

BUILDING REGULATION SPECIFICATION

PROPOSED WORKS: **New Flat Roof Extension**

ADDRESS: **21 Westloats lane, Bognor Regis, W/sx PO21 5LE**

CONTRACT NO: **1468**

PREPARED BY: **C.R. Barrow & Associates Limited, Studio 1,
Manor Nursery, Lagness Road, Chichester, PO20 1LJ.**

1.0 Miscellaneous

1.1 Building Regulation Notes.

1.2 Scales 1:50 and 100.

1.3 This specification to be read in conjunction with drawings and Structural Engineer's details and calculations.

1.4 All building work is to be carried out in accordance with all the current Building Regulations and codes of practice in force at this time.

1.5 Any discrepancies found with any drawing or detail must be reported to the client prior to works continuing.

1.6 No work to encroach over the boundary of the neighbours' property.

1.7 In accordance with the provisions of Section 16(12) of the Building Act 1984, it is agreed to extend the period within which plans be passed or rejected to two months from the date of deposit.

1.8 In accordance with the provisions of Section 16 of the Building Act 1984, a conditional approval of plans is requested if this is necessary to secure compliance with the Building Regulations.

1.9 These construction notes are for the purpose of Building Regulation approval only and do not represent a detailed specification.

1.10 All lengths of proposed beams to be measured on site prior to ordering to verify Structural Engineer's dimensions.

1.11 Contractor to carry out his own survey prior to works commencing and report any discrepancies to the client.

- 1.12 Client is reminded to serve notice under the Party Wall Etc. Act 1996 where appropriate.
- 1.13 This specification cannot cover all eventualities encountered on site. If the contractor is in doubt he should raise any queries direct with the client.

2.0 FOUNDATIONS/FLOOR SLAB

- 2.1 600 wide mass fill concrete footings as shown unless dictated by Structural Engineer. All foundations to be minimum 1.0M below ground level with exact depth to suit site conditions. New foundations to go down to invert level of any adjacent drains.
- 2.2 Any internal load bearing walls to have 450mm wide, unless again dictated by Structural Engineer, mass fill concrete foundations (1:2:4 concrete mix) taken to at least 1.0M deep or to suit site conditions as before.
- 2.3 There are some trees on the site which may or may not affect the foundation design. However, this will largely depend upon the prevailing soil conditions and as such will need to be agreed on site with Building Control before relevant works commence.
- 2.4 Existing foundations taking additional loading to be exposed and assessed and agreed with Building Control before commencement of works. This also includes the internal walls, where applicable.
- 2.5 New floor levels to line through with existing, junction detail between new and existing to be agreed on site. New floor build to be 75mm sand and cement screed on a min 150mm A142 mesh reinforced RC45 concrete slab on min 500 gauge vapour control layer, on 75mm Celotex GA4000 insulation boards with 15mm vertical insulation to exposed sides on 1200 gauge DPM or if required install Visqueen multi-layer reinforced LDPE polythene gas barrier with all joints service and pipe penetrations sealed and installed to all manufactures and BRE, recommendations. U value 0.22W/m2k. **(REDUCE FLOOR LEVEL TO CORRECT DEPTH)**

3.0 EXTERNAL WALLS

- 3.1 External skin of the cavity wall to be face brickwork forming minimum 100mm cavity with full fill 'Dritherm' mineral wool insulation fixed in accordance with manufacturer's requirements or 50mm 'Celotex' insulation.
- 3.2 Internal skin to the external wall to be 100mm 'Celcon Hi 7' 7 Newton blockwork or similar inner skin with two coat lightweight plaster internally finished to clients choice and specification. All to achieve 0.29 U-value.
- 3.3 Horizontal strip polymer damp proof course to BS:6515 in each leaf of new walls minimum 150mm above adjacent ground level in external leaf DPC and positively linked to the DPM.
- 3.4 Blockwork below ground level to be Class A dense concrete or alternatively semi-engineering brickwork. Cavities below ground level to be filled with lean mix concrete up to ground level and minimum 225mm below damp proof course.
- 3.5 Where drains pass through external walls provide 65mm deep x thickness of wall pre-stressed concrete lintel over each leaf of wall. Minimum cover over drains to be 50mm clear. Mask opening with sheet material to prevent entry of fill or vermin.

- 3.6 Ensure that for all opening where cold bridging could occur a proprietary system such as 'Thermabate' closers to be used.
- 3.7 All walls constructed with stainless steel vertical twist wall ties to BS:1243-1978 built in at 450mm centres vertically and 750mm centres horizontally in staggered rows unless dictated by Structural Engineer. Doubled up at corners and reveals. Cavities closed at eaves level with proprietary cavity closer.

4.0 INTERNAL WALLS

- 4.1 Where shown, internal walls are to be 100mm lightweight concrete blockwork with two coat plaster either side finished to client's choice and specification.
- 4.2 Internal stud and partition walls to be constructed of 50 x 100mm timber studding. Studding faced both sides with 12.5mm 'Gyproc' plasterboard finished with joints taped and filled and finished to client's choice and specification.
- 4.3 Stud walls to be constructed to achieve nominal sound insulation with 12.7mm plasterboard either side and 25mm mineral quilt within a density of at least 10KG/M³.

5.00 FLAT ROOF

Form new warm roof construction of singler ply EPDM sarnafil or similar roof covering on 135mm celotex EL300 insulation on 19mm WPBP ply decking on treated SW firings cut to 1:60 falls to gutter on (see calculations) joits at 400c/c. Underlined with 500 Gauge polythene VCL and 12.5mm gypsum wallboard and skim coat plaster finish. Where flat roof abuts pitched roof tiles, roof tiling to be cut back to allow roof finish to be taken up roof rafters over mm WPB ply support boards a minimum of 150mm above flat roof level, dress roof underlay over tilting fillet and over roof felt. Overall construction to achieve a U value of 0.16W/m2k.

6.0 BEAMS AND LINTELS

- 6.2 Any new steel beams to be 30 minute fire protected using 12.5mm 'Gyproc Fireline' plasterboard with padstone design to be in accordance with Structural Engineer's design and calculations.
- 6.3 Where any existing beams are to take additional loading they will need to be exposed for assessment and agreed with Building Control with justification or replacement to be allowed for if deemed necessary.

7.00 VENTILATION

- 7.1 New windows to provide openable ventilation area of net less than 1/20th of the floor area of the rooms which they serve, all fitted with a minimum 8000mm² trickle ventilator to habitable rooms (4000mm² elsewhere). Where windows open to an angle of less than 30 degrees the requirement is increased to 1/10th floor area ventilation.

- 7.2 New shower rooms and bathrooms to be provided with an extractor fan capable of extracting not less than 15 litres per second, operated intermittently and ducted to external air. Mechanical vent to be ducted to the outside and to include cowl and all necessary weathering.
- 7.3 Kitchen to be provided with an extractor fan capable of extracting not less than 60 litres per second (or 30 litres per second if via a cooker hood) which may be operated intermittently and ducted to external air as before.

8.00 FOUL WATER DRAINAGE

- 8.1 All plumbing to BS:5572.
- 8.2 All below ground draining to BS:8301.
- 8.3 Drainage layout to connect into the existing foul water system via a new soil and ventilating pipes and gulleys with drains to be located by contractor and agreed with local authority Building Control.
- 8.4 All fittings to be provided with trapped waste pipes as follows:-
- | | |
|--------------------------|-----------------|
| Wash hand basin | - 32mm diameter |
| Sink/shower | - 40mm diameter |
| Common waste pipes to be | - 50mm diameter |

Common wastes or runs in excess of 1.7M long are to be fitted with anti-siphonic traps.

- 8.5 SVP's to terminate 900mm above any opening within 3 metres. Any stub stacks to terminate with air inlet valve sited above highest spill levels.
- 8.6 All drains to be 100mm diameter uPVC pipes laid and surrounded in pea beach to fall 1:60. Provide concrete cover where invert is less than 450M.
- 8.7 New manholes to be 450mm diameter 'Osma' bin type or 450 x 600mm rectangular type formed with pre-cast concrete sections formed on existing drain run.
- 8.8 Any manhole greater than one metre deep to measure minimum 1200 x 750mm internally.
- 8.9 Contractor to carry out his own survey prior to commencement of works and report any discrepancies to the client.

9.0 SURFACE WATER DRAINAGE

- 9.1 Rainwater to approved gutter system to client's choice and specification laid to fall to 65mm down pipes to discharge to a new soakaway located in the garden area to be a minimum of 1.0M² below the invert level of the pipe entry level. The soakaways are to be constructed using clean hardcore fill with 'Geotecnic' cover with concrete capping.

- 9.2 All drains to be 100mm diameter uPVC pipes laid and surrounded in pea beach to minimum fall of 1:80. Provide concrete cover where invert is less than 450M, or 750mm where under driveways.

10.00 GLAZING

- 10.1 All glazing to critical areas (window less than 800mm off floor and doors and adjacent windows up to height of 1500mm) to be toughened or laminated safety glass in accordance with clause 5.3 of BS:6206.
- 10.2 Any glazing to internal doors to be of laminated safety glass in accordance with clause 5.3 of BS:6206.
- 10.3 All new windows to be double glazed uPVC with 16mm air gap, with one pane being low emissivity glass to comply with Approved Document L((1B) 2010 – to give maximum area weighted U-value of 1.6W/M²K.

11.0 HEATING

- 11.1 Heating to be to client's choice and be fitted in accordance with Gas Safe or IEE regulations where applicable. At present it is the client's intention to install a wood burning stove incorporating a back boiler to serve the new formed rooms which will enhance the existing Calor Gas fired heating system.
- 11.2 All hot water pipes to be insulated where necessary in accordance with the Building Regulations. Use thermostatic valves where new radiators fitted.

12.0 FIRE SAFETY

- 12.1 Mains operated self-contained smoke alarms to BS:5389-6:2004 and BS:5446-1:2000 to be installed within the ground floor hallways as shown on the plan and they are to be linked to new detectors on the landings on the first floor and to be sited a maximum of 3M from bedrooms and 7M from risk areas as shown on the plans. Where the dimensions are exceeded, additional detector heads will need to be installed.
- 12.2 All smoke alarms to be interconnected, be permanently wired to a separate fused circuit at the distribution boards in accordance with IEE Regulations. They may be operated at low voltage via a mains transformer.
- 12.3 Provide a heat detector to the kitchen area.
- 12.4 If ceiling mounted, smoke alarms should not be installed within 300mm of a wall or light fitting.

13.00 MISCELLANEOUS

- 13.1 Provide a minimum of 75% low energy light fittings within the new development. Any external lighting to be of low energy use type.
- 13.2 Please note that all electrical work will be required to meet the provisions of Approved Document P (Electrical Safety) to the Building Regulations and that the works will be designed, installed, inspected and tested by a person competent to do so. Also prior to completion the Council should be satisfied the Part P has been complied with and may require an appropriate BS:7671 electrical installation certificate to be issued for the work by the competent person.
- 13.3 Water to the distribution system must not exceed 60 degrees Celsius.
- 13.4 The hot water system is to be designed, constructed and installed to ensure that the temperature does not exceed 48 degrees Celsius.
- 13.5 The fixed building services will be tested and commissioned in accordance with the Domestic Heating compliance guide with a notice of satisfactory commissioning to be provide to Building Control no more than 5 days after commissioning.

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