



AEROFLEX®

EPDM Insulation Fittings



AeroFit™

**AEROFLEX EPDM™ Insulation Fittings for
Standard and Grooved Pipe Fittings**





AeroFit™ EPDM Insulation Fittings

HVAC | Refrigeration | VRF | Chilled Water
Hot & Cold-Water Piping

Factory-fabricated insulation fittings for high-quality installation on piping systems insulated with AEROFLEX EPDM™ closed-cell elastomeric foam insulation. Made with the same proprietary EPDM-based formula as AEROFLEX® insulation, AeroFit insulation fittings help maintain the superior performance of your nonpolar EPDM insulating system.

Precise factory fabrication saves field labor and improves overall aesthetics of installation. Ensures consistent, long-lasting thermal performance and protection against moisture and environmental stresses.

Available in AEROFLEX® Black and White/Gray.

Wide range of ID's (3/8" - 6" IPS) and thicknesses (1/2" - 2"). See back cover.

Safe for indoor environments

Superior fire safety – 25/50 rated (ASTM E84, UL723, CAN/ULC-S102) and self-extinguishing (ASTM D635) thru 2-inch thick

GREENGUARD Gold Certified for low chemical emissions

Does not contain asbestos, fibers, formaldehyde, lead, mercury, mercury compound, or nitrosamine

Naturally mold-resistant; no added biocides required

Compliant with EPA TSCA – does not contain PFAS, PBT, or POP chemicals

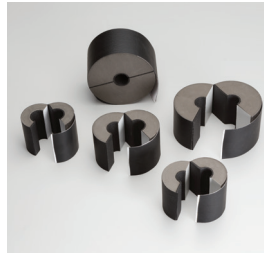
Environmental Product Declaration (EPD)

Health Product Declaration (HPD)

Ultra-low PVC content — less than 1%

*Supplemental vapor barrier may be required in extreme low-temperature or high-humidity applications. Protective jacket required for direct-bury applications and if insulation may be subjected to mechanical damage.

AEROFLEX EPDM™ insulation system solutions



Aerofix®

Light-weight, rigid pipe supports, pre-insulated with high-density, load-bearing foam and encased with zero-perm EPDM polymer membrane. Includes built-in pressure sensitive Protape® closure system.



AEROFLEX® Adhesives

Specially formulated adhesives for bonding and vapor-sealing AEROFLEX EPDM™ insulation. Fast tack and LVOC formulations available.



Courtesy of Nelson
Insulation Company

Protape®

Zero-perm EPDM-based, self-adhering rubber tape for sealing glued insulation seams and termination points.



Aerocoat®

Premium insulation coating specially formulated for AEROFLEX EPDM™ insulation to provide UV protection for exterior applications and as a decorative finish.

Fast, simple to install

Factory-fabricated for standard and grooved fittings, 45° and 90° elbows, tees and p-traps

Saves labor – Eliminates need for jobsite/shop fabrication

Ready to slit, install and glue with AEROFLEX® adhesive and Protape®

Built-in vapor retarder – No supplemental vapor barrier required for most applications*

Superior performance

Nonpolar – does not induce or react to water

Ensures full insulation thickness on fittings to manage heat gain/loss, prevent condensation and corrosion under insulation (CUI)

Non-corrosive on stainless steel piping

Helps prevent corrosion under insulation (CUI)

Suitable for interior and exterior applications**

**For exterior applications, Aerocoat®, Aerocoat LVOC®, or an insulation jacket are recommended for UV protection to maximize the insulation's life cycle.

Product: Factory fabricated EPDM insulation fittings for insulating fittings on HVAC (VRF, chilled water & refrigeration) and plumbing piping.

Standard Specification: ASTM C534 Type I and II Grade 1

**Installation
Instructions:**



Thermal Conductivity (K) Btu-in/hr-Ft² -°F (W/m.K)

Mean Temperature	K Value	Test Method
50°F (10°C)	0.237 (0.0342)	ASTM C177/C518
75°F (24°C)	0.245 (0.0353)	
100°F (38°C)	0.252 (0.0363)	
125°F (52°C)	0.260 (0.0375)	
150°F (66°C)	0.267 (0.0385)	
200°F (93°C)	0.282 (0.0406)	
250°F (121°C)	0.315 (0.0454)	

Physical and Operational Properties

Property	Test Value/Rating	Test Method
Service Temperature, CONTINUOUS ^{1,2}	-297°F to 257°F -183°C to 125°C	ASTM C411 ¹
UV Resistance	Minimal cracking or color change	ASTM G7
Ozone Resistance	No cracking	ASTM D1171
Water Vapor Permeability, Max	0.02 perm-inch (Black); 0.03 perm-inch (White/Gray) (4.38 x 10 ⁻¹¹ g/Pa.s.m)	ASTM E96
Water Absorption (% by Volume), Max	0.2%	ASTM C209
Surface Burning/Flammability (through 2" thick)	Pass	UL94 V-0
	< 25 FSI, < 50 SDI (25/50)	ASTM E84, UL723, CAN/ULC-S102
	Pass	NFPA 90A/90B
	Self-extinguishing	ASTM D635
VOC Emissions	< 0.5 mg/m3	CDPH Standard Method v1.2
Corrosion of Stainless Steel	Non-corrosive	ASTM C692, DIN 1988
Fungi Resistance	No Growth	ASTM C1338/G21
Mold Resistance	No Growth	UL181
Density	3.0-6.0 lbs/ft3	ASTM D1667
Linear Shrinkage	< 7.0%	ASTM C534

¹ AEROFLEX EPDM™ flexibility begins to decrease at -70°F and below. This does not impact the insulating properties of the material.

² Approved for intermittent operating temperatures to 300°F / 150°C for up to 30 minutes within a 24-hour period.

Additional Approvals, Certifications & Compliance

ASTM D1056, 2C1	Standard Specification for Flexible Cellular Materials—Sponge or Expanded Rubber
ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1	International Green Construction Code® (igCC®)
ANSI/ASHRAE/IES Standard 90.1	Energy Standard for Buildings Except Low-Rise Residential Buildings
BABA	Build America, Buy America Act
Buy American	Buy American, Federal Acquisition Regulation, FAR 52.225 Buy American
CA Title 24	California Building Energy Efficiency Standards
California Specification 01350	VOC Emissions, Standard Method v1.2
EPA	Toxic Substances Control Act (TSCA) Persistent, Bioaccumulative, and Toxic (PBT) Chemicals, Per- and Polyfluoralkyl Substances (PFAS), Persistent Organic Pollutants (POP)
IECC*	International Energy Conservation Code*
LEED*	U.S. Green Building Council – Leadership in Energy and Environmental Design
MEA #171-04-M	City of New York Material and Acceptance Pipe Insulation
Montreal Protocol	Manufactured without CFC and HCFC ozone-depleting blowing agents
REACH	European Chemicals Agency (ECHA) – Registration, Evaluation, Authorization and Restriction of Chemicals
RoHS	European Union – Restriction of Hazardous Substances

Potential LEED® Credit Contributions

Energy & Atmosphere (EA)	Prerequisite: Minimum Energy Performance Credit: Optimize Energy Performance
Materials & Resources (MR)	Credit: Building Product Disclosure and Optimization – Environmental Product Declarations (EPD), Product Specific Type III Credit: Building Product Disclosure and Optimization – Material Ingredients, verified HPD
Indoor Environmental Quality (EQ)	Credit: Low-Emitting Materials Credit: Indoor Air Quality Assessment Credit: Thermal Comfort Credit: Acoustic Performance
Innovation (IN)	Credit: Occupant Comfort Survey





Size Availability - AeroFit™ EPDM Insulation Fittings

Fitting	Thickness Range (inches)	ID Range (inches)
Elbow – short radius	1/2, 3/4, 1, 1-1/2, 2	3/8 – 6 IPS
Elbow – long radius	1/2, 3/4, 1, 1-1/2, 2	3/8 – 6 IPS
Elbow – 45 degree	1/2, 3/4, 1, 1-1/2, 2	3/8 – 6 IPS
P-Trap	1/2, 3/4, 1, 1-1/2	5/8 – 2-1/8
Tee's (Equal Leg)	1/2, 3/4, 1, 1-1/2, 2	1/2 – 6 IPS
Mechanical Grooved		
Elbow – 90 degree	1/2, 3/4, 1, 1-1/2	3/4 IPS – 6 IPS
Elbow – 45 degree	1/2, 3/4, 1, 1-1/2	3/4 IPS – 6 IPS
Tee's	1/2, 3/4, 1, 1-1/2	3/4 IPS – 6 IPS
Coupling S77	1/2, 3/4, 1	3/4 IPS – 6 IPS

Installation: All fitting seams must be glued with AEROFLEX® adhesive and wrapped with Protape® for exterior applications!

Lead times (order-to-ship date): Most standard shapes & sizes are stocked or 1-week. Mechanical grooved fittings run 2-3 weeks.

Customization: Special shapes and sizes will be considered based on manufacturing capabilities.

AeroFit™ EPDM Insulation Fitting R-Values

Pipe Size (inches)	IPS (inches)	Wall Thickness (inches)				
		1/2	3/4	1	1-1/2	2
3/8			6.0	9.0	15.8	24.0
1/2	1/4	3.4	5.5	8.3	14.4	21.9
5/8	3/8	3.2	5.2	8.0	13.5	20.6
3/4		3.1	5.0	7.7	13.0	19.7
7/8	1/2	3.2	5.3	7.4	12.9	18.5
1-1/8	3/4	3.0	5.0	6.9	12.1	17.3
1-3/8	1	3.1	5.0	6.5	11.3	16.2
1-5/8	1-1/4	3.0	4.8	6.3	11.1	15.9
1-7/8	1-1/2	2.9	4.7	6.0	10.6	15.2
2-1/8		3.0	4.6	5.9	10.3	14.8
2-3/8	2	3.0	4.5	5.8	10.0	14.3
2-5/8		2.9	4.4	5.7	9.8	14.0
2-7/8	2-1/2	2.9	4.3	5.5	9.5	13.6
3-1/8		2.9	4.3	5.5	9.4	13.4
3-1/2	3	3.0	4.2	5.3	9.1	12.9
3-5/8		3.0	4.2	5.3	9.1	12.9
4-1/8		2.9	4.1	5.2	8.9	12.5
4-1/2	4	2.9	4.0	5.1	8.7	12.2
5-1/2	5	2.8	3.9	5.0	8.4	11.7
6-5/8	6	2.8	3.9	4.9	8.1	11.3



Aeroflex USA

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