

# Xtratherm® Tapered Roof Insulation

## Xtratherm TR/ALU Sheet Size (mm)

### Length

1200

### Width

1200

### Thickness

30 (minimum)

Other sizes available subject to quantity and lead time.

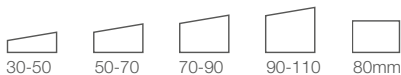
Note: Xtratherm Ltd. reserves the right to amend product specifications without prior notice

### TR/ALU Tapered 1:60

1200 x 1200

Flat

A60 B60 C60 D60 2400 X 1200



Alternative tapers available on request.

Xtratherm TR/ALU tapered insulation should be laid over a separate vapour control layer. The requirements for this vapour control layer should be assessed in accordance with BS6229 1982. Typically a 1000 gauge polythene should be used with all joints lapped and sealed.

The joints should be butted and care taken to ensure that all joints are supported by the deck. Mechanical fixings with washers are normally used to secure both the insulation and waterproof membranes. Fixings that penetrate the vapour control layer must be of the self sealing type.

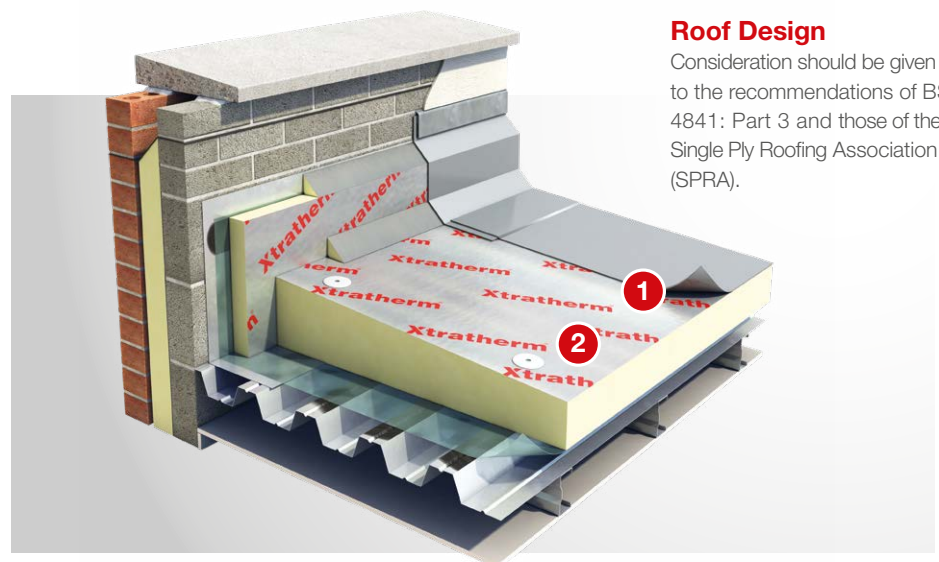
Xtratherm tapered roof insulation TR/ALU is suitable for use under single ply mechanically fixed roof membranes.

Xtratherm TR/ALU tapered roof insulation systems have been designed to provide solutions to design issues that arise in new and refurbishment roofs. Xtratherm TR/ALU systems address most flat roof failures i.e. ponding of rainwater caused by an inability to shed rainwater on the surface whilst providing a high level of thermal insulation performance.

## Tapered Roof Board TR/ALU

Tapered Insulation for Mechanically Fixed, Single Ply Waterproofing Systems

Xtratherm TR/ALU is a high performance Polyisocyanurate Tapered Roof Insulation with vapour tight aluminium foil facings suitable for use with single ply membranes. TR/ALU is part of the comprehensive range of Xtratherm's high performance tapered roof boards providing total solutions for tapered roof projects.



### Roof Design

Consideration should be given to the recommendations of BS 4841: Part 3 and those of the Single Ply Roofing Association (SPRA).



### 1

Xtratherm TR/ALU is faced with a gas-tight foil face.

Xtratherm TR/ALU foil faced roof boards are suitable for use below single ply mechanically fixed roof membranes.

### Note:

TR/ALU is not suitable for applications with built-up bitumen based roofing or mastic asphalt systems.

### 2

Xtratherm TR/ALU foil faced insulation boards are suitable for use on roof decks that are subject to maintenance traffic only. Walk ways should be provided on roofs requiring regular pedestrian access. When the roof is complete, protective boarding should be laid if additional site work is to be carried out. The completed roof should not be used for storage of heavy materials or air conditioning plant.

### Heat Loss/Condensation Risk

A U-value calculation should be carried out at design for minimum or average U-values depending on requirements. In addition a condensation risk analysis must be calculated within the guidance provided in BS 5250 code of practice for control of condensation in buildings.

### 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.

### Product Description

Xtratherm TR/ALU is the tapered version of FR/ALU. It is faced on both sides with composite gas tight foil facings autohesively bonded to a Polyisocyanurate (PIR) core during manufacture. ALU achieves a BRE Green Guide A+ Rating.

### 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.

### Laying over Metal Deck

Xtratherm TR/ALU tapered boards should be laid over the vapour control layer with all joints fully supported by the deck. The TR/ALU boards are secured by mechanical fixings with washers. The waterproofing is also mechanically fixed in accordance with the specific manufacturer’s instructions.

### Laying over Concrete Deck

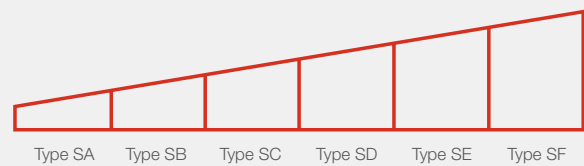
Xtratherm TR/ALU tapered boards should be fitted over the vapour control layer that has been laid on a prepared deck that is clear, dry and level without gaps. The TR/ALU boards are secured by mechanical fixings with washers. The waterproofing is also mechanically fixed in accordance with the specific manufacturers instructions.

### Daily Working Practice

The facing of Xtratherm TR/ALU 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.

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 1200 x 600



Note: Fall across 1200mm dimension

## Typical Physical Characteristics

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

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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.