

Detail in addition to already indicated must comply in all respects with the current Building Regulations and any allied legislation

Install pre-formed cavity tray by Cavity Trays Ltd. (or similar approved with integral code 4 lead flashing. Minimum of 150mm upstand above roof covering. For stepped cavity trays a minimum of 150mm girth is to be maintained. Units to be installed to manufacturers instructions and roofing felts to be taken well up behind lead.

Roof construction to comprise interlocking roof tiles or reconstituted slate finish on treated s.w. battens installed to BS5534 : 2015 on Tyvek breathable membrane on trusses supplied and designed by Specialist to BS268 Part 3 1985 and to include all necessary temporary & permanent struts, trimmers, ties, binders and bracing. Roof and ridge tiles are to be mechanically fixed to BS5534 : 2014. Calculations to be provided by Truss Manufacturer for approval prior to fixing of truss which is to be secured to cavity wall using 900x30x5mm lateral restraint straps @ max. 2.0m centres

Continuous 5mm ventilation gap to be provided at ridge level

100x25mm diagonal & longitudinal bracing as reqd. by truss manufacturer
Roof insulation to be cross lapped between and over ceiling joists & comprise 100mm Kingspan Kooltherm K107 between joists with 75mm Kooltherm K107 laid over joists in opposite direction to provide a U value of 0.12W/m2K. Alternative insulation combinations can be utilised providing they satisfy the min. U value of 0.13

Gable ladder to BS 5268 Pt:3:1985 secured to cavity wall with 900x30x5mm galv. m.s. straps at max. 2000 centres. Straps to reach uncut blocks

100mm external skin of face brickwork, 50mm clear cavity with flexible stainless steel timber frame wall ties to BS1243 and located at stud centres (600mm) horizontally and 450mm vertically and doubled up at openings and corners. Inner skin constructed using 140 x 38mm CLS vac-vac treated studwork at max. 600mm centres with 9.5mm sheathing grade plywood or 9mm Sterling board to external face and covered with breather paper to BS 4016. 100mm Kingspan Kooltherm K112 between studs leaving a 40mm service cavity to the interior of studs with an additional 37.5mm insulated plasterboard with 3mm lightweight plaster skim finish to inside of studs to achieve a minimum U value of 0.17W/m2K. Alternative combinations can be used providing they satisfy the minimum requirement of 0.18. Internal timber frame lintols to comprise 3 no. 220x45mm s.w. timbers spliced together and with a minimum of 150mm end bearing and external lintol to be Catnic CTF5 or similar. Provide horizontal and vertical dpc to all openings.

Safety glazing to be provided to all critical areas, ie. within 0.8m of ground floor level is safety/toughened glass, installed to BS EN 12150-1:2015

Existing foundation shown at nominal depth but to be exposed at construction stage and new foundations to be tied-in to existing using galvanised mild steel starter bars at max. 250mm centres

SECTION A.A. CONSTRUCTION DETAIL

The foundations indicated are based on the assumption that ground conditions on site are good. If necessary the foundations are to be designed & detailed by a structural engineer appointed by the client.

Foundations designed in accordance with BS8004 2015 / BS EN8103-1: 2011
Code of Practice for Foundations

Profile of foundations as indicated in sections, generally 650x300mm mass concrete grade C25/20 – 20N/mm minimum strength, 20mm nominal coarse aggregate to CP 2004 Foundations taken down to firm natural soils with minimum safe allowable bearing pressure of 110kN/m2

Excavation for foundations to be taken down to a minimum of 760mm below existing ground level to the satisfaction of L. A. building control officer
Below ground cavity walls to be formed with dense concrete blockwork 7N/mm2 20kg with thickness to match walls above. Provide a minimum of 3 courses of facing brickwork from dpc level down to below existing ground level, all bed in (1:3) sand and cement mortar. Wall ties as described in external walls
Cavity filled with weak mix of concrete to within 225mm of dpc level

Min. 65mm reinforced self leveling screed on a 500 gauge vapour controlled layer/membrane draped over 100mm Kingspan Kooltherm K103 insulation board or similar approved to achieve a U value of 0.15W/m2K and turned up under dpc at wall abutments. Joints to be taped between insulation boards. Insulation to be laid on 100mm mass concrete floor slab (1:3:6) mix C30 N/mm2 with a separating layer of minimum of 500 gauge polythene between. 20mm nominal coarse aggregate on 1200 gauge Visqueen dpm and Radon protection. Membrane to BS8215:1991. Dpm to lap with new cavity tray fitted at dpc level throughout new building works. All joints to be lapped, folded and taped on 50mm sand blinding on minimum of 150mm compacted/consolidated hardcore.

New foundations to be taken down to level of existing footing and tied in but where foul sewer pipe passes under building/ through cavity wall then foundations are required to be below invert pipe level and may need to be stepped. Where pipe passes through wall it is to be protected by 2no. pre-cast conc. lintols bridging each skin of wall & where pipe runs under building it should be surrounded by 150mm granular material. Where drainage pipes pass through the below ground wall construction, then the opening will be masked by a rigid sheet material

PROJECT

PROPOSED IMPROVEMENTS/ALTERATIONS AT
20, SHIRE COURT,
QUAKERS YARD,
TREHARRIS,
CF46 5HJ

DRAWING CONSTRUCTION DETAIL

SCALE 1:50 @ A3 DATE MARCH 2026

DRAWN RE DRG.NO. 6