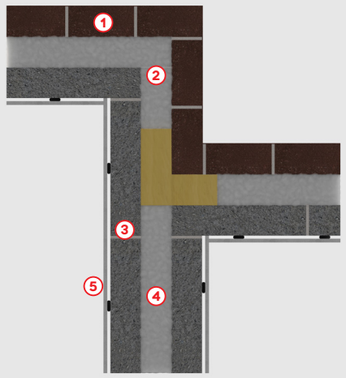
# E25 - Staggered party wall between dwellings

**Superglass Superwhite 34 Blown Cavity Insulation**




1. 102.5mm Outer Leaf Brickwork
2. Superglass Superwhite 34 Blown
3. 100mm Inner Leaf Blockwork
4. Superglass Superwhite 34 Blown
5. 12.5mm Standard Plasterboard

Images for illustration purposes only.

**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 |

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 | 0.057 | 0.955 | 0.053 | 0.965 | 0.048 | 0.969 | 0.046 | 0.974 | 0.043 | 0.979 |
| Standard Aircrete | 0.15 | 0.058 | 0.954 | 0.054 | 0.963 | 0.049 | 0.969 | 0.047 | 0.974 | 0.044 | 0.978 |
| High Strength Aircrete | 0.19 | 0.059 | 0.953 | 0.055 | 0.962 | 0.050 | 0.969 | 0.047 | 0.974 | 0.045 | 0.978 |
| Ultra Lightweight Aggregate | 0.28 | 0.060 | 0.950 | 0.056 | 0.960 | 0.050 | 0.968 | 0.048 | 0.974 | 0.045 | 0.978 |
| Medium Dense | 0.45 | 0.061 | 0.948 | 0.057 | 0.959 | 0.051 | 0.968 | 0.048 | 0.973 | 0.046 | 0.978 |
| Dense Concrete | 1.13 | 0.063 | 0.946 | 0.058 | 0.957 | 0.052 | 0.967 | 0.049 | 0.973 | 0.046 | 0.977 |

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