

PRODUCT DATA SHEET

TECHNICAL DATA SHEET 232105ME002
SUPERCEDES: TECHNICAL DATA SHEET 170714SME2E

DESCRIPTION

COLPHENE® BSW H 3.5 is a high performance, fully bonded composite sheet membrane designed for blind side waterproofing assemblies in pre-applied 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 reinforcement system (heavy duty non-woven polyester). The top surface is treated with a Specially Engineered Silicon Dioxide Crystals while the underside is laminated with a distinct synthetic film. The unique design of COLPHENE® BSW H 3.5 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.

STORAGE & HANDLING

COLPHENE® BSW H 3.5 should be stored away from the source of ignition. Wear necessary Personal Protective Equipment. Partly used material should be placed in a sealed container and stored in a well-ventilated area. Open containers should be kept tightly closed, away from fire or open flame.

USER APPLICATION

COLPHENE® BSW H 3.5 is used in various applications for substructure waterproofing. All the application guidelines are described in SOPREMA's Technical Manuals in force.

ADVANTAGES

- Tenacious and coherent bond strength to poured concrete
- An exclusive and homogenous "Duo Selvedge" Technology for the safest installation
- Durable value engineering solution for sub-structure waterproofing
- Resistant to aggressive chemicals, radon gas diffusion and methane gas permeability
- Robust to static and kinetic forces with crack bridging ability
- Watertight, high resistance to hydrostatic pressures and lateral water migration
- UV and elevated temperature exposure capabilities



HEALTH, SAFETY & ENVIRONMENT

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

TRACEABILITY

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

QUALITY MANAGEMENT

SOPREMA always recognises as a high level of importance the quality of the products, the environment and safety. For this reason, we operate independently monitored Quality Management Systems in line with ISO 9001:2015.

COMPOSITION & PACKAGING

PROPERTY	STANDARDS	COLPHENE® BSW H 3.5
Colour	-	Black
Thickness (Gross)	ASTM D5147	3.5 mm
Roll dimension	-	10 x 1 m
Roll weight	-	44 kg
Rolls per pallet	-	25
Underface	-	Thermofusible Film
Surface	-	Specially Engineered Silicon Dioxide Crystals
Side-Lap Width	-	12 cm

TECHNICAL PROPERTIES

PROPERTIES	STANDARDS	COLPHENE® BSW H 3.5
Tensile strength @ peak load, MD / CMD	ASTM D5147	17 / 11.5 kN / m
Elongation @ break, MD / CMD	ASTM D5147	60 % / 65 %
Tear strength, MD / CMD	ASTM D5147	600 N / 400 N
Resistance to puncture, MD / CMD	ASTM E154	1050 N
Radon gas diffusion coefficient	ISO/TS 11665 - 13	2.9 (± 0.3) x 10 ⁻¹¹ (m ² /s) @ 20 °C
Methane gas transmission	ISO 15105 - 1	64 cm ³ / (m ² .d.bar) @ 23 °C
CO ₂ gas transmission	ISO 15105 - 1	356 cm ³ / (m ² .d.bar) @ 23 °C
Water vapour permeance	ASTM E96 method B	< 2.1 ng / (Pa • S • m ²) < 0.04 perms
Water absorption	ASTM D570 @ 24 hrs	< 0.5 %
Adhesion to poured structural concrete, 22 °C	ASTM D903 modified	3400 N / m
Resistance to hydrostatic head	ASTM D5385	> 110 m
Lateral water migration	ASTM D5385 modified	> 110 m
Low temperature flexibility	ASTM D5147	Unaffected @ -30 °C (-22 F)

Conforms to Norms: EN 13969 / EN 13707 : 2004 + A2 : 2009 / EN 13969 : 2004 + A1 : 2006

(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.

TESTING AND CERTIFICATIONS



SUSTAINABILITY AND ENVIRONMENT

