

# TECHNICAL DATA SHEET

## GTEC Thermal EPS Board

Page 1 of 1

### Description

GTEC Thermal EPS Board is for use as a general purpose drylining board laminate with thermal insulation.

### Appearance

GTEC Thermal EPS Board is coloured ivory on the front and has expanded white polystyrene foam on the back and has tapers down the long edges of the front.

### Composition

Aerated Calcium sulphate di-hydrate enclosed inside a tough paper with bound edges. Core and papers are bonded with starch. Edge glue is PVA. Various thicknesses of Expanded polystyrene (EPS) are factory bonded to 9.5 mm board using PVA adhesive.

### Compliance Authority

GTEC Standard Board complies with BS EN 520:2004+A1:2009 Type A. Laminate complies with BS EN 13950:2005 The EPS complies with BS EN 13163

### Physical Properties

#### Strength to BS EN 520:

9.5mm board

Longitudinal breaking load  $\geq$  400 N

Transverse breaking load  $\geq$  160 N

#### Water vapour resistance:

22 mm = 2.31 MNs/g

30 mm = 3.47 MNs/g

40 mm = 4.92 MNs/g

50 mm = 6.37 MNs/g

*Fire Resistance* and Sound Insulation  $R_w$  depend on the system call, Technical Enquiryline for advice.

#### Reaction to fire:

Euroclass B-s1, d0 to BS EN 13501-1

Class 0 to Building Regulations Part B 2006.

#### Moisture Content:

< 2 %

#### Mass:

22 mm = 6.3 kg/m<sup>2</sup>

30 mm = 6.4 kg/m<sup>2</sup>

40 mm = 6.5 kg/m<sup>2</sup>

50 mm = 6.6 kg/m<sup>2</sup>

The density of the EPS is 13 kg/m<sup>3</sup>

#### Thermal Conductivity, $\lambda_R$ :

EPS Insulation: 0.037 W/mK

Plasterboard: 0.19 W/mK

#### Thermal Resistance, $R$ :

22 mm = 0.37 m<sup>2</sup>K/W

30 mm = 0.62 m<sup>2</sup>K/W

40 mm = 0.89 m<sup>2</sup>K/W

50 mm = 1.16 m<sup>2</sup>K/W

#### Nail & screw pull through:

> 200 N

*Impact resistance to BS 5234-2 appendix B*  
Medium Duty

### Environment & Sustainability

Global Warming Potential (GWP) = 0

Ozone depleting Potential (ODP) = 0

### Fixing

Use either dabs of GTEC Universal Bonding compound, GTEC Wall Lining Adhesive, GTEC Shallow Wall Channels (MFCS) or the GTEC Dryliner system

### Jointing Finishing & Painting

GTEC Thermal EPS Board can be jointed and finished with GTEC Jointing Systems. The boards require priming with GTEC Universal Sealer prior to decorating.

### Health & Safety

Please read the Laminates Health and Safety Datasheet available on our website or at Enquiryline.

#### Laminate weight:

23 kg for 2400 mm x 1200 mm x 40 mm board

### GTEC Vapour Board option

GTEC Thermal EPS Board is available with a vapour control layer of metallised polyester film within the laminate which enhances the vapour resistance of the product.

The vapour board performance:

Mean Water Vapour Resistance in MNs/g = 58.5

Mean Water vapour resistance factor:

$\mu$  of GTEC Vapour Board = 900

20/03/2015 RC