BOX This drawing is copyright. Figured dimensions are to be followed in preference to scaled dimensions and particulars are to be taken from the actual work where possible. Any discrepancy must be reported to the architect immediately and before proceeding.

Revision	Date	Description	Revised by
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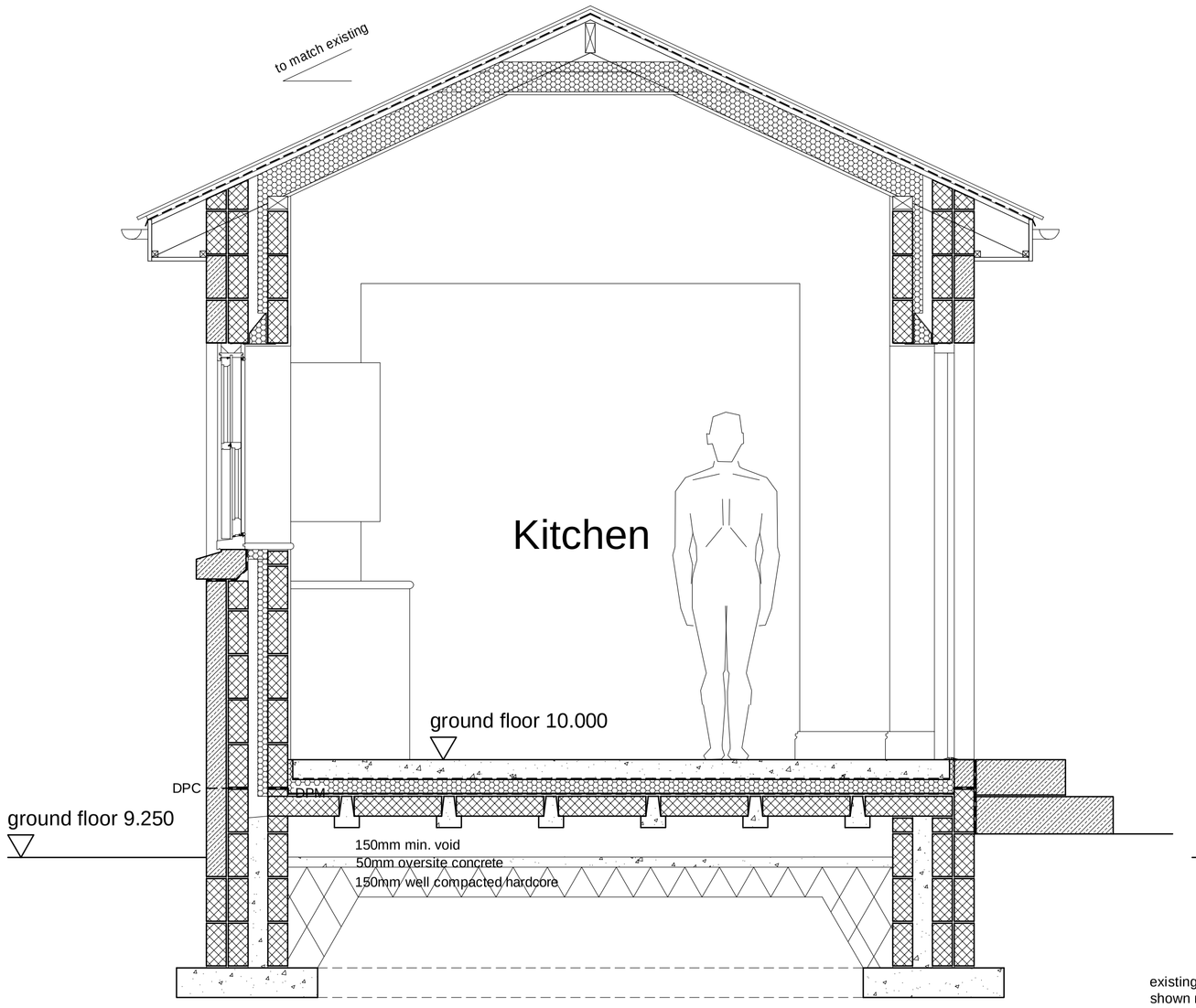
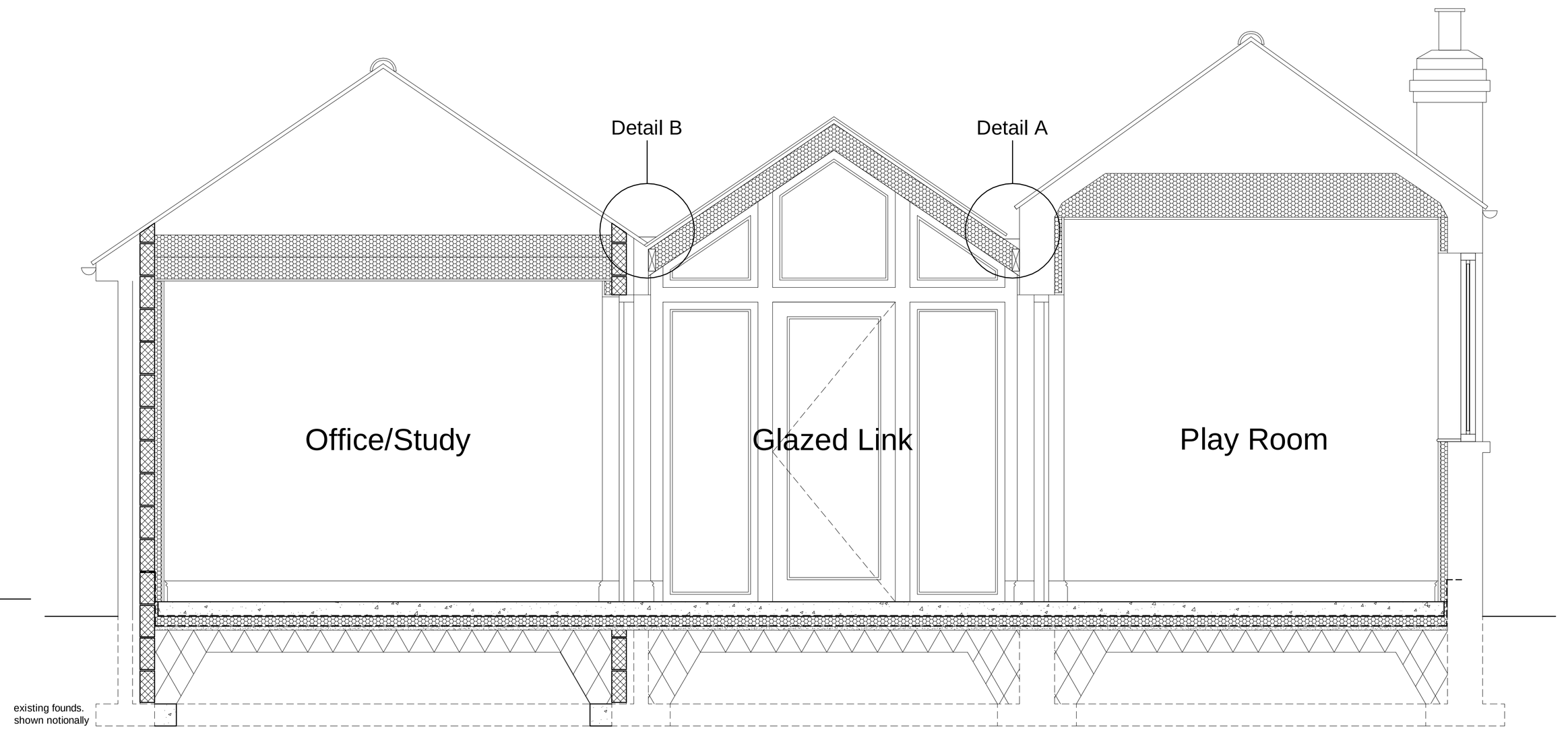


Section A-A

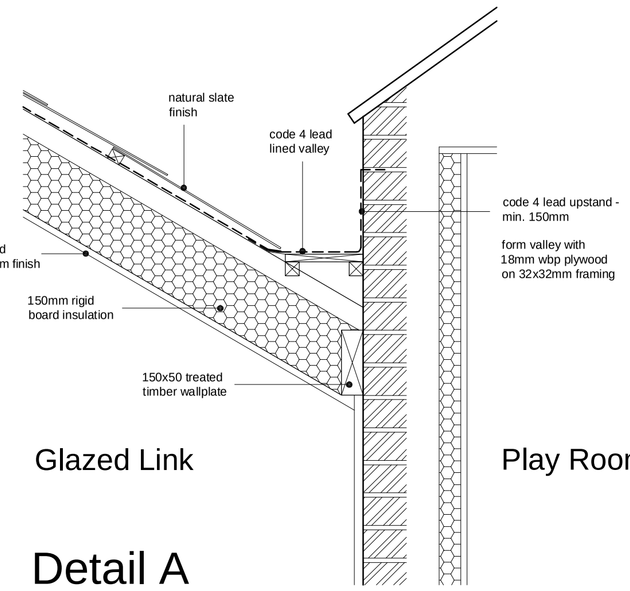


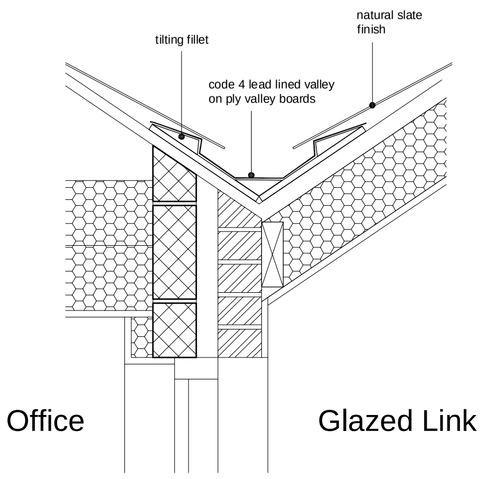
Section B-B

Specification:

Foundations -
Concrete strip foundations to be carried out to the satisfaction of the relevant inspector and in accordance with the Approved Documents. Depth and sizes to be determined in relation to ground conditions and as shown on Substructure & Drainage Plan.
Walls below DPC -
To be in accordance with BS 5268. Blockwork below DPC level to be 100mm standard dense concrete blocks (7.0 N/mm2, min. density 1350 kg/m3) to comply with BS 6073. Mortar for use below DPC level to comply with the recommendations of BS 5628 Part 3. Where sulphate contamination is encountered, the mortar is to contain sulphate resisting cement to comply with BS 4027. Cavities to be 225mm below DPC.
Damp Proof Course -
To be Hyload pitched polymer dpc at least 0.5mm thick (2000 guage) to BS 6561and to be provided minimum 150mm above external ground level constructed within a 20mm joint. Horizontal DPMs to be lapped below DPC by at least 100mm. All DPCs to be min. 112.5mm wide in both inner and outer leaf locations, ensuring that the DPC's do not protrude into the clear cavity.
Ground Floor (Kitchen) -
To be 100mm concrete floor slab with trowelled finish on 500 guage seperating membrane on min. 70mm Kingspan Kooltherm K7 or e.a. rigid board insulation to provide min. 0.22 W/m2K on 1200 guage polythene Visqueen DPM with lapped and taped joints and taken up and lapped with wall dpc, on 1:6 cement:sharp sand grout to fill all joints and surface irregularities on structural 'Beam and Block' floor system by ACP (Concrete) Ltd or e.a. installed as per manufacturers strict instructions and associated details. Ensure a min. 150mm clear space void is maintained between the underside of the floor beams and the top of the ground. Ensure the ground is brought up to an even surface with a suitable clean hard material. All topsoil is to be removed. Provide and install 150mm well consolidated hardcore sub base free from water soluble sulphates and deleterious matter with 50mm oversite concrete to top face DPM in floor to be lapped and taped jointed with min. 150mm laps and lapped into inner leaf DPC in all walls. Include for min. 25mm vertical edge strip insulation around perimeter of floor slab.
Floor Ventilation -
Refer to precast floor manufacturer details for layout and details of suspended floor and positions of vents. Cranked ventilators to be positioned to give free path of air between opposite sides and all compartments equivalent to 1500sq.mm per meter run of external wall. Cranked ventilators must not be positioned under beams, with internal walls to be honeycombed to allow cross air flow.
Ground Floor (Outhouses) -
To be 100mm concrete floor slab with trowelled finish on 500 guage seperating membrane on min. 70mm Kingspan Kooltherm K7 or e.a. rigid board insulation to provide min. 0.22 W/m2K on 1200 guage polythene Visqueen DPM with lapped and taped joints and taken up the wall min. 150mm, on 25mm sand blinding on 150mm well consolidated hardcore base. Allow for 25mm vertical edge strip insulation around perimeter of floor slab.
External Cavity Walls (Kitchen) -
To be 425mm overall cavity wall comprising of 100mm facing of coursed natural ashlar with 100mm standard dense blockwork backing leaf with 50mm clear cavity, 50mm Kingspan Kooltherm K8 partial - fill cavity wall board fixed in accordance with the manufacturers instructions to 100mm standard dense concrete blockwork inner leaf. Total structure to give a min. overall U-value of 0.30 W/m2K. Internal finish to be 12.5mm Gyproc wallboard and skim fixed with adhesive dabs in accordance with the manufacturers recommendations and instructions (15mm allowed for on drawings). All blockwork to comply with BS 6073 Part 1 and used in accordance with BS 5628 Part 3. Close cavity walls at head with 5mm Supalux board or e.a. Wall insulation to be continuous with roof insulation at head of all walls.
External Walls (Outhouses) -
Build up inner leaf of 100mm standard dense concrete blockwork as shown. Internal finish to be 12.5mm Gyproc wallboard and skim fixed with adhesive dabs in accordance with the manufacturers recommendations and instructions (65mm allowed for on drawings). All blockwork to comply with BS 6073 Part 1 and used in accordance with BS 5628 Part 3. Close cavity walls at head with 5mm Supalux board or e.a. Wallboard insulation to be continuous with roof insulation at head of all walls.
Party Wall Lining (Second Floor) -
Provide and install 50mm Gyproc ThermaLine SUPER wallboard with plaster skim finish to party walls in roof space.
Cills/Heads -
Install natural stone proprietary cills and heads to match existing lodge. Cill to have drip to bottom outside edge, and have splayed faces. Install cavity tray behind all cills as shown. Cavity tray to lap to vertical DPC in jambs. Wall insulation to continue up behind cill.
Lintels -
Factory insulated thermal break steel lintels by Catnic or e.a. to comply with BS 977 and be provided with min. 150mm end bearings. Provide a separate cavity tray with stop ends over all lintels. Cavity trays or combined lintels should have stop ends. Weepholes should be provided at 450mm max. centres with a least two weepholes per opening. Where new drainage runs pass through walls a suitable lintel should be provided over to give a 50mm space all round, the opening should be masked with a rigid sheet material or filled with a suitable inert and compressible material.
Wall Ties -
All cavity walls to have wall ties complying with BS1243. Wall ties to be spaced 600mm horizontally and 450mm vertically above and below dpc and every block course within 150mm of all openings. Ties to be stainless steel and lengths to provide a minimum of 50mm to be bedded into each leaf. Insulation retaining clips to be installed in accordance with the insulation manufacturers requirements. Ties should be 225mm long and be double triangle or vertical twist type.
Cavity Closers -
Cavity wall generally to be closed at window/door jambs with Rockwool Rockclose cavity closers or e.a. and window sills with insulated DPC. Cavities to be closed at eaves level using silicate board/insulation as indicated.
Windows & Escape Windows -
Timber framed (softwood) windows (painted white) with 4/16/4 sealed doubled glazing with Low emissivity glass (Pilkington K or e.a.) to provide a minimum u-value of 1.8 W/m2K - Manufacturer to be agreed. All habitable rooms to include an escape window with a min. 0.33 sqm unobstructed opening with a clear opening dimension of 750x450mm min. The bottom of the openable area should be between 800-1100mm above the floor and are not to be fitted with key locks. Windows with sills level below 800mm to be fixed with restrictor stays. Window styles to be as elevations. Windows to all habitable room to incorporated 8000sqmm trickle ventilation in the heads of window frames. (All other rooms 4000sqmm). Provide obscured glazing to all Bathrooms/En suites/WCs where necessary.
Glazing -
Glazing within 1500mm of floor level to doors and side screens and to windows below 800mm above floor level to be laminated safety glass to meet the requirements of BS 6206:1981. All toughened or laminated panels will be provided with identification markings and be provided in accordance with Approved Document Part N1.
Limiting Leakage -
Limit air leakage paths in the structure by:
a. Providing continuous bands of fixing plaster in dry-lining at the junctions with walls, floors and ceiling and at the edges of all openings.
b. Provide draught stripping to all window opening lights and doors and mastic seal frames at external perimeter.
c. Ensure any boxing for concealed services is sealed at floor and ceiling levels and seal all piped services where they penetrate hollow construction or voids.
d. Ensure all loft hatches (min. 550x550mm) are fully draught stripped and insulated.
Non Loadbearing Internal Timber Partitions -
To be 100x50mm sw timber studs at 600mm c/cs. Dpc's to be provided below all sole plates where fixed directly to floor. Partitions to be finished with 12.5mm plasterboard each side with a min. density of 10kg/m2 ie. Gyproc Wallboard Ten. Fill all voids within wall with mineral wool quilt insulation. All joints to be taped to receive a skim coat finish all in accordance with manufacturers instructions. Moisture resistant plasterboard should be provided where persistant wetting occurs.
Fireplace & Flue -
A secure means of anchorage or an effective fireguard shall be provided in the adjoining structure. Hearth to comply in all respects with the Approved Document and be min. 125mm thick solid concrete projecting min. 150mm either side of the fire place recess and 500mm min. from the face of the recess of jambs, and to be capable of buming smokeless fuel. Flues to be constructed of 103mm thick brickwork with approved socketed/rebated flue liner constructed with sockets facing upwards and sealed in accordance with the manufacturers recommendations. Min. dimensions 200mm to BS 1181 1971. Voids between flue liners and brick flue to be filled with vermiculite aggregate insulating mortar. Cheek fireplace jambs to be a min. 200mm thick. A vent for combustion air is to be provided for the open flued fireplace with a perminent ventilation area of at least 50% of the total opening area. Flue to be tested on completion with a smoke test in accordance with BS 6461-1 1984 (1988) and BS 5440-1:2000. Notice plates of hearth and flues to be provided in accordance with Part J of the Approved Documents paras. 1.5, 1.57 and diagram 1.9.

Ceilings To Outhouses -
Provide 12.5mm plasterboard with min. 300mm quilt insulation above to provide min. 0.16 W/m2K. Finish boards internally with plaster skim finish.
Sloping Ceiling To Kitchen -
To be foil backed 12.5mm plasterboard with 150mm thick rigid Kingspan insulation or e.a. above to provide min. 0.16 W/m2K. Finish boards internally with plaster skim finish.
Structural Members -
All details to be as per Structural Engineers detail sheets and as shown on Floor Plans. All steel shot blast in SA2.5 + 100 MICS DFT epoxy zinc phosphate primer paint. All to be boxed in where required using 1no. layer plasterboard to provide min. 30 mins. fire resistance. Provide plaster skim finish to all boxing.
Roof Trusses -
Timber trussed roof to be designed by trussed roof manufacturer. Full design details and calculations to be submitted to Building Control prior to commencement of works on site. All trusses, binders and diagonal bracing etc to comply with BS 5268 Part 3. Rafters to be fixed at 400/600mm centres as stated by manufacturer and fixed to wallplates with BAT truss clips. Loose rafters to be sizes as indicated on the drawings at 400mm centres skew nailed to wallplates and to trussed rafters (min. 600mm overlap) and birdsmouthed over wallplates.
Wall plate -
100 x 50mm treated timber wallplate bedded 10mm onto blockwork and strapped inside wall face with 100x 1000 x 30 x 5mm galvanised ms straps at max. 2m centres plugged and screwed to blockwork with a minimum of 5 no. fixings.
Lateral restraint -
1200mm "L" shaped glavanised m.s. restraint straps (30x5mm min. cross section) at max. 2000mm c/c extending over min. 3 no. joists with full depth noggins securely fixed with 12 guage x 50mm sheridised screws through all the holes in the straps. Solid sw blockings provided between the first 3 rafters beneath each strap and solidly blocked to masonry.
Preservative Treatment -
All roof timbers to be preservative treated. Building Regulation 1992 Edition Regulation 7 Materials & Workmanship, BS 5268 Part 5. Any cutting on site to be made good by application of suitable preservative solution.
Slating -
Natural grey slate roof tiles with min. 75mm head and side laps on treated 50x25mm European Grade 'A' sw battens and counter battens with Tyvek Supro breathable roofing felt laid with 150mm laps on treated timber trusses at centres to be determined. Tyvek to be installed as per Agrement Certificate no. 04/4101. All to comply with BS 5268 Part 3 and carried out with the slate manufacturers recommendations and in accordance with BS5534 Part 1 1997. Ridge tiles to be Redland Slate Dryvent ridge system or e.a.
Ventilation -
Rapid ventilation:
All habitable rooms (inc. kitchen) and sanitary accommodation (separate from bathrooms) located on an external walls are to have opening windows at least $\frac{1}{20}$th of the floor area. All other rooms are to have a opening window (no min. size required).
Background Ventilation:
Generally all habitable rooms to ground floors require 8000sqmm trickle ventilation in the heads of the window frames and patio doors. All other rooms require 4000sqmm. An alternative is to provide and average of 6000sqmm for all rooms with a min. provision of 4000sqmm per room. Trickle vents to first floor rooms to be maintained.
Mechanical Extract Ventilation:
Generally by wall mounted fans (or via cooker hood) discharging to air bricks and extracting at a rate of
Kitchens - 30 litres per second when used in conjunction with a cooker hood operating intermittently. (60 litres per second all other).
Utilities - (enclosed from kitchens) 30 litres per second operating intermittently.
Bathrooms/En suites - (with or without WC) 15 litres per second operating intermittently.
Sanitary accommodation without opening windows - 6 litres per second with 15min over run and controlled by the operation of the light switch. Air inlet to be provided eg. 10mm gap under the door.
Boiler/Heating Controls -
Heating system to be designed by Specialist designer. Provide and install new gas fired combination boiler - to be Class A SEDBUK rated (91% efficient). Boiler to be installed by CORGI registered and approved installer.
Identification Labels -
Identification labels required for all combustion appliances.
Commisioning -
The heating and hot water system to be inspected at completion in accordance with the Approved Document and a suitable commisioning certificate provided. The building owner and/or occupier to be provided with suitable information as to the operation and maintenance of the system.
Insulation of Hot and Cold Pipes -
All pipes in unheated spaces and within 1m of the cylinder are to be insulated with a material with a thermal conductivity not exceeding 0.045W/sqmK and a thickness equal to the outside diameter of the pipe. Cold water riser main pipe within 750mm of external wall to be insulated to prevent condensation or frost damage and to be located below sink unit where practical. All openings to be sealed where pipes penetrate into unheated spaces.
Guttering & Rainwater Pipes -
Provide and install new 100mm dia. half round guttering and associated 75mm dia. cast iron downpipes finished black to match existing lodge.
Drainage -
Pipes to be Hepworth UPVC installed to manufacturers details and as shown on drainage plan. All drains passing through walls to have precast concrete lintels over and flexible joints either side of wall. Mask opening on each side with rigid material to prevent the entry of fill or vermin. Fill void with compressible sealant to prevent entry of gas. Surface water drainage to soakaways where practicable.
Soil and Vent Pipes -
To be Hepworth 110mm dia. UPVC with easy bend at foot, and to terminate at roof level. SVP to be encased with 2 layers 9.5mm plasterboard in a duct insulated with min. 25mm quilt insulation. Min. gadient for branch manifold discharge pipes to be 9mm per metre.
Waste Pipes -
Kitchen and Utility Room sinks to have 40mm waste connected to SVP or back inlet gulley via a sealed connecting plate. Plumbed in wahing machines to have 40mm waste connected to SVP or back inlet gulley connected via stand pipe. Cloaks basins may be connected to collar-boss at WC, to SVP or stub-stack or to a back inlet gulley.
Bath, shower and basins to have separate 40mm wastes up to 3m in length respectively where practical connected to the SVP. If jointed or over 3m from stack, then all wastes up to a max. length of 4m should be 50mm.
Traps -
All fittings to have 75mm deep seal traps and to be in accordance with BS 5572. Hot and cold water supplies to be provided to washing machines.
Smoke Detectors -
Self contained smoke alarms should be fiited as shown on the drawing in accordance with Approved Document B1 and conforming to bS 5446 Part 1. They should be mains operated via a separate fused circuit at the distribution board, wiring to conform to the current IEE Wiring Regulations. They should be battery backup and interconnected.
Light Switches and Sockets -
Switches and sockets outlets for lighting and other equipment in habitable rooms should be located between 450mm and 1200mm from the finished floor level.
Dustbin Storage -
For positions of dustbin storage refer to the house Floor Plan.
Electrical Work -
All electrical work required to meet the requirements of Part P (Electrical Safety) will be designed, installed, inspected and tested by a person competent to do so. Prior to the completion of works, the Council will need to be satisfied that Part P has been complied with and will require a copy of an appropriate BS 7671 Electrical Installation Certificate issued for the work by a person competent to do so.





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Drawing	As Proposed Sections & Spec.	Revision	-	Scale	1:20 / 10	
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