

# THIN-R PIR INSULATION

## Insulated Loft Decking

### XT/WALK-R

Safe access to attic space

High thermal performance

Complies with health and safety guidelines

Easy to install

Lightweight



High performance PIR Insulation composite for safe roof space access

**THIN-R** PIR INSULATION

# Insulated Loft Decking

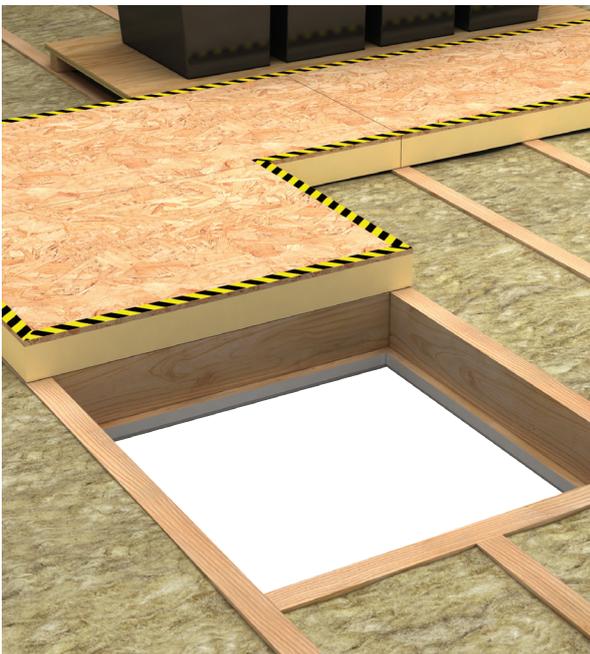
## XT/WALK-R

Thin-R 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.

Whether building new or upgrading, due consideration towards the energy efficiency of your home can have many benefits, including reduced energy costs and improved living conditions. One of the easiest and most cost effective measures to take is to insulate the roof space. But how do you allow safe access to this space, water tanks, services and fittings? Walk-R is the solution and provides safe entry as well as improved insulation of the attic space.

### Benefits

- Safe access to attic space
- High thermal performance
- Complies with health and safety guidelines
- Easy to install
- Lightweight



### Specification Clause

The ceiling insulation shall be Unilin Insulation Thin-R Walk-R manufactured to EN 13165 by Unilin Insulation, comprising of a rigid Polyisocyanurate (PIR) core between low emissivity foil facings bonded to OSB Board. The Walk-R 86mm with \_\_\_mm Mineral Wool to achieve a U-Value of \_\_\_W/m<sup>2</sup>K for the roof element. To be installed in accordance with instructions issued by Unilin Insulation.

An Environmental Product Declaration (EPD), certified by IGBC is available for the product insulation. Please contact technical support for further details.



Refer to NBS clause P10 10, P10 135.



### Thermal Resistances

Thickness (PIR)	Thickness (OSB)	R-Value (m <sup>2</sup> K/W)
75	11	3.40

### Resistance 'R' Values

The resistance value of any thickness of Unilin insulation can be ascertained by simply dividing the thickness of the material (in metres) by its lambda value, for example: Lambda 0.022 W/mk and thickness 75mm -> 0.075/ 0.022 -> R-Value = 3.40. R-Values should be rounded down to the nearest 0.05 (m<sup>2</sup>K/W).

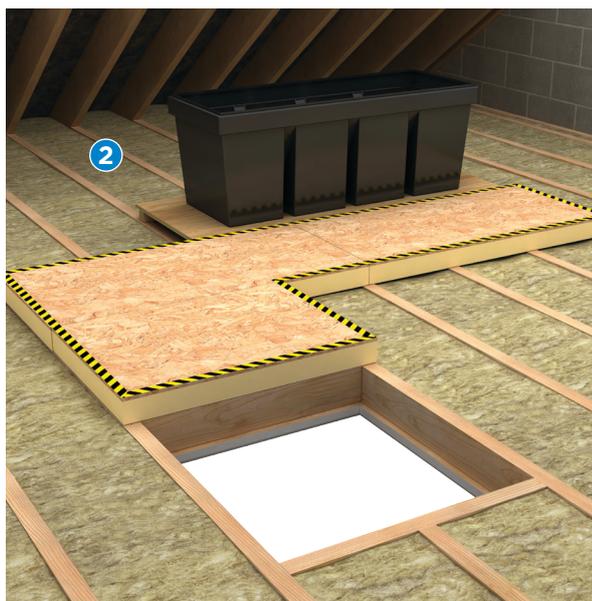


## XT/WALK-R

1. There is a growing awareness of the benefits of upgrading the energy efficiency of our homes by installing energy efficient measures. One of the easiest and most cost effective measures to take is to insulate the roof space, however consideration must be given to safe access to that roof space once the upgrade has taken place.

Walk-R is the solution for high performance lofts – with safe access.

2. Walk-R allows maintenance access and storage in roof space areas.



### NOTE

In every roof space where there are cold water tanks or services, for H&S reasons the Contractor should construct a permanent boarded walkway to access services. This walkway should be supported above the first layer of insulation to prevent any compaction of insulation below the walkway.

## XT/WALK-R

<b>Length (mm)</b>	1200
<b>Width (mm)</b>	600
<b>Thickness (mm)</b>	PIR 75 OSB 11

Other thicknesses may be available depending on minimum order quantity and lead time.

## Property & Units

<b>Thermal Conductivity</b>	0.022 (W/mK)
<b>Compressive Strength</b>	>150(kPa)

# INSTALLATION GUIDELINES

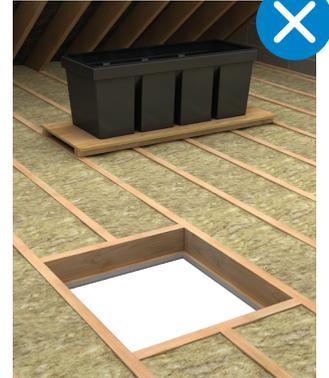
## XT/WALK-R

1. Boards should be laid transverse to the joists, spanning a minimum of 4 joists at 400mm centres.
2. Pre-drill the Walk-R panels and secure with wood screws. Screws should penetrate joists by 25mm and be placed no closer than 25mm from any panel corner. Do not over-tighten the screws.
3. Ensure that no electrical cables are damaged or compressed between the Walk-R panels and the joists. Mark the top of the panels to indicate the positioning of any services below the walkway.
4. Ceiling joists are not designed to take a floor loading, loads applied should not be excessive. If loading other than maintenance traffic or light storage is required, an engineer should be consulted.

### Existing loft space

Insulation between joists only

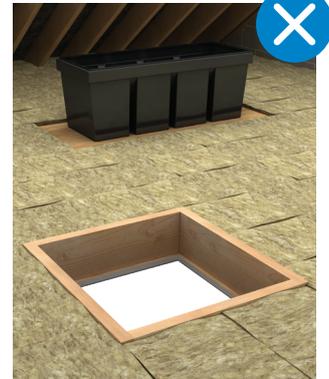
- Energy Efficient
- Safe Access



### Upgraded loft space

2<sup>nd</sup> layer of insulation over joists

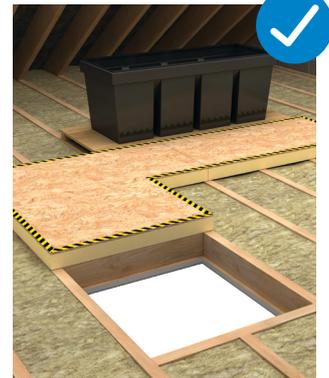
- Energy Efficient
- Safe Access



### Upgraded loft space

2<sup>nd</sup> layer of insulation over joists plus Loft Walk-R access

- Energy Efficient
- Safe Access



# THERMAL PERFORMANCE

## XT/WALK-R

### Typical U-Values



**Table 1**

U-Value calculations to EN ISO:6946

U-Value achieved with 86mm XT/Walk-R Insulated Loft Decking

**Build up:**

- 86mm over joist depth fully filled with mineral fibre insulation (0.044 W/mK) between joists @ 400mm centres
- Plasterboard and plaster skim

Joist Depth (mm)

	100mm	125mm	150mm	225mm
U-Value Achieved	0.17	0.16	0.15	0.12

## 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.





# Expect more Knowledge

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

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

#### Here to support you

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

#### Get in touch

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### **The Sustainable Solution**

Specifying Unilin Insulation is a real commitment to minimising energy consumption, harmful CO<sub>2</sub> emissions and their impact on the environment. Using our products is one of the most effective ways to reduce energy consumption – in fact, after just eight months the energy they save far outweighs the energy used in their production. In addition, our manufacturing facilities operate to an ISO 14001 certified Environmental Management System.

### **Environmental Product Declaration (EPD)**

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

### **EPDs and BREEAM**

BREEAM is primarily trying to encourage designers to take EPDs into consideration when specifying products. BREEAM requires EPDs to be verified by a third-party. For the Mat O2 category, points are awarded based on whether EPDs are generic, manufacturer-specific, or product-specific. Non 3rd party verified EPDs to EN 15804 cannot be accepted. All of Unilin EPDs are externally verified.

### **Responsible Sourcing**

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

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



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