

Rubberfuse

The best way to a greener future

TPO

IPS Rubberfuse TPO Membrane



waterproofing systems
for roofing

1936

Since 1936, the year it was founded, with its products and water-proofing systems IMPER ITALIA positioned itself as a privileged technical partner in the market. **One of the first companies to develop and make pre-manufactured polymer bitumen membranes** and obtain the Quality and Technical Certification from top Italian and international bodies, IMPER ITALIA is now an acknowledged sector leader.

1995

Always ahead of its time in the mid-1990s, as part of the ambitious project of offering its clients an exhaustive product range capable of solving any waterproofing issue, even under the most critical of conditions, IMPER ITALIA **diversified its production with the development of synthetic membranes made of polyolefin**: initially were only designed for underground use. It presented its new range of synthetic membranes made of a flexible polyolefin with a polypropylene base, the IPS Rubberfuse series. IPS Group were one of the first companies to become system managers of the RUBBERFUSE TPO membrane back in 1995.

2015


IMPER ITALIA became part of the **TECHNONICOL Ltd** industrial group, one of the world's largest manufacturers of waterproofing products, insulating items and bitumen tiles.

Rubberfuse



MANUFACTURING CAPACITY
"SYNTHETIC" 




PRODUCTION
LINES "SYNTHETIC" 



TRAINING CENTER 



RESEARCH AND
DEVELOPMENT CENTRE 



PRODUCTION
SITES 



IPS RUBBERFUSE TPO

ECO FRIENDLY an in-built feature



In the mid-1990s, led by the need to complete its range of waterproofing products and systems, by relying on its extensive knowledge of polypropylene-based polymers already extensively used in components for high-end polymer bitumen membranes, **IMPER ITALIA launched on the market its IPSRUBBERFUSE product range**, synthetic waterproofing membranes made by means of coextrusion of a mix of polypropylene-based elastomerised polyolefins (TPO/FPA).

Generally various acronyms are used on the market to refer to polyolefin membranes, i.e. TPO (Thermoplastic Polyolefin) FPA (Flexible Polypropylene Alloy) FPO (Flexible Polyolefin).

The absence of halogens and the fact that the polymeric chain of IPSRUBBERFUSE membranes only contain carbon and hydrogen is the key to their inborn eco-logical vocation.

The chemical composition of the product, with no plasticizers and halogens, prevents the release of harmful emissions both during production and welding of the membrane on site.

The absence of plasticizers determines the outstanding resistance to ageing, UV rays, atmospheric agents and ensures chemical inertia by making them compatible with any kind of heat-insulating element.

STRONG SUITS



The resistance to wear of the waterproofing membranes determines their foreseeable operating life.

Due to the quality of the compounds in their formulas, the **IPS RUBBERFUSE series** waterproofing membranes ensure outstanding physical and mechanical features that guarantee long-term resistance to atmospheric agents and can absorb stress generated by the roofing even under the most challenging circumstances without reporting any damage.

BENEFITS

ENVIRONMENTALLY FRIENDLY

The roofing solutions with IPS RUBBERFUSE membranes help earn **LEED credits**.

COST-EFFECTIVE

Very competitive roofing solutions from an economic point of view compared with traditional systems.

DURABILITY

Exceptional **resistance to atmospheric agents and ageing** (BBA Agrément Certificate and a 40-year life expectancy).

VERSATILITY

Thanks to the chemical inertia and the absence of plasticizers results in **compatibility with any thermal insulation element** (EPS - XPS - PUR - PIR - Mineral wool, etc.), which means that in any case no separation layers are required.

LIGHTNESS

Ideal for roofing systems that require roofing packages with a limited weight (aeric mass 0,90 kg/sqm per mm of thickness). When used for retrofit projects, avoids adding weight to the roof. **In the event of disposal, the reduced weight will result in low costs.**

GUARANTEED

Solutions that can be guaranteed even with a thinner membrane.

VERSATILITY OF THE MEMBRANES

Can be **applied at both low and high temperatures.**



BENEFITS

● SAFETY ON SITE

Protection for workers' health. The IPS RUBBERFUSE membranes do not release harmful smoke/gases during production and welding of the membrane on site. No naked flames or equipment with flammable or explosive content are required to apply them, just automatic or manual hot air welding machines.

● EASY INSTALLATION

The IPS RUBBERFUSE membranes bring together the best features of synthetic EPDM membranes (exceptional physical and mechanical properties, along with excellent durability). This ensures **materials whose phenomenal properties are maintained for more than 40 years, whilst being easy to seal and repair in the event of accidental damage in future.**

● FAST EXECUTION

The size of the sheets, together with the application methods employed, allow for a **far higher daily output on site compared with traditional systems.**



ENERGY SAVINGS

LEED CREDITS

Member of GBC Council Italy



- A member of the **GBC Council Italy**, a body designed to promote and develop the culture of sustainability and environmental impact awareness in the Italian construction industry. With its IPS RUBBERFUSE membranes, **IMPER ITALIA wanted to develop a range of waterproofing products that can provide a decisive contribution to earning LEED credits** (Leadership in Energy and Environmental Design).

Sustainability and environmental impact

- IMPER ITALIA's commitment to sustainability and a low environmental impact** permeates the whole lifecycle of the IPS RUBBERFUSE waterproof membranes.

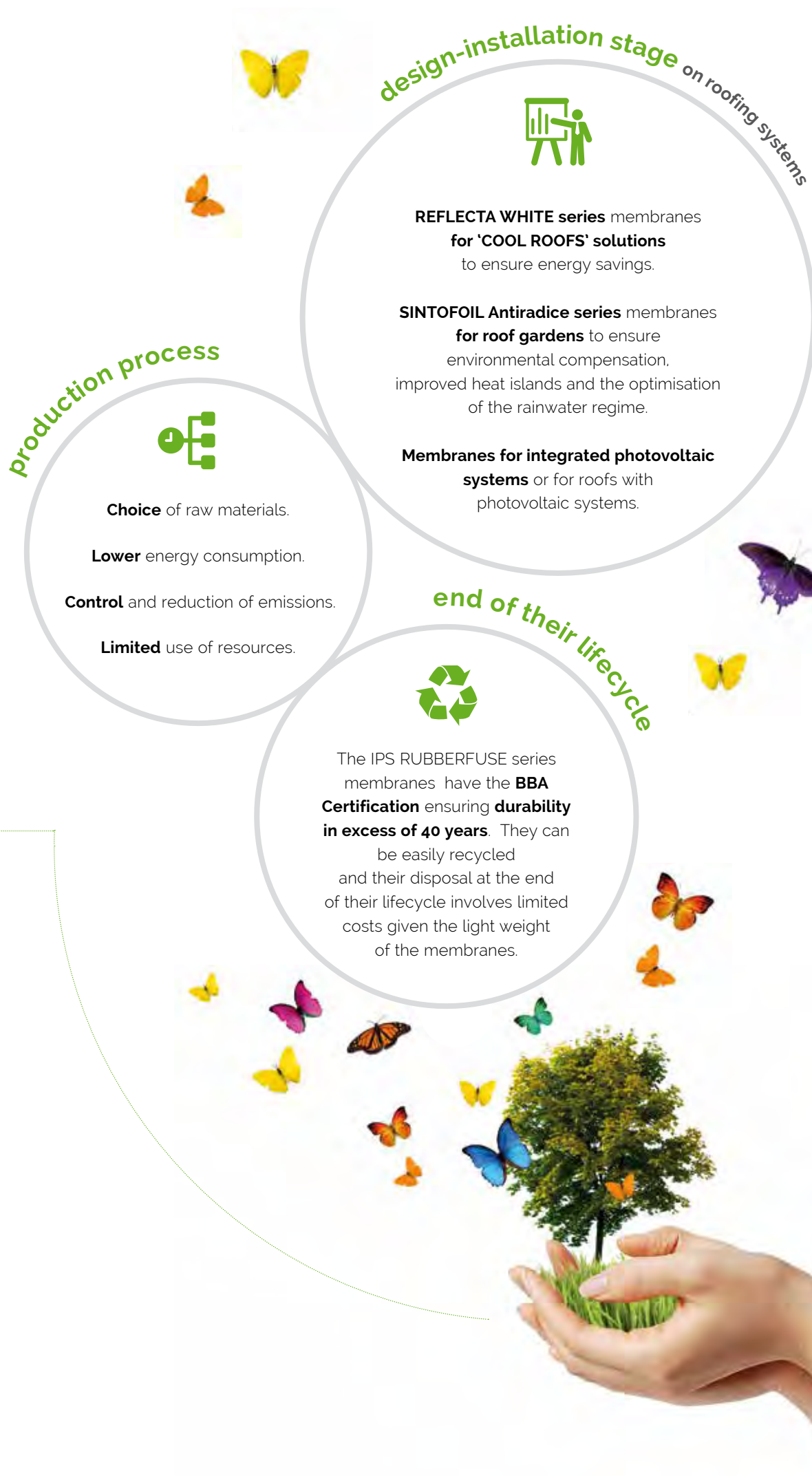
Environmental Product Declaration

- The IPS RUBBERFUSE membranes have the Environmental Product Declaration (EPD)** defined by **ISO 14025** as a document containing the criteria to measure the environmental performance of a product with parameters calculated according to the Life Cycle Assessment (LCA) method, **based on the standards of the ISO 14040 series**.



ISO 9001
ISO 14001
OHSAS 18001
BUREAU VERITAS
Certification





ENVIRONMENTALLY SUSTAINABLE ROOFING SYSTEMS



Solutions

The IPS RUBBERFUSE TPO membranes are at the basis of the roofing systems developed by IMPER ITALIA, which have been designed strictly in line with the Green Building philosophy.

When speaking of waterproofing roofs, one should actually refer to waterproofing systems rather than the individual waterproofing layer. The effectiveness of the waterproof coating is indeed guaranteed by a set of compatible primary and secondary layers that are applied in the right sequence and forming an integral part of the system.

GREEN ROOF SYSTEMS



SYSTEMS FOR COOL ROOFS



ROOFING SOLUTIONS AND PHOTOVOLTAIC SYSTEMS

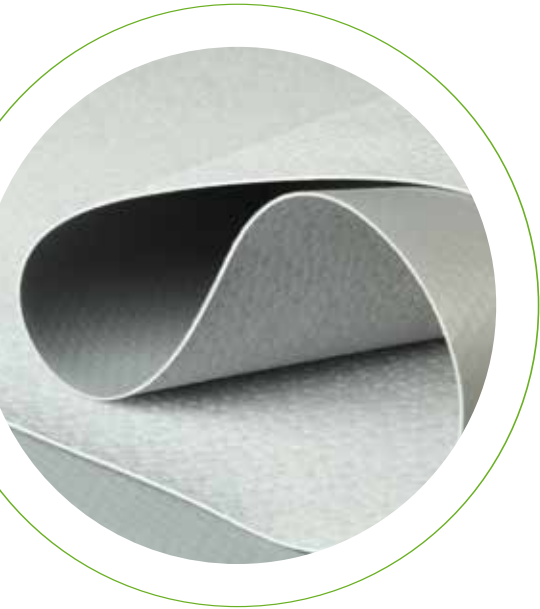


SOLUTIONS

GREEN ROOF & ATTENUATION SYSTEMS

Active
BLUE

leicht entwässern. **sita** 



● The **IPS RUBBERFUSE TPO membranes** are certified to counter **roots** according to the latest regulations and they provide a watertight protection in accordance with UNI EN 11935 for IMPER ITALIA roof garden systems. IPS can also design and supply the Active Blue - Blue roof attenuation system. Please phone for more details or visit our dedicated website: www.activeblue.co.uk.

IMPER ITALIA roof garden systems THE NATURALLY GREEN ROOFING SOLUTIONS

USABILITY of the roofing.

GREATER ARCHITECTURAL VALUE of the building.

LESS NOISE POLLUTION.

REDUCTION of the urban heat island effect.

Smog **ABSORPTION.**

GREATER THERMAL INSULATION (lower energy consumption).

Optimisation of the hydraulic **REGIME** (rainwater drainage).

GREATER DURABILITY of the roofing.



SYSTEMS FOR COOL ROOFS



TO MITIGATE THE EFFECT OF HEAT ISLANDS AND HELP SAVE ENERGY

Together with efficient thermal insulation, the use of high reflectance and emissivity membranes, like the **IPS RUBBERFUSE REFLECTA WHITE series with a 102% SRI**, ensures a lower surface temperature of the roofing with decisive effects on thermal comfort and energy savings for internal air conditioning.

25-30°C	30-40°C	40-60°C
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Source:

Dalla cartografia storica al telerilevamento:
La città di Roma.

By the Italian National Research Council.

ROOFING SOLUTIONS AND PHOTOVOLTAIC SYSTEMS



The **IPS RUBBERFUSE TPO membranes** are the elements providing watertight protection in **ELIO PV Rail** and **BIPVco thin film integrated photovoltaic systems**.

IPS have developed a heat-weldable, non penetrating **ELIO rail** system for traditional crystalline PV installations. Fully wind tested and offering a quick installation and fully warranted solution.

IPS in partnership with **BIPVco**, are also able to offer a fully integrated, light weight thin film **CIGS PV** solution.

The increasing use of photovoltaic systems on roofs also involved greater attention on roofing packages and their fire resistance. To meet growing demand, **IMPER ITALIA** developed specific product ranges to ensure **certified roofing solutions in accordance with BROOF t1 t2 t3 & t4 standards**.

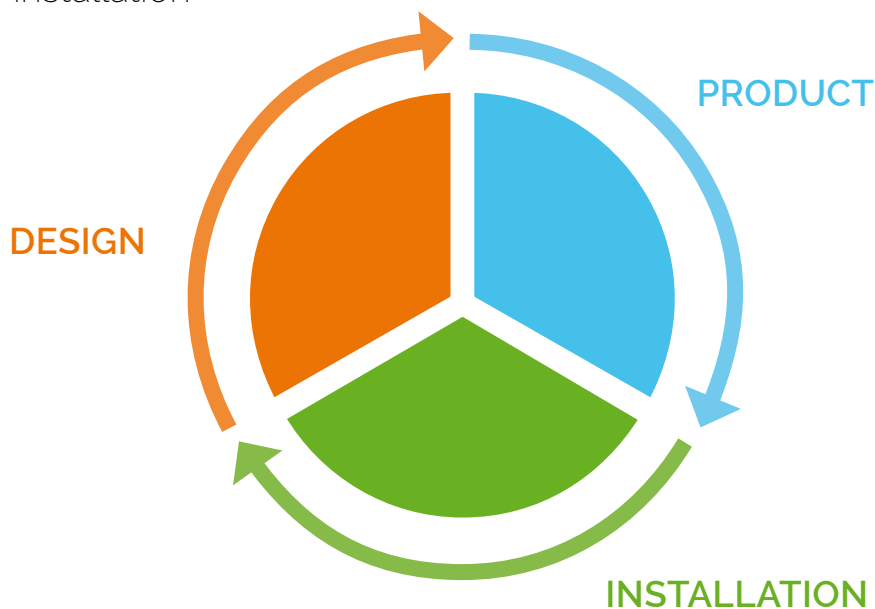


A PERFECT ROOFING SYSTEM

Main factors

● A perfect roofing system is the result of the combination of three fundamental factors that all require the same attention:

- product
- design
- installation



PRODUCT



To ensure an efficient roofing system, quality products made with the best raw materials and cutting-edge technology are essential, though it must also be suitable for its use and purpose from a technical point of view.

This is why IMPER ITALIA always devoted the utmost care to choosing raw materials and making compounds that can ensure membranes the requested features for the specific use.

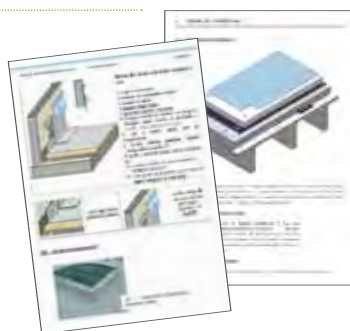


● The production cycles and also the membranes obtained a number of Italian and international certifications.

DESIGN



In its over 80 years of business in the specific roofing waterproofing sector and with the experience acquired in thousands of projects in Italy and abroad, IMPER ITALIA developed products and systems that can guarantee watertightness also in complex and challenging structures. Our technical staff provides guidance for clients to choose the best solutions and provide instructions and detailed designs, whilst applying our tailor-made approach for every single project.



Our technical department, consisting of expert professionals with extensive experience in the field, can provide support for our Client for:

- Technical instructions;
- Detailed drawings;
- Temperature and humidity assessments;
- Support to calculate wind uplift.

INSTALLATION



Our IPS RUBBERFUSE polyolefin synthetic membranes are only applied by authorised installers who have successfully completed the training course.

For design engineers we also hold workshops about waterproofing issues to further examine specific technical topics.

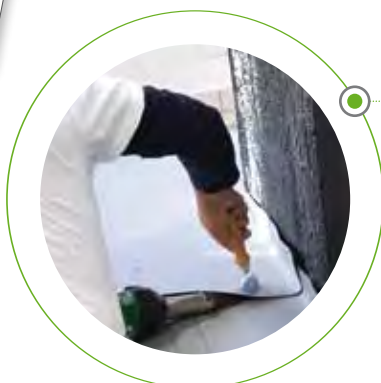
TRAINING & MEETING CENTRE

Every year at our Training and Meeting Centre in Mappano we hold more than 50 courses to specialise in the installation of synthetic membranes and a number of workshops for technicians and design engineers. To date, our Training Centre attracted 2,500 participants.



INSTALLATION MANUAL

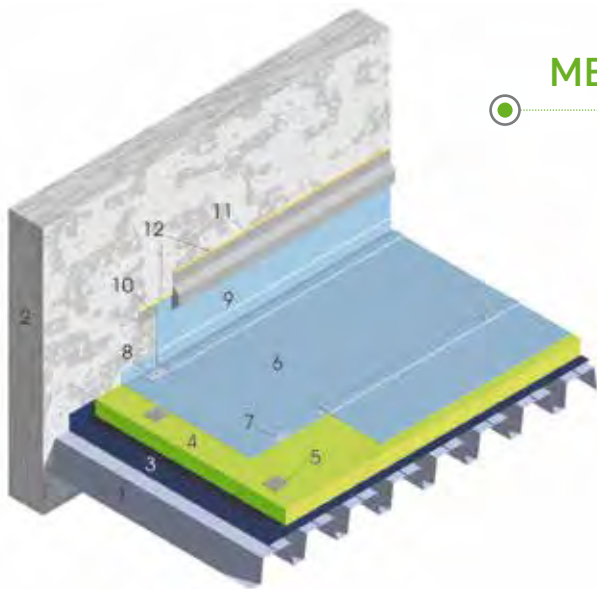
The Installation Manual provided at the end of each course is a valid reference to apply the synthetic waterproofing membranes correctly.



ON-SITE SUPPORT

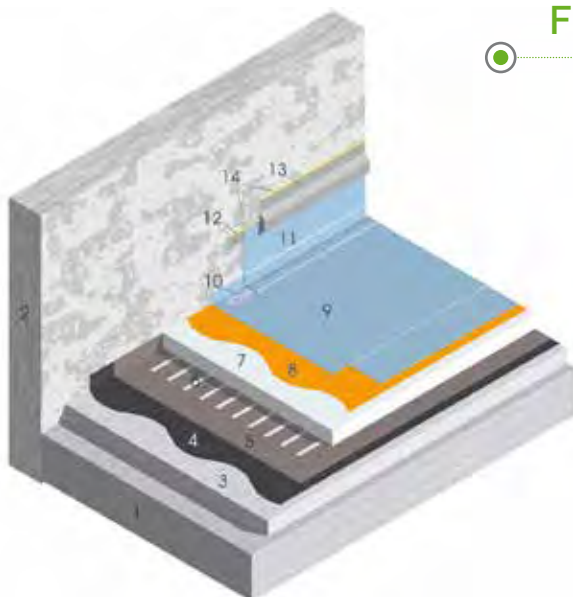
Upon request from the client, IPS Group technicians are available to provide on-site support. All participants of the specialisation course are always offered the presence of a technician when they start their first waterproofing project.

ROOFING SOLUTIONS WITH EXPOSED LAYER



MECHANICAL FIX

- METAL DECK **1**
- VERTICAL WALL **2**
- POLYETHYLENE VAPOUR BARRIER **3**
- THERMAL INSULATION **4**
- THERMAL INSULATING FIXING **5**
- RUBBERFUSE TPO MEMBRANE** **6**
- WATERPROOF MEMBRANE FIXING **7**
- MECHANICAL FIXING WITH PRE-DRILLED BAR **8**
- RUBBERFUSE TPO MEMBRANE** **9**
- FIXING PROFILE **10**
- PROTECTION FLASHING **11**
- ELASTOMERIC SEALANT **12**



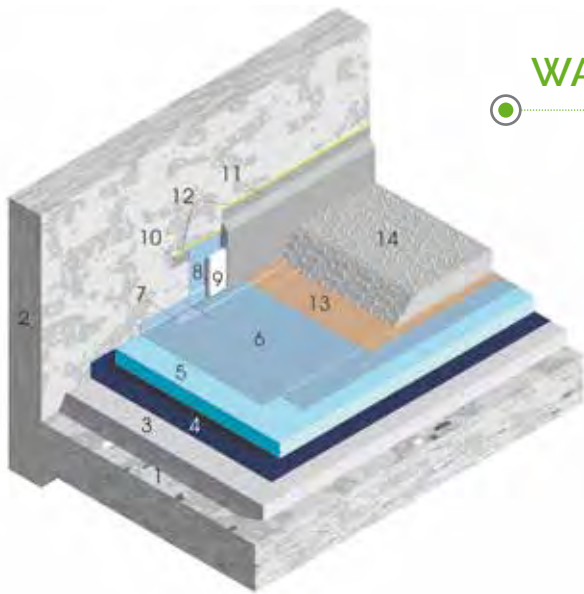
FULL ADHERED

- CONCRETE DECK **1**
- VERTICAL WALL **2**
- SLOPE **3**
- BITUMINOUS PRIMER **4**
- VAPOUR BARRIER BITUMEN MEMBRANE **5**
- THERMAL INSULATION ADHESIVE **6**
- THERMAL INSULATION **7**
- POLYURETHANE ADHESIVE **8**
- RUBBERFUSE TPO MEMBRANE** **9**
- WATERPROOF MEMBRANE FIXING **10**
- RUBBERFUSE TPO MEMBRANE** **11**
- FIXING PROFILE **12**
- PROTECTION FLASHING **13**
- ELASTOMERIC SEALANT **14**

ROOFING SOLUTIONS WITH PROTECTED LAYER

Ballasted system not suitable for foot and vehicular traffic

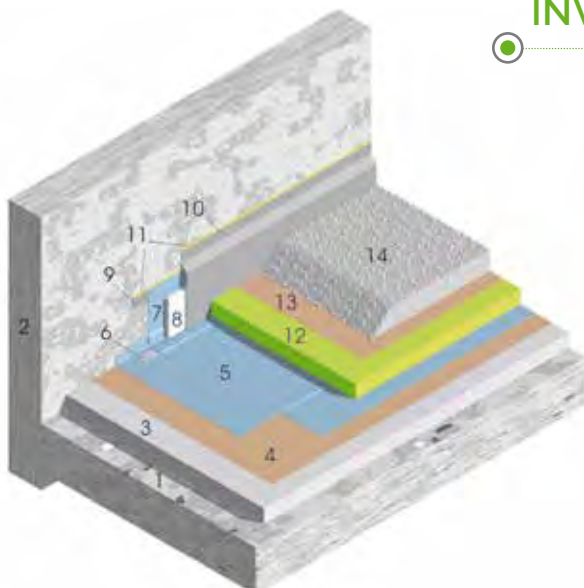
WARM ROOF



- CONCRETE DECK 1
- VERTICAL WALL 2
- SLOPE 3
- POLYETHYLENE VAPOUR BARRIER 4
- THERMAL INSULATION 5
- RUBBERFUSE TPO MEMBRANE 6**
- MECHANICAL FIXING WITH PRE-DRILLED BAR 7
- RUBBERFUSE TPO MEMBRANE 8**
- PROTECTION PANEL 9
- FIXING PROFILE 10
- PROTECTION FLASHING 11
- ELASTOMERIC SEALANT 12
- GEOTEXTILE 13
- GRAVEL BALLAST 14

Ballasted system not suitable for foot and vehicular traffic

INVERTED ROOF

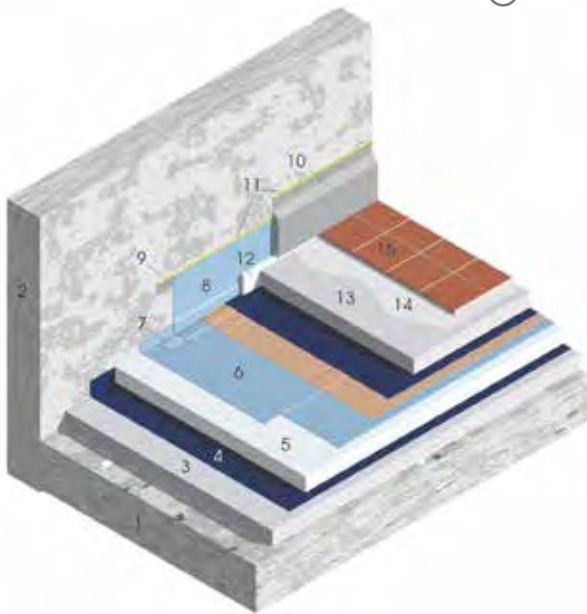


- CONCRETE DECK 1
- VERTICAL WALL 2
- SLOPE 3
- GEOTEXTILE 4
- RUBBERFUSE TPO MEMBRANE 5**
- MECHANICAL FIXING WITH PRE-DRILLED BAR 6
- RUBBERFUSE TPO MEMBRANE 7**
- PROTECTION PANEL 8
- FIXING PROFILE 9
- PROTECTION FLASHING 10
- ELASTOMERIC SEALANT 11
- THERMAL INSULATION 12
- GEOTEXTILE 13
- GRAVEL BALLAST 14

ROOFING SOLUTIONS WITH PROTECTED LAYER

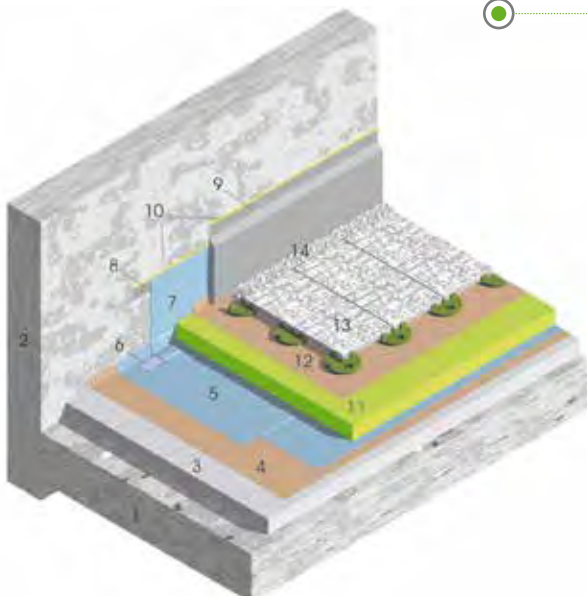
Ballasted system suitable for foot traffic

WARM ROOF



- CONCRETE DECK **1**
- VERTICAL WALL **2**
- SLOPE **3**
- POLYETHYLENE VAPOUR BARRIER **4**
- THERMAL INSULATION **5**
- RUBBERFUSE TPO MEMBRANE** **6**
- MECHANICAL FIXING WITH PRE-DRILLED BAR **7**
- RUBBERFUSE TPO MEMBRANE** **8**
- FIXING PROFILE **9**
- PROTECTION FLASHING **10**
- ELASTOMERIC SEALANT **11**
- PROTECTION PANEL **12**
- PROTECTION SLAB **13**
- CEMENT GLUE **14**
- TILE **15**

INVERTED ROOF

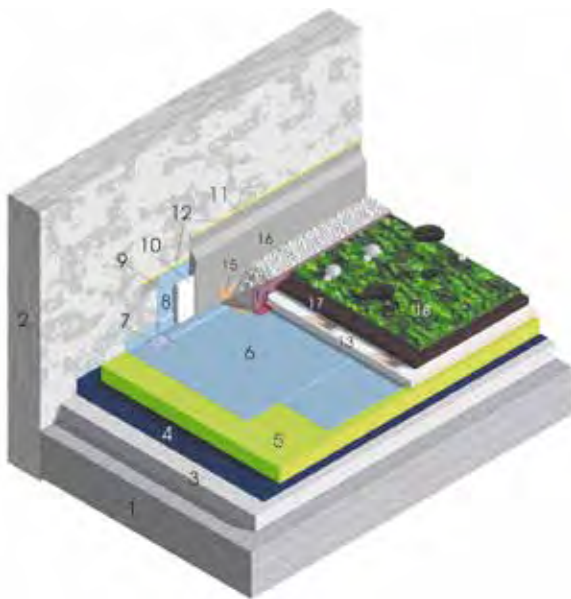


- CONCRETE DECK **1**
- VERTICAL WALL **2**
- SLOPE **3**
- GEOTEXTILE **4**
- RUBBERFUSE TPO MEMBRANE** **5**
- MECHANICAL FIXING WITH PRE-DRILLED BAR **6**
- RUBBERFUSE TPO MEMBRANE** **7**
- FIXING PROFILE **8**
- PROTECTION FLASHING **9**
- ELASTOMERIC SEALANT **10**
- THERMAL INSULATION **11**
- GEOTEXTILE **12**
- FLOATING FLOOR **13**
- GRAVEL **14**

ROOFING SOLUTIONS WITH PROTECTED LAYER

Green Roof System

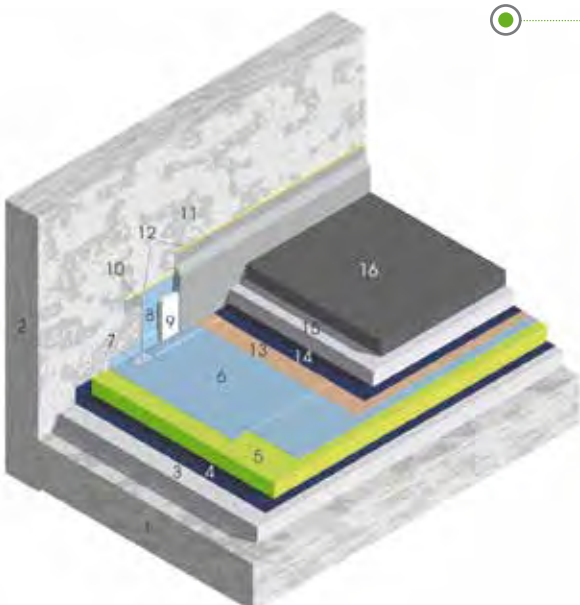
WARM ROOF



- CONCRETE DECK 1
- VERTICAL WALL 2
- SLOPE 3
- POLYETHYLENE VAPOUR BARRIER 4
- THERMAL INSULATION 5
- RUBBERFUSE TPO MEMBRANE 6**
- MECHANICAL FIXING WITH PRE-DRILLED BAR 7
- RUBBERFUSE TPO MEMBRANE 8**
- FIXING PROFILE 9
- PROTECTION PANEL 10
- PROTECTION FLASHING 11
- ELASTOMERIC SEALANT 12
- DRAINAGE, FILTER AND IDRIC RETENTION WATER 13
- BACK-UP 14
- GEOTEXTILE 15
- GRAVEL 16
- SOIL 17
- VEGETATION 18

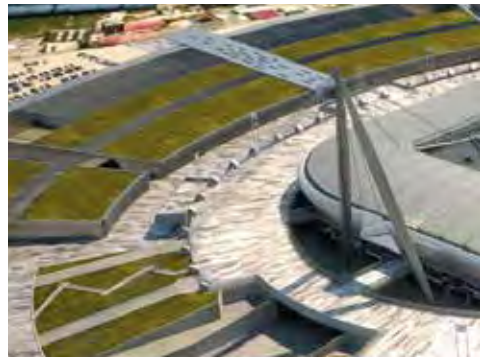
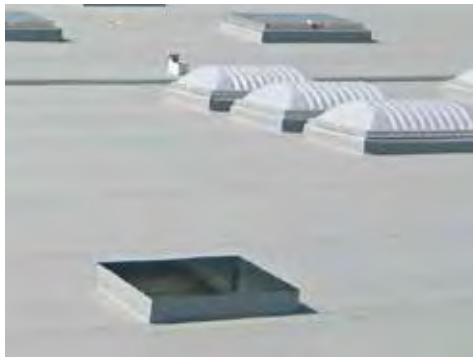
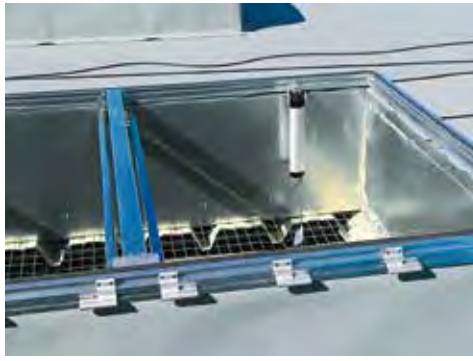
Ballasted system suitable for vehicular traffic

INVERTED ROOF



- CONCRETE DECK 1
- VERTICAL WALL 2
- SLOPE 3
- POLYETHYLENE VAPOUR BARRIER 4
- THERMAL INSULATION 5
- RUBBERFUSE TPO MEMBRANE 6**
- MECHANICAL FIXING WITH PRE-DRILLED BAR 7
- RUBBERFUSE TPO MEMBRANE 8**
- PROTECTION PANEL 9
- FIXING PROFILE 10
- PROTECTION FLASHING 11
- ELASTOMERIC SEALANT 12
- GEOTEXTILE 13
- POLYETHYLENE FILM 14
- PROTECTION SLAB 15
- ASPHALT BINDER 16

REFERENCES





PRODUCT	EXPOSED ROOFING		BALLASTED ROOFING	WALK-ON ROOFING	ROOF GARDEN SYSTEMS	DETAILS OF FITTINGS
	INSTALLATION WITH MECHANICAL FASTENING	FULL INSTALLATION BONDING				
RUBBERFUSE RG	●		●	●	●	
RUBBERFUSE RG FB		●	●		●	
RUBBERFUSE FB		●	●		●	
RUBBERFUSE RT	●					
RUBBERFUSE RT FB	●					
RUBBERFUSE RC	●					
RUBBERFUSE ST	●			●		●



Agrément Certificate
97/3422



Rubberfuse

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Catterick Garrison, North Yorkshire
DL9 4QJ