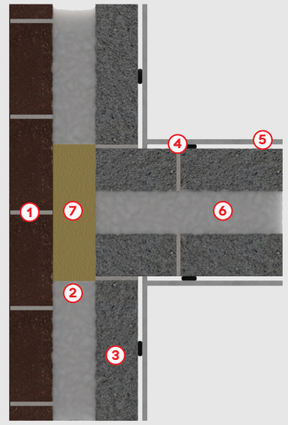
E18 – Party wall between dwellings

Superglass Superwhite 34 Blown Cavity Insulation

Date of Issue: September 2026

	External Wall Build-up	
	Thickness (mm)	**Thermal Conductivity (W/mK)**
Outer Leaf Brickwork	102.5	0.77
Superglass Superwhite 34 Blown Cavity Insulation	Shown in tables below	
Inner Leaf Blockwork	100	Shown in tables below
Plaster Dabs	15	0.088
Standard Plasterboard	12.5	0.19

	Party Wall Build-up	
	Thickness (mm)	**Thermal Conductivity (W/mK)**
Standard Plasterboard	12.5	0.19
Plaster Dabs	15	0.088
Standard Aircrete Blocks	100	0.15
Superglass Superwhite 34 Blown Cavity Insulation	100	0.034
Standard Aircrete Blocks	100	0.15
Plaster Dabs	15	0.088
Standard Plasterboard	12.5	0.19



1. 102.5mm Outer Leaf Brickwork
2. Superglass Superwhite 34 Blown
3. 100mm Inner Leaf Blockwork
4. 15mm Plaster Dabs
5. 12.5mm Standard Plasterboard
6. 100mm Superwhite 34 Blown
7. Cavity Barrier

Images for illustration purposes only.

Linear Thermal Transmittance (Ψ-value) and Temperature Factor (f-value) calculated for a range of block types and insulation thicknesses.
Ψ – values shown below are applicable to each dwelling on either side of the party wall.

Superwhite 34 Blown Cavity Insulation - 0.034W/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	0.035	0.947	0.031	0.945	0.028	0.958	0.025	0.963	0.023	0.959
Standard Aircrete	0.15	0.036	0.946	0.031	0.945	0.028	0.958	0.025	0.963	0.023	0.959
High Strength Aircrete	0.19	0.037	0.945	0.032	0.944	0.029	0.958	0.026	0.963	0.023	0.959
Ultra Lightweight Aggregate	0.28	0.038	0.945	0.032	0.944	0.029	0.958	0.026	0.964	0.024	0.959
Medium Dense	0.45	0.039	0.945	0.033	0.944	0.030	0.959	0.026	0.964	0.024	0.959
Dense Concrete	1.13	0.040	0.947	0.035	0.946	0.030	0.961	0.027	0.966	0.025	0.961

Stone Mineral Wool Insulation cavity barrier with a thermal conductivity of 0.035W/mK.

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