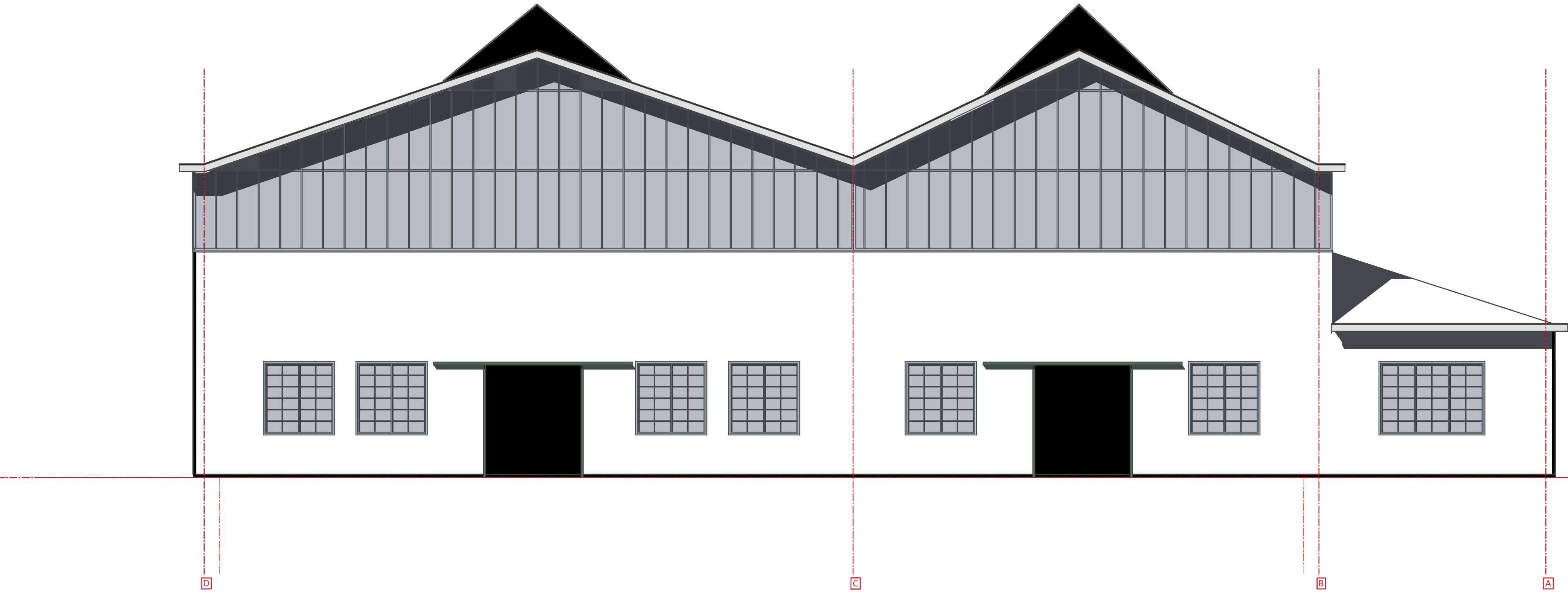
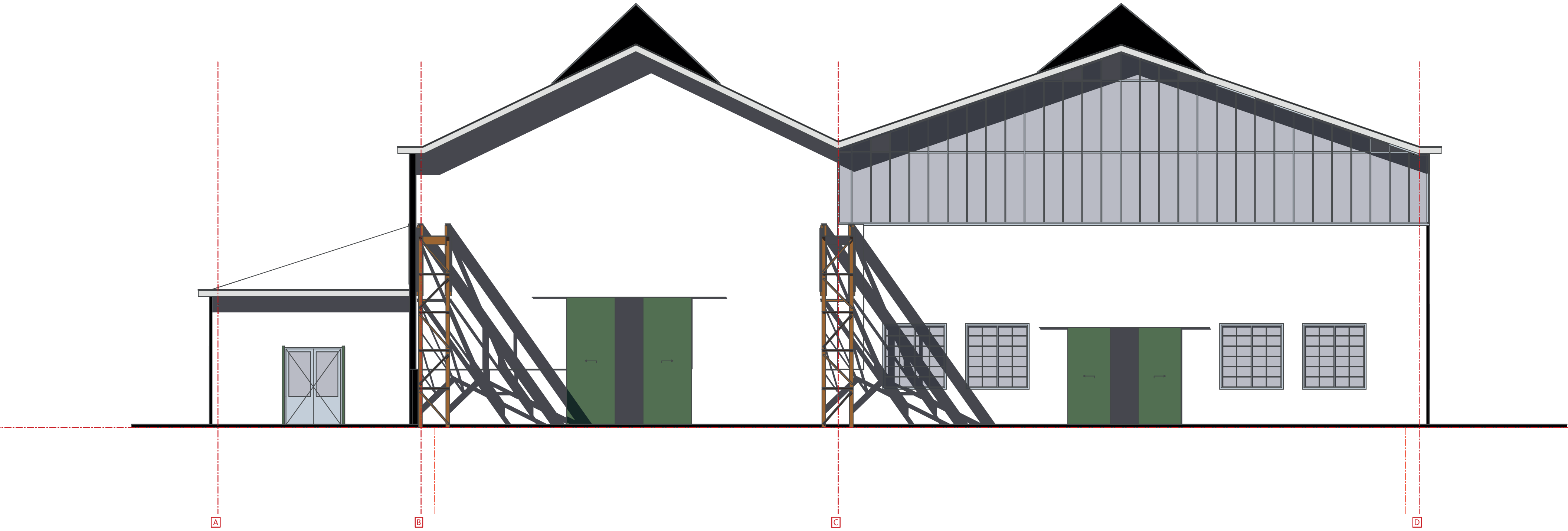


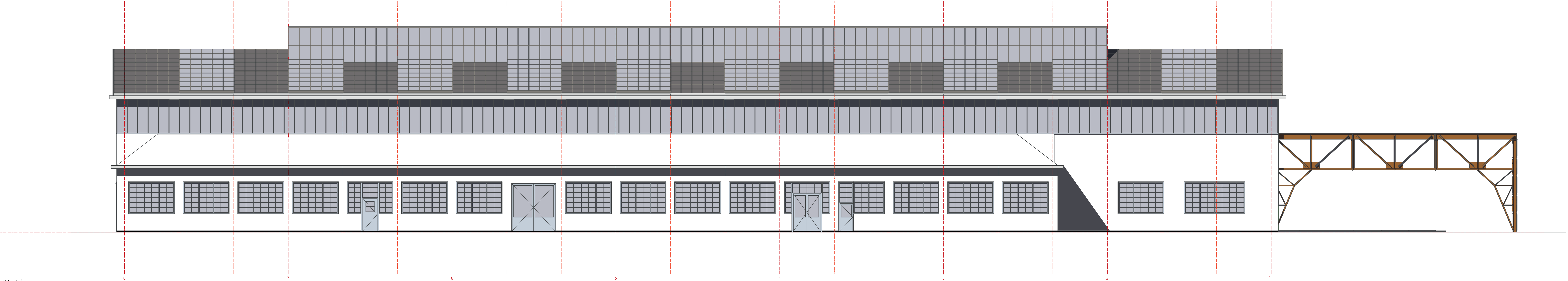
East façade



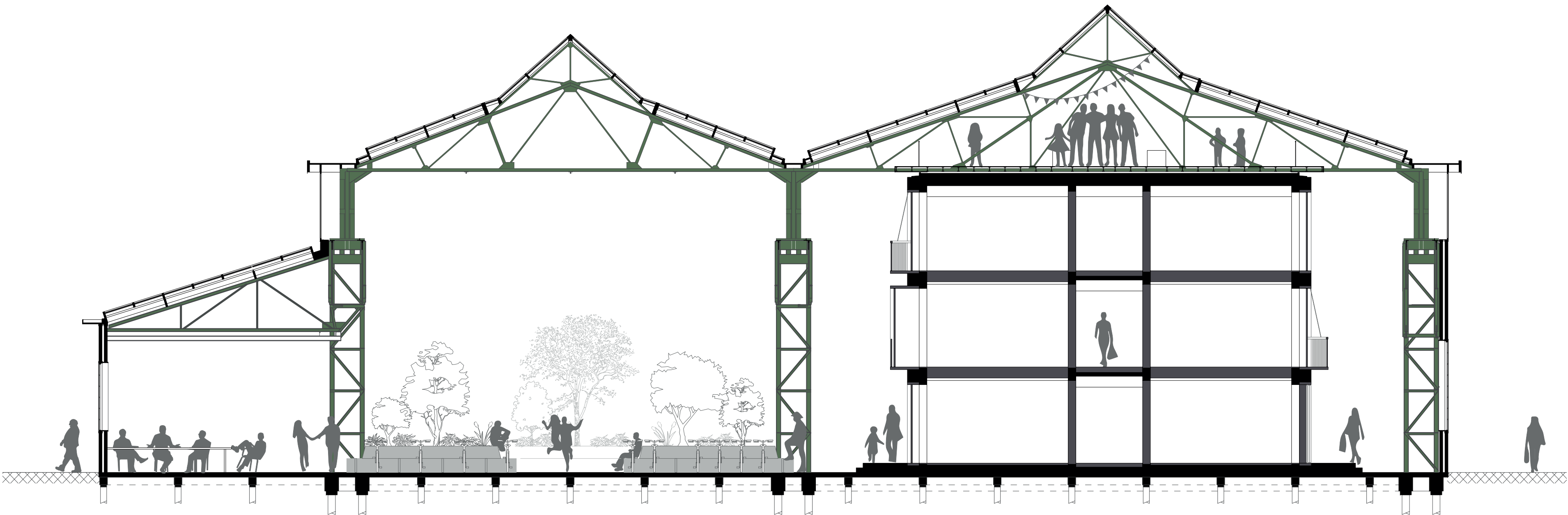
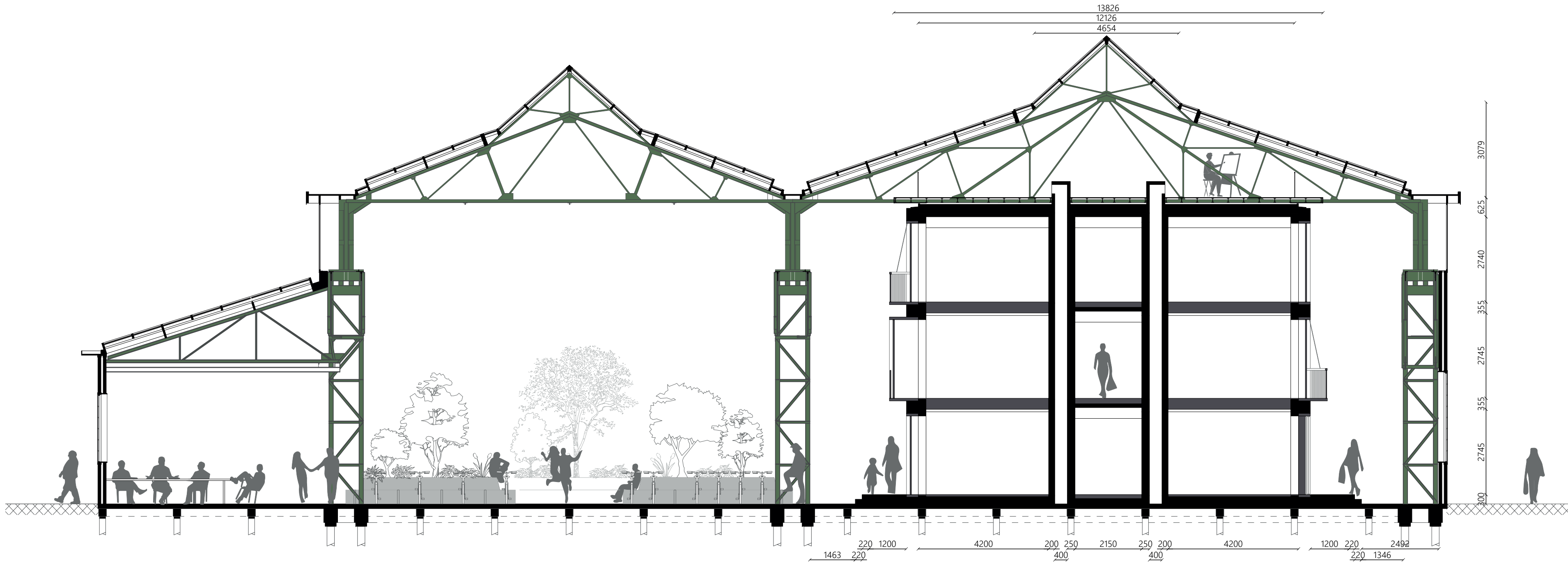
North façade



South façade

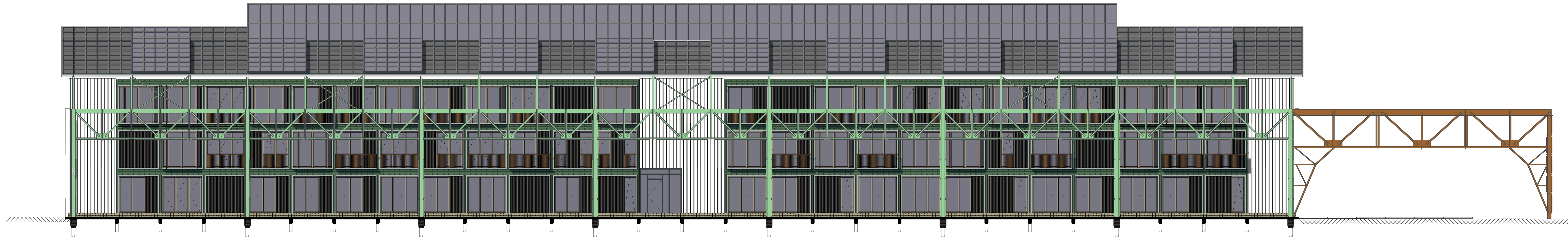


West façade

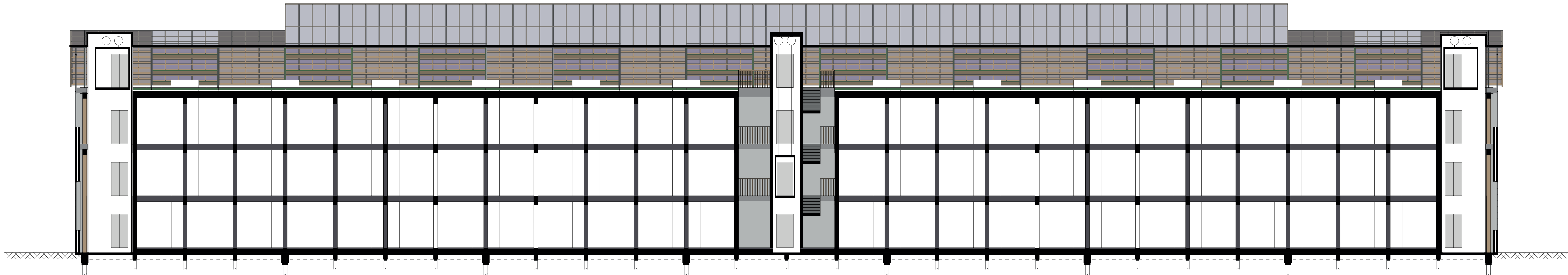


East-west section with shafts

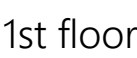
East-west section with partition walls



Inner west façade



Nort-south section



Timber battens mounted on top and bottom of steel I-beams, which are spaced at 500 mm centre-to-centre and connected to the historic steel trusses of the existing monumental structure.

The timber battens are dimensioned to match the width of the lower flange of the steel trusses, creating a refined architectural connection between the new intervention and the original structure.

Safety railing along the perimeter of the collective roof area.

Roof construction

Gravel ballast (to secure insulation layer)

Waterproof vapour-open membrane

175–250 mm Wood fibre insulation, (λ): 0.038 W/mK Rc: 6,6 m²K/W

125 mm Cross-dowel laminated timber panel, spanning direction: short span (3.0 m)

Ceiling System

-160 mm Plenum (accommodates air extraction and lighting)

-25 mm Wood wool panel (fire-rated up to B-s1,d0)

-Optional: Limestone plaster finish

Steel bracket supporting the crane rail,

Emergency rainwater rrainage, provides drainage in case of failure of the closable roof system, allowing water to be safely discharged

Crane, can move along the whole façade, meant for lifting the adaptable façade modules in its place.

250x335 mm Glulam beam

Steal ring attached to façade module. This element

250x535mm Glulam beam

Steel frame for façade module support, composed of three welded I-beams of varying dimensions.

One of the I-beams is connected to the adjacent glulam beam using timber screws at staggered vertical positions to anchor into multiple lamellae.

This method provides horizontal stability for the frame.

Welded steel stiffening fins within the steel frame, spaced at 375 mm centre-to-centre. Provide vertical rigidity and act as a functional façade ornament.

Timber screws for attaching the façade modules and act as a functional façade ornament.

1200 mm long stone element serves as a raised threshold in front of the ground floor façade. Elements can be temporarily removed to install façade modules at ground level. The threshold is aligned with the interior floor level to ensure wheelchair accessibility.

250x250mm existing concrete foundation beam

Floor construction

15 mm Floor Finishing

20 mm Dry Screed Layer

18 mm Chipboard Element (within raised floor system)

80 mm Raised Floor

-Raised floor pedestals spaced at 300 mm intervals

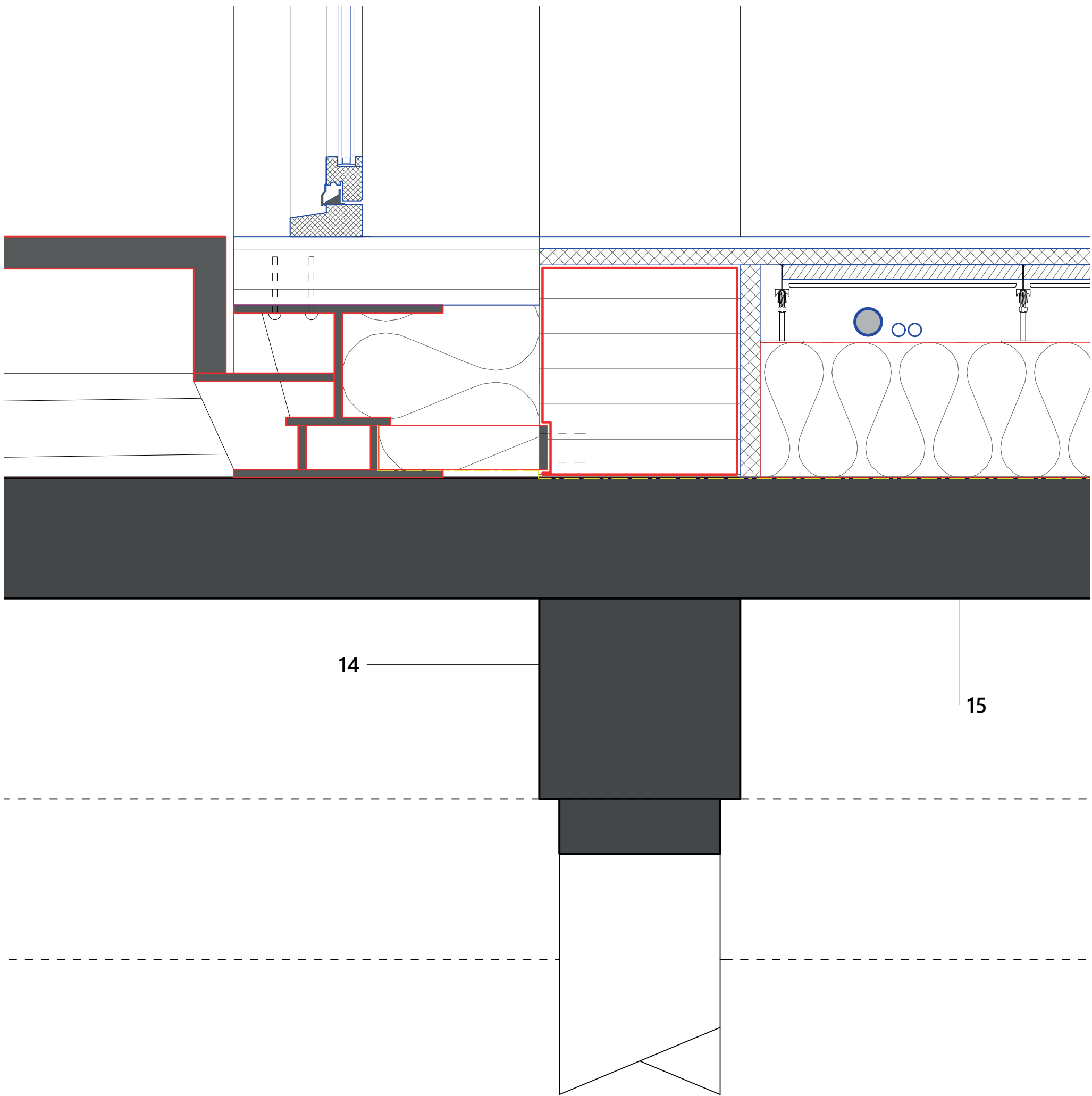
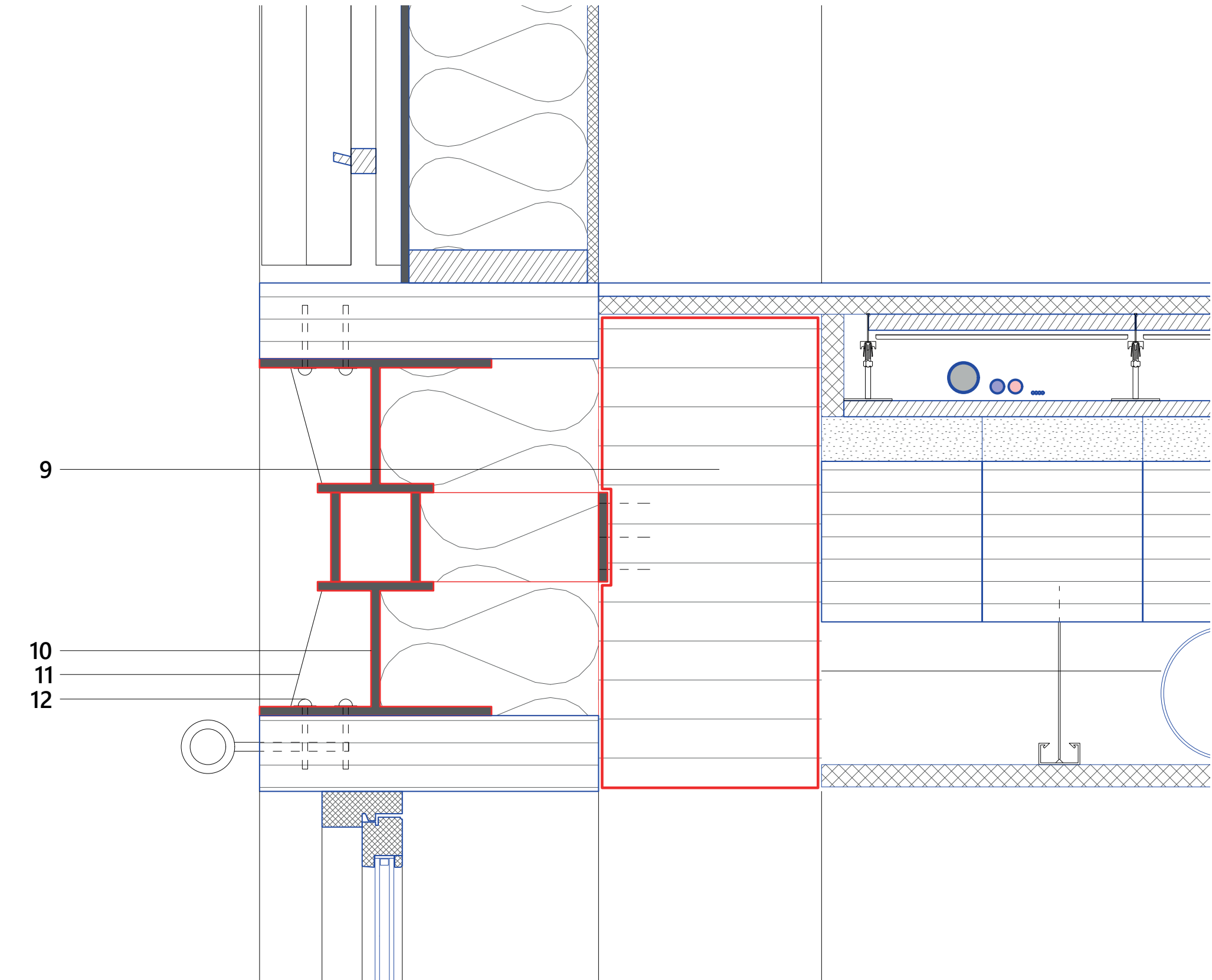
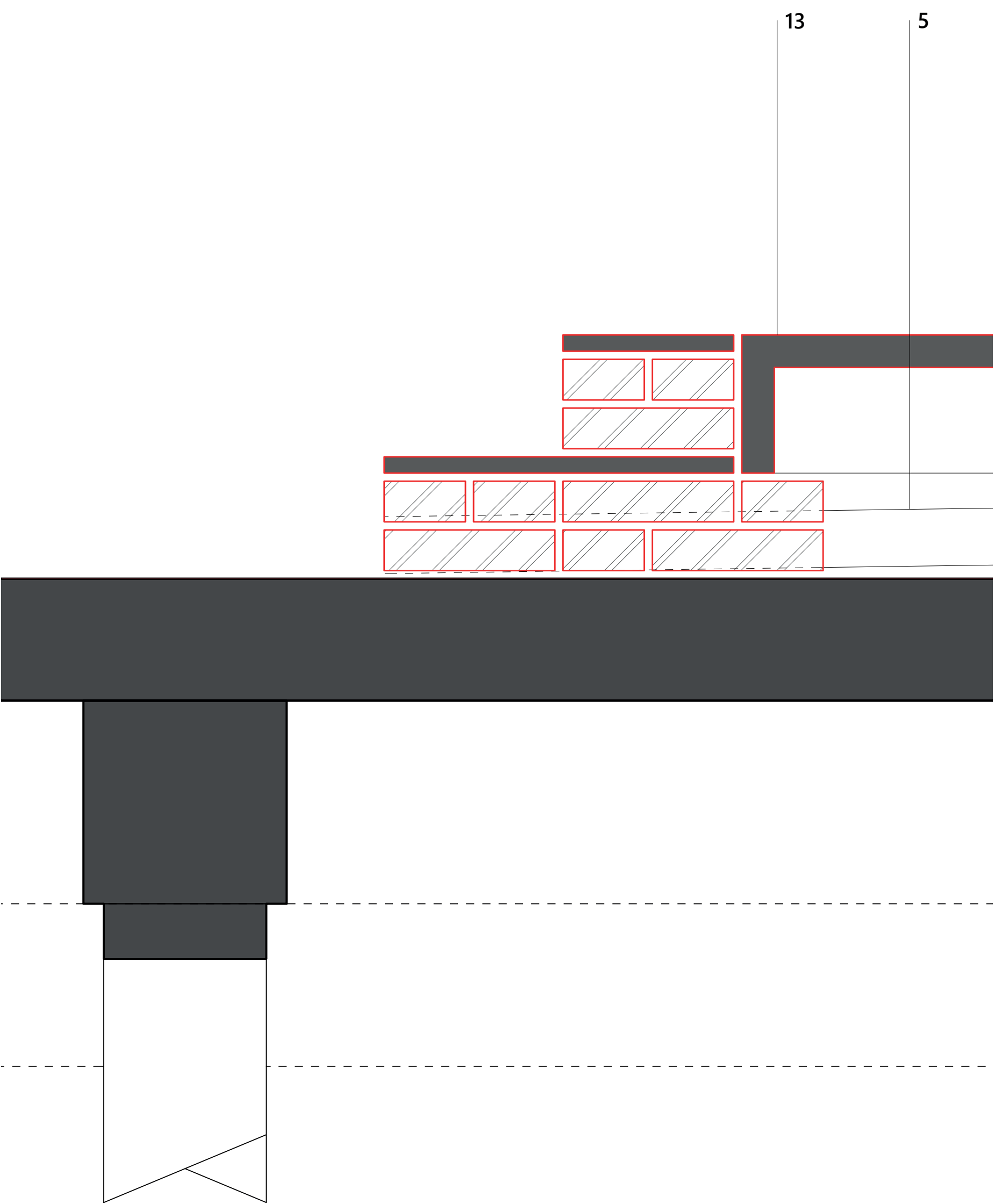
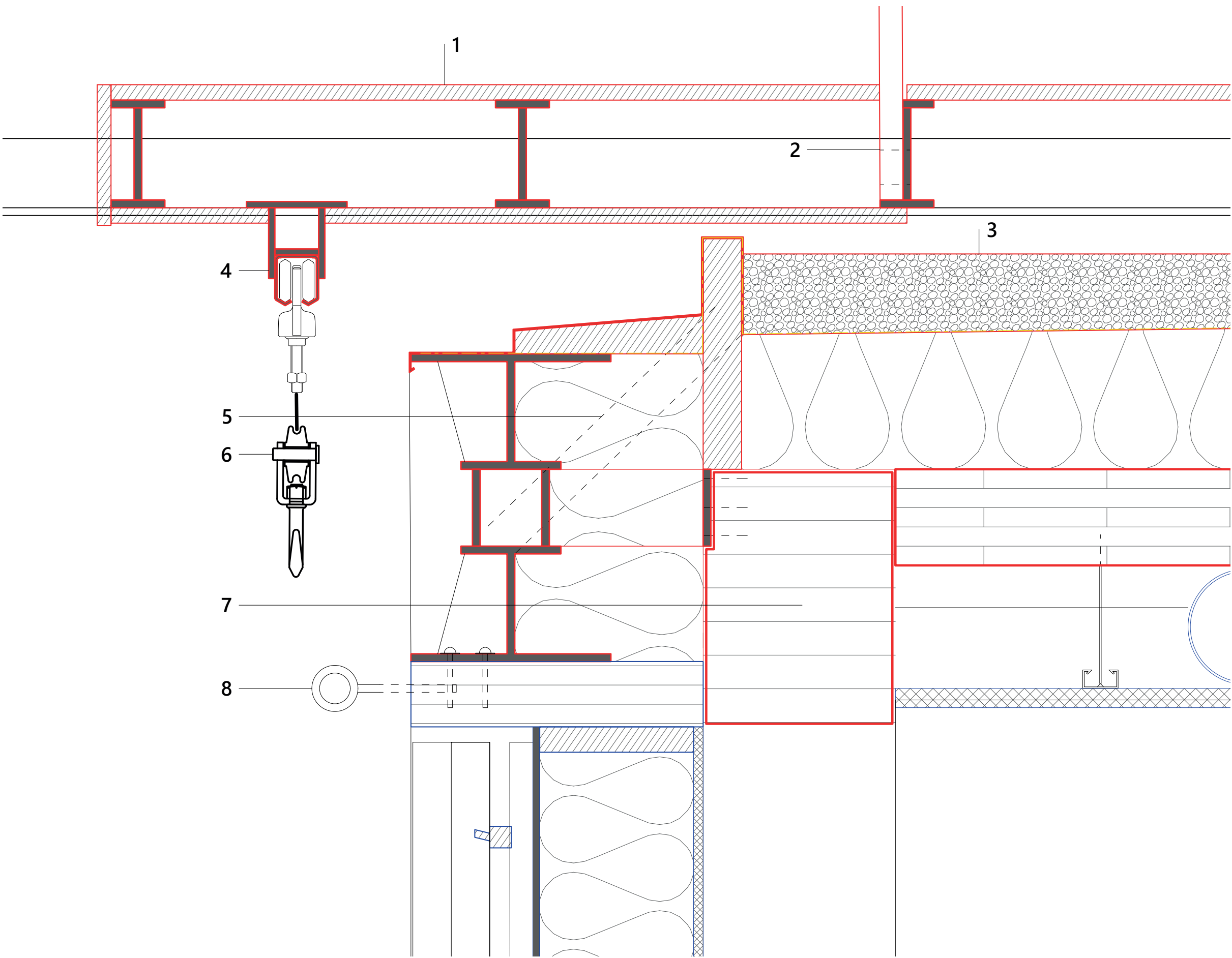
-Cavity allows for grey water drainage (shower, washbasin, kitchen, dishwasher), with a maximum horizontal distance of 4.5 metres from the shaft due to the required slope of 1 cm per metre

170 mm Wood Fibre Insulation

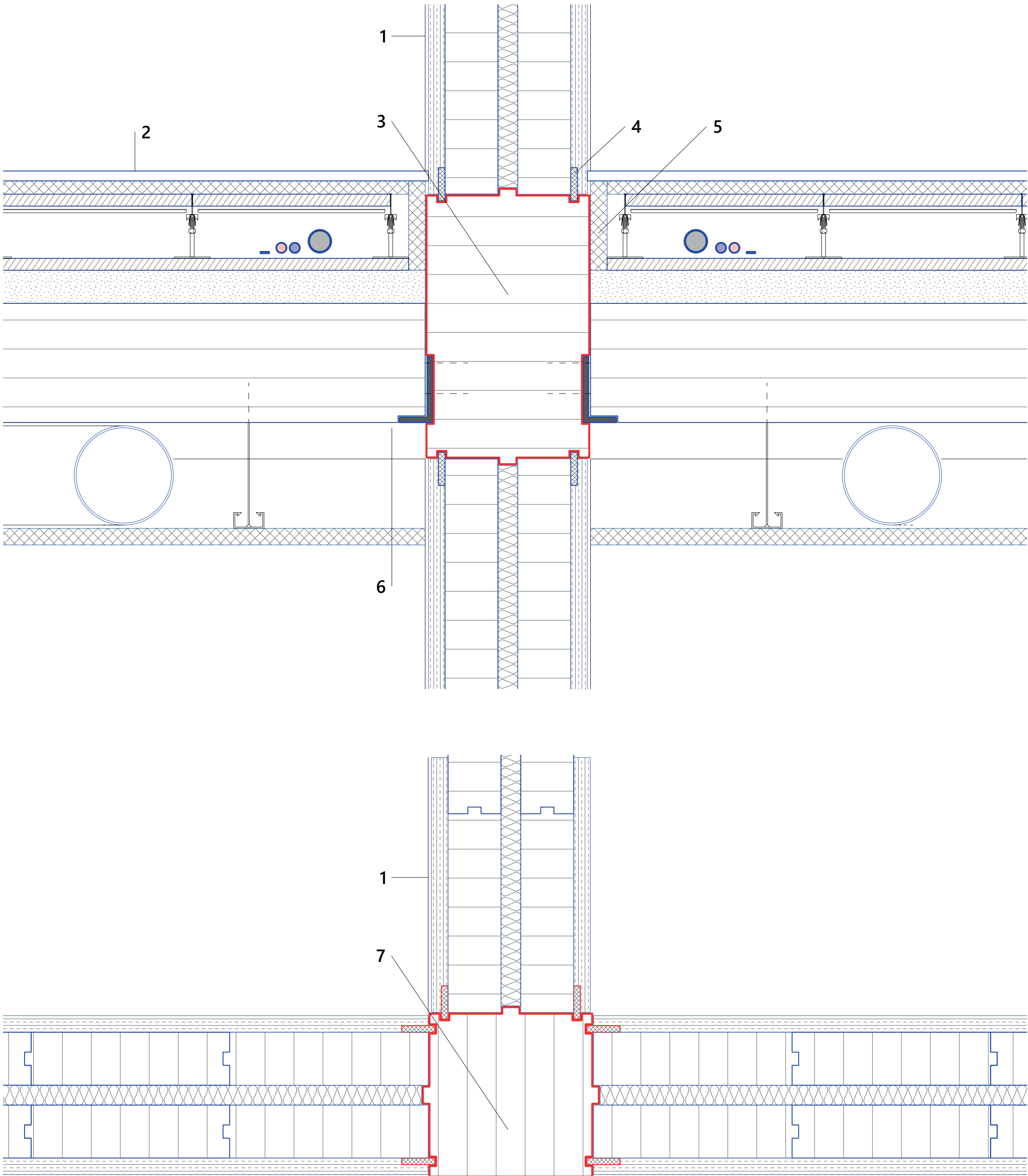
Thermal conductivity (λ): 0.038 W/mK, Rc: 4.47 m²K/W

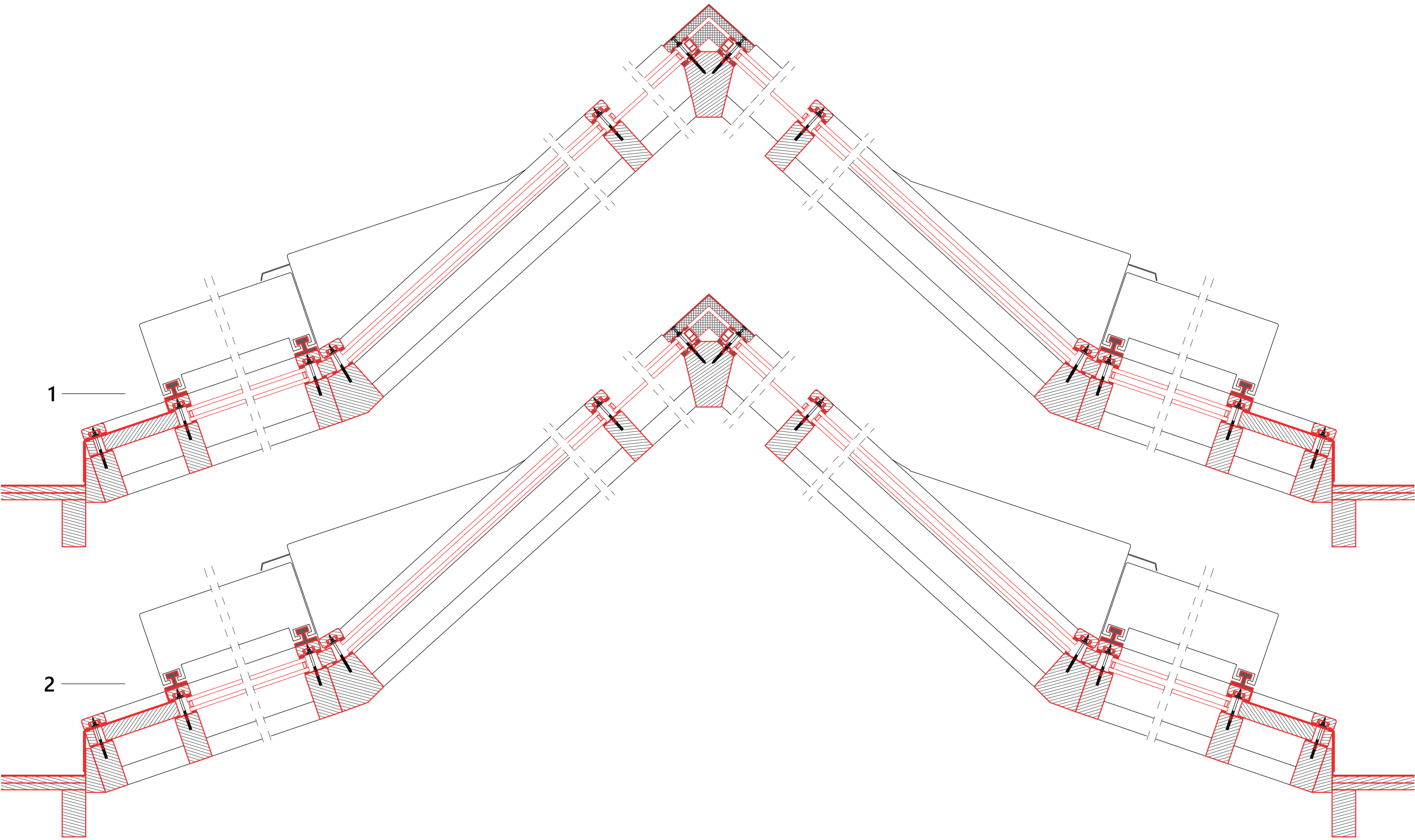
Vapour-open, water-resistant membrane

150 mm Existing Concrete Foundation

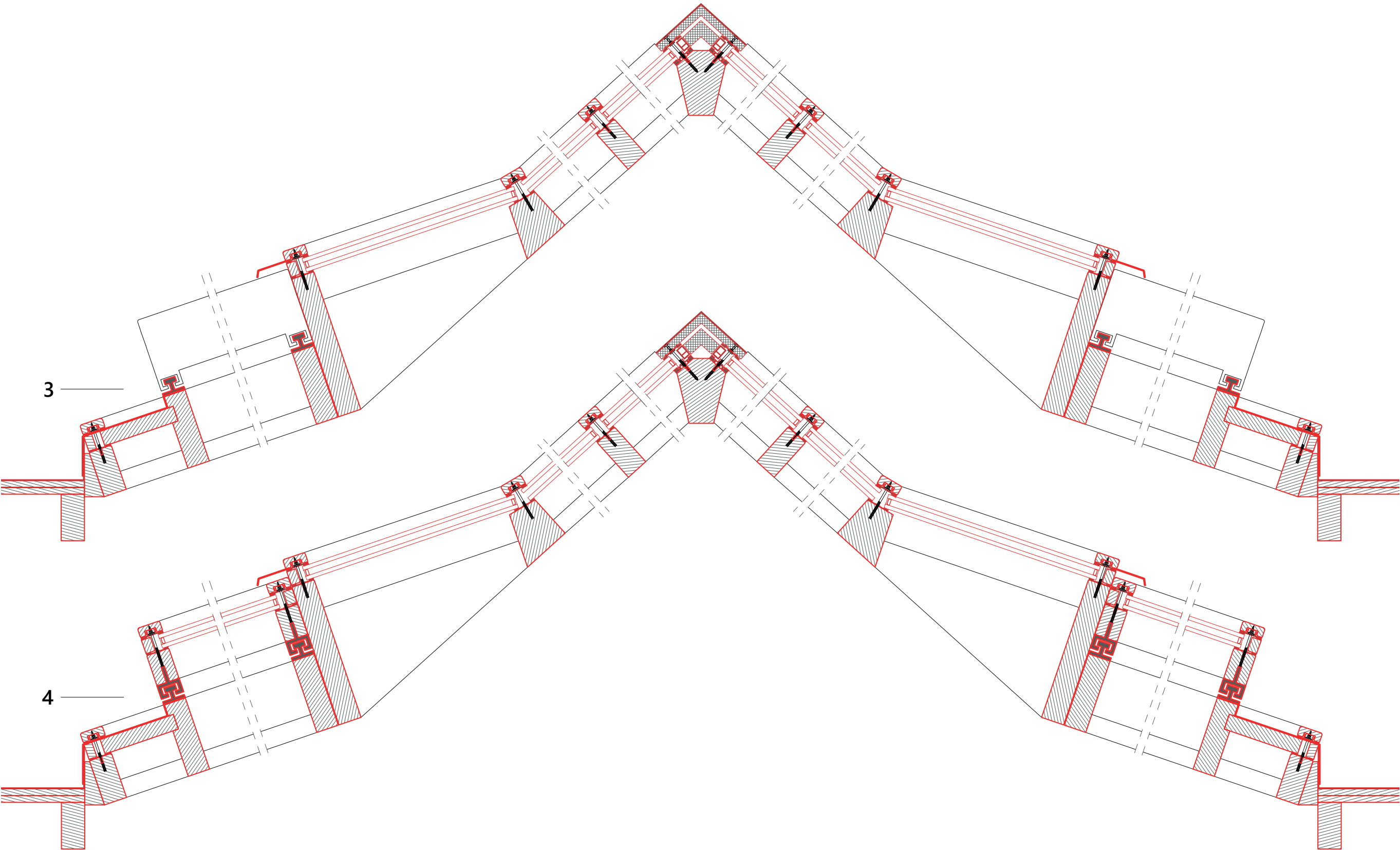
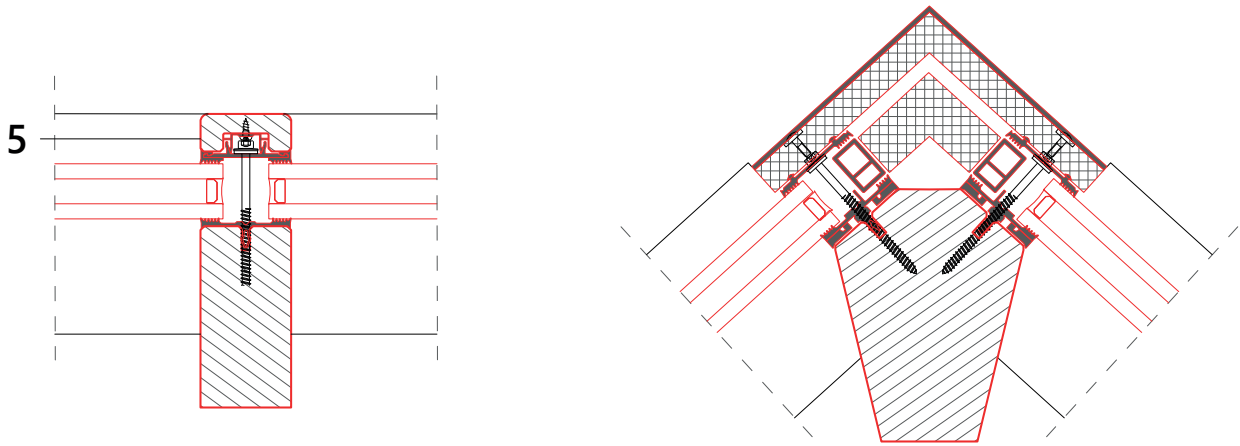


Partition wall Construction Optional: Limestone plaster finish 25 mm Wood wool panel (fire-rated up to B-s1,d0) 80×310 mm Glulam element 30 mm Wood fibre insulation (resilient layer for acoustic insulation in a mass-spring-mass system) 80×310 mm Glulam element 25 mm Wood wool panel (fire-rated up to B-s1,d0) Optional: Limestone plaster finish	1
Partition Floor Construction 15 mm Floor Finishing 20 mm Dry Screed Layer 18 mm Chipboard Element (within raised floor system) 80 mm Raised Floor -Raised floor pedestals spaced at 300 mm intervals -Cavity allows for grey water drainage (shower, washbasin, kitchen, dishwasher), with a maximum horizontal distance of 4.5 metres from the shaft due to the required slope of 1 cm per metre 18 mm Chipboard Layer (distributes load over structural components) 50 mm Cork Layer (serves as a resilient layer for acoustic insulation in a mass-spring-mass system; factory-attached to glulam beam) 180×180 mm Glulam Beams -Span: 2760 mm -Weight per element: approx. 45 kg -Combined weight of glulam + cork component: approx. 50 kg Ceiling System -160 mm Plenum (accommodates air extraction and lighting) -25 mm wood wool panel, fire-rated up to B-s1,d0 -Optional: Limestone plaster finish	2
400x250 glulam beam	3
Detachable Wood element to keep the Glulam wall in place	4
25 mm wood wool fire protection (fire-rated up to B-s1,d0)	5
Steel L-Profile supporting Glulam Floor Beams Steel L-profile, 8 mm thick, 80×180 mm, with a horizontal support lip of 80 mm. Modular lengths, allowing for various floor configurations, from fully closed to fully open and intermediate variants.	6
Installation Method: -Mounted by timber screws, placed in a staggered vertical pattern to distribute loads across multiple horizontal plies of the glulam beam structure. -Centre-to-centre spacing of fixings: 180 mm. -All holes in both the steel profile and glulam beams are pre-drilled to enable easy and precise user installation. The end faces of the Glulam floor beams are milled to match the counter-shape of the L-profile, allowing the floor surface to align almost flush with the wall.	
250x250mm Glulam column	7





Section A, Open roof	1
Section A, Closed roof	2
Section B, Open roof	3
Section A, Closed roof	4
60 mm stabalux curtain wall systeem, equipped with a modular wooden cover cap, allowing the infill panels between the frames to be adjusted. This enables variations in light and shadow performance within the roof structure.	5



380x85mm impregnated Glulam frame, serves as the structural base of the façade module, capable of accommodating various spatial configurations such as operable glazing, solid panels, balconies, or bay windows.

1

Wood window frame

2

Closed façade construction

3

Timber slats mounted perpendicular to the façade, spaced at 40 mm centre-to-centre, reused from the existing roof, which is being replaced by a new operable roof structure.
2x28 mm Vertical and Horizontal Timber Battens (stud and counter batten system)
9 mm Wind Barrier Board
200 mm Wood Fibre Insulation Thermal conductivity (λ): 0.038 W/mK, Rc: 5.26 m²K/W
12 mm Plywood Sheathing
Limestone Plaster Finish

Steel cable for vertifal load bearing of balcony

4

Timber railing in front of openable façade areas positioned on the 1st or 2nd floor.

5

930mm deep balcony Glulam frame

6

