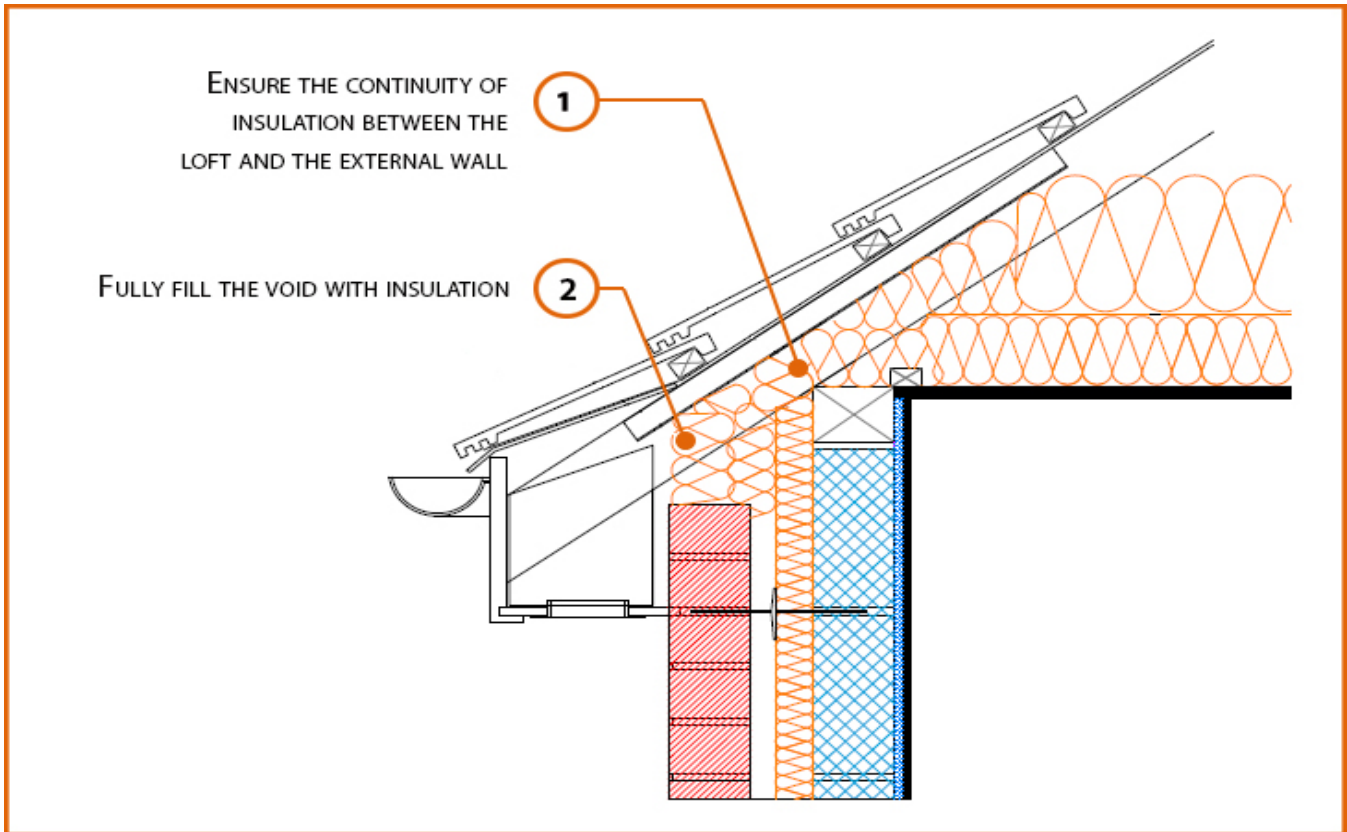


Registration Number: E10MCPF2



Build Up

External Masonry Cavity Wall

Masonry Outer Leaf ($\lambda = 0.77$)

Lightweight Concrete Block Inner Leaf $\lambda \leq 0.60W/mK$

Partial Fill Fill Insulation

Pitched Roof Eaves

400mm insulation ($0.044W/mK$) at Ceiling Level

Ventilated Loft

LABC Registered Construction Details

Masonry



Calculated ψ -values

Inner leaf blockwork	
Lightweight Concrete Block $\lambda \leq 0.60$ W/mK	
Cavity Insulation	ψ -value W/mK
50mm $\lambda=0.022$	0.086
100mm $\lambda=0.022$	0.105

Points to Watch

- Ensure cavities are kept clean of mortar snots and other debris during construction
- Ensure gap between wall plate and eaves ventilator is fully filled to maintain continuity of insulation through the junction. For partial fill, compressible insulation should be tucked into the head of the cavity.
- Any vapour permeable roof underlay should be used in accordance with manufacturer's recommendations where it may be in contact with the insulation.
- The eaves insulation should not compromise the cross flow ventilation or free water drainage below timber battens.
- Fire resistance will also be required for room in roof situations.
- Fix ceiling plasterboard first and seal all gaps between ceiling and masonry then seal all penetrations through air barrier with flexible sealant.
- Read in conjunction with roof details E12 and E13.
- Cavity barriers may require an additional vertical DPC and/or cavity tray.
- Cavity must be closed at head of wall (insulation is often omitted here, or poorly fitted) Recommend calcium silicate or cement board closer so detail is not relying on compressed insulation
- Note that a cavity barrier should, wherever possible, be tightly fitted to a rigid construction and mechanically fixed in position. ADBV2 Para 9.14 identifies conditions where this may not be possible, for instance at a wall/roof junction with slates or tiles. In this case the junction should be fire-stopped.

