

# SarnaTherm InsulDeck

## Plywood & PIR Composite Thermal Insulation Board

**Product Description** SarnaTherm InsulDeck is a rigid insulation board, faced on one side with 6mm WBP plywood and on the other with aluminium composite foil, autohesively bonded to the insulation core during the manufacturing process. The core of SarnaTherm InsulDeck is a high performance CFC / HCFC – free rigid urethane insulant with a typical density of 32 kg/m<sup>3</sup>.

**Uses** Thermal insulation underneath waterproofing layer, in the following roofings systems:

- Sarnafil® G 410, G 410 Felt adhered single ply membrane systems

**Characteristics / Advantages**

- Very low thermal conductivity
- CFC/HCFC-free with zero Ozone Depletion Potential (ODP)
- Ideal for new construction and refurbishment
- No separation layer for PVC membranes required
- Low adhesive consumption
- High compression strength
- Supports excellent adhesion with appropriate Sarnacol range
- Lightweight and low load on the roofing structure

### Product Data

**Length** 2400mm

**Width** 1200mm

**Thickness** 25, 50, 70, 90, 110, and 120mm (plus 6mm plywood)  
Other thicknesses may be available, subject to quantity.  
Consult current price list for detailed product listing.

**Compressive strength** > 150 kPa at 10% deformation BS EN 826:1996

**Fire performance** Class 1 BS 476: Part 7: 1997

**Thermal conductivity**

0.027 W/m <sup>2</sup> K (insulation thicknesses < 80 mm)	EN 13165
0.026 W/m <sup>2</sup> K (insulation thicknesses from 80 mm to 120 mm)	EN 13165
0.025 W/m <sup>2</sup> K (insulation thicknesses > 120 mm)	EN 13165
0.140 W/m <sup>2</sup> K (plywood)	EN 13165

### Storage



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<b>Storage Conditions</b>	The packaging of SarnaTherm InsulDeck shall not be considered adequate for long term outside protection. Ideally, boards shall be stored inside a building. If however, outside storage cannot be avoided the boards shall be stacked clear of the ground and covered with a polythene sheet or weatherproof tarpaulin. Boards that have been allowed to get wet must not be used.
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## System Information

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<b>System Structure</b>	Ancillary products and system components according to local price list.  Roof waterproofing single ply membranes: ■ Sarnafil® G 410-types ■ Sarnafil® G 410 Felt-types  Fasteners and fixings: ■ Sarnafil® fixing range  Adhesives ■ Sarnacol® 2170 ■ Sarnacol® 2142s  Vapour control layers: ■ Sarnavap® range
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## Application Details

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<b>Substrate Quality</b>	The substrate surface must be uniform, smooth and free of any sharp protrusions or burrs, etc. It shall be clean, dry and free of grease and dust.
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## Application Conditions / Limits

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<b>Temperature</b>	Limited to appropriate roof waterproofing membrane system temperature limitations. Please observe information given by Product Data Sheets.
<b>Compatibility</b>	SarnaTherm InsulDeck is compatible with Sarnafil® FPO and PVC single ply membranes. No additional separation layer is required.

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## Installation Instructions

### Installation Method / Tools

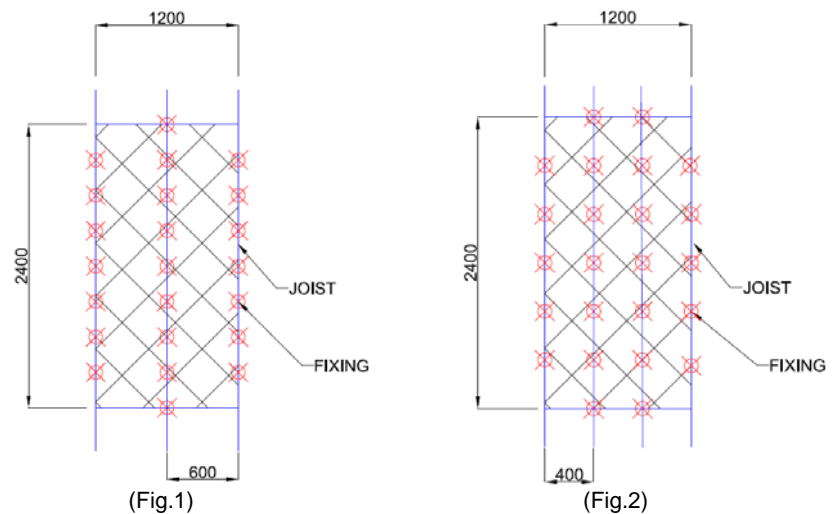
#### Installation procedure:

SarnaTherm InsulDeck shall be laid over timber joists and secured with mechanical fixings as below.

#### Fixing Method:

SarnaTherm InsulDeck should be installed onto minimum 50mm wide joists set at 600mm maximum centres, for maintenance access purposes only or 400mm maximum centres where regular foot traffic is expected. The board length should be laid along the joists. Board joints should be staggered (broken) and lightly butted (approx 2mm gap) ensuring there is a minimum bearing of 20mm per board edge, over the supporting timber. In all cases, timber cross noggins should be used to fully support all free edges.

SarnaTherm InsulDeck should be screw fixed to the underlying supporting timbers with Sarnafil SBT thermally broken fasteners & SBIW-70 x70 pressure plates on the pre-drilled plywood (to accommodate the 30mm dia. dish in the countersunk plate) with a minimum fastener embedment of 35mm into the joist.



For joists at 600mm centres (Fig.1) these fasteners should be placed at maximum 300mm centres around the board edges and at 300mm centres along any intermediate supporting timbers.

For joists at 400mm centres (Fig.2) these fasteners should be placed at maximum 400mm centres around the board edges and at 400mm centres along any intermediate supporting timbers.

Where two boards are secured to the same joist, fixings should be staggered.

All board edges should be fixed over supporting timbers.

A non-setting gun-grade mastic bead sealant should be applied to the upper surface of all supporting joists, noggins and all abutments with perimeters and penetrations should be adequately sealed to maintain a continuous vapour retarder to the foil underside.

If using Sarnacol 2170 adhesive cover all joints with self adhesive aluminium tape.

### Notes on Installation / Limits

Installation works to be carried out only by Registered Sarnafil Contractors. Temperature limits will depend on waterproofing membrane installation limits. Use of some ancillary products, e.g. adhesives is limited to temperatures above +5 °C. Please observe information given by Product Data Sheets.

# Roofing

<b>Value Base</b>	All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.
<b>Local Restrictions</b>	Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.
<b>Ecology, Health and Safety Information</b>	The product does not fall within the EU-regulation of hazardous goods. As a result, a material safety data sheet following EU-Guideline 91/155 EWG is not needed to bring the product to the market, transport or use it. The product does not damage the environment when used as specified.
<b>Protective Measures</b>	Fresh air ventilation must be ensured, when working (welding) in closed rooms. Regulatory Safety requirements must be observed.
<b>Disposal</b>	The material is recyclable. Any disposal must be in accordance with regulatory guidelines.
<b>Transportation Class</b>	The product is not classified as hazardous good for transport.

All data in our product information are based on our current knowledge and experience. They do not release users from careful testing of the application and strict observation of the relevant processing regulations because of the wide range of possible influences during the application and use of our products. Legally valid assurances of specific characteristics or suitability for special purposes of application other than those provided in our documentation for the specific product cannot be inferred from our information. Any protective rights or existing laws and provisions must be followed by the recipient or processor of our products at their own responsibility. Moreover our general terms and conditions of sale and guarantee are valid.



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