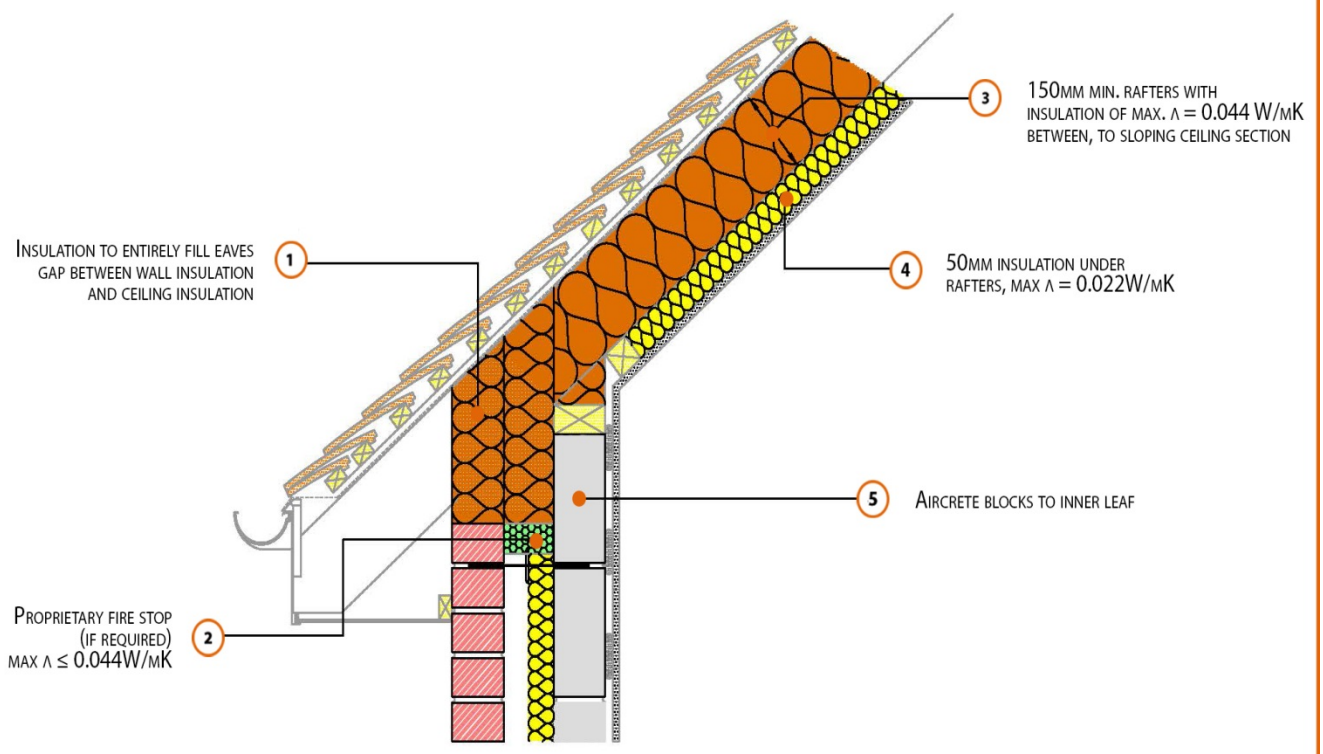
LABC Registered Construction Details
Masonry

Registration Number: E11MCPF5



Build Up

External Masonry Cavity Wall

Masonry Outer Leaf (λ = 0.77)

100mm Aircrete Block Inner Leaf (λ = 0.15 W/mK)

Partial Fill Insulation

Pitched Roof Eaves

150mm insulation (0.044W/mK) between rafters

50mm insulation (0.022W/mK) beneath rafters

Unventilated Rafter Void

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Calculated ψ-values

	Inner leaf blockwork
	Aircrete Block λ = 0.15 W/mK
Cavity Insulation	ψ-*value W/mK*
50mm λ=0.022	**0.027**
100mm λ=0.022	**0.047**

Points to Watch

- Ensure cavities are kept clean of mortar snots and other debris during construction
- Compressible insulation should be tucked into the head of the cavity.
- The eaves insulation should not compromise the cross flow ventilation or free water drainage below timber battens.
- Consider whether a vapour control plasterboard or separate vapour control barrier is required.
- Fire resistance will also be required for room in roof situations.
- Ensure eaves ventilation does not compromise free water drainage below the tiling battens.
- 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.