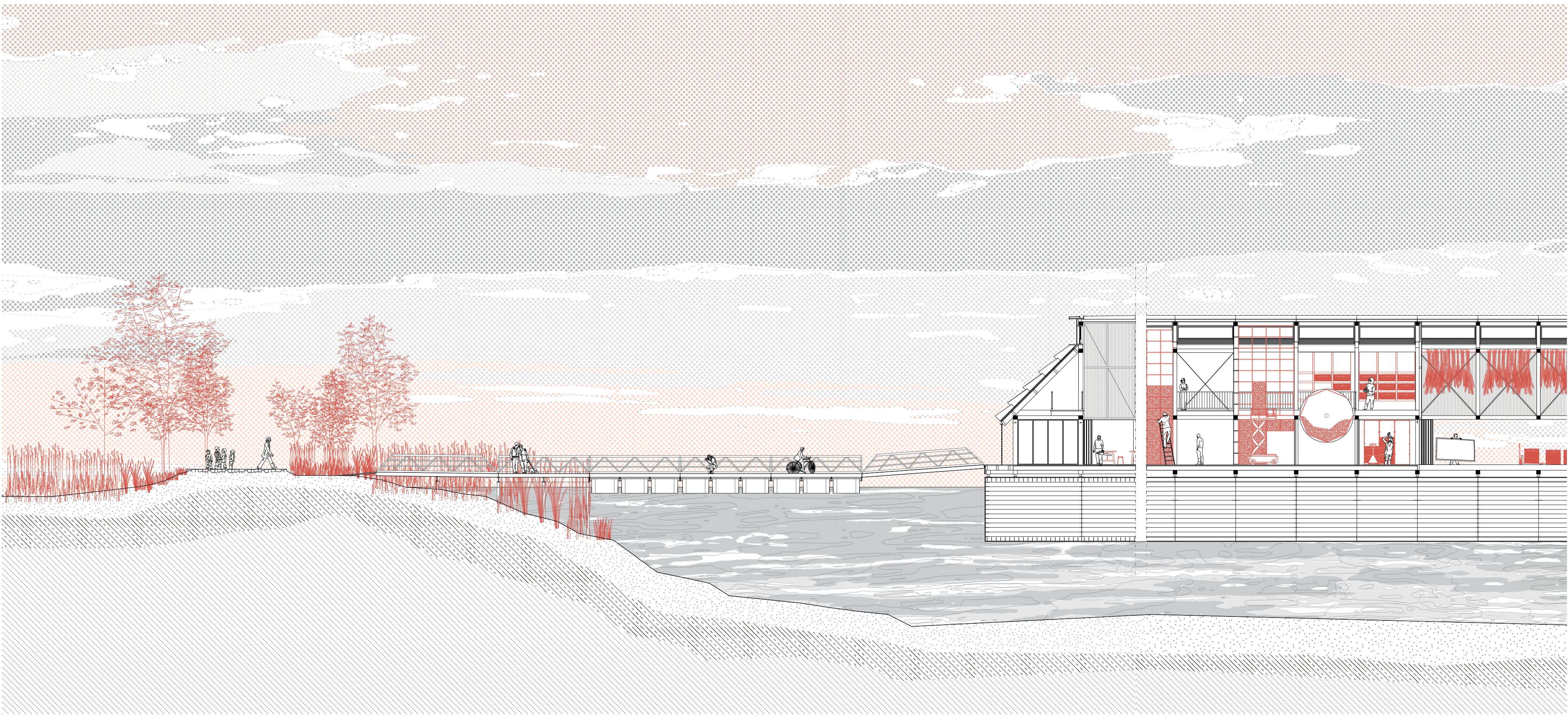
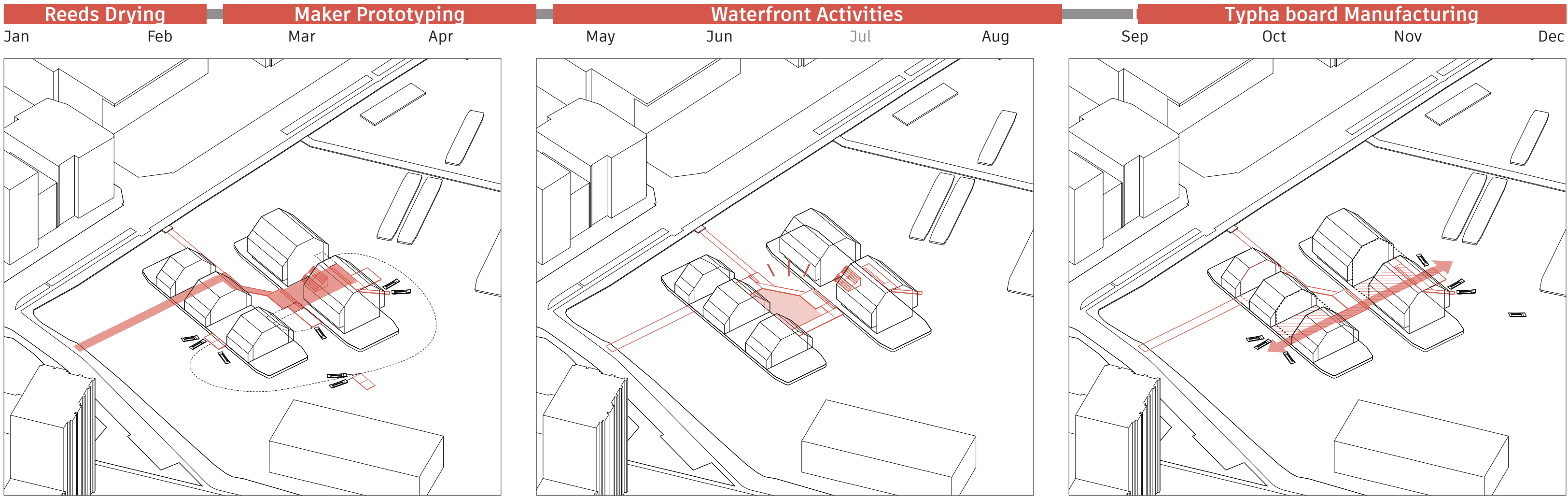
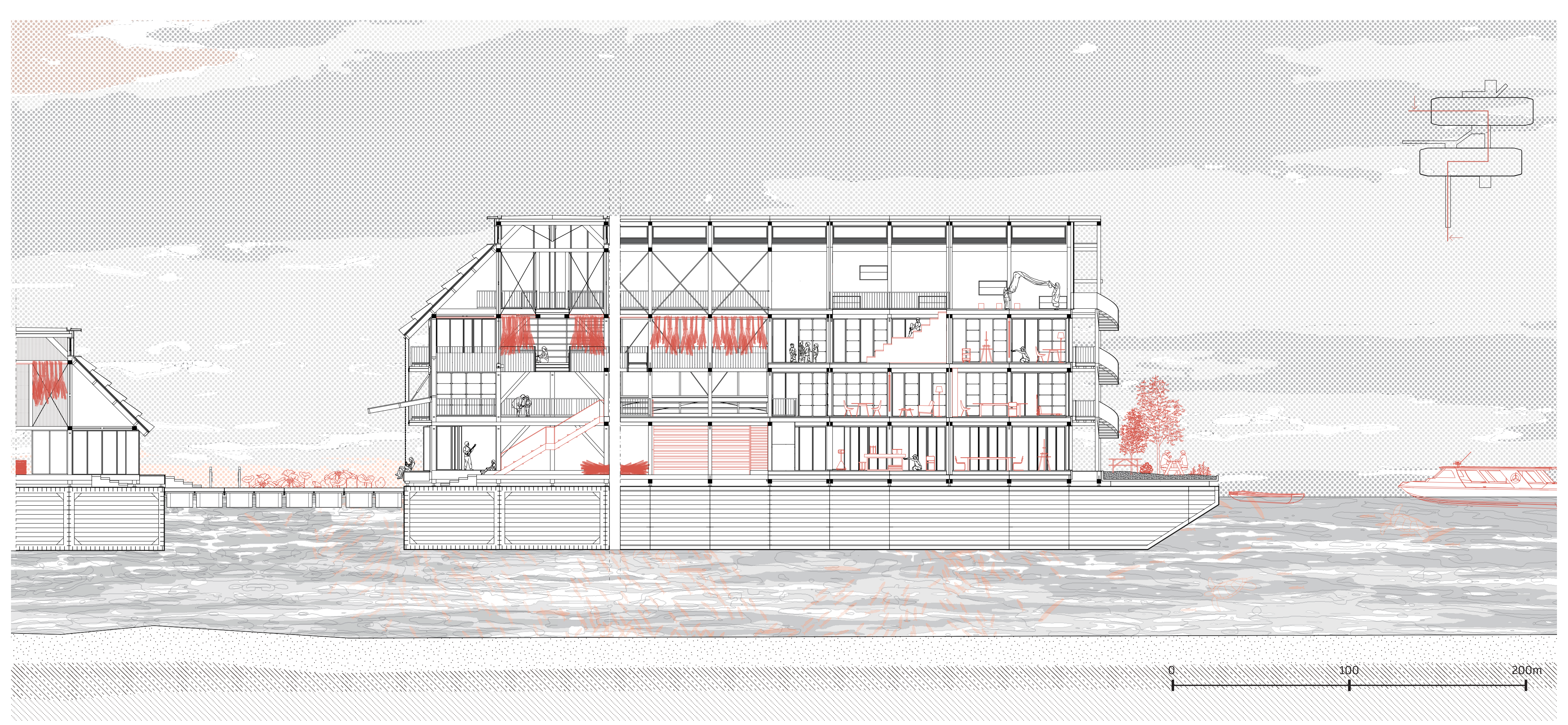
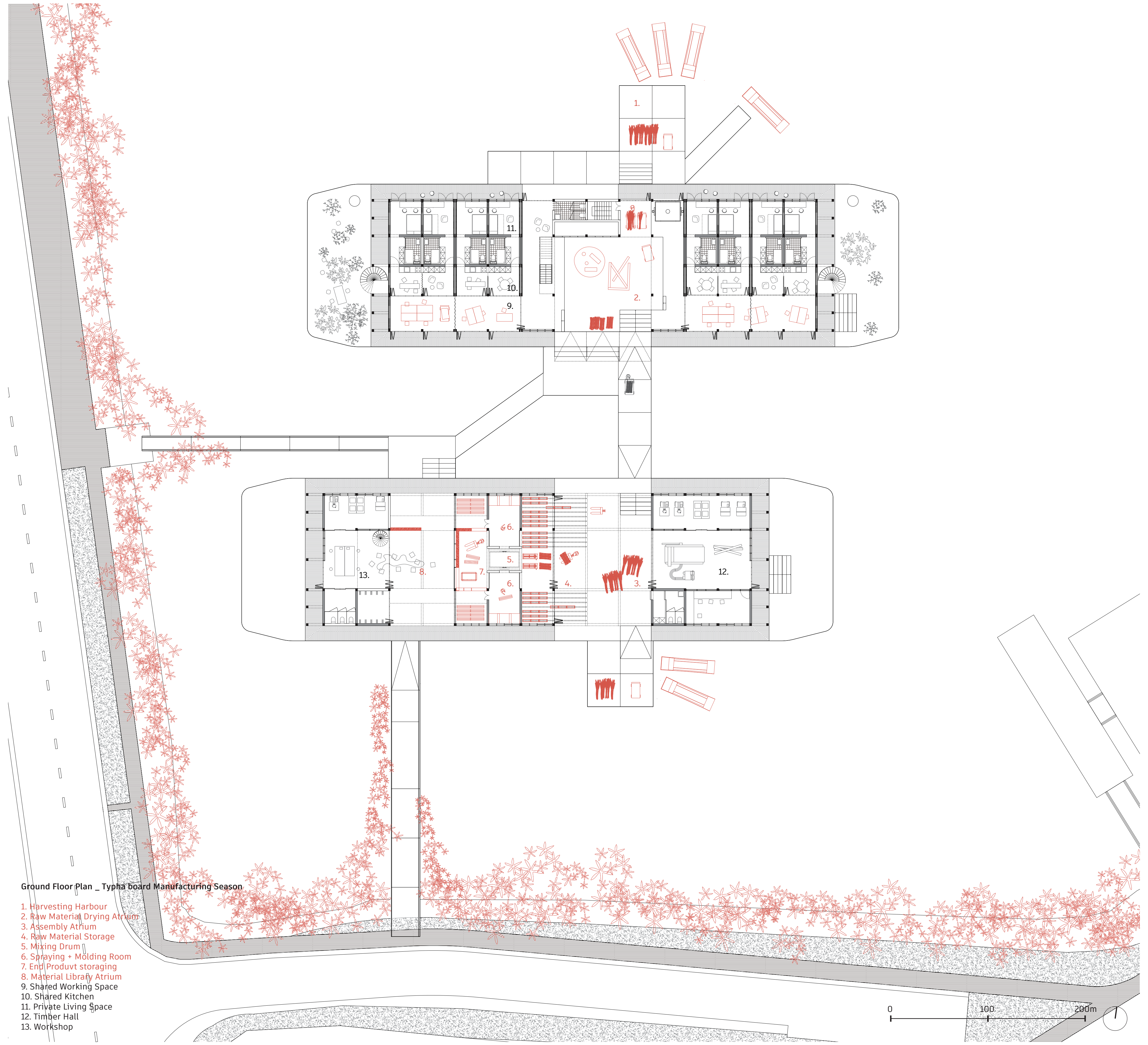
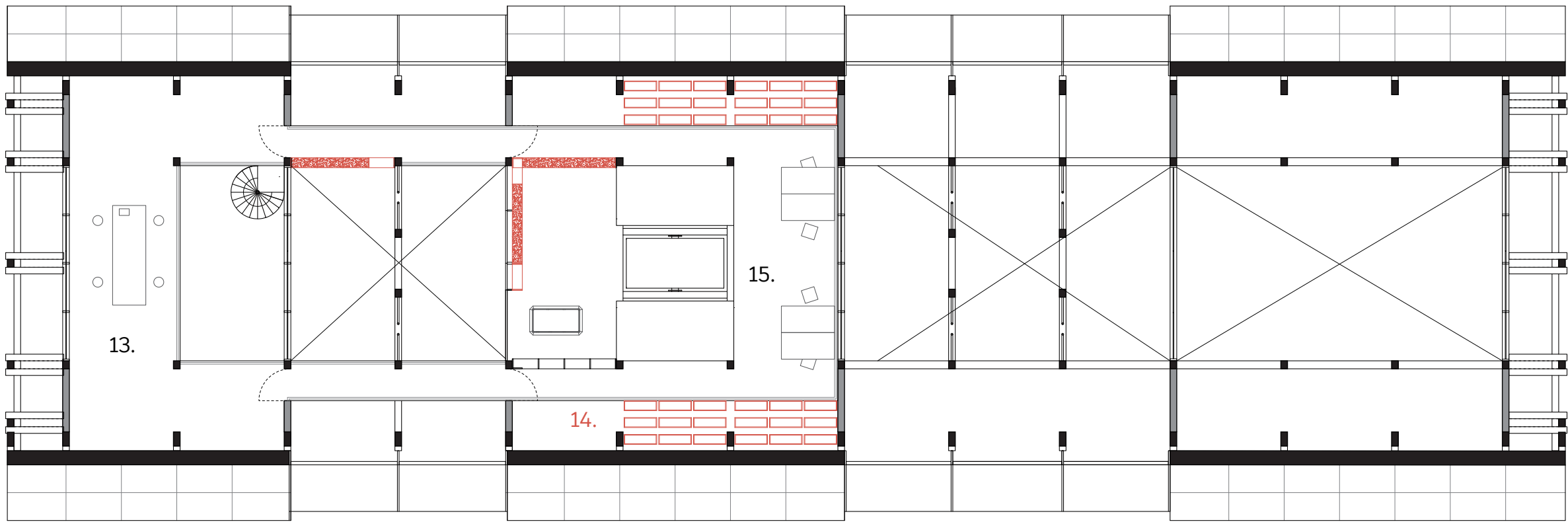






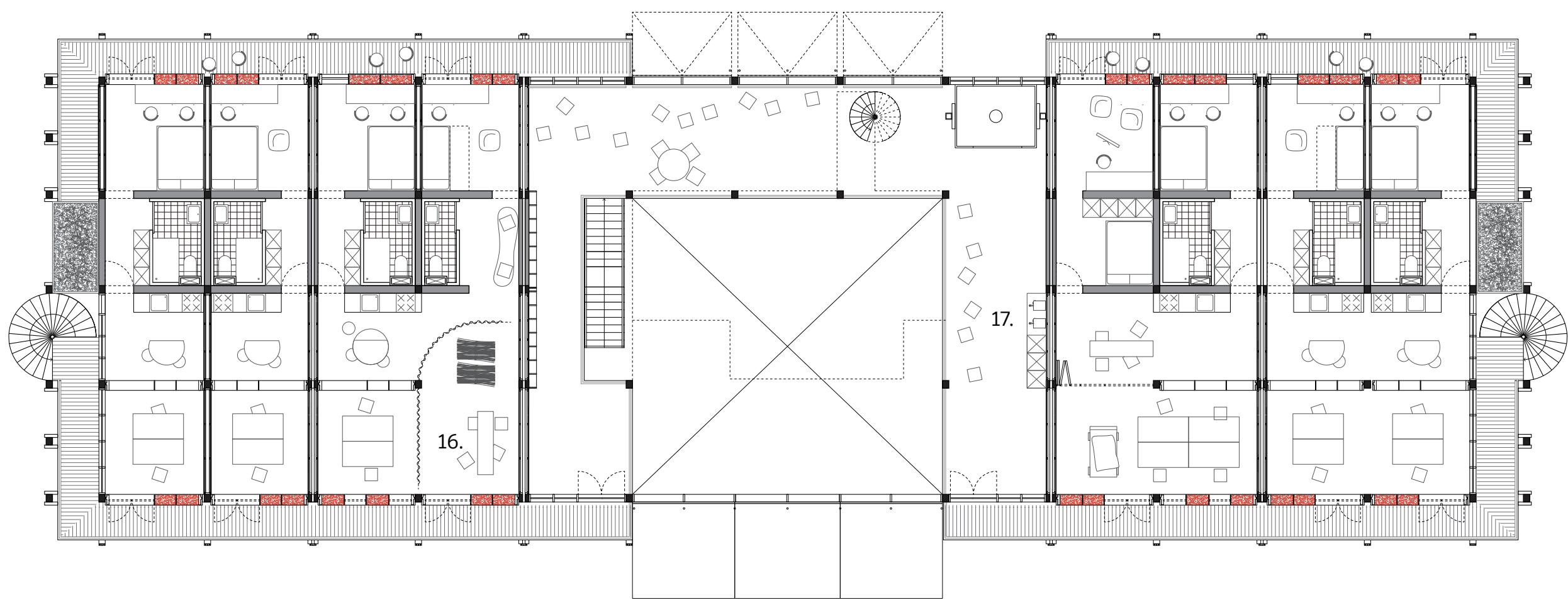


First Floor Plan _ Manufacturing Barge

- 13. Workshop
- 14. Raw Material Storage Hanger
- 15. Pathway



View from wetland park



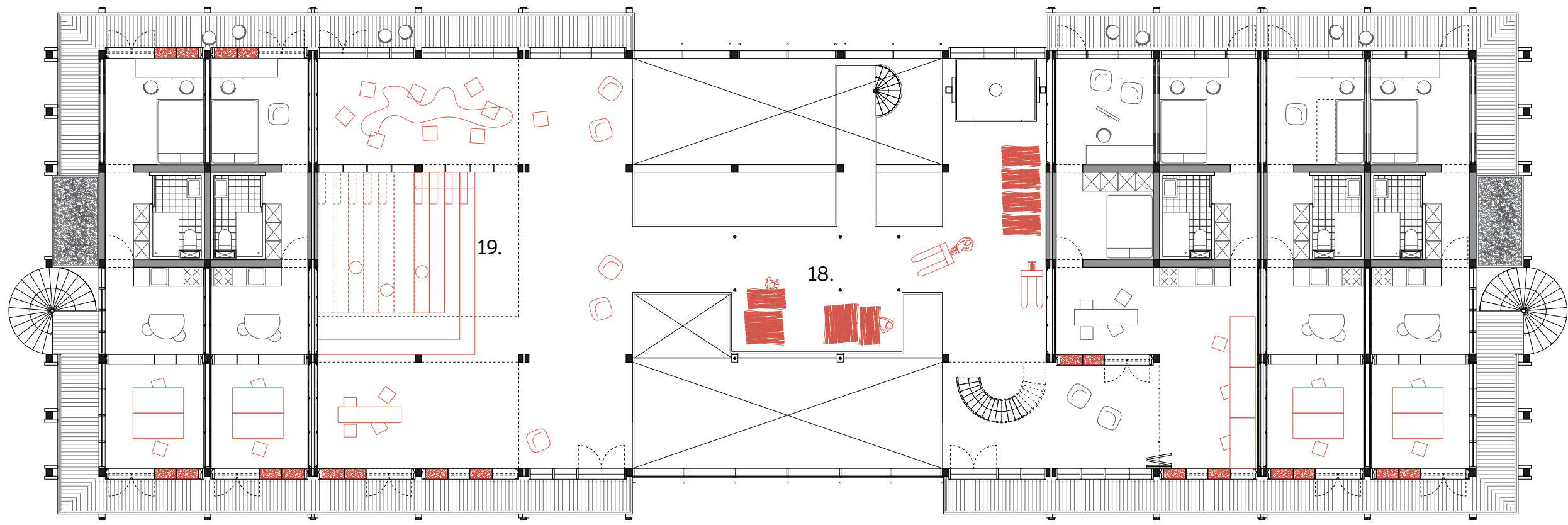
First Floor Plan _ Residential Barge

17. Gathering Platform

- 16. Working+Living Apartment
 - Studio
 - Living Space (kitchen; dinning room)
 - Enclosed Bedroom



Entrance through the material library and workshop

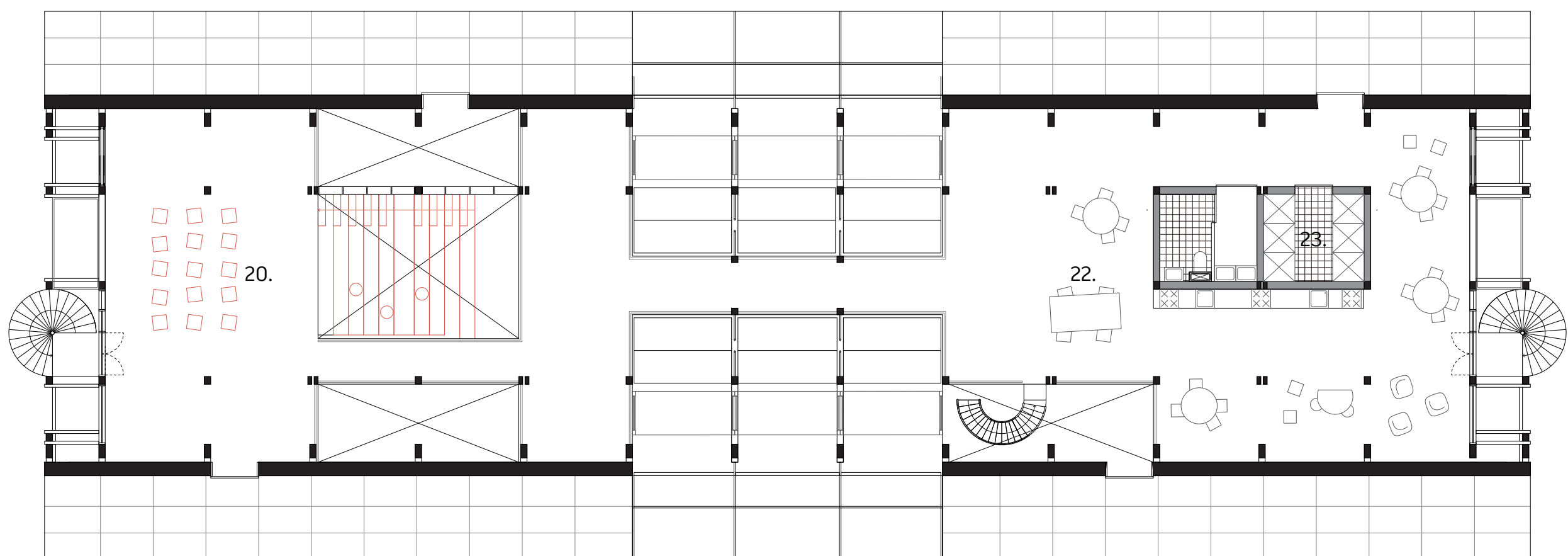


Second Floor Plan _ Residential Barge

- 18. Material Sorting Platform
- 19. Communal Lecture Space

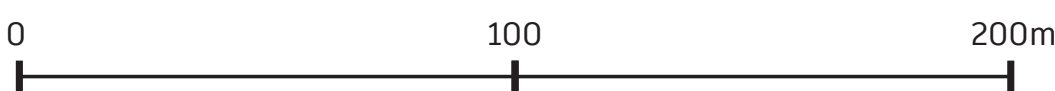


Raw material drying space integrated with community recreational space



Community Roof Plan _ Residential Barge

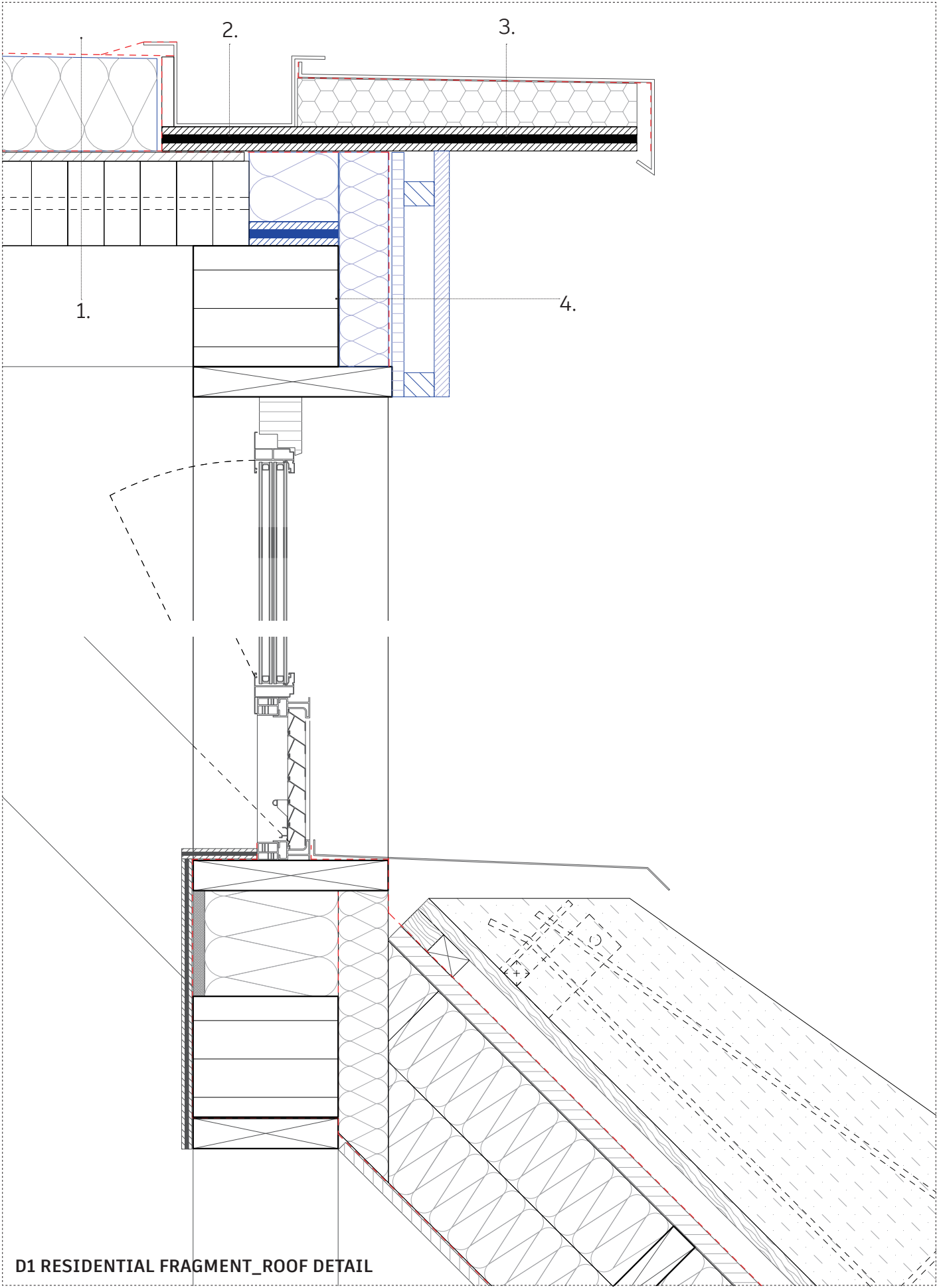
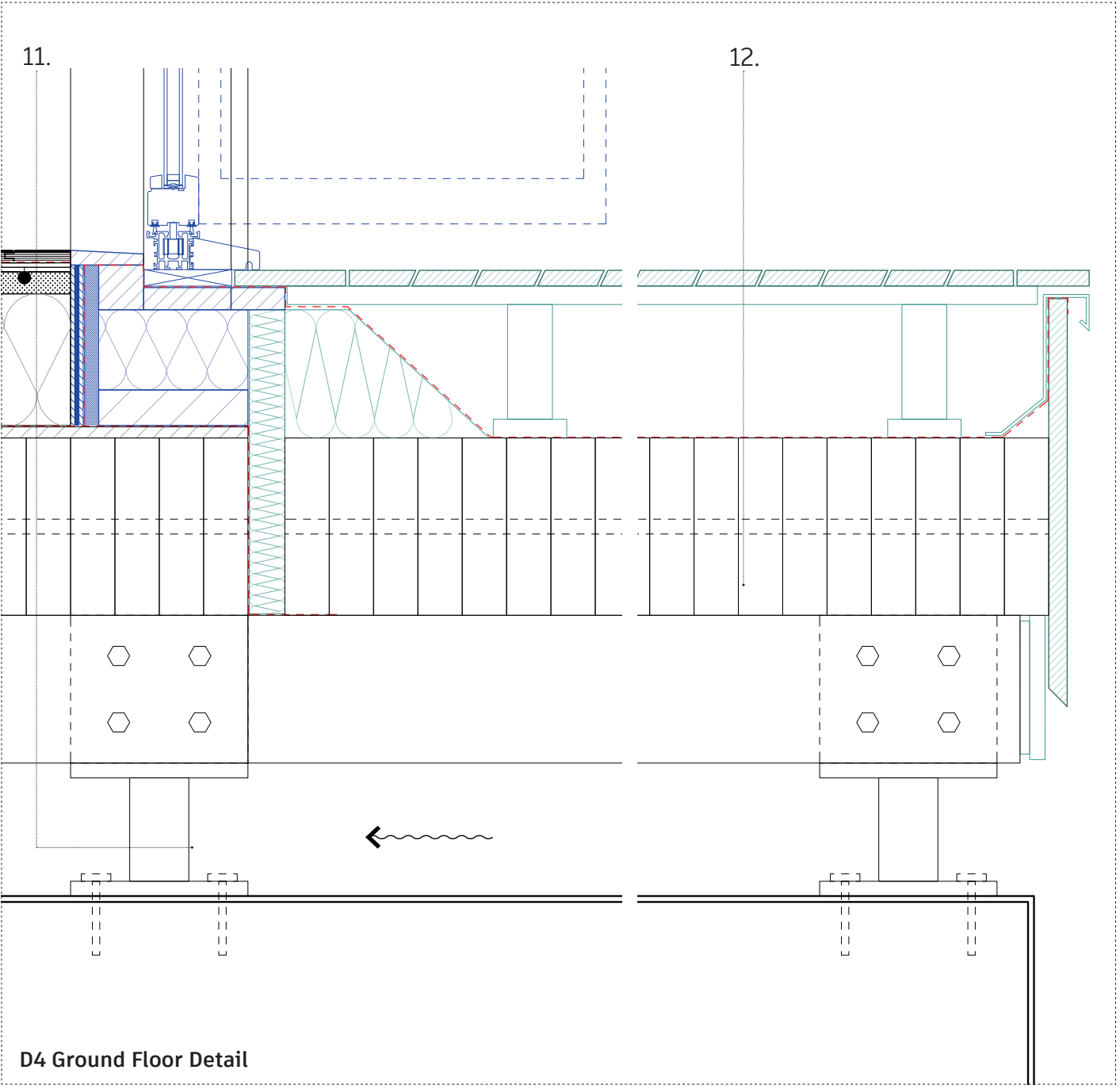
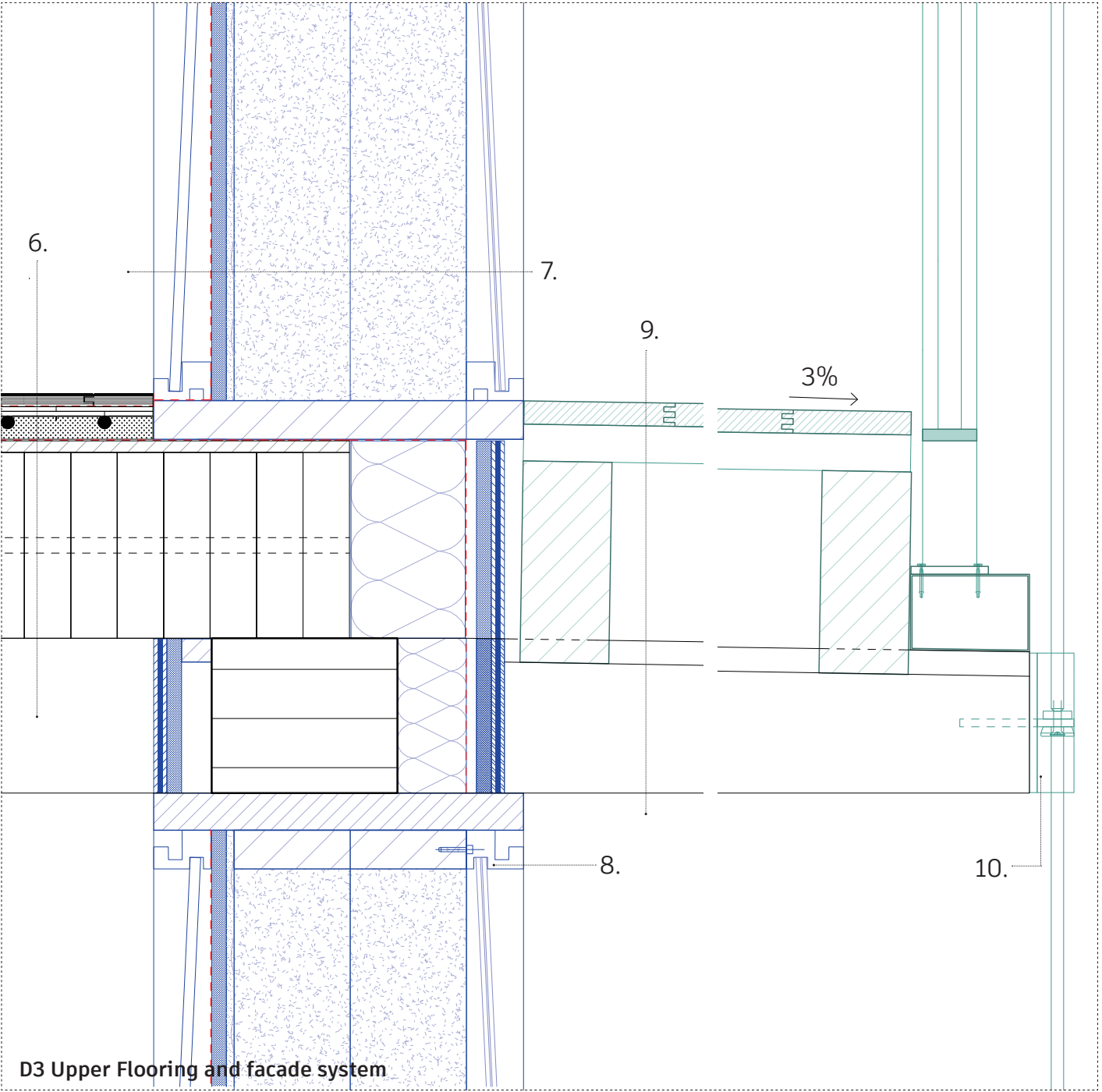
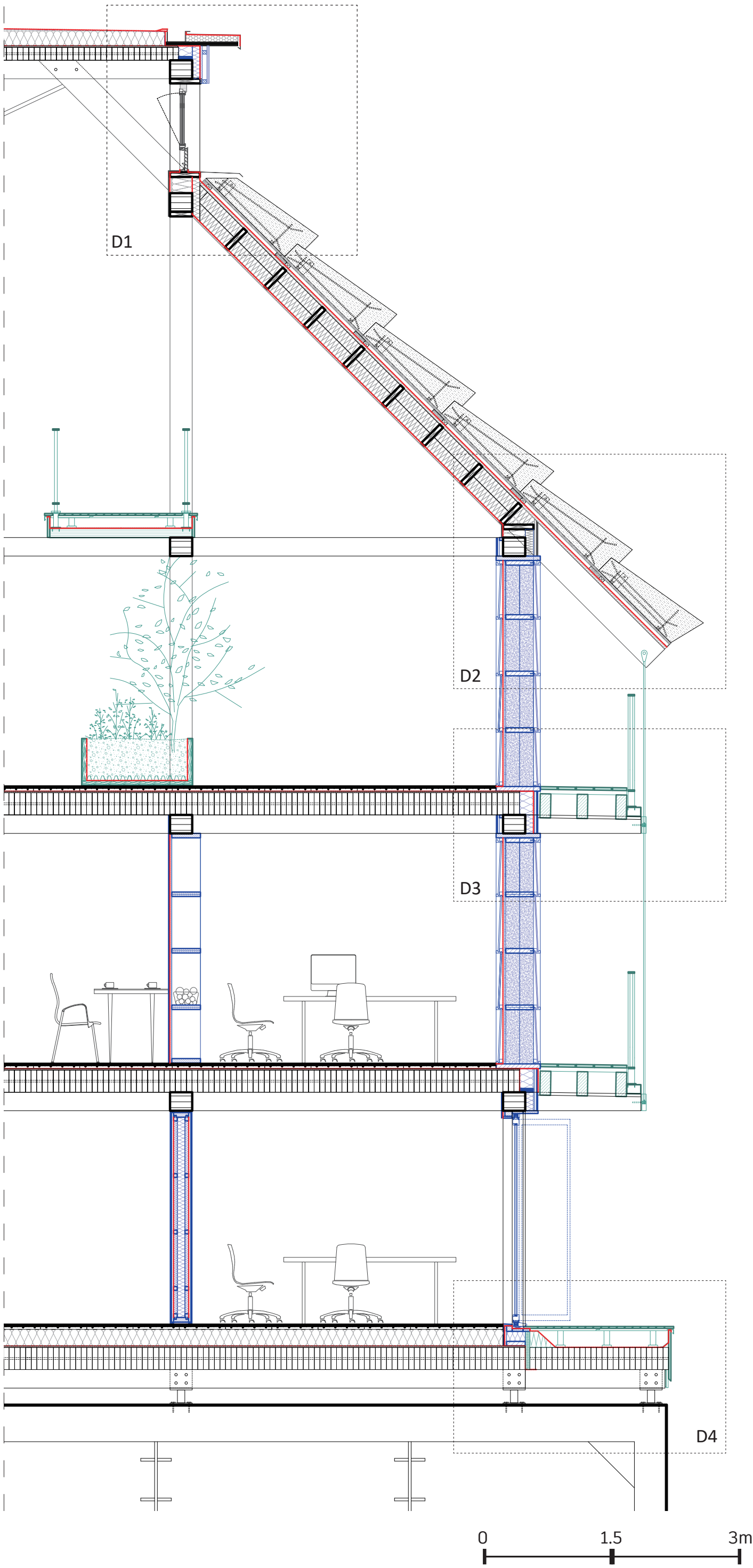
- 20. Community Gathering Space
- 21. Shared Cooking Space
- 22. Laundry Room



Rooftop as communal gathering space



Residential Fragment with seasonal adaptable facade



D1 RESIDENTIAL FRAGMENT_ROOF DETAIL

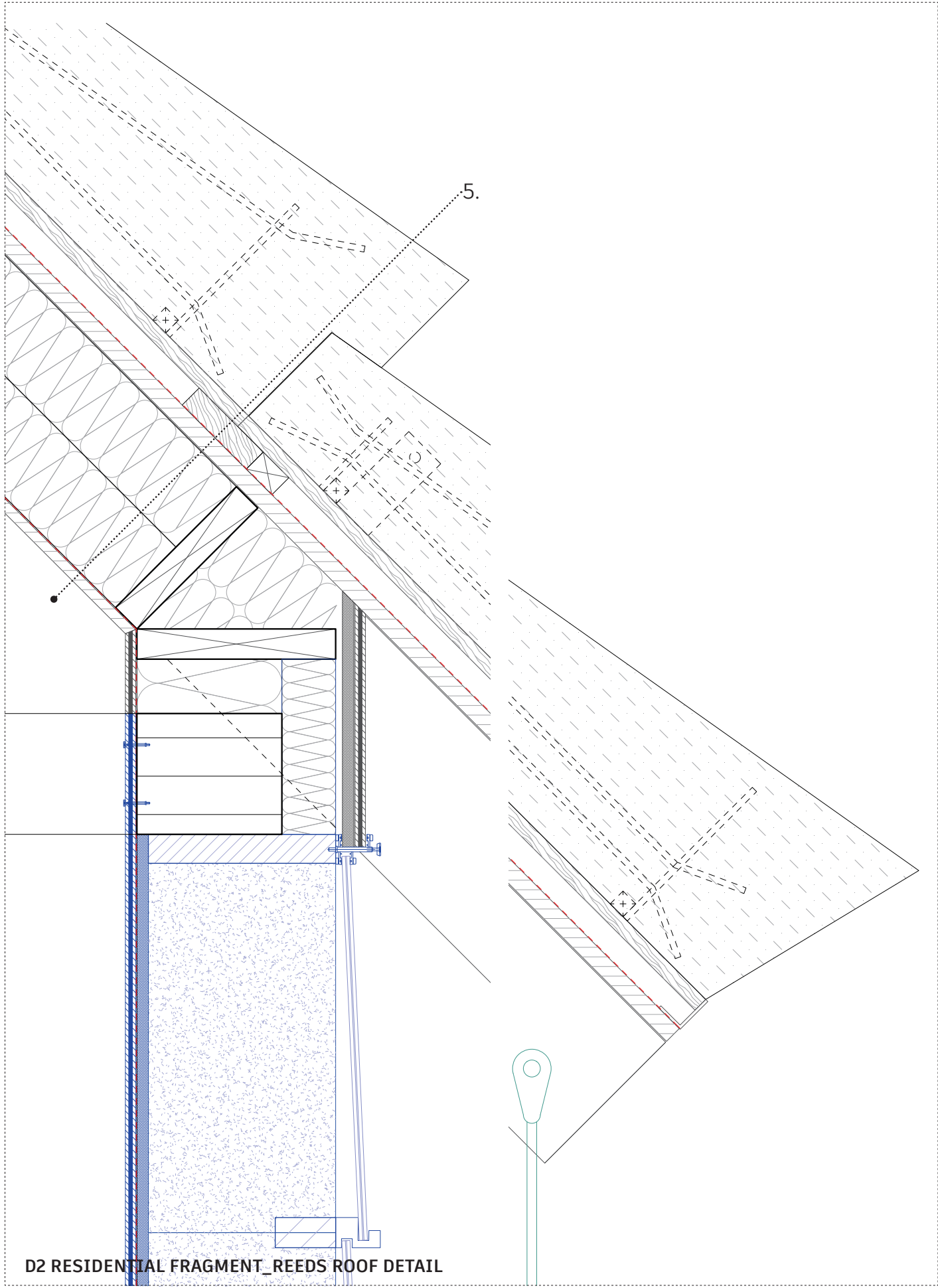
1. Roof Structure:
Roofing film
wood fiber insulation
Vapor barrier
Dowel laminated ceiling 240mm
2. Cover plate gutter 2mm
3. Fire barrier:
cover plate 2mm
board 40mm
4. Exterior wall element:
Glulam 240mm
compact, compressive-resistant rock wool insulation
board, 2*80mm
Waterproof layer
Horizontal battens
Pre-gray poplar finishing

5. Reeds roof structure:
Reeds modular block: Dried reeds block 375mm, hot-dip galvanized, SOP for reeds fixation, Plywood plank 25mm
Alder timber batten 25mm
plywood layer 25mm
Waterproof, plastic membrane
Rafters, nailed to double frame wood fiber insulation 300mm
Vapour barrier
Sheathing 20mm
Tri-plywood panel 18mm

D3 Upper Flooring and facade system

6. Floor structure, upper floor
Flooring, parquet, solid bleached poplar, on-edge 15mm
JUPITER Firmax CP
JUPITER Ideal ECO with underfloor heating
Thermal insulation, EPS with cement-bound OSB panel for reinforcement 15mm
Dowel laminated Alder timber flooring 240mm
Beech wood Glulam beam

D2 RESIDENTIAL FRAGMENT_REEDS ROOF DETAIL



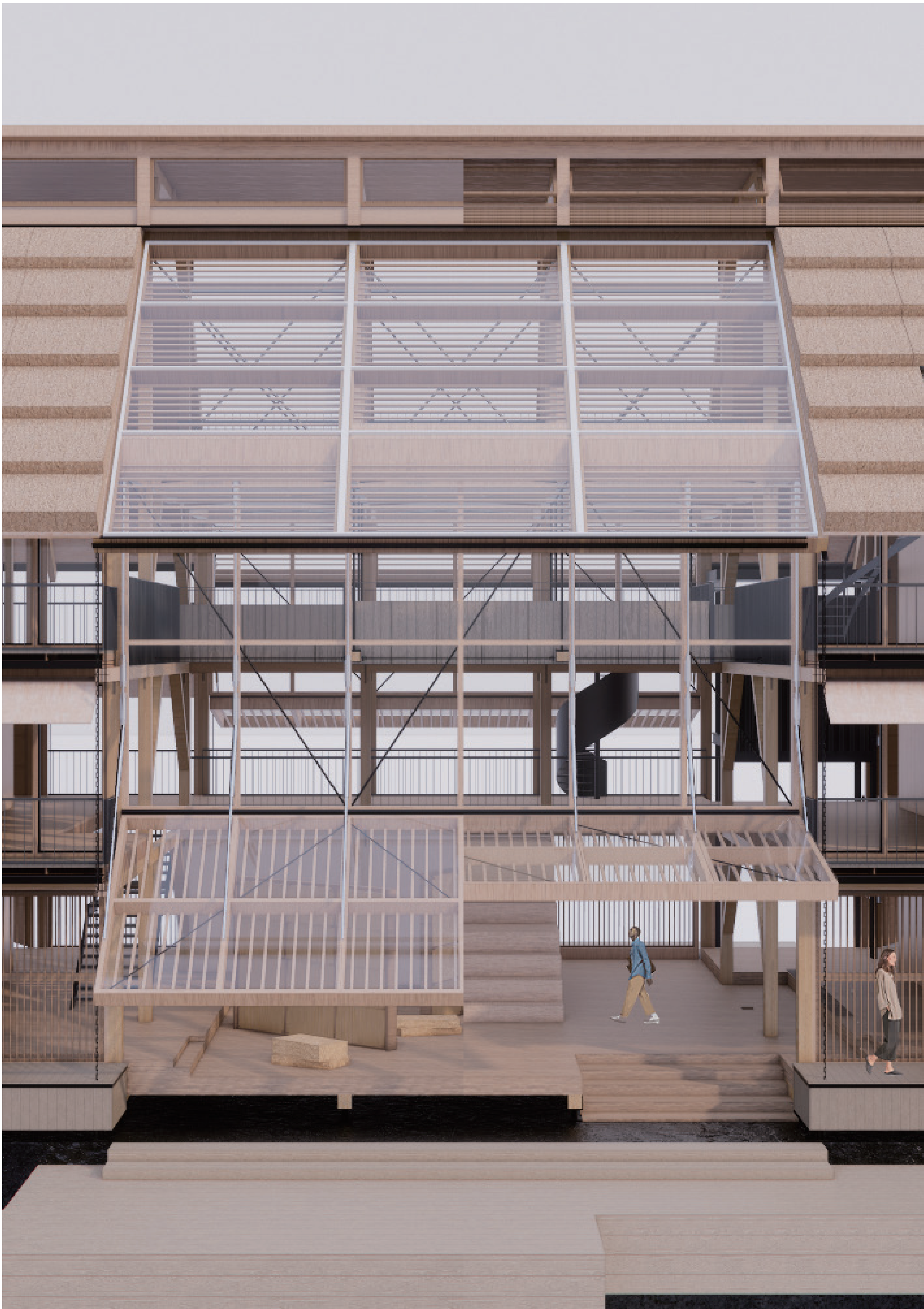
7. Demountable facade Structure (outdoor-indoor)
Glazed cladding with timber joint
Rear ventilation 30mm
Wood studs/ thermal insulation, typha board 330mm, R = 6 m²K/W
Gypsum fibreboard 15mm
vapour barrier
plywood finishing
8. Wooden bracket
9. Upper floor Varanda

D4 Ground Floor Detail

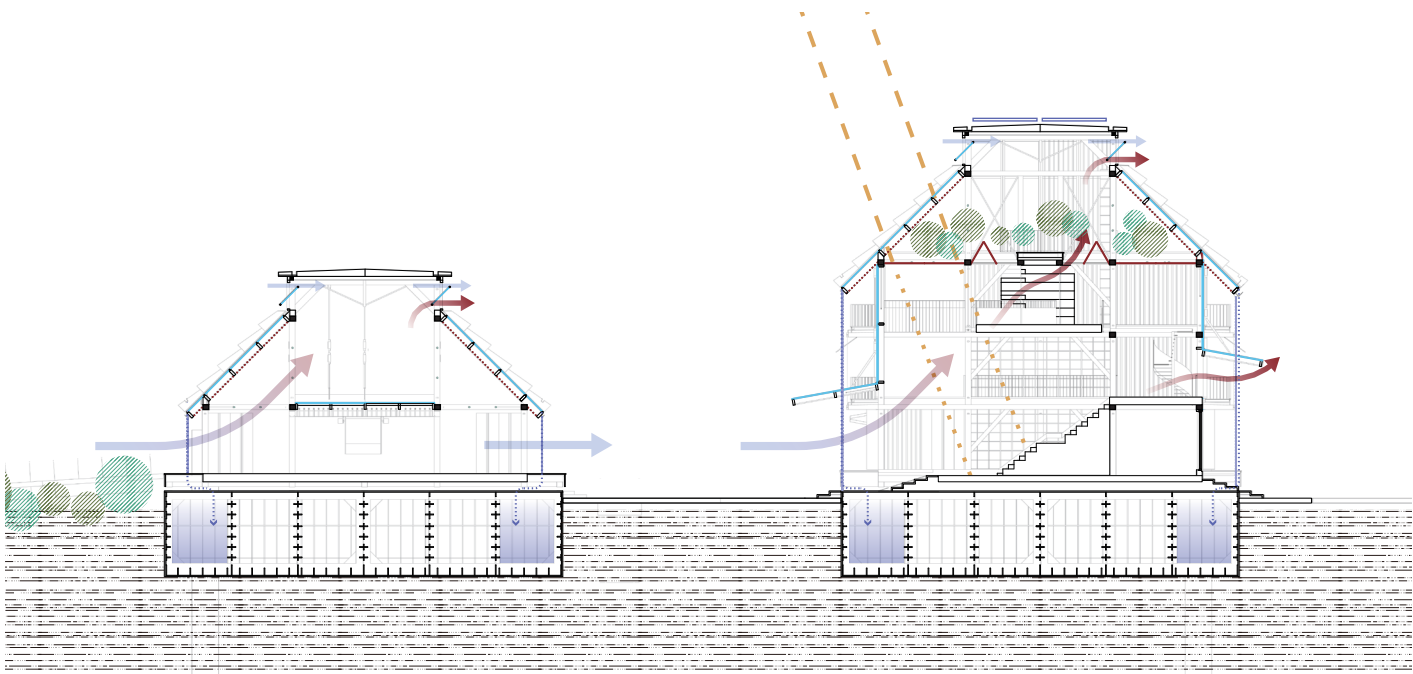
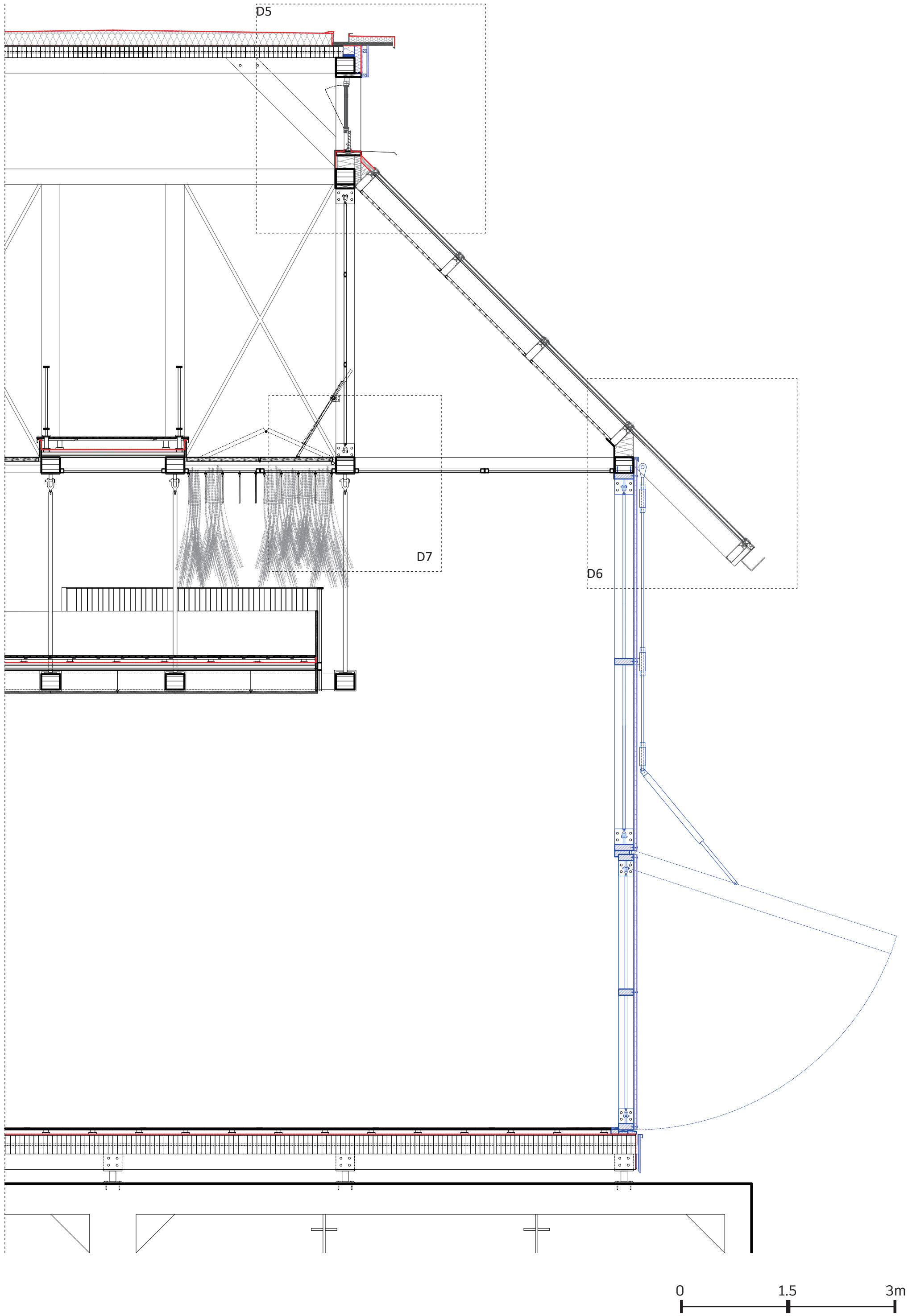
11. Floor structure, ground floor
Flooring, parquet, solid bleached poplar, on-edge 15mm
JUPITER Firmax CP
JUPITER Ideal ECO with underfloor heating
Thermal insulation, EPS with cement-bound OSB panel for reinforcement 15mm

12. Floor structure, varanda
Accoya plank, planed / sanded 27mm, battens 27mm, mitred blocks 51-81 mm
Alder sawn timber board in gradient 1.5%
Waterproofing, plastic membrane, mechanically fastened
Dowel laminated Alder timber flooring 240mm
Beech wood Glulam beam for levelling 200mm
Air cavity for ventilation 180mm
Steel footing fixed to the barge secondary beam

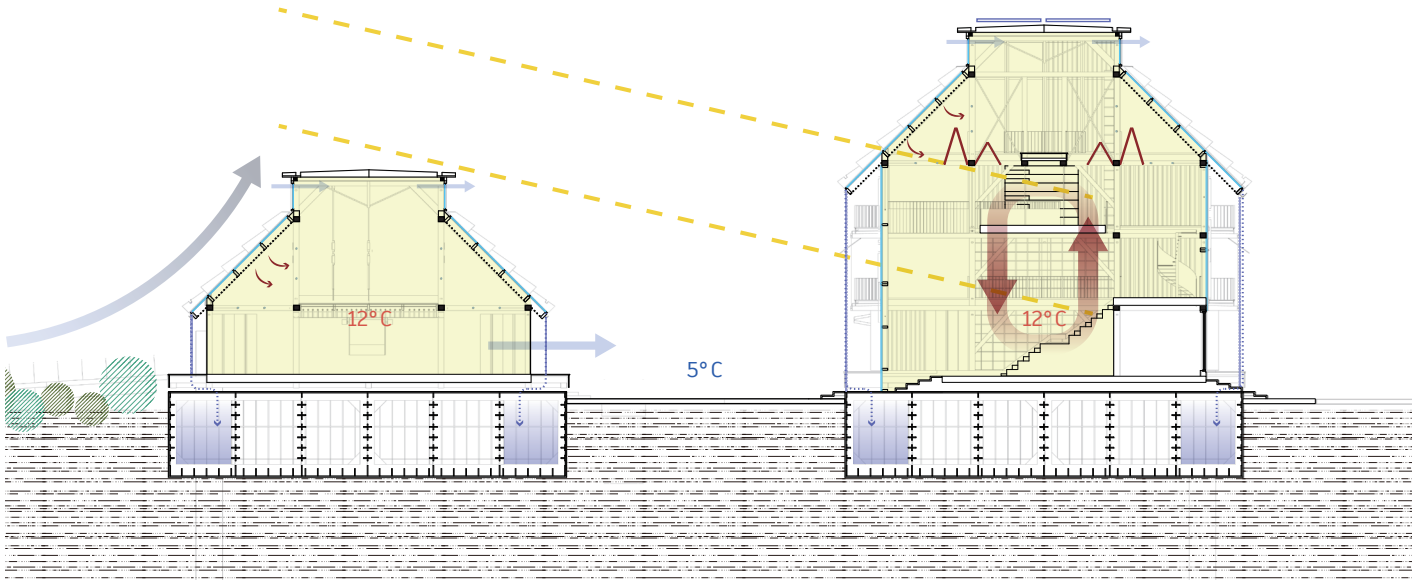
10. Eaves board, pre-grayed poplar



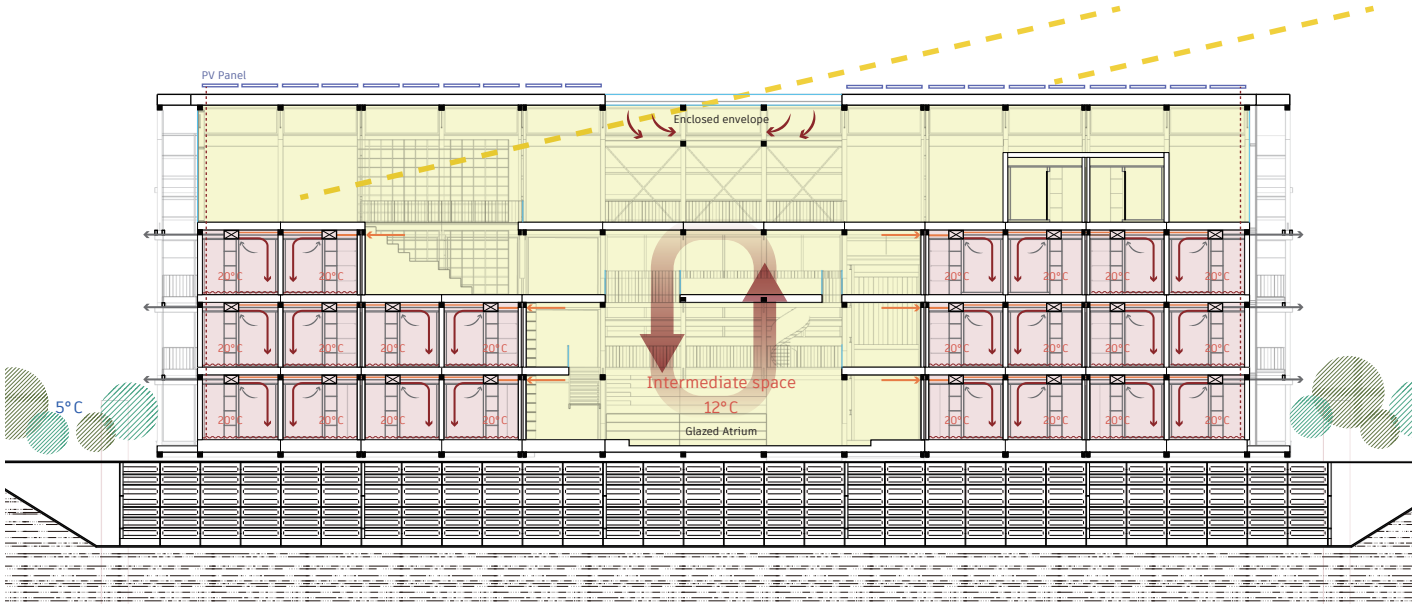
Atrium Fragment with seasonal climate control strategy



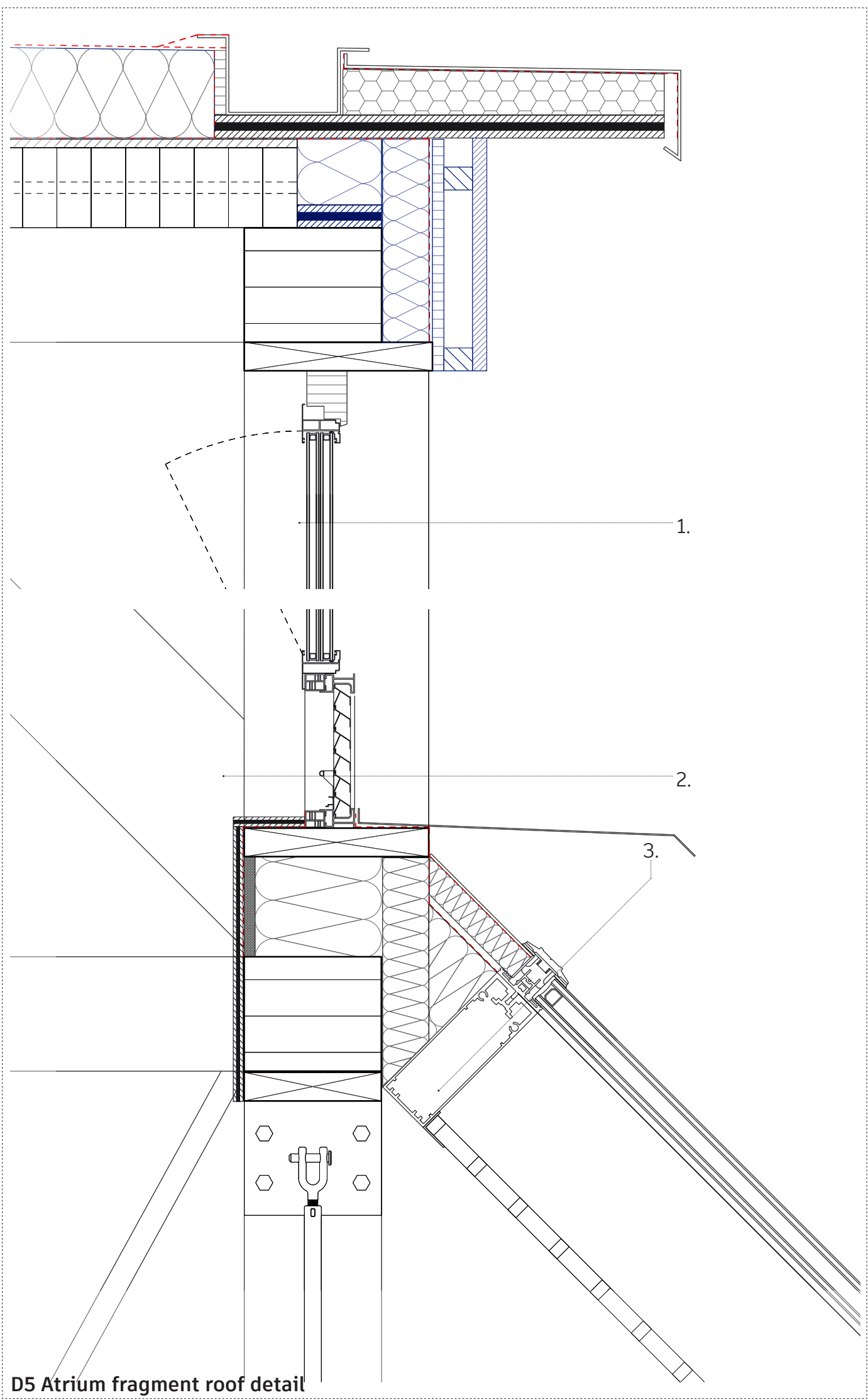
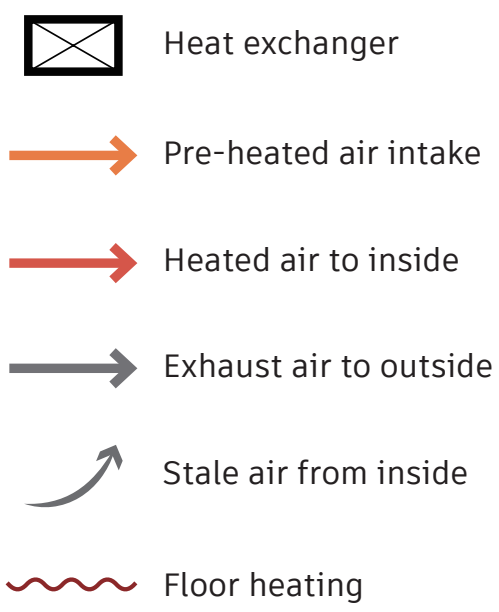
Summer climate strategy



Winter climate strategy

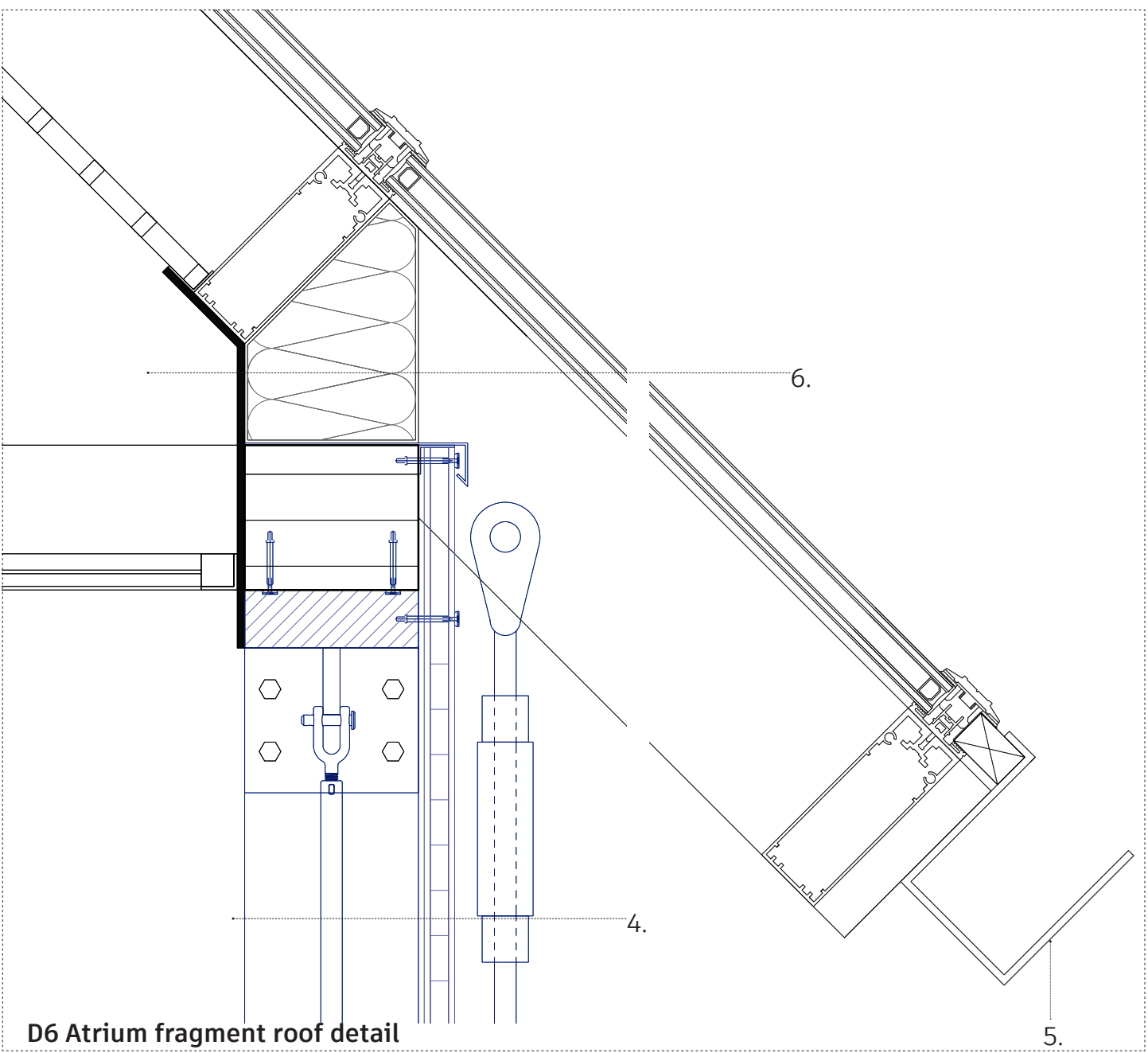


Winter heat recovery ventilation

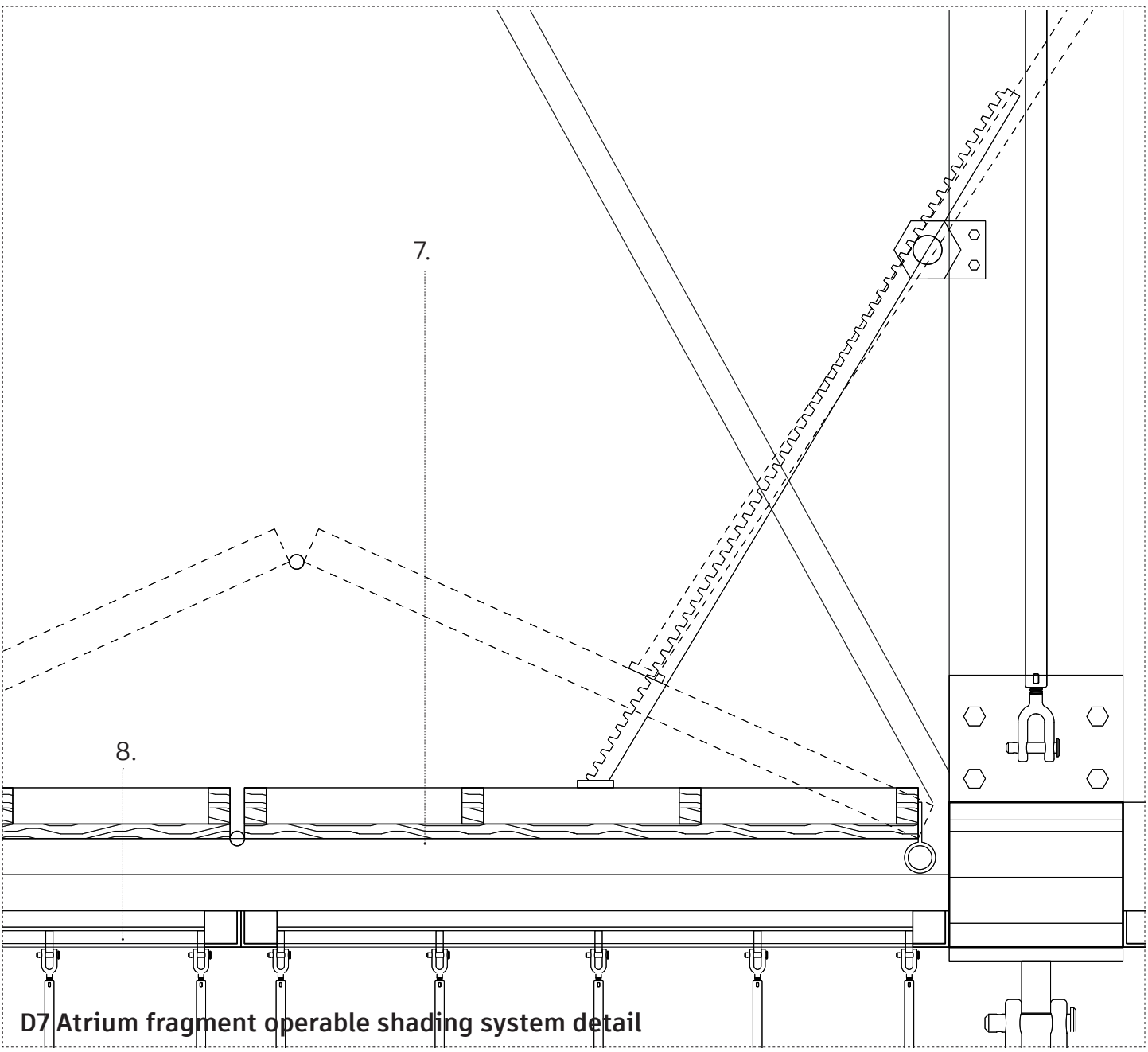


D5 Atrium fragment roof detail

1. Fully automatic operation night vent hatch
 2. Roof opening
Tri-plywood
Vapour barrier
Gypsum board
Wooden batten as upper and lower finish of the window with wood fiber insulation
Awning roof window for summer ventilation
 3. Glazed pitch roof
Poplar timber shading
Double glazing fixed to metal mullion supported by the rafter
- D6 Atrium fragment roof detail**
4. Suspended semi-transparent facade
Suspended LVL timber frame with metal cable bracing 240mm
Polycarbonate fixed to timber frame 42mm
5. Metal gutter



D6 Atrium fragment roof detail



D7 Atrium fragment operable shading system detail

7. Mechanical shading system
8. Raw cattail hanger
6. LVL Bracket against torsion