

THE GLASS SCHOOL

URBAN ARCHITECTURE
FINAL PRESENTATION

Robert Roohé
28 January 2021

INTRODUCTION

Index

THE LOCATION

Location research
Master plan
Design

THE MATERIAL

History of the craft
The facade

THE CRAFTSMAN

Interviews
Workshop analysis
Program

THE WORKSHOP

Concept
Floor-plans
Sections
Structure
Climate
Detailing

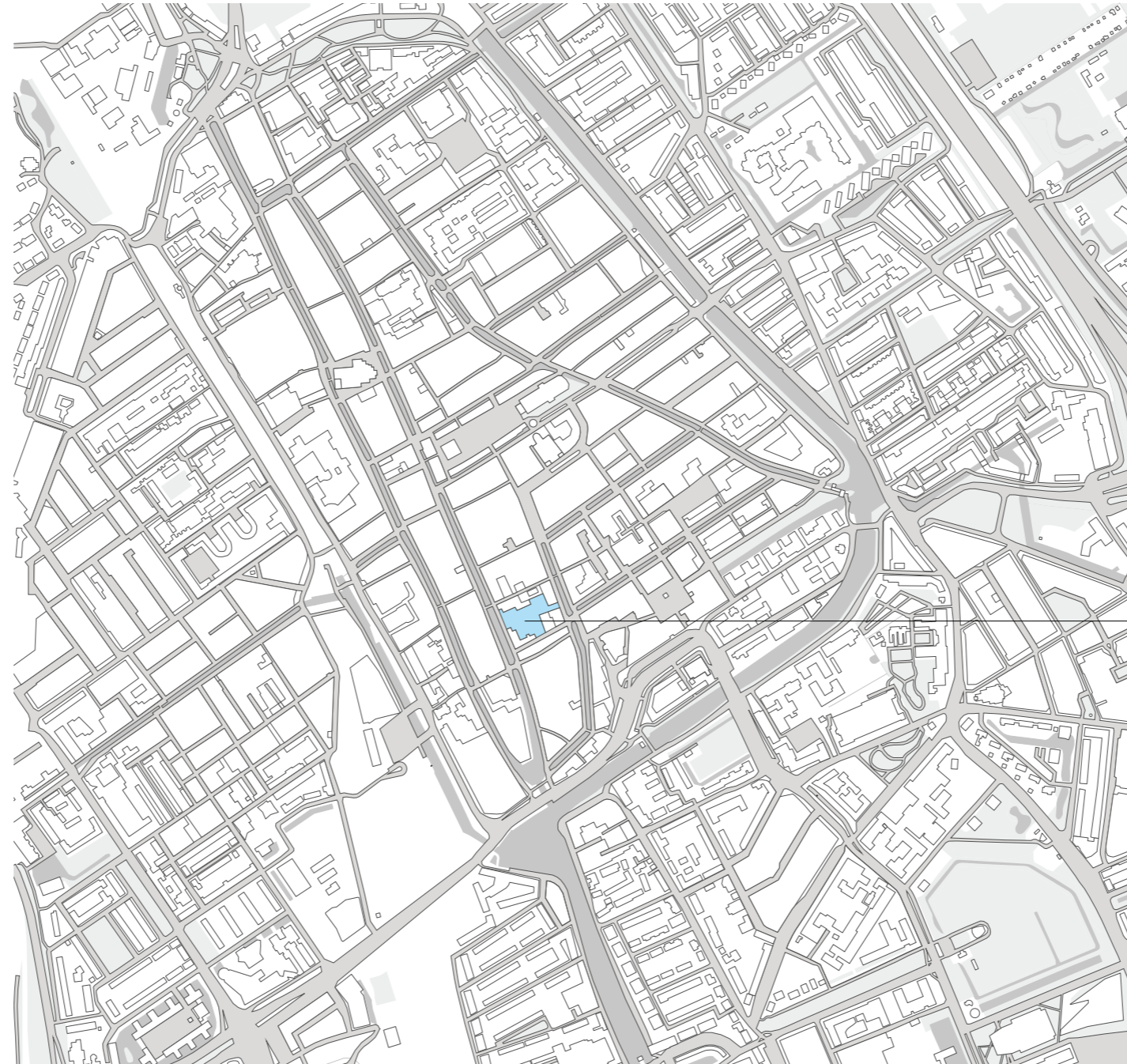
THE LOCATION



Make the craft visible

Gasthuisplaats

Connection to the city and make glass approachable



Gasthuisplaats

View from the Koornmarkt

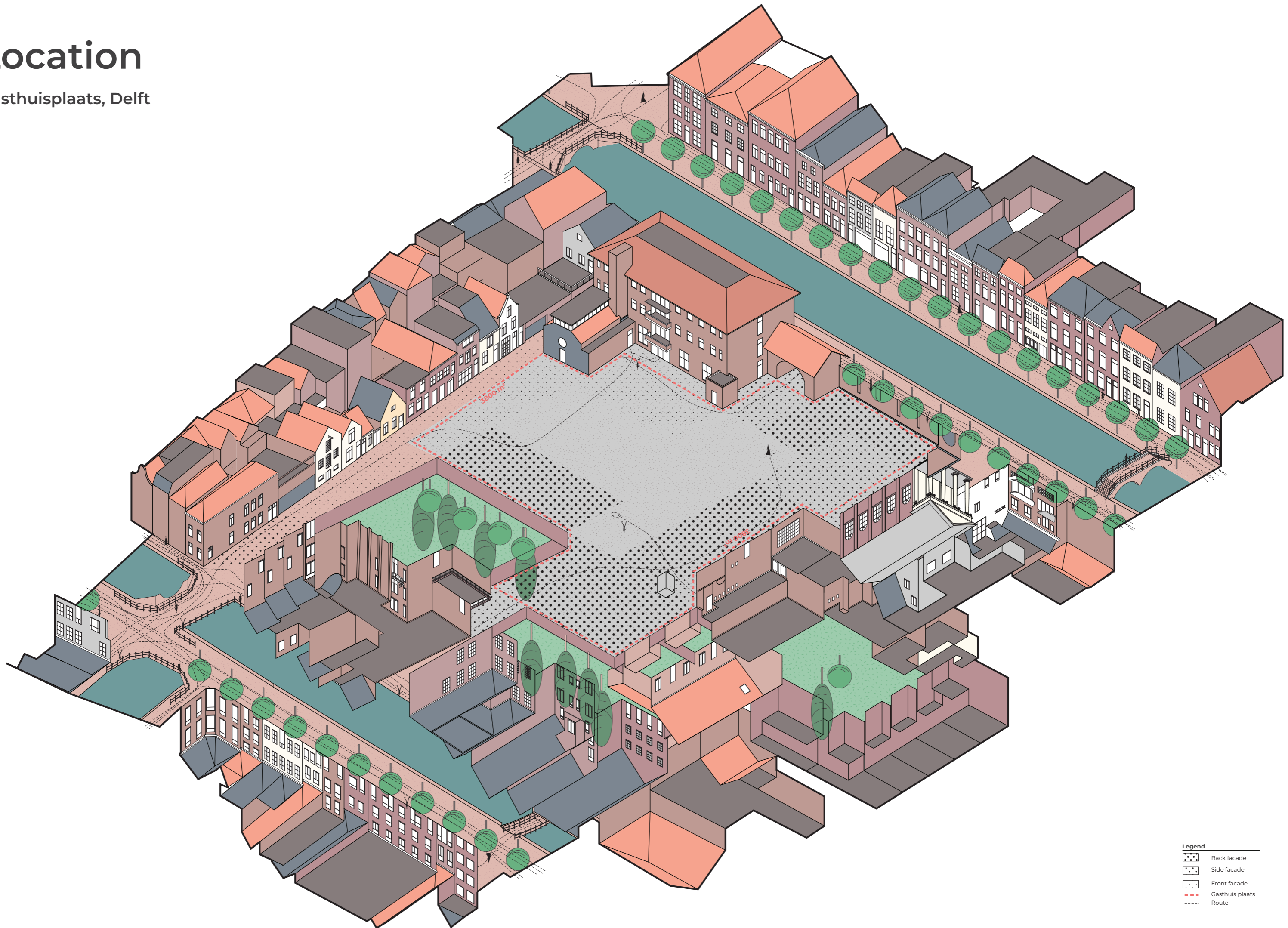


View inside Gasthuisplaats



Location

Gasthuisplaats, Delft



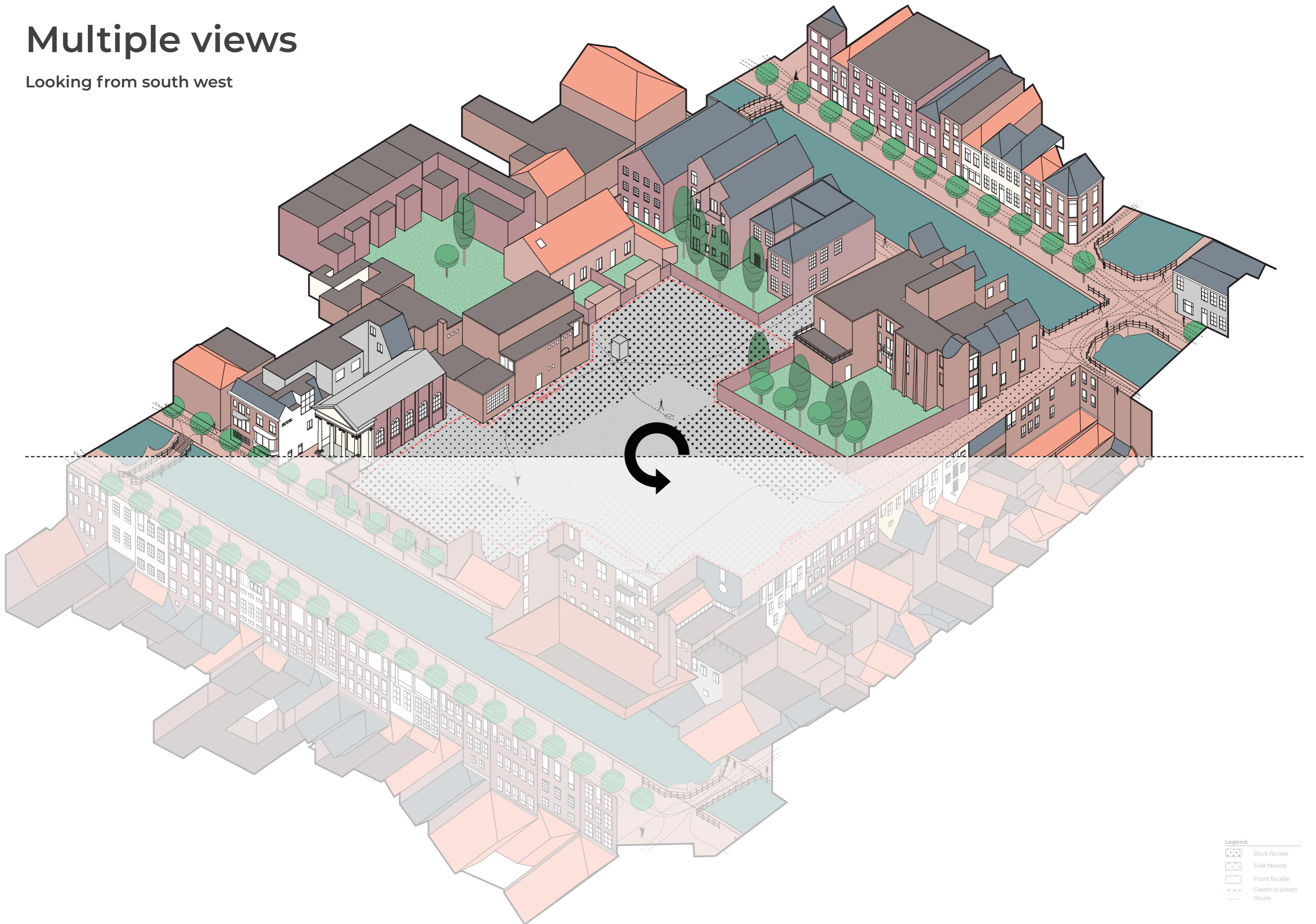
Multiple views

Looking from north east



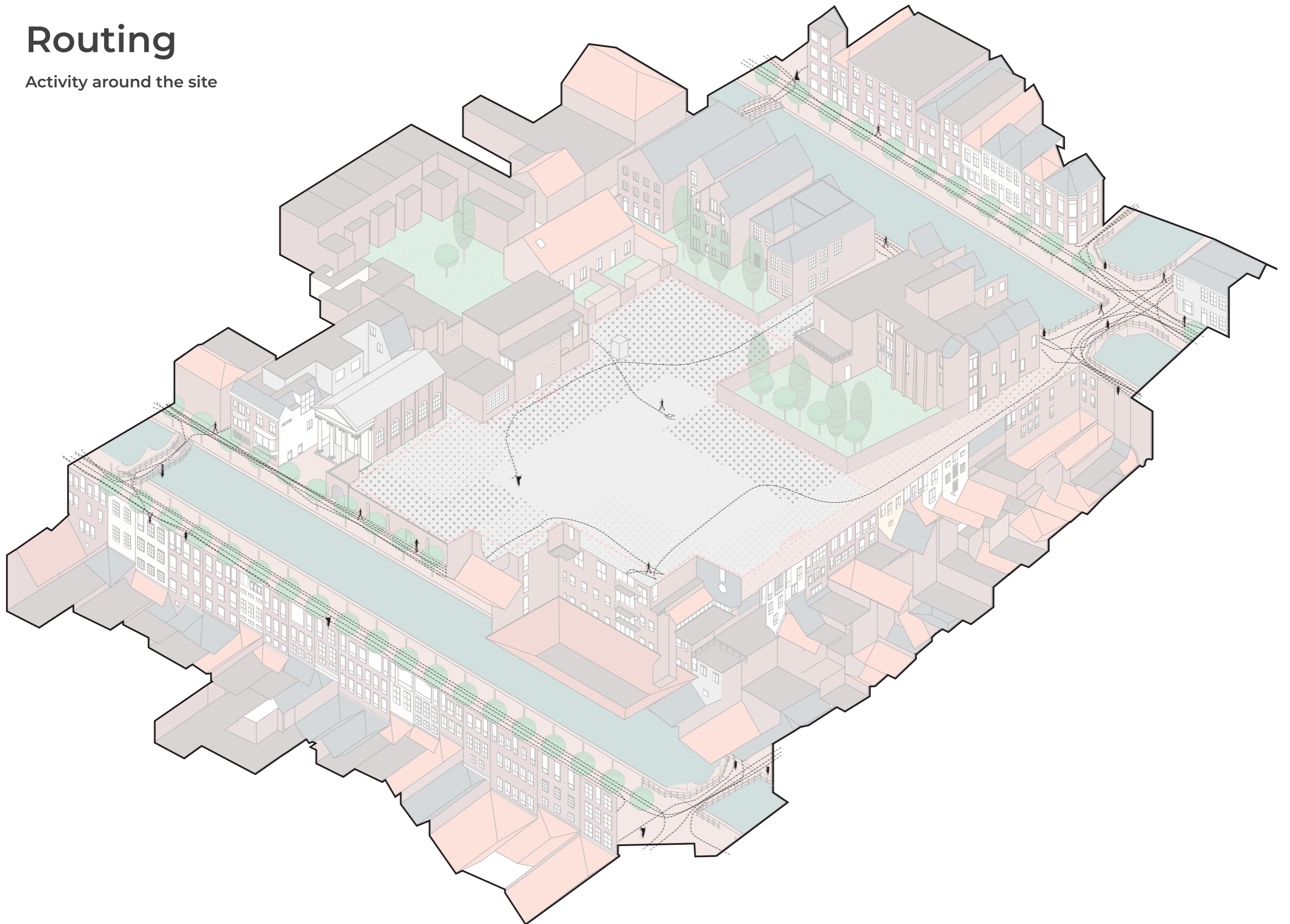
Multiple views

Looking from south west



Routing

Activity around the site



Facades

Backside



- Legend**
- Back facade
 - Side facade
 - Front facade
 - Gasthuis plaats
 - Route

Facades

Side facade



- Legend**
- Back facade
 - Side facade
 - Front facade
 - Gasthuis plaats
 - Route

Facades

Front side



- Legend**
- Back facade
 - Side facade
 - Front facade
 - Gasthuis plaats
 - Route

Buildings & streets

Public and cultural

Old pharmacy

This former pharmacy building is the oldest remaining part of the hospital. It is a municipal monument that was built in 1895. Some parts of the building date back to 1800.

Old school

The former school building looks deserted but at the moment it is used for storages and technical space. The first floor is not removed or broke down during the years.

Synagogue

The construction of the synagogue started in 1861 and is a national monument. This neo-classical building is an exception. Not only for its architectural aesthetics but also of its set-back. Its function changed during the years but now the function is restored to a synagogue. The building can be rent for cultural purposes.

Brabantse Turfmarkt

Smaller than the Koormarkt. The buildings are smaller and the canal is narrower. A street that connects the old city to the new shopping area. Different functions like, retail and hospitality in the plinth. Once a week on Thursday it has a market.

Cultuur lab

Culture lab has multiple rooms and stages for social, musical, cultural or sports. Multiple associations are connected to this building and use it for practice. The building was built in 1958.

Gasthuissteeg

The building alongside this small street look similar to the ones along the Koormarkt or the B. Turfmarkt. However the buildings are a sober detailed lot smaller than the ones around the corner, this can be 2 to 3 stories.

De zuster

This building is one of the last remaining buildings of the old hospital. The hospital on the Gasthuisplaats was the oldest in the Netherlands, however, the building was demolished in the last century. The building that remains was built in 1930 and its function was to educate nurses. At the moment it houses small companies and start-ups. The wall is also part of the extension.

Koormarkt

The second best known canal in Delft, after the Oude Delft. All the facades are built in dutch neo-classical way. A formal street with its facade and the trees along side the canal. It is mostly residential but some offices are housed in the buildings as well.

Legend

-  Back facade
-  Side facade
-  Front facade
-  Gasthuis plaats
-  Route



Potentials and limitations

Gasthuisplaats can function as an oasis in the city for culture and craft

-

Creating a community where the school functions as the main workshop space

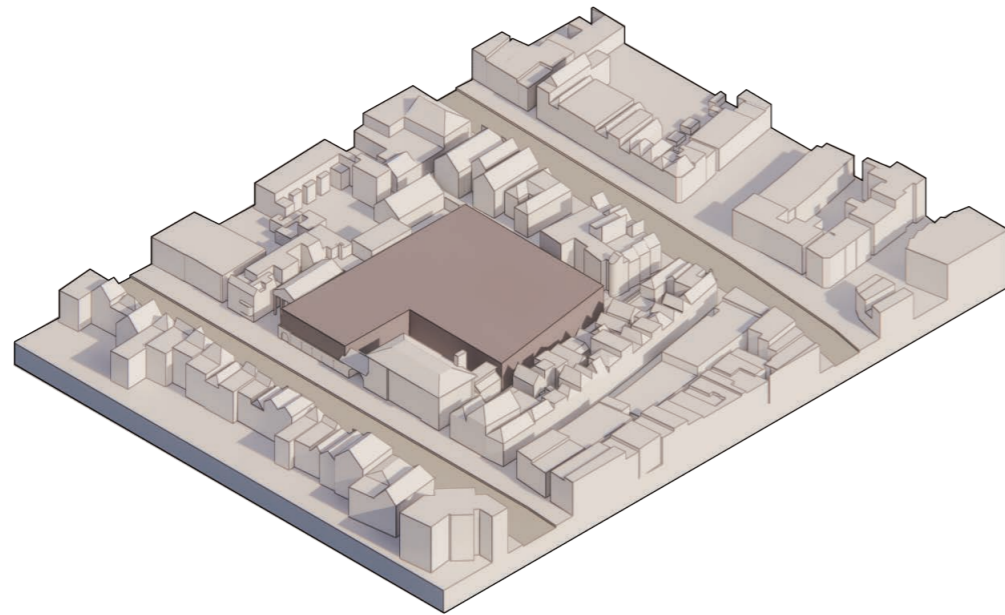
-

Create places with different qualities

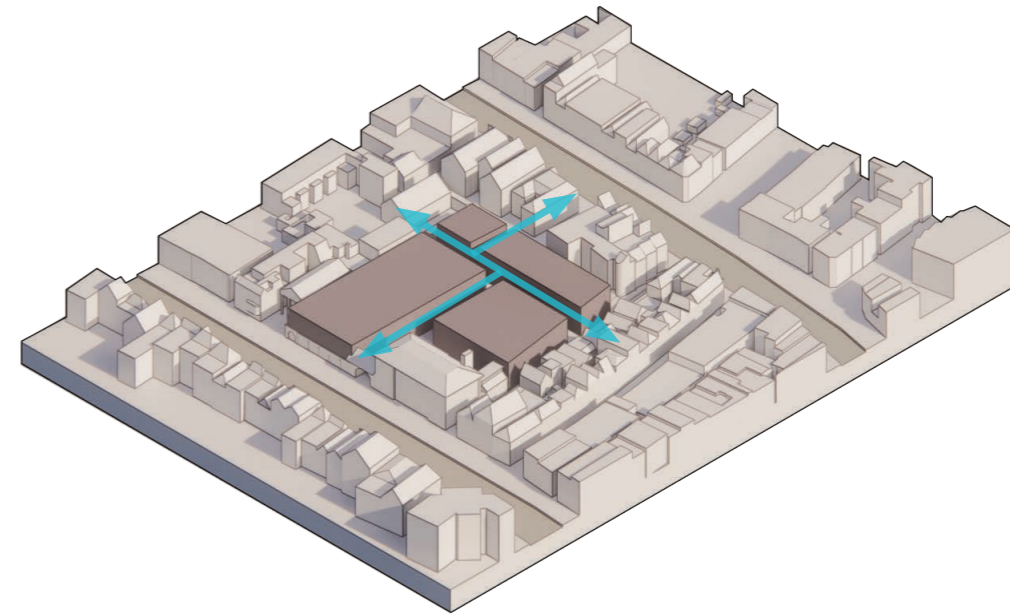
-

Connecting the gasthuisplaats to its surrounding

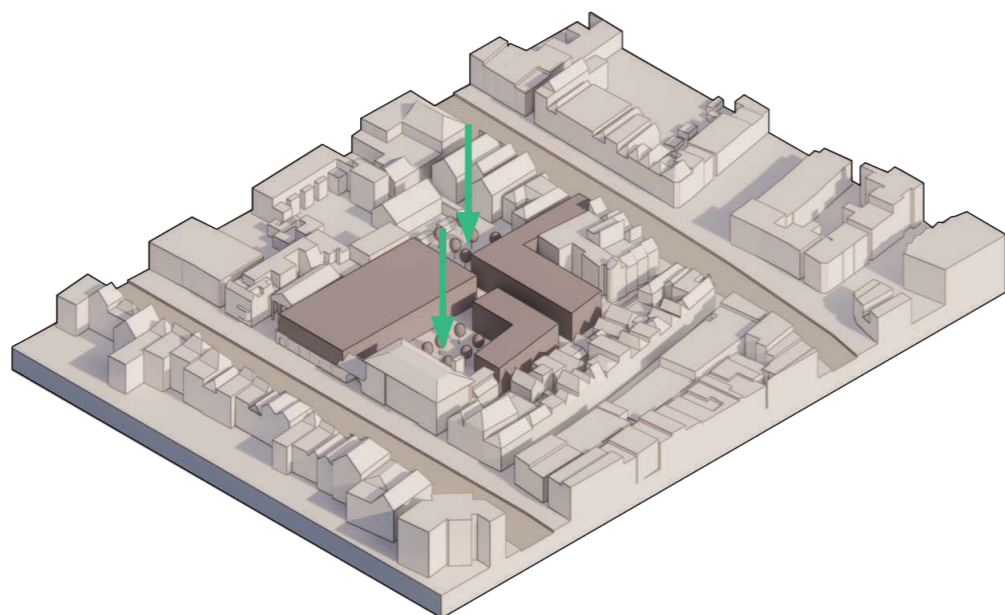
Masterplan concept



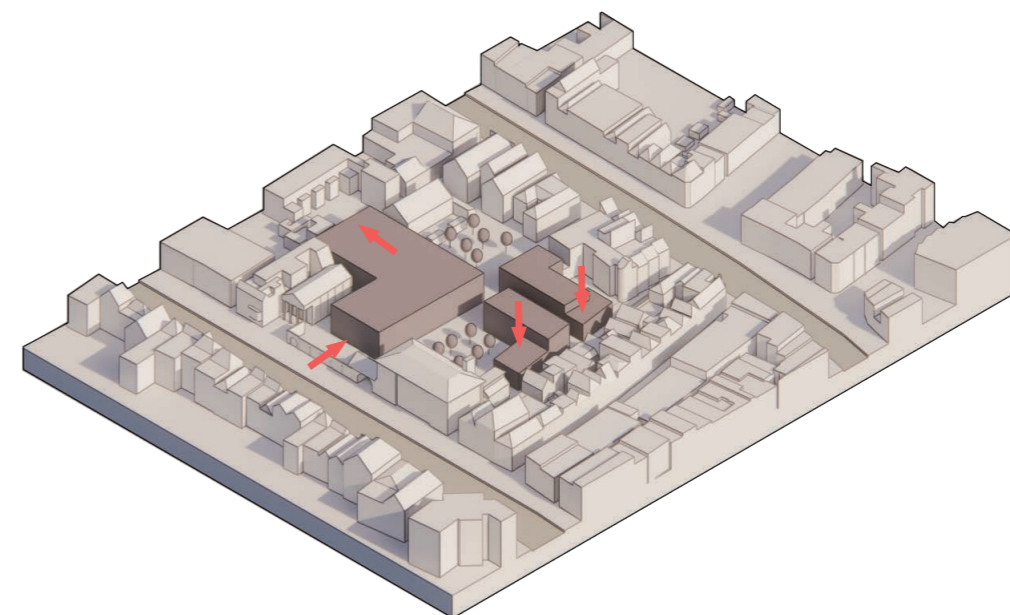
Complete block



Connecting pathways

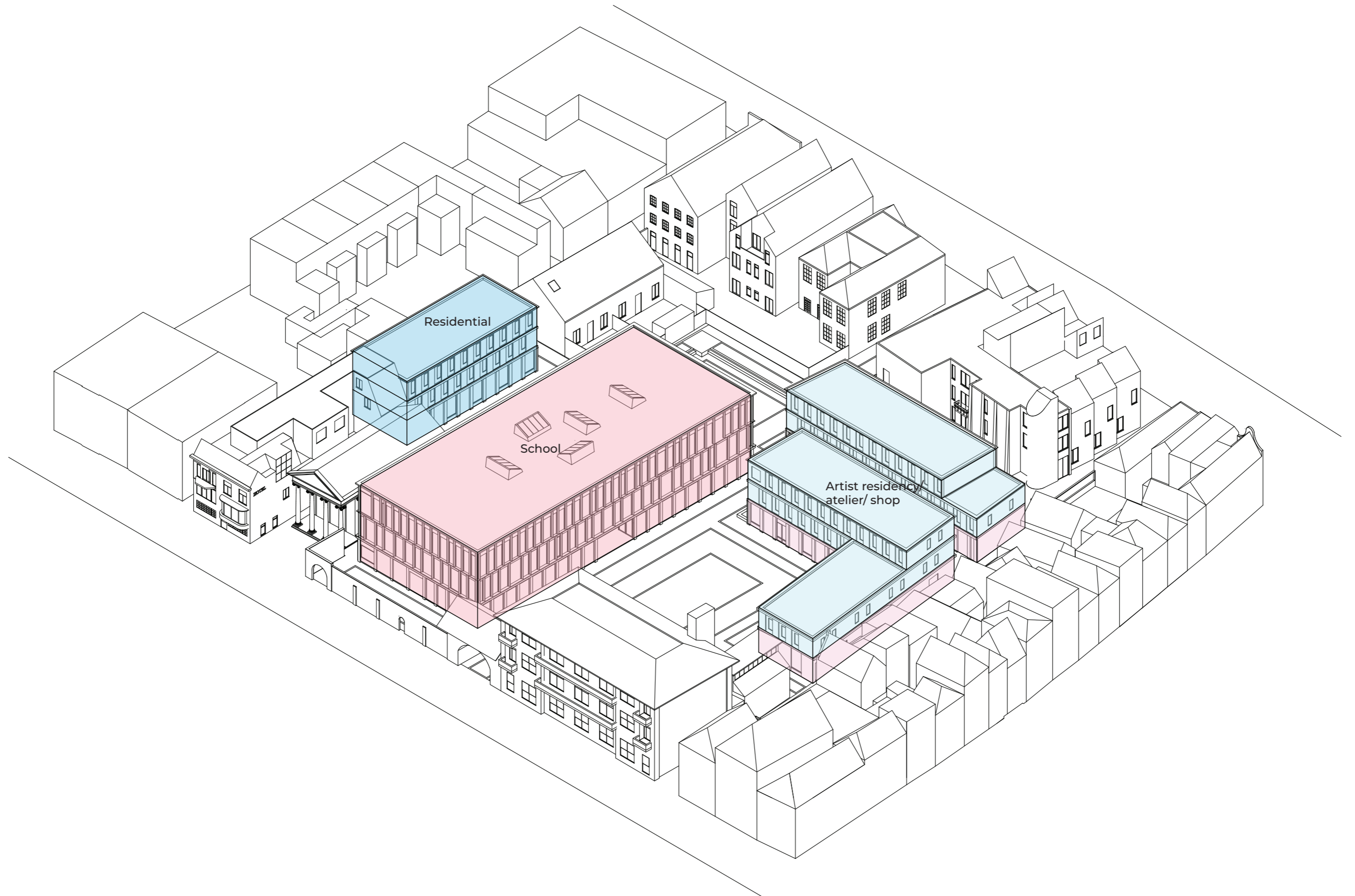


Creating public space



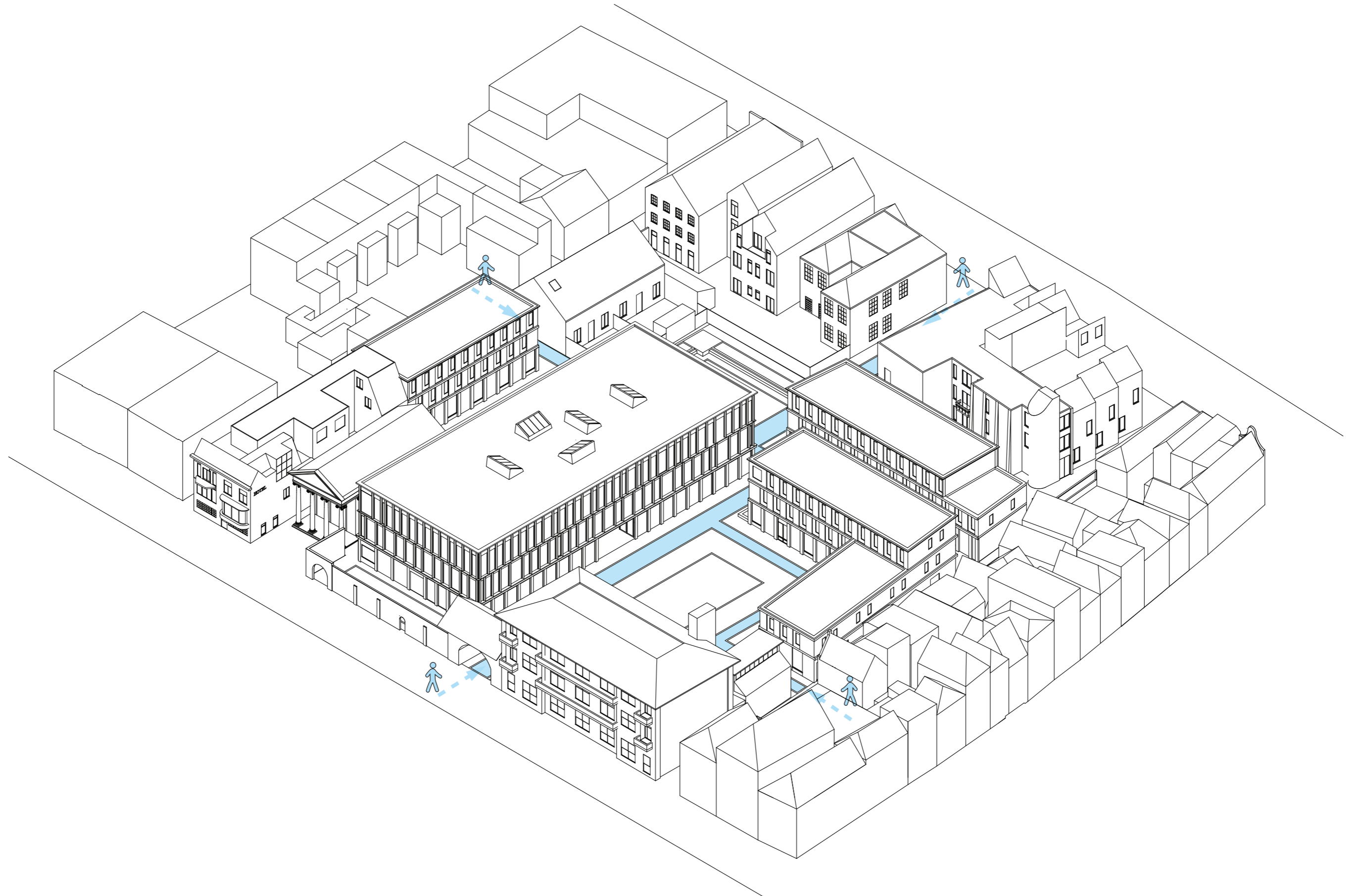
Connecting to context

Program location



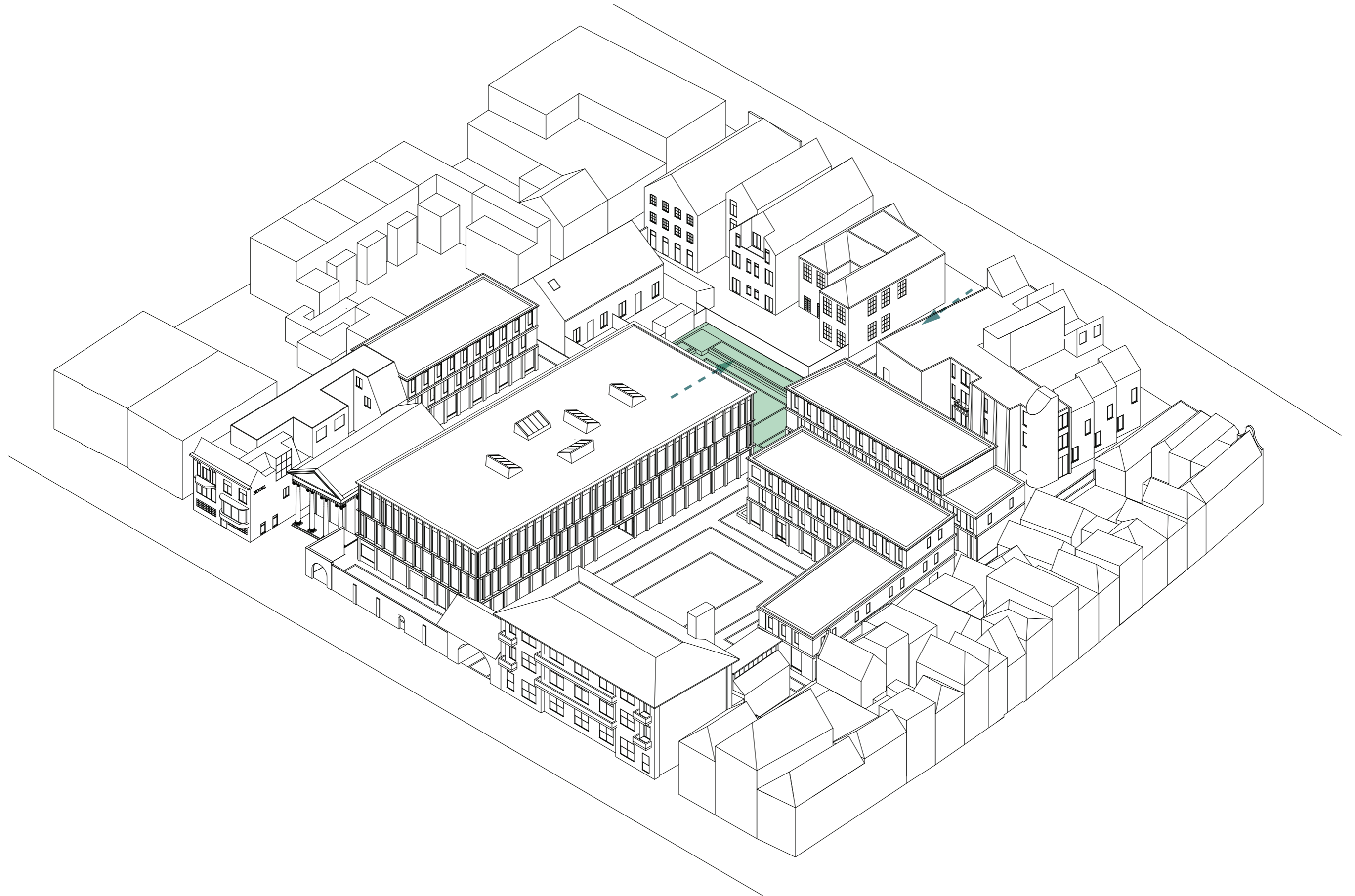
Routing

Exploration route



Terrace

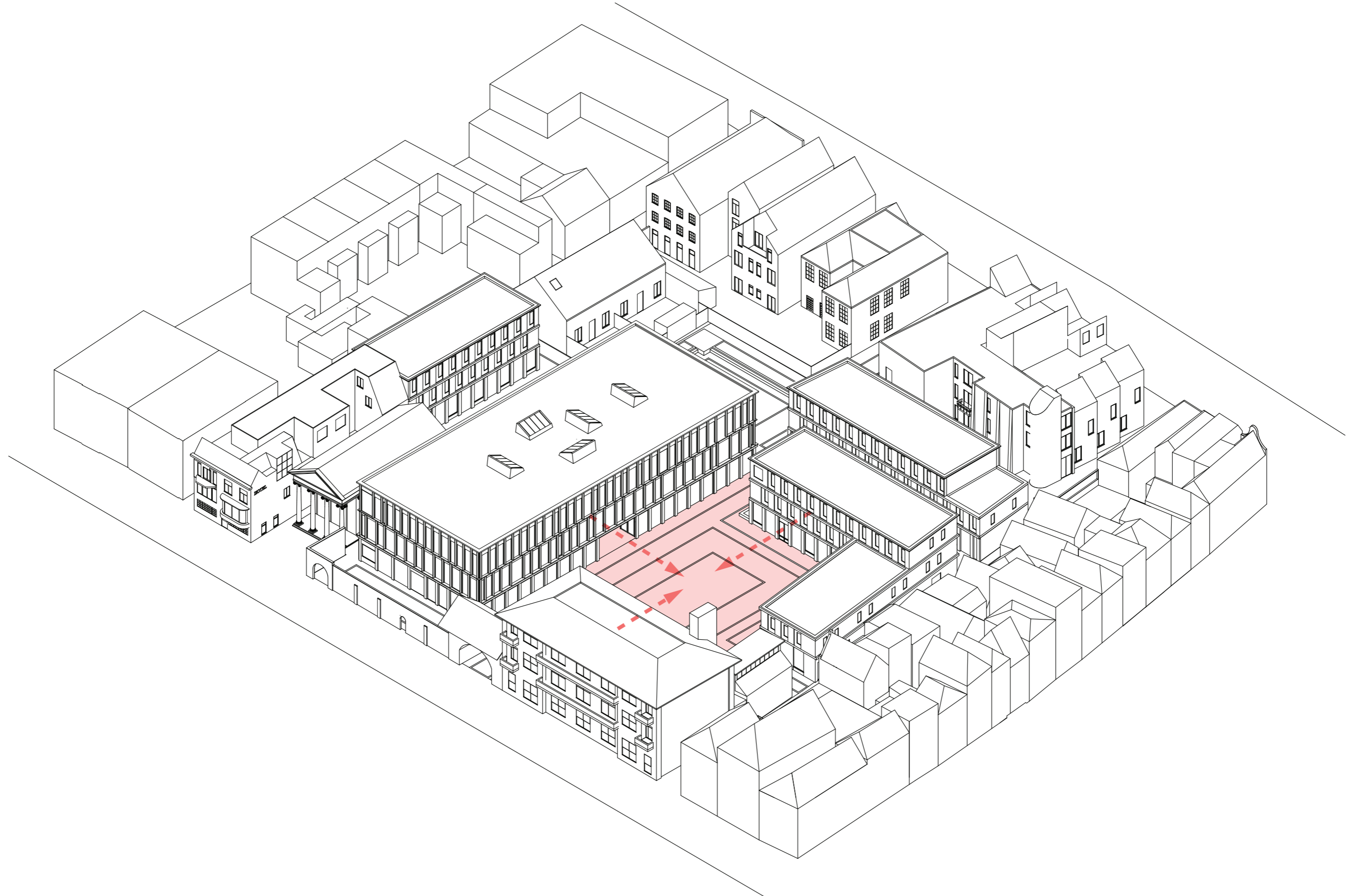
Informal space in-between the buildings

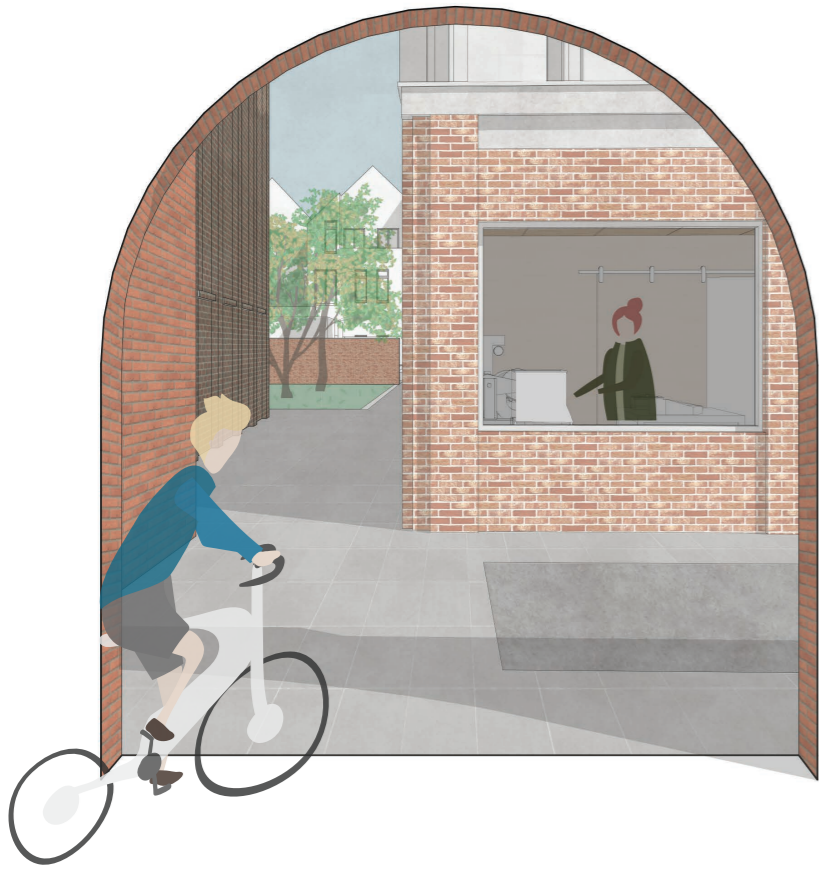


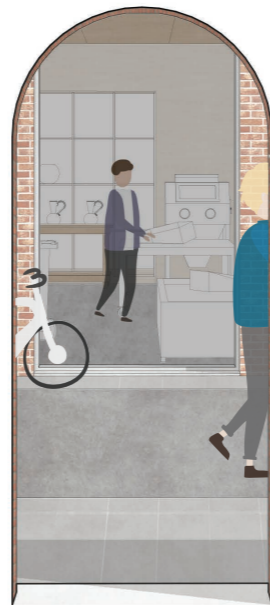


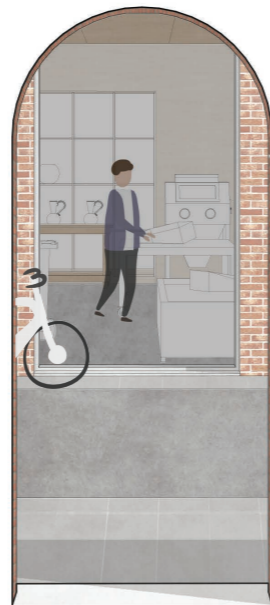
Hofje

Oasis in the city, creates a coherent whole for collectivity and individuality



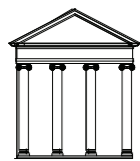
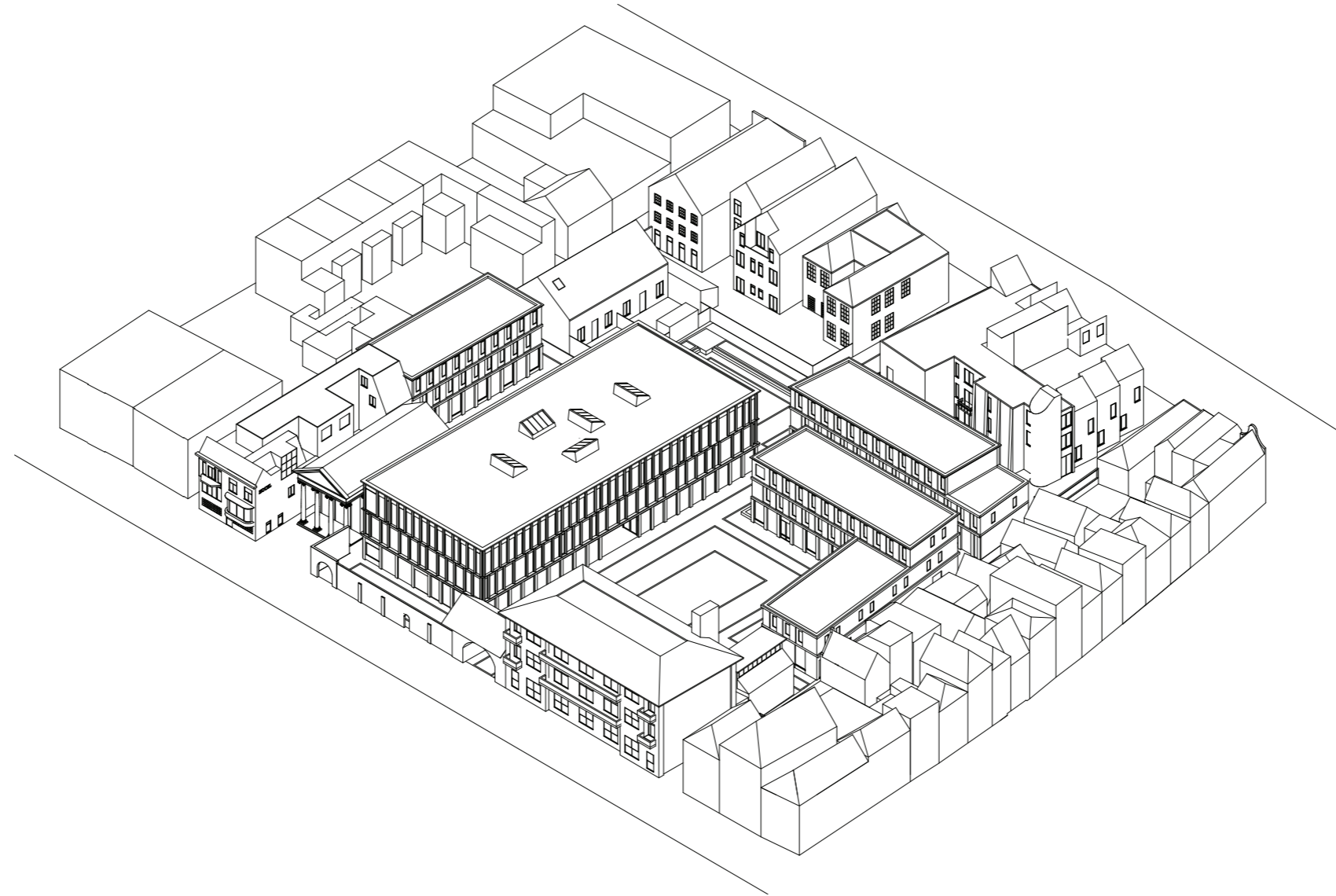






Buildings facades

Stratifying and stitching the urban layers



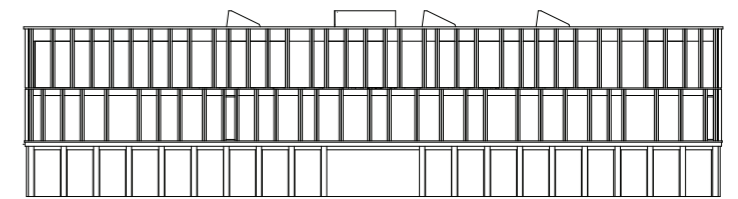
Synagogue



De Zuster



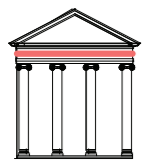
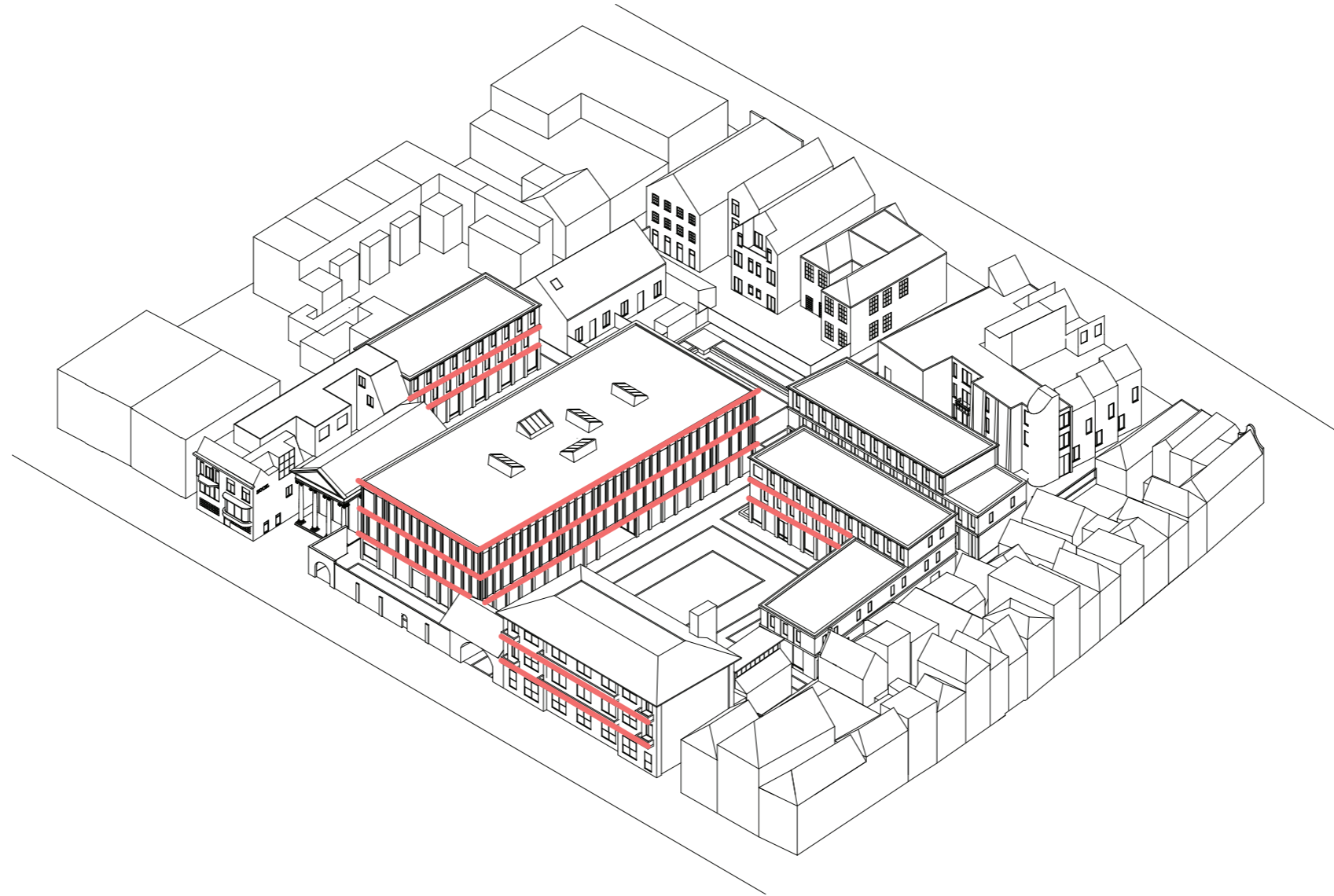
'Hofje' mix use



The Glass School

Buildings facades

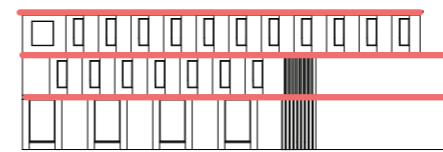
Horizontal lines



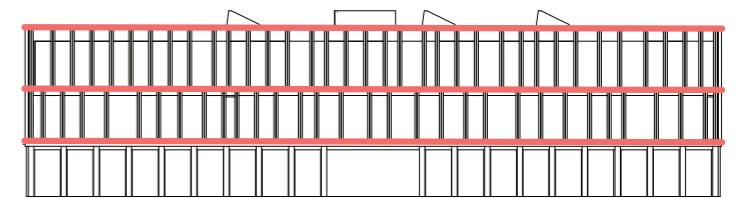
Synagogue



De Zuster



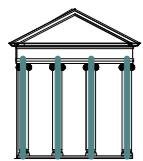
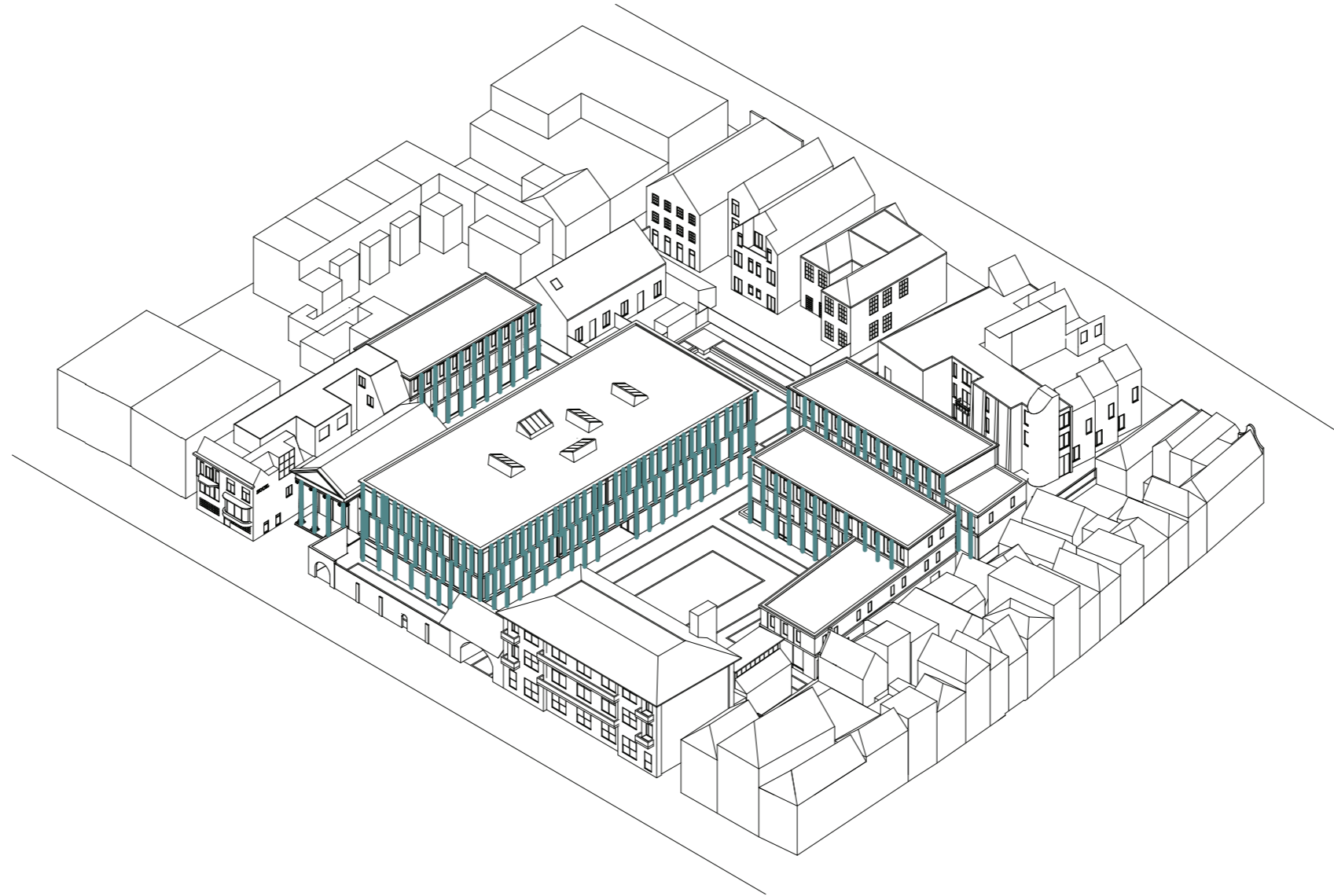
'Hofje' mix use



The Glass School

Buildings facades

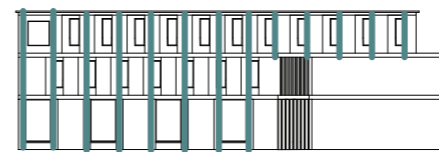
Vertical lines



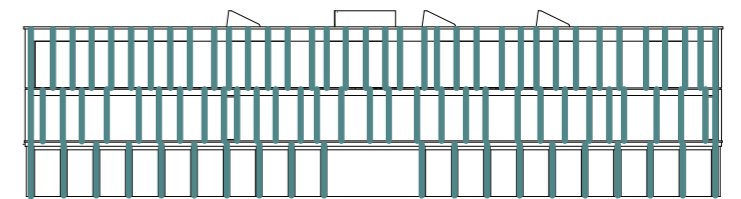
Synagogue



De Zuster



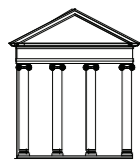
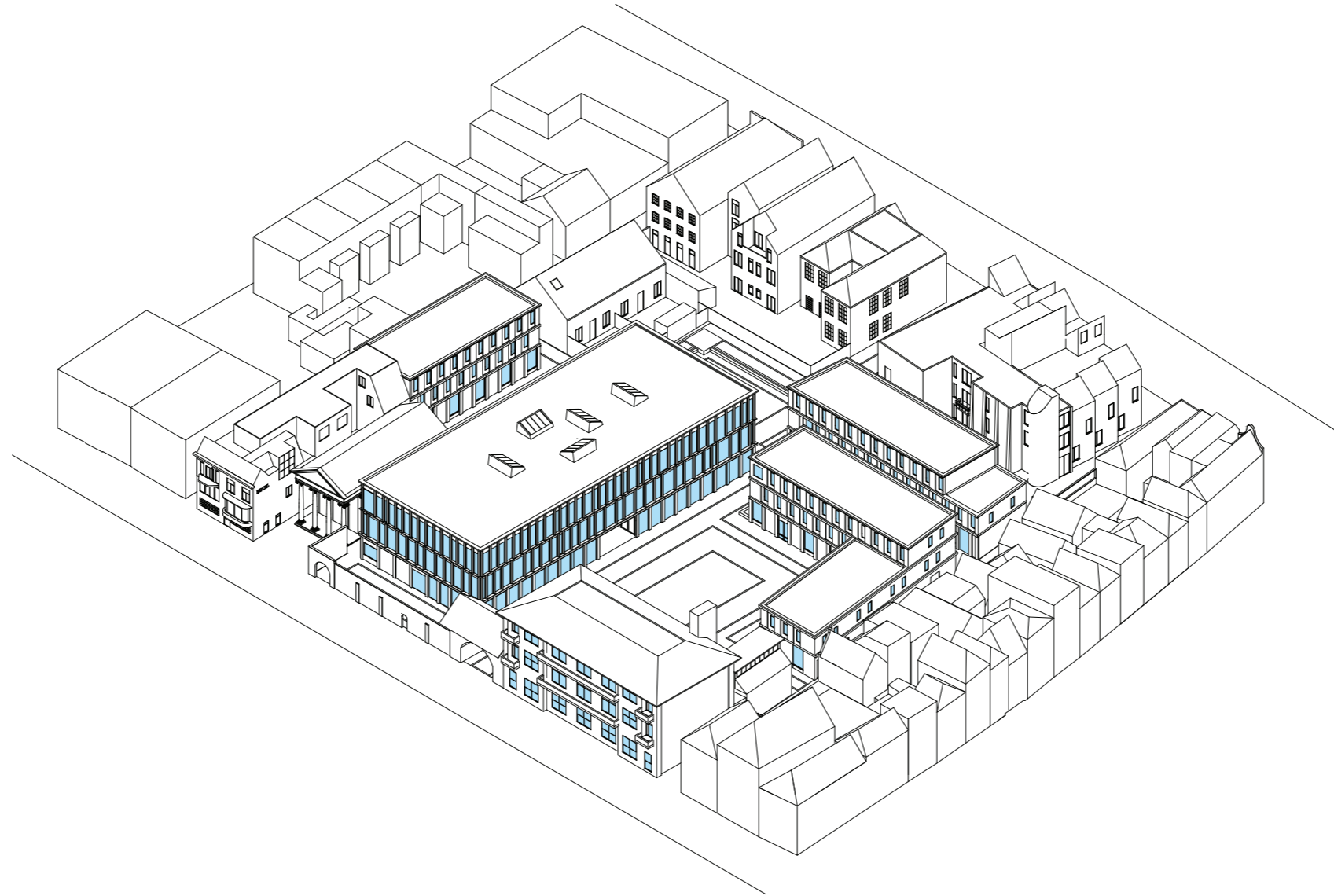
'Hofje' mix use



The Glass School

Buildings facades

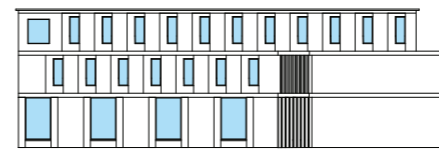
Cascading windows



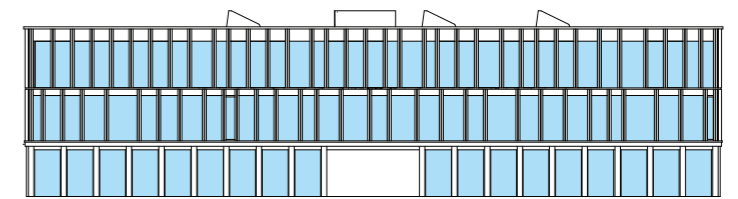
Synagogue



De Zuster



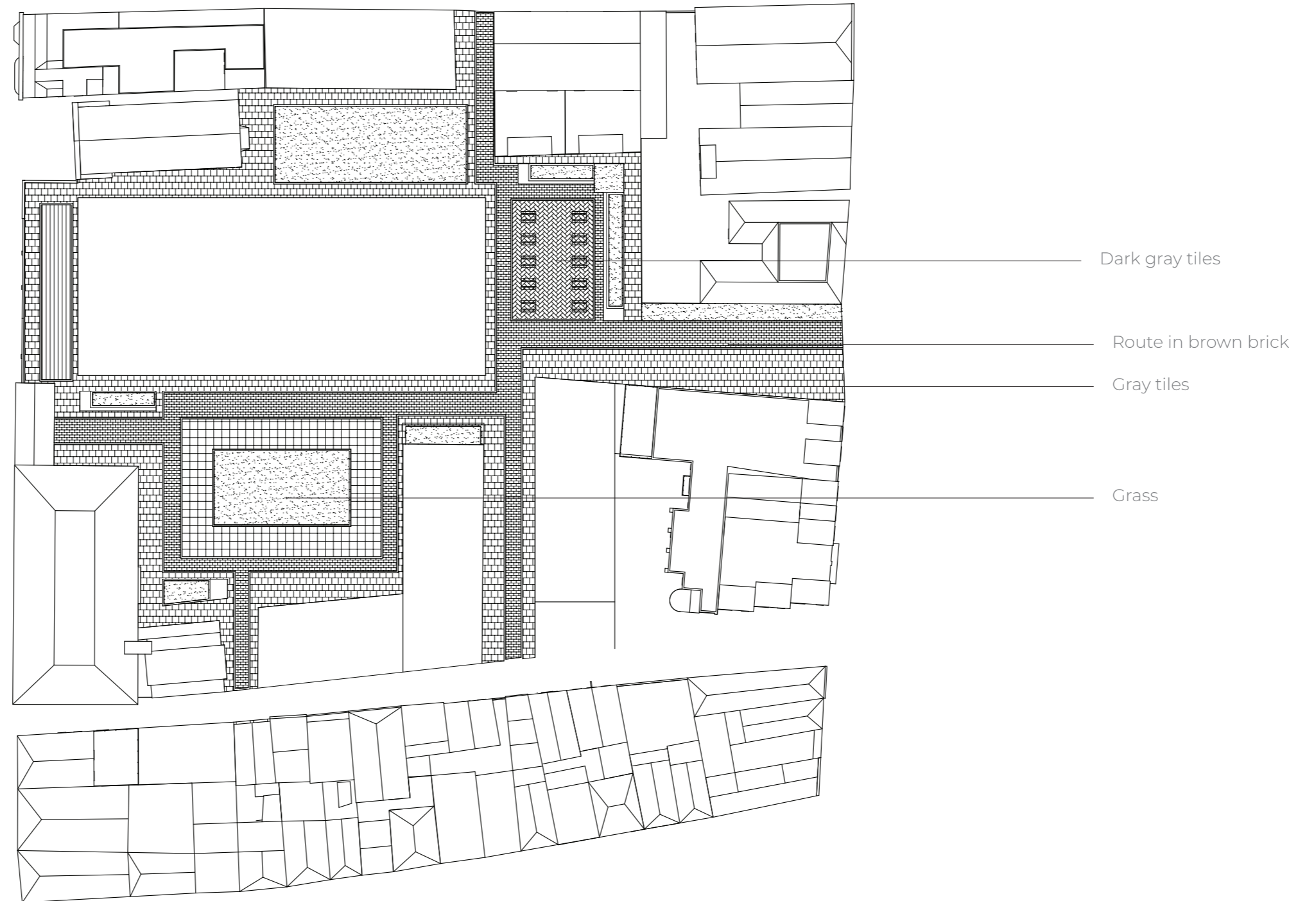
'Hofje' mix use



The Glass School

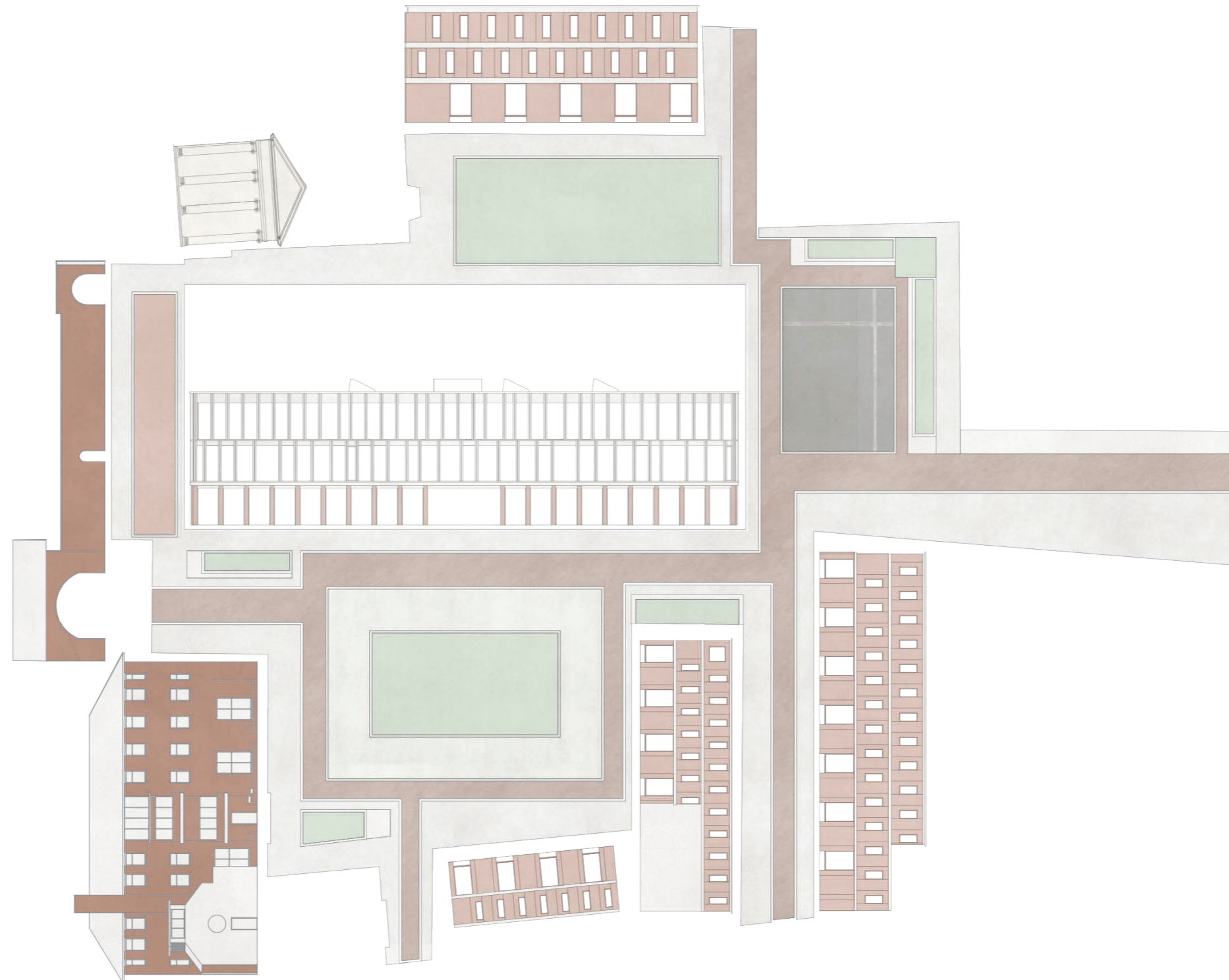
Pavement

Patchwork of materials to create places with different qualities



Material study

Color pallet of the new Gasthuisplaats





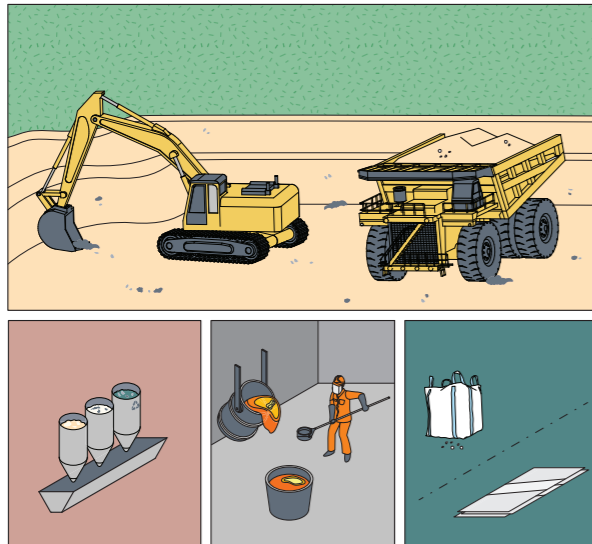
THE MATERIAL



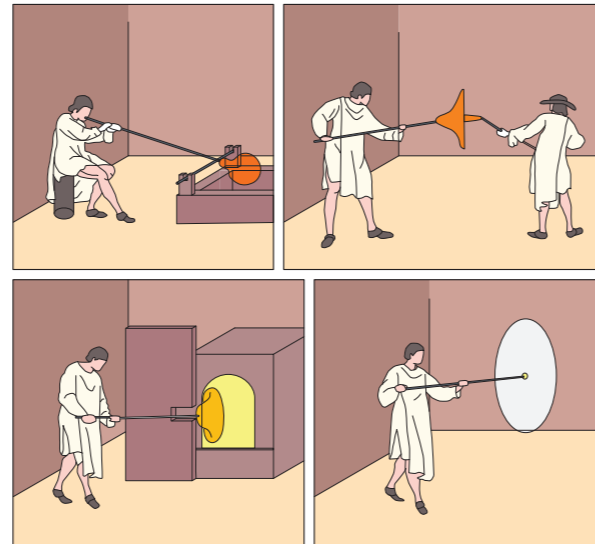
Translucent glass to stimulate interaction

History of the activities

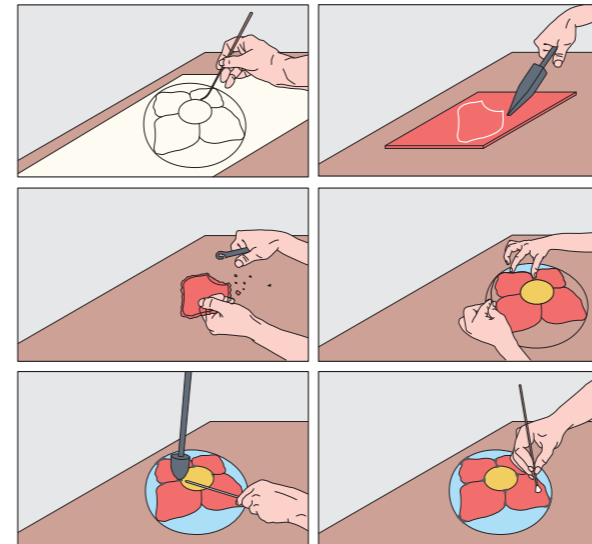
Delving



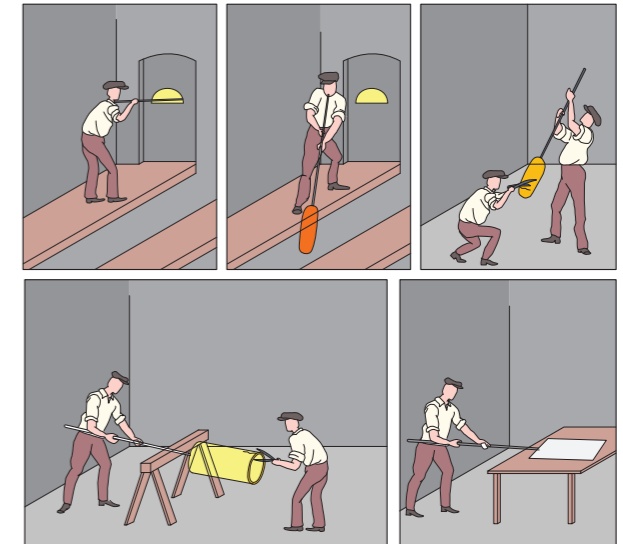
1000 BC.



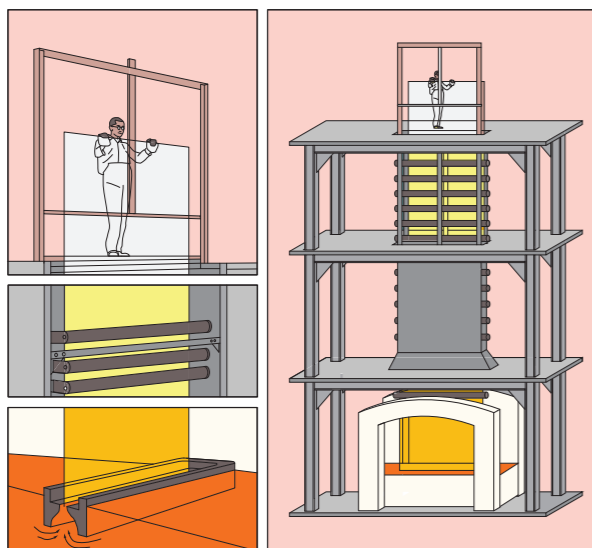
950



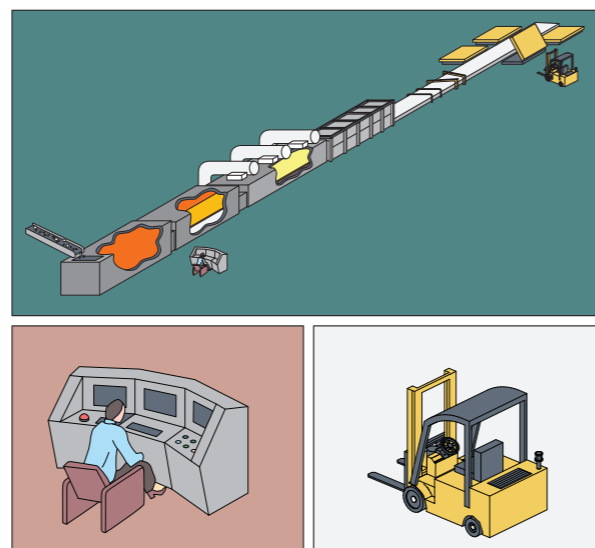
1850



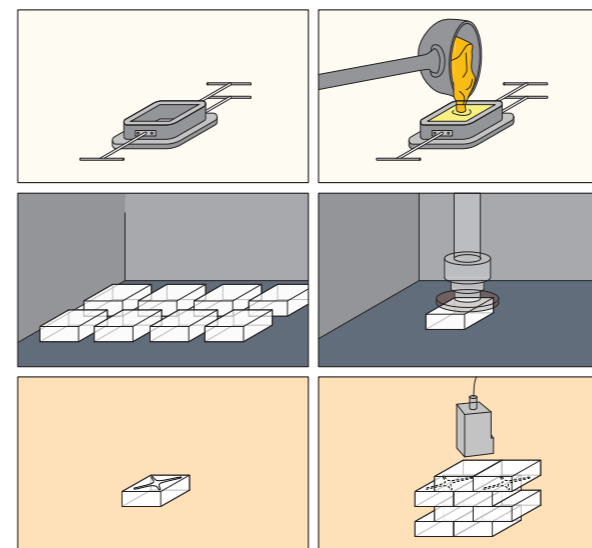
1925



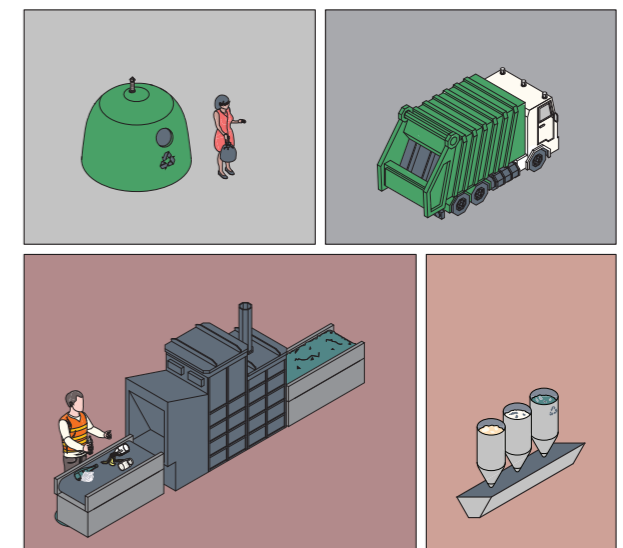
1955



2016



Recycling

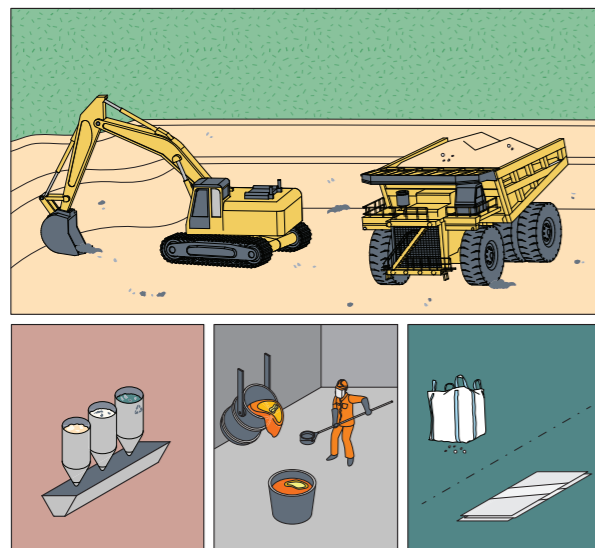


Modern/classical

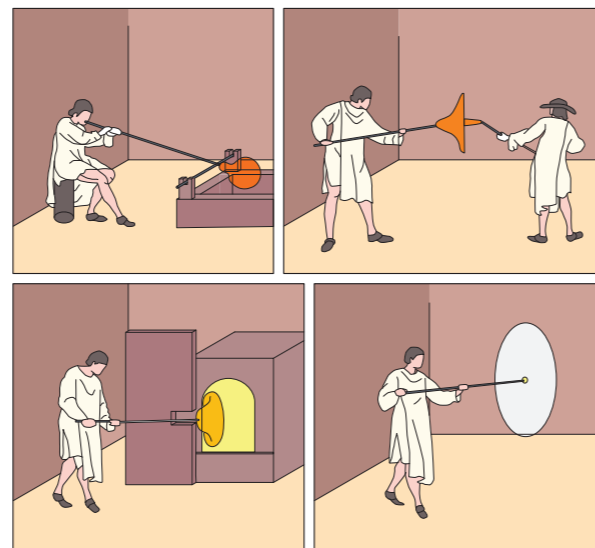
The change in time

CLASSICAL

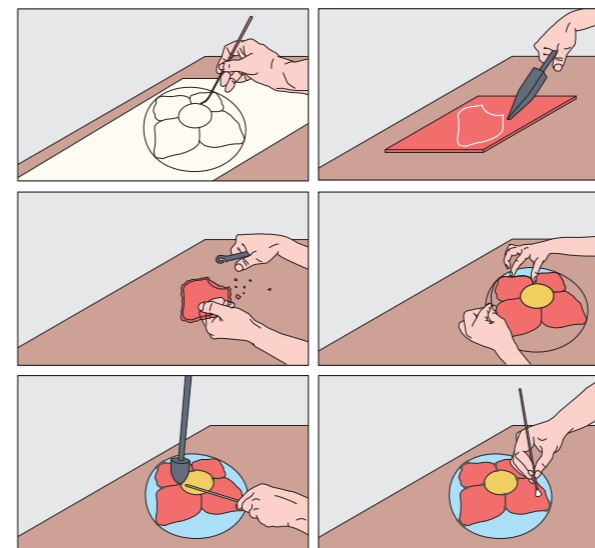
Delving



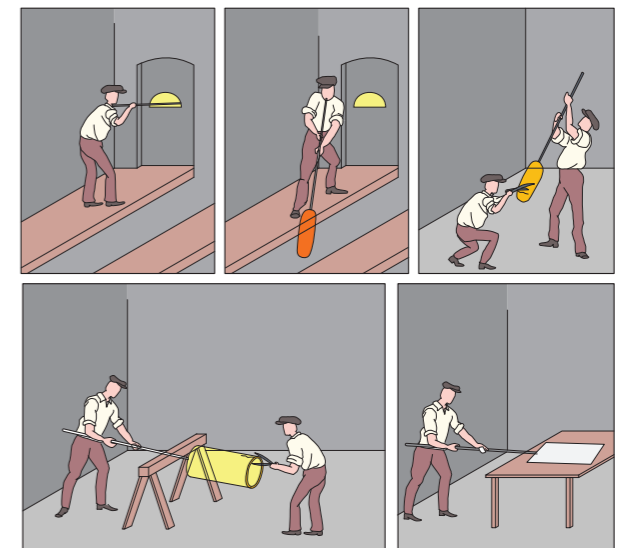
1000 BC.



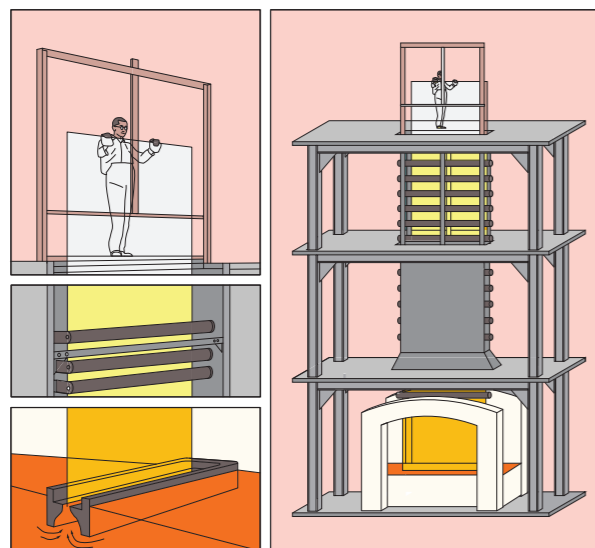
950



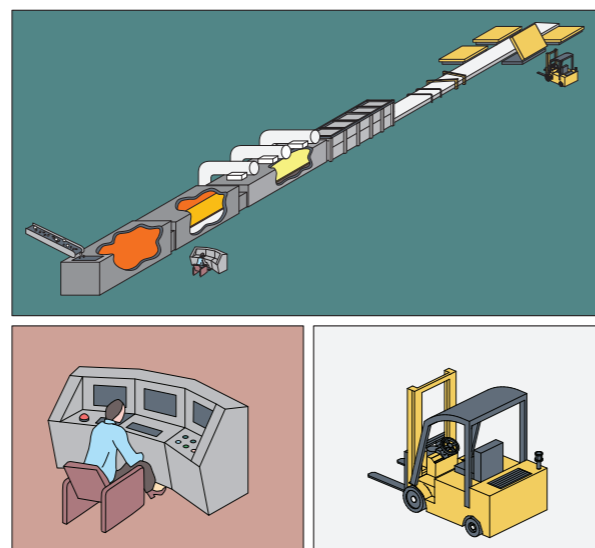
1850



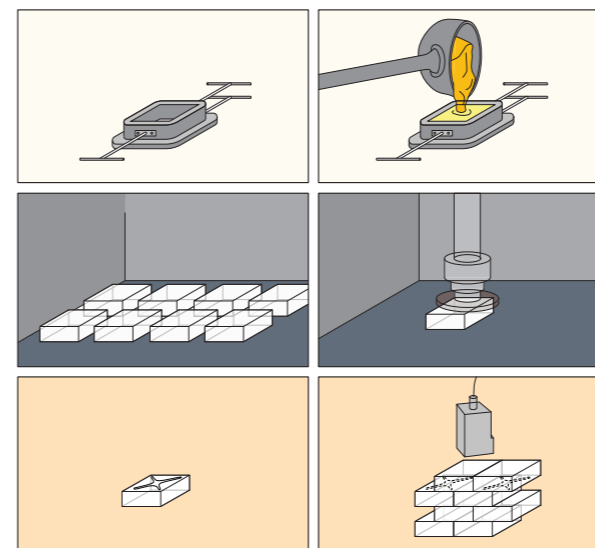
1925



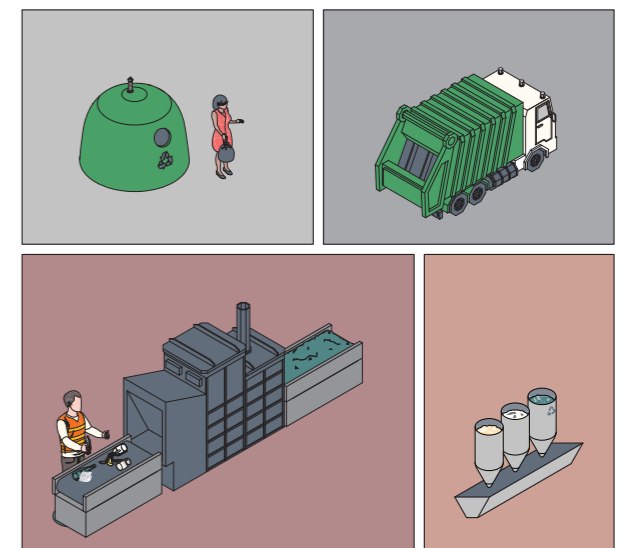
1955



2016



Recycling

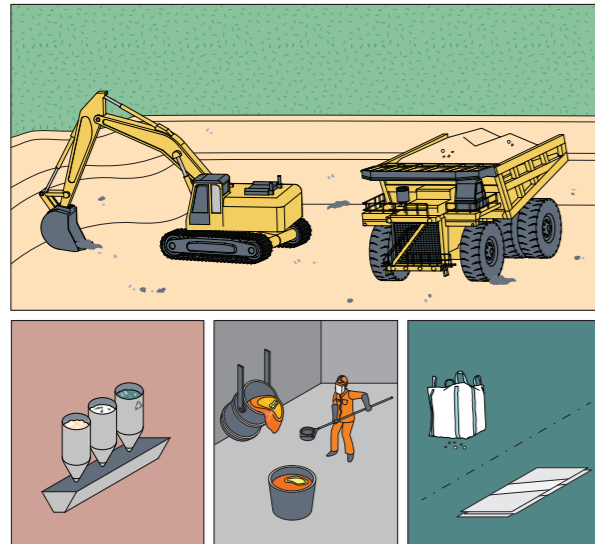


MODERN

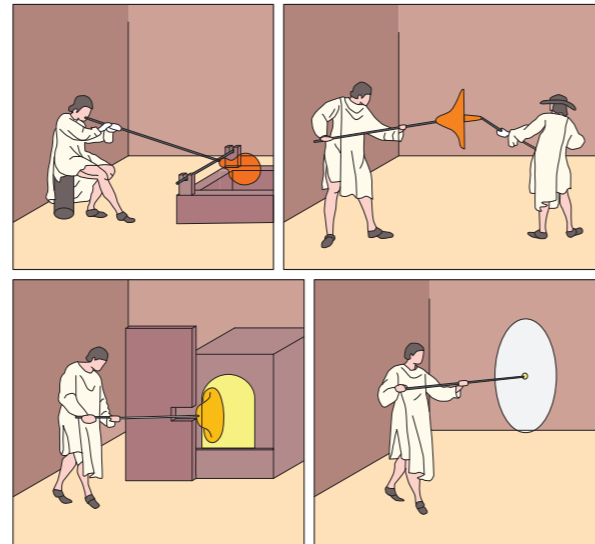
Focus of the glass school

GLASS SCHOOL

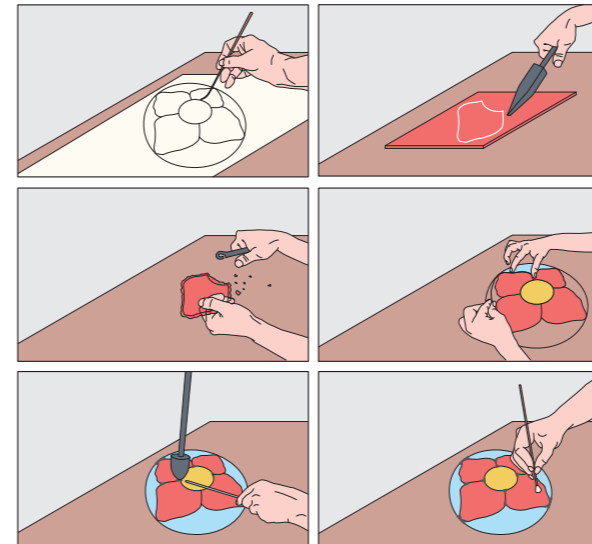
Delving



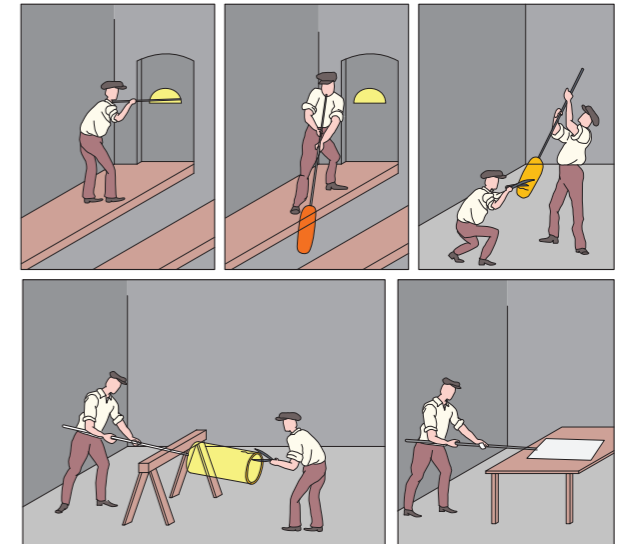
1000 BC.



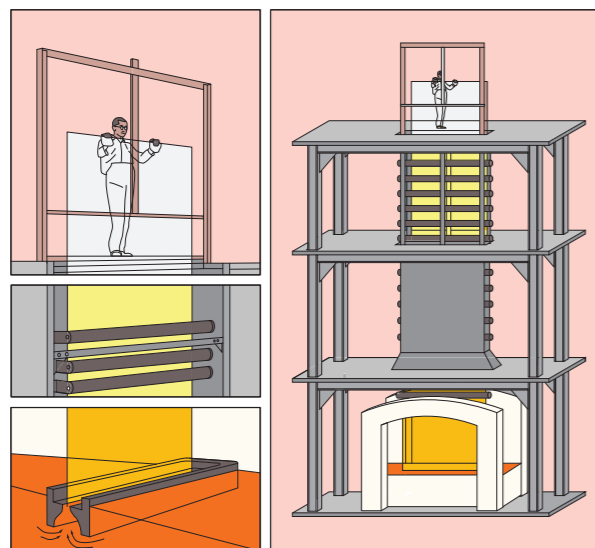
950



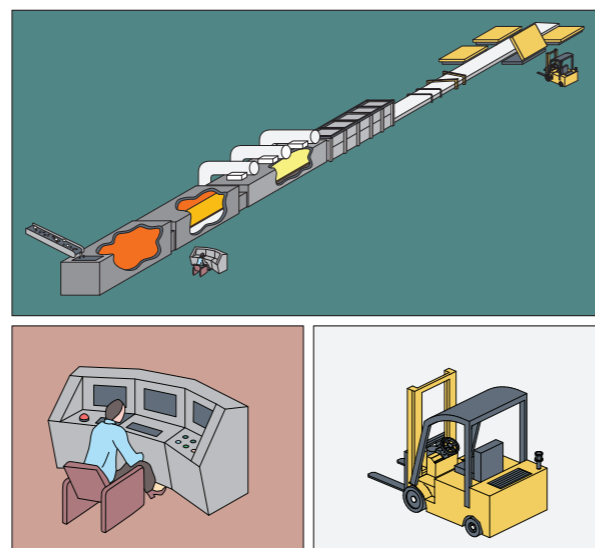
1850



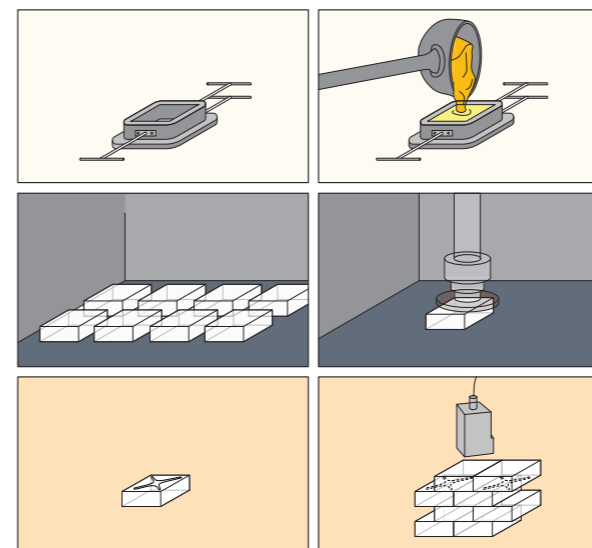
1925



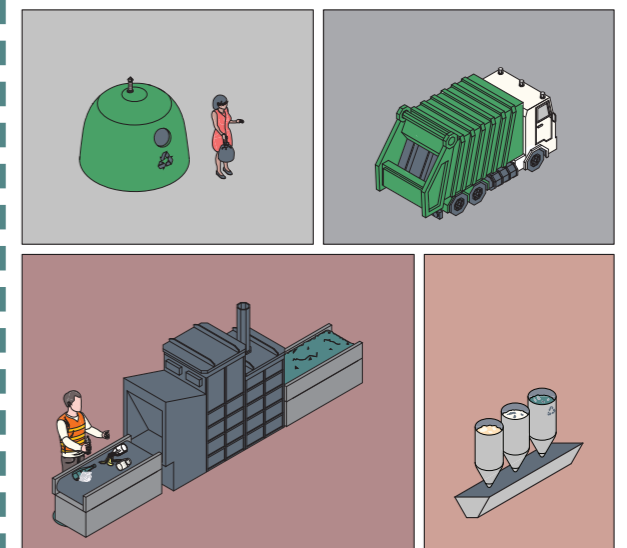
1955



2016

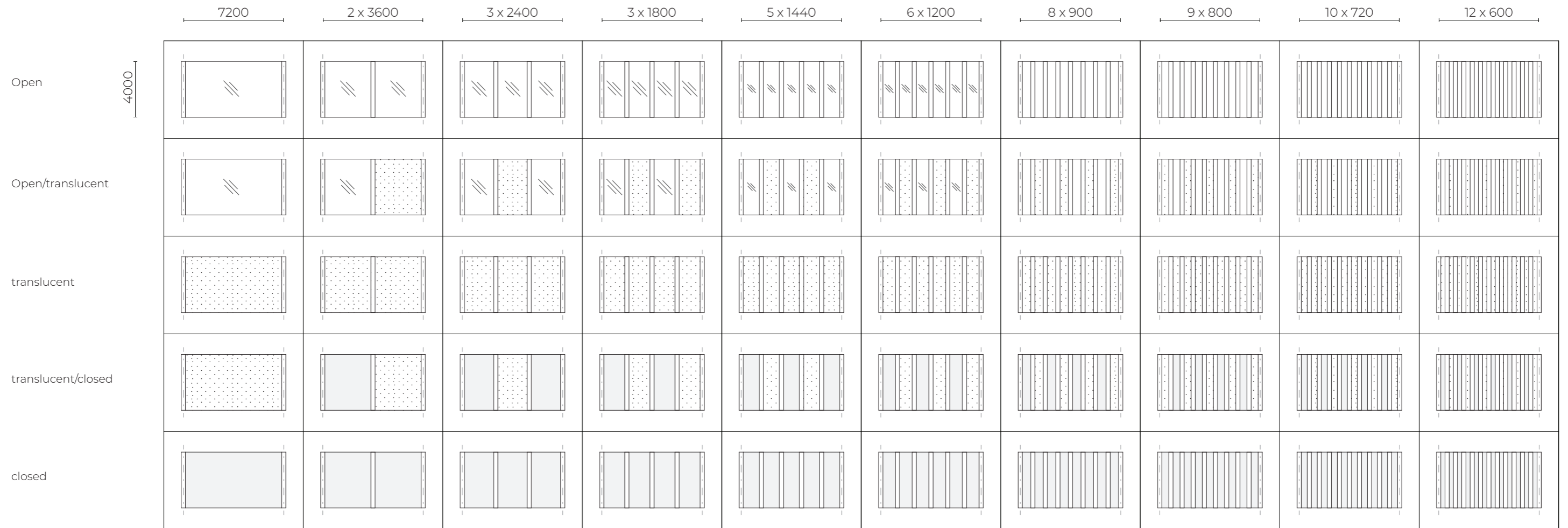


Recycling

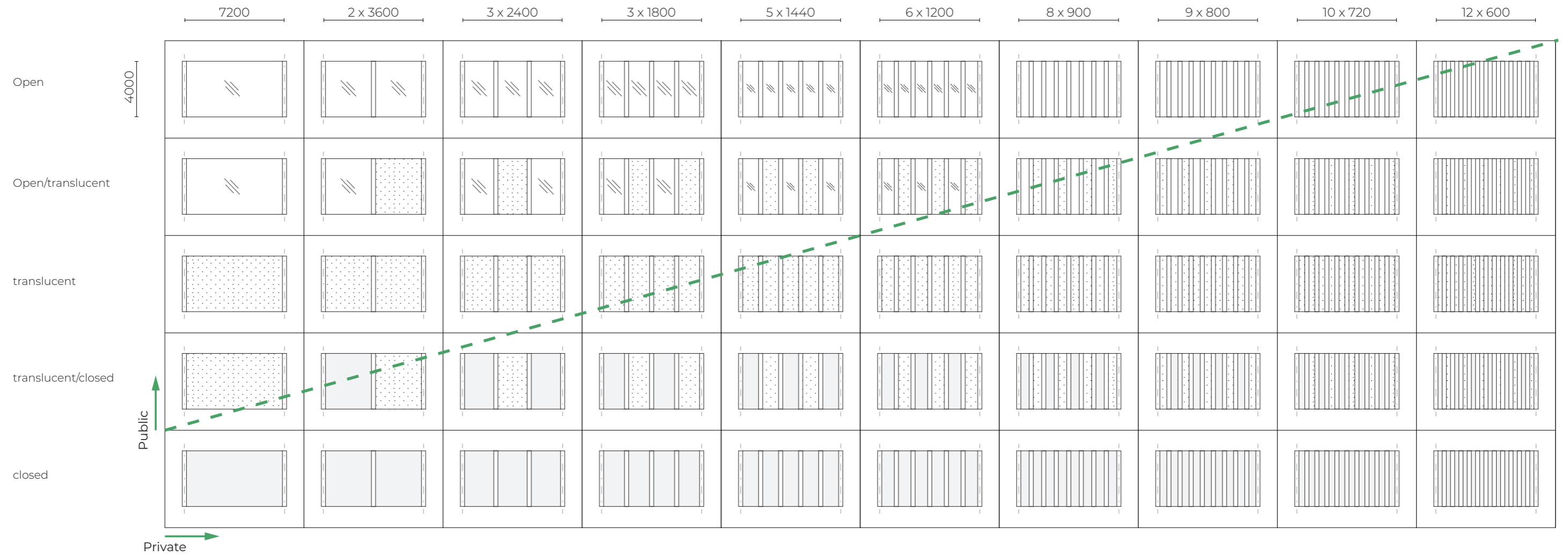


Facade

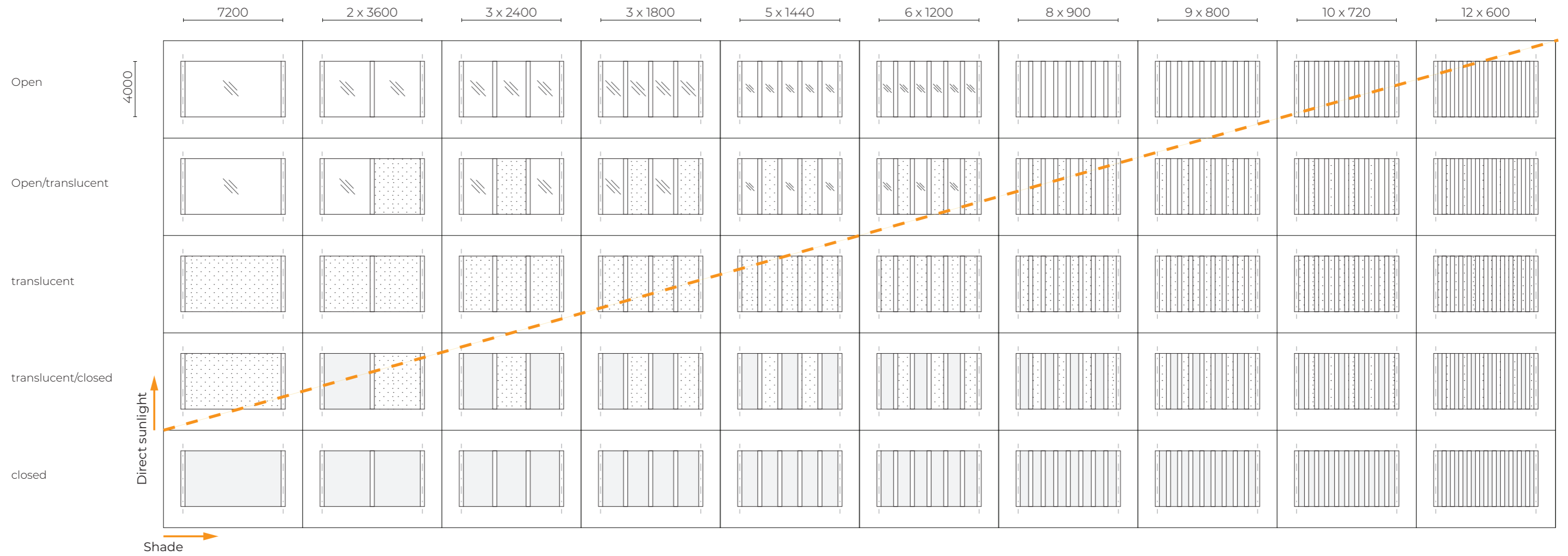
Rhythm in the facade



Facade Public/Private



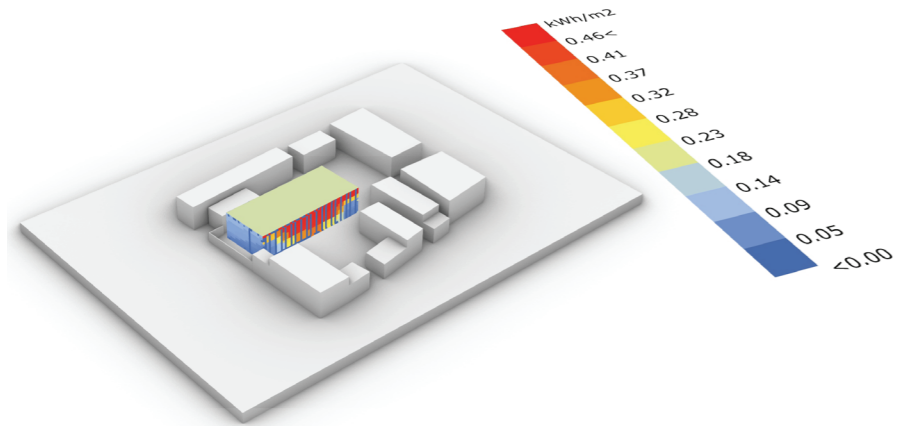
Facade Sun intensity



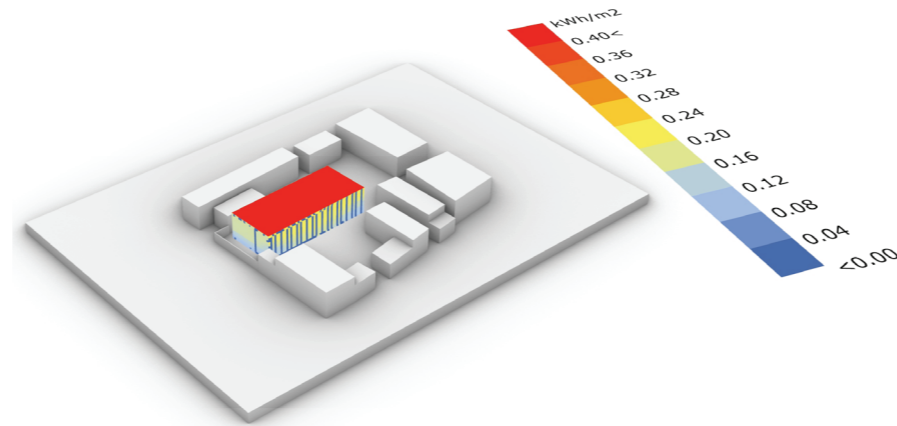
Facade on levels



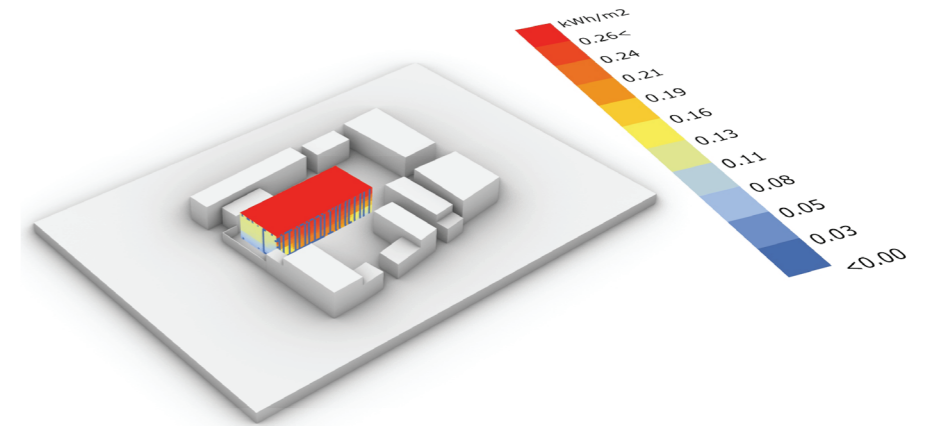
Solar study



Radiation Analysis
AMSTERDAM_NLD_1990
21 DEC 11:00 - 21 DEC 12:00

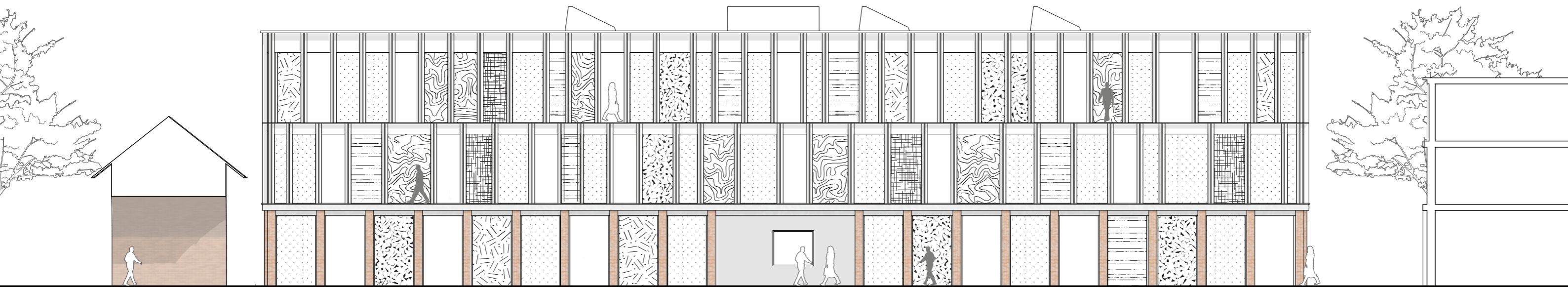


Radiation Analysis
AMSTERDAM_NLD_1990
21 JUN 11:00 - 21 JUN 12:00



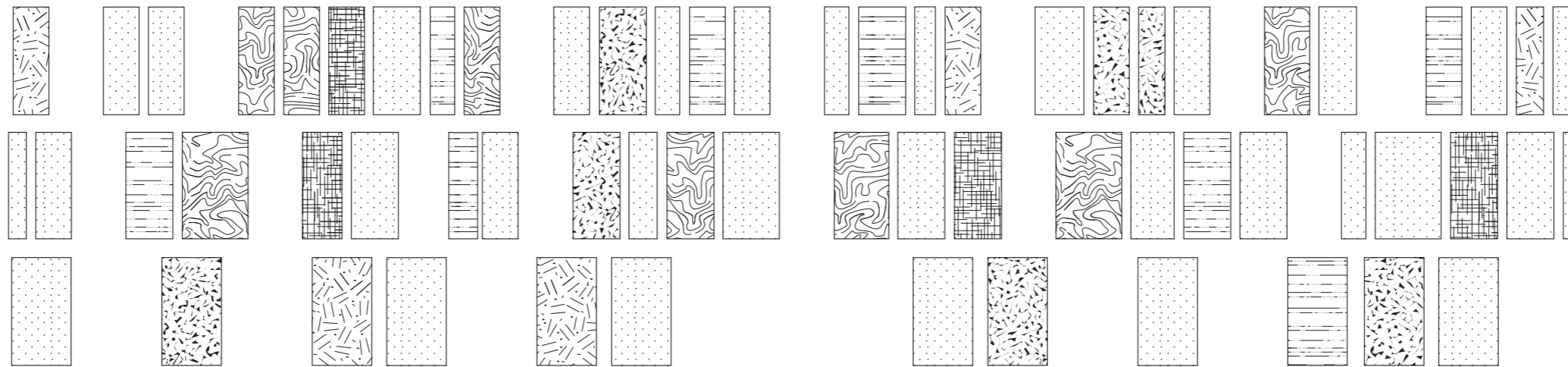
Radiation Analysis
AMSTERDAM_NLD_1990
21 MAR 11:00 - 21 MAR 12:00

South facade



South facade

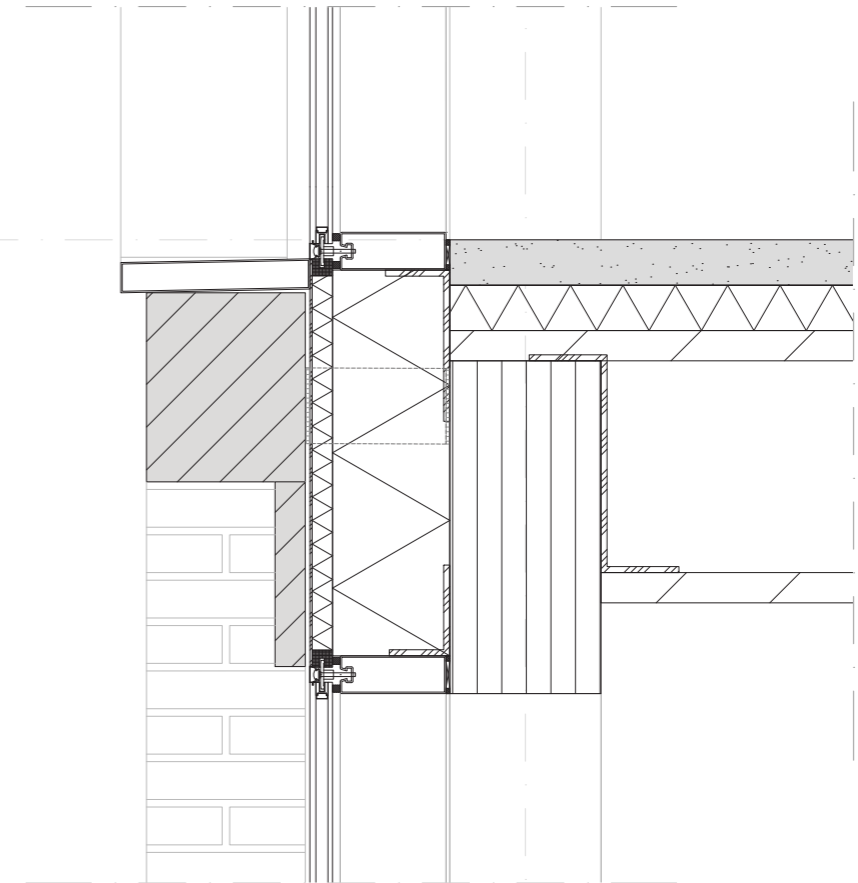
Each panel shows a different patten that represents a crafting method



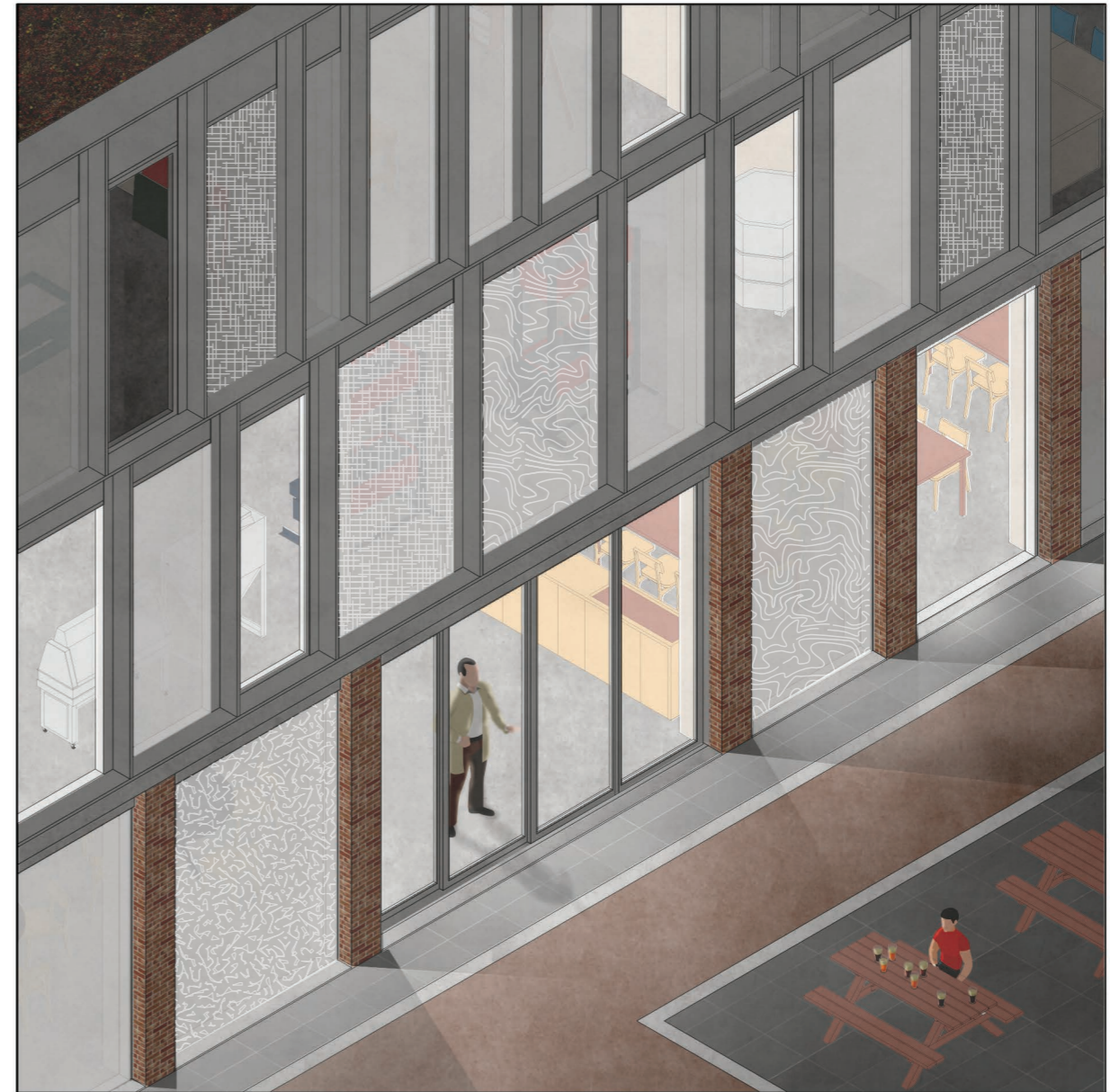
Facade close up



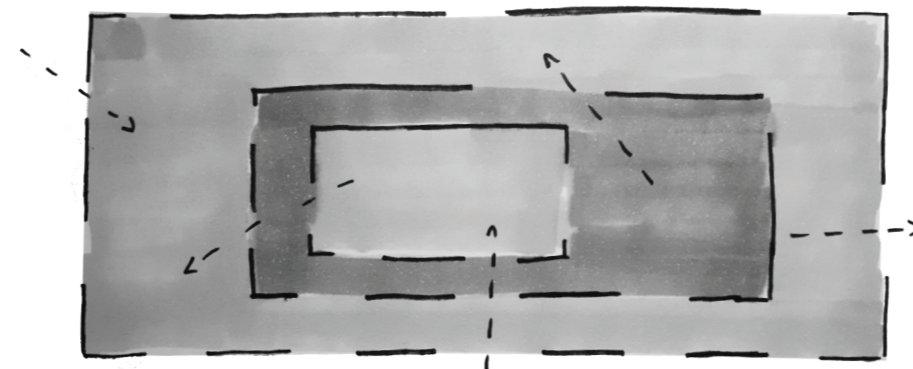
Detailing of the facade



Day and night situation



THE CRAFTSMAN



Connecting the multiple disciplines

Interviews



Glass artist



Glass studio



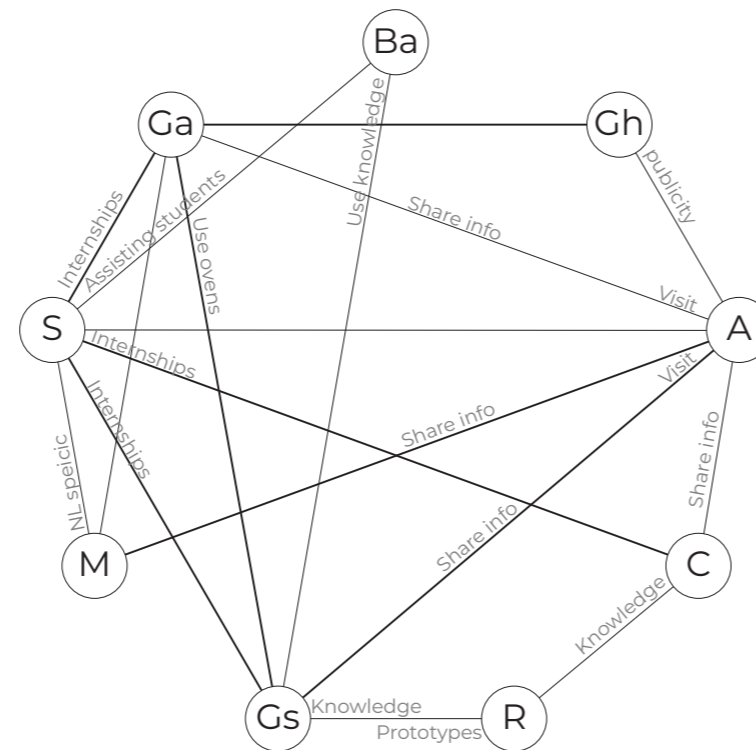
Museum

Interviews

11 interviews in 8 different occupations

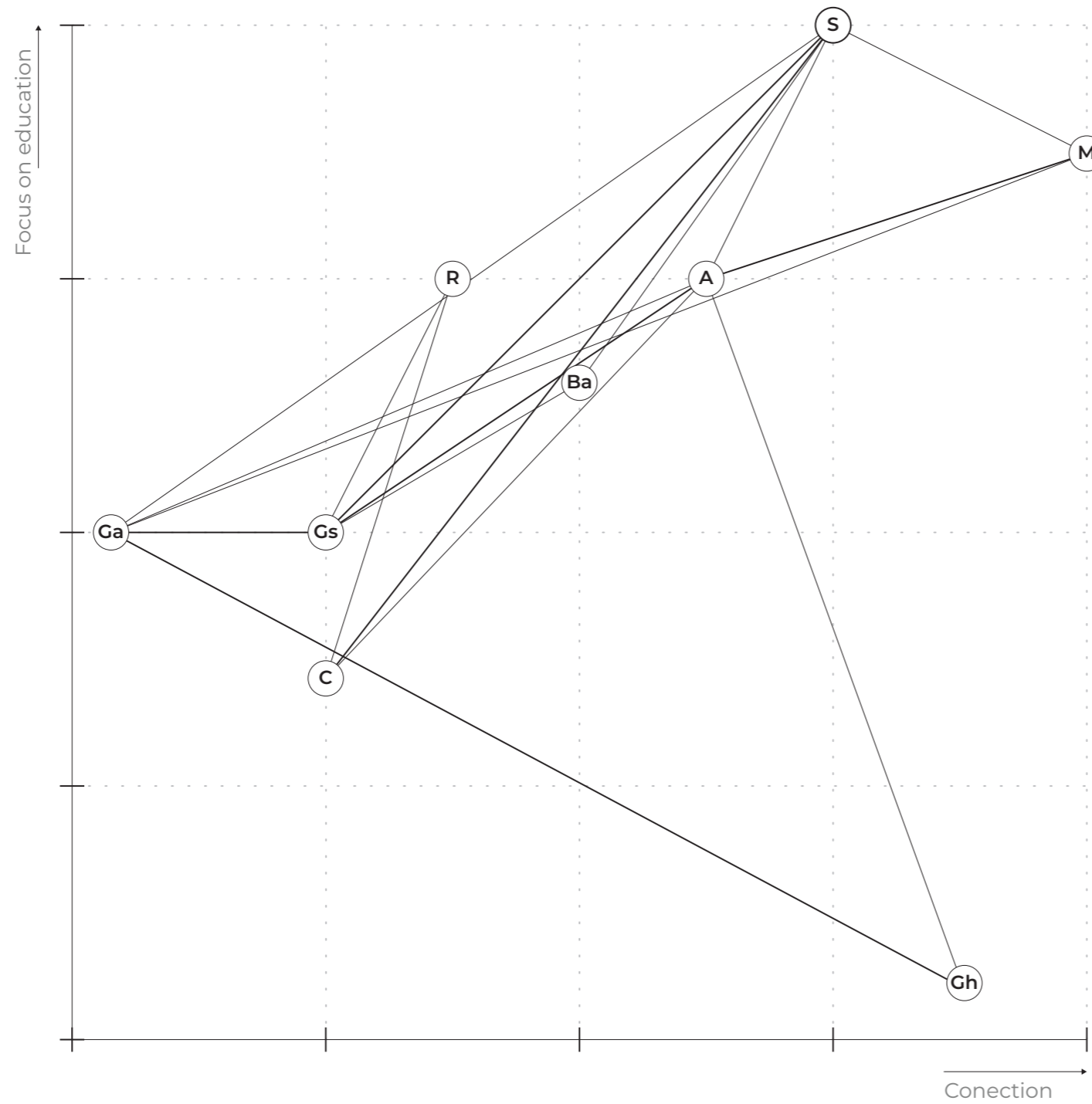
- ⓑ Beginning artist
- ⓖ Glass artist
- Ⓢ School
- Ⓜ Museum
- ⓖ Glass studio
- Ⓡ Research
- Ⓢ Company
- ⓐ Association
- ⓖ Gallery holder

Connection of the different occupancies



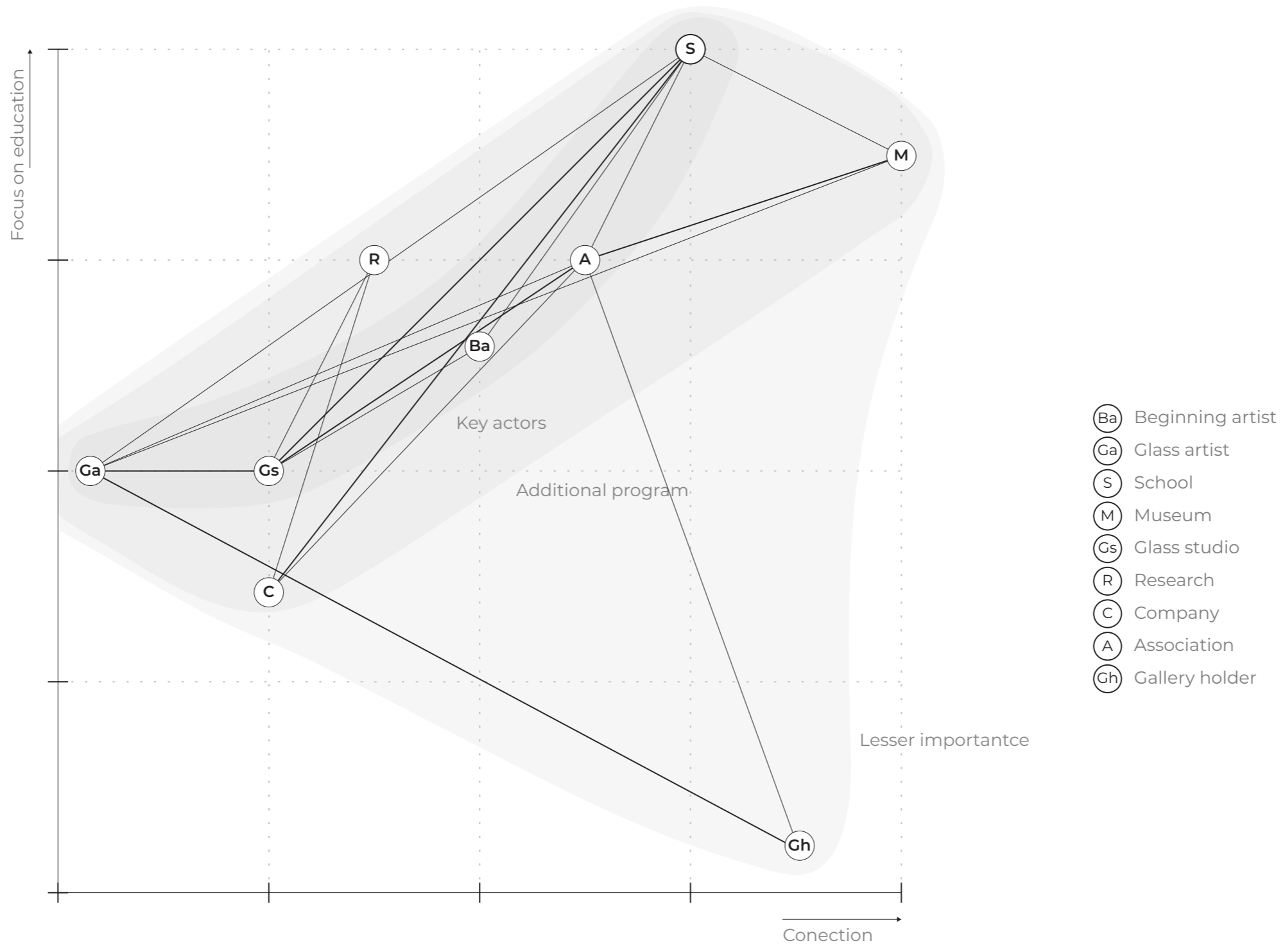
- Ⓟ Ba Beginning artist
- Ⓟ Ga Glass artist
- Ⓟ S School
- Ⓟ M Museum
- Ⓟ Gs Glass studio
- Ⓟ R Research
- Ⓟ C Company
- Ⓟ A Association
- Ⓟ Gh Gallery holder

Combining information

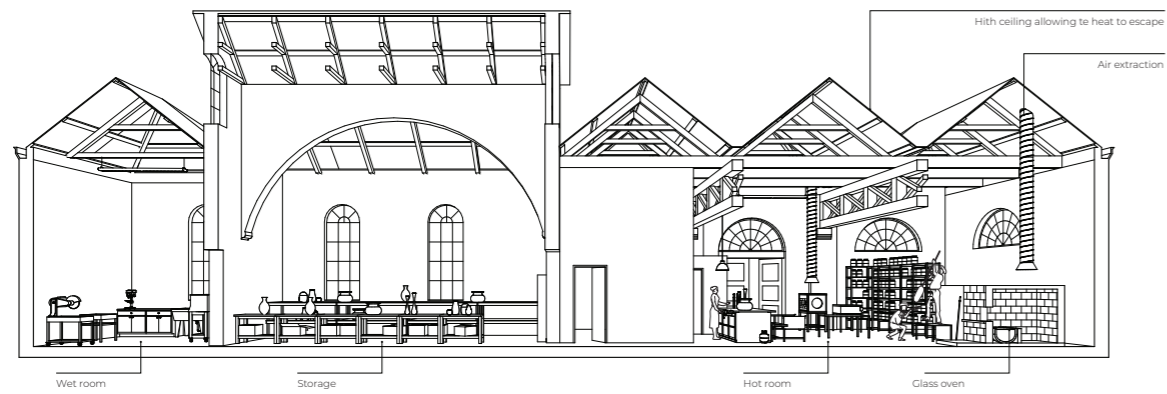


- ⓑ Beginning artist
- Ⓙ Glass artist
- Ⓢ School
- Ⓜ Museum
- Ⓖ Glass studio
- Ⓡ Research
- Ⓒ Company
- Ⓐ Association
- Ⓖ Gallery holder

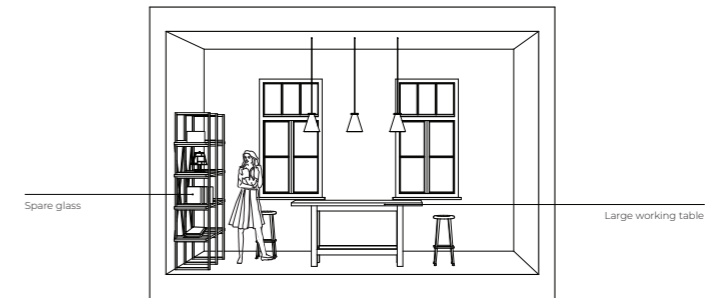
Importance for a glass school



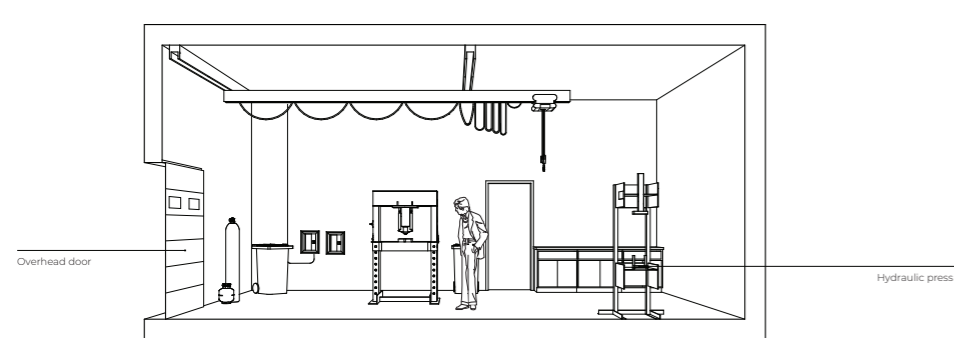
The workplaces



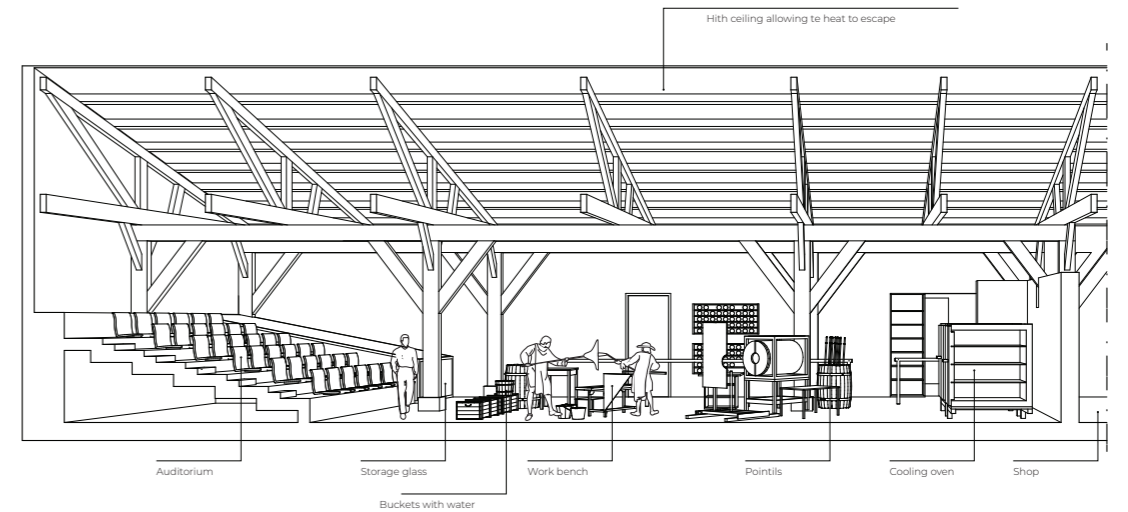
Glass artist



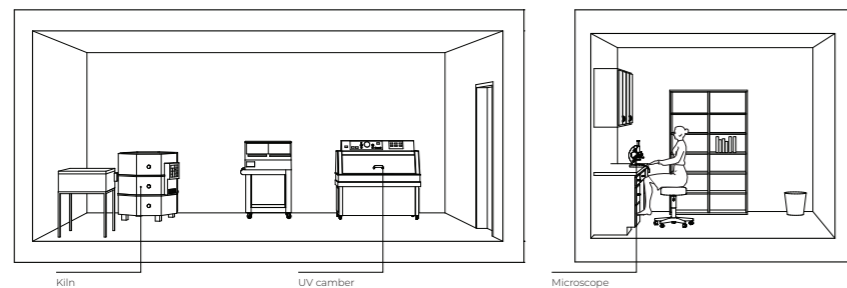
Beginning artist



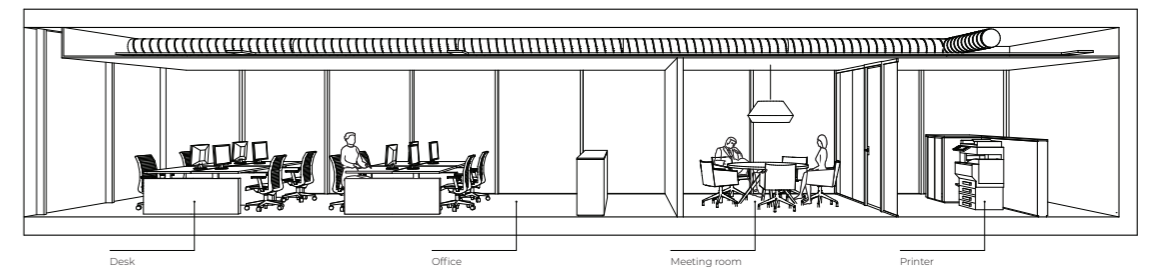
Association



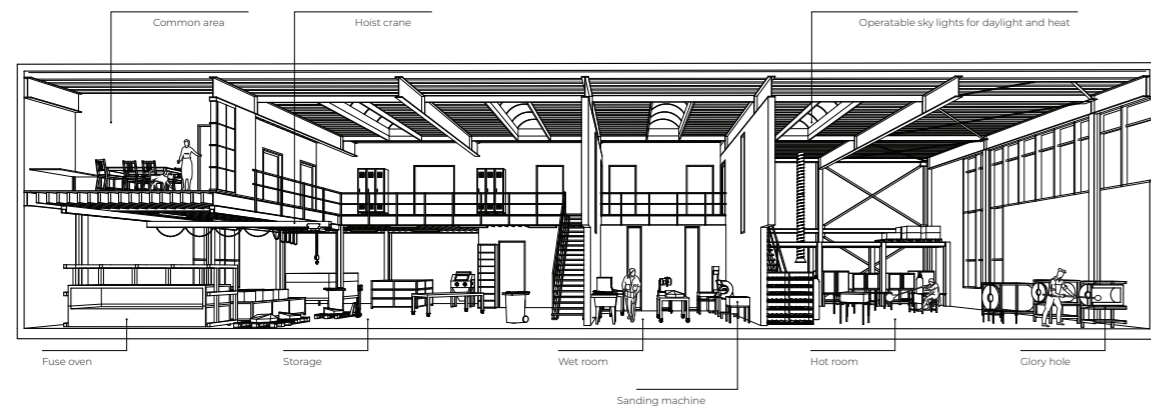
Museum



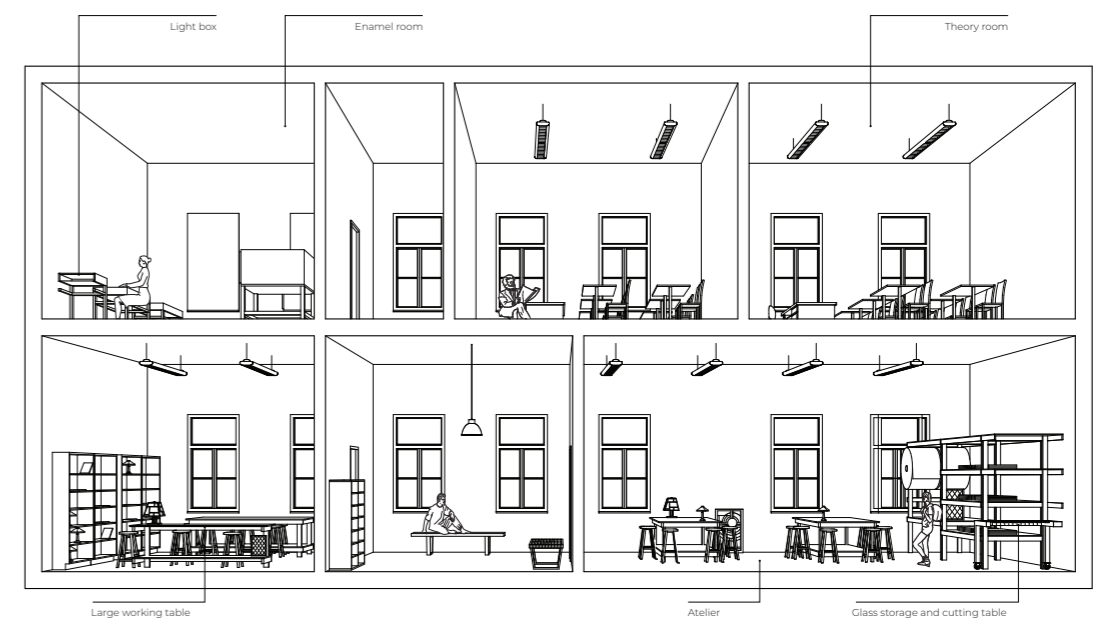
Research



Office

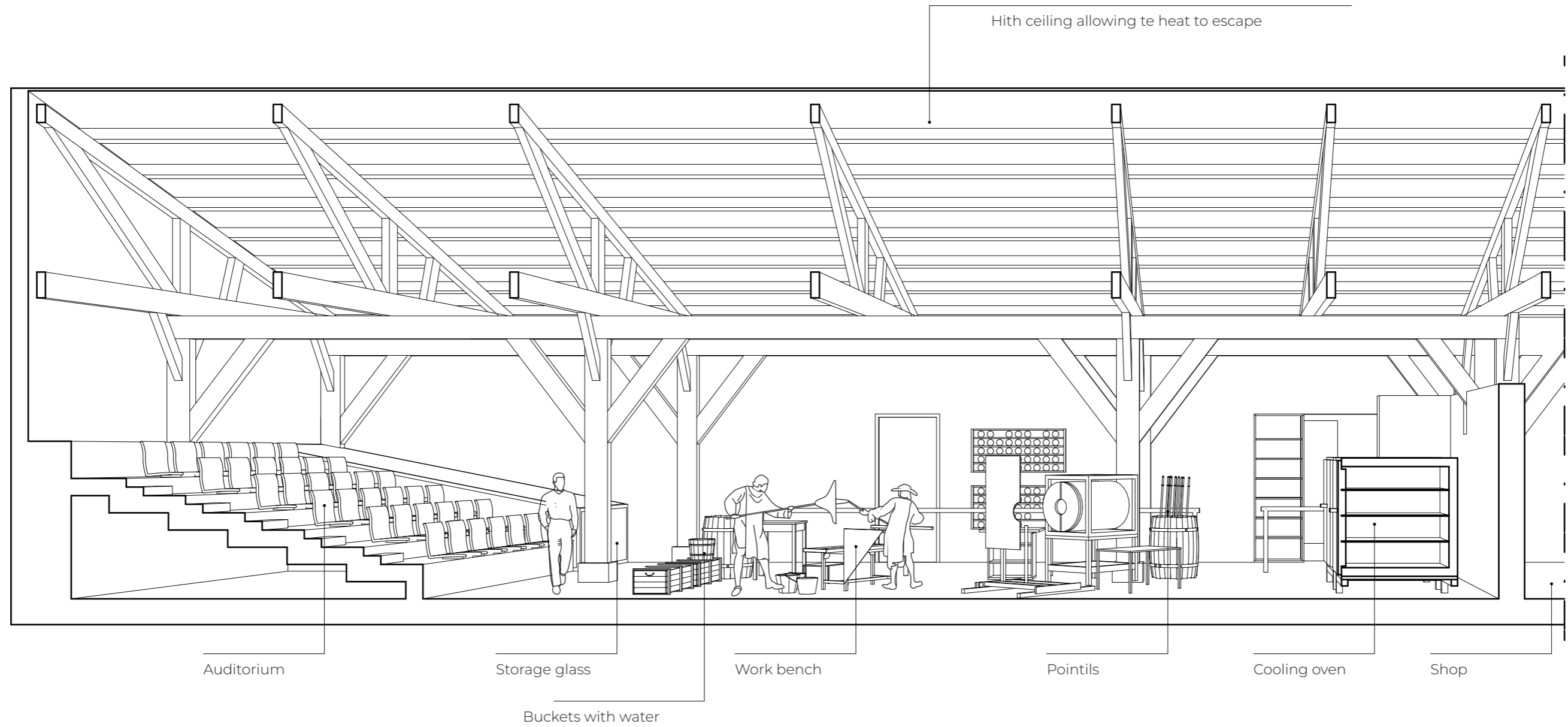


Glass studio

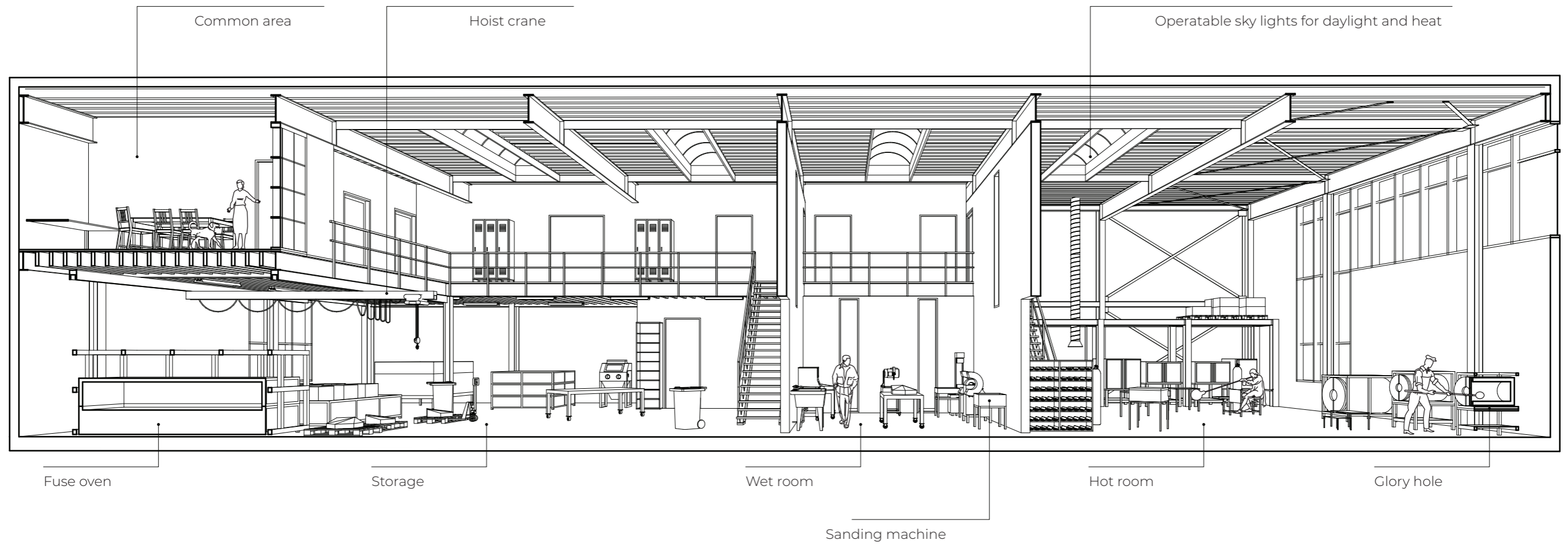


School

The Museum

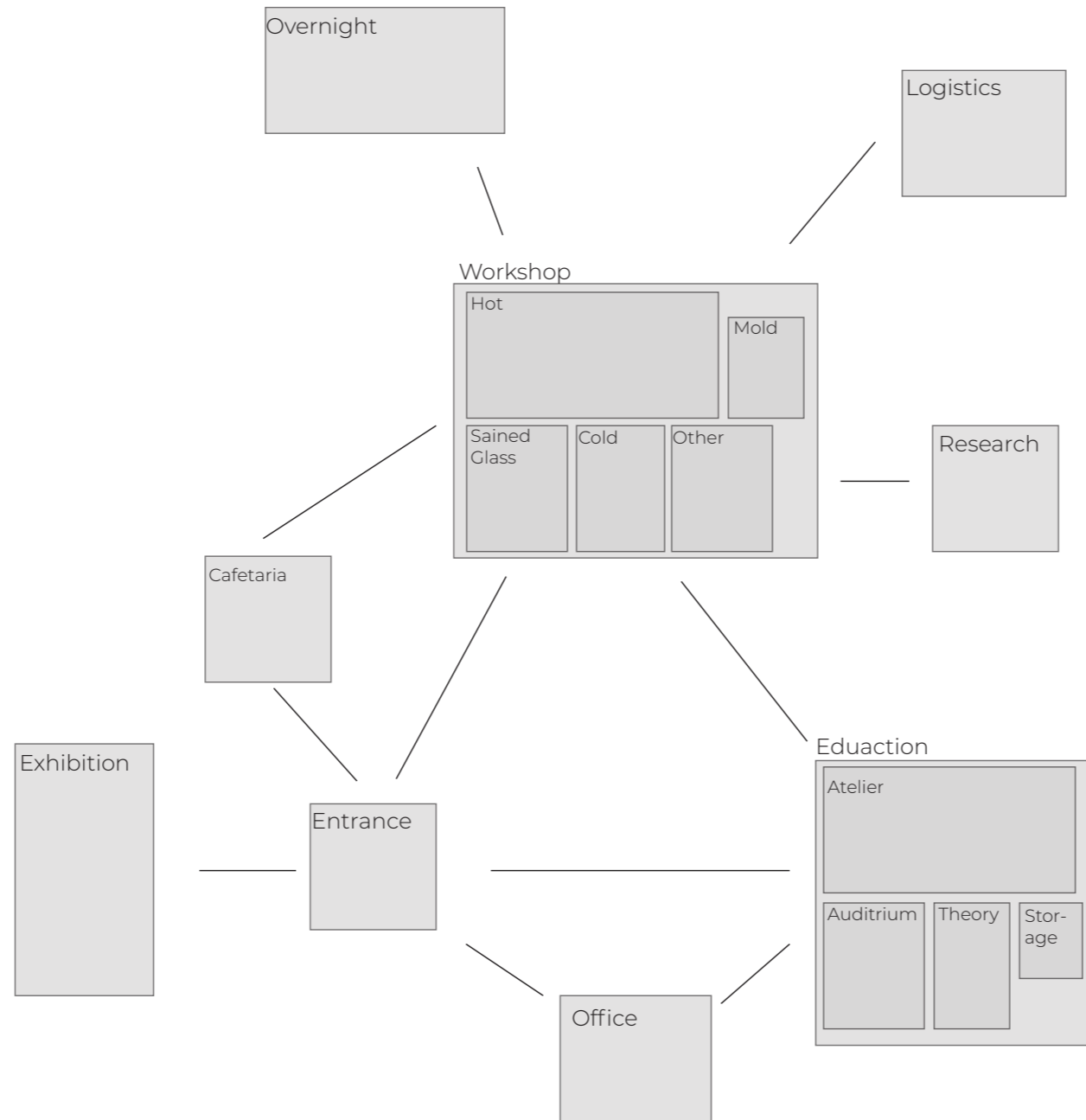


The Studio



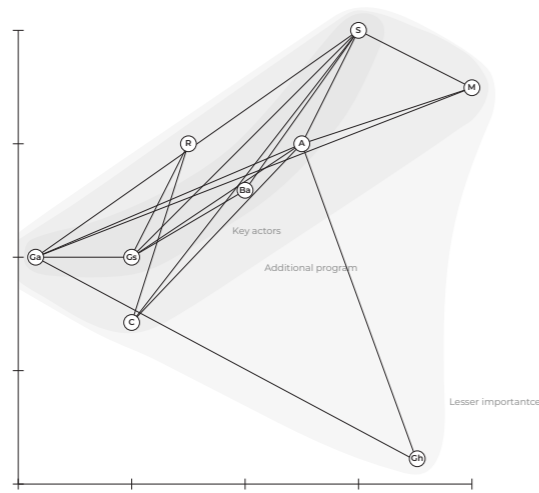
Relation diagram

Combination of the workplaces and people

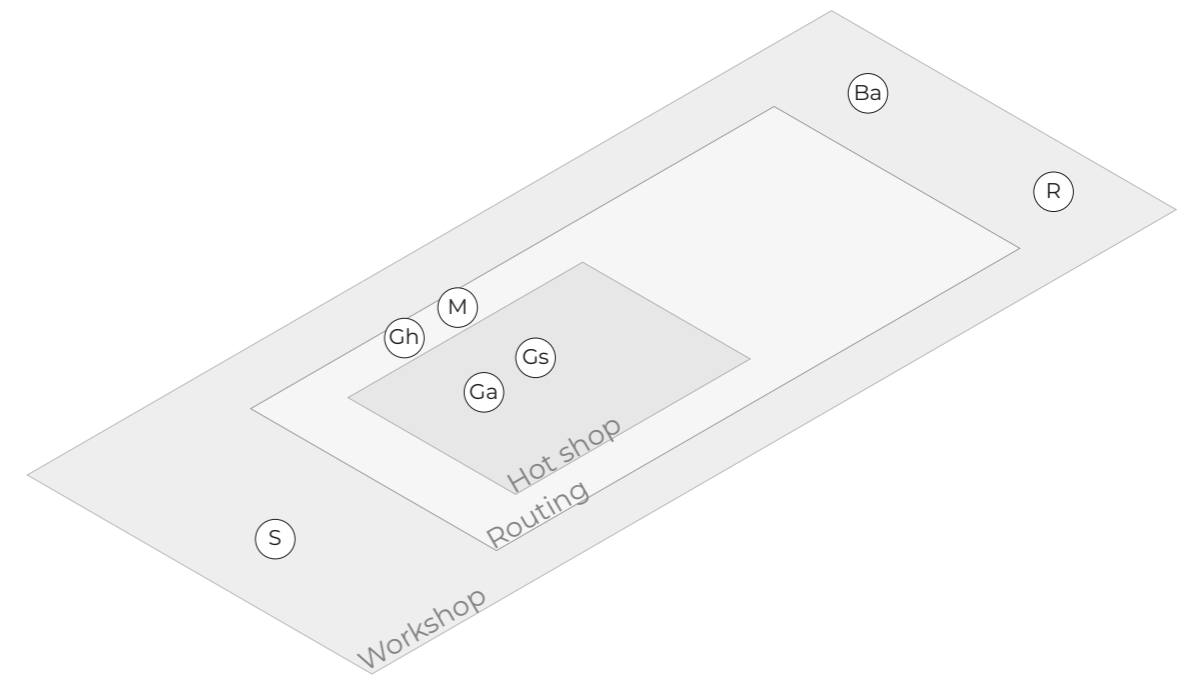
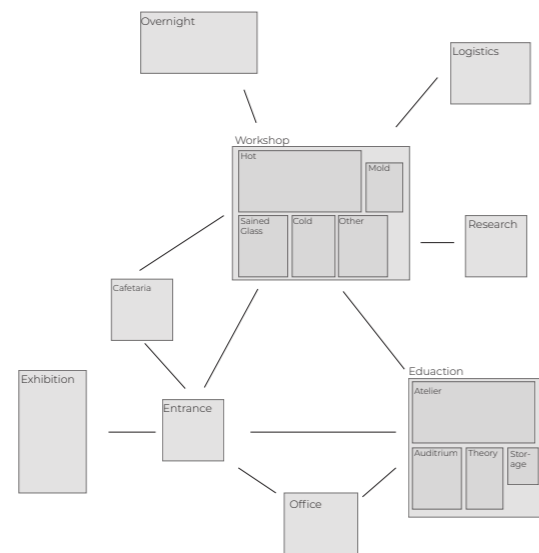


Spatial program

The Public program on the outside and the private interior is connected through a circular route

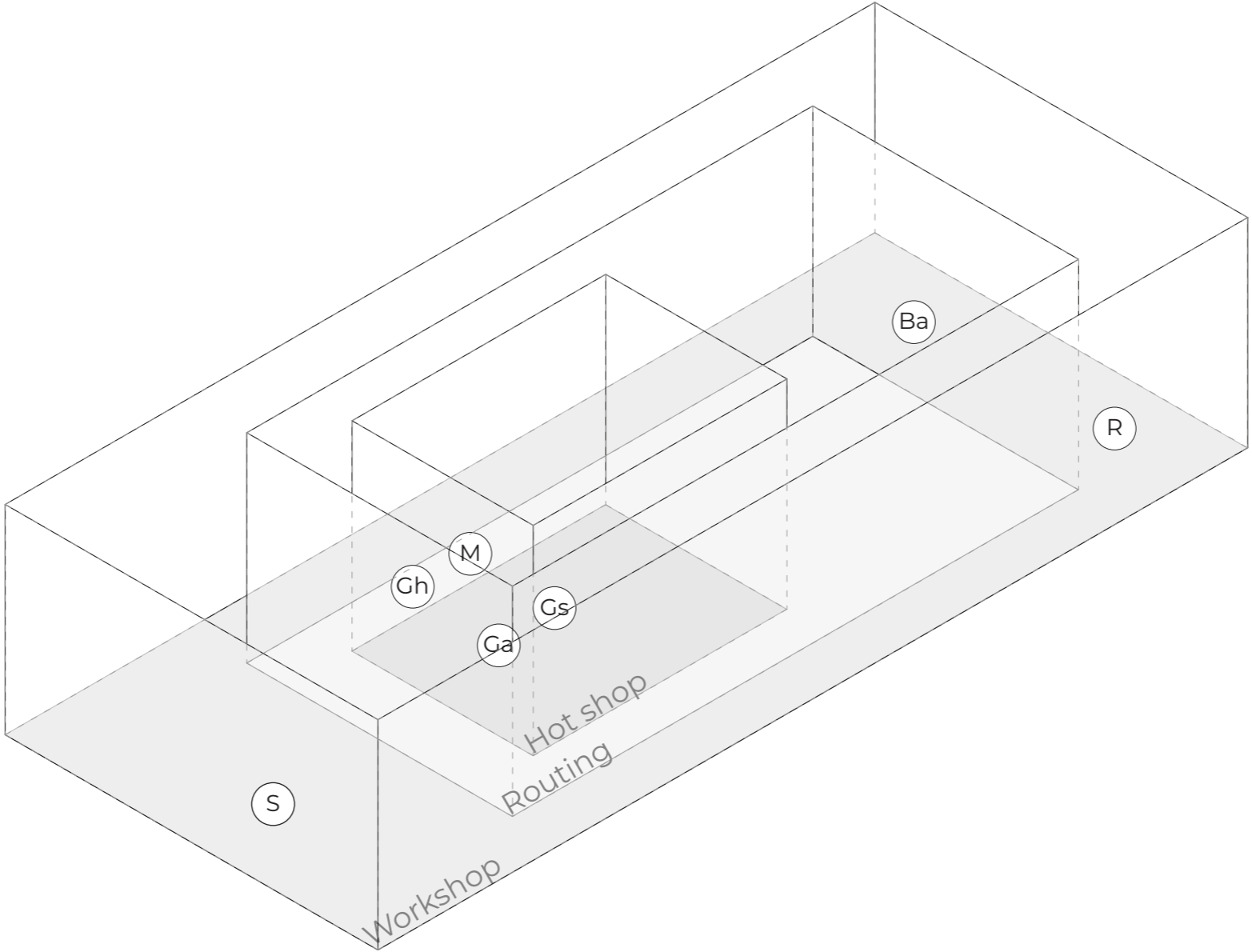


+

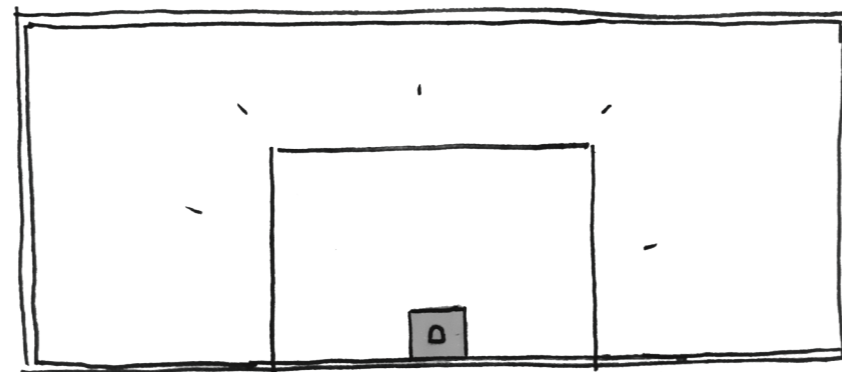


Extrusion of the program

Three layer show the different qualities of glass



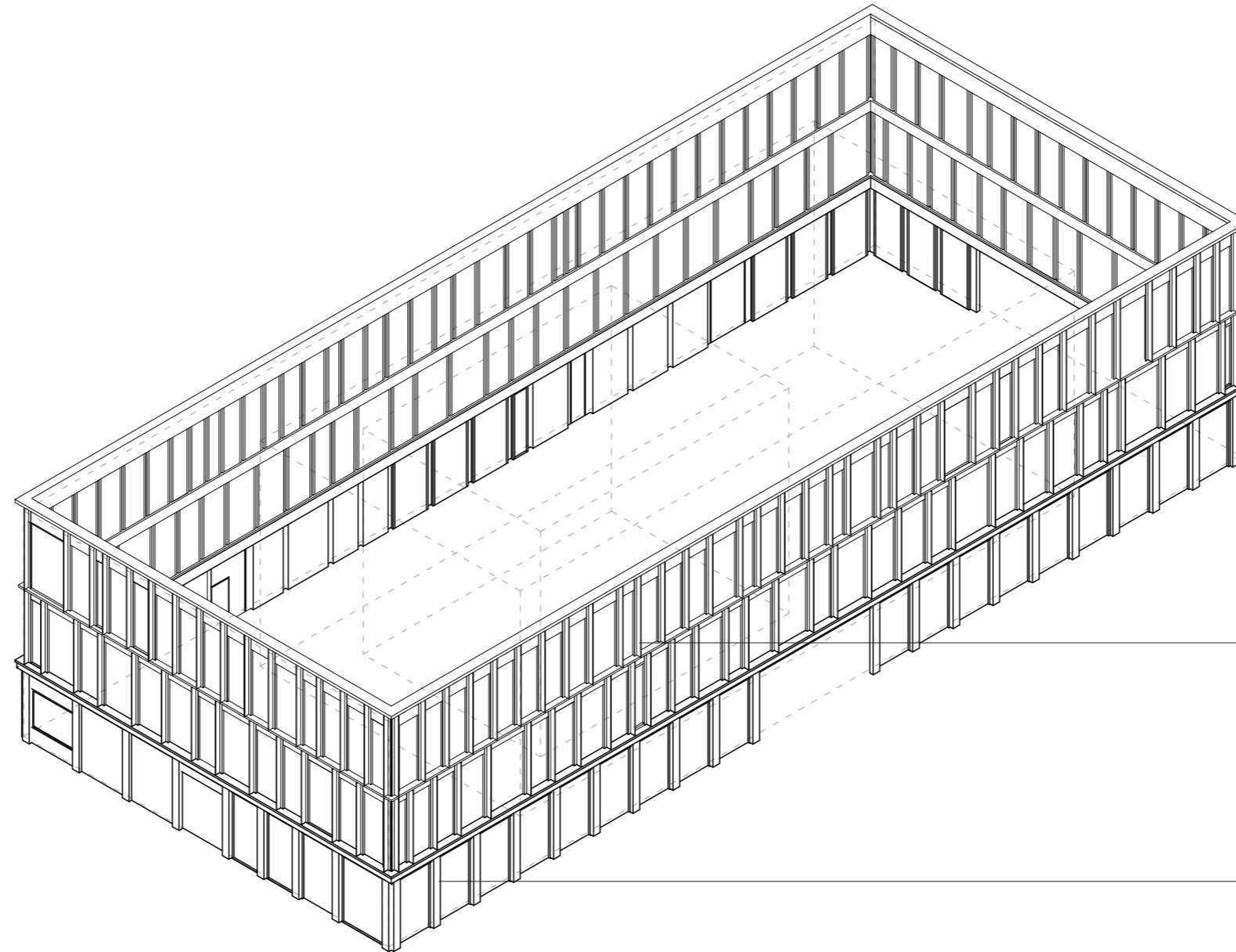
THE WORKSHOP



Hot shop as the heart of the building

Skin layer

Glass as a skin to stimulate interaction and creativity



- Translucent glass to blur what is going on inside the school

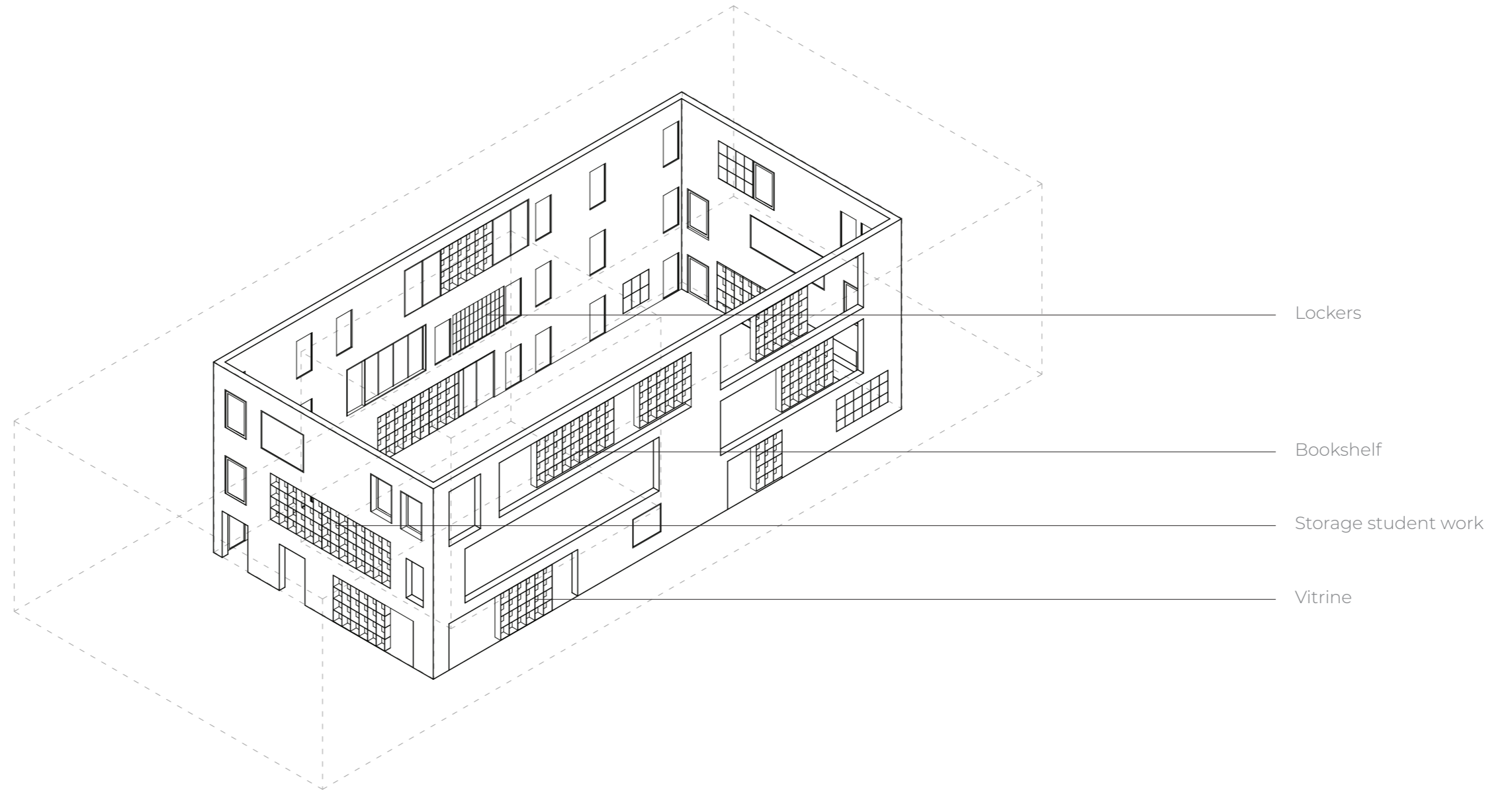
- Glass as a sheet

- Glass and metal

Brick base

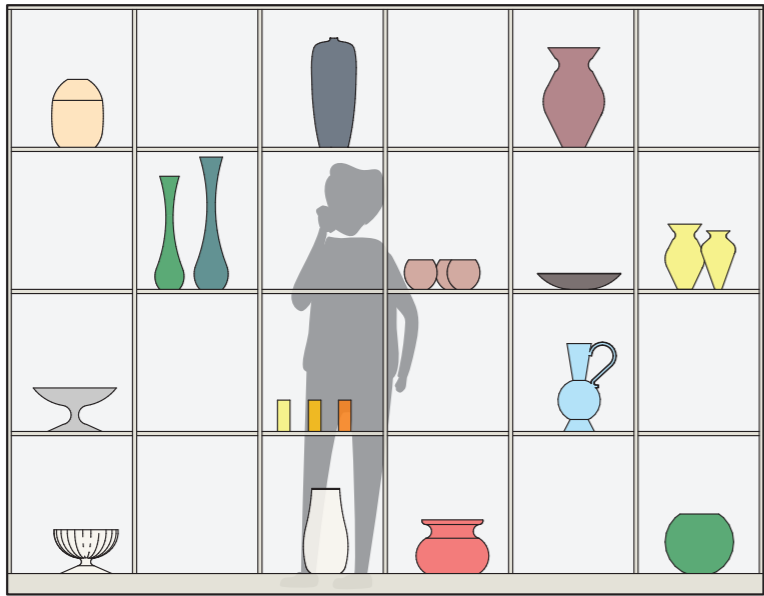
Exploration layer

Glass as a vitrine to show the craftsmanship

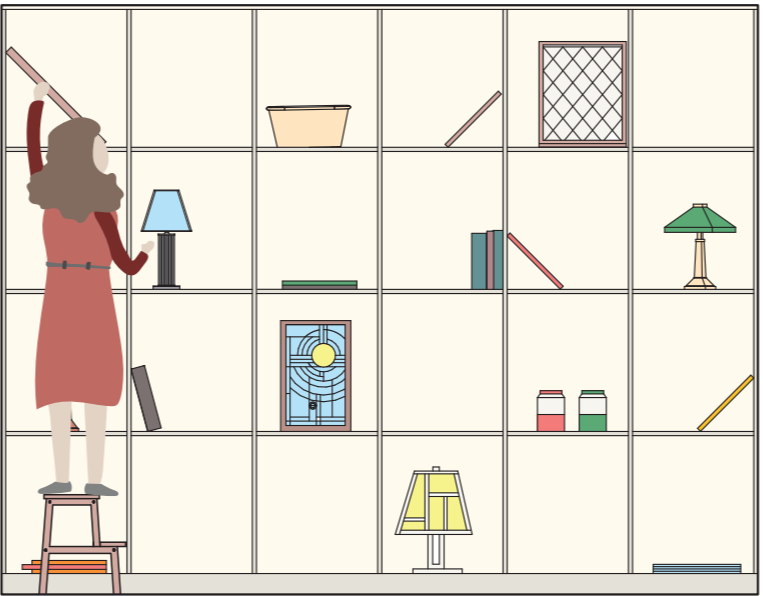


Exploration layer

Multiple uses of the same wall



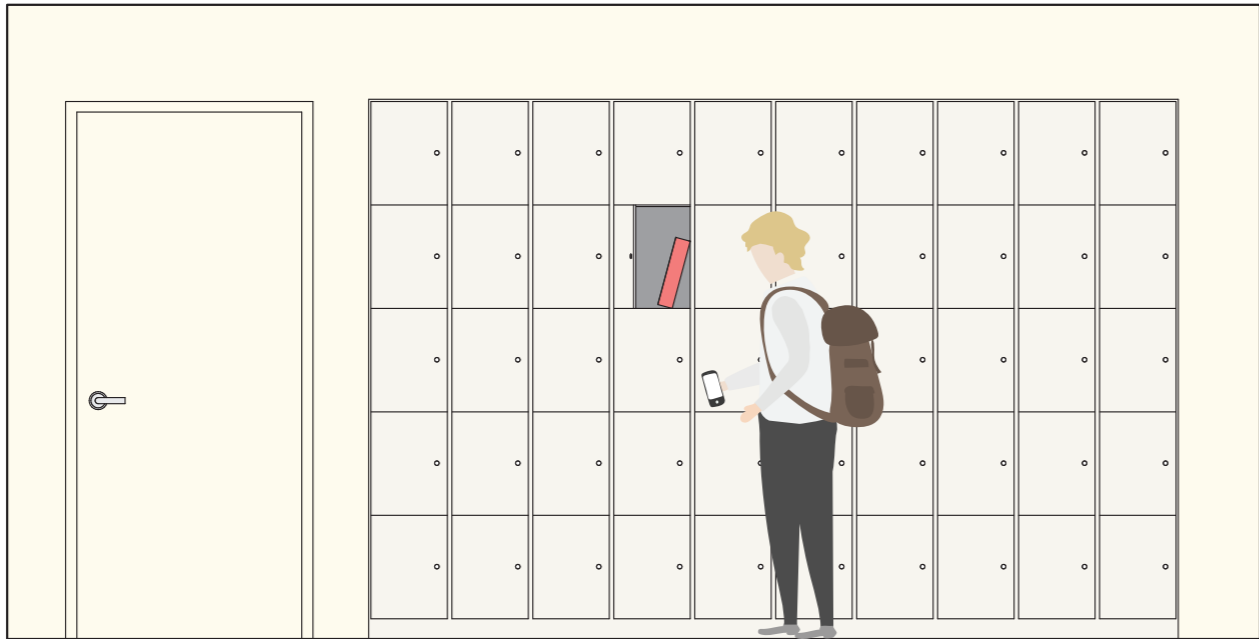
Vitrine



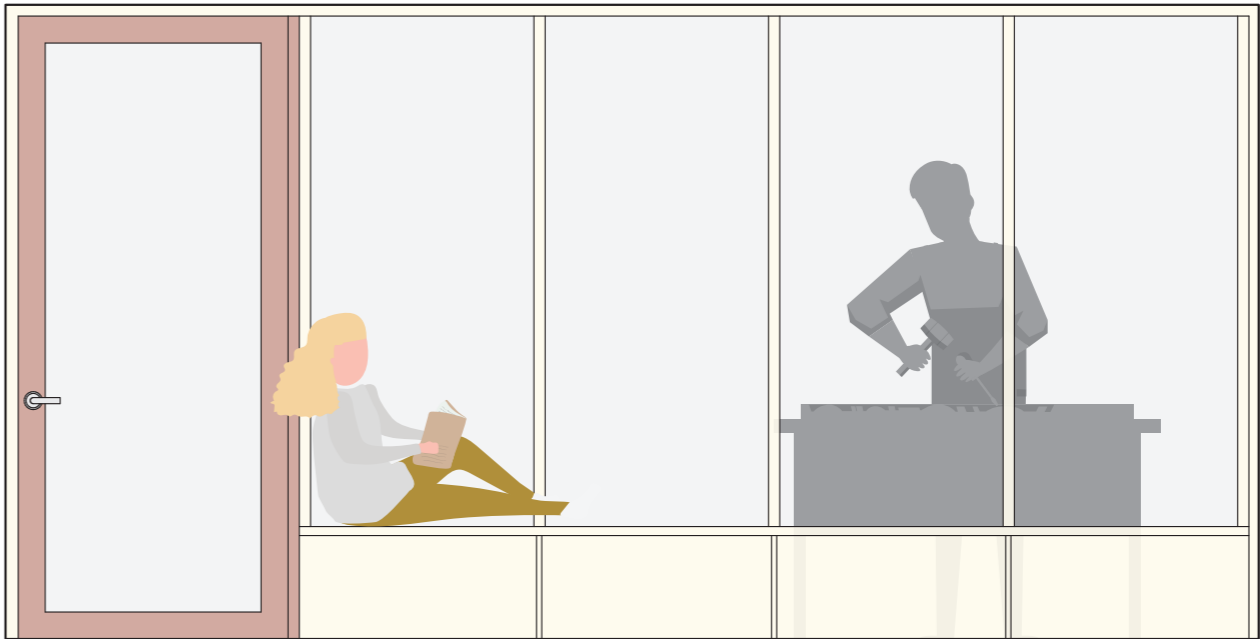
Storage student work



Library



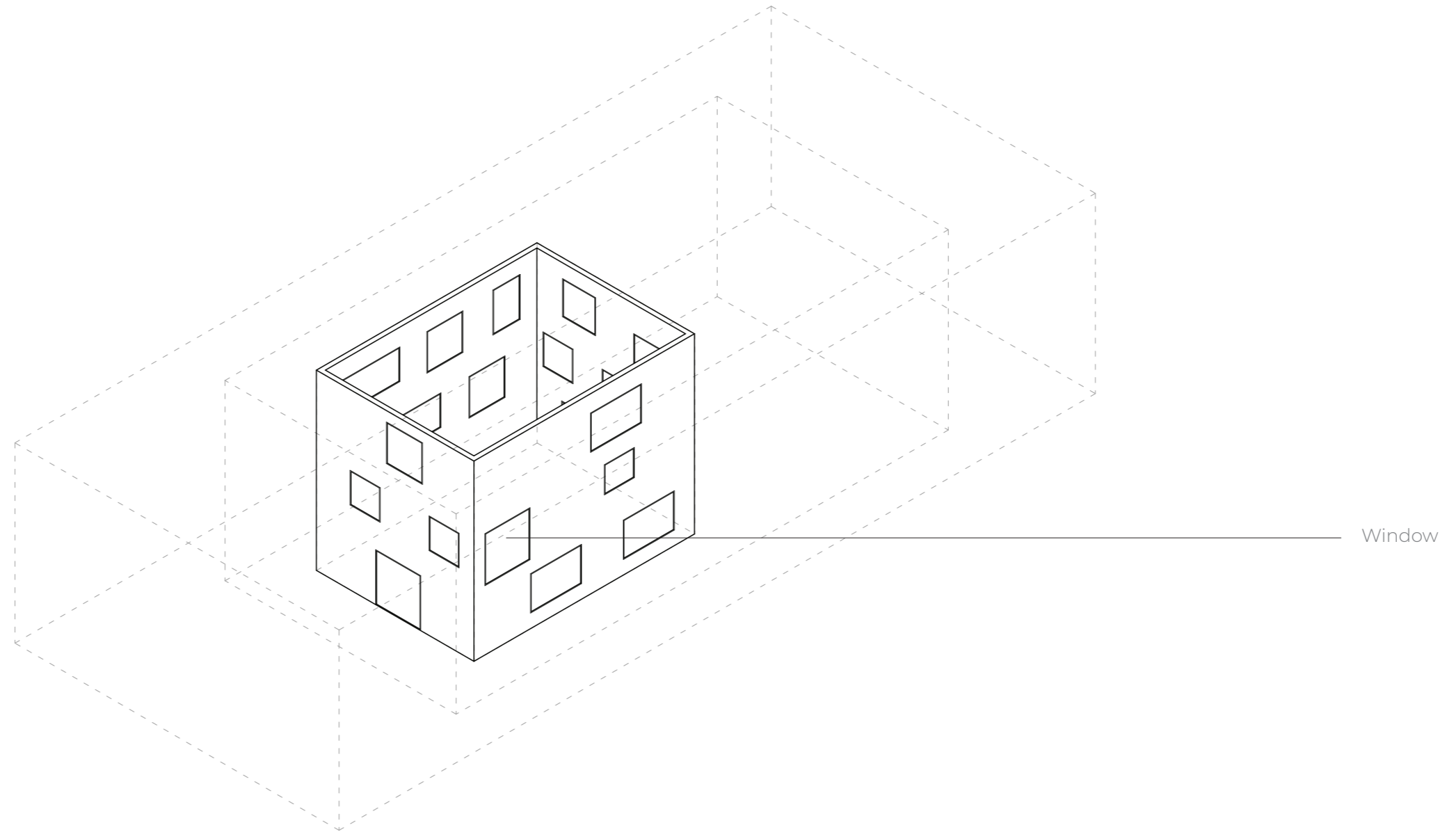
Lockers



Bench

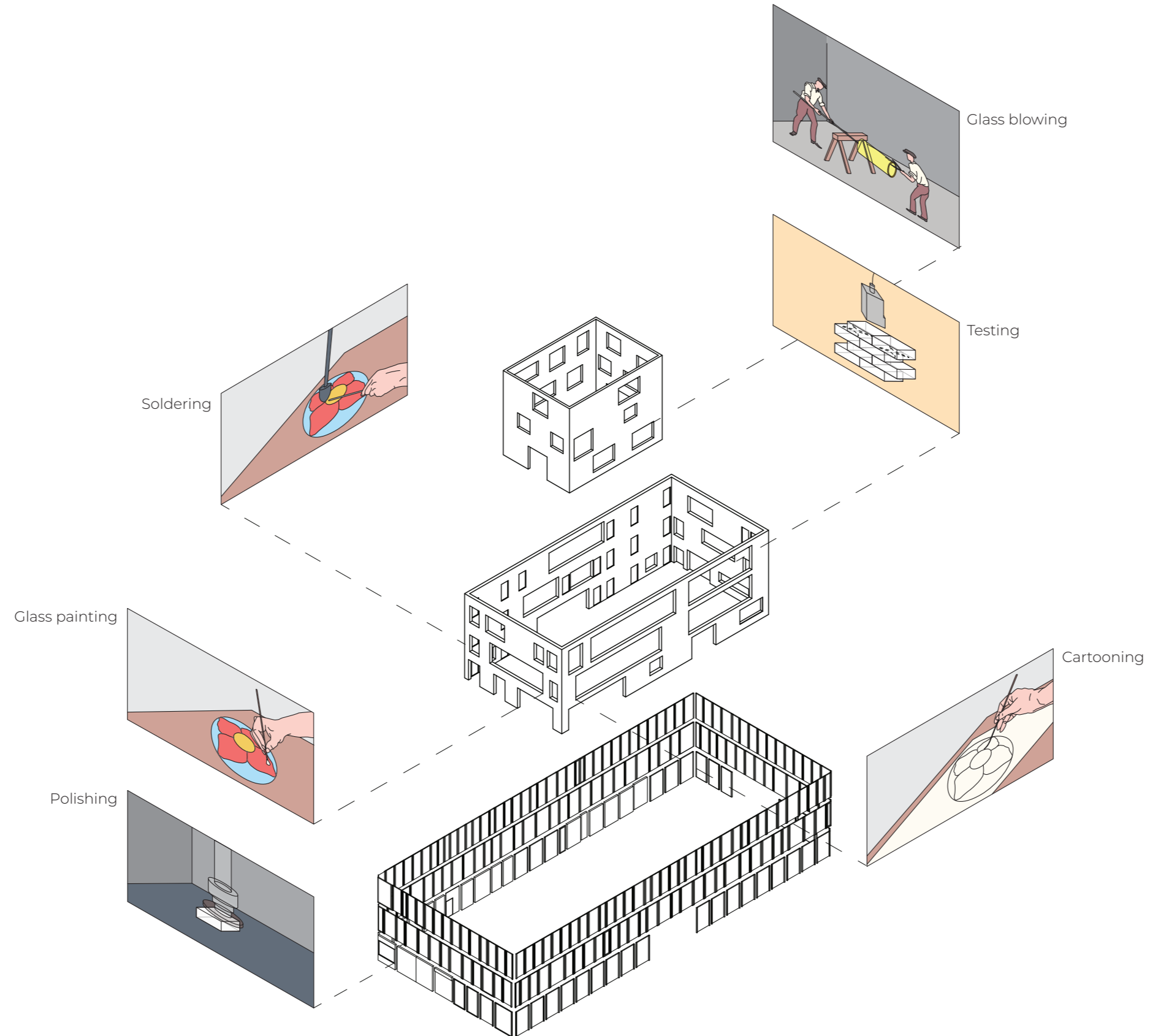
Hot shop layer

Glass as a window



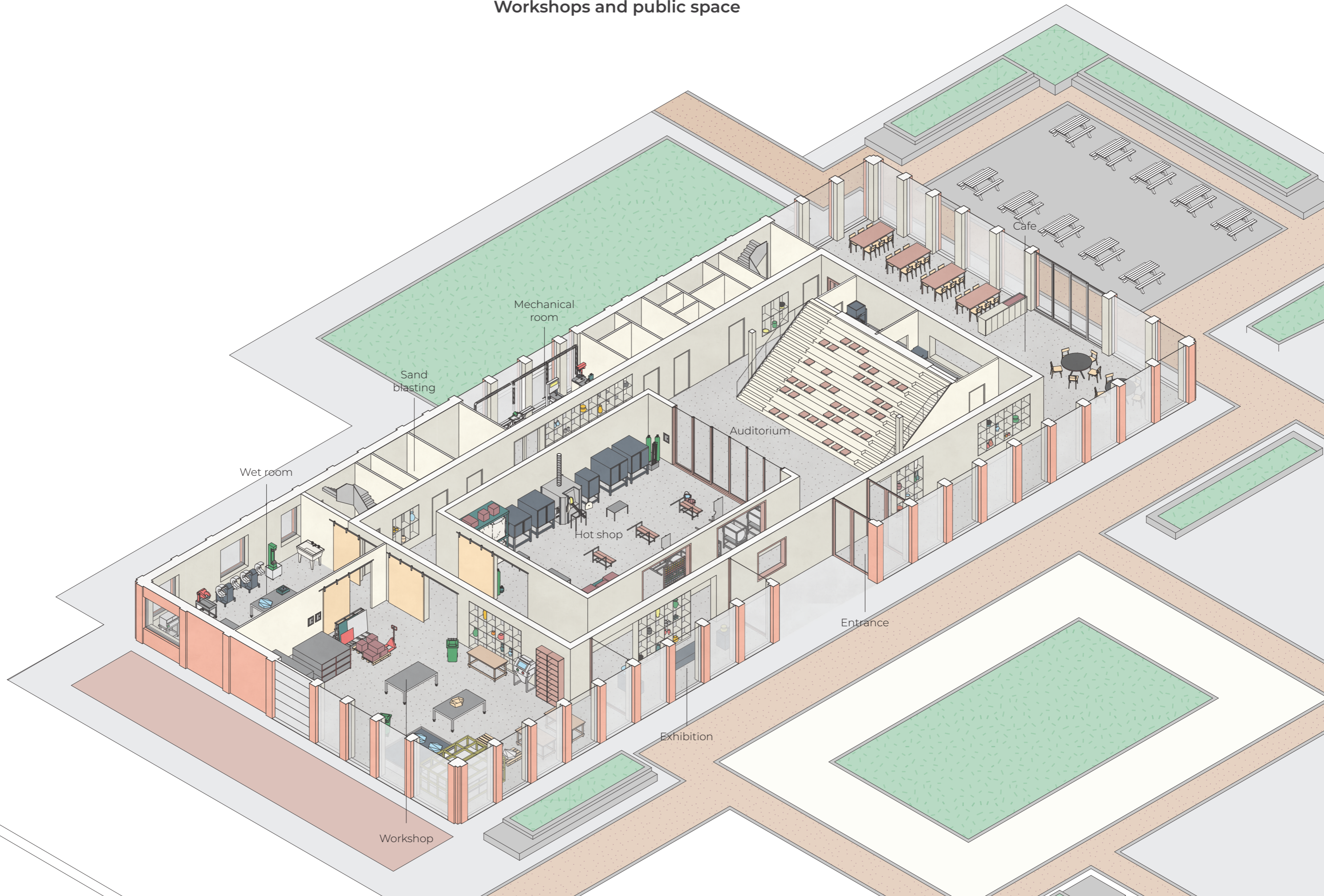
Openings

The openings create moments of interaction, behind the windows you can see a different craft



Ground Floor

Workshops and public space

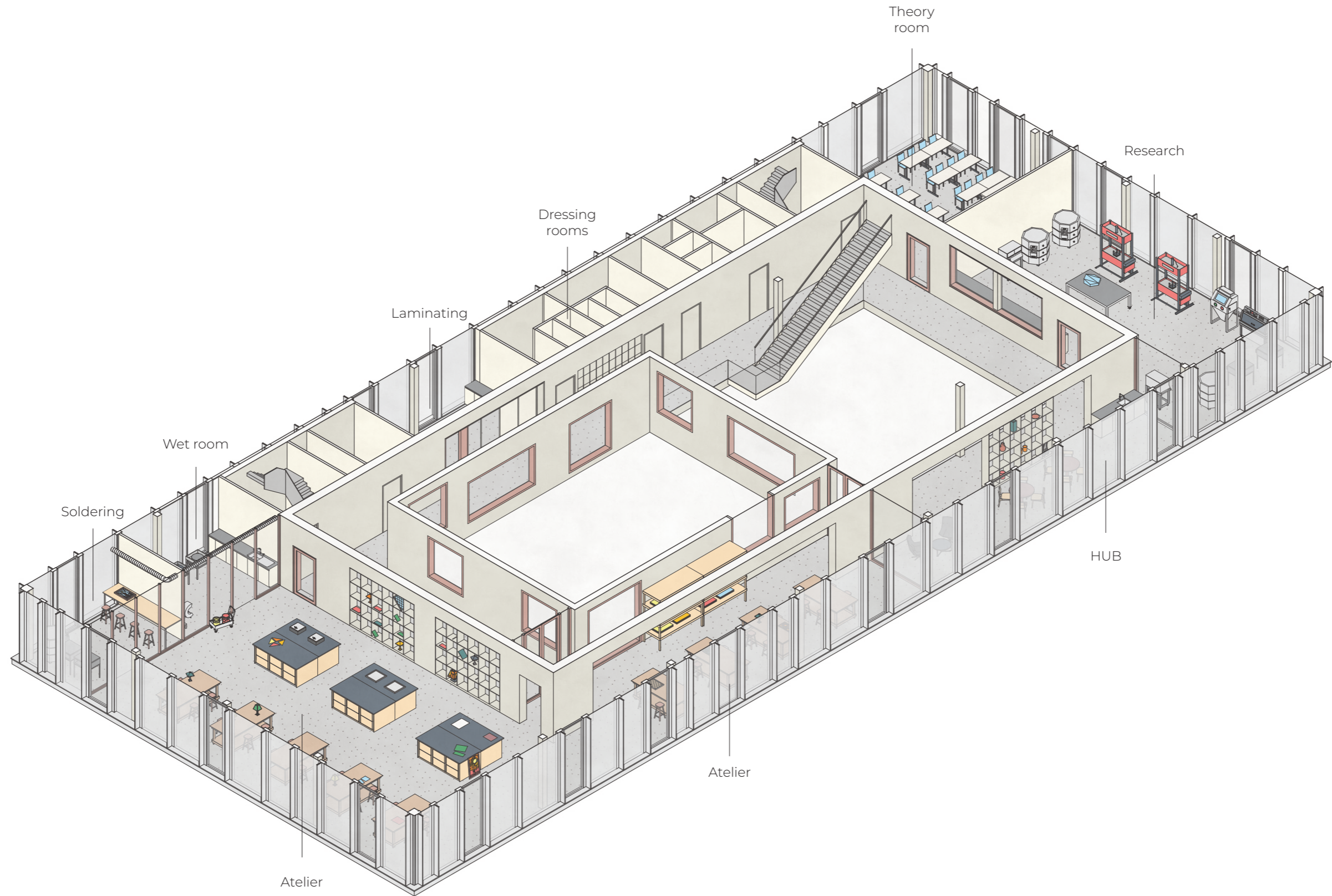






First Floor

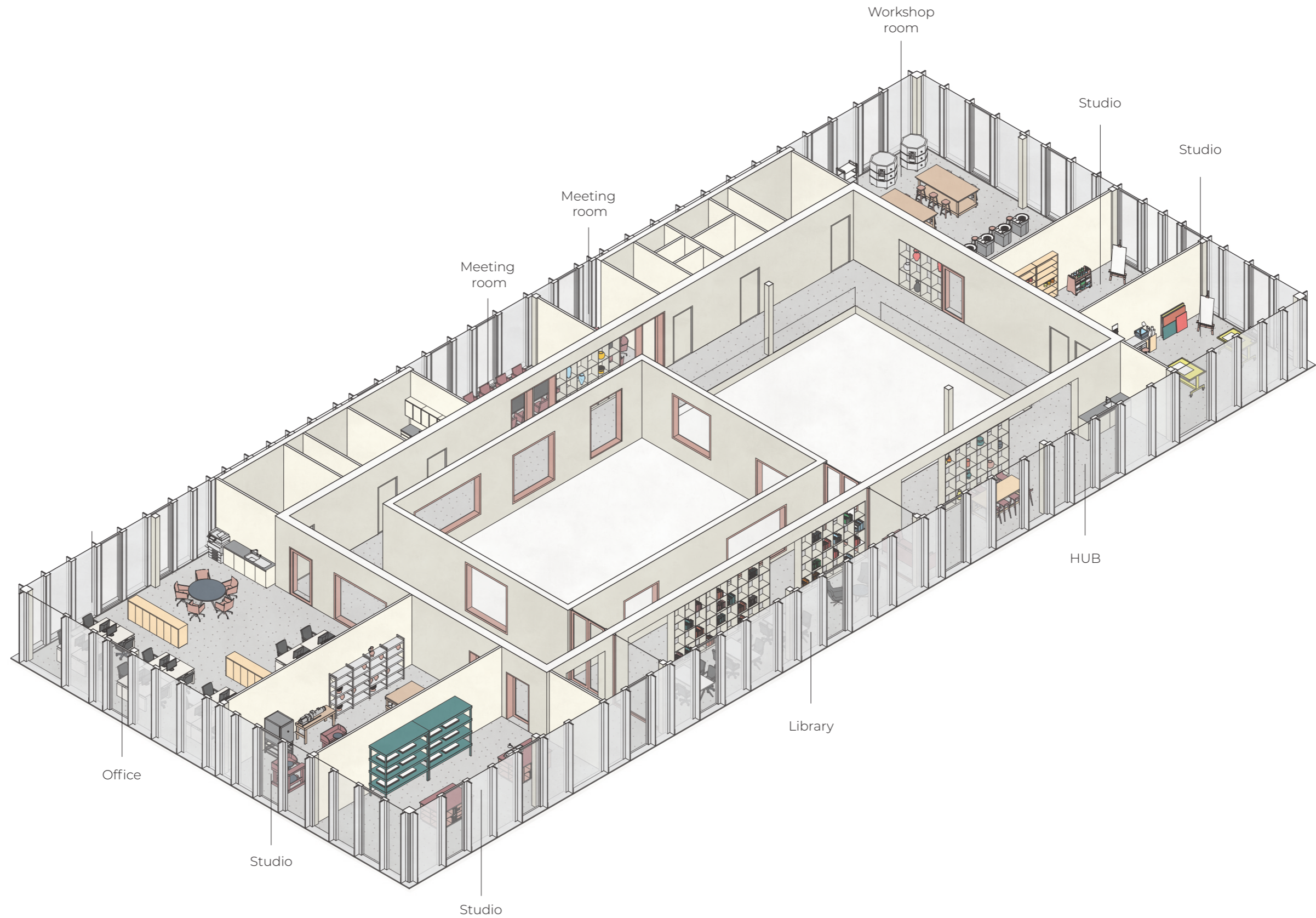
School and research





Second Floor

Office and ateliers



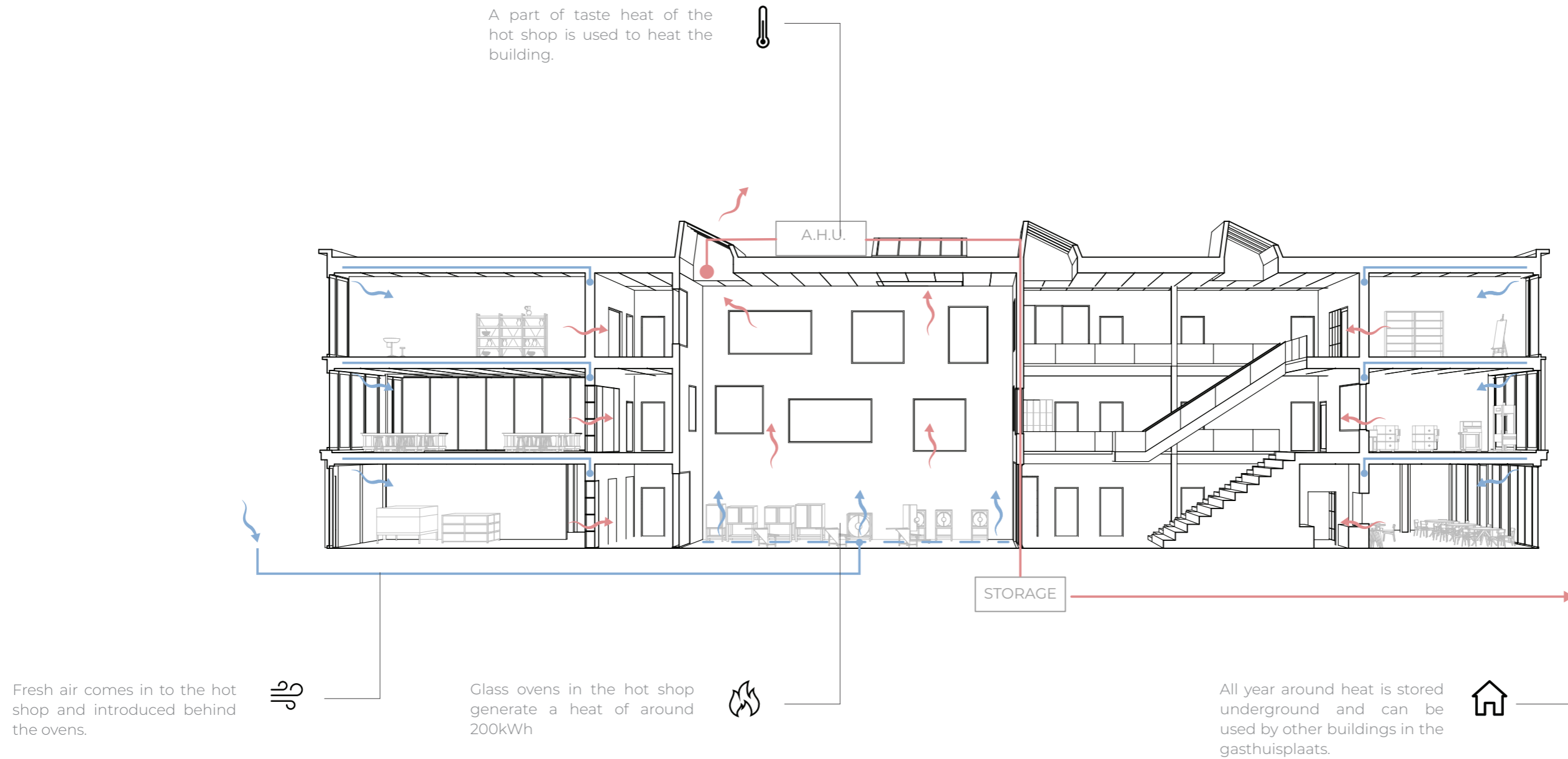
Section

Daylight and sight



Heat Load

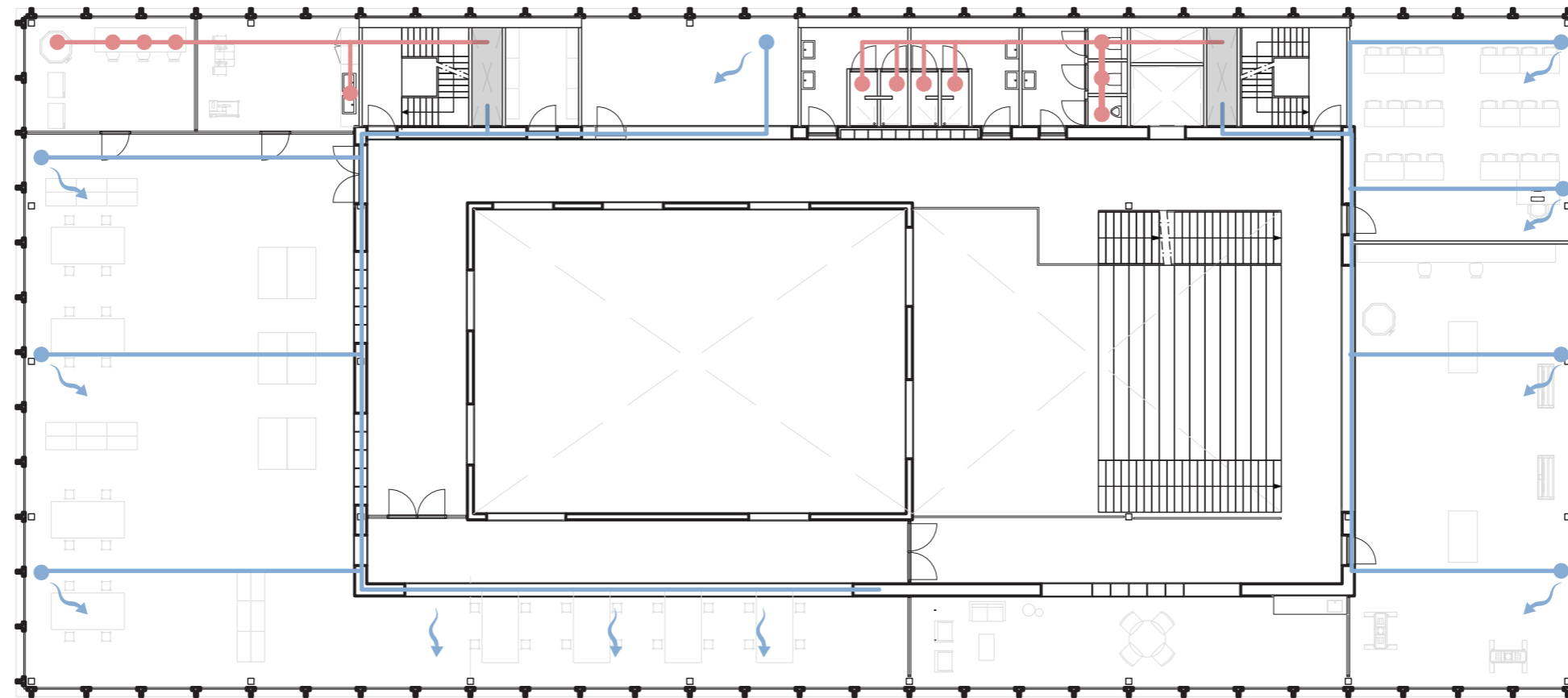
The use of the excess heat generated by the ovens



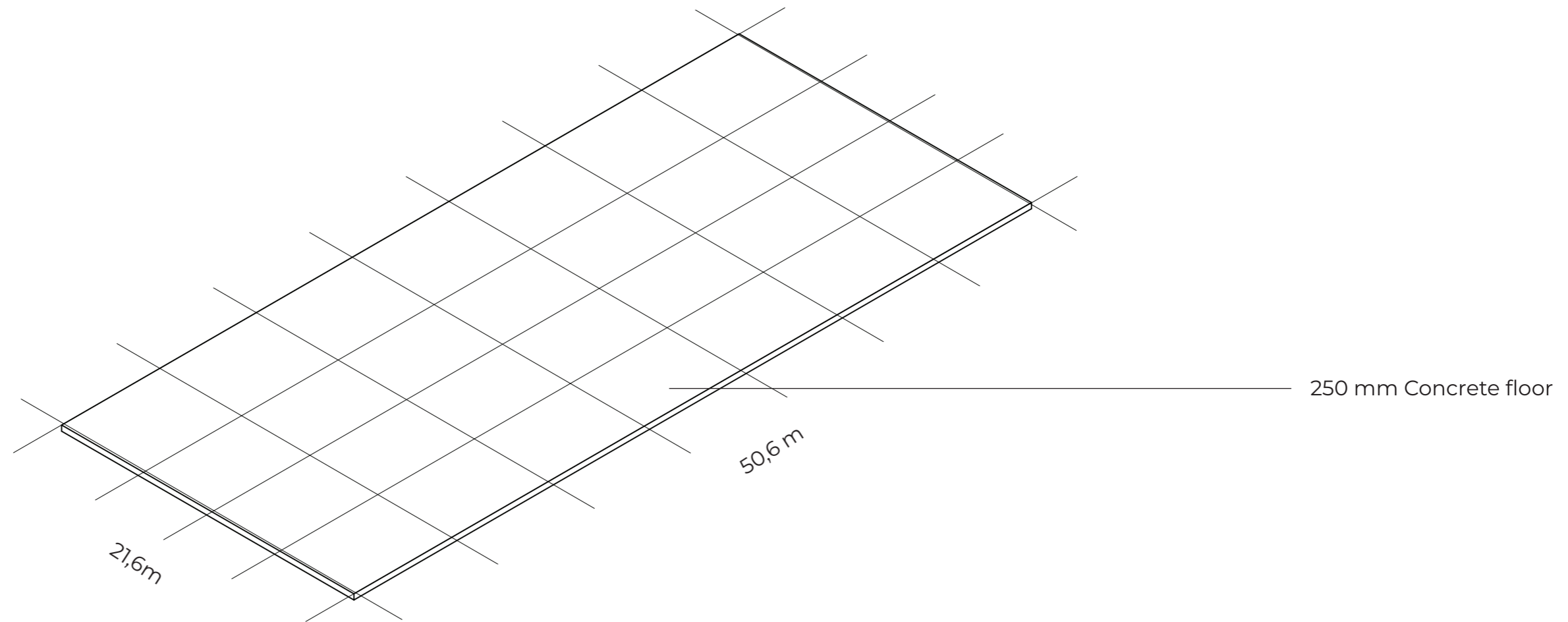
Climate concept



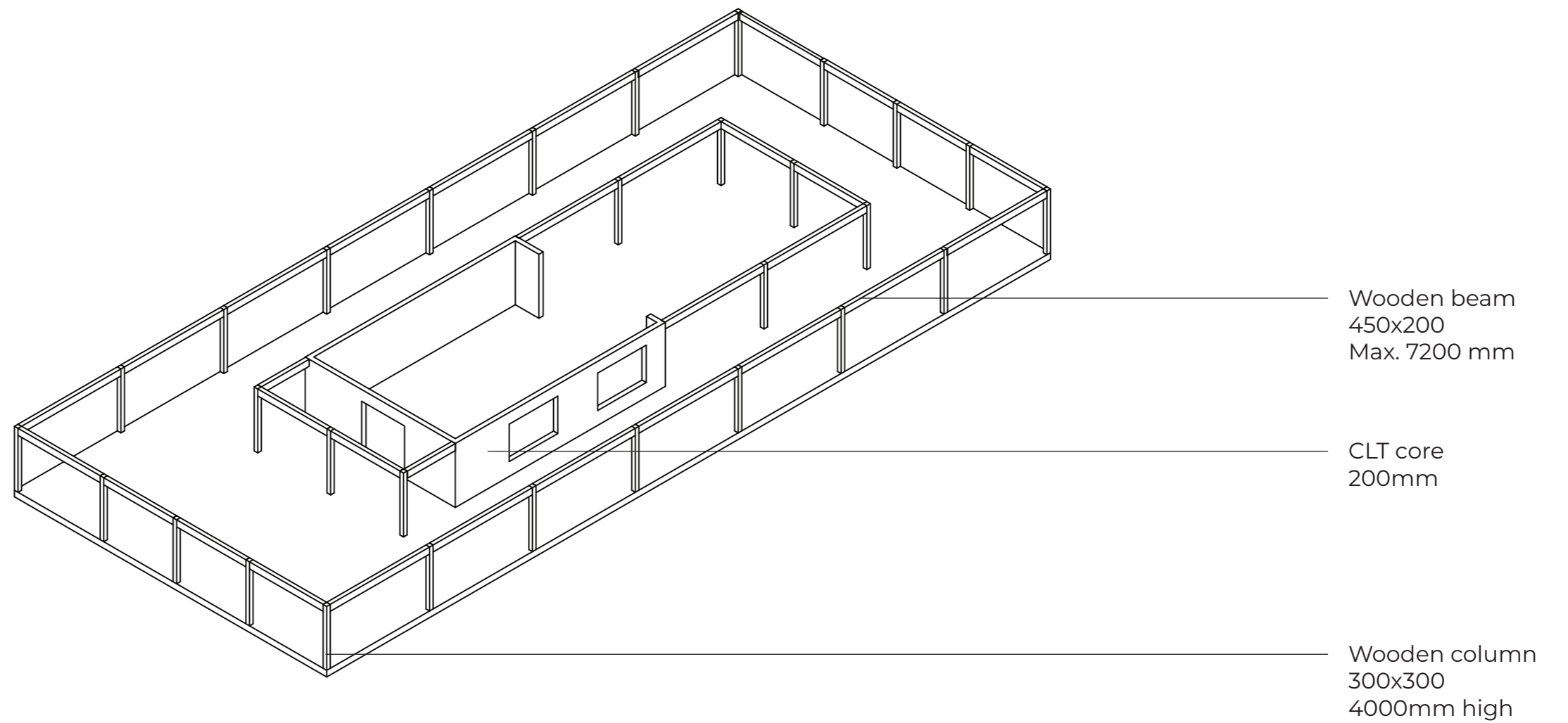
Ventilation



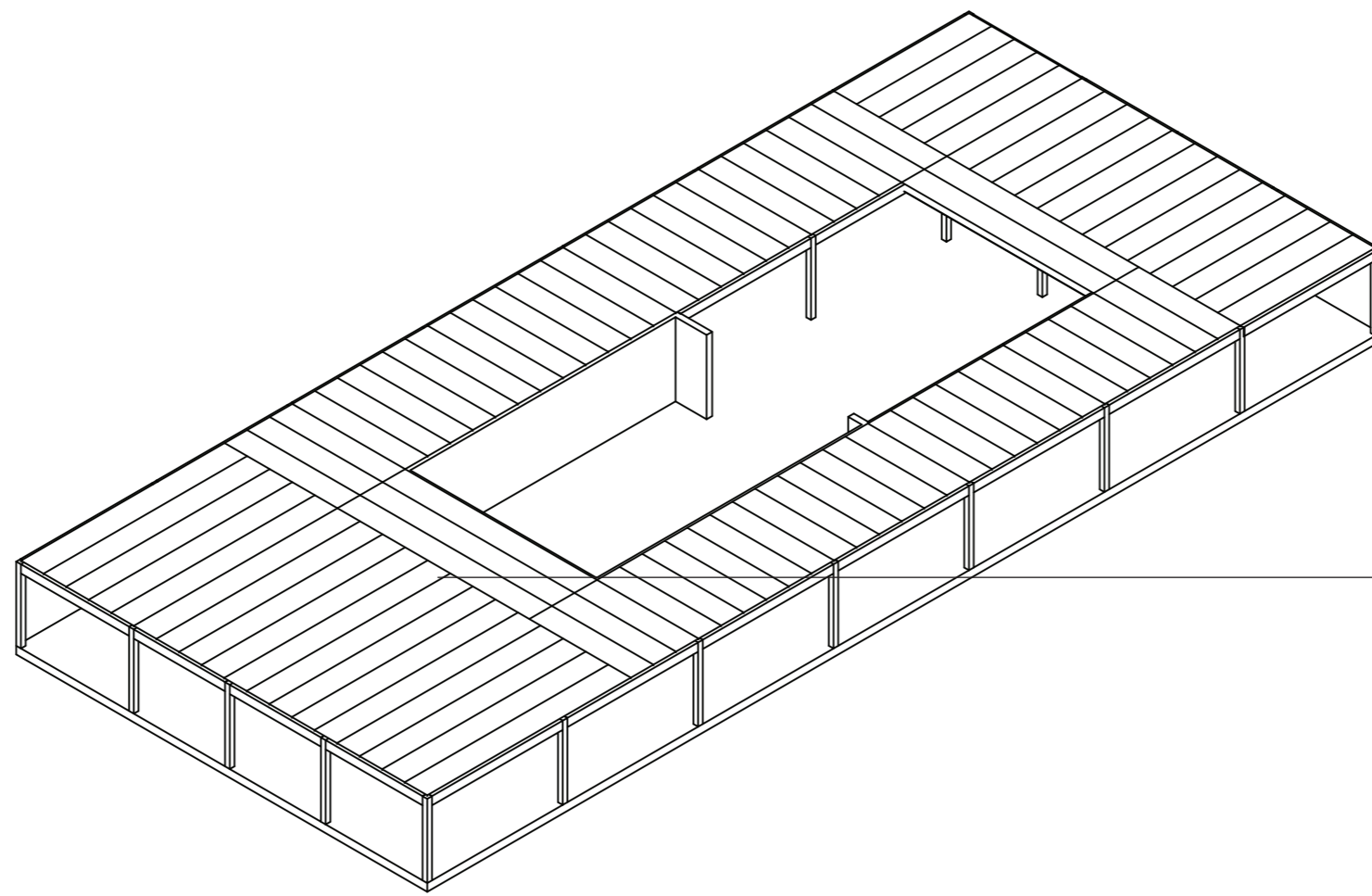
Construction | Ground Floor



Construction | Ground Floor



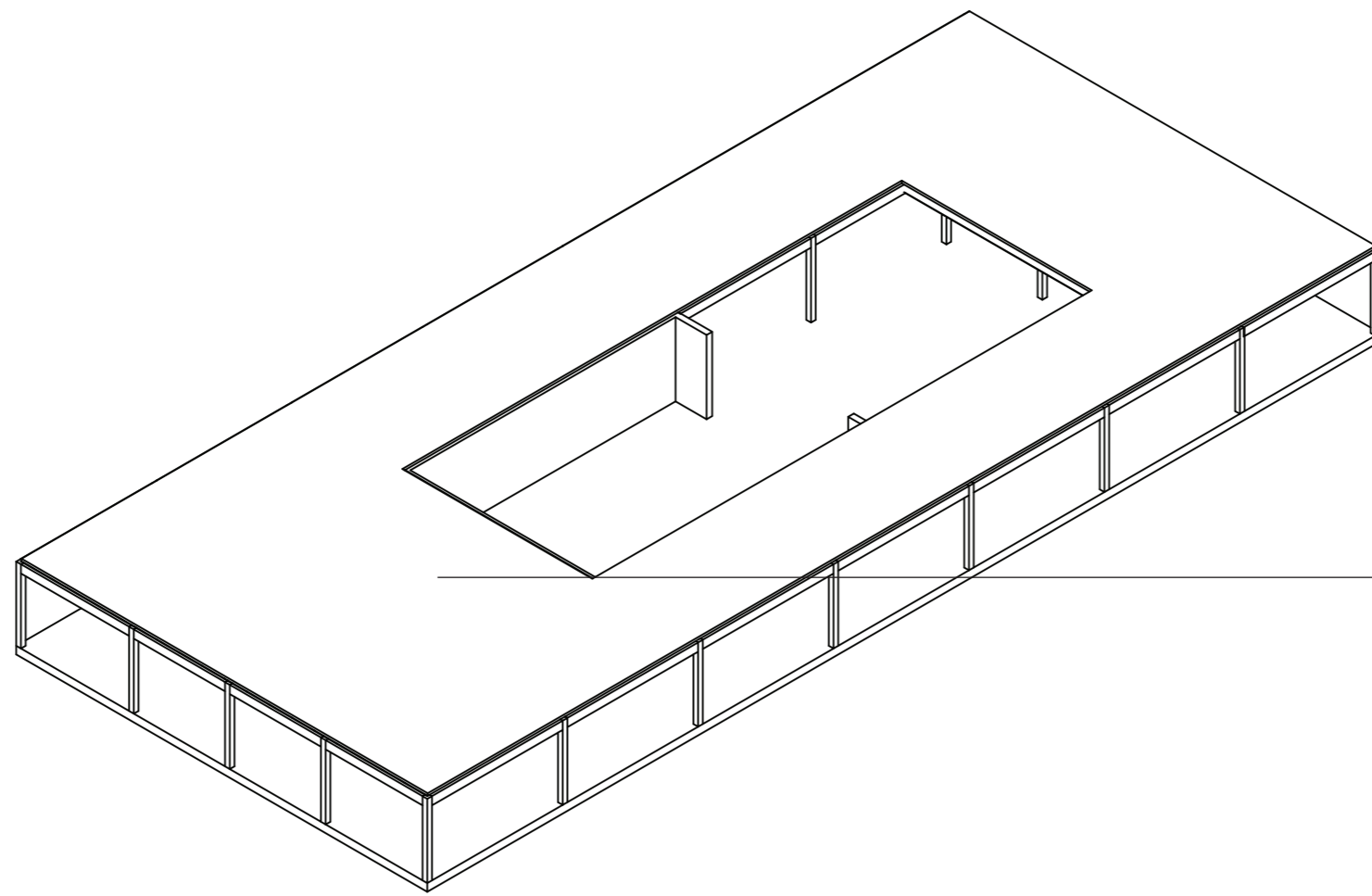
Construction | Ground Floor



Lignatur element
360 mm
Max. 10800 mm

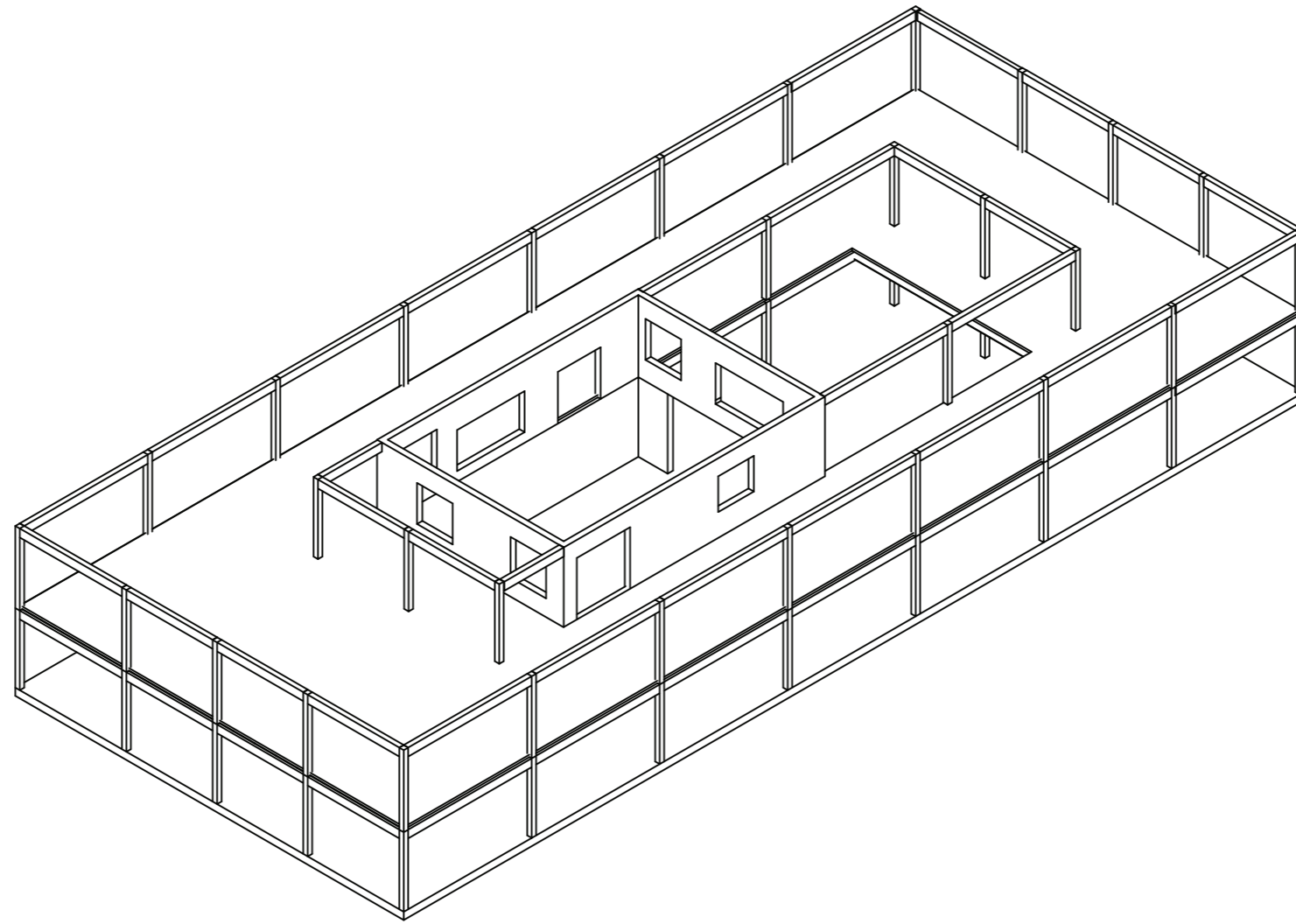
+ Shear connection

Construction | First Floor

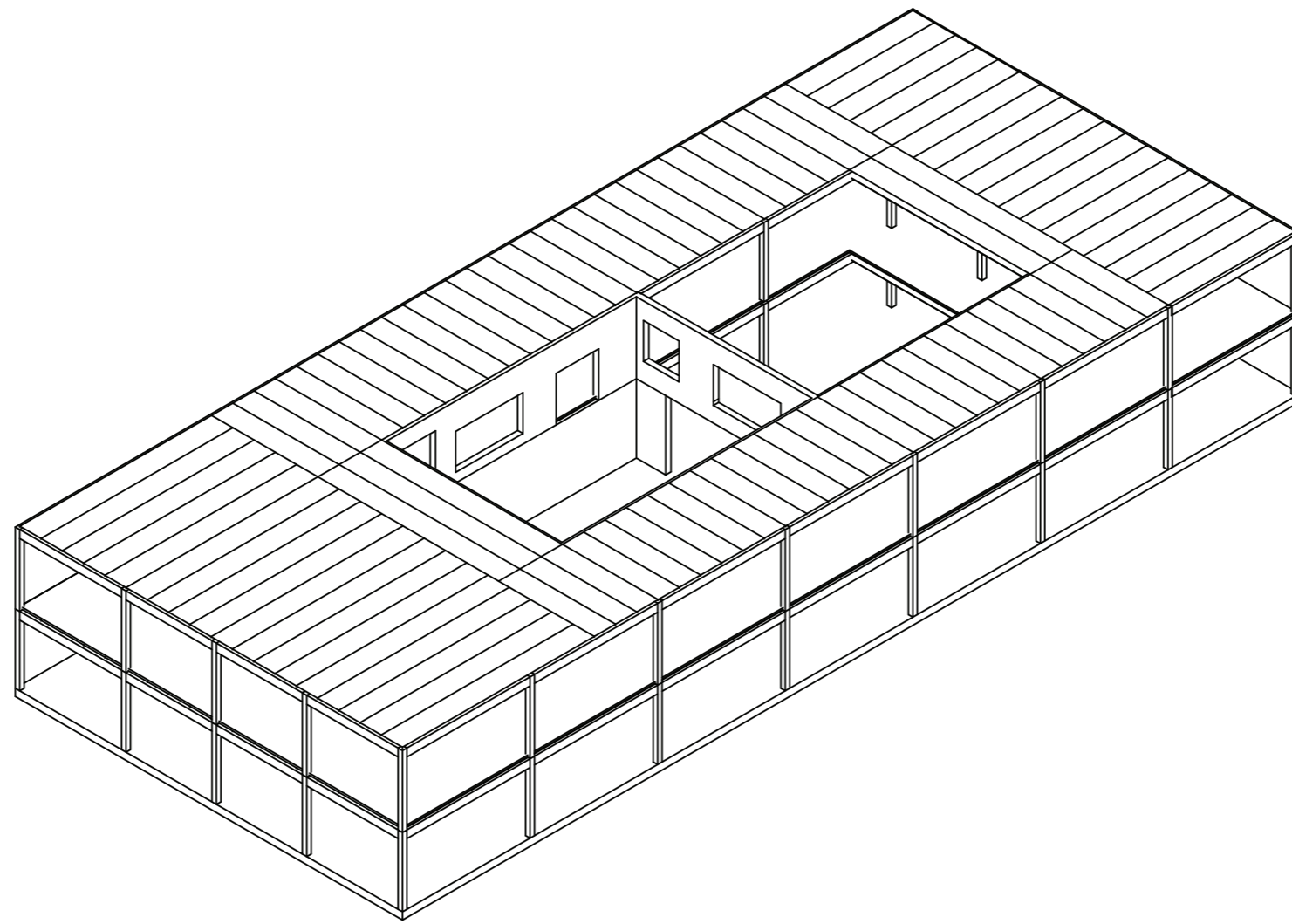


Concrete screed
+ soundproofing
120mm

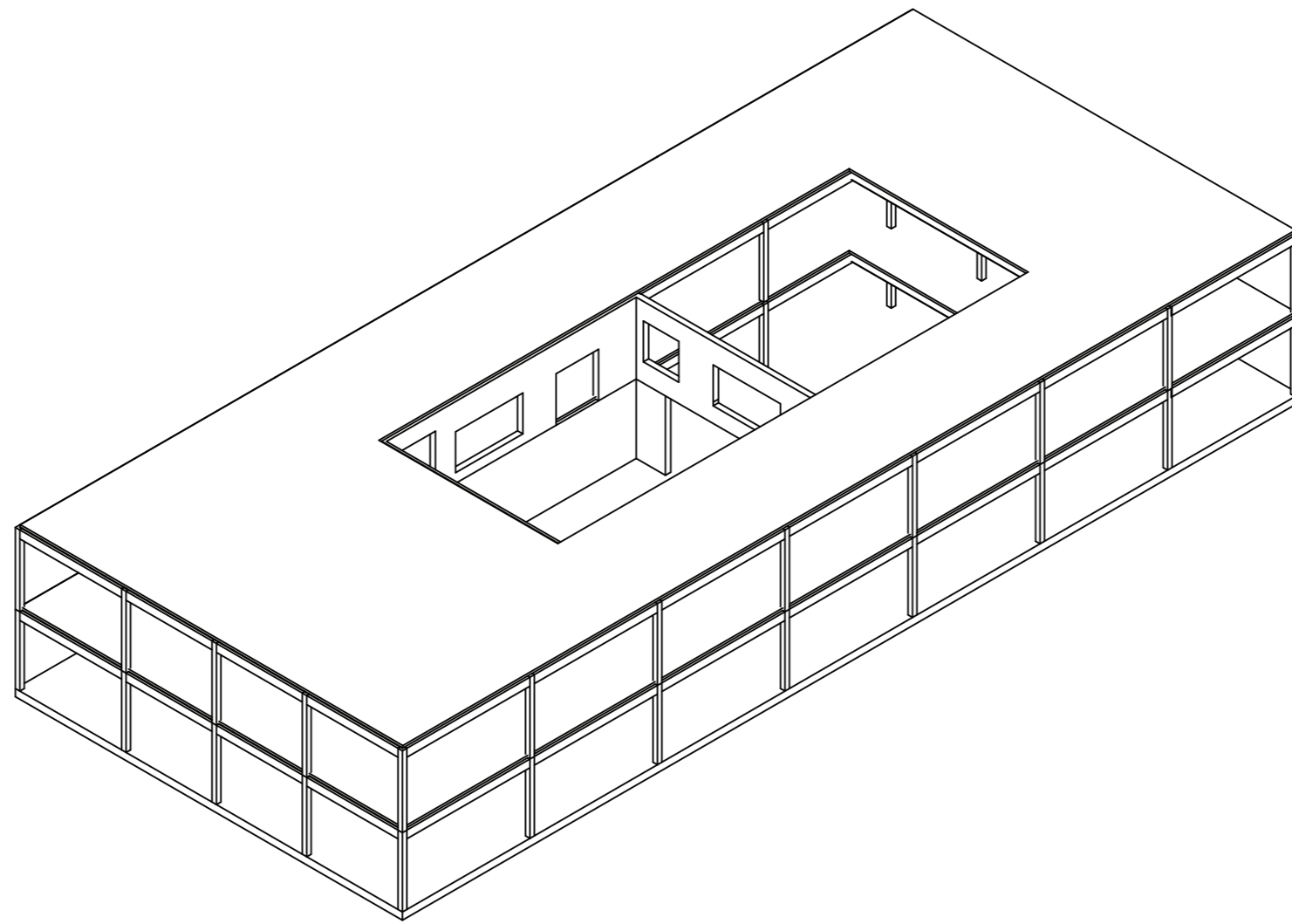
Construction | First Floor



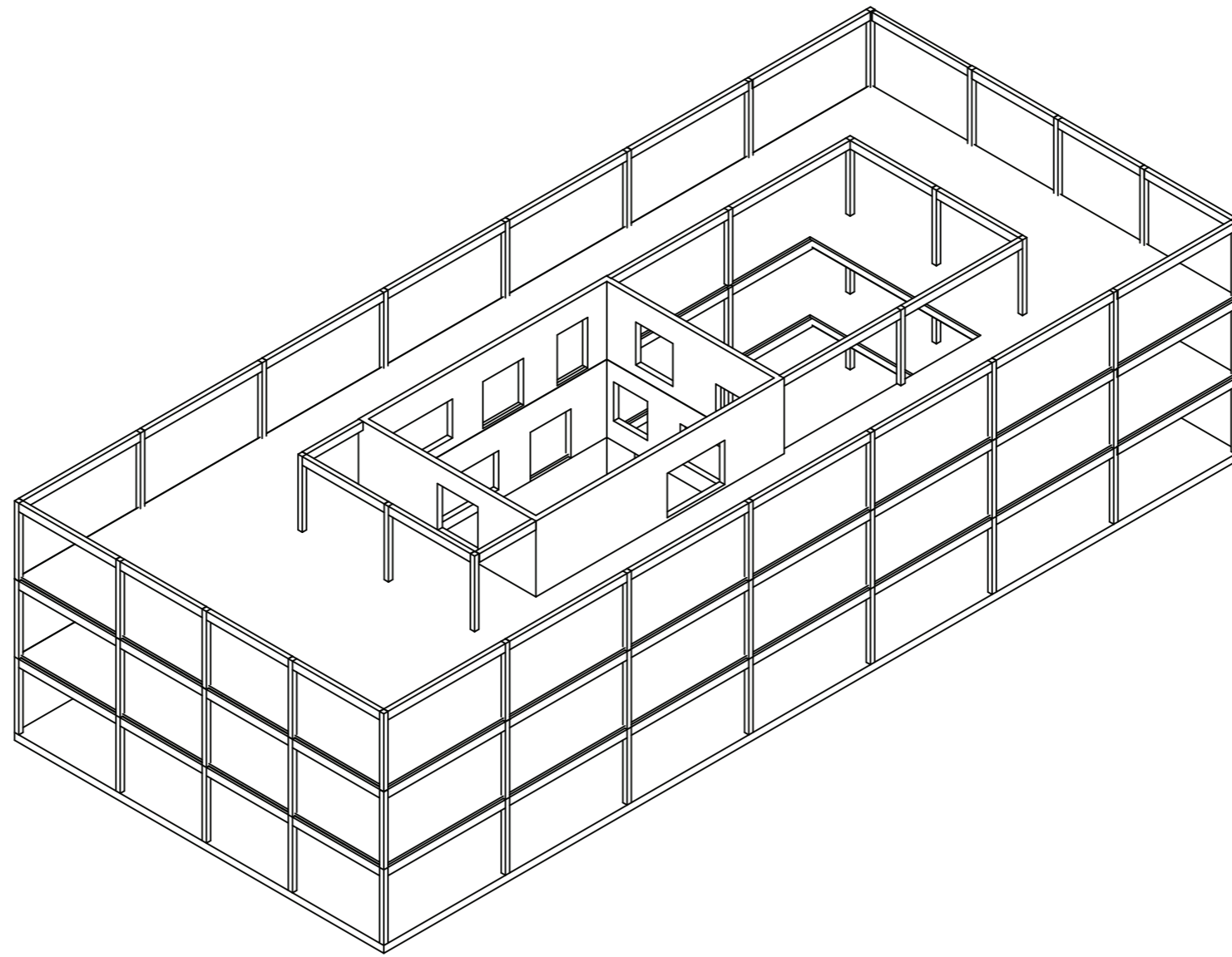
Construction | First Floor



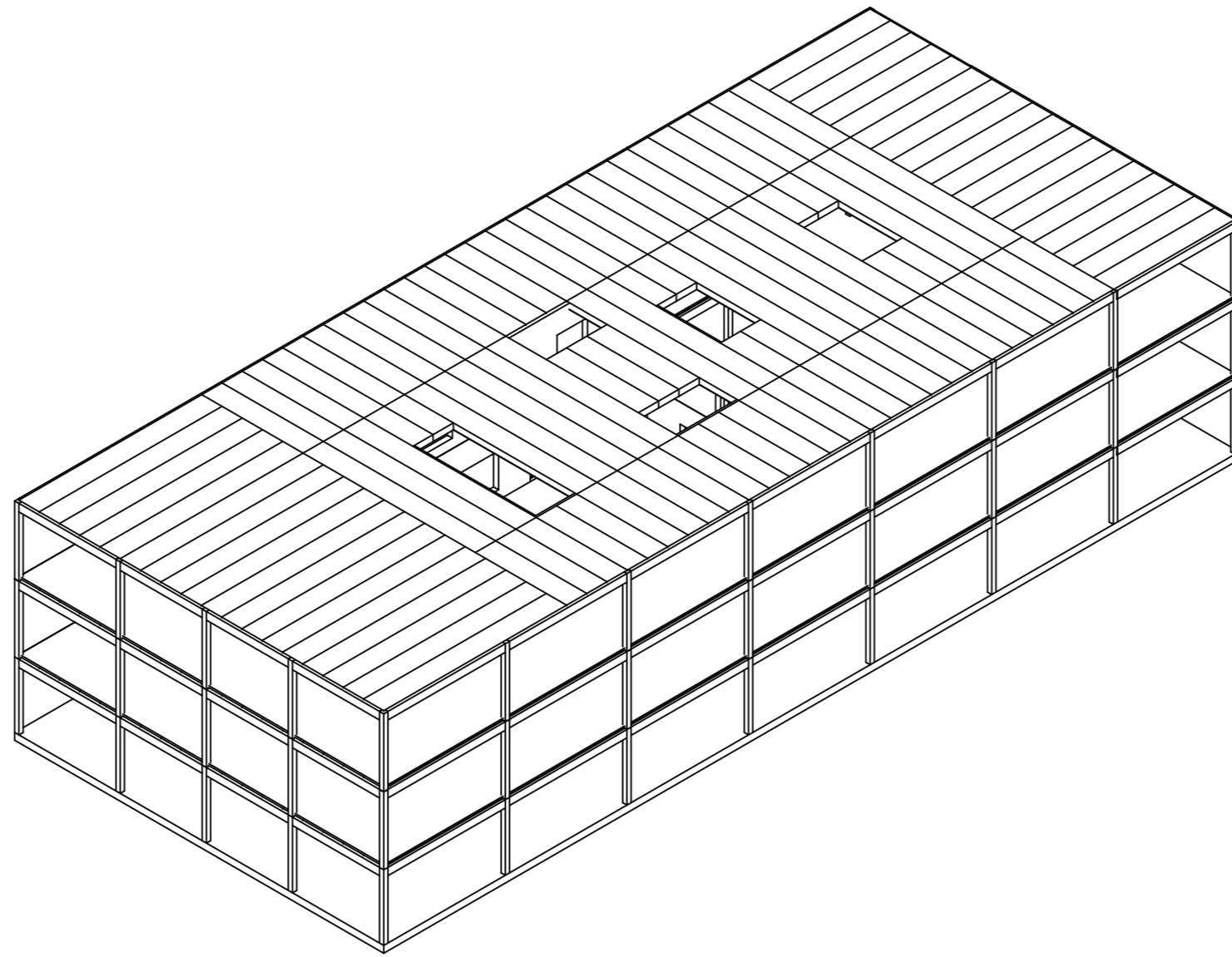
Construction | Second Floor



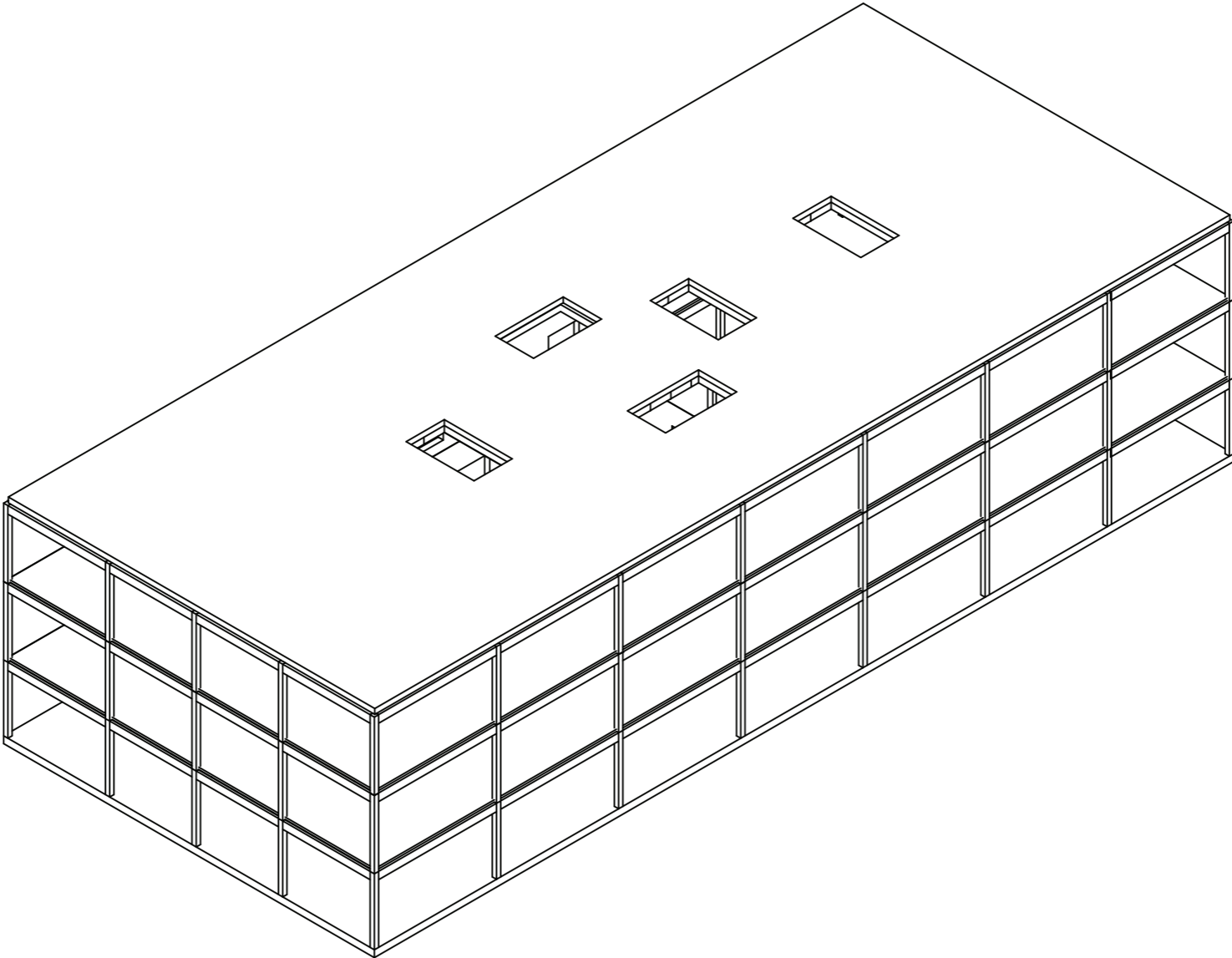
Construction | Second Floor



Construction | Second Floor



Construction | Roof



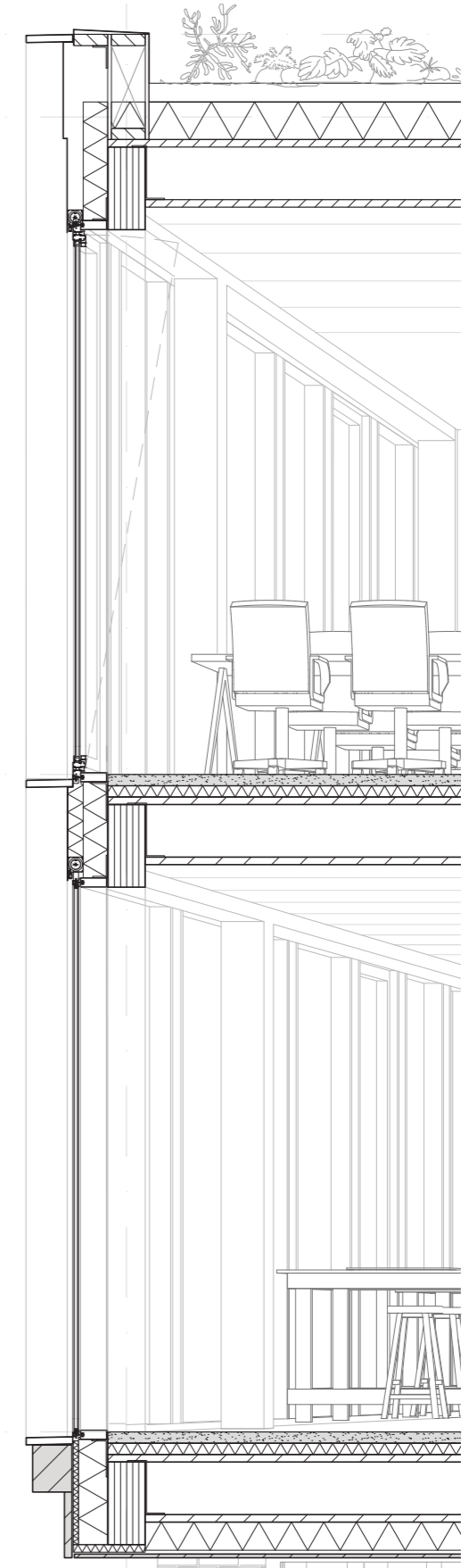
Section



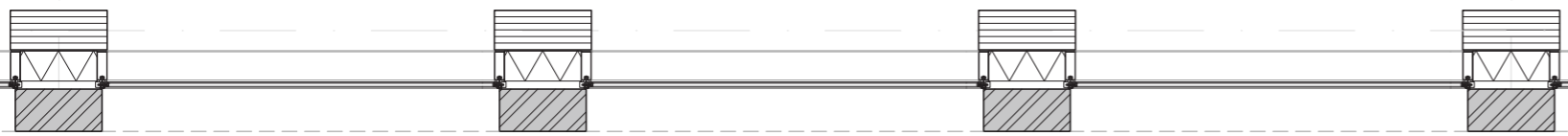
Fragment



Roof:
 360 mm Lignatur flooring
 200 mm Rockwool insulation
 100 mm soil
 Sedum roof

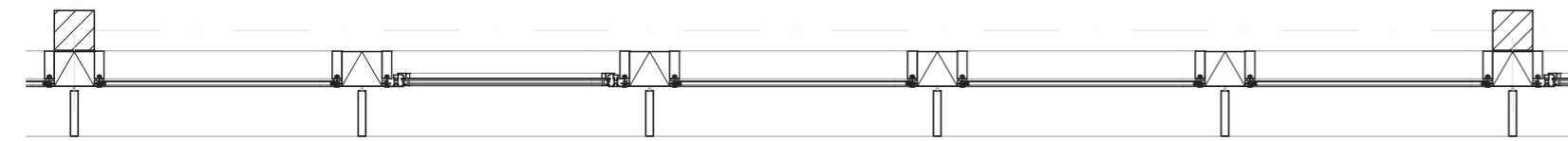


Facade 1F and 2F:
 200 mm Laminated construction
 180 mm Rockwool insulation
 Steel window frame
 Patterned/ translucent glass
 Anodized aluminium panels

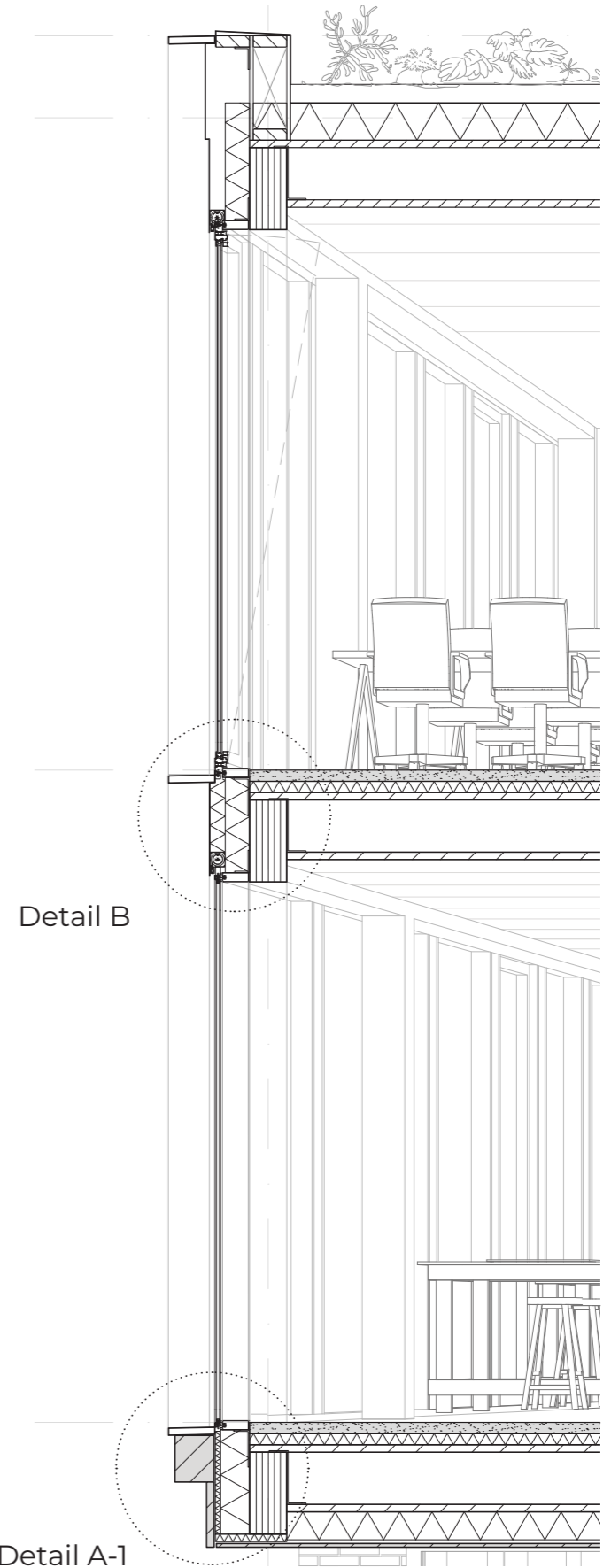


Facade GF:
 200 mm Laminated construction
 180 mm Rockwool insulation
 Steel window frame
 Patterned/ translucent glass
 210 mm brick pier

Fragment



Detail A-2

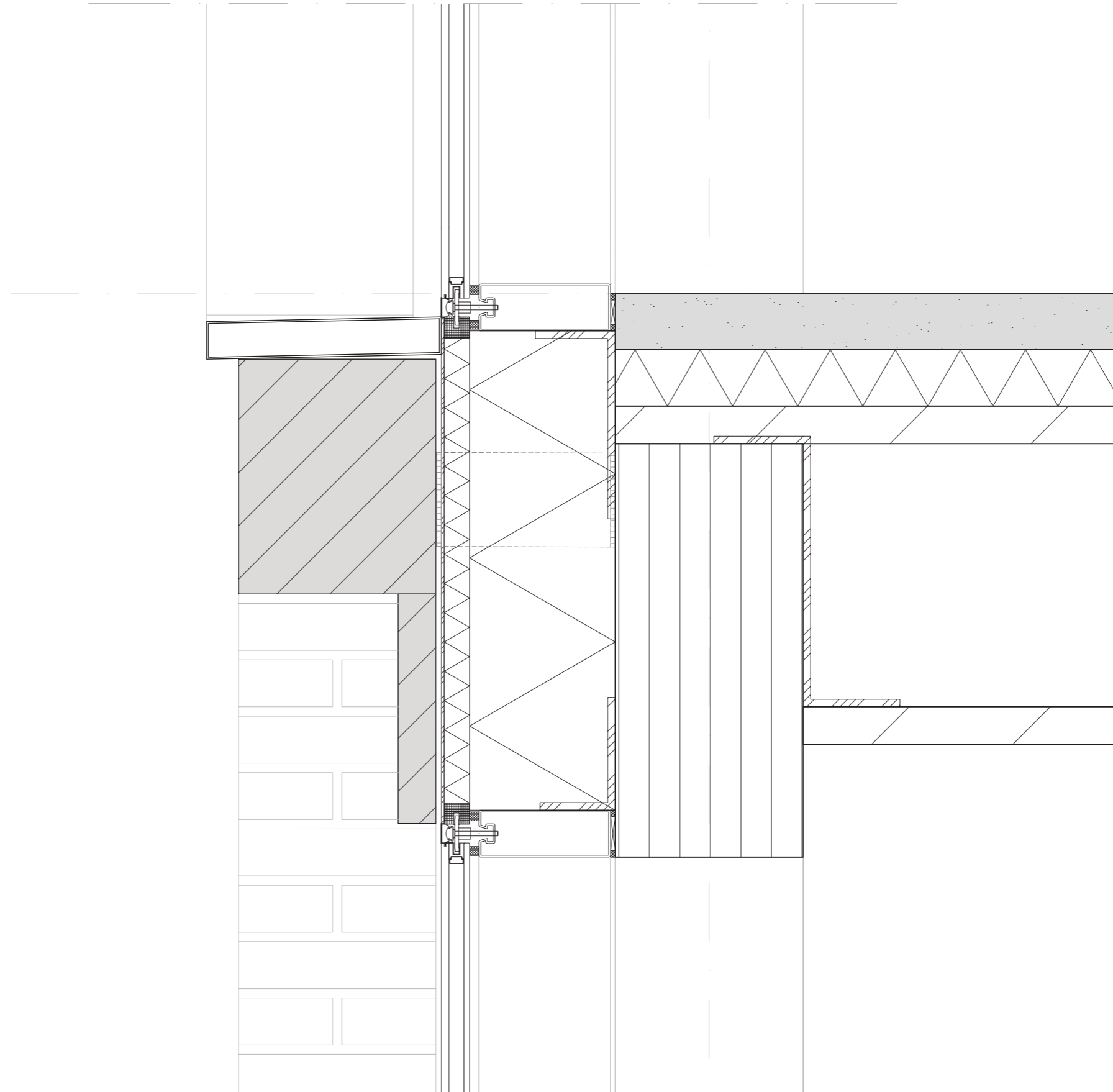


Detail B

Detail A-1

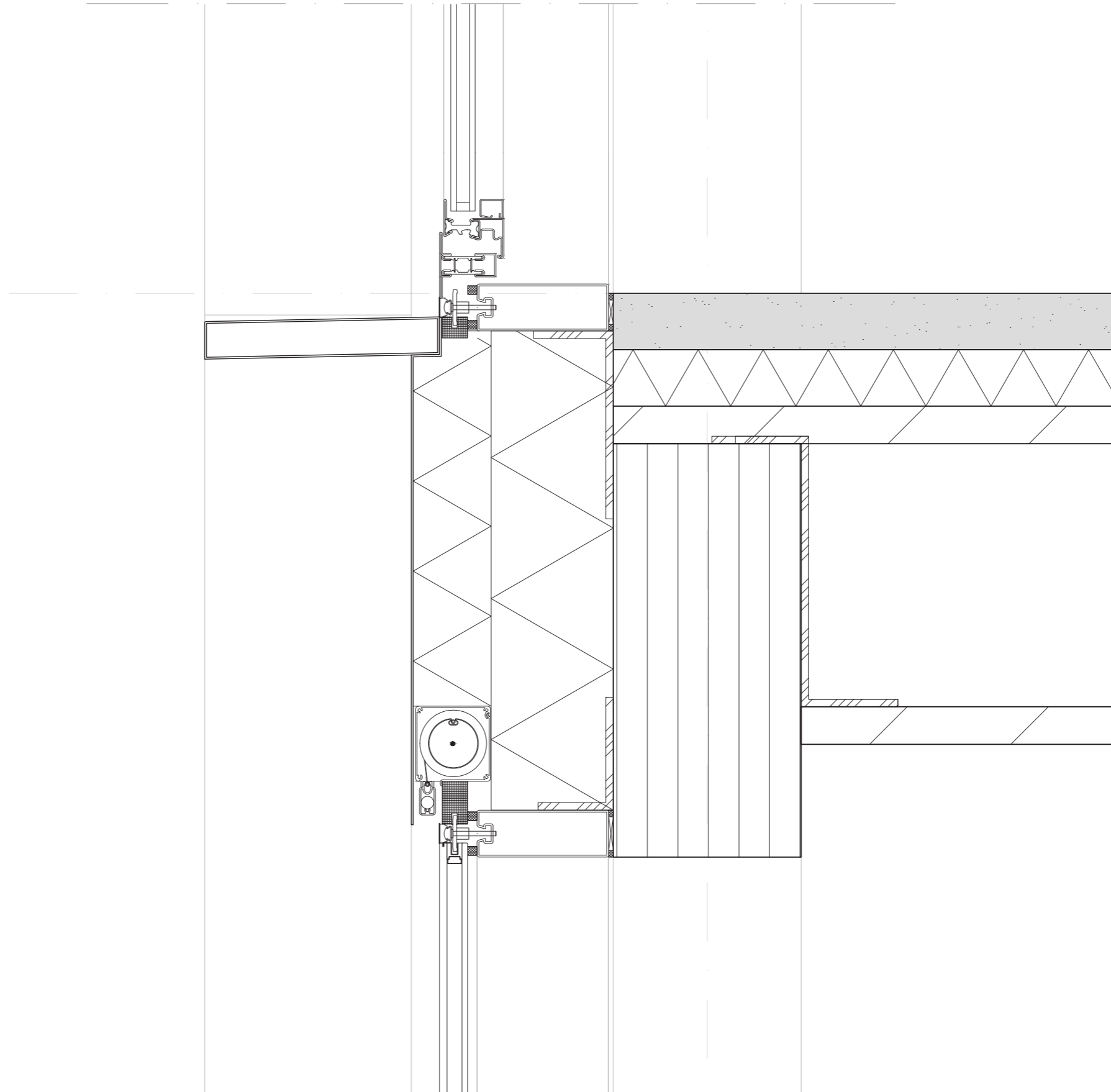
Detail A -1

First floor detail



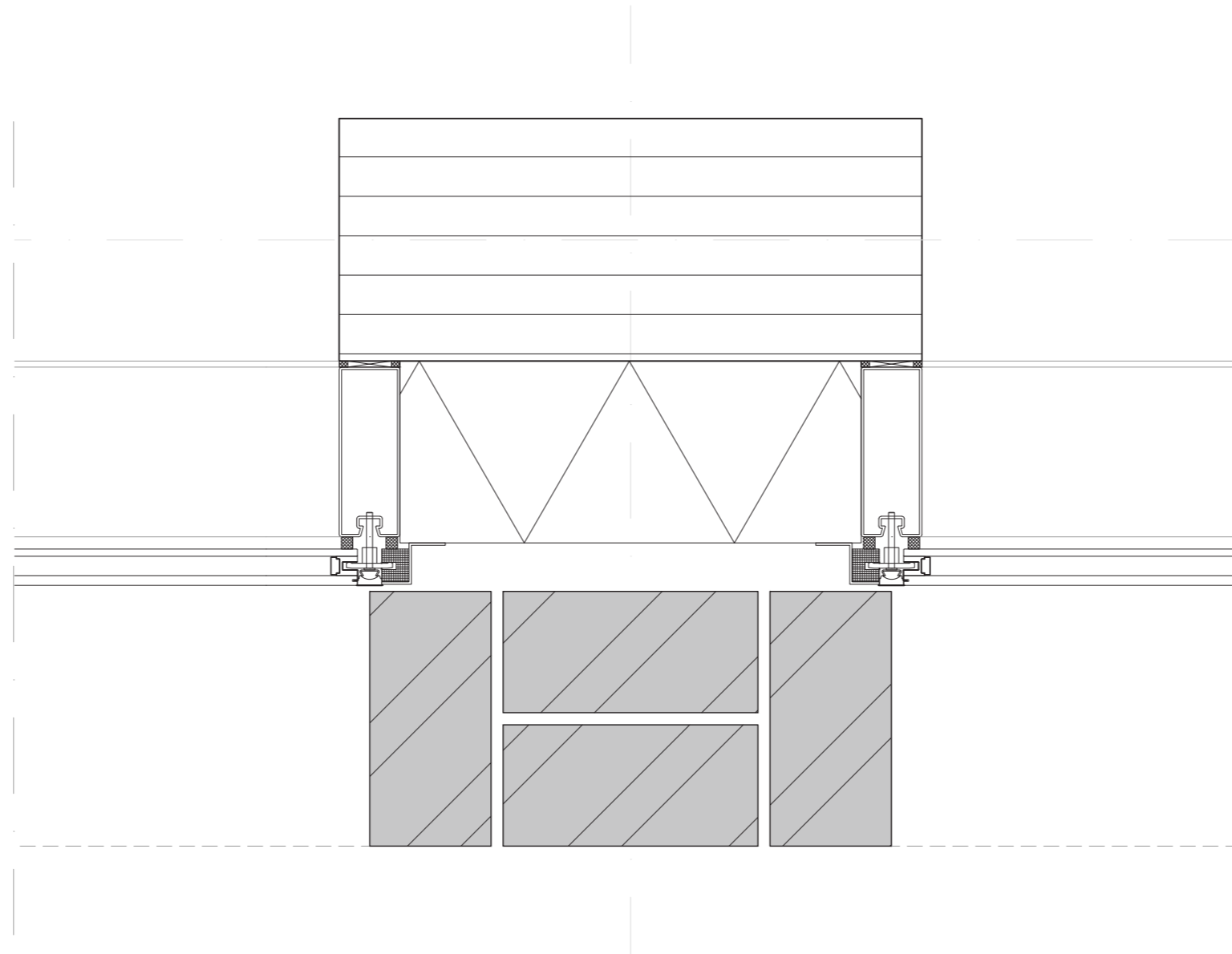
Detail B

Second floor detail



Detail A-2

Horizontal Ground floor detail



Conclusion



Thank you