

Product: Polystyrene Insulation (Rail and Square Edged)  
 Product Code: PSE020-PSE250, PRS050-PRS200

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**Authorised By:**

Product Technical Data: EOI03/14

### **Thermal Performance**

Polystyrene traps air to provide an efficient insulating material with a k-value of 0.037W/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

Wall construction	Thickness of insulation
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. EPS 70e has a density of 15kg/m<sup>3</sup>, and a minimum compressive strength of 70kPa at 10% compression, and a safe working load of 21kPa.

### **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 70e 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 or Euroclass B-S1, d0. Polystyrene insulation can be used up to 18m in height in an external wall application, in accordance with part B of the Building Regulations and Technical Standard 2.

For use above this height please contact SPS Envirowall for further details.

### **Acoustic**

Polystyrene provides no substantial acoustic benefit.

### **Dimensions**

Rail System supplied in pre routed boards 500 x 500mm. 40mm-200mm thickness' as standard. Square edged supplied 1200 x 600mm, 20mm-250mm as standard. Tongue and Grooved supplied 1200 x 600mm, 50mm-250mm as standard.



For non standard dimension please  
contact Envirowall Ltd.

### **Vapour Permeability**

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

