

# **SPECIFICATION**

**FOR**

**NEW FRONT ENTRANCE PORCH AND ASSOCIATED  
WORKS**

**AT**

**10 LIMMRAD WAY, FELPHAM, BOGNOR REGIS, WEST  
SUSSEX PO22 7NH**

## **1.0 General Notes**

1.1 This specification is to be read in conjunction with corresponding drawings.

Discrepancies, errors or omissions to be notified to originator at the earliest opportunity for clarification or correction.

1.2 Products/systems specified may be substituted for equivalent others by the contractor only with the Clients' approval. The contractor shall take responsibility for ensuring any substitutions are fit for purpose, comply with the Building Regulations, and are approved by the project Building Control surveyor.

1.3 The general standards of workmanship, British and / or European Standards, National Building Regulation, Codes of Practice and Certification requirements referred to herein are believed to be current, but in the event, they have been superseded or replaced, standards and requirements prevailing at the time of issue of this specification shall be followed.

1.4 This specification has been prepared to support the project's technical design drawings, and for use by Building Control to assess the proposal in terms of compliance with the current Building Regulations and other applicable standards. It is the responsibility of any contractors, suppliers, installers or third-party consultants that may refer to this specification (or associated drawings) that they verify their own governing standards against their own brief, and to raise any queries or doubt they may have prior to ordering materials or commencing on site.

1.5 The contractor will be required to include for such sums as he considers necessary to cover his obligations, liabilities and services as required for the proper execution of the works described and illustrated on the drawings and specification.

1.6 The contractor is to allow all necessary temporary supports, weathering, scaffolding, working rules and statutory requirements as necessary to complete the works.

1.7 CDM 2015 and the appointed contractor: as of October 2015, domestic works (other than diy) must be included within the type of works covered by the Construction, Design and Management Regulations. This means that there are defined duties and responsibilities held by a client, designer and contractor(s). In quoting and carrying out the works detailed within this document and any accompanying drawings and specification, the contractor is agreeing to take on the client's duties (as is normal accepted practice under CDM 2015) and see that they are discharged adequately. This is in addition to the contractor's own duties under the Regulations.

1.8 Assessment of risk: The assessment is that there are no abnormal hazards beyond those typical and common arising from the scale and nature of domestic works defined. General risks / hazards should (as the contractor feels necessarily proportionate to the risk and to discharge their duties under the Regulations) be defined and mitigated prior to works commencement within their risk assessments, construction phase plans, method statements and so on.

## **2.0 Foundations**

2.1 Deep trench concrete foundations to new extension external walls to BS8500-1 mix GEN1, and of width 600mm x average provisional depth (for tender purposes) of 1m below finished external ground level. Depths anticipated to vary between a max. 1.2m and min 0.9m below finished ground level.

2.2 Foundation formation levels indicated are subject to inspection and approval by the area Building Control Surveyor prior to placement of concrete.

## **3.0 Drainage**

3.1 All new and altered drainage is to comply with BS EN 752-4:1981, BS 5955-6:1980, and all relevant manufacturer's instructions.

3.2 110mm dia. PVC-u pipes with flexible joints and accessories by Osma (or similar and approved). Lay drains to fall 1 in 40. Bed and surround with pea shingle, and where required, with 300mm deep backfill of pea shingle and further backfilled with selected fill, well consolidated in layers not exceeding 300mm.

3.3 Drains to be protected with 150mm concrete cover where passing under the building, and protected with concrete lintels where passing through walls. Where the crown of the pipes are within 300mm of the underside of the slab, concrete encasement should be used integral with the slab.

3.4 New inspection chambers and new gullies to be proprietary pre-formed units in PVCu manufactured by Osma Wavin (or similar & approved). Inspection chambers to be fitted with medium duty plastic covers, and new gully units are to be trapped and roddable types.

#### **4.0 External Walls**

4.1 Below dpc construct walls in 100mm concrete blockwork to inner and outer skins with 100mm filled cavity between. Mortar to be 1:3 cement:sand.

4.2 Continue to construct inner and outer skins of cavity wall, above dpc, in 100mm aerated blocks Mortar to be 1:3 cement:sand with 100mm cavity filled with 100mm Celotex or similar insulation Board

4.3 Abutment of existing and new cavity walls: ensure existing outer leaf is broken out (to 100mm width to match that of proposed cavity in new external wall) to maintain continuous cavity at the abutment. New blockwork to be tied to existing with Simpson 'C2K Crocodile' or equivalent, proprietary wall extension profiles.

4.4 Finish walls externally with two coats of traditional cement based smooth render to be painted With 2 coats of masonry paint and one coat of stabilising solution.

4.5 Line walls internally with 12.5mm Gyproc Wallboard or equivalent plasterboard on proprietary dry lining system. All standard wallboard joints to be taped and filled and finished with Gyproc Thistle Board Finish or equivalent skim coat plaster.

Include all required manufacturer approved thin coat stop beads and angle beads

The above construction achieves a U-value of 0.21w/m<sup>2</sup>k

4.6 Close cavities around external window and door openings with proprietary ½ hour fire rated cavity closer system with integral dpc, such as Manthorpe G249F or equivalent (product selection from range to suit 100mm cavity).

4.7 Close cavity at top of walls with Rockwool TCB or equivalent ½ hr fire rated cavity closer.

4.8 Inner and outer skins to be tied together with 200mm Ancon Staifix RT2 or equivalent proprietary wall ties in conjunction with insulation retaining clips.

4.9 Ties to be spaced at max. 900mm centres horizontally, max. 450mm centres vertically, staggered and doubled up at all openings.

4.10 Ensure cavities and ties are kept clean of mortar.

4.11 New lintels to be galvanised steel Catnic 'Cougar' (or equivalent) insulated, open back type with min. 150mm bearing at each end. All lintels to suit specific wall construction and loading requirements.

## **5.0 DPC's, Flashings & Cavity Trays**

5.1 Horizontal dpc's to be 10mm larger than the width of the walls they are bedded on and are to be IKO Hyload Original or equivalent BBA approved / EN 14909:2012 compliant product. Installation to be in accordance with the recommendations of BS 8215:1991 and dpcs positioned a minimum of 150mm above external ground level/hard landscaping. All

cavities are to be continuous except around doors and windows, where cavities are to be closed with proprietary half hour fire resisting cavity closer system as noted in 4.6 above.

5.2 Apron flashings to be in Code 4 lead sheet, to BS EN 12588:1999. Leadwork to be laid in accordance with the Lead Sheet Association requirements. Apply to all visible lead a coating of patination oil, evenly in one direction, and in dry conditions. All individual flashing pieces are not to exceed 1.5m in length. Minimum 150mm roof membrane upstand to be provided at wall abutment.

5.3 Cavity trays to be as manufactured by Yeovil Cavity Trays Ltd (or similar and approved) and to be at least 2 courses high. Proprietary slim profile weep units to be installed at 900mm centres for draining cavity.

## **6.0 Ground Floor**

6.1 To be ground bearing and to comprise of 150mm of compacted hardcore, 50mm sand blinding, 1200 gauge damp proof membrane, 100mm Celotex or similar flooring insulation board, 500 gauge Separating layer/vapour barrier, 100mm thick ready mixed concrete slab. 25 x 165mm high Insulation board to perimeter of slab

6.2 Dpm to be fully lapped with dpc in external walls, vapour barrier to be left long and tucked up wall, behind plasterboard.

6.3 All membrane joints to be lapped and sealed in accordance with manufacturers recommendations.

The above construction achieves a U-value of 0.21w/m<sup>2</sup>k

## **7.0 Pitched roof**

7.1 Marley Ludlow Major Dark Red (Granular) tiles (or similar), colour to best match existing roof tiles and subject to acceptance by the clients prior to ordering, on 50 x 25mm treated (to BS 1282:1999) softwood battens at gauge to suit 35 degree roof pitch (min. 100mm tile headlap), on Proprietary breather membrane (Dupont 'Tyvek Supro' or equivalent BBA certified).

7.2 Roof structure currently designed with 47 x 145mm softwood treated rafters at 400mm centres. 100mm Celotex or similar insulation board between rafters.

7.3 100 x 50mm wall plates over masonry extension walls to be strapped down at 1.2m centres with 30 x 2.5mm section galvanised m.s. straps.

7.4 Gable end wall to be tied across 3 no. rafters using 30 x 5mm galvanised m.s. straps fully supported on timber noggins spiked between rafters, at 1.2m centres.

7.5 Ensure all roof void areas are fully insulated, also that the insulation is taken over the wall plate to link with the wall insulation. All holes at ceiling level must be filled to block air paths.

7.6 Ceilings to be vaulted and fixed to underside of rafters and to be lined with vapour barrier then 12.5mm plasterboard, with taped & filled, tapered edged joints or skim coat finish. Allow to support boards at all edges with adequate noggins as required.

7.7 Ensure a minimum 50mm air gap is maintained over insulation at eaves junctions by use of a proprietary eaves ventilator tray (e.g. 'Marley' or equivalent).

7.8 Provide adequate cross-flow ventilation over insulation – Glidevale or equivalent proprietary over fascia ventilator system (10,000mm/m) at eaves level, and Marley or equivalent pitched roof abutment ventilator system (5,000mm/m) at wall abutment.

## **8.0 Flat roof**

N/A

## **9.0 Structural & Carcassing Timber**

9.1 To be pre-treated with pressure impregnated preservative such as Protim or similar and approved. All saw cuts to be re-treated.

## **10.0 Rainwater Goods**

10.1 All new rainwater goods are to Osma white half round gutters or equivalent to match existing and white round downpipes, accessories in white, to BS EN 12200-1:2000 & BS 4576:pt1:1989.

10.2 At pitched roof eaves level, allow to provide proprietary gutter offset brackets to ensure adequate airflow reaches over fascia ventilator units.

## **11.0 External Doors and Windows**

11.1 New external windows and doors to be proprietary (Rehau or equivalent) PVC-u of general appearance & opening arrangements as shown on the accompanying elevation drawings, manufactured to BS 5713:1979 & all fitted with good quality (min. 3 point) security locks. New windows to be in white.

All units to achieve a U-value 1.6W/m<sup>2</sup>k or better

11.2 Glazing generally to comply with BS 6262:2005, BS EN 12600:2002 & BS EN 14449:2005; also, to be in accordance with Glass & Glazing Federation regulations and Building Regulations Parts N & K.

11.3 Toughened safety glass to be installed into the new doors.

11.4 Background ventilation to be provided in the form of controllable trickle vents installed into each window / door frame head, with a total ventilation area of 8000mm<sup>2</sup>.

11.5 Coloured silicone sealant to be neatly applied around all frames.

11.6 Cavities to be closed with a proprietary thermal and half hour fire resistant cavity closer such as Manthorpe G249f. Minimum insulated closer / frame overlap to be 40mm for aluminium windows and doors; and the reveal set-back for all timber windows and doors is to match existing.

11.7 New external door sets and windows to be secure to meet the requirements of British Standard PAS 24:2012.

## **12.0 Internal Walls**

N/A

## **13.0 Woodwork**

13.1 The bedding face of all architraves, skirtings and internal door linings are to be primed with approved primer sealer before fixing.

13.2 Provide & fix to perimeter of all new and altered walls new swd skirtings, of type to match be agreed with client and with neatly scribed internal angles & properly finished tight to architraves.

## **14.0 Mechanical Ventilation**

N/A

## **15.0 Mechanical Services**

15.1 The whole of the mechanical engineering installations is to be carried out in accordance with the relevant British Standard Code of Practice.

15.2 All new and altered water carrying pipework systems shall be thoroughly flushed and cleaned including chlorination where required, before setting to work.

15.3 The whole of the installation must be tested on completion and put into full working order to the satisfaction of the Contract Administrator or representative.

15.4 The new and altered hot water systems are to be commissioned in accordance with the Approved Procedure in the Domestic Heating Compliance Guide and a copy of the commissioning documentation passed to building control on completion.

## **16.0 Electrical Works**

16.1 Provide and install all new electrical circuitry to the extended house generally in accordance with the current British Standards electrical regulations, and to positions confirmed by the clients.

16.2 All electrical work to be carried out to an acceptable standard in accordance with the local electricity authority and in compliance with the current I.E.E Regulations.

16.3 All electrical installations shall either:

A) be carried out by a competent person registered with a Self-certification Scheme (approved by the Secretary of State)

Or

B) Designed, installed and tested by a suitably qualified electrician in accordance with BS7671 (I.E.E. Wiring Regulations)

16.4 On completion of the installation, the tests prescribed in the I.E.E. Regulations are to be carried out and the results recorded. When tests have proved satisfactory the contractor is to hand to the employer the requisite certificate duly signed as detailed in the I.E.E. Regulations and provided to local authority building control.

16.5 New electrical socket outlets and switches to be sited at appropriate heights between 450mm and 1200mm from the finished floor level. Client to confirm final installation heights within this range.

16.6 All new light fittings are to be of the low energy type providing a lighting efficiency of min 45 lumens per circuit watt.

#### **17.0 Fire alarm & carbon monoxide alarm installations**

N/A

#### **18.0 Builders work in connection**

18.1 Allow for all builder's work in connection with the various electrical and mechanical services work, including making good wall chases in masonry walls, infilling holes in walls, floors and ceilings where old services have been removed / capped off, and other suchlike repairs.

#### **19.0 Above Ground Drainage**

N/A

## **20.0 Painting and Decorating**

To be agreed with the clients.

## **21.0 Miscellaneous**

Internal plaster repairs to altered window and door openings, infill walling within existing building.

Stormwater Drainage: Two new downpipes to be connected into the existing storm water drainage

## **22.0 External works**

Allow to make good and clean driveway and paths as necessary following building works.

*End of Specification*