
TECHNICAL INFORMATION

PROPOSED EXTENSION

AT

12 ROMAN BANK

LONG SUTTON

FOR

MR BRUNTON

DOCUMENT REF: SD25-007/TI

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Build on extension in the manner shown.

Replace flat roof above proposed utility and part of kitchen as shown.

Boiler to be re-positioned in new utility as shown.

Form opening to kitchen area as shown to create kitchen/diner. Support over with steel beam all to structural engineers calculations.

Steel beams to be encased to give ½ hour fire protection.

Remove internal wall between utility and bathroom to create larger utility.

Bathroom window to be removed and opening extended down to suit external door as shown.

Existing window in dining room to be removed and opening extended to suit internal door as shown. Support over with IG box 200 lintel or similar approved.

Proposed foul water drains to be connected to existing foul drains as shown.

Install roof light as shown all to manufacturers instructions to make completely watertight.

Flat roof joists to be 175 x 50 SC3 grade at 400 centres.

Proposed floor to be laid level with existing.

Make good to all disturbed and affected areas.

Roof/Wall Abutments

Provide Code 4 lead flashings and lap over roof covering. Dress up wall a minimum of 150mm (stepped on pitched abutments) and provide d.p.c. cavity tray to make completely watertight.

Flat Roof Construction (Cold Roof)

12.7mm white spar chippings bedded on bitumen on 3no. layers built up felt (first layer asbestos based) on 12mm external grade plywood decking on 50mm to 0mm timber firrings securely spiked to treated timber joists (size stated on drawings). Provide 30 x 5mm mild steel anchor and lateral restraint straps to joists fixed to walls at maximum 1200mm c/c. Extend joists past wall and provide suitably sized fascia board, complete with soffit board. Provide proprietary ventilation to soffit to offer equal to a 25mm continuous gap along eaves. Lay between joists proprietary 150mm thick insulation maintaining a 50mm air gap between insulation and plywood. Form all necessary felt drips including tilting fillets and keep felt drips clear of fascia boarding. If flat roof intersects with pitched roof ensure flat roof felt laps under felt of pitched roof by a minimum of 600mm.

New/Old Walling

Where new walling meets old provide proprietary flexible wall starters.

Roof Ventilation

At eaves provide proprietary ventilation equivalent to a 10mm continuous gap along eaves.

At eaves provide proprietary ventilation equivalent to a 25mm continuous gap along eaves.

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Kitchen Ventilation

Provide proprietary mechanical extract ventilation unit capable of extracting 60lt/sec. Alternatively provide proprietary cooker hood capable of extracting 30lt/sec.

Bathroom/En-Suite Ventilation

Provide proprietary mechanical extract ventilation unit capable of extracting 15lt/sec. System to offer intermittent operation.

Hot Water Storage

Provide system approved by BBA and installed by BBA approved installer. System to be vented and insulation in accordance with BS5615 1985. Provide thermostatic control.

Heating System

Provide room thermostat or thermostatic radiator valves or similar approved to control the output from the heating system.

Insulated Pipes and Ducts

All pipes, which do not contribute to the heating of the building, will be insulated to BS5422 1977.

Safety Glazing

Provide safety glass to BS6206 to all windows to a minimum height of 800mm above floor level plus doors to a minimum height of 1500mm above floor level. Side screens to be same as doors if within 300mm of doors.

Smoke Detection

Provide mains operated self-contained smoke alarms to BS5839 Part 6, 2006 in accordance with Approved Document B1.

Rainwater Goods

PVC rainwater goods 110mm half-round gutters and 68mm diameter downpipes.

Habitable Room Trickle Ventilation

Provide proprietary trickle ventilators to head of windows giving a total opening area of not less than 8000mm²

Kitchen/Utility/Bathroom/WC Trickle Ventilation

Provide proprietary trickle ventilators to head of window giving a total opening area of not less than 4000mm²

Utility Ventilation

Provide proprietary mechanical extract ventilation unit capable of extracting 30 lt./sec. System to offer intermittent operation.

All Background ventilators should be in accordance with Table 1.7 of the latest Building Regulation Approved Document F1.

Roof Insulation

To roof spaces provide proprietary 300mm thick fibreglass insulation laid as 100mm between joists and 200mm across joists or equivalent to achieve a u-value of 0.11W/m²K. Ensure a gap of 50mm between roof underfelt and quilt at all times..

Foul Water Drainage

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Underground drainage to be proprietary 110mm diameter p.v.c. pipes flexible jointed to fall 1:70 bedded in 100mm pea gravel. Under building drains to be encased in 150mm pea gravel with lintel over pipes at wall abutments. Where drain passes through wall, provide suitable protection to prevent gas ingress to building. 110mm diameter soil and vent pipe to extend 900mm above window head and to terminate in balloon finial. Soil and vent pipe to be fitted with access plate at base. Provide suitably sized wastes from all appliances (in accordance with Approved Document H) complete with minimum 75mm deep sealed traps and rodding eye access points at every direction change. All above ground drainage to BS5582 and all underground drainage to BS8301. Provide seal plates both sides of pipe entry to avoid vermin entry.

Surface Water Drainage

To be proprietary 110mm diameter p.v.c. pipes flexible jointed to fall 1:70 bedded in 100mm pea gravel. Pipes to discharge into 1200mm diameter soakaways sited 5000mm away from buildings.

Protection to Underground Pipes

Where pipes are not under road and have less than 600mm cover concrete paving slabs should be laid as bridging above the pipes on minimum 75mm pea gravel. If flexible pipes are under a road and have less than 900mm cover reinforced concrete bridging should be used instead of paving slabs. Provide compressible material below slab/concrete.

Inspection Chamber Construction

Proprietary polypropylene inspection chambers bedded on 150mm concrete. Form protective 255mm thick concrete collar around head of inspection chamber with 300mm projection from cover. Covers to be Grade C light duty unless inspection chambers are in driveways where Grade B medium duty covers are to be used.

Fascia and Bargeboards

To be 25 x 75mm PSE with 6 mm groove to accept 6mm thick exterior grade plywood soffit.

Ceilings

To all insulated roof ceilings provide 12.5mm Gyproc Duplex plasterboard of 10kg/m³ or similar and either 5mm skim or Artex finish. To remaining ceilings provide 12.5mm Gyproc plasterboard or similar with finishes as above.

Ground Floor Construction

65mm sand/cement screed on 100mm Celotex insulation with perimeter insulation to screed on 1200 gauge polythene d.p.m. on 100mm concrete oversite on minimum 150mm, maximum 600mm well blinded and compacted hardcore. Wall d.p.c. to lap floor d.p.m. by a minimum of 50mm.

Lintels

All coded lintels as stated in Schedule or marked on plan to be by I.G. To be installed in strict accordance with manufacturers instructions. Form d.p.c. cavity tray above all lintels. To all exposed lintels i.e. not sheltered from overhanging eaves, etc. to have proprietary weepholes to joints of brickwork at approximately 450mm c/c. To be confirmed on site with Building Control Surveyor

Opening at eaves level to be L1/E lintels by I.G. or similar approved.

Sub-structure Walling

100 mm Class A dense concrete blocks. Bitumen felt d.p.c. to external walls 150mm above ground level. Weak mix infill to base of cavities to terminate 225mm below lowest d.p.c. level.

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Foundations

As indicated on plan provide concrete strip foundations. To cavity walls provide 700mm wide x 225mm thick and to 100mm walls provide 450mm wide x 225mm thick, unless noted otherwise. To non-load bearing internal walls thicken out ground floor oversite concrete to 450mm wide x 200mm thick. Widen foundations at chimney breast accordingly and make 300mm thick. Foundations to be taken down to an approved firm base, subject to local authority specifications. Concrete to be ST3 grade unless noted otherwise. Proximity of existing and proposed trees are to be taken into account in accordance with N.H.B.C. chapter 4 when determining foundation depth.

I.G. Type L1/S75 lintels to cavity walls and I.G. type internal lintels to 100mm internal walls unless stated otherwise. To be confirmed on site with Building Control Surveyor.

All windows to give minimum 1/20th of floor area as ventilation and to be double-glazed.

Glazing

All windows and doors to be double-glazed with Pilkington 'K' glass or similar approved, to achieve either WER Band C or a 'U' value of 1.6W/m²K.

Commissioning of Heating and HWS Systems

A competent person, i.e. the main contractor or sub-contractor shall supply a Certificate of Satisfactory Compliance with Building Regulations Part L. A copy of which shall be made available to both the client and the Building Control body.

A suitable set of operating and maintenance instructions are to be made available to the client to explain to the householders how to operate the systems so that they can perform efficiently and what routine maintenance is advisable for the purpose of the conservation of fuel and power.

Internal Lighting

Provide energy efficient lights that only take lamps having a luminous efficiency greater than 45 lumens per circuit watt. Examples of lamps are fluorescent tubes and compact fluorescent lamps (note GLS tungsten lamps with bayonet cap or Edison screw bases).

Method of determining number of locations:

75% of all lighting to be energy efficient.

Excludes garages, lofts and outhouses.

Electrical Work

All electrical work required to meet the requirements of Part P (electrical safety) must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the council must be satisfied that either:-

a)an electrical installation certificate issued under a competent person's scheme has been issued

or

b)an appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

Purge ventilation to windows

For a hinged or pivot window that opens 30° or more the height and width should be at least 1/20th of the floor area of the room.

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For a hinged or pivot window that opens less than 30° the height and width should be at least 1/10th of the floor area.

Background Ventilation

Background ventilation is to be provided by trickle ventilators to the tops of windows. Use trickle vents offering 8000mm² per window head. Ventilation for whole extension to be 60,000mm²

External Wall Construction (300mm cavity)

100mm facing brickwork (see site plan for details)

100mm thick rigid board insulation (Thermaclass cavity wall 21 or similar)

100mm inner skin of tarmac Hemalite blocks

Cavity wall ties to be stainless steel type spaced 900mm horizontally and 450mm vertically to BS1243:1978. Internal block walls to receive 10mm sand/cement render and skim. Robust details in accordance with T50:2001

Brickwork below d.p.c. to be F.L. quality

Outlets from balanced flue boilers to be at least 300mm from any openings.

Any bends in flues should not be more than 45°.

All soakaways to be minimum 1m deep.

All external lintels to be insulated type.

All external joinery to be fully draught proofed.

To all domestic floors to external perimeter walls provide 25mm thick insulation dressed up walls to prevent cold bridging.

Seal all openings and joints to perimeter walls.

All doors, windows and any loft hatches to be effectively sealed and draught proofed.

Provide a fibrous separating member between floor screed and insulation and provide chicken wire between insulation and screed.

Smoke detectors to be to BS5839/6:2004, Grade D, Category LD3.