

SPECIFICATION

for

**Extension to Dwelling
for Granny Annexe**

at

**16, Aldergrove Close,
Baglan,
Port Talbot.**

March 2020

ROOF CONSTRUCTION

New roof construction to consist of pre-fabricated roof trusses, minimum pitch 17.5 degrees and to be accurately established on site prior to manufacture. The trusses shall be designed in accordance with BS 5268 Part 3 and manufactured by a company that is a member of the TRADA Trussed Roofing Quality Assurance Scheme, marked accordingly, and installed in accordance with their recommendations.

Trusses to be fixed using proprietary truss clips. Wind bracing shall be provided as detailed in Technical Bulletin Number 1 produced by the Truss Plate Association Ltd., and current Building Regulations. Calculations of the trusses to be provided by company prior to manufacture and installation.

Roof covering to be concrete interlocking tile to match existing fixed in accordance with manufacturer's instructions to 38 x 25mm treated softwood battens on VPU breathable felt to BS 5534. Ridge tiles to be smooth faced clay or concrete angular tiles bedded in tinted cement mortar.

Ceilings to be 12.5mm or 15mm plasterboards to BS 1230 Part 1, screwed to underside of joist section of truss with taped joints or plaster skim finish to provide 30mins fire resistance.

All structural timber to be Grade GS treated with tanlith preservative treatment in accordance with BS 5268 Part 5 (1977).

All carcassing and first fix softwood timbers in roof or in positions exposed to possible dampness are to be pressure impregnated to BS 5268 Part 5 with severity rating high.

All soffits and fascia boards to be uPVC to BS 7619 incorporating a minimum 25mm continuous air vent with insect proof mesh screen, to allow cross ventilation of roof void areas conforming to Approved Document F Part F2.

Roof voids to be insulated with 300mm Rockwool (or similar) glass fibre insulation quilt laid between joists, to achieve a U- Value of 0.15W/m²K.

Rainwater goods to be uPVC complying with BS 4576 Part 1. Rainwater gutters to be 100mm with 68mm diameter rainwater pipes all clipped and bracketed strictly in accordance with manufacturer's specification.

EXTERNAL WALLS

Cavity walls to be 325mm thick, comprising outer skin of Class A Dense Concrete block, 125mm cavity with 75mm Kingspan (or similar) rigid insulation batts, with inner skin of 100mm thick Class A dense concrete block. Cavity wall to achieve a minimum U-Value of 0.21 W/m²K.

Alternatively inner skin to be 140mm timber frame construction to be designed and manufactured by a company that is a member of the TRADA Trussed Roofing Quality Assurance Scheme

Wall ties to be stainless steel vertical twist type at 450mm vertical and 600mm horizontal centres, staggered and doubled up at all openings. All ties to be to BS 1243 and fixed in accordance with BS 5628. Cavities to be closed at eaves, cills and jambs with Thermabate (or similar) closers incorporating a DPC. Cavity to be adequately firestopped at eaves level using a suitable non-combustible material such as Rockwool cavity wall batts. Below ground level, cavity to be filled to within 150 of DPC with lean mix concrete to BS 5328.

Provide Hyload DPC by Ruberoid at 150mm above outside ground level and to all vertical and horizontal openings in accordance with BS 743 and CP 121. Lintels over all external openings to be IG SW1L or p.c. concrete lintels, or timber frame lintels if timber frame construction used, incorporating a DPC.

Provide code 4 lead flashing and soakers at abutment of new roof and external walls, dressed over cavity trays built into external skin of walls.

WALL FINISHES

External block work walls to receive 2 coats of cement render with finish of fined down cement render or spar dash to client's choice.

Internal block work walls to receive 2 number coats of sand cement render with plaster skim finish.

Provide architectural skirting to BS 1186 Part 3 to client's choice to all walls. Backs of skirting shall be knotted and primed prior to fixing. All softwood to receive one coat of primer, two coats of undercoat and one coat of gloss finishing paint to BS 5358.

All plastered walls and ceilings to receive one thinned coat and two full coats of vinyl matt emulsion to BS 7719.

FOUNDATIONS

Foundations to be 600 x 300mm concrete strip type, 30N/mm² strength concrete, with nominal A142 fabric mesh in bottom, to a minimum depth of 750mm below ground level, and below invert level of any adjacent drains. Actual depth of foundations to be determined following examination of the sub-grade site condition.

FLOORS

Floor construction to achieve U-Value of 0.22 W/m²K comprising 65mm thick cement mortar screed on 75mm thick Kingspan (or similar) insulation batts on 1200 gauge Visqueen damp proof membrane on 100mm thick concrete oversite slab to BS 5328 on 150mm thick well compacted Type 1 granular sub base material. Additional layers of fill to be compacted in 225mm layers.

WINDOWS AND DOORS

All windows to be uPVC double glazed units to BS 6375, incorporating draft proof trickle vents. Window to provide a minimum of 1/10th daylight and 1/20th ventilated opening area of the floor area of the served room. Background ventilation (trickle vents) to be provided having a total area not less than 65,000mm² as per table 1.2a of Approved Document F1. Opening should be controllable, secure and located so as to avoid undue draughts.

Security locks to be fitted to all ground floor windows. Window to be double glazed with clear sealed units to BS 6262. Obscure glass to be provided in shower room window. Glazing to be low emissivity Pilkington K glass (or similar) with 16-18mm air gap to achieve a U Value of 1.8W/m²K.

Provide mechanical ventilation of 60 litres/second to the kitchen area or 30 litres/second if incorporated into cooker hood facility. Provide mechanical ventilation of 15 litres/second to shower room.

Internal cill level to be agreed with client, but shall be no higher than 1100mm or lower than 800mm.

External doors to be fitted complete with all ironmongery. Any glazing below 1500mm to be toughened glass. Door size to comply with requirements of Approved Document M. Glazing to be as for windows and to achieve a minimum U Value of 1.8W/m²K.

STORM WATER DRAINAGE

Downpipes to discharge to uPVC roddable back inlet gulleys. All pipework to be 'Osma' 110mm uPVC below ground quality pipes bedded on and encased in granular material to BS 882, laid to fall as specified by manufacturer. Storm water to discharge to soakaway located 5.0m from building.

FOUL WATER DRAINAGE

All foul water to discharge to existing sewer as shown on plans.

All waste pipes and fittings to be in accordance with BS 3380 and BS 5255 and installed to BS 5572. All deep sealed traps to be to BS 3943.

All drainage below ground to be 100mm uPVC Osma (or similar) to BS 4660 or BS 5481 laid strictly in accordance with manufacturer's instructions and Approved Document H of the Building Regulations 2002. Drains to be laid to a minimum fall of 1 in 40 at a minimum depth of 0.6m, bedded on granular material to BS 882.

Where drains pass through walls or foundations provide 2 number 100 x 150 x 450mm concrete lintels over pipe giving a minimum 50mm clearance all around pipe with both sides masked with a rigid sheet material. Any drain passing under a floor or within 1.0m of a building to be encased in 150mm of concrete.

Inspection Chambers (minimum internal size 450 x 450mm) to be either preformed uPVC chambers or 225mm thick engineering brick to BS 3921. Base to be 150mm thick concrete slab, fitted with standard air tight medium duty frame and cover to BS EN 124. Half round channels to be used in chambers with branches discharging into channel at or above the level of the horizontal diameter. Channel and branches should be benched up to at least the top of the outgoing pipe and at a slope of 1 in 12. The benching should be rounded at the channel with a radius of at least 25mm.

CENTRAL HEATING

Extend central heating system. All heating works to be carried out strictly in accordance with the requirements of Approved Document J of the Building Regulations.

Provide thermostatic valves to all radiators. System to be installed by a 'Gas Safe' registered contractor.

ELECTRICAL INSTALLATION

To be fully in accordance with the Regulations of the I.E.E. (18th Edition), to BS 7671 and undertaken by an approved electrician, registered on a competent persons scheme. Completion certificates to be submitted to Building Control. All power and lighting points to be at locations agreed with client. All sockets and switches to be located at a height between 450 and 1200mm above floor level. Lighting to be energy efficient lights as supplied by Lampholder (ref www.lampholder.co.uk).

EXTERNAL WORKS

Provide concrete paths to perimeter of new building.

ALL WORKS TO COMPLY WITH THE CURRENT BUILDING REGULATIONS.

ALL MEASUREMENTS ARE GIVEN IN MILLIMETERS UNLESS OTHERWISE STATED AND SHOULD BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORKS.