# XTRAFALL TAPERED ROOFING SYSTEM

## High Performance PIR Flat Roof Insulation

Available in 3 different facers

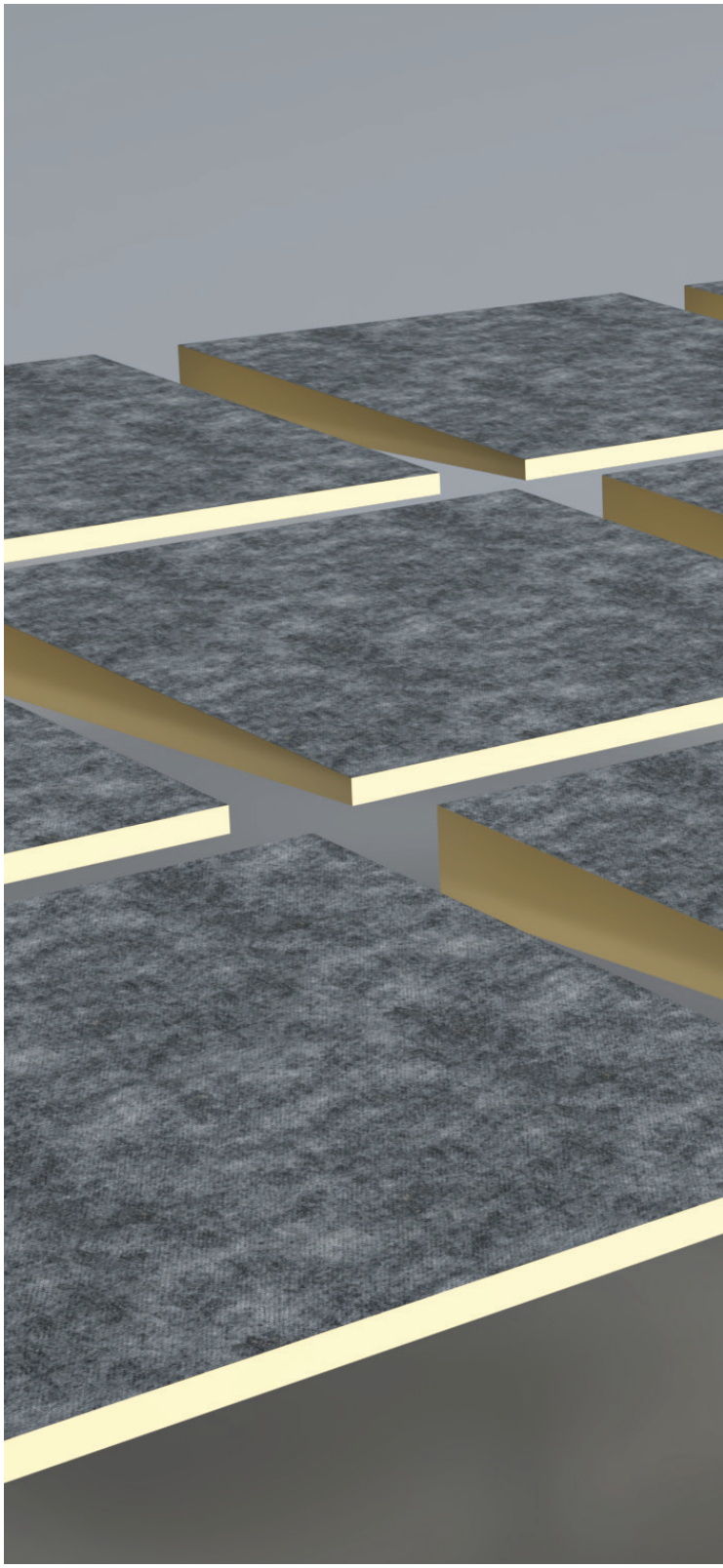
Labour savings due to factory made quality assured single layer system

Flat roof insulation and drainage in a single system

UNILIN INSULATION

# XTRAFALL TAPERED ROOFING SYSTEM

The XtraFall system provides a high performance precision solution to thermal insulation and water drainage on flat roofs.



## Product Features

- Flat roof insulation and drainage in a single system
- Labour savings due to factory made quality assured single layer system
- Pre-fabricated elements build to a system: mitred boards, hips, valleys and other accessories
- Cost effective solution for creating drainage falls with certified U-Values
- Less waste due to single layer system
- Available in 3 different facers:
  **XF/ALU** Mechanically fixed
  **XF/MG** Fully adhered
  **XF/BGM** Bonded, torched on

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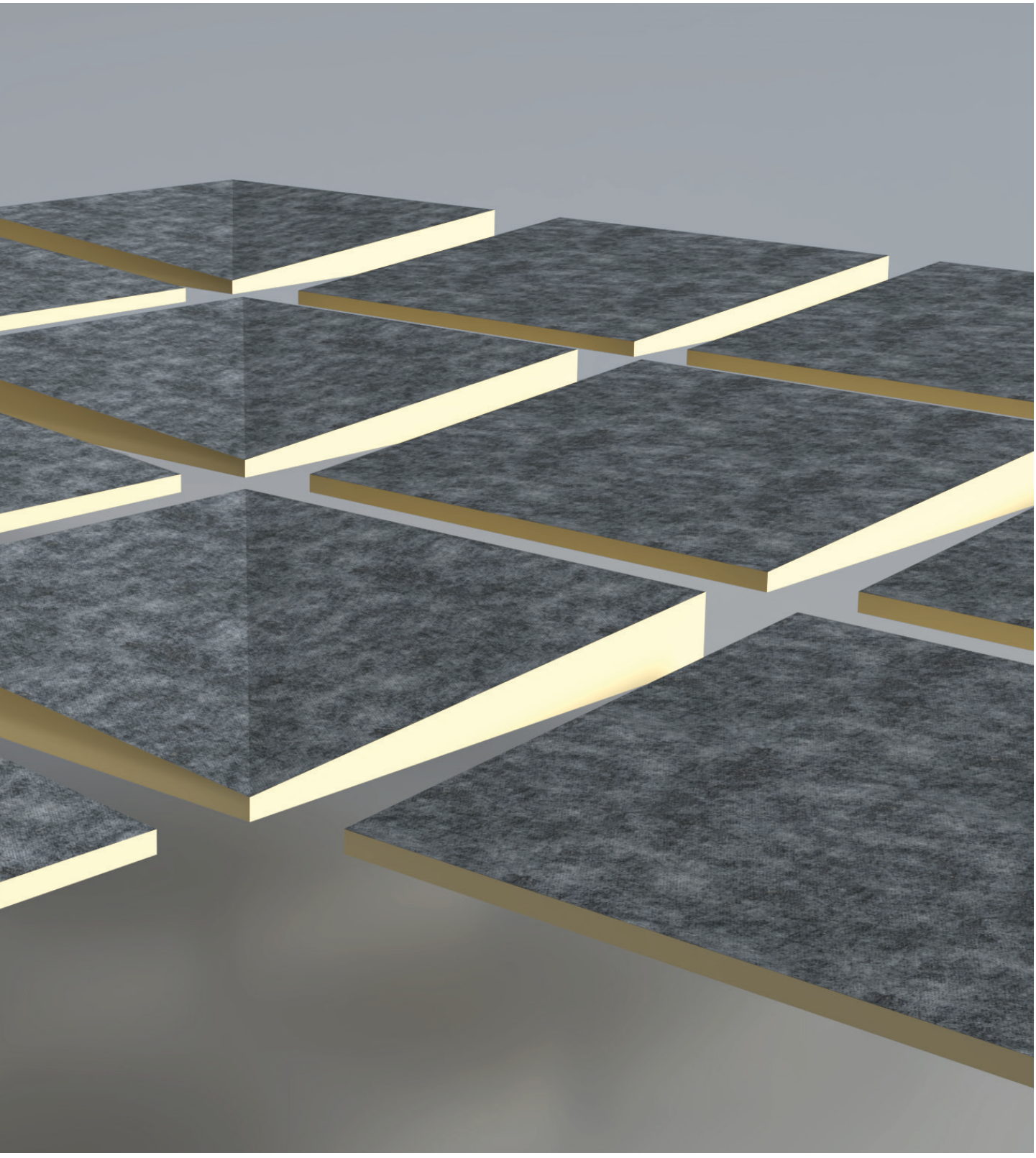
TAPERED
ROOF



# XTRAFALL TAPERED ROOFING SYSTEM
# 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.

Unilin 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. 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. Thee products are exclusive to the XtraFall system.

### 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
- BBA Assured Technical Team

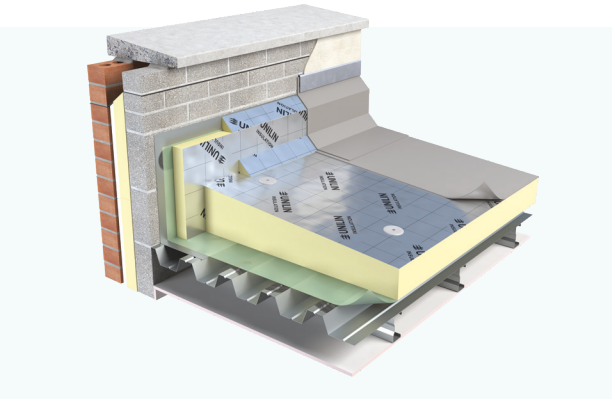
TAPERED ROOF

**Xtrafall Tapered Boards**

## XF/ALU

**Tapered Insulation for Mechanically Fixed Single Ply Waterproofing Systems**

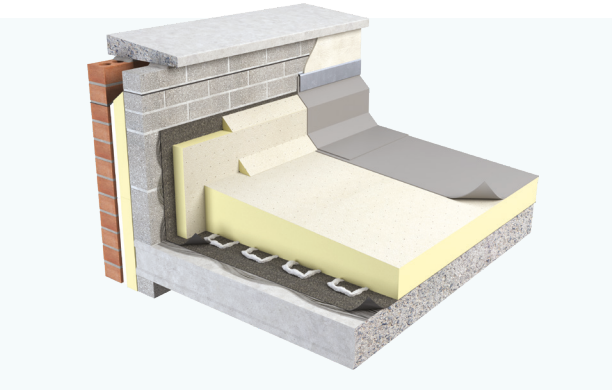
- Aluminium faced rigid PIR
- Thermal Conductivity 0.022 W/mK
- Compatible with Single Ply Waterproofing Systems



## XF/MG

**Tapered Insulation for Single Ply Fully Adhered/ Partially Bonded Built-up Felt Systems**

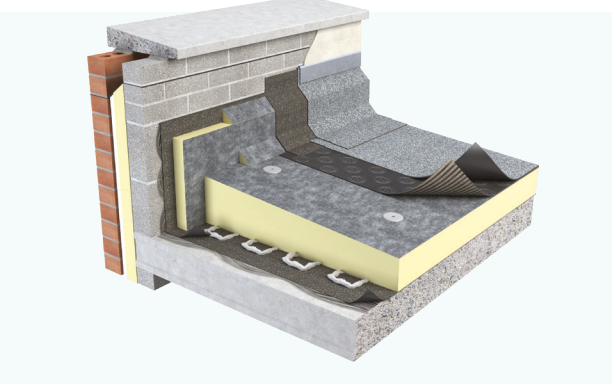
- Mineral glass tissue faced rigid PIR
- Thermal Conductivity as low as 0.024 W/mK
- Compatible with Adhesively Bonded/Mechanically Fixed Single Ply Roofing Membranes



## XF/BGM

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

- Bituminous faced rigid PIR
- Thermal Conductivity as low as 0.024 W/mK
- Compatible with most Bituminous based Roofing Systems



# XTRAFALL MITRES

Prefabricated composite falls PIR tapered insulation boards

## 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.

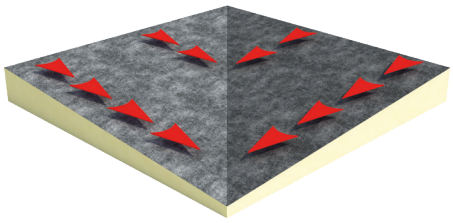
Xtra-mitre boards are placed in the appropriate location on the roof, then the XtraFall Tapered Insulation boards are placed to suit.

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.

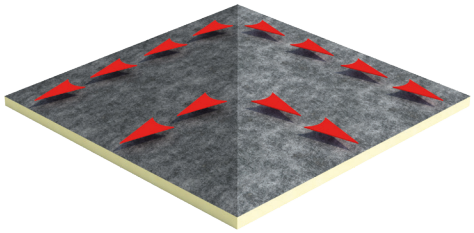
It should be noted that correct, on site, setting out of the laying pattern, of XtraFall boards, is essential to quick and efficient placing of the insulation. The roofing contractor must ensure that the information/drawing provided is relevant to the on site works.

**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



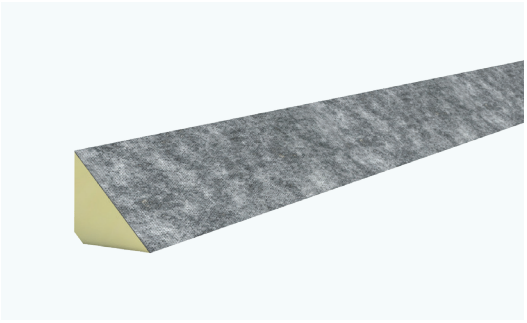
Valley Board



Ridge Board

## 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

# DRAINAGE DESIGN

CERTIFICATE CS/nnnn-n
U Value Competency Scheme

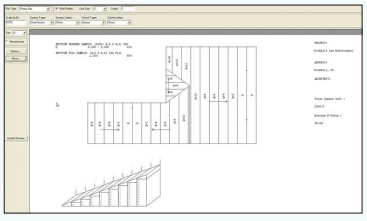
Individually engineered, pre-mapped components providing a high tolerance precision solution to roof drainage.

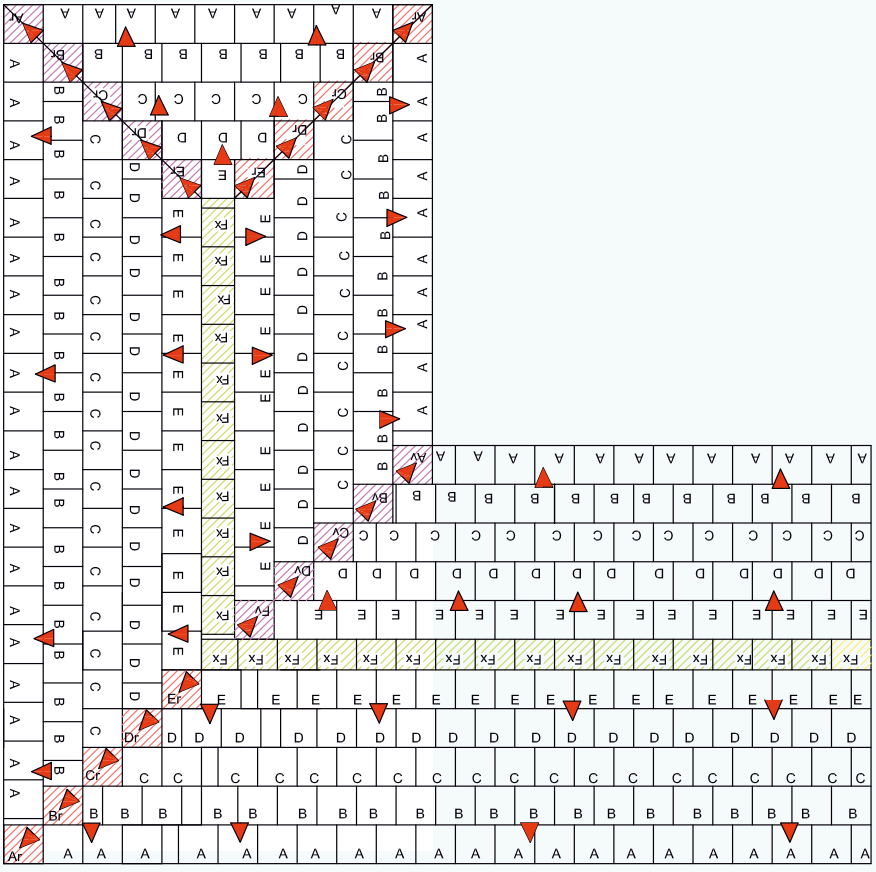
**Cut-to-fall schemes designed specific to your requirements**
Unilin provide individually engineered pieces, when installed in accordance with comprehensive laydown mapping to ensure designed intent is actually achieved on site.

The precision manufacturing of single piece components provide accuracies and fixing surety not achievable when multi-layer systems are formed on site under our often challenging 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.

Working closely with the project design team, experienced Unilin 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.

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





# HANDLING, CUTTING & STORAGE

Unilin insulation should be stored off the ground, on a clean, flat surface and must be stored under cover. The polythene wrapping is not considered adequate protection for outside exposure. Care should be taken to protect the insulation in storage and during the build process.

The insulation boards can be readily cut using a sharp knife or fine toothed saw. Ensure tight fitting of the insulation boards to achieve continuity of insulation as asked for within the ACDs. Appropriate PPE should be worn when handling insulation. Please refer to Health & Safety data sheets on our website.

The boards are wrapped in polythene packs and each pack is labelled with details of grade/type, size and number of pieces per pack.

## Durability

Unilin Insulation products are stable, rot proof, provide no food value to vermin and will remain effective for the lifetime of the building, depending on specification and installation. Care should be taken to avoid contact with acids, petrol, alkalis and mineral oil. When contact is made, clean materials in a safe manner before installation.


# Expect more Knowledge

Unilin Insulation, formerly Xtratherm, is one of Ireland and the UK's largest manufacturers and suppliers of insulation. We have a 30 plus year history of working in partnership with construction professionals to close the gap between design and as-built performance.

**FREE**
One-to-one advice

Higher standards of fabric performance call for greater adherence to best practice detailing. To achieve this and to 'close the gap' between design and build, we provide a dedicated Technical Team, all qualified to the highest standards of competency in U-Value calculation and condensation risk analysis.

**Here to support you**

- BRE listed Thermal Bridging Detailing
- BRE/NSAI Trained Modelling
- BBA/TIMSA calculation competent
- Warranted Calculations available
- Immediate technical response
- SAP and DEAP Qualified
- Insulation systems to deliver real onsite performance

**Get in touch**

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# Notes

TAPERED
ROOF

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

IRL/UK_XtrafallBrochure_March2024_v1

### The Sustainable Solution

Specifying Unilin Insulation is a real commitment to minimising energy consumption, harmful $CO_2$ emissions and their impact on the environment. Using our products is one of the most effective ways to reduce energy consumption – in fact, after just eight months the energy they save far outweighs the energy used in their production. In addition, our manufacturing facilities operate to an ISO 14001 certified Environmental Management System.

### Environmental Product Declaration (EPD)

An Environmental Product Declaration or EPD for a construction product indicates a transparent, robust and credible step in the pursuit and achievement of real sustainability in practice, it is a public declaration of the environmental impacts associated with specified life cycle stages of that product. Unilin EPDs have been independently verified in accordance with EN 15804+A2:2019 and ISO 14025 accounting for stages of the LCA from A1 to A3, with options A4-A5 and modules C1-C4 and D included. The process of creating an EPD allows us to improve performance and reduce resource wastage through improvements in product design and manufacturing efficiency. They play a crucial role in manufacturing and construction and are increasingly asked for by industry.

### EPDs and BREEAM

BREEAM is primarily trying to encourage designers to take EPDs into consideration when specifying products. BREEAM requires EPDs to be verified by a third-party. For the Mat 02 category, points are awarded based on whether EPDs are generic, manufacturer-specific, or product-specific. Non 3rd party verified EPDs to EN 15804 cannot be accepted. All of Unilin EPDs are externally verified.

### Responsible Sourcing

Unilin has BES 6001 certification for responsible sourcing. The second BREEAM credit under that category is based on responsibly-sourced materials – at least 80% of the total insulation used in roofs, walls, ground floors and services must meet any of tier levels 1 to 6 in the BREEAM table of certification schemes. Our Environmental Management System is certified under EN ISO 14001, and our raw materials come from companies with similarly certified EMS (copies of all certificates are available for BREEAM assessments). This level of responsible sourcing meets tier level 6 in the BREEAM table.

Good workmanship and appropriate site procedures are necessary to achieve expected thermal and airtightness performance. Installation should be undertaken by professional tradespersons. The example calculations are indicative only, for specific U-Value calculations contact Unilin Insulation Technical Support. Unilin technical literature, Agrément certifications and Declarations of Performance are available for download on the Unilin Insulation website. The information contained in this publication is, to the best of our knowledge, true and accurate at the time of publication but any recommendations or suggestions which may be made are without guarantee since the conditions of use are beyond our control. Updated resources may be available on our websites. All images and content within this publication remain the property of Unilin Insulation.