



**WINDOWS AND DOORS.**  
 WINDOWS ARE TO BE HIGH QUALITY UPVC WINDOWS FITTED WITH DOUBLE GLAZED UNITS. THE WINDOWS ARE TO BE BUILT INTO BRICKWORK USING PROPRIETARY CRAMPS AND DPC AND MASTIC POINTING TO BE CARRIED OUT AROUND THE REVEAL.  
 ALL ROOMS TO CONTAIN WINDOWS OFFERING OPENING VENTILATION AREAS NOT LESS THAN 1/20TH THE FLOOR AREA OF THE ROOM, SOME PART OF WHICH IS AT LEAST 1750mm ABOVE FLOOR LEVEL. BACKGROUND VENTILATION TO ALL OCCUPIABLE ROOMS TO BE PROVIDED BY TRICKLE VENTILATORS INCORPORATED IN THE WINDOW HEAD OFFERING A MINIMUM OF 5000sq.mm FREE VENTILATION AREA TO HABITABLE ROOMS AND 5000sq.mm TO KITCHEN, AND BATHROOMS TO BE CONTROLLABLE.  
 THE GLAZING TO THE WINDOWS IS TO BE CLEAR FLOAT GLASS ON THE INNER PANE AND Pilkington K GLASS ON THE EXTERNAL PANE WITH AN AIR GAP BETWEEN PANES OF MINIMUM 16mm.  
 THE U-VALUE OF THE WINDOW IS TO ACHIEVE 1.6W/sq.m.K.  
 ANY GLAZING WITHIN 800mm OF THE FLOOR LEVEL MUST BE SAFETY GLAZING EITHER TOUGHENED GLASS OR LAMINATED. INDIVIDUAL PANES OF SAFETY GLASS SHOULD BE SUITABLY MARKED IN ACCORDANCE WITH BS6206 SO THAT THEY CAN CLEARLY BE IDENTIFIED.  
 ANY GLAZING WITHIN DOORS WHICH IS WITHIN 1500mm OF FLOOR LEVEL IS TO BE SAFETY GLAZING. ANY GLAZING SITUATED WITHIN 300mm OF THE DOOR OPENING AND WITHIN 1500mm OF FLOOR LEVEL IS TO BE SAFETY GLAZING TO BS 6206 SAFETY PANES ARE TO BE MARKED AS PREVIOUSLY SPECIFIED.  
 THE WINDOWS TO THE BEDROOMS ARE TO HAVE MEANS OF ESCAPE OPENINGS. THE WINDOW SHOULD HAVE AN UNOBSTRUCTED OPENABLE AREA THAT IS AT LEAST 0.33sq.m. AND AT LEAST 450mm HIGH AND 450mm WIDE. THE BOTTOM OF THE OPENABLE AREA SHOULD BE NOT MORE THAN 1100mm ABOVE THE FLOOR. THESE WINDOWS SHOULD BE FITTED WITH ESCAPE WINDOW HINGES.  
 ALL NEW DOORS WITH MORE THAN 50% OF THEIR INTERNAL FACE AREA AS GLAZED SHOULD ACHIEVE A U VALUE NOT EXCEEDING 1.8W/m2K.

**ROOF**  
 ROOF COVERING TO BE CONCRETE INTERLOCKING TILES BY 'REDLAND' OR SIMILAR. TILES TO BE LAID IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS TO FORM A WATERTIGHT COVERING.  
 TILES ARE TO BE LAID ON 50 x 25mm TREATED SOFTWOOD BATTENS NAILED AT REQUIRED CENTRES ON TYVEK BREATHABLE ROOFING FELT LAID HORIZONTALLY ACROSS ROOF TIMBERS WITH 150mm MINIMUM OVERLAP TO EACH JOINT.  
 THE MAIN ROOF STRUCTURE IS TO BE OF CUT TREATED TIMBER MEMBERS TO SIZES AND SPACES SHOWN ON SECTIONS AND DETAILED BY THE STRUCTURAL ENGINEERS CALCULATIONS  
 ROOF TIMBERS ARE TO BE TWICE NAILED TO 100 x 50mm SC3 GRADE SOFTWOOD WALLPLATE ON MORTAR BED. WALLPLATE TO BE ANCHORED TO THE WALL USING 30 x 2.5mm GALVANISED STRAPS, 900mm LONG BENT OVER THE WALLPLATE 100mm AND SCREWED TO BLOCKWORK AT 2.0M MAX. CENTRES.  
 ANY TIMBERS WHICH ARE CUT ON SITE ARE TO HAVE THE EXPOSED FACES LIBERALLY COATED WITH SUITABLE PRESERVATIVE.  
 THE CEILINGS ARE TO BE FORMED USING ONE LAYER OF SQUARE EDGED PLASTERBOARD WITH A SKIM COAT APPLIED FINISHED IN EMULSION PAINT.  
 THE MAIN ROOF SPACE IS TO BE INSULATED WITH 1 LAYER OF 100mm THICK MINERAL FIBRE QUILT LAID BETWEEN THE JOIST AND THE 1 LAYER OF 170mm THICK LAID AT RIGHT ANGLES TO THE FIRST OVER THE JOISTS.  
 THE INSULATION IS TO BE TAKEN OVER THE WALL PLATES AND INTO THE EAVES VOID. PROPRIETARY ROOF VENTILATORS ARE TO BE FIXED OVER/BETWEEN RAFTERS ABOVE WALL PLATES TO MAINTAIN AN EQUIVALENT 25mm CONTINUAL AIRFLOW OVER THE INSULATION.  
 U-VALUE ACHIEVED IS 0.16W/sq.m.K.  
 THE SKILLED ROOF IS TO BE INSULATED WITH 100mm CELOTEX OR KINGSPAN RIGID INSULATION LAID BETWEEN RAFTERS AND 45mm THICK CELOTEX INSULATION LAID ACROSS THE UNDERSIDE OF THE RAFTERS. CEILING FINISHED IN 12.5mm PLASTERBOARD.  
 MAINTAIN A MINIMUM 50mm AIRSPACE FROM TOP OF INSULATION TO UNDERSIDE OF ROOF U-VALUE ACHIEVED IS 0.20W/sq.m.K.

**STAIRCASES.**  
 THE STAIRCASES ARE TO BE FORMED FROM TIMBER WITH RISERS OF 205mm AND TREADS OF 228mm WHICH WILL FORM A PITCH ANGLE OF 42 DEGREES. A MINIMUM CONTINUAL CLEAR HEADROOM OF 2000mm IS TO BE PROVIDED OVER THE STAIRS MEASURED FROM THE PITCH LINE. THE CLEAR WIDTH OF STAIRCASE IS 850mm.  
 THE HANDRAILS TO THE STAIRS AND LANDING ARE TO BE 900mm MINIMUM HEIGHT ABOVE PITCHLINE FOR STAIRS AND 900mm ABOVE FLOOR FOR THE LANDINGS. ON THE LOWER STAIRS A HANDRAIL IS TO BE PROVIDED ON BOTH SIDES. BALUSTRADING TO STAIRS TO BE FORMED USING VERTICAL SPINDLES SPACED SO AS TO PREVENT THE PASSAGE OF A 100mm DIAMETER SPHERE BETWEEN THEM. HANDRAIL FIXED TO WALL TO HAVE A 50mm WIDE CLEARANCE GAP BEHIND TO ALLOW EASY GRIP.

**EXTERNAL WALLS**  
 EXTERNAL CAVITY WALLS, 285mm THICK, TO BE OF 102mm THICK BRICKWORK 85mm WIDE CAVITY, 100mm THICK CELCON SOLAR CONCRETE BLOCK INNER SKIN WITH A MINIMUM STRENGTH OF 3.5N/sq.mm. INTERNAL FINISH WITH PLASTER AND SET.  
 BRICK AND BLOCKWORK SKINS ARE TO BE LAID IN 1:6 CEMENT MORTAR. THE CAVITIES ARE TO BE FILLED WITH 85mm THICK CROWN DRYTHERM 32 INSULATION BATTS, U-VALUE 0.28W/sq.m.K.  
 STAINLESS STEEL WALL TIES TO BS 1243: 1979 (AS AMENDED) TO BE BUILT INTO THE CAVITY WALLS AT 750mm MAX. HORIZONTALLY AND 450mm MAX. VERTICAL CENTRES. TIES ARE TO BE STAGGERED RISES. INCREASE NUMBER OF TIES AT WINDOW/ DOOR OPENINGS TO 300mm MAX. VERTICAL CENTRES.  
 ALL VERTICAL AND HORIZONTAL DPC'S ARE TO BE BUILT IN TO BS 743: 1970 (AS AMENDED) STANDARD.  
 PROVIDE ANY REQUIRED EXPANSION JOINTS WITHIN BLOCKWORK WALLS AS RECOMMENDED BY THE MANUFACTURER OF THE BLOCK TYPE USED.  
 HEADS OF CAVITIES AND CAVITIES AROUND OPENINGS ARE TO CLOSED OFF USING THERMOBATE INSULATED CAVITY CLOSERS

ALL OPENINGS ARE TO HAVE 'IG' GALVANISED STEEL LINTELS OVER, WITH FACTORY FITTED INSULATION INFILL. ALL LINTELS ARE TO HAVE A MINIMUM END BEARING OF 150mm. PROVIDE CAVITY TRAYS OVER LINTELS.  
 LATERAL SUPPORT TO CAVITY WALLS AND INTERNAL WALLS TO BE PROVIDED BY SEATING OF TRUSSES/JOISTS. WHERE WALLS ARE PARALLEL TO JOISTS GALVANISED STEEL STRAPS, 30 x 50mm ARE TO BE FIXED AT 1800CENTRS AT FIRST FLOOR CEILING AND RAFTER LEVELS. NOGINS ARE TO BE FIXED BETWEEN JOISTS AT STRAP POSITIONS. END OF STRAPS ARE TO BE BUILT INTO BLOCKWORK AND NAILED ACROSS 3 No. JOISTS.  
 WHERE ROOFS ABUT EXTERNAL WALLS LEAD FLASHINGS ARE TO BE INCORPORATED IN THE WALLING WITH CAVITY TRAYS OVER WHERE APPLICABLE. LEAD TO BE CODE 4, TO BS 178: 1983.  
 INTERNAL WALLS  
 TO BE EITHER 100mm THICK BLOCKWORK OR TIMBER STUDWORK STUDS TO BE FROM 75 x 50mm TIMBER FRAMING WITH VERTICAL STUDS AT 600mm CENTRES AND FACED WITH ONE SKIN 12.5mm PLASTERBOARD ON BOTH SIDES OF FRAMING WITH PLASTER SKIM COAT. PARTITIONS ARE TO BE FILLED WITH MINERAL WOOL INSULATION.

**GROUND FLOOR**  
 THE GROUND FLOOR IS TO CONSIST OF A SUSPENDED CONCRETE SLAB. THE EXISTING GROUND IS TO BE EXCAVATED TO PROVIDE A 200mm LAYER OF REJECT STONES TO VENT THE UNDERFLOOR AREA DUE TO LANDFILL SITE BEING WITHIN 250 METRES OF THE SITE.  
 THE STONE BAND IS TO BE VENTILATED TO OUTSIDE AIR VIA CRANKED VENTILATORS BUILT IN TO THE PERIMETER CAVITY WALLS AT CENTRES TO ACHIEVE EQUIVALENT 1500sq.mm. CLEAR OPENING TO EACH METRE RUN OF WALL.  
 150mm THICK INSITU CONCRETE SLAB IS TO BE CAST ON THE BLINDING. 35N/sq.mm. CONCRETE SLAB WITH B785 MESH REINFORCEMENT IN IN THE BOTTOM (40mm COVER TO ALL REINFORCEMENT) TO BE CAST TO SPAN FROM 100mm INTO THE NEW WALLS OR IF TRENCH FILL FOOTINGS ARE USED THEN ON TOP OF THE FOOTINGS.  
 THE FLOOR FINISH IS TO BE OF MINIMUM 75mm THICK SAND/CEMENT REINFORCED SCREED LAD TO BS 1521: 1972 (AS AMENDED) ON 80mm THICK CELOTEX RIGID SLAB INSULATION BOARDS LAID ON STRUCTURAL SLAB UNDERNEATH THE INSULATION LAY A GAS MEMBRANE VISQUEEN DPM TURNED UP AT THE SIDES AND LAID COMPLETELY ACROSS THE EXTERNAL WALL, INCLUDING THE CAVITY TO THE EXTERNAL FACE OF THE WALL. INSTALL A CAVITY OVER THE MEMBRANE IN THE EXTERNAL WALL.

**INTERMEDIATE FLOOR**  
 FLOOR TO COMPRISE OF 50 x 170mm CLASS C16 TIMBER JOISTS SPACED AT 400mm CENTRES. THE FLOOR JOISTS ARE TO SPAN AS SHOWN ON THE PLANS ON DRAWING. JOISTS TO BE SUPPORTED ON GALVANISED STEEL HANGERS BUILT INTO THE BLOCK WALLS. THE JOISTS ARE TO BE DOUBLED UP UNDER THE STUD PARTITIONS WHERE THE PARTITION RUNS IN THE SAME DIRECTION AS THE JOISTS AND UNDERNEATH THE BATH POSITION.  
 THE FLOOR JOISTS ARE TO BE STRUTTED BY 2 ROWS OF SOLID OR HERRINGBONE STRUTTING AT ONE THIRD POSITIONS. SOLID STRUTTING SHOULD BE AT LEAST 38mm TIMBER THICKNESS EXTENDING AT LEAST 0.75 TIMES THE DEPTH OF THE JOISTS. HERRINGBONE STRUTTING SHOULD BE AT LEAST 38 x 38mm TIMBER SIZE.  
 UNDERSIDE OF THE JOISTS ARE TO BE LINED IN 1 LAYER OF 12.5mm PLASTERBOARD PREPARED READY TO RECEIVE A SKIM COAT FINISH. FLOOR TO UPPER LEVEL TO BE OF 18mm THICK FLOORING GRADE CHIPBOARD NAILED TO JOISTS. FLOOR VOID BETWEEN JOISTS TO BE INSULATED WITH 150mm THICK MINERAL WOOL INSULATION FOR ACOUSTIC INSULATION PURPOSES

THE TILE HANGING WILL COMPRISE OF A 500 GAUGE VAPOUR BARRIER 38 x 38 SW COUNTER BATTENS, 38 x 25 SW BATTENS AT 100mm GAUGE TO WHICH TILE PLAIN TILING IS TO BE NAILED TO AS RECOMMENDED BY MANUFACTURER.

**FOUNDATIONS.**  
 THE NEW FOUNDATIONS ARE TO BE EITHER TRADITIONAL 600 x 250mm DEEP CONCRETE STRIP FOUNDATIONS OR CONCRETE TRENCH FILL, TAKEN DOWN TO A FORMATION LEVEL AS APPROVED BY THE LOCAL AUTHORITY BUILDING INSPECTOR ON SITE AND TO SUIT THE GROUND CONDITIONS. THE FOUNDATIONS WILL BE AT LEAST 900mm BELOW GROUND LEVEL.  
 THE WALLS UP TO DPC LEVEL ARE TO BE FORMED IN 2 SKINS OF DENCE BLOCKWORK WITH A 85mm CAVITY WHICH WILL BE FILLED WITH LEAN MIX CONCRETE TO A MINIMUM 225 BELOW GROUND LEVEL. THE BLOCKWORK TO THE OUTER SKIN OF THE CAVITY WALL WILL BEGIN AT LEAST 3 COURSES BELOW FINISHED GROUND LEVEL.  
 A SUITABLE HORIZONTAL DPC SUCH AS 'HYLOAD' IS TO BE BUILT IN TO THE WALLS A MINIMUM OF 150mm ABOVE GROUND LEVEL.  
 ALL VERTICAL AND HORIZONTAL DPC'S ARE TO BE BUILT IN TO BS743 : 1970 (AS AMENDED) STANDARD.



CLIENT	
MR. B. BRADSHAW	
PROJECT	
TWO STOREY SIDE, SINGLE STOREY FRONT AND REAR EXTENSIONS	
33 FIELD WAY, ALDERSHOT HAMPSHIRE. GU12 4UL	
DRAWING TITLE	
SECTION A-A	
DATE	SCALE
12:08:2014	1:20
JOB / DRAWING No.	REV.
14018/BR/004	A