



***Extreme Duty
Fabric Expansion Joints***

Engineered for the Power Generation, Chemical and Processing Industries

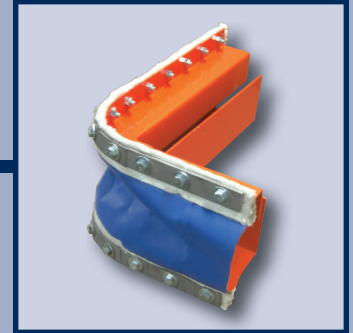
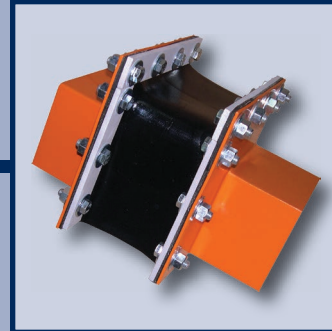
Products

Expansion Joints

- Elastomeric
- High Temperature Composite
- Fully Molded
- Textiles, Insulation, Gaskets & Seals

Breaching Framework

- External Mounts
- Internal Clamp Mount
- Internal Stud Mount
- Back Up Bars
- Flow Liners



Services

On-Site

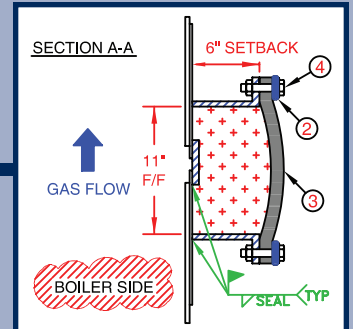
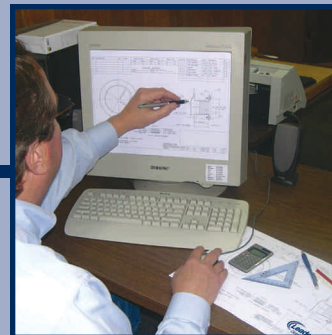
- Vulcanizing & Repair
- Inspections & Surveys
- Drawing Verification
- Installation Supervision



Design

Engineering

- Expansion Joint
- Breaching Framework
- Duct Work Thermal Analysis
- Drawing Management
- Auto CAD Drawings



Fabrication

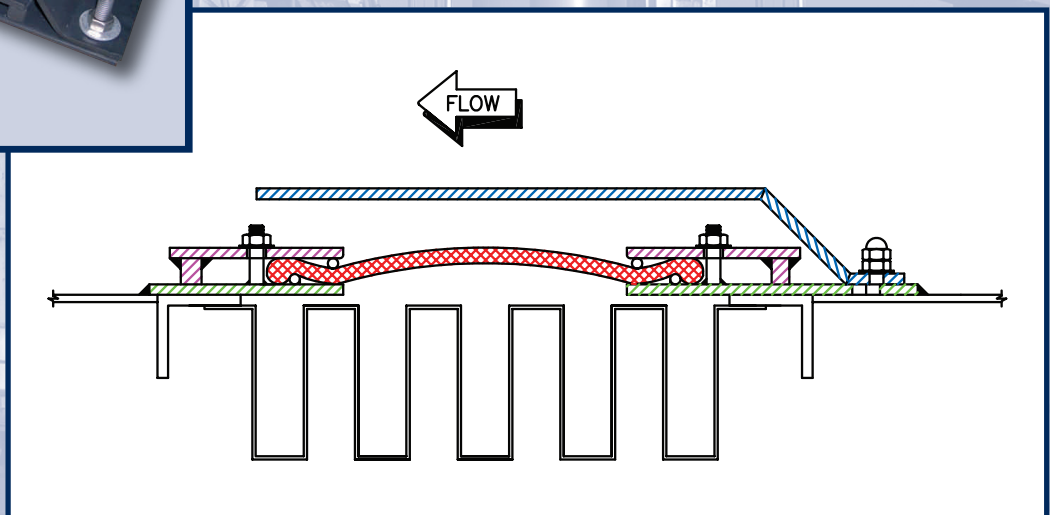
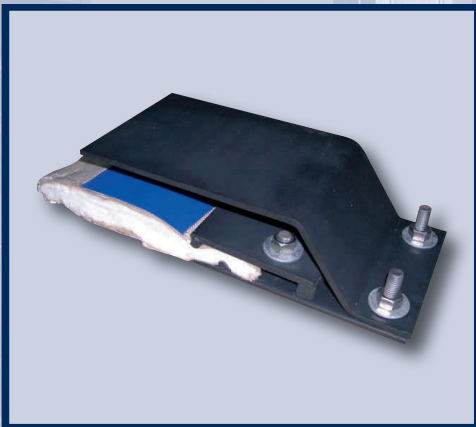
Single Point Sourcing

- Flex Element Fabrication
- Framework Fabrication
- Assembly of Belts to Frames
- Special Metal Fabrication

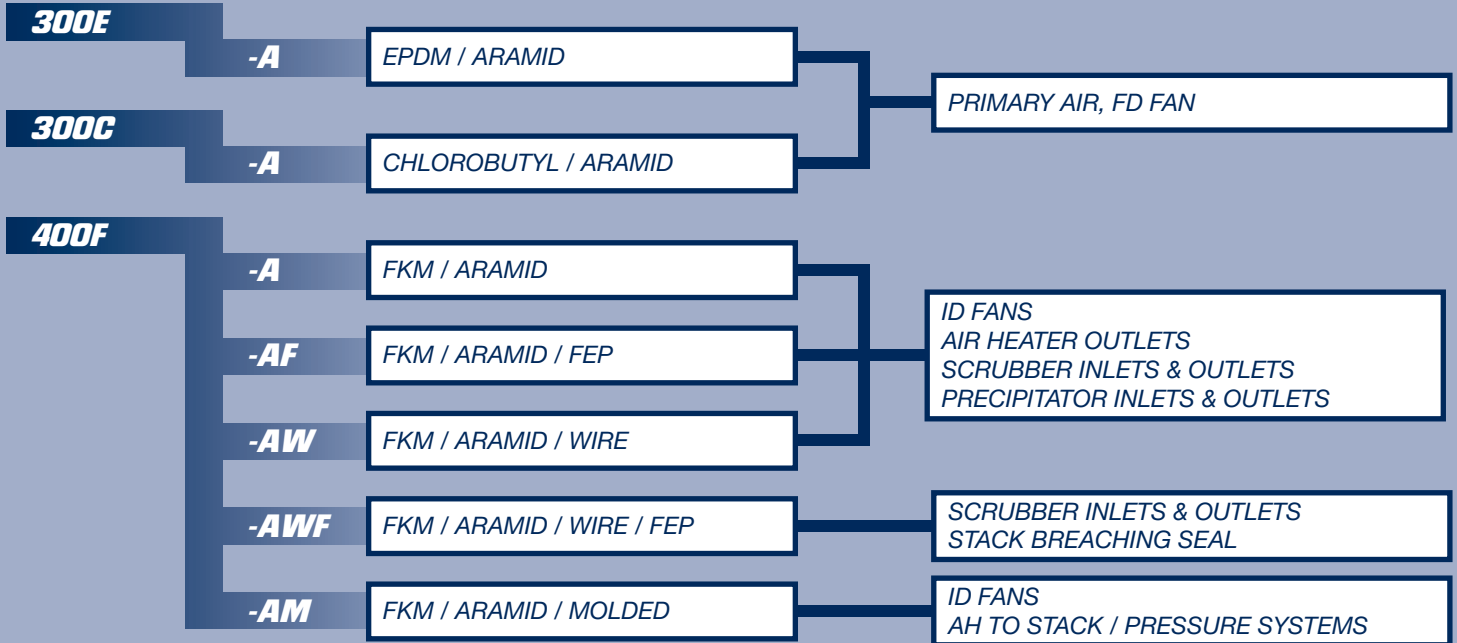


...Eliminate Costly Set-ups for Scaffolding & Rigging on Elevated Ductwork

Expansion Joints such as SCR's, Primary Air & Metal Bellows can be retrofitted from inside the ductwork with internally mounted frames & joint. The Internal Clamp Mount Frames eliminate exterior scaffolding & rigging, and requires no punching of the joint.



Elastomeric



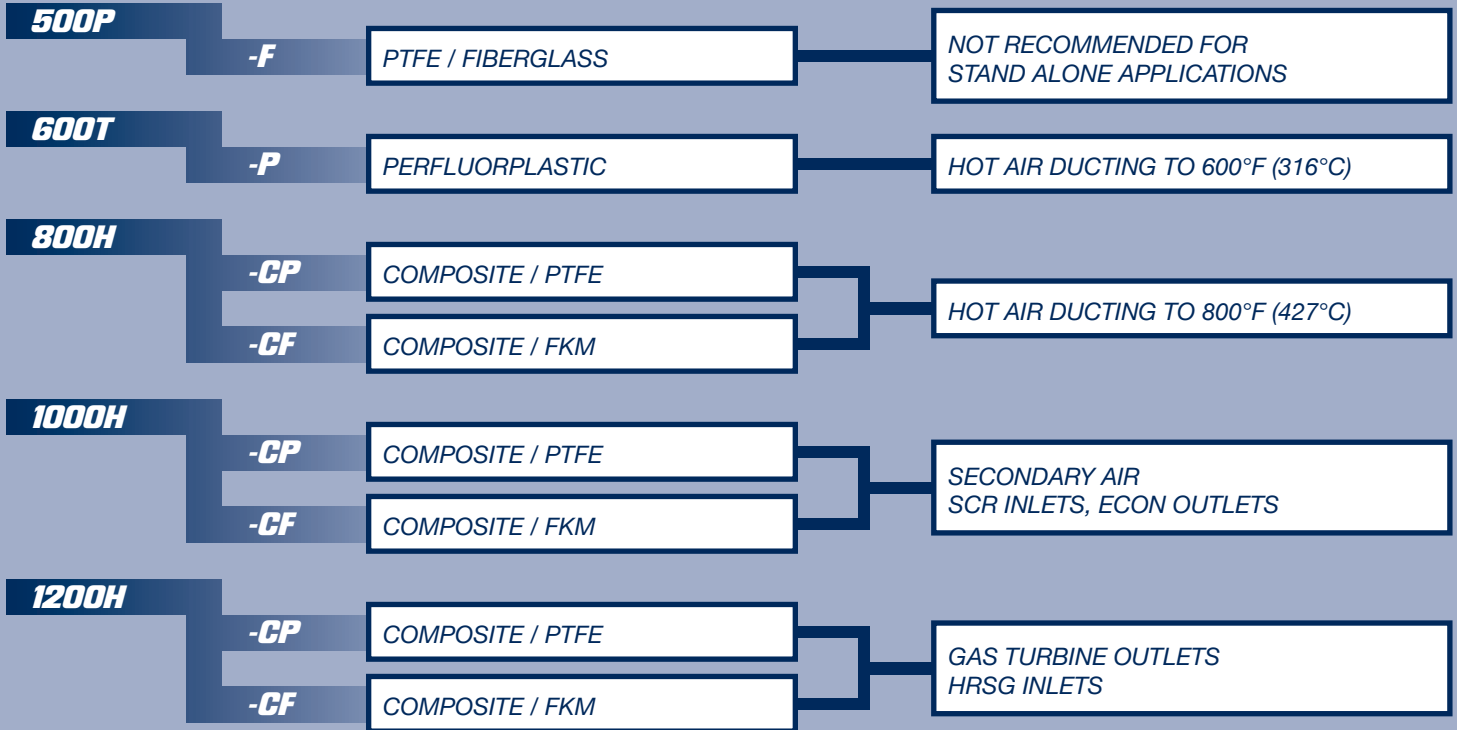
Materials

300E	<p>EPDM (Ethylene Propylene) A high performance compound that has excellent resistance to ozone & oxygen. It has excellent chemical resistance, including ammonia & mild acids. TEMPERATURE LIMIT: 300°F (149°C), CONTINUOUS</p>
300C	<p>CIIR (Chlorinated Isobutylene) Commonly called Chlorobutyl, is resistant to ozone & oxidizing chemicals as well as some mineral acids & ketones. CIIR has good characteristics in tensile strength, elongation & low gas permeability. TEMPERATURE LIMIT: 300°F (149°C), CONTINUOUS</p>
400F	<p>FKM (Fluoroelastomer) Manufactured in the USA by DuPont (Viton®), has outstanding resistance to chemicals, oil & heat. Excellent in high acid conditions, typically found from the Air Heater to the Stack and is acceptable for use in low concentrations (<10PPM) of AMMONIA. TEMPERATURE LIMIT: 400°F (205°C), CONTINUOUS</p>



* Viton® & Viton® Extreme™ are Registered Trademarks of DuPont Co.

Fluoroplastic / Composite



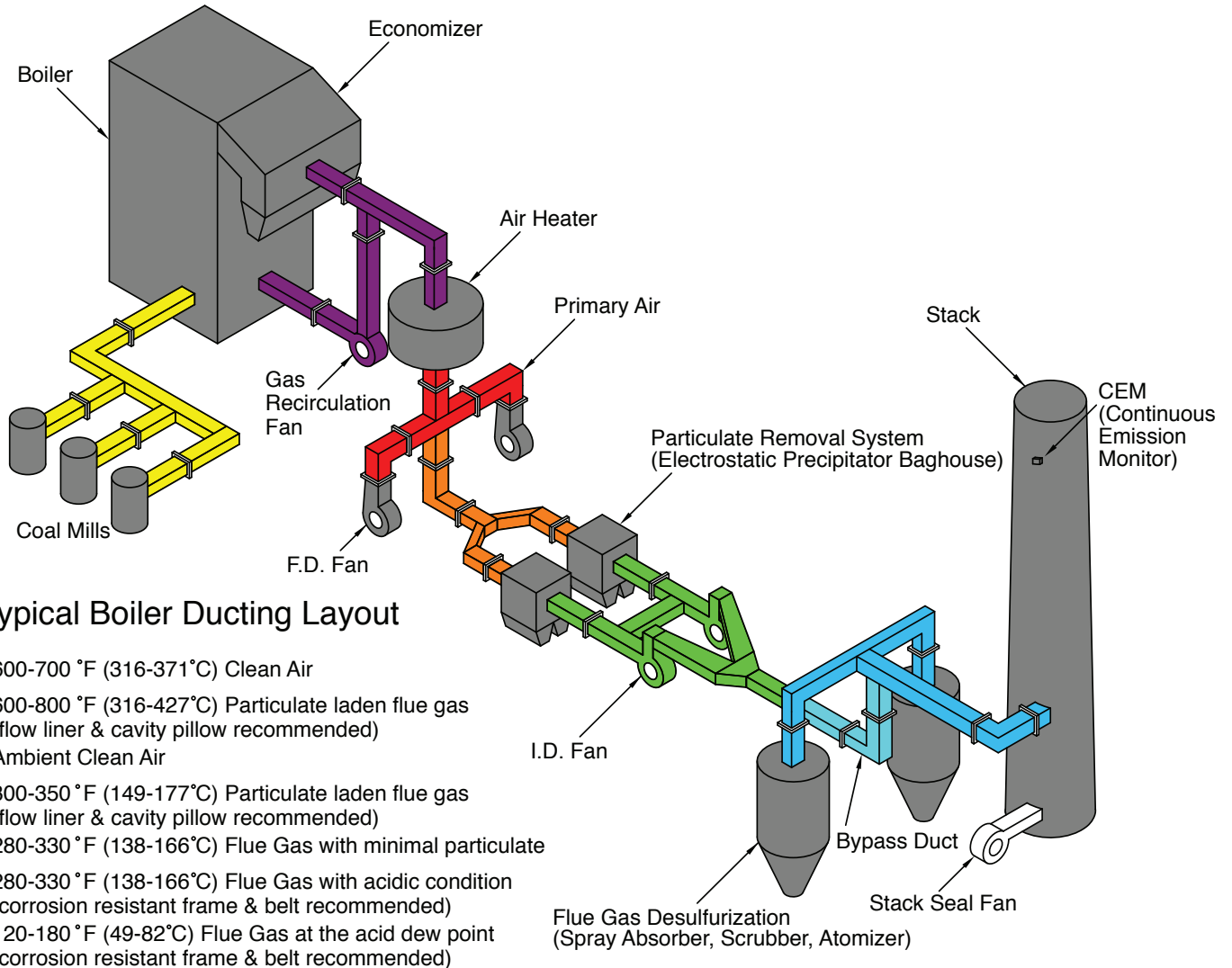
Materials

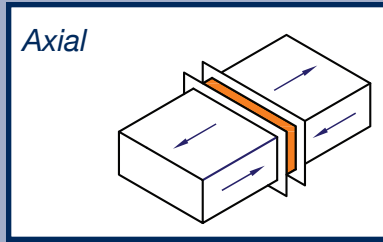
500P	<p>PTFE (Polytetrafluoroethylene) Fiber glass reinforced PTFE with a zero porosity gas barrier, mechanically bonded. For use in wet or dry service up to 575°F (302°C). Provides outer cover & gas seal for composite expansion joints. TEMPERATURE LIMIT: 575°F (302°C), CONTINUOUS</p>
600T	<p>PTFE (Polytetrafluoroethylene) Perfluoroplastic composite, laminated with a nonwoven insulation component that gives both strength & resiliency. The insulation component can prevent "hot spots" from forming on the belt. TEMPERATURE LIMIT: 700°F (371°C), CONTINUOUS</p>
800H 1000H	<p>COMPOSITE Multiple layers of PTFE (gas seal), insulation & woven fabric or knitted wire. Used in air & gas applications up to 750°F (399°C) & 2 PSIG & 1000°F (538°C) with a 4 inch insulation pillow. Primary gas seals available when gas dew point is a concern. TEMPERATURE LIMIT: 750°F (399°C), TO 1000°F (538°C), CONTINUOUS</p>
1200H	<p>COMPOSITE Multiple layers of PTFE (gas seal), insulation & woven fabric or knitted wire. Used in temperatures above 1000°F (538°C) in gas turbine type applications where heavy cycling, radial growth, hot spots & large movements are expected. Insulation pillows can be provided with 304 SS foil to prevent flyash build up in joint cavity. TEMPERATURE LIMIT: 1000°F (538°C), TO 1200°F (649°C), CONTINUOUS</p>

TEMPERATURE DESIGN STANDARDS

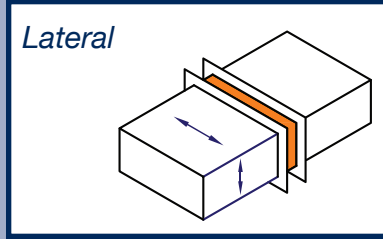
BGT PRODUCT	RECOMMENDED CONSTRUCTION			FLUE GAS TEMPERATURE		MAX TEMPERATURE DURATION LIMITS		SERVICE
	TYPE	CONSTRUCTION	MATERIAL	OPERATING °F	EXCURSION °F	SINGLE OCCURRENCE (HOURS)	MAXIMUM CUMULATIVE (HOURS)	
300E	ELASTOMERIC	BELT OR FLANGED	EPDM / ARAMID	300	350	4	100	WET / DRY
300C	ELASTOMERIC	BELT OR FLANGED	CHLOROBUTYL / ARAMID	300	350	4	100	WET / DRY
					450	2	3000	WET / DRY
					500	2	1000	
			FKM / ARAMID		550	2	240	WET / DRY
400F	ELASTOMERIC	BELT OR FLANGED	FKM / WIRE	400	600	2	48	WET / DRY
400B	ELASTOMERIC	BELT OR FLANGED	BRE / ARAMID		650	1	8	WET / DRY
			BRE / WIRE		700	1	4	WET / DRY
					750	1/2	2	
500P	FLUOROPLASTIC	BELT OR FLANGED	PTFE / FG	575	650	1	100	WET / DRY
600T	FLUOROPLASTIC	BELT	PTFE / INSULATION	700	CONSULT BAKER ENERGY GROUP			DRY / CYCLE DEW POINT
800H	COMPOSITE	BELT	COVER, PTFE, FKM	750	CONSULT BAKER ENERGY GROUP			DRY / CYCLE DEW POINT
1000H	COMPOSITE	BELT	COVER, PTFE, FKM	750/1000*	CONSULT BAKER ENERGY GROUP			DRY / CYCLE DEW POINT
1200H	COMPOSITE	BELT	COVER, PTFE, FKM	1000/1200*	CONSULT BAKER ENERGY GROUP			DRY / CYCLE DEW POINT

* REQUIRES 4" INSULATION PILLOW

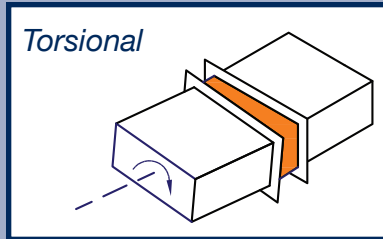




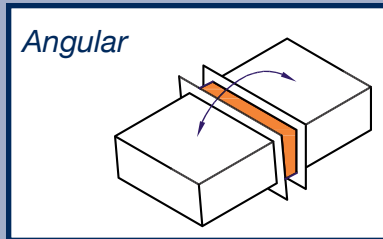
Axial Extension / Compression – The dimensional compression or extension of the expansion joint flange to flange dimension, parallel to its axis in longitude.



Lateral Movement – The amount of duct movement occurring in either of the two perpendicular planes to the longitudinal axis of the duct, which moves the expansion joint flanges out of alignment.



Torsional Deflection – The amount of twisting movement (in degrees) occurring in the perpendicular planes to the longitudinal axis of the duct system.



Angular Deflection – The amount of rotation (in degrees) of the duct system which flexes the expansion joint flanges out of parallel position with each other.

TYPE	ACTIVE LENGTH	AXIAL COMPRESSION		AXIAL EXTENSION	RESULTANT LATERAL		MINIMUM SETBACK	
		OPERATING	EXCURSION		OPERATING	EXCURSION	FLANGED	BELT
BELT STYLE ELASTOMERIC EXPANSION JOINTS								
300E-A	6" (150 mm)	1" (25 mm)	2" (50 mm)	1" (25 mm)	1" (25 mm)	2" (50 mm)	2 1/2" (64 mm)	6" (152 mm)
300C-A	9" (230 mm)	2 1/4" (57 mm)	4 1/4" (108 mm)	1" (25 mm)	2 1/4" (57 mm)	3 3/4" (96 mm)	3 1/2" (89 mm)	6" (152 mm)
400F-A	12" (305 mm)	3 1/4" (83 mm)	6" (152 mm)	1" (25 mm)	3 1/4" (83 mm)	5" (127 mm)	4 1/2" (114 mm)	6" (152 mm)
400F-AW	16" (405 mm)	5" (127 mm)	8 1/2" (216 mm)	1" (25 mm)	5" (127 mm)	7" (178 mm)	5 1/2" (140 mm)	8" (203 mm)
FLANGED ELASTOMERIC EXPANSION JOINTS								
300E-A	6" (150 mm)	1" (25 mm)	2" (50 mm)	1" (25 mm)	1" (25 mm)	2" (50 mm)	2 1/2" (64 mm)	6" (152 mm)
300C-A	9" (230 mm)	2 1/4" (57 mm)	4 1/4" (108 mm)	1" (25 mm)	2 1/4" (57 mm)	3 3/4" (96 mm)	3 1/2" (89 mm)	6" (152 mm)
400F-A	12" (305 mm)	3 1/4" (83 mm)	6" (152 mm)	1" (25 mm)	3 1/4" (83 mm)	5" (127 mm)	4 1/2" (114 mm)	6" (152 mm)
400F-AW	16" (405 mm)	5" (127 mm)	8 1/2" (216 mm)	1" (25 mm)	5" (127 mm)	7" (178 mm)	5 1/2" (140 mm)	8" (203 mm)
HIGH TEMPERATURE COMPOSITE EXPANSION JOINTS								
500P-F	6" (150 mm)	1" (25 mm)		1" (25 mm)		1/2" (13 mm)		6" (152 mm)
600T-P	9" (230 mm)	2" (50 mm)		1" (25 mm)		1" (25 mm)		6" (152 mm)
800H-CP	12" (305 mm)	3" (75 mm)		1" (25 mm)		1 1/2" (38 mm)		6" (152 mm)
800H-CF	12" (305 mm)	3" (75 mm)	CONTACT	1" (25 mm)	CONTACT	1 1/2" (38 mm)	CONTACT	6" (152 mm)
1000H-CP	16" (405 mm)	4" (100 mm)	BAKER	1" (25 mm)	BAKER	2" (50 mm)	BAKER	8" (203 mm)
1000H-CF	16" (405 mm)	4" (100 mm)	ENERGY	1" (25 mm)	ENERGY	2" (50 mm)	ENERGY	8" (203 mm)
1200H-CP	16" (405 mm)	4" (100 mm)	GROUP	1" (25 mm)	GROUP	2" (50 mm)	GROUP	8" (203 mm)
1200H-CF	16" (405 mm)	4" (100 mm)		1" (25 mm)		2" (50 mm)		8" (203 mm)



Mission / Vision

*Baker Energy Group, as a wholly owned business unit of Baker Bohnert, launches a unique “**Single Source**” concept for the design and manufacture of Fabric Expansion Joints and Breaching Framework. This also includes **on-site** technical support and **service**.*

Baker Energy Group joins Baker Bohnert as it enters its seventh decade of providing to the Power Generation, Chemical and Processing Industries world-class service, quality, value and information.

*This “**Single Source**” concept is structured to utilize the most advanced sealing technologies in concert with the best state of the art thermal management products available. With this, Baker Energy Group will produce the most flexible, cost effective and longest lasting expansion joints on the market today.*