

# Xtratherm® Flat Roof Solutions

## Xtratherm FR/TP Sheet Size (mm)

Length  
2400

Width  
1200

Thickness\*  
56, 76, 86, 96, 106, 116

\*Thickness includes 6mm plywood

### 1

Xtratherm FR/TP is faced to the under side with a gas-tight foil facer, bedding the panel onto a bed of mastic creates a continuous vapour control layer.

### 2

The Xtratherm FR/TP provides a high level of thermal insulation and decking in one application.

### 3

A second layer of Xtratherm may be added between the joists to increase the thermal performance of the roof or to allow a reduction in the thickness of material over the joists. If using insulation between joists the VCL should be placed to the underside of the joists.

## Flat Roof Board FR/TP

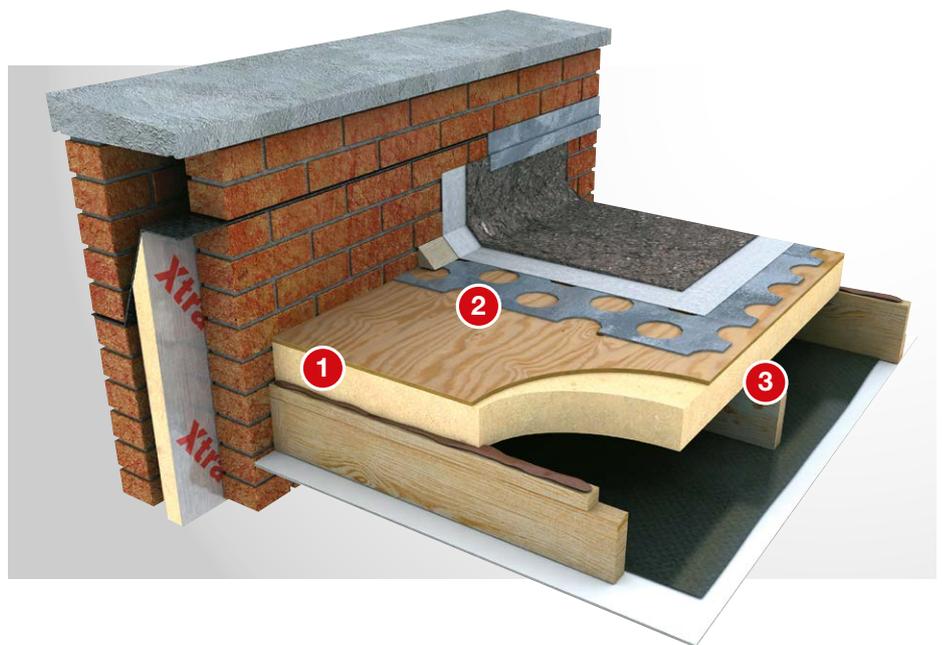
Thermal Ply High Performance PIR  
and Plywood Composite for Flat Roofs

Xtratherm FR/TP Thermal Ply is a composite insulated panel of Xtratherm Polyisocyanurate core with a composite foil face, bonded to 6mm WBP grade plywood. FR/TP is designed to provide high levels of thermal insulation and decking in one operation for new and refurbishment flat roof applications.

Insulation & decking in one fix

For new & refurbishment roofs

Rapid weather proofing



### Roof Design

Consideration should be given to the recommendations of BS 4841: Part 3 and the certification of the chosen membrane manufacturer.

### Falls

The fall on a flat roof should be constant and steep enough to ensure that rainfall does not pond.

### Fire Performance

The fire rating when tested to EN 13501-5 and BS 476 Part 3 'External Fire Exposure Roof Test' will be dependent upon waterproofing system. specified

Xtratherm's comprehensive range of high performance flat and tapered roof insulation boards provide a guaranteed quality solution to flat roof specification.



## Flat Roof Insulation

Xtratherm FR/TP should be fixed to a minimum of 50mm thick joists at 400mm (IRL)/600mm (UK) centres max with the plywood uppermost.

Boards should be staggered and butted. Each edge should have a minimum bearing of 20mm on joist.

All edges should be supported - add noggings where necessary. Stagger fixings where boards are butted.

Boards should be embedded in vapour resistant mastic to provide a vapour control layer in conjunction with foil facing.

Mastic should be laid wide enough to facilitate 2 panel edges and be continuous around all edges.

FR/TP should be fixed with low profile screw fixings, placed at 200mm centres around the perimeter of the boards and at 300mm centres along any intermediate supports.

All fixings should penetrate the joists by a minimum of 35mm and be placed 12mm from the edge of the FR/TP, and no further than 50mm from any corners.

Care should be taken to ensure that the heads of any fixings are flush with the plywood surface and not over-driven.

The roof should be fire protected to the underside by plasterboard or other approved material.

FR/TP is suitable for maintenance traffic loadings only.

Typical Physical Characteristics		Typical U-values	
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Property	Units
Density (Foam Core)	32kg/m <sup>3</sup>
Compressive Strength	>150kPa @ 10% Compression
Thermal Conductivity	0.022 W/mK

FR/TP Over Timber Deck	
FR/TP (mm)	U-value (W/m <sup>2</sup> K)
56	0.37
76	0.26
86	0.23
96	0.21
106	0.19
116	0.18

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**ISO 9001** | Quality Management Systems  
**ISO 14001** | Environmental Management

The given U-values are indicative only. The effect of fixings has been assumed to have had no effect on the U-value. For comprehensive calculations on all deck types, please contact Xtratherm Technical Support. \*Thermal conductivity is dependent on facings and product thickness.