

## ( TECHNICAL BULLETIN )

SPECIFY ASTEC POLYESTER REINFORCEMENT FABRICS

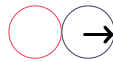
EXCELLENT COMFORMABILITY FOR REINFORCEMENT ON ROUGH SURFACES

Sontara



### PRODUCT TYPE

Spun laced polyester reinforcing fabric.



### DESCRIPTION / USE

Reinforced acrylic elastomeric coatings have long been used as a positive method for waterproofing continually moving splits and seams on building construction surfaces. To date many applicators and specifiers have persisted with the use of fibreglass for reinforcing because of its generic flexibility. However, flexibility alone does not accommodate the elongation and recovery ability of todays coatings which possess outstanding elasticity. As a consequence, split repair failures are inevitable where the fibreglass is subject to extreme changes in temperature which extend outside its narrow elongation range. The fibreglass reinforcing tears and the crack is once again open to the effects of the weather.



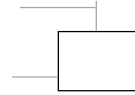
1.1 Sontara used for seam sealing sheet joins in a metal roof

**Sontara** is a spun laced fabric textile material composed of staple fibres woven to form a strong reinforcing fabric for use with liquid membrane coatings. Composed of 100% polyester, the membrane has excellent conformability, making it ideal as a reinforcement on rough surfaces, for turn-ups and for general detailing work. Sontara has proven to be a perfect replacement for fibreglass.

**Sontara** is recommended for detailing due to its excellent conformability and the products ability to wet up easily during application ensures a fast trouble-free application. Sontara's multi directional elongation means that you can be confident in its long term performance when used as reinforcement for highly elastic liquid membrane coatings.



*Astec Paints are a 100% Australian owned company committed to the research and development of technologically advanced coatings that provide premium durability against our harsh Australian conditions. Our coatings are manufactured with high regard for worker safety and environmental care and will provide you with absolute confidence in long term performance.*



## PROPERTIES

Sontara exhibits a high resistance to splitting and cracking from thermal shock, low temperatures, freezing/thaw cycles, folding/creasing and rough handling. Unlike fibreglass, it is non-irritating to the skin. The fabric is not effected by sunlight when covered with roof coatings or aggregates and has been successfully used with a variety of roof coatings including acrylics, cutback asphalt, bitumen emulsion, elastomeric asphalt, and synthetic rubber coatings.

Sontara fabrics maintain their physical properties when wet and are dimensionally stable during humidity changes. The fabrics do not rot, even after 5 years buried in the soil Sontara retained all its original properties. The product can be used in single or multiple layers for repairs, re-roofing or new work. In conjunction with suitable coatings Sontara can be used on podium and plaza decks, trafficable roof-top

parking decks, balconies, roofs, wet areas and shower trays. It is easier to wet out than fibreglass chopped strand mat, and possesses superior elongation and flex-life compared with chopped strand mat or woven fibreglass.

**NOTE:** THE CRITERIA FOR SELECTING A REINFORCING MATERIAL FOR USE WITH A LIQUID MEMBRANE COATING IS QUITE DIFFERENT TO THE SELECTION OF REINFORCEMENT FOR OTHER APPLICATIONS. ONE OF THE PROPERTIES NOT COMMONLY REQUIRED FOR THE MAJORITY OF REINFORCEMENT MATERIALS IS ELONGATION YET THIS PROPERTY IS OF UTMOST IMPORTANCE WHEN USING A REINFORCEMENT WITH AN ELASTOMERIC TOP-COATING.

Sontara is an ideal reinforcement for elastomeric liquid membranes as randomly orientated fibres provide the multi directional elongation that is necessary to accomodate all mechanical deck movement and elongation of the top-coat. Where surfaces are irregular sontara will easily conform to the uneven surface.

Astec polyester tapes are manufactured with the ideal performance properties necessary for reinforcing the latest design of elastomeric coatings. In combination with each other the complete system offers up to 3 times the elongation to break and delivers far greater ease in application.

Sontara is manufactured from 100% polyester and possesses the necessary characteristics for reinforcing high build elastomeric coatings:

- High multi-directional elongation to break
- High tensile strength
- High resistance to chemicals
- Not affected by water, rot or mildew
- Resistant to temperatures up to 205°C
- Non-irritating to the skin
- Wets up easily



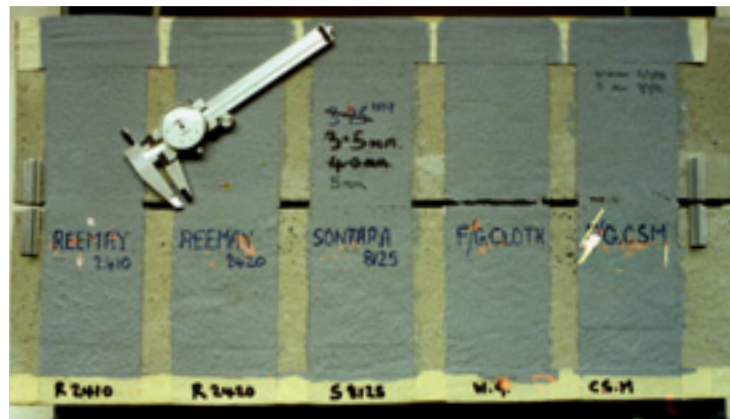
PRODUCT DATA



<input type="checkbox"/>	Weight (g/m <sup>2</sup> )	44
<input type="checkbox"/>	Thickness (mm)	0.46
<input type="checkbox"/>	Elongation Length	45%
<input type="checkbox"/>	Elongation Width	105%
<input type="checkbox"/>	Packaging	Weight grams/m <sup>2</sup> Roll Size width & length
		44 50mmx50m
		44 70mmx50m
		44 100mmx50m
		44 150mmx50m
		44 200mmx50m
		44 300mmx50m
		44 400mmx50m
		44 610mmx50m
		44 1220mmx100m



1.2 Sontara Tape



1.3 Sontara versus fibreglass reinforcement

In the test pictured (fig. 1.2), the performance of Sontara polyester reinforcement for liquid membrane coating is compared with woven and chopped strand mat fibreglass (225 grams).

This test involves five specimens, all with the same high solid acrylic co-polymer water-based coating reinforced with different fabrics applied to two separate concrete blocks.

After the coating was cured the blocks were opened. The woven fibreglass was the first specimen to fail followed by the chopped strand mat. Both specimens of fibreglass had failed @ 1.55mm on May 22, 1985. The blocks were progressively opened until July 5, 1985 when the gap between the blocks reached 5mm. Several weeks later there had still been no change in the appearance of the Sontara specimens.



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