

Specification Notes
&
Existing & Proposed Planning Drawings
For
Proposed Single Storey Rear Extension
With Internal Alterations & Flat Roof

At
12 CHESTNUT AVENUE
HAVANT
HAMPSHIRE
PO9 3QR

MR MARTIN TERRY

NOVEMBER 2019
PLANNING ISSUE
JDS/1384

CONSTRUCTION & BUILDING REGULATION ISSUE
JDS DESIGN SERVICES
John Stoneman 3 Weylands Close, Liphook, Hampshire GU30 7QG
01428 724924
jdsdesignservices14@gmail.com

General Specification Notes Proposed Extension & Alterations

All work shall be carried out in a workmanlike manner, and in full compliance with the Building Regulations and all current British Standard Codes of Practice. The contractor is to ensure that the existing structure is adequately propped where new openings are formed and that all props remain in place until new beams, top flange packing and bearings have reached working stress. Protection shall also be provided to prevent the elements damaging the building fabric prior to making the building weather-tight.

Demolition

Where indicated demolition shall be carried out in a workmanlike manner. Where applicable, existing slabs are to be completely broken up and removed, with the ground being excavated and consolidated. All demolition material shall be removed from the site.

Foundations

New foundations are to be as set out in Separate Document, together with Layout Drawings.

New Ground Floor

Refer to Additional Specification Notes

Existing Suspended Timber Ground Floor Construction

The existing suspended timber floor is to be upgraded as follows:

Floor Boards- The existing pine floor boards are to be carefully lifted and set aside for re-use.

Polythene Sheet- Fix a 1200 gauge black polythene sheet over the top of the existing joists.

Insulation- 95mm thick Celotex 'FR5090' insulation press fixed between the existing joists all in accordance with the manufacturers recommendations.

Insulation Clips- Fix Celotex 'Insulation Clips' all in accordance with the manufacturers recommendations.

Existing Joists- The existing joists will be used, it is assumed they are 50mm x 100mm

The upgraded floor construction shall achieve a minimum U-value of 0.22 W/m²K

JDS DESIGN SERVICES

3 Weylands Close
Liphook
Hampshire
GU30 7QG

Tel: 01428 724924

E-Mail jdsdesignservices14@gmail.com

18 November 2019

JDS/1384 12 CHESTNUT AVENUE, HAVANT PO9 3QR

SPECIFICATION FOR NEW SUSPENDED BEAM & BLOCK GROUND FLOOR SLAB.

PROPOSED KITCHEN

- Provide 155mm deep Beam & Block Ground Floor Slab SUPREME CONCRETE BEAMS REF: S458 together with a 65mm thick concrete screed. Grade C20 concrete to give a strength of 20N/mm² at 28 days, with a 10mm max. aggregate Un-reinforced.
- Insulation 70mm CELOTEX 'GA4070' Installed in accordance with the Manufactures recommendations
- Design, layout & setting out to be in accordance with the Specialist working drawings.
- Beams to sit on top of the inner skin blockwork walling and other internal walls. All blockwork to be 200mm thick CELCON HI-SEVEN or similar approved, below ground floor slab level.
- Infill floor blocks to have a minimum density of 1480kg/m³ and a minimum strength of 4.0N/mm² all as directed by the Specialist.
- Provide a minimum 150mm void below the suspended slab together with air bricks to the Local Authority approval.
- Should any discrepancy arise between the details shown and the site situation, the Engineer is to be informed and permission to alter the details will be given as necessary.
- Calculations and setting out to be provided by Specialist Manufacturer when units are ordered.
- All details to be issued by the Main Contractor to the Local Authority for approval prior to starting the work on site.

J. D. STONEMAN

John Stoneman ACIOB

NEW EXTERNAL CAVITY WALL CONSTRUCTION AT GROUND FLOOR LEVEL BRICKWORK TO MATCH EXISTING/ CAVITY / BLOCKWORK

The cavity construction is to be a full filled cavity wall construction consisting of:

Footings- To be 100mm thick Celcon 'Hi Seven' blocks with a compressive strength of 7.3N/mm² and a density of 750kg/m³, weight 8.4kg each.

Blockwork Mortar- 1:1/2:3 cement:lime:sand mortar.

Facing Brick – 102.5mm thick facing bricks to match those on the existing building. **A sample of the brick is to be submitted to the Local Authority for their approval, if required by the planning approval.**

Brick Bond Mortar Joints- to matching existing 1:1:6 cement:lime:sand mortar, to match existing.

Blocks- To be 100mm thick Celcon 'Hi Seven' blocks with a compressive strength of 7.3N/mm² and a density of 750kg/m³, weight 8.4kg each. An alternative would be to use 7N/mm² concrete blocks.

Bond Mortar Joints- Stretcher 1:1:6 cement:lime:sand mortar Flush joints

Overall cavity- To be 100mm wide and partially filled with insulation

Insulation- To be 100mm thick 'Isover Hi-Cav 32' full fill wall insulation installed all in accordance with the manufactures recommendations.

Wall Ties- To be stainless steel double triangle wall ties fixed 600mm horizontally and 450mm vertically and 225mm vertically within 150mm of openings and movement joints.

Inner Skin- to be 100mm thick Celcon 'standard' blocks with a compressive strength of 3.6N/mm² and a density of 600kg/m³, weight 7.3kg each.

Internal Finish- To be a wet plaster finish consisting of:

Finishing Coat Undercoat- 2-3mm thick Gyproc 'Thistle Multi Finish'. 11 mm thick Gyproc 'Thistle Browning' or a cement:sand render coat.

Decoration- Once the plaster has had a light sanding, the decoration is to be:

Mist Coat- 1 no. emulsion paint

Undercoat- 2 no. emulsion coat

Top Coat- 1 no. emulsion coat

The wall construction shall achieve a minimum U-value of 0.28 W/m²K

EXISTING EXTERNAL WALLS

It is assumed that the existing external walls have no insulation. If this is the case the walls are to be thermally upgraded by injecting the cavity with insulation, Isover 'Walltherm' or similar approved.

The wall construction shall achieve a minimum U-value of 0.28 W/m²K

INTERNAL BLOCKWORK WALLS

New internal and blockwork walls both load bearing and non-load bearing to be:

Blocks- To be 100mm thick, unless stated otherwise on the Architects or Structural Engineers drawings, Celcon 'Standard' blocks with a compressive strength of 3.6N/mm² and a density of 600kg/m³, weight 7.3kg each and toothed in at the junctions.

Blockwork Mortar- To be 1:1:6 cement: lime: sand mortar

Finish- To be a gypsum plaster finish to consist of:

Finishing coat - 2-3mm thick Gyproc 'Thistle Multi Finish'

Undercoat- 11mm thick Gyproc 'Thistle Browning' or a cement: sand render coat.

Decoration- Once the plaster has had a light sanding, the decoration is to be:

Mist Coat- 1 no. emulsion paint

Undercoat- 2no. emulsion paint

Top Coat- 1 no. emulsion paint

The internal blockwork walls shall achieve a minimum mass per unit area, including finishes of 120kg/m².

INTERNAL STUDWORK WALLS

New internal studwork construction is to be:

Studwork- All timber to be treated to be:

Vertical Studs- 50mm x 100mm P.A.R treated softwood at maximum 400mm centers.

Noggins- 50mm x 100mm P.A.R treated softwood at maximum 600mm vertical centers.

Sole Plate- 75mm x 100mm P.A.R treated softwood

Head Plate- 75mm x 100mm P.A.R treated softwood

Insulation- Place a minimum 25mm thick Isover 'APR 1200 Acoustic Partition Roll' between the studs. All in accordance with the manufacturer's recommendations.

Plasterboard- To be 15mm thick Gyproc 'Wallboard' or 12.5mm thick Gyproc 'Wallboard Ten' or 15mm thick Gyproc 'SoundBloc' screw fixed to the studwork all in accordance with manufacturers recommendations. In high humidity areas such as bathrooms use 15mm thick Gyproc 'Moisture Resistant Board' screw fixed all in accordance with the manufacturers recommendations. Scrim all joints.

Minimum mass of plasterboard per unit area to be 10kg/m².

Finish- For Gyproc 'Wallboard & Wall Ten' to be a Gypsum plaster finish to consist of:

Skim Coat- 2-3mm thick Gyproc 'Thistle Multi Finish'.

Tape and fill all joints ready for direct decoration or tiling all in accordance with the manufacturers recommendations.

Decoration- Once the plaster has had a light sanding, the decoration is to be:

Mist coat- 1 no. emulsion paint

Undercoat- 2 no. emulsion paint

Top Coat- 1 no. emulsion paint

The internal studwork walls shall achieve a sound insulation Rw value of 40dB.

The internal studwork walls shall achieve a minimum fire rating of 30 minutes.

STRUCTURAL FIRE PROTECTION OF STEELWORK

To provide a minimum fire protection to steel beams, fix 1 no. layer of 15mm thick Gyproc 'Fireline' board all in accordance with the manufacturers recommendations or where appropriate, encase the steelwork with 25mm thick Rockwool 'Beamclad' or 25mm thick Gyproc 'Glassroc' insulation all in accordance with the manufacturers recommendations.

WARM FLAT ROOF CONSTRUCTION IN THE PLANE OF THE ROOF JOISTS TO GROUND FLOOR REAR / SIDE EXTENSION TOGETHER WITH DORMER ROOF

The new extended roof is to be a cold roof (breather membrane) cut and pitch construction consisting of:

Warm Flat Roof Specification

2 or 3 ply - Torch on polymer modified bitumen roof membrane, IOK or similar approved.

Insulation- To be 150mm thick Celotex 'Crown up' Insulation

Vapour Control- To be 1000 gauge polythene vapour control layer

Decking- To be 25mm thick WBP plywood deck

Firrings- To be Treated softwood firrings to give a finished fall of 1:80

Flat Roof Joists- To be 50mm x 200mm grade C24 regularised, treated and stress graded softwood at maximum 400mm centers.

Plasterboard- To be 15mm thick Gyproc 'Wireline' plasterboard fixed to the underside of the joists with plasterboard screws all in accordance with the manufacturers recommendations. Scrim all joints.

Finish- To be a Gypsum plaster finish to consist of:

Skim Coat- 2-3mm thick Gyproc 'Thistle Multi Finish'.

Decoration- Once the plaster has had a light sanding, the decoration is to be:

Mist coat- 1 no. emulsion paint

Undercoat- 2 no. emulsion paint

Top Coat- 1 no. emulsion paint

Roof construction shall achieve a minimum U-value of 0.18 W/m²K.

DAMP PROOF COURSES

Horizontal- At ground floor level to be Visqueen 'Zedex CPT DPC' installed all in accordance with the manufacturers recommendations a minimum 150mm above the finished ground level. Elsewhere to be Visqueen 'Zedex CPT DPC'.

Vertical- To window and door openings to be a combined DPC and insulation vertical DPC such as Cavity Trays 'Type D Damp Course (Verticle) or similar approved.

CAVITY TRAYS

Are all to be installed all in accordance with the manufacturers recommendations.

New Cavity Trays- Where flashing about new cavity walls, built-in cavity trays and stepped trays are to be used. Install Visqueen 'Zedex CPT High Performance DPC'.

New Cavity Trays Above Lintels- Where required above openings, use Visqueen 'Zedex High Performance' cavity tray, all to be installed above the lintel and to extend a minimum of 150mm beyond the opening. Unless the lintel has a built-in cavity tray.

LEAD FLASHINGS AND SOAKERS

All to be installed all in accordance with the Lead Development Associations guidelines.

Lead soakers- To be code 3 Lead all in accordance with LDA guidelines

Lead flashings- To be code 5 lead all in accordance with LDA guidelines

SMOKE DETECTORS

Smoke detectors are to be interconnected mains operated with a battery back up and positing in the circulation areas as per the drawings.

A- 7.5m from areas where fires are likely to start i.e. kitchens or living areas

B- Within 3m of bedrooms.

Also a heat detector if to be installed in the kitchen.

WINDOWS FOR MEANS OF ESCAPE

Windows to habitable rooms are to have an unobstructed opening of a minimum 450mm wide and 750mm high, giving an unobstructed area of 0.33m². The bottom of the window opening should not be more than 1,100mm and not less than 800mm above the finished floor level.

WINDOWS, DOORS AND LOCKS

All are required to meet Secured by Design Standards, style and colour to the Clients specification.

GLASS AND GLAZING

To be hermetically sealed double glazed units in PVCU frames.

Double glazing- 4:16:4 Argon filled cavity and low E_{en}= 0.05 glass

Windows shall achieve a minimum U-value of 1.6 W/m² K.

Safety glass- To be provided in the following locations:

Windows- To any part of a window where the cill is below 800mm from the finished floor level.

Door/ sidelights- Any part of a glazed door where there is glazing a zone of 1,500mm from the finished floor level, including any sidelight within 300mm (measured horizontally) of the door.

Percentage of Openings to Floor Area- The percentage of openings to floor area is to be less than 25%

LINTELS

All lintels to be as per the structural engineers drawings and specification and are to conform to the manufacturers load/span tables and installed all in accordance with the manufacturers recommendations.

EXTERIOR WOODWORK

Painted- New exterior woodwork to be painted is to be lightly sanded then knotted and finished as follows:

Primer- 1no. primer coat.

Undercoat- 2no. undercoat

Top coat- 1no. gloss top coat

Stained- New exterior woodwork to be stained is to be lightly sanded and cleaned with white spirit to remove dirt and grease. Then apply stain all in accordance with the manufacturers recommendations to build up the desired finish.

VENTILATION

Background- Background ventilation to be trickle vents or night safety latches provided as follows:

Habitable- 5,000mm² equivalent area

Bathrooms- 2,500mm² equivalent area

Kitchen- 2,500mm² equivalent area

Extract- Extract fans are to be provided as follows:

Bathroom- 15 liters/ second, connected to the light switch

Kitchen- 30 liters/ second when above the hob and 60 liters/ second when above the hob.

Cloakroom- 6 liters/ second.

Purge- All rooms are to be provided with opening lights equivalent to 1/20th the gross internal floor area of the room.

JOINERY

Skirting's- Painted softwood, moulding to Clients specification

Architraves- Painted softwood, moulding to Clients specification.

Door Lining- 32mm thick, width to suit wall softwood, painted.

Doors- Timber, style TBC.

ELETRIC'S

All new electric's are to be conform to the latest IEE regulations and are to be installed by an electrician registered with a competent person scheme in accordance with the Building Regulations. On completion the new system is to be tested and a Part P certificate issued.

All switches and socket outlets for lighting and other equipment in habitable rooms to be located at appropriate heights between 450mm and 1200mm from the finished floor level.

Switch plates, sockets, light fittings to be MK 'Logic Plus'.

Energy efficient lighting- Energy efficient lighting is to be provided to all rooms. The lights are to have an efficiency greater than 40 lumens per circuit watt.

HEATING

The existing system is to be altered and extended to suit the new layout.

Boiler- Existing boiler to be checked to confirm size to suit the heating load of the house.

Hot water cylinder- Check pressureised hot water cylinder.

Radiators- Myson round top sized to suit the heating requirement of the room fitted with TRV or to match existing

Controls- Seven day wall mounted programmer. Allow for thermostats and a boiler interlock system.

The new system is to be installed by a competent person in accordance with the Building Regulations who is Gas Safe registered. On completion the system is to be tested, commissioned and a certificate issued.

FOUL WATER DRAINAGE

All to the local Authority's approval to be:

Above ground- The new shower, bath, toilet, wash hand basin and sink are to be connected as indicated on the drawings.

The shower, bath, toilet, wash hand basin and sink are to have the following waste pipe trap sizes:

Bath & Shower- 40mm pvcu pipe with a 50mm deep seal.

Toilet- 100mm pvcu pipe with 50mm deep seal.

W.H.B.- 32mm pvcu pipe with a 75mm deep seal.

Sink- 40mm pvcu pipe with a 75mm deep deal.

Below ground- The new below ground drains are to be 100mm diameter pvcu installed all in accordance with the manufacturers recommendations. New drains are to be laid to falls on a bed of pea shingle, minimum 100mm thick, and covered with pea shingle to a depth of 150mm above the pipe and then backfilled with suitable material compacted in layers not exceeding 300mm deep.

Where drains pass through the external walls, install 2no. precast concrete lintels above the pipe.

Inspection Chambers- Where indicated to be Hep-worth pvcu inspection chambers, or similar approved, installed all in accordance with the manufacturers recommendations.

Manholes- Where indicated to be precast concrete with a pre-formed base with a ductile cast iron cover, installed all in accordance with the manufacturers recommendations.

SURFACE WATER DRAINAGE

All to the Local Authority's approval to be:

Above ground-

Gutters- To be black cast iron size to match existing, installed all in accordance with the manufacturers recommendations.

Downpipes- To be black cast iron to match existing, installed all in accordance with the manufacturers recommendations.

Below ground- The new below ground drains are to be 100mm diameter PVCU installed all in accordance with the manufactures recommendations. New drains are to be laid to falls on a bed of pea shingle, minimum 100mm thick, and covered with pea shingle to a depth of 150mm above the pipe and then backfilled with suitable material compacted in layers not exceeding 300mm deep.

Soakaways- Where indicated new soakaways are to be a minimum of 5m from any part of the building and constructed with perforated pre-cast rings located on a circular concrete base with a cover. Soakaways are to be 1.5m in diameter and 1.5m deep, subject to ground porosity tests on site and sub-soil conditions. Subject to the checking authority's approval. As an alternative a crate system such as Wavin Aquacell Core units or similar approved installed all in accordance with the manufacturers recommendation.