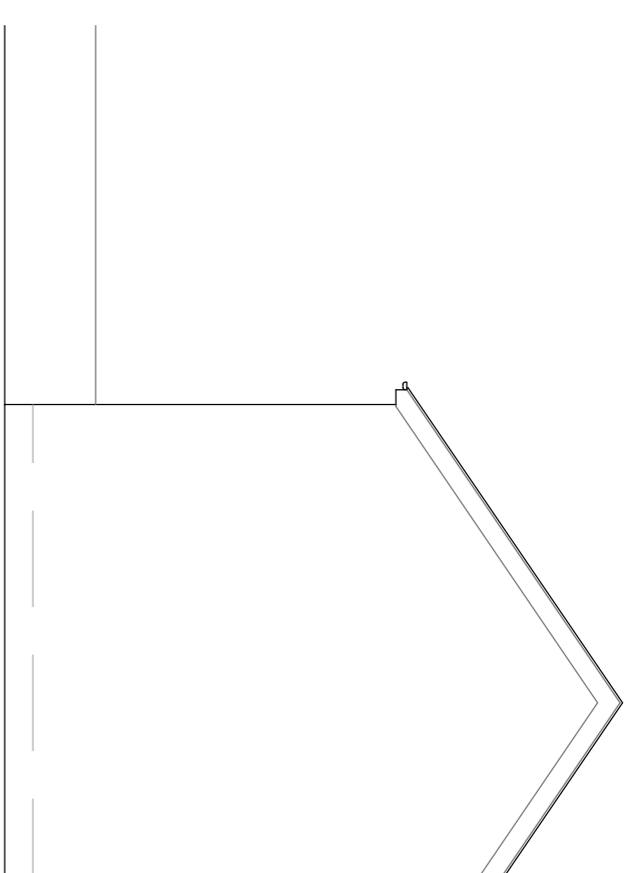
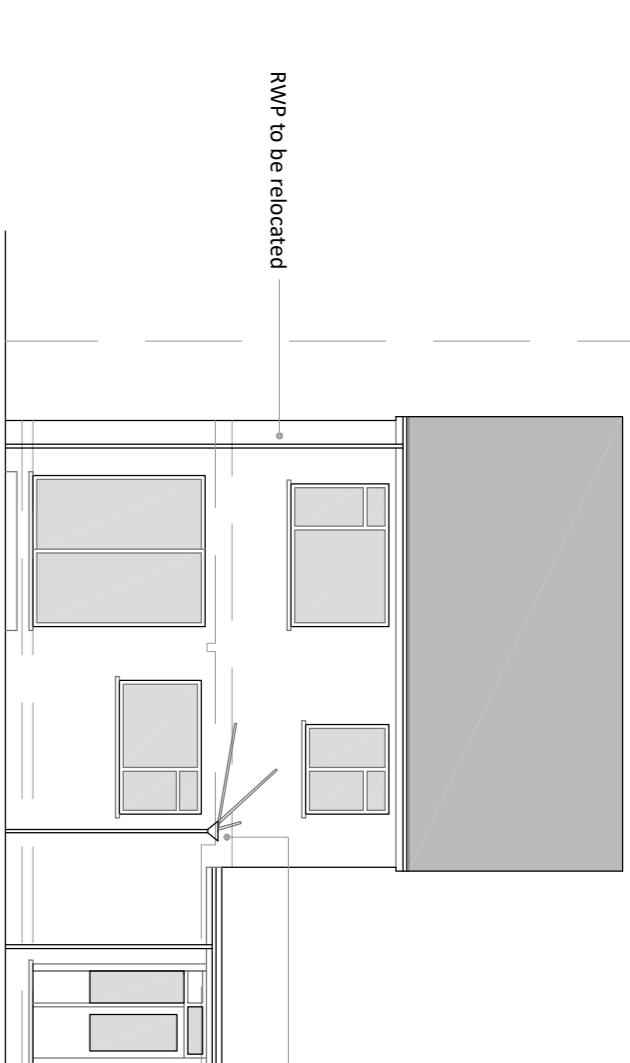


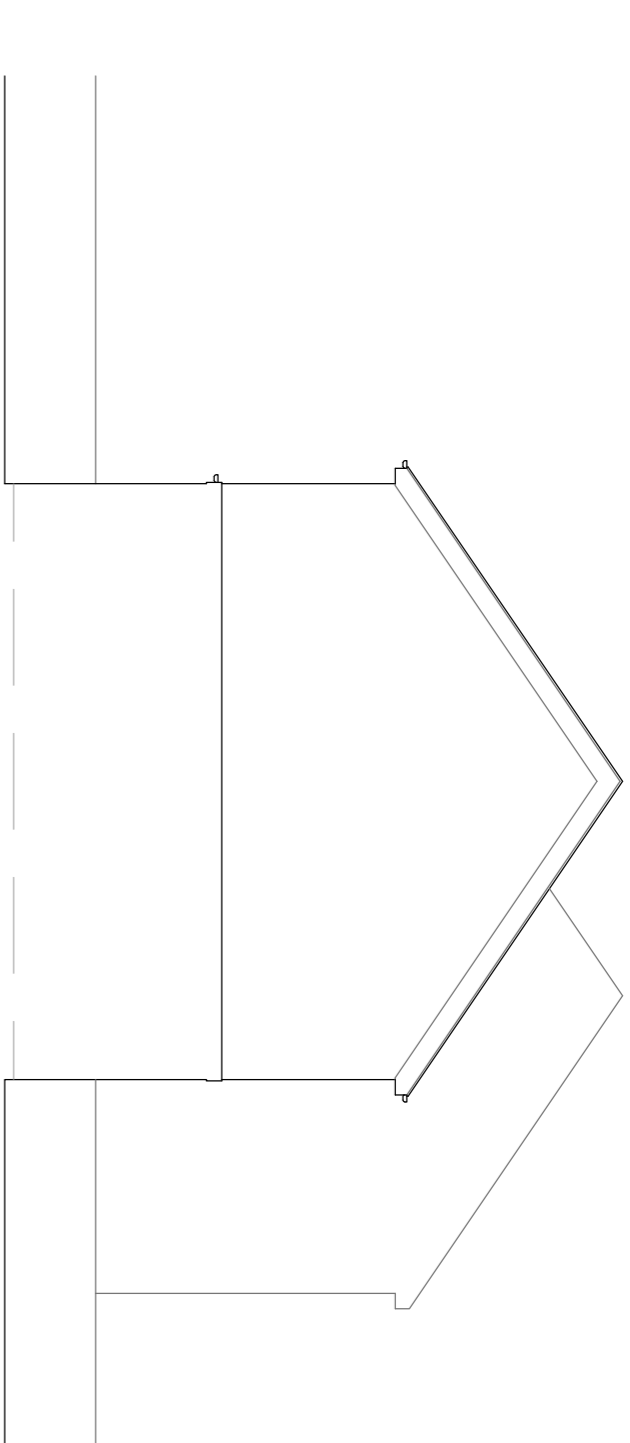
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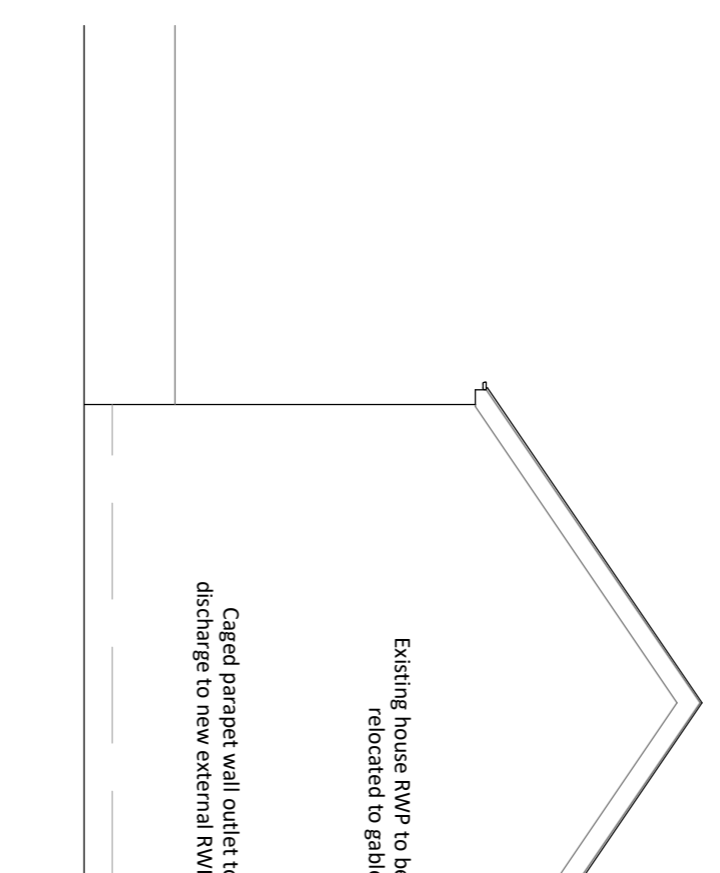
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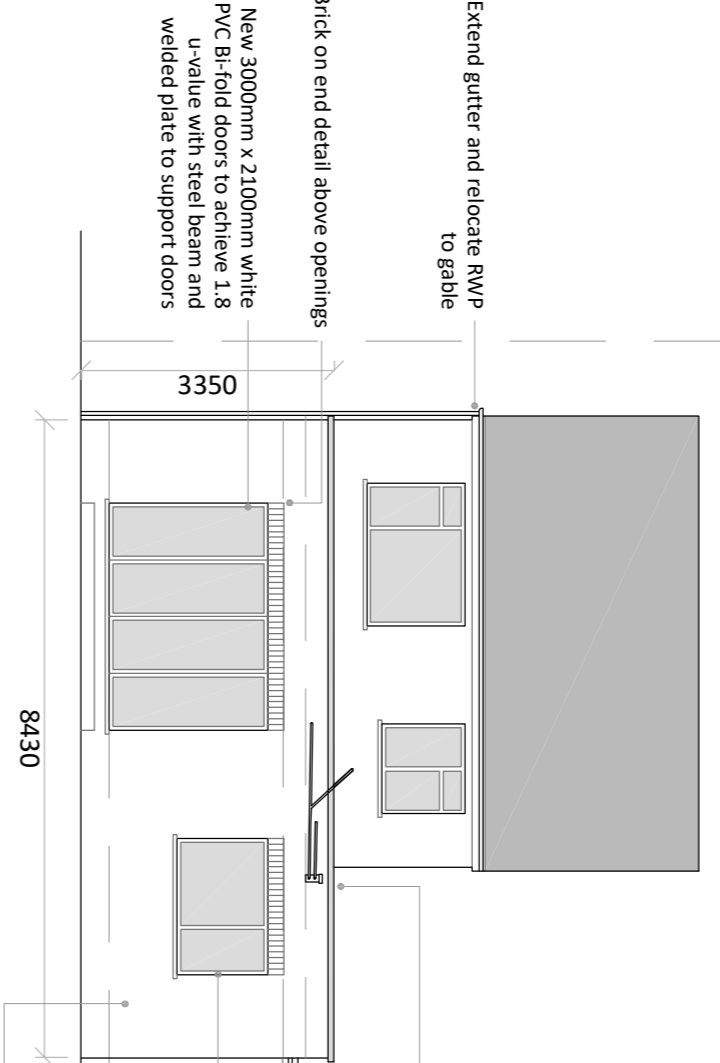
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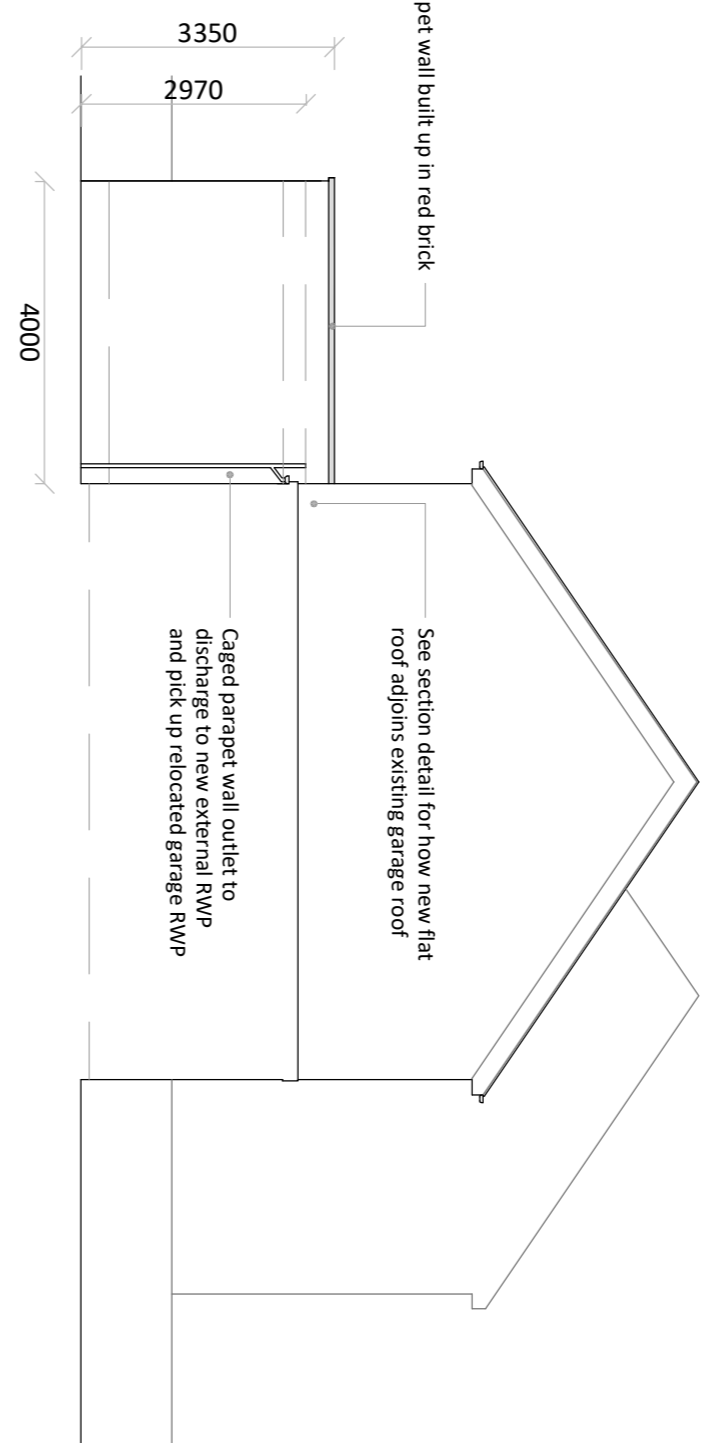
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NORTH

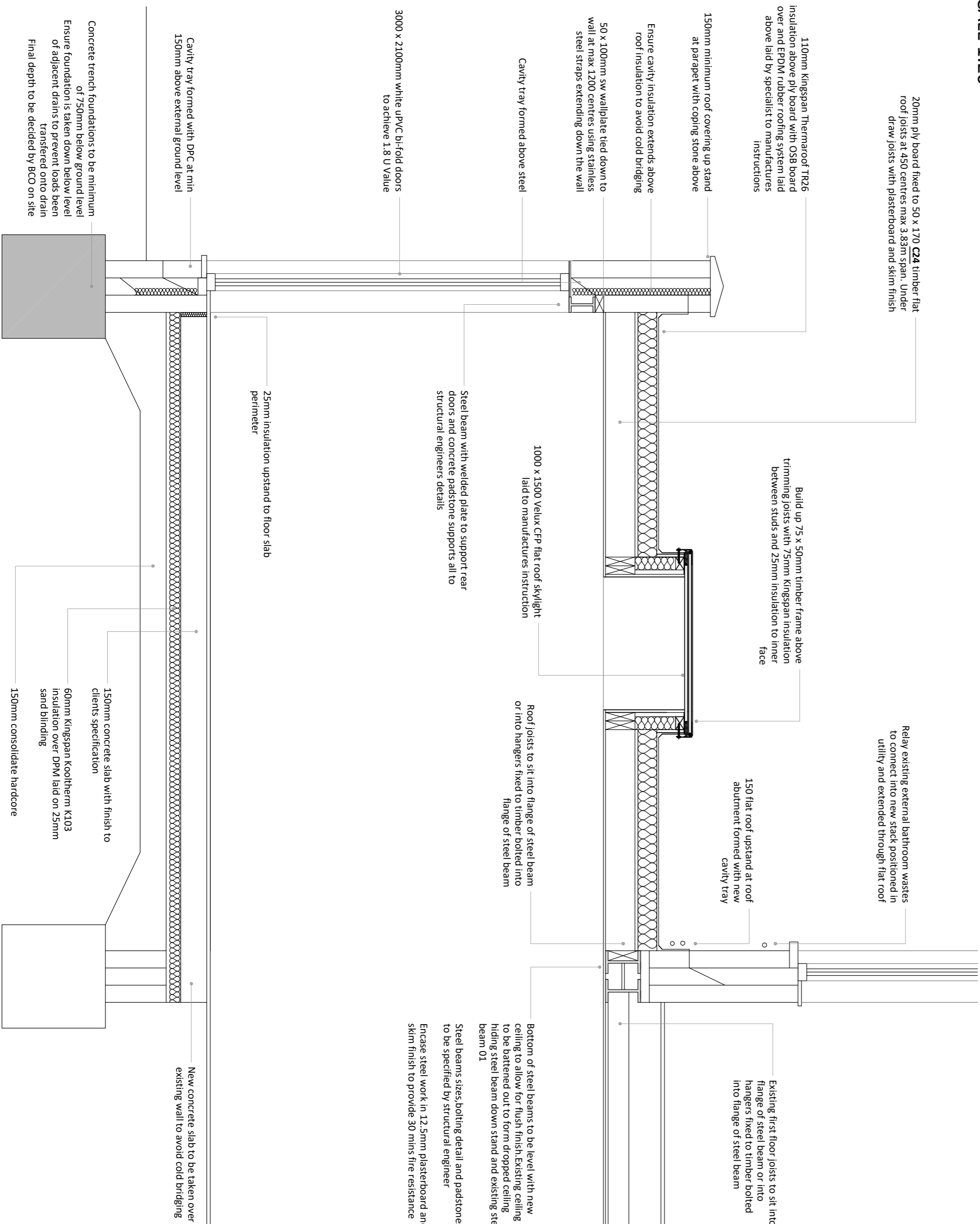


WEST



PROPOSED SECTION

SCALE 1:20

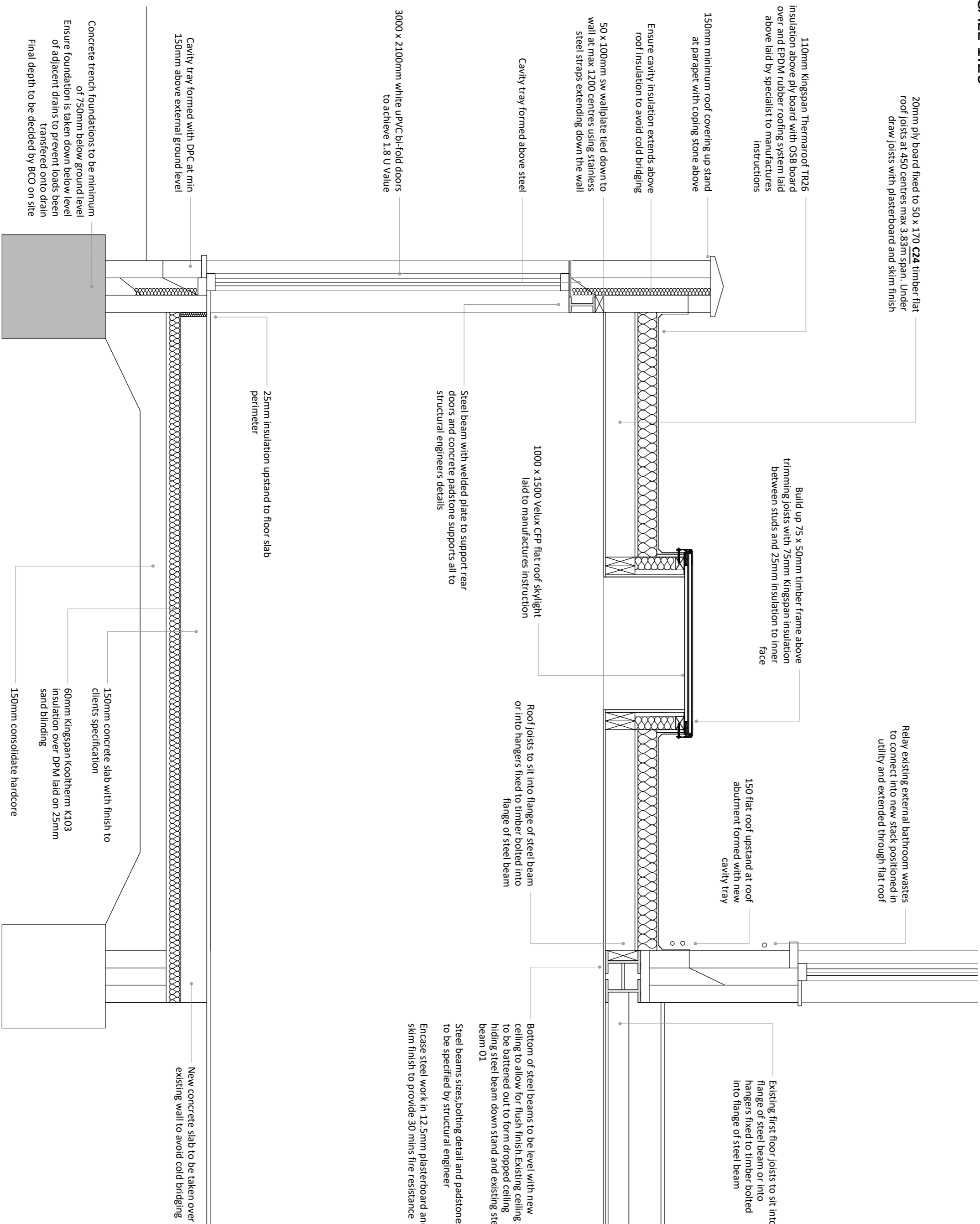


NORTH

WEST

PROPOSED SECTION

SCALE 1:20



MATERIALS AND WORKMANSHIP

All works are to be carried out in a workmanlike manner. All materials and workmanship must comply with Regulation 7 of the Building Regulations, all relevant British Standards, European Standards, Agreement Certificates, Product Certification of Schemes (Kite Mark) etc. Products conforming to a European technical standard or harmonised European product should have a CE marking.

THERMAL BRIDGING

Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

BASIC RADON PROTECTION

Provide a 1200g (900 um) radon membrane under floor slab lapped 300mm double welled and taped with gas proof tape at joints and service entry points. Carry membrane over cavity and provide suitable cavity tray and weep holes.

EXISTING STRUCTURE

Existing structure including foundations, beams, walls and linels carrying new and altered load are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

BEAMS

Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and purlins in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 12.5mm Gypvac fireline board with staggered joints. Gypvac firecase or painted in Naloffe 5 or similar intumescent paint to provide 1/2 hour fire resistance as agreed with Building Control. All fire protection to be installed as detailed by specialist manufacturer.

LINELS

- For uniformly distributed loads and standard 2 storey domestic loadings only. Linel widths are to be equal to wall thickness. All linels over 750mm steel internal door openings to be 63mm deep pre-stressed concrete plank linels. 150mm deep linels are to be used for 900mm steel internal door openings. Linels to have a minimum bearing of 150mm on each end. Any existing linels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete linels to be designed and manufactured in accordance with BS 8110, with a concrete strength of 50 or 40 N/mm<sup>2</sup> and incorporating steel strands to BS 5896 to support loadings assessed to BS 5977 Part 1.

For other structural openings provide proprietary insulated steel linels suitable for spans and loadings in compliance with Approved Document A and linel manufacturers standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located linels.

OPENINGS AND RETURNS

An opening or recess greater than 0.1m<sup>2</sup> shall be at least 550mm from the supported wall (measured internally).

TRENCH FOUNDATION

Provide 750mm x 600mm trench fill foundations, concrete mix to conform to BS EN 206-1 and BS 5500-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2004 Building Regulations A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be in 600mm below ground level. Suitable resistant cement to be used if required. Please note that should any adverse soil conditions or differences in soil types be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.

SOLID FLOOR INSULATION UNDER SLAB

To meet min U value required of 0.22 W/m<sup>2</sup>K  
Solid ground floor to consist of 150mm consolidated well-rammed hardcore, blinded with 50mm sand blinding. Provide a 1200mm gauge polythene DPM, DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 60mm thick Kingspan Kooltherm K103 insulation.

25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting. All joints to be lapped 150mm and sealed. 150mm S12 or GEN2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL. Finish to clients specification.

Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.

Where existing suspended timber floor or bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia UPVC pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

PARTIAL FILL CAVITY WALL

To achieve minimum U value of 0.28W/m<sup>2</sup>K  
Provide 100mm red brick to match existing construction, 50mm clear residual cavity, 50mm Celotex insulation fixed to 100mm standard block K value 0.15 (Celcon standard). Thermally shield, Toplite standard) internal vertical DPC to be installed at all reveals where cavity is closed.

WALLS BELOW GROUND

All new walls to have Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes.

DPC

Provide horizontal strip polymer (nyloal) damp proof course to both internal and external skins minimum 150mm above external ground level. New DPC to be made continuous with existing DPC's and with floor DPM. Vertical DPC to be installed at all reveals where cavity is closed.

WALL TIES

All walls constructed using stainless steel vertical twist type retaining wall ties built in at 750mm ctrs horizontally, 450mm vertically and 225mm cts at reveals and corners in staggered rows. Wall ties to be suitable for cavity width and in accordance with BS 5268: 6-1: 1996 and BS EN 845-1: 2003

CAVITIES

Provide cavity trays over openings. All cavities to be closed at eaves and around openings using Thermabate or similar non combustible insulated cavity closers. Provide vertical DPCs around openings and abutments. All cavity trays must have 150mm upstands and suitable cavity weep holes (min 2) at max 900mm centres.

EXISTING TO NEW WALL

Cavities in new wall to be made continuous with existing where possible to ensure continuous weather break. If a continuous cavity cannot be achieved, where new walls abuts the existing walls provide a movement joint with vertical DPC. All tied into existing construction with suitable proprietary stainless steel profiles.

WARM FLAT ROOF

(Imposed load max 1.0 kN/m<sup>2</sup> - dead load max 0.75 kN/m<sup>2</sup>)

To achieve U value 0.18 W/m<sup>2</sup>K

Flat roof to be single ply membrane roofing providing as fire rating for surface spread of flame with a current BBA or WIMILAS Certificate and laid to specialists specification. Single ply membrane to be fixed to 22mm exterior quality plywood over 110mm Kingspan Thermafloor FR26 insulation.

Insulation bonded to vcl on 22mm external quality plywood decking or similar approved on sw fringes to minimum 1 m 80 fall on sw treated 50 x 170 C24 timber flat roof joists at 450 centres max 3.8m span or as Structural Engineer's details and calculations. Understore of joists to have 12.5mm foil backed plasterboard and skim. Provide cavity tray to existing house where new roof abuts existing house.

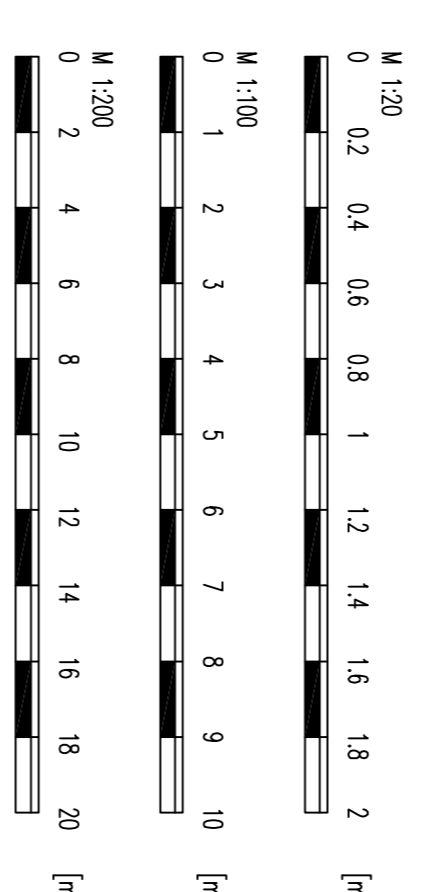
Provide restraint to flat roof by fixing of 30 x 5 x 1000mm m.s galvanised lateral restraint straps at maximum 2000mm centres fixed to 100 x 50mm wall plates and anchored to wall.

LEAD WORK AND FLASHINGS

All lead flashings, any valleys or soakers to be Code 5 lead and laid according to Lead Development Association. Flashings to be provided to all jams and below window openings with welded upstands. Joints to be lapped min 150mm and lead to be dressed 200mm under tiles, etc. All work to be undertaken in accordance with the Lead Development Association recommendations.

INTERNAL STUD PARTITIONS

100mm x 50mm softwood treated timbers studs at 400mm ctrs with 50 x 100mm head and sole plates and solid plasterboard fixed to studs. 120mm Rigidfoam insulation to be fixed to studs and plasterboard to be fixed to studs. Partitions built of double up joists where partitions run parallel or provide nogging where at right angles, or built off DPC on thickened concrete slab if solid ground floor. Walls faced throughout with 12.5mm plaster board with skim plaster finish. Taped and jointed complete with beads and stops.



Building Regulations Elevations

Single-Storey Rear Extension  
25 North Brook Road  
Hadfield  
Glossop  
SK13 2EZ

Scale - 1:100 @ A1  
unless stated  
Drawn By - EH  
Date - 06.2018

Rev	Description	Date

DRAWING REF: 25NB/BR/01

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