

RENOVATE | INSULATE

Better Homes

Energy efficient
insulation solutions
for renovation



 **UNILIN**
INSULATION

Better Homes

RENOVA / IN

A renovation project brings exciting prospects for your home – a new aesthetic appeal, additional space and an increase in your property's value. When you upgrade your insulation, you can expect to enjoy improved energy efficiency and a more comfortable environment.

By choosing Unilin Insulation as your renovation partner, you are assured of the best product range and technical advice to suit your project.

We push boundaries to improve people's quality of life by creating **Better Spaces. Better Homes.**



W ATE S SULATE

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Reducing Energy

Renovation of existing dwellings plays an increasingly important role in the reduction of energy use. Protecting our planet and contributing to a more sustainable future for us all.

At Unilin, our commitment to renovation is part of our global ONEHOME strategy.



25%

AROUND 25% OF HEAT IS LOST THROUGH POORLY INSULATED ROOFS



35%

AROUND 35% OF HEAT IS LOST THROUGH POORLY INSULATED WALLS



10%

AROUND 10% OF HEAT IS LOST THROUGH POORLY INSULATED FLOORS

source: energysavingtrust.org.uk





 UNILIN | ONEHOME

Our Sustainability Pillars:

Planet Home

Your Home

Our Home

Why Renovate?

Reinvigorate your living space

Your renovation project gives you one opportunity to get your insulation right, so it is important to consider it carefully. Unilin Insulation will help guide you to the best insulation solution for your home.

Benefits of Insulation

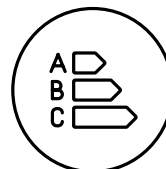
Enhanced comfort and warmth

Insulation has the single biggest impact on energy efficiency. It helps to reduce heat transfer and maintain consistent temperature levels throughout the home.



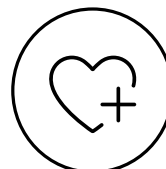
Reduced energy

Insulation directly impacts energy use. Combining the correct insulation choices with a low energy heat source, such as a heat pump, enables the heating system to run efficiently and to reduce your home's energy demand.



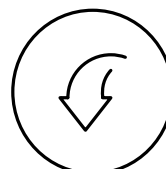
Helps protect your home & health

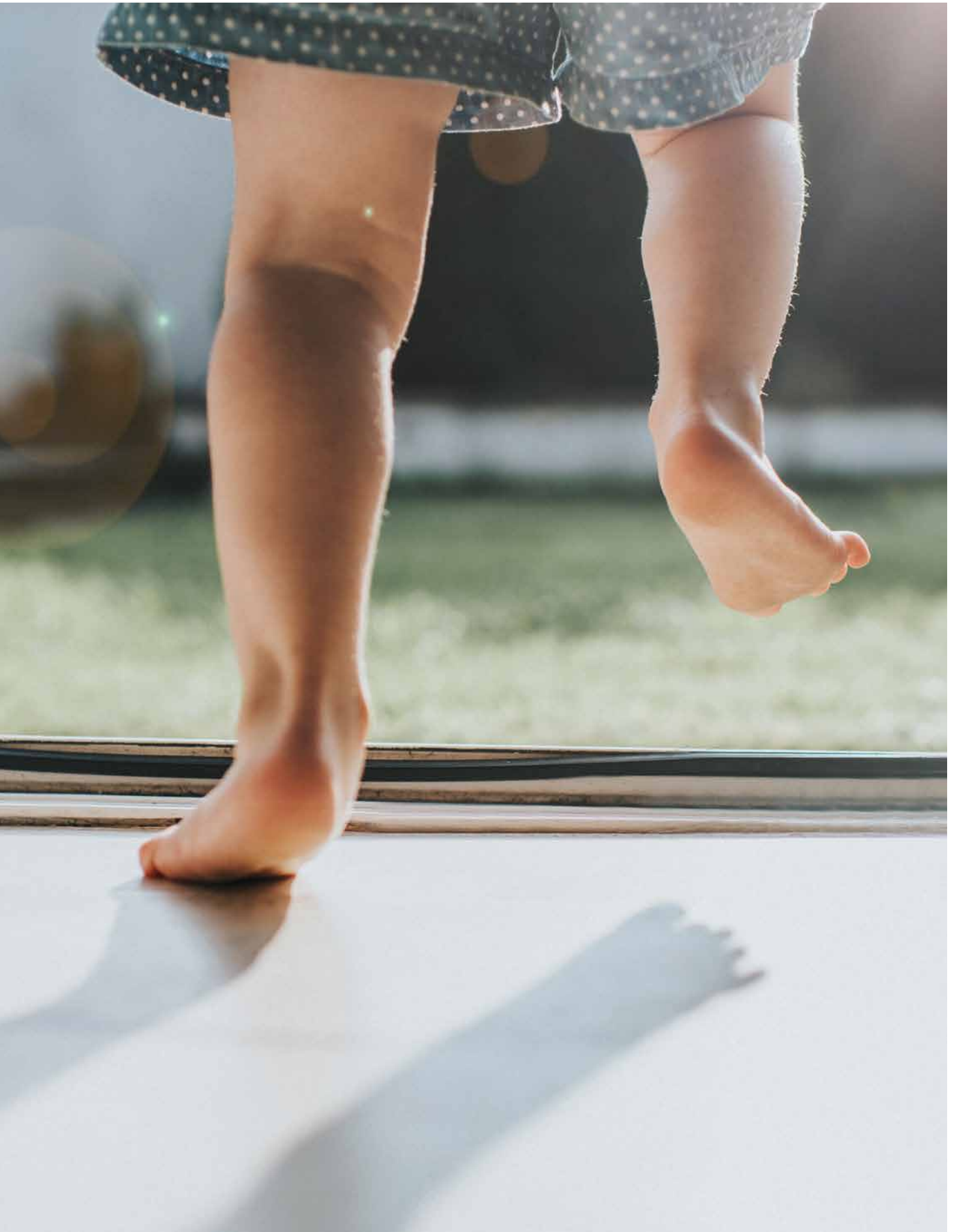
Insulation can help alleviate condensation and mould, protecting the fabric of your home and your health.



Lower bills

Investing in good quality insulation can help deliver substantial home energy reduction, providing short and long-term savings.





Renovation in Practice

Planning for a better home

We are here to help you get the best results from your renovation. While a piecemeal approach may gradually improve the energy efficiency of your home, a comprehensive whole house approach is more effective in improving efficiency and reducing running cost in the long term.

Whole house renovation takes the entire home into consideration, ensuring that installations and refits are planned in a step-by-step manner.

It is advisable to talk to a qualified Energy Assessor about your project for specific guidance on a whole house approach.

The improvements you make to upgrade your home’s energy performance can range from simple changes like switching to energy efficient lighting to more extensive solutions like drylining your internal walls.

The table below gives an indication on costs and CO₂ savings from some of the major renovation measures you can undertake.

Area	Improvement measure category	Capital Cost (indicative)	CO ₂ Saving (kg/yr) (indicative)
Lighting, Appliances	Energy efficient appliances	£	☉
	Energy efficient lighting	£	☉
Renewables	Air Source Heat Pump	£ £ £ £ £	N/A
	Solar PV	£ £ £	☉☉
Windows	New or replacement windows	£ £ £ £ £	☉☉
Insulation	Drylining insulation	£ £ £ £ £	☉☉☉☉☉
	Floor insulation	£ £ £ £	☉☉

Capital Cost Tiers		CO ₂ Saving Tiers	
£	<250	☉	<200
£ £	<2500	☉☉	<500
£ £ £	<5000	☉☉☉	<750
£ £ £ £	<7500	☉☉☉☉	<1000
£ £ £ £ £	7500+	☉☉☉☉☉	1000+

Table adapted from Retrofit Academy, Improvement Option Evaluation and Medium Term Improvement Plans. Peter Rickaby and Alan Pither. retrofitacademy.org

Piecemeal Vs Whole House approach.

Whole House approach

Work is phased, meaning interventions can be designed to work together to deliver the most benefit as effectively as possible.

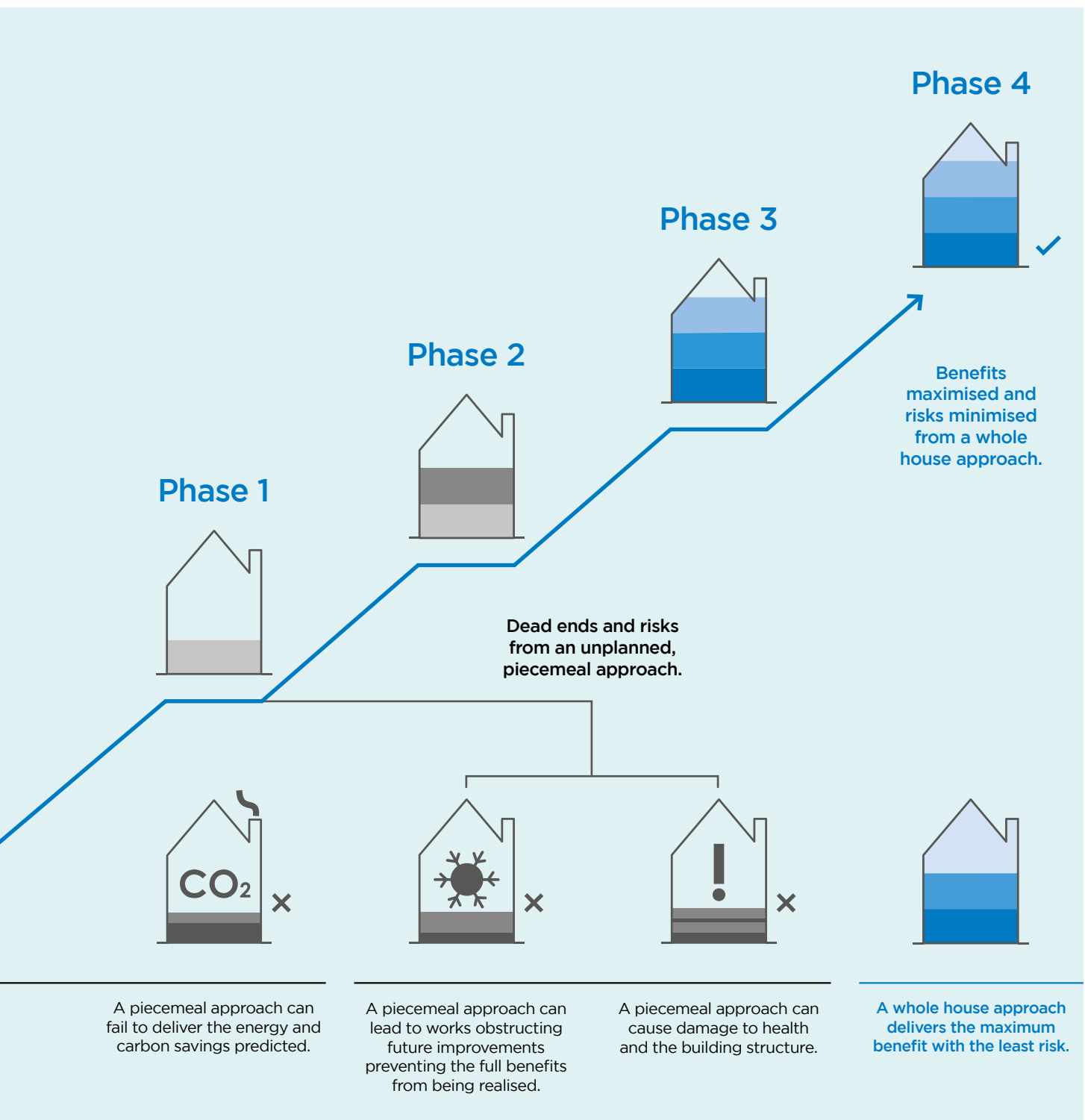
A co-ordinated phased approach means each phase is planned to accommodate and facilitate any future work without disruptions.



Grant availability

Adopting a whole house approach also allows you to maximise financial assistance available through grants. For those eligible, these grants help alleviate the financial impact of a renovation project and will deliver savings through energy bill reduction.

Visit energysavingtrust.org.uk for more information.



Adapted from Figure 5.1 - LETI piecemeal versus whole house approach diagram.

Solutions for every area

Improve your home's performance and value from top to bottom with Unilin Insulation's range of trusted insulation products.

Roofs

RAFTERLOC

Variable Width
Pitched Roof Board



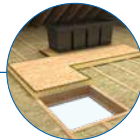
XT/PR_UF (ROOFS)

Pitched Roof



XT/WALK-R

Insulated Loft Decking



Floors

XT/HYF

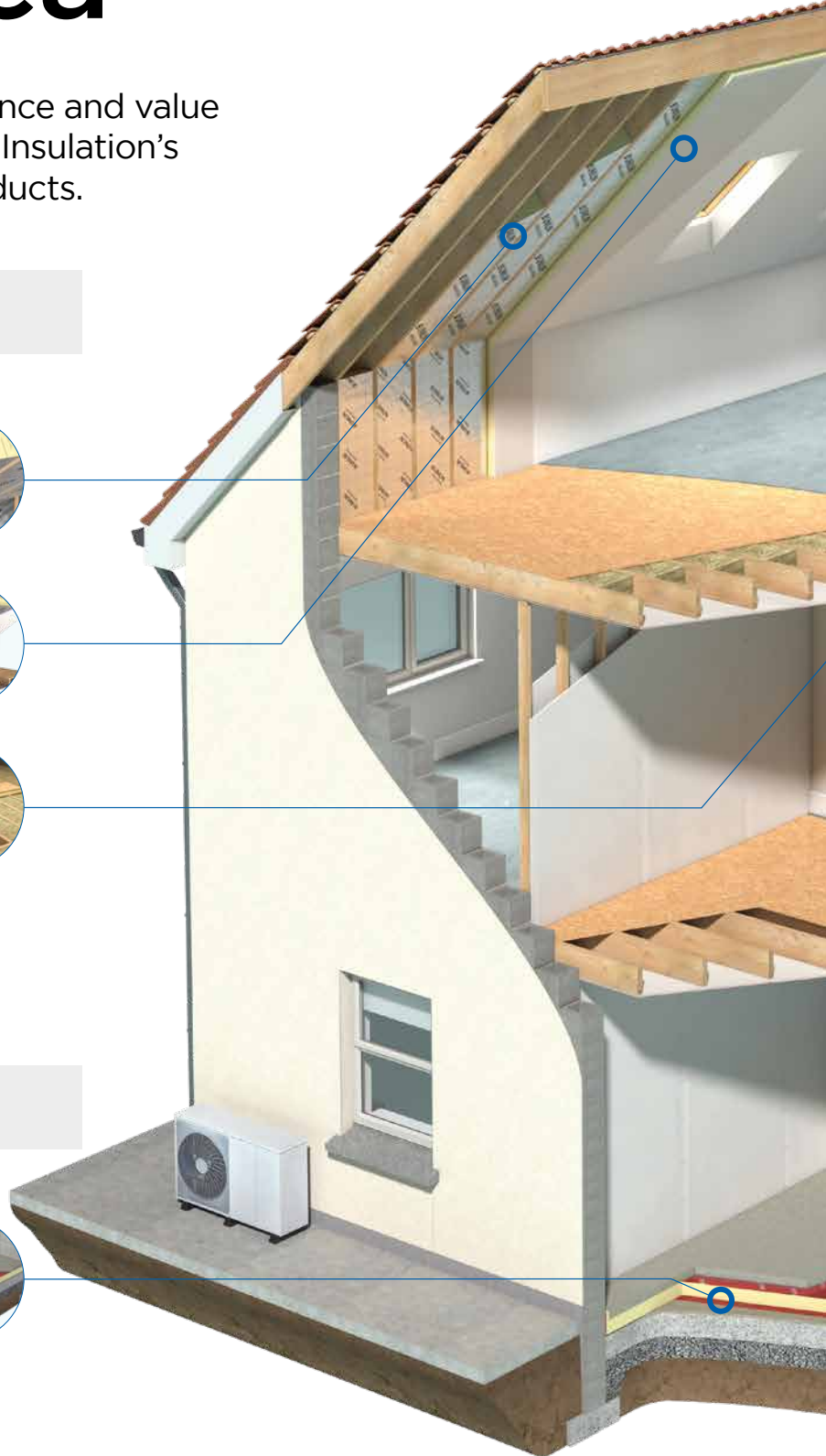
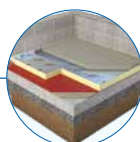
Ground Supported &
Suspended Floors

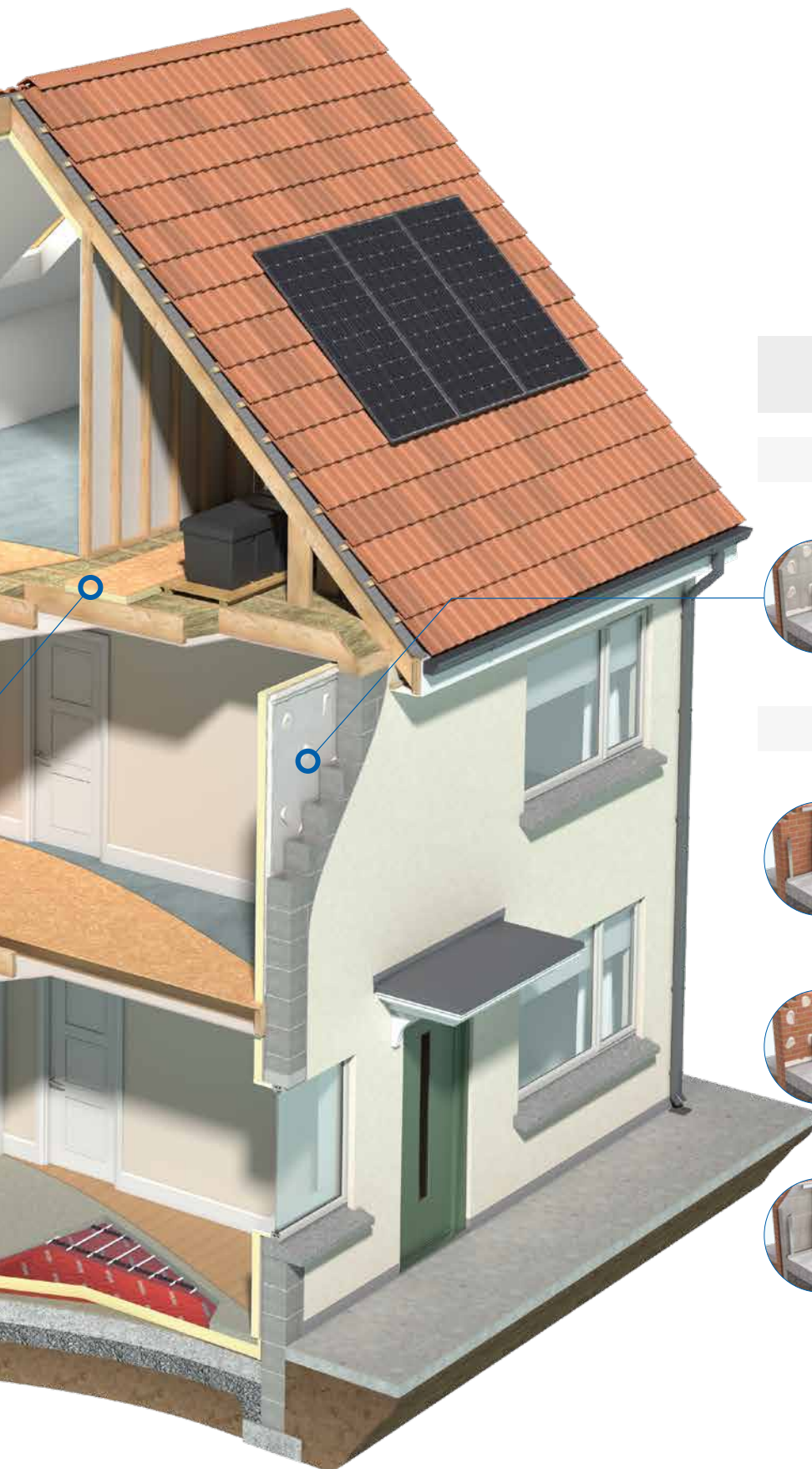


Floor Insulation Option

XT/PR_UF (FLOORS)

Ground Supported &
Suspended Floors



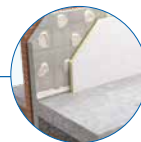


Internal Walls

Thermal Liners

XT/TL

Drylining Walls Fixed with Adhesive Dabs



Other Thermal Liner Options

XT/TL-MF

Drylining Walls: Mechanically Fixed



SR/TB

Drylining Walls Fixed with Adhesive Dabs



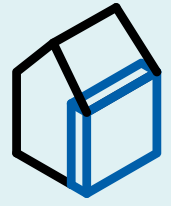
SR/TB-MF

Drylining Walls: Mechanically Fixed



For further details see pages 12-19

Internal Walls



Thermal Liners

When upgrading an existing property, the addition of an insulated thermal lining to the inside of a wall, roof slope or ceiling will dramatically improve your home's energy efficiency.



Internal Wall Insulation Solutions

Find out more at:
unilininsulation.co.uk/betterhomes

XT/TL

Drylining Walls Fixed with Adhesive Dabs

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 an adhesive bonding.

BENEFITS

- ✔ Insulation & Drylining in one application
- ✔ Suitable for a variety of Wall Types

MOSTLY USED WHEN

- ✔ Walls are plumb, in good condition and when interior space isn't restricted



XT/TL-MF

Drylining Walls: Mechanically Fixed

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. It is only suitable for mechanically fixed applications.

BENEFITS

- ✔ Insulation & Drylining in one application
- ✔ Suitable for a variety of Wall Types

MOSTLY USED WHEN

- ✔ On older walls and uneven surfaces and when interior space isn't restricted



Internal Wall Insulation Solutions

Find out more at:
unilininsulation.co.uk/betterhomes

SR/TB

Drylining Walls Fixed with Adhesive Dabs

SR/TB is a composite insulated panel of Unilin Insulation phenolic insulation core with a glass tissue facing bonded to 12.5mm tapered edge plasterboard for internal applications, fixed with proprietary adhesive bonding.

BENEFITS

- ✓ Reduces intrusion into living area
- ✓ Easy installation

MOSTLY USED WHEN

- ✓ Walls are plumb, in good condition and when interior space isn't restricted



SR/TB-MF

Drylining Walls: Mechanically Fixed

SR/TB-MF is a composite insulated panel of phenolic insulation core with a composite foil facing bonded to 12.5mm tapered edge plasterboard for internal walls, sloped roofs and ceilings. SR/TB-MF is only suitable for mechanically fixed applications.

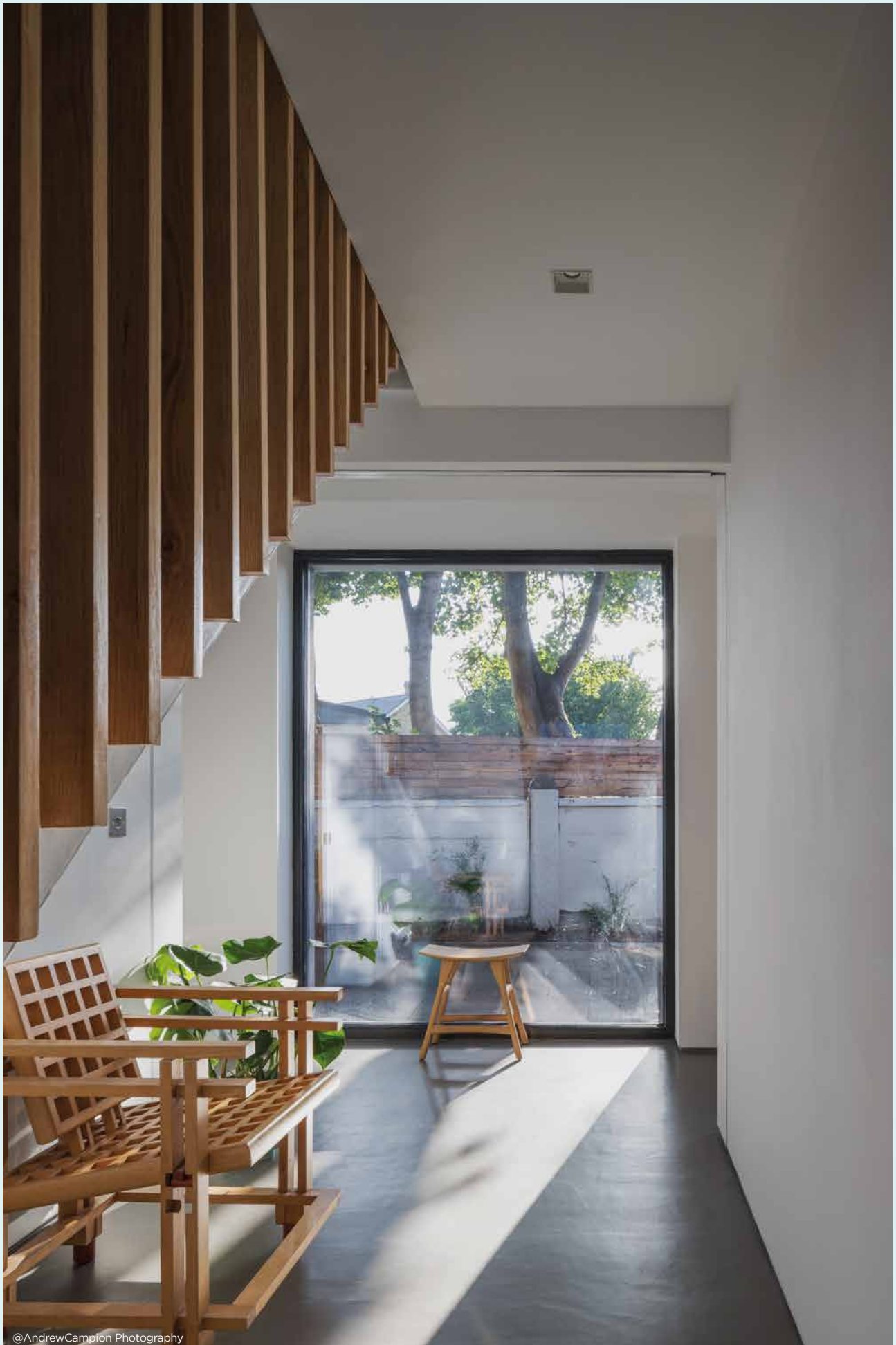
BENEFITS

- ✓ Insulation & Drylining in one application
- ✓ Suitable for a variety of Wall Types

MOSTLY USED WHEN

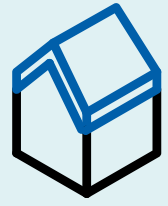
- ✓ On older walls and uneven surfaces and when interior space isn't restricted





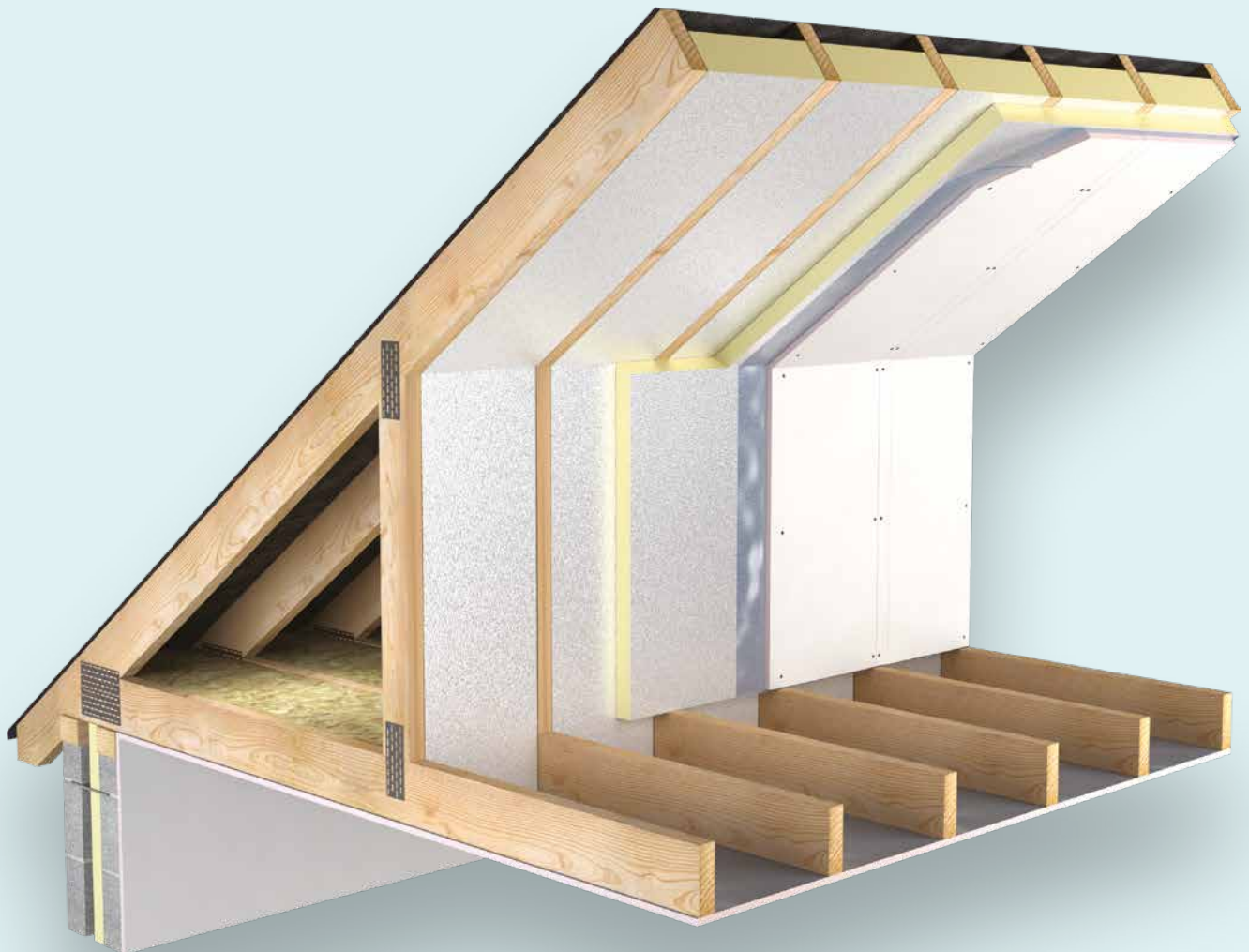
@AndrewCampion Photography

Roofs



Roof & Loft Decking

Insulating your roof helps complete the project's thermal envelope.



Roof Insulation Solutions

Find out more at:
unilininsulation.co.uk/betterhomes

XT/WALK-R

Insulated Loft Decking

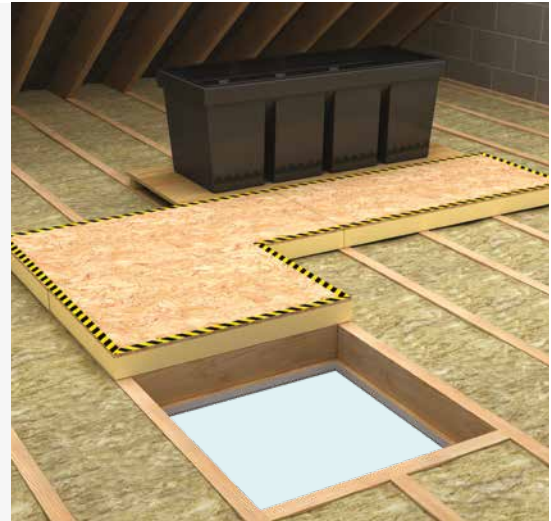
Thin-R Walk-R is a composite of high performance PIR insulation with tough OSB board that provides safe access into insulated roof spaces. Walk-R maintains very high insulation values and complies with health and safety guidelines.

BENEFITS

- ✔ Provides safe access to water tank
- ✔ Easy installation

MOSTLY USED WHEN

- ✔ When access to utilities is required



RAFTERLOC

Variable Width Pitched Roof Board

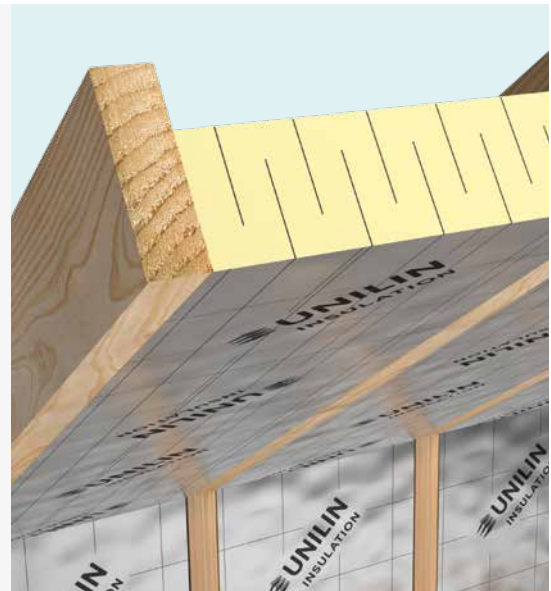
Unilin Rafterloc Pitched Roof Insulation has a unique width variation feature offering a 20-30mm adjustment margin to ensure a tight fitting, high performance insulation locked between rafters.

BENEFITS

- ✔ Variable width feature
- ✔ Easy installation
- ✔ Minimal intrusion into living area

MOSTLY USED WHEN

- ✔ Renovating older buildings where there may be inconsistencies in rafter centres



XT/PR_UF (ROOFS)

Pitched Roof

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.

BENEFITS

- ✔ Reduces Intrusion into living area
- ✔ Easy installation
- ✔ Reduces the risk of condensation

MOSTLY USED WHEN

- ✔ Optimum thermal performance is a consideration

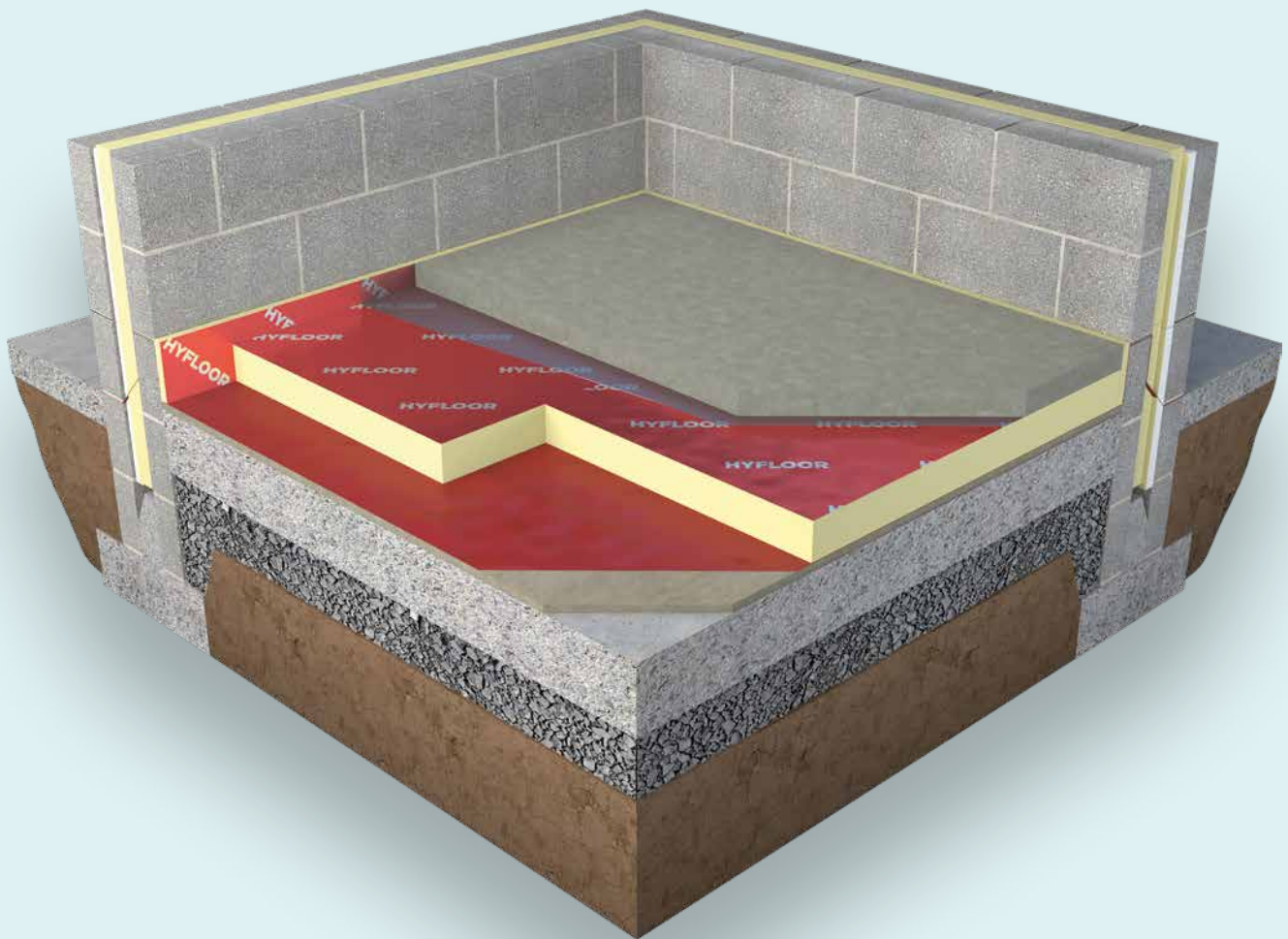


Floors



Solid & Suspended Floors

The floor in any building is an area of considerable downward heat loss when not properly insulated. Correctly insulating your floors can help prevent moisture problems and mould growth.



Floor Insulation Solutions

Find out more at:
unilininsulation.co.uk/betterhomes

XT/PR_UF (FLOORS)

Ground Supported & Suspended Floors

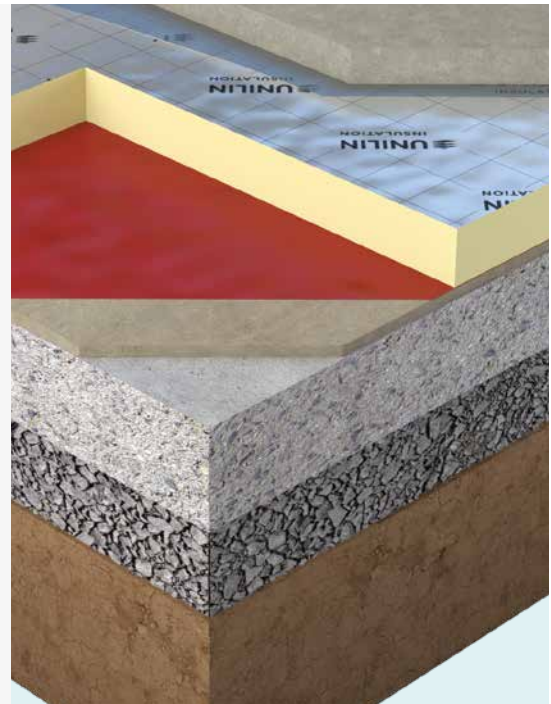
Thin-R Underfloor is lightweight, easy to install and combines high compressive strength with low thermal conductivity, providing a high performance solution for floor insulation.

BENEFITS

- ✔ Suitable for underfloor heating
- ✔ Perimeter strips for robust detailing
- ✔ Reduced insulation thickness

MOSTLY USED WHEN

- ✔ When aiming to upgrade the thermal efficiency of your home



XT/HYF

Ground Supported & Suspended Floors

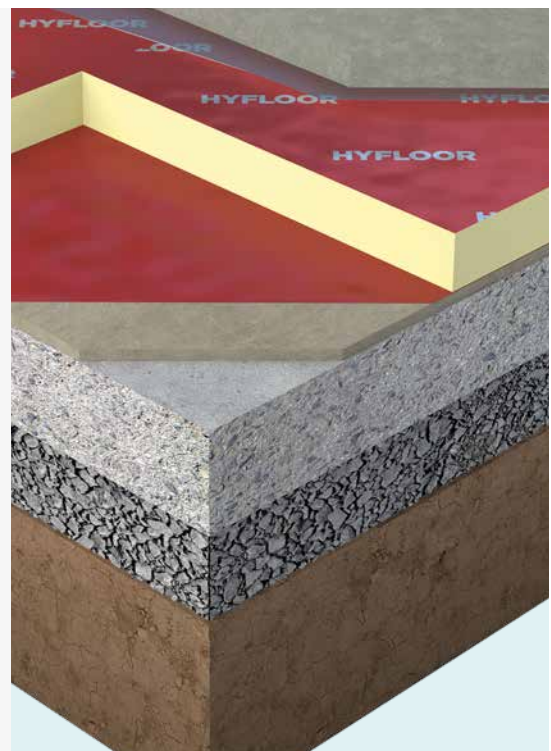
We have developed Hylfloor insulation as the answer to achieving lower U-Values - in a practical and robust manner.

BENEFITS

- ✔ Suitable for underfloor heating
- ✔ Perimeter strips for robust detailing
- ✔ Reduced insulation thickness

MOSTLY USED WHEN

- ✔ A higher standard thermal performance is required



Renovation Case Study

Victorian House



@PaulTierney Photography

The selection of Unilin Insulation products ensured superior thermal performance and enhanced indoor air quality, while meeting the project's stringent standards for sustainability and comfort.

Purchased back in 2017, this building had previously been split into four bed sits. The house needed structural changes and rising damp was also an issue. Architect Brendan O'Connor devised the concept of encasing the old brick structure within a timber framed house.

According to the owner "I've always believed that if you have to do the right thing, even if it's hard, then you still do it and I knew I'd never have a second chance to get it right".

There were various challenges on the project including the search for a responsible way to deal with ventilation and airtightness. Significant structural changes were needed with everything removed except the stairs, three walls and the upstairs floorboards. The floors had Unilin Insulation's XT/PR UF floor insulation installed along with membranes and damp proof courses along with the construction of a timber frame to encase the existing building.



@PaulTierney Photography

The contractors rebuilt the side back wall to allow for the cantilever to support the corner unit and constructed a cavity wall extension with Unilin Insulation's CavityTherm full-fill insulation system. The house has triple glazed windows and two wood-burning stoves.

The build followed passive house principles resulting in an improvement in the building energy rating (SAP) from a G (before the build) which jumped to an A3.



@PaulTierney Photography

Product Specification:
Floors: XT/PR_UF (Floors)

Walls: Cavitytherm full fill cavity wall insulation

Roof: XT/PR_UF roof insulation

Client:
Private Homeowner

Contractor:
Doyson Construction

Architect:
Brendan O'Connor

Meet the team who can help with your project

Achieve your renovation dream

Whether you are thinking of upgrading part, or all of your home insulation, our technical experts are here to advise you on the best insulation approach for you and your home.

Free One-to-One advice

At Unilin Insulation, we recognise that insulation is key to maximising the benefits of all other energy improvement products that you plan on upgrading as part of your home renovation.

Our technical team are on hand to provide free one-to-one advice, guiding you through your insulation journey.

Services

- Free Consultation Service with Unilin Technical expert
- Certified U-value Calculations/ Condensation Risk Analysis
- Off plan BER/SAP Calculation consultation service*
- Fabric performance specifications to achieve 'A' rated building
- Pre-design assessment of details & Y-value performance
- Pre tender Unilin Insulation spec check
- Prompt response - all project sizes
- Installation Training
- Installation validation process with install team

* in conjunction with your SAP assessor

Technical Team



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