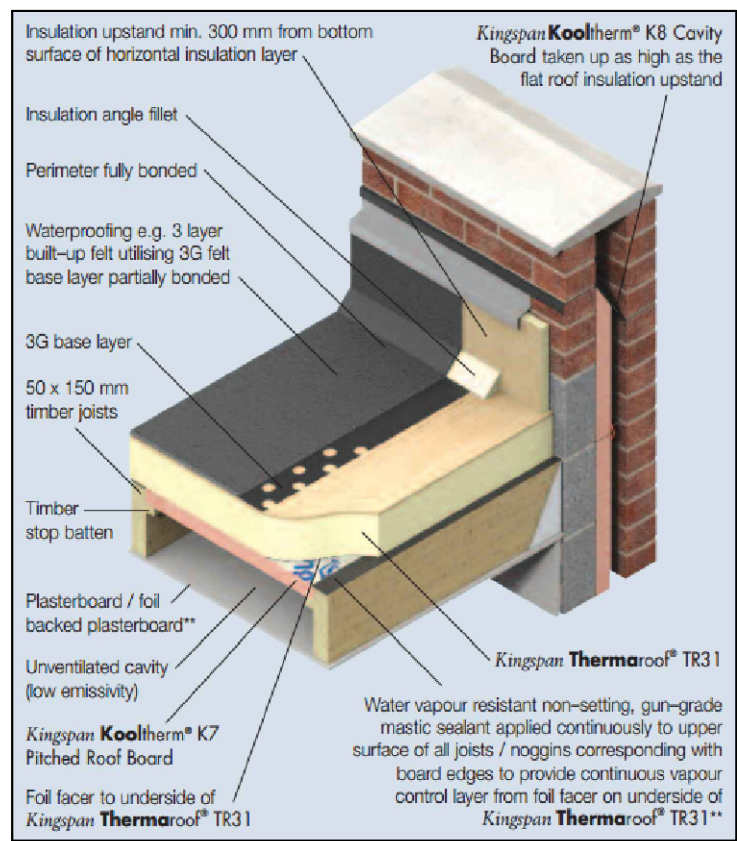
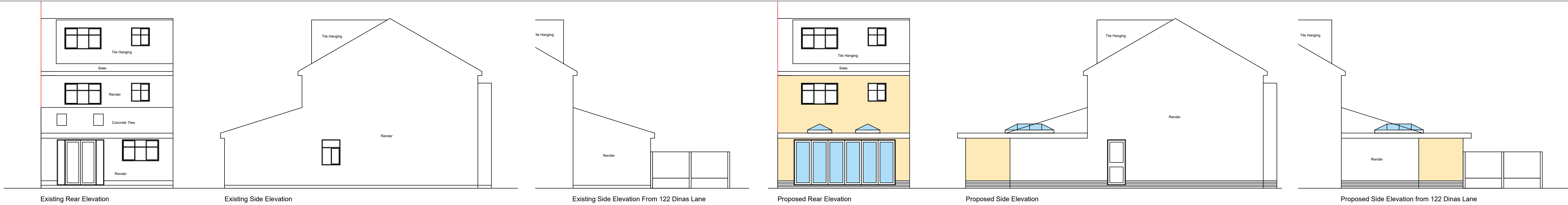
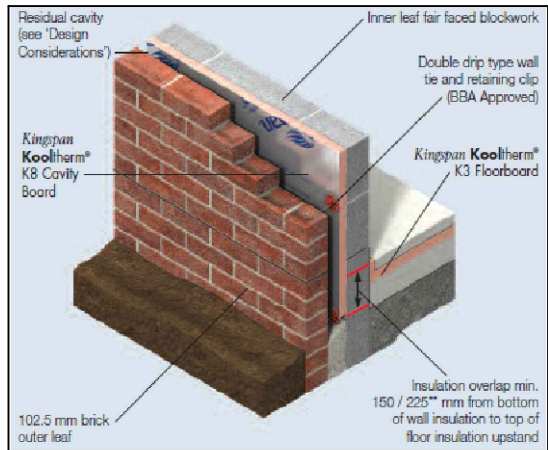
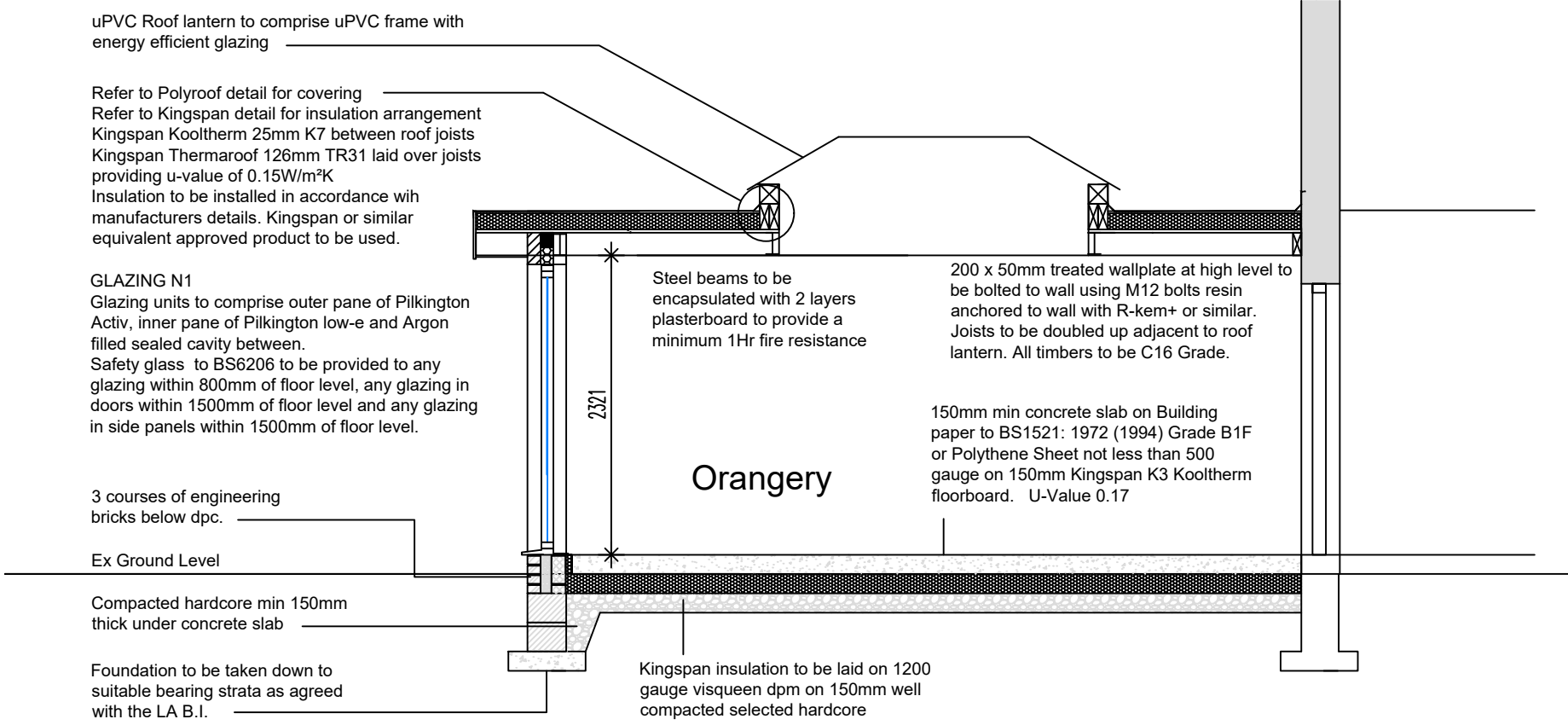




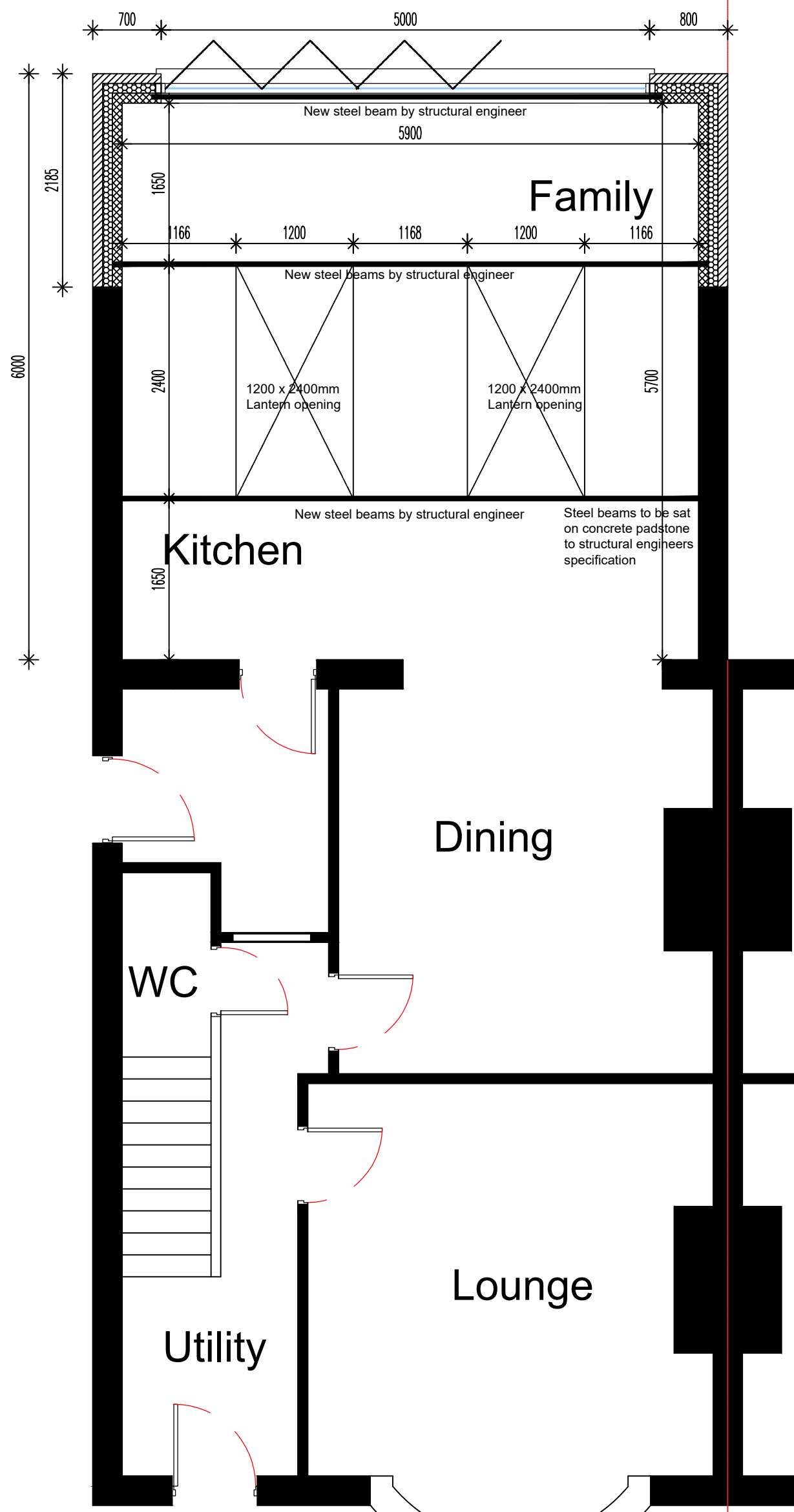
Roof Insulation Detail



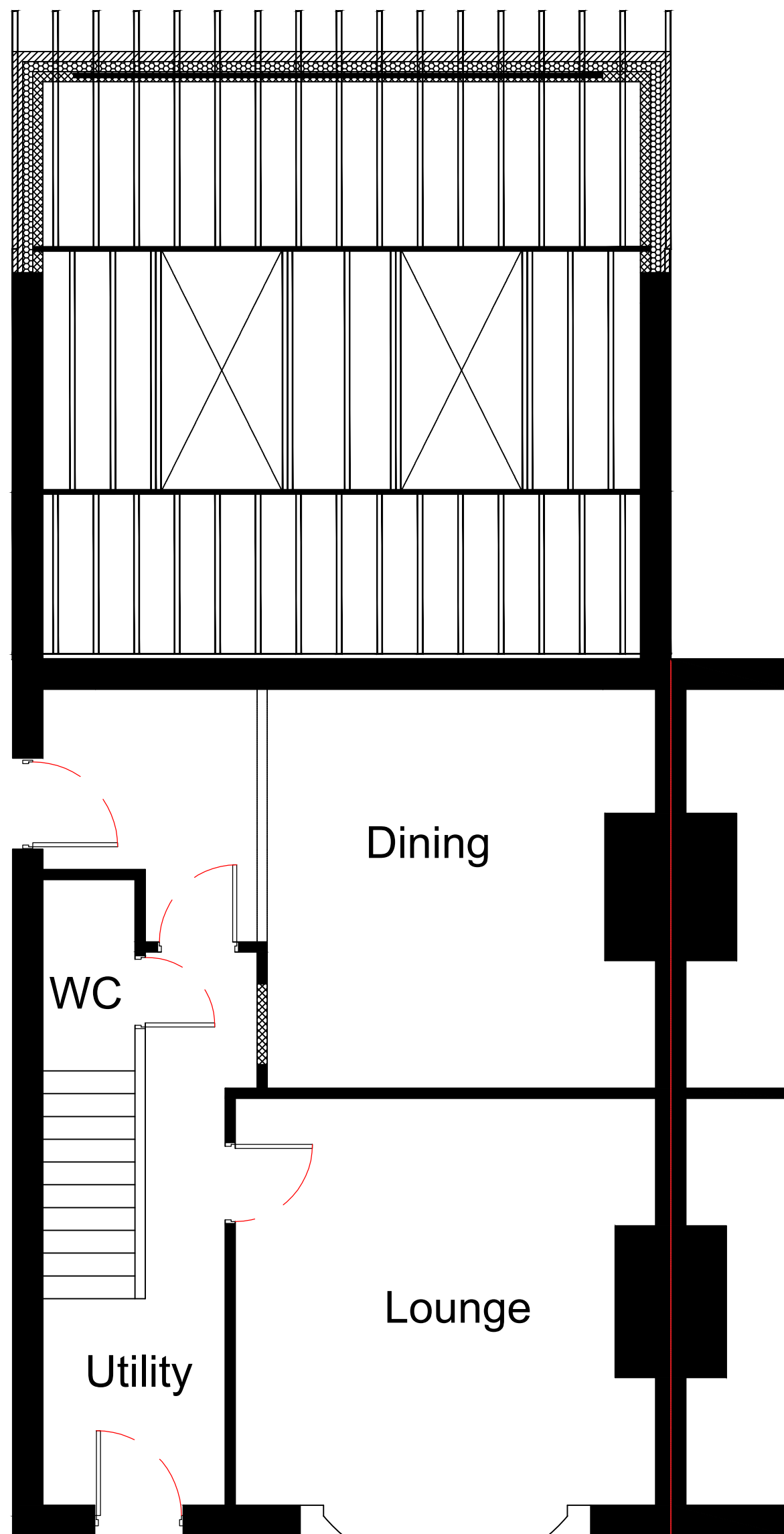
Wall Insulation Detail



Typical Section



Proposed Ground Floor Plan



Roof Plan

General
All work to comply with the Town & Country Planning Act 1990, the latest Approved Documents of the Building Regulations, Codes of Practice, British & European Standards, The Party Wall Act 1996, neighbouring consent to be sought for work on, at or within 3m of a party wall or fence with 2 months notice required.

Foundations
Foundation design and depth is subject to ground conditions. It is recommended that a trial hole is dug to assess existing conditions prior to quoting or work commencing.

A standard strip foundation is suitable for depths of between 450mm to 900mm to the underside of the foundation on good load bearing strata.

For foundations between 900mm to 2500mm consider trench fill foundation design.
If deeper foundations are required seek the advice of a structural engineer for a possible pile design.

Foundations to be 600mm wide by 150mm minimum thickness.

Foundation depth to be agreed on site with Building Control Officer.

Allowance should be made for building within influence of tree roots, advice to be sought from structural engineer to avoid clay heave.
Consideration to be given to stepped foundations on sloping sites.

Drainage
New plastic drains to be laid to fall at 1:40 on 150mm pea gravel bed and connect to existing system. Drains to have min 150mm cover.

Any existing drains passing under proposed building to be exposed and inspected for integrity. Any damaged or poor quality pipework to be replaced.

Existing (and replaced) drains passing under proposed building to be encased in 150mm concrete with joints left flexible.

Where the drains pass through sub walls, concrete lintels to be provided over.

All drainage to comply with AD H

Walls
a) Sub Walls
Brick cavity wall construction, with 100mm cavity filled with lean mix concrete to within 225mm of ground level.

DPC to be provided 150mm above ground level, with double damp proof course incorporated where level threshold is provided.

Use 3 courses of engineering or facing bricks (FL quality) below DPC.

Any existing drains passing through sub walls to have concrete lintels provided over.

Consider use of trench blockwork for deeper foundations in lieu of cavity brickwork.

External Walls
Walls to comprise through colour render onto 7N blockwork. Smooth facing bricks to be coursed to match existing below render level.
Provide 3 courses min smooth engineering brick below ground level.
Provide 50mm clear cavity, 50mm Kingspan Kooltherm K8 insulation with 100mm Celcon Solar medium density blockwork giving U-value of 0.27W/m2K.

Alternatively consider full fill cavity insulation using Knauff Supafil 34 giving a U-value of 0.25W/m2K. (to be avoided in exposed locations)
Stainless steel cavity ties to be positioned at 450mm ctrs vertically (300mm vertically within 225mm if adjacent to un bonded wall) and 750mm ctrs horizontally.

Cavities to be closed with insulated finned cavity closer

Lintels to be taken from Catnic range (see lintel schedule for references) have min 150mm end bearing and be insulated to meet AD L1/L2.

Walls to be finished internally with 12.5mm plasterboard and skim on plaster dabs.

Internal Walls
Internal load bearing walls to be 100mm solid blockwork

Non load bearing partition walls to be 75 x 50mm studwork finished with 12.5mm plasterboard and skim finish.

Ground Floor
To comprise 150mm in-situ concrete on separation layer on 150mm Kingspan Kooltherm K3 insulation providing a U-Value of 0.17W/m2K with 25mm perimeter insulation around slab edges on 1200g DPM on 150mm well compacted selected clean hardcore.

All vegetable matter to be removed from below slab area

Flat Roof
Roof joists to be formed from 200 x 50mm C16 timbers @ 400mm max ctrs and seated on 100 x 100 sw timber walplate strapped to wall
Refer to Kingspan detail for insulation arrangement
Kingspan Kooltherm 25mm K7 between roof joists
Kingspan Thermafoam 126mm TR31 laid over joists providing u-value of 0.15W/m2K
Insulation to be installed in accordance with manufacturers details.
Kingspan or similar equivalent approved product to be used.
Fascias to be white uPVC.

Rainwater Goods
Rainwater goods to be 100mm half round guttering leading to 86mm dia rainwater downpipes discharging into back inlet gulleys.

Windows
Windows to be double glazed white uPVC.

Trickle vents to be provided to window heads equal to min 5000mm2 for habitable rooms and 2500mm2 for wet rooms.

Any glazed areas below 800mm above floor level to be laminated or toughened glass.

Glazing to be Pilkington K Glass with min 20mm sealed double glazed units with U-value equal to min 1.4W/m2K

Doors
External doors to be white uPVC, style to match elevation unless alternative specification provided by client with U-value equal to min 1.4W/m2K

Internal doors to be good quality doors to clients specification.

Electrics
All electrical work to be carried out to AD Part P & BS7671.

Position and number of sockets and light fittings to be agreed with client prior to tender / quotation.

Low energy light fittings to be provided.

Sockets and switches to be positioned in accordance with AD Part M. Contractor to be Part P certified.

Electrician to provide full details of fire alarm system

Structural Steelwork
All structural steelwork to be designed by structural engineer. Unless otherwise specified, steel beams to be seated on designed concrete padstones.

All structural steel beams to be encased with two layers of 12.5mm plasterboard providing 1hr fire protection.

Mechanical Ventilation Summary
Kitchen 60 ltrs/sec
Utility 30 ltrs/sec
Bathroom & Ensuite 15 ltrs/sec
WC 6 ltrs/sec

Minimum U-Value Summary
Floors 0.22W/m2K
Walls 0.21W/m2K
Roof Ceiling level insulation 0.15W/m2K
Roof Rafter level insulation 0.15W/m2K
Flat Roof insulation 0.18W/m2K
Windows 0.14W/m2K
Doors 0.14W/m2K

New Build
0.11W/m2K
0.16W/m2K
0.11W/m2K
0.11W/m2K
0.11W/m2K
0.11W/m2K
0.11W/m2K

SITE LOCATION PLAN
AREA 4 HA
SCALE 1:1250 on A4
CENTRE COORDINATES: 343040, 391414



1:1250 Location Plan

Rev	Description	Drawn	Date
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Project Title
Mr J Pennington
124 Dinas Lane
Hayton
Liverpool
L36 2NT

Drawing Title

Proposed Rear Extension to Existing Rear Extension

Scale	Drawn By	Checked By	Authorised By
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1:100	N.M.Ward		
1:50			
1:1250	Date Feb 21	Date	Date

Job No.	Drawing No.	Revision
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	124DLHWD01	.
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Original Sheet Size A1 Do Not Scale From This Drawing