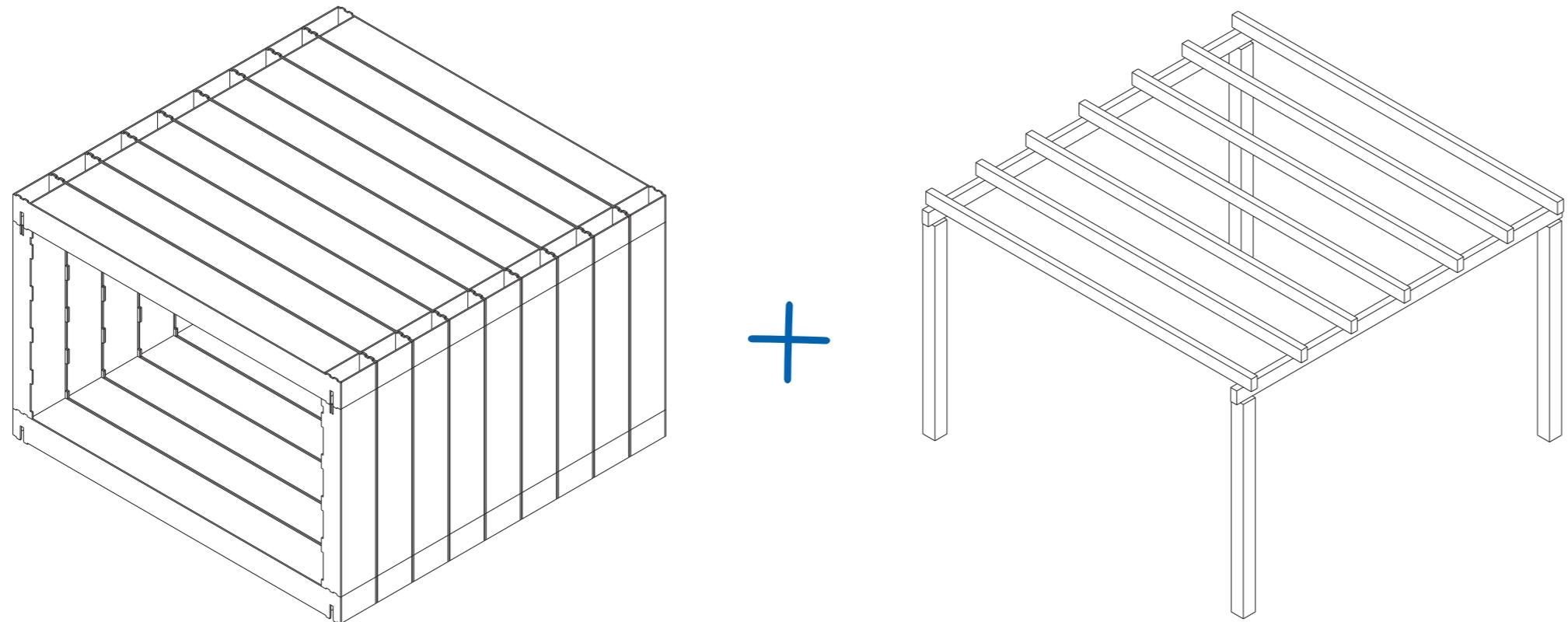
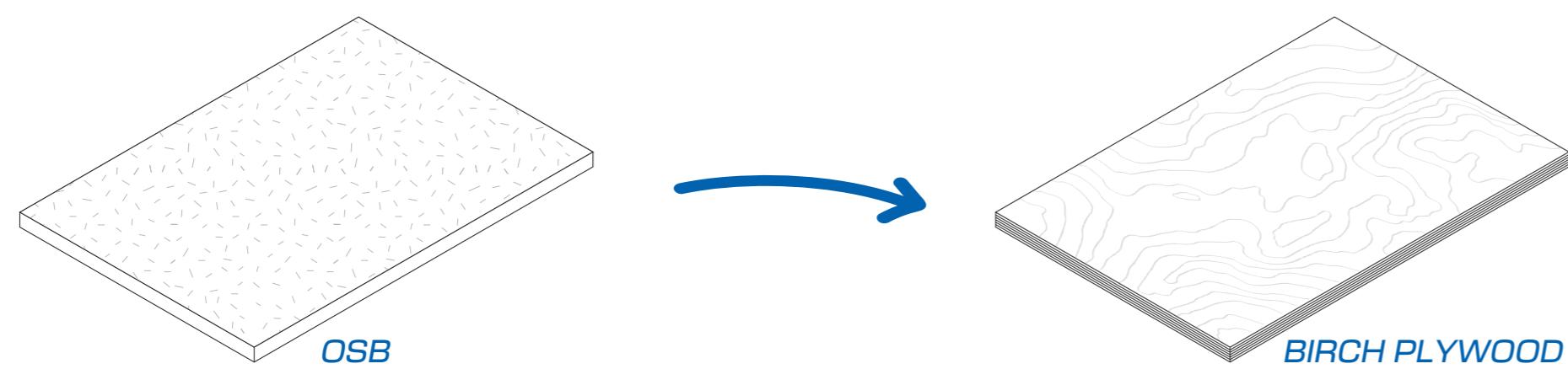


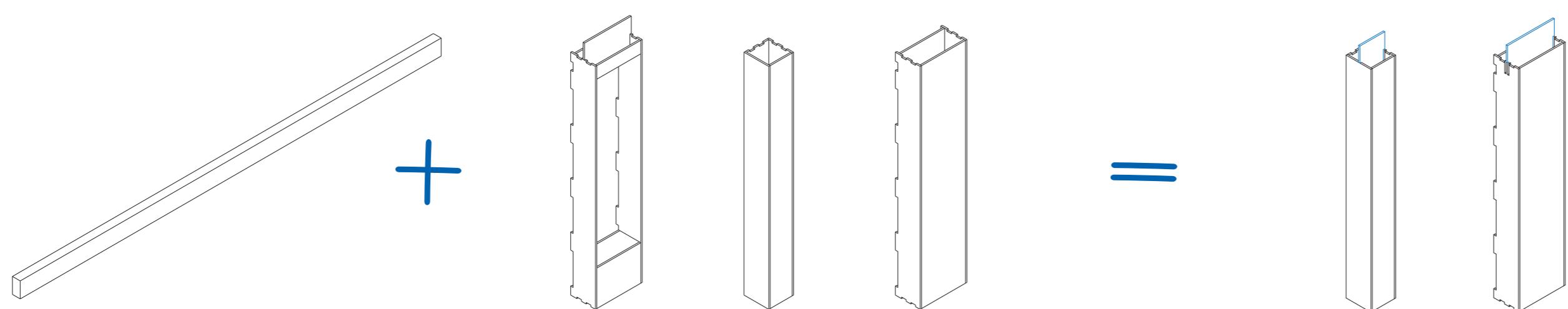
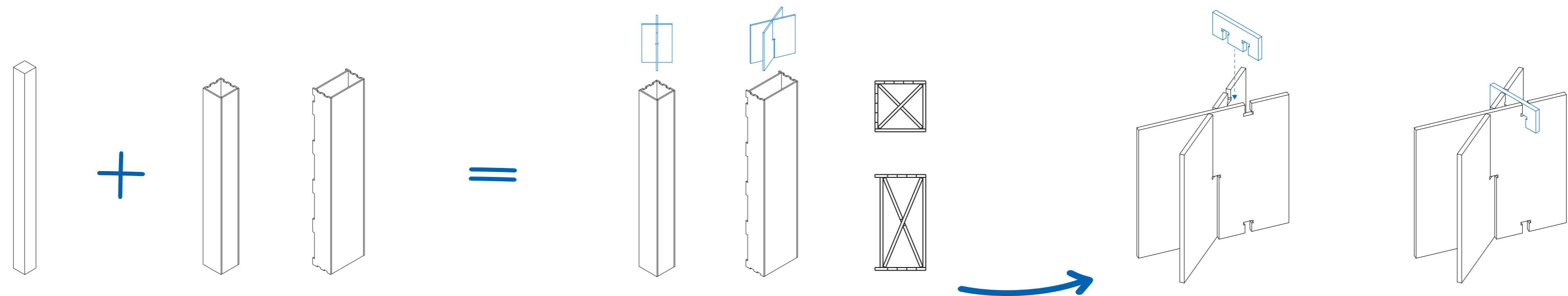
SYSTEM DEVELOPMENT



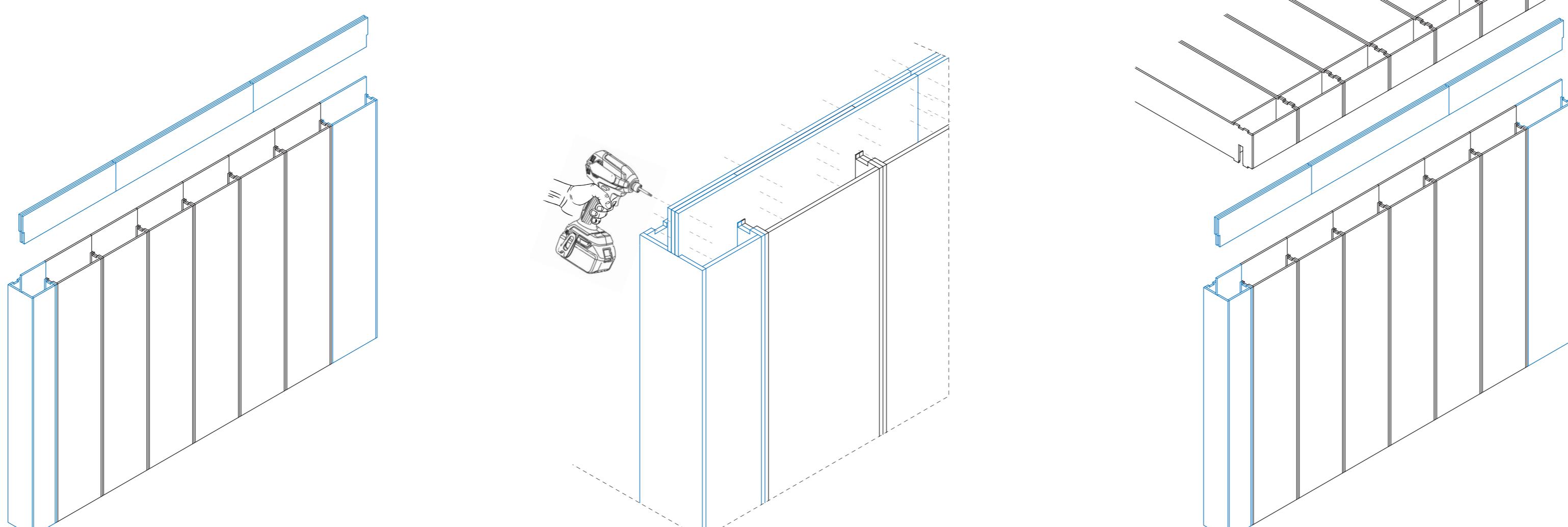
The first step is to switch from OSB, which is strong but easily damaged to birch plywood, which is stronger and can be used without the need to cover it up.



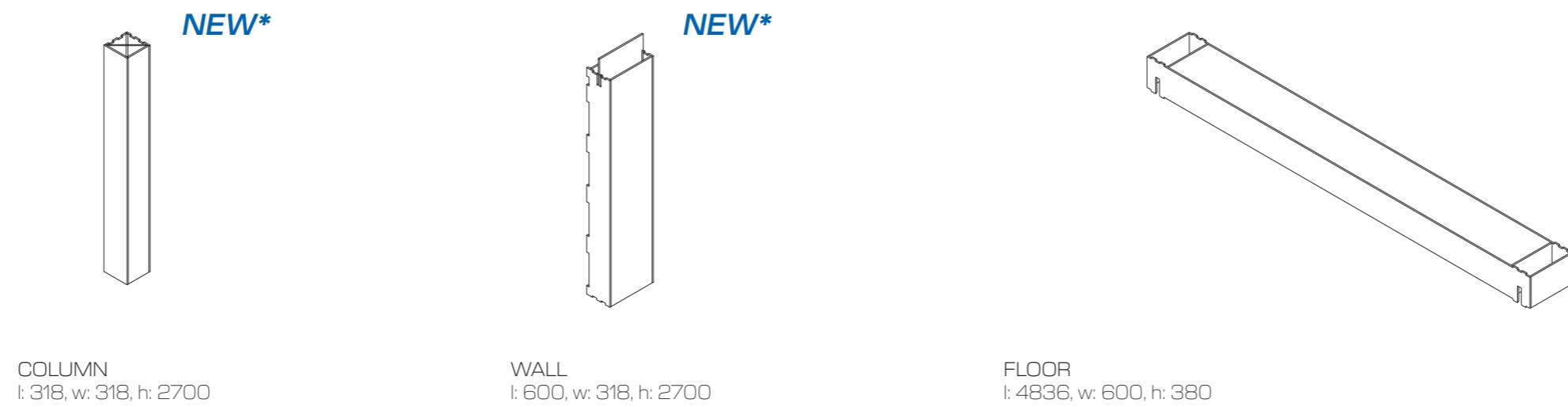
The second step was comparing the system to traditional ways of timber construction and trying to incorporate the elements that makes the one on the right strong into the one on the left. Wall and corner elements have been beefed up with cross members to resemble a solid wooden column. This way these elements are more rigid and can carry a heavier load. The cross members are made from the same plywood and are milled on the cnc. Two pieces slot together and a third one locks them in place. This way they remain their shape would the outside of an element be damaged by fire for example.



The final step has been the introduction of a beam within the system. Derived from the original design of the window elements; all new wall elements will have a lintel. These lintels get sandwiched between two longer pieces of plywood and create a beam between reinforced elements. Eventually the floor elements have a slot to accommodate the beam, which locks it into place.



CATALOG



COLUMN
l: 318, w: 318, h: 2700

WALL
l: 600, w: 318, h: 2700

FLOOR
l: 4836, w: 600, h: 380



INTERNAL WALL
l: 600, w: 150, h: 2700

Wikihouse is designed only as the outer shell of the house. Therefore internal walls still rely on traditional carpentry to be put up.

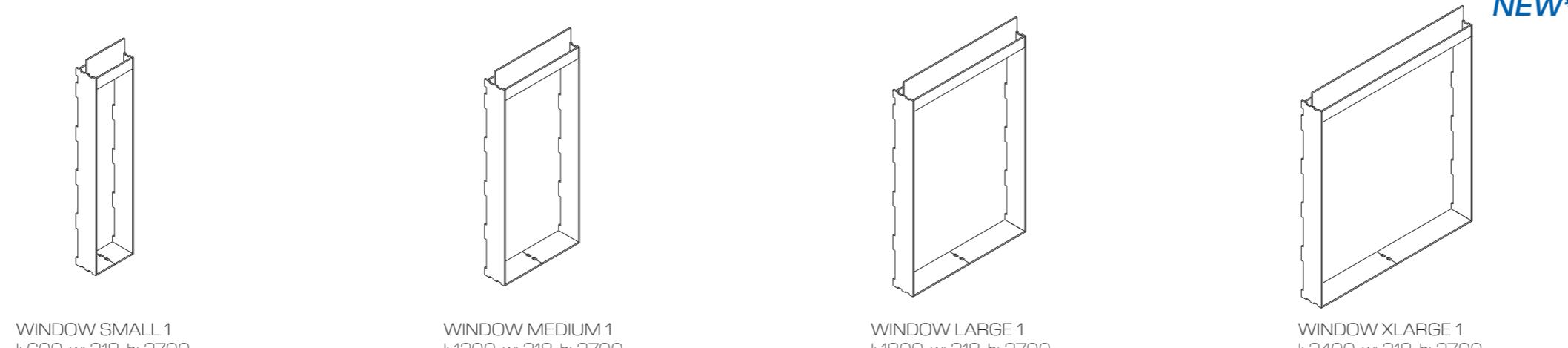
That's where this adapted version comes into play. It uses the same development process and installation as the outer shell.

Just a slimmer version

STRUCTURAL

INTERIOR

WINDOW OPENINGS

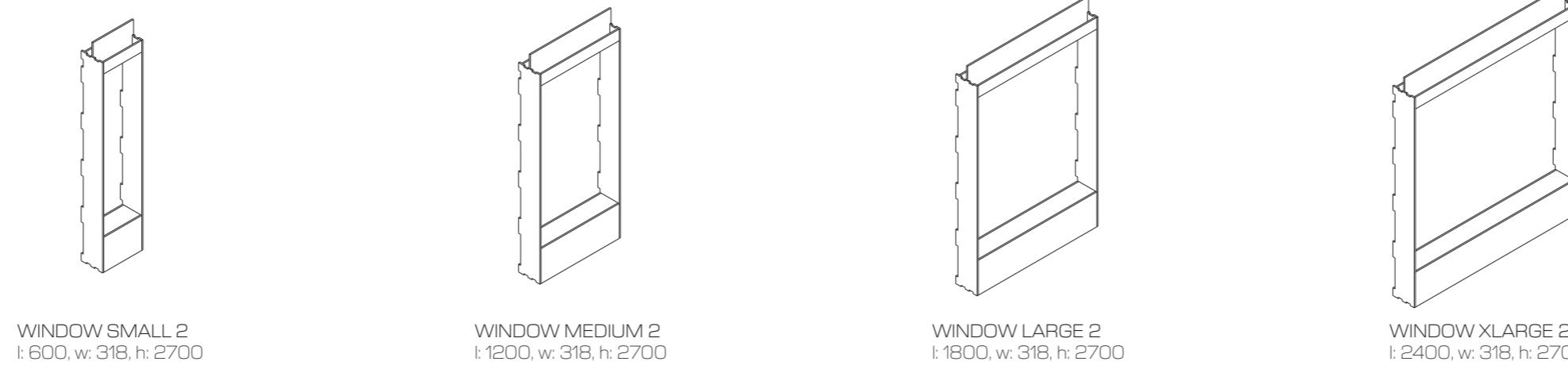


WINDOW SMALL 1
l: 600, w: 318, h: 2700

WINDOW MEDIUM 1
l: 1200, w: 318, h: 2700

WINDOW LARGE 1
l: 1800, w: 318, h: 2700

WINDOW XLARGE 1
l: 2400, w: 318, h: 2700

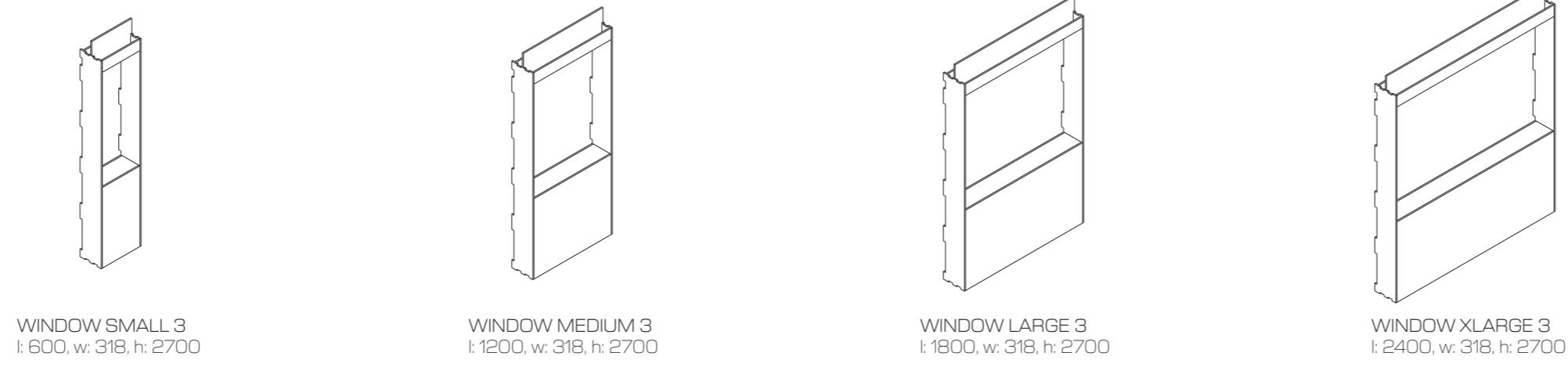


WINDOW SMALL 2
l: 600, w: 318, h: 2700

WINDOW MEDIUM 2
l: 1200, w: 318, h: 2700

WINDOW LARGE 2
l: 1800, w: 318, h: 2700

WINDOW XLARGE 2
l: 2400, w: 318, h: 2700



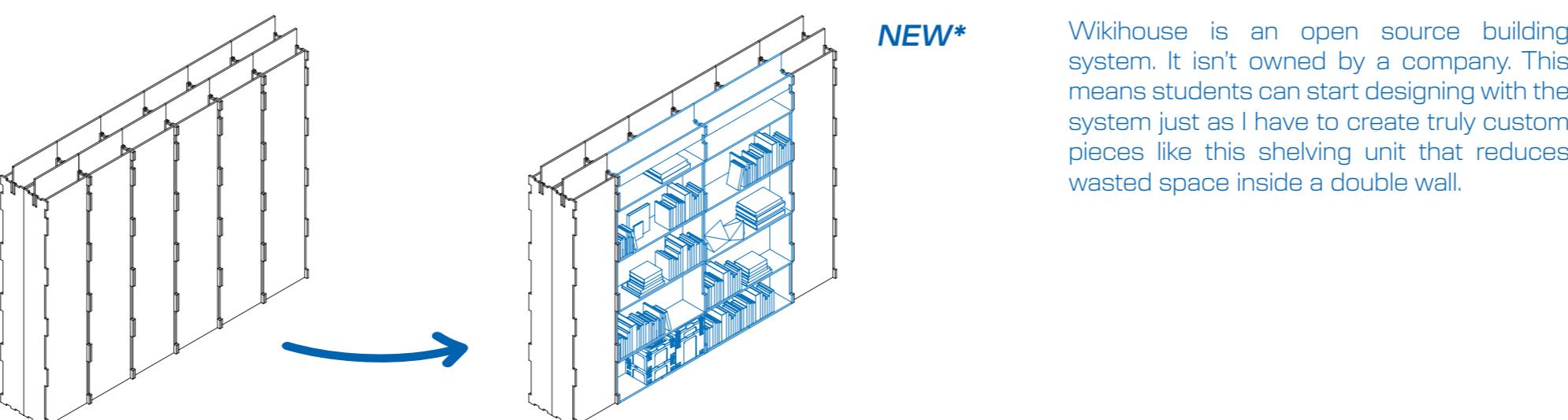
WINDOW SMALL 3
l: 600, w: 318, h: 2700

WINDOW MEDIUM 3
l: 1200, w: 318, h: 2700

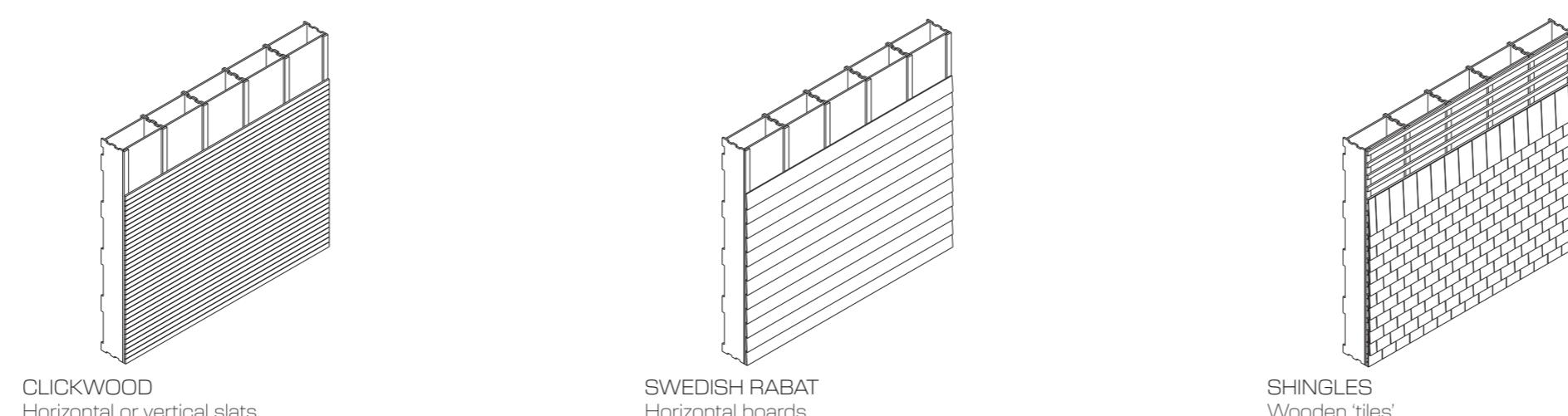
WINDOW LARGE 3
l: 1800, w: 318, h: 2700

WINDOW XLARGE 3
l: 2400, w: 318, h: 2700

OPEN SOURCE



Wikihouse is an open source building system. It isn't owned by a company. This means students can start designing with the system just as I have to create truly custom pieces like this shelving unit that reduces wasted space inside a double wall.

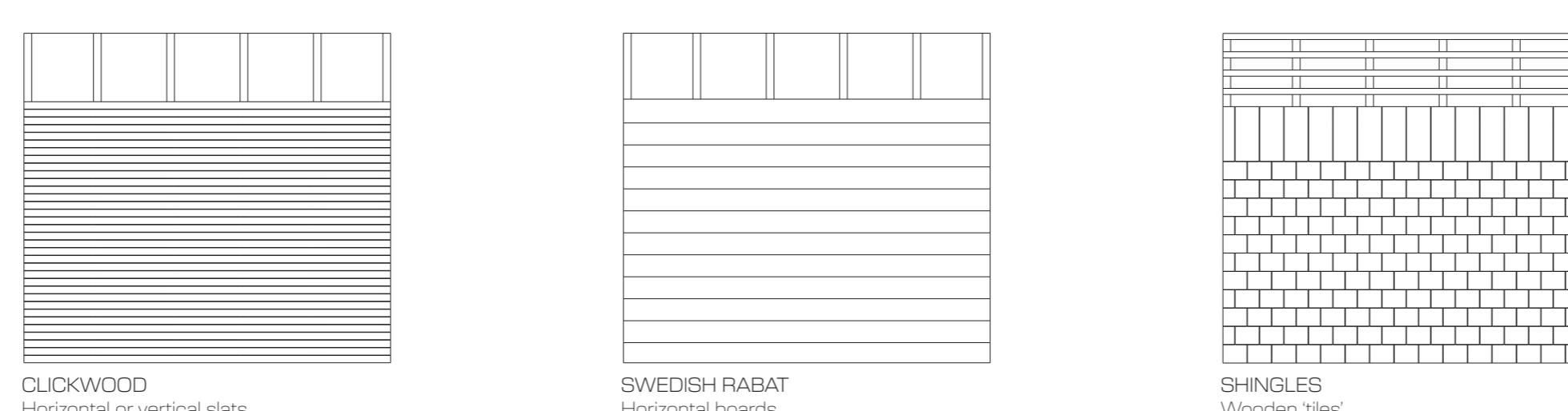


CLICKWOOD
Horizontal or vertical slats

SWEDISH RABAT
Horizontal boards

SHINGLES
Wooden 'tiles'

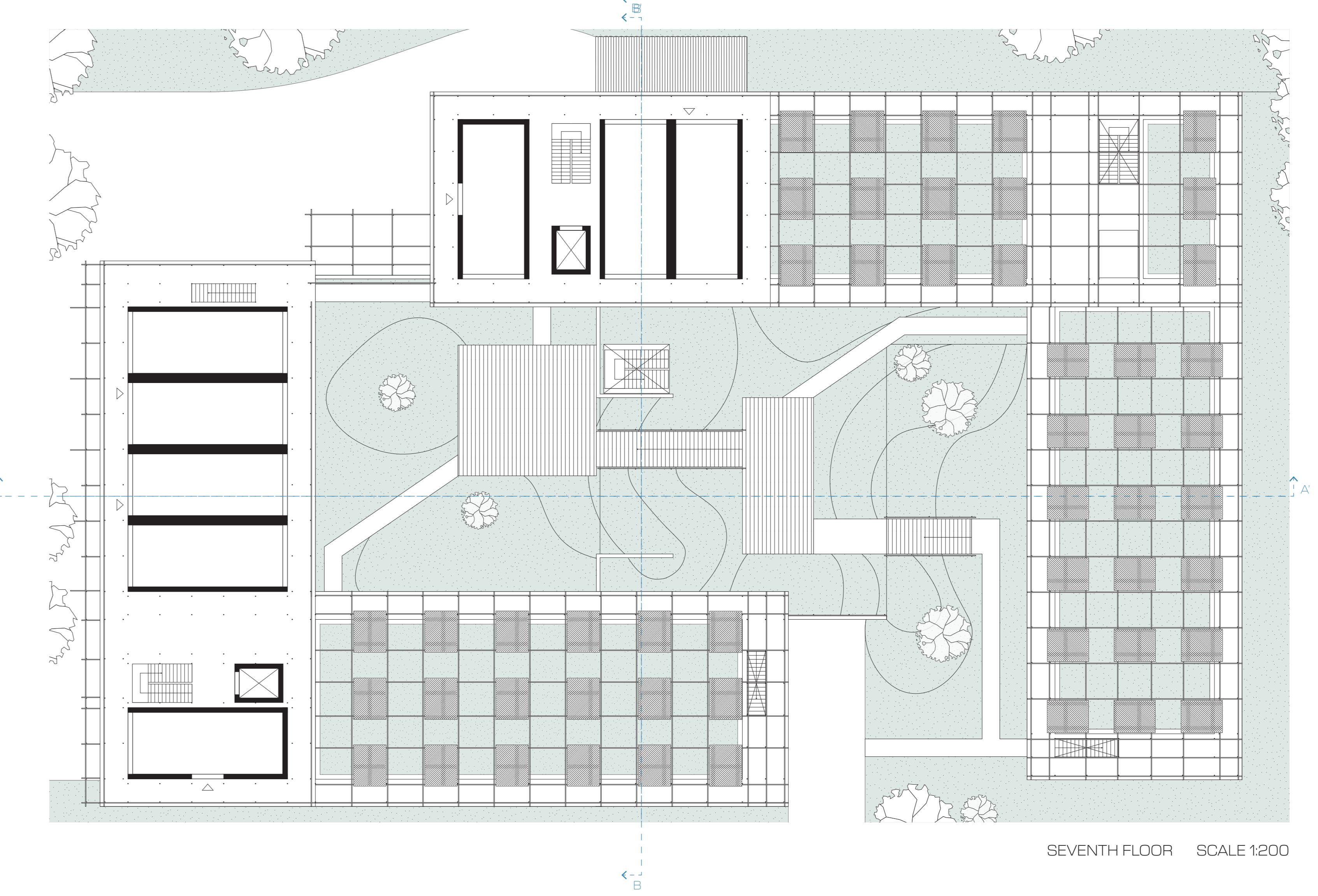
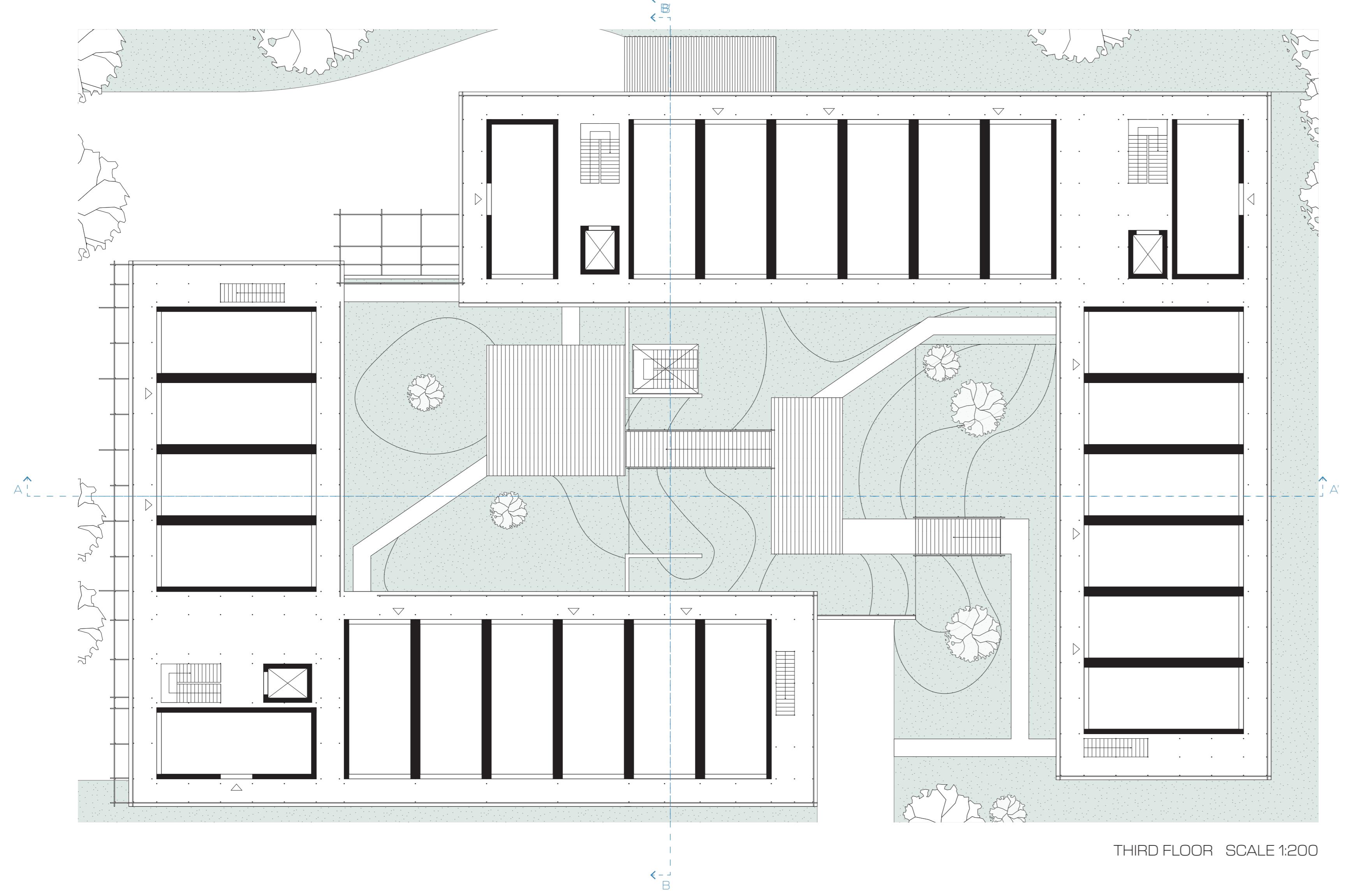
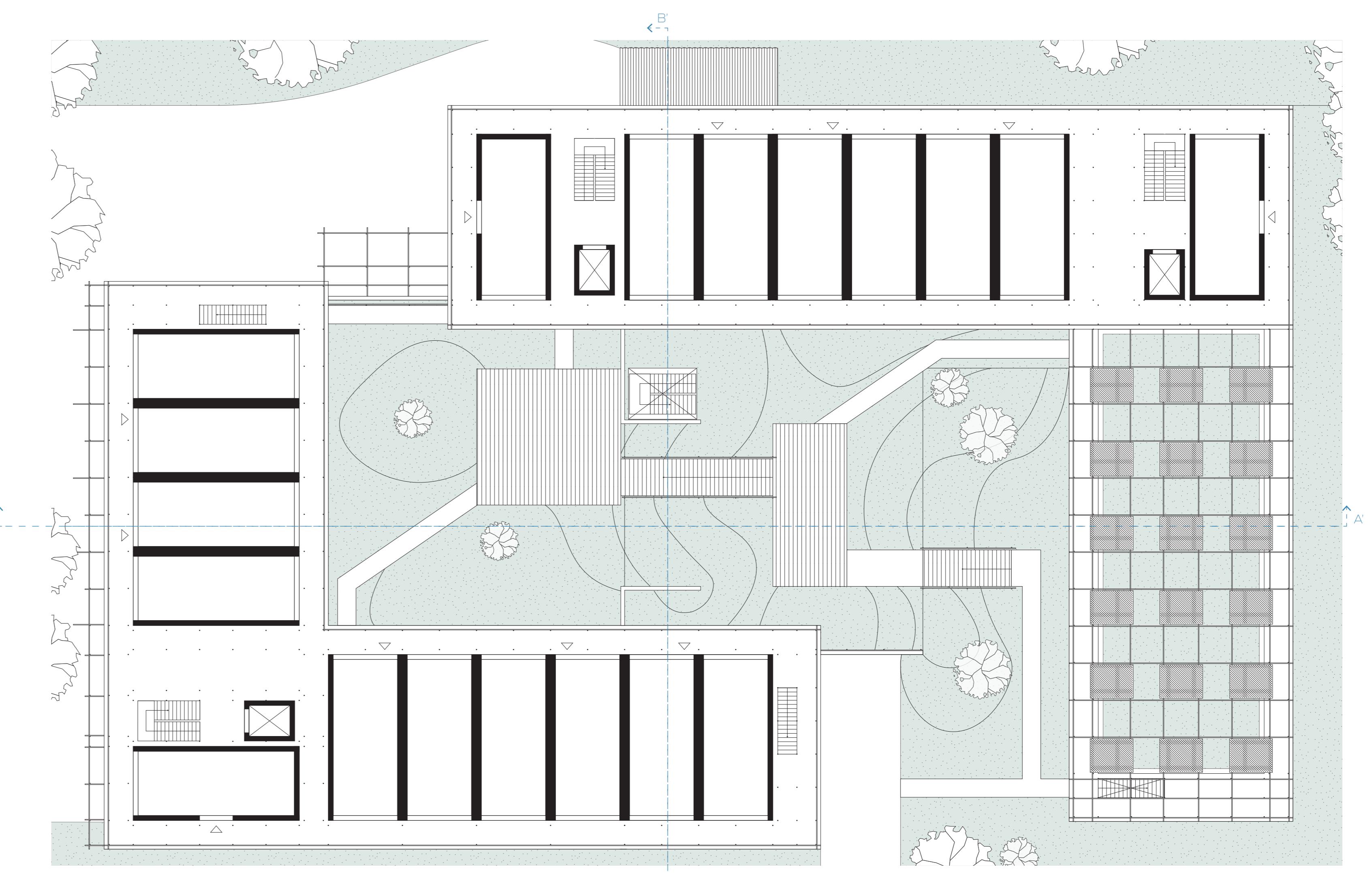
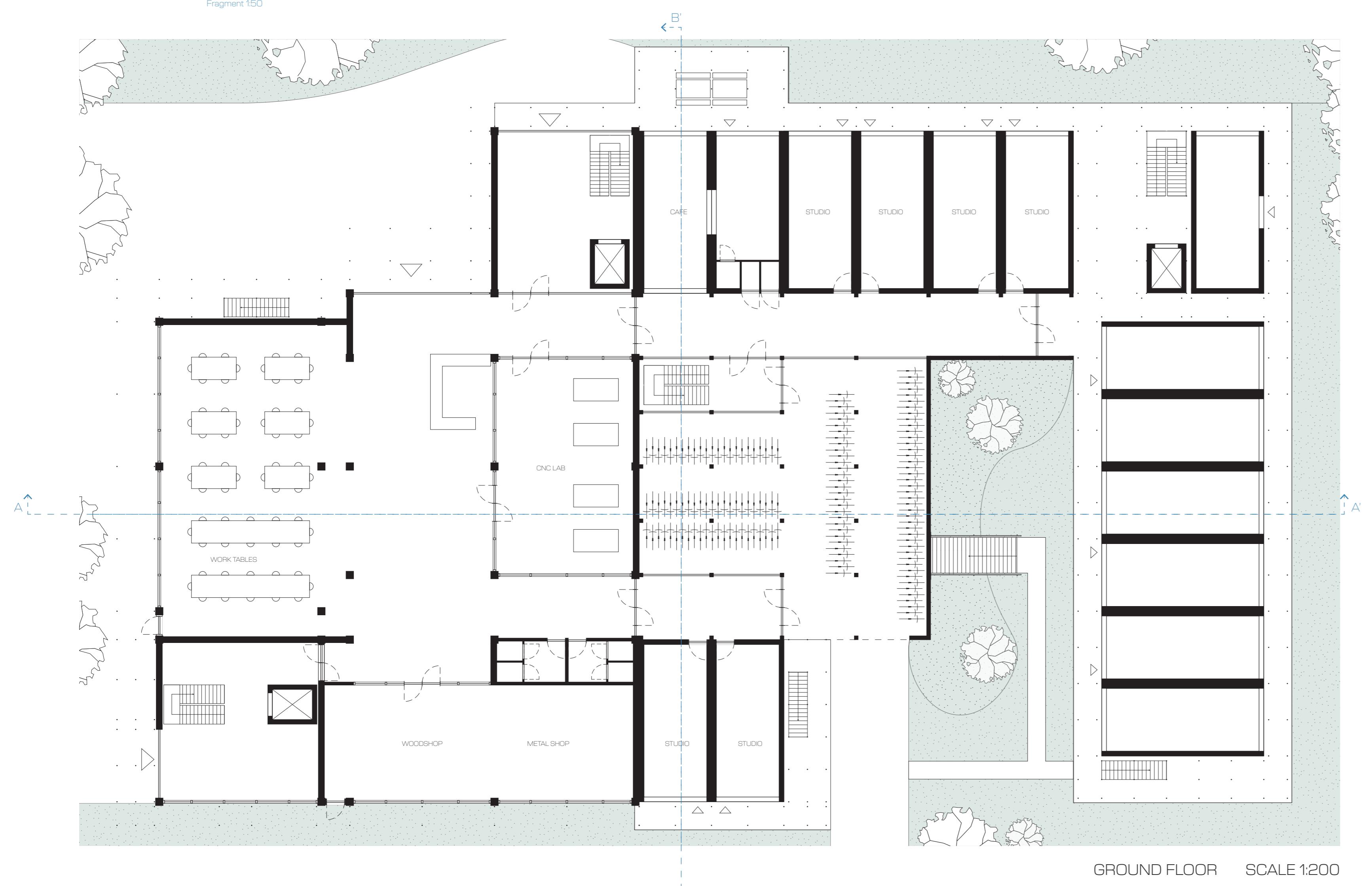
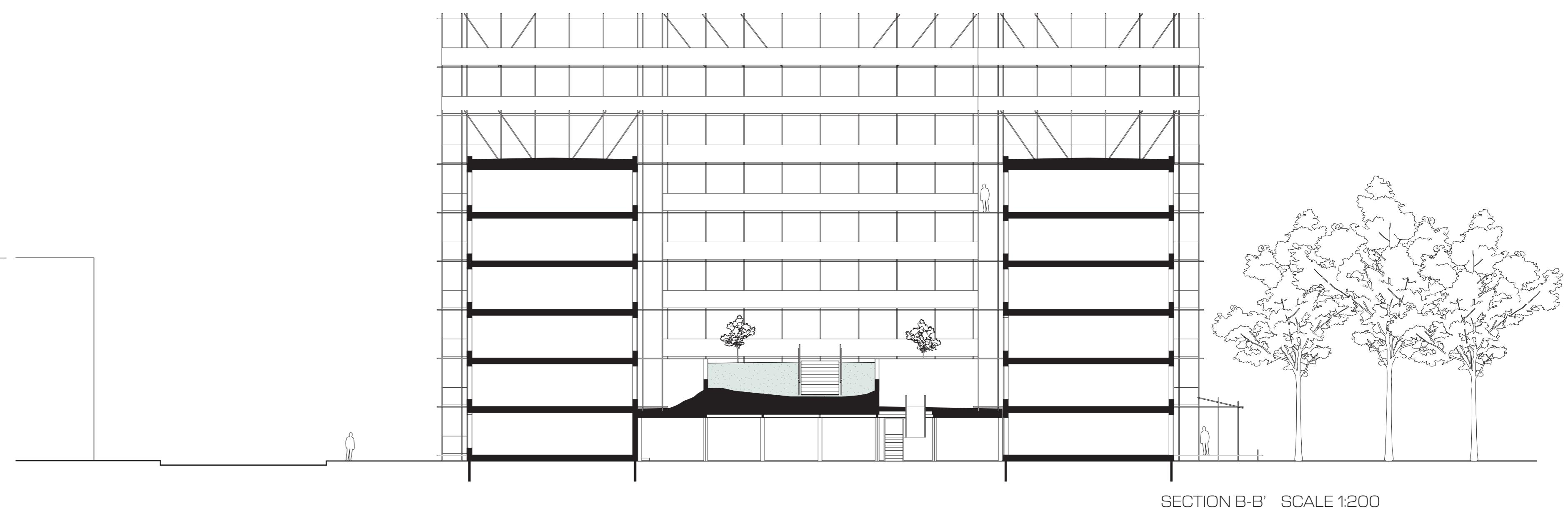
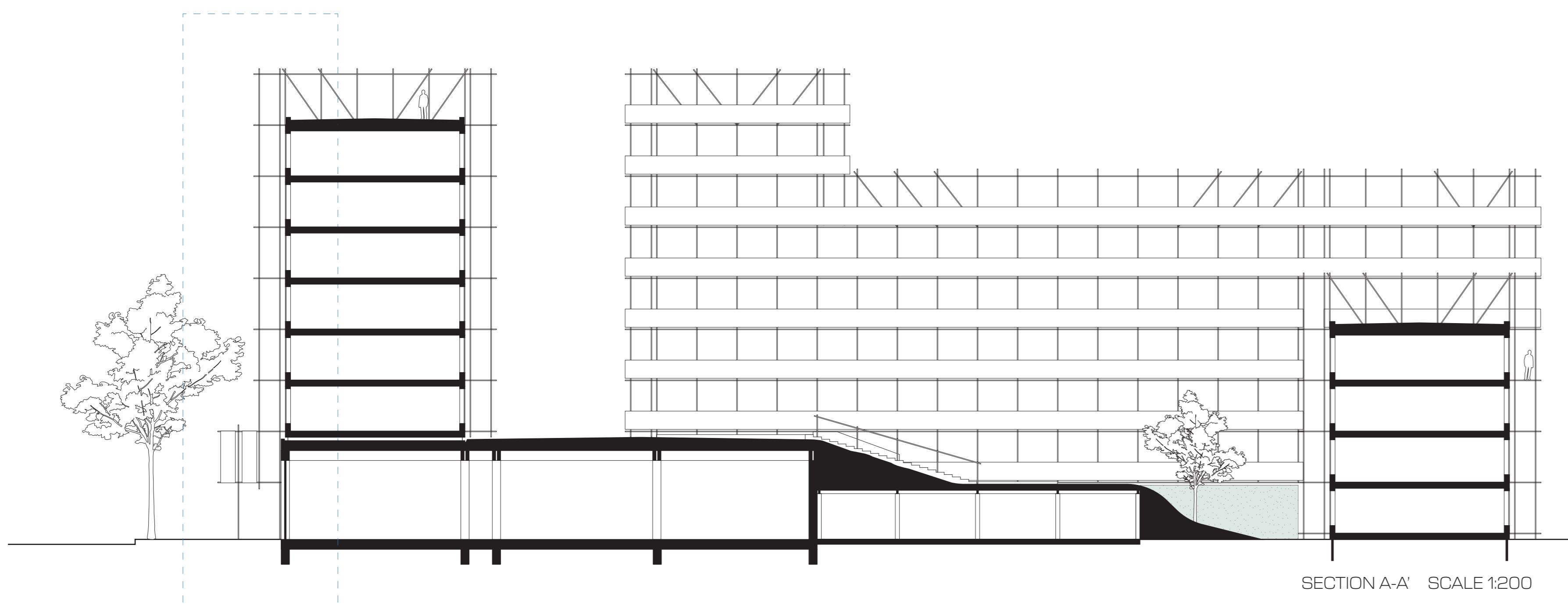
EXTERIOR

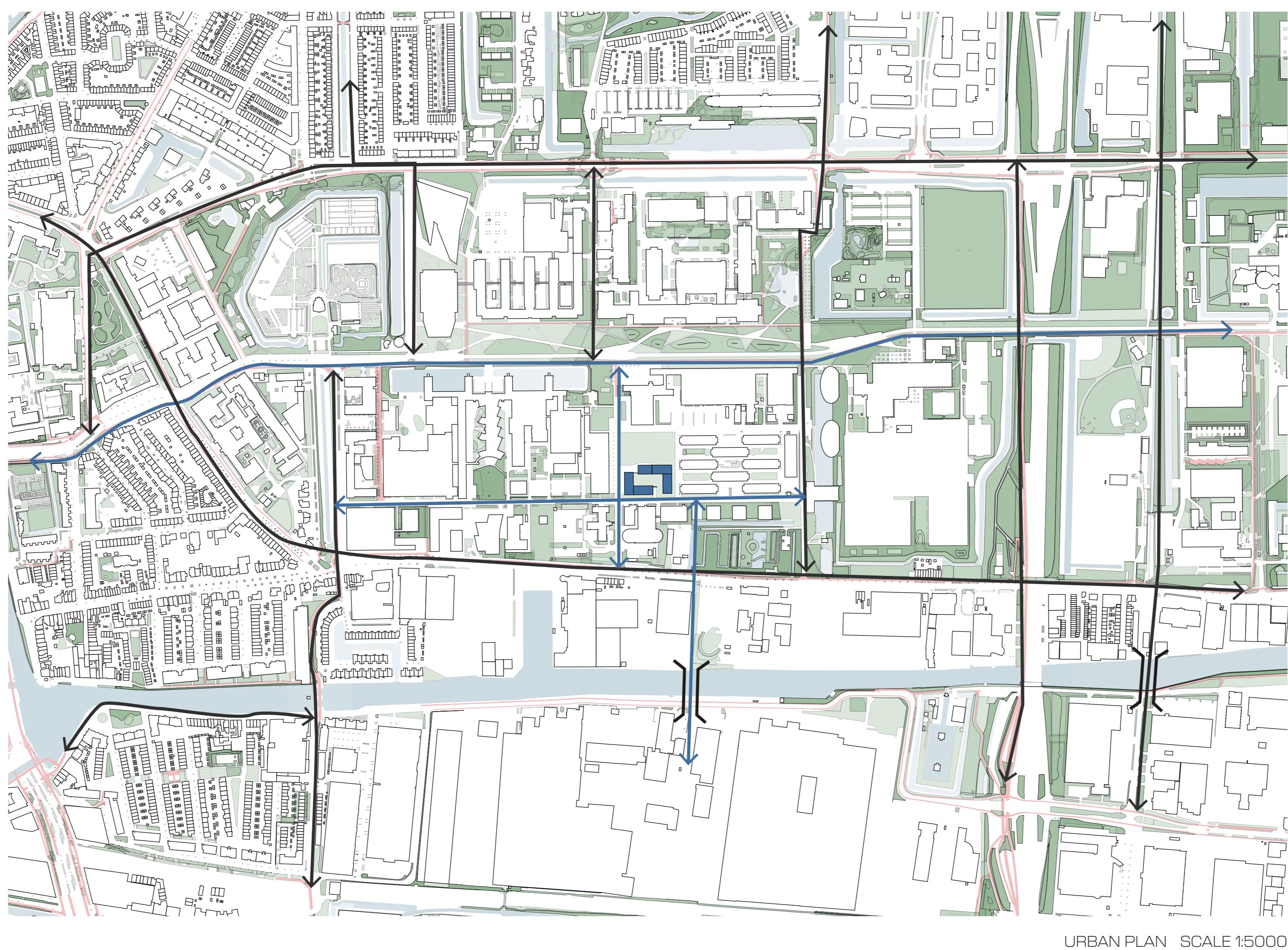
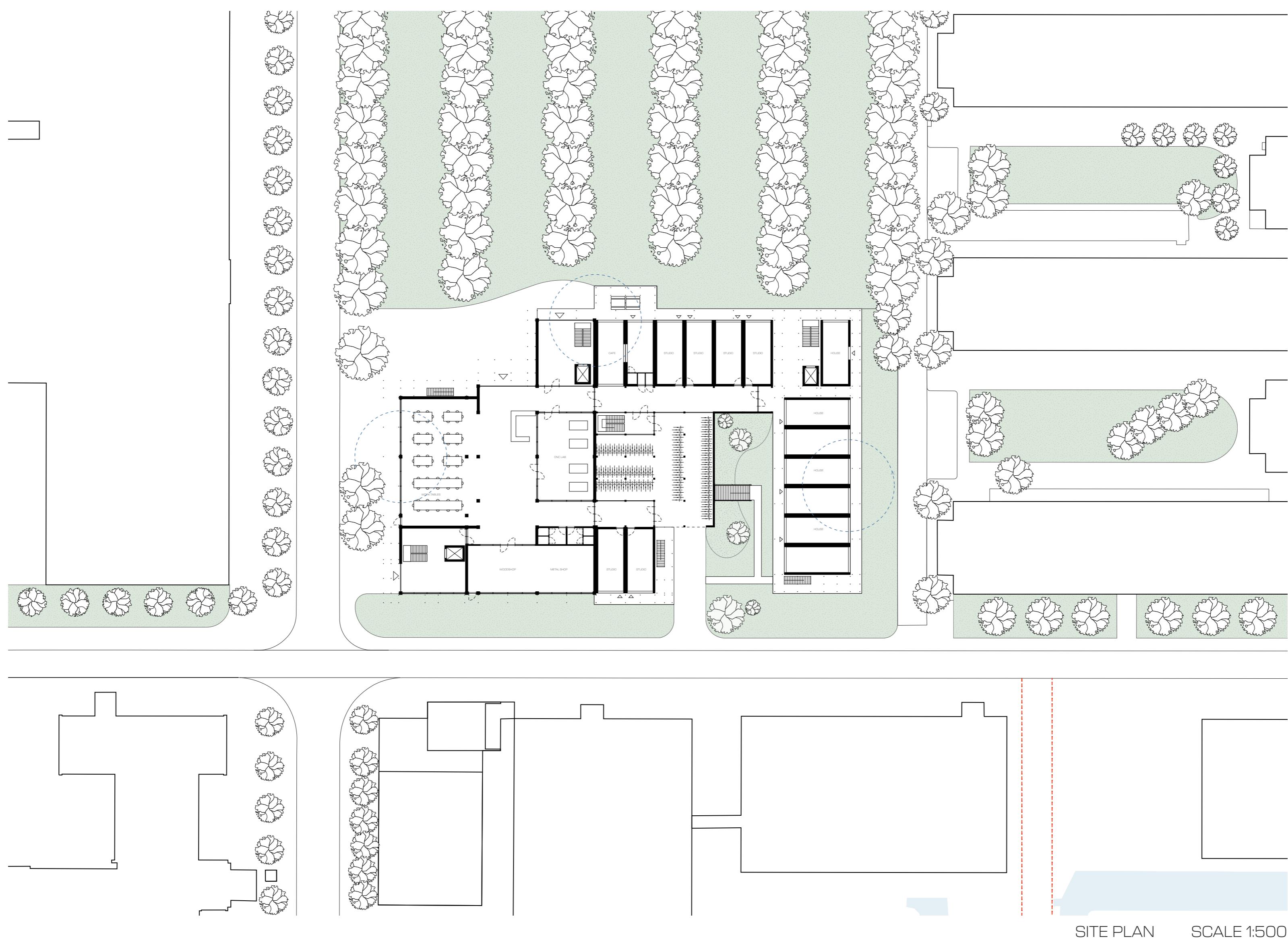


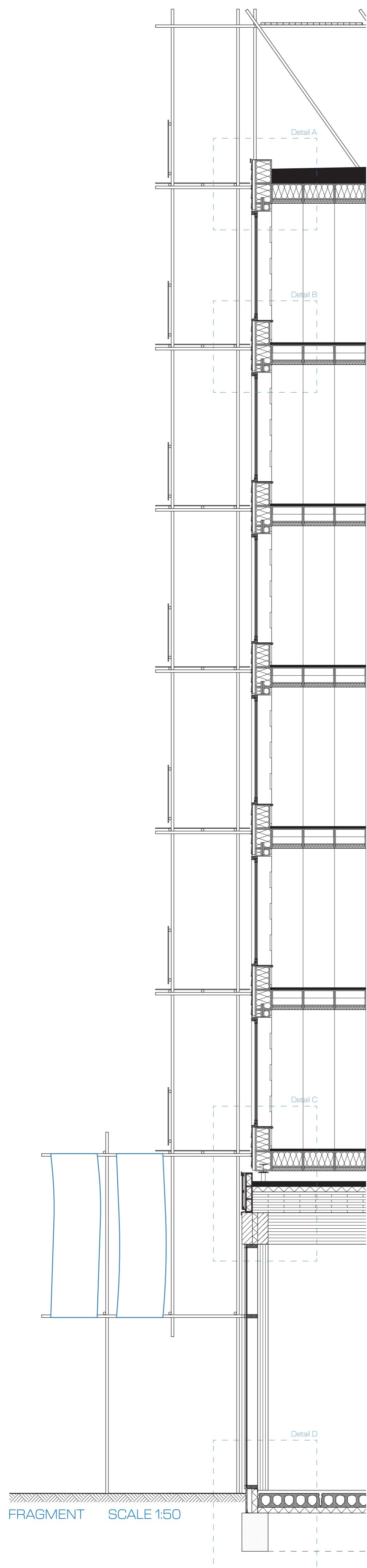
CLICKWOOD
Horizontal or vertical slats

SWEDISH RABAT
Horizontal boards

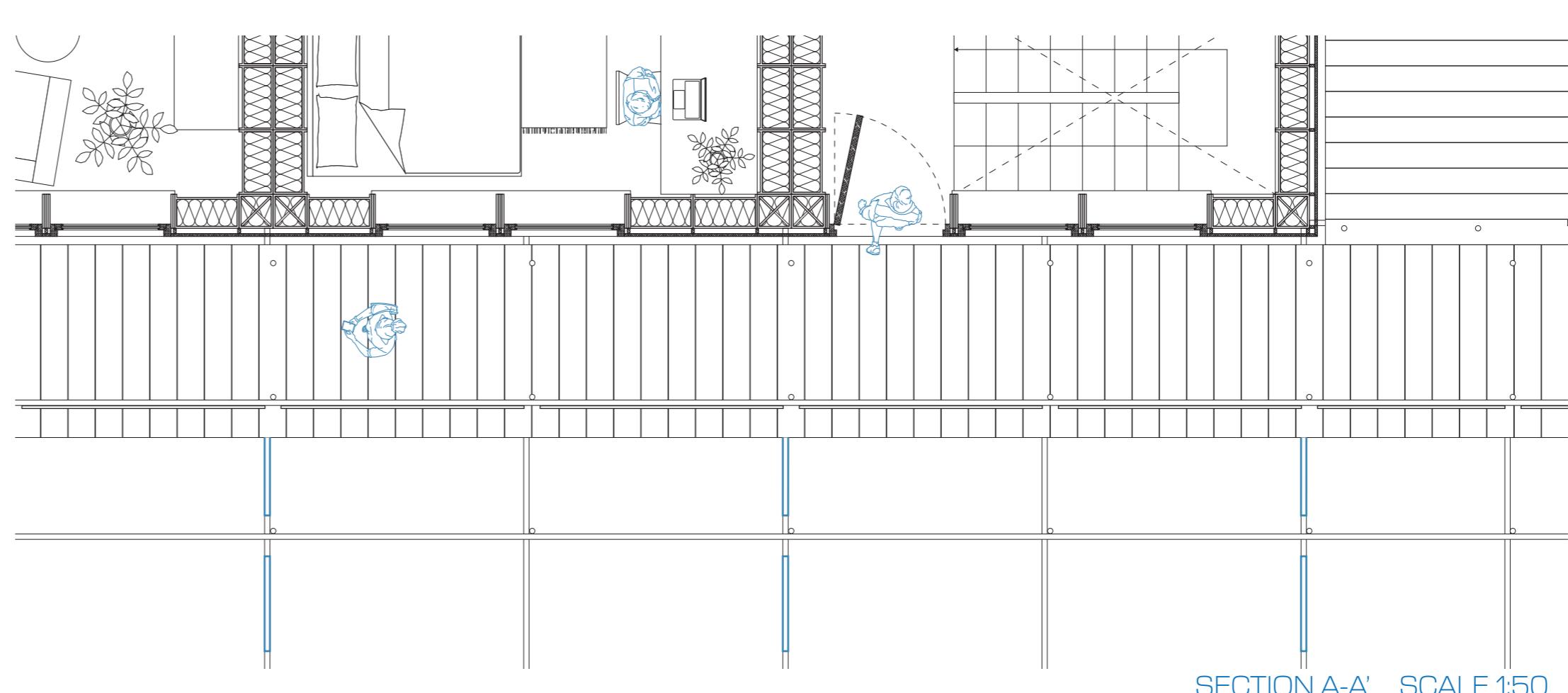
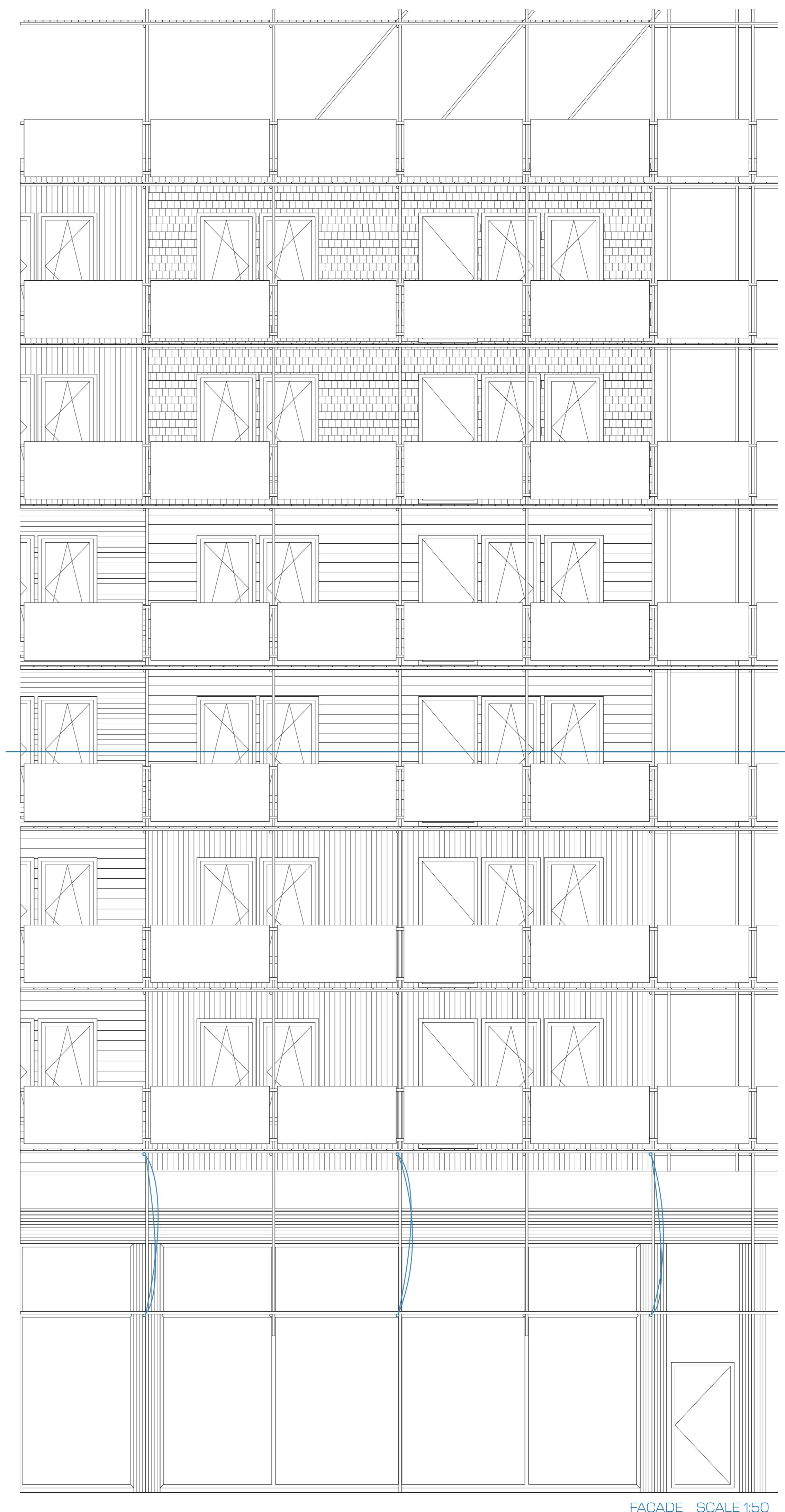
SHINGLES
Wooden 'tiles'

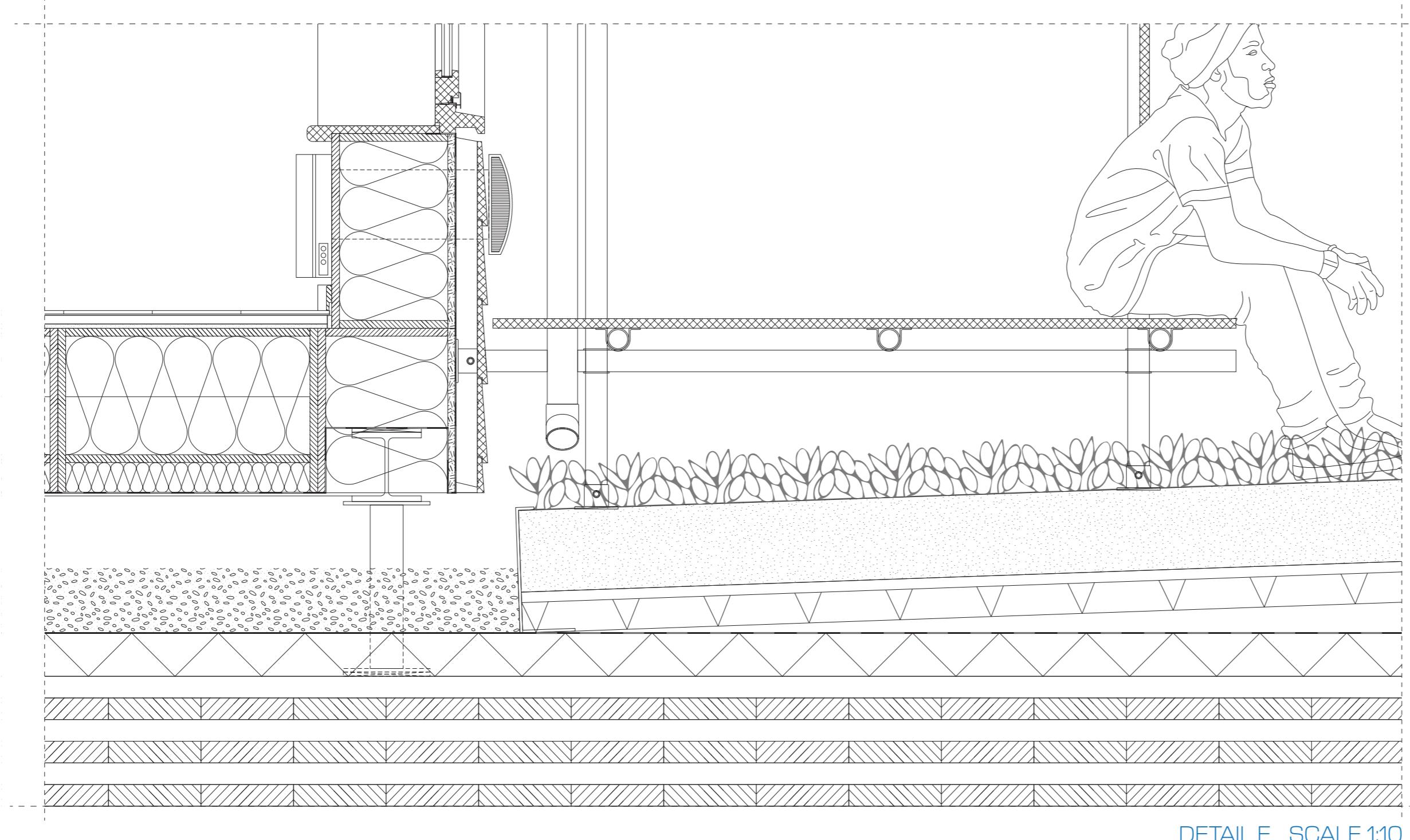
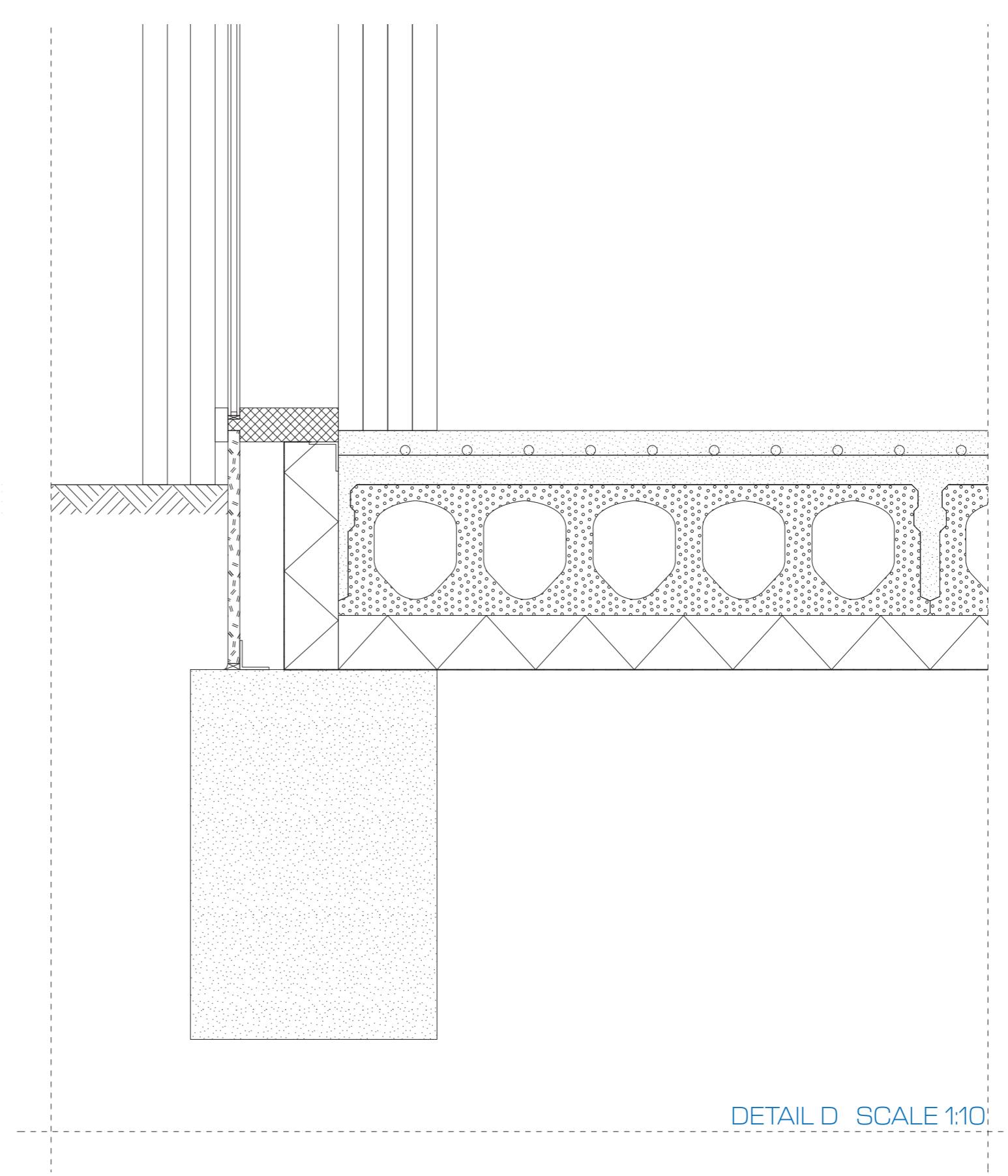
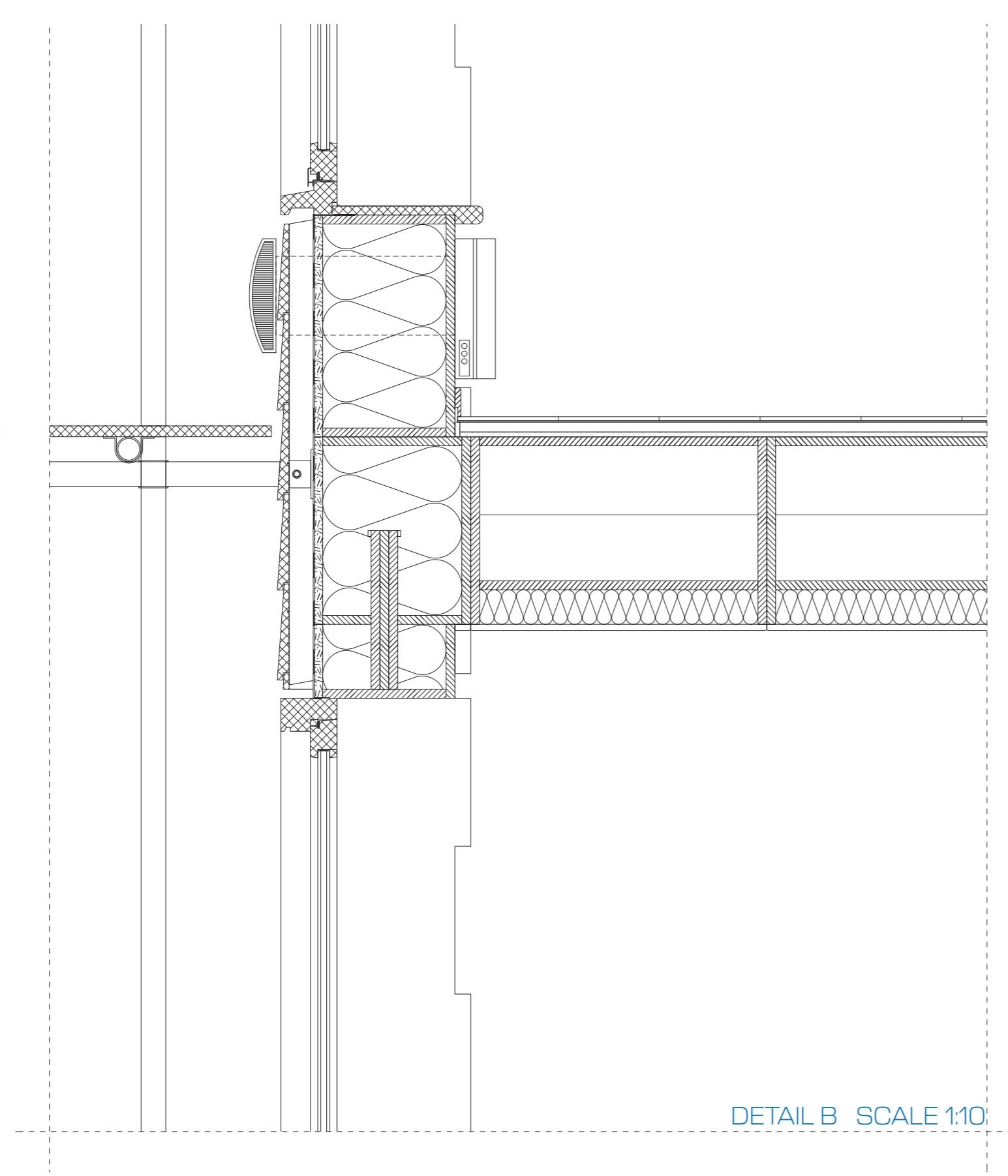
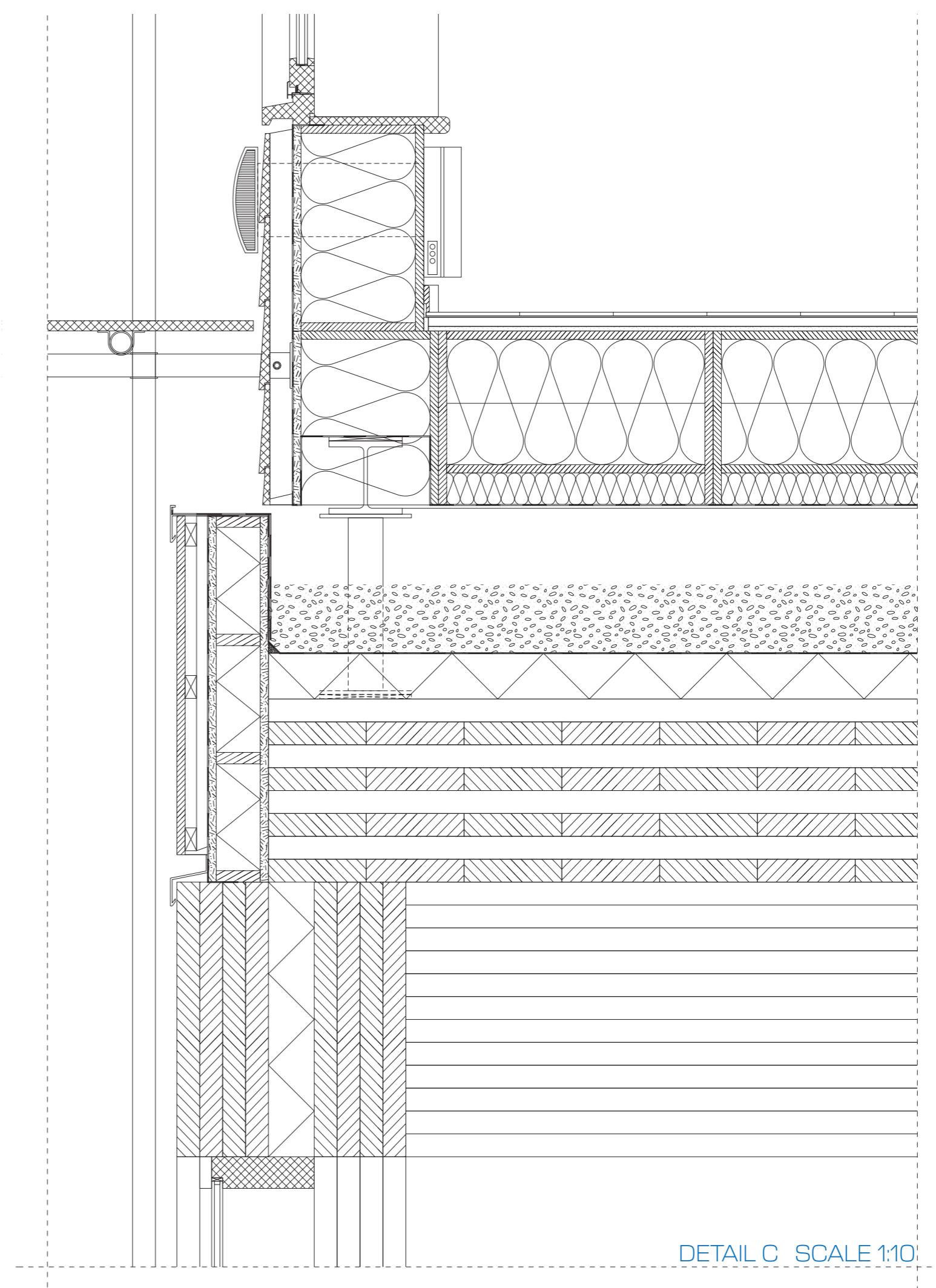
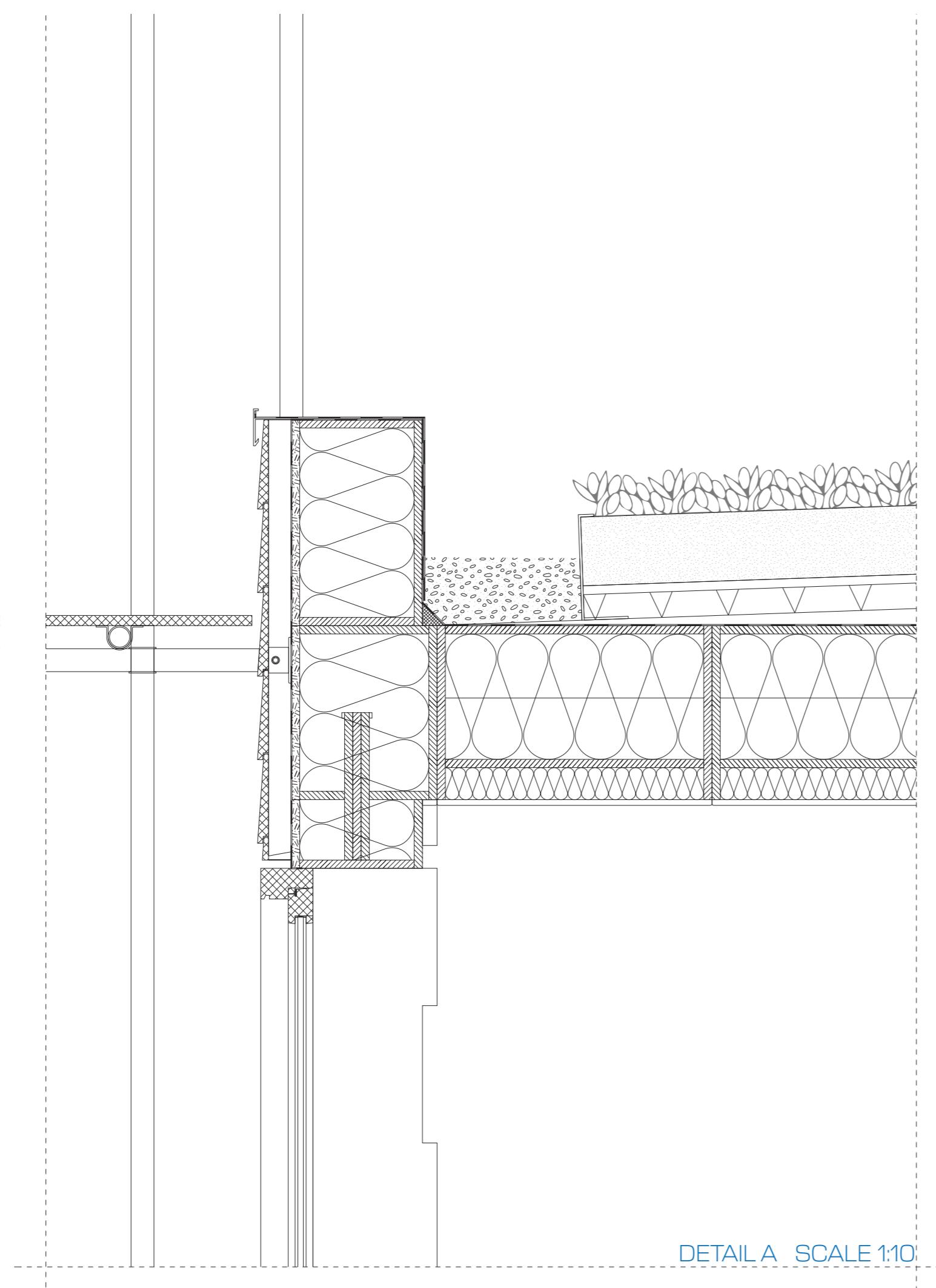






FRAGMENT





DETAILS