

## Product Specifications

# Warm-R SD E Grey EWB

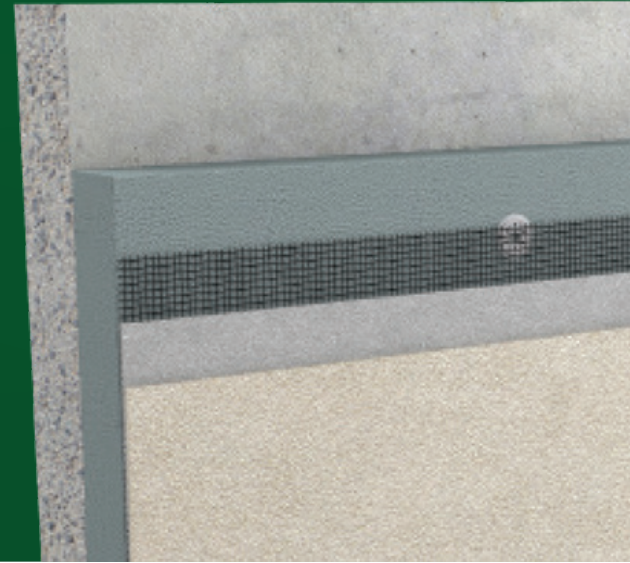
**Walls:** Enhanced EPS

### Key Features

Extensive Range of Sizes and Thicknesses

Thermal Conductivity of 0.031 W/mk

BRE Green Guide A Rated



**Xtratherm Warm-R is a high quality expanded Polystyrene containing integrated graphite within the cell structure that reflects and absorbs radiant heat resulting in an improved thermal insulation performance.**

The Warm-R External Wall board is an Expanded Polystyrene with Graphite/Carbon Enhancement.

The graphite particles act as infrared absorbers to reduce heat dissipation caused by the radiation. This improves the thermal conductivity of the board to 0.031 W/mK, an improvement on conventional expanded polystyrene products.

### Application

This board provides thermal insulation to new and existing rendered or unrendered masonry.

(All surfaces should be sound)

### Description

Warm-R External Wall insulation board is suitable for mechanical fix to sound substrate using approved fixings at a specified rate per board. When considering use on uneven surfaces then bedding shall be required in accordance with the system specification.

### Quality

This range is manufactured to:

ISO 9001

Quality Management System

ISO 14001

Environmental Management System

### Specification Clause

The Wall insulation shall be Xtratherm Warm-R SD E Grey EWB manufactured to EN 13163:2012+A2:2016 under ISO 9001 by Xtratherm, comprising a graphite enhanced EPS \_\_\_mm to achieve a U-Value of \_\_\_ W/m<sup>2</sup>K for the wall element. To be installed in accordance with instructions issued by the full system provider. Refer to NBS clause E21 210 & 220.

#### Property & Units

Thermal Conductivity  
0.031 (W/mk)

Length Tolerance  
±2mm

Width Tolerance  
±2mm

Thickness Tolerance  
±1mm

Flatness Tolerance  
5mm

Squareness Tolerance  
±2mm / 1200mm

Dimensional Stability  
DS (70,90) 1

Compressive Strength  
>70 (kPa)

Tensile Strength  
>70 (kPa)

Fire Properties  
Euroclass E

#### Sheet size & Thickness

Length (mm) x Width (mm) 2400 x 1200

1800 x 1200

Thickness (mm) 80 - 220

#### Typical R-Values

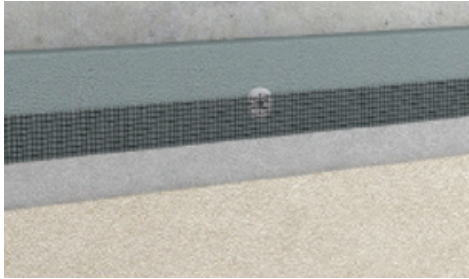
80mm R-Value: 2.55

100mm R-Value: 3.20

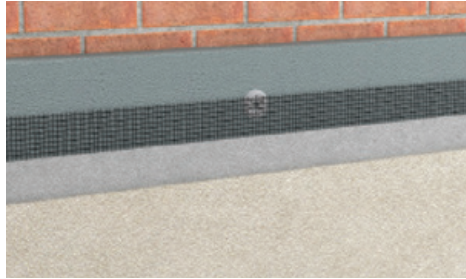
120mm R-Value: 3.85

140mm R-Value: 4.50

220mm R-Value: 7.05



New Build



Refurbishment

### U-Values - External Wall Board

Wall Type	80mm	100mm	120mm	140mm	220mm
Cavity Empty	0.31	0.26	0.22	0.20	0.13
Cavity 50mm EPS	0.22	0.19	0.17	0.16	0.11
Hollow Block	0.33	0.27	0.23	0.20	0.13
Solid Block	0.32	0.27	0.23	0.20	0.13

### EWB Standards & Thermal Conductivity

EWB: EN13163: Thermal insulation products for buildings - Factory made products of expanded polystyrene (EPS) Specification. Warm-R Enhanced EPS has a thermal conductivity (90/90 value) of 0.031 W/mK.

### System Compatibility

Each EWI system supplier must refer to the published physical properties and standards to which External Wall Board is manufactured and take the necessary actions to establish the suitability for each specific systems application.

### Quality Inspection

A visual check of each board must be conducted by suitably qualified/trained operative to ensure that wet or otherwise damaged boards are not installed.

Good workmanship and appropriate site procedures are necessary to achieve expected performance. The information contained in this data sheet is, to the best of our knowledge, true and accurate but any recommendations or suggestions which may be made are without guarantee since the conditions of use are beyond our control. Xtratherm reserve the right to change the content of this datasheet without prior notice.

### QC Report Procedure

Xtratherm shall be notified in writing within 2 days of delivery should any concerns be identified. Failure to notify shall render any claims invalid.

### Sitework

Insulated rendered systems are proprietary and use many different methods of fixing the External Wall Board to suitable substrates. Specific sitework guidance must be sought from the system manufacturer.

### Daily Working Practice

At the end of each days work or upon interruption for extended periods of time the surface of all boards should be covered in order to protect from inclement weather.

### Product Improvement

Xtratherm has a policy of continual product development and reserves the right to change the specification without prior notice.

### Standards

This range is manufactured to EN 13163 under quality systems approved to ISO 9001:2000 quality management, EN ISO 14001:2004 environmental management.

### Storage

This product must be stored on a firm, clean, level base off the ground and must be protected from prolonged sunlight. Care must be taken when moving or handling the insulation boards to avoid damage. It must not be exposed to naked flame or other ignition sources.

### Cutting

Xtratherm External Wall boards can be readily cut using a sharp knife or fine toothed saw. Ensure tight fitting of the insulation boards to achieve continuity of insulation as asked for in accredited details.

### Packaging

The boards are wrapped in polythene packs and each pack is labelled with details of grade/type, size and number of pieces per pack.

### Availability

Xtratherm products are available through builder's merchants and specialist distributors throughout the UK and Ireland. For the location of your nearest stockist contact Xtratherm.

### Durability

External Wall Board is classified as a non-deleterious material and when correctly applied will last the life time of the rendering system.

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