

## Climate EWI

### **External Wall Insulation**

Sundolitt Climate External Wall Insulation is graphite enhanced expanded polystyrene with excellent insulation performance and easy installation.

Expanded polystyrene insulation boards can be used with bonded render external wall insulation systems providing fast construction. The insulation boards are also easy to handle and cut with no special requirements for PPE.

#### **FPS Benefits**



Suitable for use with all render systems



Excellent thermal properties



Lightweight and easy to install



Resistant to freeze/thaw



Flame Retardant



ODP = 0 GWP = <5



Rated A+ in BRE Green Guide



Fully Recyclable



Standard Sizes Available				
	Length	Width	Thickness	
Dimensions (mm)	1200	600	20 - 300	

Climate External Wall Insulation is suitable for use with all render systems. The expanded polystyrene (EPS) boards can be fixed to the existing wall with adhesive alone or with mechanical fastenings where required for extra stability.

EPS is a rigid board insulation that can be used with thick sand and cement, lime based and thin layer polymer modified renders.

Polymer modified renders require a smooth surface to be applied to. This is easily achieved by removing surface discrepancies in the EPS with a rasp.

Sundolitt Climate EWI - Physical Properties					
	CE70	CE100			
Thermal Conductivity (W/mK)	0.031	0.030			
Compressive Strength at 1% nominal Compression (kPa)	20	45			
Compressive Strength at 10% nominal Compression (kPa)	70	100			
Bending Strength (kPa)	115	150			
Water Absorption by Immersion (vol %)	< 5				
Dimensional Stability at 23°C and 50% RH	± 0.5				
Reaction to Fire	Euroclass E				









# Climate EWI

### **External Wall Insulation**

Sundolitt Climate External Wall Insulation provides excellent thermal performance. Achieving energy savings up to £375/year dependent on property type with a thickness of 120mm. Information on the energy saving potential of external wall insulation can be found on Energy Saving Trust website.

Passive House standards can also be achieved with the application of 300mm. Using external wall insulation reduces energy required for heating and cooling reducing the building's ecological footprint.

### Sundolitt Climate EWI - Thermal Resistance (m<sup>2</sup>K/W)

Thickness (mm)	CE70	CE100
50	1.613	1.613
75	2.419	2.419
100	3.226	3.226
110	3.548	3.548
120	3.871	3.871
150	4.839	4.839
200	6.452	6.452
250	8.065	8.065
300	9.677	9.677

Climate EWI is lightweight EPS rigid board insulation 1200 x 600mm panels make them easy to handle and transport on site, especially where scaffold is required. It is easy to install using dot and dab adhesive to hold in place, tightly butting the square edged boards together against the wall.

Expanded Polystyrene is moisture resistant and remains unaffected by freeze/thaw for the lifetime of the insulated wall.

#### Accreditation

Sundolitt Climate EWI is manufactured in accordance with BS EN ISO 13163.







Climate External Wall Insulation is supplied containing a flame retardant additive, reducing the risk of accidental ignition during installation. Being encapsulated between the wall and render means the material does not become a fire accelerator.

Expanded polystyrene is not harmful to the environment either in manufacture or use. With an Ozone Depletion Potential of Zero and Global Warming Potential of < 5 the material meets the requirements of environmental design parameters.

It is environmentally a good choice with excellent energy saving per kg of material achieving an A+ rating within the BRE Green Guide.

EPS is fully recyclable, clean waste can be ground to smaller granules and mixed with raw materials to produce new insulation panels.

The material can also be melted down and is used in the manufacture of wood-effect panels to create long life park benches. EPS also has a high calorific value when used in energy recovery.

Manufacturing Tolerances				
Length	L2	±2mm		
Width	W2	± 2mm		
Thickness	T2	± 2mm		
Flatness	P5	5mm		
Squareness	S5	± 5mm/m		

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