

SOUTH ELEVATION - PROPOSED



EAST ELEVATION - EXISTING



WEST ELEVATION - EXISTING

PITCHED ROOF CONSTRUCTION.
Concrete interlocking tiles to BS EN 490-2011. Laid in accordance with B.S 5534:2014 on 25 x 38 softwood treated battens on tyvek® supro BBA certificate: 08/4948 or similar over rafter unsupported breather membrane fitted in full accordance with manufacturers instructions in all cases to be lapped by 150mm vertically and 300mm horizontally. Tiles to be laid with min. head lap of 75mm and to be fixed in accordance with reqard to wind speed, roof pitch and exposure catesgory as detailed in B.S 6399. Pt 2.
Cut Roof to consist of:
38 x 125 SC3 timber Ridge Board
47 x 100 SC3 Jack Rafters at 400 c.c. pitch to match existing. ( approx.. 30 deg.)
47 x 100 SC3 Ceiling Joists at 400 c.c.
75 x 200 SC3 Binder
All rafter feet to be strapped to wall plate by 30 x 2.5 galvanised metal straps acting as anchors 30 x 5 galvanised metal lateral restraint straps at max. 1.5m c/ c. Note: provide solid bridging beneath straps: 50 x 100 wall plate bedded on sand and cement: 25 x 175 fascia boards: 6mm ext. grade plywood soffit complete with 10mm wide continuous air gap and fly proof screen. All structural timber to be min.SC3 grade. stamped 'DRY' or 'KD' to indicate moisture content of 20% or less all in accordance with BS. 4978. Timber supports are to be provided beneath water storage tanks over 4No ceiling joists. At roof intersections provide
25 x 100 lay boards and diminishing trusses at 400 c/ c :
Install GRP lead valley liner.

FLAT ROOF CONSTRUCTION.
'Polyroof 1B5' or similar on 120mm'Kingspan Thermaroof TR27 LPC/ FM' insulation boardina: on 20mm ply decking on s/ w firrings to 1:100 fall: 47 x 175 SC3 grade joists stamped 'DRY' or 'KD' to indicate moisture content of 20% or less all in accordance with BS. 4978. at 400 c/ c with 50 x 5 m.s. straps at max. 1.5m centres 'U' value of 0.18 W/ m2K.

CEILINGS / INSULATION.
Roof Level: Flat ceilings lay 400mm total thickness of Knauf Earthwool Loft Roll 40 glass mineral wool insulation. 100mm between joists & 300mm ( 2 layers 150mm) over Joists 15mm Gyproc wallboard with skim finish.
'U' value of 0.10 W/ m2K.
Ensure 50mm air gap over all insulation.: All joints to be taped and filled. Provide access trap to roof space: opening to be lined with 25 x 25 planted stops: Access panel to be 12mm ply with layer of 12.7mm Fireline board fixed to face. 100mm Jablite to top surface. Provide slide bolt fastening & draught seal all round

WALLING.
300 cavity walling to consist of face brickwork to B.S. 3921:1974 for clay bricks and B.S. 187:1978 for calcium silicate bricks: 100mm cavity: Build into cavity 100mm lower Hi Cav 32 ( Thermal Conductivity 0.032W/ mK) or similar cavity wall batt insulation in accord. with makers instructions and agreement cert' No.90/ 2465. 100mm Tarmac Toplite Grll. 2.9 N/ mm2 ( Thermal Conductivity 0.11W/ mK) or similar solid insulation blocks or similar:
'U' value 0.25 W/ m2K .
Cavity walls tied together using stainless steel vertical twist ties set 750 horizontally and 450 vertically all to
B.S. EN 845 wall ties positioned at 300 vertical centres at all unbonded closures of cavity: Close cavities with "Thermobate" preformed closer and provide bitumen felt DPC to C.P. 121: All work to be carried out in accordance with BS Code of Practice 121 Pt.1. 1973. Internal walls of 100mm Tarmac Toplite Standard solid insulation blocks.
Movement joints to be installed in blockwork in accordance with B.S. 5628 pt. 3 1985.
External walls to receive 12.5mm Plasterboard on dabs with skim finish.
Stud walls to consist of 38 x 75 C.L.S. timber studs at 400mm c/ c, both sides to be clad with 12.5mm Gyproc SoundBloc and skim. 25mm Isowall Acoustic partition roll infill between studs.

GROUND FLOOR CONSTRUCTION.
Strip all vegetable soil and lay floor as follows:
90mm "Capsol" or similar Ankadrite floor screed on 500g polythene D.P.M. on 100mm 'Kingspan Kooltherm K105" insulation board, on 1200g polythene D.P.M. lapped continuous with D.P.C. to min.100mm All on 100mm concrete over site: Concrete mix. C20 in non aggressive soils and FND2 mix in sulphate bearing soils to
B.S. 5328: pt 1991 on 150 blinded and consolidated hardcore.
'U' value 0.15 W/ m2K

FIRST FLOOR CONSTRUCTION
22mm T&G. flooring grade chipboard on 47 x 175 SC3 grade joists stamped 'DRY' or 'KD' to indicate moisture content of 20% or less all in accordance with BS. 4978. at 400c/ c: 50 x 5 galvanised. steel anchor and lateral restraint straps to joist at max. 1.5m c/ c straps to be run over min. 3No. joists with solid bridging beneath: Provide herring bone strutting min. 38 x 38 at mid span of joists where span exceeds 2.5m: Lay 100mm Isowool roll infill between joists
All joists where built into external wall to receive mastic seal all round

FOUNDATIONS.
Under walls as shown provide 225 x 600 strip concrete foundations all C20 mix to B.S. 5328: pt1 1991. All foundations taken down to bear on load bearing strata min. depth of 450mm below ground level to top of foundations: should shrinkable soil conditions be found on site then foundations shall be taken down to a minimum depth of 1000mm below ground level. In all cases foundations are to be designed in accord with N.H.B.C. Foundation Practice Guidance Notes where localised trees and shrubs are present.

SUB STRUCTURE WALLING.
100mm dense concrete blocks to B.S. 6073 pt.1 1981: DPC to external wall positioned in accordance with CP 102 min. 150 above finished ground level: Weak mix concrete infill to base of cavity no closer than 225 to DPC. All brickwork below DPC to be F.L. quality.

LINTELS.
All lintels to be as manufactured by Messrs. I.G. Limited
I.G. Hi-Therm or similar and to be installed in accordance with makers' instructions, all to have min. end bearing of 150mm and at external positions to have cavity tray D.P.C. to CP. 121: Internal lintels to be I.G. 100 Box type. Provide Perp-end weep holes and stop ends to cavity tray

FOUL DRAINAGE
Foul drainage pipes to be 110mm dia. UPVC, to B.S. 4660:1989 flexibly jointed and laid to makers' instructions to a fall of 1:80 bed and surround with 100mm pea gravel: Where pipes pass under floors encase in 150mm pea gravel. Where pipes pass under drives surround in 150mm concrete with flexel joints to correspond with joints in pipe work. Provide 65 x 100 pre-stressed concrete lintel bridging where pipes pass through walls, provide compressible filler around pipe, opening marked both sides of wall with ridged sheet material: Soil and vent pipes to be 110mm dia. PVC to B.S. 4514: 1989 and to extend 900mm above window head terminating with PVC balloon. Waste pipes to be generally 40mm dia. If over 3.0m long run increase to 50mm dia. All PVC to B.S. 5955: 1979 complete with rodding eyes at every change of direction:
Bath, basins and sink to have 75 deep seal traps: Shower to be raised on 150mm plinth with access plate to anti-syphon trap and 50mm waste. All redundant drains to be grubbed out or filled with lean-mix concrete. Condensation drainage from boiler flues to discharge via min. 22mm diameter pipe work through a 75mm condensation trap. Alternatively an additional trap should be provided externally to provide the required seal, an air gap should be provided between the boiler and the trap.

SURFACE WATER DRAINAGE.
112mm dia. half round rainwater gutters to 65mm dia. rainwater pipes: 110mm dia. underground pipes flexibly joined to a fall of 1:80 pipes bedded and surrounded in pea gravel and discharge to 1.2m dia. soak away min. 9.0m to edge from dwelling. All footpaths and drives to slope away from building.

EGRESS WINDOWS.
All habitable rooms in the upper story of a dwelling should have a window with an unobstructed openable area of at least 0.33 sq.mm and at least 450mm wide x 750mm high ( the route through the openina may be at an anale rather than straight through) The bottom of the openable area should not be more than 1100mm above floor level

GLAZING.
Double glaze property throughout with p.v.c.u windows BFRC rating in BAND C or better.
All windows and doors to have min. 'U' value of 1.4 W/ m2K or better. i.e. "Saint-Gobain Glass UK Ltd PLANITHERM TOTAL +" with 16mm air gap.
All excluding aarage.
All glazing between F.F.L. and 800mm high and between F.F.L. and 1500mm high in doors and side lights to be safetu glass to B.S. 6206. All windows/ doors to be draught sealed.

VENTILATION.
All windows to have openina lights that open to
30 degrees or more and to provide the equivalent of 1/ 20th the floor area of each room. Shsdd openina lights be to less than 30 dearees provide the equivalent of 1/ 10th the floor area of each room. Background ventilation to windows to provide a minimum total of 60,000 mm. sq. permanent free air ventilation per dwelling. Based upon a minimum of 5,000 mm. sq per habitable room and 2,500 mm. sq per kitchen, utility room, bathroom, en-suite, wet room and cloak room.
The following rooms to have in addition to the above wall mounted mechanical extractor fan ( Specific Fan Power ( SFP) to be no worse than 0.5W. L/ s) Recommended extract rates:
Kitchen min. 60 litres per second.
Utility rooms min. 30 litres per second.
Bathroom/ En-suite min. 15 litres per second, which may be operated intermittently and to have a 15 minute over-run.
W.C. min. 6 litres per second with 15 minute over-run.
Electrical Engineer to provide L/ A. Building Control with a suitable Commissioning Certificate upon completion.
Flow rate test results to be deposited with L/ A Building Control no more that 5 days after final test.

SPACE HEATING.
Extend and uparade existina Gas fired system as required.
The heatina system should be controlled by time and temperature zone controls with compatible delayed start thermostat. Time and Temperature control is defined as either A. Separate plumbina circuits, either with their own programmer, or separate channels in the same programmer Or B. Programmable TRV's or communicating TRV's that are able to provide time and temperature function.
Hot water system to be thermostatically controlled with timer switch.
Hot Water Storage - 250 l HWSC declared loss, no greater than 1.67kWh/ 24hrs.
All hot water pipe work to be insulated to B.S. 5422:2001.
Heatina flow rate temperature is to be between 36 - 45 Deg. C
Heatina Engineer to provide L/ A. Building Control with a suitable Commissioning Certificate in accordance with that published as part of the Benchmark Code of Practice upon completion. And to confirm that the system has been designed and installed to the guidance of the BRE Trust report FB59
All un-vented hot water systems and packages to be fitted with a minimum of two independent safetu devices, these shall be in addition to any thermostats provided on the system.
The system or package shall be indelibly marked with the following details, which shall remain visible after installation.
a. The Manufacturers name and contact details.
b. The Model reference details.
c. The rated storage capacity of the storage water heater.
d. The operating pressure of the system and the operating pressure of the expansion valve.
e. Relevant operating data on each of the safetu devices fitted.
f. The maximum primary circuit pressure and flow temperature of indirect hot water storage system units or packages.

SMOKE / HEAT DETECTORS.
Provide ceiling mounted mains operated self-contained Smoke Alarms to BS 5839-1:2013 in positions shown on plan.
Provide ceiling mounted mains operated self-contained Rate of Rise Alarms to BS 5414-3 Type 'R' in positions shown on plan.
Where more than one detector is to be provided they will be interconnected. All permanently wired to a separate fused circuit at distribution board.

ELECTRICAL INSTALLATIONS.
All electrical work to meet the requirements of Approved Document Part P ( Electrical Safetu) and must be designed, installed, inspected and tested by a person competent to do so.
All electrical switches, socket outlets, telephone and T.V. points to habitable rooms to be positioned at appropriate heights between 450mm & 1200mm from F.F.L.
Electrical consumer units to be positioned so that switches are mounted between 1350mm & 1450mm above F.F.L.
Prior to completion of the works the Local Authority must be satisfied that either:-
An electrical installation certificate issued under a competent persons scheme has been issued.
OR
An appropriate installation certificate has been issued for the work and that it has been signed by a person competent to do so.

LIGHTING.
To all habitable rooms provide eneray efficient light fittings capable only of takina lamps havina a luminous efficacy greater than 45 lumens per circuit watt and a total output greater than 400 lamp lumens.
External lightina is to be fitted with Dawn-Dusk or movement sensors and capable only of takina lamps havina a luminous efficacy greater than 45 lumens per circuit.
All lightina to be in accordance with the Domestic Building Services Compliance Guide.

WATER
Provision is to be made for wholesome water to be drawn off wherever drinkina water is drawn off. Also to any wash basin, bidet, fixed bath or shower in any room containina a sanitary convenience.
Water of suitable quality is to be provided to all sanitary fittings with flushina devices. Pressure, flow rate and reliability to be sufficient for operating all sanitary appliances.
Potable water is to be supplied by any statutory water undertaker or licensed water supplier.
Potential consumption of wholesome water is to be limited to be not more than 125 litres per person per day. Water efficiency calculations are to be submitted to L/ A Building Control not later than 5 days after work is completed.
Recommendations:
Bath 140 litre max capacity
Showers Flow Rate 10 litres/ minute
W.C. Dual flush Full 6litre Half 4 litre
Taps Flow Rate 5 litres/ minute
Hot water supply to any fixed bath to be requlated to ensure maximum temperature of delivered water will not exceed 48 deaC by the use of an in-line blendina valve or other appropriate device.

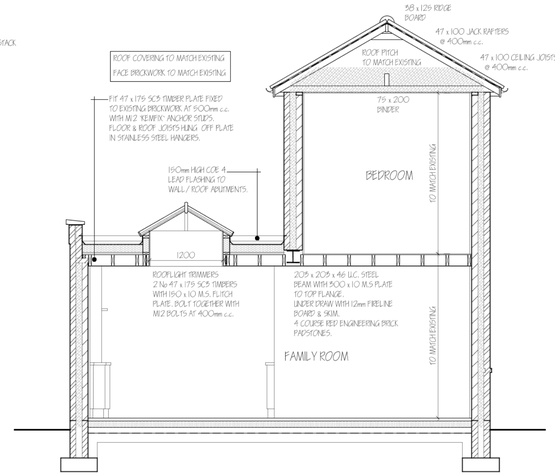
PART Q.
All easily accessible doorsets ( inc.Garage & Communal Entrance) that provide access to a Dwellina or Buildina containina a Dwellina should be secure doorsets to the following standards:
Manufactured and Designed to meet the security requirements of British Standard Publication PAS 24:2012 or
Manufactured and Designed in accordance with Approved Document Q Appendix B.
Ground Floor, Basement and other easily accessible windows ( Inc. Rooflights) should be secure windows in accordance with Approved Document Q para. 2.1 ans 2.5. Windows should be made to a design that has been shown by test to meet the security requirements of British Standard Publication
PAS 24:2012




GROUND FLOOR - PROPOSED




FIRST FLOOR - PROPOSED




SECTION - PROPOSED

LIMITATIONS.
This drawing is limited to the amount of information contained and does not purport to contain a full specification of the works. It is solely for the purpose of obtaining Planning/Building Regulation approval.
The drawing must not be used for any other purpose than above.
All dimensions shall be taken from site from actual work. Under no circumstances shall measurements be scaled from this drawing for construction or ordering purposes.
All given dimensions shall be checked by the Builder/Contractor and will be his responsibility from commencement of site works.
The works will not be supervised or inspected on site by C.A.D. or any representative thereof, it is the client or their appointed agents responsibility to control workmanship, substitution of materials, adherence to specification, variations to contract etc.

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STANDARDS.
All materials to be new unless otherwise stated and all components and materials etc. to be used fitted and installed etc. in strict accordance with manufacturers Instruction and relevant Code of Practice.
Materials shall conform to appropriate British Standard Specification or BBA Certificate or European Code equivalent.

HEALTH & SAFETY.
The Employer/Client shall ensure that the selected contractor is conversant with and adopts all measures necessary to achieve compliance with Health & Safety legislation for Building Sites and Work Places.
The Employer /Client is advised that should the works need to comply with the Construction Design and Management Regulations an Independent Planning Supervisor will be required.

SCOPE OF THE WORKS.
The works shall comprise of all that is shown on the drawing and details. Work that may not be specifically shown but may be reasonably inferred as necessary to carry out the works shall be deemed to be included.

LABC CONSTRUCTION DETAILS
Available at -
www.labc.co.uk/ registration-schemes/ constructiondetails

| | | |
|---|---|---|
| E1MCFF4 | - | Lintel |
| E3MCFF4 | - | Cill |
| E4MCFF4 | - | Jamb |
| E5MCFF9 | - | Beam & Block Floor |
| E5MCFF22 | - | Floor Slab. Ins. Under |
| E6MCFF4 | - | Intermediate Floor |
| E10MCFF4 | - | Eave - Flat Ceiling |
| E11MCFF4 | - | Eave - Sloped Ceiling |
| E12MCFF4 | - | Gable - Pitched Roof |
| E16MCFF4 | - | Corner - Full Fill |
| E17MCFF4 | - | Inverted Corner - Full Fill |
| E18MCFF7 | - | Party Wall - Ext. Wall Junction |
| P1FCFF2 | - | Party Wall - Floor Junction |
| P4PMCFF2 | - | Party Wall - Roof Junction |

ROOM DIMENSIONS ARE INTERNAL OF WALL FINISHES

| revision | date | init. | revision details. |
|---|---|---|---|
| A | JAN. '21 | J.C. | BUILDING REGULATIONS |
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Client.
B MORRIS & M SMITH

Project.
PROPOSED EXTENSION
8 PARK ROAD
LONG SUTTON
LINCS
PE12 9BJ

Drawing.
PROPOSED
FLOOR PLANS - SECTION - ELEVATIONS

| | |
|---|---|
| Scale 1:50 1:100 @ A1 | Drawing No. 2014-02-A |
| Date. DEC. '20 | Drawn. J.C. |