XR-5® 8138

ETHYLENE INTERPOLYMER ALLOY (EIA)

Viaflex

PRODUCT DESCRIPTION

XR-5® geomembranes consist of an compounded Ethylene Interpolymer Alloy (EIA) outer coating. They are very stable, with low thermal expansion and contraction properties. XR-5® 8138 is reinforced with an extremely tough woven synthetic fabric coated with a unique polymeric adhesive, providing a molecular bond between the compounded EIA coating an the reinforcement.

XR-5® 8138 is extremely chemical resistant with high puncture and tear resistance, as well as dimensionally stable under high loads and temperature fluctuations.

PRODUCT USE

XR-5®-Series is designed to contain and protect against acids, oils, methane and alkalis. It is often used for pond liners, secondary containment, floating covers, and wastewater baffles. Other common applications include: tank farms, wastewater impoundments, landfill liners and potable water applications. XR-5®-Series geomembranes are capable of performing in harsh environments.

SIZE & PACKAGING

XR-5® 8138 can be seamed by hot air or wedge welded into custom sized panels up to 15,000 square feet in controlled factory conditions for ease of field installation. It is available in a 30 or 40 mil thickness based on application requirements.

XR-5®

Tank Farm Secondary Containment

PRODUCT	PART #
XR-5®	XR58138B

APPLICATIONS

Secondary Fuel Containment

Electrical Substations

Baffle Curtains

Floating Covers

Potable Water Storage

Clear Wells

Waste Water Impoundments

Tank Farms

Landfill Liners

Potable Water Applications

Leachate Ponds

Oil Booms

XR-5® 8138

ETHYLENE INTERPOLYMER ALLOY (EIA)

		XR-5® XR58138	
PROPERTIES	TEST METHOD	IMPERIAL	METRIC
Appearance		Black or Custom Color	
Base Fabric Type Base Fabric Weight (nominal)	ASTM D751	Polyester 6.5 oz/yd^2	Polyester 220 g/m^2
Thickness (nominal)	ASTM D751	40 Mils	1.0 mm
Weight	ASTM D751	38.0 ± 2 oz/yd^2	1288 ± 70 g/m^2
Tear Strength	ASTM D4533- Trapezoid Tear	40/55 lb min	175/245 N min
Breaking Yield Strength	ASTM D751 - Grab Tensile	550/550 lb min	2448/2448 N min
Low Temperature Resistance	STM D2136 - 4 hr - 1/8" mandrel	Pass @ -30° F	Pass @ -34° C
Dimensional Stability	ASTM D1204 - 212° F / 100° C - 1 hr	0.5 % max each direction	
Adhesion Heat Sealed Seam	ASTM D751 - Dielectric Weld	40 lb/2 in min	35 N/cm min
Dead Load Seam Strength	ASTM D751 - 4-hour test	2 in seam, 4 hrs, 1 in strip Pass 240 lb @ 70° F Pass 120 lb @ 160° F	5 cm seam, 4 hrs, 2.5cm strip Pass 1068 N/2.54cm @ 21° C Pass 534 N/2.54cm @ 70° C
Bursting Strength	ASTM D751 - Ball Tip	750 lb min	3330 N min
Hydrostatic Resistance	ASTM D751	800 psi min	5.51 MPa min
Blocking Resistance	ASTM D751 - 180° F / 82° C	#2 Rating max	
Adhesion - Ply	ASTM D413 - Type A	15 lb/in min or Film Tearing Bond	26 N/cm min or Film Tearing Bond
Bonded Seam Strength	ASTM D751- Grab Test Method Procedure A	550 lb min	2450 N min
Abrasion Resistance	ASTM D3389 - H-18 Wheel 1kg Load	2000 cycles (min) before fabric exposure 50 mg/100 cycles maximum weight loss	
Weathering Resistance	ASTM G153 (Carbon-Arc)	8000 hrs (min)-No appreciable changes or stiffening or cracking of coating	
Water Absorption	ASTM D471 - Section 12 - 7 Days	0.025 kg/m^2 max @ 70° F/21° C 0.14 kg/m^2 max @ 212° F/100° C	
Wicking	ASTM D751	1/8 in max	0.3 cm max
Puncture Resistance	ASTM D4833	275 lb min	1200 N min
Coefficient Of Thermal Expansion/Contraction	ASTM D696	8 x 10^{-6} in/in/°F max	1.4 x 10^{-5} cm/cm/°C max
Puncture Resistance	FED-STD 101C - Method 2031	350 lb (approximate)	1550 N (approximate)

Seaming: Thermal welding methods are recommended. No glues or solvents are suggested

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