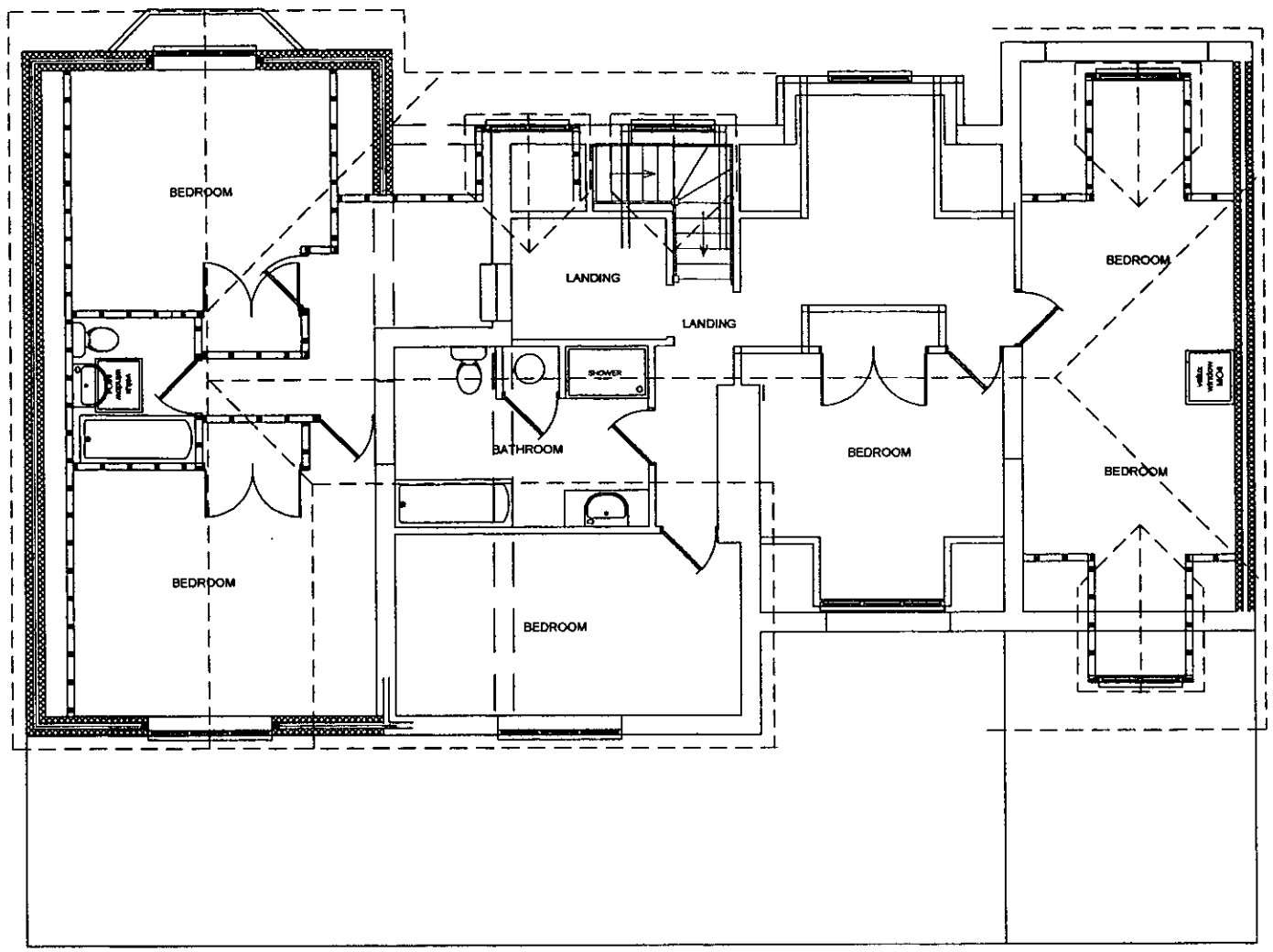


NEW FIRST FLOOR PLAN

SPECIFICATION

FOUNDATIONS Building Regulation A1/A2.
229 mm Walls, 2 x 7N solid concrete blocks minimum cover to foundations 1 m or to local authority requirements. Cavities to be filled with lean mix concrete to to a mimum level of 225mm from DPC. Foundations concrete 1 : 3 : 6 20 mm Premix 600mm wide x 225mm deep. DPC to be 150mm above ground level. If any trees are within 30m of the foundation the foundation depth will need to be increased as this may affect the design.

SOLID GROUND FLOORS Building Regulation C4.
75mm sand and cement screed on 100mm concrete 1 : 4 : 2 Pre-mix on 1200 polythene DPM on Celotex floor insulation minmum U - Value of 0.22 W/m2k on 1200 polythene DPM on 25 mm sand blinding on 100 mm hard core, all voids and excavation to walls filled with hardcore. Provide A142 mesh within the bottom of concrete slab over drainage runs.

EXTERNAL WALLS Building Regulation A1/A2.
Outer skin to be brick to match existing. Inner skin to be 100mm Toplite GTI blocks with 45mm CW3045 Celotex cavity insulation, minimum U - Value of 0.30 W/m2k in a minimum 50mm wide and a maximum of 80mm wide cavity including insulation. Wall ties to be stainless steel type 750 x 450mm c/c 225mm vertical spacing at reveals, insulated to prevent cold bridging. Fire stop to head of cavities.

LINTELS
Reinforced concrete or steel to manufacturers specification, 150 mm bearings either side.

Foundation and lintels to be checked for stability as requested by the building inspector

ROOF Building Regulation A1/A2 and TRADA technology.
Concrete or clay plain tiles to match existing on wooden battens on reinforced roofing felt to BS747 on 50 x 150 mm rafters 50 x 100mm stud work, all to engineer's calculations on 50 x 100mm wall plates, hold down straps every 2m run to wall plates and rafters/gables. 75mm Celotex GA3000Z insulation between rafters with 55mm fixed to under side of rafters. Continuous ventilation strip 25mm wide to all soffits.

FIRST FLOOR JOIST Building Regulation A1 A2.
Joist to be 47 x 200mm C16 Table 6, Double joist under partition walls. 2 No 50 x 200 joist joining 2 No. 75 x 200mm joist parallel to stairs, to support partition and roof above, joist connection with steel hangers. Provide 30 x 5mm steel restraint straps at 2m intervals at right angles to the joist, to extend over 3 No. joist with noggings.

Provide 30 x 5mm steel restraint straps at 2m intervals at right angles to the rafters, to extend over 3 No. joist with noggings.

STUD WALLS
External and internal stud walls to be in 50 x 100mm timber

FLAT ROOF A1/A2/B4 and TRADA technology.
Flat roof covering 3 layers of mineral felt with 12.5 depth bitumen bedded stone chippings Building Regulation Part B Table 5 Part iii: or fibreglass by specialist supplier (fibreglass specialist to provide fire rating specifcation) on 19mm marine ply on 115mm TD3115 Celotex Minimum U - Value 0.19 W/m2k on 200 x 50mm joist C16 table 36 @ 400 c/c on 50 x 100mm wall plates, hold down straps every 2m run.

FLASHING Building Regulation C4.
Valley to be code 4 lead. stepped and joined to British standard between pitches.

STUD WALLS
Internal stud walls to be in 50 x 100mm timber

PLUMBER Hot water and central heating Building Regulations G3/J and L.
The hot water and central heating system will be extended to include the new extension to comply with approved documents J & L, by a competent plumbing and heating engineer. All gas installations will be installed by a qualified CORGI gas engineer. Central Heating and Hot and Cold water in copper to BS864. If new replacement boiler is required a Condensing Boiler must be installed
RAIN WATER Building Regulation H3 Table 2 100mm Gutter, 75mm down pipes discharging into 100mm Osma drains into soakaways 4.5m from buildings. All underground drains to be Osma below ground type surrounded with pea shingle.

All traps from sinks,baths and basins are to be deep seal 76 mm, showers 50 mm seal shower traps. Bath,shower and sink waste pipe to be 40 mm dia. basin waste to be 32 mm dia. access plugs where necessary. 110 mm pipe soil and vent pipe. Building Regulation H1

ELECTRICITY. Building Regulation Part P (Electrical Safety)
To comply BS 7671 (I.E.E. Wiring Regulations 16th Edition). Fit mechanical extractor to Bathrooms, Kitchens and Utility rooms to vent: 30 litre /sec. adjacent to hob and 60 litres/sec. elsewhere in kitchens. 30 litres/sec. utility rooms, 15 litres/sec. for bathrooms.Certificate to comply with BS7671 to be issued after completion of the work.

Smoke alarms, mains operated and interconnected, to be fitted to ground floor hall and landings. Bulding Regulation B 7.10.

PLASTERING
Ceilings to be boarded with 12.5mm plasterboard and skimmed with plaster Internal walls to receive 13mm Carlite plaster. 12.5 Fireline plasterboard fire protetion to all stees beams.

GLAZING Building Regulations F1 Table 11.1 Ventiation, N1 Glazing.
Windows and doors to be double glazed with 16 mm separation low emissive glass to give maximum 2.U-Value. New windows ventilation not less than 1/20 of room floor area and fitted with a minimum 8000mm2 trickle ventilator to habitable rooms, all other rooms 4000mm2. All new external doors and joining windows to be glazed in safety glass in an area 1500mm high from bottom of glass and extend 300mm either side of door frame opening. All internal glass doors and screens to be in safety glass. All to BS6206 and supplied by FENSA approvrd installer.

PASSAGE OF SOUND Building Regulation E Resistance to passage of sound. Stud partition walls to include sound insulation to regulation E2 with 75mm minimum distance between 12mm plaster board linings. 25mm wool batts or quilt, minimum density 10 kg/m, suspended in cavity. Solid block walls type C minimum mass per unit area, excluding finish, 120 kg/m2 Sound insulation to first floor to be mineral wool a minimum 100mm thick, minimum density 10kg /m3 laid between joist.

INSULATION SCHEDULE

Ground floors Concrete slab P/A = ..86 = 80mm TB3080 Celotex = 0.22 W/m2K, Celotex Tbreak TB3000 between screed/concrete and outside walls.

Cavity walls 90mm brick outside skin 100mm Toplight GTI inside skin 45mm CW3045 Celotex = 0.3 W/m2K.

Timber stud walls and Dormer cheeks to roof space - 75mm GA3075 Celotex between studs pressed forward to outside face of stud with 25mm gap and 12mm Celotex to inside face plus 12.5mm plasterboard = .3 W/m2k.

Pitched roof ceilings 75mm GA3075 Celotex between rafters plus 55mm GA3055 Celotex underside of rafter = 0.2 W/m2K, leaving minimum 50mm gap between insulation and underside of tile battens and felt.

Timber flat roof 115mm TD3115 Celotex = 0.19 W/m2K.

Do not scale from drawings
(excepting Local Authorities)
All dimensions to be checked on site

All work to comply with Building Regulations, British Standards, manufacturer's instructions /specifications and engineer's calculations at all times. Construction must also comply with all safety at work regulations.Additional work may be requested by the building inspector as work proceeds to ensure the new building complies with all building regulations.

No	Change	Date	Init
	Roof and Dormer Windows	27/09/2011	

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Durrington,
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Scale:	1:100
Date:	4th December 2010
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Drawing 4 / 5	

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