

Building Regulations: (for TWBC approval)

All timber to be C24 grade including non-structural.

Roof and ceilings:

125mm x 50mm common and jack rafters at 400mm centres.

175mm x 25mm ridge board.

175mm x 38mm lay boards supporting jack rafters fixed across existing rafters.

100mm x 50mm ties to alternate rafters as specified for new roof i.e., jack rafters.

200mm x 50mm ceiling joists bolted to feet of rafters with M12 threaded studs and connectors, joists at 400mm centres.

100mm x 50 mm ties at 800mm centres spanning a minimum of 3 ceiling joists, with solid packing under ties between joists, at hip end.

Roof anchored to walls at roof plate level with 30mm x 5mm x 1000mm galvanised straps at 1200mm centres.

100mm x 50mm roof plate bedded in mortar mounted on internal block wall.

Plain concrete roof tiles on 25mm x 38mm tanalised battens over non-tearing breathable sarking felt (Tyvek or equivalent).

Lead valley to be formed in accordance with the recommendations laid out in the lead sheet development associations guide to good practices handbook to BS EN 12588

400mm fibre glass quilt insulation between and over ceiling joists.

12.5mm foil backed plasterboard ceiling throughout, plaster finished.

Floor:

200mm x 50mm floor joists at 400mm centres with solid blocking at mid span, joists parallel to external wall to be tied to wall with 30mm x 5mm x 900mm straps spanning 3 floor joists with solid packing under straps between joists, straps at 900mm centres.

18mm flooring grade t & g plywood flooring.

Stud walls:

Stud partition out of 100mm x 50mm studs at 400mm centres, clad in 12.5mm plasterboard containing fibreglass sound proofing.

Brick and blockwork:

New structure tied to existing with Catnic s/steel stronghold wall starter kit and wall ties with continuous cavities.

100mm facing brickwork with 80mm cavity fully insulated with 80mm rockwool cavity bats in alignment with existing cavities.

Inner skin of 100mm Celcon solar blocks, finished internally with 13mm lightweight plaster.

Mortar mixes: Bricks 4.5 to 1 Blocks 6 to 1.

S/steel butterfly type wall ties spaced 750mm horizontally and 450mm vertically and set staggered, around openings wall ties to be installed at a maximum of 225mm vertical centres to BS1243.

Catnic heavy-duty box lintel BHD 1003300 to enlarge opening with minimum end bearing of 150mm.

Catnic standard gauge CG70/100 2300 lintel for window opening with minimum end bearing of 150mm.

Bathroom:

Velux window to be installed for daylight and ventilation

550mm x 780mm GGU (CK02)

2600²mm trickle ventilation area through vent flap.

Additional external opening 0.42²M.

Extract fan to be installed capable of extracting a minimum of 15 litres per second and of being operated intermittently.

Waste pipes, 40mm diameter from bath or shower and 32mm diameter from basins, with deep seal traps. 110mm Soil pipe to be run internally to Tee previously installed in existing soil down service, an air admittance valve will be fitted next to the concealed WC cistern in new bathroom.

Window:

The window will be fully part L compliant, including a fire escape window, and have a U-value (thermal insulation) of $1.3\text{W/m}^2\text{K}$, it will also match the existing windows to the rear of the premises in all respects. Trickle ventilation and lockable handles will also be fitted. The window will be kitemark approved.

Size: (H) 1040mm. (W) 1770mm. Glazing thickness 28mm, low E, argon filled and warm edge spacer.

Electrical installation:

The electrical installation will fully comply with the latest edition of the regulations for the Electrical Equipment of Buildings BS7671 in all respects.

The installation will be designed and installed by a competent and qualified electrician.

LED lighting to be used for energy efficiency, any equipment to be used within the bathroom shall comply with part 7, section 701 of the regulations.

Central heating system and plumbing:

The central heating and plumbing systems will be designed and installed by a competent and qualified heating and plumbing engineer and will comply with the latest regulations and byelaws. The radiators shall operate via thermostatic radiator valves for efficient zone control.