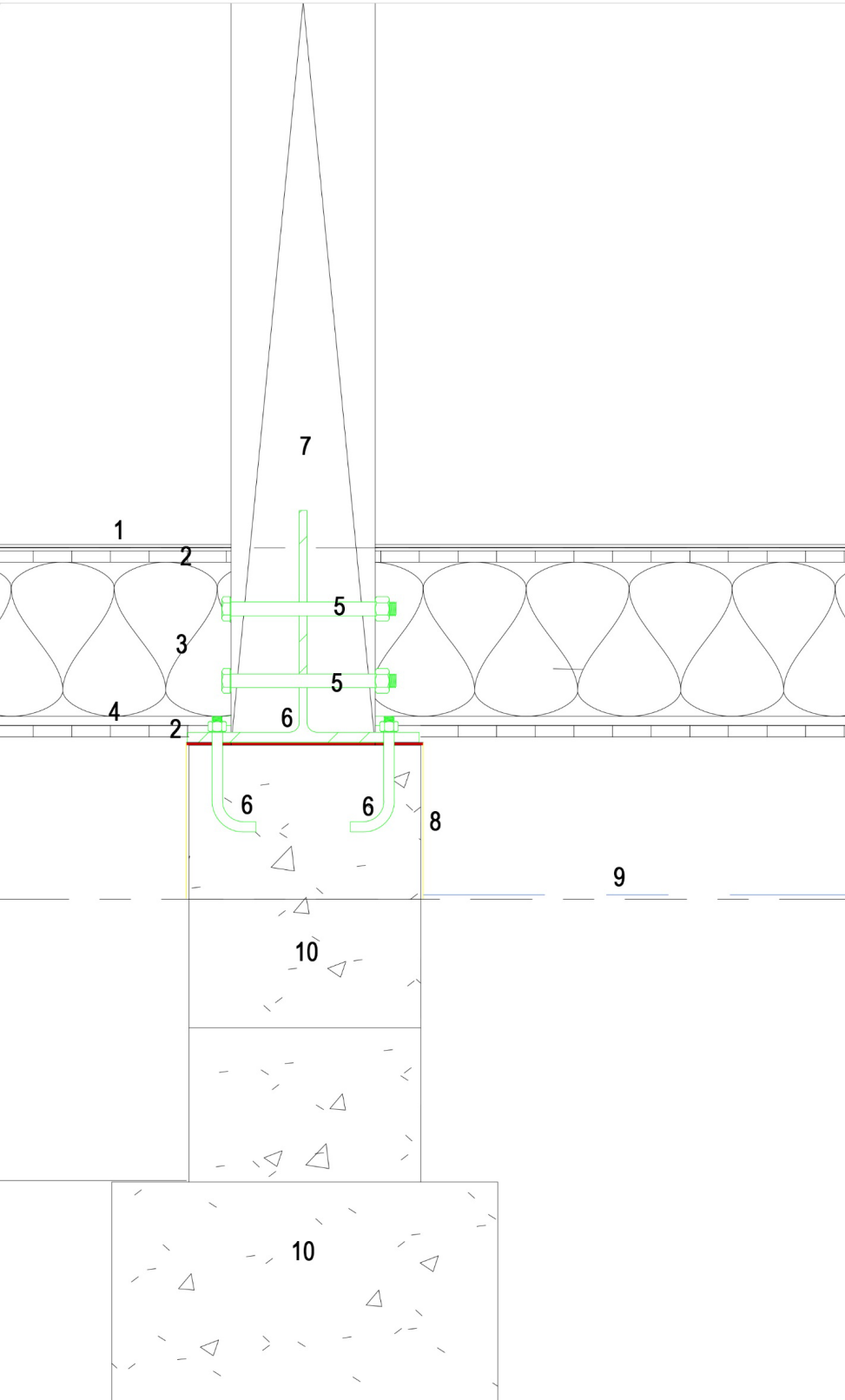


Detail – Sandwiched CLT Panels – Engineered Joist Floor and Glulam Column Intermediate Support Section



1. Stone Effect Grey Engineered Stone Flooring (Tenacity Tile). PVC free and plasticizer free ceramic composite (magnesium) made to be rigid, strong, unaffected by heat and temperature variations, and sustainable. Flooring Edges-Bevelled, Flooring Fitting Type-Click Fit, Flooring Format- Tile, Flooring Surface- Stone. Colour Description- Grey, Light grey, Commercial Suitability- Class 33 Heavy Commercial, Finish-Matt, Non-Lacquered, Material-98% Mineral Compound, Pack Size-12, Product Type- Engineered Stone, Thermal resistance- 0.15(m2K)/W. Length- 596mm, Width- 298mm, Thickness- 7mm, Abrasion Class-AC4-medium commercial use, Effect of Caster Chairs- Pas25,000R, Impact resistance >1800m, Light Fastness >Grade 6, TriTec Ultimate Surface, Mould, fire & smoke resistant, Similar stability, scratch, stain resistance as a ceramic tile Backing made from recycled plastic bottles pre-attached (500 ft2 | 50 m2= 550 bottles recycled).
2. CHIP FLOORBOARD: P5 22 T&G Caberfloor- an internal high-density structural moisture resistant floor panel, 22mm. A high-density durable, tongued and grooved profile, Moisture resistant P5 grade flooring. Low emission standards 'E1'. To EN13986, standard EN 312. Characteristic Strength {N/mm2}: Bending/m 10.0, Compression fc 9.8, Tension/ 1 6.6, Panel Shear fv 5.2, Planar shear f, 1.3, Mean Stiffness (MOE) (N/mm2) Tension E, 1800 Compression E 1800, Bending Em 3000, Panel Shear Gv 860, Characteristic Point load Fm., k (kN) (for floors and roofs) 5.4, Point load mean stiffness (N/mm) (for floors and roofs) 560, Characteristic Point load serviceability F ser,k (kN) (for floors and roofs) 4.3, Reaction to fire DFLA-S1. Moisture resistance Internal bond after boil test (%) 0.12. Sizes: 2400 x 600 x 22mm TG4, 600 centres.
3. 300mm PUR expanding foam insulation, ISOTHANE LD40, CFC & HCFC FREE, density 40 kg/m3, water and air tight, fire resistant, U-value 0.025W/mK
4. Timber I-JOISTS: European Spruce Grade 16, LVL flange and fibreboard web, to BS EN 1995-1-1, treated with organic solvent preservative to BS 5268 Pt 5 double vacuum process. Joist height h [mm] 360 Characteristic bending moment) [kNm] 31.02, Characteristic vertical shear [kN] 20.80, Bending stiffness EIjoist [N · mm2 * 109] 2,714, Shear stiffness GAjoist [MN] 5.19. All cut ends have two coats brush applied. Sizes: 90x360mm.
5. Steel Black Coating Stud Bolts Threaded sized 30mm dia. 275mm long. Material: Carbon Steel, Type: Round Head, Connection: Common Bolt, Head Style: Round, Grade: 10.9, Coarse Thread Pitch 3.5mm, weight: 4.75kg, coated BSC Colorcoat HP 200 plastisol. Nominal organic coating thickness (µm) 25 to EN13523, to BS EN 10346:2009. Bolts spaced two vertical rows by 3 at the bottom of column,
6. Base plate, thickness tp > 6 in (10mm), material ASTM A36 inserted to bottom end of the column and attached to the foundation with four holding down anchor rods S275 steel: material ASTM A36, Tensile Strength Fu (ksi) 58, Nominal Tensile Stress,[a] Fnt = 0.75Fu (ksi) 43.5, Nominal Shear Stress (X type),[a, b], Fnv = 0.50Fu (ksi) 29.0, Nominal Shear Stress (N type),[a, c] Fnv = 0.40Fu (ksi) 23.2, Maximum Diameter 4 in., thickness 10mm, bolts M20 8.8 Tapcon Anchors 4H45, Steel Nail-in Anchor, M6 x 40 mm, Dimensions and drill holes [mm] 200x200x15, 22 Ø. Horizontal bolt spacing 60/60/60/60 mm. Grit blasted to SA 2.5 and painted with two coats of Zinc Phosphate epoxy primer. Fire exposed sides coated with fire resistant vermiculite spray.
7. Glulam column 260x260, 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.
8. DPC overlapped with DPM
9. DPM
10. Sleeper wall 455mm on foundation slab 750mm. Concrete mix- RIGAcrete Watertight-water resistant concrete, minimum cement content of designed mixes shall be 220 kg/m3, strengths C40/50. Designed mixes for reinforced concrete shall comply with the requirements of BS 8500-2.