

OUTLAST. OUTPERFORM. OUTSTANDING.

For over 30 years, XR-5[®] has been used by engineers who have needed the strongest geomembrane for use in the world's harshest conditions. Backed by over 60 years of coated fabric technology, Seaman Corporation's XR-5 is the highest-strength and most chemically

resistant fabric on the market. XR-5 was developed to contain and protect against acids, oils, methane. Across the world, XR-5 is being used for pond liners, secondary containment, floating covers, wastewater baffles and potable water containment.



The Difference vs. HDPE, CSPE and Polypropylene

- Superior UV-Resistance
- Low Thermal Expansion & Contraction
- Superior Chemical Resistance
- Superior Tensile Strength
- 10-Year Weathering Warranty

Seaman Corporation is a global leader in the development of a broad range of innovative, high-performance fabrics. With a 60-year track record, Seaman Corporation has developed innovative fabric solutions for the roofing, military, architectural and marine industries.

Property	Test Method	8130 XR-5®	8138 XR-5®
Base Fabric Type Base Fabric Weight	ASTM D 751	Polyester 6.5 oz/yd ² nominal (220 g/m ² nominal)	Polyester 6.5 oz/yd ² nominal (220 g/m ² nominal)
Thickness	ASTM D 751	30.0 mils nominal (0.76 mm min.)	40.0 mils nominal (1 mm min.)
Weight	ASTM D 751	30.0 ± 2.0 oz/yd ² (1017 ± 2 g/sq. m)	38.0 ± 2.0 oz/yd ² (1288 ± 2 g/sq. m)
Tear Strength	ASTM D 751 Trap Tear	40/55 lb. min. (175/245 N min.)	40/55 lb. min. (175/245 N min.)
Breaking Yield Strength	ASTM D 751 Grab Tensile	550/550 lb. min. (2,448/2,448 N min.)	550/550 lb. min. (2,448/2,448 N min.)
Low Temperature Resistance	ASTM D 2136 4hrs-1/8in Mandrel	Pass @ -30° F (Pass @ -34° C)	Pass @ -30° F (Pass @ -34° C)
Dimensional Stability	ASTM D 1204 212°F/100° C-1 hr.	0.5% max. each direction	0.5% max. each direction
Hydrostatic Resistance	ASTM D 751 Method A	800 psi min. (5.51 MPa min.)	800 psi min. (5.51 MPa min.)
Blocking Resistance	ASTM D 751 180° F/82° C	#2 Rating max.	#2 Rating max.
Adhesion-Ply	ASTM D 413 Type A	15 lb./in. min. or film tearing bond (13 daN/5 cm min. or FTB)	15 lb./in. min. or film tearing bond (13 daN/5 cm min. or FTB)
Adhesion- Heat Welded Seam	ASTM D 751 Dielectric Weld	40 lb./2in. min. (17.5 daN/5 cm min.)	40 lb./2in. min. (17.5 daN/5 cm min.)
Dead Load Seam Strength	ASTM D 751 4-Hour Test	Pass 240 lb./in. @ 70° F (Pass 1,068 N/2.54 cm @ 21° C) Pass 120 lb./in. @ 160° F (Pass 534 N/2.54 cm @ 70° C)	Pass 240 lb./in. @ 70° F (Pass 1,068 N/2.54 cm @ 21° C) Pass 120 lb./in. @ 160° F (Pass 534 N/2.54 cm @ 70° C)
Bonded Seam Strength	ASTM D 751 Procedure A, Grab Test Method	550 lb. min. (2,450 N min.)	550 lb. min. (2,450 N min.)
Abrasion Resistance	ASTM D 3389 H-18 Wheel 1 kg Load	2,000 cycles min. before fabric exposure, 50 mg/100 cycles max. weight loss	2,000 cycles min. before fabric exposure, 50 mg/100 cycles max. weight loss
Weathering Resistance	ASTM G 153	8,000 hours min. with no appreciable change or stiffening or cracking of coating	8,000 hours min. with no appreciable change or stiffening or cracking of coating
Water Absorption	ASTM D 471, Section 12 7 Days	0.025 kg/m ² max. @ 70° F/21° C 0.14 kg/m ² max @ 212° F/100° C	0.025 kg/m ² max. @ 70° F/21° C 0.14 kg/m ² max @ 212° F/100° C
Wicking	ASTM D 751	1/8in max. (0.3 cm max.)	1/8in max. (0.3 cm max.)
Bursting Strength	ASTM D 751 Ball Tip	750 lb. min. (3,330 N min.)	750 lb. min. (3,330 N min.)
Puncture Resistance	ASTM D 4833	275 lb. min. (1,200 N min.)	275 lb. min. (1,200 N min.)
Coefficient of Thermal Expansion/Contraction	ASTM D 696	8 x 10 ⁻⁶ in/in/° F max. (1.4 x 10 ⁻⁵ cm/cm/° C max.)	8 x 10 ⁻⁶ in/in/° F max. (1.4 x 10 ⁻⁵ cm/cm/° C max.)
Puncture Resistance	FTMS 101C Method 2031	350 lb. approx. (1550N approx.)	350 lb. approx. (1550N approx.)
Environmental/Chemical Resistance Properties	ASTM D 741 7-day Total Immersion with Exposed Edges	See Chemical Resistance Table	See Chemical Resistance Table