

**SPECIFICATION.**

**GENERAL:-** Single storey extension to existing Church. Where building to boundaries the adjacent owner is to be informed under the terms of the Party Wall Act 1996 and its provisions followed. All dimensions must be checked on site and not scaled from this drawing. Any dimensions given are in millimetres.

**1. EXTERNAL WALLS AND FOUNDATIONS:-** The external walls are to be in a facing brick to match existing comprising of 103mm brickwork to the external leaf with 1.1.6 cement/lime/sand. 130mm cavity with 75mm Kingspan Kooltherm K108 Cavity Board insulation - partial fill cavity. 100mm thermal insulating blockwork Celcon or Thermalite using AIRCRETE blocks on the inner leaf with mortar as before and finished internally with 12,5mm plasterboard and skim finish (plasterboard to be fixed on dabs to inner face of blockwork), all to achieve a'U' value of 0.18. Cavity wall insulation carried below DPC and overlapped by 150mm with floor insulation and to meet with roof insulation at top of wall. Cavity insulation carried the full extent of gable walls. Cavity must not be closed at eaves with blockwork. All cavity closers to be insulated. All external and internal leaves are to be securely retained by approved stainless steel wall ties to BS EN 845-1 positioned 450mm apart vertically and 750mm horizontally. Wall ties at openings spaced not more than 300mm vertically provided within 225mm from sides of openings at unbonded jambs. Lean mix cavity fill to all cavity walling terminating min. 225mm below lowest DPC level. Cavity insulation to finish at same level as floor slab insulation. Below ground level both leaves shall be built in trench-blocks or class 'B' engineering brickwork. Any existing suspended ground floor ventilation blocked by new ground floor structure to be extended by ducting 100mm diameter pipes through new solid floor. ))) Foundations in accordance with BS8004. Foundation depth and type depends on existing ground conditions and nearby trees, an engineering design may be required if existing conditions are not favourable. Foundations depth and type to be in accordance with NHBC chapter 4.2 and to Building Control approval. Foundations shall be extended below pipe or ductwork penetrating walling. Oversite concrete will be level with or above the finished ground level. Oversite concrete to be grade ST2 or GEN 1 concrete to BS 8500-1. Unsuitable load bearing strata will necessitate separate structural design.

(a) Concrete trench fill founds to all load bearing cavity walls to be min. 600 x 1000mm deep. Use concrete grade ST2 or GEN 1 to BS 8500-1.

**2. DAMP PROOF COURSES:-** Horizontal and vertical DPC's will comply with BS743 (pitch polymer) and be incorporated:

(a) min. 150mm above ground to all load bearing walls, lapped with floor damp proof membrane.

(b) Vertically built into jambs of all external openings.

(c) Horizontally stepped to all external openings.

**3. DRAINAGE:-** The existing drainage system is assumed to be a single line combi system (to be confirmed on site). UPVC fittings to BS 4514, BS EN 1329-1. Baths, sink units, showers - 42mm dia. wastes via 75mm traps. WC pans - 100mm dia. with 100mm traps. Where WHB waste exceeds 1.75m length or Bath/Shower exceeds 2.3m anti-syphon traps to be fitted. Safe operation of all types of hot water systems are required to prevent scalding, so the temperature does not exceed 48 degree celsius through taps or 100 degree celsius where held in storage, (i.e. by use of temperature relief valves). Reasonable provisions must be made by the installations of fittings and fixed appliances that use water efficiently for the prevention of undue consumption of water. Below ground drainage to comprise Marley UPVC pipes to BS 4660 & BS EN 1401-1 or similar. Laid on granular bed material to BS 882 table 4. The selected fill should be free from stones larger than 40mm clay exceeding 100mm, timber, vegetable matter or frozen material. Where rigid pipes of less than 150mm dia. have less than 300mm cover, or rigid pipes of 150mm or more have less than 600mm of cover the pipes should be encased in 150mm concrete. Where flexible pipes are not under a road or have less than 600mm cover they should be encased in 150mm concrete. Where drainage runs within 1.0m of any foundation and the level of the drain is below the level of the foundation then the drain trench should be backfilled to the found level with concrete. Any pipe penetrating through a structure below ground level should have a lintel above opening (or use of rocker pipes) and a settlement gap of 50mm corkpack or similar flexible material should be inserted to provide protection to the drain.

Pipe to be either rocker type or hole around fitted with compressible material. All gravity drainage should have a min. fall requirement of 1:40 to provide self cleansing velocities. All gullies will be back inlet trapped gullies with rodding facility unless otherwise stated. Inspection chambers of up to 900mm depth may be of a UPVC or GRP material or constructed of 150mm concrete base slab with benching formed in 1.2 cement mortar to 1.12 gradient trowelled smooth with all channels, branches and connecting bends. The walls are to be 225mm, class 'B' engineering brick to BS EN 771-1 to the required invert depth. 150mm concrete cover slab with haunching forming the cover level complete with frame and lid. Where foul and surface water are available on site connections must be proved. Priority order for surface water is 1. Soakaway which must be designed to comply with BRE 365 and BS EN 752-1. Soakaways to be at min. 5.0m away from any building (foundations). 2. A watercourse or 3. A sewer. Rainwater connections to foul sewers may only be made where soakaway and watercourse cannot be used. On completion the system is to be water pressure tested and cleansed.

**4. SOLID FLOOR SLAB:-** 75mm concrete screed, on 500 gauge vapour check layer, 100mm GA4000 Celotex insulation with a 25mm upstand of insulation provided to perimeter edges of floors, on 150mm re-inforced concrete slab (grade ST2 or GEN 1 to BS 8500-1.) on 1200 gauge DPM lapped to wall DPC. Sand blinding and 150mm clean compacted hardcore (for hardcore deeper than 600mm, further advice is required from the structural engineer). All to give 'U' value of 0.18.

**5. TIMBER PARTITIONS:-** 100x50mm SC3 vertical softwood studs at 600mm c/c secured to 100x50mm SC3 head and sole plates. Noggins at 600mm intervals. 12.7mm Gyproc plasterboard and skim finish to both sides. Provide 25mm Isowool APR 1200 sound insulation to partition voids at bathrooms and around bedrooms to comply with E2 requirements for sound deadening. Floor joists to be doubled up when running parallel with and under timber partitions.

**6. LINTELS:-** Unless otherwise stated lintels to be Catnic combined steel to BS5977 (sizes as recommended by manufacturer). Provide min. 150mm end bearing where bearing is less than 150mm concrete padstones are to be provided (sizes to suit load and detail). All lintel backs and soffits to have min. half hour fire resistance and be insulated to prevent cold bridging where necessary. Where steel beams are used they are to be braced together 350mm from each bearing point and at mid span and set to concrete padstones each end as per Structural Engineer's drawings and details. Half hour fire protection to steelwork as above.

**7. LATERAL RESTRAINT TO FLOOR AND ROOF:-** All floors and roofs to be anchored by Bat or Catnic metal anchors (30 x5mm mild steel). Straps to be secured to timber elements and walls min. 1.0m long at max. 1.2m c/c (1.8m c/c in single storey construction).

**8. FLAT ROOF CONSTRUCTION:-** Three layers of built up roofing class 3 to BS EN 13707. The top layer to be mineral surfaced bituminous fully bonded to glass fibre based underfelt layer. Type 3G bottom layer to be partially bonded to 18mm WBP plywood to BS 1088 all laid to falls via softwood firrings. Softwood treated timber flat roof joists as specified by Structural Engineer with min. 100mm end bearing. 120mm Celotex XR4000 insulation ( height of firrings to suit 50mm ventilated air gap between insulation and plywood ) laied between joists and 50mm Celotex PL4000 insulation (with 12.5mm plasterboard - vapour check type, manufactured fixed and skim finish) fixed across face of joists, all to provide a 'U' value at 0.15 or better. Provide 25mm wide continuous strip ventilator at eaves of flat roof.

**9. FRAMES, CASINGS, SKIRTINGS, ARCHITRAVES :-** Internal door linings shall be 100 x 38 with planted stops. Skirting boards shall be 100 x 19mm. chamfered. Architraves shall be 75x19 chamfered. All new internal doors to have min. undercut of 10mm above the fitted floor finish surface. Window frames with safety glazing to all doors, side panels, and all areas extending below 800mm from floor level and to be in accordance with BS 6206 and or BS EN 12600. New or replacement doors and windows to be UPVC and double or triple glazed, argon filled gaps and finished soft low 'E' coating to achieve U-value of 1.40W/m2K or window energy rate - Band B or better. New rooflights with kerb/upstands can have a value no worse than 2.2W/m2K. New external doors with more than 60% of internal face glazed to have a U value of 1.40W/m2K or doorset energy rate - Band C or better, other external doors to have a U value of 1.40W/m2K or doorset energy rate - Band B or better.

Installed either by Fensa registered installer or compliance via certificate from L.A. Building control (fee Payable). All roof lights/lanterns to be glazed. If polycarbonate or uPVC roof lights/lanterns are to be used, ensure rating is class C-s3,d2 which can be regarded as having a BRoof(t4) classification. BRoof(t4) units can be used within 6m of the boundary. However, they are not to be used within 1500mm of a compartment wall line separating property's. Max. area of windows, doors and roof lights should not exceed the sum of the following:

- a. 25% of the floor area of the extension and
- b. the total area of any windows and doors which no longer exist or are no longer exposed due to the extension.

When glazing area is more than the sum of a. and b. then SAP calculations must be provided and the new sets of U-values must be followed.

**10. ELECTRICAL INSTALLATION and PART P BUILDING REGULATIONS**

**ELECTRICAL SAFETY:-** Where electrical work is required to comply with Schedule 1 of the Building regulations it will either:

- a. Be installed, by electrician who is registered as Part P approved by an authorised body (a completion certificate/certificate of compliance will need to be obtained from their authorised body (NICEIC, ELECSA, NAPIT etc.).
- b. Any other electrician will require and Electrical Safety Building Notice application.

The proposed electrical installation, earthing and bonding to be installed to current IEE regulations & to comply with Part P requirements of the Building regulations. Smoke alarms must be provided at each landing level. The fire alarm system to be at least a Grade D2 Category LD3 in accordance with BS 5839-6. Smoke alarms to be mains operated and inter linked and conform to BS EN 14604 whilst heat alarms to be BS 5446-2. The alarms to have a standby power supply, such as battery back-up. Any fixed lighting to achieve lighting levels appropriate to the activity in the space and spaces to not be over-illuminated. Each internal light fitting to have lamps with a minimum luminous efficacy of 75 light source lumens per circuit-watt. Internal light fittings to have local controls to allow for the separate control of lighting in each space or zone. Controls may be manual, automatic or a combination of both. Fixed external lighting to have both of the following controls.

- a. Automatic controls which switch luminaires off in response to daylight.
- b. If luminous efficacy is 75 light source lumens or less, automatic controls which switch luminaires off after the area lit becomes unoccupied. If luminous efficacy is greater than 75 light source lumens, manual control is acceptable.

**11. GAS INSTALLATION & HEATING:-** The proposed gas installation shall be designed and installed by GASSAFE registered person and a relevant certificate provided to Building Control pre-completion. Extend existing central heating to new areas to client's instructions. Where new or replacement boilers are installed must be a condensing boiler and must have a SEDBUK rating of Class A or B and the condensate outlet must be taken to the foul drainage system. New radiators fitted with thermostatic type valves with pipework insulated to non heated locations.

**12. NATURAL AND MECHANICAL VENTILATION:-** Prior to completion details of commissioning and testing of mechanical systems for extracts to be deposited with building Control to show compliance with F1 (2).


- a) Habitable room:
  - Rapid ventilation - 1/20th of floor area - for a hinged or pivot window that opens 300 or more, or for sliding sash windows. 1/10th of floor area - for a hinged or pivot window that opens less than 300.
  - Background ventilation - 8000 mm2

**THE CONTRACTOR SHALL ALLOW FOR MAKING GOOD OF ALL DISTURBED WORKS.**

**Other Notes, Alterations.**

Notes:

All existing foundations, beams and/or lintels accepting additional load, are to be exposed, if necessary, for consideration by the Building Control Surveyor and upgraded if found necessary.

DRAWING STATUS		PLANNING		GENERAL NOTES: Any dimensions shown are indicative only and are subject to verification on site. The contractor to set out, check and co-ordinate all dimensions on site during the course of the works and prior to setting out on site. This drawing to be read in conjunction with all other Architect's and Engineer's drawings, Structural Engineers calculations and any specialist supplier's drawings. Prior to commencement of building works the contractor or homeowner is responsible and should:-		7. Where works involve demolition to ensure that all elements of the building and adjoining structures are accounted for and that all necessary propping and temporary supports are in place. "do not scale off this drawing as the scaling may be off"		OTHER NOTES: All new proposed roof and wall finishes on this drawing to match existing materials. All new proposed skylights shown on this drawing will be designed not protrude more than 150mm from the existing roof profile. All new proposed windows shown on this drawing which overlook other property's are designed to be non opening and of obscure glazing. For a permitted development loft design the dormer designed on this drawing is set back from the eaves by 200mm, this note is a confirmation that it is designed this way. All works to be carried out in accordance with the latest appropriate codes of practice and to comply with current building regulations. An inspection of the underground drainage was not possible on survey. Contractor should check drainage runs and insert levels prior to starting work on site and notify building control of results. ALL DRAINAGE SHOWN IS ASSUMED AND MUST BE VERIFIED BY CONTRACTOR. TERMS - this drawing has been created by discount plans ltd for the "client" only, a bound contract has been made between both party's in which a signed contract for creation of works involving person-working hours for this drawing has been made, no refund will be allowed or claim made of drawing and any other drawing/s relating to this project for whatever reason can be made against DPL. Discount plans ltd hold full copyright of this material and have the full right to control the use of these works, any company, department or person that infringes these rights will be subject to legal compensation brought against them. client accepting these terms has agreed on all the above by signing contract between both party's and understands that no refunds can be given. 12. All drainage connections is assumed & is subject for checking by builder, Thames water & building control, foul and surface connections should be approved by Thames water before works commence.		SITE ADDRESS WARD HATCH, MOWBRAY ROAD, HARLOW, ESSEX, CM20 2NB	
REV.	DATE	NAME	DESCRIPTION	1. Ensure that all working drawings and calculations are completed, approved by Building Control or Planning Departments & that they are the current revised drawings before any works start on site.		8. Works carried out under a building notice or prior to approval of drawings are at the contractors/owners risk. (all DPL drawings must be approved before works commence) Builders building without plans being approved by planning & building control departments are fully responsible for the likelihood of condemned works.		11. All wall/s which have been deemed to be removed on plans are to be checked on site by building control inspector/builder for load bearing or non-load bearing status before purchase of steel/s. If non-load bearing then steel/s should not be ordered. No refund or claim can be given against DPL on the design/materials charged for these steel/s.		DRAWING TITLE SPECS.	
 Architectural Design Studio 4 ST ANNES, DORIC WAY, EUSTON, LONDON NW1 1LG +44 07838 135 957				2. Inform the Building control department that the works are about to commence on site after receiving an approved decision from planning / building control in writing for your proposed works.		9. Any discrepancies, either between written and site dimensions or between this drawing and other consultant's or suppliers drawings, should be brought to the immediate attention of DPL before executing the structural, drainage, mechanical and electrical works. This includes types of materials if materials shown on drawings do not match which is on site then this will need to be brought to DPL attention straight away before works commence and purchase of materials be made so an alternative design can be checked and approved by building control or the engineer before works can commence.		12. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		DRAWN AT HEAD OFFICE	
				3. Verify boundary lines & ground conditions including checking positions and new connections of all gas; electrical, water & other services drainage ect. within the site prior to the commencement of excavations. Owner is responsible for establishing own boundary lines as DPL are not responsible for checking land ownership even if drawings have been approved by the planning and building control departments. If uncertain a land search should be carried out by the homeowner/contractor.		10. All of DPL structural designs are subject to footings being 1m deep. If however the existing foundation is different a trial-hole will need to be dug to establish the existing foundation type and building control will need to advise on a different method of construction. If requested by building control either a raft or piled foundation, this will need to be designed by an engineer with an additional cost being implemented.		13. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		DRAWN BY	
				4. DPL are not responsible for builders changing design methods from proposed works. The client is responsible for works being carried out on a building notice. No project should start without cons.		11. All wall/s which have been deemed to be removed on plans are to be checked on site by building control inspector/builder for load bearing or non-load bearing status before purchase of steel/s. If non-load bearing then steel/s should not be ordered. No refund or claim can be given against DPL on the design/materials charged for these steel/s.		14. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		SCALE @ A3 16. OCTOBER, 2023	
				5. Owner is responsible for purchasing additional materials and covering extra engineering design costs for any additional structural design change on site from the start to end of building works requested by building control or any other third party's instruction during building works.		12. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		15. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		DRAWING No. DPL . 05 .	
				6. Request a copy of the Party Wall Award where works affect party wall or involve excavations within 3 meters of adjoining buildings or building over a public sewer. (clients responsibility)		13. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		16. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		REVISION -	
				7. Request a copy of the Party Wall Award where works affect party wall or involve excavations within 3 meters of adjoining buildings or building over a public sewer. (clients responsibility)		14. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		17. All drawings content including notes is bond to signed AGREED CONTRACT BETWEEN CLIENT & DISCOUNT PLANS LTD		www.discountplansltd.com	