

# PRODUCT HANDBOOK

Insulation for:

**Walls**

**Floors**

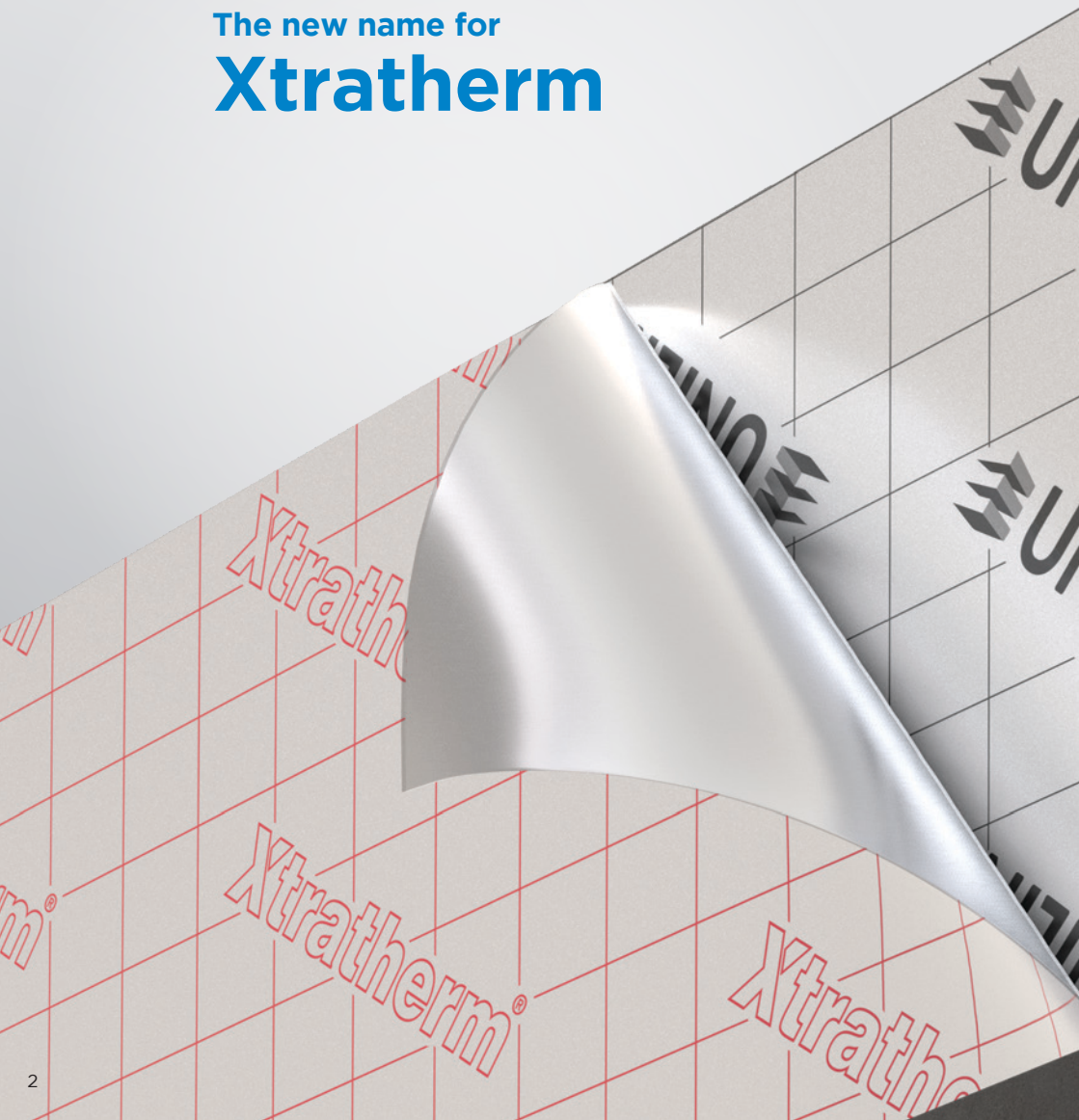
**Roofs**

**Soffit**





The new name for  
**Xtratherm**





For over three decades Xtratherm has been proudly serving the Irish construction industry. From 2023 we will continue to do so under our new name 'Unilin Insulation'.

Eight years in the making, this change marks our evolution to one of Europe's largest PIR insulation manufacturers and to a global supplier of building products to the construction industry.

As part of the Unilin Group we are able to deliver impactful results to a more sustainability minded construction sector, where environmental considerations are an urgent priority.

As Unilin Insulation we are now joining over eight thousand of our colleagues across 105 locations in a cohesive effort to deliver more on effective specification, sustainability and compliance.

Your Unilin Insulation team will be the same familiar and dedicated individuals who have been working with you over many years.

**Join us on this exciting journey.**

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Find out more on [unilininsulation.ie](https://unilininsulation.ie)

# 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 & LETI Targets
- ✓ Reduced packaging materials
- ✓ Halogen free formulation
- ✓ Improved thermal performance of 0.020 W/mK
- ✓ Bio-degradable packaging materials







The image shows a 3D perspective of a wall's cross-section. It features several layers: a dark grey outer layer, a thick yellow insulation layer, another dark grey layer, and a white outer layer with a series of rectangular protrusions. A teal line connects a callout bubble to the yellow insulation layer.

**0.020**  
W/mK

**Bio**  
Inside

# 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.

**ONEHOME**

Part of Unilin Europe's wider sustainability strategy

**IGBC**  
IRISH GREEN BUILDING COUNCIL



## 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

## Products by Application

### WALLS

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## Key

ECO360	XTROLINER
SAFE-R	THIN-R
CAVITYTHERM	THIN-R PLUS



## Products by Range

### ECO360

BIO-ENHANCED  
PIR INSULATION

**ECO/CT** 11  
Walls:  
Full Fill Cavity Walls

**ECO/CW** 12  
Walls:  
Partial Fill Cavity Walls

**ECO/MA (Roofs)** 25  
Roofs:  
Pitched Roofs

**ECO/MA (Roofs)** 26  
Roofs:  
Sarking Warm  
Roof Construction

**ECO/MA (Floors)** 38  
Floors:  
Solid & Suspended Floors

### SAFE-R

PHENOLIC  
INSULATION

**SR/TBFL-MF** 18  
Walls:  
Drylining Walls

**SR/FB** 21  
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Steel & Timber Frame

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Soffit:  
Soffit Application

**SR/STP** 46  
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Soffit Application

### CAVITYTHERM

BUILT-IN FULL FILL  
PIR WALL INSULATION

**CT/PIR** 13  
Walls:  
Full Fill Built-in  
Insulation system

**CT/PIR Flex** 14  
Walls:  
Full Fill Built-in  
Insulation system

### XTROLINER

SUPERIOR PERFORMANCE  
PIR INSULATION

**XO/XW** 15  
Walls:  
Partial Fill Cavity Walls

**XO/XWP** 16  
Walls:  
Partial Fill Cavity Walls

**XO/FB** 22  
Walls:  
Steel & Timber Frame

**XO/PR** 27  
Roofs:  
Pitched Roofs

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Roofs:  
Pitched Roofs

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Roofs:  
Built-up Bituminous Felt  
Systems

**XO/UF** 41  
Floors:  
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& Suspended Floors

**XO/STP** 47  
Soffit:  
Soffit Application

### THIN-R

PIR  
INSULATION

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Walls:  
Partial Fill Cavity Walls

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Walls:  
Drylining Walls  
Dot & Dab

**XT/TL-MF** 20  
Walls:  
Drylining Walls  
Mechanically Fixed

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Walls:  
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Roofs:  
Pitched Roof

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Roofs:  
Pitched Roof

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Roofs:  
Mechanically Fixed  
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Systems

**FR/MG** 33  
Roofs:  
Single Ply Fully Adhered  
/ Partially Bonded Built-  
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Roofs:  
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Bituminous Felt Systems

**FR/TP** 35  
Roofs:  
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Performance PIR &  
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Floors:  
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& Suspended Floors

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ENHANCED  
PIR INSULATION

**Hyfloor  
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& Suspended Floors

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### FOAMGLAS®

**FOAMGLAS®** 48  
Cellular Glass Insulation

### XPS

EXTRUDED POLYSTYRENE  
INSULATION

**XPS** 50  
Extruded Polystyrene  
Insulation

### EPS

EXPANDED POLYSTYRENE  
INSULATION

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Expanded Polystyrene  
Insulation

### CLOSE-R

INSULATED  
CAVITY CLOSER

**Safe-R Close-R** 52  
Insulation Accessories

**Close-R** 53  
Insulation Accessories



\*Unilin Insulation products are available with engineered jointing  
for improved continuity and Thermal Bridging detailing.

Our insulation products have been manufactured as solutions for specific building projects. Whether you are constructing a roof, installing a floor, or looking at low carbon wall types, there is always a practical, cost effective Unilin Insulation solution to suit your project.

# WALLS



## Partial Fill Cavity Walls

■ ECO/CW Partial Fill Cavity Walls*	12
■ XO/XW Partial Fill Cavity Walls*	15
■ XO/XWP Partial Fill Cavity Walls*	16
■ XT/CW (T&G) Partial Fill Cavity Walls*	17

## Built-in Full Fill Walls

■ ECO/CT Full Fill Cavity Walls*	11
■ CT/PIR Full Fill Cavity Walls*	13
■ CT/PIR Flex Full Fill Cavity Walls*	14

## Drylining Walls

■ SR/TBFL-MF	18
■ XT/TL Drylining (Dot & Dab)	19
■ XT/TL-MF Drylining (Mech Fixed)	20

## Framing Walls

■ SR/FB Framing Board	21
■ XO/FB Framing Board	22
■ XT/TF Timber Frame	23

# ECO360 BIO-ENHANCED PIR INSULATION

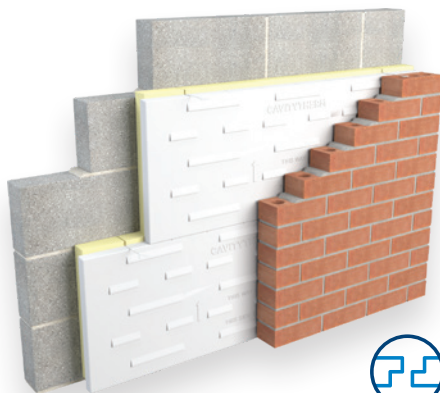
## Full Fill Cavity Walls

Lambda  
value as low as  
**0.020 W/mK**

### ECO/CT

An engineered system providing added resilience against increases in wind-driven rain resulting from climate change.

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



SHIPLAP  
JOINTING

### 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

### Specifications

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# ECO360 BIO-ENHANCED PIR INSULATION

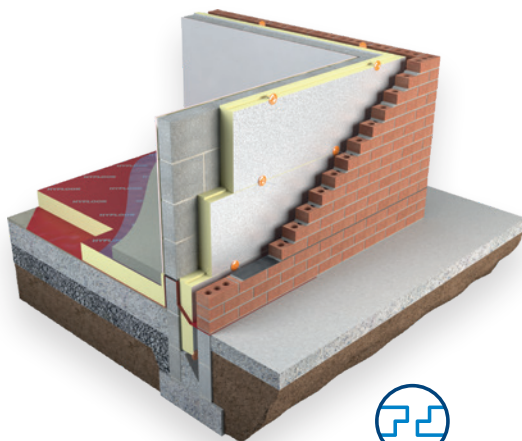
## Partial Fill Cavity Walls

Lambda  
value as low as  
**0.020 W/mK**

### 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 Lambda 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/m<sup>2</sup>K 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details



# CAVITYTHERM

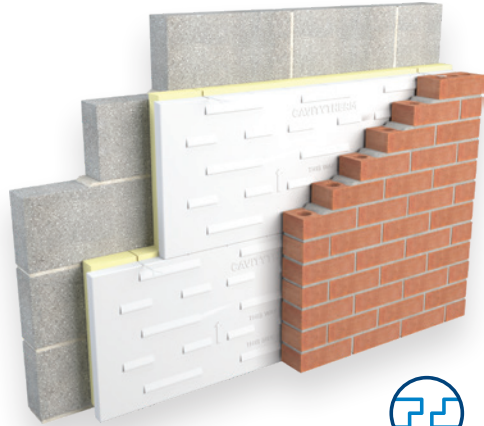
BUILT-IN FULL FILL  
PIR WALL INSULATION

## Full Fill Cavity Walls

Lambda  
value as low as  
**0.021 W/mK**

### CT/PIR

CavityTherm is an innovative built-in insulation for traditional walls that achieves Passive level U-Values as low as 0.13 W/m<sup>2</sup>K with excellent Thermal Bridging detailing in cavities up to 150mm wide.



SHIPLAP  
JOINTING

### 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

\*Where the boards are butt jointed tape is required

### Specifications

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# CAVITYTHERM

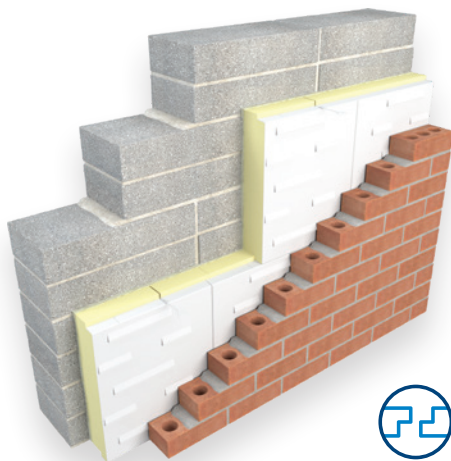
BUILT-IN FULL FILL  
PIR WALL INSULATION

## Full Fill Cavity Walls

Lambda  
value as low as  
**0.021 W/mK**

### 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.



SHIPLAP  
JOINTING

### 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\*

\*Where the boards are butt jointed tape is required

### Specifications

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# XTROLINER<sup>®</sup> SUPERIOR PERFORMANCE PIR INSULATION

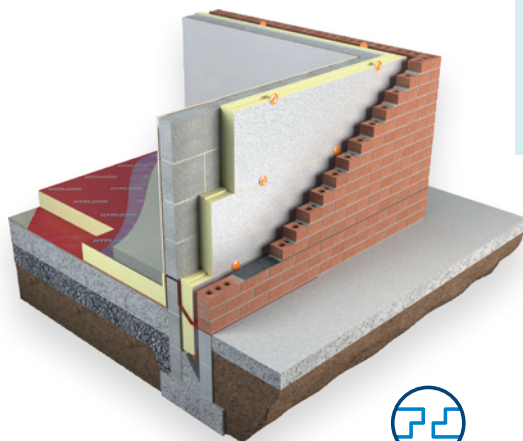
## Partial Fill Cavity Walls

Lambda  
value as low as  
**0.021 W/mK**

### XO/XW

XtroWall is an innovative partial fill wall insulation system incorporating robust facings, engineered jointing details, preformed corners and a certified lambda 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# XTROLINER<sup>®</sup> SUPERIOR PERFORMANCE PIR INSULATION

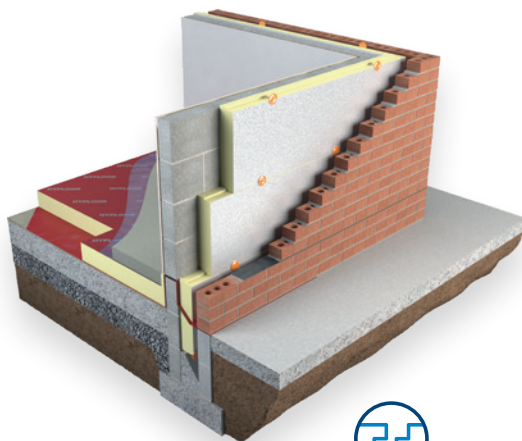
## Partial Fill Cavity Walls

Lambda  
value as low as  
**0.020 W/mK**

### XO/XWP

XtroWall Plus is a superior performance insulation with a Lambda value 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/m<sup>2</sup>K 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details



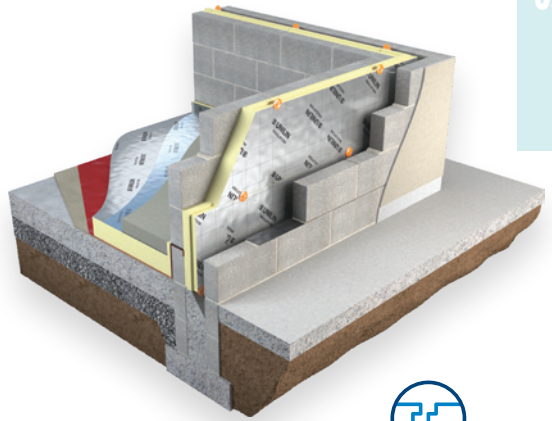
# THIN-R<sup>PIR</sup> INSULATION

## 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 minimisation 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.



TONGUE  
& GROOVE  
JOINTING

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# SAFE-R PHENOLIC INSULATION

## Drylining Walls

(Installed with Adhesive Dabs or Mechanically Fixed)

Lambda  
value as low as  
**0.020 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# THIN-R<sup>PIR INSULATION</sup>

## 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

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

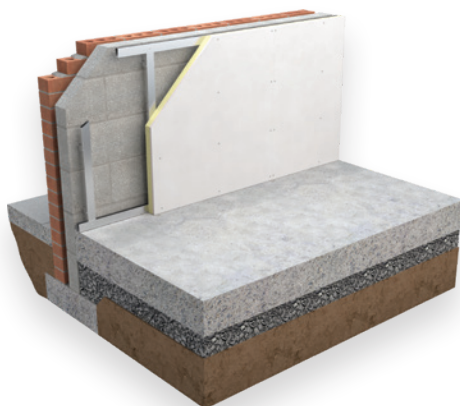
Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# THIN-R<sup>PIR INSULATION</sup>

## 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details



# SAFE-R PHENOLIC INSULATION

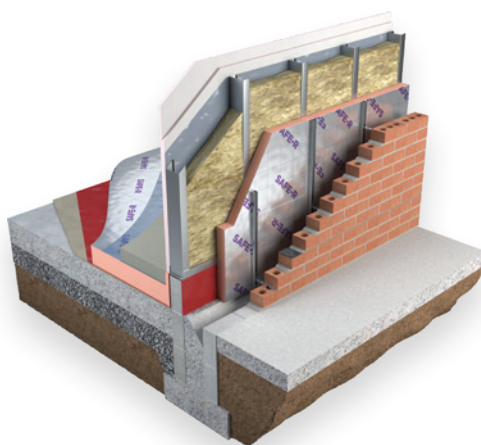
## Steel & Timber Frame

Lambda  
value as low as  
**0.020 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times. Please contact your Area Sales Manager for further details

# XTROLINER

SUPERIOR PERFORMANCE  
PIR INSULATION

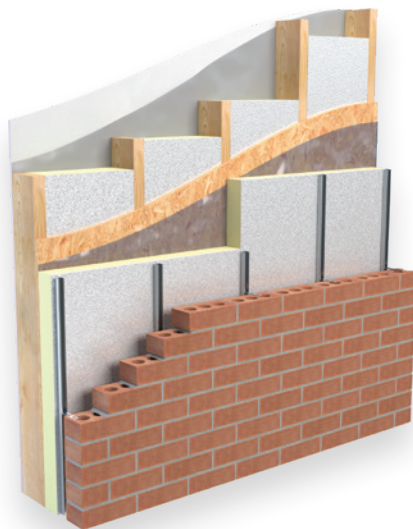
## Steel & Timber Frame

Lambda  
value as low as  
**0.021 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

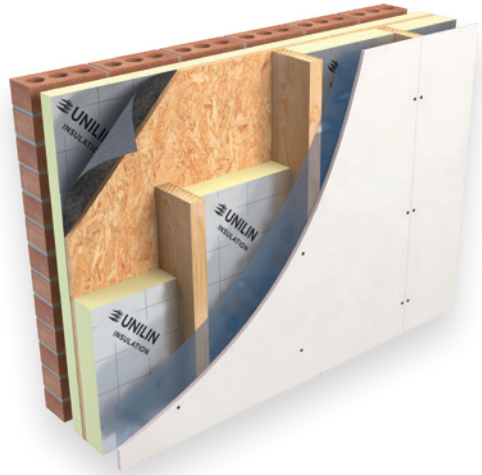
# THIN-R<sup>PIR</sup> INSULATION

## 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# PITCHED ROOFS



## Pitched Roofs

■ ECO/MA Pitched Roof	25
■ ECO/MA Sarking Warm Roof Construction	26
■ XO/PR Pitched Roof	27
■ XO/SK Sarking (T&G)	28
■ XT/PR_UF Pitched Roof	29
■ XT/RLOC Pitched Roof	30

# ECO360 BIO-ENHANCED PIR INSULATION

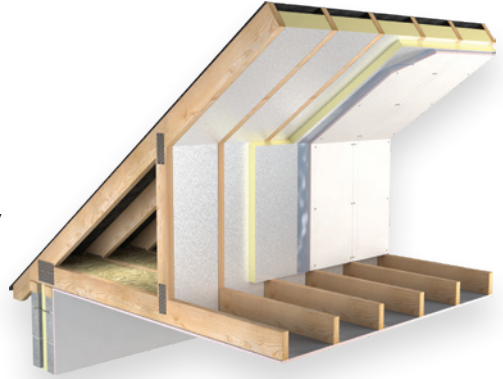
## Pitched Roofs

Lambda  
value as low as  
**0.020 W/mK**

### 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.



ROOFS

### 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

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

\*The thermal performance of the 50mm thickness is 0.023 W/mK

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# ECO360 BIO-ENHANCED PIR INSULATION

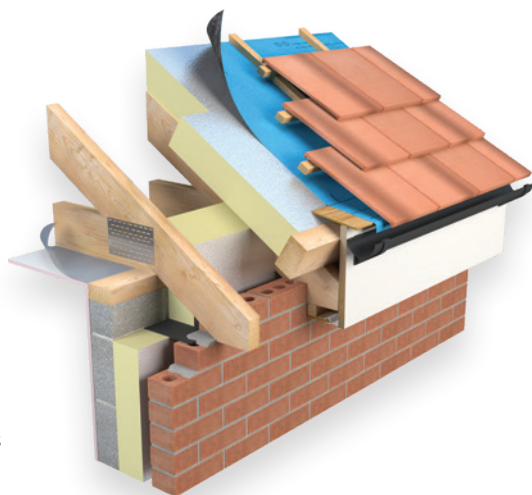
Lambda  
value as low as  
**0.020 W/mK**

## 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details



# XTROLINER

SUPERIOR PERFORMANCE  
PIR INSULATION

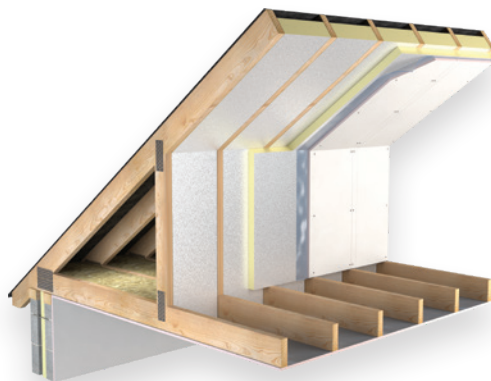
## Pitched Roofs

Lambda  
value as low as  
**0.021 W/mK**

### 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.



ROOFS

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# XTROLINER

SUPERIOR PERFORMANCE  
PIR INSULATION

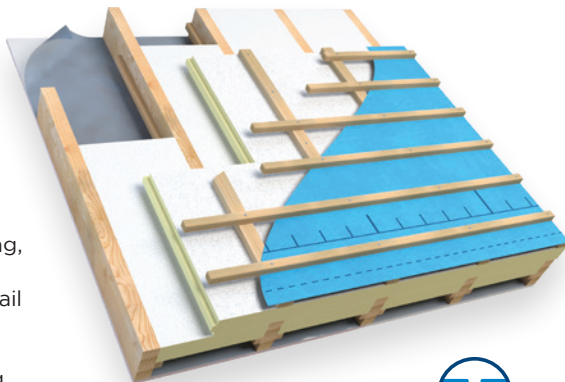
Lambda  
value as low as  
**0.021 W/mK**

## 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/m<sup>2</sup>K.

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.



TONGUE  
& GROOVE  
JOINING

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# THIN-R<sup>PIR INSULATION</sup>

## 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

Other thicknesses may be available subject to minimum order quantity and extended lead times. Please contact your Area Sales Manager for further details

# RAFTERLOC

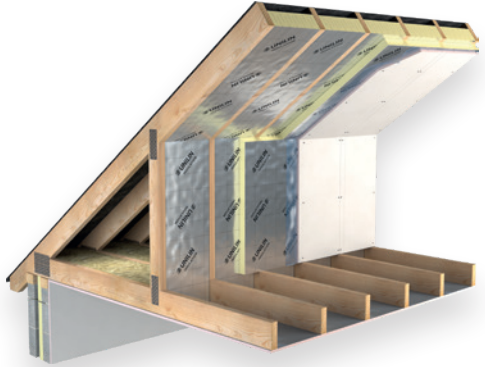
## Pitched Roof Board

Lambda  
value as low as  
**0.023 W/mK**

### 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

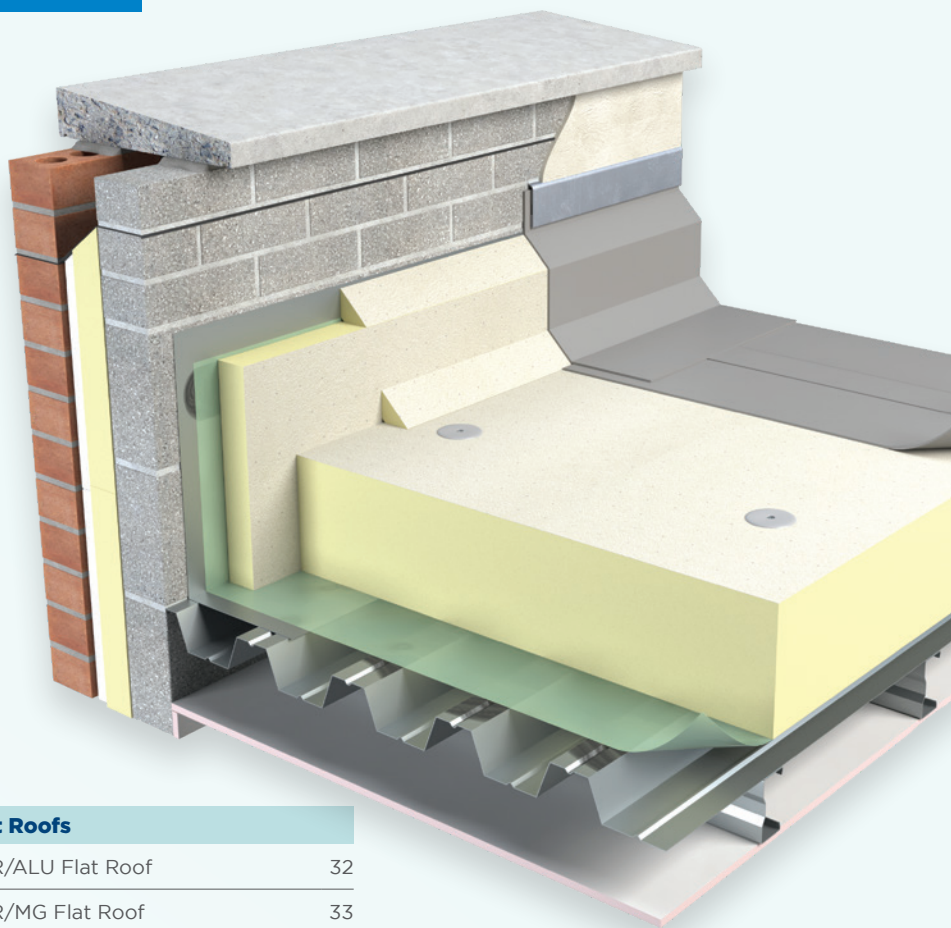
- Variable width feature
- Minimal intrusion into living area
- Reduced Thermal Bridging
- Low emissivity foil facings
- Extra thermal performance

#### 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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# FLAT ROOFS



## Flat Roofs

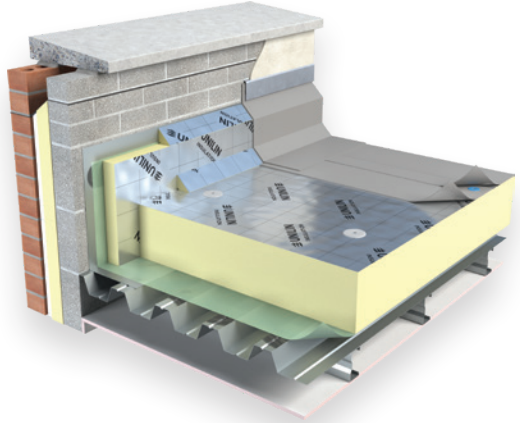
■ FR/ALU Flat Roof	32
■ FR/MG Flat Roof	33
■ FR/BGM Flat Roof	34
■ FR/TP Thermal Ply	35
■ XO/XD Flat Roof	36

# THIN-R<sup>PIR</sup> INSULATION

## 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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

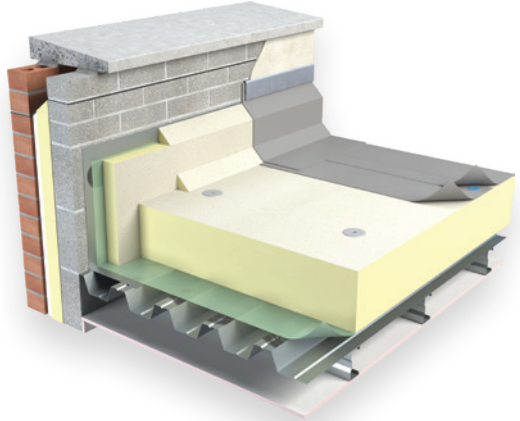


# THIN-R<sup>PIR</sup> INSULATION

## 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

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

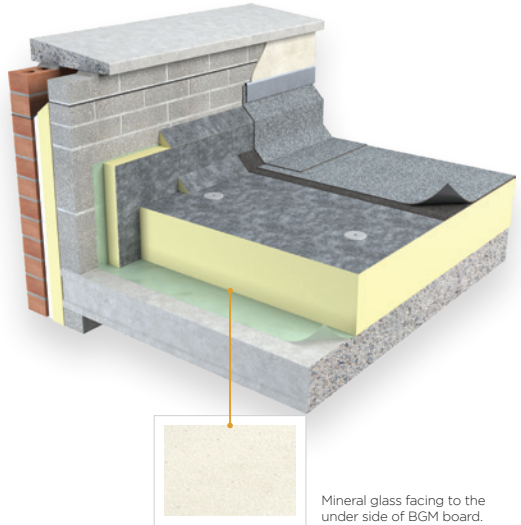
Other thicknesses may be available subject to minimum order quantity and extended lead times. Please contact your Area Sales Manager for further details

# THIN-R<sup>PIR INSULATION</sup>

## 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

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

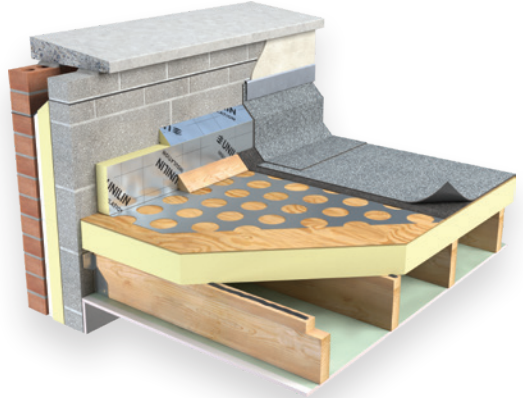
Other thicknesses may be available subject to minimum order quantity and extended lead times. Please contact your Area Sales Manager for further details

# THIN-R<sup>PIR</sup> INSULATION

## 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.



ROOFS

### Key Features

Verified EPD is available for the product insulation

Insulation & decking in one fix

For new & refurbishment roofs

Rapid weather proofing

### Specifications

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

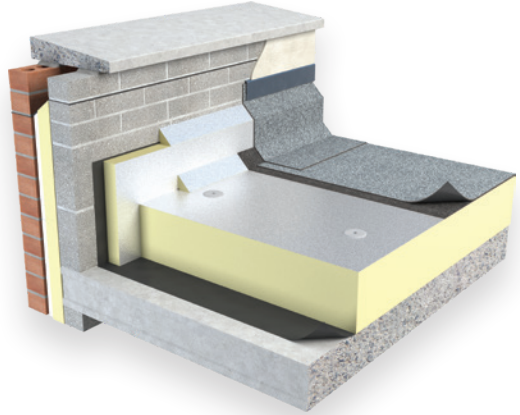
Other thicknesses may be available subject to minimum order quantity and extended lead times. Please contact your Area Sales Manager for further details

# XTROLINER<sup>®</sup> 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

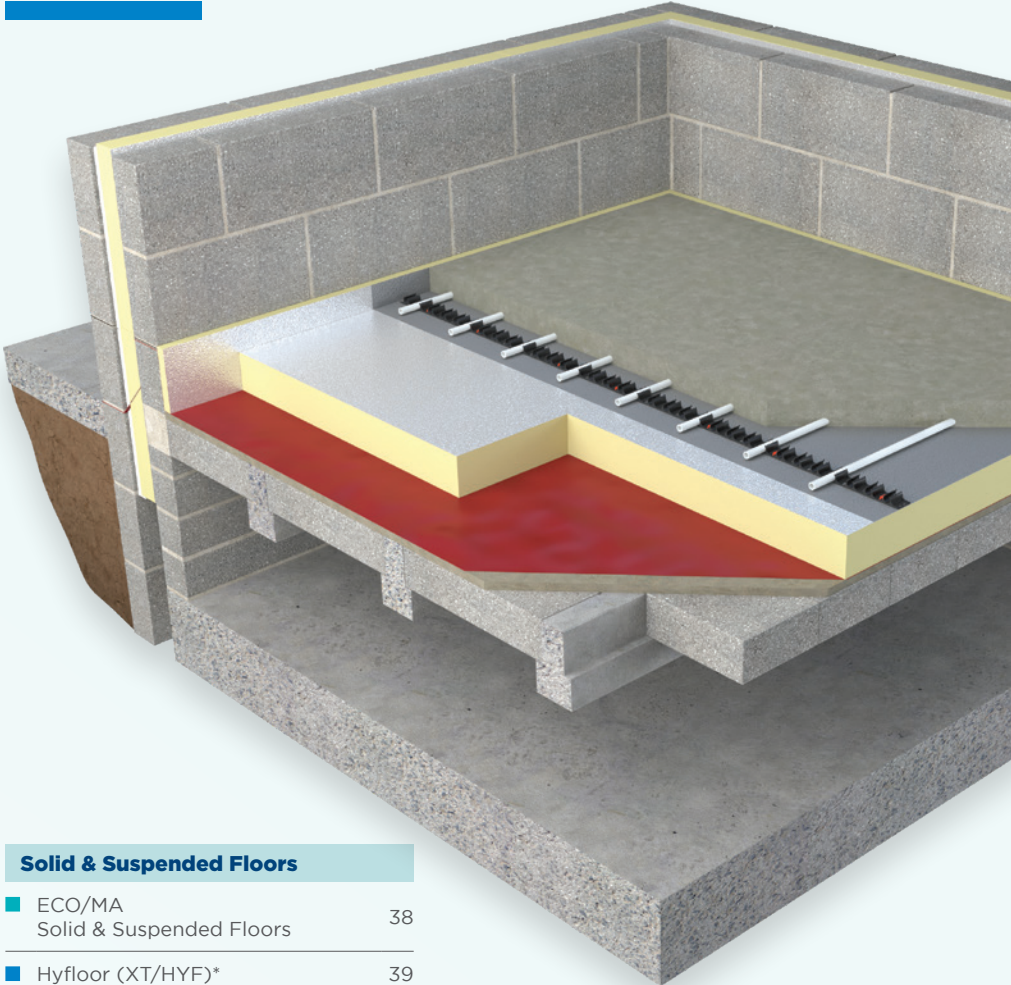
Compatible with most bituminous based roofing systems containing self adhered underlays with heat activated cap sheets

### Specifications

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# FLOORS



## Solid & Suspended Floors

■ ECO/MA Solid & Suspended Floors	38
■ Hyfloor (XT/HYF)*	39
■ Hyfloor Strip Foundation System	40
■ XO/UF Floors	41
■ XT/PR_UF Floors	42
■ XT/Walk-R	43

# ECO360 BIO-ENHANCED PIR INSULATION

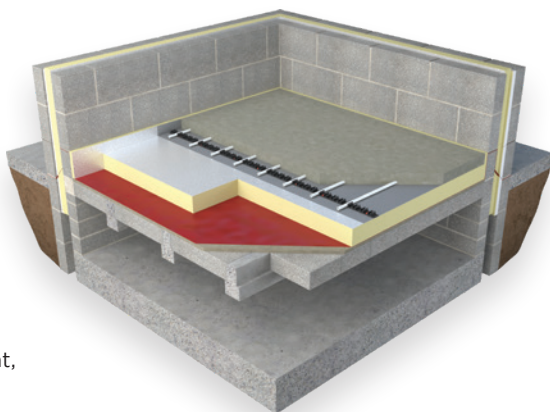
## Solid & Suspended Floors

Lambda  
value as low as  
**0.020 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details



# THIN-R PLUS ENHANCED PIR INSULATION

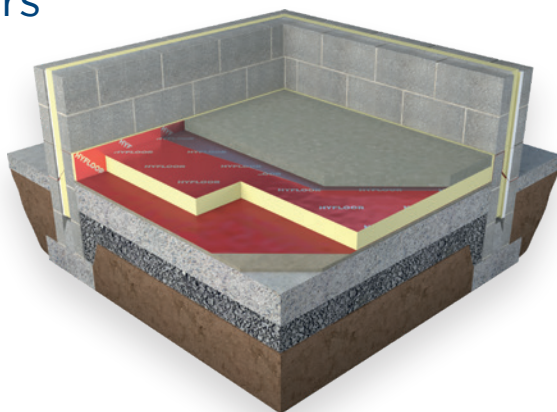
## Ground Supported & Suspended Floors

Lambda  
value as low as  
**0.021 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# THIN-R PLUS

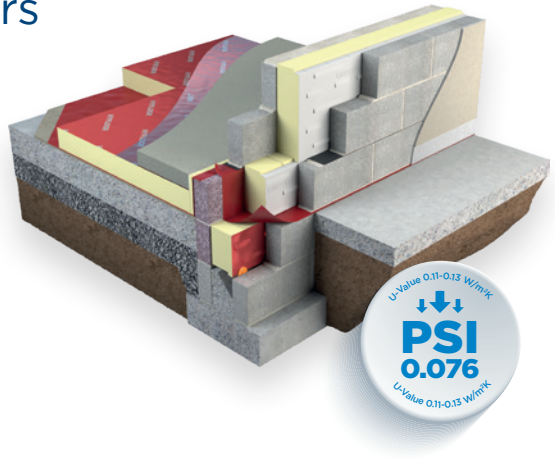
ENHANCED  
PIR INSULATION

## Ground Supported & Suspended Floors

Lambda  
value as low as  
**0.021 W/mK**

### 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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# XTROLINER<sup>®</sup> SUPERIOR PERFORMANCE PIR INSULATION

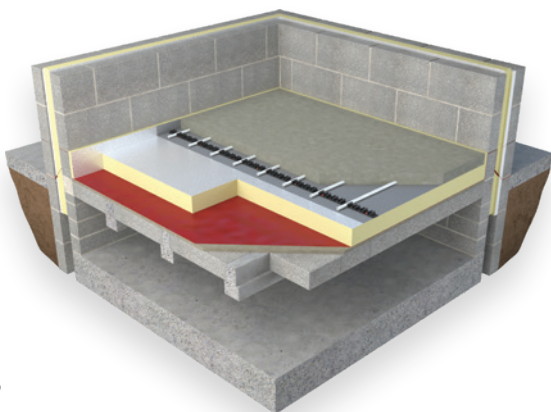
## Solid & Suspended Floors

Lambda  
value as low as  
**0.021 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times. Please contact your Area Sales Manager for further details

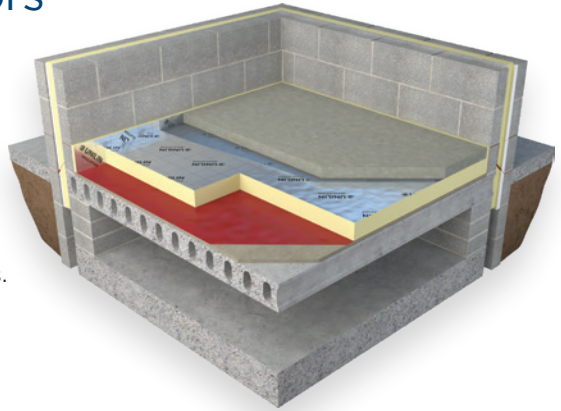
# THIN-R<sup>PIR INSULATION</sup>

## 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

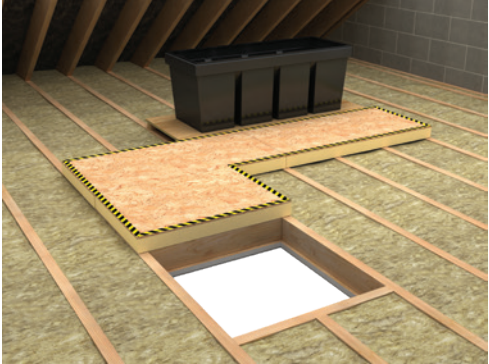
Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# THIN-R<sup>PIR INSULATION</sup>

## 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

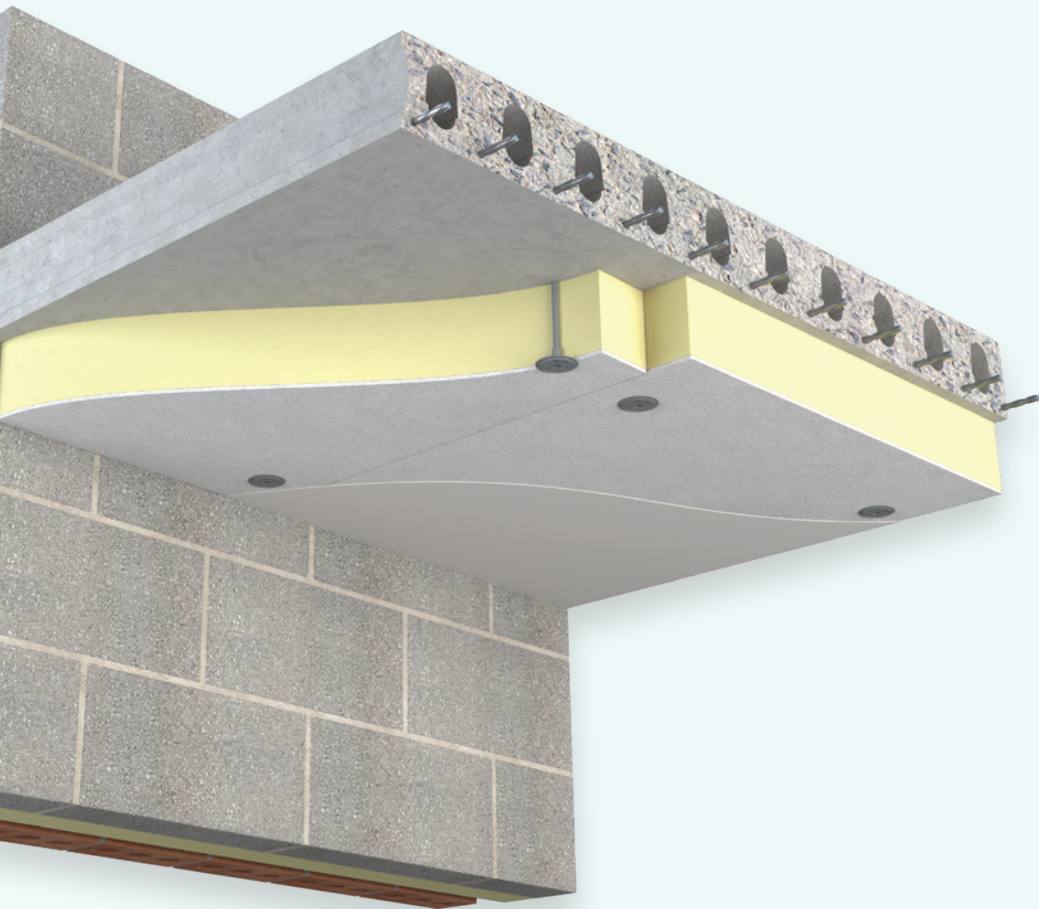
#### Specifications

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# SOFFITS

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■ SR/ST Soffit	45
■ SR/STP Soffit	46
■ XO/STP Soffit	47



# SAFE-R PHENOLIC INSULATION

## Soffit Application

Lambda  
value as low as  
**0.020 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# SAFE-R PHENOLIC INSULATION

## Soffit Application

Lambda  
value as low as  
**0.020 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# XTROLINER

SUPERIOR PERFORMANCE  
PIR INSULATION

## Soffit Application

Lambda  
value as low as  
**0.021 W/mK**

### 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

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

# 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
- High Compressive Strength

### Specifications

Thermal Conductivity	0.036 W/mK
Compressive strength	500 KPa
Core	Cellular Glass Insulation
Board Size	600x450mm/1200x600mm
Board Thickness	50-200mm
Board Profile	Square Edge

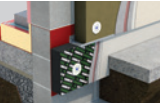
\*\* recycled glass consists of highly selected postconsumer glass and highly selected production scrap/co-products

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

## FOAMGLAS PERINSUL HL

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

Extensive Range of Applications:



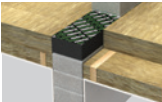
EWI Plinth



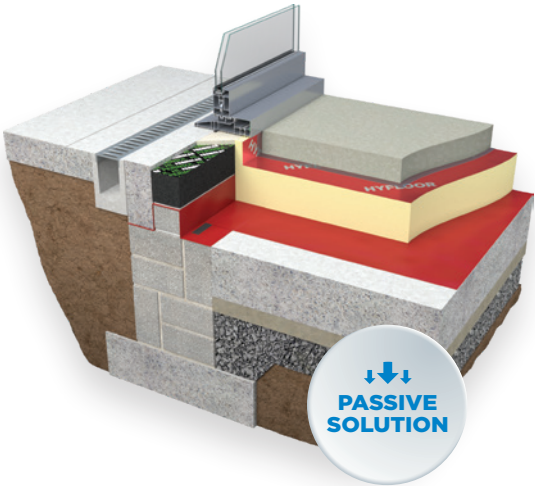
Flat Roof Parapet



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

### Specifications

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

Other thicknesses may be available subject to minimum order quantity and extended lead times.  
Please contact your Area Sales Manager for further details

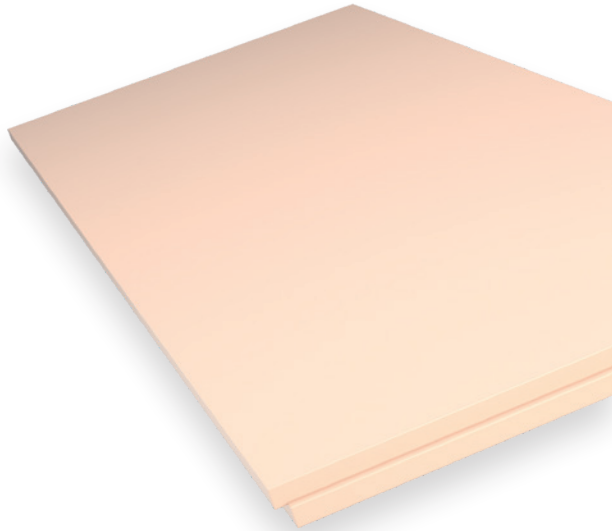
# XPS

EXTRUDED POLYSTYRENE  
INSULATION

## 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

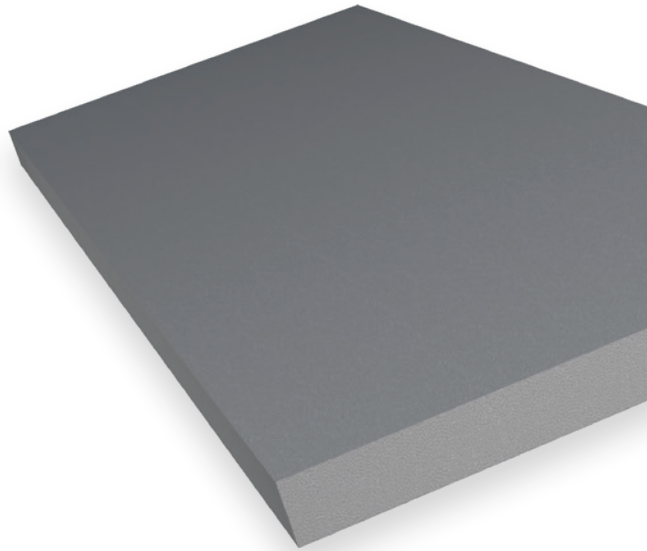
XPS 300 available in 140mm and 160mm subject to quantity and lead time.

\*Thermal conductivity is dependent on product thickness

**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	



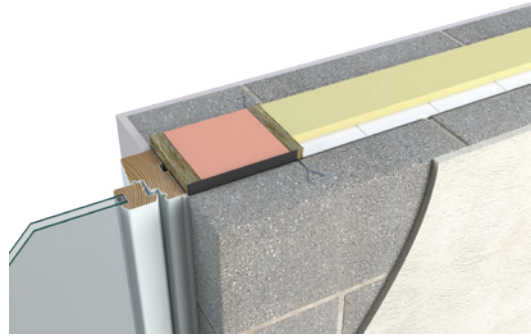
# SAFE-R CAVITY CLOSERS

## 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

Other thicknesses may be available subject to minimum order quantity and extended lead times.

Please contact your Area Sales Manager for further details

\*Please contact our Technical Team for further information

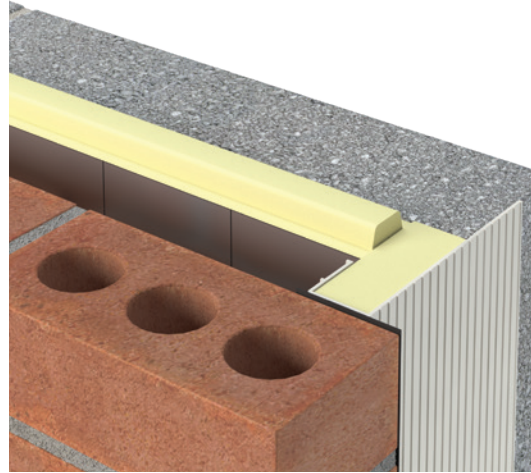
# CLOSE-R

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 Controls	Yes	Full Time & Temp Controls
Cylinder	200L	Factory Insulated 100mm
Secondary Heating	Yes	Log Burning Stove
Delay Start Stat	No	
Light Fittings	100%	Low Energy Lights
Renewable Technology	Yes	From Heat Pump

## 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 (4.89m <sup>2</sup> )

**Apartment:** Scheme Development (Mid Floor Apartment)

EPC	CPC	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 100mm
Secondary Heating	None	
Delay Start Stat	None	
Light Fittings	100%	Low Energy Lights
Renewable Technology	Yes	From Heat Pump

**Detached:** Self Build

EPC	CPC	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.

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

1. **BRE** Thermal bridging modelling competency certification
2. **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



**Talk to the Technical Team**

**t. 046 906 6050 e. [tech.ui@unilin.com](mailto:tech.ui@unilin.com)**

## External Specification Team



**Phil Ward**  
Specification Manager  
Dublin



**Raymond Madden**  
Specification Manager  
South



**Francis Rilely**  
Specification Manager  
North

## 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

# Our Dedicated Sales Team

Meet the team who can help you with your project



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



**Noel O'Donoghue**  
South East  
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**Niall Spillane**  
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**Wayne Murphy**  
South West  
t. 087 966 6955



**Michael Bryson**  
North  
t. +44 7787 556 700



**Keith Woods**  
Greater Dublin  
t. 087 995 0436





# 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.



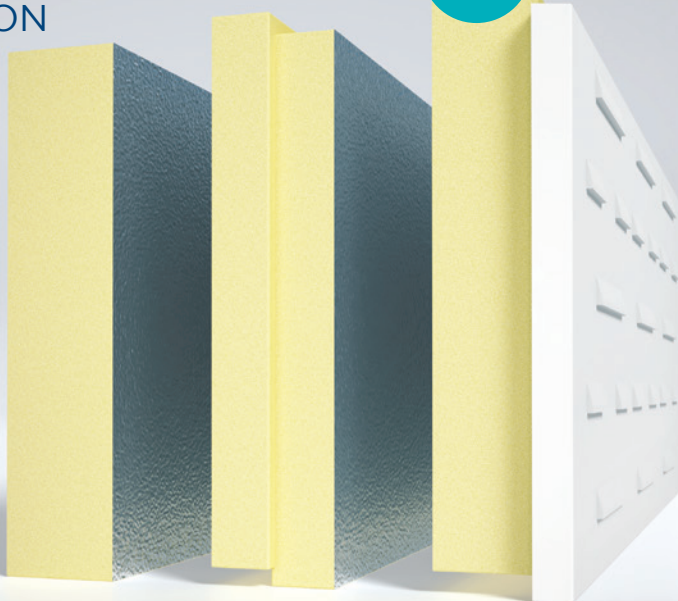


# ECO360

BIO-ENHANCED  
PIR INSULATION

**HIGH**  
THERMAL  
EFFICIENCY

**LOW**  
EMBODIED  
CARBON



**0.020**  
W/mK

**Bio**  
Inside

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 & LETI Targets
- ✓ Halogen free formulation
- ✓ Improved thermal performance of 0.020 W/mK
- ✓ Bio-degradable packaging materials

Visit the Unilin Insulation website to download our

## Embodied Carbon Report





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