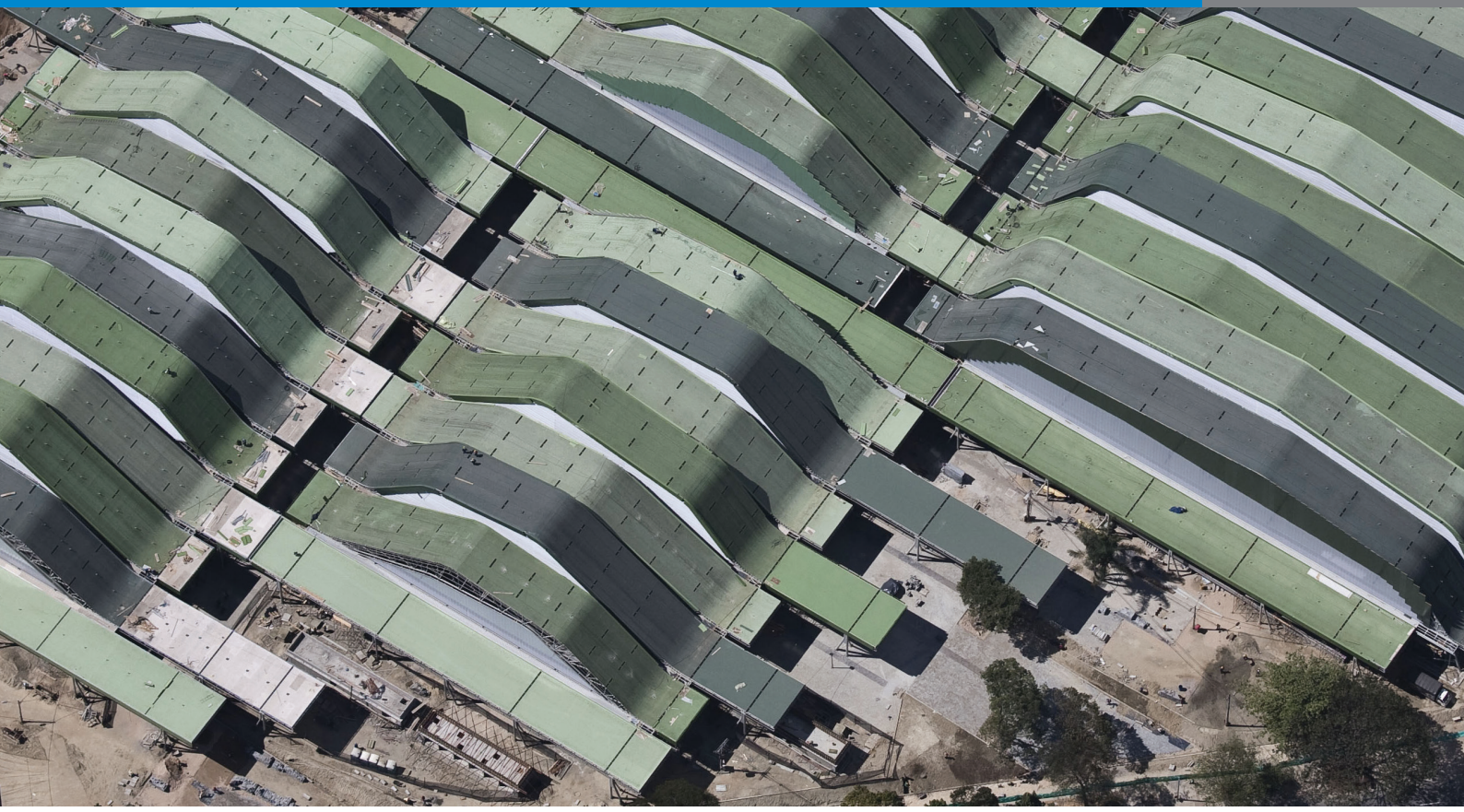
WATERPROOFING

ROOFS

FLAGON PVC

SYNTHETIC WATERPROOFING

PVC SINGLE-PLY WATERPROOFING MEMBRANES



SOPREMA®

Apartment Development
KIRRIBILLI, NSW

FLAGON PVC

SOPREMA offers a wide variety of PVC single-ply waterproofing membranes for roofing, civil engineering, and swimming pools.

FLAGON PVC waterproofing membranes represent a new generation of synthetic waterproofing solutions based on innovative formulations. FLAGON development is built on more than 50 years of extensive synthetic membrane manufacturing experience and industry leading technologies.

HIGH PERFORMANCE VERSATILITY

Modern architecture requires high performance materials and solutions, providing durable results in terms of functionality, profitability, and attractiveness. To meet these requirements, SOPREMA has developed a unique range of PVC waterproofing membranes. These modern and reliable systems provide users with many benefits.

FLAGON PVC waterproofing systems are suitable for both new build and refurbishment projects. The product line offers systems for fully adhered, loose laid and mechanically fixed applications.

TESTING AND APPROVALS

FLAGON PVC waterproofing comply with Australia's AS 4654 Standard and are BBA certified.

SOPREMA's PVC membranes are manufactured according to the principles of sustainable construction, respecting the environment, human resources and the economy. During the manufacturing process, rainwater is collected and used to cool machinery, then recirculated through a closed circuit, avoiding any risk of environmental pollution.

FLAGON PVC systems are the perfect solution for quick and easy installation on large scale commercial projects that demand flexibility and excellent dimensional stability.

FLAGON PVC systems are particularly suited to roofing applications such as stadiums, supermarkets, distribution centres, production facilities, and complex profile designs.

UNRESTRICTED DESIGN

The FLAGON PVC range offers completely unrestricted design due to its ability to adapt to even the most complex structures and design profiles.

FLAT ROOF

Lightweight, reinforced synthetic membrane systems developed for flat and mono-pitch roofs.

COMPLEX PROFILES

Decorative, reinforced synthetic waterproofing systems for complex profiles and facades.

CURVED STRUCTURES

Flexible, reinforced synthetic waterproofing systems for curved, barrel and wave form roofs.

The PVC membranes in the FLAGON range can be ordered in any RAL colour to suit specific aesthetic design requirements. Standing seam profiles can also be incorporated into the system in order to provide the aesthetic finish of a traditional metal roof. The versatility and performance benefits that the FLAGON PVC systems offer have resulted in these products becoming increasingly popular for many high profile projects.

COPPER ART

SILVER ART

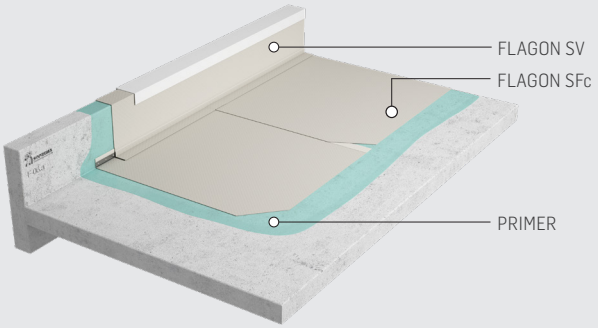
SOPREMA's **PVC** ROOFING SYSTEMS

FULLY ADHERED

Exposed roof | Non-trafficable

On the main surface, FLAGON SFC membranes are fully-adhered to the substrate with FLEXOCOL A89 adhesive. The membranes are then fastened around the perimeter of the roof with metal bars. On the upstands, FLAGON SV membranes are heat-welded on metal strips mechanically fastened onto the substrate.

This is a fast and cost effective way to waterproof an exposed roof.

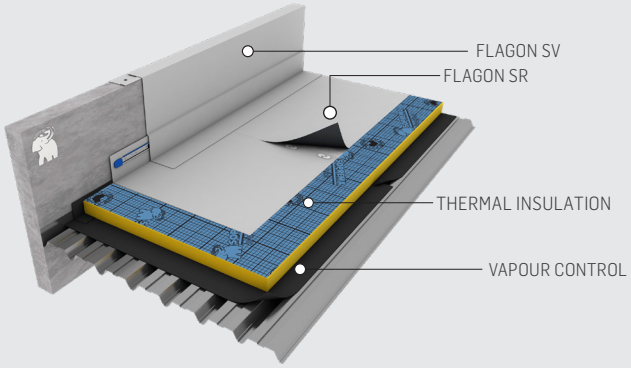


MECHANICALLY FASTENED

Exposed roof | Non-trafficable

On the main surface, FLAGON SR membranes are mechanically fastened onto the substrate and also around the perimeter of the roof with metal bars. On the upstands, FLAGON SV membranes are heat-welded on metal strips mechanically fastened onto the substrate.

The insulation and vapour control layer are optional.

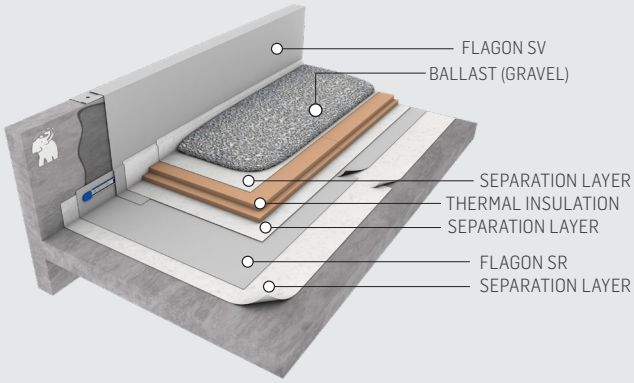


BALLASTED

Protected roof | Non-trafficable

On the main surface, FLAGON SR membranes are loosely laid and the overlaps are heat-welded. The membranes are fastened around the perimeter of the roof with metal bars. On the upstands, FLAGON SV membranes are heat-welded on metal strips mechanically fastened onto the substrate.

The waterproofing system is protected from weathering and UV.



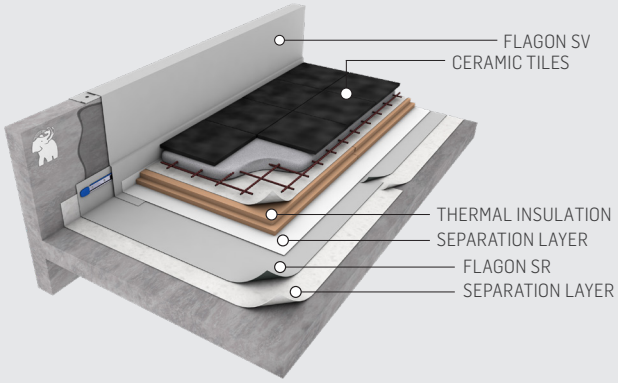
* A separation layer is not required between the membrane and the insulation when using an insulation board with an aluminum foil surface such as SOPRA-ISO BLUE. It is also not required for cold-roof system where the FLAGON SR membranes are directly fixed onto the concrete or metal deck.

PAVED (TILES)

Protected roof | Trafficable

On the main surface, FLAGON SR membranes are loosely laid and the overlaps are heat-welded. The membranes are fastened around the perimeter of the roof with metal bars. On the upstands, FLAGON SV membranes are heat-welded on metal strips mechanically fastened onto the substrate.

Designed for areas with heavy pedestrian traffic, the waterproofing system is protected with the mortar and ceramic tiles.

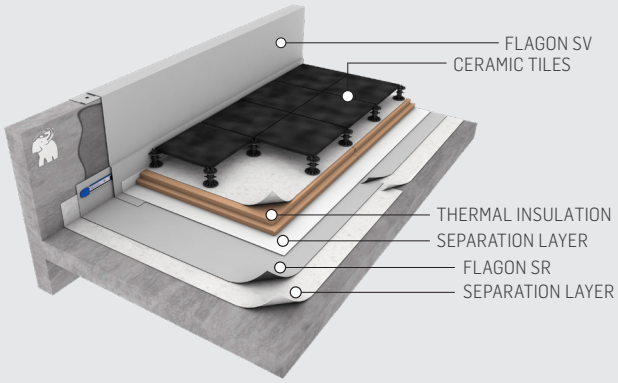


PAVED (PAVERS)

Protected roof | Trafficable

On the main surface, FLAGON SR membranes are loosely laid and the overlaps are heat-welded. The membranes are fastened around the perimeter of the roof with metal bars. On the upstands, FLAGON SV membranes are heat-weldedon metal strips mechanically fastened onto the substrate.

Designed for areas with heavy pedestrian traffic, the waterproofing system is protected with paving slabs. The pedestal pavers allows continuous and effortless adjustments and leveling of slabs.

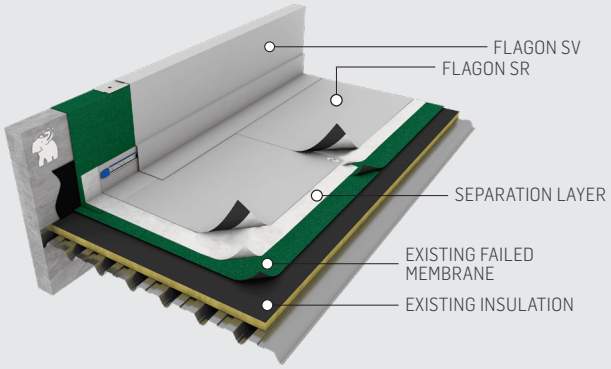


RECOVERY

Exposed roof | Non-trafficable

On the main surface, FLAGON SR membranes are mechanically fastened onto the substrate and also around the perimeter of the roof with metal bars. On the upstands, FLAGON SV membranes are heat-welded on metal strips mechanically fastened onto the substrate.

Ideal for refurbishment projects, where an existing roofing system is failing or has reached its service life. A cost effective solution, as there is no need to remove and dispose of the existing waterproofing system.



RETHINK ROOFING

TRANSFORMING ROOFTOPS INTO **PRODUCTIVE SPACES**

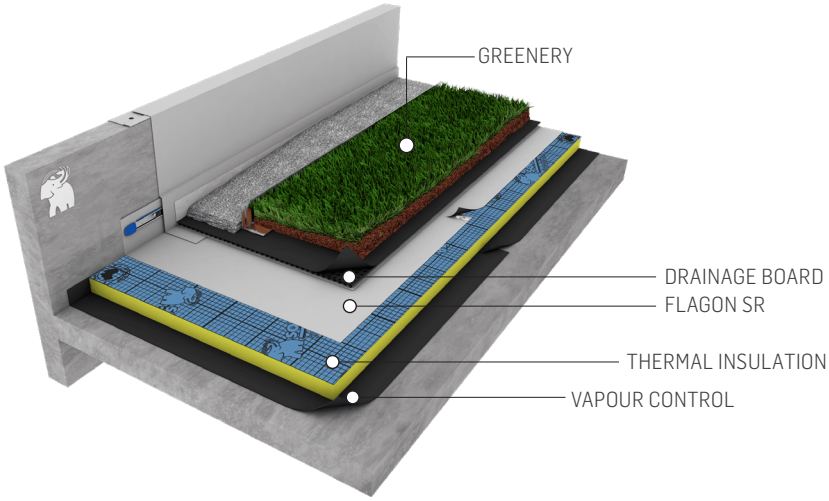
GREEN ROOF SYSTEMS

FUNCTIONAL SPACE ON THE ROOF THAT CAN TAKE THE FORM OF A GARDEN

Green roofs are partially or completely covered with vegetation and a growing medium, installed over a SOPREMA waterproofing system. They are the perfect way to create a more functional space, turning what would otherwise be a wasted area into a useful space promoting biodiversity.

Green roofs offer a wide variety of social, economic and environmental benefits to buildings owners and communities. In addition to replacing mineral surfaces with permeable and living surfaces within the properties, they compensate for the loss of ecosystem services caused by urban development.

- OPTIMISE THE USE OF AVAILABLE SPACE
- IMPROVE STORMWATER MANAGEMENT
- REDUCE AIR POLLUTION
- EXTEND THE LIFE OF THE ROOF MEMBRANE



BLUE ROOF SYSTEMS

REDUCE THE RISK OF FLOODING AND MANAGE STORM WATER

There are numerous reasons to opt for a blue roof. Blue roofs temporarily store rainwater to then gradually release it, significantly reducing the risk of flooding in areas with few permeable surfaces. Blue roofs can also harvest rainwater for indoor use and help manage storm water runoff. They are also able to cool buildings, and even serve recreational purposes such as swimming pools.

- OPTIMISE THE USE OF AVAILABLE SPACE
- IMPROVE STORMWATER MANAGEMENT AND SIGNIFICANTLY REDUCE THE RISK OF FLOODING
- HARVEST RAINWATER FOR INDOOR USE

SOLAR SYSTEMS

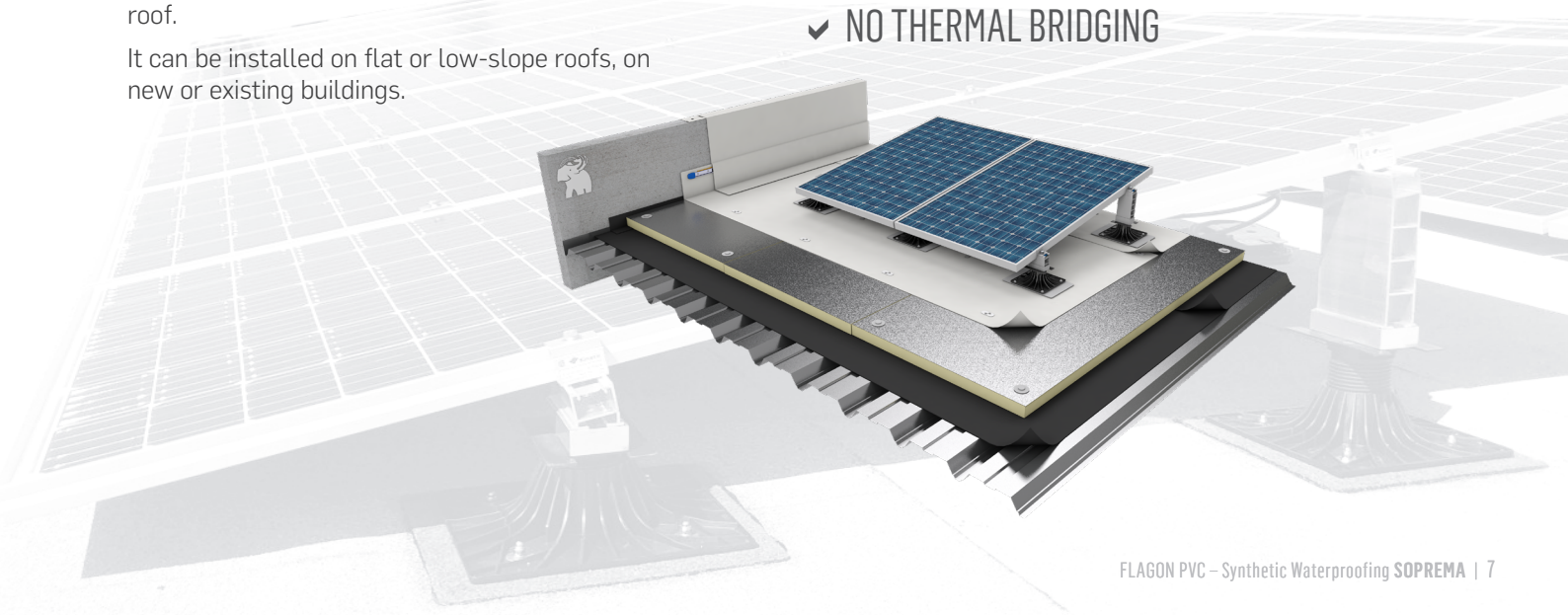
PHOTOVOLTAIC PANEL SUPPORTS THAT MAINTAIN THE WATERPROOFING PROPERTIES OF THE ROOF

The SOPRASOLAR FIX EVO PVC system is used as a support for photovoltaic panels on roofs.

It makes it possible to link the panel and the PVC membrane without piercing it, which could compromise the waterproofing system of the roof.

It can be installed on flat or low-slope roofs, on new or existing buildings.

- INTACT WATERPROOFING
- NO BALLAST REQUIRED
- READY-TO-INSTALL SOLUTION
- NO THERMAL BRIDGING



SOPREMA's
INSULATED
ROOFING SYSTEM

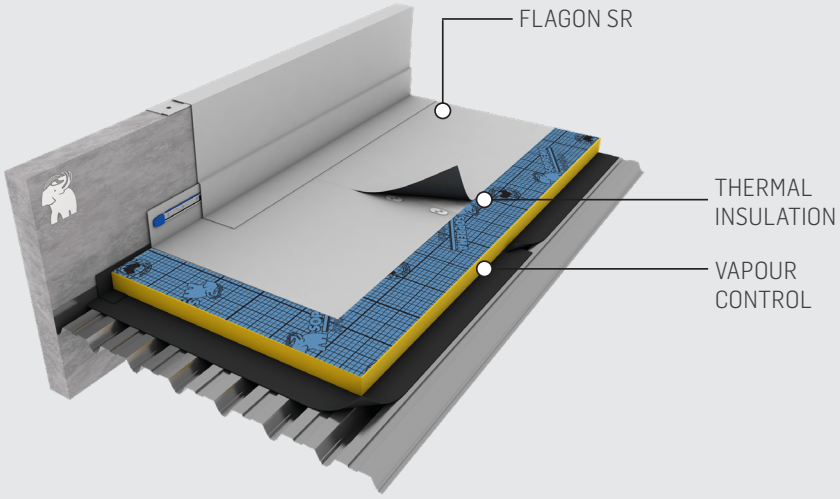
R YOU READY?

WARM ROOF SYSTEM

The insulation is installed under the roofing waterproofing system, giving it an excellent thermal performance. It also reduces energy consumption by preventing heat loss during winter and heat gains during summer.

A vapour control layer is installed prior to the insulation board, preventing condensation and moisture.

The full system is manufactured, supplied and warranted by SOPREMA, giving peace of mind to property owners.



SOPRA-ISO BLUE

SOPRA-ISO BLUE is a high performance thermal insulation board, composed of closed-cell polyisocyanurate (PIR) foam.

It is laminated on both sides with textured aluminium facer, providing superior fire resistance. The blue upper-facing provides a glare-free surface, easing the installation process.

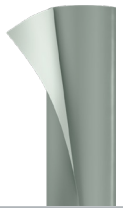
DENSITY: > 34 kg/m³

R-VALUE (50mm): R 2.35

- ✔ SUPERIOR THERMAL PERFORMANCE WITH MINIMAL THICKNESS
- ✔ EXCEPTIONAL COMPRESSIVE STRENGHT AND DIMENSIONAL STABILITY
- ✔ SUPERIOR FIRE RESISTANCE

SYNTHETIC WATERPROOFING

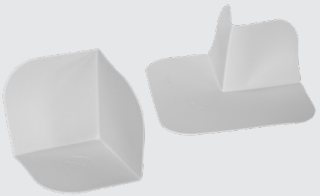
Using thermo-plastic polymer technology, FLAGON PVC membrane systems provide excellent waterproofing capacities. These systems propose lightweight waterproofing solutions, resulting in a lower permanent load on the structure onto which the systems are applied.

	PRODUCT NAME	DESCRIPTION	BENEFITS	CHARACTERISTICS	
				APPLICATION	REINFORCEMENT
FLAGON PVC MEMBRANES	 **FLAGON SR**	PVC membrane with a polyester reinforcement mesh and a signal layer on the surface. Ideal solution to waterproof exposed roofs.	• Service life in excess of 35 years • High tear resistance • Self-extinguish • Weatherproof and UV resistant • Easy to weld	Mechanically fixed with hot air welded laps	Polyester
	FLAGON SFc	PVC membrane with a glass fiber reinforcement mesh and a non-woven polyester fleece-back. Ideal solution to waterproof exposed roofs.	• Service life in excess of 35 years • Excellent dimensional stability • High tear resistance • Self-extinguish • Weatherproof and UV resistant • Easy to weld	Fully-adhered with hot air welded laps	Fiber glass
	FLAGON SV	PVC membrane with a glass fibre reinforcement mesh and a signal layer on the surface. Ideal to waterproof ballasted and other protected systems as well upstands and detailing works.	• Service life in excess of 35 years • Excellent dimensional stability • High resistance to puncture • Self-extinguish • Weatherproof and UV resistant • Easy to weld	Loose laid with hot air welded laps	Fiber glass
	FLAGON S	Non-reinforced PVC membrane. Ideal for detailing work.	• Resistant to puncture • Flexibility at low temperatures • Adaptability to structural movements • Self-extinguish • Weatherproof and UV resistant • Easy to weld	Welded with hot air. Applied in conjunction with FLAGON membranes and accessories	-
	FLAGON AT	Thermoplastic non-reinforced PVC membrane. Specially designed to waterproof potable water tanks and other hydraulic works.	• High mechanical resistance • Flexibility to low temperatures • Resistance to aqueous dosium hypochlorite solutions	Welded with hot air.	-

PVC ACCESSORIES

PIPE COLLAR

FLAGON 90° CORNERS (INTERNAL AND EXTERNAL)



CONICAL PIPE COLLAR

FLAGON WAVY CORNER

ROOFING SAFETY LINES CONNECTION

CONNECTION PIPE COLLAR

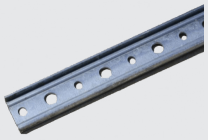
RAIN WATER OUTLET

DRAINI

FLAGMETAL PERIMETER DRIP PROFILE

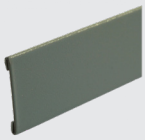
FLAGMETAL SHEET

PREPUNCHED GALVANISED FLAG BAR



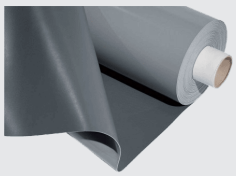
FLAGMETAL TERMINATION STRIP

FLAGMETAL STRIP



STANDING SEAM PROFILE

FLAGON PVC WALKWAY



PVC accessories can be ordered in any RAL colour to suit specific aesthetic design requirements.

COMPLEMENTARY PRODUCTS

PRIMER

ELASTOCOL STICK

Cold-applied primer composed of SBS synthetic rubbers, adhesion-enhacing resins and volatile solvents. It is used to enhace the adhesion of self-adhesive membranes on various substrates.

SEPARATION LAYER

GEOLAND PT FR 100/200

The geotextile range is a 100% polyester staple filament that is highly needled for the use of a wide range of geotechnical applications including separation, protection, filtration and drainage procedures.

VAPOUR CONTROL

SOPRAVAP'R

Self-adhesive vapour barrier membrane used as a vapour barrier on insulated roof systems. It can be intalled on most substrates, such as steel, concrete, plywood, gypsum or cementboment boards, and asphaltic panels.

VAPOUR CONTROL

SOPRADRAIN ECO 10

High-density drainage board composed of a polypropylene core on which a geotextile is factory laminated. It helps to drain the rain water excess from your green roof to the water management system.

ADHESIVE

DUOTACK

Two-component polyurethane adhesive used to adhere layers of insulation boards of polystyrene, of polyisocyanurate, of approved mineral fibre (stone wool) and for cover boards such as asphaltic, wood fibre, perlite, gypsum or cement boards.

ADHESIVE

FLEXOCOL A89

Mono-component polyurethane adhesive moisture curing liquid, with medium-low viscosity and controlled expansion, used for bonding PVC waterproofing membranes to a non-woven polyester felt on horizontal surfaces.

ADHESIVE

FLEXOCOL V

Mono-component elastomeric and solvent based adhesive, liquid with low viscosity, resistant to water, used for bonding FLAGON PVC waterproofing membranes on vertical surfaces.

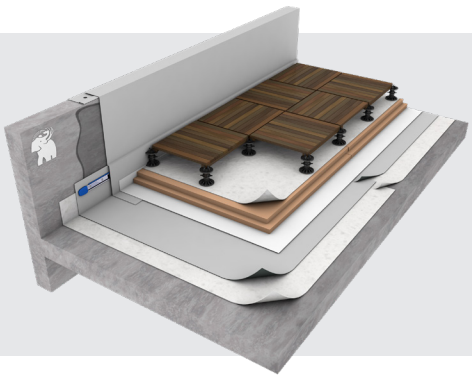
CLEANER

PVC CLEANER

Ready-to-use solvent for reactivating the welding zone of the FLAGON PVC membranes.

PEDESTALS

A solution for paved finishes without compromising the integrity of the waterproofing system.



INNOVATION SINCE 1908

SOPREMA has developed around the idea that the quality, durability and reliability of materials must match builders' ambitions and expectations. For more than 100 years, SOPREMA has been using its expertise to develop a variety of high-end products that meet or exceed all the requirements of the construction field.

ROOFS WALLS FOUNDATIONS PARKING DECKS BRIDGES ADDITIONAL EXPERTISE

SOPREMA is an international manufacturer specialising in the production of waterproofing and insulation products, as well as vegetative and soundproofing solutions, for the building and civil engineering sectors.

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