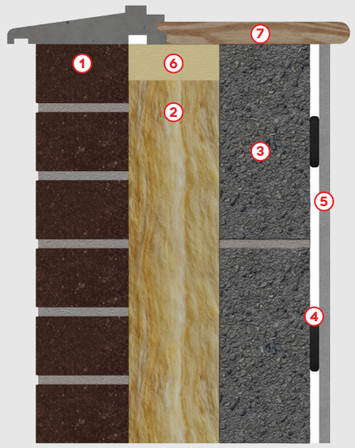
E03 – Window Sill

Superglass Superwall 32 & Superwall 34 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 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

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



1. 102.5mm Outer Leaf Brickwork
2. Superglass Superwall Cavity Batt
3. 100mm Inner Leaf Blockwork
4. 15mm Plaster Dabs
5. 12.5mm Standard Plasterboard
6. 45mm Cavity Closer
7. 20mm Internal Window Sill

Images for illustration purposes only.

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	0.016	0.906	0.017	0.906	0.020	0.902	0.021	0.905	0.023	0.903
Standard Aircrete	0.15	0.015	0.907	0.017	0.906	0.020	0.903	0.020	0.905	0.022	0.903
High Strength Aircrete	0.19	0.015	0.907	0.016	0.907	0.019	0.903	0.020	0.905	0.022	0.903
Ultra Lightweight Aggregate	0.28	0.014	0.908	0.016	0.907	0.019	0.903	0.020	0.905	0.022	0.904
Medium Dense	0.45	0.014	0.908	0.015	0.907	0.018	0.904	0.019	0.905	0.021	0.904
Dense Concrete	1.13	0.013	0.908	0.015	0.908	0.018	0.904	0.019	0.906	0.021	0.904

Superwall 34 – 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	0.016	0.905	0.017	0.905	0.020	0.902	0.021	0.904	0.023	0.903
Standard Aircrete	0.15	0.015	0.906	0.016	0.906	0.019	0.903	0.020	0.904	0.022	0.903
High Strength Aircrete	0.19	0.015	0.907	0.016	0.906	0.019	0.903	0.020	0.905	0.022	0.903
Ultra Lightweight Aggregate	0.28	0.014	0.907	0.015	0.907	0.018	0.903	0.019	0.905	0.021	0.903
Medium Dense	0.45	0.013	0.908	0.015	0.907	0.018	0.903	0.019	0.905	0.021	0.903
Dense Concrete	1.13	0.013	0.908	0.015	0.907	0.018	0.903	0.019	0.905	0.021	0.904

The internal sill is 20mm softwood with a thermal conductivity of 0.12W/mK. The cavity closer is 45mm high insulation with a thermal conductivity of 0.026W/mK.

The adiabatic frame is 70mm wide, with a 30mm overlap.

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