# CORNERSTONE
# INSULATING RENDER
## Thermal Conductivity

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CORNERSTONE™
PROTECTING THE PAST & PRESENT

Cornerstone Insulating Render Insulation Calculations

The following calculations are performed in accordance with BS EN ISO 6949 using a thermal conductivity of 2.79 W/mK for a granite wall of varied thicknesses and a measured value of 0.123 W/mK for the Cornerstone Insulating Render;

| | Wall Thickness (mm) | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Render Thickness (mm) | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 |
| 0 | 3.8 | 3.6 | 3.4 | 3.2 | 3.0 | 2.9 | 2.7 | 2.6 |
| 15 | 2.6 | 2.5 | 2.4 | 2.3 | 2.2 | 2.1 | 2 | 2.0 |
| 25 | 2.2 | 2.1 | 2.0 | 1.9 | 1.9 | 1.8 | 1.8 | 1.7 |
| 50 | 1.5 | 1.5 | 1.4 | 1.4 | 1.4 | 1.3 | 1.3 | 1.3 |
| 75 | 1.2 | 1.1 | 1.1 | 1.1 | 1.1 | 1.0 | 1.0 | 1.0 |

The standard is in our opinion inappropriate; for a 600mm thick solid wall of **any** minerology they assume 2.6 W/mK. In real life measurements from SPAB it has been shown to be anywhere between 1.5 and 6.2 W/mK for a 600mm thick wall depending on mineralogy and building method. For Granite walls in Cornwall we have experimental data showing a typical value between 4 and 5 W/mK.