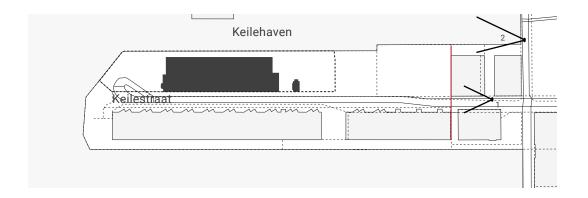


Current state of the facade

Cultural values Problem statement

# Heritage approach

Design proposal





Urban model 1:2000 - Current situation

Design proposal Reflection

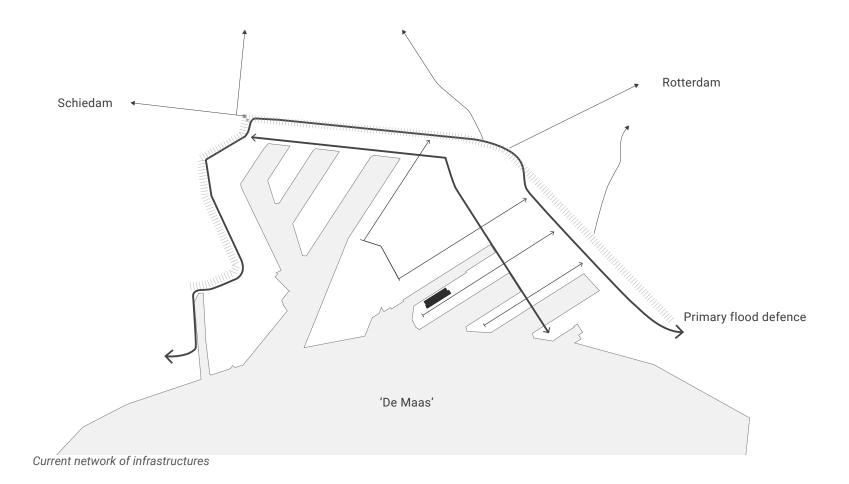


1. Fences in the Keilestraat



2. Keilehaven

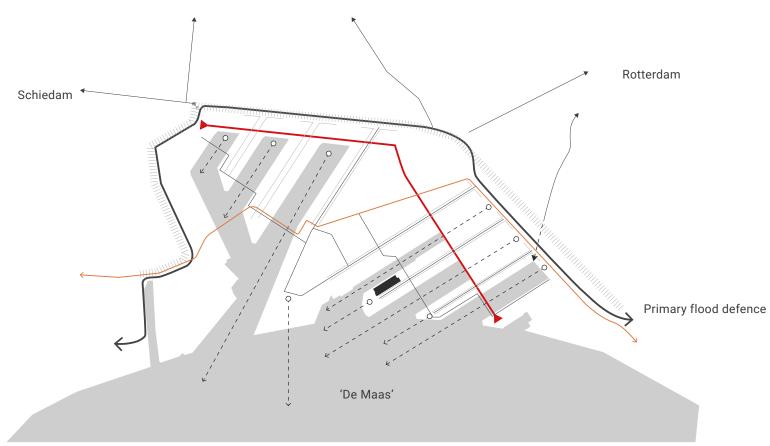
Design proposal



Design proposal



Design proposal

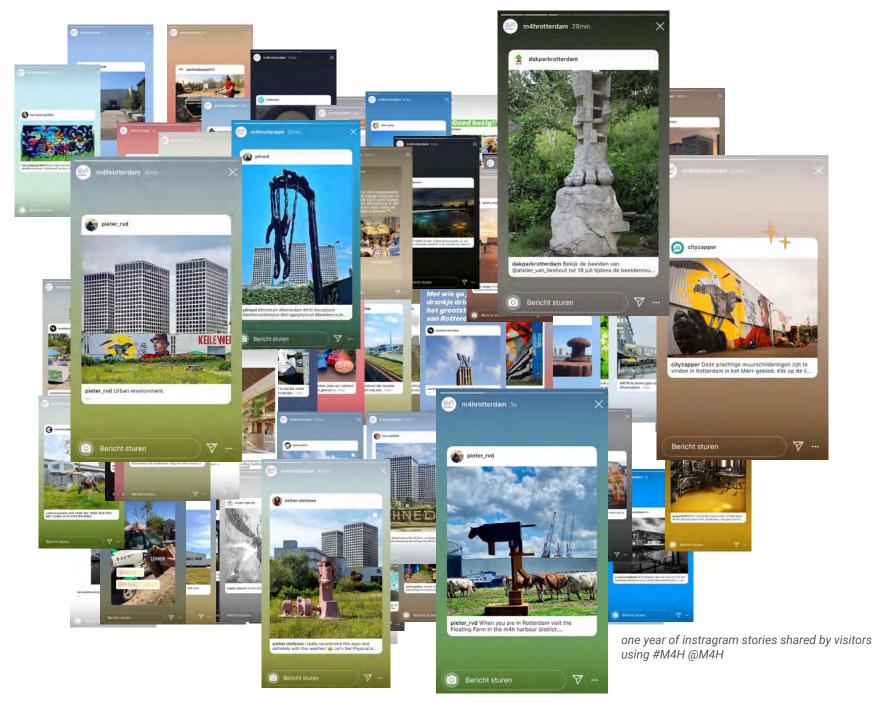


Structuurvisie Merwe-vierhavens 2030 - Municipality of Rotterdam

Cultural values Art in M4H

### Heritage approach

Design proposal Reflection



Design proposal



Cultural highlights in redevelopment framework - Structuurvisie 2030

Design proposal Reflection



Sculpture by Atelier van Lieshout



'Cloud' by Berndnaut smilde

Design	objective
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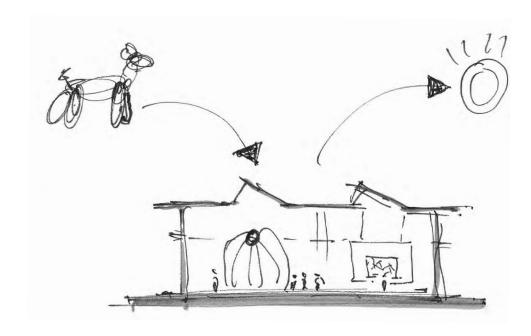
# Research question:

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.

Design proposal

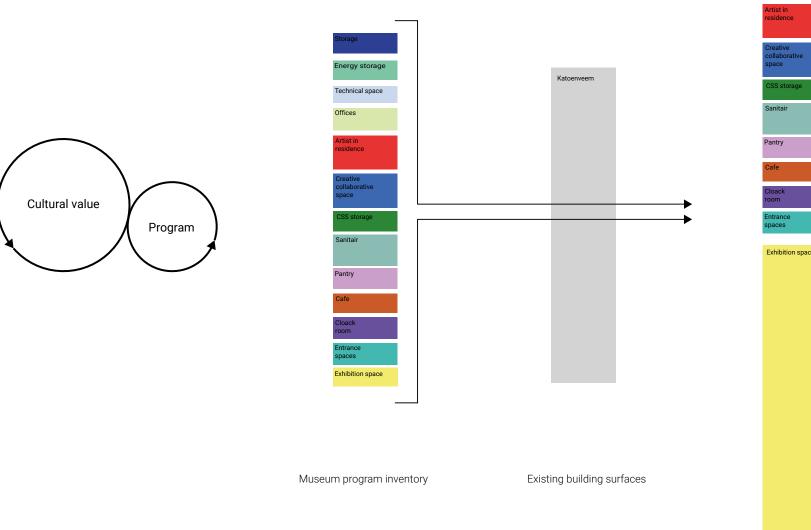


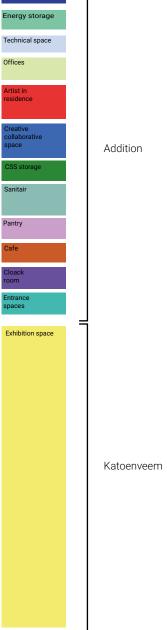
- Adaptibility
- Functional character of the architecture
- Architecture as a background



Impression exhibition spaces - 1st floor Katoenveem

Design proposal





Design proposal

Reflection

# Cultural values

Historic concrete		
Architectural qualities		
	Former technical use	
		Typology
		Interior scale
		Ensemble

# Architectural method





Preservation

Intervention

Addition

- Reconstruction damaged parts
- Restoration of exterior facades

- Ensuring safety
- Increase of thermal comfort
- Accessibility

- Collaborates with exisiting
- Reinterpretates the former complex

Design proposal Reflection

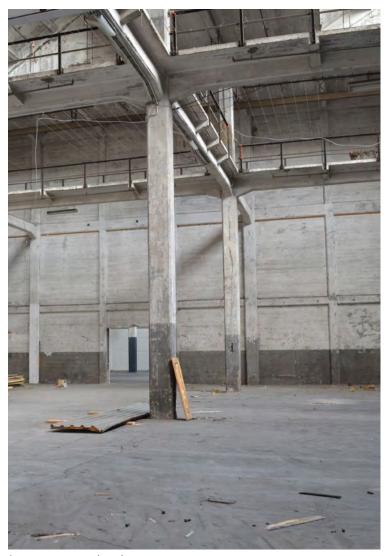
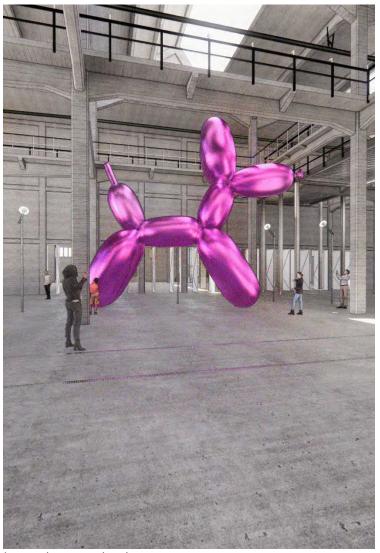


Image - current situation

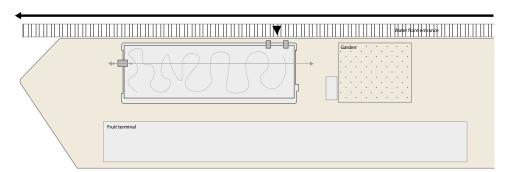


Impression - new situation

Cultural values Urban strategy - 1

Heritage approach

# Design proposal



2021

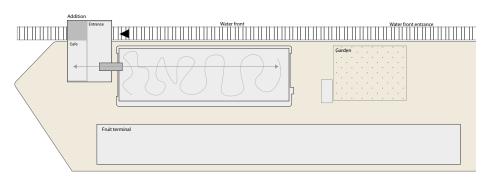


Urban model 1:2000

Cultural values Urban strategy - 2

Heritage approach

# Design proposal



2025

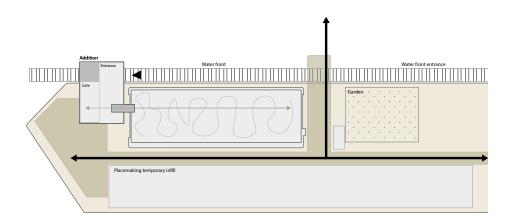


Urban model 1:2000

Cultural values Urban strategy - 3

Heritage approach

# Design proposal

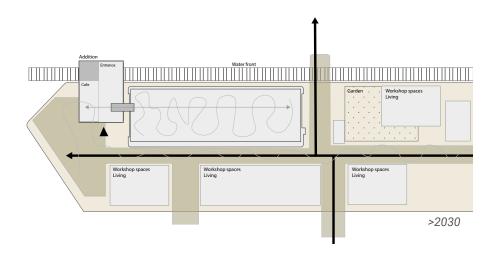


2030



Urban model 1:2000

# Design proposal





Urban model 1:2000

Cultural values New sillhouette

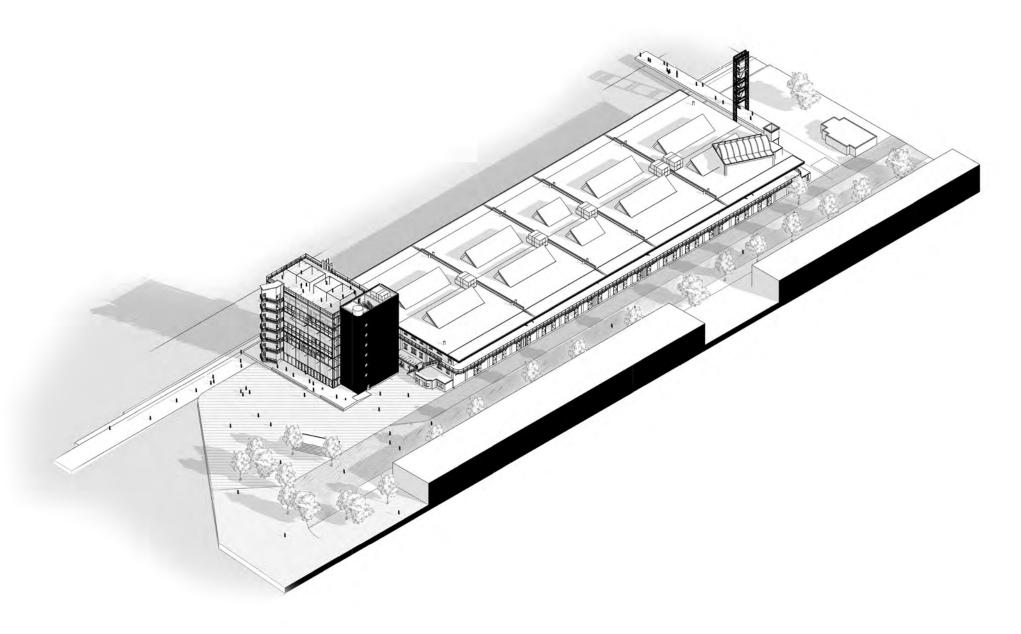
Heritage approach

Design proposal



South east facade elevation

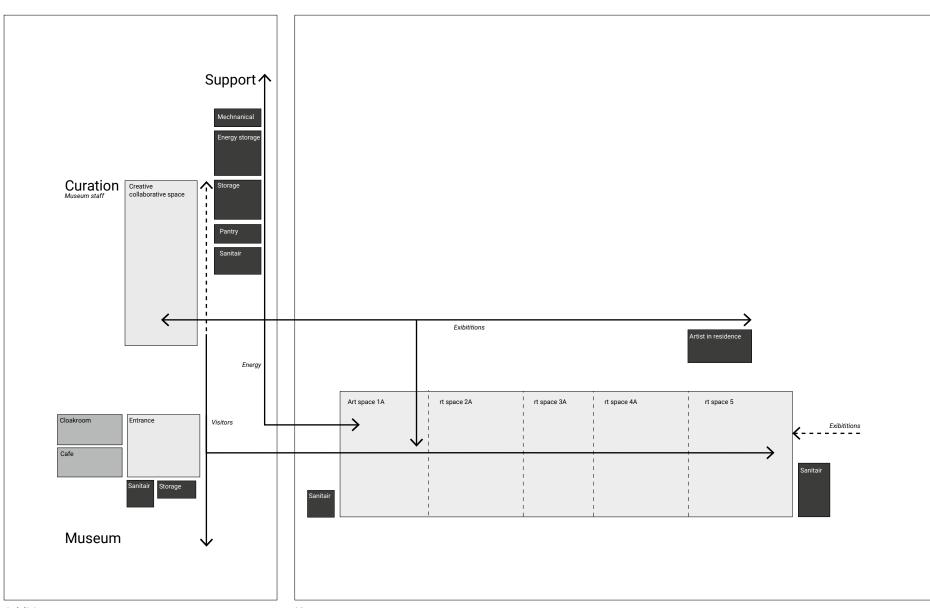
# Design proposal



Heritage approach

# Design proposal

Reflection



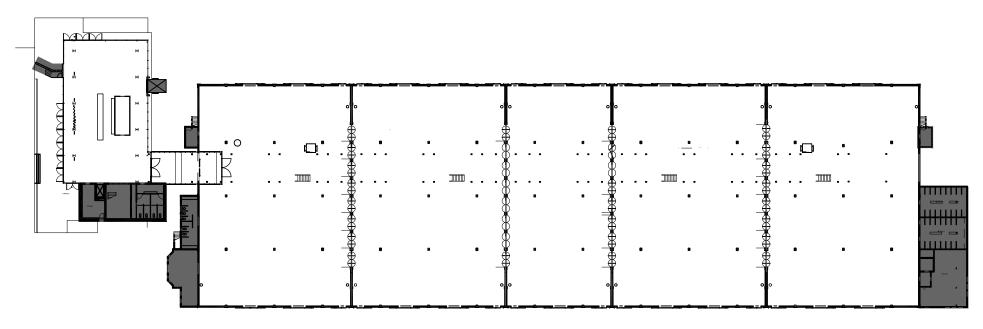
Addition Katoenveem

Cultural values

Undefined vs defined

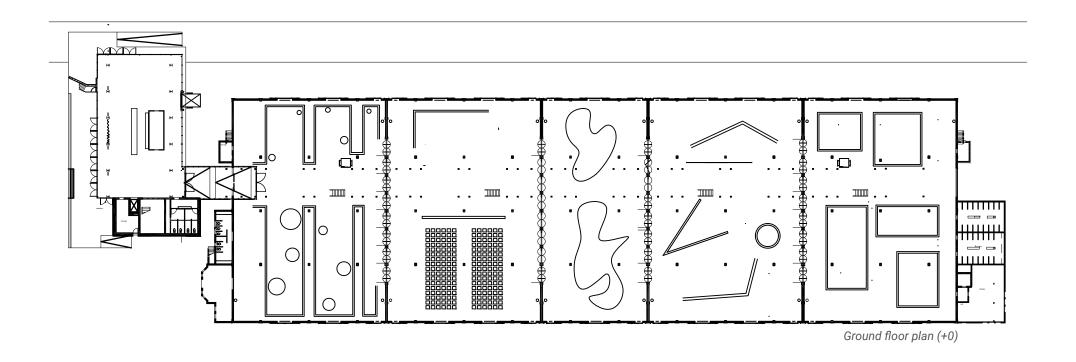
Heritage approach

Design proposal



Ground floor plan (+0)

#### Design proposal

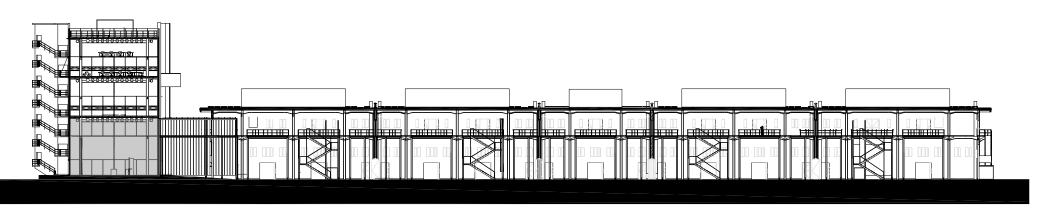


Cultural values Entrance

Heritage approach

Design proposal

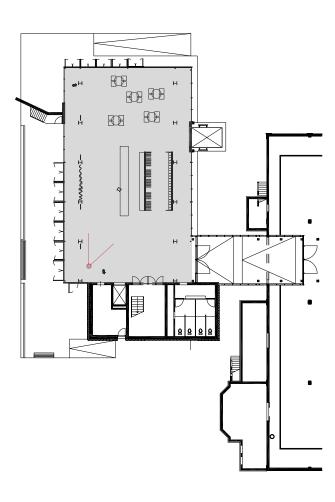
Reflection



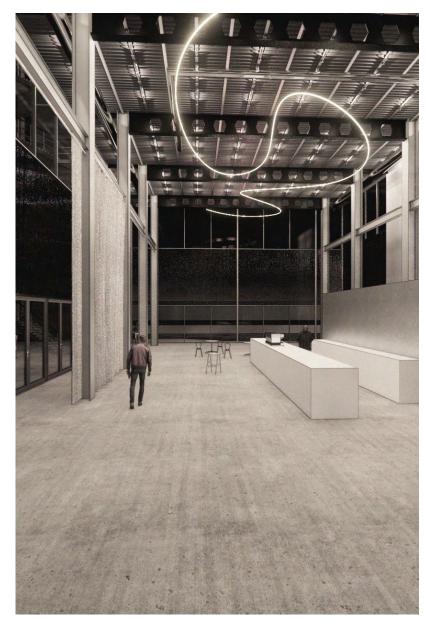
Longitude cross section

Heritage approach

#### Design proposal

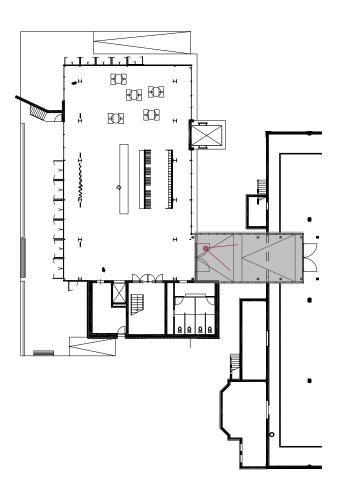


Ground floor plan - addition (+700)

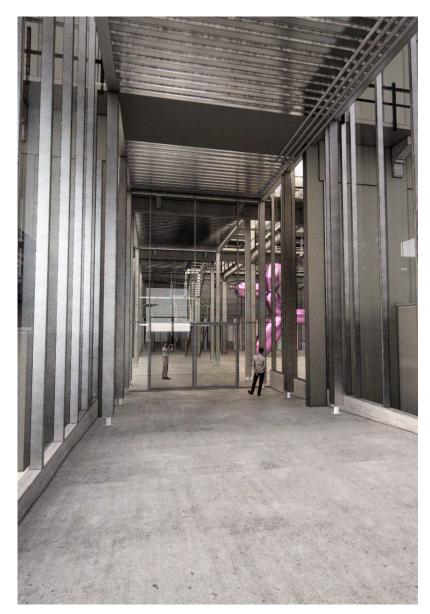


Impression entrance space - Addition

#### Design proposal



Ground floor plan - addition (+700)



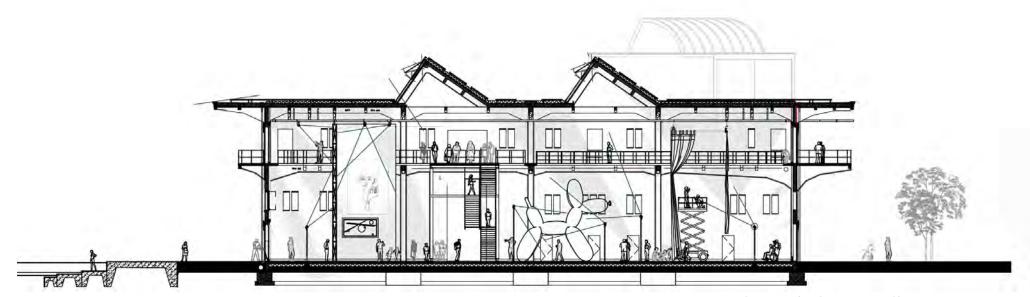
Impression entrance hall

Exhibition spaces

Cultural values

Heritage approach

Design proposal

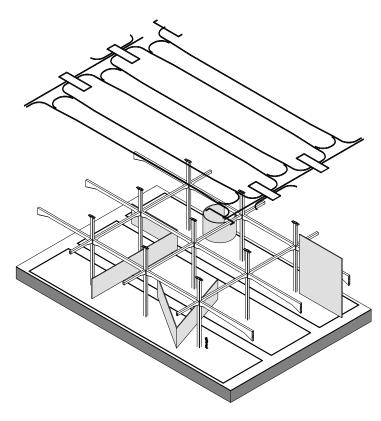


Cross section Compartment Katoenveem

Heritage approach

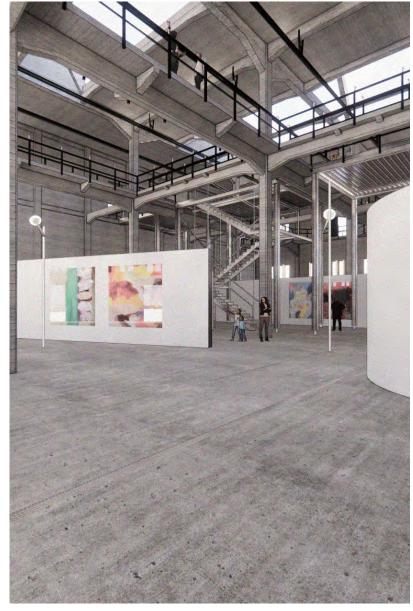
#### Design proposal

Reflection



framework for temporary infill -Spatial bounderies

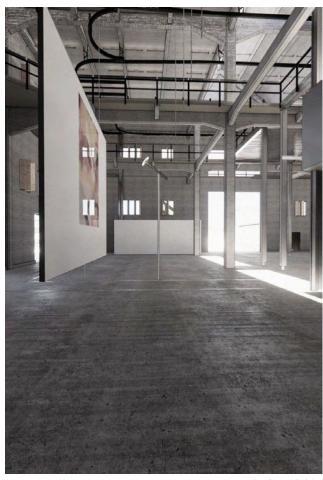
- -Electrical utilities
- -Hanging system by conveyer system



Impression exhibition spaces Katoenveem

# Heritage approach Design proposal

Reflection



Spring 12:23

Natural light -diffuse



Natural light

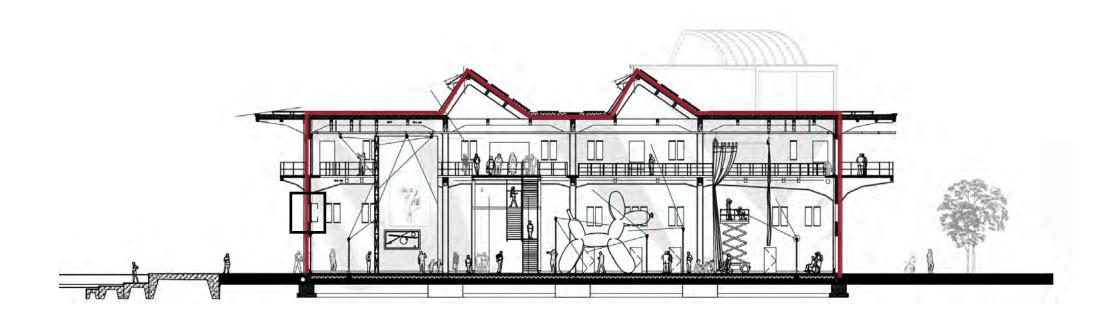


Spring 23:04

Artifical light
-primary
-specific

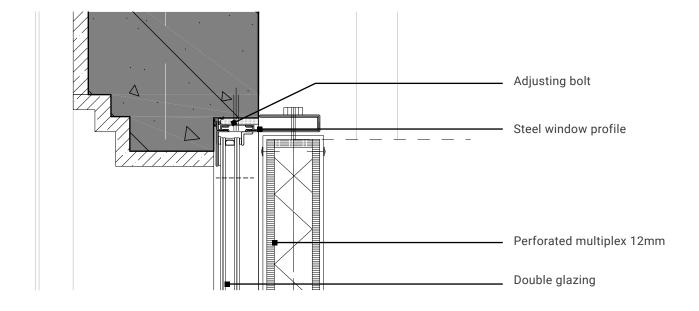
Heritage approach

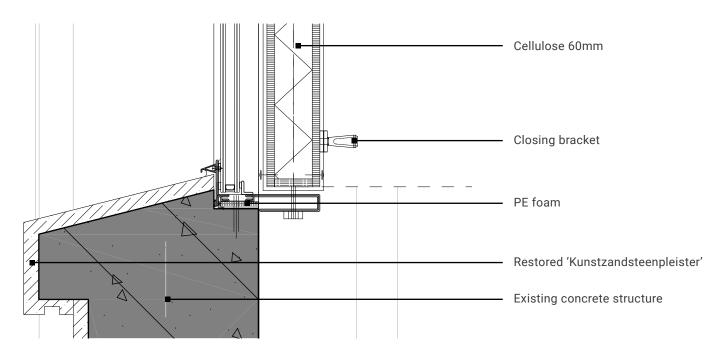
Design proposal



Heritage approach

#### Design proposal





#### Design proposal



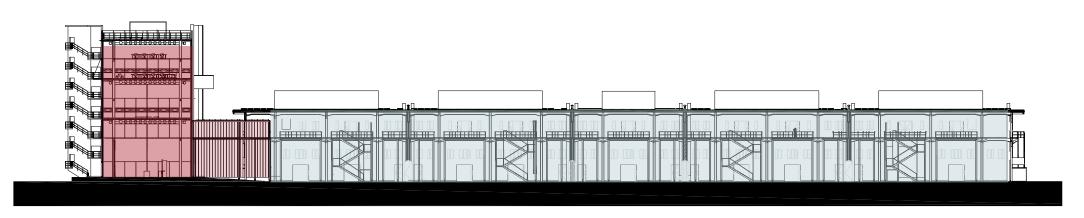
Exposed concrete in interior



'Kunstzandsteenpleister' rendering on South-West facade

Design proposal

Reflection



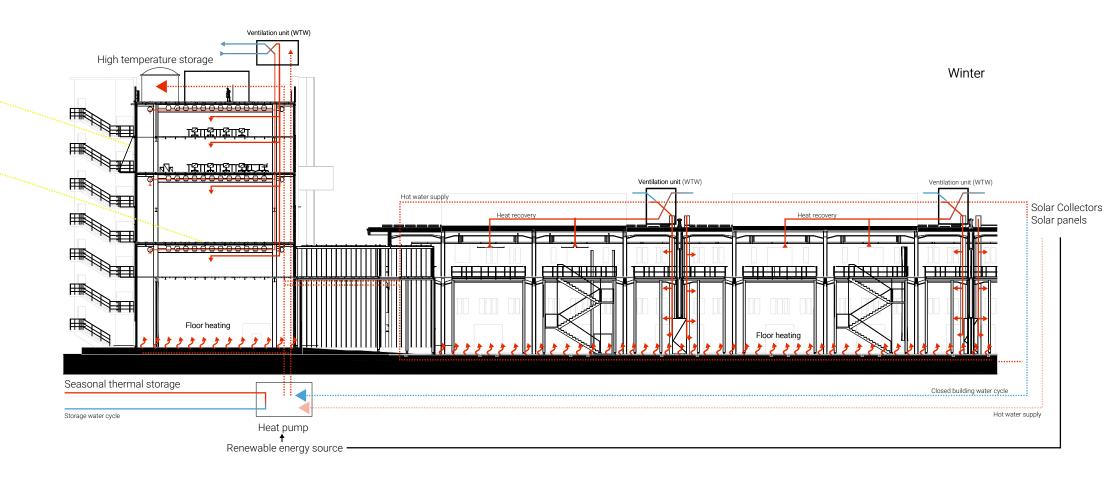
Exhibition climate set to[18-22C] Adapts to outdoor climate

Buffer zone

Climatized Set to [18-22C] Cultural values Climate scheme

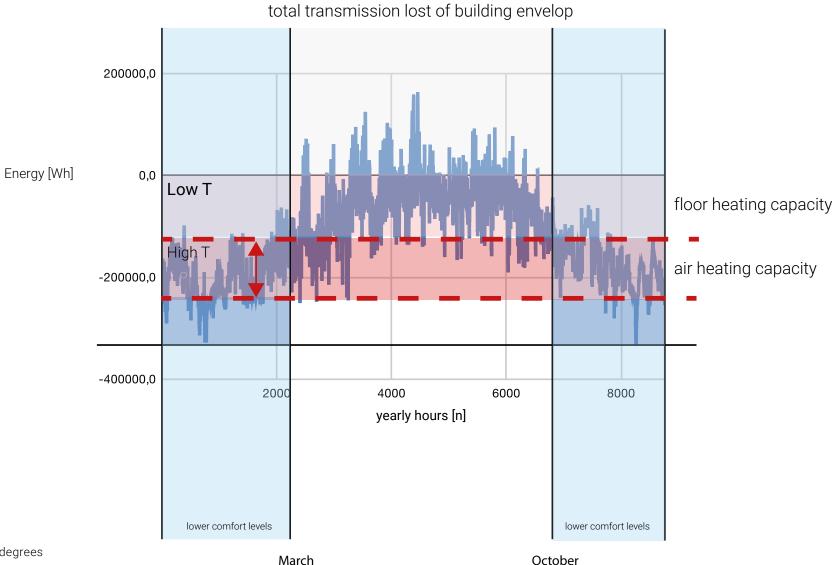
Heritage approach

Design proposal



#### Design proposal

Reflection



Input parameters:

Set indoor temperature: 18 degrees

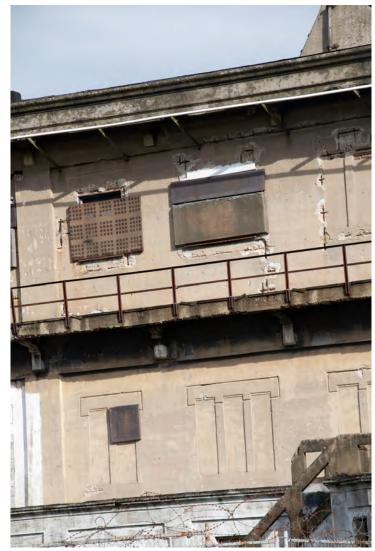
Rc values;

Roof (intervented): 7 Wall (preserved): 0,145 Floor (intervented) 7

#### Design proposal



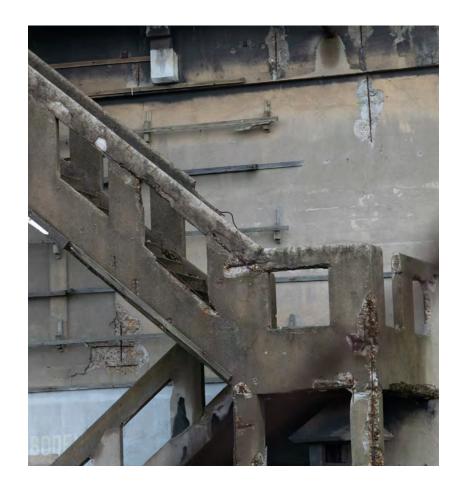
Exposed concrete in interior

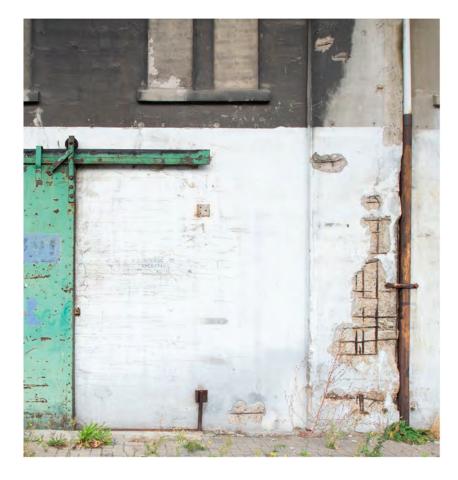


'Kunstzandsteenpleister' rendering on South-West facade

#### Design proposal

Reflection

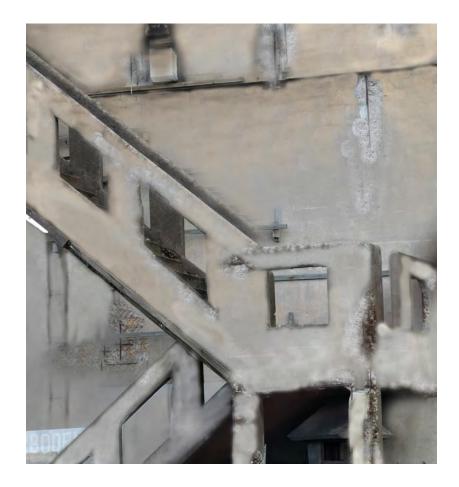




Cleaning Damage inventory Local restoration

Steam cleaning Serverness of damages Preservation of natural material Presence of rrepairs

Cultural values
Heritage approach
Design proposal
Reflection





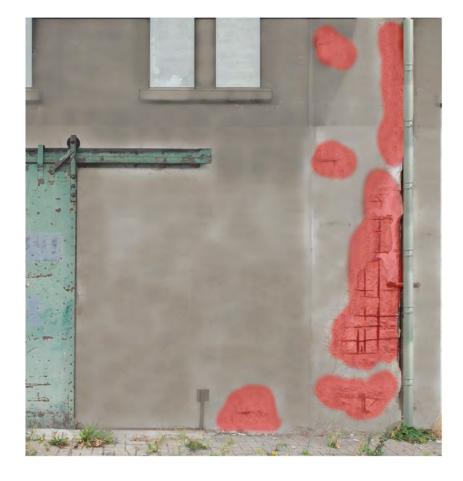
Cleaning → Damage inventory → Local restoration

Steam cleaning Serverness of damages Preservation of natural material Presence of repairs

#### Design proposal

Reflection





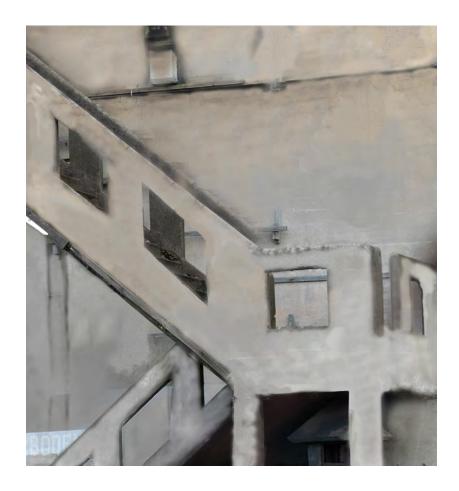
Cleaning → Damage inventory → Local restoration

Steam cleaning Serverness of damages Preservation of natural material Presence of repairs

Cultural values Heritage approach

Design proposal

Reflection





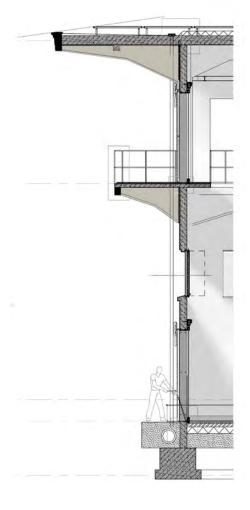
Cleaning → Damage inventory → Local restoration

Steam cleaning Serverness of damages Preservation of natural material Presence of repairs

Heritage approach

#### Design proposal

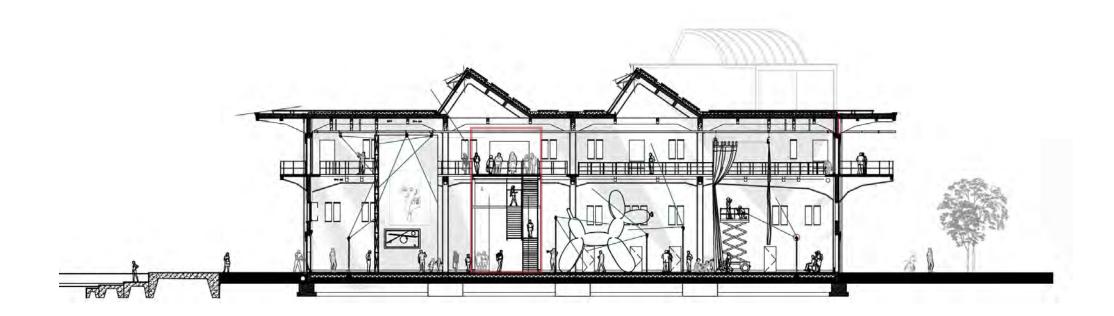




North east facade - detail

Heritage approach

Design proposal



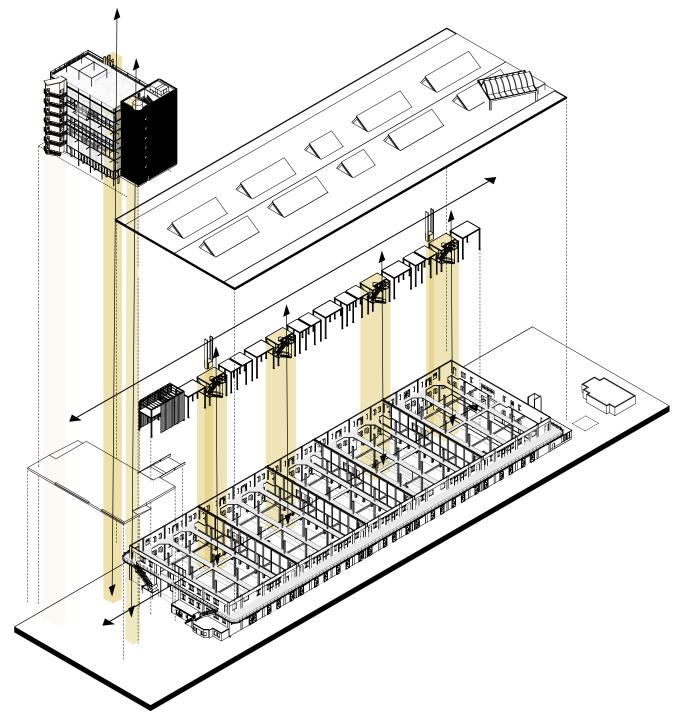
Heritage approach

Design proposal



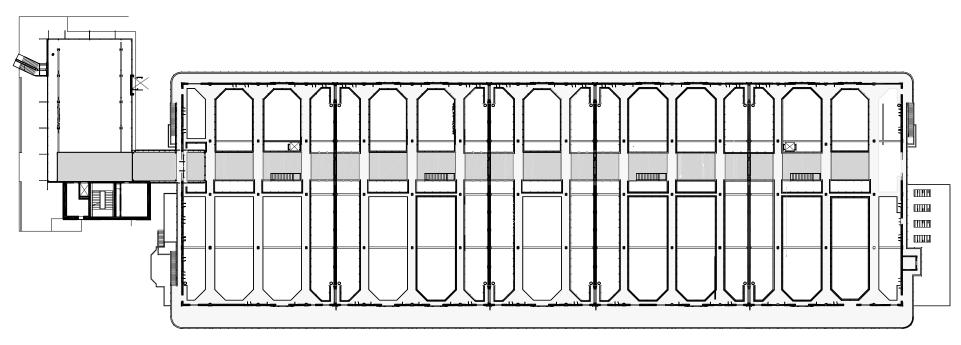
Heritage approach

Design proposal



Heritage approach

## Design proposal



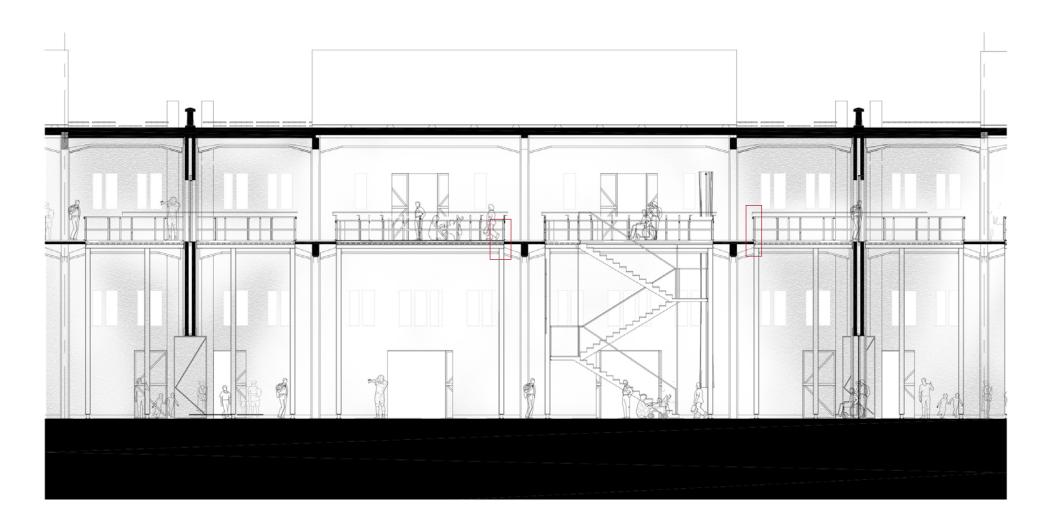
First floor (+7800)

Cultural values

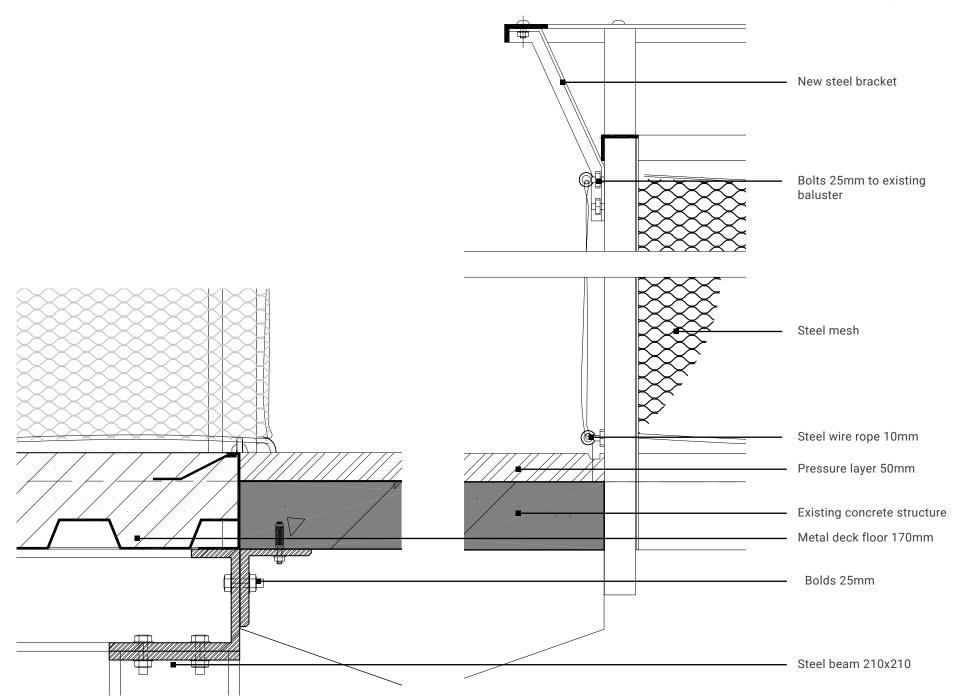
Heritage approach

Walkway section

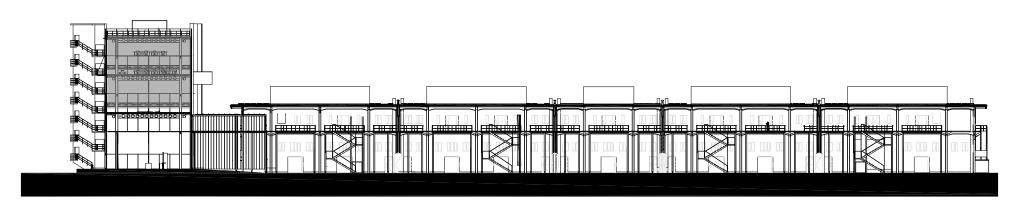
Design proposal



### Design proposal

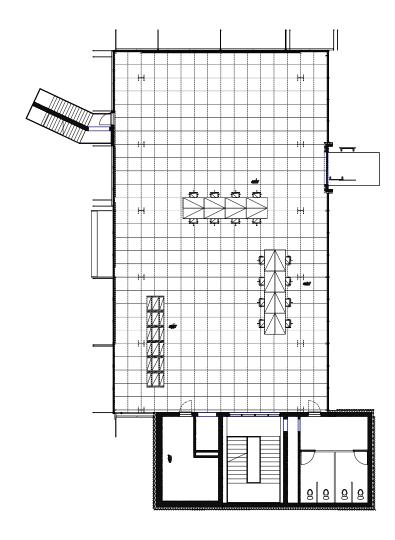


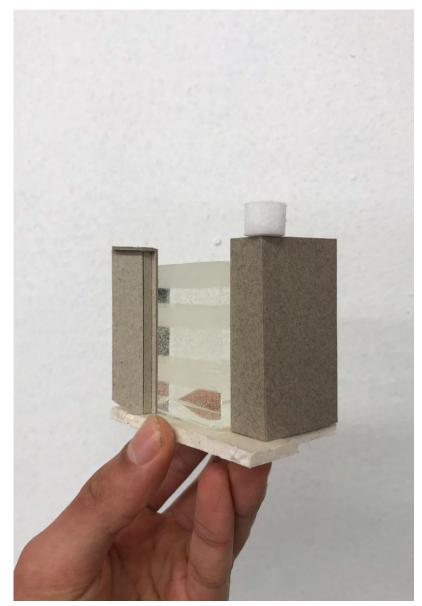
Design proposal



Longitude cross section

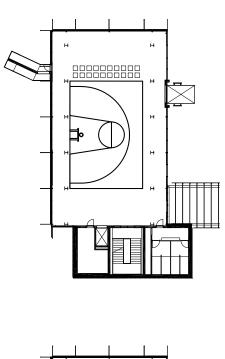
# Design proposal

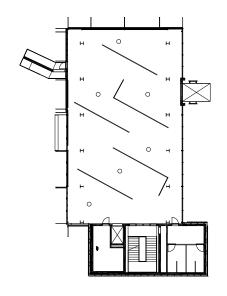


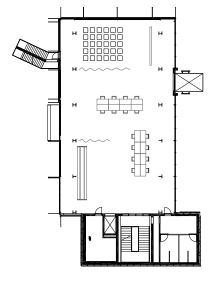


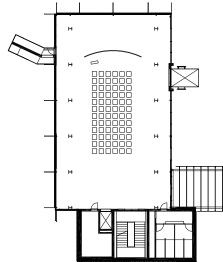
Mass model 1:500

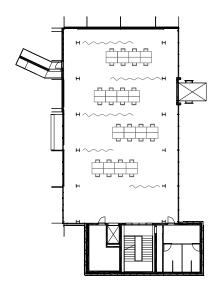
#### Design proposal

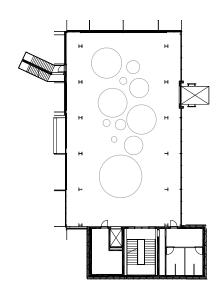






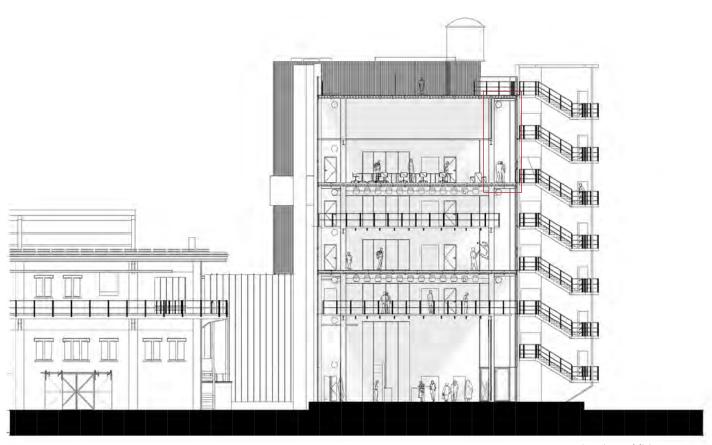






Heritage approach

#### Design proposal

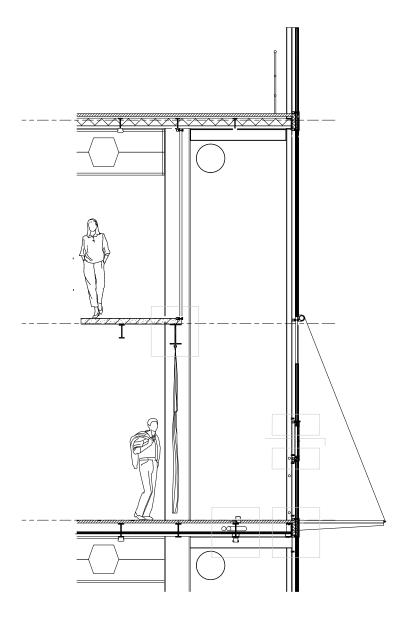


Section addition

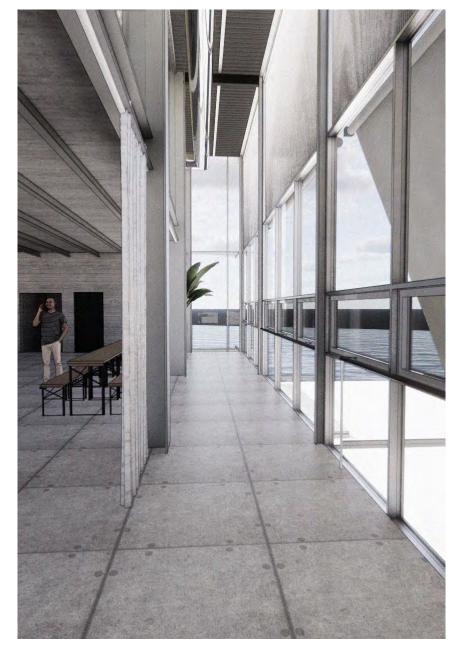
Cultural values Detail addition

Heritage approach

#### Design proposal

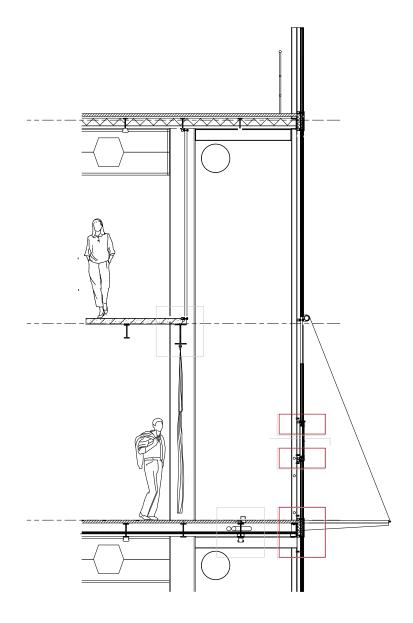


Detail section

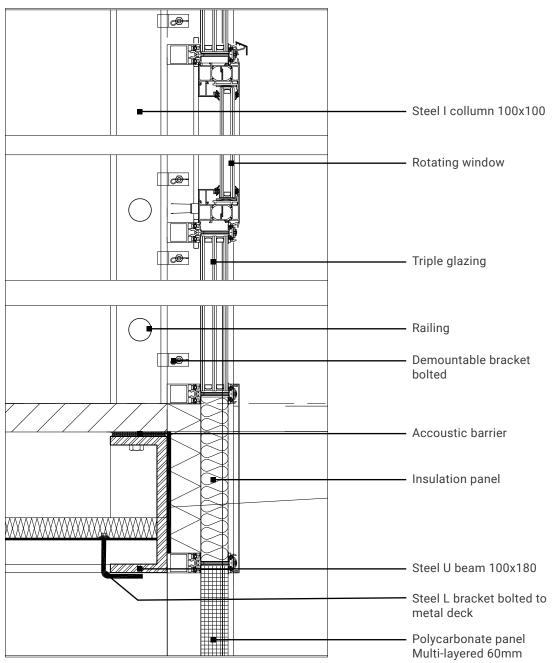


Impression - addition

#### Design proposal

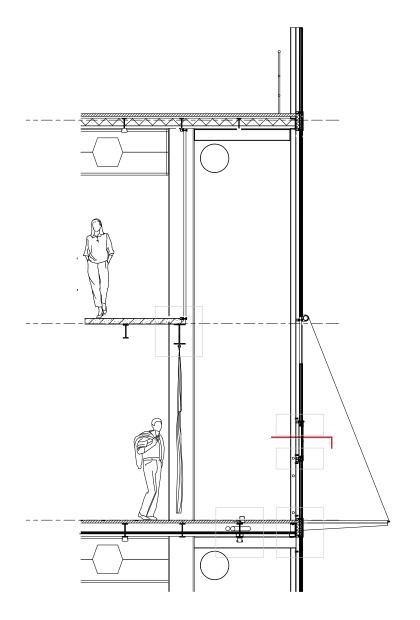


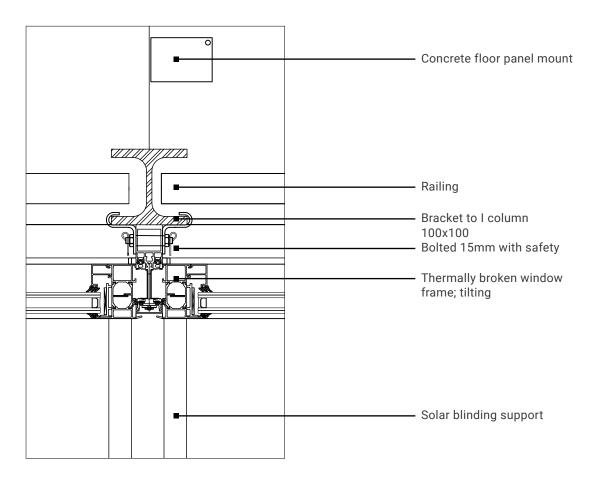
Detail section



Detail curtain wall 1:5

#### Design proposal





#### Design proposal



North East facade along the Keilehaven

Spatial comparison

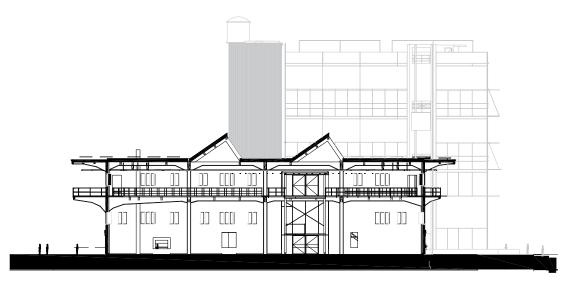
Cultural values

Heritage approach

Design proposal



Addition section

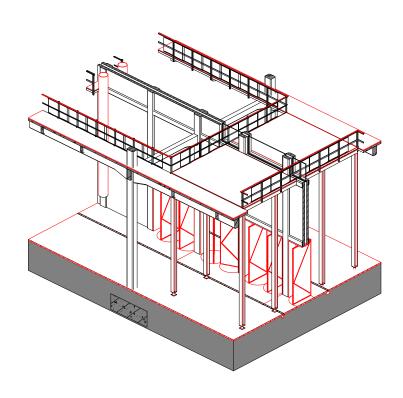


Katoenveem section

Reflection

Cultural values Heritage approach

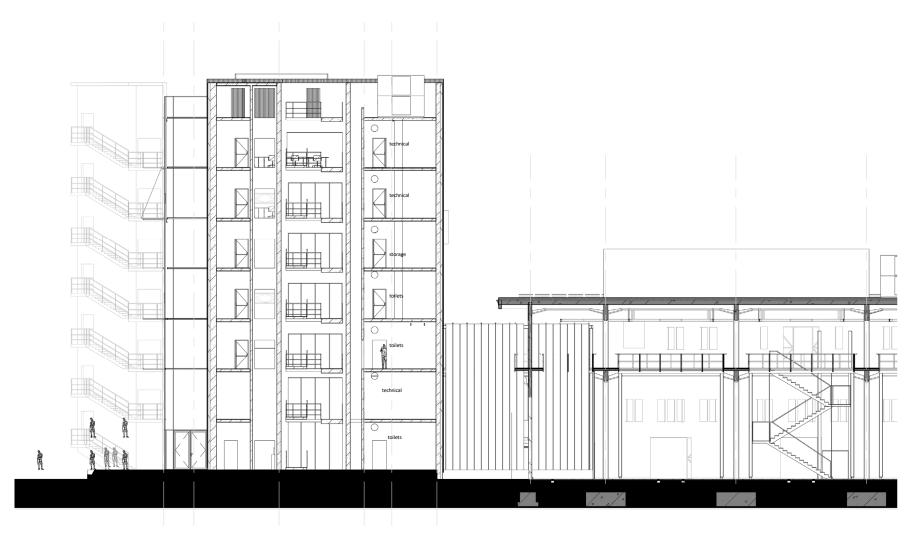
Design proposal





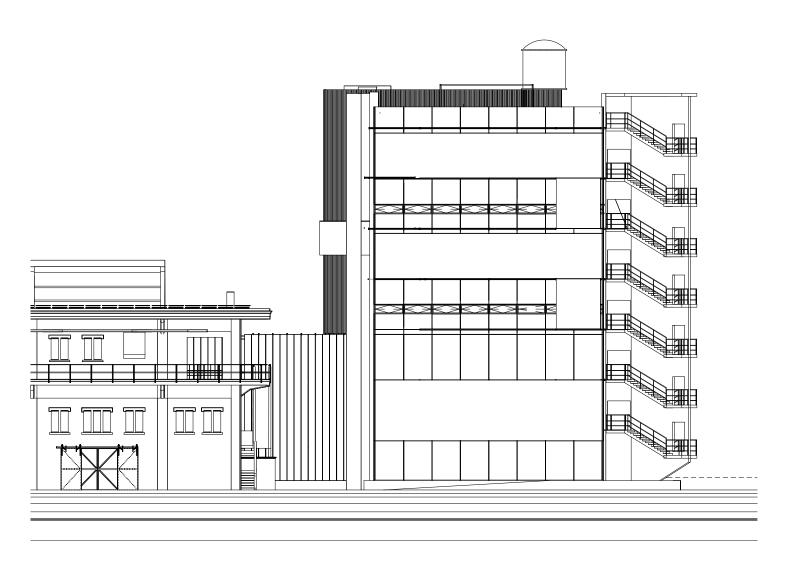
Impression - interventions

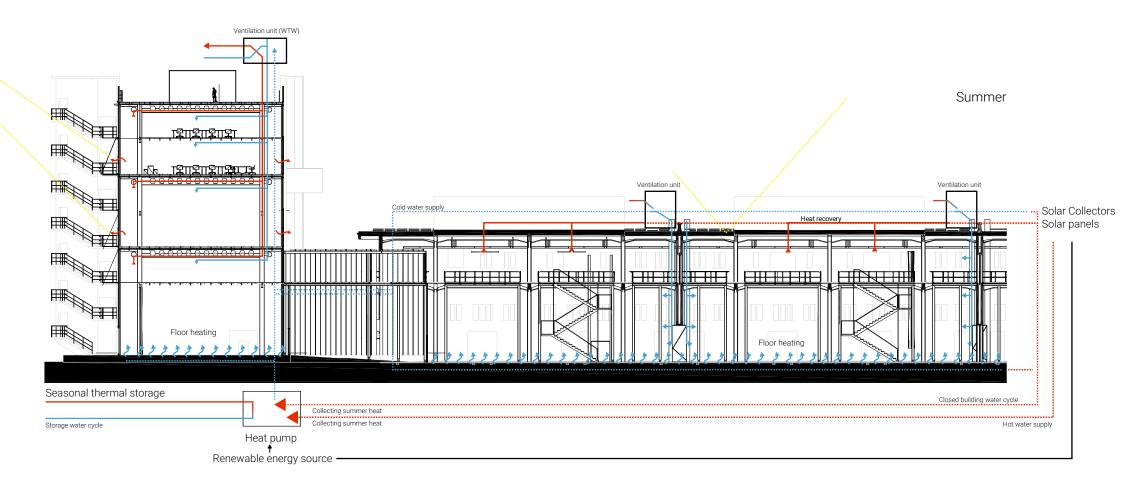






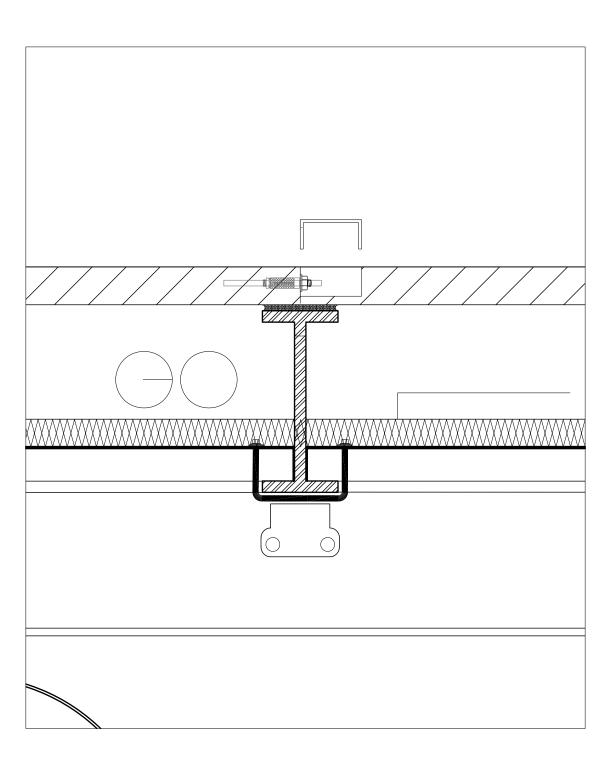
Cultural values
Heritage approach
Design proposal
Reflection

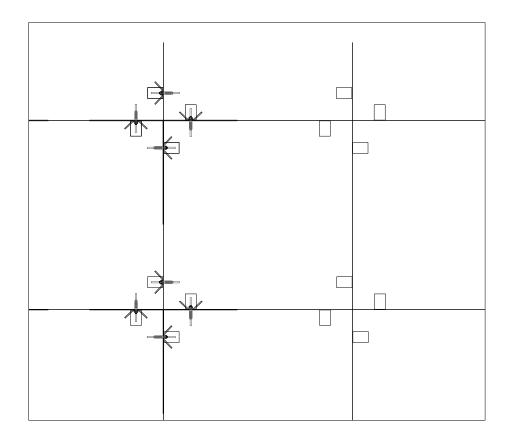


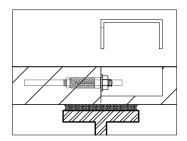


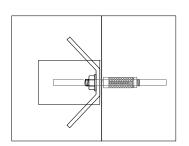
Cultural values Heritage approach Design proposal Reflection









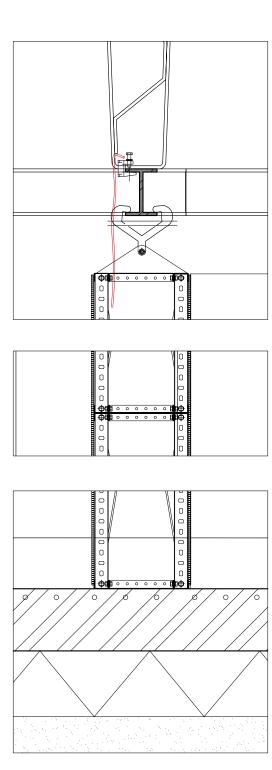


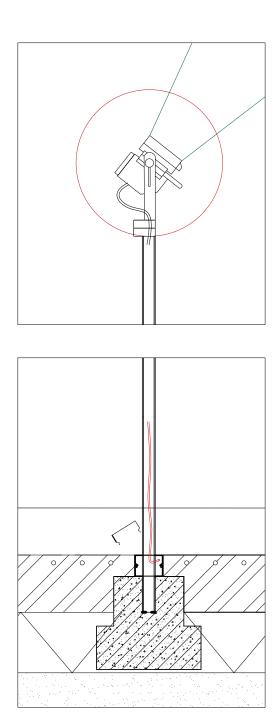
Cultural values

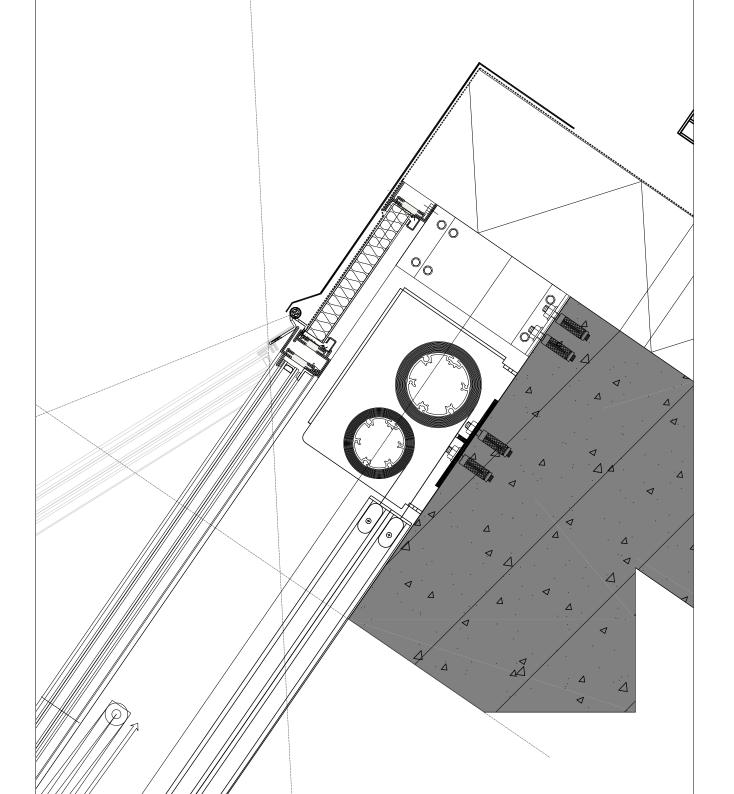
Heritage approach

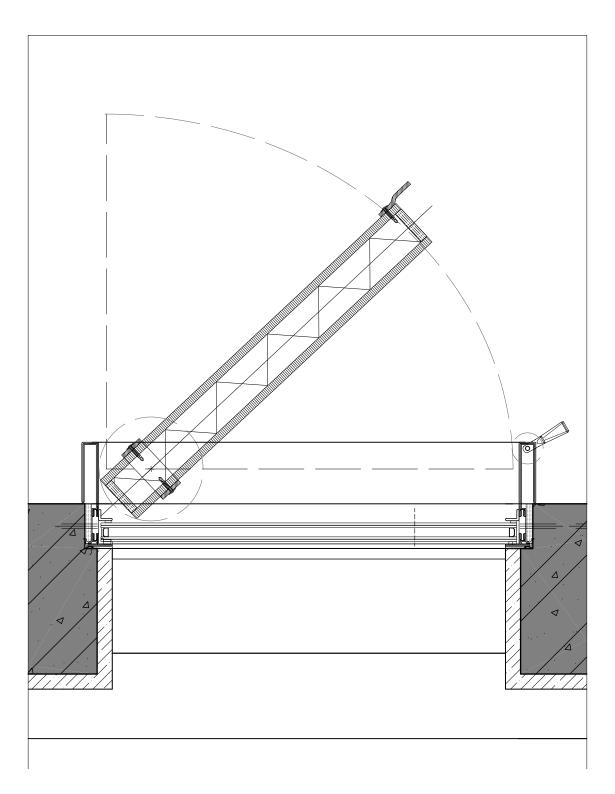
Design proposal

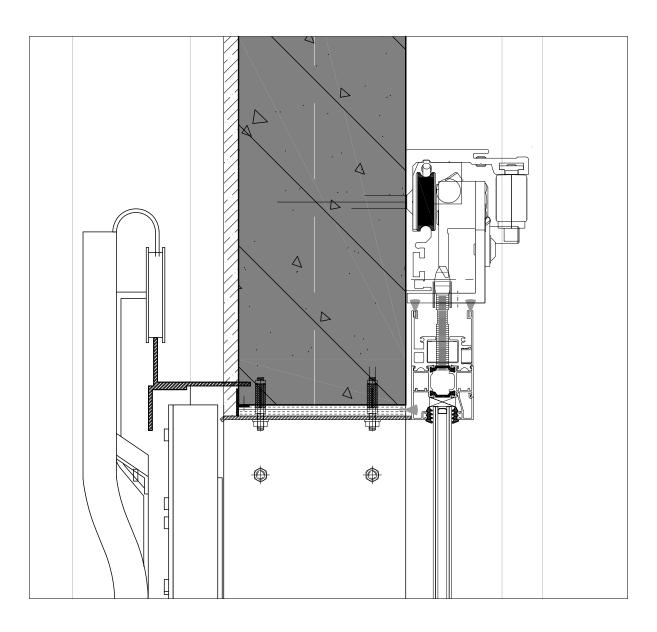
Reflection



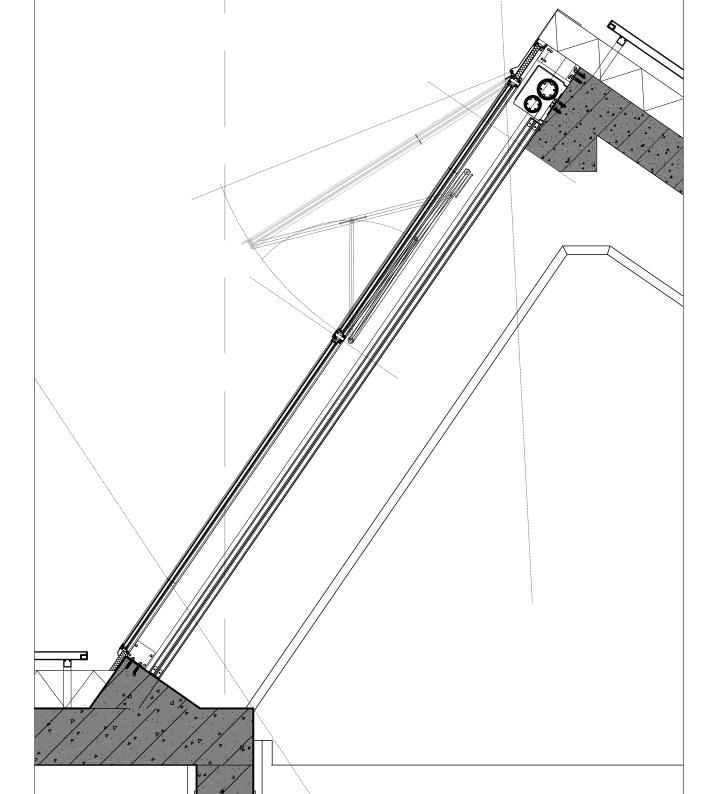








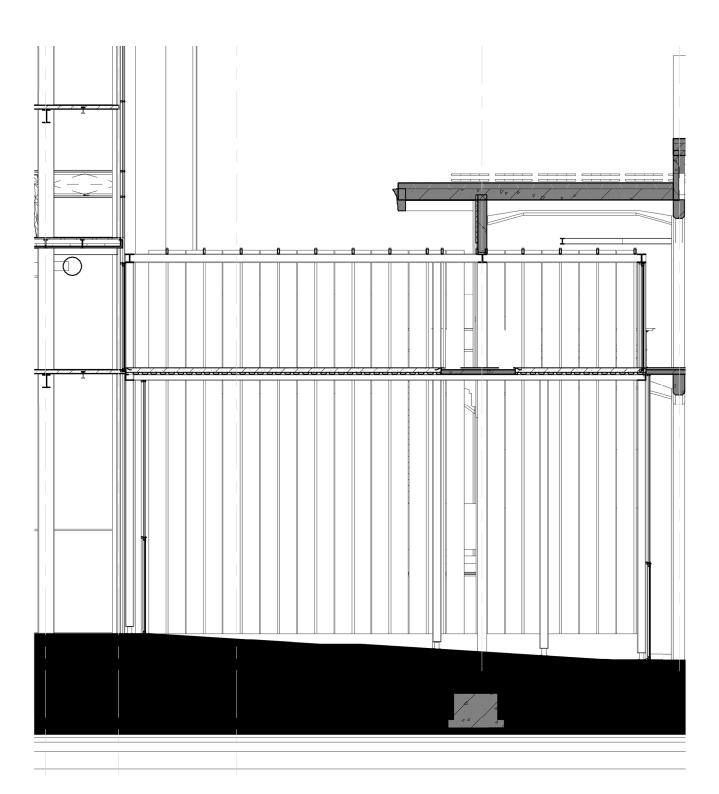
Cultural values Heritage approach Design proposal Reflection Δ  $\Delta$ . Δ  $\triangle$ 





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