

Proposed Extension to No 30 Island Mews, Port Talbot.

For: Miss Sian Sims.

Specification

Note

The extension is to be constructed so no part of the building encroaches onto the adjacent property, namely the foundations, roof structure and any boundary enclosure.

Construct new extension as detailed below:

Carefully remove prefabricated carport to side elevation together with the double access timber gates and steel support framing and set aside for future re-sale. Remove timber panel boundary fence to area of new extension and cart away.

Foundations: provide concrete strip foundations size 630 x 300mm (25n/mm² mix) laid on suitable ground to a minimum 750mm depth and to approval of Building Control Inspector.

Sub-structure: cavity wall comprising inner skin of 100mm concrete block (7N/mm²) with 125mm cavity filled with lean-mix concrete to within 150mm of dpc level and 100mm concrete block outer skin.

Ground floor: 40mm sand/cement screed laid on 100mm concrete slab laid on 1200 gauge polythene membrane on "Kingspan" or similar insulation boards (100mm thickness) on 1200 gauge damp proof membrane laid on 50mm stone dust blinding on approx 150mm thickness of well consolidated hardcore base well compacted with a mechanical compaction plate. Provide 20mm insulation strip to external perimeter of concrete floor slab to prevent cold bridging. Ensure continuity of dpm in floor slab with dpc in inner skin of cavity wall.

Super-structure: cavity wall comprising 102mm face-brick outer skin to all walls, 125mm cavity partially filled with "Kingspan" or similar insulation batts (75mm thickness) or similar approved batts secured to inner skin ensuring a 50mm clear cavity and a 100mm concrete block inner skin.

New face-brickwork to match house brickwork and incorporate quoin/soldier/dentil courses to match.

Skins tied together with stainless steel double triangle wall ties incorporating insulation retaining discs at max 450mm centres vertically and 750mm horizontally, ties located at 225mm centres vertically at reveals. Close cavities at reveals with insulation block and batts including vertical dpc and provide 25mm check rebate to inner reveals.

Close cavities at top of walls with non-combustible material. Bond new walls to existing using "Furfix" profiles including cutting a vertical slot in the existing external face-brickwork to incorporate a vertical dpc.

Provide 100mm wide horizontal dpc to both skins of cavity wall, min 150mm above external path level.

Internal skin of cavity walls and original face-brick walls (previously external) to be rendered and skimmed with gypsum plaster (13mm-2 coat work).

Lintels: build in steel "Catnic" or similar approved lintels over external window openings to all elevations with min 150mm end bearings. Include for stepped dpc over lintels (450mm girth) and provide insulation packing to void below dpc to eliminate thermal bridging across cavity. Provide stepped dpc under upvc window cills.

Suspended first floor comprising 200x50mm C16 grade timber floor joists fixed at 450mm centres onto inner skin of new cavity wall, other end fixed via galvanised joist hangers fixed to wall bearer rawl-bolted into existing outer skin of house gable wall. Provide galvanised restraining straps, 30x5mm in cross section to the joists nearest the front/rear walls and the inner skin at max 2m centres, straps should turn-down at the wall face at least 100mm. Provide solid strutting to joists where strapping occurs and packing between wall and first joist and at mid span of floor joists. Ensure level of new floor aligns with existing first floor level.

Provide 22mm tongue and grooved moisture resistant chipboard flooring to top of floor joists with 38x38mm timber noggins between joists and at perimeter to support floor edges. Fix 12.5mm vapour-check plasterboard to underside of floor joists and finish with gypsum plaster. Provide 38x38mm timber noggins between joists and at perimeter to support plasterboard edges. Provide 100mm thickness of "Rockwool" insulation quilt between joists (min 10kg/m³ density) for soundproofing purposes.

New pitched roof structure to be constructed at same pitch as existing roof, approx 35-degree pitch. Provide and fix "Specialist" roof trusses at 450mm c/c's onto 100x50mm wall plates via truss clips. Wall plates bedded level onto the inner skin of the cavity walls and secured to block-walls with 30x5mmx1200mm long galvanised anchor straps at maximum 2m centres. Where roof trusses run parallel with gable wall, build in galvanised restraining straps/noggins and fix to trusses at max 2m centres.

Provide 12.5mm vapour-check plasterboard ceiling fixed to underside of ceiling joists with gypsum plaster finish. Provide 38x38mm timber noggins between joists/trusses and at perimeter to support plasterboard edges.

Roof covering: concrete interlocking tiles (colour/profile to match existing) fixed in accordance with manufacturers recommendations onto treated timber battens on breathable roofing underlay.

Provide high and low level roof ventilation via vent tiles or upvc soffit ventilation to promote cross ventilation to new roof space.

Provide code 4-lead cover flashing at roof junction between new roof and existing face-brick gable cavity wall. Dress new flashing up to underside of existing gable soffit.

Provide 300mm total thickness of "Rockwool" insulation quilt to new roof space. Lay 150mm thick layer between trusses and 150mm layer placed at right angles over the top.

Fascias to be upvc (white in colour) fixed to ends of trusses.

Provide upvc soffits incorporating continuous ventilation slots to promote cross ventilation to roof space. Provide upvc bargeboard flush to gable wall.

Rainwater gutters/down pipes to be brown upvc, square-line profile, inclusive of all associated fittings.

Provide new 2no 110mm-dia upvc soil and vent pipes to receive ground and first floor waste connections from new sanitary fittings. Internal s&vp sited in WC to be terminated via air admittance valve and boxed in with plasterboard ensuring ventilation to top of pipe.

External windows to be white upvc, sizes as indicated below. Windows to incorporate 24mm double-glazed sealed units (6/12/6) incorporating low-emissivity glazing. Glazing in windows below a cill height of 800mm to be glazed in safety glass to comply with BS6262 and glazing to shower room and WC to be obscure. Provide opening windows not less than 1/20th of floor area for rapid ventilation purposes to all habitable rooms. All windows to incorporate trickle ventilators (min 4000mm² to non-habitable rooms and 8000mm² to habitable rooms) for background ventilation purposes.

Kitchen	-	900x1000mm
Lounge	-	775x1400mm
Front bedroom	-	900x1150mm
Shower room	-	775x1150mm
Wc	-	600x1150mm

All internal timber stud partitions to be constructed with 75x50mm studs/sole/head plates/noggins and lined with 12.5mm plasterboard both sides with a gypsum plaster skim finish. Provide insulation quilt between studding for sound insulation purposes.

Provide new internal doors (to owner's approval) with associated linings, architraves and ironmongery to extension, including softwood skirting boards.

Construct ceiling access in extension including providing insulated trap door for access to new roof space.

Sanitary ware: supply and install new sanitary fittings and sink unit in locations indicated on floor plan (type to owner's approval). Provide 75mm deep seal traps to all waste pipes and all associated hot/cold water pipework and waste connections for washing machine. Box in all waste/pipework.

Adapt existing gas pipework in kitchen and extend into kitchen extension for new cooker/hob location.

All electrical work is to comply with Building Regulations – Approved Document P. All electrical works are to be undertaken by a person registered under an approved "Competent Person Scheme" or the contractor is to provide a completed copy of the Electrical Installation Certificate to the Local Authority on completion. Provide switched and socket outlets for lighting and other equipment in the extension at appropriate heights between 450mm and 1200mm from finished floor level.

Contractor to liaise with Client with regard to quantity, type and location of fittings prior to first fix. Provide energy efficient light fittings to new extension.

Install mechanical extract ventilation via wall or ceiling mounted extract fans to kitchen (60-litres/second capacity or 30 litres/second if incorporated in cooker hood), shower

room (15 litres/second) and ground floor WC (6 litres/second). All fans to be vented external.

Extend existing central heating system into new extension, including pipework and radiators. Reposition existing wall mounted central heating boiler ("Vaillant Ecotec Pro24") into new kitchen extension including extending pipework, fluepipe and electrical cabling as required.

Drainage: provide and lay new 100mm dia upvc drainage pipes connected to new 110mm dia upvc soil and vent pipes and connect to existing inspection chamber in rear garden. Encase new drains in 150mm concrete surround under extension and bridge over with concrete lintels where pipes run under walls.

Lay new concrete paving slabs to front/rear of extension on a well-consolidated hardcore sub-base.

Miscellaneous Works

Disconnect and make safe all services to ground floor kitchen and lounge areas prior to demolition work. Remove kitchen base and wall units including sink and cooker and cart away.

Carefully demolish external cavity walls to kitchen and lounge as shown on plan and cart away debris. Provide temporary support to walls/floor joists above during works. Build in 4no 203x102mmx23kg/m universal steel beams over kitchen and lounge areas with minimum 225mm end bearings to support existing cavity walls/floor joists and proposed floor joists above. Beams supported on 100mm thick concrete padstones seated on existing cavity walls and encased in 2no layers of 12.5mm plasterboard with skimmed finish for fire protection purposes. Make good disturbed areas to walls, ceiling and floors to match existing surfaces.

Remove small window from side wall of lounge and brick up opening both sides. Render/skim affected areas.

Remove existing window to bathroom including removal of lintel above. Reform opening to create door width opening into first floor extension including building in 2no concrete lintels over new opening. Make good disturbed areas to walls, ceiling and floors to match existing surfaces.

Remove existing internal soil and vent pipe in lounge and bathroom including boxing and seal drain below. Make good aperture in roof covering on removal of existing soil pipe. Remove bathroom suite and all associated pipework/waste connections and cart away.

Take down section of stud partition wall as shown to front bedroom and cart away. Construct new partition wall in new position to form passage wall to extension. Make good disturbed areas to walls, ceiling and floor to match existing surfaces.