



Technical Data Sheet

DS MEMBRANES

DS30, DS30M, DS30200, DS30200M, DS40, DS40M, DS40200, DS40200M, DS40250, DS40250M, DS50250, DS50250M
APP modified bituminous membrane, reinforced with Polyester; complies with ASTM D 6222, Type I & II, Grade S and G and SASO 2633

DESCRIPTION

APP Modified bituminous membrane, reinforced with non woven polyester mat. The polyester combines high tensile strength and elongation. The special polymer modifier used has great resistance to ultra - violet radiation.

FEATURES

- Good flexibility at low temperature and stability at high temperature.
- Durable and easy to apply.
- Remarkable resistance to aggressive attack of salts and chemicals.
- High tensile strength and elongation.
- Excellent tear and puncture resistance.

FUNCTIONS

Used as double layers for tanking in basements and single and / or double layers for waterproofing of roofs. A plain layer followed by a layer of mineral surfaced DS should be used as exposed layer.

INSTRUCTIONS FOR APPLICATION

The membranes can be installed fully bonded or loose - laid by torch welding. The substrate should be cleaned and primed with AWAZEL PRIMER D 41 and allowed to dry. Torching should be done by skilled labor and should be controlled so that only the PE film is melted and the asphalt coating is softened sufficient to bond the membrane. All lap joints should be smoothed and sealed using a heated round - nosed trowel. The heat of the gas flame should be applied to the trowel. In loose - laid applications, only the lap joints, areas around penetrations (pipes etc.), upstands and a 30 cm

wide strip around the perimeter of the work should be fully bonded. Upstands and flashings should be installed using 1 M wide pieces cut from the length of the roll. (The overlap joints should be 5 to 10 cm at the sides and 15 cm at the end)

COVERAGE

1.12 meter per layer : for flat surfaces

HEALTH & SAFETY

All safety measures should be taken during application. Fire extinguishers should be available in the site. Labor should wear personnel protective tools such as gloves and goggles during application.

PACKING

It is produced in rolls of 1 x 10 and 1 x 8 meters; special lengths are available upon request. The rolls are palletized and shrink-wrapped.

SURFACING

Surfaced with P.E. on both sides. Mineral surfaced membrane is surfaced with mineral granules (slate) on top and PE film at bottom side and overlap side to facilitate torching.

STORAGE & MATERIAL HANDLING

The rolls should always be stored vertically in a shaded area. Normally the pallets should not be stacked one over the other. However, if a wooden board is used in between, two pallets may be stacked one over the other.

MR031604

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TECHNICAL DATA

Properties	Typical Results						Test Method
	DS30 DS30M	DS30200 DS30200M	DS40 DS40M	DS40200 DS40200M	DS40250 DS40250M	DS50250 DS50250M	
Roll Size, m	10 x 1	10 x 1	10 x 1	10 x 1	10 x 1	8 x 1	ASTM D 5147
Thickness, mm	3.0	3.0	4.0	4.0	4.0	5.0	ASTM D 5147
Unit Weight (Plain), kg/m ²	3.0	3.0	4.0	4.0	4.0	5.0	ASTM D 5147
Unit Weight (Mineral), kg/m ²	3.5	3.5	4.5	4.5	4.5	5.5	
Carrier (Polyester), g/m ²	160	200	180	200	250	250	UEAtc MOAT 30
Coating Asphalt Type	APP Modified Asphalt						
Softening Point, °C	150						ASTM D 36
Penetration at 25°C, 0.1 mm	15 - 30						ASTM D 5
Tensile Strength, N/5cm	*	*	*	*	*	*	
Longitudinal	700	950	900	1,000	1,150	1,250	ASTM D 5147
Transverse	500	750	700	800	1,000	1,050	ASTM D 146
Tensile Strength, ASTM D 6222, Requirements, kN/m	Type I			Type II			
Longitudinal & Transverse	≥ 8.8			≥ 14			ASTM D 5147 ASTM D 146
Elongation, % : Longitudinal	45			**			
Transverse	50						
Tensile Strength, ASTM D 6222, Requirements, %	Type I			Type II			
Longitudinal & Transverse	≥ 23			≥ 40			ASTM D 5147 ASTM D 146
Tear Resistance, N:							
Longitudinal	350	400	450	500	550	600	ASTM D 4073
Transverse	325	350	400	400	450	500	
Tear Resistance, ASTM D 6222, N	Type I			Type II			
Longitudinal & Transverse	311			356			ASTM D 4073
Lap Joint Strength, N/5cm	Same as Membrane						UEAtc M.O.A.T. 30 & 27
Longitudinal & Transverse							
Load Strain Product:							
Longitudinal	31,500	42,2750	42,500	45,000	51,750	56,250	CGSB 37-GP 56 M
Transverse	25,000	40,000	35,000	42,000	50,000	52,500	
Cold Flexibility at -0 to -5 °C	No Cracking						UEAtc M.O.A.T. 30
Flexibility, ASTM Requirement	No Cracking at 0 °C						ASTM D 5147
Heat Resistance at 135 °C	No Flowing						UEAtc M.O.A.T. 30
Resistance to Water Pressure	No Leakage						DIN 52123
Water Absorption (Grade S), %	≤ 3.2						ASTM D 5147
Static Puncture Resistance	L3 (15 kg)			L4 (25 kg)			UEAtc M.O.A.T. 27
Dynamic Puncture Resistance	13 (8-12mm indenter)			14 (4-6 mm indenter)			UEAtc M.O.A.T. 27
Dimensional Stability, %	≤ 1.0						ASTM D 5147
Moisture Content (W.V.T.), %	≤ 1.0						ASTM E 96
Resistance to Aging after 2000 hrs	No Deteriorations						ASTM D 4799

Note: The above shown technical data are typical results obtained, to the best of our knowledge. From our quality control records extra details can be provided upon request.

* In accordance to the standard, a variation of 20% is expected.

** In accordance to the standard, a variation of 15% is expected.

Refer TDS Control Nos. SA011604, SA021604 & SA031604 for Supporting Accessories

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