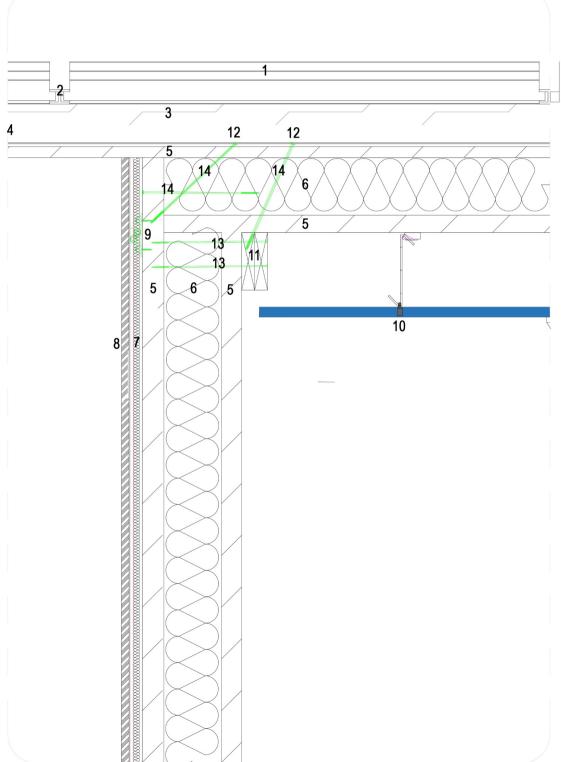
Detail – Sandwiched CLT Panels – Eave Joint Section and Suspended Ceiling



1. AMORPHOUS SILICON PV GLASS SYSTEM CLADING. 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. Viridian sill flashing

4. Gutter, metal profiled sheet: Galvanized steel profiled sheet with standard zinc coating (g/m2) 275 (Z275) fixed onto overhang panel over felt and PV rafter brackets. NE ends capped/closed. SW/SE ends connected to downspouts. From downspouts (2 located at the SW/SE ends of gutter) rainwater flows down to the underground pipe and through filtration system to the underground water tank equipped with high pressure water pump.

5. 80mm MM cross-laminated timber panels, spruce, European Technical Approval ETA-09/0036, improoved 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) 6. 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 7. 25mm PermaRock EPS-Premium Insulation (EPS100) strip backing for Breathable felt.

 Click-on battens, Blackbutt, durability Class 1 -over 40 years exterior use, BAL rating 29, fire retardant treated, Cutek CD50 Clear Oil coated for natural weathering.
Click-on battens brackets, on CLT surface mounted.

10. Troldtekt akustik panels installed with concealed Troldtekt KN brackets on suspended C60 profile system. Panel size: 600X2400mm, Thickness: 35mm, Panel finish: Black 207 wood. Structure: Coarse 3mm, Edge design: KO - Square edges, Ceiling type: Fine fibre wood wool panels meeting EN 13168 and EN 13964 standards. The panels must be available as be PEFC[™] or FSC®-certified (FSC® C115450). Certified "Silver" Cradle to Cradle" and the "Allergy Friendly Product Award" - "Allergy UK"., Grid form: C60 Troldtekt C60 system, Primary C60 grid profile centres: Maximum 1200mm, Hanger centres: Maximum 1000mm, C60 main runner centres: 600mm, C-cross connectors at C60 primary grid/ C60 main runner intersections.

11. Roof to wall support, C16 timbers, 2 x 45x200

12. 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 $0.6 \le sd \le 23$ m, Resistance to driving rain >600 Pa, Airtight to around ≤ 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. 13 HBS 8x320 screws

14. HBS 6x340 at 300 atlerating centres screws.