The XtraFall system provides a high performance precision solution to thermal insulation and water drainage on flat roofs.
The XtraFall Taper System provides the designer and contractor with a precise, technically excellent solution to providing thermal insulation and bespoke drainage on flat roofing that avoids water retention and consequent damage in traditional flat roofs.

The factory formed single layer system, manufactured under the highest ISO quality standards provides the quality assurance that is more difficult to achieve with on-site built-up systems.

Designing ‘cut-to-fall’ schemes to result in a roof that is thermally efficient, manages water drainage and is cost effective may seem daunting, that is where we come in.

Our team in Navan can help you achieve the answer you are looking for. Our experience in roofing and BBA approved technical competency in U-value and condensation risk provide the assurances you need. Calculations for flat roofing are undertaken in accordance with Annex C of EN ISO 6946: 2007 (Building Components and building elements - Thermal resistance and thermal transmittance - calculation method), BRE IP 10/02: 2002 Metal Skin Z roofs & SCI Info paper P312:2002 Metal roof cladding. We are also listed under the SEAI competency scheme for thermal bridging analysis.

The team members are there to help you with any technical issues you might have, give them a call, you’ll find them easy to talk to.

**Technical Team:**
IRL: 046 906 6050 | UK: 0371 222 1055
Meet the team who can help you with your project

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**XtraFall Features**

- Highest Performance Rigid PIR Insulation
- Practical Solution: flat roof insulation and drainage in a Single System
- A cost effective solution to creating drainage falls with excellent U-values
- Factory bonded components manufactured to precision tolerances
- Factory made quality assured single component system
- Quality Assurance of mechanical properties of component bonding
- Pre-mitred, hips, valleys and extensive range of accessory pieces
- Rigid, lightweight material accepting maintenance traffic
- Suitable for new and existing flat roofs
- Green Guide A Rated product
- BRE Assured Technical Team

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Total flat roof insulation solutions, including the XF range of tapered systems.

Xtratherm offer a comprehensive range of high performance PIR Flat Roof insulation boards that includes the XF range of tapered insulation, providing comprehensive solutions for all flat roof projects whatever the choice of waterproofing system, with the highest environmental scoring within the ‘BRE Green Guide’ and is available with Factory Mutual. Our extensive range of high performance PIR foam insulation products with unique performance characteristics has been engineered to meet any project specification.

The XF system is supported by a range of ancillary products, designed to ensure continuous thermal insulation and complete roof drainage. These products are exclusive to the XtraFall system.
Individually engineered, pre-mapped components providing a high tolerance precision solution to roof drainage.

Cut-to-fall schemes designed specific to your requirements. Xtratherm provide individually engineered pieces, when installed in accordance with comprehensive laydown mapping to ensure designed intent is actually achieved on site.

The precision manufacturing of single piece components provide accuracies and fixing surety not achievable when multi-layer systems are formed on site under Irish weather conditions. Complex geometrical patterns are pre-formed under controlled factory conditions to provide a technically excellent, cost effective method of providing effective flat roof insulation and drainage solutions with improved speed of installation.

Ridge/Valley Boards
Xtra-mitre Ridge/Valley boards are prefabricated composite falls PIR tapered insulation boards. Xtra-mitre boards are an integral part of the XtraFall tapered roof insulation system. The construction of the Xtra-mitre board is faced PIR insulation with in-built composite falls. Xtra-mitre boards are made to suit the full range of XtraFall board thicknesses. Mitred board size 1200 x 1200.

XtraFall system of tapered insulation boards, due to a graduated thickness, will cause positive drainage falls on flat roofs. Xtra-mitres are prefabricated to allow changes in direction of drainage falls, without on-site cutting of XtraFall insulation boards, with the associated labour and waste costs. Each Xtra-mitre board is clearly identified by board type and the direction of fall.

Xtra-mitre boards are placed in the appropriate location on the roof, then the XtraFall Tapered Insulation boards are placed to suit.

The XtraFall boards are then “laid away” from the Xtra-mitre boards as dictated by the XtraFall Layout drawing and the topography of the roof. Xtra-mitre boards and XtraFall boards are always used in conjunction with roof insulation layout drawings.

It should be noted that correct on-site setting out of the laying pattern of XtraFall boards, is essential to quick and efficient placing of the insulation. The roofing contractor must ensure that the information/drawing provided is relevant to the on-site works.
Drainage Design

Working closely with the project design team, experienced Xtratherm Technical staff provide expertise in providing solutions to roof drainage in the most cost effective, thermally efficient method possible, backed by accredited calculations for U-values, condensation and thermal bridging.

Xtratherm Technical Team members are a valuable resource that can be called upon to advise from the initial consultation to formulate design strategies right through to providing comprehensive layout schemes for the contractor to simplify the installation of complex drainage courses, all backed by third party calculation.

Benefits
- Good roof drainage
- Quick board laying
- Reduced on-site cutting
- Lower labour costs
- Versatile systems

Features
- Creates multi-directional falls
- Exact dimensions
- Clear board identification
- Easily installed
- Suitable for all roof Specs
Xtratherm ALU is a high performance Polyisocyanurate flat roof insulation with vapour-tight aluminium foil facings suitable for use with single ply membranes. Xtratherm ALU is available Flat (FR/ALU) or Tapered (XF/ALU).

### XtraFall XF/ALU Sheet Sizes (mm)

<table>
<thead>
<tr>
<th>Size</th>
<th>Thicknesses 1/60 30-410mm</th>
<th>Thicknesses 1/80 30-315mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200 x 1200</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Typical R-values

<table>
<thead>
<tr>
<th>ALU (mm)</th>
<th>R-value (m²K/W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>3.63</td>
</tr>
<tr>
<td>90</td>
<td>4.09</td>
</tr>
<tr>
<td>100</td>
<td>4.54</td>
</tr>
<tr>
<td>110</td>
<td>5.00</td>
</tr>
<tr>
<td>120</td>
<td>5.45</td>
</tr>
<tr>
<td>130</td>
<td>5.90</td>
</tr>
<tr>
<td>140</td>
<td>6.36</td>
</tr>
</tbody>
</table>

### Spanning

<table>
<thead>
<tr>
<th>ALU Trough Openings (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80 ≤ 75</td>
</tr>
<tr>
<td>90 76-100</td>
</tr>
<tr>
<td>100 101-125</td>
</tr>
<tr>
<td>110 126-150</td>
</tr>
<tr>
<td>120 151-175</td>
</tr>
<tr>
<td>130 176-200</td>
</tr>
</tbody>
</table>

Xtratherm ALU insulation boards laid over metal decks should be in accordance with BS 4841: Part 3.

### XtraFall XF/ALU Tapered System

#### 1/60 XtraFall board sections

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
|---------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 30 | 50 | 70 | 90 | 110 | 130 | 150 | 170 | 190 | 210 | 230 | 250 | 270 | 290 | 310 | 330 | 350 | 370 | 390 | 410 |

#### 1/80 XtraFall board sections

| A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S |
|---------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|---------------------------|
| 30 | 45 | 60 | 75 | 90 | 105 | 120 | 135 | 150 | 165 | 180 | 195 | 210 | 225 | 240 | 255 | 270 | 285 | 300 | 315 |
**Design**

XtraFall XF/ALU high performance PIR roof insulation, manufactured to EN 13165 and ISO 9001 Quality Management. For use as a tapered to falls roofing insulation board.

**Waterproofing Membranes**

Xtratherm XF/ALU high performance PIR boards are for use with mechanically fixed single ply waterproofing membranes laid in accordance with the system designers instructions. XF/ALU boards are not recommended for use with built-up bitumen based roofing or mastic asphalt systems.

**Vapour Control Layer (VCL)**

PVC sheeting with taped joints can be used. The screw fixings for XtraFall Insulation must self-seal when penetrating the VCL. The VCL edges must turn-up above insulation boards, at all roof protrusions/upstands, to allow for sealing of the VCL to the base layer of roofing membrane.

**XtraFall Insulation Installation**

Insulation boards must be mechanically fixed*. Fixing strength must comply with wind uplift calculations for the roof. Mechanical fixings must self-seal at penetrations of the VCL. Boards to be laid in accordance with the XtraFall Insulation layout drawing. During laying, water must not ingress under the insulation layer. Day/night seals must be used during all interruptions to works. Careful attention to roof details and setting out of laying pattern of XtraFall is required.

XtraFall is designed to be installed by a competent contractor, experienced with this type of product. Boards that have been damaged or allowed to get wet should not be used.

**Fixing**

Insulation must be mechanically fixed to the substrate. The location/quantity of fixings to be in accordance with good roofing practice. The fixing strength must comply with the wind uplift calculations for the roof. The requirements of DOE Building Regulations 1997 Technical Guidance Document A, Code of Practice 3 Chap. 5 and BS 6399 Part 2 1995 should always be consulted.

**Roof Loads**

XtraFall is designed for roofs with limited access subject to pedestrian traffic for maintenance only, for roofs with regular maintenance the designer should consider the provision of walkways. Special provision for the roof top installation of equipment/machinery will be necessary.

**Fire Performance**

The fire rating of any roof containing XtraFall product when tested to BS 476 Part 3 will depend on the type of deck and the nature of the waterproofing covering. Consultation with a waterproofing supplier is recommended.

**Specification Clause**

The tapered insulation shall be XtraFall XF/ALU manufactured by Xtratherm Ltd., to EN.13165 comprising a rigid Polyisocyanurate (PIR) core between low emissivity foil facings. XtraFall XF/ALU minimum thickness_ _ _mm with Agrément certified Lambda value of 0.022 W/mK to achieve an average U-value_ _ _W/m²K for the roof element. XtraFall XF/ALU achieves an A+ rating under the BRE Green Guide. Refer to NBS clauses J42.420, J42.430.

---

**Typical Physical Characteristics**

<table>
<thead>
<tr>
<th>Property</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
<td>32kg/m³</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>&gt;150kPa@10% Compression</td>
</tr>
<tr>
<td>Water Vapour Resistivity</td>
<td>&gt;100MNs/gm</td>
</tr>
<tr>
<td>Thermal Conductivity</td>
<td>0.022 W/mK</td>
</tr>
</tbody>
</table>

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ISO 9001
ISO 9001 Quality Management Systems
ISO 14001 Environmental Management
OHSAS 18001 Occupational Health & Safety
Xtratherm MG Roof Board is a high performance Polyisocyanurate with mineral coated glass facers suitable for use below single ply fully adhered roof membranes, single ply waterproofing systems and partially bonded built-up felt. Xtratherm MG is available Flat (FR/MG) or Tapered (XF/MG).

### XtraFall XF/MG Roof Application

High Performance Rigid insulation

Thermal Conductivity as low as 0.024W/mK

Compatible with Adhesively Bonded Single Ply Roofing Membranes laid on Mechanically Fixed Boards

LPC/FM Approved

#### XtraFall XF/MG Sheet Sizes (mm)

<table>
<thead>
<tr>
<th>Size</th>
<th>Thicknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200 x 1200</td>
<td>1/60 30-410mm</td>
</tr>
<tr>
<td>Thicknesses</td>
<td></td>
</tr>
<tr>
<td>1/80 30-315mm</td>
<td></td>
</tr>
</tbody>
</table>

#### Typical R-values Spanning MG (mm)

<table>
<thead>
<tr>
<th>Thicknesses</th>
<th>1/60</th>
<th>1/80</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>3.20</td>
<td>3.60</td>
</tr>
<tr>
<td>90</td>
<td>3.20</td>
<td>3.60</td>
</tr>
<tr>
<td>100</td>
<td>4.00</td>
<td>5.00</td>
</tr>
<tr>
<td>120</td>
<td>5.00</td>
<td>6.83</td>
</tr>
</tbody>
</table>

#### XtraFall XF/ALU Tapered System

1/60 XtraFall board sections

1/80 XtraFall board sections

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

Xtratherm MG insulation boards laid over metal decks should be in accordance with BS 4841: Part 3.
**Design**

XtraFall XF/MG high performance PIR roof insulation, manufactured to EN 13165 and ISO 9001 Quality Management. For use as a tapered to falls roofing insulation board. It is designed for use with fully bonded/adhered and partially bonded/mechanically fixed systems of roofing. It can also be mechanically fixed to all roof deck types.

**Waterproofing Membranes**

XtraFall XF/MG Mineral-Glass tissue facings is a standard product. Designed for use with roof waterproofing systems for warm roofs and green roofs and Liquid membranes. Mechanical/Full/Partial bonding of the roof membrane.

**Vapour Control Layer (VCL)**

XtraFall XF/MG Mineral-Glass tissue facings is a standard product. Concrete/timber decks must be primed before full-bond application of 3B/3G roofing felt. On metal decks, the VCL roofing felt may be loose laid with the 150mm overlaps hot torch to seal. PVC sheeting with taped joints can be used. The screw fixings for XtraFall Insulation must self-seal when penetrating the VCL. The VCL edges must turn-up above all insulation boards, at all roof protrusions/upstands, to allow for sealing of the VCL to the base layer of roofing membrane.

**XtraFall Insulation Installation**

**Concrete/Timber Decks:**

Insulation boards must be mechanically fixed or adequately bonded to the VCL/Deck with adhesive or hot bitumen*. Fixing strength must comply with wind uplift calculations for the roof. Mechanical fixings must self-seal at penetrations of the VCL. Boards to be laid in accordance with the XtraFall Insulation layout drawing. During laying, water must not ingress under the insulation layer. Day/night seals must be used during all interruptions to works.

**Metal Decks:**

Insulation boards must be mechanically fixed to the metal Deck. Fixings penetrating the VCL must self-seal. Fixing strength must comply with wind uplift calculations for the roof. Insulation to be laid in accordance with the Xtratherm Insulation Layout drawing. During laying, water must not ingress under the insulation. Day/night seals must be used during all interruptions to works. Careful attention to roof details and setting out of laying pattern of XtraFall is required.

XtraFall is designed to be installed by a competent contractor, experienced with this type of product. Boards that have been damaged or allowed to get wet should not be used.

**Fixing**

Insulation can be bonded/adhered or mechanically fixed to the substrate. The location /quantity of fixings to be in accordance with good roofing practice. The fixing strength must comply with the wind uplift calculations for the roof. The requirements of DOE Building Regulations 1997 Technical Guidance Document A, Code of Practice 3 Chap. 5 and BS 6399 Part 2 1995 should always be consulted.

**Roof Loads**

XtraFall is designed for roofs with limited access subject to pedestrian traffic for maintenance only, for roofs with regular maintenance the designer should consider the provision of walkways. Special provision for the roof top installation of equipment/machinery will be necessary.

**Fire Performance**

The fire rating of any roof containing XtraFall product when tested to BS 476 Part 3 will depend on the type of deck and the nature of the waterproofing covering. Consultation with a waterproofing supplier is recommended.

**Xtratherm XtraFall Roof drainage system is designed and supplied as an integral component of the overall roof design. The use and specification of Xtratherm product with ancillary roofing products and waterproofing compatibility remains the responsibility of the roof designer.**

**Typical Physical Characteristics**

<table>
<thead>
<tr>
<th>Property</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density</td>
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</tr>
<tr>
<td>Compressive Strength</td>
<td>&gt;150kPa @ 10% Compression</td>
</tr>
<tr>
<td>Water Vapour Resistivity</td>
<td>&gt;100 MNs/gm</td>
</tr>
<tr>
<td>Thermal Conductivity**</td>
<td>0.024 - 0.026 W/mK</td>
</tr>
</tbody>
</table>

**Specification Clause**

The tapered insulation shall be XtraFall XF/MG manufactured by Xtratherm Ltd., to EN 13165 comprising a rigid Polysocyanurate (PIR) core between mineral glass facings.

XtraFall XF/MG minimum thickness _ _ mm with Agrément certified Lambda value as low as 0.024 W/mK to achieve an average U-value _ _ W/m²K for the roof element. XtraFall XF/MG achieves an A rating under the BRE Green Guide. Refer to NBS clauses J42 420, J42 430.
Xtratherm BGM is faced with a polypropylene fleece finished bitumen/glass fibre working surface and a mineral glass facing to the under side. Flat (FR/BGM) or Tapered (XF/BGM).

XtraFall XF/BGM Roof Application

High Thermal Performance

Compatible with most bituminous based roofing systems

Fleece finished bitumen/glass fibre facings

Xtratherm BGM Sheet Sizes (mm)

<table>
<thead>
<tr>
<th>Size</th>
<th>Thicknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>1200 x 1200</td>
<td>1/60 30-410mm</td>
</tr>
</tbody>
</table>

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

Typical R-values

<table>
<thead>
<tr>
<th>Size (BGM mm)</th>
<th>R-value (m²K/W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>3.20</td>
</tr>
<tr>
<td>90</td>
<td>3.60</td>
</tr>
<tr>
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</tr>
<tr>
<td>120</td>
<td>5.00</td>
</tr>
<tr>
<td>140</td>
<td>5.83</td>
</tr>
</tbody>
</table>

Spanning

<table>
<thead>
<tr>
<th>Size (BGM mm)</th>
<th>Trough Openings (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25</td>
<td>≤ 75</td>
</tr>
<tr>
<td>30</td>
<td>76-100</td>
</tr>
<tr>
<td>40</td>
<td>101-150</td>
</tr>
<tr>
<td>50</td>
<td>151-200</td>
</tr>
</tbody>
</table>

Xtratherm BGM insulation boards laid over metal decks should be in accordance with BS 4841: Part 3.

XtraFall XF/ALU Tapered System

1/60 XtraFall board sections

1/80 XtraFall board sections

Note: The diagrams show the XtraFall XF/ALU Tapered System with different board sections and spanning details.
Design

XtraFall XF/BGM high performance PIR roof insulation, manufactured to EN 13165 and ISO 9001 Quality Management. For use as a tapered to falls roofing insulation board. It is designed for use with fully bonded/adhered and partially bonded/mechanically fixed systems of roofing. It can also be mechanically fixed to all roof deck types.

Waterproofing Membranes

XtraFall XF/BGM Bitumen/mineral-Glass tissue facings is a standard product. Designed for use with roof waterproofing systems for warm roofs and green roofs. Mechanical/Full/Partial bonding of the roof membrane.

Vapour Control Layer (VCL)

Concrete/timber decks must be primed before full-bond application of 3B/3G roofing felt. On metal decks, the VCL roofing felt may be loose laid with the 150mm overlaps hot torched to seal. The screw fixings for XtraFall Insulation must self-seal when penetrating the VCL. The VCL edges must turn-up above all insulation boards, at all roof protrusions/upstands, to allow for sealing of the VCL to the base layer of roofing membrane.

XtraFall Insulation Installation

Concrete/Timber Decks:
Insulation boards should be placed with bituminous facer uppermost and must be mechanically fixed or adequately bonded to the VCL, with adhesive or hot bitumen*. Fixing strength must comply with wind uplift calculations for the roof. Mechanical fixings must self-seal at penetrations of the VCL. Boards to be laid in accordance with the XtraFall Insulation layout drawing. During laying, water must not ingress under the insulation layer. Day/night seals must be used during all interruptions to works.

Metal Decks:
Insulation boards should be placed with bituminous facer uppermost and must be mechanically fixed to the metal Deck. Fixings penetrating the VCL must self-seal. Fixing strength must comply with wind uplift calculations for the roof. Insulation to be laid in accordance with the XtraFall Insulation Layout drawing. During laying, water must not ingress under the insulation. Day/night seals must be used during all interruptions to works.

Careful attention to roof details and setting out of laying pattern of XtraFall is required.

XtraFall is designed to be installed by a competent contractor, experienced with this type of product. Boards that have been damaged or allowed to get wet should not be used.

Fixing

Insulation can be bonded/adhered or mechanically fixed to the substrate. The location/quantity of fixings to be in accordance with good roofing practice. The fixing strength must comply with the wind uplift calculations for the roof. The requirements of DOE Building Regulations 1997 Technical Guidance Document A, Code of Practice 3 Chap. 5 and BS 6399 Part 2 1995 should always be consulted.

Roof Loads

XtraFall is designed for roofs with limited access subject to pedestrian traffic for maintenance only, for roofs with regular maintenance the designer should consider the provision of walkways. Special provision for the roof top installation of equipment/machinery will be necessary.

Fire Performance

The fire rating of any roof containing XtraFall product when tested to BS 476 Part 3 will depend on the type of deck and the nature of the waterproofing covering. Consultation with a waterproofing supplier is recommended.

Xtratherm XtraFall Roof drainage system is designed and supplied as an integral component of the overall roof design. The use and specification of Xtratherm product with ancillary roofing products and waterproofing compatibility remains the responsibility of the roof designer.

Typical Physical Characteristics

<table>
<thead>
<tr>
<th>Property</th>
<th>Units</th>
</tr>
</thead>
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<tr>
<td>Density</td>
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<tr>
<td>Water Vapour Resistivity</td>
<td>&gt;100MNs/gm</td>
</tr>
<tr>
<td>Thermal Conductivity**</td>
<td>0.024 - 0.026 W/mK</td>
</tr>
</tbody>
</table>

Specification Clause

The tapered insulation shall be XtraFall XF/BGM manufactured by Xtratherm Ltd., to EN 13165 comprising a rigid Polyisocyanurate (PIR) core between fleece finished bitumen/mineral glass facings.

XtraFall XF/BGM minimum thickness _ _ _ _ _ mm with Agrément certified Lambda value as low as 0.024 W/mK to achieve an average U-value _ _ _ _ _ _ _ W/m2K for the roof element.

XtraFall XF/BGM achieves an A rating under the BRE Green Guide.

Refer to NBS clauses J42 420, J42 430.
The XtraFall system includes a range of optional high precision ‘Plus’ components to enhance drainage solutions for cut to fall roofs.

These pre-cut and factory fabricated components enhance the contouring of water channeling at detailing and mid valley positions to provide an unparalleled solution to removing standing water. **The Plus range of components are only available as part of an XtraFall designed solution and not as separate components.**

**Mitred-Boards**  
Prefabricated ridge/valley mitred-boards. Design and thickness to suit every situation.

**Roof Drainage Crickets**  
The quick answer to localised roof drainage. Up to 2.4m long available ex-stock. Other sizes to order.

**Angle Fillets**  
Prefaced with bitumen tissue for full bond to felts. Will fit to gussets without specific fixing.

**RWO Sumps**  
Pre-cut for easy installation and fixing. Will suit all XtraFall thicknesses.

**CoverPlus**  
A roof protector board to prevent impact damage to the waterproof membrane.

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**XtraFall Plus Accessories - Generic Properties**  
Construction is generally precut/fabricated foil/tissue faced PIR, the nature of the facing is contract dependent.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Size</td>
<td>1200 x 1200mm</td>
</tr>
<tr>
<td>Density</td>
<td>32 kgs/m³</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>150 kPa @ 10%</td>
</tr>
<tr>
<td>Thermal Conductivity</td>
<td>0.022-0.026 W/mK</td>
</tr>
</tbody>
</table>

**Note**  
For specific component properties contact Xtratherm Technical Support.

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Xtratherm Ltd., Roofing Insulation products are designed for use on properly designed roofs. Use of Xtratherm products is the sole responsibility of the roof designer. Refer to Xtratherm Ltd., conditions of sale prior to purchase.
Definitions

XtraCrickets are constructed of modular tapered PIR insulation panels, which solve localised drainage issues on roofs. XtraCrickets provide drainage slopes to either direct rainwater to a specific area such as RWOs or direct rainwater away from obstructions to drainage such as roof lights and lift shafts.

XtraCrickets are pre-engineered to customer requirements, they are quickly and easily installed on top of the base roof insulation. The XtraCricket system is designed to integrate with XtraFall tapered insulation designs. The modular system facilitates simple specifier / customer instruction and ordering. Quick and easy installation on-site is supported by layout drawings and each module is clearly identified.

XtraCrickets can be made to suit most applications. The modular construction allows for adjustment of length and width to suit all roof types and applications. The on-site combination of roof rainwater outlets and roof slope variations requires a flexible and creative design approach. XtraCrickets meet this requirement. The customer needs to advise only the roof slope and the distance over which the XtraCricket is needed, our design team will do the rest.

Features

Multiple applications
Layout drawings
Ease of installation

XtraCrickets are suitable for use with all roof insulations and waterproofings. XtraCrickets design, as with all tapered insulation systems, requires certain criteria, to ensure that correct drainage falls are achieved. The drainage fall along the leading edge of the XtraCricket is a function of the fall on the roof and the angle of slope of the cricket. The greater the fall on the roof the lesser the angle of slope requirement. Whilst there is a convention that the slope / taper of the cricket is twice the slope of the roof, increasing the taper or fall of the XtraCricket will not enhance the ability of the XtraCricket to assist roof drainage. So the less the fall in the roof, the wider the XtraCricket. The critical factor is the degree of drainage fall on the XtraCricket valley slope. This is why each unique roof slope should have its own unique length to width ratio.

XtraCrickets can be made to suit most applications. Lengths up to 2.40m are readily available. Larger XtraCrickets can be made to order.

XtraFall Preformed Crickets

XtraCrickets provide an efficient tool for the management of rainwater drainage on roofs, the pre-cut pyramidal piece allows for directional drainage towards outlets in new or existing roofs where ponding may occur.
Prefabricated insulated rainwater outlet sumps are available that can be adjusted to suit 4, 3 or 2 sided outlets. The pre-formed PIR insulation tapers in thickness, from 50 to 30mm* in 600 x 600mm modular panels. The sump can be placed at the RWO location, on the roof deck or it can be laid directly on top of a base layer of insulation to give the appropriate insulation thickness.

*Other thicknesses available.

**Features**
- Suitable for most RWO types
- Assists drainage
- Continuous thermal insulation

**Benefits**
- No on-site cutting
- Quick installation
- Labour saving

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**Fillet**

An insulated angle fillet, suitable for all applications where acute angle directional changes are required by bituminous roof membranes, to avoid stress-nodes. Each fillet is 1200 long and 50mm in vertical depth. The facing of bituminous glass tissue allows perfect bonding to the waterproof membrane.

BG Facer shown - also available MG.

**Features**
- Easily handled / fitted
- Fits irregular gussets

**Benefits**
- Cost effective
- Labour saving

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Only available as part of an XtraFall designed solution and not as separate components.
**XtraFall CoverPlus Board**

High density PIR insulation Roof Protector board, 15mm thick. Faced with mineral coated woven mineral glass tissue on both sides.

**XtraFall CoverPlus Properties**
Construction is generally precut/fabricated foil/tissue faced PIR, the nature of the facing is contract dependent.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Size</td>
<td>1200 x 1200 x 15mm</td>
</tr>
<tr>
<td>Density</td>
<td>80 kgs/m³</td>
</tr>
<tr>
<td>Compressive Strength</td>
<td>&gt;400 kPa @ 10%</td>
</tr>
<tr>
<td>Thermal Conductivity</td>
<td>0.032 W/mK</td>
</tr>
</tbody>
</table>

**Features**
Strength / Durability
Excellent U-value
Light/easy handling
Compatible all membranes

**Benefits**
Improved roof service life
Reduced Roof height
Cost saving
Energy saving

Xtratherm’s CoverPlus boards can be incorporated into properly designed roofing systems that have followed good roofing practice. The use of CoverPlus within a system is the responsibility of the roofing designer/supplier.