



ALPHALAM X 510

Product Composition

Fluoroplastic Chemical Barrier Compound
100% virgin PTFE resin

English

0.020 inch

Metric

0.51mm

Physical Property

Test Method

English

Metric

Composite Weight, Nom

Basis Weight

28.6 oz/yd²

970g/m²

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 Resistance¹

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

¹The 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.