



HOLZ

Rubber Company, Inc.

Flue Duct Expansion Joints



The Expansion Joint Experts

Holz provides application-matched expansion joints for a wide range of industries and uses. Whether it is an elastomeric, fabric or metal expansion joint, Holz has engineered products and application expertise to solve your specific issue or problem.

Holz Rubber is the leading supplier of elastomeric, fabric and metal expansion joints serving the power generation, refining, cement, pulp and paper, waste water and all other heavy industrial applications.

Flue Duct Joints For Ducting Systems

Holz Rubber Company offers a wide variety of Flue Duct Expansion Joints, depending upon your specific application requirements. All Holz Rubber Flue Duct products offer superior design, durability and application-matched performance.

Elimination of Corner Failures

Each corner is fabricated independently in a fully molded configuration without splices.

Margin of Engineered Safety

Typically, flue duct joints have a higher pressure rating than fabric joints.

Adaptability

Available in round or rectangular configurations with variable face-to-face dimensions, the expansion joint may be made to fit existing ductwork easily.

Elimination of Costly Gaskets

The integral rubber flanges act as a built-in gasket. Eliminating a separate gasket makes for a much faster and easier installation.

Chemical Resistance

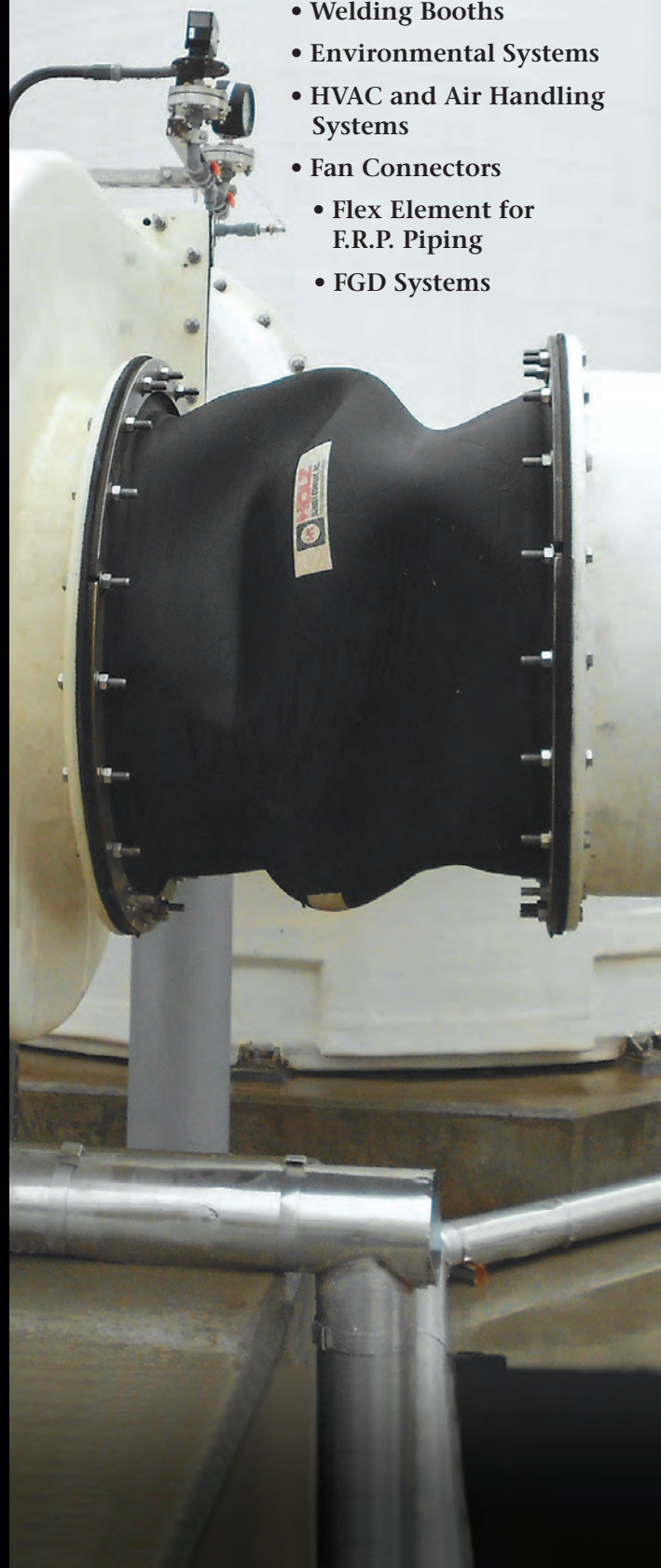
We offer a full range of elastomers suitable for any application. Call our trained staff in order to help you make the right choice.

Materials and Temperature Selection Guide

Maximum Continuous Operating Temperatures	Material		Holz Rubber Material Code	Typical Application
	Toward Gas Flow Tube	Toward Atmosphere Cover		
250° F	Neoprene	Neoprene	333	Hot Oily Air/ Gas Special Chemicals
300° F	Butyl	Butyl	555	Hot Non Oily Air/Gas
300° F	E.P.D.M.	E.P.D.M.	777	Hot Air/Gas
400° F	Viton	Viton	888	Very Hot Air/Gas

Flue Duct Joint Applications

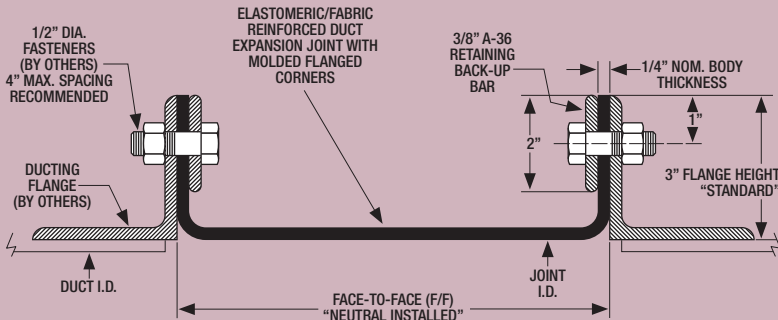
- Paint and Powder Coating Booths
- Welding Booths
- Environmental Systems
- HVAC and Air Handling Systems
- Fan Connectors
- Flex Element for F.R.P. Piping
- FGD Systems



Style 942 U-Design *(For Normal Movements)*

For applications requiring standard movement, maximum noise, vibration, and sound absorption. Superior Protection to Duct Systems, Flanges and Equipment Housing.

Typical Installation Arrangement



Maximum Movement Capabilities (in inches)

Movement shown at face-to-face

Size	Axial Compression	Axial Extension	Lateral Offset
6" F/F	.75	.25	.5
9" F/F	1.25	.25	.75
12" F/F	2.0	.5	1.0
16" F/F	3.0	.5	1.5

Lateral Offset figures are based on the assumption that all lateral movement occurs prior to compression movements. In practice, movements may occur simultaneously thus the allowable lateral offset may increase or decrease.

Extension may be increased or decreased by pre-compression during installation. However, the amount of pre-compression will correspondingly reduce the compression rating.

Pressure/Vacuum Ratings

Nominal Body Thickness	Number of Body Plies	Pressure Vacuum			
		PSIG	In.H2O	kPa	Excursion PSIG
1/8"	1	+/-1	+/-28	+/-6.9	+/-2
1/4"	2	+/-3	+/-83	+/-20.7	+/-5
3/8"	3	+/-5	+/-138	+/-34.5	+/-8

For constant vacuum, a set-back may be required to ensure the joint is not in the media stream.

Product Weight

Nominal Body Thickness	Pounds per (sq. ft.)		(linear ft.) Retaining Rings/Bars
	Elastomer		
	EPDM	VITON	
1/8"	.70	1.1	5.0
1/4"	1.1	1.7	
3/8"	1.7	2.5	

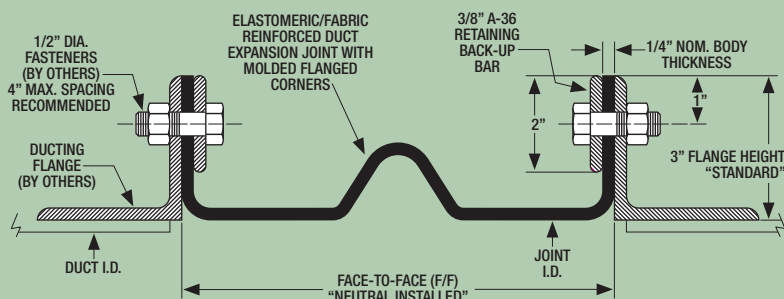
Add 6 inches to the face-to-face dimension for calculating the square footage. Retaining Bars: 3/8" X 2", A-36 Carbon Steel.



Style 952 Arch-Design *(For Ultra-High Movements)*

Designed for ultra-high movements in short face-to-face applications. Constructed with a large, high "V" shaped arch which allows very high axial movement while exerting very low forces on the ductwork, duct flanges and equipment.

Typical Installation Arrangement



Maximum Movement Capabilities (in inches)

Movement shown at face-to-face

Size	Axial Compression	Axial Extension	Lateral Offset
6" F/F	2.25	1.25	1.25
9" F/F	3.0	1.5	2.0
12" F/F	4.0	2.0	2.5
16" F/F	5.0	2.75	3.0

Lateral Offset figures are based on the assumption that all lateral movement occurs prior to compression movements. In practice, movements may occur simultaneously, thus the allowable lateral offset may increase or decrease.

Extension may be increased or decreased by pre-compression during installation. However, the amount of pre-compression will correspondingly reduce the compression rating.

Pressure/Vacuum Ratings

Nominal Body Thickness	Number of Body Plies	Pressure Vacuum			
		PSIG	In.H2O	kPa	Excursion PSIG
1/8"	1	+/-1	+/-28	+/-6.9	+/-2
1/4"	2	+/-2	+/-55	+/-13.8	+/-3
3/8"	3	+/-4	+/-111	+/-27.6	+/-6

Positive Pressure Applications are recommended. Not recommended for constant vacuum and extension. If joint is to be subjected to axial extension under vacuum conditions, vacuum rating may be reduced and a set-back may be required to ensure the joint is not in the media stream.

Product Weight

Nominal Body Thickness	Pounds per (sq. ft.)		(linear ft.)
	Elastomer		Retaining Rings/Bars
	EPDM	VITON	
1/8"	.90	1.4	5.0
1/4"	1.4	2.1	
3/8"	2.1	3.1	

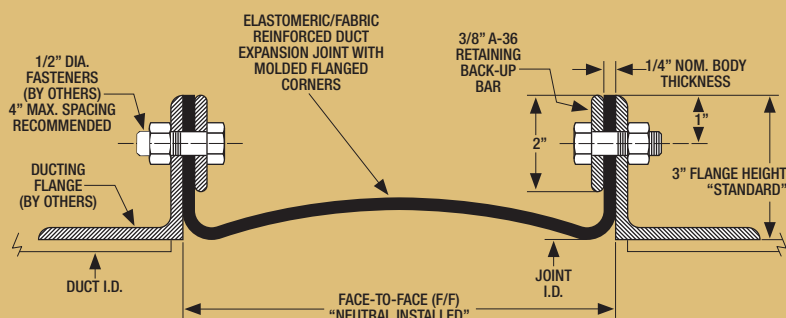
Add 8 inches to the face-to-face dimension for calculating the square footage. Retaining Bars: 3/8" X 2", A-36 Carbon Steel.



Style 945 W-Design *(For Maximum Movements)*

Designed especially for scrubber, precipitator, baghouse and stack, hot air or flue gas ducts, Style 945 offers superior axial and lateral movements. The compound curve molded corners ensure that the reinforcing material is not pre-stressed at the neutral installed face dimension.

Typical Installation Arrangement



Maximum Movement Capabilities (in inches)

Movement shown at face-to-face

Size	Axial Compression	Axial Extension	Lateral Offset
6" F/F	2.0	.5	1.0
9" F/F	3.0	.75	2.0
12" F/F	4.0	1.0	3.0
16" F/F	7.0	1.0	4.0

Lateral Offset figures are based on the assumption that all lateral movement occurs prior to compression movements. In practice, movements may occur simultaneously, thus the allowable lateral offset may increase or decrease.

Extension may be increased or decreased by pre-compression during installation. However, the amount of pre-compression will correspondingly reduce the compression rating.

Pressure/Vacuum Ratings

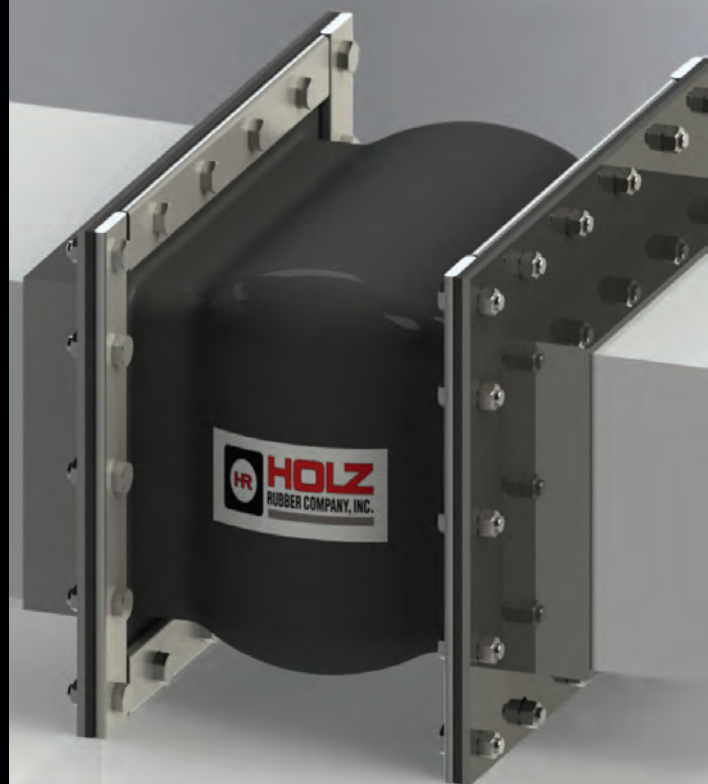
Nominal Body Thickness	Number of Body Plies	Pressure Vacuum			
		PSIG	In.H2O	kPa	Excursion PSIG
1/8"	1	+/-1	+/-28	+/-6.9	+/-2
1/4"	2	+/-3	+/-83	+/-20.7	+/-5
3/8"	3	+/-5	+/-138	+/-34.5	+/-8

For constant vacuum, a set-back may be required to ensure the joint is not in the media stream. Maximum hole spacing (4" centers).

Product Weight

Nominal Body Thickness	Pounds per (sq. ft.)		(linear ft.)
	Elastomer		Retaining Rings/Bars
	EPDM	VITON	
1/8"	.70	1.1	5.0
1/4"	1.1	1.7	
3/8"	1.7	2.5	

Add 7 inches to the face-to-face dimension for calculating the square footage. Retaining Bars: 3/8" X 2", A-36 Carbon Steel.





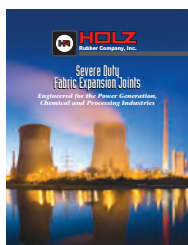
HOLZ
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Holz Rubber offers a complete line of expansion joints including elastomeric, high-temperature fabric and metallic expansion joints.

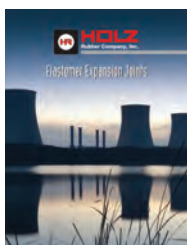


- Coal Fired Power Plants
- Bio Mass
- Hydro Electric
- Cement Kilns
- Food Processing
- Gas Fired Power Plants
- Environmental Systems
- Water Treatment
- Refineries
- HVAC
- FRP Piping

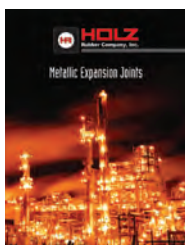
Holz – For All Your Expansion Joint Needs



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Elastomer



Metal



Flue Duct



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