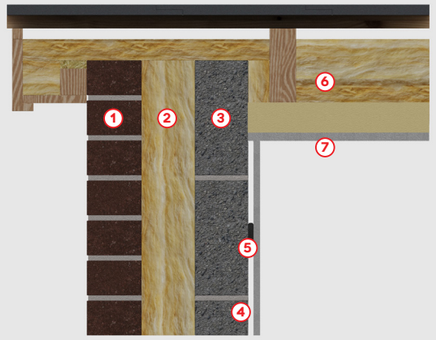
E13 - Gable (Insulation at rafter level)

Superglass Superwall 32 Cavity Batt



1. 102.5mm Outer Leaf Brickwork
2. Superglass Superwall 32 Cavity Batt
3. 100mm Inner Leaf Blockwork
4. 15mm Plaster Dabs
5. 12.5mm Standard Plasterboard
6. 140mm Superglass Timber & Rafter Roll 32
7. 52.5mm Siniat Thermal PIR Board

Images for illustration purposes only.

Date of Issue: September 2026

	Wall Build-up	
	Thickness (mm)	**Thermal Conductivity (W/mK)**
Outer Leaf Brickwork	102.5	0.77
Superglass Superwall 32 Cavity Batt	Shown in tables below	
Inner Leaf Blockwork	100	Shown in tables below
Plaster Dabs	15	0.088
Standard Plasterboard	12.5	0.19

	Roof Build-up	
	Thickness (mm)	**Thermal Conductivity (W/mK)**
Roof Tiles		
Ventilated cavity between timber battens	50	
Superglass Timber & Rafter Roll 32 between rafters	140	0.032
Siniat Thermal PIR Board	52.5	R-Value: 1.89W/m²K

Linear Thermal Transmittance (Ψ-value) and Temperature Factor (f-value) calculated for a range of block types and insulation thicknesses.

Superwall 32 – 0.032W/mK											
	Insulation & Cavity Thickness	**100mm**		**125mm**		**150mm**		**175mm (100+75mm)**		**200mm (2x100mm)**	
Block Type	**Thermal Conductivity (W/mK)**	**Ψ-value (W/mK)**	**f-value**	**Ψ-value (W/mK)**	**f-value**	**Ψ-value (W/mK)**	**f-value**	**Ψ-value (W/mK)**	**f-value**	**Ψ-value (W/mK)**	**f-value**
Lightweight Aircrete	0.11	0.045	0.900	0.045	0.902	0.046	0.904	0.046	0.906	0.048	0.902
Standard Aircrete	0.15	0.048	0.900	0.048	0.902	0.049	0.905	0.049	0.907	0.051	0.903
High Strength Aircrete	0.19	0.050	0.900	0.050	0.903	0.051	0.906	0.051	0.908	0.053	0.905
Ultra Lightweight Aggregate	0.28	0.054	0.902	0.053	0.905	0.054	0.908	0.054	0.911	0.056	0.909
Medium Dense	0.45	0.058	0.905	0.057	0.910	0.058	0.913	0.058	0.916	0.060	0.914
Dense Concrete	1.13	0.064	0.915	0.063	0.920	0.064	0.924	0.063	0.928	0.065	0.927

The results have been generated using AutoPsi Thermal Modelling Tool. The calculations have been completed using the methodology outlined in BS EN ISO 10211 and in accordance with BR497 2nd Edition.

Any deviation from the details used as part of this calculation will result in the calculation being inaccurate. To request a copy of a calculation or a different build-up please email technical.stirling@etexgroup.com