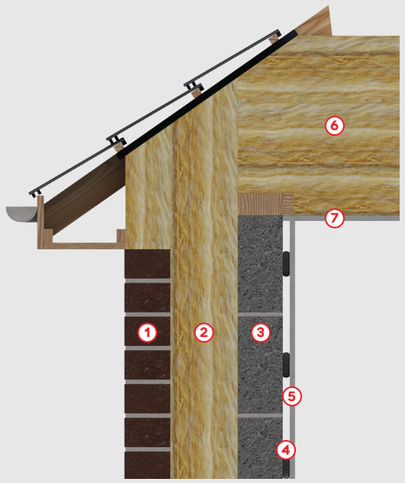
# E10 – Eaves (Insulation at ceiling level)

**Superglass Superwall 34 Cavity Batt**




1. 102.5mm Outer Leaf Brickwork
2. Superglass Superwall 34 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.

**Date of Issue: September 2026**

| | Wall Build-up | |
|---|---|---|
| | **Thickness (mm)** | **Thermal Conductivity (W/mK)** |
| Outer Leaf Brickwork | 102.5 | 0.77 |
| Superglass Superwall 34 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 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 | 0.057 | 0.923 | 0.050 | 0.932 | 0.048 | 0.937 | 0.048 | 0.939 | 0.045 | 0.943 |
| Standard Aircrete | 0.15 | 0.058 | 0.925 | 0.051 | 0.934 | 0.048 | 0.939 | 0.049 | 0.940 | 0.046 | 0.944 |
| High Strength Aircrete | 0.19 | 0.059 | 0.926 | 0.052 | 0.935 | 0.049 | 0.940 | 0.050 | 0.942 | 0.046 | 0.946 |
| Ultra Lightweight Aggregate | 0.28 | 0.060 | 0.928 | 0.053 | 0.937 | 0.050 | 0.942 | 0.051 | 0.944 | 0.047 | 0.948 |
| Medium Dense | 0.45 | 0.061 | 0.930 | 0.054 | 0.939 | 0.051 | 0.944 | 0.052 | 0.946 | 0.048 | 0.950 |
| Dense Concrete | 1.13 | 0.063 | 0.934 | 0.056 | 0.942 | 0.053 | 0.947 | 0.053 | 0.949 | 0.049 | 0.953 |

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