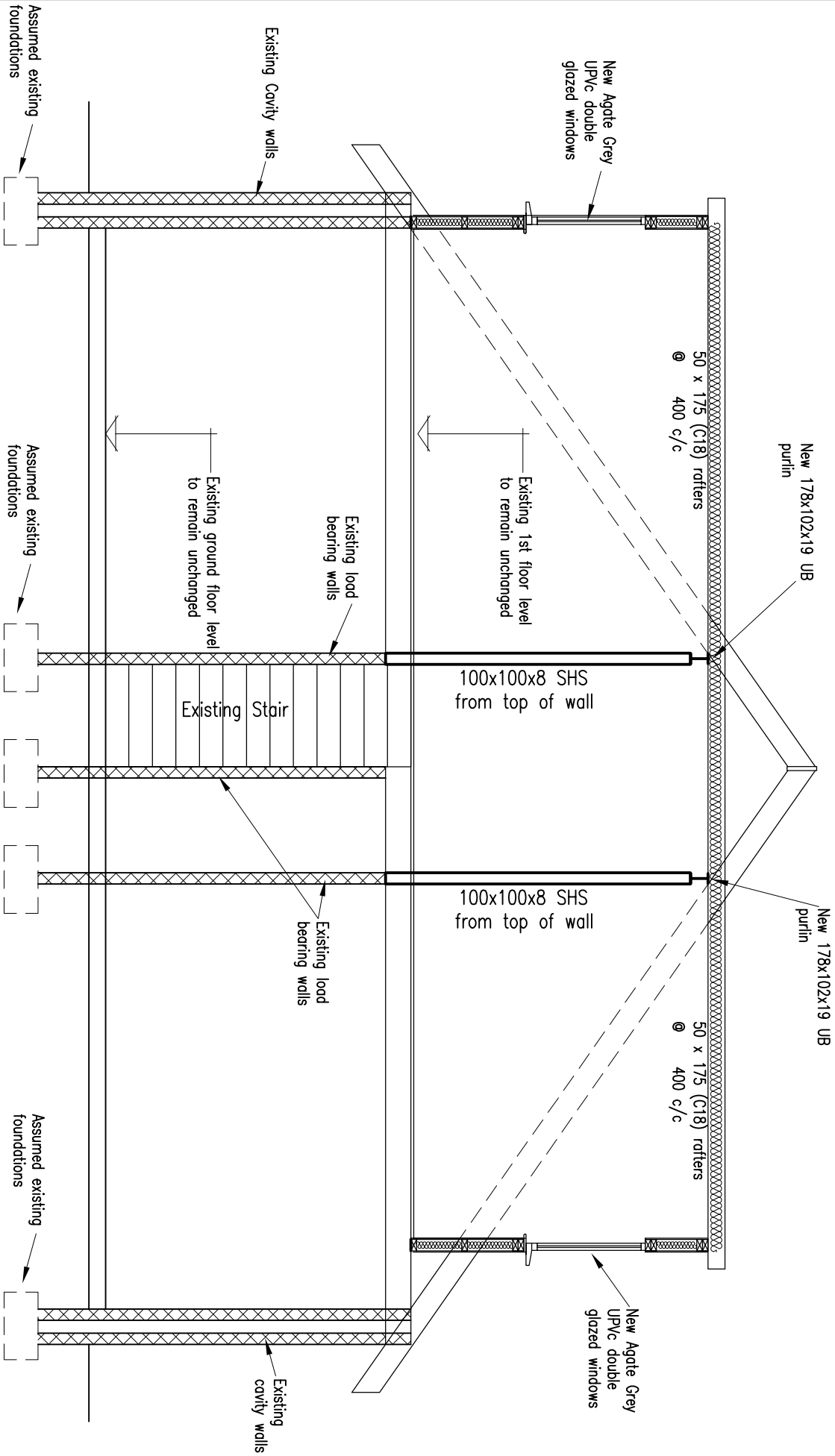




TYPICAL CROSS SECTION

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.
Mechanical ventilation to be fitted to new bathroom and to be electrically operated with a 10 minute over-run feature.

HEATING:

Suitably sized double radiators to be installed into all first floor rooms and run off existing combination boiler.
Installation Engineer to provide all commissioning certification and instructions to client upon completion of installation.

GLAZING:

Windows and external doors:
New windows and glazed areas o be double glazed.
1/2 low emissivity glass to BS6262 to be used.
All glazing units 1st Floor to have minimum 450mm x 450mm opening as means of escape, and cill heights to be no greater than 1100mm from finished first floor levels.

GLAZING:

Replace ALL windows to ground floor and first floor and external doors with new Agate Grey UPVC double glazed units.
1/2 low emissivity glass to BS6262 to be used. All glazing below 800mm (1500mm to doors) to be laminated or toughened glass.

STEELWORK SPECIFICATION:

All steelwork to be grade 43 unless noted otherwise.
Steelwork to be workshop blast cleaned (grade S2 1/2) 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.

DORMER ROOF CONSTRUCTION:

GRP covering on 18mm marine ply on s.w. firing pieces fixed to 50x175 rafters (grade C18) fixed to 100x75 sw wall plate to new dormer front wall one end and to s.w wallplate attached to new steel purlins the other end. Provide 100mm Celotex insulation batts laid between joists.

TIMBER FRAMED WALLS TO DORMER:

(All to achieve a U-Value of 0.21 W/m2K)
Vertically hung concrete tiles to match existing fixed to 38x25 tanalised timber battens on breathable vapour barrier on 15mm exterior quality ply sheathing all on 125x50 grade C16 timber studs @ 450mm c/c. Provide 100mm thick non-compressible insulation batts between studs and 12.5mm plasterboard and skim internally.

CONSEQUENTIAL IMPROVEMENTS:

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

DRAINAGE:

All new storm water from dormer roofs to discharge into existing combined drain via existing gutters and gulleys.
New first floor bathroom waste to discharge into existing SYP for bathroom below

SMOKE DETECTORS:

New electrically operated smoke detectors to be fitted to top of stair well at first floor as well as hallway at ground floor.

DORMER WALLS CONSTRUCTION:

Vertically hung composite cladding externally fixed to 50x25 sw battens on untearable breathable felt on 50x125 timber studs. Provide 2 no rows of timber nogins between studs. Provide 100mm Celotex Insulation batts laid between studs whilst maintaining a minimum 25mm continuous air gap for cross ventilation.
12.5mm thick plaster board with a 3mm plaster skim finish internally

CARRREG DESIGN STRUCTURAL ENGINEERS & BUILDING CONSULTANTS		Project Client		Drawing Title		Revision		Date		Scale @ A3 1:50 @ A3		Drawn By WJS	
18 Rosslyn Road, Newport, South Wales NP19 8PD Office: (01633) 668308 Mobile: 07845 416086 Email: carrreg@virginmedia.com		Project Title		TYPICAL CROSS SECTION & SPECIFICATION		NOTES ADDED/AMENDED		18/06/25		Date MAY 2025		Checked	
5 MILBOURNE CLOSE MERTHYR TYDFIL						REV.A REV.B REV.C				Job No. 25-048		Drawing No. 15	
												Rev.No. A	