PRODUCT GUIDE

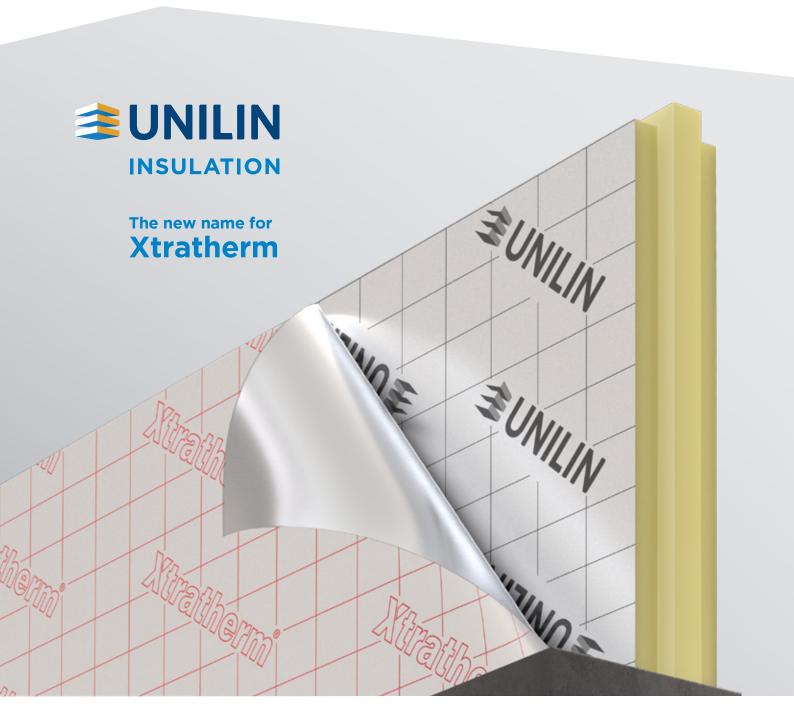
Insulation for:

Walls

Floors

Roofs

Soffit









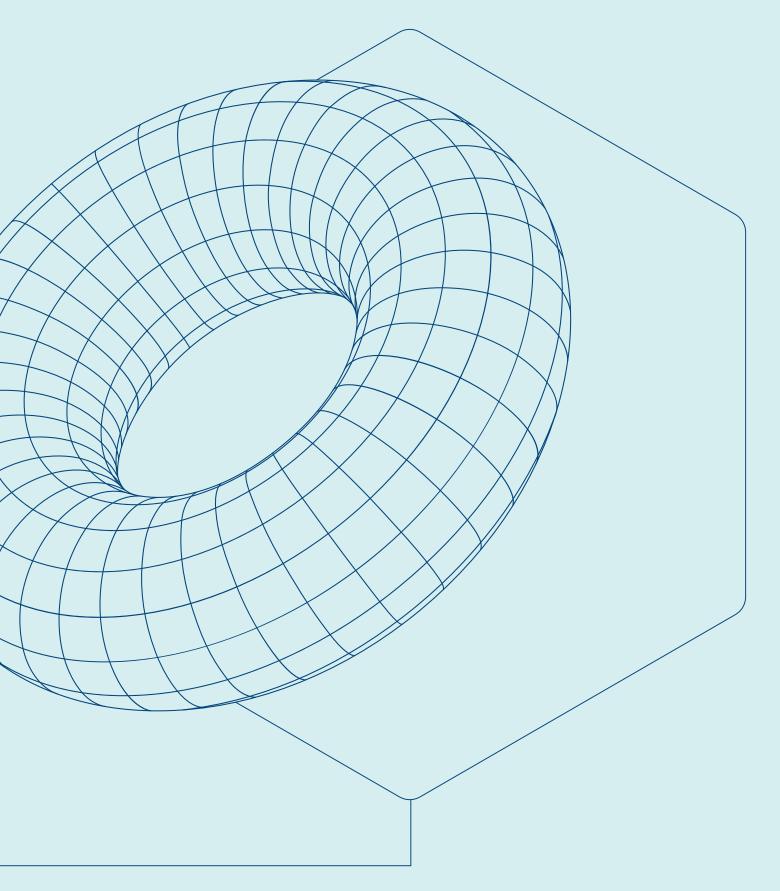
Reduce by Design

ACTION ON EMBODIED CARBON

It has been independently proven that clever design using high-performance insulation can **reduce embodied carbon** levels and help achieve 2030 Climate Challenge targets.

Contact our Technical Team for advice on the reduction of embodied carbon.





Designing to Zero

We are committed to developing and promoting sustainable low energy design in construction.

Meeting Passive or NZEB Standards requires us all to think and deliver differently. We continually improve and adapt to the challenge, gaining in-depth knowledge and sharing those technical aspects with industry.

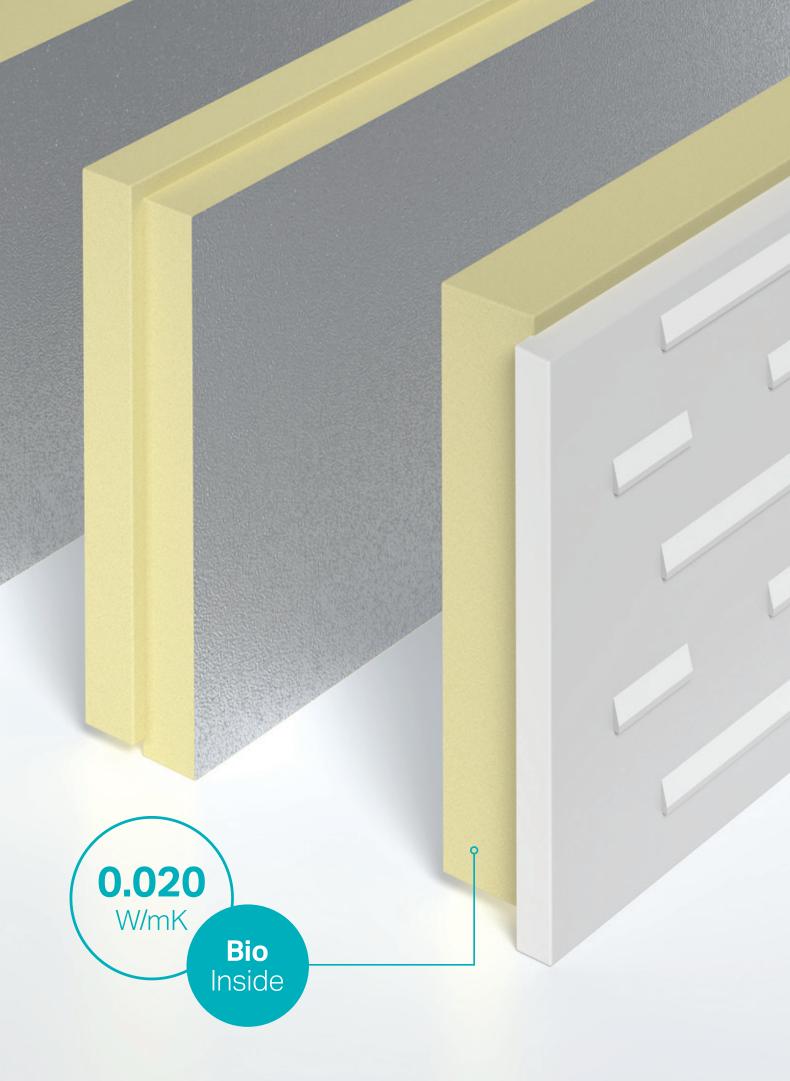
The Climate Emergency necessitates an accelerated drive for reducing our own impact and the impact of the projects we work on in terms of operational energy and embodied carbon. Unilin Insulation welcomes the growing industry momentum for performances beyond Building Regulations such as the Climate Challenge 2030 and by groups such as Low Energy Transformation Initiative (LETI).

ECO360

The ECO360 Range sees pioneering environmental improvements in the manufacturing, delivery and use of PIR insulation.

- Bio-enhanced formulation
- Part of a design solution to achieve Climate Challenge 2030 Targets
- Reduced packaging materials
- Halogen free formulation
- ✓ Improved thermal performance of 0.020 W/mK
- Bio-degradable packaging materials





Sustainability Pledge

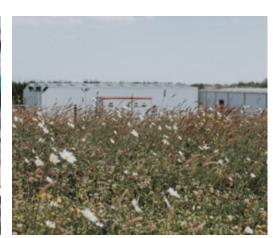
Our environmental impact is the predominant consideration in all operational and commercial decisions for the benefit of our business, staff, shareholders, customers, communities and families.

















Four Focus Areas



Product

Improving product sustainability, as evidenced by our published **Environmental Product Declarations** (EPDs). Working with our industry partners, we aim to drive a more environmentally aware industry.



People

Our greatest asset. Unilin's success is driven by a dedicated team. It is their vision that will deliver a more sustainable Unilin operation.



Place

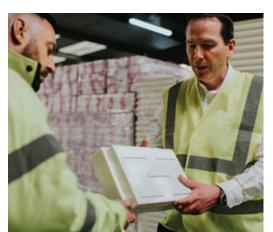
Promoting the adoption of more sustainable practices in the places and communities in which we work and live.



Partnership

Working with our partners throughout the business to make more environmentally sensitive choices.













OUR PRODUCTS

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Products by Range

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ECO/MA (Roofs)
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SUPERIOR PERFORMANCE PIR INSULATION

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THIN-R

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Pitched Roof

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Single Ply Fully Adhered / Partially Bonded Built-Up Felt Systems

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FOAMGLAS® 56 Cellular Glass Insulation

XPS

EXTRUDED POLYSTYRENE INSULATION

XPS 58
Extruded Polystyrene Insulation

EPS

EXPANDED POLYSTYRENE INSULATION

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CLOSE-R

INSULATED CAVITY CLOSER

Safe-R Close-R 60 Insulation Accessories

Close-R 61
Insulation Accessories







Partial Fill Cavity Walls		Drylin
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ECO360 BIO-ENHANCED PIR INSULATION Full Fill Cavity Walls



ECO/CT

CavityTherm 360 is a bio-enhanced high performance composite board of enhanced PIR with a thermal conductivity as low as 0.020 W/mK for full fill cavity wall applications.









Key Features

Bio-enhanced PIR insulation

Halogen free

Enhanced performance as low as 0.020 W/mK

Bio-degradable packaging - Reduced packaging materials

Moisture directed to outer surface

Fully engineered jointing

Fully recyclable HIPs facer provides wind-driven rain protection

Wide range of system compatible accessories that build to a system

Preformed corner panels available

Specifications	
Thermal Conductivity	0.020 W/mK
Facings	Composite Foil/Engineered Hips
Core	Bio-enhanced PIR Insulation
Board Size	1200mm x 450mm
Board Thickness	110, 125, 150mm
Board Profile	Rebate Edge
Preformed Corner	Yes



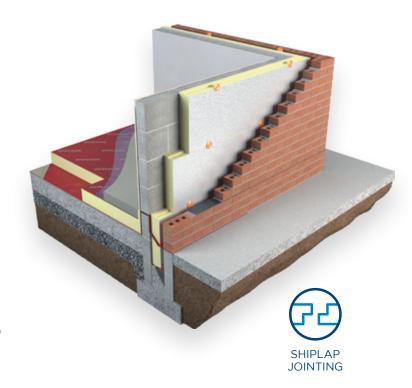
ECO360 BIO-ENHANCED PIR INSULATION Partial Fill Cavity Walls



ECO/CW

Cavity Wall 360 is a bio-enhanced partial fill wall insulation system. The system incorporates robust facings, engineered jointing details, preformed corners and has a thermal conductivity of 0.020 W/mK.

Cavity Wall 360 is an environmentally sound choice for Passive and low energy builds. It can achieve a Passive U-Value of 0.15 W/m²K in a traditional cavity wall. When building with Cavity Wall 360 a residual cavity is maintained, offering excellent protection against wind-driven rain.



Key Features

Bio-enhanced PIR insulation

Halogen free

Enhanced performance as low as 0.020 W/mK

Bio-degradable packaging

Clear cavity maintained

Lower Lambda value for improved U-Values

Specifications	
Thermal Conductivity	0.020 W/mK
Facings	Robust low emissivity foil facings
Core	Bio-enhanced PIR Insulation
Board Size	1200mm x 450mm
Board Thickness	100, 110mm
Board Profile	Rebate Edge
Preformed Corner	Yes

CAVITYTHERMBUILT-IN FULL FILL PIR WALL INSULATION Full Fill Cavity Walls



CT/PIR

CavityTherm is an innovative built-in insulation for traditional walls that achieves Passive level U-Values as low as 0.13 W/m²K with excellent Thermal Bridging detailing in cavities up to 150mm wide.





External corner Internal corner



Key Features

Verified EPD available

Engineered HIPs facer provides wind driven rain protection

Moisture redirected to outer surface

Prepositioned slots for sloping wall ties - no creep

Fully engineered jointing - no reliance on taping*

Full range of accessory pieces build continuous system

Excellent Thermal Bridging Values

Preformed corner panels available

*Where the boards are butt jointed tape is required

Specifications	
Thermal Conductivity	0.021 W/mK
Facings	Composite Foil/Engineered Hips
Core	PIR Insulation
Board Size	1200mm x 450mm
Board Thickness	100, 110, 125, 150mm
Board Profile	Rebate Edge
Preformed Corner	Yes



CAVITYTHERMBUILT-IN FULL FILL PIR WALL INSULATION Full Fill Cavity Walls



CT/PIR FLEX

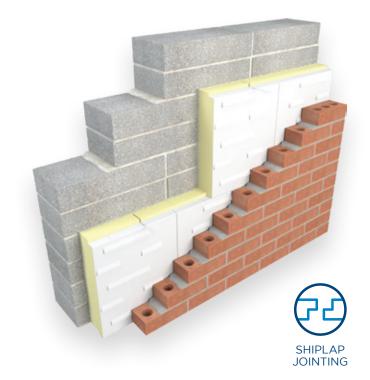
CavityTherm Flex is the perfect solution when insulating fair faced inner block walls or when block is laid flat resulting in an uneven surface to accept the insulation. The 25mm flexible fleece layer absorbs any variations due to block tolerances, providing a continuous unbroken bond between insulation layer and block.





External corner

Internal corner



Key Features

Engineered HIPs facer provides wind driven rain protection

Flexible backing to eliminate indentations

Excellent Thermal Bridging Y-value

Robust moisture protection facing

0.14 U-Value in 150mm Cavity

Fully engineered jointing - no reliance on taping*

Preformed corner panels available

*Where the boards are butt jointed tape is required

Specifications	
Thermal Conductivity	0.021 W/mK
Facings	Composite Foil/Engineered Hips
Core	PIR Insulation/Flexible Fleece
Board Size	1200mm x 450mm
Board Thickness	125, 150mm
Board Profile	Rebate Edge

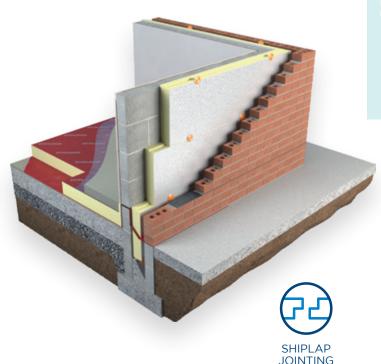
XTROLINER SUPERIOR PERFORMANCE PIR INSULATION Partial Fill Cavity Walls



XO/XW

XtroWall is an innovative partial fill wall insulation system incorporating robust facings, engineered jointing details, preformed corners and a certified thermal conductivity of 0.021 W/mK.

This lower Lambda improves U-Values and meets Passive house levels, proving an excellent choice for Passive and low energy builds. XtroWall can achieve NZEB Standard in a traditional cavity wall. Building with XtroWall, a residual cavity is maintained, offering excellent protection against wind driven rain.



Key Features

Verified EPD available

Reaction to Fire (Euroclass) C-s2, d0

Engineered Jointing

Corner panels and cavity closers: Reduced Thermal Bridging

Clear cavity Maintained

Lower lambda value for improved U-Values

Robust textured foil

Specifications	
Thermal Conductivity	0.021 W/mK
Facings	Robust low emissivity foil facings
Core	Superior Performance PIR Insulation
Board Size	1200mm x 450mm
Board Thickness	80, 90, 100mm
Board Profile	Rebate Edge
Preformed Corner	Yes



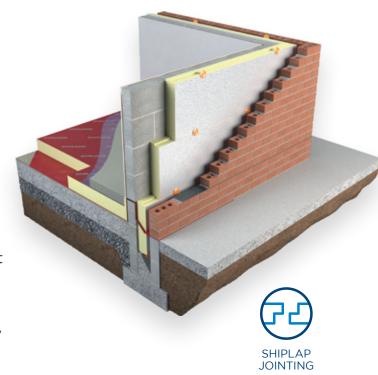
XTROLINER SUPERIOR PERFORMANCE PIR INSULATION Partial Fill Cavity Walls



XO/XWP

XtroWall Plus is a superior performance insulation with a thermal conductivity of 0.020 Wm/K and an enhanced Euroclass C fire classification. It is faced with a robust aluminium foil and is available with engineered jointing to deliver improved Thermal Bridging detailing.

This lower Lambda improves U-Values and meets NZEB standards, proving an excellent choice for Passive and low energy builds. XtroWall Plus can achieve a passive U-Value of 0.15 W/m²K in a traditional cavity wall. Building with XtroWall Plus, a residual cavity is maintained, offering excellent protection against wind driven rain.



Key Features

Verified EPD available

Reaction to Fire (Euroclass) C-s2, d0

Achieves 0.15 U-Value in 150mm Cavity

Improved lambda value 0.020 W/mK

Engineered Jointing

Corner panels and cavity closers: Reduced Thermal Bridging

Clear cavity maintained

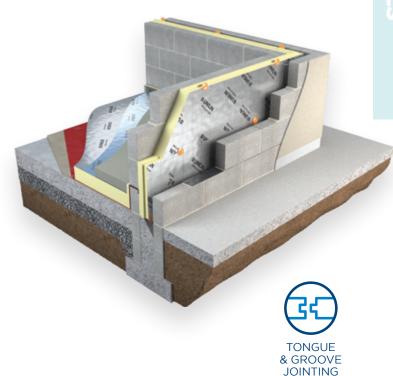
Specifications	
Thermal Conductivity	0.020 W/mK
Facings	Robust low emissivity foil facings
Core	Superior Performance PIR Insulation
Board Size	1200mm x 450mm
Board Thickness	110mm
Board Profile	Rebate Edge
Preformed Corner	Yes

THIN-R PIR INSULATION Partial Fill Cavity Walls

XT/CW (T&G)

Thin-R Partial Fill Cavity Wall (T&G) Insulation builds to a system thanks to its engineered tongue and grooved joints and preformed corners, ensuring insulation continuity and minimising of Thermal Bridging.

Cavity Wall (T&G) for use in traditional masonry walls, builds to the highest thermal standards whilst maintaining a residual cavity, offering protection from wind driven rain.



Key Features

Verified EPD available

Robust Tongue & Groove Jointing

Corner panels and cavity closers: Reduced Thermal Bridging

Clear cavity maintained

No exposure restrictions

Low emissivity foil facings

Specifications	
Thermal Conductivity	0.022 W/mK
Facings	Low emissivity foil facings
Core	PIR Insulation
Board Size	1200mm x 450mm
Board Thickness	60, 70, 80, 90, 100, 110, 120, 125mm
Board Profile	Tongue & Groove
Preformed Corner	Yes



SAFE-R PHENOLIC INSULATION Drylining Walls



(Installed with Adhesive Dabs or Mechanically Fixed)

SR/TBFL-MF

Safe-R Fireline Thermal Laminate is a composite insulated panel comprising of a rigid Phenolic core and 15mm Fireline plasterboard achieving a Euroclass B s1 d0 reaction to fire classification for internal applications. The superior thermal performance provides excellent U-Values with minimal intrusion into valuable living space.

Safe-R Fireline Thermal Laminate achieved a REI 45 fire resistance in a system for ceiling and roof application in accordance with TGD B. This product is designed to provide high levels of thermal insulation and drylining in one operation, with the added assurance of high fire performance combined with excellent thermal values.



Key Features

Verified EPD is available for the product insulation

Reaction to Fire (Euroclass) B-s1, d0

High performance to thickness ratio - Space saving

Superior thermal performance of 0.020-0.021 W/mK

Specifications	
Thermal Conductivity	0.020 - 0.021 W/mK
Facings	Low emissivity foil facings/ Fireline plasterboard
Core	Phenolic Insulation
Board Size	2400mm x 1200mm
Board Thickness	50, 60, 70, 80, 100mm
Board Profile	Square Edge

Drylining Walls Fixed with Adhesive Dabs

XT/TL

Thin-R Thermal Liner (Dot & Dab) is a composite insulated panel of Unilin PIR insulation core with a composite kraft facing bonded to 12.5mm tapered edge plasterboard for internal applications, fixed with proprietary adhesive bonding.



Key Features

Verified EPD is available for the product insulation

Reaction to Fire (Euroclass) B-s1, d0

Insulation & Drylining in one application

Provides effective vapour control layer

Reduced insulation thickness

Suitable for a variety of wall types

Cost effective solution in refurbishment and new build

Specifications	
Thermal Conductivity	0.022 W/mK
Facings	Composite Kraft/Plasterboard
Core	PIR Insulation
Board Size	2438mm x 1200mm
Board Thickness	37.5, 50.5, 62.5, 72.5, 82.5 and 92.5mm (Thickness includes 12.5mm plasterboard)
Board Profile	Square Edge
Plasterboard	Tapered Edge



THIN-R PIR INSULATION Drylining Walls - Mechanically Fixed

XT/TL-MF

Thin-R Thermal Liner (Mechanically Fixed) is a composite insulated panel of Unilin PIR insulation core with a composite foil facing bonded to 12.5mm tapered edge plasterboard for internal walls, sloped roofs and ceilings. This product is only suitable for mechanically fixed applications.



Key Features

Verified EPD is available for the product insulation

Reaction to Fire (Euroclass) B-s1, d0

Insulation & Drylining in one application

Provides effective vapour control layer

Reduced insulation thickness

Suitable for a variety of wall types

Cost effective solution in refurbishment and new build

Specifications	
Thermal Conductivity	0.022 W/mK
Facings	Composite Foil/Plasterboard
Core	PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	37.5, 42.5, 52.5, 62.5, 72.5, 82.5, 92.5, 102.5, 112.5mm (Thickness includes 12.5mm plasterboard)
Board Profile	Square Edge
Plasterboard	Tapered Edge

STONEWOOL NON-COMBUSTIBLE INSULATION

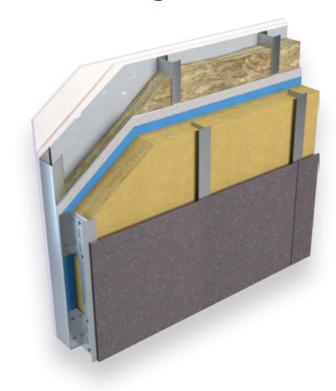


Ventilated Rainscreen Cladding

SW/RS

Unilin's range of non-combustible, Euroclass 'A1' stonewool insulation provides surety when the highest fire performance is required. Stonewool Rainscreen insulation is suitable for use in ventilated facade, rainscreen and framing applications and closed systems such as curtain walling.

Unilin's Stonewool insulation provides a robust, uniform, high density solution throughout the product providing resilience during the build process for the application of mechanically fixed substrates.



Key Features

Euroclass A1 Fire classification

Robust high density

Improved acoustic performance

Suitable for use in high rise buildings

Specifications	
Thermal Conductivity	0.035 W/mK
Board Size	1200mm x 600mm
Board Thickness	50, 75, 100, 125, 150mm
Board Profile	Square Edge

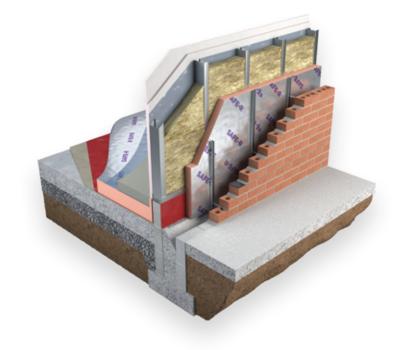
SAFE-R PHENOLIC INSULATION Steel & Timber Frame



SR/FB

Safe-R Framing Board is designed for use with steel or timber frame applications up to 18m in height. With a Euroclass C Fire Classification the framing board can be used between studs or as an insulated sheathing board. Using Safe-R Framing Board provides excellent U-Values and improved Thermal Bridging detailing.

The use of combustible insulation is restricted on high buildings and buildings of a certain use. Regulations will differ regionally. Seek the guidance of the project architect or engineer before proceeding.



Key Features

Verified EPD available

Suitable for use in steel and timber frame systems up to 18m in height

Lower lambda value for improved U-Values

Reaction to Fire (Euroclass) C-s1, d0

Reduced Thermal Bridging

Combustible materials have height restrictions. Please contact our Technical Team for more information.

Specifications	
Thermal Conductivity	0.020 - 0.021 W/mK
Facings	Low emissivity foil facings
Core	Phenolic Insulation
Board Size	2400mm x 1200mm
Board Thickness	50, 60, 75, 80, 100, 120, 140mm
Board Profile	Square Edge

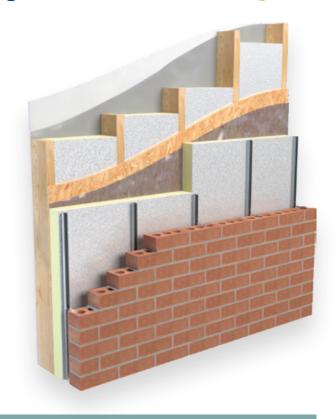
XTROLINER SUPERIOR PERFORMANCE PIR INSULATION Steel & Timber Frame



XO/FB

XtroLiner Framing Board is designed for use in a wide range of construction including steel or timber frame applications up to 18m in height. The framing board can be used between studs or as an insulated sheathing board. Using XtroLiner Framing Board in this application will reduce the Thermal Bridging of the steel or timber studs.

The use of combustible insulation is restricted on high buildings and buildings of a certain use. Regulations will differ regionally. Seek the guidance of the project architect or engineer before proceeding.



Key Features

Verified EPD available

Reaction to Fire (Euroclass) C-s2, d0

Suitable for use in steel and timber frame systems.

Lower lambda value for improved U-Values

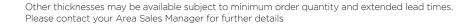
Suitable for new build and renovation up to 18m in height

Reduced Thermal Bridging

Robust textured foil

Combustible materials have height restrictions. Please contact our Technical Team for more information.

Specifications	
Thermal Conductivity	0.021 W/mK
Facings	Robust low emissivity foil facings
Core	Superior Performance PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	50, 60, 75, 80, 100, 120, 140mm
Board Profile	Square Edge



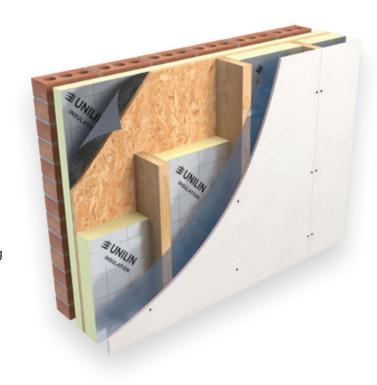


THIN-R PIR INSULATION Timber Framed Walls

XT/TF

Timber Frame construction is a fast, systematic method that results in high performing buildings with regard to energy efficiency and in environmental terms.

Unilin's Timber Frame Systems bring timber framed wall insulation performance to new levels, surpassing the default values asked for in current building regulations. Using this product in timber framed walls helps achieve NZEB fabric standards and Passive House Standards.



Key Features

Verified EPD available

Rapid build system

Approved for use with fibre in stud

Suitable for new build and renovation

Reduced insulation thickness

Low emissivity foil facings

Specifications	
Thermal Conductivity	0.022 W/mK
Facings	Low emissivity foil facings
Core	PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	25, 30, 40, 50, 60, 70, 75, 80, 90, 100, 110, 125, 150mm
Board Profile	Square Edge



Pitched Roofs	
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■ ECO/MA Sarking Warm Roof Construction	27
XO/PR Pitched Roof	28
XO/SK Sarking (T&G)	29
XT/PR_UF Pitched Roof	30
XT/RLOC Pitched Roof	31

ECO360 BIO-ENHANCED PIR INSULATION Pitched Roofs



ECO/MA

Bio-enhanced, superior performance PIR insulation suitable for pitched roofs (ventilated, hybrid or warm). ECO360 MA for roofs offers excellent insulation performance with a thermal conductivity as low as 0.020 W/mK.

Using pioneering environmentally conscious technology, ECO360 MA in roof applications will reduce heat loss while also delivering excellent Thermal Bridging details.



Key Features

Bio-enhanced PIR insulation

Halogen free

Enhanced performance as low as 0.020 W/mK

Bio-degradable packaging - Reduced packaging materials

High compressive strength

Specifications	
Thermal Conductivity	As low as 0.020 W/mK
Facings	Textured robust low emissivity foil facings
Core	Bio-enhanced PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	50*, 100, 125, 150mm
Board Profile	Square Edge

^{*}The thermal performance of the 50mm thickness is 0.023 W/mK

ECO360 BIO-ENHANCED PIR INSULATION

Sarking Warm Roof Construction



ECO/MA

Bio-enhanced, superior performance PIR insulation suitable for Sarking Warm Roof construction. ECO360 MA, with a thermal conductivity as low as 0.020 W/mK, in a sarking warm roof application offers an environmentally conscious solution which provides improved detailing, speed of installation and a uniform plane to accommodate more efficient detailing.

This bio-enhanced insulation is lightweight, easy to install and combines high compressive strength with low thermal conductivity, providing a high performance solution for roof insulation.



Key Features

Bio-enhanced PIR insulation

Halogen free

Enhanced performance as low as 0.020 W/mK

Bio-degradable packaging - Reduced packaging materials

High compressive strength

Suitable for pitched roofs

Specifications	
Thermal Conductivity	0.020 W/mK
Facings	Textured robust low emissivity foil facings
Core	Bio-enhanced PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	100, 125, 150mm
Board Profile	Square Edge



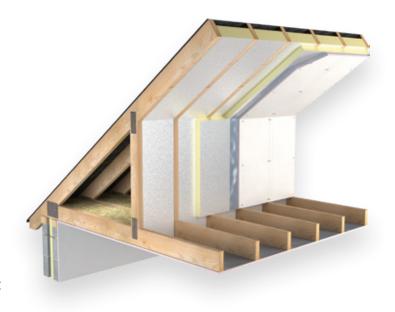
XTROLINER SUPERIOR PERFORMANCE PIR INSULATION Pitched Roofs



XO/PR

XtroLiner Pitched Roof on sloped roofs (ventilated, hybrid or warm) provides the most efficient U-Values with minimal intrusion into valuable living space.

The roof construction is a critical element in the building fabric and is an area at high risk of heat loss. Using XtroLiner Pitched Roof will reduce heat loss while also delivering excellent Thermal Bridging details.



Key Features

Verified EPD available

Reaction to Fire (Euroclass) C-s2, d0

Reduces intrusion into living area

Reduced risk of condensation

Robust foil facings

Lightweight and easy to install

Reduced Thermal Bridging

Specifications	
Thermal Conductivity	0.021 W/mK
Facings	Robust low emissivity foil facings
Core	Superior Performance PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	25, 40, 50, 60, 70, 75, 80, 100, 120mm
Board Profile	Square Edge

& GROOVE JOINTING

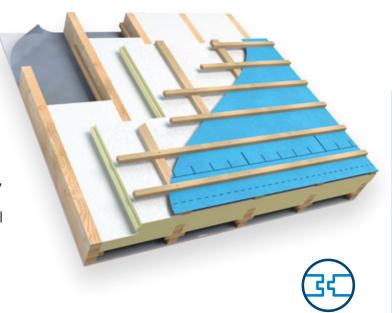
XTROLINER SUPERIOR PERFORMANCE PIR INSULATION Sarking Warm Roof Construction



XO/SK (T&G)

XtroLiner Sarking (T&G) is an engineered tongue and grooved external roof insulation system with robust facings which meets the passive U-Value of 0.15 W/m²K.

Using this product improves detailing, speeds up the installation process and provides a uniform plane to detail more effectively. Creating a warm roof reduces the normal amount of junctions prone to Thermal Bridging greatly improving the thermal performance of the roof.



Key Features

Verified EPD available

Reaction to Fire (Euroclass) C-s2, d0

Robust tongue & groove jointing

Reduced risk of condensation

Avoids intrusion into living area

Excellent U-Value in roofs

Reduced Thermal Bridging

Specifications	
Thermal Conductivity	0.021 W/mK
Facings	Robust low emissivity foil facings
Core	Superior Performance PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	50, 75, 100, 125mm
Board Profile	Tongue & Groove





THIN-R PIR INSULATION Pitched Roofs

XT/PR_UF (ROOFS)

Thin-R Pitched Roof on sloped roofs (ventilated, hybrid or warm) provides the most efficient U-Values with minimal intrusion into valuable living space.

The roof construction is a critical element in the building fabric and is an area at high risk of heat loss. Using this product will reduce heat loss while also delivering excellent Thermal Bridging details.



Key Features

Verified EPD available

Avoids intrusion into living area

Reduced risk of condensation

Low emissivity foil facings

Lightweight and easy to install

Reduced Thermal Bridging

Specifications	
Thermal Conductivity	0.022 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Low emissivity foil facings
Core	PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	25, 30, 40, 50, 60, 70, 75, 80, 90, 100, 125, 150mm
Board Profile	Square Edge

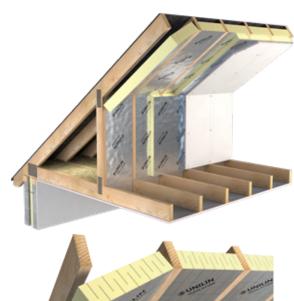
RAFTERLOC Pitched Roof Board

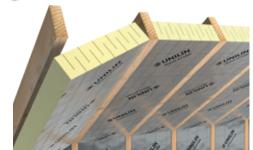


XT/RLOC

Unilin Rafterloc Pitched Roof Insulation has a unique width variation feature offering a 20-30mm adjustment margin to ensure a tight fitting, high performance insulation locked between rafters.

Used in conjunction with a layer of Unilin XT/TL or XT/PR_UF below the rafters, the Rafterloc system provides a robust, cost effective solution to insulating sloped rafters to the most efficient standards with minimal wastage and reduced fitting time.





Key Features

Variable width feature

Minimal intrusion into living area

Reduced Thermal Bridging

Low emissivity foil facings

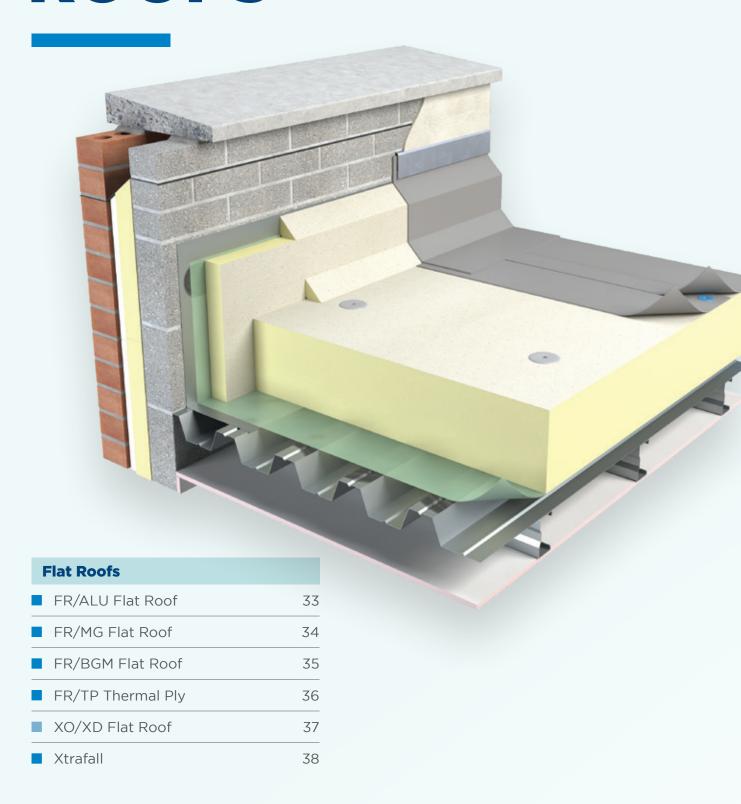
Extra thermal performance

Specifications	
Thermal Conductivity	0.023 W/mK
Facings	Low emissivity foil facings
Core	PIR Insulation
Board Size	1200mm x 370mm
Board Thickness	100, 125, 150mm
Board Profile	Square Edge





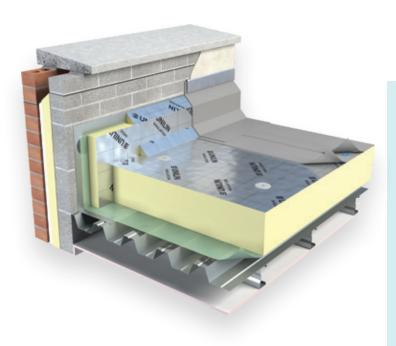
FLAT ROOFS



Mechanically Fixed Single Ply Waterproofing Systems

FR/ALU

Flat Roof ALU is a high performance Polyisocyanurate flat roof insulation with vapour-tight aluminium foil facings suitable for use with single ply membranes. Flat Roof ALU is part of the comprehensive range of Unilin's high performance flat roof boards providing total solutions for flat roof projects.



Key Features

Verified EPD available

High Thermal Performance

Compatible with mechanically fixed single ply systems. Loose laid ballasted systems

Vapour resistant foil facers

Specifications	
Thermal Conductivity	0.022 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Vapour-Resistant aluminium foil facings
Core	PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	25, 30, 40, 50, 60, 70, 75, 80, 90, 100, 110, 120, 125, 130, 140, 150mm
Board Profile	Square Edge



Single Ply Fully Adhered/Partially Bonded Built-Up Felt Systems

FR/MG

Flat Roof MG is a high performance Polyisocyanurate flat roof insulation with mineral coated glass facers suitable for use below single ply waterproofing systems (mechanically fixed or fully adhered) and partially bonded built-up felt.



Key Features

Verified EPD available

High Thermal Performance

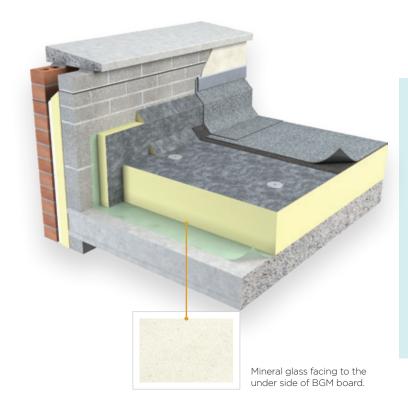
Compatible with adhesively bonded single ply roofing membranes laid on mechanically fixed or adhered boards

Specifications	
Thermal Conductivity	0.024 - 0.027 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Mineral Glass
Core	PIR Insulation
Board Size	1200mm x 1200mm
Board Thickness	25, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150mm
Board Profile	Square Edge

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

FR/BGM

Flat Roof BGM is faced with a polypropylene fleece finished bitumen/glass working surface and a mineral glass facing to the under side. Flat Roof BGM is part of Unilin's comprehensive range of high performance flat roof boards providing total solutions for flat roof projects.



Key Features

Verified EPD available

High Thermal Performance

Compatible with most bituminous based roofing systems

Fleece finished bitumen/glass fibre facings

Specifications	
Thermal Conductivity	0.024 - 0.027 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Mineral Glass/Bitumen Glass
Core	PIR Insulation
Board Size	1200mm x 1200mm
Board Thickness	25, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150mm
Board Profile	Square Edge





Thermal Ply High Performance PIR & Plywood Composite for Flat Roofs

FR/TP

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



Key Features

Verified EPD is available for the product insulation

Insulation & decking in one fix

For new & refurbishment roofs

Rapid weather proofing

Specifications	
Thermal Conductivity	0.022 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Composite foil facing/6mm WBP Grade Plywood
Core	PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	56, 76, 86, 96, 106, 116mm
Board Profile	Square Edge

XTROLINER SUPERIOR PERFORMANCE PIR INSULATION

Partially Bonded, Self Adhered, Built-up Bituminous Felt Systems

XO/XD

XtroDeck is faced with an embossed aluminium facing on both sides. XtroDeck is part of Unilin's comprehensive range of high performance flat roof boards providing total solutions for flat roof projects.



Key Features

Verified EPD available

Reaction to Fire (Euroclass) C-s2, d0

Superior Performance PIR Insulation

Compatible with most bituminous based roofing systems containing self adhered underlays with heat activated cap sheets

Specifications	
Thermal Conductivity	0.021 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Robust low emissivity foil facings
Core	PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	25, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150mm
Board Profile	Square Edge



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. These products are exclusive to the XtraFall system.



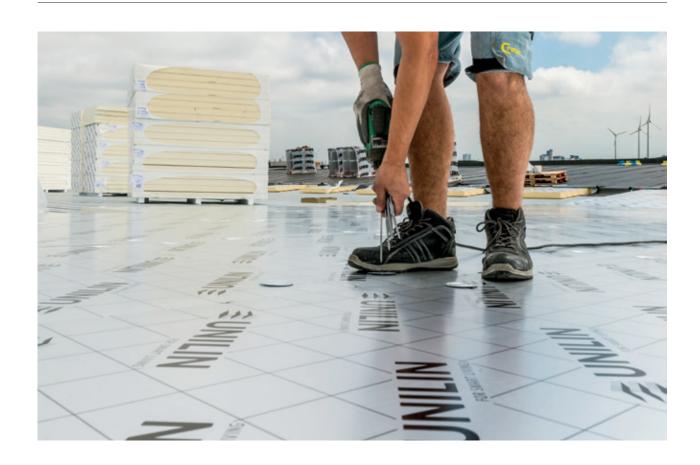












Key Features

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

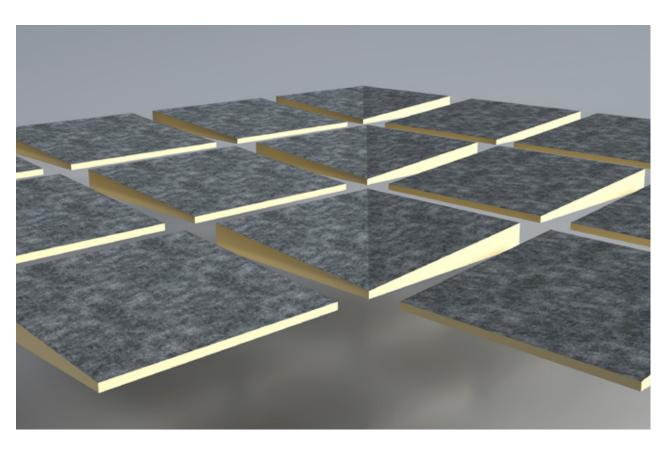
Pre-mitred, hips, valleys and extensive range of accessory pieces

Rigid, lightweight material, accepting maintenance traffic

Suitable for new and existing flat roofs

Verified EPD available

BBA Assured Technical Team

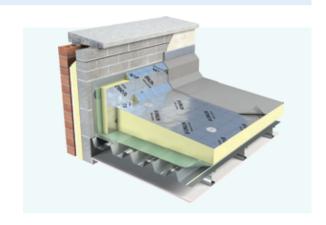


Xtrafall Tapered Boards

XF/ALU

Tapered Insulation for Mechanically Fixed Single Ply Waterproofing Systems

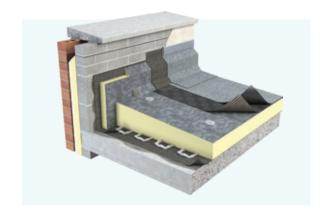
- Aluminium faced rigid PIR
- Thermal Conductivity 0.022 W/mK
- Compatible with Single Ply Waterproofing Systems



XF/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



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.



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.

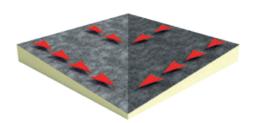
It should be noted that correct, on-site, setting out of the laying pattern, of XtraFall boards, is essential to quick and efficient placing of the insulation. The roofing contractor must ensure that the information/drawing provided is relevant to the on-site works.

Benefits

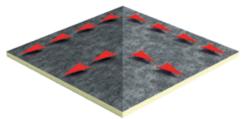
- Good roof drainage
- Quick board laying
- · Reduced on-site cutting
- Lower labour costs
- Versatile systems

Features

- · Creates multi-directional falls
- · Exact dimensions
- Clear board identification
- Easily installed
- Suitable for all roof Specs



Valley Board



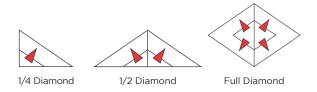
Ridge Board

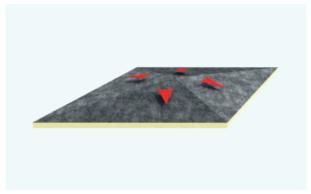
ANCILLARY PRODUCT RANGE

The XtraFall 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.

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.

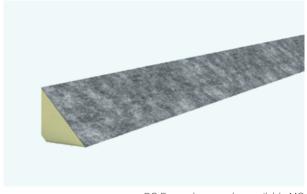




Only available as part of an XtraFall designed solution and not as separate components.

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.



 $\operatorname{\mathsf{BG}}\nolimits$ Facer shown - also available $\operatorname{\mathsf{MG}}\nolimits$

DRAINAGE DESIGN



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

Cut-to-fall schemes designed specific to your requirements

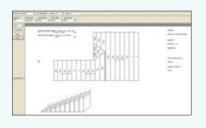
Unilin provide individually engineered pieces, when installed in accordance with comprehensive laydown mapping to ensure designed intent is actually achieved on site.

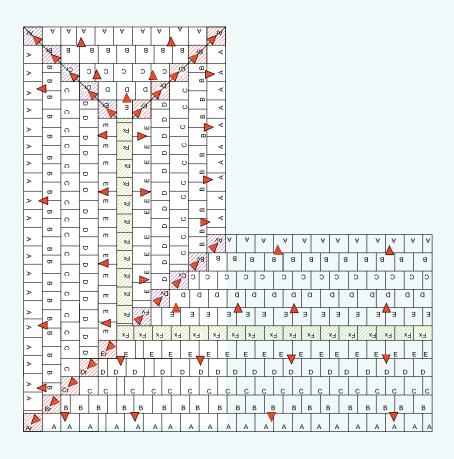
The precision manufacturing of single piece components provide accuracy and fixing surety not achievable when multi-layer systems are formed on site under our often challenging weather conditions. Complex, geometrical patterns are pre-formed under controlled factory conditions to provide a technically 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.

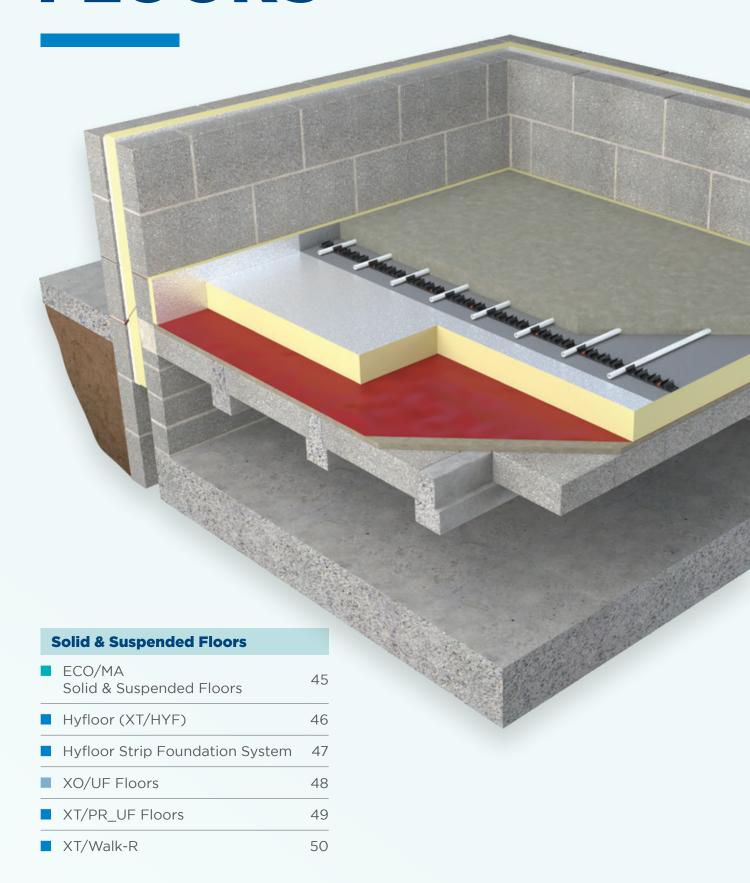


Unilin Technical Team members are a valuable resource that can be called upon to advise from the initial consultation to formulate design strategies. They will assist you right through providing comprehensive layout schemes for the contractor to simplify the installation of complex drainage courses,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





FLOORS



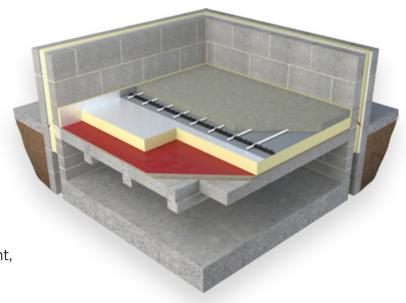
ECO360 BIO-ENHANCED PIR INSULATION Solid & Suspended Floors



ECO/MA

Bio-enhanced, superior performance PIR insulation suitable for solid and suspended floors. ECO360 MA for floors offers excellent insulation performance with a thermal conductivity of 0.020 W/mK.

This bio-enhanced insulation will significantly improve the U-Value of new and existing floors. It is lightweight, easy to install and combines high compressive strength with low thermal conductivity, providing a high performance solution for floor insulation.



Key Features

Bio-enhanced PIR insulation

Halogen free

Enhanced performance as low as 0.020 W/mK

Bio-degradable packaging

High compressive strength

Suitable for underfloor heating

Specifications	
Thermal Conductivity	0.020 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Robust low emissivity foil facings
Core	Bio-enhanced PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	100, 125, 150mm
Board Profile	Square Edge



THIN-R PLUS ENHANCED PIR INSULATION

Ground Supported & Suspended Floors



HYFLOOR (XT/HYF)

The floor in any building is an area of considerable downward heat loss when not properly insulated. Unilin has developed Hyfloor insulation as the answer to achieve lower U-Values – in a practical and robust manner.

Hyfloor has a superior thickness to performance ratio, allowing the lower targets required under Building Regulations to be achieved with minimum thickness.



Key Features

Verified EPD available

Excellent 0.021 W/mK Lambda value

High compressive strength

Suitable for underfloor heating

Perimeter strips for robust detailing

Reduced insulation thickness

Specifications	
Thermal Conductivity	0.021 W/mK
Compressive Strength	CS (10\Y) 140
Facings	Composite foil facings
Core	Enhanced PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	75, 100, 125, 150mm
Board Profile	Square Edge

THIN-R PLUS ENHANCED PIR INSULATION

Ground Supported & Suspended Floors



HYFLOOR STRIP FOUNDATION SYSTEM

Hyfloor Strip Foundation System provides U-Value and Thermal Bridging performance to meet Future Homes Standard along with assurance of compressive strength at foundation level.



Key Features

Addresses site detailing from an early stage

Y-Values achieved < 0.05

U-Values achieved 0.11- 0.13 W/m²k

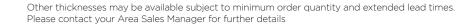
Using blocks suitable for multi storey buildings with a high compressive strength of 7.5 N/mm² and 13 N/mm²

Complies with standard construction ACDs

Traditional construction, avoiding the need for engineering assurances

Suitable for use with built-in full fill and partial fill wall insulation

Specifications	
Thermal Conductivity	0.021 W/mK
Facings	Composite Foil/Engineered Hips
Core	Enhanced PIR Insulation
Board Size	225mm & 450mm (H)
Board Thickness	75, 100, 125, 150mm
Board Profile	Rebate





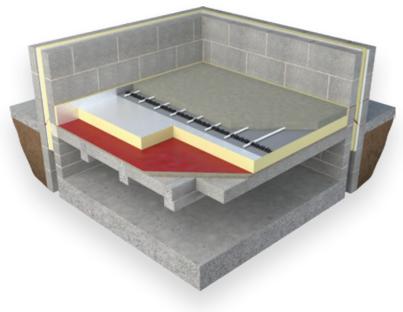
XTROLINER SUPERIOR PERFORMANCE PIR INSULATION Solid & Suspended Floors



XO/UF

XtroLiner Underfloor superior performance PIR offers excellent insulation performance with a thermal conductivity of 0.021 W/mK. The floor in any building is an area of considerable downward heat loss when not properly insulated.

XtroLiner Underfloor will significantly improve the U-Value of new and existing floors. It is lightweight, easy to install and combines high compressive strength with low thermal conductivity, providing a high performance solution for floor insulation.



Key Features

Verified EPD available

Reaction to Fire (Euroclass) C-s2, d0

High compressive strength

Suitable for underfloor heating

Perimeter strips for robust detailing

Reduced insulation thickness

Robust textured foil

Specifications	
Thermal Conductivity	0.021 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Robust low emissivity foil facings
Core	Superior Performance PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	50, 60, 75, 80, 100, 120, 150mm
Board Profile	Square Edge

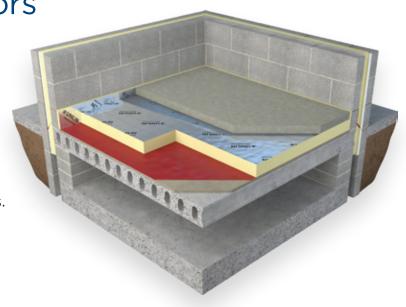
THIN-R PIR INSULATION

Ground Supported & Suspended Floors

XT/PR_UF (FLOORS)

The floor in any building is an area of considerable downward heat loss when not properly insulated. Thin-R Underfloor will significantly improve the U-Value of new and existing floors.

Thin-R Underfloor is lightweight, easy to install and combines high compressive strength with low thermal conductivity, providing a high performance solution for floor insulation.



Key Features

Verified EPD available

High compressive strength

Suitable for underfloor heating

Perimeter strips for robust detailing

Reduced insulation thickness

Low emissivity foil facings

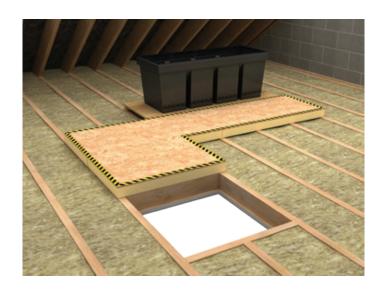
Specifications	
Thermal Conductivity	0.022 W/mK
Compressive Strength	CS (10\Y) 150
Core	PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	25, 30, 40, 50, 60, 70, 90, 100, 110, 125, 140, 150mm
Board Profile	Square Edge



THIN-R PIR INSULATION Insulated Loft Decking

XT/WALK-R

Thin-R Loft Decking Walk-R is a composite of high performance PIR insulation with tough OSB board that provides safe access into insulated roof spaces. Walk-R maintains very high insulation values and complies with health and safety guidelines.



Key Features

Verified EPD is available for the product insulation

Safe access to attic space

High thermal performance

Complies with health and safety guidelines

Easy to install

Lightweight

Specifications	
Thermal Conductivity	0.022 W/mK
Compressive Strength	CS (10\Y) 150
Facings	Low emissivity foil facings/OSB Board
Core	PIR Insulation
Board Size	1200mm x 600mm
Board Thickness	86mm (75mm PIR + 11mm OSB Board)
Board Profile	Square Edge

SOFFITS



SR/ST Soffit	52
SR/STP Soffit	53
XO/STP Soffit	54
SW/ST Soffit	55

SAFE-R PHENOLIC INSULATION Soffit Application



SR/ST

Safe-R Soffit provides effective thermal and fire performance solutions in structural ceiling applications in commercial and residential buildings. This high performance phenolic insulation board is faced with low emissivity foil facings.

Safe-R Soffit Board is supplied as a performance, rather than a decorative product. Refer to Safe-R Soffit Plus, a high performance laminate that offers low maintenance and security protection with a surface that will accept a decorative finish.



Key Features

Verified EPD available

Reaction to Fire (Euroclass) C-s1, d0

Foil faced finish

Reduced Thermal Bridging

Lower lambda value for improved U-Values

Specifications	
Thermal Conductivity	0.020 - 0.021 W/mK
Facings	Low emissivity foil facings
Core	Phenolic Insulation
Board Size	2400mm x 1200mm
Board Thickness	50, 60, 75, 80, 100, 120mm
Board Profile	Square Edge

SAFE-R PHENOLIC INSULATION Soffit Application



SR/STP

Safe-R Soffit Plus provides effective thermal and fire performance solutions in structural ceiling applications in commercial and residential buildings.

The high performance phenolic insulation board, with low emissivity aluminium foil facings, is adhesively bonded to a 6mm building panel which offers a secure finish for ease of maintenance to which a decorative finish may be applied.



Key Features

Verified EPD is available for the product insulation

Reaction to Fire (Euroclass) B-s1, d0

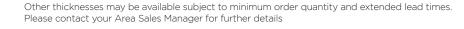
Impact resistant 6mm building panel

Accepts decorative finish

Reduced Thermal Bridging

Lower lambda value for improved U-Values

Specifications	
Thermal Conductivity	0.020 - 0.021 W/mK
Facings	Composite foil/6mm building panel
Core	Phenolic Insulation
Board Size	2400mm x 1200mm
Board Thickness	56, 66, 81, 86, 106, 126mm
Board Profile	Square Edge





XTROLINER SUPERIOR PERFORMANCE PIR INSULATION Soffit Application



XO/STP

XtroLiner Soffit Plus provides effective thermal and fire performance solutions in structural ceiling applications in commercial and residential buildings.

The high performance modified PIR insulation board, with low emissivity textured aluminium foil facings, is adhesively bonded to a 6mm building panel which offers a secure finish for ease of maintenance to which a decorative finish may be applied.



Key Features

Verified EPD is available for the product insulation

High impact resistant 6mm building panel

Reaction to Fire (Euroclass) B-s1, d0

Accepts a decorative finish

Reduced Thermal Bridging

Lower lambda value for improved U-Values

Specifications	
Thermal Conductivity	0.021 W/mK
Facings	Robust foil facings/6mm building panel
Core	Superior Performance PIR Insulation
Board Size	2400mm x 1200mm
Board Thickness	56, 66, 81, 86, 106, 126mm
Board Profile	Square Edge

STONEWOOL NON-COMBUSTIBLE INSULATION Soffit Application

SW/ST

Unilin's range of non-combustible, Euroclass 'A1' Stonewool Insulation provides surety when the highest fire performance is required. Stonewool Soffit provides effective fire performance in structural ceiling applications in both residential and commercial buildings.

Our Stonewool Insulation provides a robust, uniform, high density insulation solution suitable for mechanically fixing to concrete substrates.



Key Features

Euroclass A1 Fire Classification

Robust high density

Improved acoustic performance

Specifications		
Thermal Conductivity	0.035 W/mK	
Board Size	1200mm x 600mm	
Board Thickness	100, 125, 150mm	
Board Profile	Square Edge	



FOAMGLAS

FOAMGLAS T3+

FOAMGLAS® insulation is manufactured from specially graded recycled glass** and natural raw materials which are available in abundant supply (sand, dolomite, lime...). The insulation is totally inorganic, contains no ozone depleting propellants, flame resistant additives or binders. Without VOC or other volatile substances.

Extensive Range of Applications:

- Floors
- Façades
- Retaining walls (Below ground level)
- Internal lining
- Soffits
- · Flat roofs



Key Features

Non combustible

Impervious to water vapour

Waterproof

Dimensionally stable

Acid/Chemical resistant

Manufactured from specially graded recycle glass*

High Compressive Strength

0.036 W/mK
500 KPa
Cellular Glass Insulation
600x450mm/1200x600mm
50-200mm
Square Edge

 $^{^{}st}$ recycled glass consists of highly selected postconsumer glass and highly selected production scrap/co-products

FOAMGLAS

FOAMGLAS PERINSUL HL

The Passive Solution for thermal breaks including ground floor perimeter, EWI and thresholds.

Extensive Range of Applications:



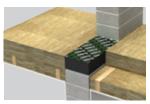
EWI Plinth



Flat Roof Parapet



Eaves



Party Wall - Ceiling



Key Features

Euroclass A1 Non-Combustible

100% impermeable to moisture penetration

Achieve Passive Performance

Gas and radon impermeable

Suitable for all walls - Masonry, Steel & Timber Framed

Solves threshold bridging with lifetime performance

Made from 60% recycled glass

Specifications	
Thermal Conductivity	0.058 W/mK
Core	Cellular Glass Insulation
Board Size	100x450mm/140x450mm/215x450mm
Board Thickness	100mm
Board Profile	Square Edge



XPS

XPS is a high performance rigid extruded polystyrene insulation board providing a durable thermal solution to technically demanding applications where high compressive loading is a requirement.

This product is ideally suited for use in commercial, industrial and cold storage areas where vehicular traffic and loading is an issue.



Key Features

Ideally suited for use in highly loaded and trafficked floors, basement walls and inverted roofs

Available as XPS 300 (300 kPa), XPS 500 (500 kPa) and XPS 700 (700 kPa)

Specifications	
Thermal Conductivity	0.033 - 0.035 (W/mK)*
Board Size	1250 x 600mm
Board Thickness	30, 40, 50, 60, 80, 100, 120mm
Board Profile	Rebated Edge

EPS EXPANDED POLYSTYRENE INSULATION

EPS

The Unilin Hytherm & Warm-R Insulation boards consist of rigid polystyrene boards cut from moulded blocks of white EPS Hytherm or with grey graphite enhanced EPS Warm-R.



Key Features

Verified EPD available

Extensive range of thicknesses

Available in 70 kPa or 100 kPa

Verified EPDs available			
Thermal Conductivity	0.031 W/mK	Warm-R SD E Grey Warm-R Premium HD E Grey Warm-R SD E Grey EWB	
	0.035 W/mK	Hytherm HD White & Hytherm HD E White	
	0.038 W/mK	Hytherm SD White	
Core	Expanded Polystyrene		
Board Size	2400mm x 1200mm 1800mm x 1200mm		
Board Thickness	Various		
Board Profile	Straight Edge		

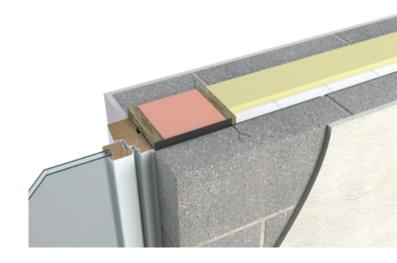
SAFE-R CAVITY CLOSERS

SAFE-R CLOSE-R

A high performance EN fire-rated cavity closer providing compliance with structural and thermal regulations in Ireland. Structural failures in cavity walls are largely due to the incorrect placement of wall ties within the cavity. Openings at windows and doors require additional wall ties to be placed at a maximum 225mm into the cavity at every course of block. It is also a requirement under TGD Part A that additional wall ties must be placed at gable end openings and either side of expansion joints.

These extra structural ties do interrupt the continuity of the insulation layer and increase Thermal Bridging issues at very vulnerable areas, with mould growth normally most evident at reveals.

Safe-R Close-R achieves an excellent fire rating and allows for the correct placement of wall ties to meet TGD Part A structural requirements. The superior insulation performance attains Passive & NZEB standards for Thermal Bridging.



Key Features

Achieved in excess of 4 hour fire rating in a 150mm cavity when tested to EN1366-4

Provides template for wall ties placement

Ensures continuity of insulation

Suitable for door, window, eaves and openings

Suitable for use at expansion joints

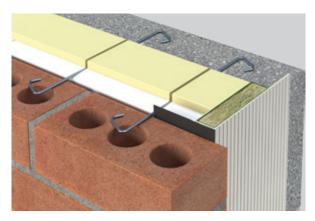
Specifications	
Facings	Plastic encapsulated stonewool
Core	Phenolic Insulation
Board Size	1200mm x 200mm
Suitable for Cavity Widths	100, 125, 150mm*
Board Profile	Square Edge

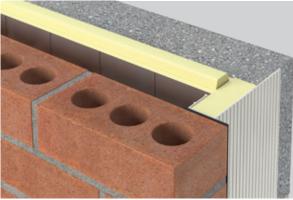
CLOSE-R INSULATED CAVITY CLOSER

CLOSE-R

Unilin Close-R fully insulated cavity closers are a cost effective solution for builders and specifiers for the closing of cavities around window and door openings, preventing cold bridging, damp penetration, air infiltration and condensation.

The Close-R range is used to close cavities and is suited to all types of windows and doors and is available in sizes to fit cavity widths from 100mm - 150mm, with checked detail to suit brick or drylined specifications and flanged detail to suit block outer facings. (Flanged detailing requires precise construction tolerances.)





Key Features

Saves time and cost effective

Suits 100 - 150mm cavities

Meets new Part L requirements

Available from Builders Merchants

Specifications

For further assistance please contact the Unilin Technical team

Achieving NZEB Compliance for Typical New Dwellings

Detached: Scheme Development

EPC	CPC	RER
Target: 0.300	0.35	20%
Actual: 0.255	0.209	50%



Result: A2 Rating

Floor U-Value	0.11	150mm Hyfloor
Cavity U-Value	0.16	125mm CavityTherm
Ceiling U-Value	0.12	300mm fibre plus thermal lining
Windows U-Value	1.40	Double glazed
Door U-Value	1.00	Insulated door
Thermal Bridging Factor	0.03	Calculated details
Air Permeability	5	0.25 ACH
Natural Ventilation	Yes	
Heating System	392/217%	Heat Pump: Space/ Water Efficiency
Heating System Heating Controls	392/217% Yes	' '
	•	Water Efficiency Full Time & Temp
Heating Controls	Yes	Water Efficiency Full Time & Temp Controls Factory Insulated
Heating Controls Cylinder	Yes 200L	Water Efficiency Full Time & Temp Controls Factory Insulated 100mm
Heating Controls Cylinder Secondary Heating	Yes 200L Yes	Water Efficiency Full Time & Temp Controls Factory Insulated 100mm

Semi-Detached: Scheme Development

EPC	CPC	RER
Target: 0.300	0.35	20%
Actual: 0.293	0.268	26%



Result: A2 Rating

Floor U-Value	0.11	150mm Hyfloor
Cavity U-Value	0.16	125mm CavityTherm
Ceiling U-Value	0.12	300mm fibre plus thermal lining
Windows U-Value	1.40	Double glazed
Door U-Value	1.00	Insulated door
Thermal Bridging Factor	0.04	Calculated details
Air Permeability	5	0.25 ACH
Natural Ventilation	Yes	
Heating System	91.2%	Gas Condensing Boiler
Heating Controls	Yes	Full Time & Temp Controls
Cylinder	200L	Factory Insulated 100mm
Secondary Heating	None	
Delay Start Stat	None	
Light Fittings	100%	Low Energy Lights
Renewable Technology	Yes	3 x 270w PV Panels (4.89m²)

Apartment: Scheme Development (Mid Floor Apartment)

EPC	СРС	RER
Target: 0.300	0.35	20%
Actual: 0.294	0.286	39 %



Result: A2 Rating

Floor U-Value	None	
Cavity U-Value	0.16	125mm CavityTherm
Ceiling U-Value	None	
Windows U-Value	1.40	Double Glazed
Door U-Value	1.00	Insulated Door
Thermal Bridging Factor	0.02	Calculated Details
Air Permeability	5	0.25 ACH
Natural Ventilation	Yes	
Heating System	390/210%	Heat Pump: Space/ Water Efficiency
Heating Controls	Yes	Full Time & Temp Controls
Cylinder	180L	Factory Insulated
		100111111
Secondary Heating	None	10011111
Secondary Heating Delay Start Stat	None None	
		Low Energy Lights

Detached: Self Build

EPC	СРС	RER
Target: 0.300	0.35	20%
Actual: 0.280	0.226	45%



Result: A2 Rating

Floor U-Value	0.11	150mm Hyfloor
Cavity U-Value	0.13	150mm CavityTherm
Ceiling U-Value	0.12	300mm Fibre Plus Thermal Lining
Windows U-Value	1.40	Double Glazed
Door U-Value	1.00	Insulated Door
Thermal Bridging Factor	0.02	Calculated Details
Air Permeability	5	0.25 ACH
Natural Ventilation	Yes	
Heating System	268/233%	Heat Pump: Space/ Water Efficiency
Heating Controls	Yes	Full Time & Temp Controls
Cylinder	300L	Factory Insulated 100mm
Secondary Heating	Yes	Log Burning Stove
Delay Start Stat	None	
Light Fittings	100%	Low Energy Lights

Remote Support & Immediate Callback

We provide an immediate callback facility available when you need it.
Our expanded Technical Help Desk provides unrivalled immediate support.

Every one of our technical team is trained to the highest industry standards of competency in U-Value calculation and condensation risk analysis with members assessed and certified under the BBA/TIMSA competency scheme.

We are the first company in Ireland to be assessed and certified under the NSAI thermal modelling competency scheme.

Our team and products are certified in Ireland and the UK through the following certifications bodies:

- BRE Thermal bridging modelling competency certification
- NSAI Thermal modelling competency scheme
- 3. TIMSA-BBA competency scheme for U-Value calculation and condensation risk analysis
- 4. BBA and NSAI certification of the Unilin Insulation insulation boards
- 5. SAP and DEAP energy assessment



Internal Technical Team



Eamonn Clarke Technical Manager



Mark Magennis Technical Services Manager



Marc Walsh
Product Management &
Development Engineer



Paschal Gallagher Technical Advisor



Conor Sheppard Technical Advisor



Gratas Drevinskas Technical Advisor

External Specification Team



Phil Ward Specification Manager Dublin



Raymond Madden
Specification Manager



Francis Rilley
Specification Manager
North

Talk to the Technical Team

t. 046 906 6050 e. tech.ui@unilin.com

Our Dedicated Sales Team

Meet the team who can help you with your project



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Bernard Morris North Midlands, **Border & West** t. 086 825 1209



Noel O'Donoghue **South East** t. 087 289 8680



Ciaran Flanagan **Midlands t.** 087 185 1677



Niall Spillane Dublin t. 087 854 9259



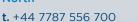
Wayne Murphy **South West**



Michael Bryson North



Keith Woods Greater Dublin





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.

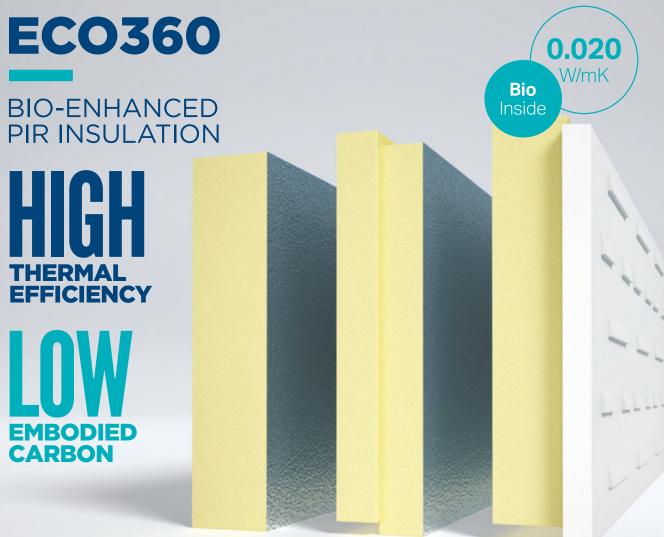
Durability

Unilin Insulation products are stable, rot proof, provide no food value to vermin and will remain effective for the lifetime of the building, dependent 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.









The ECO360 strategy is a commitment by Unilin Insulation to continually review and improve the sustainable credentials of our product offering and services, to reduce the environmental impact of the projects we work on in terms of operational energy and embodied carbon.

- ✓ Bio-enhanced formulation
- Part of a design solution to achieve Climate Challenge 2030 Targets
- Halogen free formulation
- ✓ Improved thermal performance of 0.020 W/mK
- Bio-degradable packaging materials





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