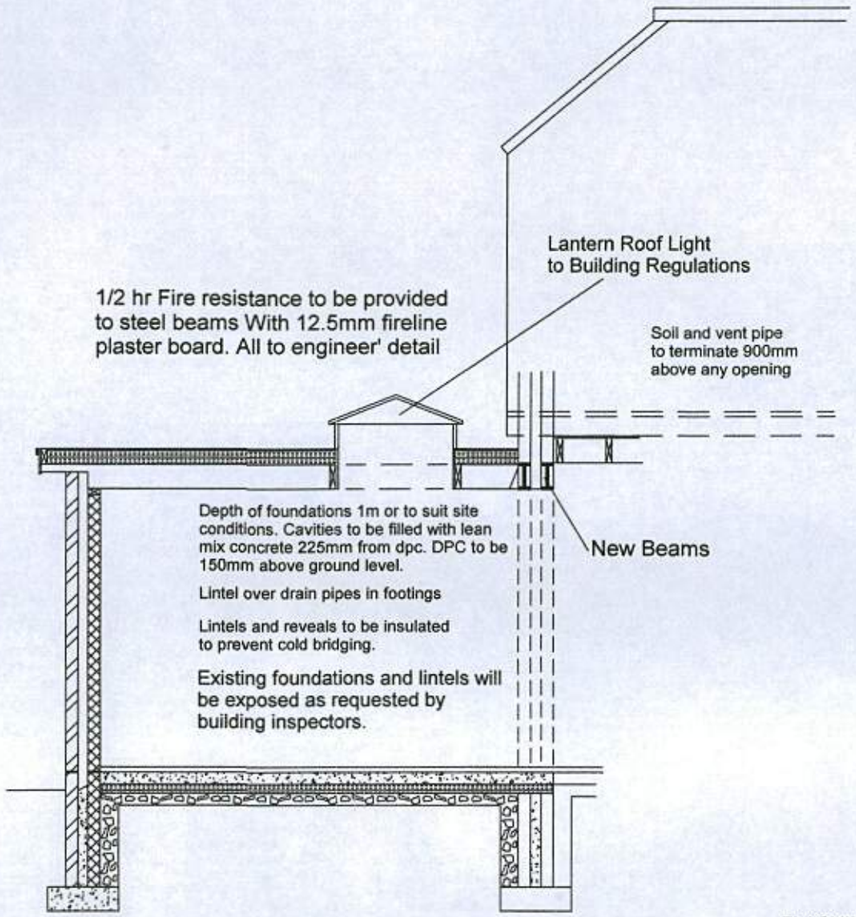
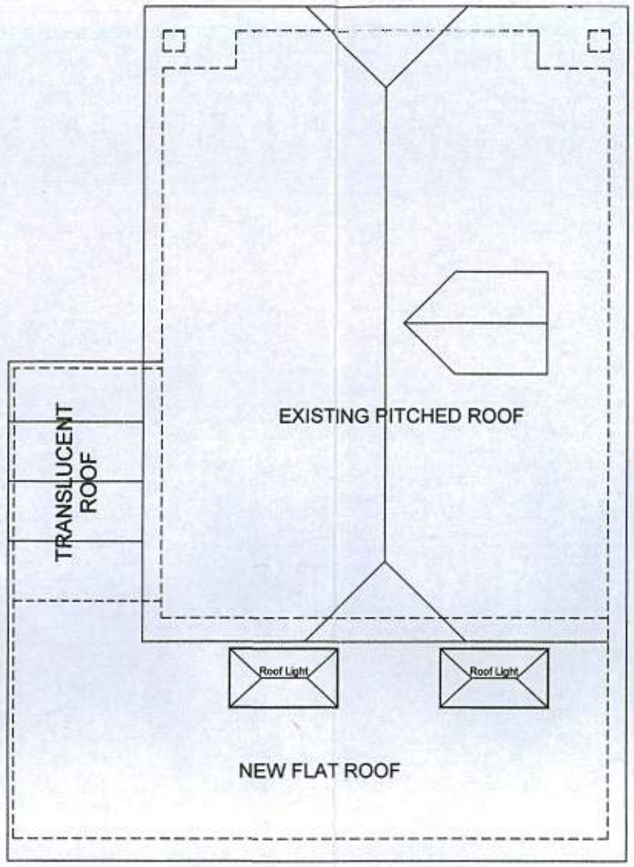


SECTION A - A



ROOF PLAN

FOUNDATIONS Building Regulation A1/A2.
295 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 80 mm GA4080 Celotex floor insulation minmum U - Value of 0.20 W/m2k With T-Break TB4000 between screed and walls 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 100mm concrete blocks and plastered to match existing
Inner skin to be 100mm Toplite GTI blocks with 45mm
CW4045 Celotex cavity insulation, minimum U - Value of 0.28 W/m2k in a minimum 50mm from insulation wide cavity and a maximum of 95mm 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 manufacturer's specification, 150 mm bearings either side. All installed to manufacturer's detail.

FLASHING Building Regulation C4.
To be code 4 lead. Cavity tray to be provided between extension and joining wall.

STUD WALLS
External and internal stud walls to be in 50 x 100mm C16 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 specification) on 19mm marine ply on 125mm TD4125 Celotex Minimum U - Value 0.19 W/m2k, on sloped firrings not less than 1 in 80 on 200 x 50mm joist C16 table 36 @ 400 c/c on 50 x 100mm wall plates, hold down straps every 2m run. Steel joist/wall connectors to support joist to existing house wall.

PLUMBER Hot water and central heating Building Regulations G3/J and L. Including Parts L1A and L1B April 2006.
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 Gas Safe engineer. Central Heating and Hot and Cold water in copper to BS864.
Boiler replacement is to be Condensing type sufficient to provide heating and hot water to the whole of the property. Provide boiler commissioning Certificate on completion.
RAIN WATER Building Regulation H3 Table 2 100mm Gutter, 75mm down pipes discharging into 100mm Osma drains into soakaways 5m from buildings, large area of roof must be proportional to the size of soakaway.
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 17th 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/toilets. All switches and sockets to be positioned between 450mm and 1200mm above floor level. Certificate to comply with BS7671 to be issued after completion of the work.

Smoke alarms, mains operated and interconnected, to be fitted to ground and first floor, located not more than 3m from any bedroom and not more than 7.5m from any other room. Heat detector fitted in kitchen. Building Regulation B1.

New window opening sash ventilation to be not less than 1/20th of room floor area.

PLASTERING
Ceilings to be boarded with 12mm plasterboard and skimmed with plaster. Internal walls to be dry- lined with 12mm plasterboard. External walls to be plastered to match existing.

GLAZING Building Regulations F1 Table 11.1 Ventilation, N1 Glazing.
Windows and doors to be double glazed with 16 mm separation low emissive glass to give Windows 1.6 W/m2K, Doors 1.8 W/m2K U-Value. New windows opening sash ventilation not less than 1/20 of room floor area, doors and rooflights not more 25% of total floor area. 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 approved 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. Provide test certificate for Local Authority.

Soakaways will be 5m from any building and be desingned to take into account the area of roof drained.

All underground drains to be Osma below ground type surrounded with pea shingle.

INSULATION SCHEDULE

Ground floors Concrete slab P/A = .51 = 75mm CA4075 Celotex = 0.20 W/m2K, Celotex Tbreak TB4000 between screed/concrete and outside walls.

Cavity walls 90mm brick outside skin 100mm Toplight GTI inside skin 45mm CW4045 Celotex = 0.28 W/m2K.

Windows to achieve 'U' value of 1.6 W/m2K.
Doors to achieve 'U' value of 1.8 W/m2K.

Flat roof insulation 125mm TD4125 Celotex on top of joist = 0.19 W/m2K.

Ceiling level to achieve 'U' value of 0.16 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

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39 Carlton Avenue
Pagham
Bognor Regis
PO21 3LR

Scale:	1:50 1:100
Date:	6 th March 2017
Drawn by:	

Drawing 3 / 3

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ARUN DISTRICT COUNCIL AW/114/17/HH