# **COLPHENE® BSW PROTECT'R 3.0**

PRE-APPLIED BONDED SYSTEM PROTECTION SHEET MEMBRANE DESIGNED FOR BLIND-SIDE WATERPROOFING

TECHNICAL DATA SHEET 170714SME3E



PRE-APPLIED / BONDED

DUO SELVEDGE

#### **DESCRIPTION**

COLPHENE BSW PROTECT'R 3.0 is a high performance, fully bonded composite sheet membrane designed as a second layer and protection sheet for blind side waterproofing assemblies in pre-applied horizontal and vertical below grade waterproofing applications. It is composed of a proprietary blend of Elastomeric Styrene-Butadiene-Styrene (SBS) modified bitumen combined with Ultra-High Strength (UHS), dimensionally stable composite reinforcement system. The top surface is treated with a specially engineered Silicone Dioxide while the underside is laminated with a distinct synthetic film. The unique design of COLPHENE BSW PROTECT'R 3.0 and the unique DUO SELVEDGE technology allows for homogenous bond to structural concrete, resistance to hydrostatic pressure, lateral water migration and precise alignment of side-laps to be heat-welded using propane torch or a hot air gun.

**USER APPLICATIONS** 

■ Protects COLPHENE BSW H 3.5 from damage due to possible labour traffic or rebar installation.

Remarkable Bond-Strength to Structural Concrete

Part of a Value Engineering System in Sub-Structure Waterproofing

Eliminates the Need for Protective Screed on Horizontal Substrates

Resistant to Aggressive Chemicals (Chloride, Sulphate and pH level between 2 & 10)

Homogeneous, Fully Sealed DUO SELVEDGE Overlaps.

#### **INSTALLATION GUIDELINES**

- As part of an integrated Value-Engineering system, COLPHENE BSW PROTECT'R 3.0 is installed layered and overlapped with other COLPHENE BSW system membranes.
- In horizontal application, adhere the onto COLPHENE BSW H 3.5 staggered and aligned properly to avoid excessive layering.
- Follow the DUO SELVEDGE guidelines to install side-laps. Side-laps with the adjacent ply should be, minimum, 100 mm while end-laps to be minimum 150 mm.
- Heat-weld all side-lap edges with a propane torch and use a round nose trowel to create a perfect seal with the bead of bitumen. End-laps shall be staggered by at least 300 mm. For more information on the system installation follow the project's Method Statement or consult your local SOPREMA representative. COLPHENE BSW PROTECT'R 3.0
- Storage of other trade material on top of the membrane should be avoided to achieve the optimum performance of the system.

#### **DUO SELVEDGE TECHNOLOGY**

COLPHENE BSW PROTECT'R 3.0 is distinguished by SOPREMA's unique, patented technology; DUO SELVEDGE which is designed to ensure a safe and high-performance installation at the critical locations of side-laps. A percentage of the surface of DUO SELVEDGE is sealed with self-adhesive. The rest of the selvedge surface is then safely sealed with propane torch or hot air. For best application use SOPREMA's SOPRAMATIC CART which is equipped with a hot air blower designed to weld the DUO SELVEDGE of SOPREMA membranes.

### SUSTAINABILITY, HEALTH & ENVIRONMENT

- COLPHENE BSW V 3.0 (Vertical Application)
- COLPHENE BSW UNILAY HP (Horizontal Application)
- COLPHENE BSW PROTECT'R 3.0 (Horizontal Protection)
- PROTECTDRAIN or SOPRADRAIN 10 G (Vertical Support)
- SOPRAJOINT RIH / SOPRAJOINT WS (CJ Treatment)

### SUSTAINABILITY, HEALTH & ENVIRONMENT

- COLPHENE SP LAP (Construction Joint & Corner detailing)
- ALSAN CAP-C (Pile Head Re-Profiling)
- ALSAN FLASHING (Detailing & Pile Head Treatment)
- ALSAN CAP-E (Pile Head Encapsulation)
- FLASHING REINFORCEMENT (Detailing & Pile Head Treatment)

#### SUSTAINABILITY HEALTH & ENVIRONMENT

All our activities & growth target sustainable development to minimize the impact on the environment. COLPHENE BSW system membranes do not contain any substances that might be detrimental to health or to the environment and complies with generally accepted health standards. Please refer to the product's Safety Data Sheet for more information.

■ SOPREMA may modify the composition and/or utilization of its products without prior notice.





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#### **PACKAGING & SUPPLY**

SPECIFICATIONS	STANDARDS	COLPHENE BSW PROTECT'R 3.0
Colour	-	Black
Thickeness (Gross)	ASTM D5147	3.0 mm
Roll dimension	-	10 x 1 m
Roll weight	-	36 Kg
Rolls per pallet	-	30
Underface	-	Silicone Release Film
Surface	-	Specially Engineered Silicone Dioxide Sand
Side-Lap Width	-	10 cm

(All values are Nominal)

#### **TECHNICAL PROPERTIES**

PROPERTIES	STANDARDS	COLPHENE BSW PROTECT'R 3.0
Tensile strength MD/CMD	ASTM D5147	15 / 13.5 kN/m
Elongation @ break, MD/CMD	ASTM D5147	60 % / 65 %
Tear strength, MD/CMD	ASTM D5147	575 N / 500 N
Puncture resistance, MD/CMDD	ASTM E154	1100 N
Water vapour permeance	ASTM E96 method B	< 2.1 ng / ( Pa•S•m² ) < 0.04 perms
Water absorption	ASTM D570 @ 24 hrs	< 0.5 %
Adhesion to poured structural concrete, 22 °C	ASTM D903	4200 N/m
Resistance to hydrostatic head	ASTM D5385	> 110 m
Lateral water migration	ASTM D5385	> 110 m
Static coefficient of friction on concrete	ASTM D1894	0.8
Low temperature flexibility	ASTM D5147	Unaffected @ - 30 °C (- 22 °F)

(All values are Nominal),

All published properties are nominal and considered by SOPREMA to be true and accurate, These nominal values are subjected to variation not exceeding 15% based on statistical data obtained internally and verified by internationally accredited independent laboratories.

## **STORAGE & HANDLING**

Rolls must be stored in a shaded area in an upright position with the selvedge side in top.

#### **QUALITY CONTROL**

COLPHENE BSW system membranes are manufactured in ISO-9001 certified SOPREMA factories which are audited by third-party organizations such as Underwriters Laboratories (UL) and FM Global. The system membranes are manufactured to meet SOPREMA's Quality Management Manual.

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