

**Product: Phenolic Insulation**
**Thermal Performance.**

Phenolic foam traps inert gasses to give an exceptional thermal performance. Its k-value is 0.24W/mK  
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	50mm
103mm Solid blockwork	55mm
215mm Solid Brickwork	55mm

Please contact our offices for an accurate u-value calculation

**Durability**

The product when fitted correctly has an indefinite life. The insulant is resistant to rot and is vermin proof. It is resistant to dilute acids and alkalis but not resistant to solvent based adhesive systems

**Installation**

Phenolic board can be cut on site and do not require any specialist trades to fit.

Phenolic insulation is dimensionally unstable and we would recommend both mechanical and adhesive fix. It is not possible to rasp the surface and it may therefore require additional thickness of base coat to ensure a flat surface to the base coat render.

**Economics**

Phenolic is more expensive than polystyrene but some economies can be made on fixings and profiles as lesser thickness of insulation can be used to achieve similar thermal performance.

**Fire**

Is classified in accordance with the building regulations when rendered as class O. BS 476: Part 6 1989 (fire propagation test) Index of performance (I) (fire not exceeding 12 and sub-index(i1) not exceeding 6. BS 476: part 7:1997. (Surface spread of Flame Test):Class1 rating.

Phenolic insulation can be used up to 18m in height in an external wall application, in accordance with part L of the building regulations. Its use above that height requires the installation of mineral wool fire breaks in accordance with BRE guidelines.

**Acoustic**

Phenolic provides no substantial acoustic benefits.

**Dimensions**

Boards are supplied 1200 x 600.  
Thickness of 20mm to 80mm in 5mm increments.

**Vapour Permeability**

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

