

Dino Vojvodic | 5232562

#### **P5** Presentation

The Faculty of Architecture and the Built Environment Delft University of Technology

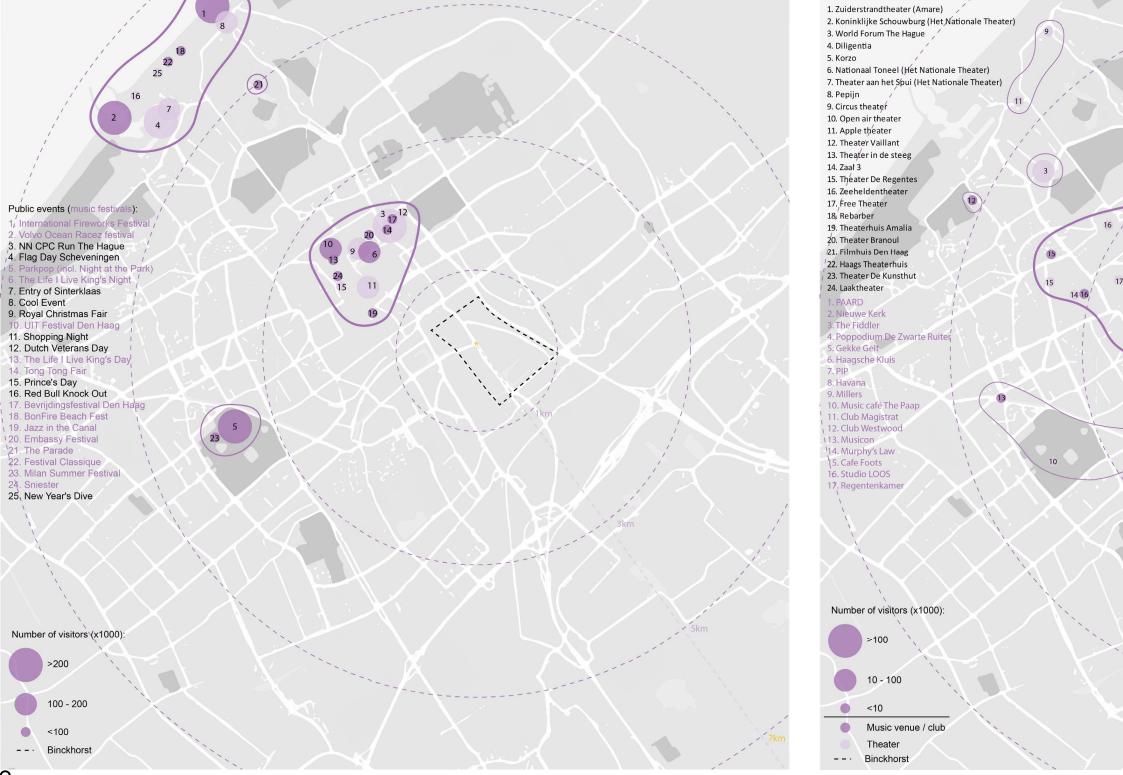
> AR3AP100 Public Building Graduation Studio MUSIC MARVEL

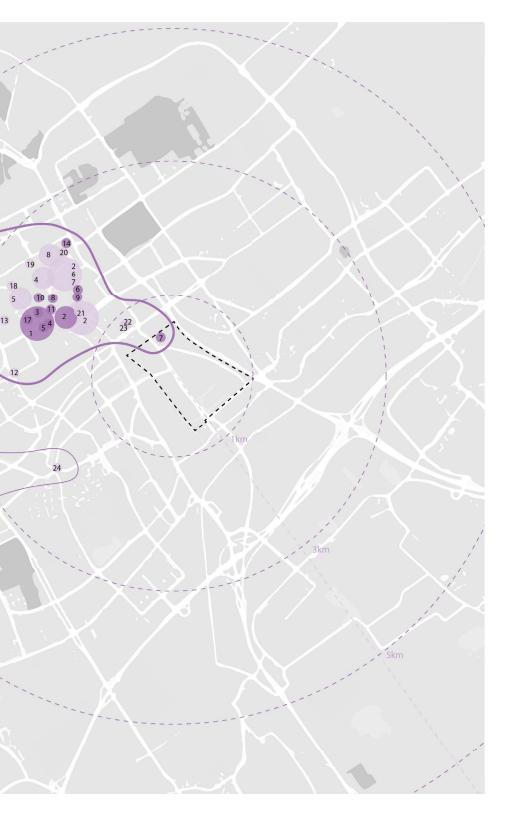
#### Mentors

Project Design: Ir. Stefan Witteman Building Technology: Piero Medici, PhD Theory Research: Dr. Sang Lee Delineation Research: Dr. Nicola Marzot

# Research & Location

# The Hague | Culture Clusters





# The Hague | Music Venues

### Amare

### Malieveld



### Paard

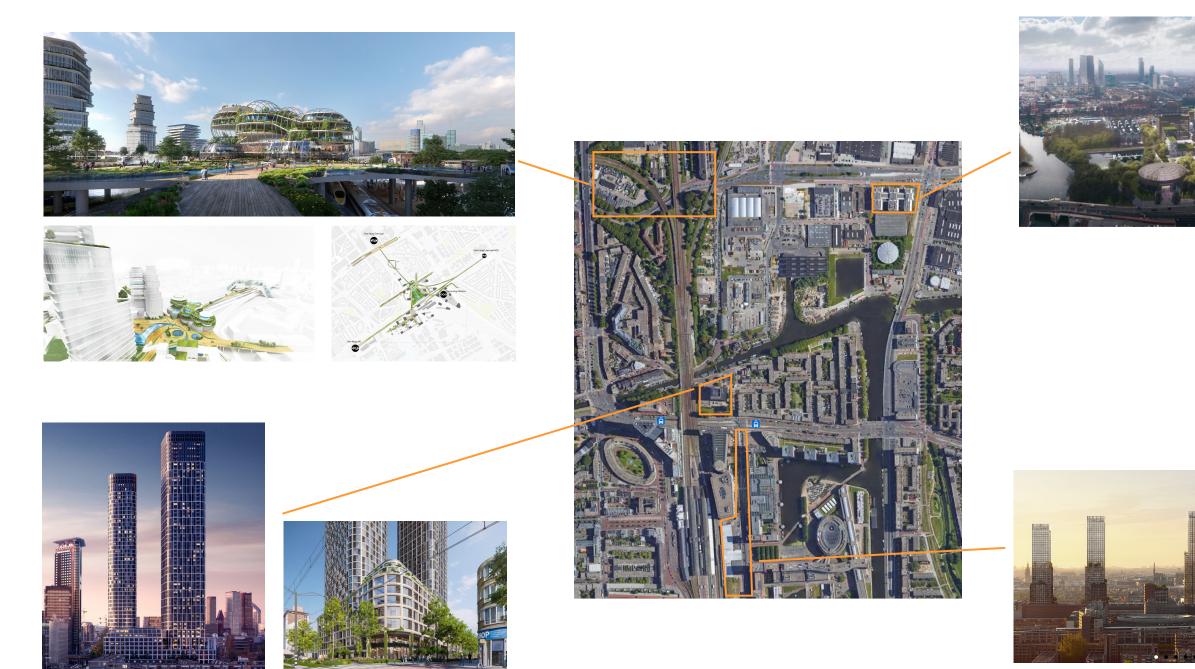


# Binckhorst | Now



Source: Google Earth

# Binckhorst | Future











WHAT IS MISSING?

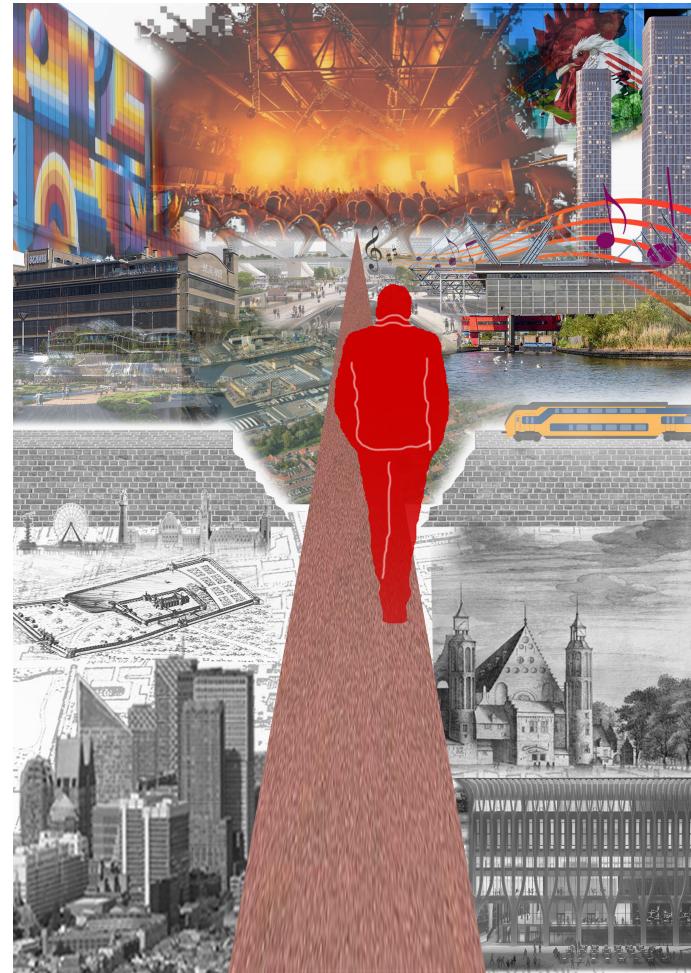
# The Hague | Night club Binckhorst | Community center





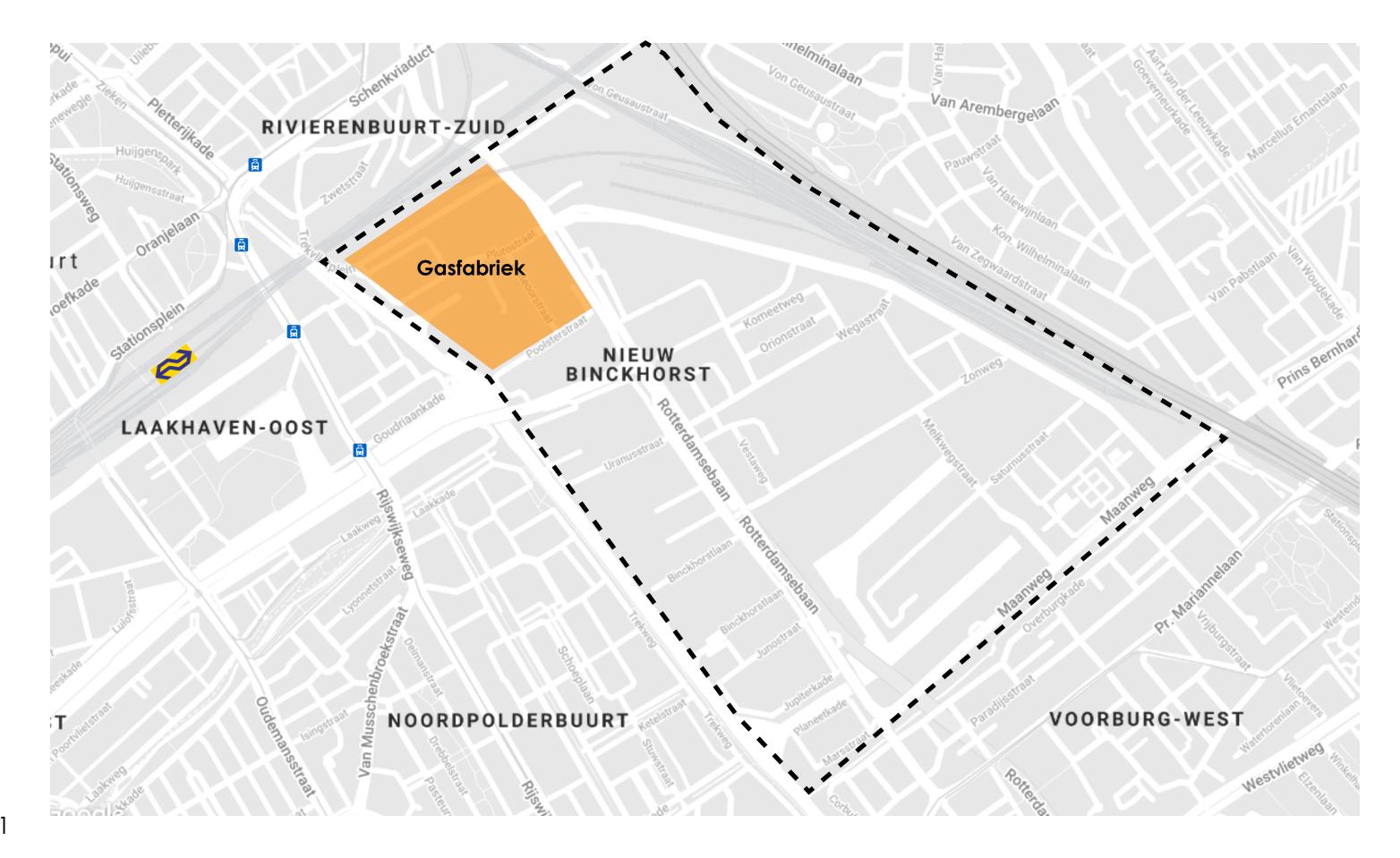
# Who?

# Design Manifesto

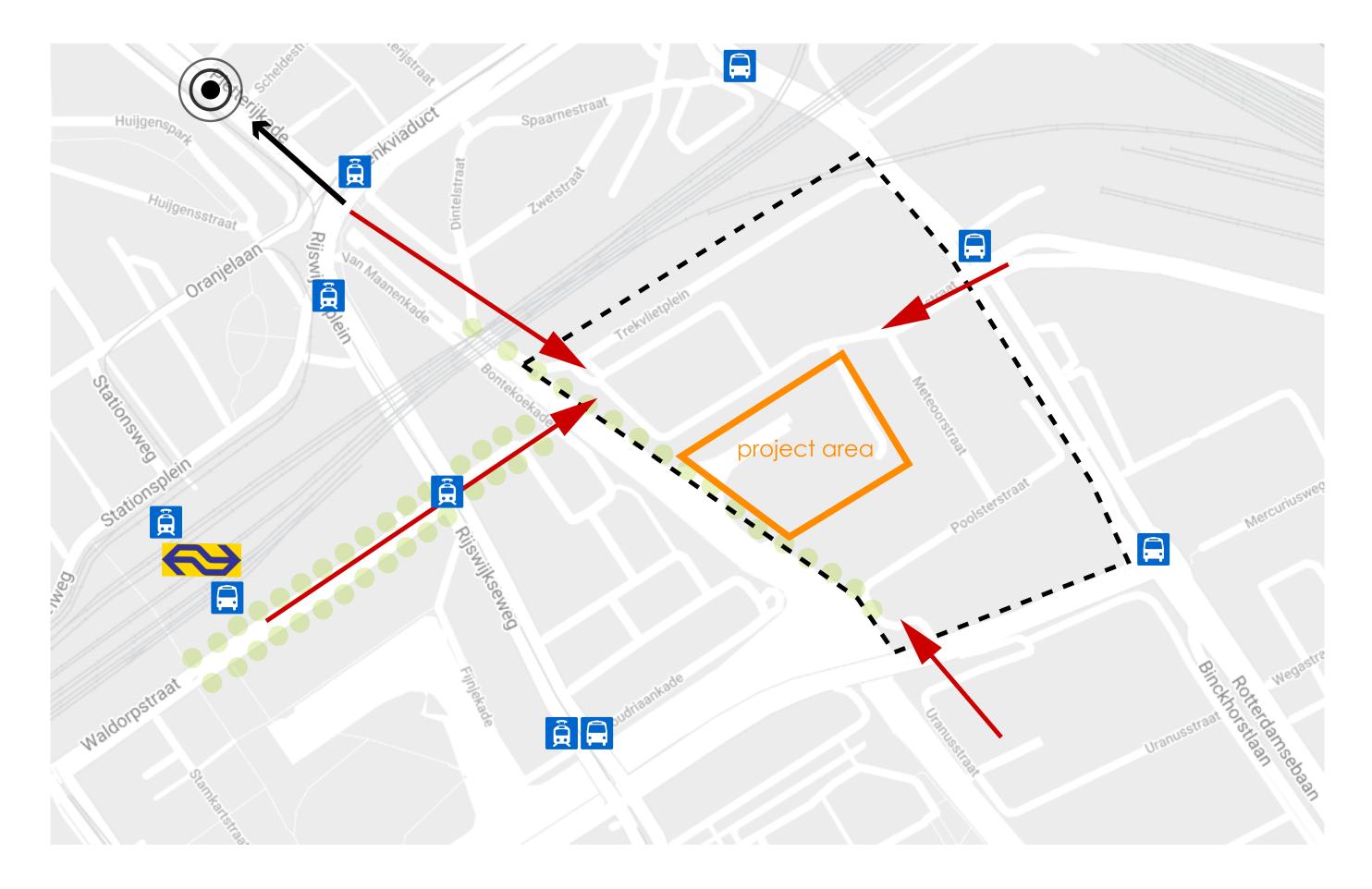


# Where & Why?

# Project site



# Site Connection



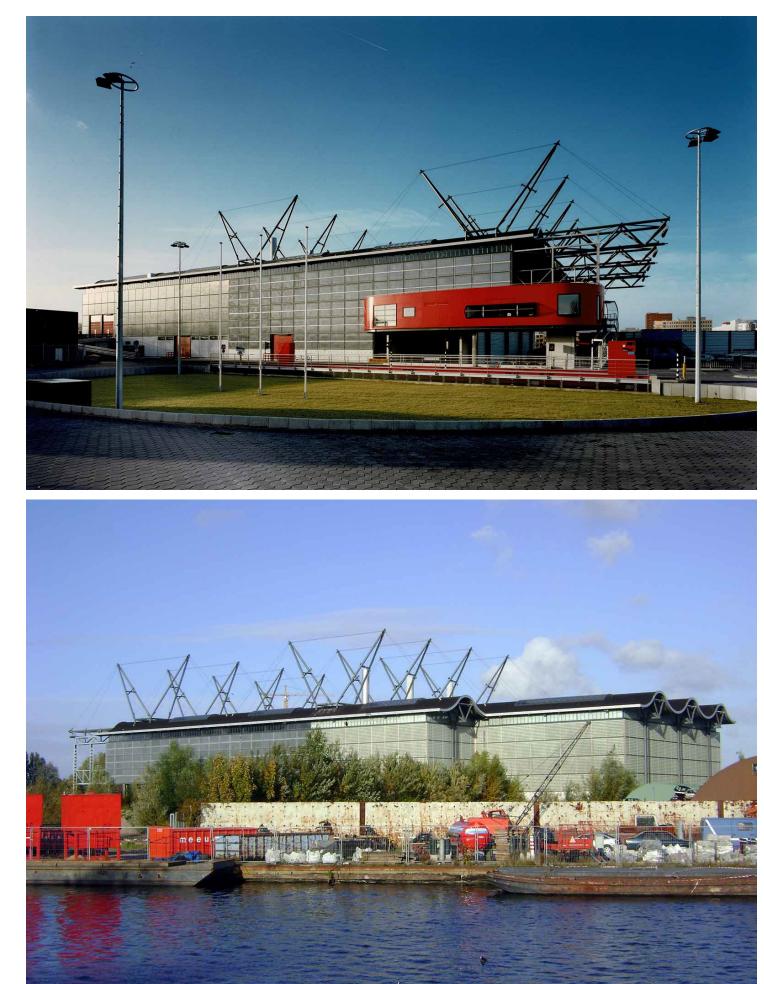
# Project Location



### Afwalkathedraal

architect: Jan Brouwer year: 1995 function: waste processing facility

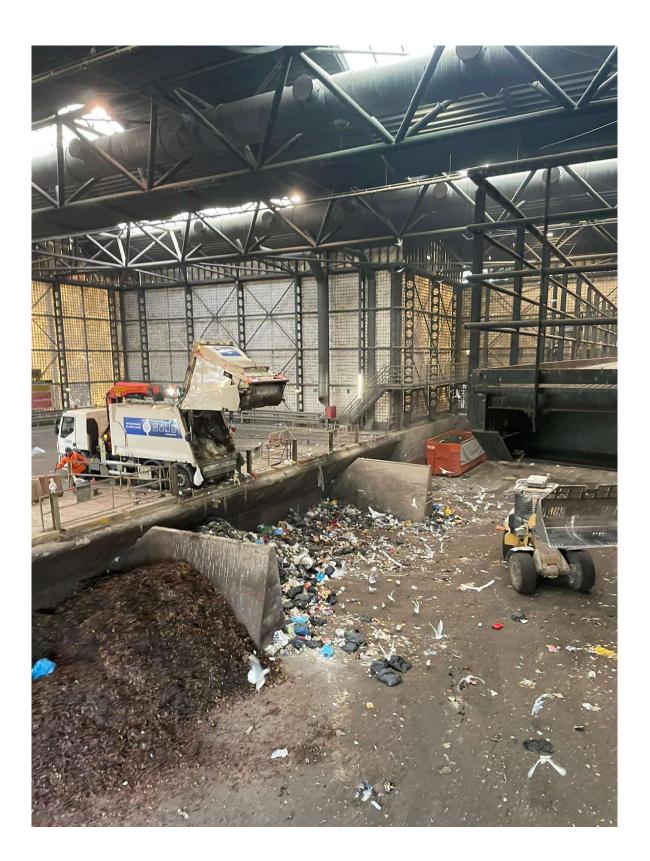


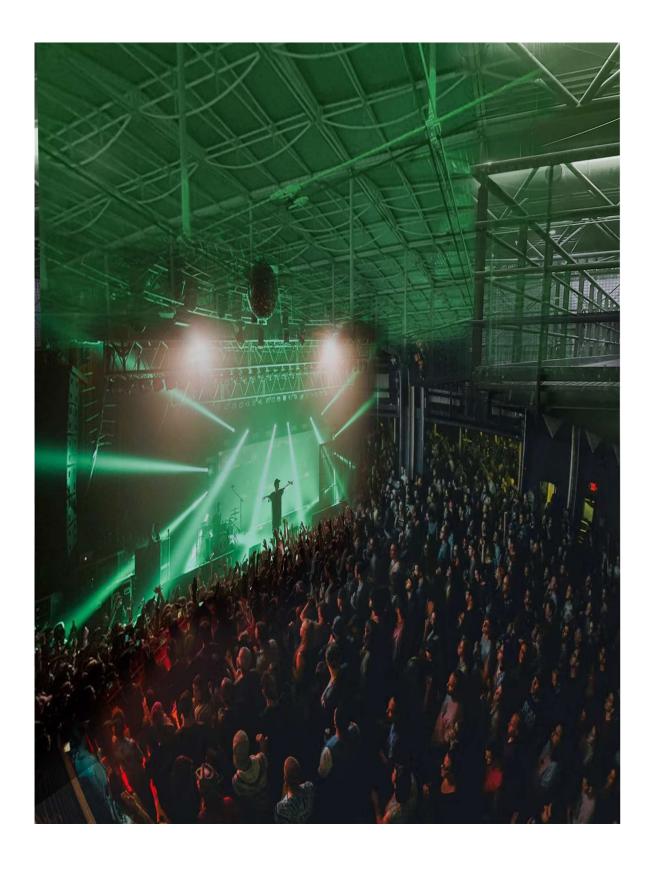


Source: Stijnvandenboogaard Architecture

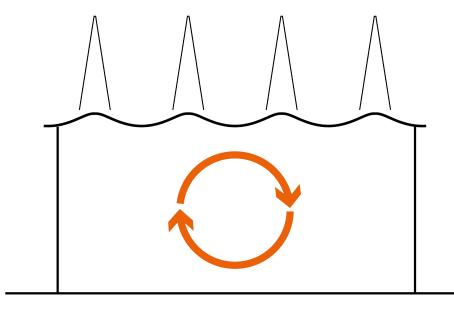
# What & How?

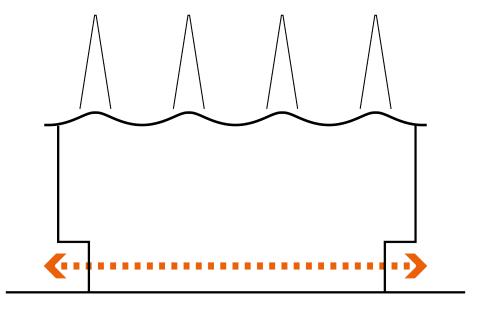
# Waste Kathedraal >> Music Kathedraal





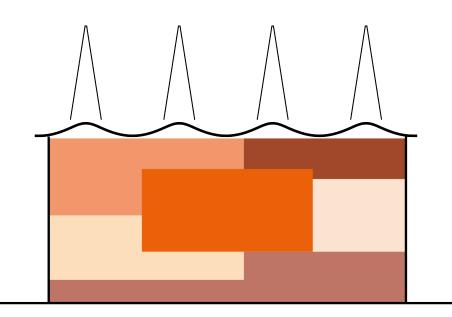
# Design Principles

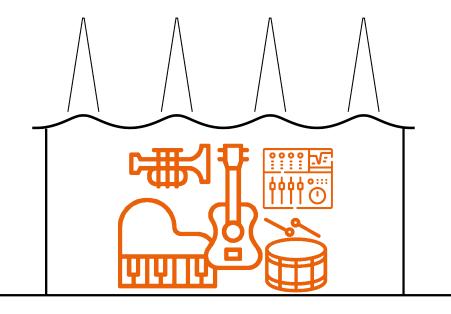




adaptive reuse

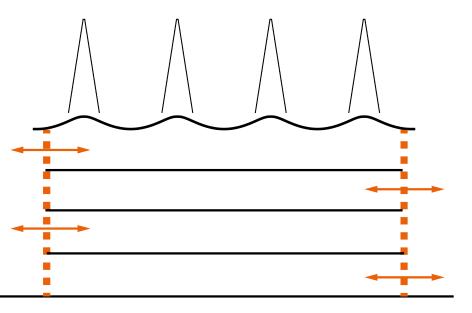
public promenade



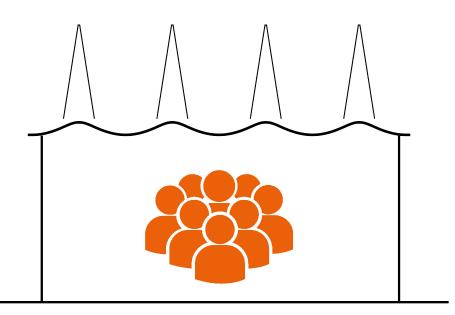


multifunctionality

genre diversity



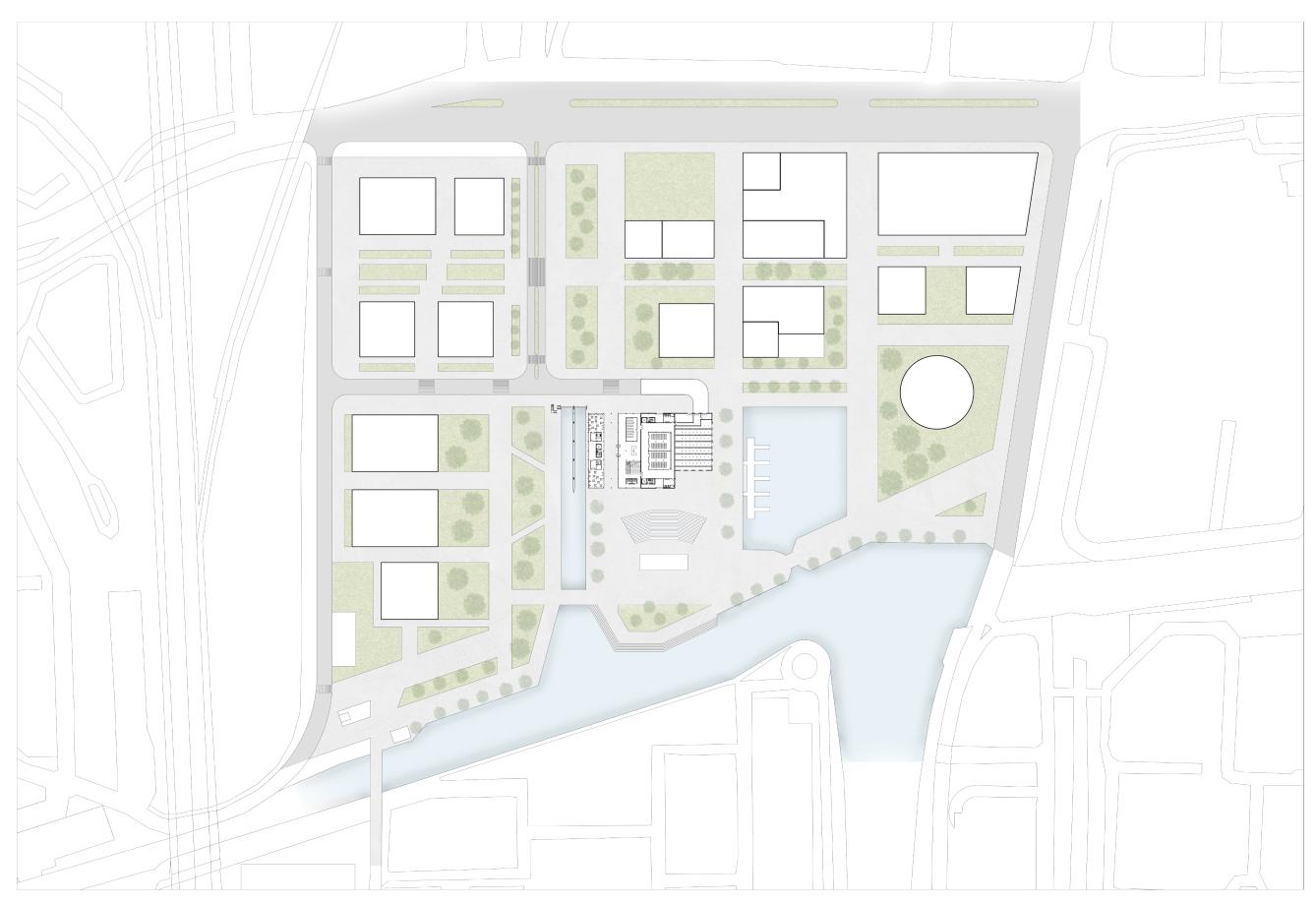
### open facade



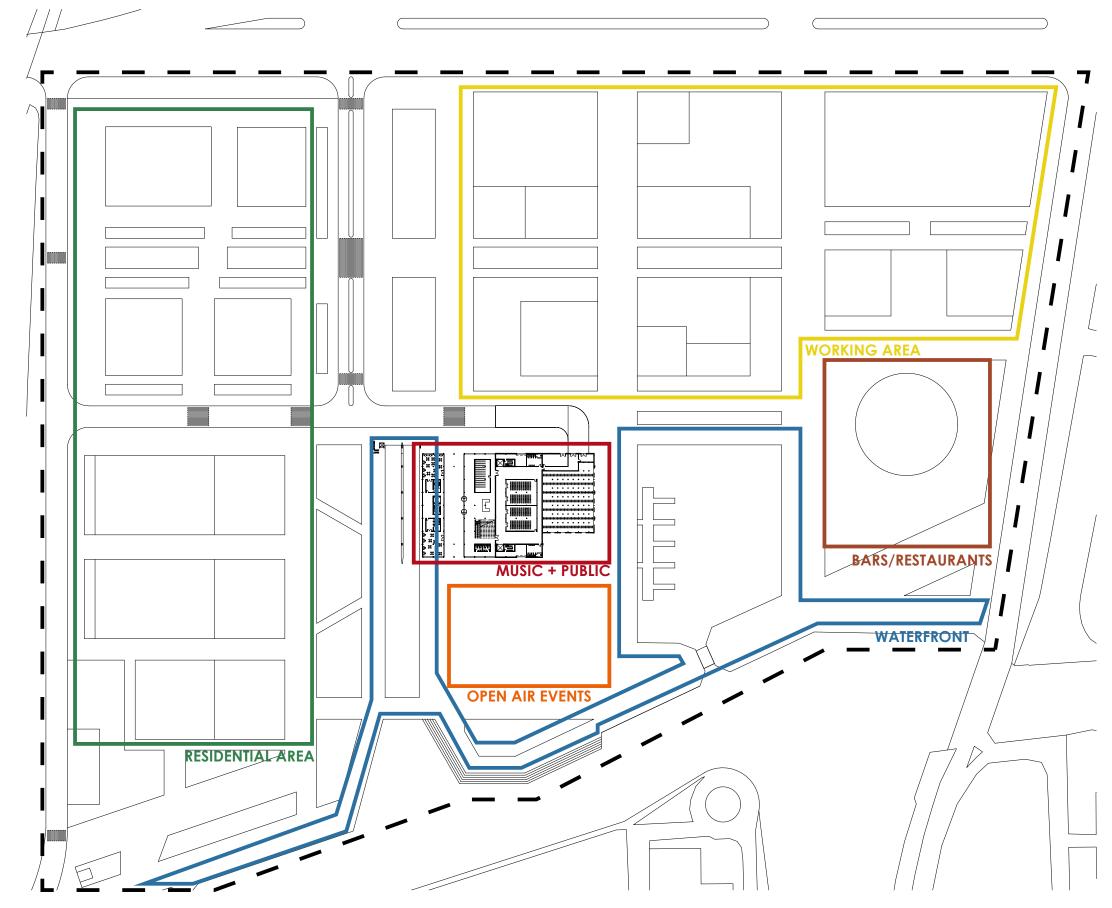
### community

# Design **Urbanism**

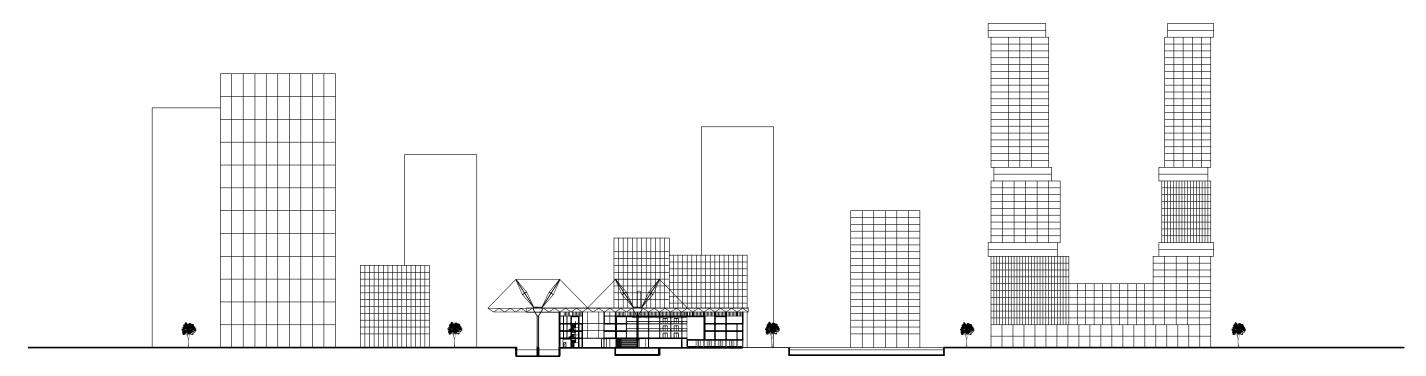
# Site plan

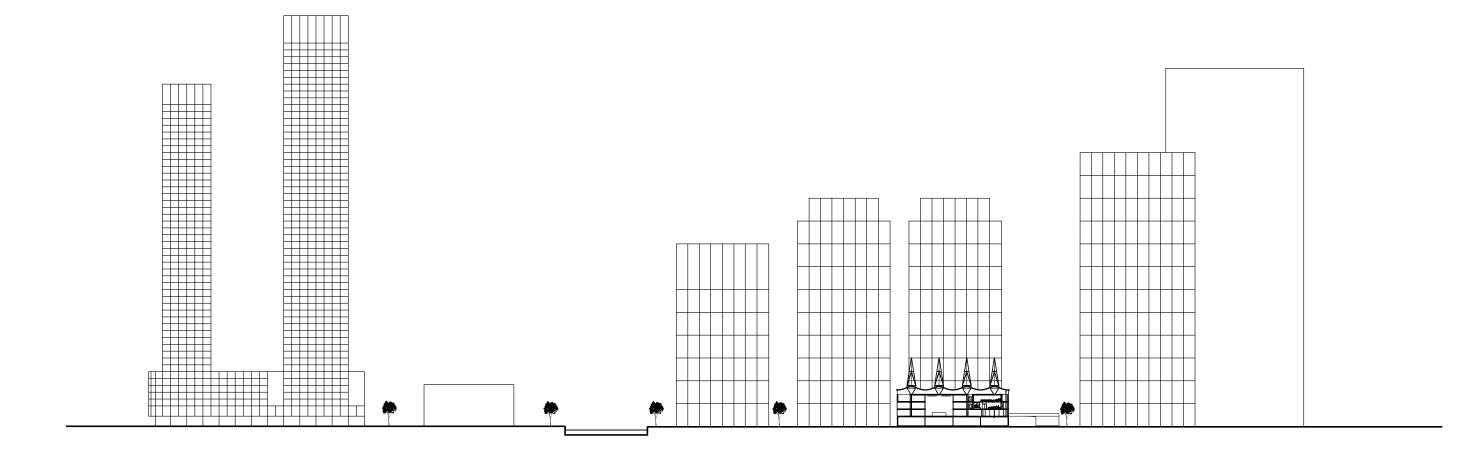


# Activity zones

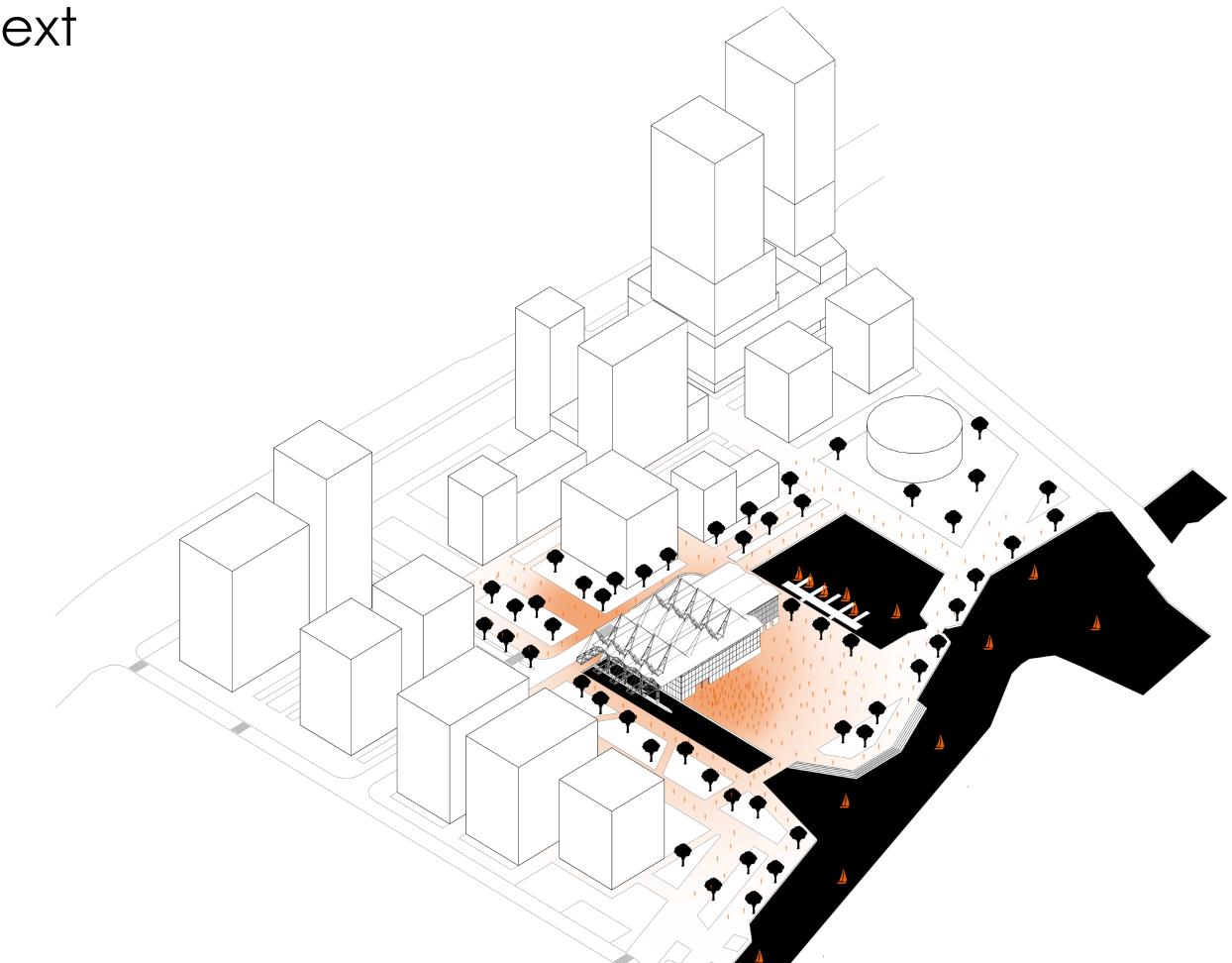


# Site profiles





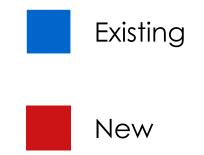
# Context

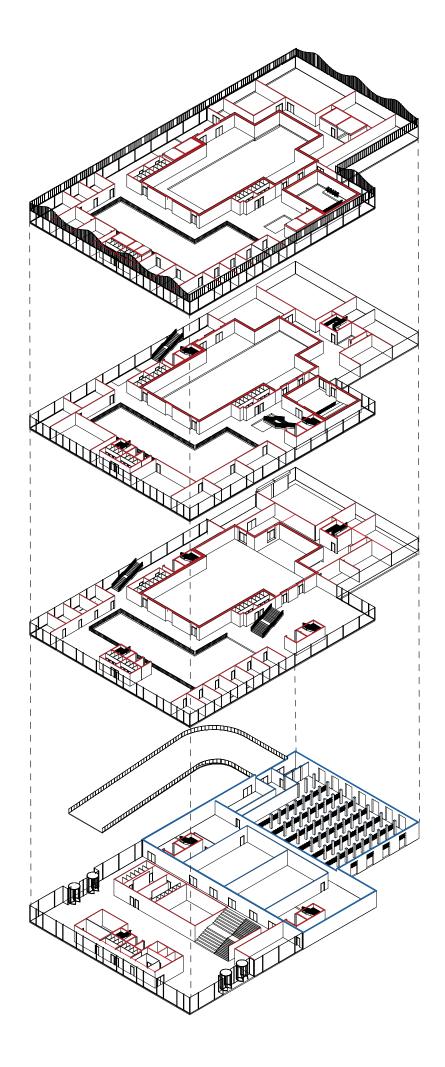




# Design Architecture

# Spatial Structure





# Program Implementation

Rehearsal rooms –

Multipurpose hall –

Small music hall —

Offices –

Dressing rooms — Multipurpose hall — Small music hall —

Music/dance studios –

Loading dock — Dressing rooms — Multipurpose hall — Study space — Library —

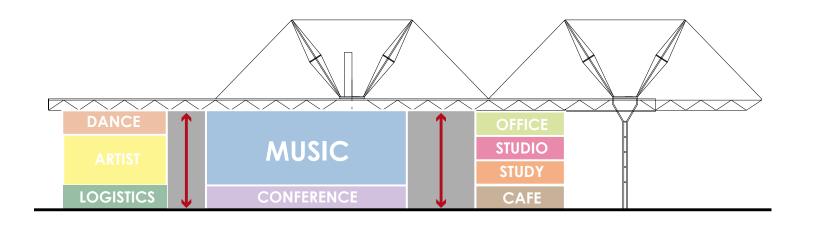
Bike parking -

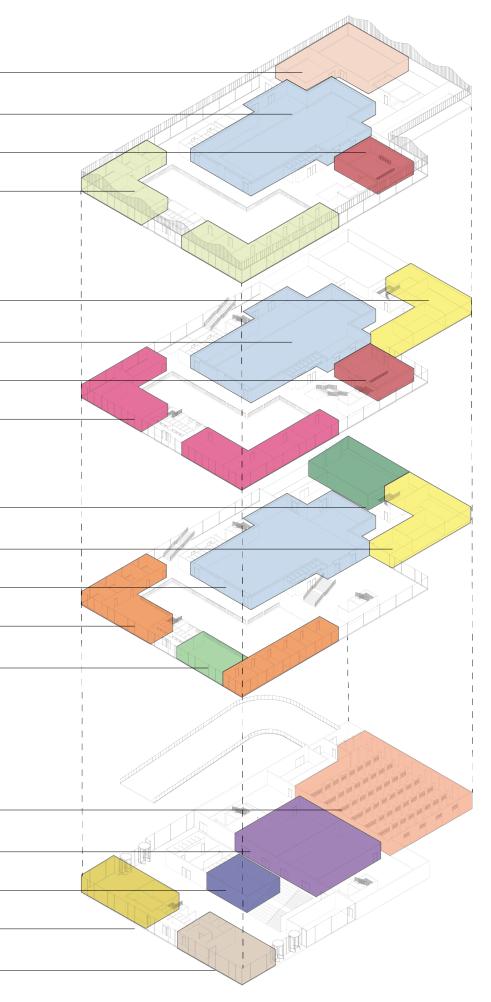
Conference rooms —

Cloak room —

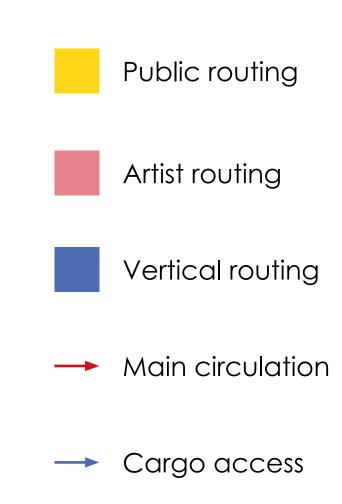
Restaurant –

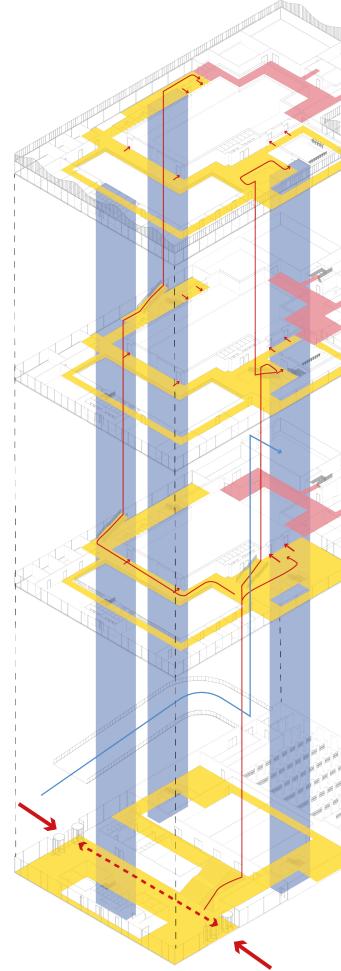
Cafe





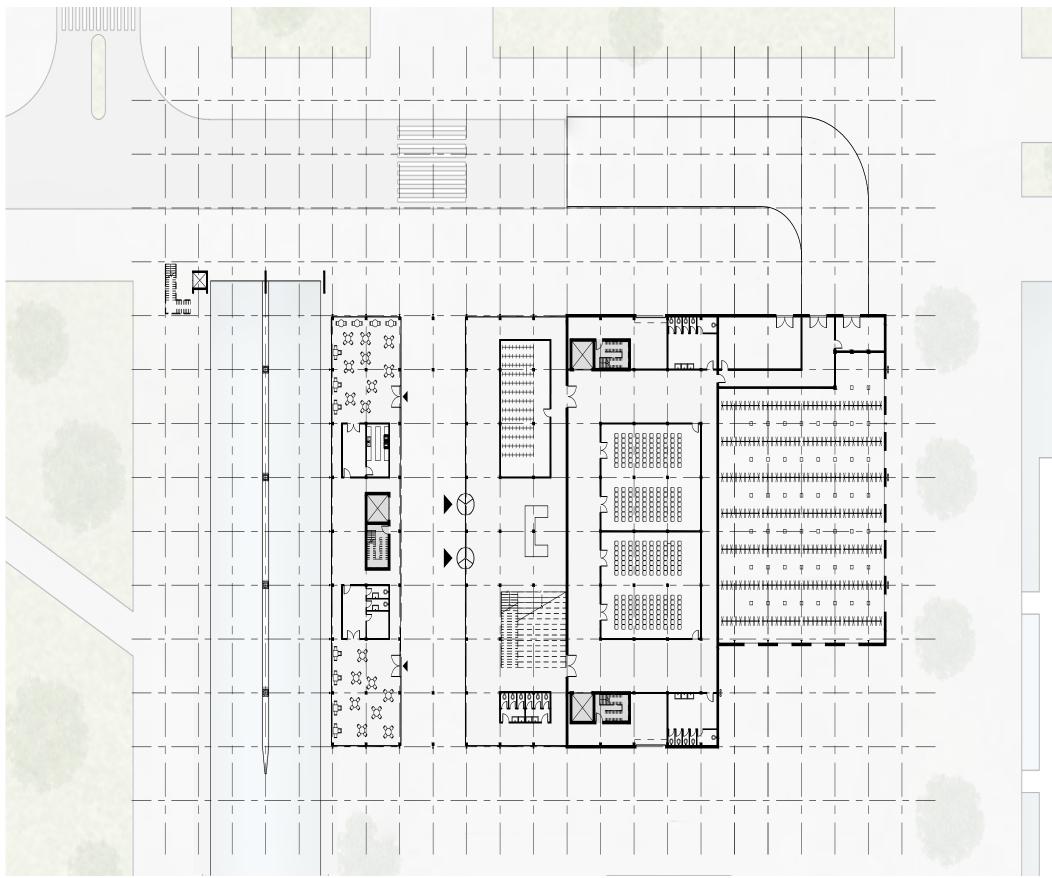
# Routing





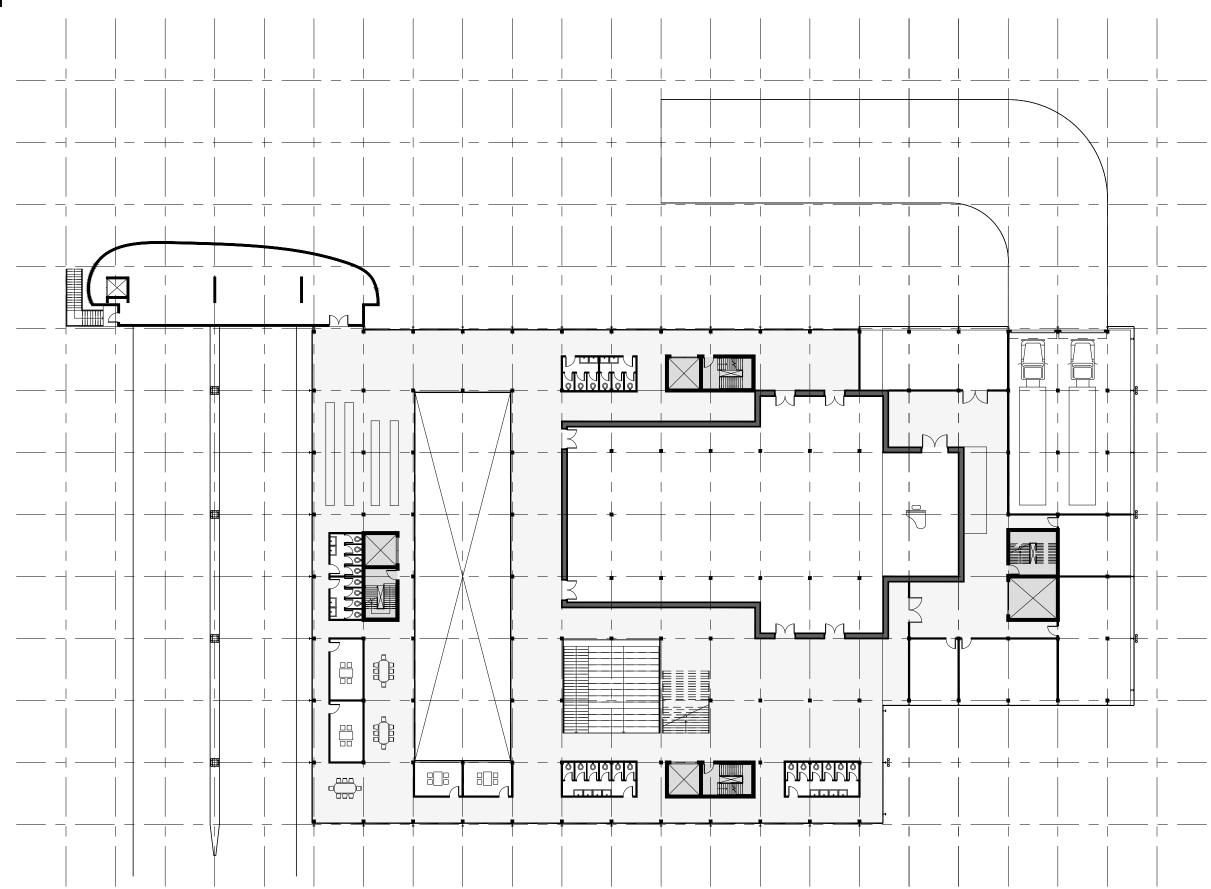


### Ground Floor



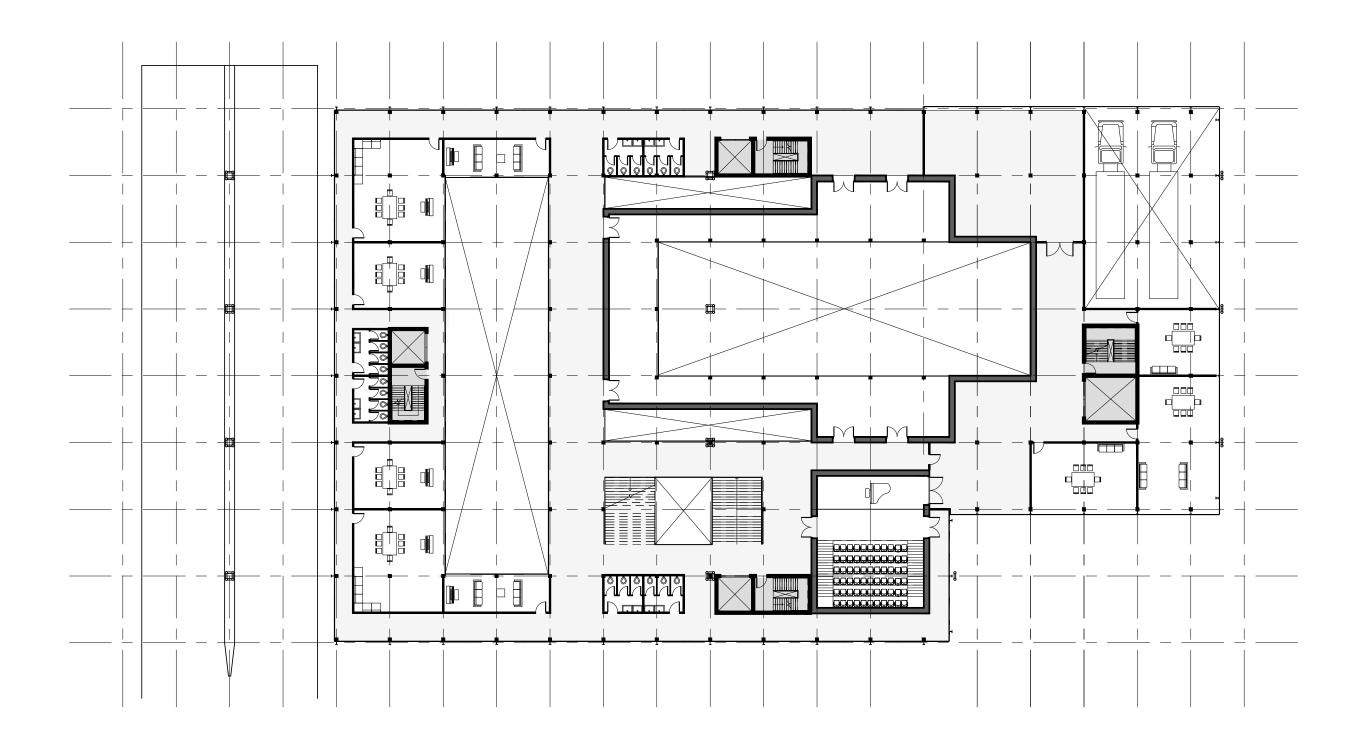


# 1st Floor



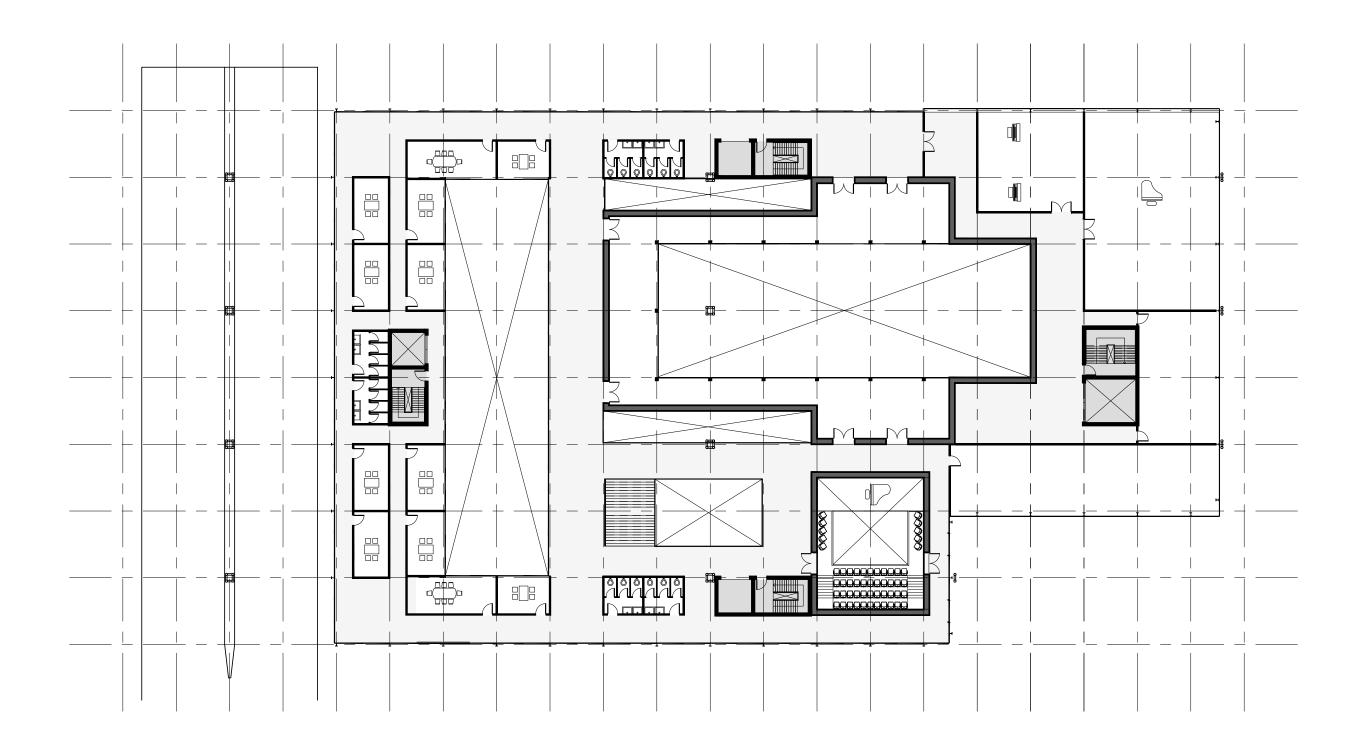


### 2nd Floor



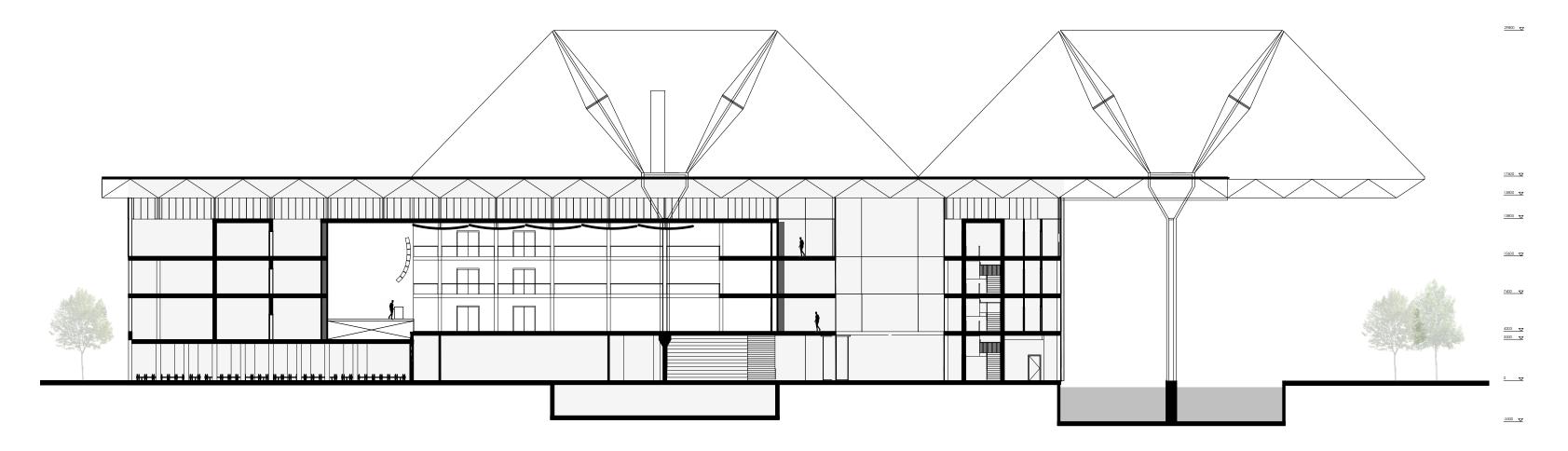


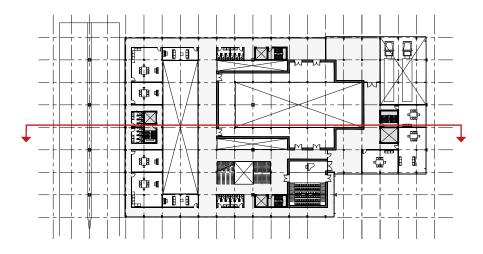
### 3rd Floor



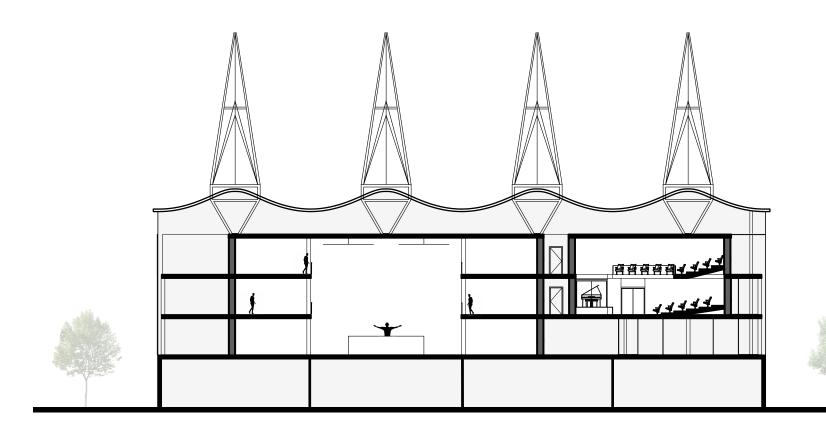


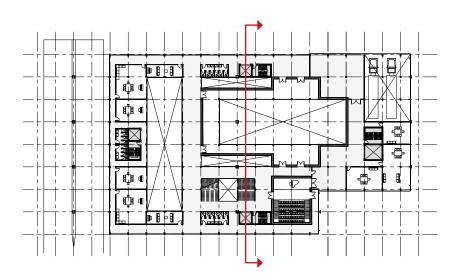
### Section A





# Section B







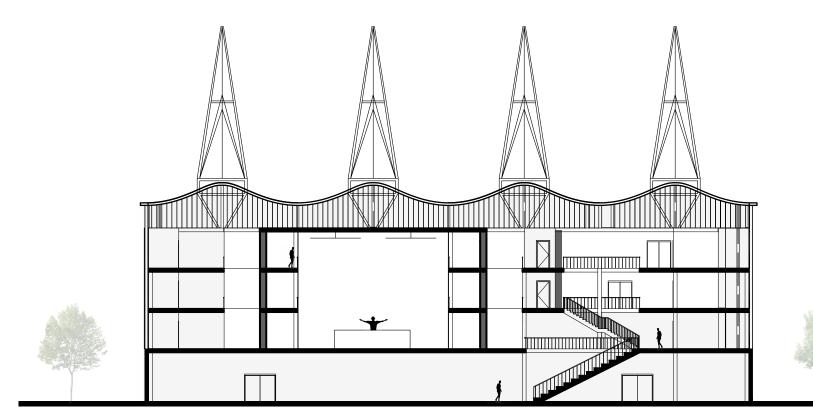
<u>17400</u> ▼ <u>15800</u> ▼ <u>13800</u> ▼

<u>7400</u> 🗸

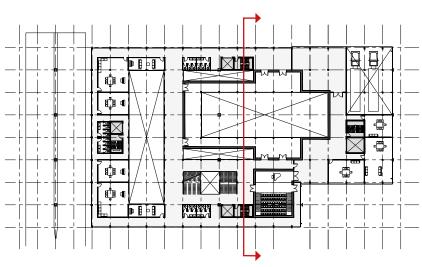
4200 ▼ 3500 ▼

0

### Section C







<u>17400</u> 🗸 <u>15800</u> 🗸

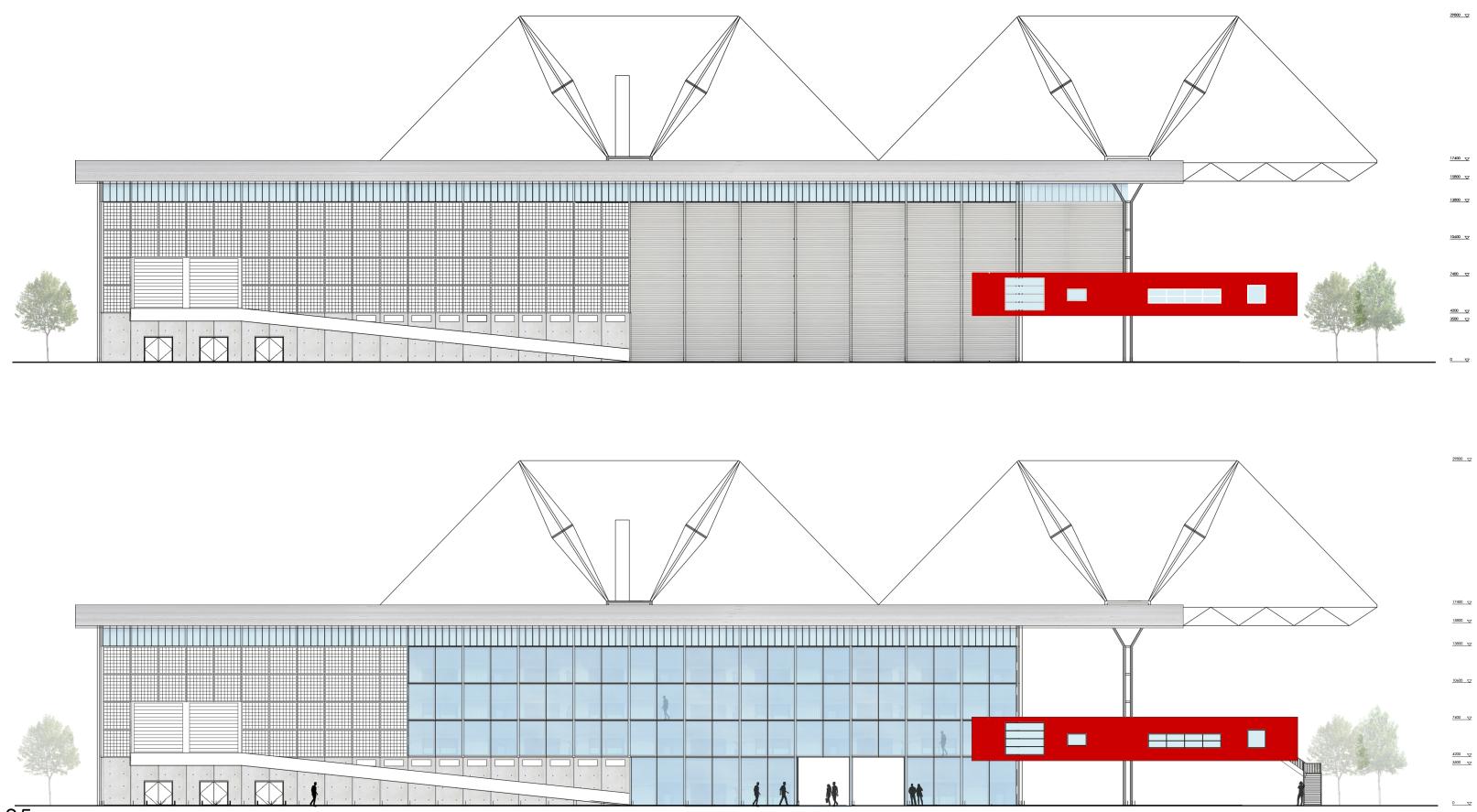
<u>13800</u> 🗸

<u>7400</u> ∇

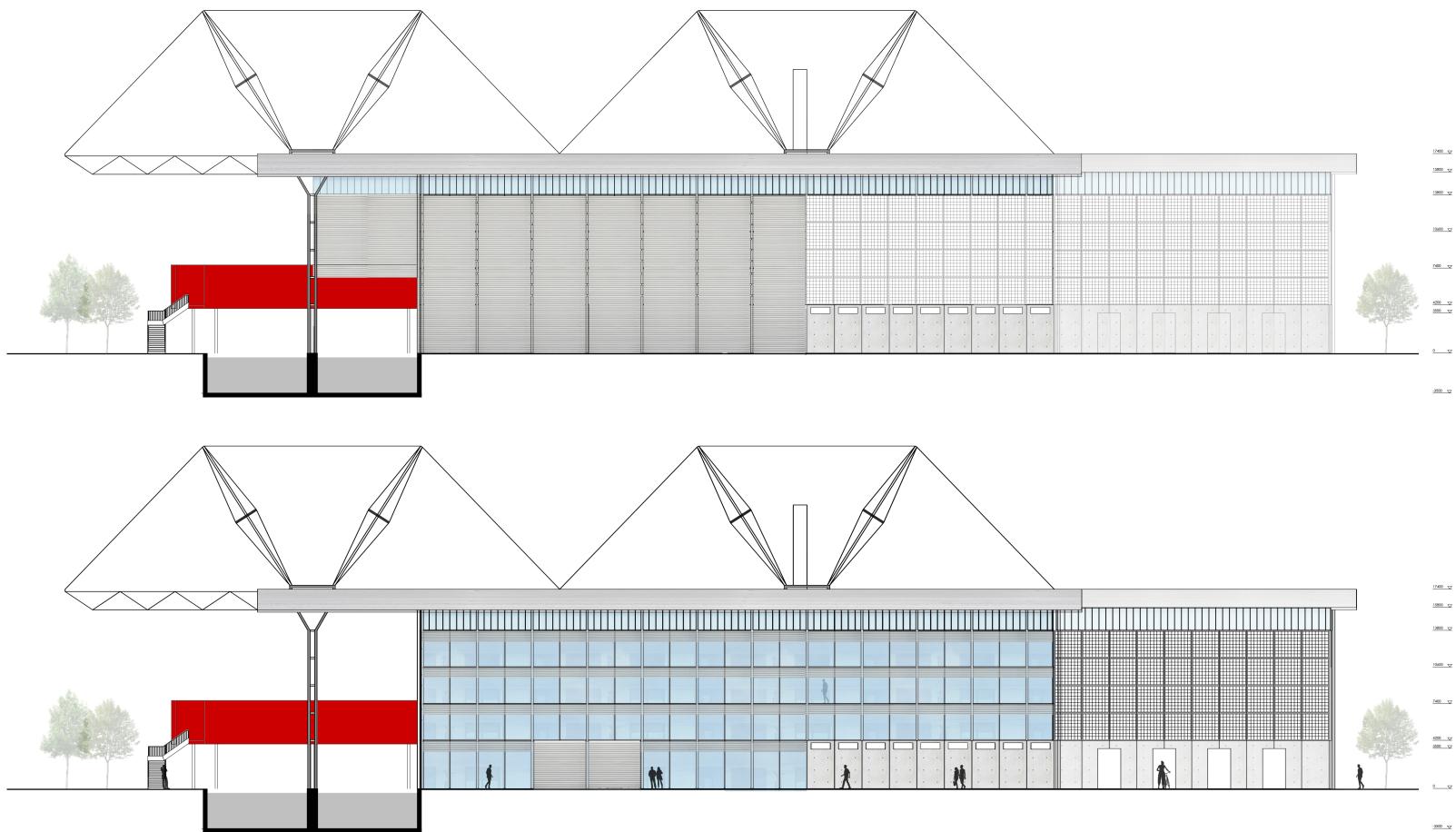
<u>29800</u> 🗸

<u>4200</u> ∇ 3500 ∇

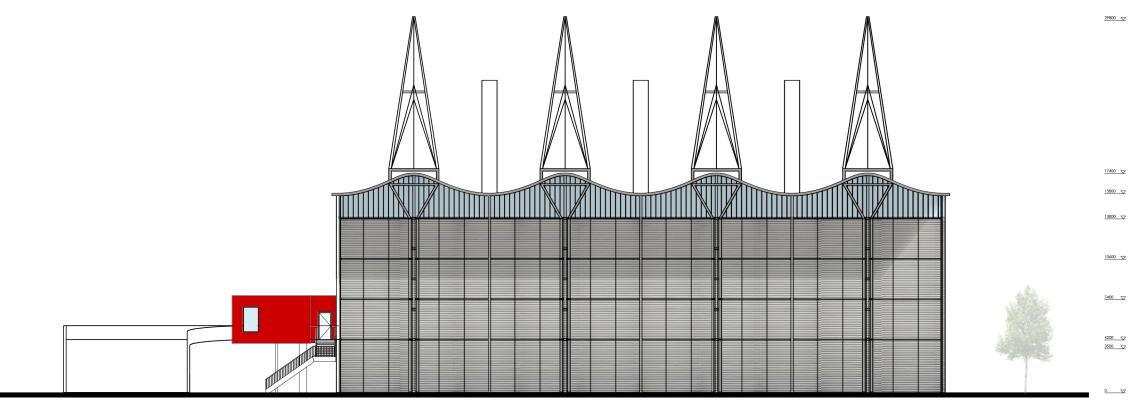
# Northeast Elevation

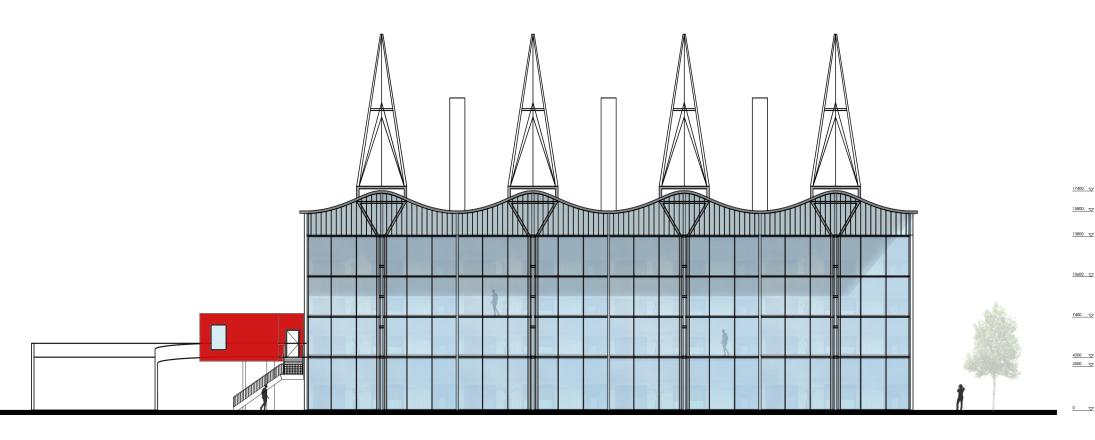


# Southwest Elevation



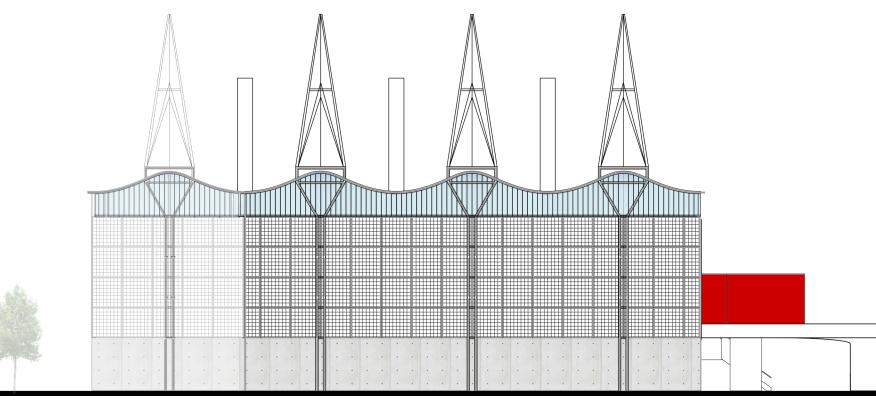
#### Northwest Elevation

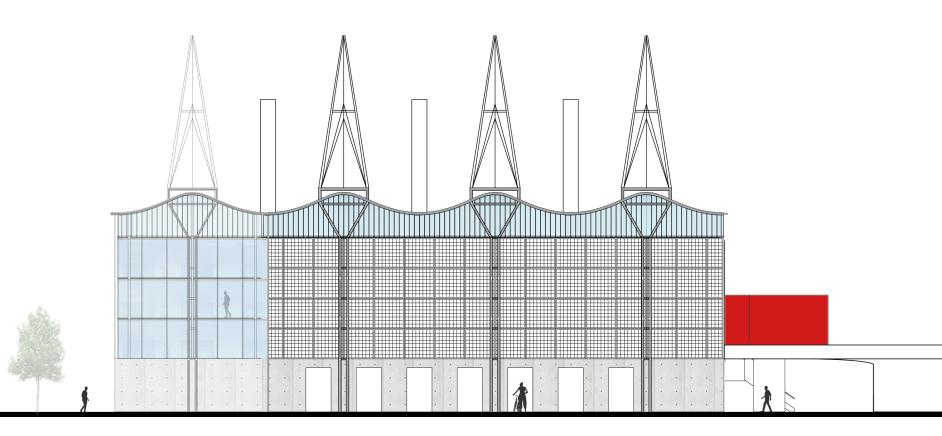




17400 🗸 15800 13800 🗸 <u>10600 \\alpha \\}</u> 7400 🗸 4200 ▽ 3500 ▽

#### Southeast Elevation





<u>17400</u> 🗸 15800 ▽ 10600 🗸 <u>4200 ⊽</u> 3500 ⊽

<u>10600</u>

<u>7400</u> ▽ 4200 ▽ 3500 ▽

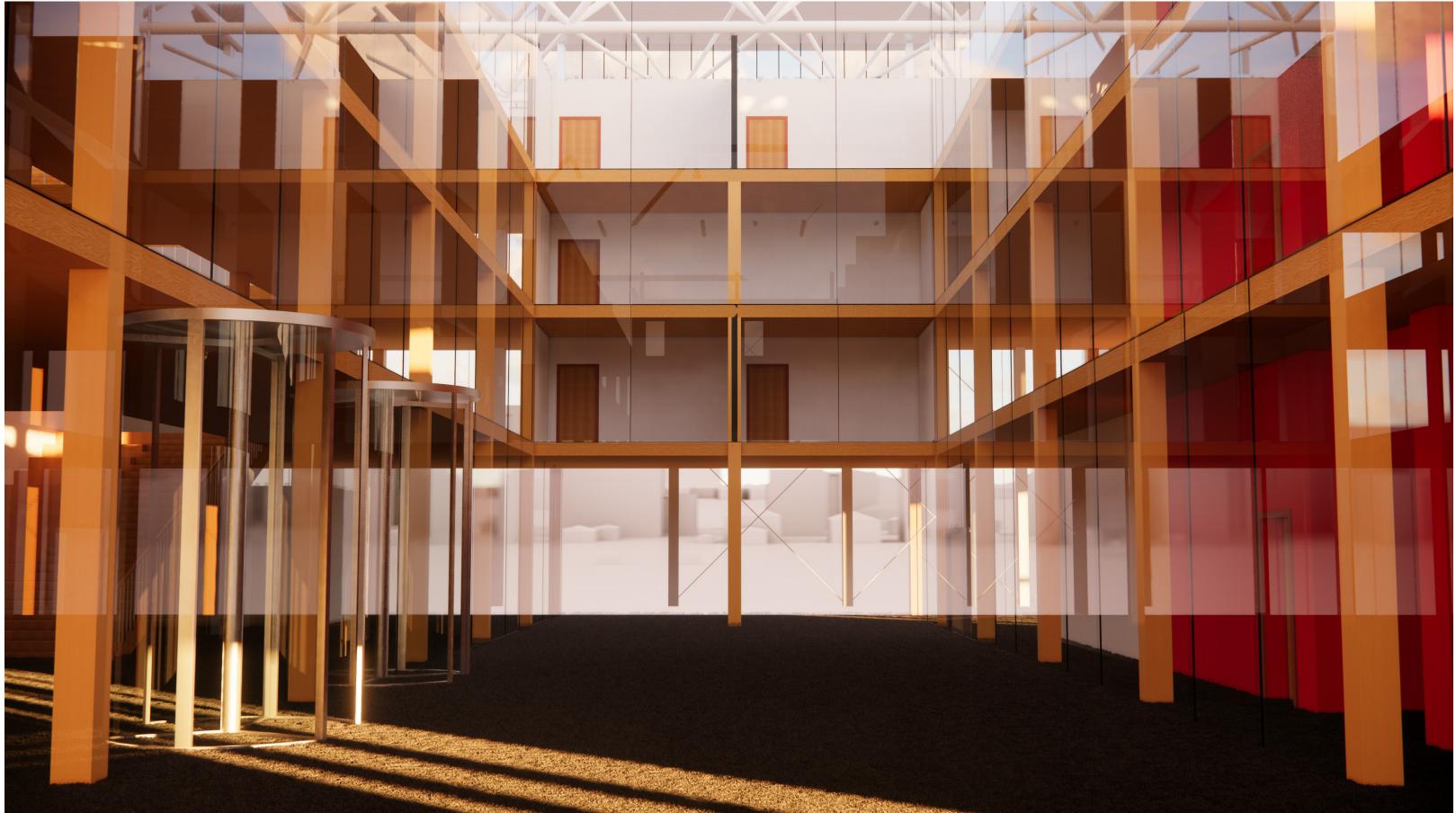
13800

<u>17400 \sqrtvect</u> 15800

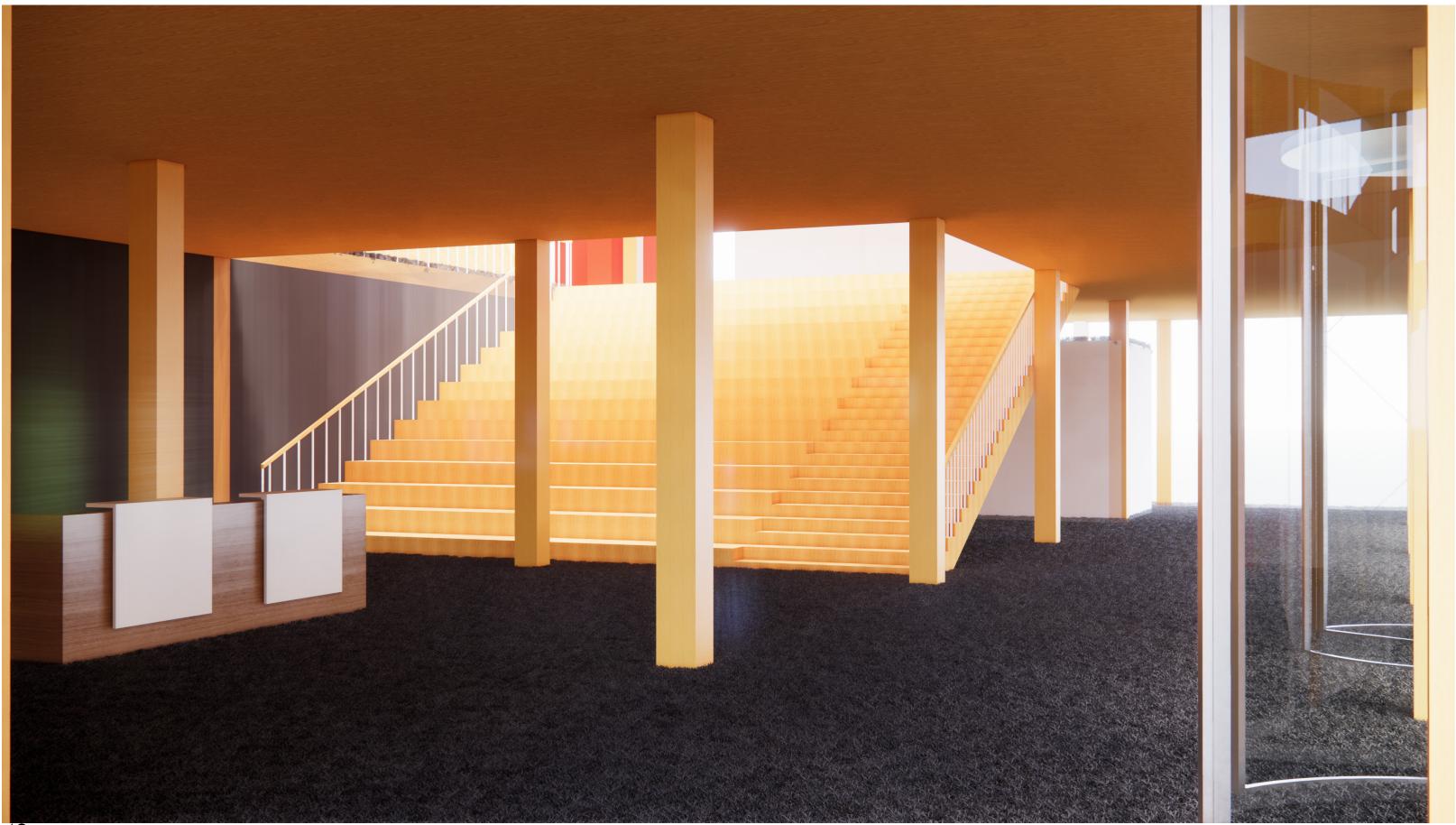
0

29800

# Impression | Atrium



# Impression | Foyer



# Impression | Route

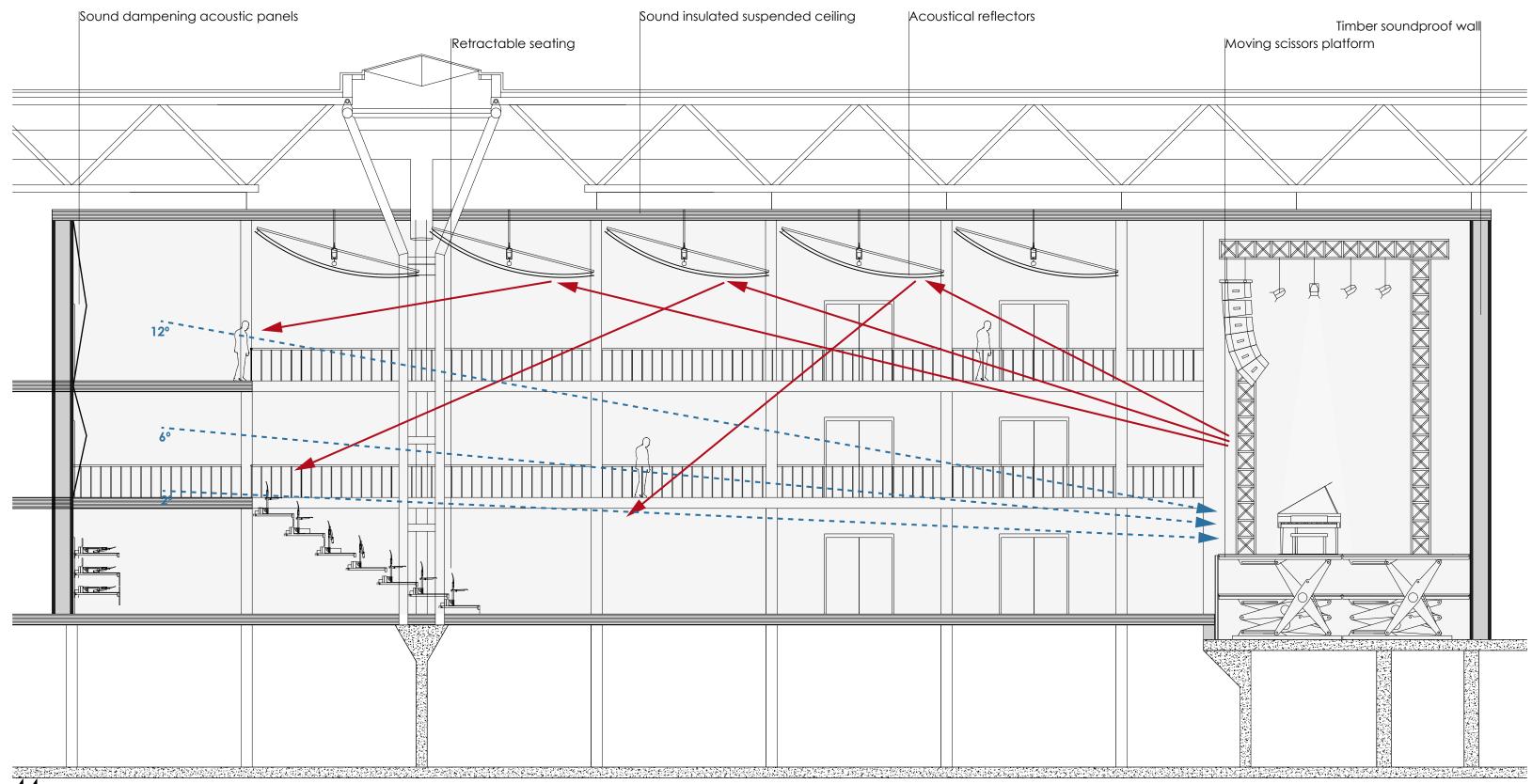


#### Impression | Kathedraal hall

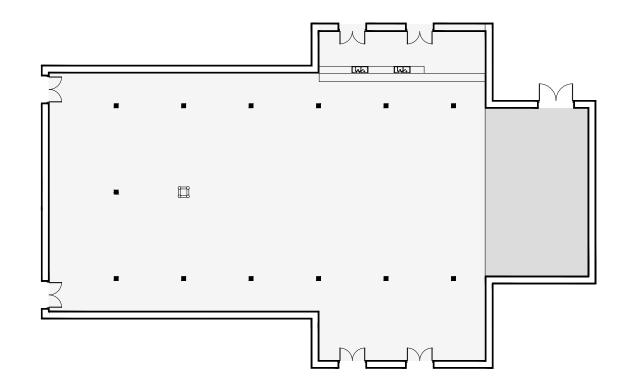


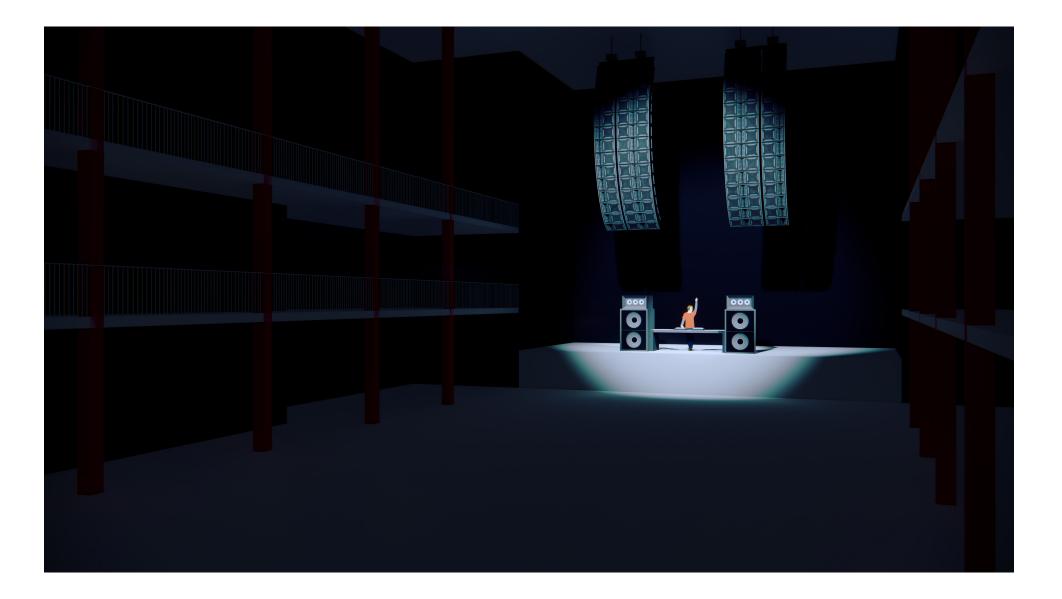
#### Design Building Technology

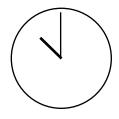
#### Acoustic Performance/Elements Reconfiguration



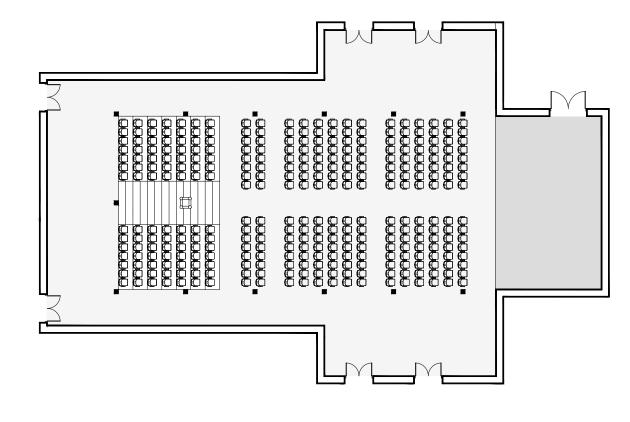
## Kathedraal Hall | Configuration 1

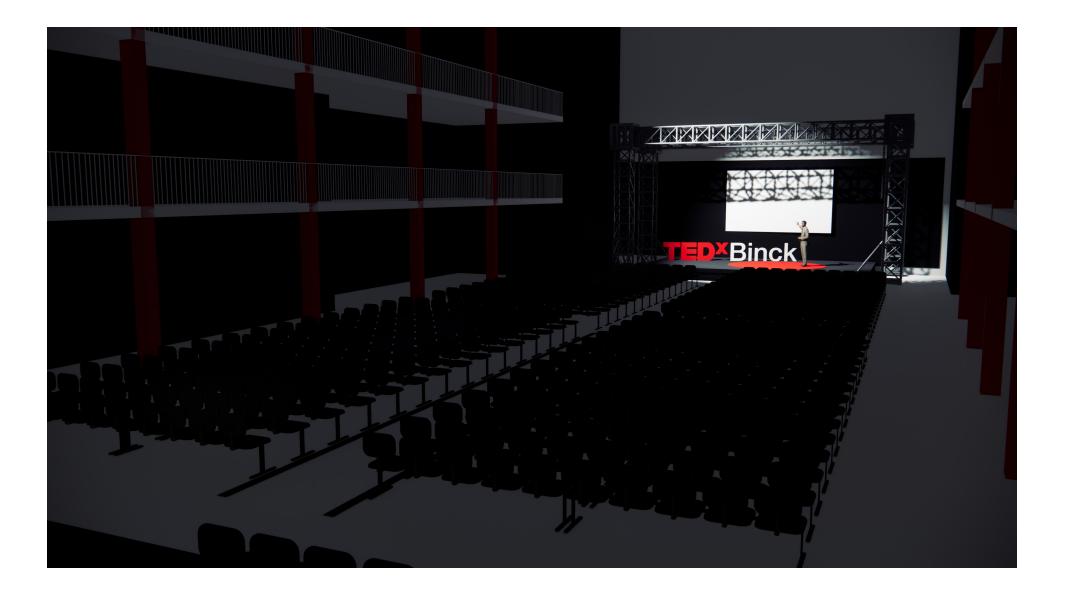






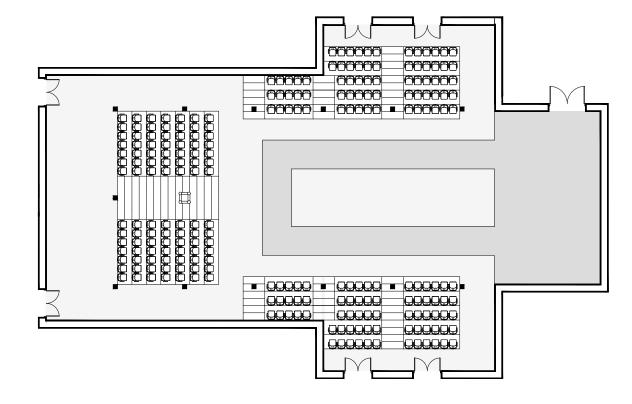
# Kathedraal Hall | Configuration 2

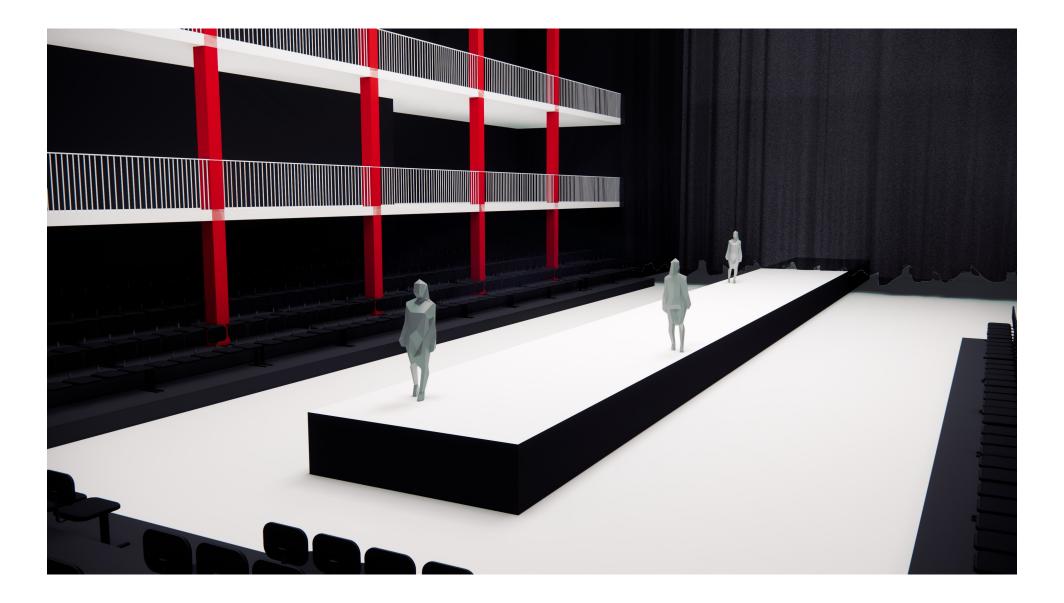


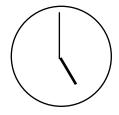




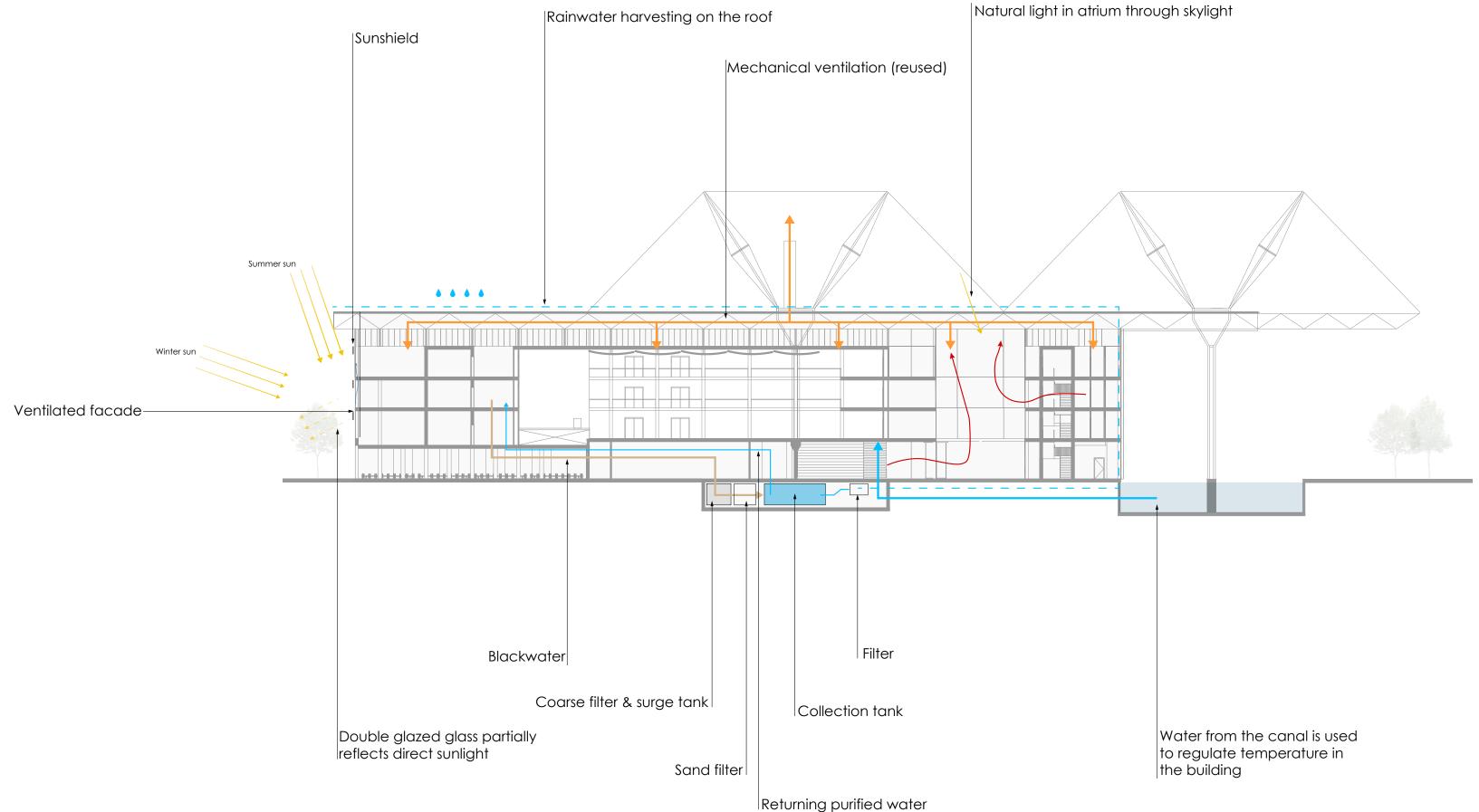
## Kathedraal Hall | Configuration 3



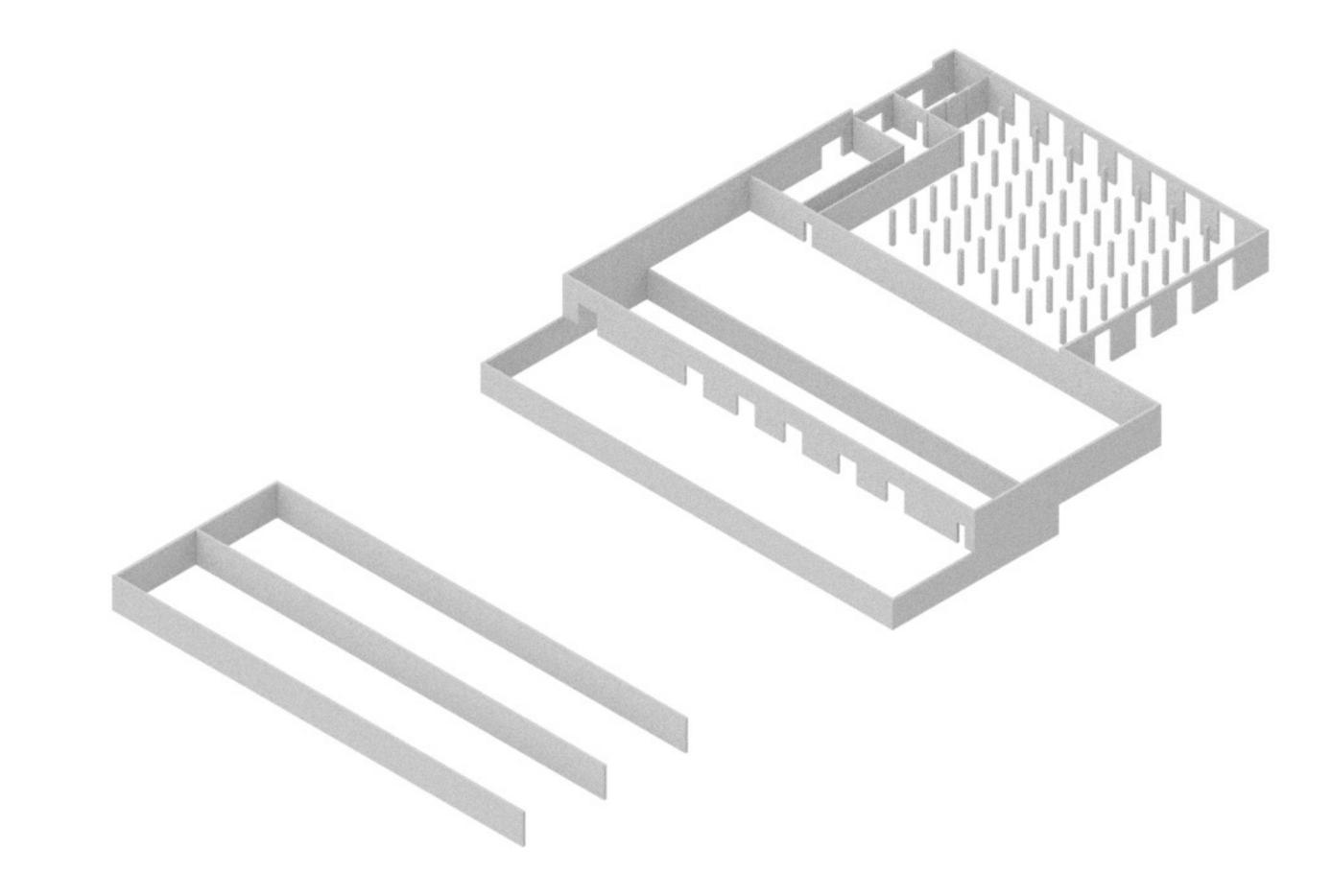


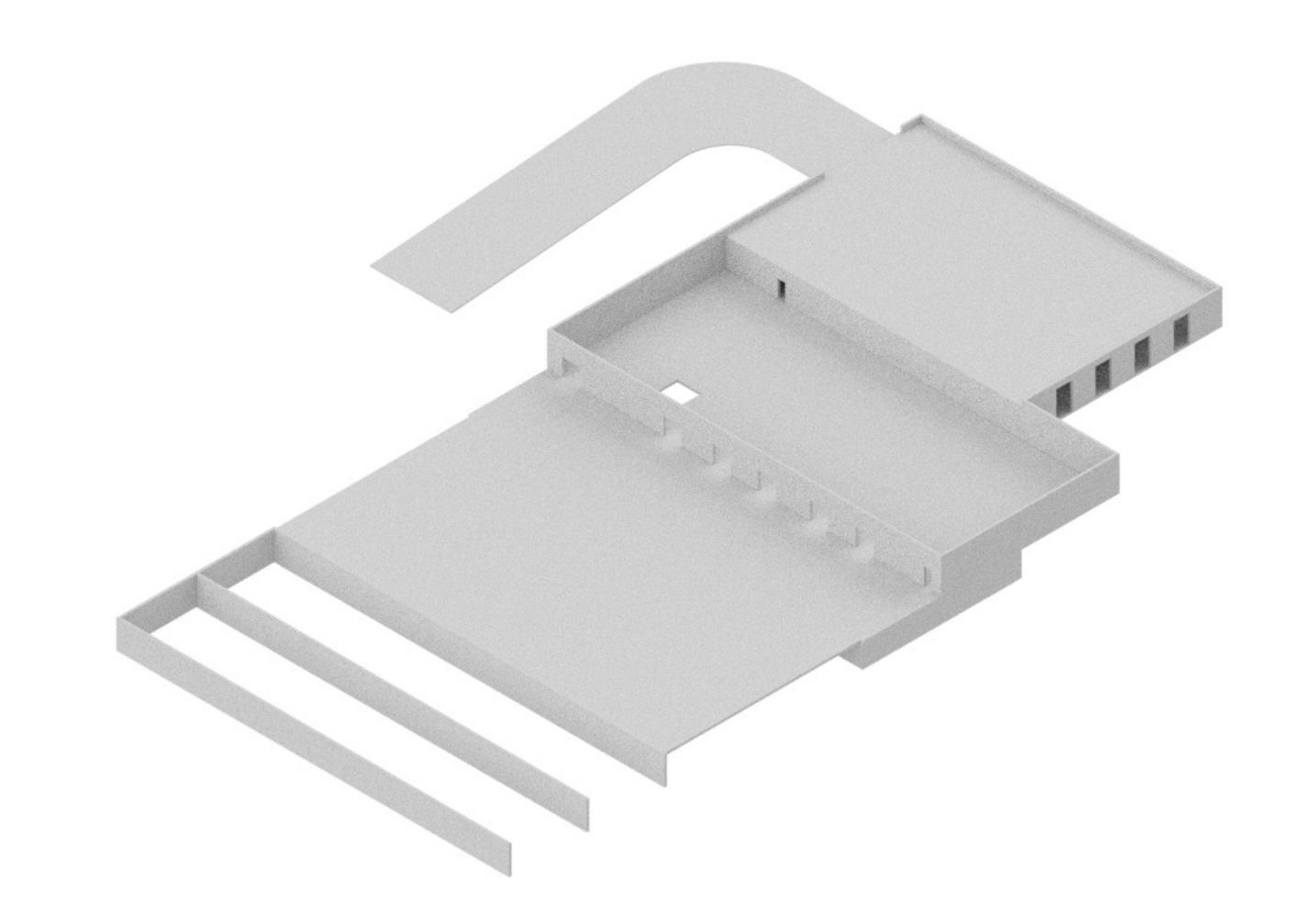


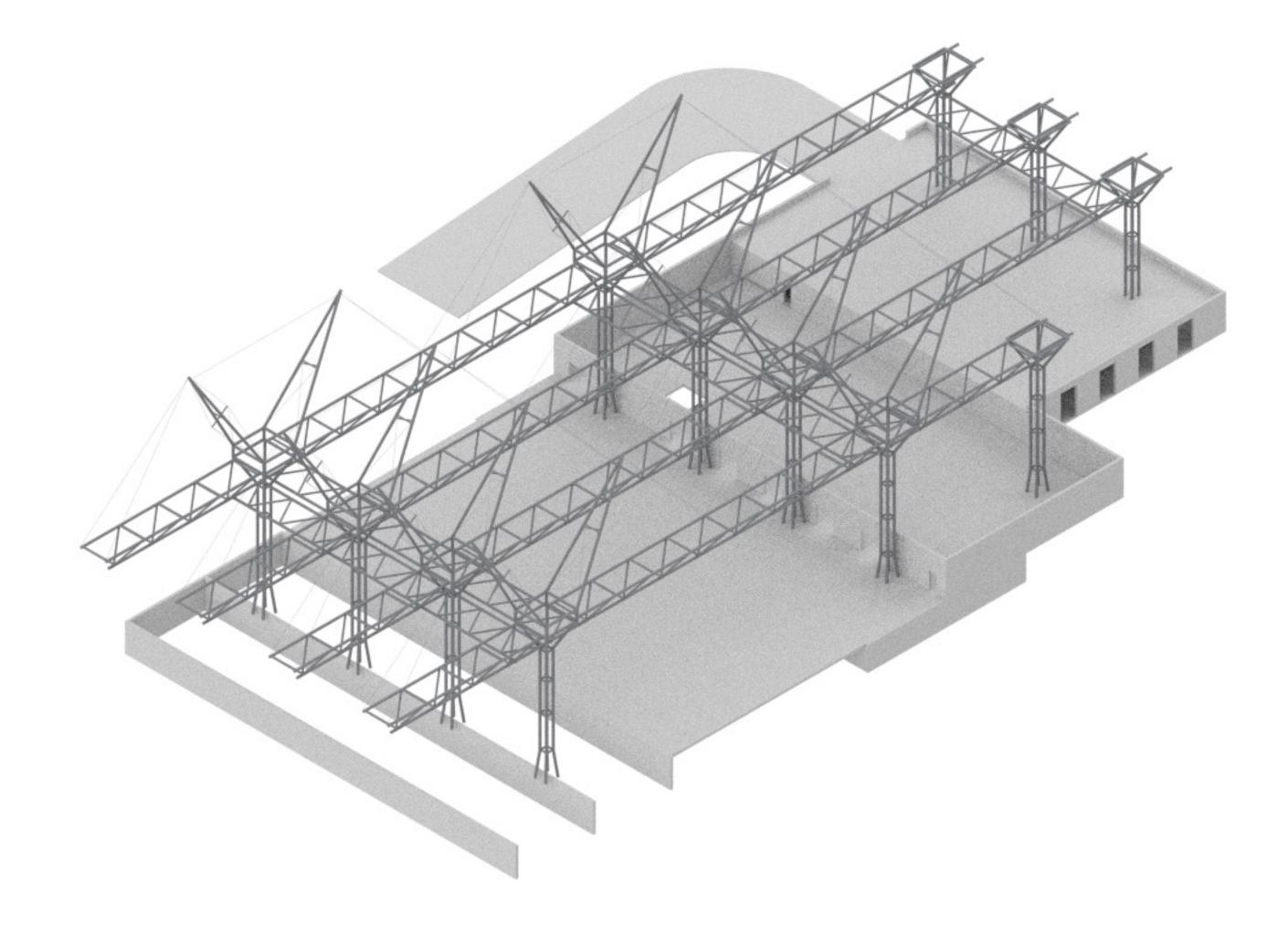
# **Building Physics**

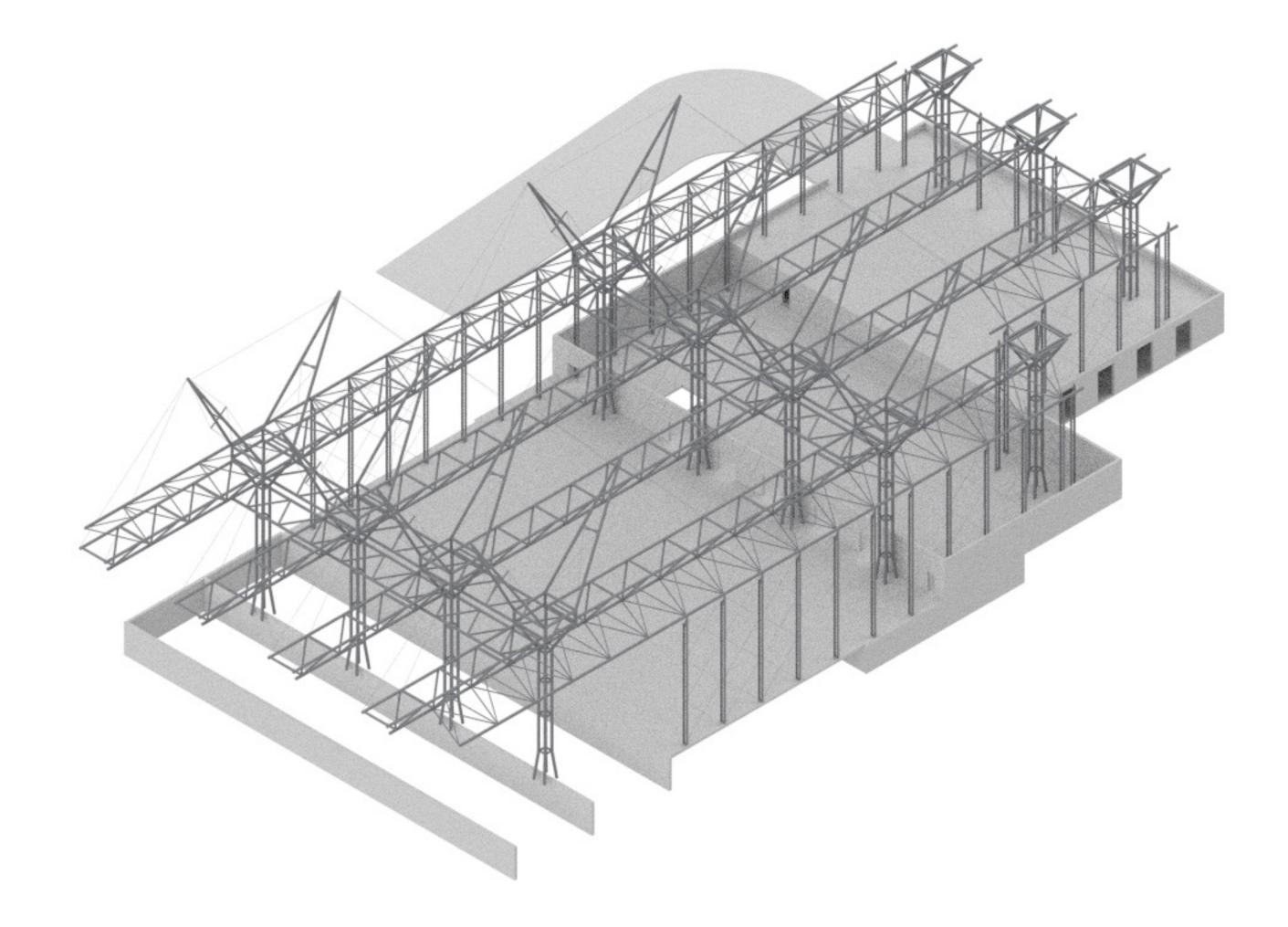


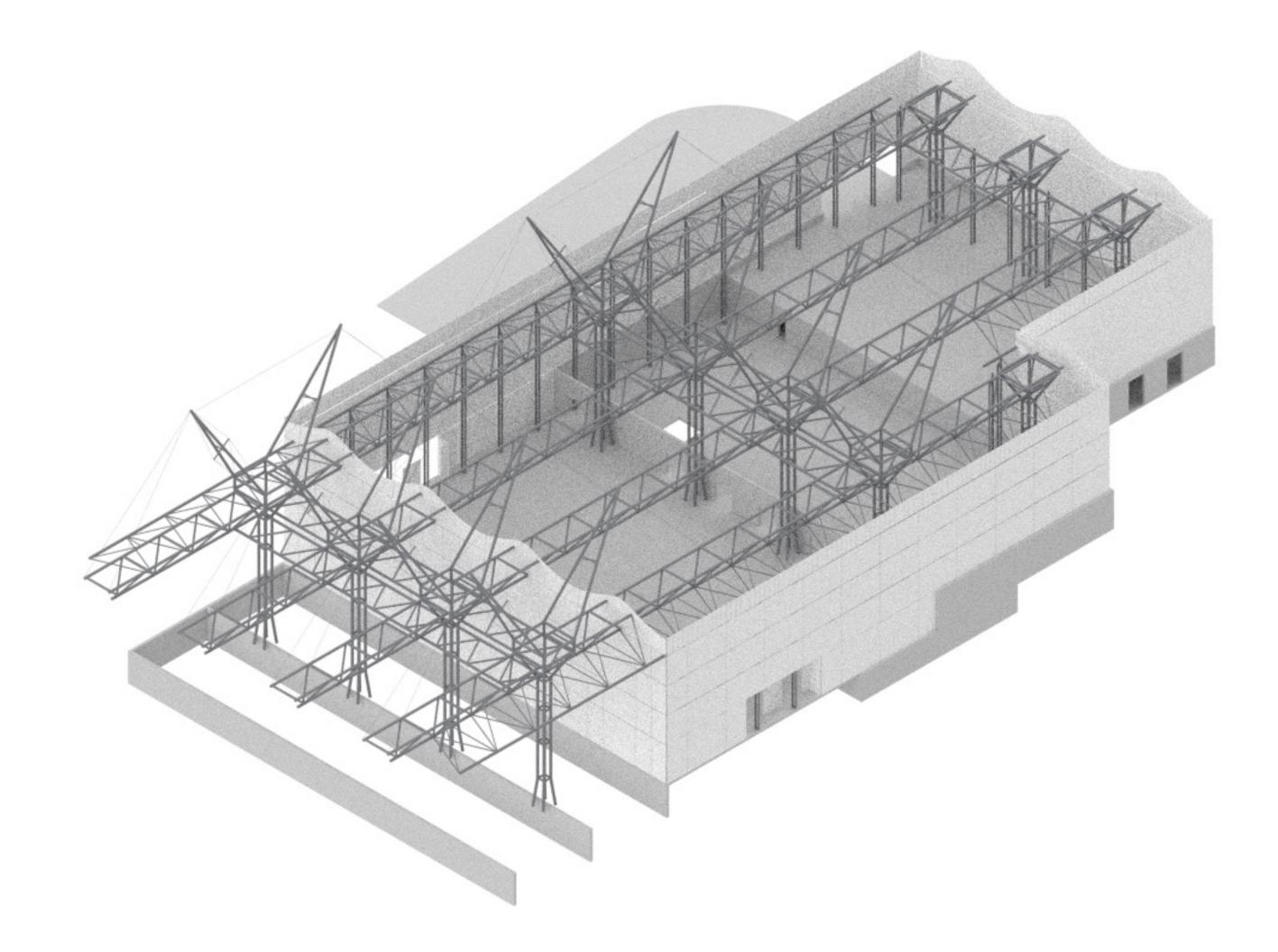
#### Construction Timeline

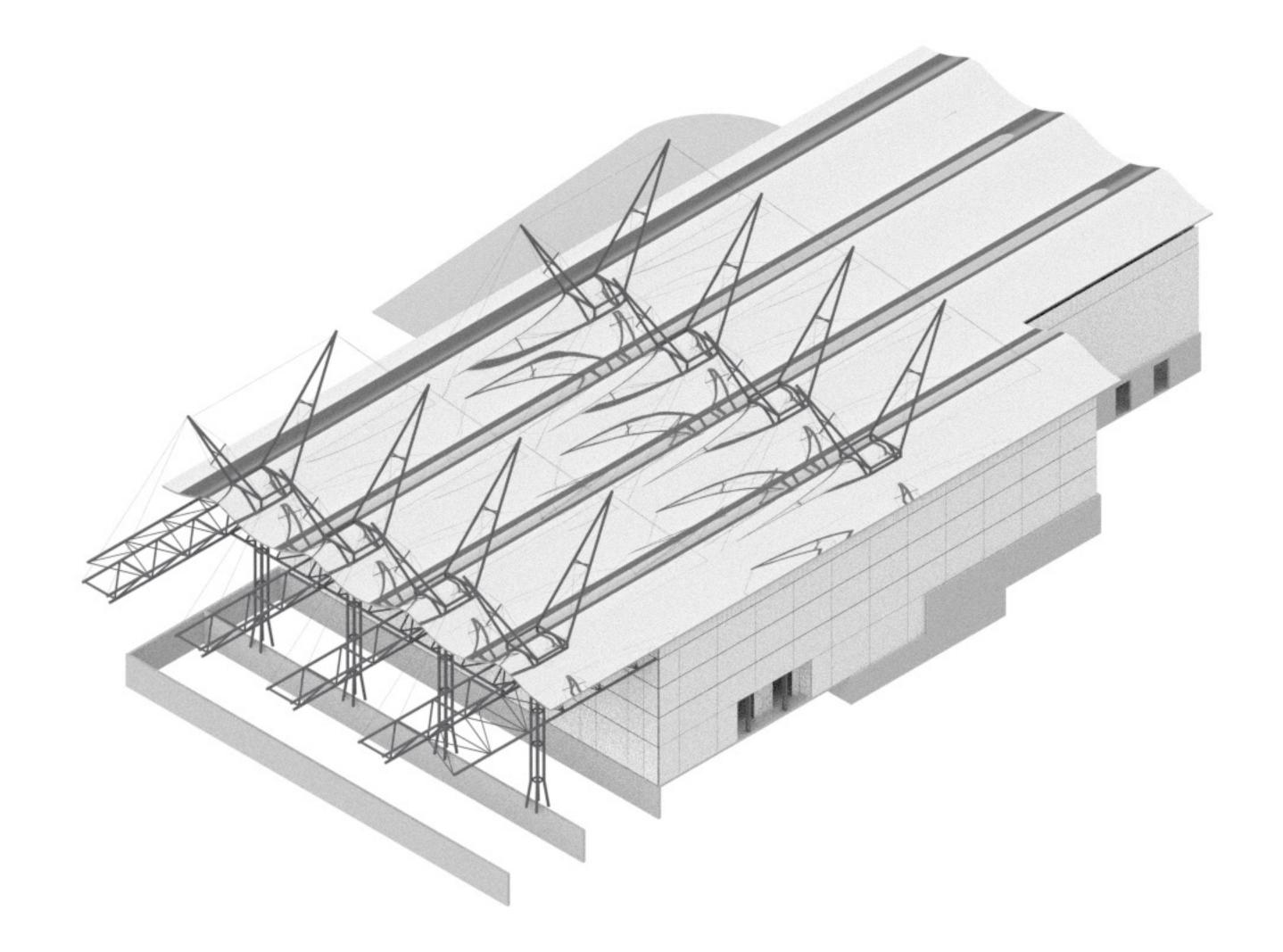


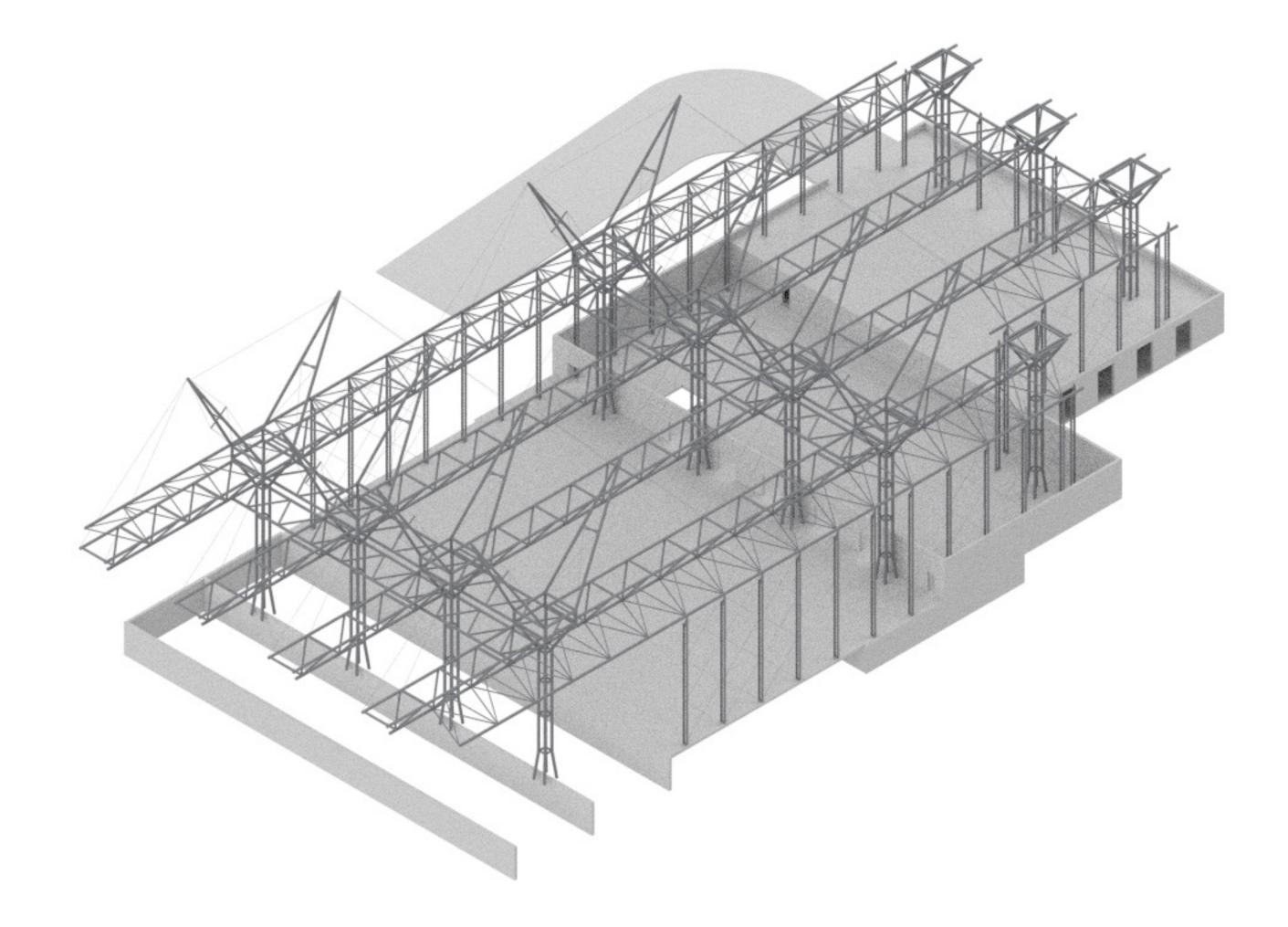


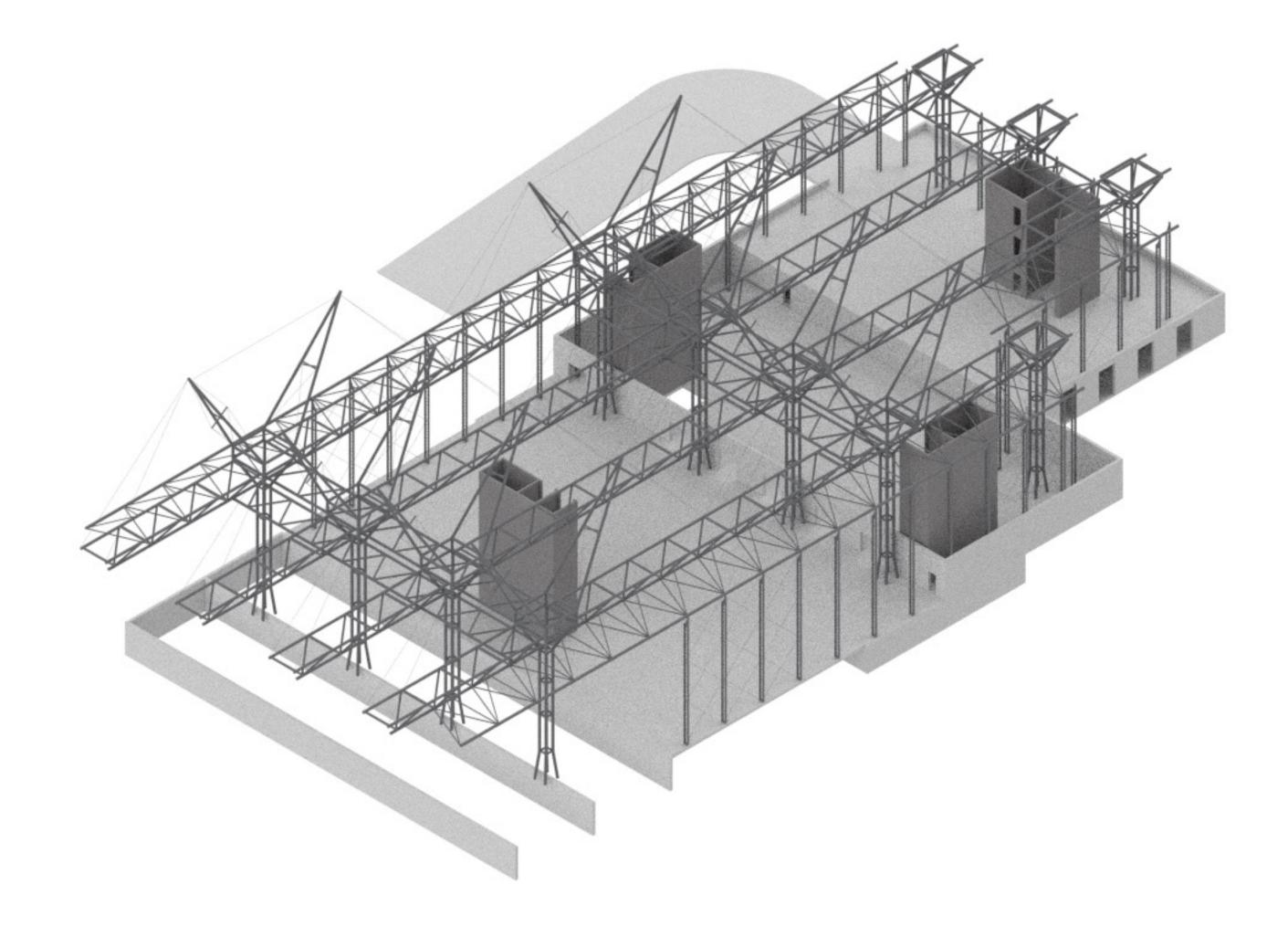


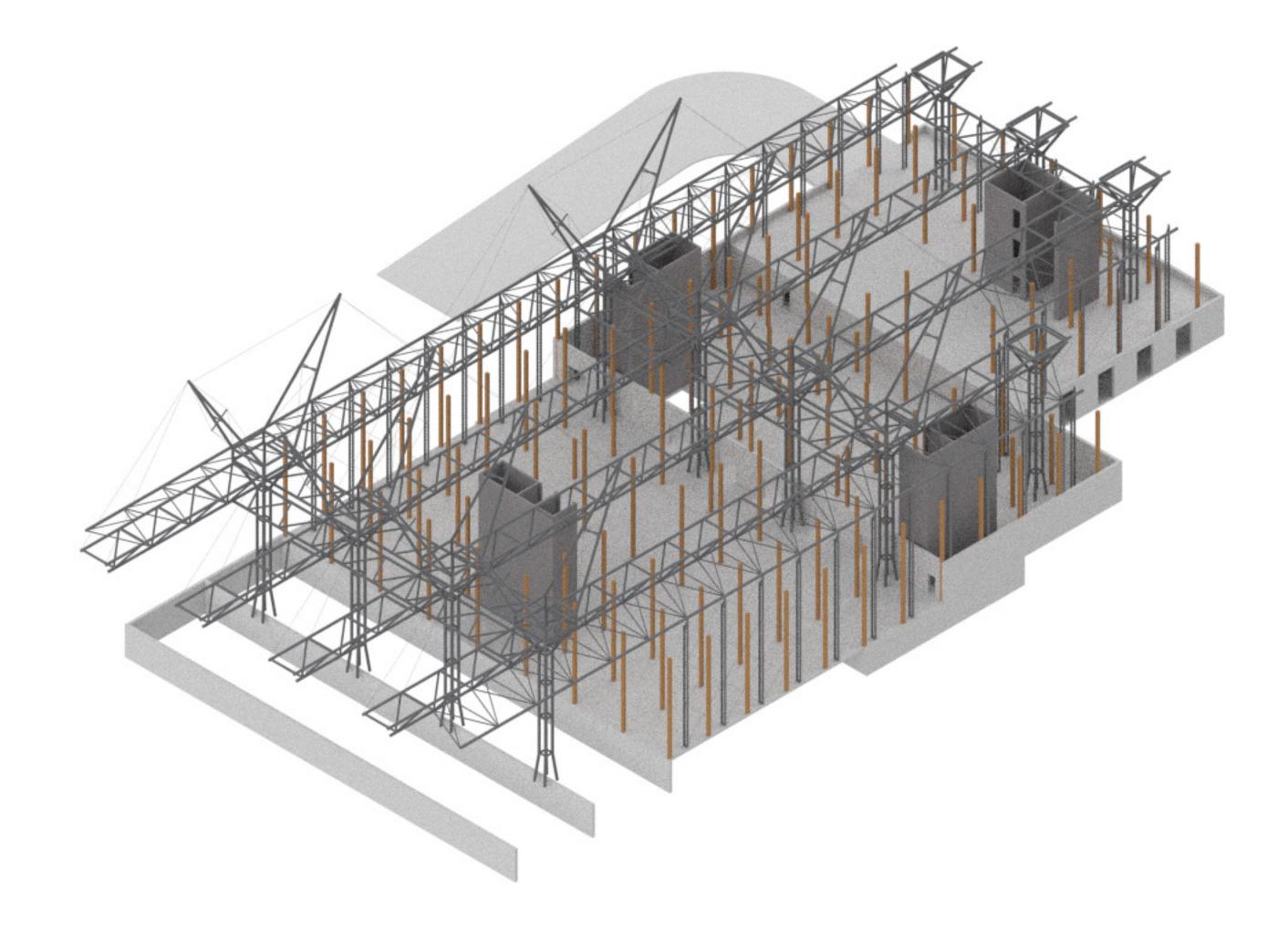


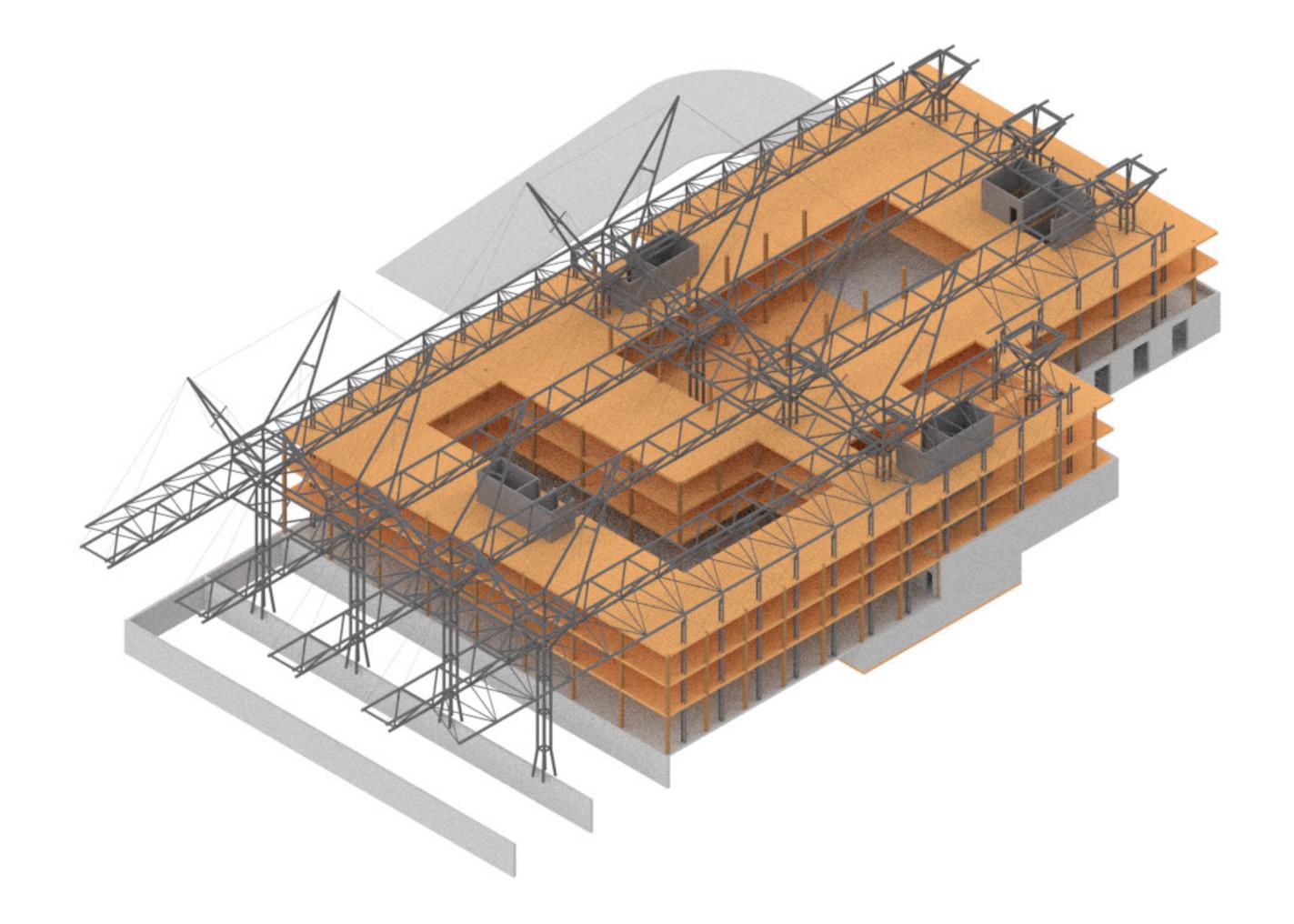


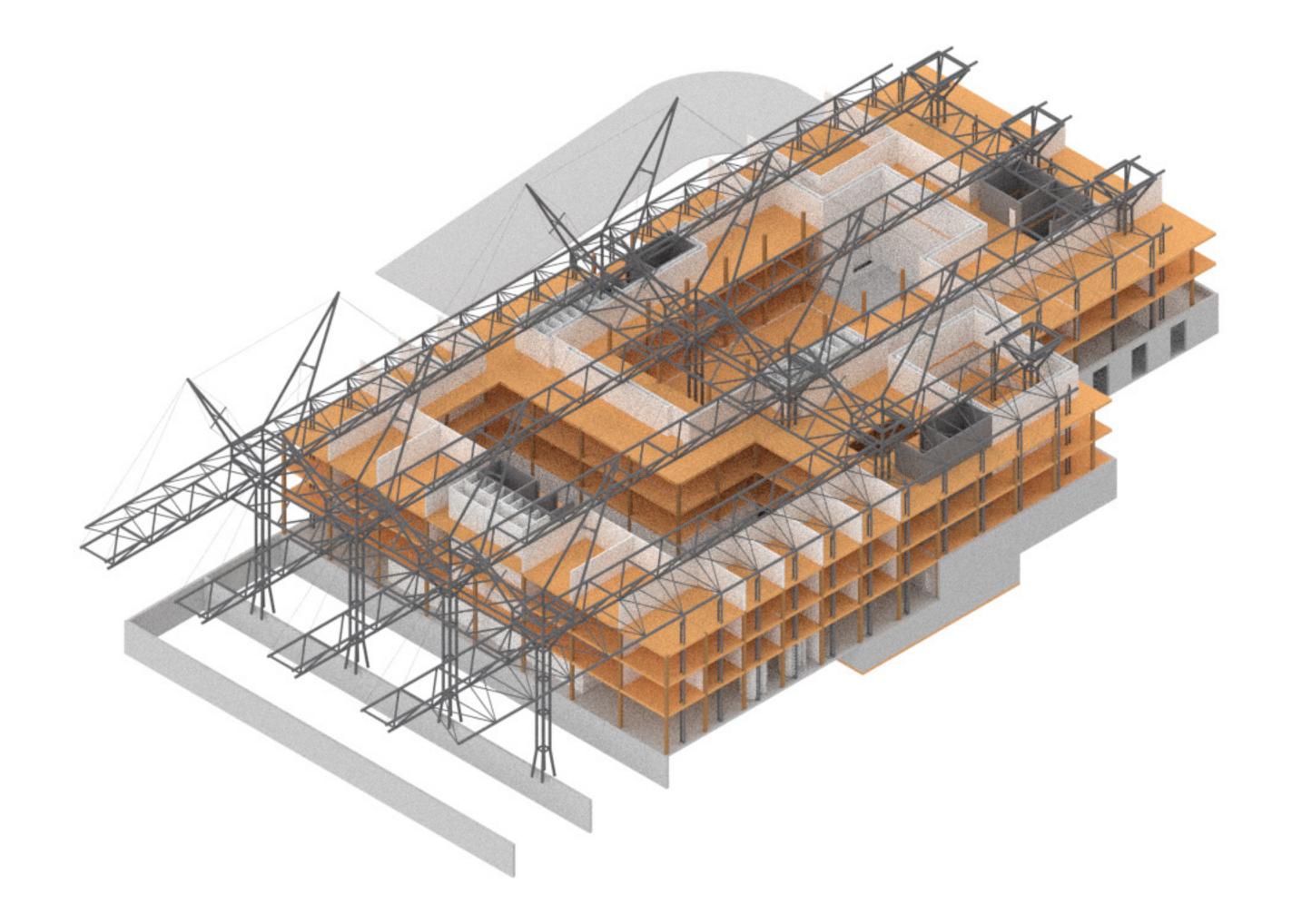


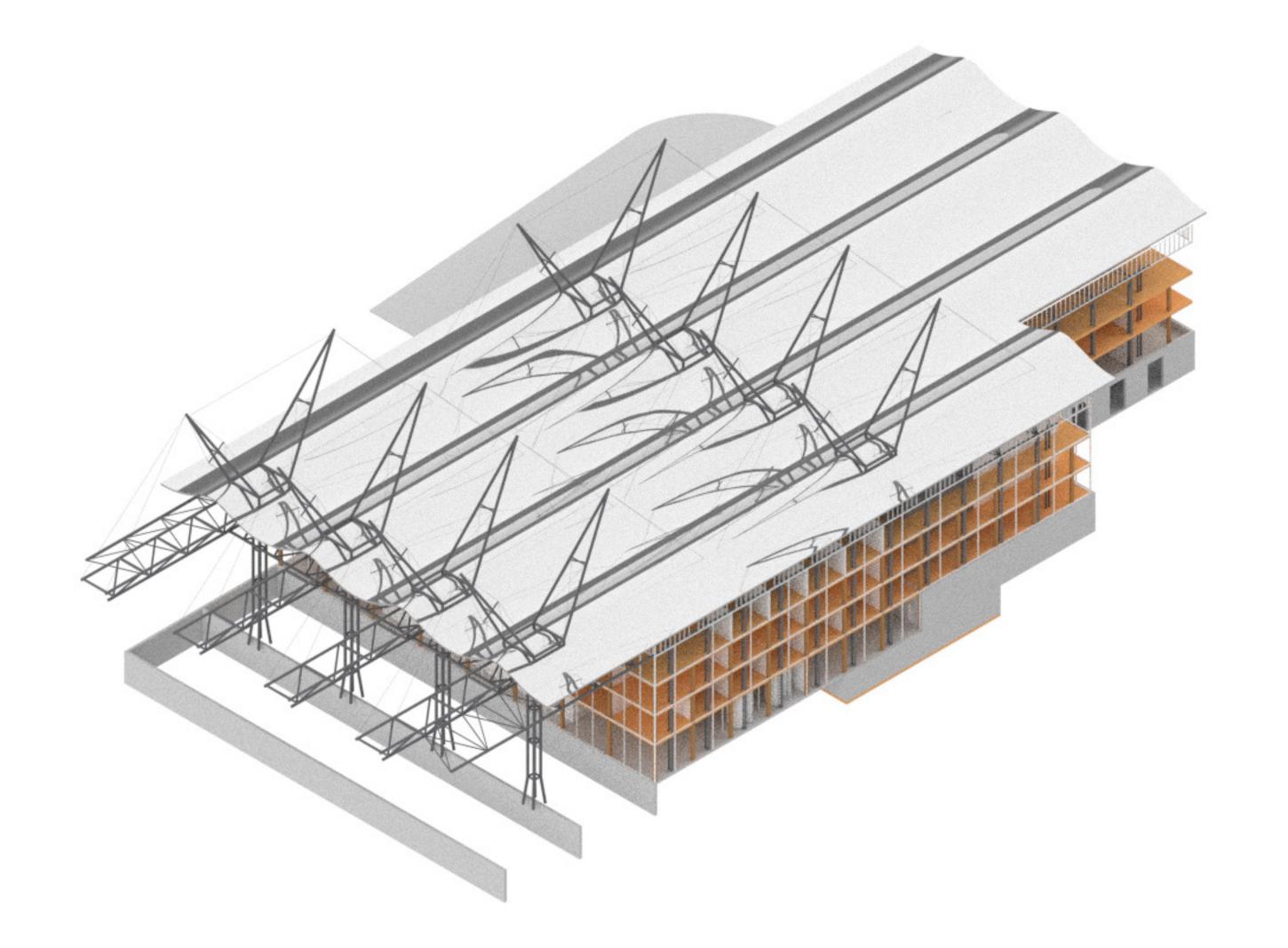




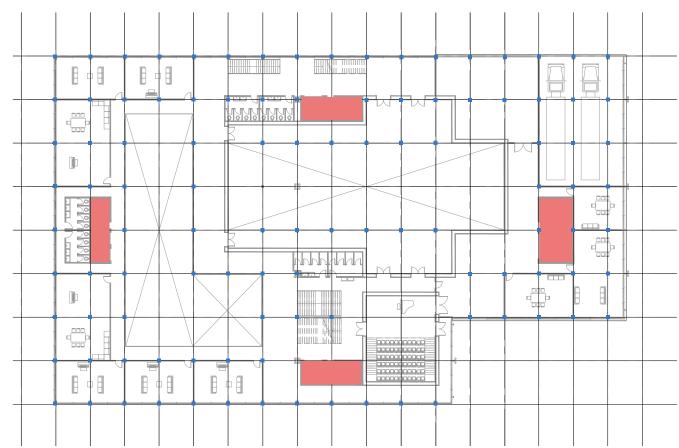


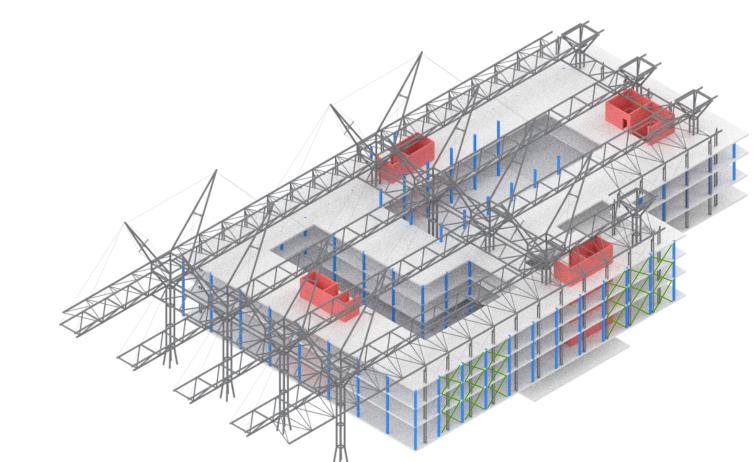


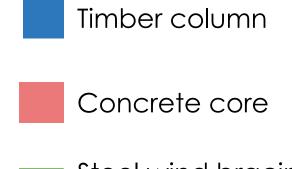




# Structural grid & Stability

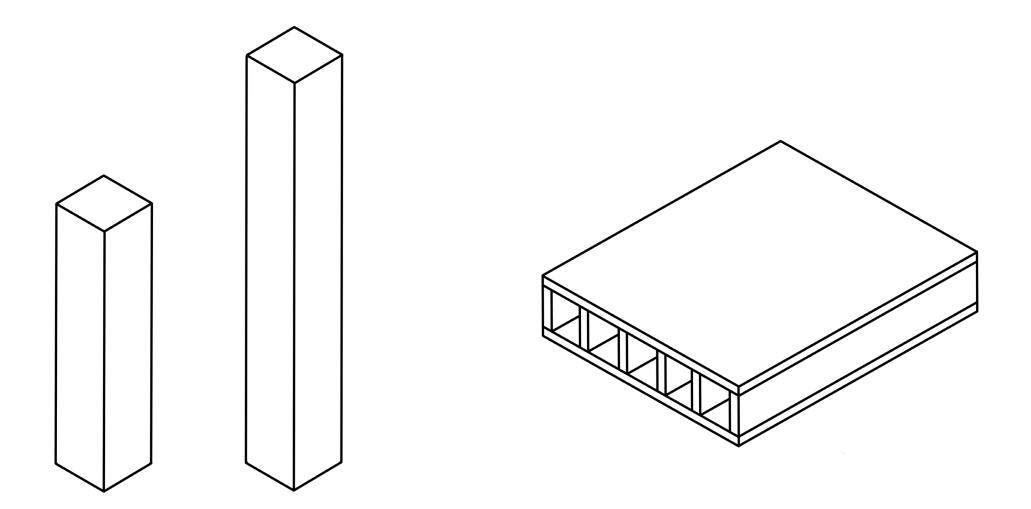






- Steel wind bracing
- Grid 4800x6000

## **Building Components**



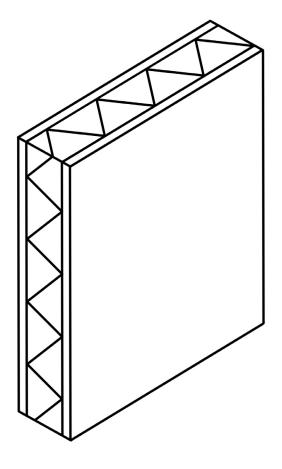
Glulam columns (300x300x2900) Glulam columns (300x300x3900)

203x

122x

Kerto prefabricated floor slabs (6000x4800x400)

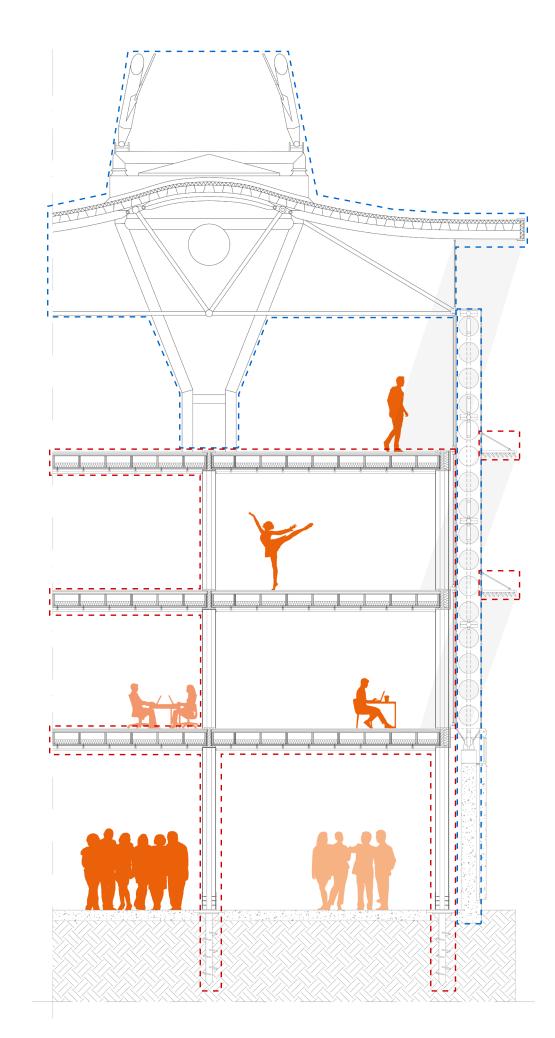
254x

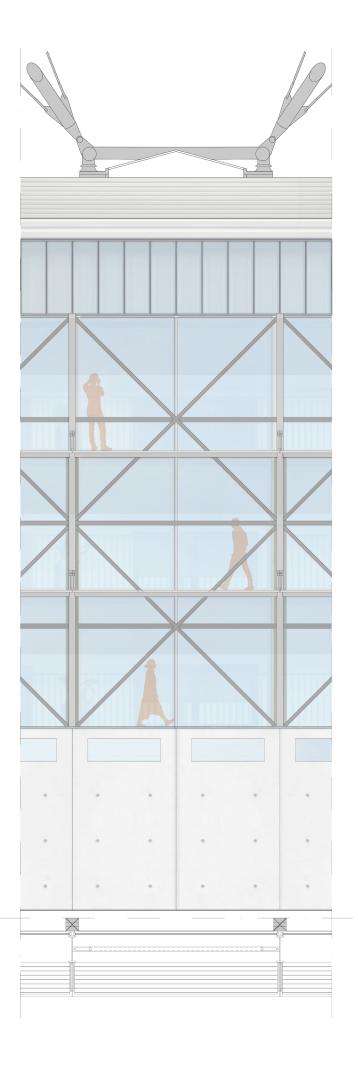


Wall panels with acoustic insulation (6000x4800x400)

#### **88**x

# Fragment

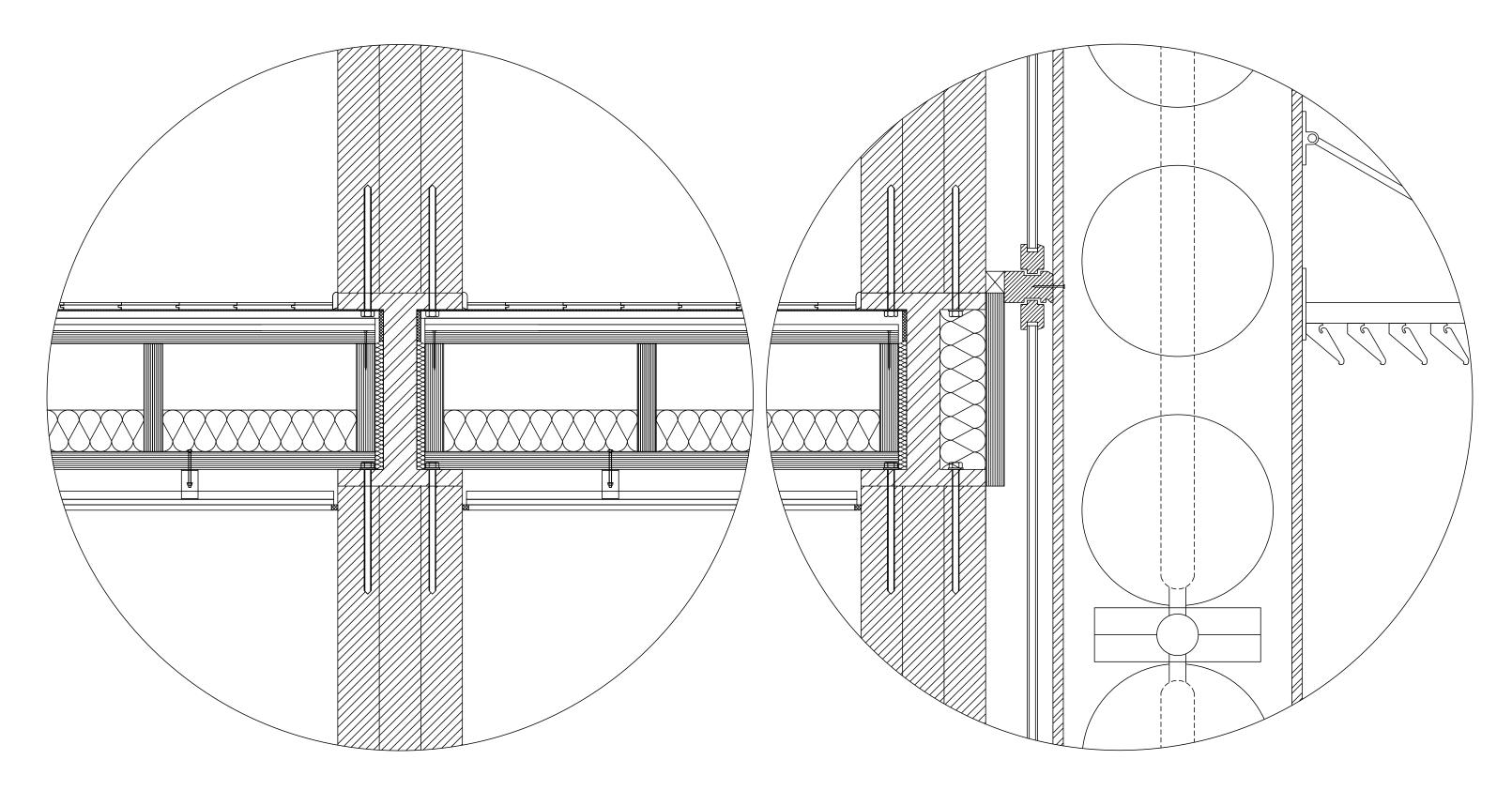




Existing

New

#### Technical Details



#### Thank you for your attention!