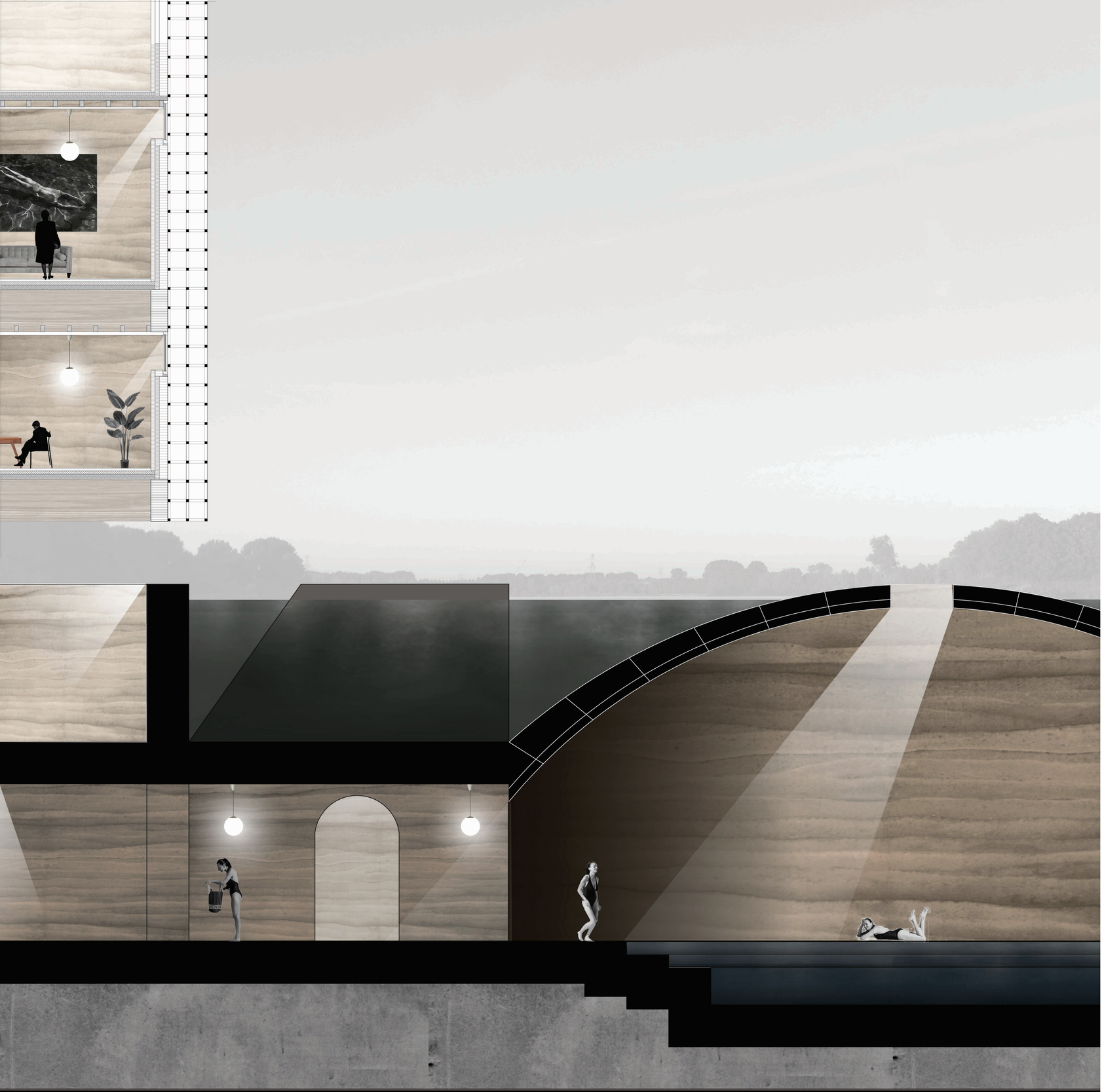
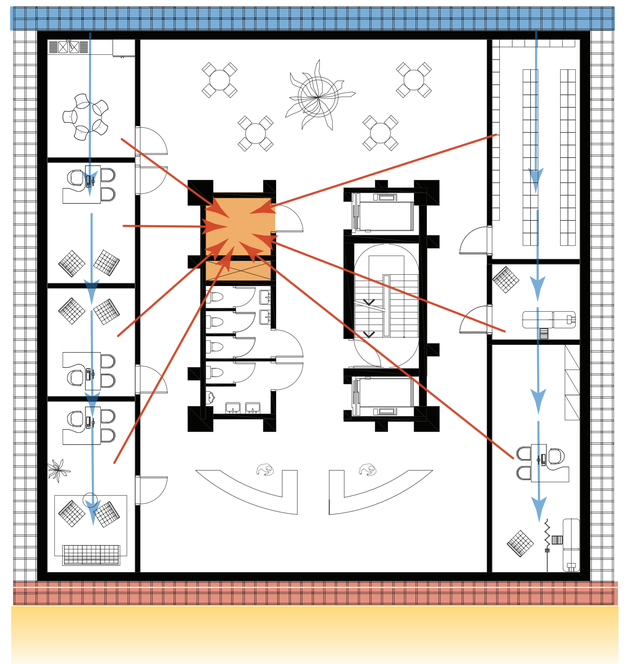
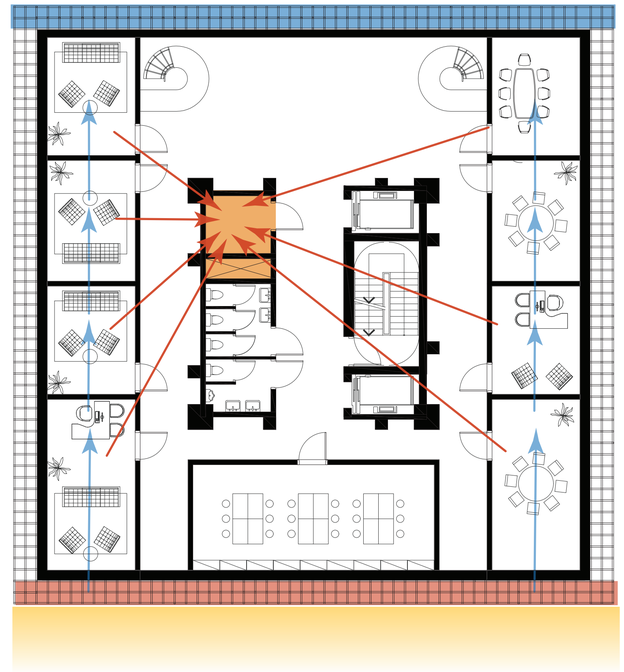


FACADE FRAGMENT 1:50

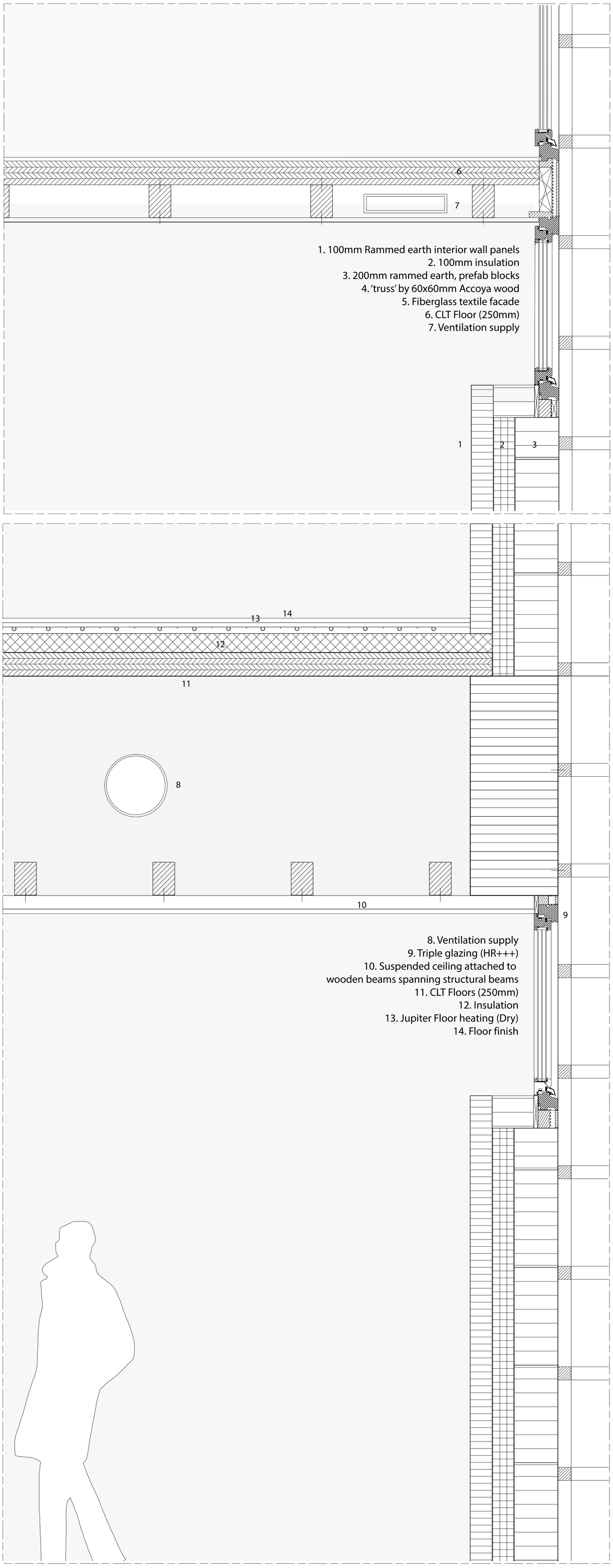
SUMMER



WINTER

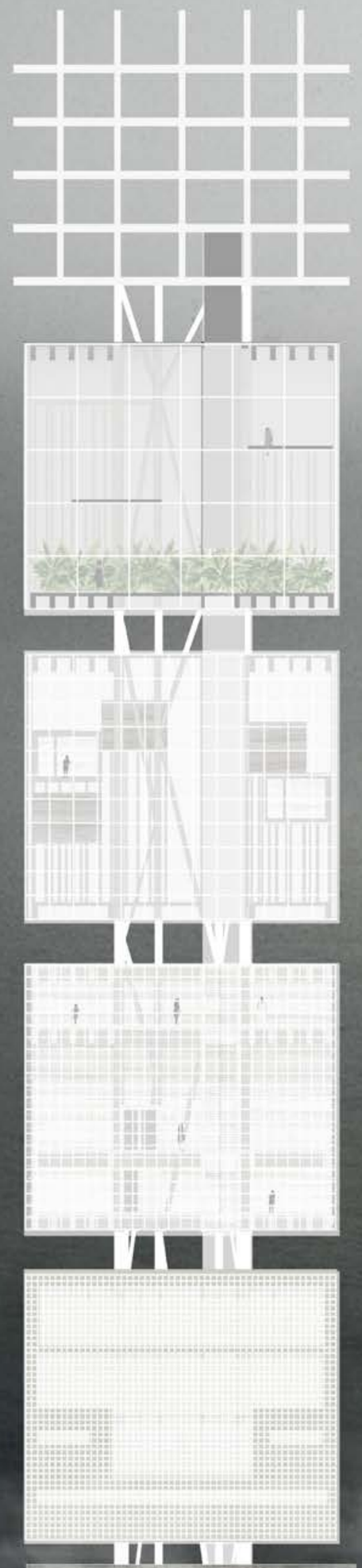


P5
Anna Estee van Oers
THE SELF OBSERVATORY
15/12/2017

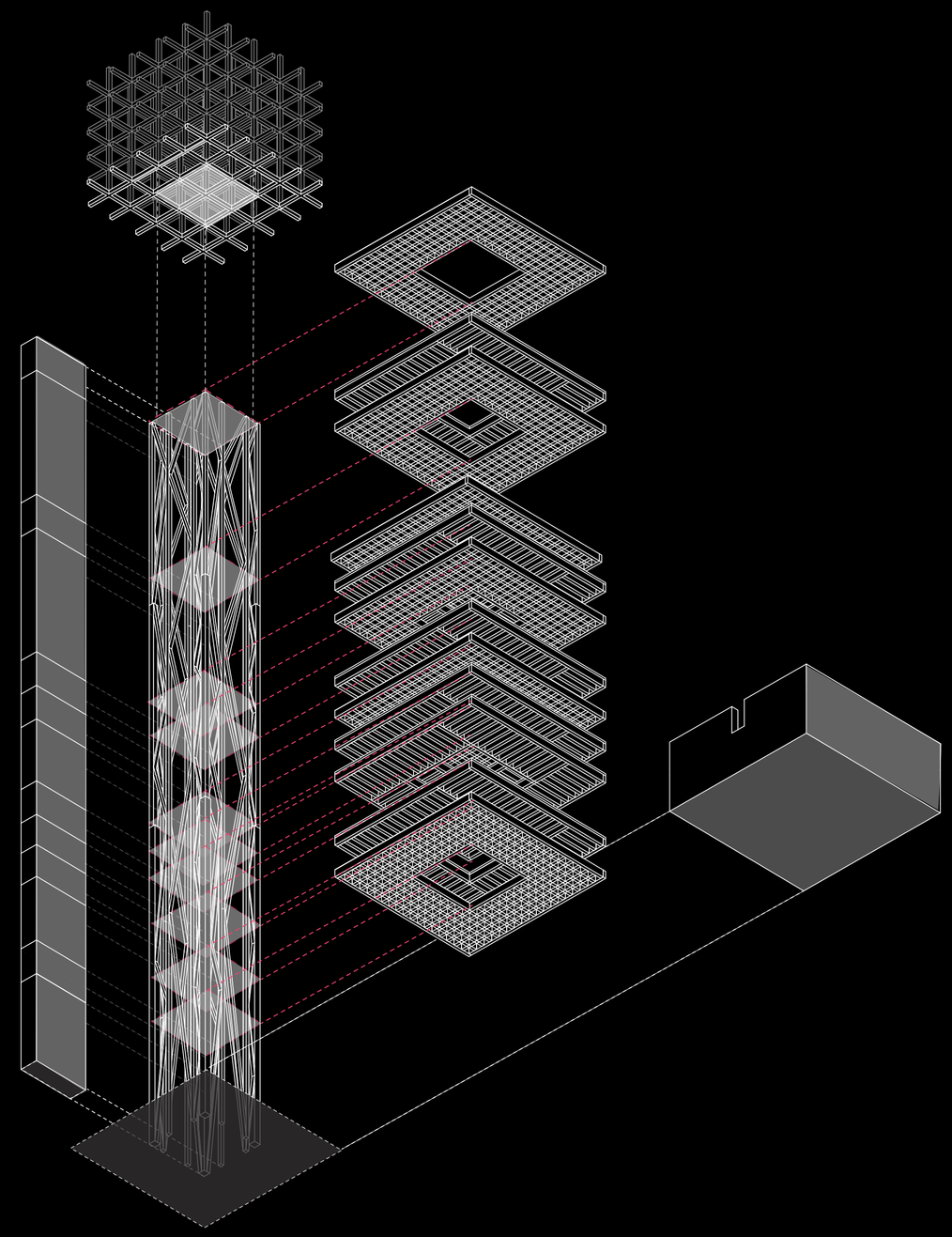


1. 100mm Rammed earth interior wall panels
2. 100mm insulation
3. 200mm rammed earth, prefab blocks
4. 'truss' by 60x60mm Accoya wood
5. Fiberglass textile facade
6. CLT Floor (250mm)
7. Ventilation supply
8. Ventilation supply
9. Triple glazing (HR+++)
10. Suspended ceiling attached to wooden beams spanning structural beams
11. CLT Floors (250mm)
12. Insulation
13. Jupiter Floor heating (Dry)
14. Floor finish

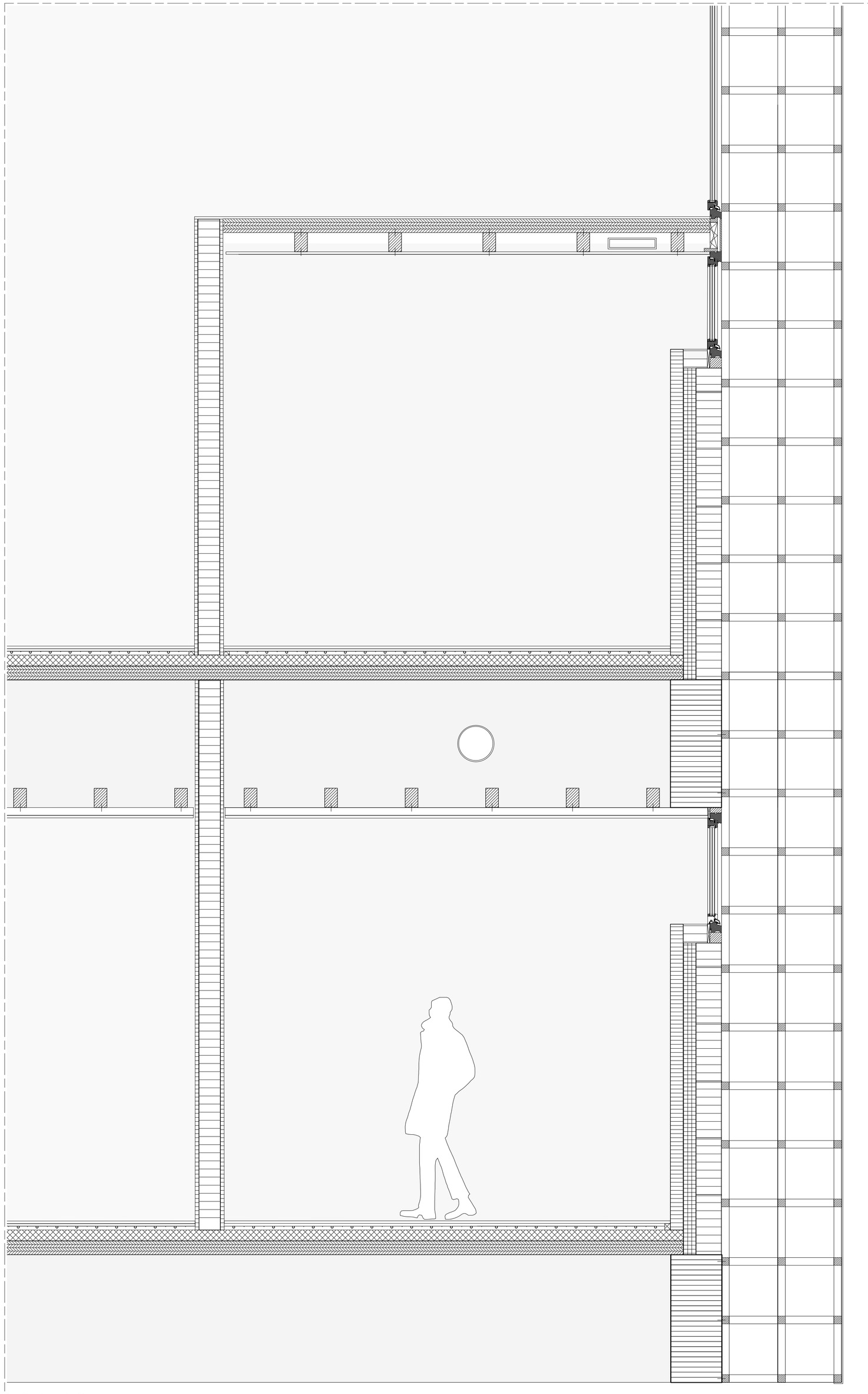
FACADE FRAGMENT
1:10



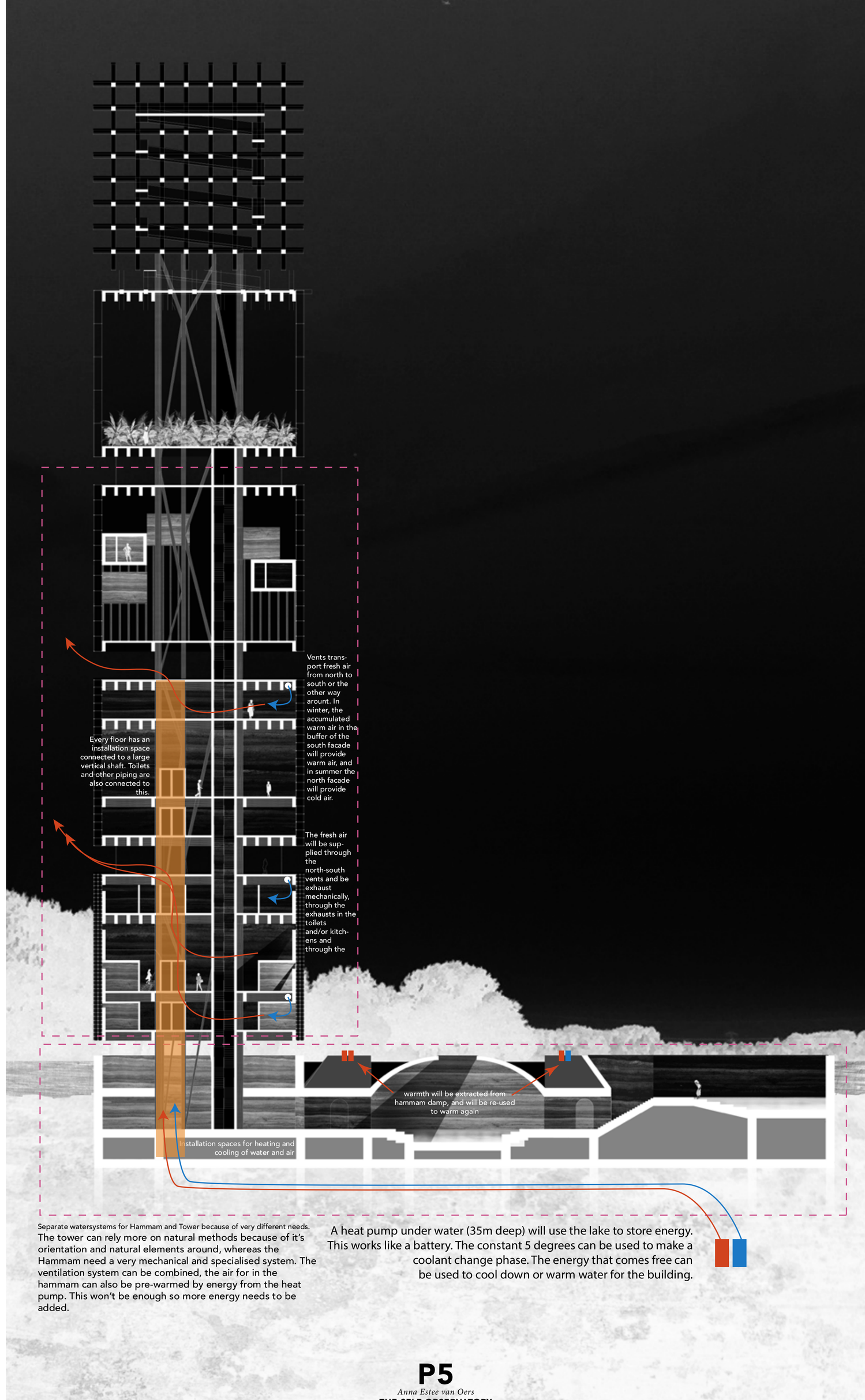
FACADE



STRUCTURAL CONCEPT



FACADE FRAGMENT
1:20



Separate watersystems for Hammam and Tower because of very different needs.
The tower can rely more on natural methods because of it's orientation and natural elements around, whereas the Hammam need a very mechanical and specialised system. The ventilation system can be combined, the air for in the hammam can also be pre-warmed by energy from the heat pump. This won't be enough so more energy needs to be added.

A heat pump under water (35m deep) will use the lake to store energy. This works like a battery. The constant 5 degrees can be used to make a coolant change phase. The energy that comes free can be used to cool down or warm water for the building.

P5
Anna Estee van Oers
THE SELF OBSERVATORY
15/12/2017

SITE 1:5000

SITE 1:2000

P5

Anna Estee van Oers

THE SELF OBSERVATORY

15/12/2017

P5

Anna Estee van Oers

THE SELF OBSERVATORY

15/12/2017