

# TECHNICAL DATASHEET GTEC Thermal EPS Board

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#### 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 liners made from recycled waste 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

GTEC Standard Board complies with BS EN 520:2004+A1:2009 Type A. Laminate complies with BS EN 13950:2014. The EPS complies with BS EN 13163.

#### **Physical Properties**

Flexural Strength to BS EN 520: 9.5mm board Longitudinal breaking load ≥ 400 N Transverse breaking load ≥ 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, acoustic, thermal & duty performance dependent on the whole system. See Siniat Drywall Manual for Siniat system performances.

Reaction to fire:

Euroclass B-s1, d0

Moisture Content:

< 2 %

Mass:

 $22 \text{ mm} = 6.3 \text{ kg/m}^2$ 

 $30 \text{ mm} = 6.4 \text{ kg/m}^2$ 

 $40 \text{ mm} = 6.5 \text{ kg/m}^2$ 

 $50 \text{ mm} = 6.6 \text{ kg/m}^2$ 

The density of the EPS is  $13 \text{ kg/m}^3$ 

Laminate weight:

18.1 kg for 2400 mm x 1200 mm x 22 mm board 18.4 kg for 2400 mm x 1200 mm x 30 mm board 18.7 kg for 2400 mm x 1200 mm x 40 mm board 19.0 kg for 2400 mm x 1200 mm x 50 mm board

Thermal Conductivity,  $\lambda_R$ : EPS Insulation: 0.037 W/mK Plasterboard: 0.19 W/mK

Thermal Resistance, R:

22 mm =  $0.37 \text{ m}^2\text{K/W}$ 30 mm =  $0.62 \text{ m}^2\text{K/W}$ 

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

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

#### **Environment & Sustainability**

Global Warming Potential (GWP) = 0 Ozone depleting Potential (ODP) = 0

#### Fixing

Use either dabs of GTEC Universal Bonding compound (two additional nailable plugs required for fire safety), GTEC Wall Lining Adhesive, GTEC Shallow Wall Channels (MFCS) or the GTEC Dryliner system.

# **Jointing Finishing & Painting**

GTEC Thermal EPS Board should be jointed and finished with GTEC Jointing Systems. Boards are suitable for gypsum finishing plasters manufactured to BS EN 13279-1:2008. The boards require priming with GTEC Universal Sealer prior to decorating.

## **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.

#### **Health & Safety**

Please refer to the Laminates Health and Safety Datasheet available on our website.

Individual board weight values may occasionally exceed nominal weights published in this datasheet.

Consult local building regulations for use in external walls in buildings over 18 m.

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Please check that this is the current version by visiting the Siniat website. For archived versions please contact technical services.

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