E12 – Gable (Insulation at ceiling level)

Superglass Superwall 32 Cavity Batt

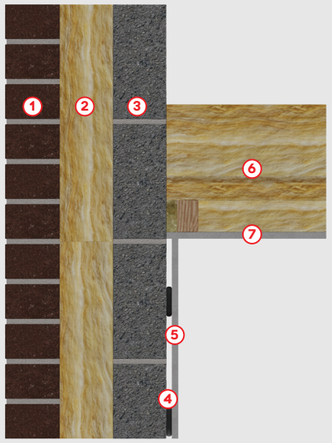
Date of Issue: September 2026

	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

	Ceiling Build-up	
	Thickness (mm)	**Thermal Conductivity (W/mK)**
Superglass Multi-Roll 44 cross-laid over timber joists	300 (2x150)	0.044
Superglass Multi-Roll 44 between timber joists	100	0.044
Standard Plasterboard	15	0.19

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	0.046	0.923	0.043	0.929	0.040	0.934	0.039	0.937	0.038	0.940
Standard Aircrete	0.15	0.053	0.917	0.050	0.923	0.047	0.928	0.045	0.931	0.044	0.934
High Strength Aircrete	0.19	0.059	0.912	0.056	0.918	0.053	0.923	0.052	0.926	0.051	0.929
Ultra Lightweight Aggregate	0.28	0.072	0.903	0.069	0.909	0.066	0.915	0.065	0.918	0.063	0.921
Medium Dense	0.45	0.093	0.891	0.092	0.898	0.088	0.903	0.087	0.906	0.086	0.909
Dense Concrete	1.13	0.165	0.865	0.169	0.871	0.163	0.876	0.163	0.879	0.162	0.881



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. 400mm of Superglass Multi-Roll 44
7. 15mm Standard Plasterboard

Images for illustration purposes only.

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