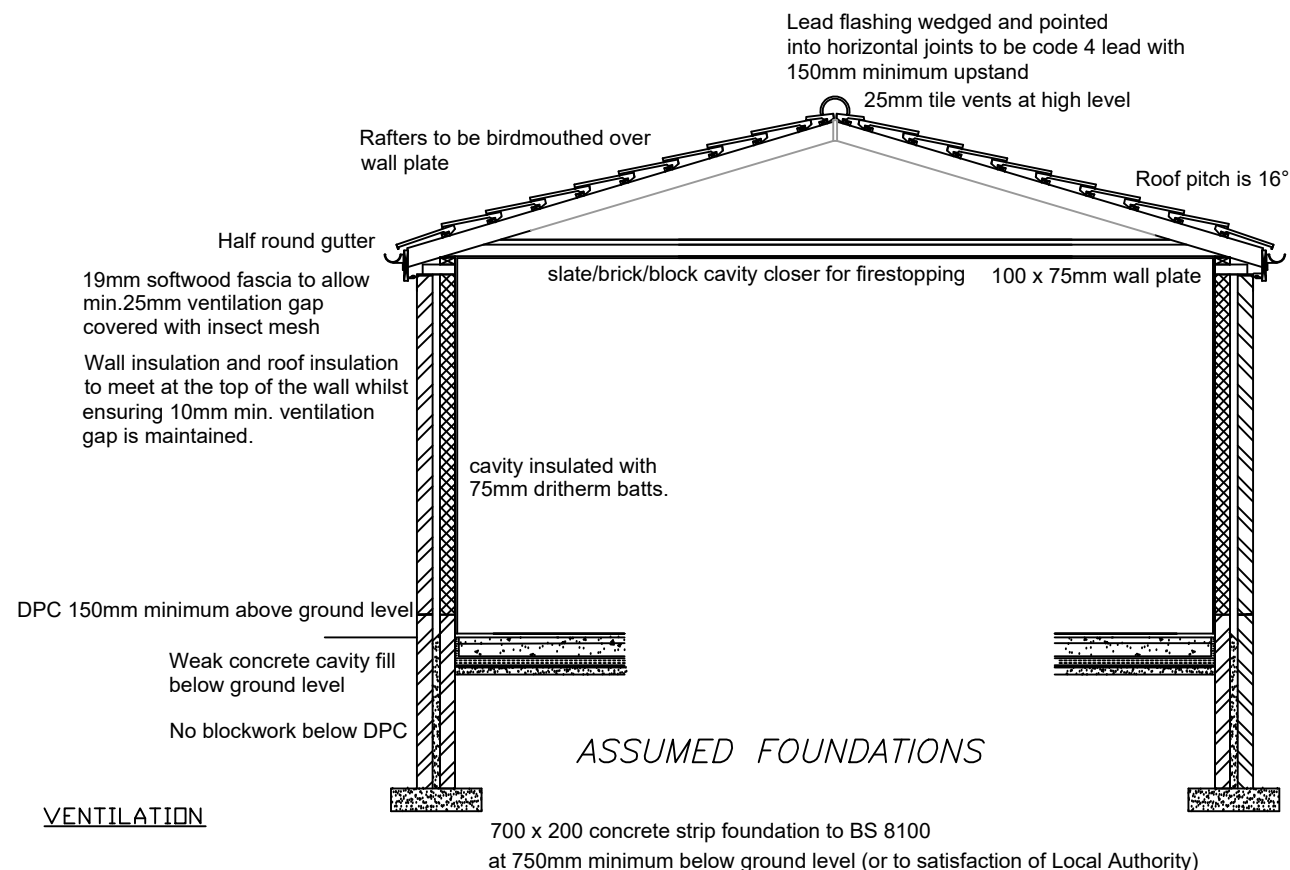


TYPICAL THROUGH SECTION OF A COLD ROOF



VENTILATION

Any new bathrooms or WC rooms to have light switch operated low voltage extract fan to give air change of 15litres/second and a minimum 15 minute override. 30l/s to Kitchen.

DOORS AND WINDOWS

All openings to have vertical and horizontal insulated DPC's; any new windows and external doors to be supplied and installed by a FENSA registered contractor and in accordance with FENSA regulations. Window glass to be e-glass double glazing with 16mm argon gas filled cavity. Windows to have max. U-value of 1.8 W/m²/K (where in new extension) and replacement windows to existing dwelling to have max. U-Value of 2.0 W/m²/K to comply with approved document L1B.

All opening lights to be 1/20th floor area and have trickle vents 8000sq mm and be weather tight to BS6375-1.

All escape windows to have minimum opening 850mm high and 500mm wide with maximum cill height at 850 from finished floor level. In critical areas, safety glazing to conform to BS6206: 1981 to be fitted in doors between finished floor level and 1500mm height and 300mm either side of doors and at 1500mm in height.

All new doorways to have a wheelchair accessible threshold.

ROOF

Roof tiles in colour to match existing as near as possible; to be Centurion low pitched roof tiles BS EN 490 or equal and approved. Nailed or clipped to 50x25mm battens on sarking felt to BS747 225x75mm rafters at 400mm centres.

225x75mm ceiling joists at 400mm centres.

Ceiling insulation to be laid between and under rafters. Insulation to be Kingspan Thermapitch TP10 zero ODP 150mm thickness (fixed between rafters) and Kingspan Thermawall TW56 zero ODP 30mm thickness (fixed under rafters)

100x75mm wall plate strapped to masonry at 1200mm centres with 1200x30x5mm galvanised steel restraint straps.

Where appropriate, 1200x30x5mm galvanised steel restraint straps to be nailed over min. 3no. rafters at max. 2m centres, with suitably sized noggins under.

Any new pitched roof to achieve a maximum U-value of 0.16 W/m²/K, to comply with approved document L1B.

DRAINAGE

100mm half round gutters fixed to timber fascia boards to run to 75mm downpipe and discharge into gully. All new SV pipes to be 100mm UPVC and to be 900mm minimum above highest opening with suitable cage cover. 75mm deep seal traps to new WHB and WC and floor drain.

Provide rodding access at base of stack 150mm above ground level. Elsewhere, all new drainage runs shall be roddable.

Other sanitary waste connection to be minimum 200mm above waste connection.

Excavate on line of drain to accommodate new inspection chamber; include for all temporary shoring, barriers & covering;

fully expose existing drain and cut out and prepare ends for connection to new inspection chamber; supply and fit universal flexible connectors to suit existing and new pipe work materials and dimensions; to be bedded on semi dry concrete bed (grade c20P) min 100mm thick; supply and install new 450mm internal diameter polypropylene inspection chamber complete with grade C ductile iron cover & frame bedded in concrete all installed plumb, & level and strictly in accordance with the manufacturers instructions; test on completion, backfill around inspection chamber/drains after approval of building control, with selected excavated materials in layers max 225mm thick and well compacted.

All drains to have 1:40 falls on a minimum 150mm bed of pea gravel. Any drainage run through brickwork to be bridged with RC lintel leaving 50mm gap around and be packed with polystyrene.

HEATING

Any pipes passing through unheated and uninsulated space to have 35mm thick factory applied insulation. Extension to heating system to include zonal timing and boiler interlock controls in accordance with approved document L. Pipes must be insulated to a K Value of not more than 0.045W/mK where within 1 metre of cylinder.

EXTERNAL AND LOADBEARING WALLS

Existing brickwork to be tied in by using connectors and providing pockets to the old brickwork. External walls to be 102mm facing brick, 100mm cavity with with U value of 0.28 w/m2k 75mm full fill Rockwool Ancon ST1 insulation or equivalent and approved; inner leaf of external walls to be 100mm Tarmac Topblock standard blocks.

Internal face of external walls to be fitted with Lafarge Thermal check K30 plasterboard. All new walls to achieve a maximum U-value of $0.28 \text{ W/m}^2/\text{K}$ to comply with approved document L1B. All new or enlarged windows, door and access reveals to be bridged over by a suitable insulated Catnic lintel (as specified on approved plan) or equivalent and approved with min. 150mm bearing unless specified otherwise on approved plan.

Stainless steel wall ties staggered at 750
horizontal and 450 vertical centres to BS1243 and
double number wall ties around openings.
Provide cavity tray over any item bridging cavity.

SOLID FLOOR

50mm s/c screed over 100mm concrete slab on floor insulation to be Kingspan Thermafloor TF70 zero ODP 80mm thickness on 1200g visqueen DPM lapped and bonded to DPC, on 12mm sand blinding on 150mm minimum well compacted hardcore. Cavity wall insulation to extend down past DPC level to level of floor insulation.

Perimeter floor slab insulation to be Kingspan Thermawall TW56 zero ODP 30mm thickness fitted to touch floor insulation where floor slab meets external walls.

New floor to achieve a maximum U-value of 0.22 W/m²/K and comply with approved document L1B.

ELECTRICAL

Smoke detector to be installed in each habitable room and either interlinked with any existing hardwired mains connected system or where none exists, hardwired to mains itself. Remote test switch to be installed.

Sockets and switches to be between 450mm and 1200 AFFL, and to comply with part M 8.3 of the Building Regulations.

All wiring and electrical work to be designed, installed, inspected and tested in accordance with BS7671, IEE 16th edition regulations and Part P of the Building Regulations approved document.

Contractor to provide Electrical Completion Certificates and Electrical Test Certificates to comply with the above.

Manchester Equipment and Adaptation Service Philips Park Rd Manchester M11 3FU	Project: Ground floor extension for Kingkraft bath . Proposed 9 Middlegate Manchester M40 0JP	Drawn By: CRL	Date: 30/10/2023	 Manchester Equipment & Adaptations Partnership
		Scale: 1:100@A3	specification	