



**APPLICATIONS** 

ROOFS
GREEN ROOFS
PLANTER BOXES

TECHNICAL DATA SHEET

NZ-TDS-02B-SOPRAGUM GARDEN PLUS 4BD

## **DESCRIPTION**

**SOPRAGUM GARDEN PLUS 4 BLACK DIAMOND** is an APP-modified bitumen waterproofing membrane integrated with anti-root additives designed for green roofing, planter boxes and below grade applications.

**SOPRAGUM GARDEN PLUS 4 BLACK DIAMOND** is reinforced with a non-woven polyester combine with fiberglass. The composite reinforcement conveys good mechanical characteristics, excellent dimensional stability, and elastic performance.

**SOPRAGUM GARDEN PLUS 4 BLACK DIAMOND** topside of is protected by black mineral granule providing UV protection and the underside is covered by a thermofusible film.

Compliance with AS 4654.1

**Anti-root properties** 

**Excellent dimensional stability** 

**Excellent elastic performance** 

Good mechanical properties

## FIELD OF APPLICATION

**SOPRAGUM GARDEN PLUS 4 BLACK DIAMOND** is suitable as top layer for single-ply or multi-layer waterproofing assemblies in protected systems where root resistance is required. It can be used in vertically and horizontally waterproofing for the following general applications:

- · Green Roofs
- · Plaza decks
- Planter Boxes
- · Retaining Walls

## APPLICATION METHOD

SOPRAGUM GARDEN PLUS 4 BLACK DIAMOND can be fully heat welded using a propane torch or MINI MACADEN.

## INSTALLATION PROCEDURE

## **SUBSTRATE**

- No work should be started until all surfaces are smooth, dry, and free of ice, snow or any other substance that may prevent the membrane from adhering properly
- · Substrate must have a minimum 1% gradient to ensure that water drains to drainage outlets
- · Do not install heat welded membranes directly onto combustible substrate
- Concrete substrate must be fully cured before application of the membrane
- · Concrete substrate must have a Concrete Surface Profile (CSP) between 3 and 6 as per International Concrete Repair Institute
- · Adhesion test is recommended prior to installation of membrane
- · Commencement of installation shall be taken as acceptance of the substrate by the Applicator

## PRIMING

- When installed as top layer over base sheet membrane, a primer is not required.
- · When installed over concrete or metal surface prime with ANTIROCK PRIMER at the rate specified in TDS









## **SOPRAGUM**GARDEN PLUS 4 BLACK DIAMOND

**APPLICATIONS** 

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TECHNICAL DATA SHEET

ANZ-TDS-02B-SOPRAGUM GARDEN PLUS 4 BD

## **INSTALLATION PROCEDURE (CONT.)**

## **HEAT WELDING**

- · Unroll membrane sheets onto the roof surface
- Starting at the low point of the roof, lay out the membrane to ensure the plies are installed perpendicular to the roof slope, shingled to prevent back-water laps
- Ensure specified side-laps and end-laps are maintained. End-laps should be staggered 1m apart
- As the membrane ply is unrolled, apply heat to the underside of the ply until the thermofusible film melts sufficiently for full adhesion to the substrate, and full adhesion between plies
- For hand-held roof torches, continuously move the torch side-to-side across the underside of the roll to melt the bitumen while continuously unrolling sheet. While unrolling and heating the sheet, ensure approximately 6 to 12 mm of hot bitumen flows ahead of the roll, and there is 3 to 6 mm bleed out at all laps. Ensure all side-laps are fully adhered and sealed watertight
- · Adjust application methods to accommodate varying environmental conditions as necessary to achieve the desired results
- At the 150 mm end-laps ensure a fully adhered watertight seal. Melt the thermofusible film or embed granules and remove other membrane surfacing, where present, using a torch or hot-air welder
- · All penetrations and upturn details should be waterproofed as per SOPREMA Installation Guides and detail drawings

## FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE. **PACKAGING**

SPECIFICATIONS	SOPRAGUM GARDEN PLUS 4 BLACK DIAMOND	
Thickness	4 mm	
Roll dimensions	10 m × 1 m	
Roll weight	45 kg	
Rolls per pallet	20	

(All values are nominal)

## **PROPERTIES**

PROPERTIES	TEST METHOD	SOPRAGUM GARDEN PLUS 4 BLACK DIAMOND
Abrasion resistance*	AS 1580.403.2	PASS
Bond strength to concrete	ASTM C794	27.4 N/2.5 cm
Cyclic movement	CSIRO Moving joint test (B)	PASS
Dimensional stability	ASTM D5147	MD: -0.10 % ; CD: -0.19%
Elongation at break	AS 4654.1	37 %
Field seam strength	ASTM D1876	1.2 (±162) N/m
Heat ageing	AS 4654.1 (AS 1145.3)	PASS; no visual change
Ultraviolet resistance*	AS 4654.1 (AS 1145.3)	PASS; no visual change
Tensile strength	ASTM D5147	740 N/5CM
Durability	AS 4654.1	PASS
Watertightness	EN 1928-B:2000	> 200 kPa
Water vapor transmission rate	AS 4654.1	0 perm**

<sup>\*</sup> Applicable only to self - protected \*\* The results values are below the variation of the equipment. We consider that the sample have no water vapor transmission







## **SOPRAGUM**GARDEN PLUS 4 BLACK DIAMOND

APPLICATIONS

WATERPROOFING

ROOFS

GREEN ROOFS
PLANTER BOXES

TECHNICAL DATA SHEET

ANZ-TDS-02B-SOPRAGUM GARDEN PLUS 4 BD

## STORAGE AND HANDLING

Rolls must be stored upright, with the selvedge side on top. If stored outdoors, cover them with an opaque protection cover after removal of the delivery packaging. Shelf life of SOPRAGUM GARDUN PLUS 4 BLACK DIAMOND is 36 months, when properly stored.

## STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this publication is based on the present state of our best knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, their representative and/or the contractor are responsible for checking the suitability of products for their intended use.







# **SOPRASUN** PLUS 3 / PLUS 3 P



**APPLICATIONS** 

WATERPROOFING

**ROOFS** 

**FOUNDATIONS** 

**PLAZA DECKS** 

TECHNICAL DATA SHEET

ANZ-TDS-03-SOPRASUN PLUS 3/3P

### DESCRIPTION

**SOPRASUN PLUS 3** is an APP-modified bitumen waterproofing membrane designed for roofing and below grade applications.

**SOPRASUN PLUS 3** is reinforced with a non-woven polyester combine with fiberglass. The composite reinforcement conveys good mechanical characteristics, excellent dimensional stability, and elastic performance.

**SOPRASUN PLUS 3 SANDED** top surface is coated with anti-adhesive amorphous sand; bottom surface is covered with a thermofusible plastic film

**SOPRASUN PLUS 3 PLAIN** top and bottom surface are covered with a thermofusible plastic film.

Compliance with AS 4654.1

Good mechanical propreties

**Excellent dimensional stability** 

**Excellent elastic performance** 

Wide temperature tolerance

## FIELD OF APPLICATION

Suitable as a top layer (no UV exposure) and as an under layer in multi-layer waterproofing assemblies, SOPRASUN PLUS 3 is used in vertical and horizontal waterproofing for the following general applications:

- Rooftops
- · Plaza decks
- Balconies
- Planter boxes (in conjunction with SOPRAGUM PLUS GARDEN 4)
- · Retaining Walls

## APPLICATION METHOD

**SOPRASUN PLUS 3** can be fully heat welded using a propane torch, MINI MACADEN machine or mechanically fixed (only when used as under layer in multi-layer roofing assemblies).

## **INSTALLATION PROCEDURE**

## SUBSTRATE

- No work should be started until all surfaces are smooth, dry and free of ice, snow or any other substance that may prevent the membrane from adhering properly
- · Substrate must have a minimum 1% gradient to ensure that water drains to drainage outlets
- $\bullet\,$  Do not install heat welded membranes directly onto combustible substrate
- Concrete substrate must be fully cured before application of the membrane
- Concrete substrate must have a Concrete Surface Profile (CSP) between 3 and 6 as per International Concrete Repair Institute
- Adhesion test is recommended prior to installation of membrane
- · Commencement of installation shall be taken as acceptance of the substrate by the Applicator

## **PRIMING**

- · When installed as top layer over base sheet membrane, a primer is not required
- · When installed over concrete or metal surface prime with ANTIROCK PRIMER at the rate specified in TDS







## **SOPRASUN** PLUS 3 / PLUS 3 P



APPLICATIONS ROOFS

WATERPROOFING

FOUNDATIONS

**PLAZA DECKS** 

TECHNICAL DATA SHEE

NZ-TDS-03-SOPRASUN PLUS 3/3P

## **INSTALLATION PROCEDURE (CONT.)**

## **HEAT WELDING**

- · Unroll membrane sheets onto the roof surface
- Starting at the low point of the roof, lay out the membrane to ensure the plies are installed perpendicular to the roof slope, shingled to prevent back-water laps
- Ensure specified side-laps and end-laps are maintained. End-laps should be staggered 1m apart.
- As the membrane ply is unrolled, apply heat to the underside of the ply until the thermofusible film melts sufficiently for full adhesion to the substrate, and full adhesion between plies
- For hand-held roof torches, continuously move the torch side-to-side across the underside of the roll to melt the bitumen while continuously unrolling sheet. While unrolling and heating the sheet, ensure approximately 6 to 12mm of hot bitumen flows ahead of the roll, and there is 3 to 6mm bleed out at all laps. Ensure all side-laps are fully adhered and sealed watertight.
- · Adjust application methods to accommodate varying environmental conditions as necessary to achieve the desired results
- At the 150mm end-laps ensure a fully adhered watertight seal. Melt the thermofusible film or embed granules and remove other membrane surfacing, where present, using a torch or hot-air welder.
- · All penetrations and upturn details should be waterproof as per SOPREMA Installation Guides and detail drawings

## FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE. **PACKAGING**

SPECIFICATIONS	SOPRASUN PLUS 3 SANDED	SOPRASUN PLUS 3 PLAIN
Thickness	3 mm	3 mm
Roll dimensions	10 m × 1 m	10 m × 1 m
Roll weight	36 kg	30 kg
Rolls per pallet	25	25

(All values are nominal)

## **PROPERTIES**

PROPERTIES	TEST METHOD	SOPRASUN PLUS 3 SANDED	SOPRASUN PLUS 3 PLAIN
Abrasion resistance*	AS 1580.403.2	NPD*	NPD*
Bond strength to concrete	ASTM C794	27.4 N/2.5cm	
Cyclic movement	CSIRO Moving joint test (B)	PASS	
Dimensional stability	ASTM D5147	MD: -0.10 % ; CD: -0.19%	
Elongation at break	AS 4654.1	37 %	
Field seam strength	ASTM D1876	1.2 (±162) N/m	
Heat ageing	AS 4654.1 (AS 1145.3)	PASS ; no visual change	
Ultraviolet resistance*	AS 4654.1 (AS 1145.3)	NPD*	
Heat resistance	(ASTM D4799)	NPD*	
Tensile strength	ASTM D5147	740 N/5CM	
Durability	AS 4654.1	PASS	
Watertightness	EN 1928-B:2000	> 200 kPa	
Water vapor transmission rate	AS 4654.1	0 perm**	

<sup>\*</sup> Applicable only to self - protected \*\* The results values are below the variation of the equipment. We consider that the sample have no water vapor transmission







# **SOPRASUN** PLUS 3 / PLUS 3 P



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**APPLICATIONS** 

**ROOFS** 

**FOUNDATIONS** 

PLAZA DECKS

## STORAGE AND HANDLING

Rolls must be stored upright, with the selvedge side on top. If stored outdoors, cover them with an opaque protection cover after removal of the delivery packaging.

### STATEMENT OF RESPONSIBILITY

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**APPLICATIONS** 

ROOFS

FOUNDATIONS CIVIL WORKS

TECHNICAL DATA SHEE<sup>-</sup>

ANZ-TDS-11-ANTIROCK PRIMER

## **DESCRIPTION**

ANTIROCK PRIMER is a blend of SBS modified bitumen, fast-evaporating solvents and adhesive enhancing additives.

ANTIROCK PRIMER is used to prime concrete and metal surfaces to improve the adhesion of SOPREMA bituminous torch-on membranes.

## INSTALLATION PROCEDURE

- ANTIROCK PRIMER can be applied with a brush or roller on clean, dry substrates free of any residue that may hinder adherence. Shake well before using.
- It must be thoroughly dry before applying the waterproofing membrane. Drying time will vary depending on air and surface temperature and humidity.

WARNING: Do not accelerate drying of ANTIROCK PRIMER by heating with a torch.

## **CLEANING**

• Tools can be cleaned with petroleum solvents such as mineral spirits, varsol, xylene, etc.

## RESTRICTION

- ANTIROCK PRIMER is a highly flammable product.
- Store away from direct sunlight and open flame. Keep ignition sources away during application and until solvent has evaporated.
   Harmful if inhaled, swallowed or when in contact with the skin. In closed areas, ventilate carefully using mechanical means if necessary.
- · Do not pour residues in drains.

## FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE

## **PACKAGING**

SPECIFICATIONS	ANTIROCK PRIMER
Physical state	Liquid
Colour	Brown
Coverage	0.15 to 0.25 l/m²
Packaging	19 (
Pails per pallet	36













ACCESSORY PRODUCTS

**APPLICATIONS** 

ROOFS

FOUNDATIONS

CIVIL WORKS

TECHNICAL DATA SHEET

TECHNICAL DATA SHEET

## **PROPERTIES**

PROPERTIES	ANTIROCK PRIMER
Specific gravity at 20°C	0.91 kg/l
Solids by weight	35 %
Brookfield Viscosity, 25 °C	50 cP
Flash point, ASTM D93	-3 °C
Drying time on smooth surfaces *	Minimum 1 hour

(All values are nominal)

## STORAGE AND HANDLING

Shelf life: Up to 5 years in original sealed containers, in cool and ventilated area.

## STATEMENT OF RESPONSIBILITY

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Note: Field service where provided, does not constitute supervisory responsibility. Suggestions made by Soprema Australia Pty Ltd either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they are responsible for carrying out procedures appropriate to a specific application.







<sup>\*</sup> In all cases, drying time must allow complete evaporation of solvents.

## SOPRADRAIN 10





**FOUNDATIONS** 

TUNNELS
UNDERGROUND STRUCTURES

TECHNICAL DATA SHEE1

## DESCRIPTION

SOPRADRAIN 10 is a high-strength drainage panel consisting of a high-density polyethylene (HDPE) core with a factory-laminated geotextile for installation over waterproofing membranes in most vertical and horizontal drainage applications. It provides protection to the waterproofing system against build-up of water pressure and humidity.

Soil backfill is retained by a filter fabric while allowing water to pass into the drainage core providing hydrostatic relief. Collected water is then conveyed to a proper collection system. Consists of an impermeable polymeric sheet cuspated under heat and pressure to form a high flow dimpled drainage core.

The core is then bonded to a layer of non woven filter fabric. The filter fabric retains soil or sand particles as well as freshly placed concrete or grout, allowing filtered water to pass into the drainage core.

Maintains a very high flow rate while providing a higher compressive strength for greater depths. A very popular choice for vertical and horizontal single sided drainage applications.

Simple and rapid installation

Very high compressive strength

High chemical resistance

Root resistant & rot-proof

Light load on structures

## FIELD OF APPLICATION

- Green roofs
- · Bridge abutments
- Planter boxes
- Retaining Walls
- Foundations

## INSTALLATION PROCEDURE

## **SUBSTRATE**

- No work should be started until the substrate must be firm, even, clean and free from loose materials or any construction debris on the surface.
- Substrate must have a minimum 1% gradient to ensure that water drains to drainage outlets.
- · Commencement of installation shall be taken as acceptance of the substrate by the Applicator.

## INSTALLATION

- The substrate must be firm, even, clean and free from loose materials or any construction debris on the surface.
- Install SOPRADRAIN 10 either vertically or horizontally.
- · Hold SOPRADRAIN 10 in place by either taping, nailing, gluing or simply overhanging over the wall while backfilling takes place.
- Install SOPRADRAIN 10 with the geotextile facing the backfill.
- Join by simply butting edge to edge and overlapping the geotextile overhang and securing with reinforced canvastape. Alternatively overlap the cuspate core by 50 mm and secure geotextile as previous.
- On the bottom of the wall it will be advisable to install a drainage pipe.

FOR COMPLETE INFORMATION ON PRODUCT INSTALLATION, PLEASE CONSULT YOUR SOPREMA REPRESENTATIVE.







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## SOPRADRAIN 10



ACCESSORY
PRODUCTS

APPLICATIONS
FOUNDATIONS
TUNNELS
UNDERGROUND STRUCTURES

TECHNICAL DATA SHEE<sup>-</sup>

ANZ-TDS-60-SOPRADRAIN 10

## **PACKAGING**

SPECIFICATIONS	SOPRADRAIN 10
Roll dimensions	12.5 m x 1.22 m
Roll weight	18 kg

## **PROPERTIES**

HDPE CORE		
PROPERTIES	TEST METHOD	SOPRADRAIN 10
Compressive strength	ASTM-1621	370 kN/m2
Flow	ASTD-4716 (i=1.0 @ 250 kPa)	180 l/min/m width
Thickness	-	10 mm

	GEOTEXTILE	
PROPERTIES	TEST METHOD	SOPRADRAIN 10
Flow	AS3706.9-12	>180 l/m2/s
CBR	AS3706.7-12	>1400 N
EOS	AS3706.4-12	<0.12 mm
Grab	AS3706.2-12	>500 N

## STORAGE AND HANDLING

Rolls must be stored in the delivery packaging, in a dry and protected environment.

## STATEMENT OF RESPONSIBILITY

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