

Building Notes/Specification

This is not a specification of works but has only been produced for gaining Planning & Building Regulation approval. The builder/client is responsible for checking prior to commencement all scaled and stated dimensions, with any discrepancies being reported to the designer. The builder/client is also responsible for checking all structural elements (walls, foundations, lintels etc) prior to commencement. Structural design is to be in accordance with the structural engineers details. Client is to ensure that any Party Wall Act notices are signed and resolved prior to commencement. Builder and client to check the precise below ground drainage layout prior to commencement to ensure that the assumed layout shown in the plans is correct. At the time of the measured survey it was not possible to access the loft, therefore the loft heights have been taken from an identical project undertaken on a neighbouring property - builder to check the loft height prior to commencement to ensure that the assumed height is correct.

Preliminary

Any existing lintels, walls and foundations taking additional load are to be exposed prior to commencement for Building Control Inspection. If Building Control consider the existing lintels to be inadequate then these should be replaced, or trimming provided within the new floor structure to remove the loads from these lintels.

Foundations

New foundations to be 600mm wide concrete trench fill foundations to a minimum depth of 1m, to suit the site conditions and to Building Control approval. Foundations alongside the boundary are to be excavated and cast in 1m long sections to maintain the structural stability of the neighbouring structure. Provide 4No T20 reinforcing bars to join each excavation. Provide new pad foundations below the new masonry piers. In clay subsoil the foundations are to be constructed in accordance with the NHBC Table 4.2. Foundations within 3m of any drainage to be below the invert level of the drains. Where pipes and services pass through the foundations/walls they shall be linteled over with precast concrete lintels, with the void around the pipe suitability sealed. The builder is to excavate trial hole prior to commencement, for Building Control inspection, to ascertain the precise ground conditions and to allow the foundation depths to be agreed. If the foundations need to be a raft or piled foundation then a structural engineer will need to be appointed to design the extensions foundations. Existing foundations to be exposed for building control inspection and approval prior to commencement.

New Ground Floor

Extension floor level to finish flush with the existing floor. Provide clients selected floor finish on 75mm sand cement screed on 500G vapour control layer on 70mm Celotex floor insulation on 1200G dpm (fully lapped with dpc and existing membranes) on beam and block suspended floor to manufacturers details and calculations. Provide 20mm Celotex insulation skirted up around the perimeter to prevent cold bridging. Builder to provide set of the manufacturers structural details for the beam and block floor system to Building Control for approval. Beam and block manufacturer to determine whether the beam and block floor is 150 or 225mm in depth, and also to determine the spacings of the beams. Provide dpc above and below the beam and block floor bearings. Provide 50mm compacted hardcore ground cover/concrete to the sub floor void. Maintain a 150mm air gap below the beam and block floor. Provide 65x215 plastic air bricks (with telescopic ventilators and cavity trays over) at 1.8m centres. Any existing sub floor vents are to be maintained

Below Ground Walls

Walls below ground to be 100mm dense concrete block inner skin, with 100mm cavity and brick to dpc level. 100mm cavity, filled with lean mix concrete (top splayed outwards) to 215mm below the lowest dpc. Below ground walls to internal walls to be 100mm blockwork. Provide a dpc at floor level which is lapped to the existing dpcs.

Above Ground Walls

External render on dense concrete blockwork to match existing (and to client approval) with 100mm cavity fully filled with Crown Dri-Therm Insulation Batts, 100mm Thermalite Shield insulating blocks, with plasterboard on dabs and skim finish. The external wall construction achieves a U value of 0.24W/m2k. Provide wall ties at 750mm centres horizontally, 450mm centres vertically, and at every block course within 300mm of openings. Insulated damcore vertical dpcs to be used at reveals to prevent cold bridging. All cavities to be continuous with existing, and new work to be bonded to existing with Furfix slip connectors to create a movement joint. Provide a continuous horizontal dpc 150mm above ground level, and continuous with any existing membranes. Provide vertical restraint straps at 2m centres to the wall plates. Provide lateral restraint straps (with solid noggins below) over the rafters at 1800mm centres. Restraint straps to be 30x5x1000mm long galvanised straps. Lintels to be preformed insulated Catnic lintels with minimum 150mm end bearing. Lintels to suit the manufacturers span and load tables.

Internal Stud Walls

Provide 50x75 timber studs at 400mm centres with head and sole plates and intermediate noggins. Provide 100mm mineral wool within the studs. Provide ply bracing either side of the studs with plasterboard and skim finish.

Roof Construction

Provide a 50x100 treated timber wall plate strapped to the external walls. Provide 47x170 C24 rafters at max 400mm centres. Birdsmouth rafters over the wall plate and a timber head plate which is bolted to the rear wall at 600mm ccs. Provide double rafters to the roof windows. Form an inverted dormer below the first floor windows with 50x100 flat roof joists at 400mm centres. Provide 1:60 timber firings over, with water resistant flat roof decking and leadwork over. Between the rafters provide 120mm celotex insulation, maintaining a 50mm ventilation void over. Provide a further 25mm celotex below the rafters with the joints fully taped. To the ceiling provide a 500g vapour control layer then 12.5mm plasterboard and skim. Renew/repair existing ceilings as necessary.

Over the rafters provide a breather membrane, 25x38mm treated battens and roof tiles to match colour of the extension but to suit the roof pitch. NOTE: if the tiles used for the single storey roofs are below their recommended roof pitch provide the Onduline undertile roof system installed in strict accordance with the manufacturers details. Provide lead flashing and cavity trays to all roof abutments. Provide upvc fascia, soffits and rainwater goods to match existing. Velux roof windows to be packed up to achieve a minimum 15 degree pitch/slope.

Loft Conversion Floor Joists

Provide new timber floor joists at max 400mm centres, alongside the existing ceiling joists. Floor joist size to be determined by the structural engineer. Joists to be packed 15mm above the existing ceiling. Provide strutting to joists at one-third span and ensure existing ceiling joists are suitably supported to prevent sagging. Provide multiple joists as detailed on the plans, with bolts at 600mm centres. Provide heavy duty joist hangers to timber connections.

Joists to be covered in 22mm t&g moisture resistant floor boarding, with boarding extending out to the eaves area to maintain the fire resistance of the floor. Provide 100mm sound insulating rockwool (min density 10kg/m3) between the new floor joists. Provide Thermal insulation within the floor joists where outside the air of the loft conversion floor.

Sloping Ceilings

Provide 50 x 150 C16 timber rafters alongside the existing rafter members. Provide 100mm GA4000 Celotex insulation between the rafters (maintaining a minimum 50mm ventilation void over) and provide a further 20mm celotex below the rafters. Provide vapour control layer and plasterboard and skim. New rafters to be birdsmouthed over the new head plate to the dwarf stud wall. Provide double rafters either side of any new velux roof windows.

Dwarf Stud Wall

Ashlar/dwarf stud walls enclosing the loft room to be constructed off the new floor joists. Studs to consist of 100 x 50 studs at 400mm centres, with head and sole plates and intermediate noggins, and ply bracing. Provide 70mm celotex GA4000 insulation within the stud work. To the room side of the stud provide 12mm bracing ply, 20mm Celotex TB4000 insulation, 500g vcl, with 12mm plasterboard and skim finish. Ensure rafters are birdsmouthed over the wall plate of the ashlar studs. Provide insulated access panels/doors with the dwarf stud walls as requested by the client.

Existing Party Walls

Provide a 35mm insulated backed plasterboard to the existing gable end walls, with plaster skim finish. It is advised that a parging coat is provided to both gable end walls to seal any voids.

Dormer Roof

Rear dormer flat roof to be formed with 47x100 C24 joists at max 400mm c/cs with firring pieces over, (to provide a fall of 1:60). Over the firrings provide 50mm celotex, 22mm water resistant flat roof decking with three layer felt finish (to achieve an AA fire rating). Provide a further 80mm celotex between the joists with the insulation pushed up tight to the upper layer of insulation. Provide a triple 47x147 roof beam spanning between the dormer cheek rafters and the party wall to support the ends of the flat roof. Ensure the edges of the insulation are sealed with mastic. To the underside of the joists provide a 500G vapour control layer to the ceiling prior to fixing 12.5mm plasterboard and skim. Ensure that the junction of the warm flat roof with the pitched roof areas are suitably sealed with mineral wool insulation.

Dormer Walls

Dormer walls/cheeks to be constructed with 100x50mm studs at 400mm centres with head and sole plates, intermediate noggins and cross bracing. Dormer cheeks to be built off the quadruple rafters. Provide 70mm GA4000 celotex insulation within the studs, and a further 20mm TB4000 of Celotex insulation to the room face of the stud (joints taped), with 12.5mm plasterboard and skim internally. Externally line dormer with, ply, (to dormer cheeks also provide 6mm masterboard), breather membrane, battens and tile/slate hanging to match the existing roof covering. Provide double studs either side of the window openings in the dormer, with double 50 x 150mm timbers over as lintel. Provide lead flashing to the dormer cheeks in accordance with the LDA guidelines.

Stairs

Provide a new 740mm wide timber staircase to comply with Part K. Stair to have a maximum rise of 220mm and a minimum going to 220mm, but a maximum pitch of 42 degrees. All treads and risers to be equal. Provide a continuous handrail 900mm above the pitchline of the stairs. Maintain an unobstructed 2m headroom over the staircase. Balsutrading to the landing to be 1000-1100mm in height and to consist of vertical balusters at max 100mm centres. Landings to be 900mm in length. Detailed stair design to be prepared by the stair fabricator prior to installing the floor joists. Stair fabricator will dictate the level of the floor joists and the position of the trimmers.

Leadwork

Provide cavity trays and lead flashings to all roof/wall abutments in accordance with the LDA guidelines.

Steel Beams

Provide steel beams, bearings and piers in accordance with the structural engineers design. Form new piers to steel beams as required by structural engineer. Steel beams to be coated with intumescent paint to achieve 30 minutes fire resistance.

Chimney

Remove the existing central chimney and replace with a preformed fake chimney which is clad with matching brick slips. Chimney to be designed by the manufacturer with details issued to the planners. Structural engineer to design the support for the chimney.

Log Burner

Any log burners are to be designed, installed and commissioned by a HETAS engineer.

Windows/Glazing

Windows to be upvc double glazed units with a 16mm air gap, soft low E coating argon filled and warm edge spacer bar to achieve a U value of 1.6W/m2k. Provide safety glass in the critical areas. Windows/doors to habitable rooms to have trickle vents giving background ventilation of 8000mm2. Window to the non-habitable rooms to have 4000mm2 trickle vents. Frames to be sealed externally and internally with mastic. Velux roof windows to be 780x980 windows, with double rafters either side. Roof windows to be packed up to achieve a minimum pitch of 15 degrees. Rear glazing to be aluminium framed - and to be designed by the manufacturer.

The drawings, details and specifications are solely for the purpose of seeking Planning and Building Regulation approvals. They are not intended as a specification of works, and PMG Ltd accepts no liability should they be used in this manner.

Drawing to be read in conjunction with specification, details notes and any specialist design elements. Any works carried out prior to approval are done so at the clients/builders own risk.

The contractor is responsible for checking all scaled and stated dimensions prior to commencement on site. The length of all structural elements are to be checked on site prior to placing orders.

The builder is to expose any existing structural elements (foundations, walls, lintels, floors, beams, roofs etc) which are accepting additional loads for Building Control and client approval prior to commencement.

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Any boundaries shown on the plan are their assumed location/line and the client should check the precise line of any boundaries prior to commencement. No works to project over the boundary line.

Client is resolve all matters relating to the Party Wall etc Act 1996 prior to commencing building works

PMG Ltd will not be liable for the accuracy of any hidden details; such as wall constructions, lintels, existing beams, foundations, drainage, etc. It is the responsibility of the client and his appointed contractor to expose all hidden features prior to commencement of any building works. The client should arrange for all drainage to be surveyed and traced prior to commencement to ensure that the drainage layouts shown on the plans are correct. The client should arrange for a trial hole to be excavated, prior to commencement, and for Building Control inspection to allow the proposed foundation type and depth to be agreed.

All drainage layouts shown on the plans are indicative only. The client must appoint a drainage survey and tracing company to ascertain the exact layout, depth and condition of the existing drainage prior to the commencement of any building works.

Project Title

Proposed Extension & Loft Conversion
10 Bath Road
Emsworth
Hampshire
PO10 7EP

Drawing Title

Proposed Section & Construction Notes

Client

Mrs L Duffy

Date:

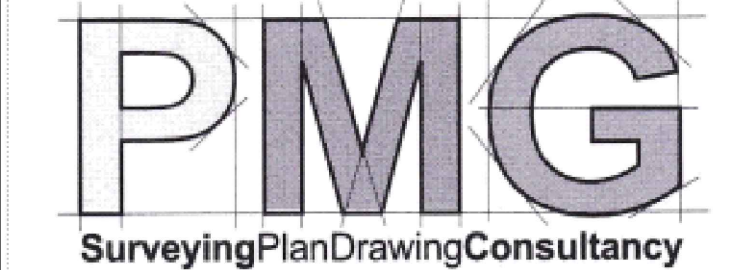
January 2016

Scale:

1:50 at A1

Drawing No.

003 rev A



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Ventilation of Rooms
Habitable rooms to have trickle ventilation of 8000mm2 and 4000mm2 to non habitable rooms. Kitchen to have extract ventilation of 60 litres per second (or 30 litres per second if part of the cookerhood). Bathroom to have extract ventilation of 15 litres per second. WC to have extract ventilation of 6 litres per second, which is linked to the light switch and have a 15 minutes over run facility. All extract fans are to be ducted to the outside air (including any cookerhoods). Fans to be tested on completion with certificate issued to Building Control confirming that the fans achieve the specified extraction rate.

Fire Safety
Provide mains operated (with battery back-up) and interlinked smoke detection in the position shown on the plans.

Any existing or proposed downlighters are to be provided with fire hoods over. Any existing or proposed ceiling mounted extract fans are to be have collars fitted.

The dormer cheeks are to be lined with masterboard on the external face of the structural studwork to achieve 30 minutes fire resistance externally.

Provide FD30 fire doors to all doors onto the stair enclosure. Doors to have 25mm glued and screwed door stops.

Heating & Hot Water
Heating and hot water system to be designed, installed and commissioned by a competent engineer. Existing boiler to be assessed by a Gas Safe Engineer. Provide TRVs to radiators. All works to the boiler to be carried out by a Gas Safe Engineer. Type and position of radiators, or underfloor heating to be determined with the client prior to installation.

Surface Water Drainage to be UPVC gutters and downpipes to match the existing. Rainwater pipes to be taken to the existing below ground surface water drainage system (if available) or to a new soakaway. Below ground surface water drainage to be 110mm diameter drainage laid to a fall and on a bed and surround of 150mm of pea shingle. Junction of the below ground drainage with the above ground rainwater downpipes is to be a trapped gully. New soakaway to be positioned a minimum of 5m from any building and to be formed in waving aquacell crated wrapped in geotextile membrane. Soakaway to be a minimum of 1m3, but actual volume to be determined by a percolation test carried out by the builder.

Foul Water Drainage
Foul water drainage to be 110mm diameter upvc pipework, laid to a fall of 1in40 and bedded and surrounded in 150mm pea shingle. Baths, Showers, Basins and Sinks to have 38mm diameter waste pipes. Combined wastes to be minimum of 50mm diameter. Provide 100mm diameter waste pipe to WCs. Above ground drainage pipes to have deep seal traps and to be laid to a suitable fall. Alter the existing below ground drainage as detailed on the plans. Lintel over all below ground drainage pipes as they pass through the foundations/walls. Builder to expose all existing below ground drainage prior to commencement to ascertain its exact position, depth and condition. Box SVP and stub stack with two layers of plasterboard and skim. SVP to terminate at a dargo valve, which is positioned above the level of the basin.

Electrics
Electrical installations to be in accordance with the latest edition (17th) of the IEE Regulations, and to be carried out by a NICEIC registered competent person, with a certificate of installation provided on completion of the project. Locations of sockets and switches to be determined on site. 75% of all lights are to only accept low energy light bulbs. Any external lighting is to be fitted with a sensor.

Meters/Services
Builder to allow for relocating/re-routing all existing services to suit the position of the new appliances/fittings. Client to submit any necessary applications to the Utility companies in relation to any relocated meters/services.

Landscaping
Builder to form patio to the rear/side of the extension. Exact size, shape and surfacing to patio to be determined by the clients during the project. Reposition the existing garden gates as agreed with the client and neighbour.

Finishes
All finishes, including skirting boards, coving, doors, architraves, radiators, kitchen units, tiles, lights, etc are to be agreed with the client on commencement of the project.