

**Product: Mineral Wool Insulation**

**Thermal Performance**

Mineral wool is available in two forms, slab and lamella. Mineral wool traps air to provide its insulating capacity and therefore has a similar thermal performance to polystyrene but is not as thermally efficient as phenolic.

EWI Slab HD  $k = 0.036W/mK$

Façade lamella =  $0.040W/mK$

Table to show thickness of insulation required to achieve a U value of  $0.35W/m^2K$

Wall construction	Thickness of insulation	
	Slab	Lamm
Brick/Cavity/Brick	80mm	90mm
103mm Solid blockwork	90mm	100mm
215mm Solid Brickwork	90mm	100mm

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.

The product may be exposed to inclement weather prior without adversely affecting it but should be allowed to dry before application of the renders

**Installation**

Mineral wool is easily cut and handled on site. The product may cause minor irritation to the skin. It is the most dense of the insulation products used for external wall insulation.

The slab can not be rasped flat and therefore may require additional thickness of render to achieve a flat finish to the base coat.

Façade lamella can be rasped and has the additional benefit that it does not require mechanical fixings.

**Economics**

Mineral Wool as an equivalent square meter cost to phenolic of the same thermal performance but is more expensive than polystyrene.

**Fire**

Rockwool has excellent fire performance. It is classified as A1 to Iso 1182. It can be used above 18m in height without the requirement for additional fire breaks.

**Acoustic**

Mineral Wool has excellent acoustic properties. By incorporating mineral wool into the wall construction appreciable improvements in the sound reduction of the structure can be made especially in lightweight-framed buildings.

**Dimensions**

Slab 1200mm x 600mm. Thickness 30mm – 120mm (10mm increments)  
 Façade Lamella 1000mm x 200mm  
 Thickness 30-300mm (10mm increments)

**Vapour Permeability**

Mineral wool is very vapour permeable. The vapour resistance of mineral wool is  $5.9MN/gm$ .

