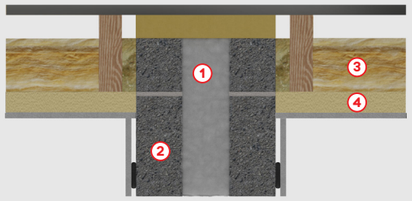
P05 - Party Wall/Roof (insulation at rafter level)

Superglass Superwhite 34 Blown Cavity Insulation



1. Superglass Superwhite 34 Blown
2. 100mm Blockwork
3. 140mm Superglass Timber & Rafter Roll 32
4. 52.5mm Siniat Thermal PIR Board

Images for illustration purposes only.

Date of Issue: September 2026

	Party Wall Build-up	
	Thickness (mm)	**Thermal Conductivity (W/mK)**
Standard Plasterboard	12.5	0.019
Plaster Dabs	15	0.088
Blockwork	100	Shown in tables below
Superwhite 34 Blown Cavity Insulation	Shown in tables below	
Blockwork	100	Shown in tables below
Plaster Dabs	15	0.088
Standard Plasterboard	12.5	0.019

	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.
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**	
Block Type	**Thermal Conductivity (W/mK)**	**Ψ-value (W/mK)**	**f-value**	**Ψ-value (W/mK)**	**f-value**	**Ψ-value (W/mK)**	**f-value**
Lightweight Aircrete	0.11	0.036	0.954	0.037	0.953	0.039	0.952
Standard Aircrete	0.15	0.039	0.954	0.040	0.953	0.042	0.952
High Strength Aircrete	0.19	0.042	0.954	0.043	0.953	0.045	0.952
Ultra Lightweight Aggregate	0.28	0.045	0.956	0.047	0.954	0.049	0.953
Medium Dense	0.45	0.050	0.959	0.052	0.957	0.054	0.955
Dense Concrete	1.13	0.059	0.952	0.060	0.965	0.070	0.949

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