





Technical Data Sheet

PYE MEMBRANES

PY30E,PY30EM, PY30200E, PY30200EM, PY40E, PY40EM, PY40200E, PY40200EM, PY40250E, PY40250EM, PY50250E & PY50250EM 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

- High 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 or single and / or double layers for waterproofing of roofs. A plain layers followed by a layer of mineral surfaced PYE should be used as exposed.

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.

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TECHNICAL DATA

Properties	Typical Results						
	PY30E PY30EM	PY30200E PY30200EM	PY40E PY40EM	PY40200E PY40200EM	PY40250E PY40250EM	PY50250E PY50250EM	Test Method
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/m²	3.0	3.0	4.0	4.0	4.0	5.0	ASTM D 5147
Unit Weight (Mineral), kg/m²	3.5	3.5	4.5	4.5	4.5	5.5	ASTM D 5147
Carrier (Polyester), g/m²	160	200	180	200	250	250	UEAtc MOAT 30
Coating Asphalt Type	APP Modified Asphalt						
Softening Point, °C	155						ASTM D 36
Penetration at 25°C, 0.1 mm		15 - 30					ASTM D 5
Tensile Strength, N/5cm			•				
Longitudinal	700	1,000	950 800	1,100	1,200	1,250	ASTM D 5147
Transverse	500	800	800	850	1,000	1,050	ASTM D 146
Tensile Strength, ASTM D 6222, Requirements, kN/m	Type I Type II						ASTM D 5147
Longitudinal & Transverse	≥ 8.8			>	≥14	ASTM D 146	
Tensile Strength, at - 18°C, kN/m							
Longitudinal	22				26	ASTM D 5147	
Transverse	20				22	ASTM D 146	
Elongation, % : Longitudinal	45 **						ASTM D 5147
Transverse	50						ASTM D 146
Elongation , ASTM D 6222,	Type I Type II						
Requirements, %	> 22						ASTM D 5147 ASTM D 146
Longitudinal & Transverse	≥ 23 ≥ 40						A31M D 140
Elongation at - 18°C, %	24						ASTM D 5147
Longitudinal Transverse	24 26						ASTM D 146
							7-3-111-3-1-1-3
Tear Resistance, N: Longitudinal	350	400	500	600	650	700	ASTM D 4073
Transverse	325	350	400	400	450	500	A31M D 40/3
Tear Resistance, ASTM D 6222, N		Type I		Tyr	pe II		
Longitudinal & Transverse		≥311		2	>356	ASTM D 4073	
Lap Joint Strength, N/5cm							UEAtc M.O.A.T. 30
Longitudinal & Transverse	Same as Membrane						27
Load Strain Product: Longitudinal Transverse	31,500 25,000	45,000 40,000	42,750		54,000 50,000	62,500 52,500	CGSB 37-GP 56 M
Cold Flexibility at -5 to - 10°C	25,000	40,000	No Cra		30,000	32,300	UEAtc M.O.A.T. 30
Flexibility, ASTM Requirement	No Cracking at 0 °C						ASTM D 5147
Heat Resistance at 150 °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 n	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.

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

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

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