



AEROFLEX[®]

EPDM Pipe Insulation

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Unslit EPDM Pipe Insulation





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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.

Meets minimum pipe insulation thickness and minimum R-value requirement of the International Energy Conservation Code® (IECC®) and ASHRAE 90.1. Energy Standard. To meet minimum R-value, insulation thickness may increase above the minimum thickness per IECC and 90.1.

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

GREENGUARD Gold Certified for low chemical emissions

Environmental Product Declaration (EPD)

Health Product Declaration (HPD)

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

Naturally mold-resistant: no biocides required

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 closed-cell foam and encased with zero-perm EPDM polymer membrane. Includes built-in pressure sensitive Protape® closure system.



AeroFit™

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



Courtesy of Nelson Insulation Company

Protape®

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 low-temperature or high-humidity applications. Protective jacket required for direct-bury applications and if insulation may be subjected to mechanical damage.

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

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

Installation Instructions:



Standard Specification: ASTM C534 Type I Grade 1

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)	
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 -183°C to 125°C	ASTM C411 ¹
UV Resistance	Minimal Cracking or color change ASTM G7	ASTM D1171
Ozone Resistance	No cracking ASTM D1171	ASTM E96
Water Vapor Permeability, Max	0.02 perm-inch (4.38 x 10 ⁻¹¹ g/Pa.s.m)	ASTM E96
Water Absorption (% by Volume), Max	0.2%	ASTM C209/C1763
Surface Burning/Flammability (through 2" thick)	Pass	UL94 V-0
	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 Section 13
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.

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 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





AEROFLEX EPDM™ Unslit Pipe Insulation R-Values (75°F / 24°C mean temperature)

Pipe Size (inches)	IPS (inches)	Wall Thickness (inches)							
		1/4	3/8	1/2	3/4	1	1-1/2	2	3
1/4		2.1	3.0	4.0	6.7	10.1	16.9		
3/8	1/8	1.9	2.7	3.6	6.1	9.1	15.3	24.5	
1/2	1/4	1.8	2.5	3.3	5.6	8.3	14.1	22.4	
5/8	3/8	1.7	2.4	3.2	5.2	8.1	13.4	21.1	33.3
3/4		1.7	2.3	3.0	5.0	7.7	12.8	20.2	31.9
7/8	1/2	1.6	2.3	3.2	5.3	7.4	12.9	18.9	31.2
1-1/8	3/4	1.6	2.2	3.0	5.0	7.0	12.1	17.7	29.1
1-3/8	1		2.1	3.1	5.1	6.6	11.4	16.6	27.3
1-5/8	1-1/4		2.3	3.0	4.9	6.3	11.1	16.3	26.5
1-7/8	1-1/2		2.3	2.9	4.7	6.1	10.7	15.5	25.2
2-1/8			2.2	3.0	4.6	6.0	10.4	15.1	24.6
2-3/8	2		2.2	3.0	4.5	5.8	10.2	14.6	23.7
2-5/8			2.2	2.9	4.4	5.7	9.9	14.3	23.2
2-7/8	2-1/2		2.1	2.9	4.4	5.6	9.7	13.9	22.4
3-1/8			2.1	2.9	4.3	5.5	9.5	13.7	22.1
3-1/2	3		2.1	3.0	4.2	5.4	9.3	13.3	21.3
3-5/8			2.1	3.0	4.2	5.4	9.3	13.2	
4-1/8	3-1/2		2.1	2.9	4.1	5.3	9.0	12.8	20.5
4-1/2	4		2.1	2.9	4.1	5.2	8.9	12.5	20.0
5-1/8					4.0	5.1	8.7	12.2	19.4
5-1/2	5			2.8	4.0	5.0	8.5	12.0	19.0
6-1/8				2.8	4.0	5.0	8.4	11.8	
6-5/8	6			2.8	3.9	4.9	8.3	11.6	18.2

NOTE: The International Energy Conservation Code® (IECC®) and ASHRAE 90.1. Energy Standard require pipe insulation to meet either a minimum thickness or as an option minimum R-value (not both). Minimum thickness or R-value is determined by the authority having jurisdiction (federal, state, or local).

To meet minimum R-value, insulation thickness may increase above the minimum thickness specified by IECC and 90.1.

AEROFLEX EPDM™ pipe insulation thicknesses and R-values meet the minimum requirements of International Energy Conservation Code (IECC) and ASHRAE 90.1. Energy Standard.

Click [here](#) to learn more.