

FlexLam® 850 Material Specification



Property Ratings

Resistance to Vibrations	<i>Good</i>
Resistance to Movements	<i>Very Good</i>
Resistance to Abrasion	<i>Very Good</i>
Resistance to Solvents	<i>Good</i>
Resistance to Oils	<i>Good</i>
Resistance to Alkali	<i>Good</i>
Resistance to Dilute Acids	<i>Good</i>
Resistance to Concentrated Acids	<i>Good</i>
Resistance to Flames	<i>Not Recommended</i>
Resistance to Weather / UV	<i>Excellent</i>

Physical Properties

Materials of Construction

Zero Porosity PTFE Film and Flexible PTFE Coated Fiberglass Cloth Laminated to a Heavy Duty Woven Fiberglass Cloth (95oz/sq yd)

Max. Operating Temperature:	<i>850°F (454°C)</i>
Min. Operating Temperature:	<i>-80°F (-62°C)</i>
Weight:	<i>155 oz/yd² (5270 g/m²)</i>
Thickness:	<i>0.345" (8.8 mm)</i>
Tensile Strength (Warp):	<i>1200 lbs/in (10724 N/50mm)</i>
Tensile Strength (Fill):	<i>1200 lbs/in (10724 N/50mm)</i>
Maximum Pressure:	<i>5 PSI (3518 mm wc)</i>
Minimum Pressure:	<i>-3 PSI -2110 mm wc)</i>

FlexLam® 850 Materials



Woven Fiberglass Cloth
95oz sq. yard

PTFE Corrosion / Gas Barrier
Weight: 13.5 oz/yd² (458 g/m²)
Thickness: 0.009" (0.23mm)
Tensile Strength: 25 lb/in (223 N/50mm)

The picture at left shows the two components that make up the FlexLam® 850 composite material. The outer ChemShield® material provides a flexible gas barrier while the inner woven fiberglass cloth provides additional temperature protection. The two layers are laminated together to form a single layer composite material capable of resisting stress cracking while providing flexibility and temperature resistance up to 850 degrees continuously.

Our FlexLam® 850 provides higher temperature ranges than our standard ChemShield® materials and can still be fabricated as a U-shaped expansion joint belt. The material combines both strength, temperature resistance with good flexibility. This material works very well for high temperature fan applications as well as any application requiring higher temperature resistance than our standard product. Our FlexLam® 850 material is the best choice for heavy duty service for elevated temperatures from 600F to 850F.

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