



Elastoseal EPDM is a unique heat-sealable elastomeric membrane, specially designed for loose laid waterproofing on ballasted roofs. With standard hot wedge or hot air machines, you splice membranes, prefabricated pipe connections, skylight collars and corner pieces into a continuous, elastic and durable rubber roofing.



*The Thermobond splice strength matches the strength of the membrane. When elongated in a tensile tester, the membrane will break, not the splice. Elongation at break exceeds 300%.*

Elastoseal EPDM is manufactured by two-ply calendering and vulcanisation to produce an elastic membrane with a tensile elongation in excess of 300%. Vulcanisation involves crosslinking the long carbon chains in the rubber molecules to create a material which, opposed to plastics and bitumen, is elastic as well as thermally and chemically stable.

Elastoseal EPDM contains no environmentally problematic additives such as plasticisers, flame retardants, heat- or UV-stabilisers. No substances that cause allergies or hazards to the environment are released.

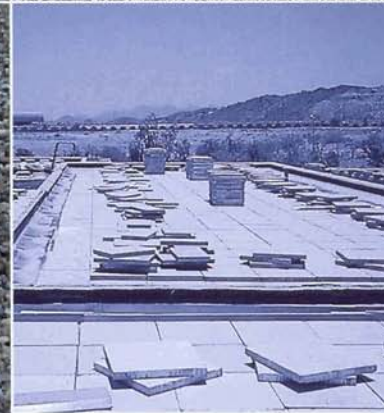
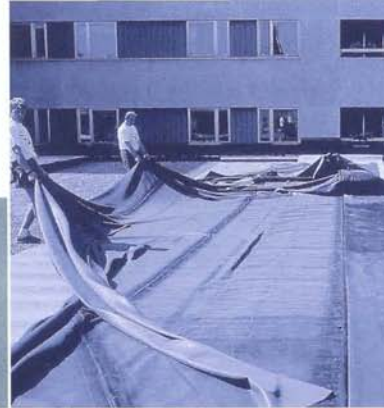
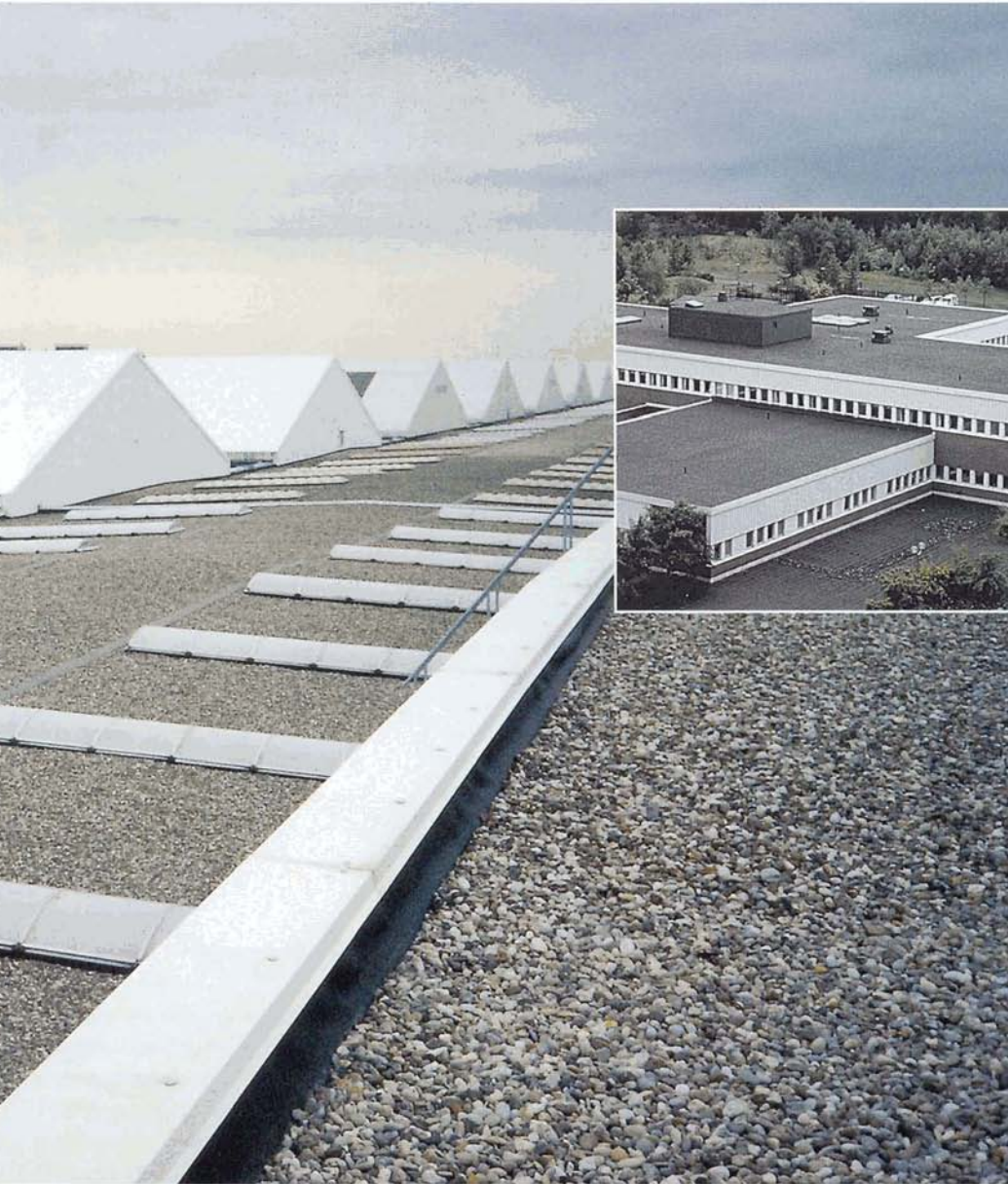
Recycling options are available for membranes reclaimed from the demolition of old constructions.

### **Thermobond splice technology**

Elastoseal EPDM is a fully heat-spliceable membrane. The rubber sheet is treated with a thin layer of a thermoplastic rubber during production. The result is a product which can be easily spliced with hot air all over the surface, as a thermoplastic membrane.

Elastoseal EPDM is the most advanced EPDM roofing system available, providing a safe, reliable, engineered and proven flat roof. The Thermobond heat splice is uncomplicated to perform and, with the Thermobond flashing sheet, there is always a long lasting solution to any details or roof penetrations.





**System approval and certification**  
Elastoseal roofing system is certified and fulfills the requirements of the following:

Austria: ofi Kunststoffinstitut (ÖNORM B 3700); Germany: SP (DIN 7864 Elastomerbahnen, Teil 1) and FLL Root penetration;  
France: Qualiconsult (Certificate 3525/T.7. 87053); Netherlands: BDA Intron (KOMO Attest No. CTG-408/1); Sweden: SITAC (Certificate No 2224/82)

### Some of the benefits of a ballasted Elastoseal roof

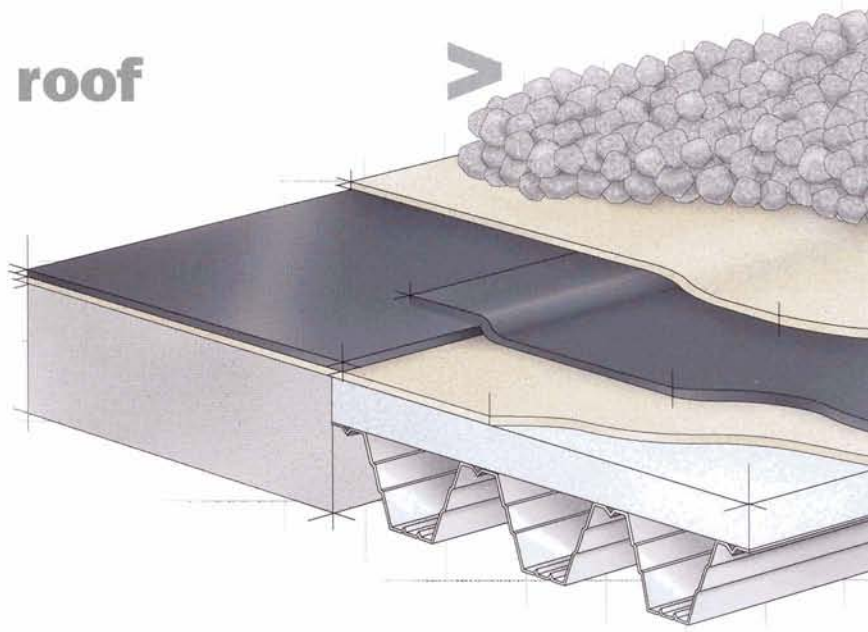
- Fast track installation reduces the total construction time and cost.
- The ballast improves flame-resistance, heat capacity and sound reduction.
- Reduced costs for fasteners.
- Reduced strain on the membrane from heat and UV-radiation, temperature variations and ice movements.
- Aesthetical appearance of roof surface.
- Reduced mechanical impact.

# Gravel ballasted roof

Coarse gravel gives the roof an aesthetically appealing surface and provides resistance to flame spread. The gravel layer reduces rainwater run-off so the capacity of the roof drainage system and consequently the building costs can be reduced. Leaves and litter are caught by the gravel surface so the risk of clogged strainers and roof drains is reduced.

A ballasted roof is the most economical solution for commercial and industrial buildings.

In total, a safer and more reliable roof with increased lifespan and economy.



# Inverted roof

The inverted roof is a variation of the traditional gravel ballasted roof. Vapour-resistant insulation made from extruded polystyrene on top of the membrane provides an additional protection from temperature and mechanical stresses. The insulation panels are installed with overlapping rebated edges.

To stop fines from penetrating into the insulation and membrane layer, a polyester felt is to be installed on top of the insulation.

The uplift forces from rainwater on the insulation panels must be compensated by sufficient gravel thickness.

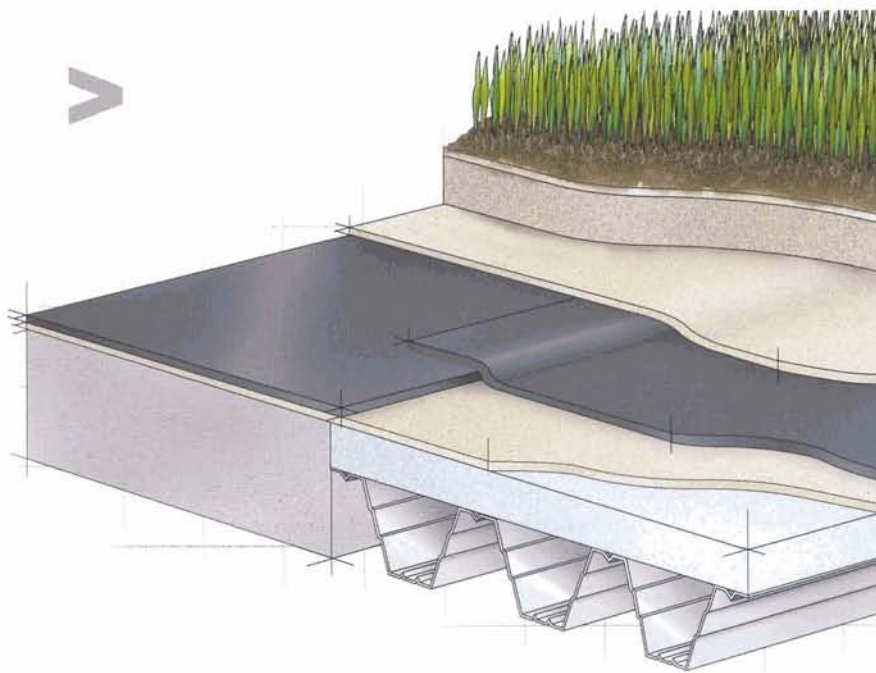
# Green roof

Roofs covered by vegetation offer aesthetic, environmental and economical benefits. The vegetation comprises hardy, short growing, self-renewing species of grass, sedum, heather, bushes and herbaceous plants that can withstand soak and drought during long periods. Care and maintenance is minimal, irrigation is not required.

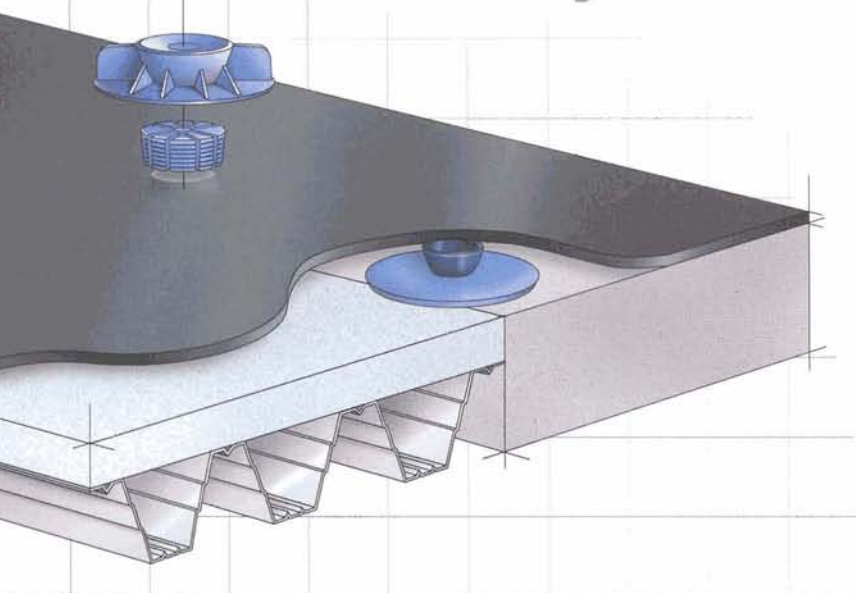
The weight of the cultivation substrate is calculated according to the design wind load and implies a subconstruction that can accommodate the extra weight.

A green roof top offers the following benefits:

- Reduces water run-off, absorbs water and increases evaporation.
- Particles of dust and dirt stick to the leaves and are rinsed down into the cultivation substrate.
- Absorbs noxious exhaust fumes and carbon dioxide, and produces oxygen.
- A living surface in alternating colours, renewed with the seasons.
- Reduces noise in the environment due to a sound absorbant surface.
- The vegetation contributes to energy conservation.



# V Mechanically attached roof



Mechanically attached roofing with non-penetrating fasteners.

This system is specially designed for light weight roofs and for renovation of old roofings. With prefabricated panels it is possible to cover up to 1000 m<sup>2</sup> per day.





## Prefabricated panels

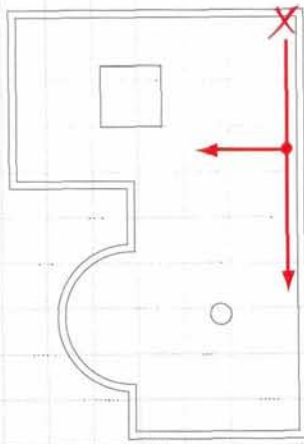
Planning and design of prefabricated panels can save considerable time and money thanks to fast installation, independent of weather conditions.

The panels are tailor made to fit any roof even if the design is irregular and complicated, including connections to piping, skylights, doors and walls. An important aspect of the planning is to specify the size and shape of the panel, the positioning of the delivered package on the roof and the unfolding directions.

The maximum size depends on available handling equipment and the conditions on the building site. Typical maximum weights are in the order of 500 kg, which corresponds to an area of approx. 400 m<sup>2</sup>. The joints between separate panels are heat sealed on the building site.

The panels are delivered folded on a pallet or folded and rolled onto a steel pipe together with instructions on where and how to place the package and how to unfold the membrane.

### Panel position and unfold direction

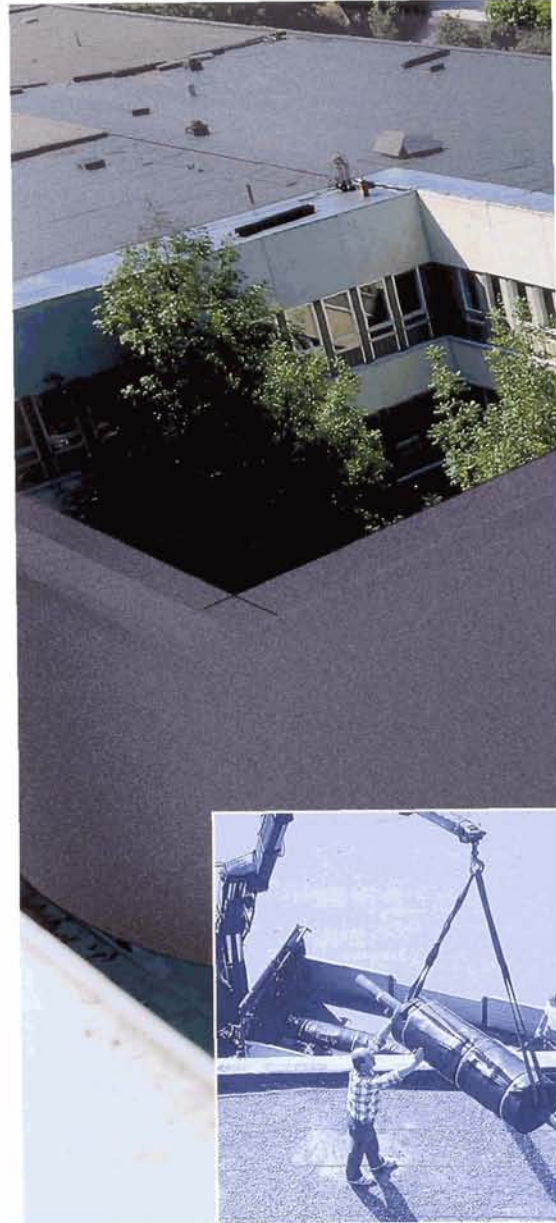


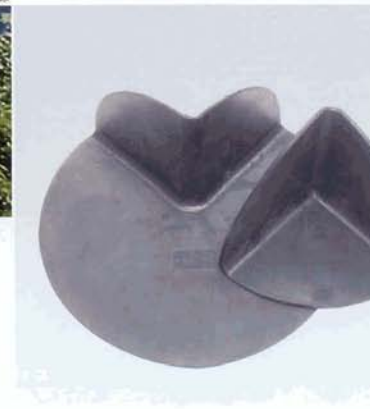
### The smart, fast roof that lasts

*The fully engineered Elastoseal EPDM roof - a panel made to exact roof size, with factory applied boots and collars. Place and unfold the panel according to the instruction sketch on the membrane. Use Thermobond heat applied details to finish the work.*

### Standard size rolls

Elastoseal EPDM can be installed similarly to any traditional single ply membrane. Standard size rolls and accessory details like pipe boots, skylight collars and drains are heat sealed on site to form a continuous EPDM rubber roofing.





### **The details that make the difference**

Elastoseal roofing systems are supplied as complete packages, including compatible accessories, installation instructions and technical supervision. Elastoseal is installed solely by authorised roofing contractors who are responsible for the integrity and performance of the finished roof and who work with full access to Trelleborg Building Systems AB know-how and technical support.

# The Watertight Difference



*Trelleborg has a hundred years history of stability and commitment to quality. Our operations are conducted according to ISO 9001. Products and systems are tested according to applicable standards, supervised by independent laboratories and authorities and certified to local building codes in all the markets where we are active.*

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## Unique rubber membranes

Rubber is elastic, not plastic. Vulcanisation creates a stable cross-linked polymer structure with unsurpassed dimensional stability, elasticity and long term durability. As an operation within one of the global leaders in industrial rubber products, we have access to the most cost effective raw materials as well as leading process technology. Trelleborg Technical Centre is working jointly with universities and technical colleges to further improve our products. Our systems involve patented, very competitive elastomeric materials and splicing techniques.

## Fully engineered systems

30 years of close co-operation with architects, construction engineers and roofing contractors have resulted in complete and reliable solutions comprising rubber membranes, installation methods and compatible accessories. All backed by efficient technical service.

## Focus on the environment

Environmental protection and care comes naturally to a supplier of products that contribute to the conservation of water, as well as the protection of goods and property from water leakage and moisture. Our rubber membranes are chemically stable and contain no problematic additives such as plasticisers, flame retardants, heat- or UV-stabilisers. They do not release any substances that cause allergies or hazards to the environment. Recycling options are available for membranes reclaimed from old installations.

