Danny Manns
18 Frances Road
Purbrook
Waterlooville

REFUSE

Building regulation and general construction notes for works in Glass
Extension to rear of property at:

Mr & Mrs D Warwood
16 Winifred Road,
Waterlooville
Hants
PO7 7TD

9TH FEBRUARY 2012

Building Specification notes to be used in conjunction with Drg: WARWOOD01A

Block & Location Plan drawings attached, Directional North indicated

Note:

Details and dimensions to be checked on site prior to any commencement of work and any queries, variations or discrepancies directed to client & DM Designs.

The following notes and associated drawings do not constitute a full specification of work as this has been solely produced for the purpose of obtaining the necessary local authority consents/approvals.

Rear Extension Notes:

Party Wall Act 1996 – Notice in writing to be given to adjoining neighbour at least two months prior to any commencement of work and reply in writing to be received.

A Party wall agreement is to be in place prior to start of works on site.

See OPDM explanatory booklet (now department for communities and local government).

Site Preparation - Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc on or in the ground covered, or to be covered by the building.

Removals – Remove existing decking to rear of property. Remove fence where applicable. (By Client).

Condition Check – Check suitability of existing drainage gulley, unblock and flush if req'd.

Existing Structure - Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

Existing Foundations – Foundations that will be taking additional loads from the room in the roof to be exposed and checked by Structural Engineer/Building Control Officer to ascertain its suitability.

Concrete strip foundation to be taken to 900mm Min. or suitable loadbearing strata. Building control officer to approve prior to filling trench. To meet local authorities satisfaction.

Lintels – Unless otherwise stated, lintels to be Catnic combined steel to BS5977 (sizes as recommended by supplier). Provide Min 150mm bearing with padstones to suit. All lintel backs to have min. 30mins. fire resistance and insulated to prevent cold bridging where necessary. Where steel UB's are used they are to be braced together 300mm from each bearing point and at mid span and set to concrete padstones each end. 30Mins. fire protection.

Existing Lintels – Lintels over various doors and window openings that will be taking additional loads from the room in the roof to be exposed to ascertain its suitability.

Make good all works.

Structural Steels – To be connected on site to manufactures details, loading and guage details determined by str.eng. All steels to be encased with plasterboard to achieve min.30mins fire resistance. Where steel beams terminate on a wall plate, 500mm x 100mm x 10mm thk. Bearer plate to be used. Connection of beams to manufacturers details and approved by str. Eng. Grade 8.8 M16 connection bolts to be used.

Damp Proof Courses - DPC in approved felt (BS743 – pitch polymer) and to be 150mm above Grd level. Vertically built into jambs of all external openings and horizontally stepped to all external openings.

Floor Construction – Foundation to be C25 grade concrete, 75mm concrete screed, on vapour barrier,on70mm Kingspan insulation with a 25mm upstand of insulation provided to perimeter edge of floors, on 150mm re-inforced concrete slab on 1200mm guage DPM lapped to wall DPC, sand blinding and minimum 150mm clean compactted hardcore. A lesser standard of insulation may be used should problems be encountered with matching existing floor levels, to be approved by B.C.O. *U-Value: 0.22w/m2k*

Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

Contractor to ensure all new floor levels to match existing.

Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min. 50mm concrete cover over length of drain.

Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia. UPVC pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

Natural & Mechanical Ventilation –

a. Habitable room – Rapid ventilation 1/20th of floor area – for a hinged or pivot window that opens 30Deg or more, or for sliding sash windows. 1/10th of floor area – for a hinged or pivot window that opens less than 30Deg.

background ventilation – 5000mmSq

b. Kitchen – Rapid ventilation – opening window

Background ventilation – 2500mmSq

Extract ventilation rates – 30l/s adjacent to hob or 60l/s elsewhere

Extracts as above required for extended kitchen.

Location of mechanical ventilation in rooms:

a. Cooker hoods should be 650-750mm above the hob surface
b. Mechanical extract fans should be placed as high as possible and preferably less than 400mm below the ceiling. Refer to appendix E. approved document F for further guidance of installation of fans in dwellings.

Extract to Utility Room - To utility room provide mechanical ventilation ducted to external air capable of extracting at a rate of 30 litres per second. Internal doors should be provided with a 10mm gap below the door to aid air circulation. Ventilation provision in accordance with the Domestic ventilation compliance guide. Intermittent extract fans to BS EN 13141-4. All fixed mechanical ventilation systems, where they can be tested and adjusted, shall be commissioned and a commissioning notice given to the Building Control Body.

Ventilation of Suspended Timber Floor - Provide cross-ventilation under floor to outside air by ventilators in at least 2 opposite external walls of the building. Ventilation openings having an opening area of 1500 mm² per metre run of perimeter wall or 500mm² per square metre of floor area whichever gives the greater opening area. All sleeper walls or similar under floor obstructions shall be of honeycombed construction or have similar provision for distribution of ventilation. The under floor space shall be free from debris. Ducts to be sealed using gas proof tap if they pass through a radon barrier.

Notes:

1. All existing foundations, beams and/or lintels accepting additional load are to be exposed if necessary for consideration by the building control officer and upgrade if found necessary.
2. All U-values to comply with current legislation and checked/approved by qualified thermal eng.

Glazing – New external doors and windows to be UPVC and double glazed or to clients instructions. Window frames to be double glazed with safety glazing to all doors, side panels, and all areas extending below 800mm from FFL. New windows to be double glazed with 16mm air gap or 12mm argon filled gap and both finished soft low 'E' coating to achieve *U –value of 1.8 W/Msq.K*.

New doors with more than 50% internal glazed area to have a *U-Value of 2.2 or 3.0* if less than 50%. Max. area of windows, doors and roof lights should not exceed 25% of floor area of extension.

Vertical DPC's to all jambs with patented insulated cavity.

Glazing to pitched roof to be Pilkington Active Blue toughened safety glass.

Safety Glazing - All glazing in critical locations to be toughened or laminated safety glass to BS 6206 and Part N of the current building regulations. i.e. within 1500mm above floor level in doors and side panels within 300mm of door opening and within 800mm above floor level in windows.

New and Replacement Doors - New and replacement doors to achieve a *U-Value of 1.80W/m²K*. Glazed areas to be double glazed with 16mm argon gap and soft low-E glass. Glass to be toughened or laminated safety glass to BS 6206 and Part N of the current Building Regulations.

Smoke Detectors – Supply and fit 10 Year Min. smoke detector to utility areas.

Electrics – Install electrics to clients requirements.

Existing consumer unit and associated cables to be upgraded/replaced if required, to comply with current regs/stds.

All new electrical work is to be designed, installed, inspected and tested in accordance with BS 7671: 2008 or equiv. Std.

These installation works are to be undertaken by a person registered with an electrical self certification scheme, or alternatively by a suitable qualified person, with a certificate of compliance produced by that person to Building Control upon completion of works.

Heating – heating engineer to check suitability of existing system and to ensure that the system if not replaced is suitable to run additional radiators to new constructed areas.

Any new radiators to be fitted with TRV's.

Any replacement boiler to be a condensing boiler with SEDBUCK rating exceeding 86% (Band A or B).

Rainwater Water Drainage – If the rainwater gutter is removed, reposition the 65mm dia. Rainwater down pipe from the rear to the side(West) elevation and connected to 100mm dia. UPVC underground pipework to connect into the existing surface water drain or to a new soakaway average 3 meters cube and positioned min. 5000mm from any building. Where rigid pipes of less than 150mm dia. have less than 300mm cover, or rigid pipes of 150mm or more have less than 600mm of cover, the pipes should be encased in 150mm of concrete. Where flexible pipes are not under a road or have less than 600mm cover, they should be encased in 150,, concrete. Where drainage runs within 1 metre of any foundation and the level of the drain is below the level of the foundation, then the drain trench should be backfilled to the found level of the concrete. Any pipe penetrating through a structure below ground level, should have a lintel above opening and a settlement gap of 50mm corkpack or similar flexible material should be inserted to provide protection to the drain. All gravity drainage should have a 1:40 min. fall requirement to provide self cleaning velocities. All gullies will be back inlet trapped gullies with rodding facilities unless otherwise stated. Inspection chambers of upto 900mm depth may be of UPVC or GRP material or constructed of150mm concrete base slab with benching formed in 1:2 cement mortar to 1:12 gradient trowelled smooth with all channels, branches and connecting bends 225mm, class 'B' engineering brick to BS3921 to thee required invert depth. 150Mm concrete over slab with hanuching forming the cover level complete with frame and lid.

New Cavity walls (External)– outside render to match existing, 100mm Thermalite Shield, 100mm Celotex full fill insulation. 100mm Thermalite Sheild inner skin and 12mm render and skim internally with thistle multi-finish plaster. All new walls to be fully bonded to the existing walls and the cavities to be continuous

Must achieve U-Value 0.28W/sqm K.

Cavity wall carried below dpc and overlapped by 150mm with floor insulation and to meet with roof insulation at the top of the wall. Cavity must not be closed at eaves with blockwork, all cavity closures to be insulated. All external and internal leafs are to be securely retained by approved stainless steel wall ties to BS1243 positioned 450mm apart vertically and 750mm horizontally.

Contractor to ensure all blockwork supporting new steel beams are constructed from solid blocks (If Applicable), contact BCO/Local Authority if in any doubt.

Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abuts the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

Internal stud walls to utility – 50 x 100mm vertical studding at 400mm centres including sole plates and clad room side with 12.5mm plasterboard and set. Noggins to be set at 600mm c/c. Infill voids with 80mm Kingspan Kooltherm K12insulation set between at 400mm c/c. Provide double joists where the stud runs parallel to the floor joists. (If Applicable)

Must achieve U-Value 0.30W/sqm K.