

Method Statement for Existing External wall.

1. Clear existing site of all loose stone debris. The existing ground floor construction to be cleared of debris and left insitu at this time.
2. The remaining walls will need to be cleared of any loose surface rubble. No further demolition is to take place.
3. The remaining walls are to be inspected by a Structural Engineer and a representative from the Planning Authority. This may be a Conservation Officer, Building Control Office, both or another.
4. At this stage, existing ground floor slab(s) will need to be carefully removed from the footprint. A new concrete slab containing appropriate thickenings will need to be cast on approved strata/hardcore. The thickening will act as a foundation to the new inner leaf. The new inner leaf will become the load bearing element of the structure.
5. Where the existing random stone inner leaf and the rubble fill remains, this cannot be relied on to provide a suitable tie to the new proposed inner leaf. It is therefor intended that a stainless steel bar is inserted through the wall, drilled from the inside, such that it is anchored into the outer stone face. This will either be a resin fix or mechanical fix. Drilling from the inside will ensure that this outer face remains visually undisturbed. The bar may need to be purpose made to suit the wall thickness, the cavity width and the new inner leaf. The bar will have a clip on drip and will serve as a wall tie. these ties will be fixed at 450mm max centres vertically and 900mm max horizontally in a staggered pattern. Elsewhere, the new wall construction comprising of an outer leaf of stone and a 140mm leaf blockwork (strength to be determined), will have traditional wall ties to suit the cavity width as dictated by BS5268.
6. The new inner walls will be constructed in lifts, no more than 2m with the inner leaf never exceeding 1m above the height of the outer leaf.
7. The wall will be taken up to first floor chamber level, where a pre-cast concrete floor of a beam and pot nature will be introduced. This will be tied to the walls as appropriate using robust details.
8. Once these details are complete to the satisfaction of all parties, the construction of the wall will continue to second floor. Here, a timber floor will be ties in to the walls.
9. The roof will be of traditional construction using loose timber, including rafters and purlins. Install to the roof structure a plywood/OSB lining to ensure this acts as a diaphragm to provide stability to the leaf of each wall. Tying details will be employed.

Internal Block Walls.100mm thick 7.0N/mm² block walls to be built off strip foundations as per structural engineers details/recommendations, and fully bonded with the adjacent walls. Walls to be dry lined with 12.5mm thick Gyproc Wallboard plasterboard and 3-5mm skim to both sides suitable to receive a paint finish.

Flashing and Cavity Trays.
At all abutments code 4 lead flashing with a min 150mm upstand bedded with Timloc or similar cavity trays and dressed down min. 150mm over zinc roof covering. Weep holes to be formed at 900mm max. centres to outer leaf of external wall construction over cavity tray/lintel positions, or at lowest level of cavity tray for stepped cavity trays. All lead flashing to receive 2 coats of patination oil prior to installation. All new leadwork to be installed in accordance with the Lead Sheet Association ' A Guide To Good Building Practice' volumes 1, 2 and 3.

External Walls New.
Re-use existing 100mm stonework (lime mortar) , 110mm cavity inc. 60mm Kingspan Tw60 cavity insulation, and 100mm 4.2N/mm.sq. blockwork. 225mm s.s double triangle wall ties @ 750mm hor. ctrs & 450mm vert. ctrs, reduced to 300mm ctrs @ openings. Blockwork to have 9.5mm plasterboard and finish on dabs. External walls to achieve max 'U' value of 0.35 w/sq.m.C.
Horizontal DPC to be installed min. 175mm above finished external ground level.
Below ground floor level to be foundation class dense concrete blockwork to within 150mm of ground level. Cavity filled with weak mix concrete to ground level, bevelled to fall to weep holes @ approx. 800mm ctrs. Lintels to be Catnic Cougars or similar.

All movement joints are to be in accordance with the structural engineers details an recommendations, and to CP 121 Part 1.

General.
All materials and workmanship to comply with the recommendations and requirements of all current relevant British Codes of Practice, British Standards and Building Regulations. All proprietary products to be utilised fully in accordance with the manufacturers instructions. All structural timber to be C16 or C24 graded in accordance with BS EN 1995-1-1:2004+A2:2014 with pressure impregnated treatment. Any discrepancies on the drawings to be reported to the Architect/Technologist prior to the commencement of construction. Written dimensions only to be taken. Do not scale any drawings.

Roof Cover and Structure 'Warm Roof' Design.
Standing seam zinc and new slates to match existing and to be fixed strictly in accordance with manufacturers recommendations. Provide minimum ventilation requirements defined by Approved Document A1/2 all on 25x38mm s.w. treated battens at gauge to suit slate size and to manufacturers recommendations on roofing felt to BS 747 or similar approved barrier, on 150x47mm Grade C24 joists at max. 400mm centres (to be confirmed by Structural Engineer) with 100mm Celotex GA4000 insulation fixed in between joists, with 50mm air gap over. 30x5x1200mm galvanised mild steel straps at 900mm maximum centres strapped to 100x75mm s.w. treated wall plate at ceiling / roof covering level. Ceilings to be finished with 50mm thick Celotex GA4000 insulation backed plasterboard all joints staggered and taped with a 3-5mm skim finish on Alreflex 2L2 air leakage barrier, all fixed through to the underside of the rafters. The complete system to give a minimum 'U' value of 0.18 W/M2K. All Alreflex 2L2 to be fitted in accordance with manufacturers printed instructions. Rafter size, centres, specification and support to prevent roof spread etc to be confirmed by the Structural Engineer. SV fascia ventilator ref: SV604E strip for use at eaves, ventilators to have internal pin arrangement for resistance to driving rain and large insects, all supplied by Glidevale Limited and installed in accordance with their printed instructions, to provide 25mm continuous ventilation gap at eaves. Provide MR50 Monovent lean-to continuous ventilation at abutment with existing stone wall to provide a ventilation gap of 5000mm2/m, supplied by Glidevale Limited and installed in accordance with their printed instructions. Rafters to be doubled up either side of conservation rooflight openings. New rooflights to be supplied with all fixtures and fittings by Velux (or similar approved) and installed in strict accordance with their printed instructions. All top, side and bottom flashings together with the two piece tray system to form a barrier against the ingress of water and that can be dispersed into the guttering system below in a controlled manner.

Ventilation.
All habitable rooms, and rooms containing a W.c. to have vent openings equal to 1/20th of the rooms floor area. Kitchen to be fitted with a mechanical extract fan capable of an extract rate of not less than 60 litres per second, operated intermittently. Bathroom, Ensuite and W.c. to be fitted with a mechanical extract fan capable of an extract rate of not less than 15 litres per second, wired to separate isolator switch and incorporating a 15 minute over run. Utility to be fitted with a mechanical extract fan capable of an extract rate of not less than 30 litres per second, operated intermittently. All windows to be fitted with slot type background vents. Background ventilator should be located in all rooms with external walls, with at least 5000mm² area in each habitable room and 2500mm² in each wet room. Bathroom, W.c., Ensuite, Utility and Kitchen mechanical extract to be in accordance with approved document F1 and to BS 5925:1991 code of practice and design for natural ventilation.

Internal Partitions
Studwork partitions to be 75x50mm softwood studs at 450mm centres maximum with cross noggins at 900mm centres maximum faced with lining of 12.5mm thick Gyproc Wallboard plasterboard and 3-5mm skim suitable to receive a paint finish to both sides. All stud partitions to be filled with 80mm thick mineral wool insulation. Provide100mm high timber sole plate at base of new partitions.

ESCAPE WINDOW
Escape window to bedrooms in accordance with part B i.e the window is to have an unobstructed openable area that is at least 0.33m² and at least 450mm high and 450mm wide (the route through the window may be an angle rather than straight through). The bottom of the openable area should be not more than 1100mm above the floor.

RIDGE TILES
Natural stone 150mm x150mm laid to a true line bedded and mortared continuously along edges and solidly at butt joints. At the intersection of ridges, slates slips to be placed below the junction and bedding squeezed up to fill the joint and then struck off smooth. Set the lower edges in mortar to form a back bed.
Slatng at the ridge should be finished with a head-nailed short course to maintain the gauge. To allow this the course of slates below the top course must be shouldered.

CEILINGS.
Flat ceilings to have 150mm of fibreglass insulation between joists and 150mm over giving a total thickness of 300mm. Finish on with 12.5mm plaster and skim.
Sloping ceilings to have insulation to be 100mm kingspan or similar between rafters (50mm air gap over) finished underside with 65mm insulated plasterboard and skim.
Roof to achieve a U Value of 0.18 W/m²k.

Internal Finishes.
Internal block walls to be finished with 22mm dry lining plaster work with 12.5 mm Gyproc Wallboard plasterboard and further 3-5mm skim coat to same on mortar dabs, suitable to receive a paint finish.

S.W. and H.W. Finishes.
All exposed softwood/hardwood to have 1 coat primer, 1 coat undercoat, and 2 coats of gloss. All finishes to be compatible with pre-treatment to timber. Colour/stain finish to match existing.

First Floor:
75mm sand/cement concrete screed incorporating underfloor heating, separating layer on 75mm insulation board on beam/block floor fixed and designed by specialist manufacturer.
NOTE - Provide a full perimeter insulated upstand.

Ground Floor Construction.
75mm thick sand/cement screed with mesh reinforcement on 500 gauge visqueen separating layer on 150mm thick Ecotherm Eco-Versal floor insulation fitted in strict accordance with manufacturers printed instructions to achieve U value of 0.22 W/m2K on 150mm thick reinforced concrete slab on 1200g visqueen dpm on 40mm thick sand blinding on 150mm thick well consolidated hardcore, on well compacted substrate. All dependent upon existing Ground Floor Construction. Floor insulation be taken up to edge of floor to prevent cold bridging. Note: The structural engineers sizing for the concrete floor slab are to take preference over the above specification.

Foundations.
All foundations in accordance with Structural Engineers details and specification.

CAVITIES:
All cavities to be closed at openings and at eaves level. All openings to have insulated cavity closers. Horizontal DPC to be installed min. 150mm above finished external ground level.
Below ground floor level to be foundation class dense concrete blockwork to within 150mm of ground level. Cavity filled with weak mix concrete to ground level, bevelled to fall to weep holes @ approx. 800mm ctrs.

Plumbing.
100mm half round gutters and 65mm circular down pipes to match existing, discharging directly into back inlet gullies. 100mm diameter upvc soil and vent pipes. 32mm diameter wash hand basin waste. 100mm diameter w.c. waste. 38mm diameter sink, shower and bath waste. All wastes to incorporate 75mm min deep seal, or anti syphonic traps as necessary. First and Second floor wastes to be connected to external SVP via Marley collarbos, or 2T branched back inlet gully. All sanitary pipe work to comply with BS EN 752:2008. Water storage cistern to be fitted with an approved insulation jacket. (if required) Internal svp's to be encased in 12.5mm thick Gyproc Soundbloc plasterboard for it's full height between floors, with skim finish, on 38x38mm S.W. treated frame, 6mm thick ply wood access panel fitte to duct. SVP's within internal ducts, where running through habitable rooms, are to be encased with 25mm sound deadening quilt insulation. Bath to be provided with an anti scolding device to prevent the temperature exceeding 48 degrees C.

GENERAL:
The following timbers must be marked 'Dry' or 'KD':
- All floor joists and trimming to openings.
- All types of truss rafters
- All structural members of traditional cut roofs, inc. studs, lintels, soleplates & wallplates.

Eaves and Barge Boards to be 200x25mm fascia board with matching vented soffit board. Verges to gables ar 200x25mm barge board with matching soffit board beyond the line of stone wall below.

Second Floor:
22mm t&g grade C4 (M0) chipboard onto 220 x 50mm softwood joists at 400mm c/c finished on underside with 12.5mm plasterboard and plaster finish. Where joists have a span in excess of 2.5m, 1 row of herringbone strutting must be used fixed at mid point of span, over 4.5m, 2 no. rows of strutting to be used. Joists running parallel to external walls to have galv. m.s straps fixed to 3 joists and built into masonry at max 2m c/c. 200mm thick rockwool insulation quilt laid between all joists.

Lintels and Steelwork.
All lintels to be fully insulated IG proprietary galvanised mild steel with cavity trays above same all to be given half hour fire resistance. All steel lintels to have a minimum end bearing of 150mm with cavity trays over. All steelwork to structural engineers details and recommendations. Provide concrete/IG internal Box lintels with a minimum end bearing of 150mm to both sides to all internal door openings, where required.

Windows.
Grey double glazed standard section aluminium windows, as indicated upon the plans and elevations. All windows to be double glazed (6/16/6) with Pilkington 'K' glass to inner sheet of double-glazing. Habitable rooms to have 1/10th of the floor area of glazing. To achieve a U-Value of 1.60 W/m²K or achieve over Band C or better. Provide escape windows to all First and Second Floor Habitable rooms to be minimum clear opening of 750x450mm and a floor window cill height of minimum 800mm and a maximum 1100mm above finished floor level, all to comply with Part B of the Approved Document. For location of window opening lights refer to Main Elevation drawings.

Glazing.
All glazing to be in accordance with BS 6262 and approved document Part K, 2013 Edition of the building regulations, i.e. toughened glass to all windows below 800mm from floor level, and to doors and adjacent windows below 1500mm from floor level.
Provide obscure glazing to Ensuite window.

ADDITIONAL NOTES
Provide air grates to ground floor of extension to achieve a ventilated rate of 4000mmsq.
All cavities below finished ground level to be filled with lean mix concrete.
All masonry below dpc level to be in cement mortar, other mortar 1:1:6.
1200 grade Visqueen DPM under all concrete floors, DPM to be continuous with and lapped onto DPC.

CROSS SECTION THROU LIVING AREA