



# **AeroFit**

AEROFLEX EPDM™ Insulating Covers for Standard and Grooved Pipe Fittings







# AeroFit EPDM Fitting Covers

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

Factory-fabricated fitting covers 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 covers 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 formulations.

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

Indoor Advantage<sup>™</sup> Gold Certified for low chemical emissions

No CFC's, HFC's, HCFC's, PBDE's, nitrosamine or fibers

Naturally mold-resistant; no added biocides required

Verified Environmental Product Declarations (EPD's) and Health Product Declarations (HPD's)

Ultra-low PVC content - less than 1%

## **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.



### **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\*\*

<sup>\*</sup>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.

<sup>\*\*</sup>Note: National, state & local energy codes require protection of cellular foam pipe insulation from solar radiation for exterior applications. Jackets and insulation coatings are acceptable. Adhesive tapes are not permitted.

**Product:** Closed-cell EPDM (Ethylene Propylene Diene Monomer) rubber elastomeric foam pipe insulation for insulating fittings on HVAC (VRF, chilled water & refrigeration) and plumbing piping.

Installation Instructions:



Standard Specification: ASTM C534 Type I and II Grade 1

# Thermal Conductivity (K) Btu-in/hr-Ft<sup>2</sup> -oF (W/m.K)

Mean Temperature	K Value	Test Method	
50°F (10°C)	0.237 (0.0342)		
75°F (24°C)	0.245 (0.0353)		
100°F (38°C)	0.252 (0.0363)		
125°F (52°C)	0.260 (0.0375)	ASTM C177/C518	
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	
Consider Terrorentum CONTINUOUS	-297°F to 257°F	A CT14 C 4441	
Service Temperature, CONTINUOUS	-183°C to 125°C	ASTM C411 <sup>1</sup>	
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 <sup>-11</sup> g/Pa.s.m)	ASTM E96	
Water Absorption (% by Volume), Max	0.2%	ASTM C209	
	Pass	UL94 V-0	
Curface Burning / Flammahility / through 211 thick	25/50	ASTM E84, UL723, CAN/ULC-S102	
Surface Burning/Flammability (through 2" thick)	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	
ear Shrinkage < 7.0%		ASTM C534	

<sup>&</sup>lt;sup>1</sup> AEROFLEX EPDM™ flexibility begins to decrease at -70°F and below. This does not impact the insulating properties of the material.

# 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
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)
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
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		
Materials & Resources (MR)	Credit: Optimize Energy Performance  Credit: Building Product Disclosure and Optimization - Environmental Product Declarations (EPD), Product Specific Type III		
Materials & Resources (MR)	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 Insulating Fitting Covers			
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 Insulating Fitting Covers Insulation R-Values					
Pipe Size	IPS		Wall Thickness (inches)			
(inches)	(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