

**Product: Polystyrene Insulation**

**Thermal Performance**

Polystyrene traps air to provide an efficient insulating material with a k-value of 0.038W/mK. A U-value of 0.35W/m<sup>2</sup>K can be achieved on most wall types using between 70-100mm.

Table to show thickness of insulation required to achieve u-value of 0.35W/m<sup>2</sup>K

<b>Wall construction</b>	<b>Thickness of insulation</b>
Brick/Cavity/Brick	90mm
103mm Solid blockwork	100mm
215mm Solid Brickwork	90mm

Please contact our offices for an accurate u-value calculation.

**Durability**

Polystyrene is rot proof and will remain effective for the lifetime of the building.

**Installation**

Polystyrene is light and easy to handle. It is easily cut and requires no specialist trades to fit. It can be rasped to provide a perfectly flat finish on which to render,

**Economics**

Polystyrene is by far the most cost effective insulation used in external wall insulation.

**Fire**

The insulation used for external wall insulation is aged and is supplied as EPS 70 as defined in BS EN 13163 containing a flame-retardant additive. When installed the insulation is protected by the render which will give a class O Surface Spread of Flame. It is recommended that in buildings over 3 storeys in height that a mineral wool fire break is inserted at every floor above the second floor in accordance with BRE guidelines.

**Acoustic**

Polystyrene provides no substantial acoustic benefit.

**Dimensions**

1200mm x 600mm in thickness' from 20mm – 140mm as standard, non standard thickness' are available on request.

**Vapour Permeability**

Polystyrene has a significant resistance to the passage of water vapour but should not be regarded as a vapour control layer.

