ALPHA
engineered composites
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ALPHALAM X
510

Product Composition	**English**	**Metric**
Fluoroplastic Chemical Barrier Compound 100% virgin PTFE resin	0.020 inch	0.51mm

Physical Property	**Test Method**	**English**	**Metric**
Composite Weight, Nom	Basis Weight	28.6 oz/yd^2	970g/m^2
Composite Thickness, Nom	ASTM D1777	0.020 inch	0.51mm
Tensile Strength, Min	ASTM D4851	75 lbs/inch (MD) 75 lbs/inch (XD)	672 N/50mm [MD] 672 N/50mm [XD]
Permeation Resistance[1]	ASTM F739	0.0 perm	0.0 ng/N
Trapezoidal Tear Strength, Min	ASTM D4851	62 lbs/inch (MD) 62 lbs/inch (XD)	276 N [MD] 276 N [XD]
Adhesion Strength, Min	ASTM D4851	5 lbs/inch	45 N/50mm
Flexural Endurance [-1]	ASTM D4851 60% to 100%	75% average	
Low Temperature Resistance	ASTM D1790 -100°F [-73°C]	Remains Flexible No Delamination	
High Temperature Resistance	ASTM D1790 +600°F [+316°C]	Remains Flexible No Delamination	
Water Immersion	24 hours @ 73° [23°C]	No Delamination	
Mold Resistance	ASTM C665 / C1338 ASTM G21 [both sides]	No Growth No Growth	

[1]The AlphaLam X composite was investigated for permeation by an independent laboratory. Sulfuric acid [2N] at 5 psig was used as the test medium. The AlphaLam X composite exhibited zero breakthrough and/or permeation. Test reports available upon request.

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