

**SPECIFICATION AND STANDARD NOTES FOR  
PROPOSED CONSTRUCTION OF 2-STOREY  
EXTENSION TO REAR OF PROPERTY AND  
ASSOCIATED WORKS AT 109 ST MARTINS ROAD,  
CAERPHILLY,**

**A** RCHITECTURAL AND **B** UILDING **S** URVEYING

**DRAWING SERVICES**

**5 Ebenezer Terrace  
Blackmill  
Bridgend  
CF35 6EA**

**Tel: 01656 842913  
Mob: 07855 935680**

# **PROPOSED 2-STOREY EXTENSION AND ASSOCIATED WORKS AT 109 ST MARTINS ROAD, CAERPHILLY**

## **STANDARD CONSTRUCTION NOTES AND DETAILS**

### **FOUNDATION**

Cavity walls are to be taken down to 800mm x 300mm concrete strip foundations. All foundations are to be taken down to a minimum of 750mm below external ground level or to an adequate load bearing strata. If necessary, foundations may have to be set deeper to achieve load-bearing strata. All foundations are to be taken down below invert level of any existing drain runs. Foundations on boundary are to be 500mm x 500mm and are to be within boundary of property referred to.

### **SUB-STRUCTURE**

Cavity walls below damp proof course level are to be built of 100mm dense concrete block external skin to within 225mm of DPC level and 3 courses of Class B semi-engineering brickwork (depth of brickwork dependent on ground levels). Cavity is to be filled with lean mix concrete to within 150mm of DPC level. Provide 225mm minimum dense concrete block internal skin (subject to width of internal skin above DPC level). DPC to cavity and solid partition walls to be at least 150mm above outside ground levels.

### **CAVITY WALLS**

**New external walls are to attain a “U Value” of at least 0.18 w/m<sup>2</sup>k, where practicable, by use of 100mm dense concrete block outer skin finished in smooth render to match existing with 150mm wide cavity with 100mm thick Celotex CG5000 rigid PIR insulation board fixed to face of inner skin, stainless steel retention wall ties at 450mm x 900mm staggered centres, 50mm residual cavity and with 100mm thick dense concrete blockwork inner skin finished in render and set gypsum plaster**

I.G. Lintels type L1 / S with tray DPC over (or equivalent) are to be used above all new openings. At eaves and verge levels use a minimum 9mm ‘supalux’ board bedded in cement mortar to cover cavity to form barrier. Where internal masonry ground floor walls abut external cavity walls, tooth and bond new work to existing or use S.S. profiles with vertical dpc’s. Provide insulated closures to all new jambs.

### **WALL TIES**

Wall ties to be positioned at 750mm centres horizontally and 450mm centres vertically and doubled up at all door and window openings with all ties and cavities kept clean at all times and free of cement droppings.

## SUB-FLOOR

Lay 65mm sand and cement screed on 100mm concrete slab on 1200 gauge polythene DPM on 25mm blinding on 150mm compacted and graded hardcore. Note: Slab to be reinforced with steel mesh in accordance with NHBC guidelines (see note 6 if depth of fill exceeds 600mm). **New solid ground floors are to attain a minimum “U Value” of 0.15 w/m<sup>2</sup>k by use of 100mm “GA 4070 Celotex” boarding as insulation to new floor areas (rated “U Value 0.11 w/m<sup>2</sup>k) Provide polythene membrane above and below insulation boards and provide insulation upstands to floor perimeter to meet a minimum R – value of 0.75m<sup>2</sup>k/w by use of “Celotex TB 4020” of upstand thickness equal to total of insulation board and screed thickness. Allow silicone expansion gap of 10mm between floors.**

## PITCHED ROOF CONSTRUCTION TO EXTENSION

Pitched roof to be tiles to match existing fixed to 28 x 25mm treated S.W. battens on un-tearable roofing felt to B.S. 747 on prefabricated clear span stress-graded TDA trusses to CP 112 set at 600mm centres. Provide 100mm x 25mm softwood timbers as binders secured across trusses at apex and 1/3<sup>rd</sup> points. Wind bracing to be provided by 100mm x 25mm softwood timbers secured to underside of rafters from eaves to ridge at 45 degrees – all as per BS 5268 Part 3. Trusses to be secured to 100mm x 50mm wallplate by 100mm galvanized roundhead nails or galvanized truss clips. Lateral restraint to be provided by 30mm x 5mm mild steel straps secured to underside of rafters with 75mm x 50mm noggins between and built into perimeter walls. Provide wallplate straps at 2.0m centres. Ceiling to be 12.5mm “Duplex” plasterboard with joints filled with scrim finish and finished in 6mm skim. Roof ventilation is to be provided by 25mm soffit vent strip with a fly proof screen. Provide a minimum of 50mm clear gap between insulation and roofing felt to assist through ventilation. **New pitched roof areas are to achieve U-value of 0.15 w/m<sup>2</sup>k by use of 100mm “Rockwool” insulation laid between ceiling joists with 170mm “Rockwool” insulation laid on top of and across ceiling joists.**

**Design and calculations for roof trusses are to be provided to and approved by Local Authority Building Control Section prior to commencement of work on site.**

## FIRST FLOOR CONSTRUCTION

Provide 200mm x 50mm floor joists at 400mm centres and fit weyroc floor boards with adequate strutting and 150mm thick insulation to floor void.

## STORM DRAINAGE

100mm half round UPVC R.W. gutter is to be fixed to fascia and connected via 68mm diameter UPVC down pipe to discharge as per existing.

## FOUL DRAINAGE

Wash hand basins are to be connected via 32mm diameter waste pipe to discharge into 100mm diameter soil and vent pipe, stub stack. Showers/baths are to be connected via 38mm diameter waste pipes and to be dispersed as above. All sanitary ware wastes are to have 75mm deep seal traps. Water closets are to be connected via 100mm diameter pipes discharging via 100mm diameter soil and vent or stub stacks. Soil and vent pipe, stub stacks and back inlet gullies are to be connected via 100mm diameter UPVC below ground quality drain pipe to inspection

chamber. All internal soil and vent pipes are to be encased in plasterboard and skim and are to be well insulated and are to be fitted with a mesh balloon terminal at least 900mm above first floor window head level. Air admittance valves (durgo valve or similar) are to be positioned above cistern level of appliances connected thereto.

### WINDOWS/DOORS

Windows and glazed doors are to be double-glazed white UPVC and windows are to have opening lights of area not less than 5% of respective floor area. Part of opening light is to be a minimum of 1.75m above respective floor level. Fit 4,000mm<sup>2</sup> adjustable ventilators to heads of all new windows to kitchen and 8,000mm<sup>2</sup> to all other rooms. Low-E,  $E_n = 0.05$ , softcoat glass is to be fitted to all windows and glazed doors with a minimum 16mm air-filled gap (to achieve "U Value" of a minimum of 1.8 w/m<sup>2</sup>k and g – value of 0.65).

### WINDOWS / MEANS OF ESCAPE

All inner windows on plan /elevations to have an unobstructed opening of 850mm high x 500mm wide minimum with a maximum cill height of 1100mm to provide adequate alternative means of escape in the case of fire.

### ELECTRICAL INSTALLATION

The electrical alteration and installation is to be undertaken by a competent, qualified person and must comply in all aspects to current I.E.E. Regulations. The electrical contractor must liaise with the electricity supply company regarding electrical loadings, the nature and location of supply and its suitability for installation, earthing arrangements and location of meters. No conduit or wiring shall be exposed and all wires in the roof space are to be clipped to the top of ceiling joists and not covered with roof insulation. No conduit or wiring is to be placed in the cavities of external walls.

### AUTOMATIC SMOKE DETECTORS

Smoke detectors are to be connected direct to mains supply and to have battery back-up and are to be placed in appropriate positions, audible from habitable rooms, within 7 metres of high risk rooms (kitchen) and 3 metres from bedrooms. Detectors are to be interlinked.

The smoke alarms should be mains operated and conform to **BS 5839, Part 6: 2013** and be positioned on each level. They should be positioned in circulation areas and within 7.5m of the door to a habitable room.

## **GENERAL NOTES**

1. Cavity trays, lead flashings and soakers, etc. are to be fitted at all abutments between new and existing work.
2. If any new extension or building work affects adjoining property, written consent is to be obtained from neighbours to comply with the Party Wall Act.
3. Any damage or disturbance to adjoining properties to be made and watertight on completion.
4. All new glazing is to comply with Document "N."
5. Contractor is to check all site dimensions before commencement of construction works
6. Contractor is to leave site clean and tidy on completion of all works
7. Contractor is to liaise with Local Authority and Utilities to ensure that all their directions and/or instructions are fully implemented.
8. All works are to be undertaken within boundaries of site and adjacent owners' consent must be obtained if entry into adjoining property is necessary to effect any works.
9. General – All works to be carried out in accordance with the current Building Regulations and Approved Documents and any subsequent amendments
10. See structural calculations for steel beams