

COLPHENE BSW H 3.5

Description

High-performance waterproofing membrane composed of elastomer modified bitumen and a non-woven polyester reinforcement. The upper surface is finished with specially engineered silicon dioxide crystals.

The lower surface is protected by a thermofusible film.

40 mm of the DUO overlap is finished with self-adhesive bitumen protected by a silicone release film. The remaining 80 mm is protected with a thermofusible film and can be welded with flame or hot air.

Used as horizontal waterproofing underneath the concrete slab (below grade works and basements).

Thanks to its special formulation and composition COLPHENE BSW H 3.5 has an excellent, continuous and homogenous bond to poured structural concrete which contributes to an increased resistance to hydrostatic pressure and superior mechanical properties.

Characteristics

Composition			Value	
Reinforcement			non woven polyester	
Finish upper side			especially engineered silicon dioxide crystals	
Finish lower side			thermofusible film	
Coating mass			elastomer modified bitumen	
Technical characteristics	Standard	Unit	Value	Tolerance
Thickness membrane	EN 1849-1	mm	3,5	± 5 %
Mass (indicative)	EN 1849-1	kg/m ²	4,3	
Tensile force (L / T)	EN 12311-1	N/50 mm	1100 / 800	± 20 %
Elongation at max. tensile force (L / T)	EN 12311-1	%	55 / 55	± 15
Resistance to static loading	EN 12730-A EN 12730-B	kg	NPD ≥ 15	
Resistance to impact	EN 12691-A EN 12691-B	mm	≥ 1000 NPD	
Resistance to tearing (nail shank) (L / T)	EN 12310-1	N	300 / 300	± 100
Flexibility at low temperature	EN 1109	°C	≤ -16	
Flow resistance at elevated temperature after aging	EN 1110 / EN 1296	°C	≥ 90	
Joint properties: peel resistance	EN 12316-1	N/50 mm	≥ 100	
Joint properties: shear resistance	EN 12317-1	N/50 mm	≥ 700	
Watertightness	EN 1928		pass	
Watertightness after ageing	EN 1928 / EN 1296		pass	
Reaction to fire	EN 13501-1	Class	E	
Tensile strength at peak load (L / T)	ASTM D5147	kN/m	≥ 17,0 / 11,5	
Elongation at break (L / T)	ASTM D5147	%	60 / 65	
Tear strength (L / T)	ASTM D5147	N	≥ 600 / 400	
Flexibility at low temperature	ASTM D5147	°C	unaffected at -18	
Resistance to puncture	ASTM E154	N	≥ 1210	
Water vapour transmission	ASTM E96-B	ng/(Pa.s.m ²)	< 2,5	
Water absorption	ASTM D570	%	< 0,9	
Peel strength on poured structural concrete	ASTM D903	N/m	≥ 3400	
Resistance to hydrostatic pressure	ASTM D5385	m	≥ 110	
Resistance to water migration	ASTM D5385	m	≥ 110	
Gas permeability	ASTM D1434	10 ⁻¹² .cm ² /s.Pa 10 ⁻⁷ .cm ² /atm	< 15 < 15	
Radon gas diffusion coefficient D	K124/02/95	10 ⁻¹² .m ² /s	6,6	± 0,3
- including joint			2,2	± 0,1

SOPREMA reserves the right to amend the composition of its material and consequently their prices, without prior notice. For this reason, all orders will be accepted only in accordance with the conditions and technical specifications in force at the date of order.

Contact: www.soprema.com

Packing

Dimensions of the roll	EN 1848-1	m	$\geq 10 \times 1$
Mass/roll		kg	± 43
Rolls/pallet			25

NPD = no performance determined

Installation

COLPHENE BSW H 3.5 is loose laid on the working surface like blinding concrete or prepared and compacted soil.

The longitudinal overlaps must be at least 120 mm and the transversal overlaps at least 150 mm.

To prevent thick overlaps, the transversal overlaps should be staggered by at least 300 mm.

The overlaps are partial torched (longitudinal partial: self-adhesive and partial torched; transversal: torched).

All angle changes (inside and outside corners) and other details must be reinforced by heat-welding an additional 300 mm piece of membrane centered on the angle or detail.

It is recommended to install COLPHENE BSW PROTECT'R, as a protection layer, over the COLPHENE BSW H 3.5 prior to the installation of the reinforcement bars and pouring of the concrete slab.

For more information, please contact Soprema.

Certifications

- BBA 21/5915

Special indications**Hygiene, Health and Environment**

The product does not contain any substance which is likely to be detrimental to your health or to the environment and complies with generally admitted Health and Safety Requirements.

For more information, please refer to the relevant safety data sheet.

Quality-, Environment- and Safety 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 and Environment Assurance Systems in line with

EN ISO 9001 and **EN ISO 14001**.