

# Xtratherm® Tapered Roof Insulation

## Xtratherm TR/BGM Sheet Size (mm)

Length  
1200

Width  
1200

Other sizes available subject to quantity and lead time.

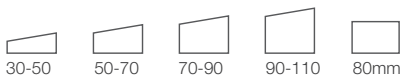
Note: Xtratherm Ltd. reserves the right to amend product specifications without prior notice.

### TR/BGM Tapered 1:60

1200 x 1200

Flat

A60 B60 C60 D60 2400 X 1200



Note: 1:80 subject to quantity & lead time.  
As prefabricated only.

Alternative tapers available on request.

### Roof Loading

Xtratherm TR/BGM is suitable for use on roof decks that are subject to limited maintenance foot traffic. Walkways should be provided on roofs requiring regular pedestrian access. When the roof is complete, protective boarding should be laid if additional sitework is to be carried out.

### Roof Finish

Built up roofing systems should be finished with a suitable reflective layer such as chippings. Advice should be sought from system manufacturer.

### 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. external fire exposure roof test.

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

Note: TR/BGM can also be used in mechanically fastened or loose laid ballasted bituminous roofing systems.

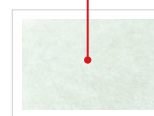
## Tapered Roof Board TR/BGM

Insulation for Partially Bonded, Torched-on, Built-up Bituminous Felt Systems

Xtratherm TR/BGM is a high performance Polyisocyanurate tapered roof insulation with a polypropylene fleece finished bitumen/glass fibre working surface and a mineral glass facing to the under side. (TR/BGM boards are not reversible) TR/BGM is suitable for use below most bitumen based partially bonded built up roofing systems. TR/BGM is part of Xtratherm's comprehensive range of high performance tapered roof boards providing total solutions for tapered roof projects.

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Xtratherm TR/BGM has a fleece finished bitumen/glass fibre working surface with a mineral glass facing to the under side. TR/BGM boards are not reversible.



Mineral glass facing to the under side of BGM board.

### Roof Design

Xtratherm TR/BGM is suitable for use with most bitumen based water proofing systems including those using a BS747 type 3G perforated base layer. The roof should be laid in accordance with BS 8217 (Reinforced bitumen membranes for roofing. Code of practice). During the construction process, the construction should be protected from rain penetration during breaks in the process.

### Falls

The fall on a flat roof should be designed to ensure that rainfall does not pond. TR/BGM provides a practical solution to Water Ponding with insulation and drainage in a single system.

## Tapered Roof Insulation

### Vapour Control Layer

Decks should be primed before the application of the hot bitumen used to bond the vapour control layer. Reference should be made to BS8217 when applying the vapour control layer. Carry the the VCL past the insulation and seal with the parapet wall. Torch on VCL's also available.

### Laying (Metal Deck)

On metal decks, Xtratherm TR/BGM should be laid break bonded into hot bitumen (max temperature 240°C) mopped or poured over the vapour control layer. The boards can also be mechanically fixed or the mineral coated glassfibre facer (MG) can be adhered with other suitable adhesive. Fixing heads should be sealed with bitumen.

### Laying (Concrete Deck)

Ensure concrete decks are clean, dry, without projections. Primer should be laid in accordance with the manufacturer's instructions. The vapour control layer should be fully bonded to the deck and the Xtratherm TR/BGM should be laid into hot bitumen on the vapour control layer in a break bonded pattern. The boards can also be mechanically fixed or the mineral coated glassfibre facer (MG) can be adhered with other suitable adhesive. Fixing heads should be sealed with bitumen.

### Laying (Plywood Deck)

On plywood decks, Xtratherm TR/BGM should be fully bedded in hot bitumen over a continuous vapour control layer which has been nailed or bonded to the deck. The boards can also be mechanically fixed or the mineral coated glassfibre facer (MG) can be adhered with other suitable adhesive. Fixing heads should be sealed with bitumen.

### Daily Working Practice

The facing of Xtratherm TR/BGM should not be considered as temporary waterproofing, when work is interrupted or at the end of each day, a night joint must be made to prevent water penetration. Xtratherm tapered boards should be waterproofed as soon as possible after fixing.

### Fixing

The specification for fixing of Xtratherm roof boards will vary with the location, roof height/width and topographical data, architectural specification should be consulted. Generally with 1200mm x 1200mm boards, a minimum of 4 fixings per board, located between 50mm and 150mm from all edges, additional fixings may be placed along the centre line. Counter sunk washers, 5mm in diameter should be used with each fixing. However, BS6399 Part 2 should always be consulted. In two layer systems, all layers should be fixed in accordance with the contained instructions.

### Bitumen Based Built Up Roofing Systems

Technical guidance from the appropriate bitumen waterproofing manufacturer should be sought as to assure proper installation of the bonded built up roof system.

### Fire

Each contract should be assessed for suitability of torch on applications. The suitability of materials, substrates and specifications should be assessed before commencement. Application of the torch on system should be undertaken only by fully trained personnel with appropriate fire precautions and fire extinguishing equipment available at hand. All timber roof components, and most insulations materials are combustible, and will be vulnerable to naked flame, these materials may be hidden from view. Due attention should be given and all precautions taken. This is the responsibility of the operatives.

## Property

### Typical Physical Characteristics

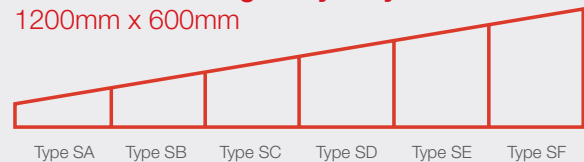
#### Units

Density (Foam Core)	32 kg/m <sup>3</sup>
Compressive Strength	>150 kPa @ 10% Compression
Thermal Conductivity*	0.024 - 0.027 W/mK

Xtratherm pre-fabricated single layer tapered roofing panels provide the most flexible, cost effective solutions that can be designed to meet a wide range of criteria in new and refurbished flat roofs. Xtratherm can provide bespoke solutions with a range of thickness from 30mm to 400mm, this enables faster installation and reduces site generated waste.

### Prefabricated Single Layer Systems

1200mm x 600mm



Note: Fall across 1200mm dimension

### Xtratherm UK Limited

Park Road Holmewood  
Chesterfield, Derbyshire  
United Kingdom  
S42 5UY

T + 44 (0) 371 222 1033

F + 44 (0) 371 222 1044

info@xtratherm.com

**xtratherm.com**

### Xtratherm Limited

Liscarton Industrial Estate  
Kells Road, Navan  
Co.Meath, Ireland  
C15NP79

T +353 (0)46 906 6000

F +353 (0)46 906 6090

info@xtratherm.ie

**xtratherm.ie**



**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.