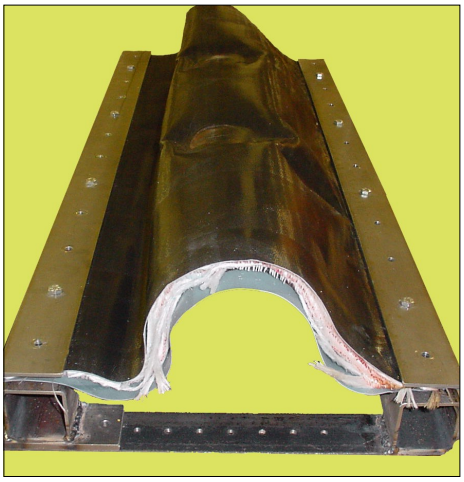
FlutterFlex™ Technology

The First Flexible PTFE Expansion Joint Product Resistant to Flue Gas Turbulence

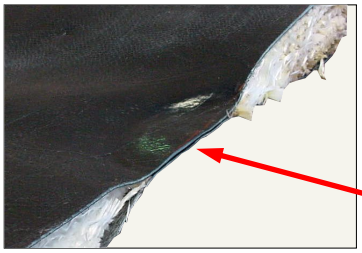
Why Does FlutterFlex™ Work?

Engineered for turbulent flue gas conditions, FlutterFlex™ is the first PTFE expansion joint product that can be manufactured to a high weight without sacrificing the critical flexing properties required for non-metallic flue duct seal service. By their nature, PTFE products are low in weight and extremely flexible at elevated temperatures. These characteristics make them prime candidates for flexing fatigue failure in turbulent flue gas conditions. Because FlutterFlex™ can be produced at a high weight, it is capable of serving as an unmovable expansion joint product in flue gas turbulence. Because FlutterFlex™ is capable of flexing at any weight, it is also capable of handling the flue duct movements found in non-metallic expansion joint service.

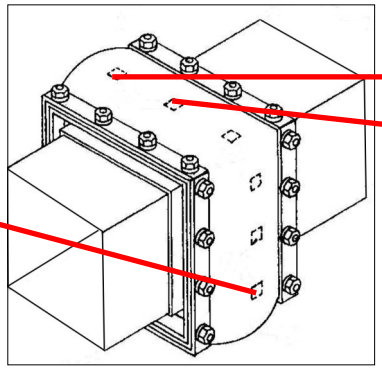


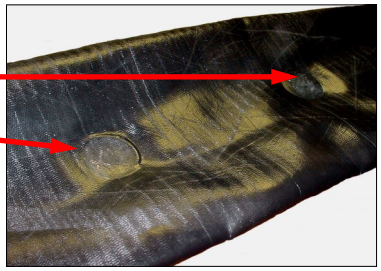
How is FlutterFlex™ Engineered?

A FlutterFlex product contains interior and exterior PTFE components that serve, primarily, as corrosion barriers and, to a lesser extent, as load bearing components. The internal components consist of high temperature fiberglass materials—products relied upon for their strength and weight. The multi-layered assembly performs as a single membrane because all plies are locked together by strategically located CrossFilm™ thermal welds.



Cross section showing a CrossFilm™ thermal weld and internal plies of fiberglass fabric





CrossFilm™ thermal welds

Typical Properties for FlutterFlex Products

Composition:	PTFE resins and fiberglass
Temperature:	up to 600°F (316°C)
Chemical:	Excellent
Weight:	15 to 30 lbs/sq yd (8.16 to 16.32 kg/sq m)
Thickness:	1 to 2 in. (25 to 50 mm)
Tensile Strength (warp and fill):	1500 to 4000 lbs/in (13125 to 35000 N/50 mm)

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FlutterFlex™ Technology

THE FIRST FLEXIBLE PTFE EXPANSION JOINT PRODUCT RESISTANT TO FLUE GAS TURBULENCE

FlutterFlex 14-7 CrossFilm™/2.86 Expansion Joint Product:

Product weight: 2.86 lbs/sf *(14.00 kg/sq m)*

Product thickness: 0.75" *(19 mm)*

Interior and exterior PTFE components: TEX-LFP™ 14-7 Expansion Joint Product

Internal plies: 35 oz/sq yd *(1190 g/sq m)* woven fiberglass fabric

No. of internal plies: 7

Thermal welds: CrossFilm™ 2130 Black Expansion Joint Product; 2" ID *(50 mm ID)*

Tensile strength: THTM (too high to measure)

FlutterFlex 2130 CrossFilm™/2.40 Expansion Joint Product:

Product weight: 2.40 lbs/sf *(11.75 kg/sq m)*

Product thickness: 0.75" *(19 mm)*

Interior and exterior PTFE components: CrossFilm™ 2130 Expansion Joint Product

Internal plies: 35 oz/sq yd *(1190 g/sq m)* woven fiberglass fabric

No. of internal plies: 7

Thermal welds: CrossFilm™ 2130 Black Expansion Joint Product; 2" ID *(50 mm ID)*

Tensile strength: 1500 lbs/in *(13350 N/50 mm)* warp and fill (estimated)

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