

**EPDM Pipe Insulation** 





# **AEROFLEX EPDM**<sup>™</sup>

**Unslit EPDM Pipe Insulation** 

HVAC | VRF | Chilled Water | Refrigeration Hot and Cold Water Piping

Closed-cell elastomeric foam pipe insulation slides easily over new piping or can be slit to snap over existing piping. Proprietary blend of nonpolar EPDM rubber is key to consistent, long-lasting thermal performance and protection against moisture and environmental stresses.

Wide range of sizes and thicknesses to meet energy code and condensation control requirements. See back cover.

## Fast, simple to install

Slides easily over new piping installations

Can be slit and snapped over existing piping

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

# Superior environmental stability

Nonpolar - does not induce or react with water

Low thermal conductivity - reduced insulation thicknesses

Greater UV resistance than NBR/PVC insulation

Non-corrosive on stainless steel & copper piping

Suitable for interior & exterior applications\*\*

## 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

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

No CFCs, HFCs, HCFCs, PBDEs, formaldehyde, nitrosamine or fibers

Naturally mold-resistant: no biocides required

Ultra-low PVC content – less than 1%



# AEROFLEX EPDM<sup>™</sup> insulation system solutions







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

## AeroFit™

Pre-fabricated fitting covers made of AEROFLEX<sup>®</sup> EPDM rubber for high-quality installation on HVAC and plumbing piping.



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



#### **AEROFLEX®** Adhesives

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

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

\*\*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.



Standard Specification: ASTM C534 Type I Grade 1

# Thermal Conductivity (K) Btu-in/hr-Ft<sup>2</sup> -°F (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		
Service Temperature CONTINUOUS	-297°F to 257°F			
Service Temperature, CONTINUOUS	-183°C to 125°C	ASTM C411 <sup>1</sup>		
UV Resistance	Minimal Cracking or color change ASTM G7	ASTM D1171		
Ozone Resistance	No cracking ASTM D1171	ASTM E96		
Water Vapor Permeability, Max	<b>0.02 perm-inch</b> (4.38 x 10 <sup>-11</sup> g/Pa.s.m)	ASTM E96		
Water Absorption (% by Volume), Max	0.2%	ASTM C209/C1763		
	Pass	UL94 V-0		
Surface Durning (Flammability (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 Section 13		
ear Shrinkage < 7.0%		ASTM C534		

<sup>1</sup> AEROFLEX<sup>®</sup> 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 <sup>®</sup>	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**

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

















AEROFLEX EPDM™ Unslit Pipe Insulation R-Values									
Pipe Size	IPS	Wall Thickness (inches)							
(inches) (inches)	1/4	3/8	1/2	3/4	1	1-1/2	2	3	
1/4		1.7	3.0	4.0	6.7	10.0	17.5		
3/8		1.6	2.7	3.6	6.0	9.0	15.8	24.0	
1/2	1/4	1.5	2.5	3.4	5.5	8.3	14.4	21.9	
5/8	3/8	1.4	2.4	3.2	5.2	8.0	13.5	20.6	32.6
3/4		1.4	2.3	3.1	5.0	7.7	13.0	19.7	31.2
7/8	1/2	1.3	2.3	3.2	5.3	7.4	12.9	18.5	30.6
1-1/8	3/4	1.3	2.1	3.0	5.0	6.9	12.1	17.3	28.5
1-3/8	1	1.3	2.1	3.1	5.0	6.5	11.3	16.2	26.7
1-5/8	1-1/4		2.3	3.0	4.8	6.3	11.1	15.9	26.0
1-7/8	1-1/2		2.2	2.9	4.7	6.0	10.6	15.2	24.7
2-1/8			2.2	3.0	4.6	5.9	10.3	14.8	24.0
2-3/8	2		2.2	3.0	4.5	5.8	10.0	14.3	23.2
2-5/8			2.2	2.9	4.4	5.7	9.8	14.0	22.6
2-7/8	2-1/2		2.1	2.9	4.3	5.5	9.5	13.6	21.9
3-1/8			2.1	2.9	4.3	5.5	9.4	13.4	21.6
3-1/2	3		2.1	3.0	4.2	5.3	9.1	12.9	20.8
3-5/8			2.1	3.0	4.2	5.3	9.1	12.9	
4-1/8			2.1	2.9	4.1	5.2	8.9	12.5	20.0
4-1/2	4		2.0	2.9	4.0	5.1	8.7	12.2	19.6
5-1/8					4.0	5.1	8.5	11.9	19.0
5-1/2	5			2.8	3.9	5.0	8.4	11.7	18.6
6-1/8				2.8	3.9	4.9	8.2	11.5	
6-5/8	6			2.8	3.9	4.9	8.1	11.3	17.8