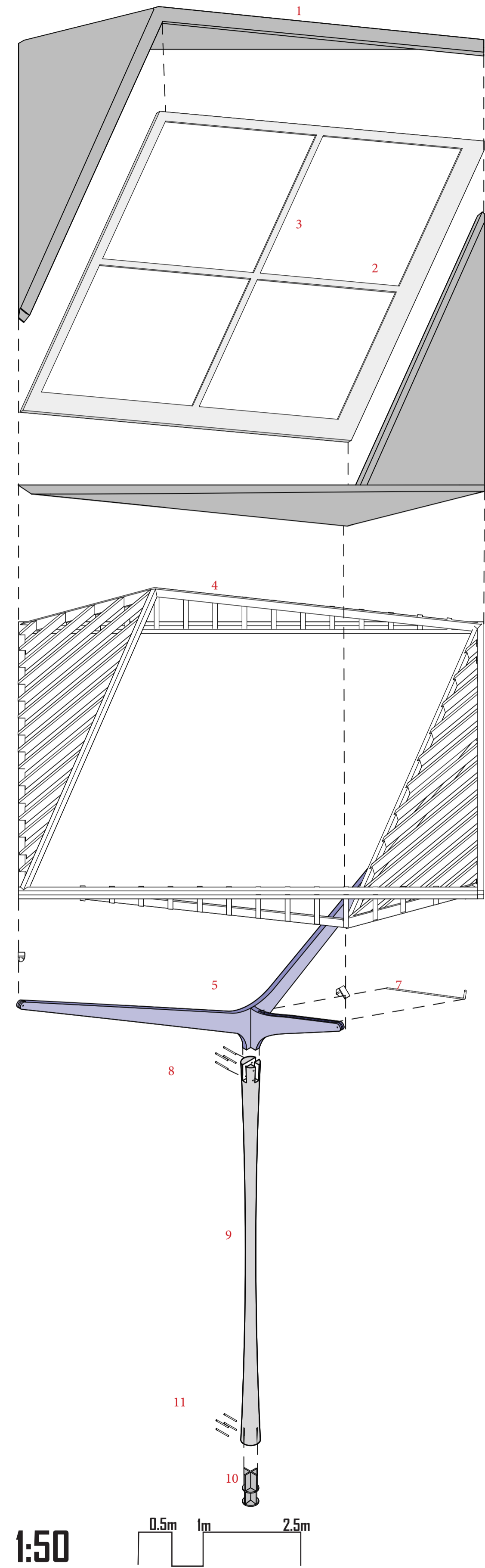


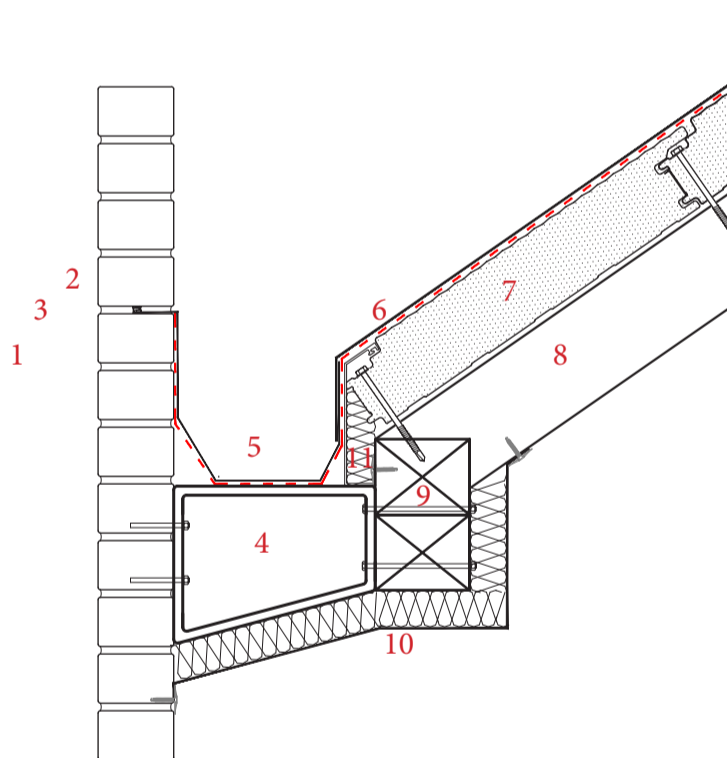
Tectonic Details:

Exploded Structural Isometric:

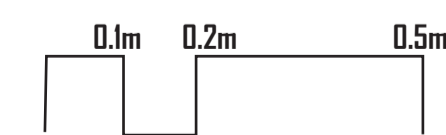


1. 120mm kingspan insulated roof panel with aluminium sheet lapped over.
2. Aluminium window frame.
3. Double glazed thermal glass pane.
4. Timber roof structure.
5. Steel Y frame.
6. Steel arm connections.
7. 50mm concealed gutter pipe.
8. M24 Bolts.
9. Timber column.
10. Steel shoe.
11. M24 Bolts

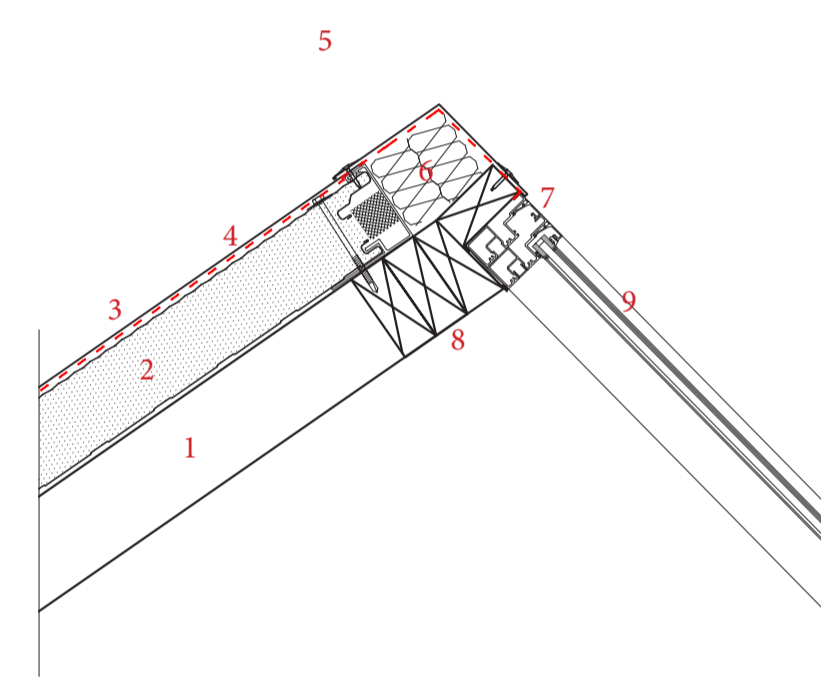
Roof - Existing detail 1:10



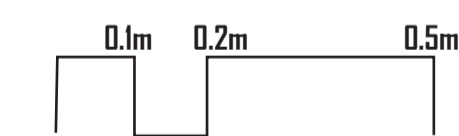
1. Existing Brickwork.
2. Lead flashing notched into mortar joint (225mm above gutter).
3. Breather membrane lapped under lead flashing
4. Steel Box section fixed to wall via x4 M12 bolts (bolts resin anchored into wall).
5. Aluminium gutter.
6. Aluminium roof sheet lapped over lead gutter and breather membrane.
7. 120mm kingspan insulated roof panel fixed to timber rafter.
8. 125x50mm exposed timber rafter fixed to timber plate (600mm centres).
9. 125x100mm timber plate (doubled up) fixed to steel box section via M12 Bolts.
10. 50mm rigid insulated fixed to rafter and existing wall via self tapping screw and aluminium sheet.
11. 3mm aluminium extrusion to square off insulated panell.



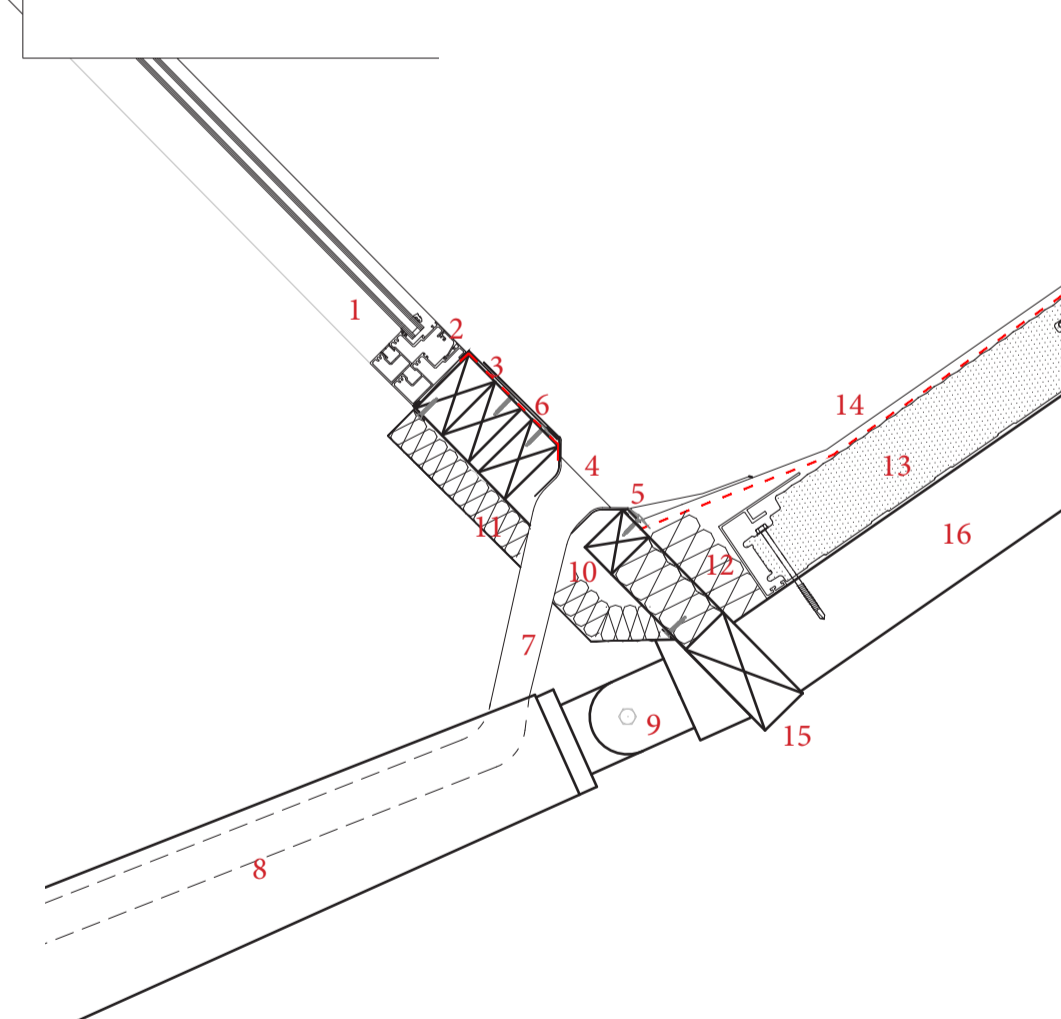
Roof Ridge detail 1:10



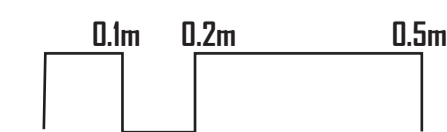
1. 125x50mm exposed timber rafter.
2. 120mm kingspan insulated roof panel fixed to timber rafter
3. 3mm aluminium roof sheet
4. Breather membrane lapped under roof sheet.
5. Aluminium ridge cap lapped over roof sheet.
6. 50mm rockwool insulation void.
7. Aluminium window frame fixed to 100x50mm timber.
8. 125x50mm timber plate (trippled up) supporting window frame.
9. Double glazed thermal glass pane.



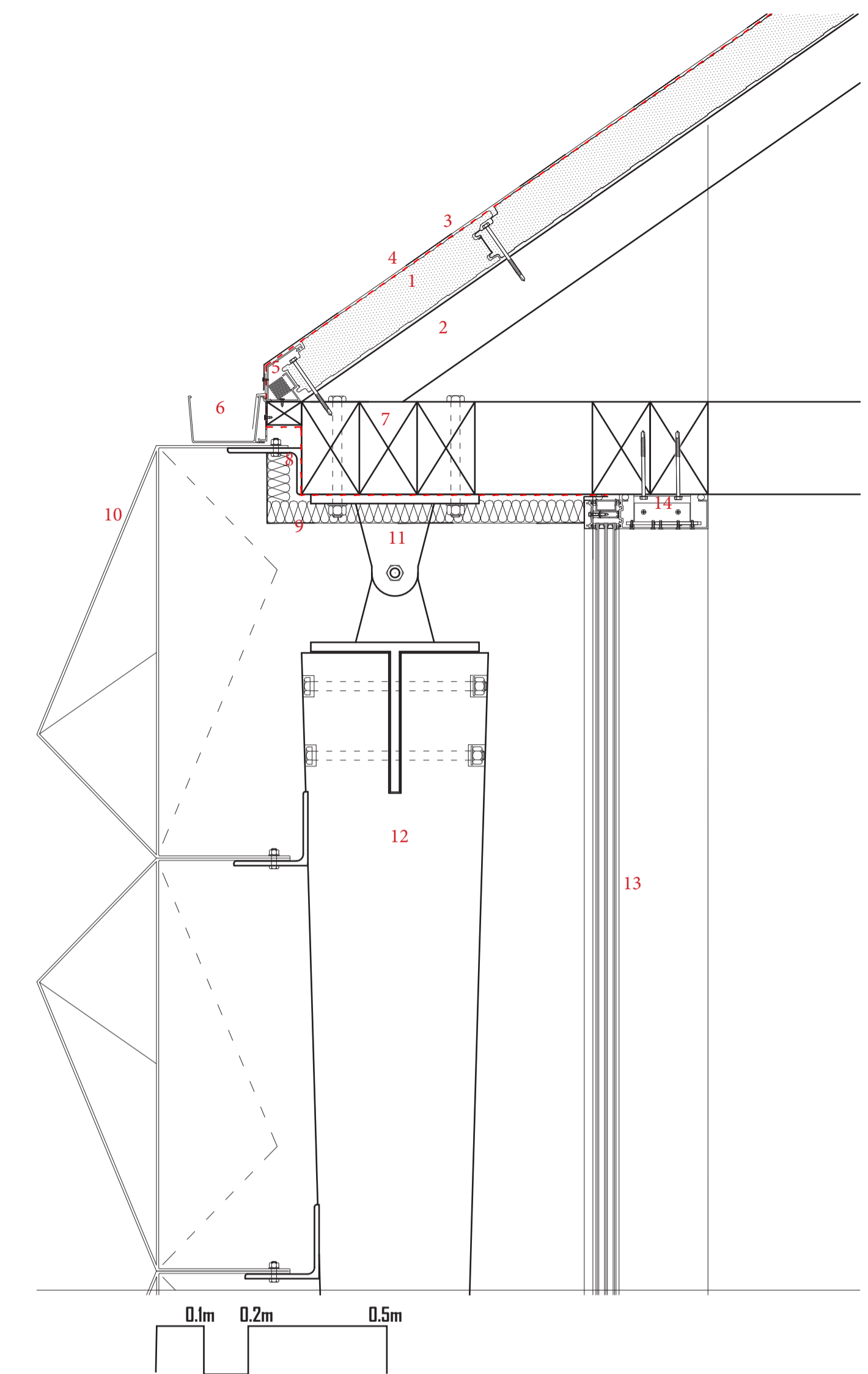
Valley detail 1:10



1. Double glazed thermal glass pane.
2. Aluminium window frame fixed to 100x50mm timber.
3. 100x50mm timber (doubled up) framed to support window frame.
4. Pvcu water outlet.
5. Aluminium flashing lapped over water outlet.
6. Breather Membrane lapped under flashing and outlet.
7. 50mm water downpipe (running into notch in steel y frame through timber column into water tank).
8. Steel y Frame arm.
9. Steel arm connection (male and female) fixed via M20 bolt.
10. 75x50mm timber frame supporting water outlet.
11. 50mm rockwool insulation.
12. 4mm aluminium extrusion to square off roof panel.
13. 120mm kingspan insulate panel fixed to timber rafter.
14. Aluminium roof sheet lapped on-top of breather membrane.
15. 125x50mm timber valley plate.
16. 125x50mm exposed timber rafter.

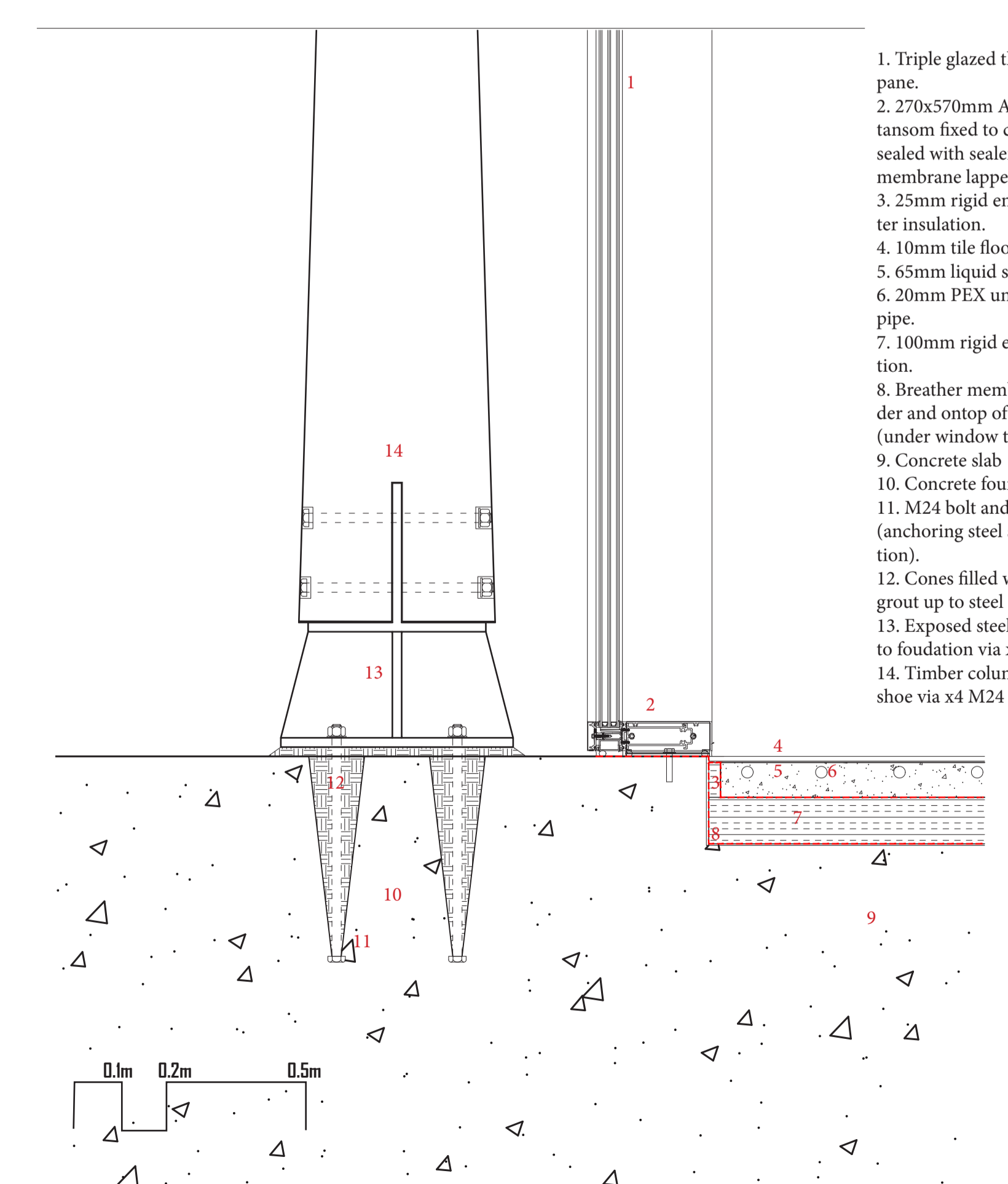


Roof - Facade detail 1:10



1. 120mm kingspan insulated panel fixed to timber rafter.
2. 125x50mm exposed timber rafter.
3. Breather membrane lapped under roof panel.
4. 3mm aluminium roof sheet lapped over membrane into aluminium gutter.
5. 3mm aluminium extrusion to square off roof panel.
6. Gutter fixed to 75x50mm timber (timber fixed to 200x100mm structural beam).
7. 200x100mm structural timber beam(trippled up) bolted together via M24 bolts).
8. 10mm steel angle bracket fixed to beam.
9. Aluminium sheet and 50mm rigid enertherm insulation lapped over breather membrane fixed to beam.
10. 3mm aluminium folded facade sheet fixed to angle bracktt via M10 bolt.
11. Steel connection plate fixed to triple timber beams via x4 M24 bolts.
12. Timber column fixed to connection plate via x4 M24 bolts.
13. Triple glazed thermal glass pane.
14. 270x70mm aluimium transom fixed to 200x100mm timber beam via steel t plate.

Facade floor detail 1:10



1. Triple glazed thermal glass pane.
2. 270x570mm Aluminium floor tansom fixed to concrete floor sealed with sealent with breather membrane lapped under.
3. 25mm rigid enertherm perimeter insulation.
4. 10mm tile floor finish.
5. 65mm liquid sreed
6. 20mm PEX underfloor heating pipe.
7. 100mm rigid enertherm insulation.
8. Breather membrane lapped under and ontop of rigid insulation (under window transom).
9. Concrete slab
10. Concrete foundation
11. M24 bolt and cone system (anchoring steel shoe to foundation).
12. Cones filled with non-shrink grout up to steel shoe.
13. Exposed steel shoe anchored to foundation via x4 M24 Bolt
14. Timber column fixed to steel shoe via x4 M24 bolts.