

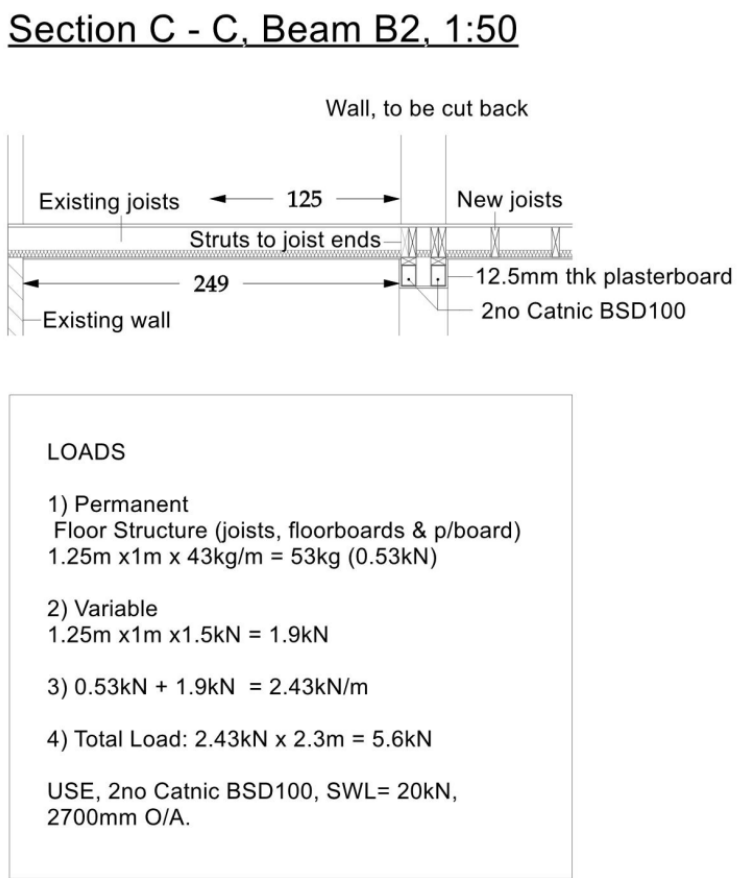
Window/ Door/ Lintel Schedule			
CODE	TYPE/ SIZE (mm)	LINTEL	GLAZING
A1	Double doors to client spec 2000(w) x 2100(h)	Catnic CG 90/100 Standard Duty Length: 2400 O/A. SWL = 22kN	To be low e sealed double glazed units with a min U-value of 1.6 W/m ² K (eg. Pilkington K Glass or similar). Centre pane value of 1.2 W/m sq K, or energy rating band C (min). Doors >60% glazed to Band E or U value of 1.8 W/m sq K. Glazing to doors & windows to be Class C to BS6206. Safe breakage to BS EN 12600/BS6202.
A2	Window: side opening casement 1800(w) x 1100(h). SH: 1100mm	Catnic CH 90/100 Heavy Duty Length: 2100 O/A. SWL = 48kN	Opening for bi-fold doors to be 2.1m nominal height. Style and final arrangement of doors to client's specification on site.
A3	Window: side opening casement Size etc as stated on plans	Catnic CH 90/100 Standard Duty Length: 900 O/A. SWL = 32kN	
A4	Window: side opening casement 1600(w) x 1200(h). Window height & sill height to match existing	Catnic CG 90/100 Standard Duty Length: 1650 - 1800 O/A. SWL = 18kN	LINTELS All lintels to have 150mm bearing at each end. Size lintel accordingly.
Window sills and heads should match up across the facades. The sill heights and window heights above should be treated as advisory and measurements should be retaken on site at the relevant stage of works.			INTERNAL DOORS Internal doors to have a min. opening leaf of 750mm

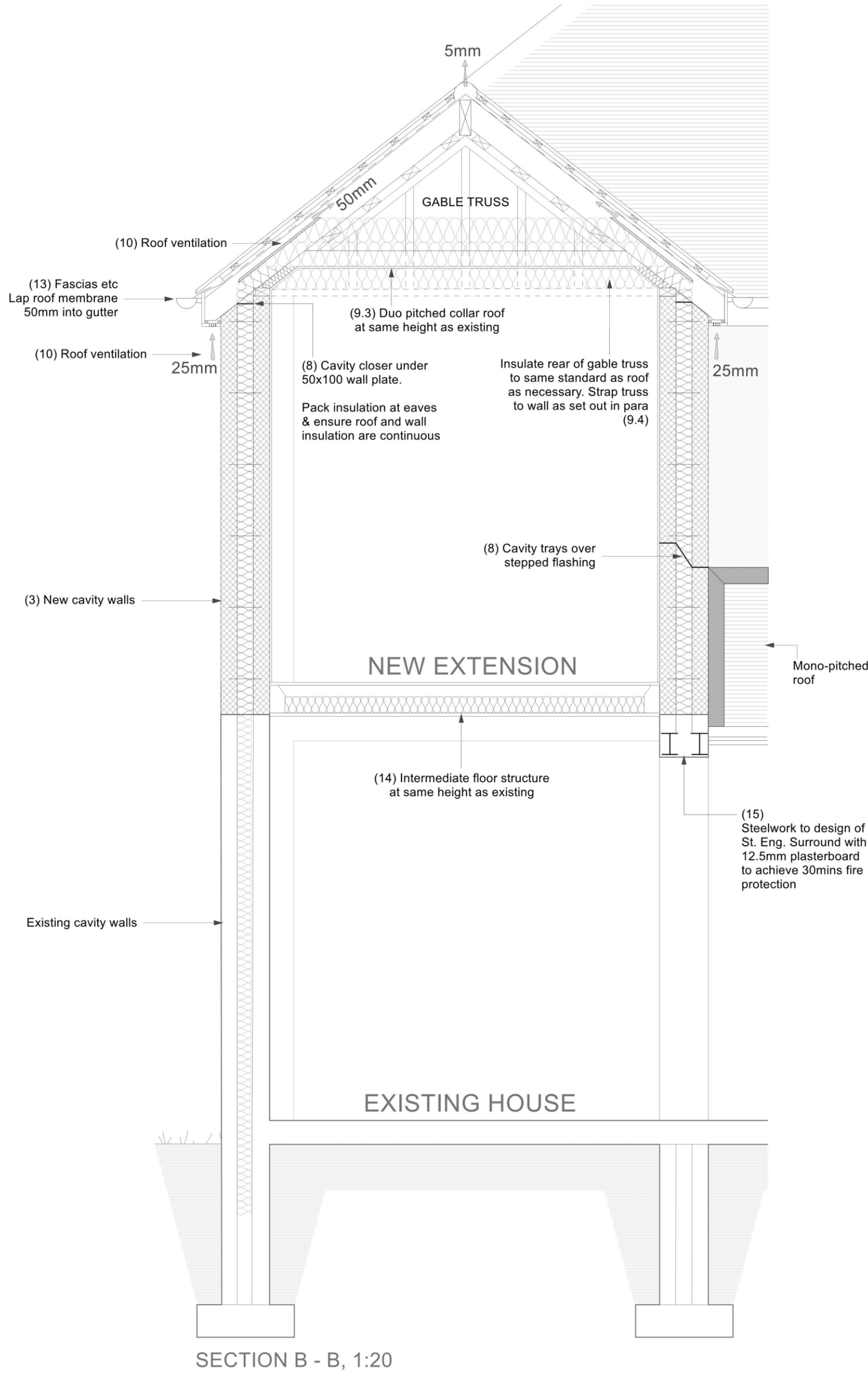
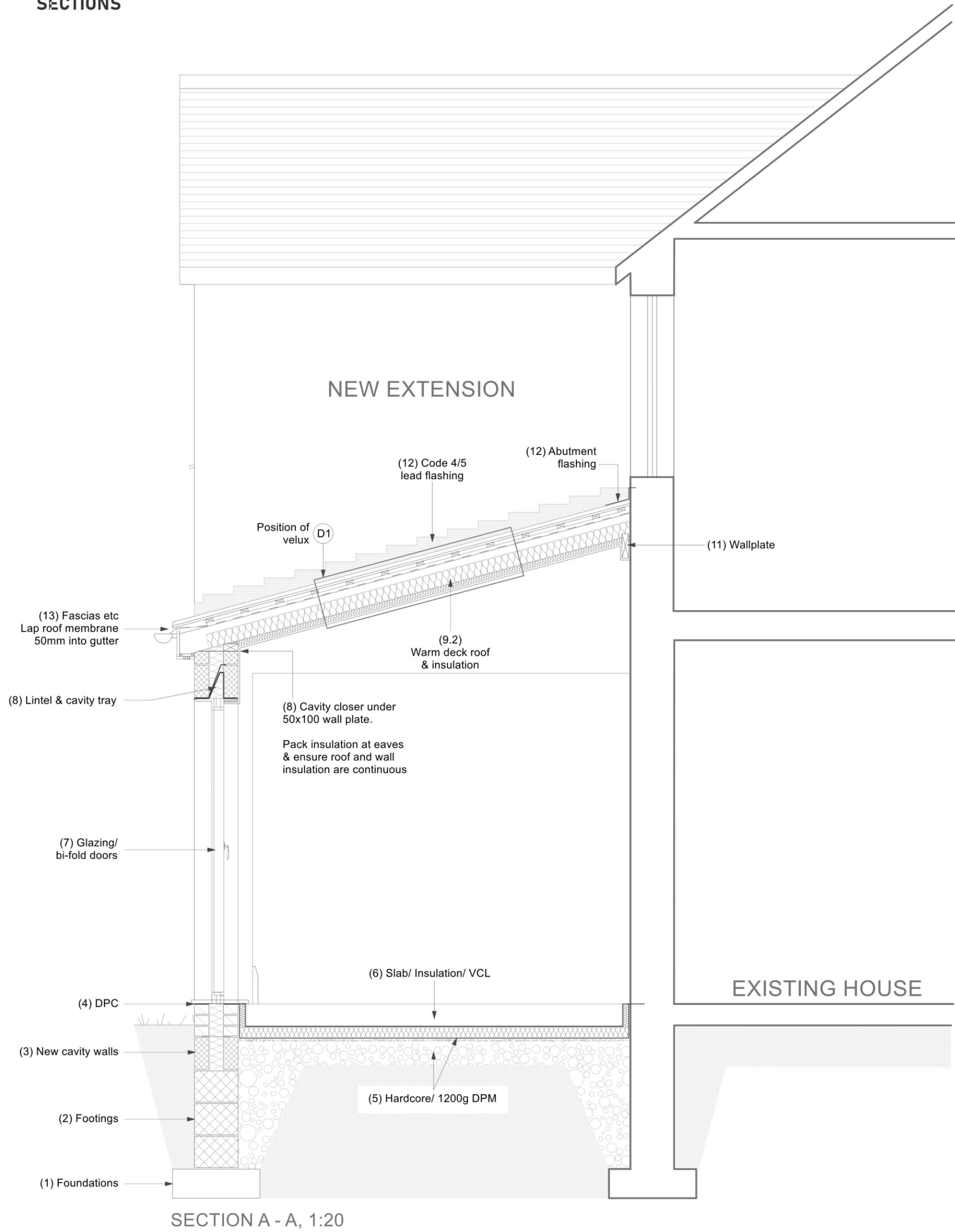
ALL TIMBER TO BE KILN DRIED TREATED - C24 SW IN ROOF SPACES; C16 SW ELSEWHERE UNLESS OTHERWISE STATED.

DETAILS RELATING TO ANY STEELWORK TO THE DESIGN OF CONSULTING STRUCTURAL ENGINEER. TO BE SUBMITTED TO THE SATISFACTION OF THE BCO BEFORE WORK BEGINS ON SITE. FOUNDATION DEPTHS TO THE SATISFACTION OF THE BCO.

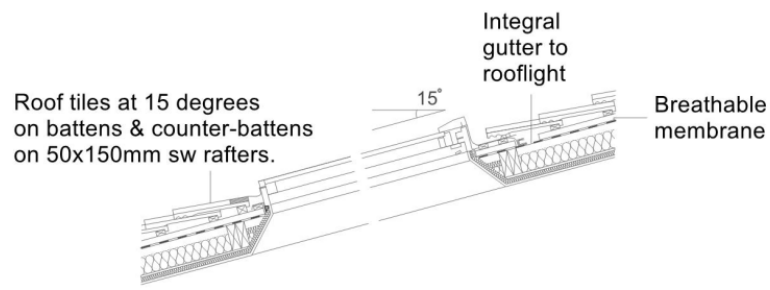
ALL LIGHTING, HEATING SERVICES & MECHANICAL VENTILATION TO COMPLY WITH THE 2013 EDITION 'DOMESTIC BUILDING SERVICES COMPLIANCE GUIDE'. COMMISSIONING CERTIFICATES SHOULD BE SUBMITTED TO THE BUILDING CONTROL OFFICER ON COMPLETION OF THE WORK.

FIRE ALARMS: COMMISSIONING CERTIFICATES SHOULD BE SUBMITTED TO THE BUILDING CONTROL OFFICER ON COMPLETION OF THE WORK.





Detail D1: Roof & Velux, 1:50

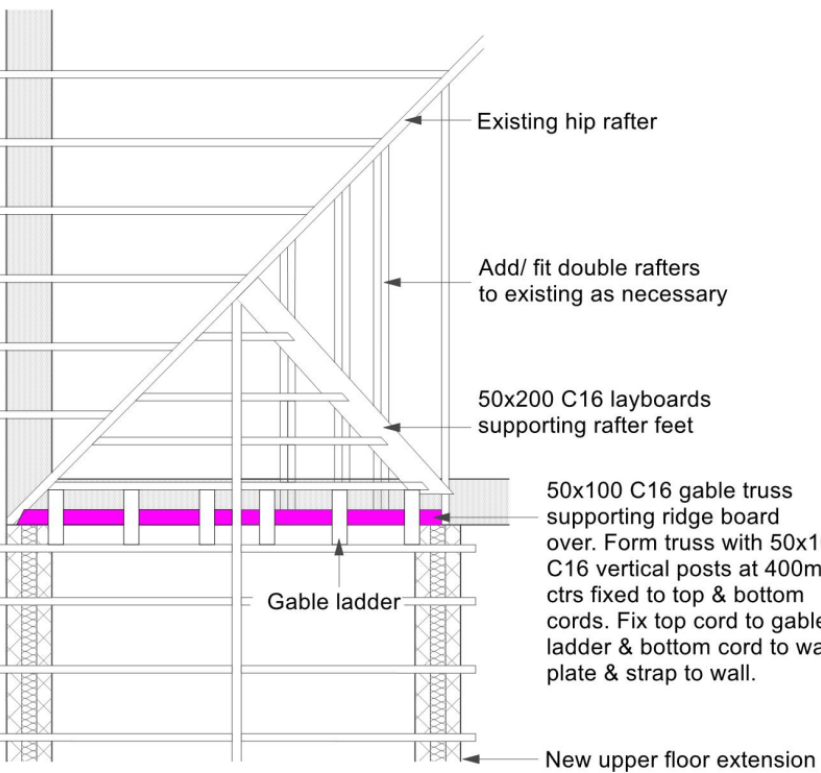


550 x 1180mm Velux rooflight installed in accordance to manufacturer's instructions. Fit trimmer rafters top and bottom of rooflight.

125mm Kingspan K7 insulation placed between rafters. Maintain a 13mm (min) air gap between top of insulation & roofing membrane. 42.5mm K118 Kingspan insulation fixed below rafters. Roof insulation to produce a U-value of 0.15W/m2K.

D2: ROOF DETAIL, 1:50

Joining new and existing roof together



- Existing walls
- Proposed Ex. Cavity Walls
- In. Timber Stud Walls

NOTES AS NUMBERED ON DRAWINGS

(1) FOUNDATIONS
Dimensions given on the foundations are only indicative for normal soil conditions. Should it be necessary to provide raft foundations or other construction the advice of a structural engineer will need to be sought. All foundations are to be taken down below drain invert levels to good bearing strata and in accordance with the local authority requirements. Concrete to strip foundations to be GEN1/ST2 Consistence Class: S3/S4, 150mm thick and at least 600mm wide & to a depth specified by the BCO or otherwise 1m deep. Should the Building Inspector instruct that differing sizes or mixes of concrete to be used, the contractor is to comply with such instructions

(2) FOOTINGS
440x300x215 trench blocks, Hanson or similar; compressive strength of 7.3N/mm2 set in type (ii) mortar using sulphate resisting Portland cement to BS EN 1996-1-1.

(3) 300mm CAVITY WALLS - u-value 0.18W/m2K
Use facing bricks where seen above ground. During the build process ensure that cavities are kept clear from debris by employing the use of timber battens pulled up as work proceeds.

(3.1) CAVITY WALLS BELOW DPC :-
[i] Outer leaf - 100mm medium block; [ii] 100mm cavity, fully filled with 90mm Kingspan K106 Cavity Board, leaving a 10mm residual cavity and all fitted in accordance with the manufacturer's instructions. [iii] Inner leaf - 100mm standard block. To have compressive strength of 7.3N/mm2 set in type (ii) mortar using sulphate resisting Portland cement to BS EN 1996-1-1.

(3.2) CAVITY WALLS ABOVE DPC :-
[i] Outer leaf - 103mm facing brick to ground floor and rendered 100mm medium block to upper floor; [ii] 100mm cavity, filled as set out above. [iii] Inner leaf - 100mm standard block inner leaf (0.15w/mK). Compressive strength 2.6N/mm2 (min) set in M4/ Type (iii) OPC mortar to BS EN 1996-1-1.

(3.3) WALL TIES/ STARTER PROFILES
Use corrosion-resistant stainless steel double drip type bedded 50mm into each leaf and slated towards the outer leaf. Subsequent wall ties to be at 450mm vertical centres & 900mm horizontal centres. At jambs, openings and movement joints position ties (a) horizontally within 225mm openings, and (b) not more than 300mm away from openings vertically.

Use starter-profiles (eg. 'fir fix') stainless steel connections where [i] the cavity & solid walls butt together in the garage space, & [ii] where new and existing masonry are to be bonded together use stainless steel masonry connectors & ties rawl bolted to existing walls. Internally walls shall be finished with a 13mm thick layer of bonding plaster and a 2-3mm thick layer of finishing skim plaster floated smooth or 12.5mm plasterboard on dabs

(4) DAMP PROOF COURSE
2000g polythene horizontal damp proof course damp course to BS743/6515 lapped at the corners and joints by a minimum of 100mm, and placed a minimum of 150mm above the adjoining ground levels. Ensure that damp proof courses are linked to the DPM & existing DPCs and do not project into the cavity.

(5) HARDCORE/ DPM
The floor slabs, oversite concrete or rafts if applicable, shall not be laid lower than the adjacent ground floor level. A hardcore bed is to be formed from inert granular material laid with an average thickness of 150mm and compacted in layers not exceeding 150mm thick. Local thicknesses should be increased as necessary to make up levels and backfill the foundation at the trench.

The hardcore is to have a sand blinding of 25mm thick minimum to provide a smooth level surface for a 1200 gauge polythene DPM. The edges of the DPM are to be lapped and taped by not less than 300mm, turned up at the perimeter walls and tucked under the DPC to provide a complete waterproof membrane.

(6) SLAB/ INSULATION/ VCL - U-value, 0.18
Place 75mm Kingspan Thermafloor K103 Floor Board insulation over the 1200g DPM. To prevent cold bridging, place 25mm thick off-cuts of insulation around the perimeter of the external walls up to the height of the FFL - all to achieve a U-value of 0.18 W/m2K. Lay a 500g polythene VCL over the insulation to act as a vapour control layer and turned up to the DPC/DPM all in accordance with the manufacturer's instructions ready to receive the slab & screed.

Lay 150mm thick concrete slab over the 500g VCL using graded GEN1/ST2 to BS8500/BS EN 206-1 using OPC cement (or sulphate resisting cement if required by ground conditions), 20mm nominal maximum size aggregate with A142 mesh laid at mid-point as reinforcement, 50mm cover (min). Finish level with existing floor.

(7) GLAZING
To be low e sealed double glazed units with a min U-value of 1.6 W/m2K (eg. Pilkington K Glass or similar). Centre pane value of 1.2 W/m sq K, or energy rating band C (min). Doors >60% glazed to Band E or U value of 1.8 W/m sq K. Glazing to doors & windows to be Class C to BS6206. Safe breakage to BS EN 12600/BS6202.

Opening for external doors to be 2.1m nominal height. Style and final arrangement of doors to client's specification on site.

(7.1) VENTILATION TO GLAZING
Windows and patio doors are to provide minimum background ventilation via trickle vents to achieve 8000mm2 equivalent area (min) ventilation to the extension.

(8) LINTELS/ CAVITY TRAYS/ CAVITY CLOSERS
(8.1) LINTELS
All lintels to have 150mm bearing at each end. See LINTEL SCHEDULE, for sizes.

(8.2) CAVITY TRAYS
A proprietary polythene cavity tray shall be provided wherever the external cavity wall is bridged (ie, by doors, window openings etc), above all lintels, and over short piers between closely spaced openings. Cavity trays shall be provided with stop ends and proprietary perpend at a minimum of 2 per opening at a maximum of 450mm apart.

The cavity tray shall project 25mm beyond the outer face of any lintels and overlap the ends of the lintel by 50-150mm (depending on the coursing of masonry) to allow the formation of an integral stop-end at a suitable perpend joint.

NOTE: In accordance with standard NHBC guidance weepholes are not necessary in rendered elevations. However, cavity trays with stop-ends should always be fitted.

(8.3) CAVITY CLOSERS
Fit a cavity closer at the top of the cavity wall as a fire seal. Returns to windows and door openings in the new cavity wall are to have vertical DPCs in the form of a proprietary cavity closers such as 'Thermabate' or similar.

(9) ROOF STRUCTURES - U-value, 0.15
(9.1) ALL ROOFS
Covering to be concrete plain tiles to match existing in colour. Capping, verge/ eaves details fixed in accordance with manufacturer's details. Cladding to be fixed to a minimum 25 x 50mm treated timber battens & counter battens or to manufacturer's directions.

Rafters to be 50x150mm treated C24 rafters at 400mm ctrs birdsmouthed over 50 x 100mm C24 wallplate.

Overlay with untearable breathable felt underlay to BS 747 or relevant BBA certificate (low vapour resistance - eg. Nilvent or similar). Where felt is exposed at eaves use UV resistant or type 5U felt or a proprietary eaves guard. Lap felt over 50mm tilting fillet at eaves and dress into gutter by 50mm.

(9.2) MONO-PITCHED ROOF
Form as a warm deck, 15 degree pitch. Insulation to be 125mm Kingspan K7 Pitched Roof Board between joists. Maintain 13mm air gap between the top of the insulation and the roofing felt. 42.5mm Kingspan K118 plasterboard below joists. Skim plaster.

(9.3) DUO-PITCHED ROOF
Form as a hybrid collar roof at pitch to match existing. 50x150mm rafters to be connected by 38x100 ceiling ties at 400mm ctrs, positioned in the bottom 1/3 of roof slope.

Insulation along rafters to be 125mm Kingspan K7 Pitched Roof Board between joists. Maintain 13mm air gap between the top of the insulation and the roofing felt. 42.5mm Kingspan K118 plasterboard below joists.

Insulation across ceiling ties to be 150 + 150mm Rockwool Roll or similar. Fit 12.5mm plasterboard across ceiling and skim plaster.

(9.4) ROOF RESTRAINT
Roof, walls & gable truss to be provided with lateral restraint straps across at least 3 timbers, & at wall plate and verge levels with 30 x 5mm x 1m galvanized metal straps or other approved to BSEN 645-1 at maximum 2m centres.

(10) ROOF VENTILATION
At Eaves - fit proprietary 25mm continuous ventilation grilles with integral insect mesh. Install plywood fixed to battens over insulation to ensure 50mm cross-ventilation is maintained at eaves level. Fit continuous 5mm proprietary ridge vent system along the ridge (Glidevale, Marley or similar).

(11) WALLPLATE/ LEDGER BOARD
Rafters are to span between C16 50x100 timber wallplates to inner leaf of the cavity walls. For the mono-pitched roof, fix a 50x150mm C16 timber ledgerboard fixed to masonry at 600mm ctrs with M12 chemical anchors as seating for rafters ends at abutments with mono pitched roof.

(12) FLASHING
Flashing/ stepped flashing to be taken up abutments by 75mm (min) and over roof slopes by 150mm (min).

(12.1) LEAD WORK - GENERAL
Lead work, flashing, soakers, valleys, and gutters, etc, to be formed from Code 5 lead sheet, to have a minimum 150mm lap joints, dressed 200mm under tiles, etc, and not to be fixed in lengths exceeding 1.5m and to be fixed in accordance with the roof cladding manufacturers and the Lead Development Association recommendations

(13) FASCIAS/ GUTTERS
Fascias, soffits etc to be formed with 18mm PAR softwood. Fit proprietary 25mm continuous ventilation grilles with insect mesh to the soffits of the duo-pitched roof for cross-ventilation of the roof void. Gutters to be 100mm uPVC.

(14) INTERMEDIATE FLOOR
Joists to be laid level with existing upper floor. Dimensions to be at least 50x150mm. Secure with masonry-to-timber joist hangers, fully nailed. Fill floor void 100mm Isover Spacesaver insulation, density 10.5kg/m2 (or similar).

Floor covering to be 18mm OSB 3 TG4 to BS EN300 laid in accordance with the manufacturer's instructions. Apply PVAC adhesive to all joints and along joists. Alternatively use 19 x 125mm T&G Matchboard.

Fit 12.5mm plasterboard under joists to achieve 30 minutes fire resistance.

(15) STEELWORK
Steelwork supporting cavity wall to be installed according to the design/ calculations of the St. Engineer and to the satisfaction of the BCO.