

▽ P+ 16090

▽ P+ 11980

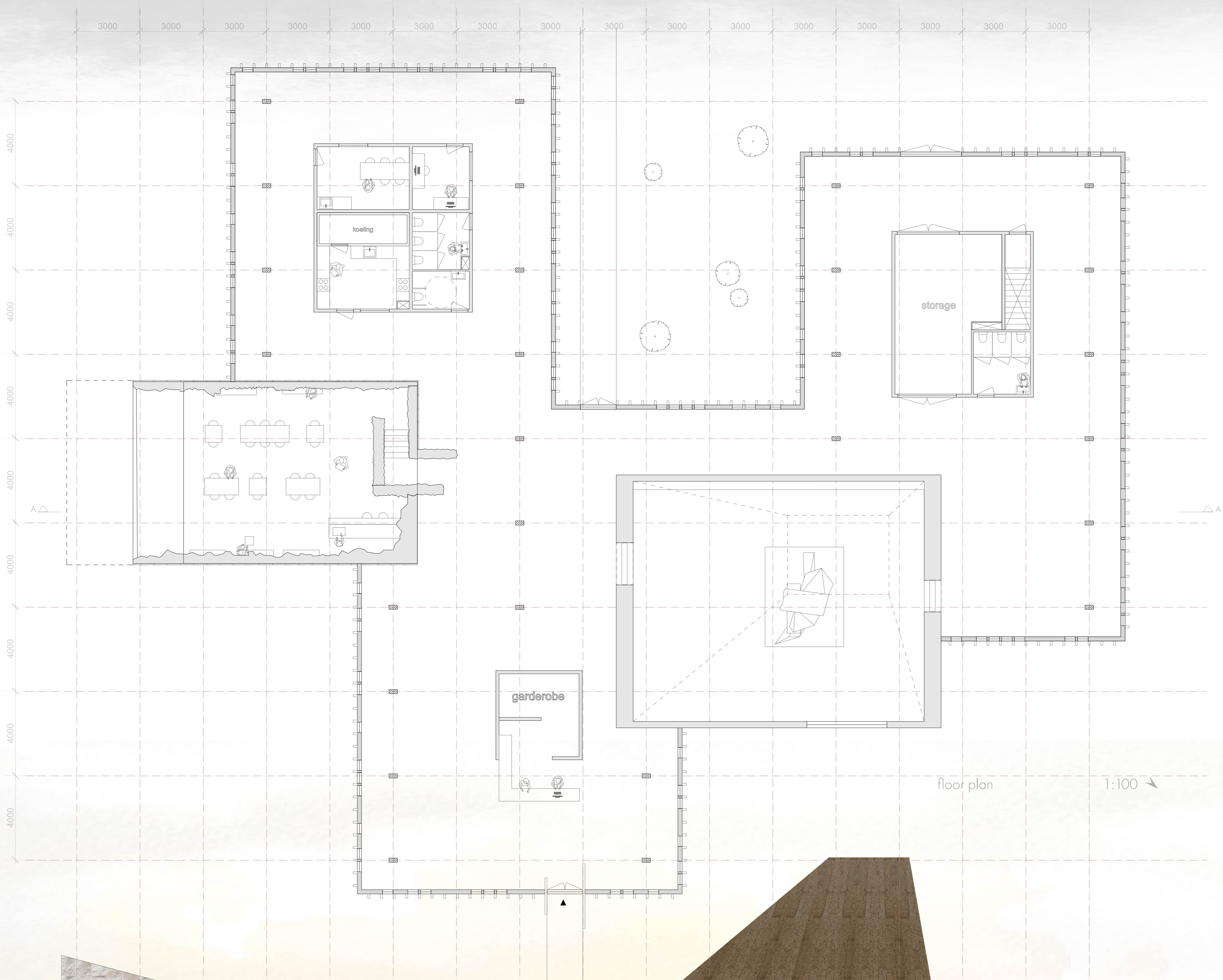
▽ P+ 7800  
▽ P+ 7480  
▽ P+ 7180

▽ P+ 800

▽ P+ 0



south-west elevation 1:100



floor plan 1:100



north-east elevation 1:100



winter

summer



climate section 1:50

WKO

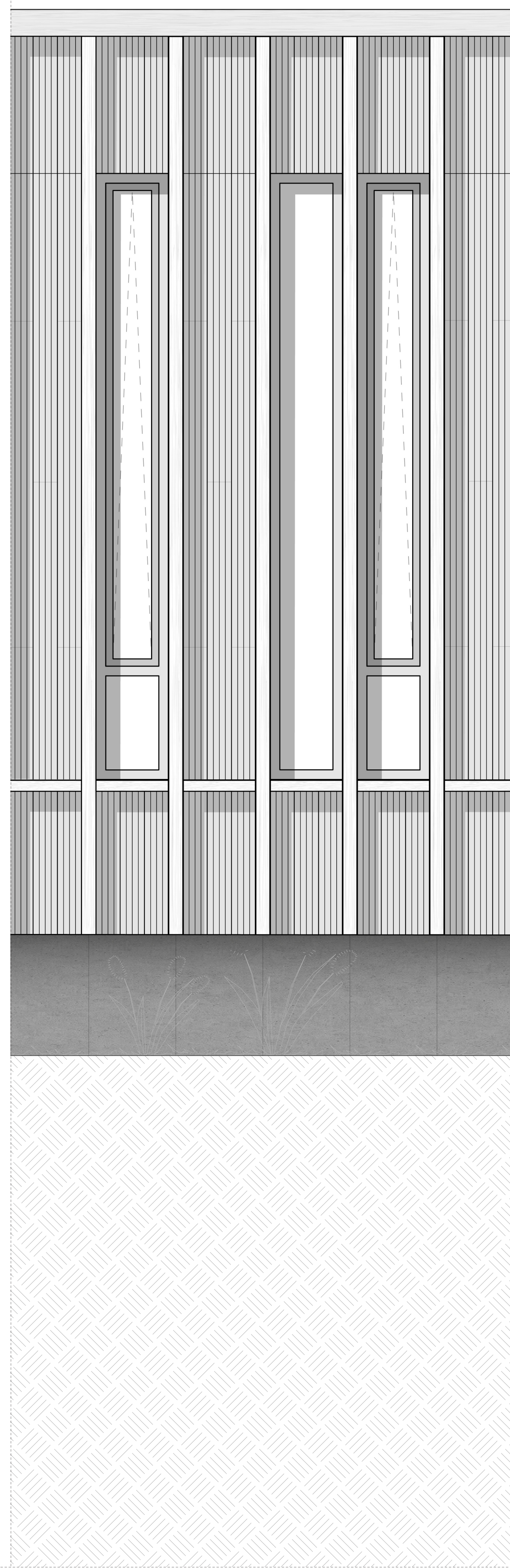
- air exhaust through core walls
- underfloor heating powered by the heat pump
- rainwater storage for toilet flushing

- sedum roof for rainwater drainage delay
- air exhaust through facility hub
- air supply through floor
- boiler to further heat tap water

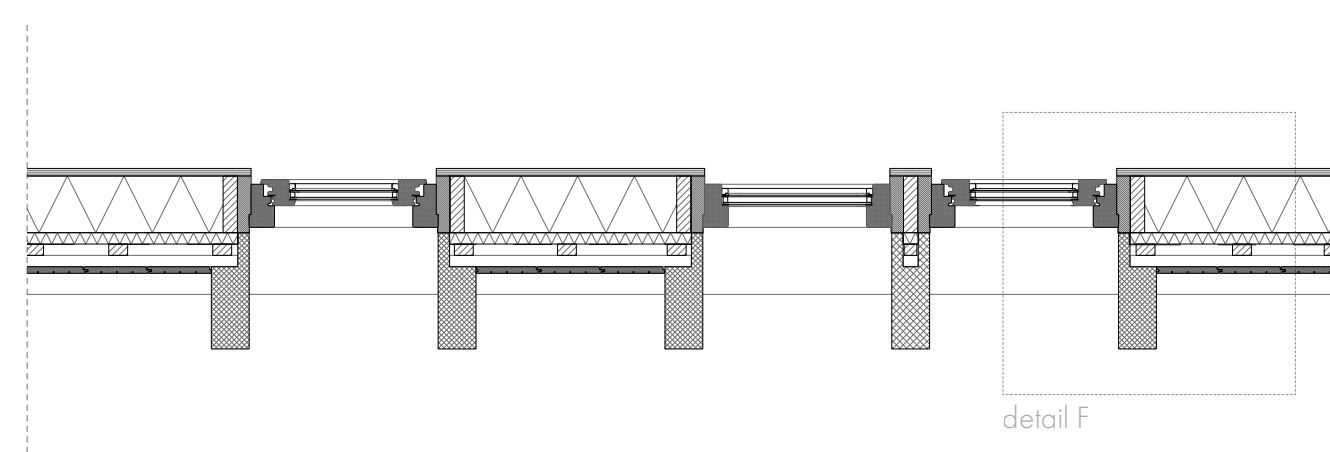
- air supply through core walls
- underfloor cooling powered by the heat pump
- thermal energy storage system (WKO) with a ground source heat pump

- roof solar panels to power technical installations
- sedum roof for solar panel cooling
- air exhaust through facility hub
- openable windows for natural ventilation
- air handling unit for mechanical ventilation

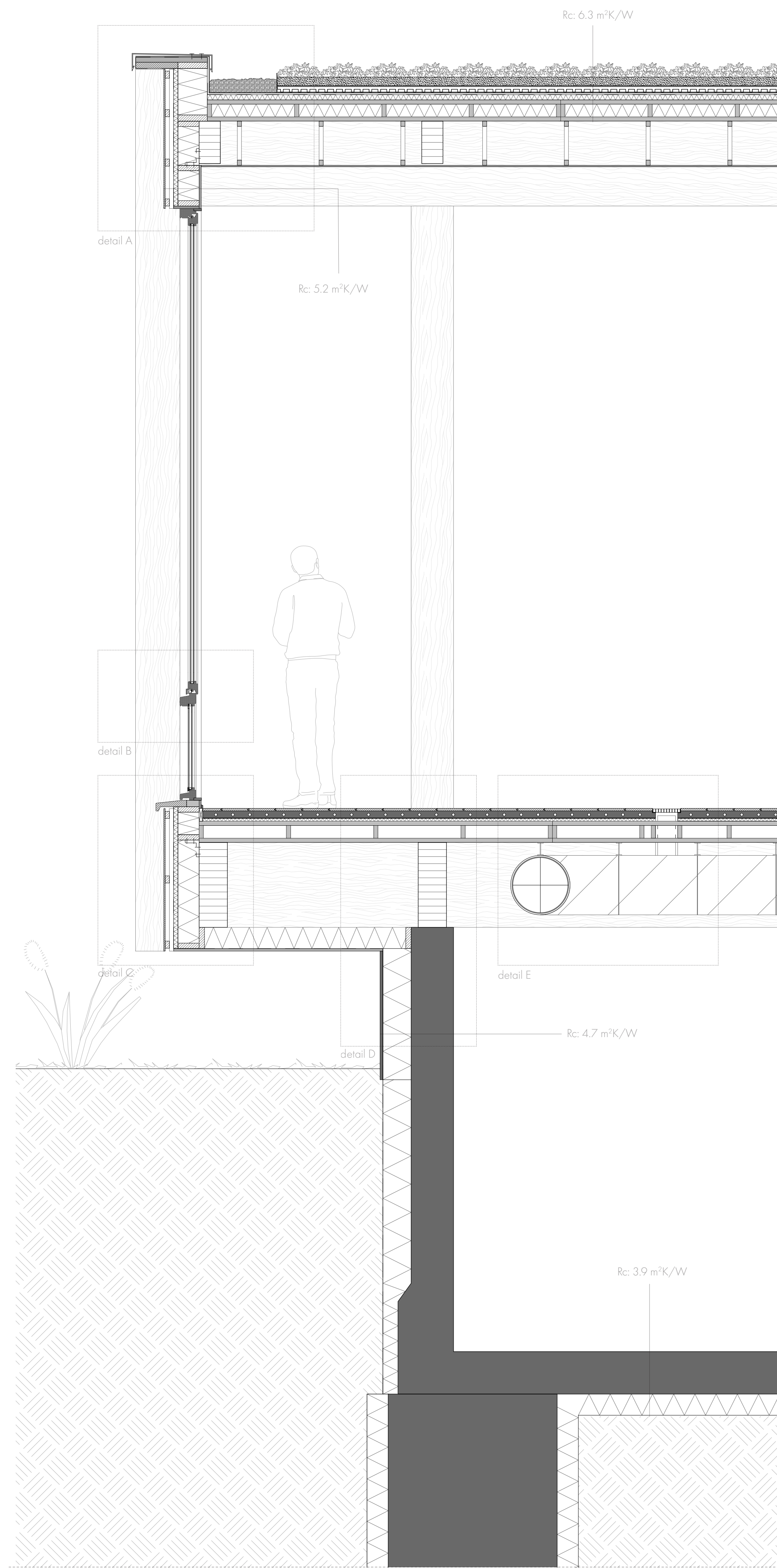




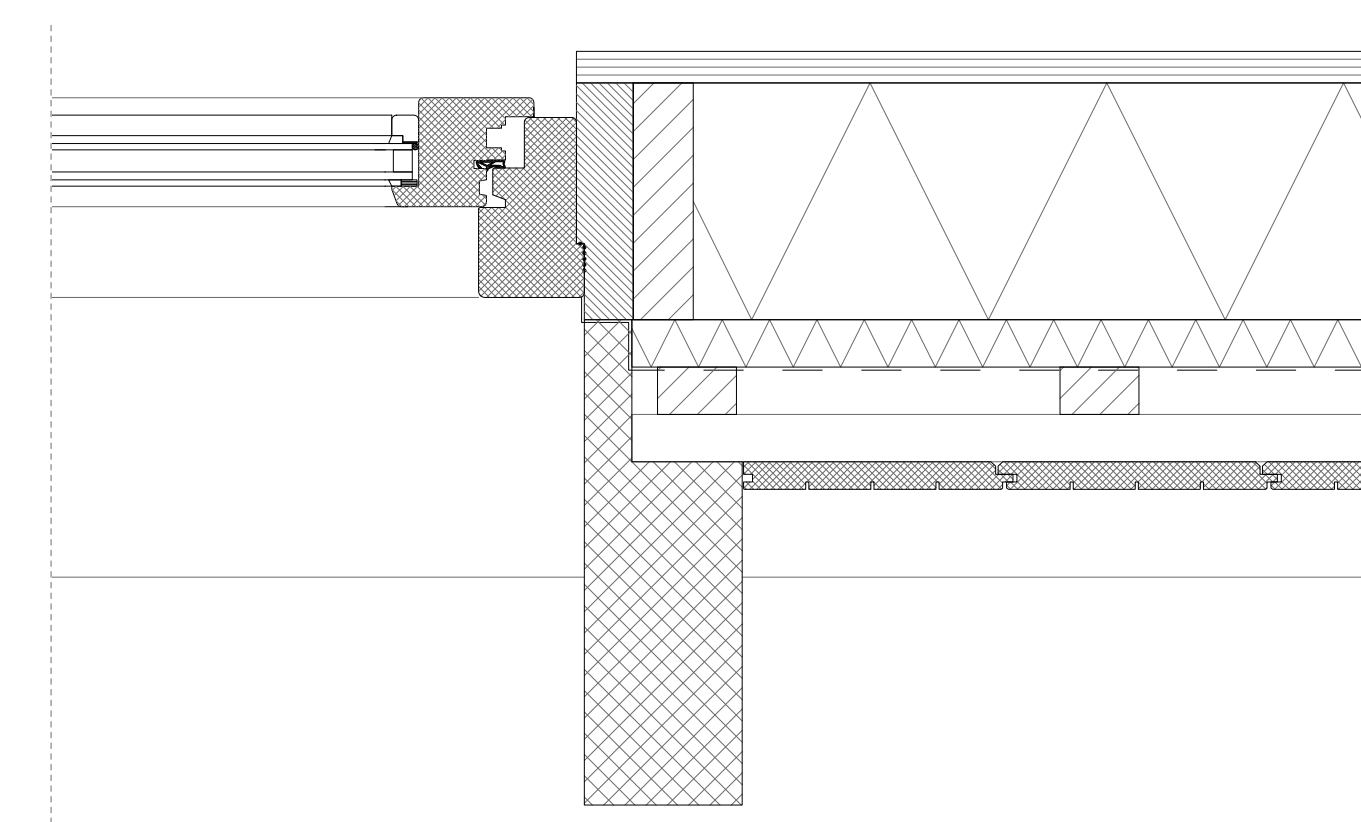
facade fragment 1:20



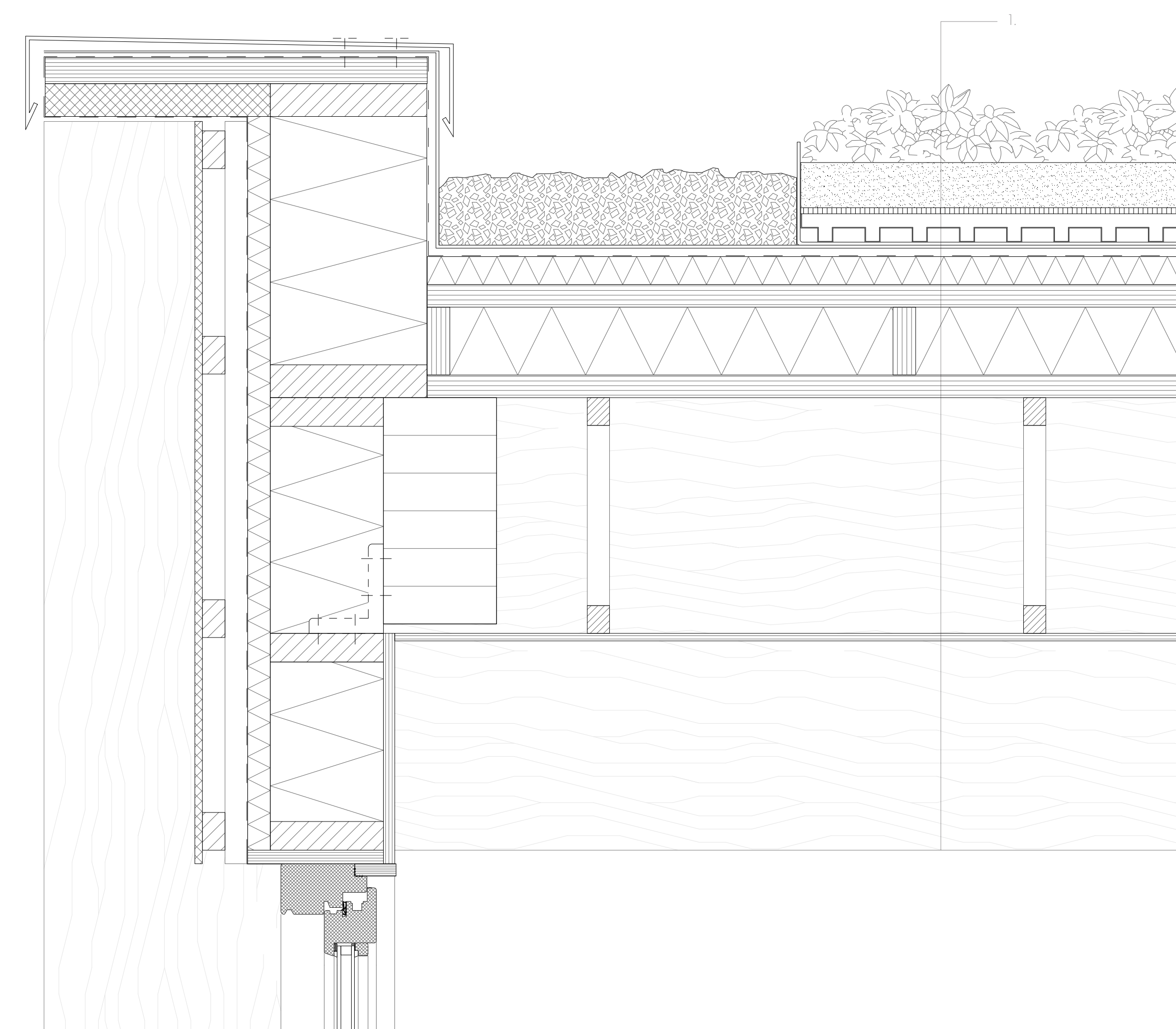
horizontal section 1:20



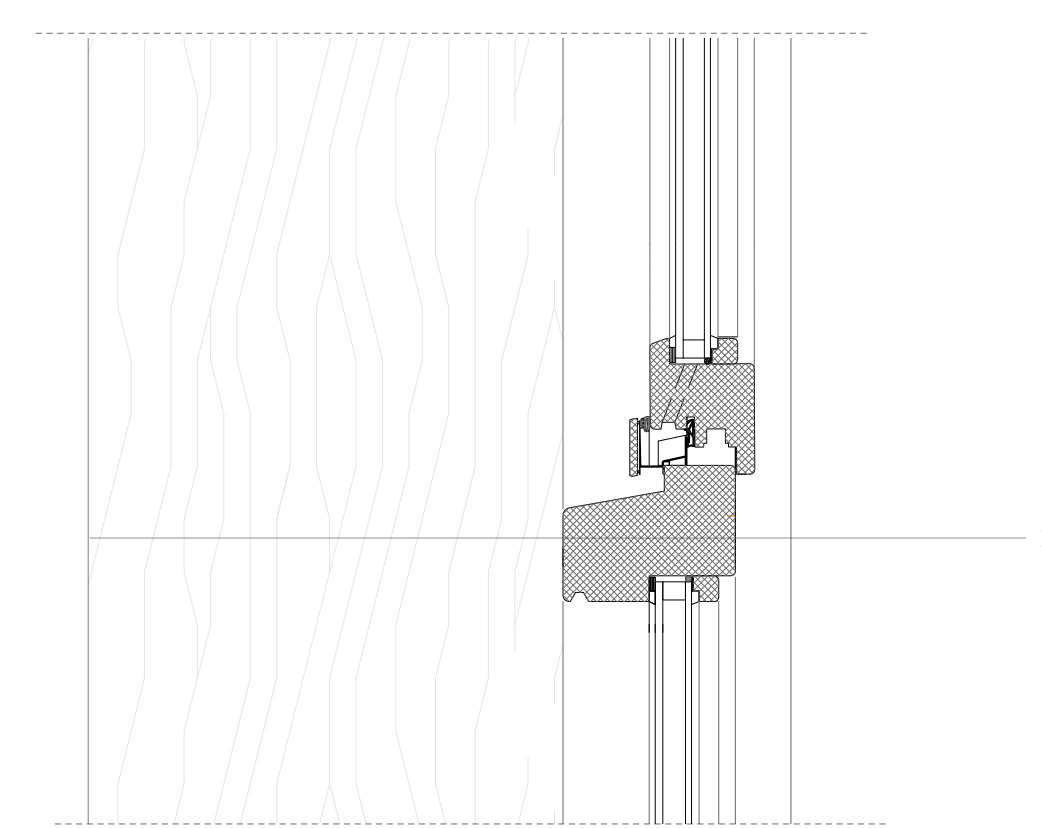
vertical section 1:20



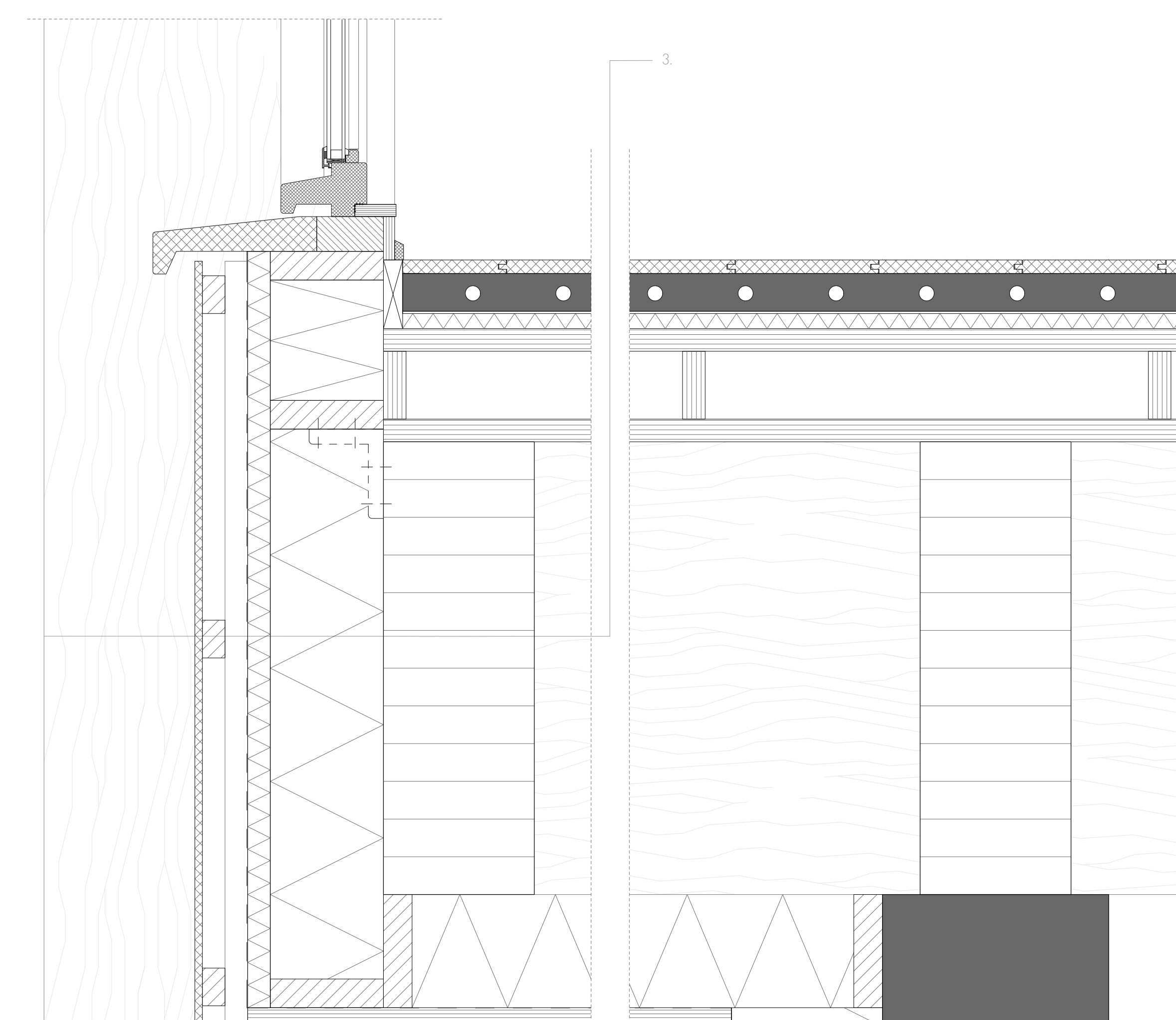
detail F 1:5



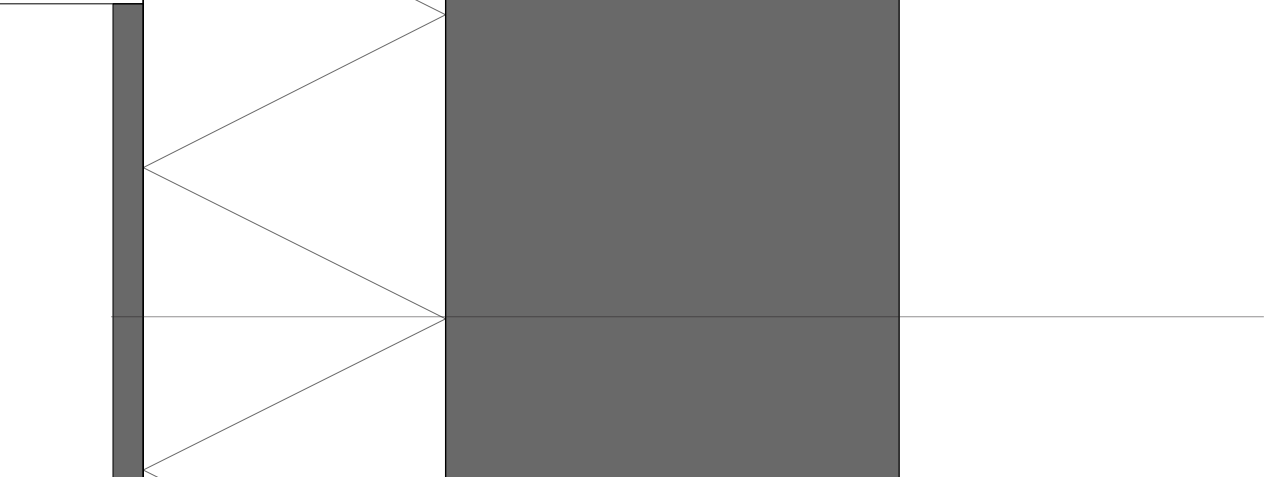
detail A 1:5



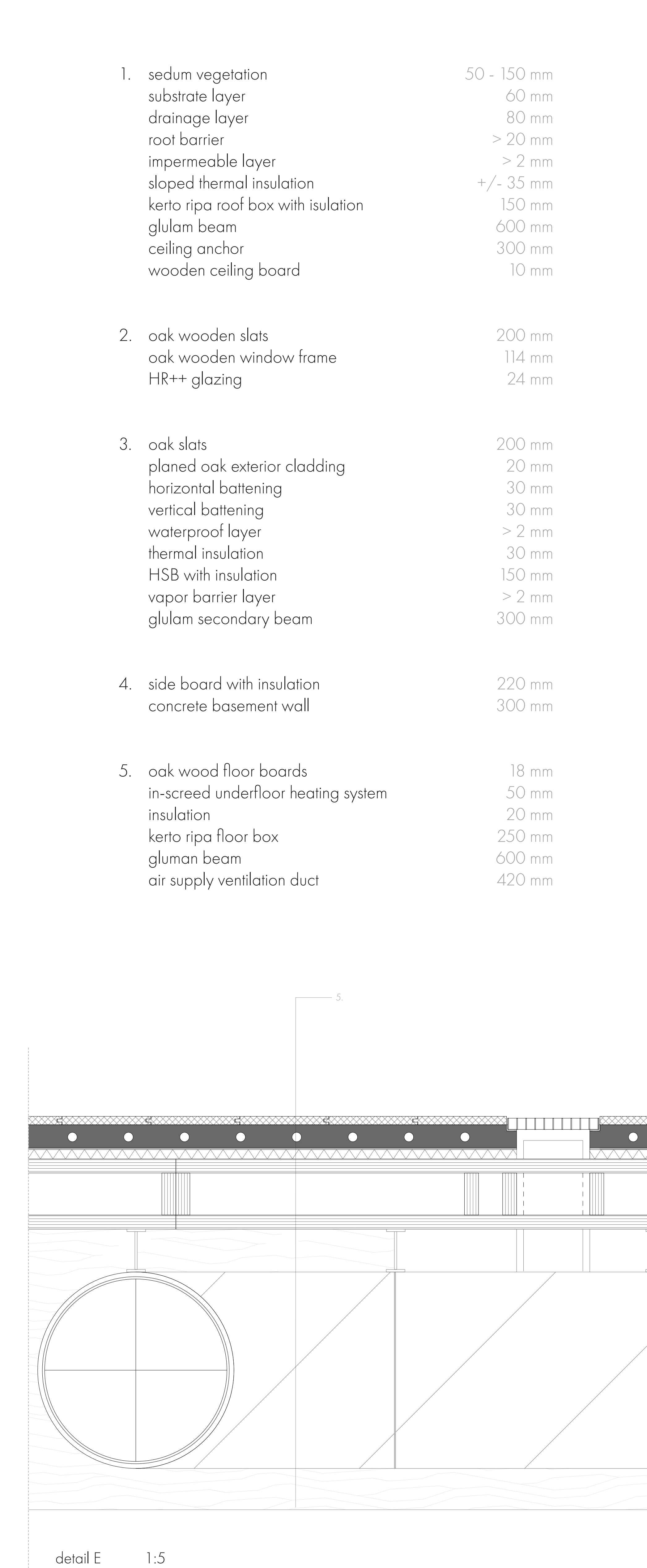
detail B 1:5



detail C 1:5



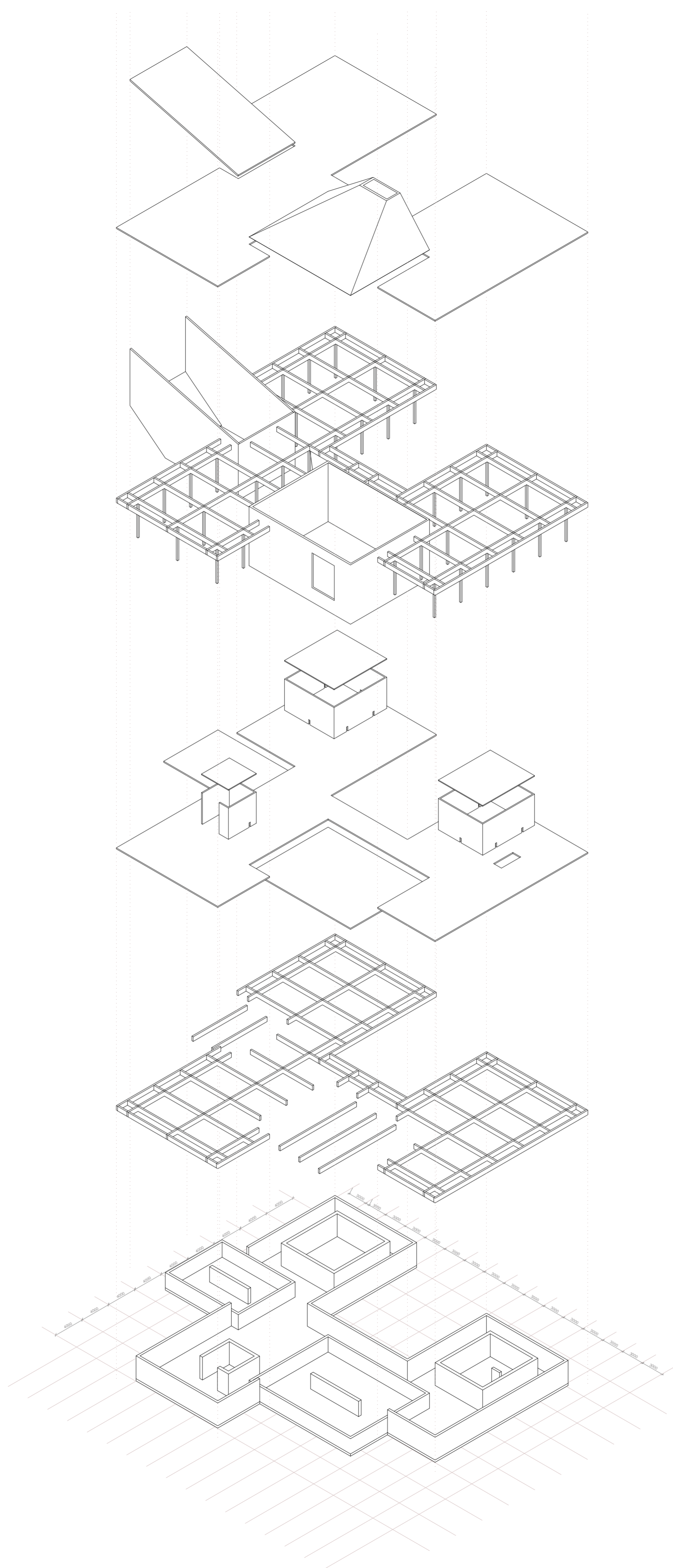
detail D 1:5



detail E 1:5

- |                                     |             |
|-------------------------------------|-------------|
| 1. sedum vegetation                 | 50 - 150 mm |
| substrate layer                     | 60 mm       |
| drainage layer                      | 80 mm       |
| root barrier                        | > 20 mm     |
| impermeable layer                   | > 2 mm      |
| sloped thermal insulation           | +/- 35 mm   |
| kerto ripa roof box with insulation | 150 mm      |
| glulam beam                         | 600 mm      |
| ceiling anchor                      | 300 mm      |
| wooden ceiling board                | 10 mm       |
|                                     |             |
| 2. oak wooden slats                 | 200 mm      |
| oak wooden window frame             | 114 mm      |
| HR++ glazing                        | 24 mm       |
|                                     |             |
| 3. oak slats                        | 200 mm      |
| planed oak exterior cladding        | 20 mm       |
| horizontal battening                | 30 mm       |
| vertical battening                  | 30 mm       |
| waterproof layer                    | > 2 mm      |
| thermal insulation                  | 30 mm       |
| HSB with insulation                 | 150 mm      |
| vapor barrier layer                 | > 2 mm      |
| glulam secondary beam               | 300 mm      |
|                                     |             |
| 4. side board with insulation       | 220 mm      |
| concrete basement wall              | 300 mm      |
|                                     |             |
| 5. oak wood floor boards            | 18 mm       |
| in-screed underfloor heating system | 50 mm       |
| insulation                          | 20 mm       |
| kerto ripa floor box                | 250 mm      |
| glulam beam                         | 600 mm      |
| air supply ventilation duct         | 420 mm      |





exploded axonometric drawing of structural design