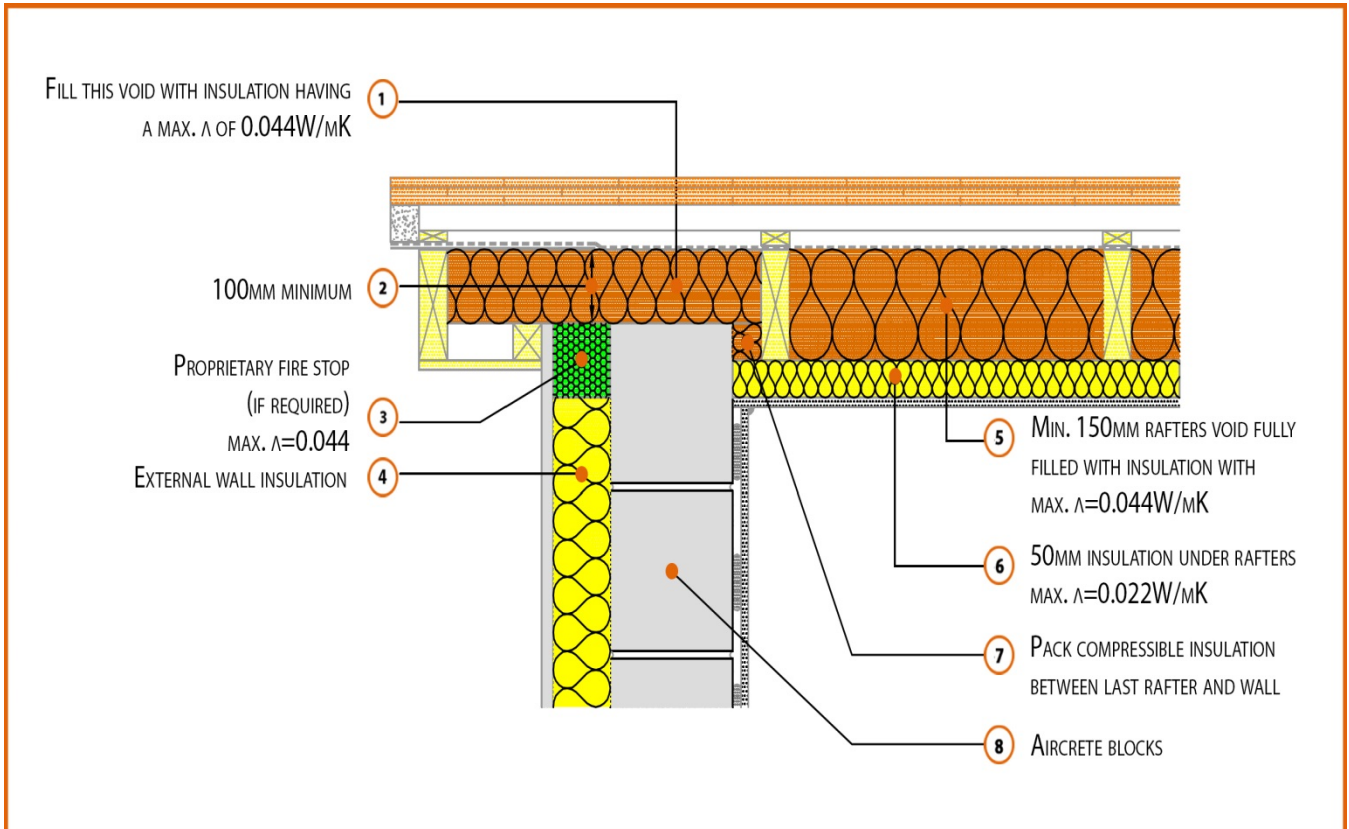


### Registration Number: E13SMEW3



#### Build Up

Solid External Masonry Wall

215mm Aircrete Solid Wall ( $\lambda \leq 0.15$  W/mK)

Render & Insulation ( $\lambda = 0.022$  W/mK)

Pitched Roof Gable

150mm insulation (0.044W/mK) between rafters

50mm insulation (0.022W/mK) beneath rafters

## Calculated $\psi$ -values

Cavity Insulation	Inner leaf blockwork
	Aircrete Block $\lambda \leq 0.15$ W/mK
	$\psi$ -value W/mK
50mm $\lambda=0.022$	0.062
75mm $\lambda=0.022$	0.064
100mm $\lambda=0.022$	0.066

## Points to Watch

- Ensure block face is kept clean of mortar snots and other debris during construction to permit tight fit of external wall insulation.
- 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.
- Ensure the top of the wall is levelled with mortar and the insulation is taken up level with the correct roof pitch.