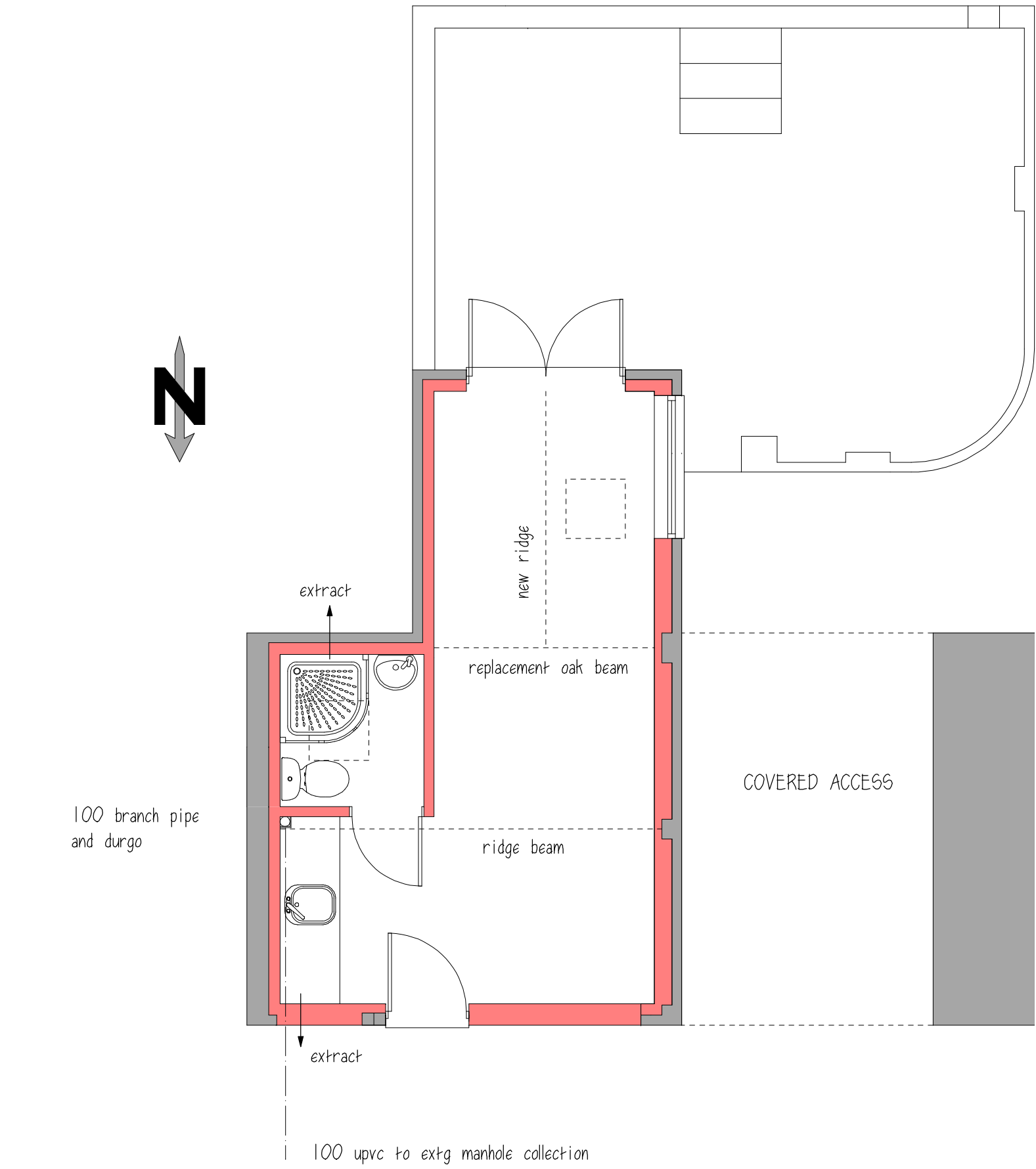


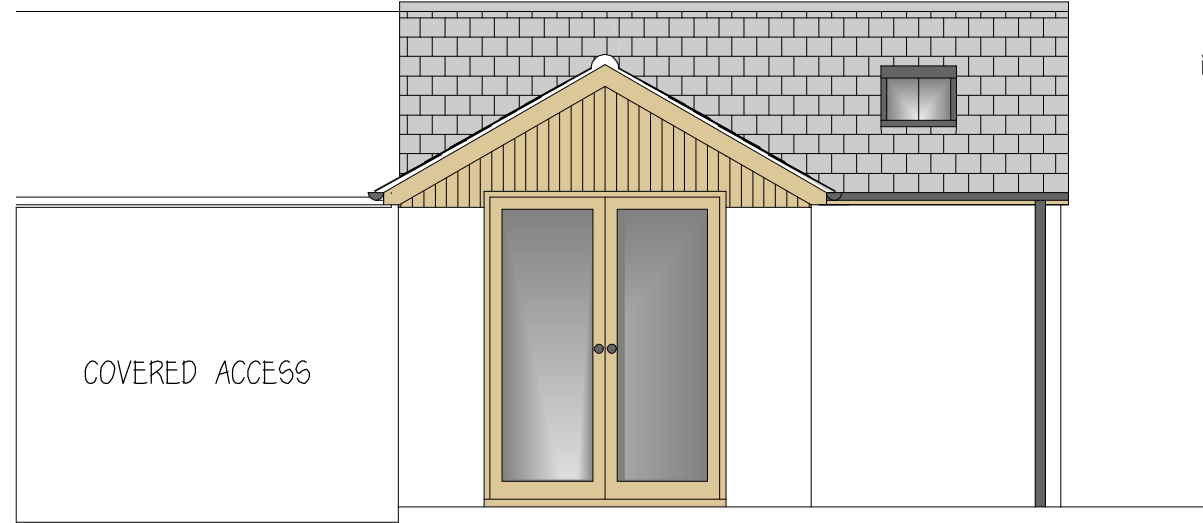
FRONT ELEVATION

END ELEVATION

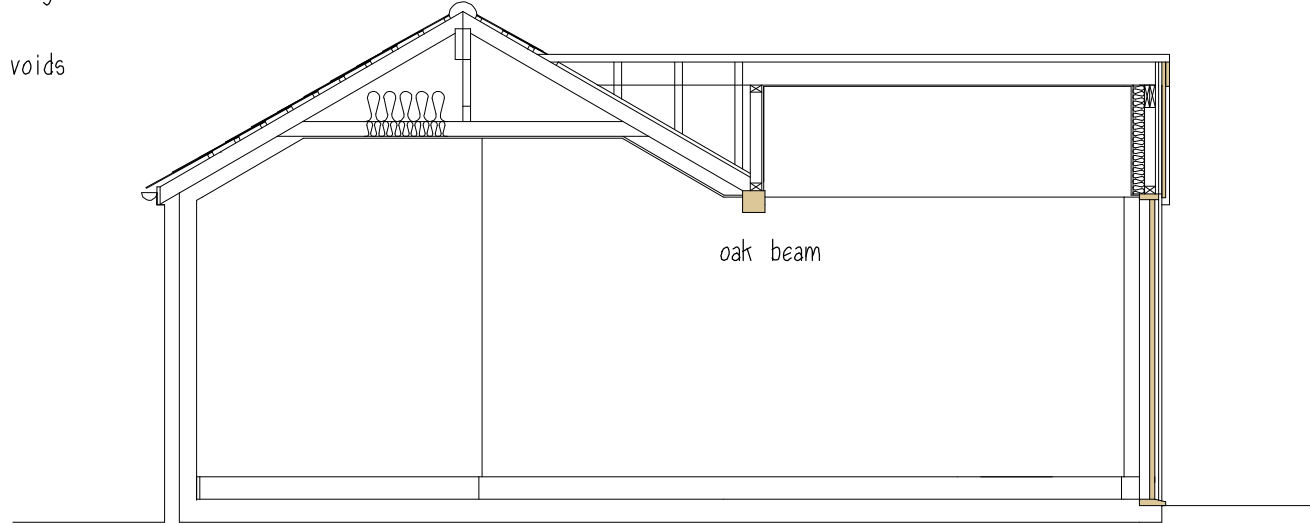
SECTION THRU COVERED WAY



PLAN AT GROUND FLOOR LEVEL



REAR ELEVATION



TYPICAL SECTION

ROOF PLAN

8.01 Air Leakage.

Many of the details shown in this document contain measures designed to reduce air leakage. The individual air tightening measures will depend on the form of construction and level of workmanship but the objective is to form a definable, continuous air leakage barrier around the dwelling. Ways of preventing air leakage should then be considered at every penetration of this barrier.

Particular care on site should be paid to:

- Joints between structural components e.g. wall to floors.
- Joints around components and opening within walls.
- Service penetrations - plumbing, electrical, and ventilation.

General

- Close any vertical ducts at top and bottom (e.g. boxing in to SVPHs).
- Seal any service penetrations.
- Select the appropriate sealant or gap filler for the size of gap and degree of movement anticipated.

Masonry Construction

- Ensure continuous ribbons of adhesive are used to fit to dry lining at perimeters of external walls, openings, and services on external walls as shown (right). The importance of correct sealing of dry lining on walls needs to be stressed, as this is a key area of air infiltration and can seriously affect the overall ventilation rate.
- Use joint fillers to support floor plates.
- Seal under skirting boards where dry lining is used, or on suspended floors.

Timber Frame

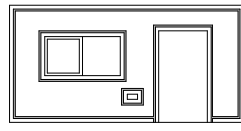
- Ensure DPCs are turned up behind sole plates and lap with vapour control layers, alternatively seal with mastic or a gasket between the DPC and sole plate.
- Place bead of mastic on timber floor deck before positioning wall panels (interior ground floors and intermediate floors).
- Ensure 'sheet' vapour control layers are properly lapped at junctions, and/or:
- Ensure any vapour control plasterboard is jointed in accordance with manufacturer's instructions.
- Always return vapour control layers into door and window reveals, heads and sills.
- Cut vapour control layers tight to electrical outlets and seal at piped service penetrations, (with tape or sealant as appropriate).
- Ensure all breather control membranes overlap each other and are stapled in place.

Steel Frame

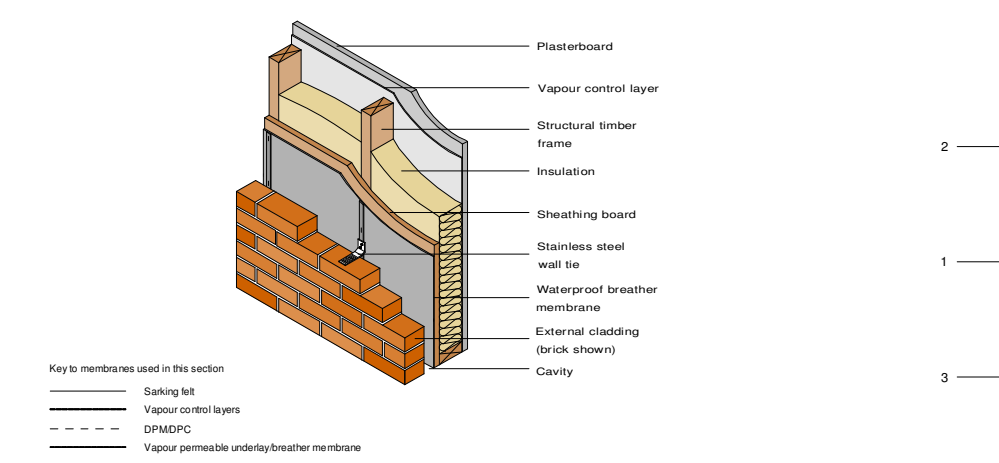
- All joints between rigid insulation boards should be lapped or sealed with tape approved by insulation manufacturer.

Additional items where hybrid construction is used:

- Ensure 'sheet' vapour control layers are properly lapped at junctions, and/or:
- Ensure any vapour check plasterboard is jointed in accordance with manufacturer's instructions.
- Always return vapour control layers into door and window reveals, heads and sills.
- Cut vapour control layers tight to electrical outlets and seal at piped service penetrations.



6.00 Introduction



The Robust Details shown here are valid for a range of timber frame wall thicknesses from 80mm up to 150mm stud size.

For any form of construction, details are given for the junctions with a range of root ground floor and internal floor types, in addition to details around window openings.

Details that apply to all wall types and guidance on air leakage are included in section 8 'General Arrangements'.

The nature of timber frame construction is that a variety of structural forms can be adopted, and variations occur in detail corners, details at right hand plates. The form of structure selected has an influence on the thermal performance of any given wall and so must be taken into account for these energy label details.

Further variables are:

- type of insulation chosen
- type of sheathing
- type and thickness of plasterboard (or other sheet material)
- internal linings used and the outer cladding of the building.

Products specified should be suitable for their intended purpose.

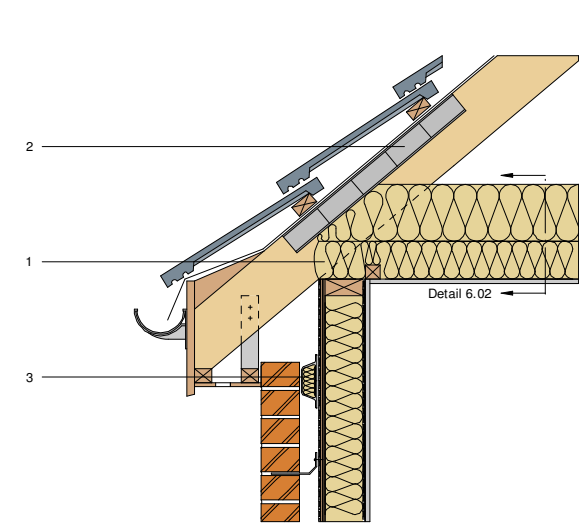
Insulation thicknesses for mass building systems have not generally been provided as these depend on the thermal properties of the materials chosen together with the proposed cavity which may vary in the External Method of compliance in use. For calculation of insulation properties should refer to the relevant Document 1 or the manufacturer's latest published figures and details, or other relevant guidance.

All details are shown with a brick outer leaf for simplification. However, other types of cladding may be used without any loss of thermal performance or structural integrity, subject to suitable detailing. These include render or stone, but any such details must be drawn to frame, the hanging or battens on frame, sheathings panels on vertical corner/bottom frame to frame, outer leaf of other masonry.

Note that the detailing of this section will vary and attention is drawn to relevant technical guidance in the subject, in particular 'Timber Frame Construction' published by TRADA.

Timber Frame robustdetails

6.01 Pitched roof. Ventilated loft. Eaves.



Notes

1. Ensure 50mm (min) layer of compressible mineral wool or similar (P.L. 1.2m/KW) fully covers top of wall panel.
2. Use proprietary cross-flow ventilator or ensure 25mm (min) air gap.
3. Cavity barrier.

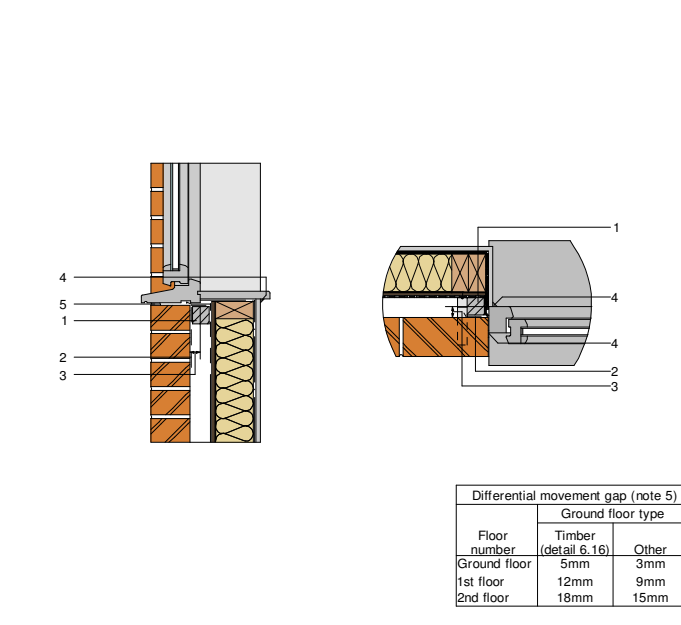
The detail is also suitable for mansard roofs subject to suitable ventilation provision.

This detail should be read in conjunction with detail 6.02.

See 6.00 for key to membranes.

Timber Frame robustdetails

6.10 Windows and doors. Jambes and sills.



Notes

1. Edge/penetration closer with minimum thermal resistance path of 0.45m/KW (manufacturer's certified detail), or:
2. DPC fixed to structural frame (interior closer).
3. Minimum thermal resistance (interior closer):
4. Edge/penetration closer (interior closer):
5. Edge/penetration closer (interior closer):

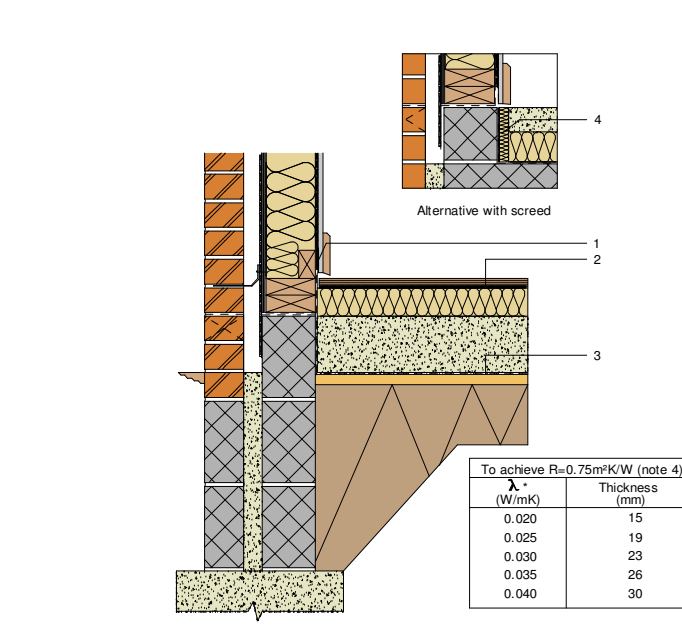
The use of closer, minimum overlaps and sealants also apply to junctions between external walls and bay windows/conservatories.

For level threshold details see section 8 'General Arrangements'.

See 6.00 for key to membranes.

Timber Frame robustdetails

6.11 Ground bearing floor. Insulation above slab.



Notes

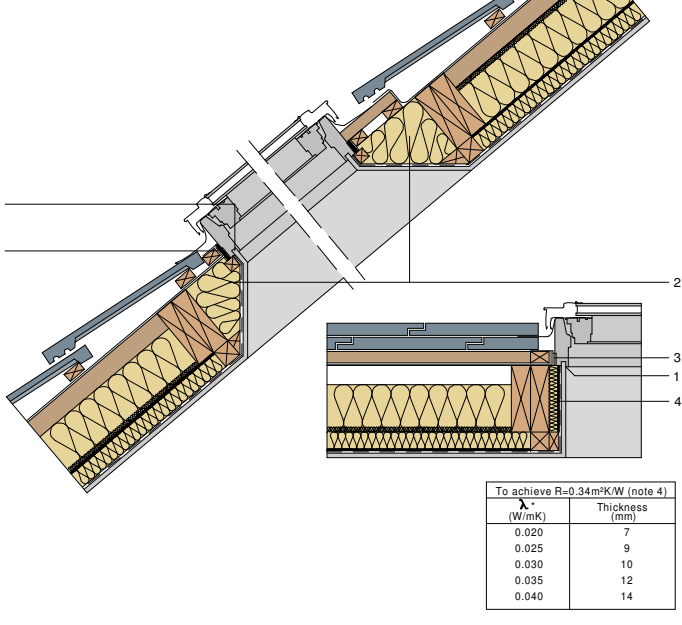
1. Ensure DPC turns up behind sole plates and laps with vertical vapour control layer to improve integrity.
2. Push with mineral wool or similar.
3. Vapour control layer under timber floor finish.
4. DPC may be above or below slab.

Any spaced must have an edge insulation with minimum R value of 0.75m/KW (alternative detail - see table).

See 6.00 for key to membranes.

Timber Frame robustdetails

8.02 Roof Window. Ventilated rafter void.

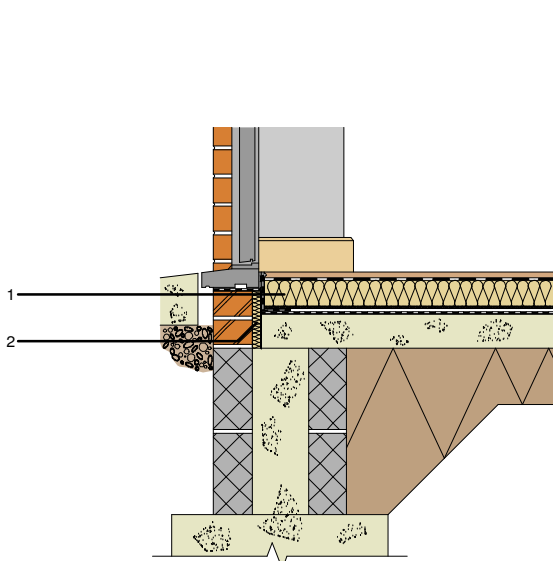


Notes

1. Window frame to be level or lower than top of rafter.
2. Push with mineral wool or similar.
3. Push insulation into gap between frame and rafter.
4. Rafter to be insulated with insulation of minimum R value of 0.34m/KW - see table.

General Arrangements robustdetails

8.05 Level threshold. Insulation above slab.



Notes

1. Continue floor insulation up to back of sill.
2. Optional insulation for cavity or gap not required for thermal bridging purposes.

This detail is provided to show the position of insulation. Slab details and positions of DPCs and DPMs may vary according to wall and floor type.

General Arrangements robustdetails

T FLEWITT

proposed alterations to store and garage

at

40 high street

downton

AS PROPOSED

scales 1:50 date oct 2025

drawing no Fd/wd/O1