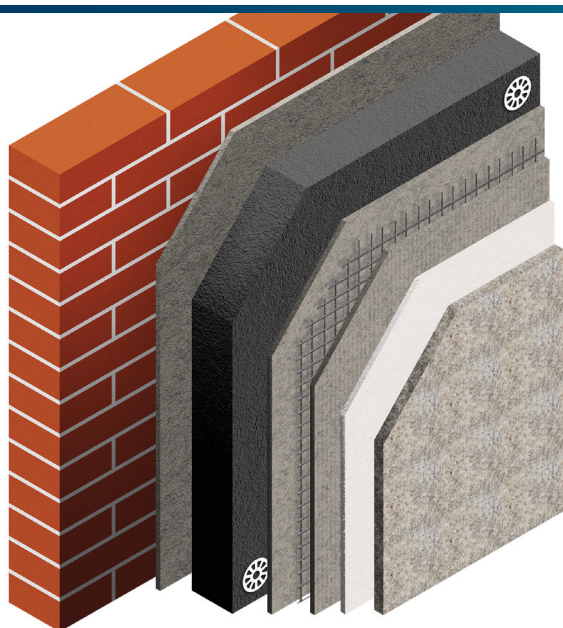




# Technical Datasheet

## External Wall Insulation (EWI) Adhesive and Mechanical



### Description

Expanded polystyrene (EPS) External Wall Insulation (EWI) boards dramatically increase the thermal performance of domestic and commercial buildings and are suited to any external wall application to satisfy current building regulations.

EWI is quick to install and a cost-effective solution that can be applied with almost any render or cladding system to produce a full EWI system for use on new builds or, as a retrofit solution for existing buildings.

### Durability of EPS

EPS is a thermally efficient and durable material that is both rot proof and water resistant. Its long life span guarantees EPS as an effective insulator for the life of the construction application.

### Key Features & Benefits

- Lambda value 0.030 W/m<sup>2</sup>k
- Straight profile edge
- Lightweight
- Application to any wall substrate
- Quick and easy installation
- Minimal water absorption & permeability
- 100% recyclable
- A+ BRE Green Guide rating

### Material Compatibility

Expanded polystyrene EWI is compatible with all types of renders and cladding systems. Specifically EPS is compatible with cement, concrete, brick, masonry, mortar and plaster.

Solvent based products should not be allowed to come into contact with EPS, including any membranes or adhesives.

### Render/Cladding Compatibility

EWI boards are compatible with any external wall system. Different systems utilise alternative wall finishes, specific to the system design and intention, all of which can change the appearance of a build. Brick slips are a popular choice, a lightweight option to mimic any type of brick work. Please contact your system designer for options using this method.

## Technical Specification: EWI Board (Grey EPS)

	Grey EWI Board	Industry Standard
Thermal Conductivity (Lambda 90/90) (Wm-1K-1)	0.030	BS EN12667
Length Tolerance	L3	EN882
Width Tolerance	W3	EN882
Thickness Tolerance	T2	EN823
Flatness Tolerance	P5	EN825
Squareness	S5	EN824
Bending Strength (kPa)	115	EN12089
Tensile Stress (at maximum load)	>150	BS EN 1607:2013
Reaction to Fire	Euroclass E	EN13501-1
Long Term Water Absorption	≤0.12%	BS EN 12087:2013
Dimensional Stability	≤0.12%	BS EN 1604:2013
Compressive Strength at 10% (kPa)	>70	BS EN826:2013
Shear Strength (kPa)	>65	BS EN 12090:2013
BREEAM Rating	A+	BRE

### EWI Board U-Values

Opposite is an overview of the U-values for EWI boards for adhesive and mechanical fixtures.

The thermal transmittance (U-value) of a wall is heavily dependent upon factors such as ventilation, bridging and wall substrate. Each U-value has been calculated in accordance with BS EN ISO6946 for

accuracy. For a specific U-value calculation contact our technical and sales teams on 01604 596800.

#### U-Values: Typical Solid Wall Construction (225mm Brick)

	U-Value W/m2K
Grey 90mm EWI Board	0.30

### BBA Certification

The British Board of Agrément (BBA) has extensively tested our EWI boards for suitability. Full details of certifications are available on our website.

### Recycling

A free scrap EPS collection service is available to help recycle as much EPS back into new products. Please contact us for more information.



#### Engineered Foam Products

Cornhill Close  
Lodge Farm Industrial Estate  
Northampton  
NN5 7UB  
T: +44 (0) 1604 596800

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