L-Ments®

Self-supporting, insulating roofing elements

flexible

new-generation insulation

efficient

space-saving

easy to install

affordable

renowned Recticel® quality

ultimate freedom of choice

L-Ments®, deliberately simple, surprisingly easy

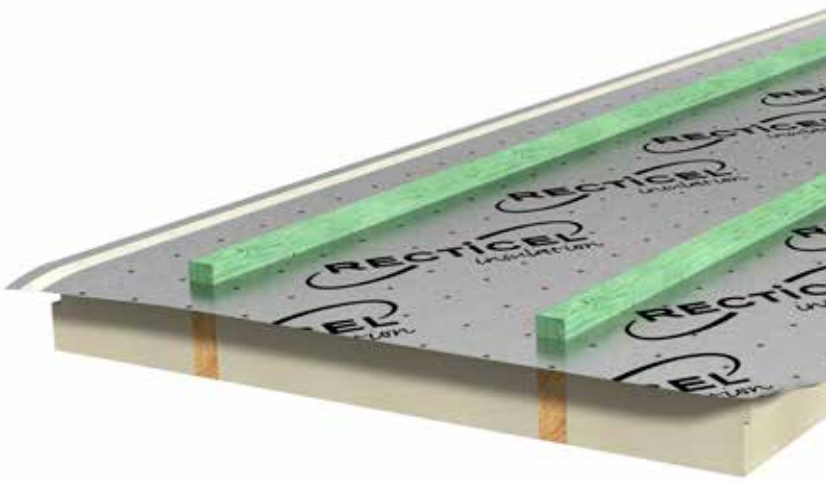
L-Ments® in a nutshell

L-Ments® is the latest generation of self-supporting, thermally insulating roofing elements for pitched roofs. These elements can be covered with a range of different materials (tiles, slates, zinc, etc.).

L-Ments® roofing elements provide an answer to various challenges associated with new-build or refurbishment projects. The innovative lightweight design ensures efficient and quick installation. Which is why Recticel Insulation is the specifier's choice. L-Ments® delivers unprecedented flexibility for non-professional users too: no internal finish means no risk on damages during the installation and maximum freedom of choice.

Top performer in insulation value

Recticel Insulation's many years of experience are encapsulated in this high-quality roofing element. For example, you can count on an outstanding lambda value (λ_D) of 0.023 W/mK.
With the incorporated timber stiffeners, there is no break in the insulation layer, which prevents thermal bridges and ensures minimum heat loss. L-Ments® also creates a future-proof solution for private and non-professional users.



FEEL GOOD INSIDE

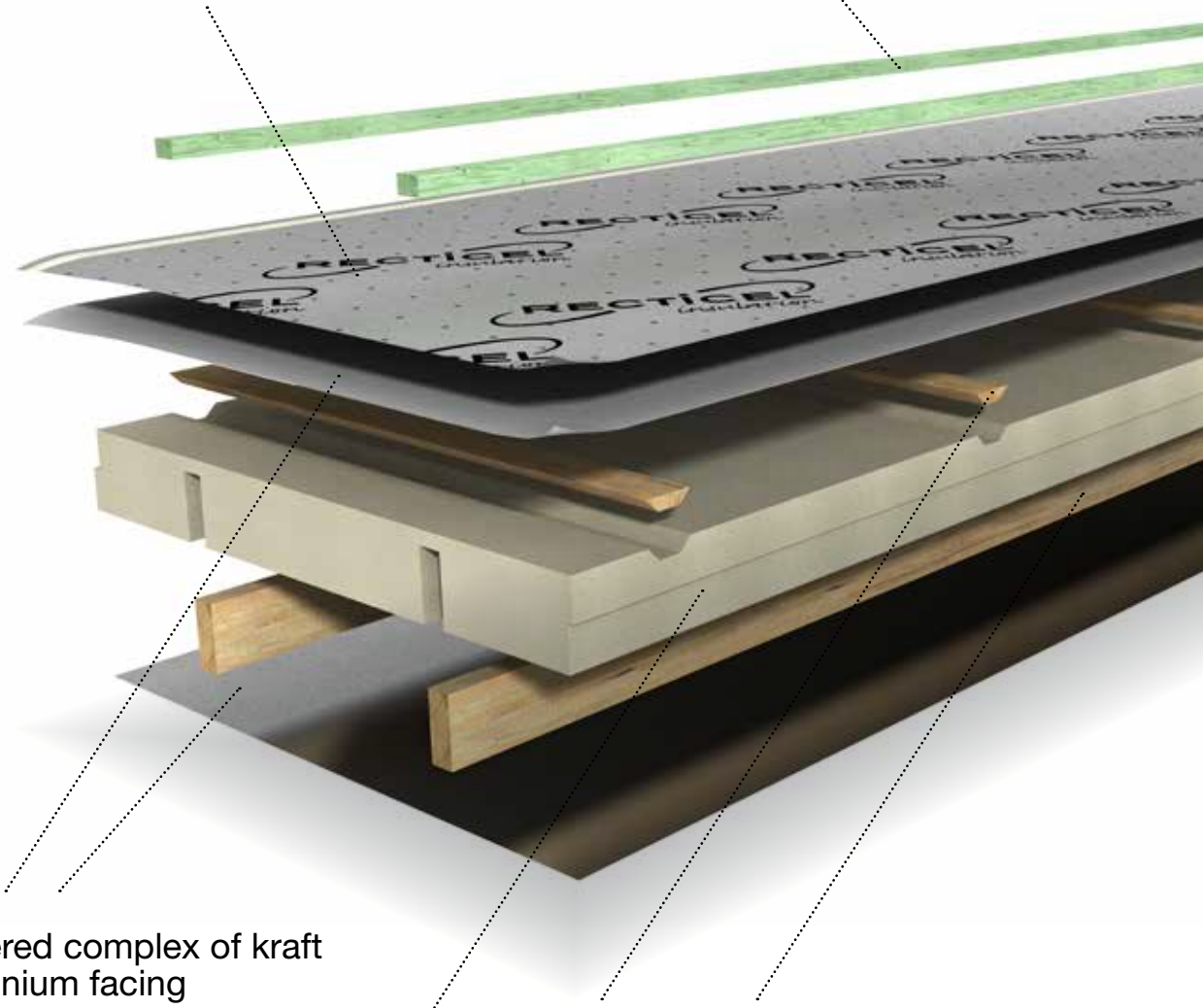
RECTICEL insulation

1 Underlay felt

The pre-glued, vapour-breathable Rectivent® underlay felt ensures a faster installation and the best possible resistance to rain. The overlaps on the membrane are also self-adhesive, making the whole structure more weatherproof and wind-tight.

2 Counter battens

The battens are already fixed to the panel. This saves a huge amount of time when installing the roof element.



3 Multi-layered complex of kraft and aluminium facing

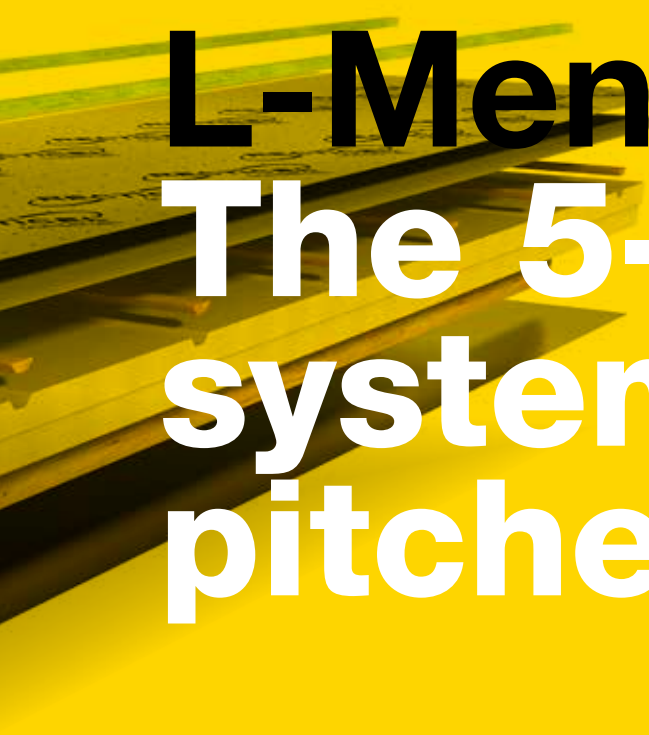
Both multi-layered kraft and aluminium facings protect the PIR foam and optimise the insulation value. On the inside, they act as a vapour and air barrier. The inner side of the facing is also marked making it easier to attach the internal finishing.

4 Insulation material in PIR foam

As the core of the roofing element, PIR foam is very stable, does not compress and has a high insulation value (λ_D = 0,023 W/mK). PIR foam also ensures better fire protection.

5 Integrated timber rafters

The wooden rafters are incorporated into the core which makes the roofing elements self-supporting. Because they are inside the foam itself, the whole element is very compact.
These rafters also make the structure extremely strong.

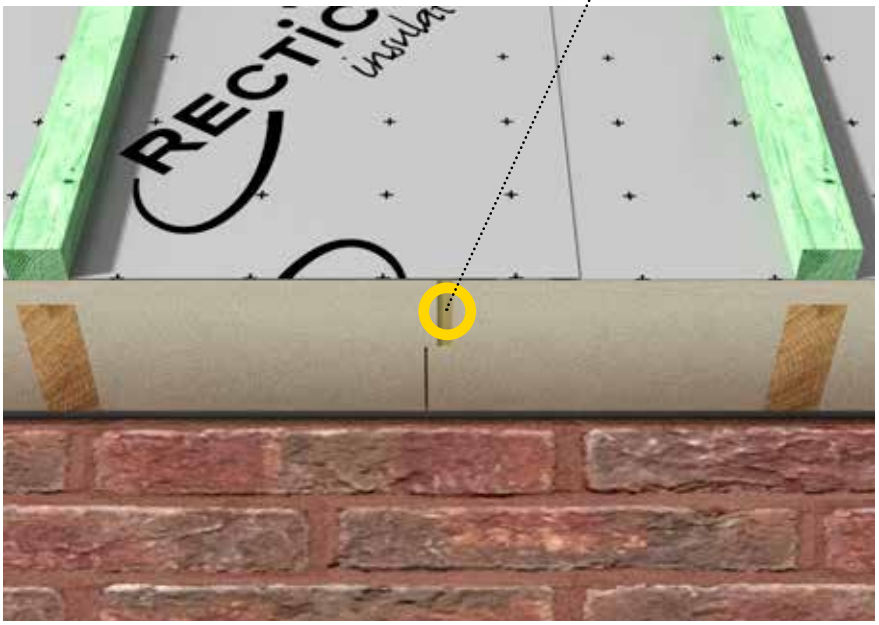


L-Ments®: The 5-in-1 system for pitched roofs

Underlay felt, counter battens, multi-layered kraft and aluminium facing, PIR insulation and integrated wooden rafters: L-Ments® self-supporting insulation panels combine five components into one single roofing element.

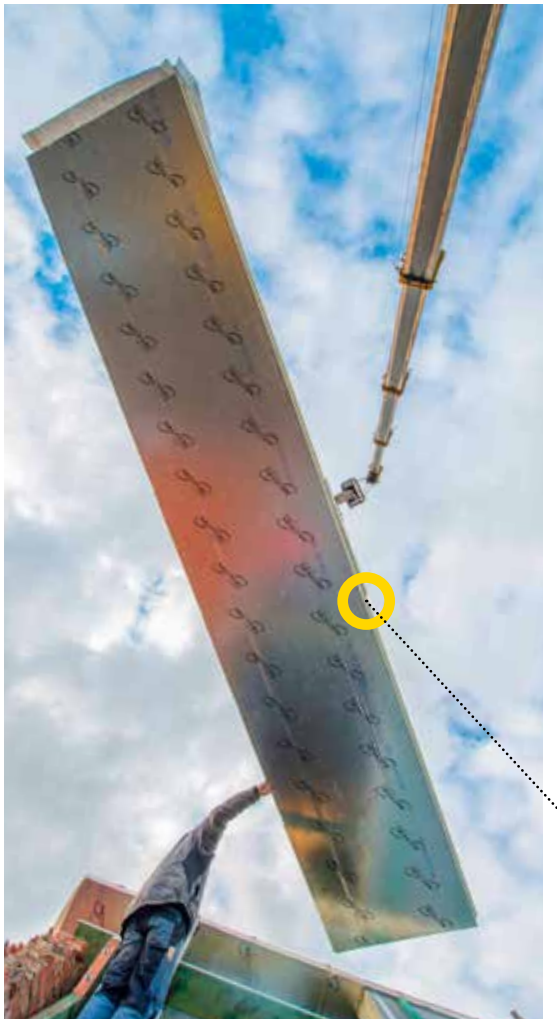
A patent is pending for the L-Ments® system.

The shiplap creates a secure joint that ensures there is no thermal bridge.



Fast installation thanks to the integrated timber rafters, counter battens and underlay felt.

The Rectitape® insulation tape means it's easy to make joins airtight.



With Recticel Insulation you also get the renowned quality of Recticel®.

L-Ments® roofing elements ensure reduced construction costs and maximum savings on space and energy usage.

Ten ways L-Ments® roofing elements makes life easy for you

1. Uncomplicated choice

L-Ments® is a universal, standardised roofing element, which means it is suitable for all kinds of pitched roofs. Ordering is very easy: the online calculation tool tells you immediately the amount of panels and which standard format you require. Find out for yourself at www.recticelinsulation.co.uk.

2. Fast delivery

L-Ments® roofing elements are produced in a number of frequently used standard lengths, guaranteeing fast delivery at all times.

3. Smooth and fast construction process

L-Ments® insulation panels consist of core PIR foam, facing, integrated timber rafters and counter battens.
These lightweight materials make the roofing element an ultra-light solution ensuring increased efficiency throughout installation.

4. User-friendly installation

Not only does the lightweight of L-Ments® make the panels easy to use, but the Rectifix® screws developed specifically for this application mean they are easy and quick to install.

5. Easy to finish

The L-Ments® system keeps all options open when it comes to finishing. Users can apply their preferred internal finish to the panels themselves. In fact, an additional finish is not needed everywhere (such as in the loft), enabling you to eliminate unnecessary costs. This modular way of building is also highly practical at the site, because with no internal finish required, there is less to worry about in terms of causing damage during installation.

6. Easy-to-assemble frame

Once the roofing elements have been fixed, it is simple to install the metal or timber for assembling the internal finish. These frames are mounted on to the integrated timber rafters, which are conveniently marked on the inside, so you know where to attach them.

Fast and flexible building process

Fast delivery

User-friendly installation

Affordable

7. Simple to conceal wiring

By fixing a counter batten to the underside of the panel, a service void can be created between the panel and internal finish.

8. Easy to make airtight

The seams or joins between two L-Ments® panels are simple to make airtight using Rectitape® insulation tape. You can also opt to attach an airtight membrane behind the internal finish.

9. New generation insulation

The combination of the high insulation and the integrated timber rafters in the PIR foam means there are no thermal bridges along the edges between two L-Ments® panels. This means that by specifying L-Ments®, you are opting for a super-insulating roof without thermal bridges. As a result, L-Ments® is the future of insulation.

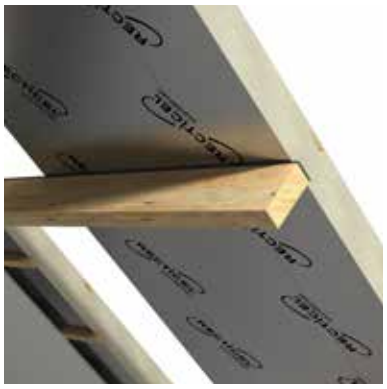
10. Affordable

Making your home energy-efficient and incorporating renewables can be very expensive. But by using L-Ments® insulation panels, you can minimise costs through both short term and long term, through faster installation and high insulation value (λ_D = 0.023 W/mK). Moreover, the lack of thermal bridges makes the roof structure an investment that will pay for itself time and again.

FEEL GOOD INSIDE

RECTICEL insulation


VERY EASY
INSTALLATION

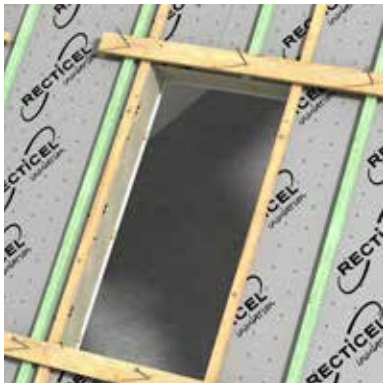


Installation

L-Ments® are installed perpendicular on to the purlin structure of the pitched roof.

Fixing

Use the Rectifix® screws from the outside to fix the roofing elements to each point where the integrated rafters cross the timber studs, ridge beam and in between the purlins. You then screw the Rectifix® screws through the counter battens and rafters.



Rooflights

If there is a gap between the panels, for example where there is a roof window, then you will need to fix additional timbers on the vertical and horizontal edges of the gaps.

Internal finish

With L-Ments® self-supporting insulation panels, you can use any type of internal finishing. Attaching timber battens on the inside is straightforward because the locations of the integrated timber rafters are clearly marked on the inside of the panels. Furthermore, there is also additional space between the panel and the internal finish for you to conceal the electrical wiring.

External finish

On the outside, the seam or join is made sufficiently resistant to the rain with the self-adhesive overlap in the underlay felt. Joins to the wall plate, ridge, gaps between the purlins, load-bearing walls and connecting joins are made thermally insulating and airtight. This is done using strips of interim membrane and filler foam. This gives a continuous insulating layer.

What do you need?

1. L-Ments® self-supporting insulation panels

In one of four thicknesses (145 / 160 / 180 / 200 mm) and eleven standard lengths (3.6 / 3.9 / 4.2 / 4.5 / 4.8 / 5.1 / 5.4 / 5.7 / 6.0 / 6.3 / 6.5 m).

2. Hoist

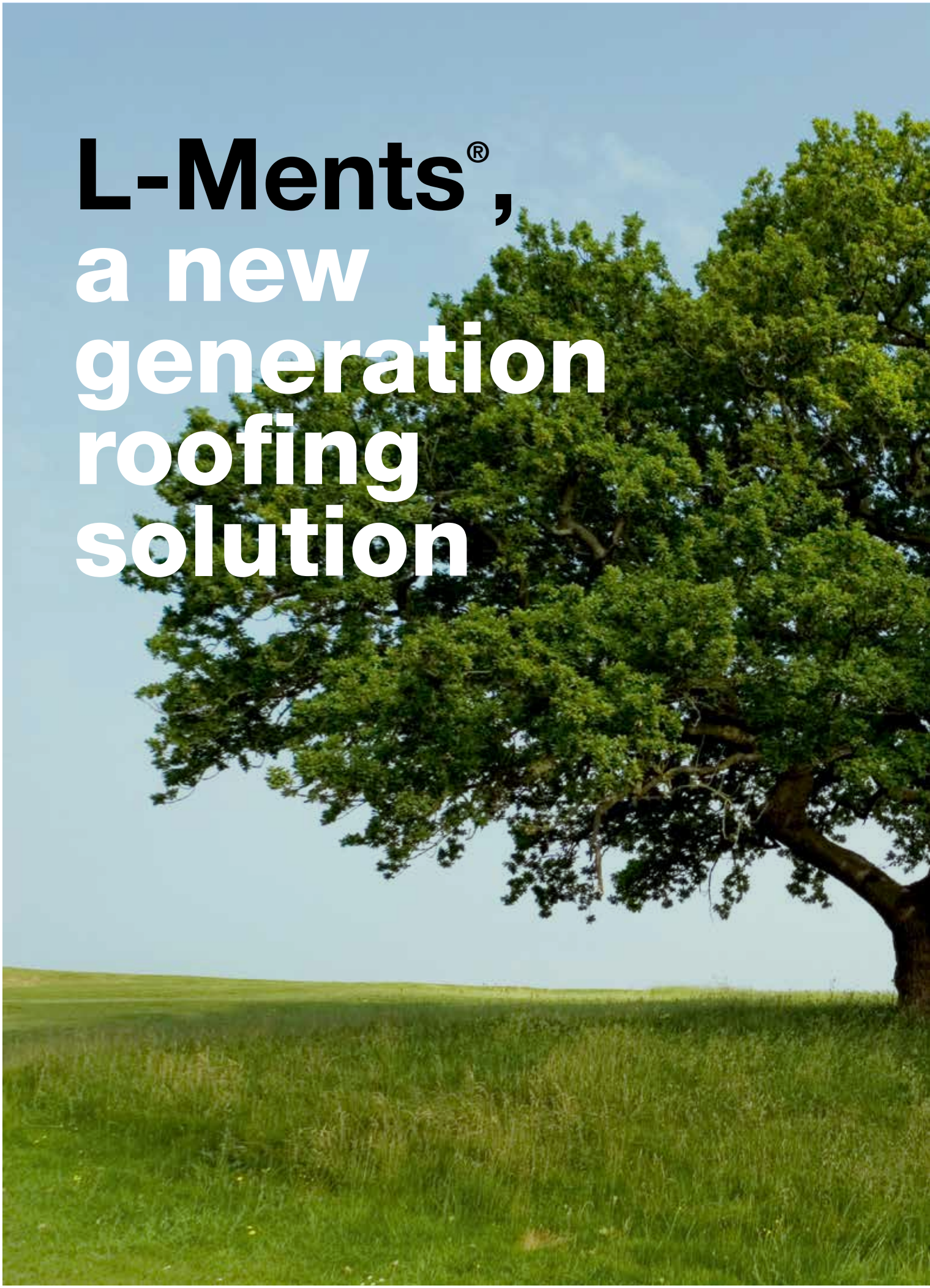
To lift the L-Ments® panels up to roof level, you will need a crane.

3. Lifting clamps

The lightweight L-Ments® panels are easy to handle using lifting clamps.

4. Accessories

Rectifix® screws, Rectitape® insulation tape, and Recticel Insulation filler foam.


L-Ments®,
a new
generation
roofing
solution

Building for the future

Affordable dwellings are one of the greatest challenges of the 21st century. Shorter installation times at the building site can help drive down costs. This means using simpler building techniques that deliver the same high quality. Because these roofing elements are easier to install, you are already making a significant time saving. The homeowner will benefit from increased energy efficiency and reduced energy costs.

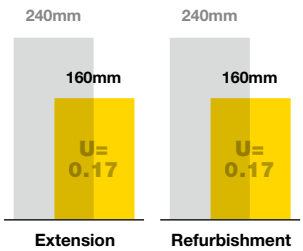
New generation insulation

In comparison with traditional roofing insulation, L-Ments® roofing elements enable you to have a significantly thinner solution, yet achieve the same insulation value. Better still, you will easily exceed your insulation requirements into the future – plus you will save on your energy costs for years to come.

Recommended U-values for domestic buildings (pitched roof – rafter level)

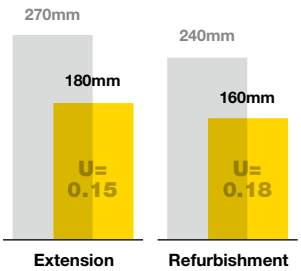
England - April 2013

Extension: 0.18 W/m²K
Refurbishment : 0.18 W/m²K



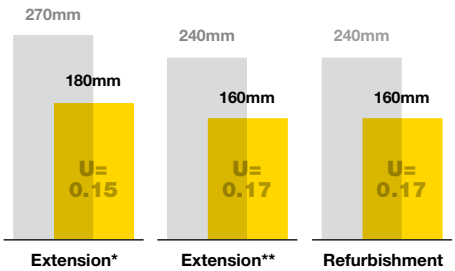
Wales - 31st July 2014

Extension: 0.15 W/m²K
Refurbishment : 0.18 W/m²K



Scotland - Current

Extension*: 0.15 W/m²K
Extension**: 0.18 W/m²K
Refurbishment : 0.18 W/m²K



traditional insulation L-Ments®

* Existing building has U-values worse than 0.70 W/m²K in walls and worse than 0.25 W/m²K in the ceiling.
** Existing building has U-values better than 0.70 W/m²K in walls and better than 0.25 W/m²K in the ceiling.

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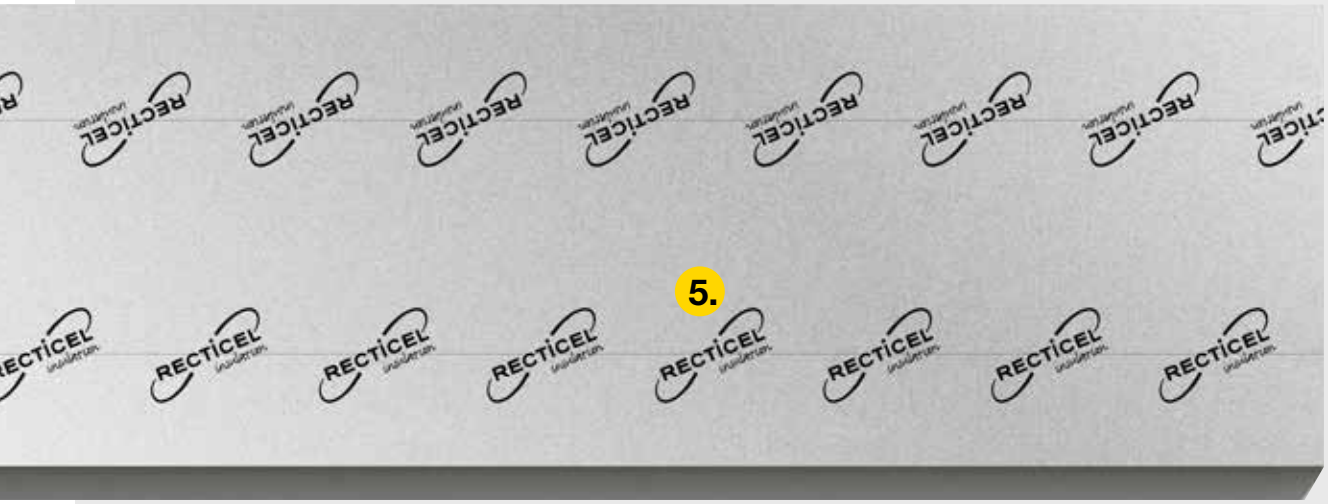
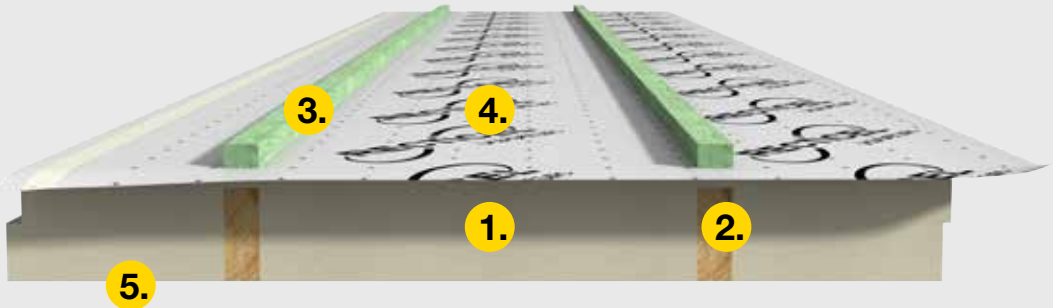
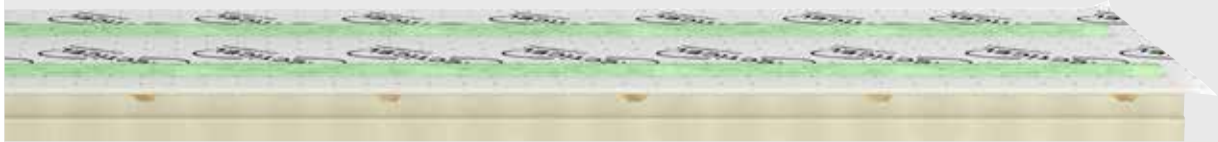
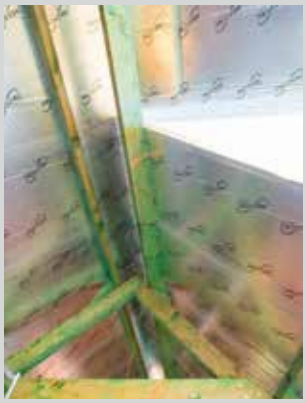
L-Ments®: Technical information









1. Insulation material

Core which consists of PIR insulation with a vapour-proof membrane on the upper and underside.

2. Integrated timber

Two 45 x 120 mm rafters integrated into the core, with a centre-to-centre distance of 600 mm. Pine, strength class C24 (see EN 338). A cross-stiffener integrated into the core per metre of panel, OSB III.

3. Counter battens

Two battens 45 mm wide and 30 mm high, pine, strength class C24 (see EN 338), treated to meet usage class II (see STS 04).

4. Underlay felt

Rainproof breathable membrane. 1.3 m wide with overlap and double-sided tape on the joins.

5. Multi-layered kraft and aluminium facing

Vapour-tight aluminium multiple-layered complex.

6. Technical table

- Insulation thicknesses: 145, 160, 180 and 200 mm
- Lambda value (heat transfer coefficient): 0.023 W/mK
- R_D insul. (heat resistance): 6.30 - 6.95 - 7.80 and 8.65 m^2K/W
- U_C (insulation value): 0.19 - 0.17 - 0.15 and 0.13 W/m^2K
- R_T (heat resistance): 5.25 - 5.90 - 6.85 and 7.75 m^2K/W
- Weight: 9.50 - 10 - 10.65 and 11.30 kg/m^2
- Lengths: 3.6 / 3.9 / 4.2 / 4.5 / 4.8 / 5.1 / 5.4 / 5.7 / 6.0 / 6.3 and 6.5 m
- Width: 1200 mm (net 1185 mm)

FEEL GOOD INSIDE

RECTICEL insulation

Want to learn more?
Please contact us or request our technical data sheet.

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