

Superimposed outline of existing dwelling

Vent tiles at max. 1500mm centres to top course but one to provide through ventilation to roof void

Wall plate to existing rear wall of property is to be fixed with a minimum of M12 bolts at max. 600mm centres to receive new pitched roof rafters. Wallplate straps are to be provided at to be provided at a max. of 2000mm centres

2no. 152x89x16Kg/m universal beams over with min. 150mm end-bearing onto 250mm long 100mm wide and 75mm deep concrete padstones See attached Engineers calculations. Beam to be encased in Supalux, 15mm fireline board or similar to provide 30 minutes fire resistance.

Existing foundation shown at nominal depth New foundation to be taken down to similar depth and tied in to existing using galvanised mild steel starter bars, 200mm in length and fixed at maximum 250mm centres

Code 5 lead flashing to be dressed over pitched roof and upstand a minimum of 150mm and to be pointed into render finish at vertical abutment with wall.

New roof covering to comprise interlocking tiles as existing, secured and clipped in accordance with BS5534 : 2015 Tiles to be fixed to 50x35mm sw tanalised roofing battens on Tyvek or similar breathable roofing membrane on 170x47mm C24 rafters at max. 400mm common centres or mono-pitch trusses at 600mm centres supplied and designed by a specialist to BS5268 Part 3 : 1985 Roof timbers to sit on 100x50mm wallplates fully bedded in mortar and strapped down with 30x2x900mm long galvanised mild steel straps plugged and screwed to blockwork at maximum of 2000mm centres. Fascias and soffits to match existing and a 25mm continuous gap to be provided at soffit level with ventilation tiles at maximum 1500mm centres to top course but one to ensure cross ventilation to roof space. 100x25mm diagonal and longitudinal bracing spanning a minimum of 5 trusses or as required by truss manufacturer.

Where ceiling is inclined or vaulted then construction to comprise 125mm plasterboard with 3mm lightweight plaster skin with taped joints. 62.5mm Kooltherm K118 insulation to u/side of rafters with 120mm Kooltherm K107 between rafters with 50mm ventilated cavity over to provide min. U value of 0.13. If there is insufficient depth then introduce counter batten to rafters

Over-fascia vent system to meet Building Regulations with 25mm ventilation gap to suit low pitch of roof

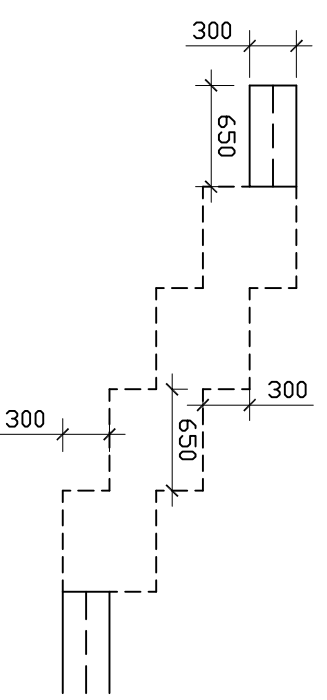
Beam over Bi-fold doors to be 152x152x23Kg/m universal column with 305x10mm plate welded to bottom flange with 6mm fillet welds to both sides, welds to be 200mm long and 200mm apart. Beam to be encased in Supalux, 15mm fire line board or similar to provide a min. of 30 minutes fire resistance. Provide 150mm end-bearing for beam onto 300x100x75mm deep concrete padstones. The beam plate is to be galvanised or receive suitable external protection. See alternative IG lintel L1/HD

Safety glazing to be provided to all critical areas, i.e. within 800mm of ground floor level is to be safety/toughened glass, installed in accordance with BS EN 12150-1:2015.

DPC level at min. 150mm above yard
Yard to comprise 75mm concrete on min. 75mm hardcore with falls from the building to a suitable outlet

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 pipe invert 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 and 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 with a rigid sheet material. Foundations to be stepped as required depending upon existing ground levels, both levels of step to be solidly united, upper level of step should overlap the lower by twice the height of the step, the thickness of the foundation or 300mm whichever is the greater. Additionally the height of the step should not be greater than the thickness of the foundation.

SECTION B.B. CONSTRUCTION DETAIL



PROJECT
PROPOSED IMPROVEMENTS/ALTERATIONS
9, BRYN OWAIN,
PENYRHEOL,
CAERPHILLY.

DRAWING CONSTRUCTION DETAIL - SECTION B.B.
SCALE 1:50 @ A3 **DATE** DECEMBER 2023
DRAWN RE **DRG. NO.** 8