



COLPHENE BSW PROTECT'R

COLPHENE BSW PROTECT'R is a high-performance protection sheet composed of SBS modified elastomeric bitumen with a composite reinforcement.

The topside is coated with specially engineered silicon dioxide crystals and the self-adhesive underside is covered by a silicone release film.

Thanks to its special formulation and composition **COLPHENE BSW PROTECT'R** has excellent, continuous and homogenous bond to poured structural concrete to increased resistance to hydrostatic pressure with superior mechanical properties.

User application

COLPHENE BSW PROTECT'R is a pre-applied membrane used as protection over **COLPHENE BSW H**.

COLPHENE BSW PROTECT'R protects **COLPHENE BSW H** membrane from damage due to foot traffic, material storage to its surface and placement of the reinforcement steel bars and poured in place concrete slab.

All the applications are described in **SOPREMA's** Technical Guidelines in force.

Composition

	COLPHENE BSW PROTECT'R
Reinforcement	Composite
Binder	Elastomeric bitumen: blend of selected bitumen and SBS* thermoplastic polymers
Thickness (EN 1849-1)	2.0 mm (±5%)
Weight (EN 1849-1)	2.4 kg/m ²
Topside	Specially engineered silicon dioxide crystals
Underside	Self-adhesive protected by a silicone release film
*According to UEAtc directives concerning the normalization of waterproof elastomeric SBS bitumen coverings	

Packaging

	COLPHENE BSW PROTECT'R
Dimensions of the roll	15 m x 1 m
Weight of the roll	about 36 kg
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
Roll lengths are given with a tolerance of < 1 %. Width of roll is given with a tolerance of 1% (UEAtc). Rolls must be stored upright on flat ground. 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.	

Characteristics (outside CE marking)

Properties	Test method	COLPHENE PROTECT'R
Tensile strength at peak load, MD/XD	ASTM D5147	≥ 11 kN/m / 10 kN/m
Elongation at break, MD/XD	ASTM D5147	60 % / 65 %
Tear strength, MD/XD	ASTM D5147	≥ 450 N / 350 N
Resistance to puncture	ASTM E154	≥ 1000 N
Peel strength Adhesion to poured structural concrete	ASTM D903	3400 N / m
Radon gas diffusion coefficient D including joint	K124/02/95	1.4 (±0.1) x 10 ⁻¹¹ m ² /s 1.2 (±0.1) x 10 ⁻¹¹ m ² /s
Values in combination with COLPHENE BSW H :		
Tensile strength at peak load, MD/XD	ASTM D5147	≥ 30 kN/m / 25 kN/m
Elongation at break, MD/XD	ASTM D5147	60 % / 65 %
Tear strength, MD/XD	ASTM D5147	≥ 1100 N / 1050 N
Resistance to puncture	ASTM E154	≥ 2000 N
Low temperature flexibility	ASTM D5147	Unaffected at -18 °C
Water vapour transmission	ASTM E96 method B	< 2.5 ng / Pa·s·m ² (<0.04 perm)
Water absorption	ASTM D570	< 2.2 %
Resistance to hydrostatic head	ASTM D5385	≥ 110 m
Lateral water migration	ASTM D5385 modified	≥ 110 m
Gas permeability (methane) - cm ² /s.Pa - cm ² /atm	ASTM D1434	< 12 (E ⁻¹²) < 12 (E ⁻⁰⁷)

(values are subject to variation not exceeding 15 %)

Installation

COLPHENE BSW PROTECT'R must be adhered, in longitudinal strip centered over **COLPHENE BSW H** side laps, by peeling off the release protection film. Once installed, a pressure must be applied over the whole surface using a membrane roller to ensure good contact.

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

Special indications

Hygiene, health and environment:

The product does not contain any substance likely to be detrimental to health or to environment and complies with generally admitted Health and Safety Requirements. For further information, please refer to relevant Safety Data Sheet.

Traceability:

Product traceability is ensured through a manufacturing code present on the packaging.

Quality control:

SOPREMA has always attached the highest importance to the quality of its products, to the respect of environment and people.

For this reason, we apply an integrated management of the Quality and Environment certified **ISO 9001** and **ISO 14001**.

CE marking

 1119
COLPHENE BSW PROTECT'R SOPREMA 14 rue de Saint-Nazaire – CS 60121 67025 STRASBOURG cedex 14 Construction Product Regulation (CPR) Declaration of Performance: DoP n° WPBEX251 Certificate of Factory Production Control: 1119-CPR-13136, 13137, 13138 (EN 13969)
<p style="text-align: center;">EN 13969</p> Membrane composed of modified elastomeric bitumen and composite reinforcement. Topside is coated with specially engineered silicon dioxide crystals and the self-adhesive underside is protected by a silicone release film. Dimensions 15 m x 1 m x 2.0 mm. Must be fully adhered to substrate. Self-adhesive protection membrane.

Essential characteristics	Performances	Harmonised Technical Specification
Reaction to fire (EN 13501-1)	E	EN 13969:2004 + A1:2006
Root resistance (EN 13948)	NPD	
Peel resistance of joints (N / 50 mm) (EN 12316-1)	≥ 100	
Watertightness – Method B (EN 1928)	Conform	
Resistance to impact – Method A (mm) (EN 12691) Method A is on rigid substrate (aluminium)	≥ 500	
Shear resistance of joints (N / 50 mm) (EN 12317-1)	≥ 580	
Flexibility at low temperature (°C) (EN 1109)	≤ -16	
Tensile properties: (EN 12311-1) Tensile strength L x T (N / 50 mm) Elongation L x T (%)	800 x 600 (±20 %) 45 x 45 (±15 abs.)	
Resistance to static loading (kg) Method B (EN 12730) Method B is on rigid substrate (concrete)	≥ 5	
Resistance to tearing (nail shank) L x T (N) (EN 12310-1)	350 x 350 (±100)	
Durability (EN 1296 / EN 1928) Watertightness after ageing	Conform	
Dangerous substances (Notes 2 and 3)	Complies	

Note 2: This product does not contain asbestos or tar constituents.

Note 3: 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.

Additional characteristics	COLPHENE BSW PROTECT'R
Durability (°C) (EN 1296 / EN 1110) Flow resistance at elevated temperature after ageing	≥ 70
Resistance to impact (mm) Method A (EN 12691) with COLPHENE BSW H	≥ 1900
Resistance to static loading (kg) Method B (EN 12730) with COLPHENE BSW H	≥ 30