EXTERNAL WALLS

Construction to comprise: 103 brick to match existing, 100mm cavity filled with 100mm Drytherm32 100mm blockwork, 62mm insulated plasterboard to inner side of block wall, to achieve a U-value of 0.18 W/m2K

Both leaves of wall construction to be tied together using stainless steel vertical twist ties at 900mm horizontal, 450mm vertical centres and no greater than 300mm at reveals.

Cavities to be closed at reveals with proprietary fire proof closer such as Thermabate.

Brickwork and blockwork attached to existing with Simpson Strong tie masonry connectors or similar ties

WALL TIES

Two and a half wall ties per square metre of masonry with a maximum horizontal spacing is 900mm and a maximum vertical spacing is 450mm. Each wall tie to be set a minimum of 50mm into both masonry leaves. Cavity wall ties to be stainless steel and 225mm in length. Three courses of blue engineering bricks in 1:3 mortar to all 215mm external walls.

BONDING OF NEW AND EXISTING WALLS

New walls to be secured to existing walls by use of stainless steel Firfix or Crocodile (or S.A.). Fixings in accordance with manufacturers instructions complete with weather strip and mastic pointing. 100mm Dpc behind all wall end ties.

CAVITY

To be cleared of all mortar droppings and closed at all openings at top of wall cavity closers . Lean mix concrete cavity fill to 225mm min. below DPC.

MORTAR

Shall be at least in strength 1:1:6 Portland cement/lime/fine aggregate mortar measured by volume of dry materials up to the proportions given in BS.5628. mix to be 1:1/2:4 below dpc.

RENDERED EXTERNAL WALLS

As above but outer leaf is 100mm Thermalite Shield block with 10mm Polymer render on render carrier board mechanically fixed through 20mm insulation (Kingspan Optim-R external wall system or similar approved),

LIMITING AIR LEAKAGE

The cavity wall insulation must be taken down below damp course level, finishing 150mm below the underside of the floor slab insulation. The cavity wall insulation and roof insulation must meet at the top of the wall

Cavity wall insulation must be carried up to the full extent of gable walls.

A 25mm upstand of insulation must be provided around the perimeter of floors, including where the floor slab touches outside wall (usually at door thresholds) using Celotex T-breaktm TB3000 boards.

All cavity closers must be fire proof and insulated.

All details are designed to comply with the robust construction manual details for air leakage and thermal bridging. A suitably qualified person should be appointed to inspect all works during construction, and shall issue a signed report on completion and issue to local authority.

STRUCTURE

FOUNDATIONS, STEEL BEAMS, PURLINS, RAFTERS, LINTELS, FLOOR JOISTS, PADSTONES & BEARINGS, SUSPENDED SOLID FLOORS, BLOCK STRENGTH, LATERAL RESTRAINT, SCREEN WALLS, RETAINING WALLS, ALL MOVEMENT JOINTS , PIER SIZES & STRUCTURAL STABILITY OF WALLS, BUTTRESSES ETC., TO BE DESIGNED BY STRUCTURAL ENGINEER.

New steel beams inserted together with padstones etc to carry existing/new construction all to structural calculations.

HALF HOUR FIRE PROTECTION; to structural steel beams supporting floors and steel columns to be encased with 12.5mm Fireline plasterboard and skim to give 30mins fire resistance. If restricted space around beams then coat the steelwork with intumescent paint to the thickness required by the manufacturer to provide 30mins fire protection

Lintels to be insulated in external walls.

Foundations within 5m of any trees to be adequate for root protection.

GENERAL

All work to be carried out in full accordance with current Building Regulations and 'robust details' as applicable. All on site operations to be carried out in full accordance with current Health & Safety Regulations and CDM Regulations 1994 as applicable.

STUDWALLS

1No layers of 12.5mm Gyproc wall board ten (with a minimum mass per unit area of 10Kg/m2) fixed each side of studs, at 150mm crs, with 40mm non-ferrous driwall screws to 100x50 sw treated studs at 450mm crs for 900mm boards + 600mm crs for 1200mm boards. With a sound absorbent layer of Isowool Acoustic partition roll fully filling the wall cavity. All joints to be well sealed. 100x50mm noggins to be fixed to support ends of boards and 900mm crs vertically between studs.

Stud walls to be skimmed with 5mm thistle board finish.

Gyproc moisture resistant board to be used in bathroom areas.

Fill all gaps around internal walls to avoid air paths between rooms.

Where partitions occur at first floor level and run parallel with joists, additional joist is to be inserted and the two bolted together.

Accoustic sealant and intumescent/ accoustic sealant on the 30min walls and ceiling around the garage.

ALL DIMS IN MILLIMETERS UNLESS NOTED OTHERWISE
DO NOT SCALE EXCEPT FOR PLANNING PURPOSES
IF IN DOUBT - ASK

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