Leadax®

PVB Roofing | Roov

Leadax Roov

The revolutionary sustainable roofing membrane

CIRCULAR

REFLECTIVE

LOW CO_2 FOOTPRINT

SUITABLE FOR MULTIPLE SYSTEMS

EXTREMELY STRONG

WHAT IS LEADAX ROOV?

Leadax Roov is the revolutionary sustainable roofing membrane, made from plastic waste. We use sustainable energy sources for its production as well. These features offer a significant CO_2 reduction, compared to alternatives. Since it is off-white, it is also reflective. Inside temperatures remain cooler because of this, yet the solar panel yield on top of the roofs is higher. Next to this, Leadax Roov is very durable and easy to apply. After its lifecycle, Leadax Roov can be recycled and reused. Also, Leadax Roov is certified.

LIGHTWEIGHT

Leadax Roov weighs just 1,8 kg p/m². It's perfect for your next waterproofing project.

EASY AND FAST TO APPLY

Leadax Roov is an easy and fast to apply single-ply roofing membrane. You'll save time and materials as a result.

MULTIPLE ROOFING SYSTEMS

Leadax Roov can be applied with all sorts of roofing systems, such as green and blue roofs.

FIRE-RESISTANT

Leadax Roov is fire-resistant of class Broof(t1). This means it's resistant to sparks coming from strong winds, such as a nearby fire or fireworks.

THE REVOLUTIONARY SUSTAINABLE ROOFING MEMBRANE

LOW CARBON FOOTPRINT

Leadax Roov has a low carbon footprint.

ROOF SYSTEMS

Leadax Roov is a single-ply roofing membrane and can be applied to multiple roofing systems.

REFLECTIVE

Since Leadax Roov is off-white the solar panel yield is higher. Indoor temperatures are also cooler because of this.

NO OPEN FIRE

Leadax Roov can be applied without the use of open torch or hot air, so it complies with NEN-EN 13501-1 (NEN 6065).

DESIGNED TO DISMANTLE

At the end of our products' lifecycles they will be recycled and the derived raw materials are reused for new products.

CIRCULAR

Leadax Roov is made from r-PVB, the safety foil that's used in laminated glass such as windshields.


LEADAX ROOV

SPECIFICATIONS

Dimensions

12,5 m x 1 m

*12,5 m x 2 m**

**available at the end of 2022*

Mass

1,80 kg p/m²

Thickness

1,5 mm

Colour

Off-white

Different colours are available on request

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REFLECTIVE *OFF-WHITE*

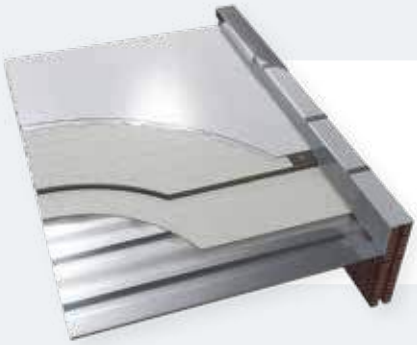
ROOF SYSTEMS

LOOSE-LAID BALLASTED

With a loose-laid ballasted system, a ballast layer ensures that Leadax Roov is held in place.

MECHANICALLY FIXED

With a mechanically fixed roof system, Leadax Roov is attached to the roof construction.



FULLY ADHERED SINGLE-PLY

With the fully adhered single-ply roof system, Leadax Roov is attached to the substrate by means of water-based glue.

DIFFERENT TYPES OF ROOFS

Leadax Roov can be used on many types of roofs, including white roofs, energy roofs and green roofs. You can also combine different roofs. These are called multifunctional roofs. For example, a combination of a water roof and a green roof is possible. Below the different types of roofs are explained and how Leadax Roov can be applied.

OFF-WHITE ROOFS

Leadax has chosen to make Leadax Roov off-white for several reasons. Most roofs in the Netherlands are covered with black bitumen. Because of this, these roofs can reach a surface temperature of 80 °C. Cooling this down requires more energy than warming it up. Off-white roofs reflect sunlight, which keeps the building cooler and saves energy.

White roofs are also very suitable in combination with solar panels. The reason for this is that solar panels have poorer electrical conductivity at a higher temperature, which reduces their efficiency. Off-white roofing under the solar panels ensures that there is less heat radiation on the roof, which keeps the solar panels cooler and means they produce more energy.

ENERGY ROOF

Leadax Roov is very suitable for combining with solar panels (see 'Off-White Roofs'). Solar collectors can also be placed on the roof for heating the building, tap water or a swimming pool. These roofs can also be combined with white and green roofs.

Leadax Roov is 1.5 millimetres thick, which makes it possible to walk on the roof, for example to carry out maintenance on the solar panels.

GREEN ROOF

A green roof is slightly different from a traditional roof, and Leadax Roov is a good product for this too. There are different types of green roofs, such as moss sedum roofs, garden roofs and roof parks.

Green roofs have multiple benefits.

- Relieving the sewerage system
- Insulating effect
- Cooling in the summer and heating in the winter
- Cooling of the ambient temperature
- Contribute to a better air quality

WATER ROOFS

Water roofs are built to temporarily store rainwater, thus relieving the sewerage system. After collecting the water, it can be stored on the roof or in a water tank. The water can be filtered and used for applications such as flushing the toilet.

There are two types of water roofs:

1. Water roofs with permanent water on them
2. Water roofs that temporarily store water

The water volume of permanent water features is higher than that of temporary water features.

A water roof has several advantages, namely

- Saving on water costs
- The burden on the sewer will be reduced, thus preventing flooding
- Reduced use of groundwater
- Insulation of the roof
- Possible reduction in sewerage charges
- Possible municipal subsidy schemes
- Payback time of approximately 12 years

RECREATIONAL ROOF

A recreational roof creates more living and/or working space. It is also possible to combine this roof with a green roof, for example by growing crops (vegetables and fruit cultivation). If this space has no use, it can be rented out, which provides an increased financial value.

Did you know? **Leadax Roov was used to waterproof the circular cone at the Dutch Pavillion in Dubai!**

The pavilion of the Royal Kingdom of the Netherlands was part of the Sustainability District of the World Expo in Dubai. During this event, visitors saw the world's most advanced technology in action, what countries are doing to champion sustainability, and experience how the human race can enjoy living in harmony with nature in a high-tech future. The Dutch pavilion was designed as a biotope, and gave visitors a sensory experience that is all about sustainability.

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LEADAX ROOV CERTIFICATION AND WARRANTY

CERTIFICATIONS

- The Roov system has passed the fire, wind uplift and aging tests
- BDA Product Performance Assessment
- CE certified
- KOMO® certification is available in combination with Kingspan insulation

WARRANTY

- Insurance backed warranty of 10 years with HDI
- Longer warranty conditions can be purchased against extra cost

Easily cut corners with a pair of Leadax scissors

Easily seal T-joints and edges with Leadax Liquid PVB

ACCESSORIES AND TOOLS

LEADAX REINFORCEMENT STRIP

The Leadax Reinforcement Strip (LRS) and the Leadax parameter fastening strip are the same product. This ensures less confusion, more comfort during application and less residual waste.

LEADAX LIQUID PVB

Leadax Liquid PVB can be used to seal T-joints and edges.

LEADAX BIO BIND

Leadax Bio bind is a welding fluid for seams and for editing details. Leadax only gives a guarantee on Leadax Roov when Leadax Bio bind is used.

LEADAX HIGH-TACK SEALANT

Leadax high-tack is very suitable for connecting Leadax Roov to the substrate. Leadax only gives a guarantee on Leadax Roov when Leadax high-tack is used.

DRAIN DOWN OUTLET

Rainwater outings for draining water on the roof. Made of PVB waste and fire retardant. The drain down outlet is available in ø50, ø63, ø75, ø90, ø110 and ø125.

DRAIN SIDE OUTLET 90˚

Rainwater outings for draining water on the roof to the sides. Available in 60x80 mm and in 100x80 mm.

DRAIN SIDE OUTLET 45˚

Rainwater outings for draining water on the roof to the sides with a 45˚ angle. Available in 60x80 mm and in 100x80 mm .

INNER CORNER 90˚

Inner corner to finish the corners (of a roof) well. The inner corner 90˚, like other Leadax products, is made of PVB waste and is fire-retardant.

OUTER CORNER 90˚

Outside corner to finish the corners (for example of a skylight). The outer corner 90˚, like other Leadax products, is made of PVB waste and is fire-retardant.

OUTER CORNER 45˚

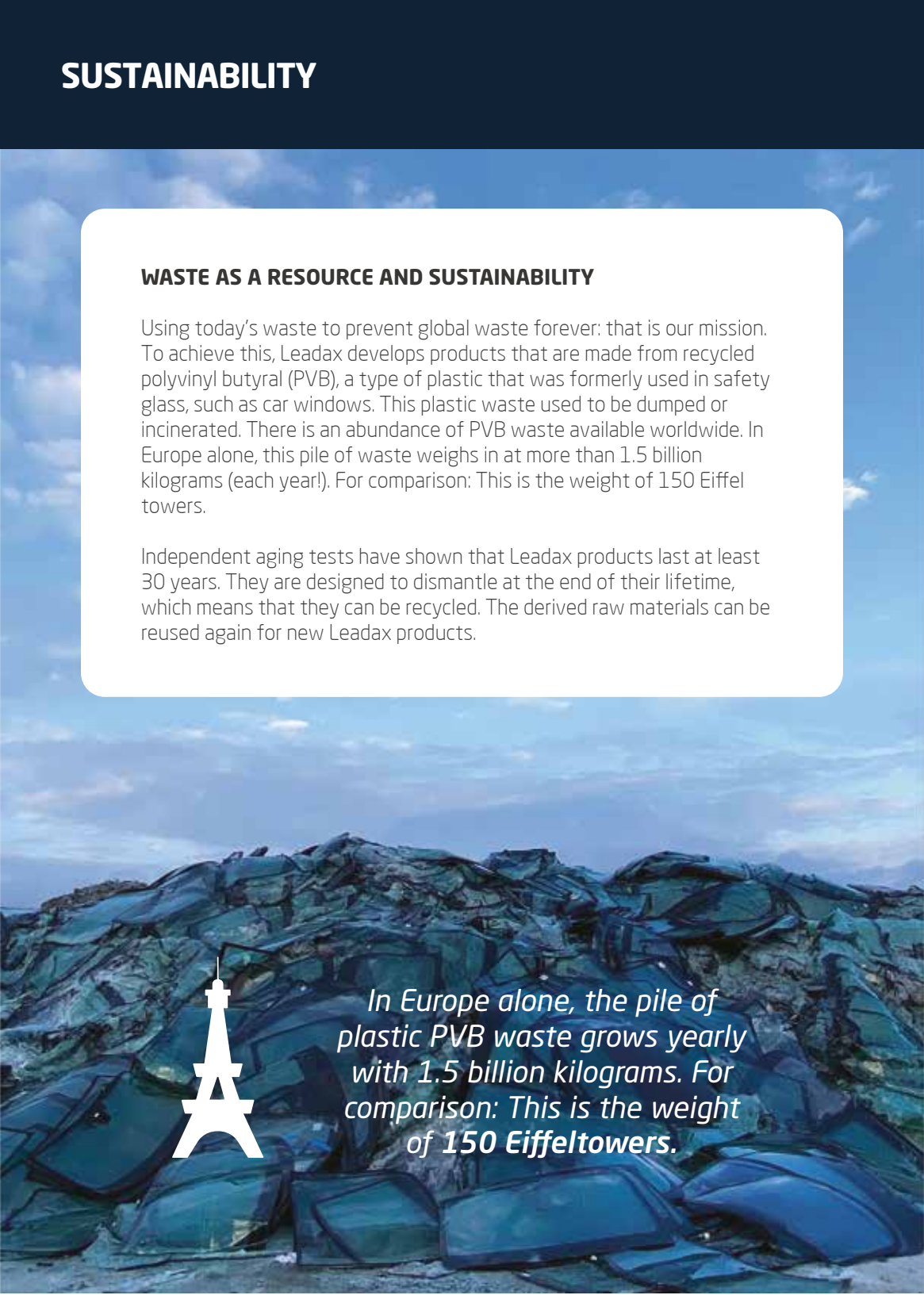
Outside corner to finish the corners with a 45˚ angle (for example of a skylight). The outer corner 45˚, like other Leadax products, is made of PVB waste and is fire-retardant.

SUSTAINABILITY

WASTE AS A RESOURCE AND SUSTAINABILITY

Using today's waste to prevent global waste forever: that is our mission. To achieve this, Leadax develops products that are made from recycled polyvinyl butyral (PVB), a type of plastic that was formerly used in safety glass, such as car windows. This plastic waste used to be dumped or incinerated. There is an abundance of PVB waste available worldwide. In Europe alone, this pile of waste weighs in at more than 1.5 billion kilograms (each year!). For comparison: This is the weight of 150 Eiffel towers.

Independent aging tests have shown that Leadax products last at least 30 years. They are designed to dismantle at the end of their lifetime, which means that they can be recycled. The derived raw materials can be reused again for new Leadax products.



*In Europe alone, the pile of plastic PVB waste grows yearly with 1.5 billion kilograms. For comparison: This is the weight of **150 Eiffeltowers.***

CO2 EMISSIONS

Leadax products have a lower carbon footprint compared to alternatives, because they are made from plastic waste and because other recycled materials are used. The European Green Deal states that Europe should become the first climate neutral continent by 2050. To achieve this, actions must already be taken to work towards this goal. By 2030, the emission of greenhouse gases must be reduced by 55% compared to 1990.

At the same time, a growing population means that more houses need to be build. The construction sector was globally responsible for 38% of energy and process-related CO_2 emissions*. In order to achieve the ambitions of the European Green Deal, it will therefore be necessary to build with more environmentally friendly materials.

With a lower CO_2 footprint, Leadax works environmentally-friendly towards the objectives of the European Green Deal.

Hamilton, I. (UCL) & Rapf, O. (2020). Global Status Report for Buildings and Construction

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