## SPECIFICATION FOR 12 ST. JOHNS STREET, NELSON, CAERPHILLY CF46 6JD

## **FOUNDATIONS**

The existing house foundations are on a raft foundations. New extension foundations to be on a raft foundation and tied into existing foundations. The foundations and tying in details are to be designed by a Structural Engineer.

# WALL CONSTRUCTION GARAGE WALLS

Face brick outer skin to match existing 125mm cavity 100mm concrete block inner skin.

## FIRST FLOOR WALLS

Face brick outer skin to match existing 125mm wide cavity partially filled with 75mm Celotex Double R CW2000 rigid batts, fixed to external face of inner leaf with insulation retaining clips fixed to stainless steel double triangle wall ties @ 750mm horizontal / 450mm vertical centres. Increase wall tie centres to 225mm vertically at structural openings. Internal leaf of wall to be 100mm thick dense concrete block. 150mm G.L. Damcor insulated d.p.c. to be provided vertically to close all openings in cavity walls. Lintels to be provided over openings with a minimum 150mm end bearing. Catnic, I.G. or precast concrete type. Tooth out existing brickwork and tooth bond new. Where cavity walls abut existing, carefully provide vertical saw cuts in existing walls. 50mm apart and break out masonry to provide a clear continuous cavity. Install Furfix or similar stainless steel verticalwall plate system bolted to existing walls to bond. Form 13mm wide vertical movement joint filled with Flexcell joint filler and seal with 19mmdeep polysulphide cement sealant.

## SUSPENDED FLOOR CONSTRUCTION

20mm flooring on 47mm x 195mm C24 grade floor joists spaced at 400mm cts. Floor joists to be built into inner skin of cavity wall and off heavy duty joist hangers of 47mm x 195mm timber bearer bolted to existing wall at maximum 2.0m cts. 12.5mm plasterboard and skim finish. Provide 150mm Rockwool insulation between floor joists. Provide solid strutting at mid span.

## **ROOFING**

Concrete interlocking tiles to match existing on 25mm x 50mm roofing battens on Tyvek breathable membrane on pre-fabricated roof trusses @ 600mm cts. Designed and installed to manufactures design and

calculations including all fixings and bracing. Roof trusses to be fixed to 50mm x 100mm wall plate bolted to walls at maximum 2.0m cts. Provided lateral restraint straps at maximum 2.0m cts. Provide a 50mm air gap with fly proof screen behind fascia boards.

## **WINDOWS**

UPVc double glazed units 16mm air gap and a soft low E coating to match existing, fitted with controllable vents not less than 8000mm sq. double glazed, lockable sashes, all sides sealed with mastic and securely fixed to reveals. Openable ventilation not less than 1/20th of Floor area of room. All new glazing to comply with BS 6206 requirement N1 Safety Glazing. Window to new bedroom to have an openable area of 0.33m2 and be a minimum of 450mm wide and 450mm high with the bottom of the openable area a maximum of 1100mm above floor level.

## RAINWATER FITTINGS

Adapt existing drainage to suit. Osma or other approved UPVc 112mm gutter with stop ends, angles, and outlets etc., including 65mm downpipes with all fittings secured to walls, all as manufacturers specification.

#### **PLUMBING**

W.h.b to have 40mm dia. waste pipes, with 75mm deep seat trap and rodding access, complete with all fittings and fixed to manufacturer's instructions. Sanitary ware all to client's requirements.

## **CENTRAL HEATING**

Adapt existing Central Heating to suit. Designed by Gas Safe or other qualified engineer to fully comply with all current regulations and clients' requirements. Provide a Gas Safe certificate upon completion.

## DRAINAGE

110mm dia. UPVc underground pipe laid as manufacturer's instructions, encased in concrete under buildings, gully's with roddable access and bedded in concrete. Osma UPVc manholes or other approved, with cast iron manhole cover and frame. Metal cage fitted on top of soil vent pipes for rodent control. All to comply with current Building Regulations (Part H). A 'Building Over Sewer' agreement with Dwr Cymru Welsh Water will be required prior to work.

## **ELECTRICAL INSTALLATION**

Provide a smoke alarm in the circulation area on the ground and first floor wired to the mains electric and have a battery backup. Provide mechanical ventilation capable of extracting at a rate of 15L/sec in the first floor en-suite. All works to comply with I.I.E. current regulations and clients' requirements and provide an electrical installation and test certificate upon completion.

## **GENERAL**

All works to comply with current Building Regulations and any associated legislation, codes of practice and B.S. specifications. No works to be undertaken which affects adjoining property without the consent of the owner. The Party Wall Act etc. 1996 effective from the 1st July 1997, requires that you must inform all affected if building on the boundary line. 'U' values: wall construction  $-0.21 \text{ w/m}_2\text{k.}$ , roof  $-0.15 \text{ w/m}_2\text{k.}$ , floor  $-0.18 \text{ w/m}_2\text{k.}$ , windows  $-1.6 \text{ w/m}_2\text{k.}$