

# TECHNICAL DATA SHEET

### GTEC Thermal PIR Board

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#### Description

GTEC Thermal (PIR) Board is an insulated drylining board laminate with enhanced thermal insulation. GTEC Thermal PIR Board is used to provide high levels of improvement to thermal insulation in wall lining and roof applications.

#### **Appearance**

GTEC Thermal (PIR) Board is coloured Ivory on the face with tapered edges running down the two longer sides. A cream coloured Polyisocyanurate (PIR) foam insulated board is bonded to the rear.

#### 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 Polyisocyanurate (PIR) are factory bonded to 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 PIR Thermal complies with BS EN 13165:2008

#### **Physical Properties**

Strength to BS EN 520: 12.5mm board Longitudinal breaking load ≥ 400 N Transverse breaking load ≥ 160 N

#### Reaction to Fire:

Board - Euroclass A2-s1,d0 to BS EN 13501-1 Laminate - Euroclass B-s1, d0 to BS EN 13501-1 Class 0 to Building Regulations Part B 2006. Self extinguishing if ignited.

#### Moisture Content:

< **2**%

#### Mass:

37.5 mm = 8.43 kg/m<sup>2</sup> 50.5 mm = 8.55 kg/m<sup>2</sup> 62.5 mm = 8.66 kg/m<sup>2</sup> 72.5 mm = 8.75 kg/m<sup>2</sup> 82.5 mm = 8.46 kg/m<sup>2</sup> Thermal Conductivity,  $\lambda_R$ : PIR Insulation: 0.022 W/mK Plasterboard: 0.19 W/mK

#### Thermal Resistance, R:

 $37.5 \text{mm} = 1.2 \text{ m}^2 \text{K/W}$   $50.5 \text{mm} = 1.79 \text{ m}^2 \text{K/W}$   $62.5 \text{mm} = 2.34 \text{ m}^2 \text{K/W}$   $72.5 \text{mm} = 2.79 \text{ m}^2 \text{K/W}$  $82.5 \text{mm} = 3.25 \text{ m}^2 \text{K/W}$ 

#### Water vapour resistance:

37.5mm: > 100 MNs/g 50.5mm: > 100 MNs/g 62.5mm: > 100 MNs/g 72.5mm: > 100 MNs/g 82.5mm: > 100 MNs/g

#### Fixing

GTEC Thermal PIR Board can be fixed using the following products:

## Bonding: GTEC Universal Bonding Compound

GTEC Wall Lining Adhesive
Fixing:
GTEC Shallow Wall Channel
GTEC Dryliner Lining Systems
GTEC Drywall Screws
GTEC Nailable Plugs

#### Jointing, Finishing & Painting

GTEC Thermal PIR Board can be jointed and finished using GTEC Jointing systems and will require priming with GTEC Universal Sealer prior to decorating.

#### **Health & Safety**

A health & safety datasheet relating to Laminate Products is available on our website or from Enquiryline.

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#### Laminate weight:

24.28 kg for 2400 mm x 1200 mm x 37.5 mm board 24.62 kg for 2400 mm x 1200 mm x 50.5 mm board 24.94 kg for 2400 mm x 1200 mm x 62.5 mm board 25.20 kg for 2400 mm x 1200 mm x 72.5 mm board 24.46 kg for 2400 mm x 1200 mm x 82.5 mm board

#### **Vapour Control Layer**

All GTEC Thermal PIR Boards are manufactured with enhanced vapour resistance.

AR Avasteh

#### Authority

Dr Ali Arasteh BU Technical Manager 14/11/2013