

# BSW UNI NG

TECHNICAL DATA SHEET APTDS-E-02-03

## DESCRIPTION

**BSW UNI NG** is a waterproofing membrane composed of a select blend of high-performance flexible SBS elastomeric bitumen reinforced with a ultra high strength double reinforcement system (heavy duty non-woven polyester associated with an additional specific fleece). The topside is covered with specially engineered carbon dioxide crystals and the underside is covered by a thermofusible plastic film. Thanks to its special formulation and composition **BSW UNI NG** has excellent, continuous and homogenous bond to poured structural concrete, increased resistance to hydrostatic pressure and superior resistance to tears and punctures. Its unique design, including the **DUO SELVEDGE** technology, allows welding of side laps using a torch or a hot air gun.

## USER APPLICATION

**BSW UNI NG** is a pre-applied membrane designed for horizontal blind side waterproofing applications (below grade and tanking works). All the applications are described in **SOPREMA**'s Technical Guidelines in force.

## INSTALLATION

**BSW UNI NG** is installed loose laid on the concrete slab or compacted soil.

To prevent overly thick membranes, stagger the end laps by a minimum of 300 mm.

Side lap joints must be a minimum of 100 mm (see **DUO SELVEDGE** rubric below) and end lap joints must be a minimum of 150 mm. Membrane overlaps are welded using a torch or a hot air gun.

All angles changes (inside and outside corners) and others details must be reinforced by heat-welding on additional 300 mm piece of **BSW UNI NG** centered on the angle.

Reinforcement steel bars installation and pouring of the concrete slab must be carried out carefully.

### DUO SELVEDGE

Over the entire width of **DUO SELVEDGE**, 40 mm of the surface is covered with exposed sticky bitumen. The remaining surface of the selvedge (60 mm) is covered by a thermofusible plastic film to seal overlap by torch-on or hot air gun techniques.

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

## HEALTH AND ENVIRONMENT

The membrane does not contain any substance that might be detrimental to health or to the environment and complies with generally accepted health standards and Material Safety Data Sheet (MSDS).

## QUALITY CONTROL

**SOPREMA** has always attached the highest importance to quality control. For this reason, we operate an internationally recognized quality system meeting ISO 9001 & ISO 14001 standards, independently monitored and certified.

# BSW UNI NG

TECHNICAL DATA SHEET APTDS-E-02-03

## COMPOSITION

Composition	BSW UNI NG
Thickness	4.0mm
Nominal weight	5.2kg/m <sup>2</sup>
Dimension	1x8m
Top face	Specially engineered carbon dioxide crystals
Under face	Thermoplastic plastic film
Binder	Elastomeric bitumen : select blend of high-performance bitumen and SBS* thermoplastic polymers
Reinforcement	Heavy duty non-woven polyester associated with an additional specific fleece
Overlap (DUO technology)	100 mm (40 mm sticky bitumen + 60 mm thermofusible film)

\*According to UEAtc directives concerning the normalization of waterproof elastomeric SBS bitumen coverings

## PROPERTIES

Properties	Test method	BSW UNI NG
Reaction to fire	EN 13501-1	E
Root resistance	EN 13948	NPD
Peel resistance of joints	EN 12316-1	≥100 N/50mm
Watertightness	EN 1928	Conform
Resistance to impact – Method A Method A is on rigid substrate (aluminum)	EN 12691	1750 mm (±250)
Shear resistance of joints	EN 12317-1	≥800 N/50mm
Flexibility at low temperature	EN 1109	-25°C
Tensile properties Tensile strength L x T Elongation L x T	EN 12311-1	950 x 950 N/50mm (±100) 45 x 45 % (+/- 10%)
Resistance to static loading Method B Method B is on rigid substrate (concrete)	EN 12730)	25 kg (±5)
Resistance to tearing (nail shank) L x T	EN 12310-1	300 x 300 N (±50)
Durability Watertightness after ageing	EN 1296 / EN 1928	Conform
Dangerous substances*	-	Complies

\* This product does not contain asbestos or tar constituents.

\* Since there is no European test method available, no performance declaration for leaching behavior can be made. It must be made according to national rules in force in the place of use. (All values are nominal)

# BSW UNI NG

TECHNICAL DATA SHEET APTDS-E-02-02

## PROPERTIES

Properties	Test method	BSW UNI NG
Durability Flow resistance at elevated temperature after ageing	EN 1110 EN 1296 / EN 1110	≥ 100°C ≥ 90°C
Peel or stripping strength of adhesive bonds Bonding peel strength	ASTM D 903-98 // 2010	6500 N / m
Resistance to hydrostatic head	ASTM D5385	> 110m
Lateral water migration	ASTM D5385 modified	> 110m
Bitumen ultimate elongation	ASTM D412 Modified	1000% (+/- 200%)
Air Permeance @75Pa	ASTM E2178	< 0.02 L/s.m <sup>2</sup>
Methane Gas Permeability @1 atm	ASTM D1434	4.12E-07 cm <sup>2</sup> /s
Resistance to Puncture	ASTM E154-99	1350 (+/-100) N/m
Vapor Permeance	ASTM E96-12 (Method B)	0.832 ng/Pa.m <sup>2</sup> .s
Lap Adhesion	ASTM D1876	1500 N/m

(All values are nominal)

## STORAGE

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

During storage, protect the rolls against moisture. In cold weather, we recommend that the rolls be kept at a minimum temperature of + 2°C (+ 36 °F) for at least 5 hours before installation.