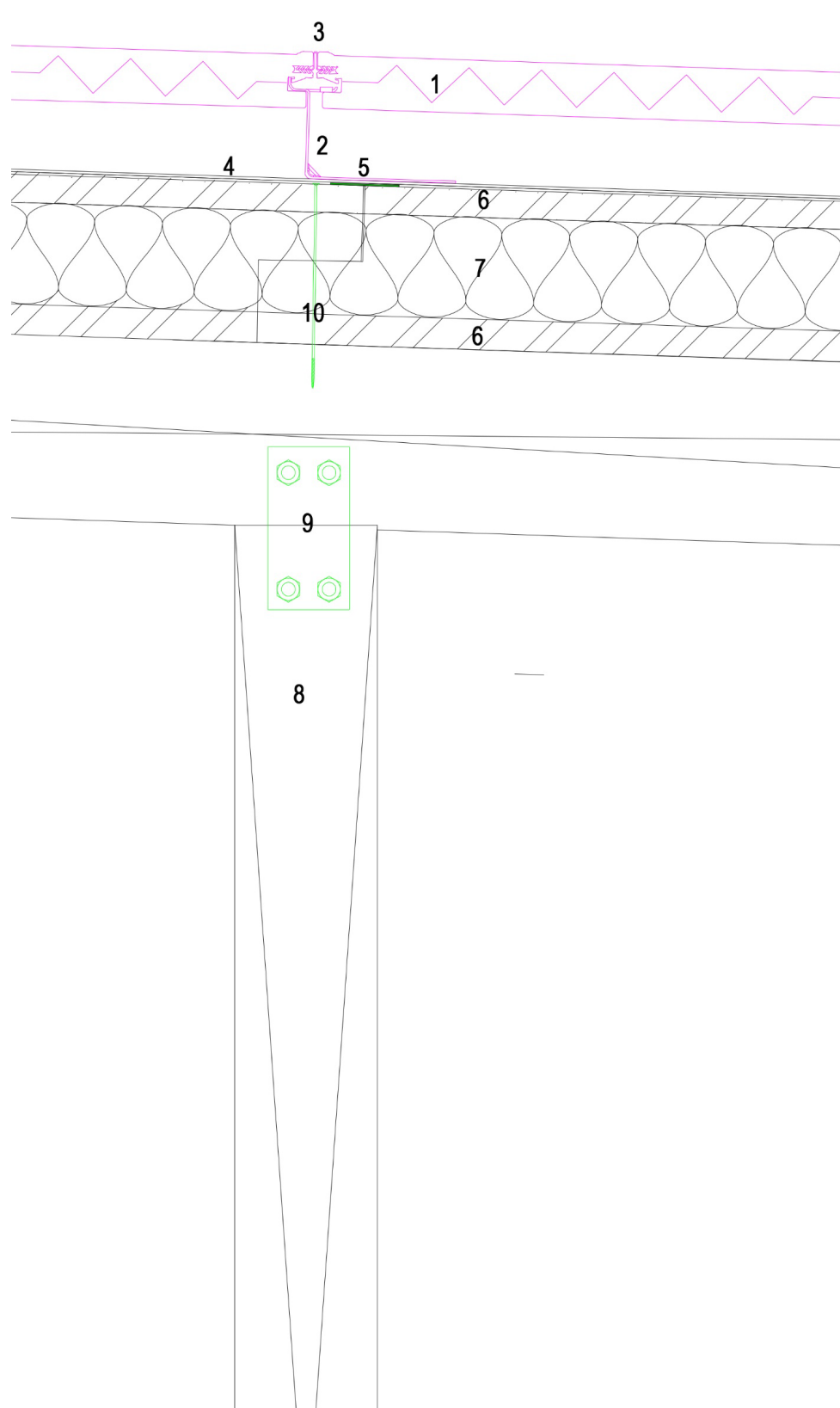


Detail – Sandwiched CLT Panels – Glulam Beam Supported CLT Roof and Glulam Column Intermediate Support Section



1. AMORPHOUS SILICON PV GLASS SYSTEM CLADDING. THICKNESS CONFIGURATION (mm) 6T+3.2+6T, SHGC 23%, U value m² – 5.2, External Light Reflection 7.3%, Transparency 0.0%, Peak Power 57.6 Wp/m²

2. Panel Rafter Brocket

3. Fusion "J" Flashing

4. Breathable Roof Membrane/Breathable Roofing Felt- 1.5m x 50m (75 SQ/M)- 135 G/SM, Grade: Heavy Duty 135g/m², Water-tightness: W1, CE approved to EN 13859

5. Full-surface self-adhesive Hanno Flashing Tape DUO Easy 180 is a full-surface adhesive flashing tape for interior and exterior seals, consisting of a modified polyamide-film/woven material combination. It is equipped with a full-surface self-adhesive side for connecting to windows and masonry as a standard feature. The cover film is cut in the longitudinal direction. Durability: optimal moisture management in the joint: sd value 0.6 :5 sd :5 23 m, Resistance to driving rain >600 Pa, Airtight to around :5 0.1 m³/(h·m ·(daPa)²/3), No additional film adhesive required, All bonded layers covered with longitudinally cut film, Stretchy and simple to work with, Can be plastered or painted over, UV-resistant for 12 months.

6. 80mm MM cross-laminated timber panels, spruce, European Technical Approval ETA-09/0036, improved fire rating- water based fire retardant treated, off-site pre-assembled and pre-insulated 4 sandwich panels per roof/floor. thermal conductivity: 0.13 W /mK, density: 480-500 kg/m³, Compressive strength: 2.5 N/mm² (perpen. to grain of boards) 21 N/mm² (parallel to grain of boards), Bending strength: 24 N/mm² (parallel to grain of boards), Elastic modulus: 370 N/mm² (perpen. to grain of boards) 11,500 N/mm² (parallel to grain of boards)

7. 200mm PUR expanding foam insulation, ISOTHANE LD40, CFC & HCFC FREE, density 40 kg/m³, water and air tight, fire resistant, U-value 0.025W/mK

8. Glulam column 240x240 and beam 240x360, Stress Grade: GL32 c (BS16) with combined layup, minthree fibre parallel oriented glued board laminations, wood species European Spruce (picea app.) and Larch. Wood moisture content 12% ± 2% at delivery. Gluing: Waterproofed adhesives approved for interior and exterior applications, tested in accordance with EN 301/302. Lamination thickness: According to EN 386-up to 42mm max. Glulam members coated with a base preservative.

9. Shear plates: two plates per one connection (front and back). Sized 110x220mm, thickness t 10mm, ASTM A36, with drilled holes for bolting 8 x 22 mm diameter in two rows. Bolts M12/M16 8.8 in 22 mm diameter holes. Minimum of two M16 grade bolts used per connection. All bolts sherardized.

10. HBS 8x320 screws