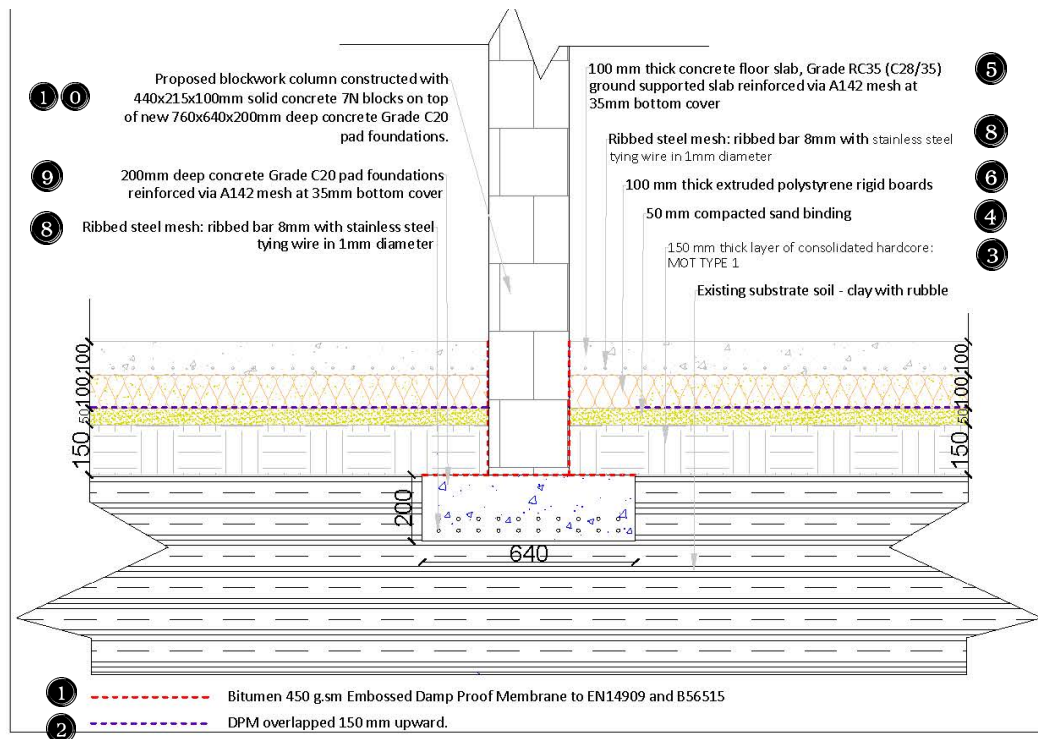


Typical Detail – Concrete Block Wall - Shallow Underpinning Foundations



NOTES:

1. Bitumen 450 g.sm Embossed Damp Proof Membrane to EN14909 and B56515.
2. DPM overlapped 150 mm upward. Type/Standard: Hyload Universal DPM (500 µm), to BS EN 13967:2012+A1:2017, Product code: 30833510. Colour and finish: blue, Unit sizes: Sheet width: 4 m, Roll length: 12.5 m, Roll weight: 23 kg. Durability: 2000 gauge. Related: Hyload DPM Jointing Tape, Product code: 30833520.
3. 150 mm thick layer of consolidated hardcore: MOT TYPE 1 SUB BASE LARGE BULK BAG, Type/Standard: MOT TYPE 1 SUB BASE, to BS EN 13242, Product Code: AGSTB020, Unit sizes: Bulk bags, Durability: Sub base aggregate.
4. 50 mm compacted sand binding: BUILDING SAND LARGE BULK BAG, Type/Standard: BUILDING SAND, to BS EN 13139:2002, Product Code: AGSTB001, Unit sizes: Bulk bags, Durability: Sharp sand.
5. 100 mm thick concrete floor slab, Grade RC35 (C28/35) ground supported slab reinforced via A142 mesh at 35mm bottom cover to BS 8500-2.
6. 100 mm thick extruded polystyrene: Extruded polystyrene rigid boards of pre-extruded polystyrene beds, to Section 6 - Energy (Scotland). Type/Standard: HEXATERM Yelofoam x2i extruded polystyrene, product code: ICX21100, (available from JEWSON Limited), U-value (W/mK) - 0.034, Colour and finish: Square edge detail, Unit sizes: 2500 x 600 x 100mm, Durability: High compressive strength - 300 kPa to BS EN 826 and BS EN 1606, High water resistance. Manufacturer: Cellecta Ltd.
7. Mass concrete Grade C28/35 underpinning stools to be constructed in lengths not exceeding 600mm per section (unless otherwise specified). No section closer than 1.2m centres to be constructed simultaneously. Heavy-duty ready mix reinforced concrete, compression strength 35N/mm², minimum cement content 220 kg/m³, to BS 8500-2.
8. Ribbed steel mesh: ribbed bar 8/10mm to BS 6744 to the mesh patterns given in BS 4483:2005, Stainless steel tying wire in 1mm diameter, shape/size- to fit strips and pads sizes. Ultimate Tensile Stress 550 N/mm², Minimum 0.2% proof stress [effective yield] 550 N/mm².
9. Concrete Grade C20 pad foundations, ratio 1:2.4 (1 part Portland cement, 2 parts fine aggregate, 4 parts of coarse aggregate), compression resistance 20N/mm².
10. Blockwork column constructed with 440x215x100mm solid concrete 7N blocks on top of new 760x640x200mm deep concrete Grade C20 pad foundations. Solid dense concrete blocks, aggregate for load-bearing applications, comprehensive strength 7N/mm², size: 440x215x100mm.
11. 75mm semi-dry concrete. Grade C28/35, 10mm max. size aggregate to be placed at least 24 hours after main stools. Rigacrete Dura L or equivalent - CBM 3 Dry Lean / Semi Dry Mix (Cement Bound Material) consisting of cement, 10mm stone, graded sand and minimal water. The ratio of all-in stone and sand : cement 16:1. Low water/cement ratio < 0.4, Dense impermeable, durable concrete. Low heat of hydration. Reduced risk of plastic settlement cracking. Grade 28/35.