DAMP PROOF COURSE

To be Andersons XTRA-LOAD ELITE or equal approved polymeric DPC. To be installed to inner and outer skins of cavity walls and to all internal blockwork walls, to be located minimum 150mm above finished ground levels to avoid the raise of water through absorption. All joints to be lapped min. 150mm (basic Radon measure).

VERTICAL DPC; at abutments of external cavity wall to solid 215 wall. Cavity fill to finish minimum 225mm below.

Cavity traves and weepholes to be provided above structural openings and base of cavity to provide basic radon protection. Weep holes at 450mm centres over lintels

Allow for suitable cavity tray and lead flashing to roof abutment as required GROUND FLOOR

If Ground conditions permit Ground bearing floor slab to be used to specification as follows:

GROUND FLOOR SLABS AND INFILLS:

Excavated site area to be treated with weed killer.

75mm reinforced cement/sand screed on 500-1000 gauge seperation layer on 150mm Kingspan Kooltherm K103 overslab insulation (25mm edge insulation) on 100mm 100C 20P mix concrete slab, 1200gauge polythene DPM carried up at edges and lapped with dpc. If joints are required in dpm they are to be welted and tape sealed. New to existing dpm also to be welted and tape sealed.

50mm sand blinding on 150mm min crushed stone well watered and rolled hardcore.

25mm insulation to perimeter of all floors. Construction to achieve U value of better than 0.11.

If Ground conditions don't permit using ground bearing slab then use the following suspended floor specification:

GROUND FLOOR Minimum of 150mm void under, Dense concrete block and precast concrete beam system to structural engineers and specialist suppliers design. Joints to grouted and trowelled off smooth to recieve 1200g PIFA polythene dpm with 150mm min laps & to be carried up walls to lap with DPC.

All joints in dpm to be welted, taped and sealed. 100mm Kingspan Thermafloor TF70 with 500g polythene separating layer laid over.

75mm sand cement screed to include underfloor heating system. 25mm insulation to perimeter of all floors.

Suspended concrete floor to be designed, manufactured and installed in strict accordance with the manufacturers & suppliers details and instructions.

Kingspan or similar approved insulation to be fitted in accordance with the manufacturers details and instructions.

Ventilation to underfloor void - periscopic vents at max 1.8m centres in external walls. The openings to be large enough to give an actual open area of at least the equivalent to 1500sq.mm per horizontal metre run of wall.

All periscopic vents to have pcc lintel over in inner leaf.

At least one periscopic vent within 450 of each corner/ return.

EXTERNAL WALLS

PLASTERBOARD TO BE FOLLOWED BY 100MM BLOCKWORK, FOLLOWED BY 100MM INSULATION, FOLLOWED BY 38X50 VERTICAL STUDS ON WHICH 38X50 HORIZONTAL BATTENS TO BE FIXED TO. EXTERNAL FINISH TO BE ZING CLADDING WHICH TO BE FIXED ON THE HORIZONTAL BATTENS.

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

(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.

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 gualified 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 walls to be secured to existing walls by use of stainless steel Firfix or Crocodile

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