ROOF

ROOF COVERING TO BE CONCRETE PLAIN 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 38 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 PREFABRICATED TREATED TIMBER TRUSSES AT 600mm CENTRES BY SPECIALIST SUPPLIER. THE MANUFACTURER IS TO PROVIDE STRUCTURAL CALCULATIONS AND DETAILS OF THE DESIGN OF THE TRUSSES USED IN ALL SITUATIONS. ALL TIMBERS ARE TO BE BRACED USING 100 x 25mm TREATED SOFTWOOD TIMBERS TWICE NAILED TO EACH RAFTER/ JOIST. BRACING TO BE LAPPED OVER MINIMUM TWO TIMBERS WHERE JOINTS ARE REQUIRED. ROOF TO BE CONSTRUCTED IN ACCORDANCE WITH BS5268: PART 3 1985 (AS AMENDED).
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 150mm 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 10mm CONTINUAL AIRFLOW OVER THE INSULATION.
THE ROOF VOID IS TO BE VENTILATED VIA EAVES VENTS INSTALLED TO GIVE THE EQUIVALENT OF A 10mm WIDE CONTINUOUS AIR GAP TO THE LENGTH OF THE ROOF EAVES.
U-VALUE ACHEIVED IS 0.16W/sq.m.K.

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 5000sq.mm CONTOLABLE OPENING AREA TO EACH ROOM

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 ACHEIVE 1.8W/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 OF SAFETY GLAZING TO BS 6206 SAFETY PANES ARE TO BE MARKED AS PREVIOUSLY SPECIFIED.

THE WINDOWS TO THE BEDROOM 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.
THIS WINDOW SHOULD BE FITTED WITH ESCAPE WINDOW HINGES.

WINDOWS AND DOORS ARE TO BE SET BACK TO OVERLAP INSULATED CAVITY CLOSER BY A MINIMUM OF 30mm IN ACCORDANCE WITH ROBUST DETAILS

EXISTING EXTERNAL GARAGE WALLS

THE EXTERNAL WALL IS TO BE OF 215mm THICK SOLID BRICKWORK TO MATCH

INTERNAL FACE TO BE LINED WITH WITH 50mm THICK CELOTEX GA3000 INSULATION BOARDS CUT TO FIT THE FLOOR-TO-CEILING HEIGHT OF THE ROOM.
FIX HORIZONTAL BATTENS OVER THE INSULATION AT THE TOP AND BOTTOM OF THE WALL TO HOLD THE BOARDS IN PLACE.
SEAL ALL BOARD JOINTS TO CREATE A VAPOUR CONTROL BARRIER USING AN ALUMINIUM FOIL SELF-ADHESIVE TAPE. SEAL ALL PERIMETER ABUTMENTS WITH MASTIC.
APPLY AN APPROPRIATE SEALANT ALONG THE WALL AT THE TOP AND BOTTOM OF THE INSULATION TO PROVIDE A VAPOUR SEAL.
ADD FURTHER VERTICAL BATTENS OVER THE INSULATION AT APPROPRIATE SPACING TO PROVIDE ADEQUATE FIXINGS FOR THE SELECTED FOR PLASTERBOARD FINISH.
ENSURE THAT EACH BATTEN COINCIDES WITH EACH LINING BOARD JOINT.
BATTENS SHOULD BE A MINIMUM OF 50 x 25mm TREATED SOFTWOOD.

LINE THE WINDOW AND DOOR REVEALS WITH THINNER BOARDS (18mm) TO REDUCE THE RISK OF THERMAL BRIDGING. FIX A BATTEN AROUND THE EDGE OF THE OPENING AND SCRIBE THE BOARD TO FIT THE REVEAL.
CUT THE DRY LINING TO SUIT AND MECHANICALLY FIX INTO THE MASONARY REVEAL USING PROPRIETRY FIXINGS. FINISH USING AN ANGLE FILLET AT THE FRAME AND AN ANGLE BEAD OR SCRIM TAPE AT EXTERNAL CORNERS

ALL VERTICAL AND HORIZONTAL DPC'S ARE TO BE BUILT IN TO BS 743: 1970(AS AMENDED) STANDARD.

ALL DOOR AND WINDOW OPENINGS ARE TO HAVE CATNIC GALVANISED BOX STEEL LINTELS OVER WITH FACTORY FITTED INSULATION INFILL FOR THE WINDOW LINTEL.
ALL LINTELS TO HAVE MINIMUM END BEARING OF 150mm.

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 75mm CAVITY WHICH WILL BE FILLED WITH LEAN MIX CONCRETE TO A MINIMUM 225 BELOW GROUND LEVEL. THE BRICKWORK 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.

EXTERNAL WALLS
EXTERNAL CAVITY WALLS, 275mm THICK, TO BE OF 102mm THICK BRICKWORK 75mm WIDE CAVITY, 100mm THICK CELCON SOLAR CONCRETE BLOCK INNER SKIN WITH A MINIMUM STRENGTH OF 3.5N/sq.mm.. INTERNAL FINISH TO BE 13mm THICK LIGHTWEIGHT PLASTER. THE BRICKWORK AND BLOCKWORK SKINS ARE TO BE LAID IN 1:6 CEMENT MORTAR.
THE CAVITIES ARE TO BE FILLED WITH 75mm THICK CROWN DRYTHERM 32 INSULATION BATTS, U-VALUE 0.29W/sq.m.K.
ON FIRST FLOOR EXTERNAL SKIN TO BE 100mm BLOCKWORK WITH A 20mm THICK 2 COAT RENDERED FINISH

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.
WHEN BUILDING NEW WALLS OFF OF EXISTING USE FIRFIX STARTER PROFILES.

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 GALVANSED STEEL STRAPS, 30 x 50mm ARE TO BE FIXED AT 1800CTRS AT FIRST FLOOR CEILING AND RAFTER LEVELS. NOGGINS ARE TO BE FIXED BETWEEN JOISTS AT STRAP POSITIONS. END OF STRAPS ARE TO BE BUILT INTO BLOCKWORK AND NAILED ACROSS 3 No. TRUSSES/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
STUD PARTITIONS ARE 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.

INTERMEDIATE FLOOR
FLOOR TO COMPRISE OF 50 x 195mm CLASS C24 TIMBER JOISTS SPACED AT 300mm 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 25mm THICK FLOORING GRADE CHIPBOARD NAILED TO JOISTS. FLOOR VOID BETWEEN JOISTS TO BE INSULATED WITH 150mm THICK MINERAL WOOL INSULATION FOR ACOUSTIC INSULATION PURPOSES

GROUND FLOOR
THE GROUND FLOOR IS TO CONSIST OF A SUSPENDED CONCRETE FLOORING SYSTEM. THE SYSTEM IS TO BE BY A SPECIALIST MANUFACTURER WHO WILL BE REQUIRED TO PROVIDE FULL DETAILS OF FLOORING LAYOUT, SPECIFICATION AND CALCULATIONS APPLICABLE TO THE SPECIFIC SCHEME. GENERALLY THE SYSTEM IS TO COMPRISE OF 225 & 150mm DEEP PRE-CAST PRESTRESSED CONCRETE FLOOR BEAMS WITH 440 x 215 x 100mm 3.5N/sq.mm BLOCKWORK SPANNED BETWEEN BEAMS. BEAMS ARE TO BE SEATED ON DPC ON BLOCKWORK SUPPORTING WALLS OFFERING MINIMUM 100mm END BEARING. VOID BELOW FLOOR IS TO MEASURE A MINIMUM OF 150mm CLEAR DEPTH FROM BEAM SOFFITS TO SOLUM. THE VOID IS TO BE VENTILATED TO OUTSIDE AIR VIA CRANKED VENTILATORS BUILT IN TO THE PERIMETER CAVITY WALLS AT CENTRES TO ACHEIVE EQUIVALENT 1500sq.mm. CLEAR OPENING TO EACH METRE RUN OF WALL. THE VENTILATORS ARE TO HAVE CAVITY TRAYS OVER.

THE FLOOR FINISH IS TO BE OF MINIMUM 75mm THICK SAND/CEMENT REINFORCED SCREED LAID TO BS 1521: 1972(AS AMENDED) ON 80mm THICK CELOTEX RIGID SLAB INSULATION BOARDS LAID ON STRUCTURAL SLAB
CUT STRIPS OF INSULATION BOARD AS UPSTANDS TO FIT AROUND FLOOR PERIMETERS TO ELEIMINATE HEAT BRIDGING. THICKNESS NOT TO EXCEED THICKNESS OF PLASTER AND SKIRTING BOARDS.
UNDERNEATH THE INSULATION LAY A 1200 GAUGE VISQUEEN DPM TURNED UP AT THE SIDES AND LAID UNDER A HYLOAD OR SIMILAR DPC IN THE NEW EXTERNAL 100mm THICK INNER SKIN BLOCK WALL.
THE USE OF A VAPOUR CONTROL LAYER OVER THE INSULATION IS RECOMMENDED BY THE BRE TO MINIMISE THE RISK OF CONDENSATION.

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PROJECT	TWO STOREY REAR AND SINGLE STOREY FRONT EXTENSIONS 28 CHESNUT GROVE, FLEET, HAMPSHIRE. GU51 3LW
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