

# SOPRALENE SOPRASUN **TUMINOUS WATERPROOFING**

ROOFS

**NATERPROOFING** 

PLAZA DECKS

SBS AND APP MODIFIED BITUMEN MEMBRANES









# SOPRALENE Soprasun

PROVEN TECHNOLOGY FROM OVER 100 YEARS OF INDUSTRY EXPERIENCE

SOPREMA offers a wide range of products manufactured with SBS and APP modified bitumen, a proven technology providing the utmost durability and reliability ensuring watertight structures for decades.

#### **GUARANTEED LONGEVITY**

SOPREMA's membranes boast exceptional performance in terms of strength, reliability and service life. SOPRALENE and SOPRASUN waterproofing systems are composed of expertly blended SBS and APP elastomeric bitumen and high-resistance reinforcement that guarantee longevity.

#### **TESTING AND APPROVALS**

SOPREMA's bitumen waterproofing membranes for roofs and decks comply with Australia's AS 4654 Standard and are BRANZ appraised, meeting the requirements of NCC BCA.

TESTED ACCORDING TO **AS 4654** STANDARD



SOPREMA's bituminous membranes are manufactured according to the principles of sustainable construction, respecting the environment, human resources and the economy.

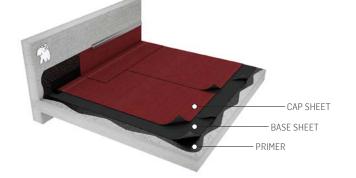
### **SYSTEM OPTIONS**

SOPRALENE and SOPRASUN systems offer great waterproofing design tailored to your needs. Our systems have been designed to meet the normative requirements and environmental challenges of the Australian climate.

#### **CONVENTIONAL ROOF SYSTEM**

#### Exposed roof | Non-trafficable

The waterproofing system is applied directly onto the construction deck. This is a fast and cost effective way to waterproof an exposed roof.

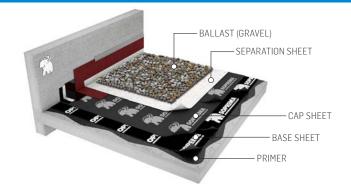


#### **BALLASTED ROOF SYSTEM**

#### Protected roof | Non-trafficable

The waterproofing system is protected from weathering and UV.

Using SOPRADRAIN drainage board will allow the roof to drain freely and not be affected by the build up of silt that can form over the years.

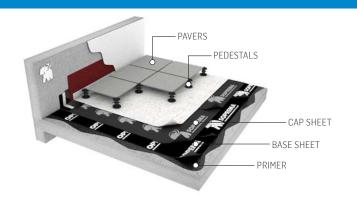


#### **PAVED ROOF SYSTEM**

#### Protected roof | Trafficable

Designed for areas with heavy pedestrian traffic. The waterproofing system is installed, and then protected with paving slabs.

The pedestal pavers allows continuous and effortless adjustments and leveling of slabs.

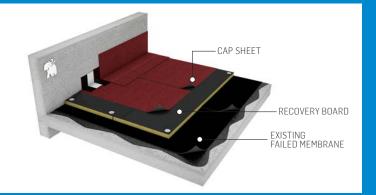


#### **RECOVERY ROOF SYSTEM**

#### Exposed roof | Non-trafficable

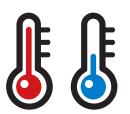
Ideal for refurbishment projects, where an existing roofing system is failing or has reached its service life.

A cost effective solution, as there is no need to remove and dispose of the existing waterproofing system.



### SOPREMA's INSULATED ROOFING SYSTEM RYOU 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.

 $^{\ast}$  The R\_{T} value was calculated with 50mm thick EFYOS BLUE A board. The value increases with the thickness of the board.

### **EFYOS BLUE A**

EFYOS BLUE A is a high performance thermal insulation board, composed of closed-cell polyisocyanurate (PIR) / polyurethane (PUR) 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.

It is biologically and ecologically harmless, manufactured without the use of CFCs, HCFCs and HBCDs.

DENSITY: > 28 kg/m<sup>3</sup> R-VALUE (50mm): R 2.27

#### SUPERIOR THERMAL PERFORMANCE WITH MINIMAL THICKNESS

CAP SHEET

**BASE SHEET** 

**VALUE** 

INSULATION

VAPOUR CONTROL

Thermal Conductivity: - Value D: 0,022 W/(m·K)

#### EXCEPTIONAL COMPRESSIVE STRENGHT AND DIMENSIONAL STABILITY

Compressive Strenght:

- at 10% deformation:  $\geq$  150 kPa
- at 2% deformation:  $\ge$  30 kPa

#### ✓ SUPERIOR FIRE RESISTANCE

Compliance with AS 1530.3:

- Spread of Flame Index: 0
- Smoke Developed Index: 2

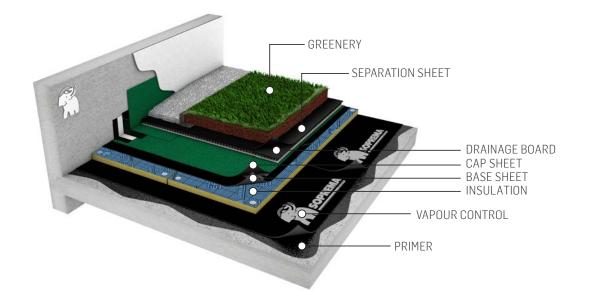
### **GREEN ROOF SYSTEM**

Green roofs are partially or completely covered with vegetation and a growing medium, installed over a SOPREMA waterproofing system.

SOPREMA offers a great green roof design flexibility, from light systems (less than 150mm) to heavy systems (more than 300mm).

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.





#### **BENEFITS**

#### FOR THE BUILDING OWNER

- Extend the life of the roof membrane
- Improve the thermal efficiency of the building
- Optimise the use of available space
- Reinforce the approach to sustainable development

#### FOR THE COMMUNITIES

- Mitigate the effects of urban heat islands
- Reduce air pollution
- Improve stormwater management
- Mitigate noise pollution





### **SBS MODIFIED BITUMEN**

SBS modified bitumen technology has proven by far to be the most reliable technology in the waterproofing industry. SBS is short for **Styrene-Butadiene Styrene**, a synthetic rubber that gives bituminous roofing membranes a greater elasticity. It's this flexibility that allows the membranes to stretch without interfering with underlying applications such as insulation. In addition, bituminous SBS membranes adhere particularly well, minimising the chance of leaks. SBS bitumen is composed of elastomer.

For SBS bitumen to retain its strength, only a **minimal amount of plastic** must be added. To keep the sunlight from penetrating the bitumen, the membranes must be covered with slates or granules, or ballasted with gravel.

|             | PRODUCTS |  | BENEFITS  | CHARACTERISTICS          |                     |   |
|-------------|----------|--|---|--------------------------|---------------------|---|
|             |          |  |   | APPLICATION              | REINFORCEMENT       | SURFACE/<br>Underface   |
| BASE SHEETS |          | SOPRALENE<br>FLAM 180  | <ul> <li>Excellent resistance against<br/>puncture and tear</li> <li>High mechanical properties</li> <li>Wide temperature tolerance</li> </ul>  | Heat-welded              | Non-woven polyester | Thermofusible<br>plastic film /<br>Thermofusible<br>plastic film                                      |
|             |          | SOPRAPLY<br>STICK DUO  | <ul> <li>Incomparable puncture and tear resistance</li> <li>Excellent dimensional stability</li> <li>Flameless solution</li> </ul>  | Self-adhered             | Composite           | Sanded /<br>Self-adhesive,<br>covered with a<br>silicone release<br>film                              |
|             |          | SOPRAFIX<br>BASE 630 /<br>SOPRAFIX<br>BASE 640<br>DUO SELVEDGE       | <ul> <li>Incomparable puncture and tear resistance</li> <li>Excellent dimensional stability</li> <li>The membrane is separate from the surface components, preventing wrinkles and folding</li> <li>Fast and cost effective installation</li> </ul> | Mechanically<br>fastened | Composite           | 630: Thermofusible<br>plastic film /<br>Sanded<br>640: Sanded /<br>Sanded                             |
|             |          | COLVENT<br>BASE 830 /<br>COLVENT<br>BASE 840<br><u>PUIO SELVEDGE</u> | • The membrane is partially<br>adhered to the substrate with<br>discontinuous self-adhesive<br>strips, preventing blistering<br>and reducing adverse effects of<br>thermal cycles   | Self-adhered             | Glass mat           | 830: Thermofusible<br>plastic film /<br>Self-adhesive strips<br>840: Sanded /<br>Self-adhesive strips |

|            |                                 | BENEFITS  | CHARACTERISTICS |                     |  |
|------------|---------------------------------|---|-----------------|---------------------|--|
|            | PRODUCTS                        |   | APPLICATION     | REINFORCEMENT       | SURFACE/<br>Underface  |
| CAP SHEETS | SOPRALENE<br>FLAM 180 GR        | <ul> <li>Excellent resistance against puncture and tear</li> <li>Easy resurfacing to extend the service life of the waterproofing system</li> <li>High mechanical properties</li> <li>Wide temperature tolerance</li> </ul> | Heat-welded     | Non-woven polyester | Granules /<br>Thermofusible<br>plastic film                                  |
|            | SOPRALENE<br>FLAM JARDIN<br>CAP | <ul> <li>Excellent resistance against<br/>puncture and tear</li> <li>High mechanical properties</li> <li>Anti-root penetration<br/>properties</li> </ul>  | Heat-welded     | Non-woven polyester | Slates /<br>Thermofusible<br>plastic film                                    |
|            | SOPRAPLY STICK<br>TRAFFIC CAP   | <ul> <li>Incomparable puncture and tear resistance</li> <li>Excellent dimensional stability</li> <li>Flameless solution</li> </ul>  | Self-adhered    | Composite           | Granules /<br>Self-adhesive,<br>covered with<br>a release<br>protection film |
|            | SOPRASTAR<br>FLAM GR            | <ul> <li>Highly reflective surface</li> <li>Contributes to Heat Island Effect<br/>Reductions</li> <li>Extended life expectancy of<br/>the membrane due to the<br/>roofing system's lower surface<br/>temperature</li> </ul> | Heat-welded     | Composite           | High reflective white<br>granules /<br>Thermofusible<br>plastic film         |
|            | SOPRALENE<br>FLAM 180 ALU       |   |                 | Non-woven polyester | Embossed<br>aluminium foil /<br>Thermofusible<br>plastic film                |

#### **DUO SELVEDGE TECHNOLOGY**

For the safest installations, a wide variety of membranes are equipped with DUO SELVEDGE, a unique technology developed and patented by SOPREMA. The first centimetres of DUO SELVEDGE are self-adhesive, protecting the components under the base sheet membrane from the flame. The remaining portion is then safely sealed with a hot-air gun. This provides additional waterproofing safety at overlaps.



### **APP MODIFIED BITUMEN**

APP bitumen membranes are a combination of bitumen and a plastic called **Atactic Polypropylen**, a polymer that ensures the membrane remains firm even under extreme temperatures. Thanks to the APP, the **softening point** (the temperature at which a substance changes from solid to liquid) increases from 50 degrees to 140-150 degrees. Moreover, it gives the membrane a higher UV-resistance.

|                    |  | BENEFITS  | CHARACTERISTICS |               |  |
|--------------------|--|---|-----------------|---------------|--|
|                    | PRODUCTS                                     |   | APPLICATION     | REINFORCEMENT | SURFACE/<br>Underface  |
| <b>BASE SHEETS</b> | SOPRASUN<br>PLUS 3 /<br>SOPRASUN<br>PLUS 3 P | <ul> <li>Excellent dimensional stability<br/>and elastic performance</li> </ul>   | Heat-welded     | Composite     | PLUS 3: Sanded /<br>Thermofusible<br>plastic film<br>PLUS 3 P:<br>Thermofusible<br>plastic film /<br>Thermofusible |
| CAP SHEETS         | SOPRASUN<br>PLUS 4.5KG<br>MINERAL            | • Excellent dimensional stability and elastic performance   | Heat-welded     | Composite     | plastic film<br>Ceramic coated<br>slates /<br>Thermofusible<br>plasctic film                                       |
|                    | SOPRAGUM<br>GARDEN 4<br>PLUS                 | <ul> <li>Excellent dimensional stability<br/>and elastic performance</li> <li>Anti-root penetration<br/>properties</li> </ul> | Heat-welded     | Composite     | Sanded /<br>Thermofusible<br>plasctic film   |

#### WHICH TYPE OF BITUMEN SHOULD ROOFERS USE?

Ultimately, selecting the type of modified bitumen depends on your project. To reduce installation time or to avoid the use of open flame, SBS modified bitumen gives roofers the versatility needed whilst keeping the same level of hard-wearing weatherproofing. However, because APP modified bitumen is more forgiving when installed under hot-melt conditions, it may be preferable. SOPREMA offers industry-leading warranties for all its bitumen systems and support for all of its products.

#### UNRESTRICTED DESIGN

The SOPRALENE and SOPRASUN bituminous waterproofing range offers flexible design through a wide range of colours and finishes. All cap sheets are available with varied finishes to suit specific aesthetic requirements.

#### CAP SHEET COLOURS

GREY

(standard)



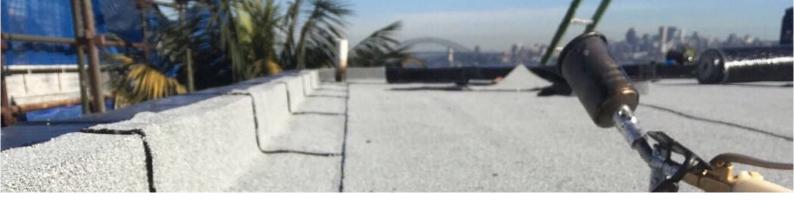




WHITE



\* Non-standard colours may require additional lead time for production and a minimum order.



#### **COMPLEMENTARY PRODUCTS**



#### ANTIROCK PRIMER

Blend of SBS modified bitumen with fast-evaporating solvents and adhesive enhancing additives, used to prepare concrete and metal surfaces before the installation of bitumen-based waterproofing membranes.



#### ELASTOCOL 500

Cold-applied bitumen primer composed of elastomeric bitumen and volatile solvents. It is compatible with many surfaces: concrete, metal, or wood substrate.



#### ELASTOCOL STICK

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



#### COLPLY ADHESIVE

SBS modified bitumen adhesive for cold application on vertical surfaces. Easy to apply with excellent bonding properties.



**ADHESIVE** 

**APOUR CONTROL** 

#### 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.



SEALANT

#### SOPRAMASTIC / ALU

Multi-purpose solvent-based mastic containing SBS modified bitumen, fibres and mineral fillers. Ideal complement for bituminous waterproofing membranes, it is used as jointing mastic, caulking material and joint filler.



#### AERISOL FLAM

Perforated bituminous separating sheet designed for partial bonding of torched-applied waterproofing sheets. The surface and underface are covered with a thermofusible film. SEPARATION LAYER

#### SOPRAVOILE 100

Fire resistant fibreglass separation layer composed with 100 g/m<sup>2</sup> non- woven glass fibers evenly spread out and thermowelded. It can be used as thermal protection layer on heat sensitive substrates.

SODDAMAST

RECOVERY BOARD



#### 2-1 SOPRASMART BOARD

High performance base sheet panel composed of SBS modified bitumen membrane with a nonwoven polyester reinforcement and a surface option of sanded, or covered with a thermofusible plastic film.



#### **3-1 SOPRASMART ROCK**

Factory-laminated high performance insulating base sheet panel composed of SBS modified bitumen membrane, a high-density mineral fibre (stone wool) support panel and a polyisocyanurate insulation board.



#### SOPRADRAIN ECO 10

High-density drainage board composed of a polypropylene core on which a geotextile is factory laminated. It provides protection to the waterproofing system against build-up of water pressure and humidity.



#### PEDESTALS

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



#### SOPRAVAP'R

SOPRAVAP'R is a self-adhesive vapour barrier membrane composed of a tri-laminated woven polyethylene facer and SBS-modified bitumen, used as a vapour barrier on insulated roof systems.

The underface is covered with a silicone release film and it can be intalled on most substrates, such as steel, concrete, plywood, gypsum or cement boment boards, and asphaltic panels.

#### **SOPRASOLAR FIX EVO TILT**

#### PHOTOVOLTAIC PANEL SUPPORTS THAT MAINTAIN THE WATERPROOFING PROPERTIES OF THE ROOF

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

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

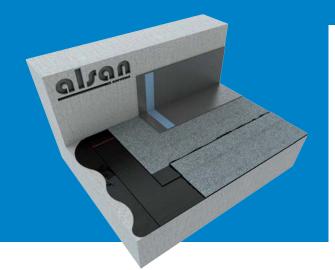
It can be installed on flat or low-slope roofs, on new or existing buildings.

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

## **ALSAN FLASHING** LIQUID WATERPROOFING

ALSAN FLASHING is a unique polyurethane bituminous resin specially formulated for liquid-applied flashings, details, and maintenance applications. It can be used to waterproof penetrations of all types, perfectly and lastingly.

ALSAN FLASHING offers flexible design through a wide range of colours and finishes. Decorative coloured granules can be added to ALSAN FLASHING top coat to suit specific aesthetic requirements. White and aluminum finishes are also available within SOPREMA's product range.



#### **BENEFITS**

- Conforms easily to any geometrical or irregular shapes
- Superior protection against moisture
- Quick-curing seamless flashing that matches granule cap sheet membranes
- Single-component flashing solution: no catalyst needed and no wasted product
- Great for quick, cost-effective repairs

| PRODUCTS                                  | DESCRIPTION  | APPLICATION     | FLEECE             |
|---|--|-----------------|--------------------|
| ALSAN<br>ALSAN<br>FLASHING                | Single-component, polyurethane- and<br>bitumen-based waterproofing coating used to<br>waterproof hard-to-access upstands and other<br>details where it is difficult to apply sheet<br>waterproofing membranes.           | BRUSH OR ROLLER | POLYFLEECE         |
| Alsan<br>Flashing<br>Jardin<br>510<br>510 | Single-component, ready-to-use watertight<br>bitumen-polyurethane resin with anti-<br>root penetration properties, to be used to<br>waterproof upstand, planters, roof edges and<br>all kinds of difficult roof details. | BRUSH OR ROLLER | POLYFLEECE         |
| ALSAN<br>FLASHING<br>QUADRO               | High-performance, single component<br>polyurethane resin, used on details, interfaces<br>and upstands. Ideal in high traffic areas where<br>a cold-applied solution is required.<br>Life expectancy of 25 years.         | BRUSH OR ROLLER | ALSAN FLEECE 165 P |

#### **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.

INFO@SOPREMA.COM.AU

SOPREMA.COM.AU