

COLPHENE BSW

DESCRIPTION

A pre-applied WATERPROOFING SYSTEM MEMBRANE designed for horizontal and vertical external blind-side waterproofing applications. The system is composed of formulated select blend of high performance elastomeric Styrene-Butadiene-Styrene (SBS) modified bitumen combined with an Ultra High Strength (UHS) reinforcement and coated with specially engineered silicone dioxide.

SYSTEM COMPONENTS

- COLPHENE BSW V (Vertical)
- COLPHENE BSW H (Horizontal)
- COLPHENE BSW PROTECT'R
- ALSAN FLASHING

APPLICATIONS

- BLIND-SIDE (Where Excavation and Access are limited)
- BELOW-GRADE STRUCTURES
- UNDER CONCRETE SLABS
- RETAINING WALLS (POSITIVE SIDE)
- TUNNELS & UNDERPASSES

INSTALLATION

A pre-applied waterproofing system designed for horizontal and vertical external blind-side, substructure and tanking waterproofing applications. For complete installation procedures please refer to the installation Guidelines in the **SOPREMA COLPHENE BSW** system technical brochure.

DUO SELVEDGE TECHNOLOGY

For the safest installation, **COLPHENE BSW V** and **COLPHENE BSW H** are provided with DUO SELVEDGE, a unique technology developed and patented by SOPREMA in 2004.

Over the entire width of DUO SELVEDGE, fifty percent (50%) of the surface is covered with exposed sticky bitumen. The remaining surface of the selvedge (50%) is covered by a thermofusible plastic film to seal overlap by heat welding.

HEALTH & 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.

Value Engineering System

Eliminates the need for concrete screed on the horizontal substrate

Eliminates the need for protection board on the vertical substrate

Superior mechanical properties

Resistant to chemicals

(Chloride, Sulphate and pH level between 2 and 10)

Homogeneous, fully sealed systems on overlaps

DUO SELVEDGE
TECHNOLOGY

COLPHENE BSW

COMPOSITION & PACKAGING

	Standards	COLPHENE BSW V	COLPHENE BSW H
Colour	–	Black	Black
Thickness	ASTM D5147	3.0 mm	3.5 mm
Roll Dimensions	–	10 x 1 m	10 x 1 m
Roll Weight	–	35 kg	43 kg
Rolls per pallet	–	30	25
Underface	–	Silicone Release Film	Thermofusible Film
Surface		Specially engineered silicone dioxide sand	

PROPERTIES

Properties	Standards	COLPHENE BSW V	COLPHENE BSW H
Tensile Strength, MD/XD	ASTM D5147	15 / 13.5 kN/m	17 / 11.5 kN/m
Elongation at Break, MD/XD	ASTM D5147	70 / 75 %	60 / 65 %
Low Temperature Flexibility	ASTM D5147	Unaffected at -23 °C	Unaffected at -23 °C
Adhesion of Poured Structural Concrete, 22 °C	ASTM D903 (peeled @ 50 mm/min)	3300 N/m	3300 N/m
Puncture Resistance	ASTM E154	1160 N	1100 N
Tear Resistance, MD/XD	ASTM D5147	575 / 500 N	600 / 400 N
Resistance to Hydrostatic Head	ASTM D5385	114 m	114 m
Crack Bridging at -23 °C	ASTM C836	Unaffected	Unaffected
Water Vapour Transmission	ASTM E96 method B	0.21 ng / Pa.s.m ²	0.21 ng / Pa.s.m ²
Water Absorption	ASTM D570	0.5 %	0.5 %
Gas permeability	ASTM D1434	* 4.12 x 10 ⁻⁷ ** 4.06 x 10 ⁻¹²	---
Resistance to Lateral Water Migration	ASTM D5385 modified	Pass @ 70 m	Pass @ 70 m

* cm²/s @ 1 atm

** cm³ X cm/cm² X s X Pa

(All values are nominal and are subject to variation not exceeding 15%)

COLPHENE BSW V meets the requirements of ASTM D6162, TYPE 1, Grade S.

COLPHENE BSW H meets the requirements of ASTM D6164, TYPE 1, Grade S.