

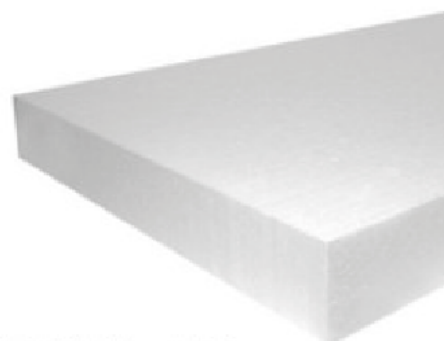
# Product Data Sheet

## HYTHERM EPS ADH Insulation

**Hytherm EPS ADH is a durable, lightweight, rigid expanded polystyrene (EPS) insulation available in both uniform and tapered boards for use in warm flat roofs with limited access and balconies and terraces with regular pedestrian traffic.**

### Key benefits

- BBA approved
- Fast, easy installation
- Lightweight, easy to handle
- Excellent compressive strength
- Long lasting dimensional stability
- Resistant to moisture
- Manufactured to requirements of BS EN 13163, BS EN ISO 14001 and BS EN ISO 9001
- A+ rated in the BRE Green Guide to Specification
- Zero ODP and virtually zero GWP
- Flame retardant additive achieving Fire Class E



## Product information

Hytherm EPS ADH is made from EPS (expanded polystyrene) which has an A+ rating in the BRE Green Guide. The BRE Green Guide to Specification ([www.bre.co.uk/greenguide/](http://www.bre.co.uk/greenguide/)) provides guidance on how to make the best environmental choices when selecting construction materials and components.

The insulation has an Ozone Depletion Potential (ODP) of zero and a virtually zero Global Warming Potential (GWP). The product may contain some residual Pentane that has a very low Global Warming Potential of <0.00044.

Hytherm EPS ADH contains a flame-retardant additive giving a Class E Reaction to Fire Classification to BS EN 13501-1: 2007.

Although Hytherm EPS ADH has significant resistance to the passage of water vapour, it should not be considered to be a vapour control layer and will not provide a barrier against damp penetration. A suitable waterproof membrane will be required in most forms of construction.

Hytherm EPS ADH is unaffected by the normal range of climatic temperatures and can be safely used in cold stores and similar applications. During installation and in service, contact with hot-water pipes or other surfaces where the temperature is likely to exceed 80°C for continuous periods should be avoided.

Correctly installed and protected, Hytherm EPS ADH will remain effective for the life of the building.

Contact Axter Ltd for further information.

## HYTHERM EPS ADH – Technical Characteristics

| Properties                | Measure unit | Value                                   |
|---------------------------|--------------|---|
| <b>Dimensions</b>         |              |   |
| FLAT BOARD                |              |   |
| Board size                | mm           | 1200 x 1200<br>1200 x 900<br>1200 x 400 |
| Board minimum thickness   | mm           | 20mm                                    |
| Board maximum thickness   | mm           | 600mm                                   |
| TAPERED BOARD             |              |   |
| Board size                | mm           | 1200 x 1200<br>1200 x 900<br>1200 x 600 |
| Board minimum thickness   | mm           | 20mm                                    |
| Board maximum thickness   | mm           | 600mm                                   |
| Working temperature range | °C           | -150 to +80                             |
| <b>Thermal Properties</b> |              |   |
| Thermal conductivity      | W/mK at 10°C | 0.035                                   |
| Thermal resistivity       | mK/W         | 28.57                                   |

| Properties  | Measure unit        | Value |
|---|---------------------|-------|
| <b>Mechanical Properties</b>                      |                     |       |
| Compressive strength at 10% compression           | kPa                 | 150   |
| Compressive strength at 1% nominal strain         | kPa                 | 70    |
| Bending strength                                  | kPa                 | 200   |
| <b>Moisture properties</b>                        |                     |       |
| Water vapour diffusion resistance factor          | μ                   | 30-70 |
| Water vapour permeability δ mg/(Pa.h.m)           | 0.009-0.020         |       |
| Vapour resistivity (MNs/gm)                       | 238                 |       |
| <b>Performance &amp; Environmental Properties</b> |                     |       |
| Fire performance – Euroclass (BS EN 13501-1)      | E                   |       |
| Nominal density                                   | 25kg/m <sup>3</sup> |       |
| EPS Rating: BRE Green Guide                       | A+                  |       |
| Ozone Depletion Potential (ODP)                   | Zero                |       |
| Global Warming Potential                          | < 5                 |       |

**Storage:** Hytherm EPS ADH boards should be kept under cover and protected from high winds and direct sunlight. Boards should not come into contact with PVC-sheathed electrical cables since this will lead to migration of plasticiser from the PVC resulting in embrittlement of the cable sheath. Cables should be protected by the use of a physical barrier, e.g. enclosed by an air gap or in a conduit.

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