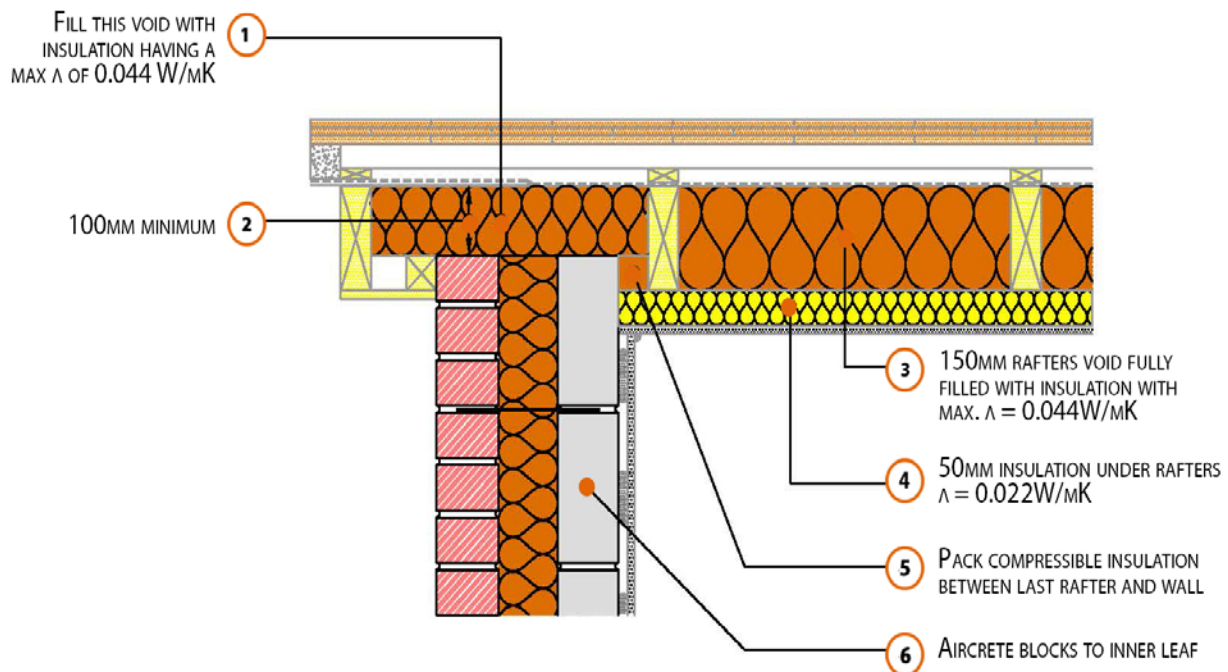


## Registration Number: E13MCFF4



### Build Up

External Masonry Cavity Wall

Masonry Outer Leaf ( $\lambda = 0.77$ )

100mm Aircrete Block Inner Leaf ( $\lambda = 0.11\text{ W/mK}$ )

Full Fill Insulation

Pitched Roof Gable

150mm insulation (0.044W/mK) between rafters

50mm insulation (0.022W/mK) beneath rafters

Unventilated Rafter Void

## Calculated $\psi$ -values

	Inner leaf blockwork
	Aircrete Block $\lambda = 0.11 \text{ W/mK}$
Cavity Insulation	$\psi$ -value $\text{W/mK}$
100mm $\lambda=0.037$	0.047
150mm $\lambda=0.037$	0.047
100mm $\lambda=0.032$	0.046
150mm $\lambda=0.032$	0.047

## Points to Watch

- Ensure cavities are kept clean of mortar snots and other debris during construction
- Any vapour permeable roof underlay should be used in accordance with manufacturer's recommendations where it may be in contact with the insulation.
- Consider whether a vapour control plasterboard or separate vapour control barrier is required.
- Fix ceiling plasterboard first and seal all gaps between ceiling and masonry then seal all penetrations through air barrier with flexible sealant.
- Ensure that the insulation between the rafters is tightly cut and packed and in contact with the under rafter insulation.