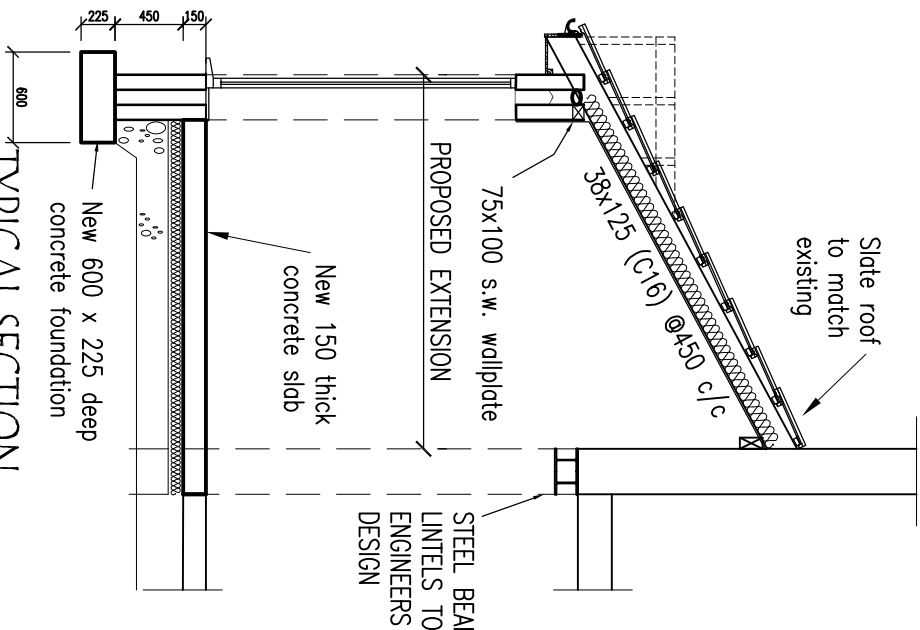




TYPICAL SECTION

THROUGH PROPOSED EXTENSION

CONSERVATION OF FUEL AND POWER:

U VALUES FOR NEW WORKS
External walls 0.21W/m²/°C
Ground Floor Slab 0.22W/m²/°C
Windows and doors 1.6W/m²/°C
Glazed doors 1.8W/m²/°C
Ceiling/New pitched roof 0.15W/m²/°C

FOUNDATIONS TO CAVITY WALLS:

600mm wide mass concrete strip foundations to new external cavity walls, minimum depth of 300mm deep, taken down to suitable natural undisturbed ground which is to be approved by Local Authority Building Inspector. Final depth of foundations to be determined on site at time of excavation. Contractor to report to building inspector if the excavation reveals any variation to assumed good ground conditions immediately, so that alternative foundation construction can be agreed and incorporated on site. Foundations to be taken down to a depth so as to avoid any loads being imposed onto adjacent drainage.

VENTILATION:

Habitable rooms to have an openable area of no less than 1/20th of floor area and trickle vents providing 5000mm² equivalent area of background ventilation.
Non-habitable rooms to have an openable area of no less than 1/20th of floor area and trickle vents providing 2500mm² equivalent area of background ventilation.

HEATING:

Suitably sized double radiator to be installed into new extension and run off existing combination boiler.

Installation Engineer to provide all commissioning certification and instructions to client upon completion of installation.

CONSEQUENTIAL IMPROVEMENTS:

Upgrade existing main roof loft insulation to meet with current building regs (part L1)
Overall thickness of fibreglas insulation quilting to be 300mm to achieve a U value of 0.16W/m²/°C

WALL CONNECTIONS:

Where new cavity walls abut existing walls 'Firfix' wall starters to be installed to manufacturers instructions

ELECTRICS:

All electrical installations to meet with Part P (Electrical Safety) and should be designed installed inspected and tested in accordance with BS7671 by qualified electrician competent to do so.

Council to be notified prior to covering up of cables or fittings so that an inspection may be made while still visible, and must be given opportunity to witness inspection and testing.

Electrical Installation Certificate must be provided to Council prior to completion along with sufficient information to the client for future maintenance.

GROUND FLOOR CONSTRUCTION:

150mm deep concrete (grade C30) with A192 anti cracking mesh laid in top on 1200gauge Visqueen d.p.m. on Celotex TB4000 insulation batts providing a U-value of 0.22 W/m²K, all on well consolidated and compacted type 1 hardcore in layers no thicker than 150mm.

DRAINAGE:

All new storm water to discharge into existing combined drain via new gully.
Where drains run below new building works then walls and foundations to be bridged by precast concrete lintels. All to satisfy Part H3-rainwater drainage requirements.

GLAZING:

Windows and external doors:
New windows and glazed areas o be double glazed.
1K low emissivity glass to BS6262 to be used.
All glazing below 800mm (1500mm to doors) to be laminated or toughened glass.

CAVITY WALL CONSTRUCTION:

Tyrolen render finish on 100mm medium dense blockwork to all elevations external skin, with 50mm clear cavity with 85mm thick Celotex CG5000 insulation batts fitted to 100mm Thermaite insulation blockwork inner skin. All to achieve a U value of 0.21W/m²/°C
Below DPC – Cavity filled with lean concrete mix.

ROOF CONSTRUCTION:

Roof slates to match existing on s.w.
battens on untreated roofing felt on vaulted 50x150 rafters (grade C18) @ 450mm c/c fixed to 100x75 sw wall plates. Provide 100mm celotex insulation batts between rafters whilst maintaining a minimum 25mm air gap for cross ventilation.

CELLING CONSTRUCTION:

3mm plaster skim finish on 22mm plasterboard on vaulted roof joists
50x150(grade c18), all on 75x100mm s.w. wallplates securely fixed to wall.

STEEL WORK SPECIFICATION

All steelwork to be grade 43 unless noted otherwise.

Steelwork to be workshop blast cleaned (grade S2½) and to receive 2 No of zinc based primer (shop applied).
Damaged paintwork caused in transit/handling should be touched up on site.

All bolts to be grade 8.8 unless noted otherwise and welds to be minimum 6mm fillet welds.

STRUCTURAL ENGINEERS & BUILDING CONSULTANTS 18 Rosslyn Road, Newport, South Wales NP19 8PD Office: (01633) 668308 Mobile: 07845 416086 Email: carrreg@virginmedia.com				Project Client Mr Wayne Edwards		Drawing Title SECTION AND SPECIFICATIONS		Revision REV.A REV.B REV.C		Description		Date		Scale @ A3 1:50 @ A3		Drawn By WJS	
Project Title 200 CHRISTCHURCH ROAD NEWPORT GWENT												Date JAN 2025		Checked			
												Job No. 25-001		Drawing No. 05		Rev.No.	