

Flat roof (warm roof) construction to be GRP, rubber, zinc or bitumenous based felt on 150mm Celotex PIR insulation board (to achieve 0.15W/m2K or better) on vapour control layer on 200 x 50mm C24 joists at 400mm centres with tapered firrings and a 19mm exterior grade plywood deck. 12mm dia (min) stone chippings to be bonded to the waterproofing in a gritting compound, not bitumen.

Ceiling joists: 150 x 50mm (C24) at 400 ctrs
To be insulated with 300mm of Rockwool Rollbatts (or similar) to achieve no worse than 0.15 W/m2K and be contiguous with wall insulation at eaves (whilst maintaining cross-flow ventilation).

Vaulted ceilings, 120mm Celotex PIR insulation board between rafters (175 x 50mm C24 at 400ctrs from ridge to plate) with 50mm air gap (min) above and 50mm Celotex PIR insulation board across underside of rafters providing a minimum U-value of 0.15W/m2K.

Rafters & ceiling joists to have a 12mm dia bolt with a 51mm dia toothed plate connector at all intersections

Loft partitions to be 97 x 47mm (C24) loadbearing framing faced both sides with 12mm plywood. Min 80mm thick Celotex PIR insulation board between studs, with 70mm Celotex insulation board across studs. Studding at 400mm centres.

Non-loadbearing timber infill to be 97 x 47mm (C24) framing faced both sides with 12mm (10kg/m2 min) plasterboard. Min 100mm thick Rockwool Flexi Acoustic partition slab infill to provide sound insulation. Studding at 400mm centres.

New staircase to loft floor:
Angle - 42 degrees (max)
Rise - 220mm max
Going - 220mm min
Headroom - 2000mm minimum
Handrail - 900mm high minimum

No part of stairs to have any opening that would allow the passage of a sphere 100mm diameter. Minimum part of the tapered tread will be at least 50mm

Suspended timber floor joists: 200 x 50mm (C24) at 400 ctrs with min 100mm Rockwool Flexi Acoustic partition slab infill between joists.

Extractor fan to be fitted to Ensuite to provide 15l/s extraction rate to external air with a 15 minute over run. Fans to be installed a maximum of 400mm below ceiling level and have a noise level less than 45dB. Door to be undercut by 10mm to provide adequate ventilation. Fan to be tested, commissioned and a certificate notifying of such no later than 30 days after completion.

Dormer cheeks to be constructed of hanging tiles to match roof colour on battens and felt on 47 x 140mm (C24) framing lined internally with 12mm foil backed plasterboard and filled with 100mm Celotex PIR insulation board, with an additional 50mm Celotex PIR insulation board on internal faces. Dormer cheek to be faced with 19mm exterior grade plywood beneath finishings with noncombustible material such as 'Supalux' (or similar) to provide 30 minute fire resistance.

Walls to be blockwork, 100mm cavity with 90mm Thermaclass Cavity Wall 21 and 100mm 'Thermalite Shield' block providing a U-value of 0.18W/m2K or better. Contractor to ensure all scaffolding is securely attached when working at height. Personal Protective Equipment to be provided to all people at risk from this activity to protect against falling objects.

3.6N blocks to be used for all walls up to two-storey high. For walls in excess of two-storeys, 7N blocks to be used at ground floor level.

Ties: 750 horizontal, 450 vertical, and double at all reveals. Reveals to have Thermabate Insulated Cavity Closers to prevent cold bridging and provide vertical dpc. All cavities to be clear 225mm below dpc level and closed at roof level. All brickwork to match existing.

1.2m galvanised steel straps to be provided at not greater than 2000mm centres, having a cross section of 30 x 5mm.

Contractor to ensure all scaffolding is securely attached when working at height. All Personal Protective Equipment to be provided to all people at risk from this activity to protect against falling objects.

All beams to have 150mm (min) end bearings on C30 concrete padstones, painted with 2 coats of red oxide and covered with 12.5mm GYPROC FIRELINE plasterboard to achieve 30 minutes fire resistance, using batten fixings where necessary. Contractor to provide all lifting equipment, temporary support and Personal Protective Equipment for all people impacted by the installation of heavy steel beams, particularly when working at height.

All ceilings to be 12mm foil backed plasterboard.

All lintels over external openings to be insulated to prevent cold bridging.

Lintels to be heaviest manufactured gauge (i.e. extra heavy duty) unless shown otherwise.

Bolted triple joists for trimmers, and under studding.

All structural timber to be C24.

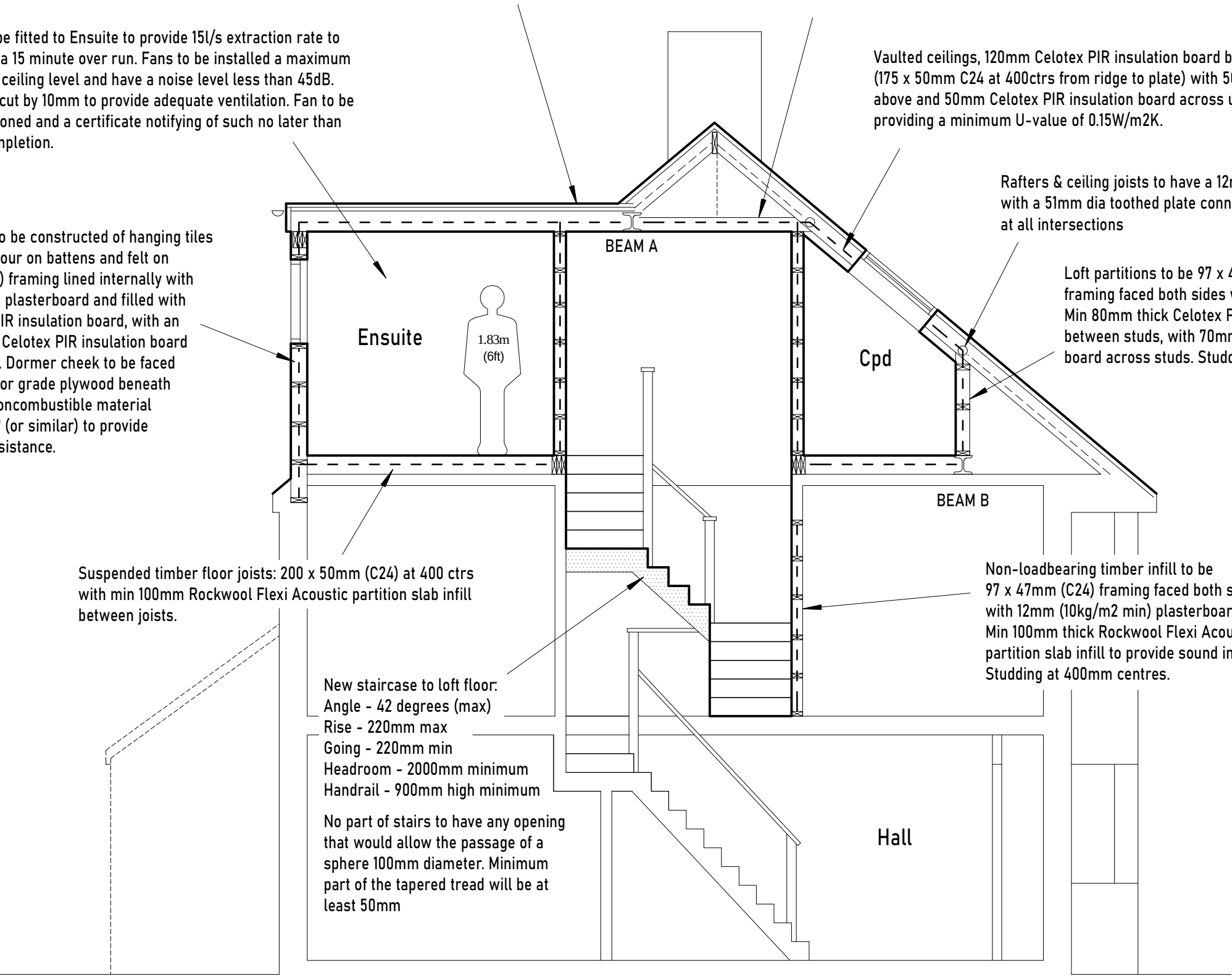
Code 4 lead flashings to be used throughout.

Floor joists with spans in excess of 2.5m to have solid or herringbone strutting.

Cavity trays at all abutments.

Cavity infill to finish at least 225mm below the level of the lowest dpc.

No development to overhang the boundary (incl. foundations).



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