



AEROFLEX®-EP

FM Approved

FM Approvals Class: 4924 Pipe and Duct Insulation FM Approval ID: PR465702











AEROFLEX®-EP

FM Approved EPDM Pipe & Duct Insulation

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

Closed-cell elastomeric foam pipe and duct insulation that conserves energy and controls condensation for projects that require FM Approval.

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.

Available in tubes (standard & self-seal) and sheets/rolls (standard & PSA). See back cover.

Fast, simple to install

Self-Seal and standard pipe insulation available up to 6" IPS and 2" thick.

Self-Seal tubes reduce installation time.

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

Certified to meet FM Approval, Class of Work, Standard FM 4924 Pipe & Duct Insulation

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

Naturally mold-resistant: no biocides required

Ultra-low PVC content – less than 1%



AEROFLEX EPDM™ insulation system solutions (only Aeroseal Adhesive is FM Approved)



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.



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.



Aerocoat®

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

*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 and duct insulation for HVAC (VRF, chilled water & refrigeration) and plumbing piping.

Installation Instructions:



Standard Specification: ASTM C534, Type I & II, Grade 1, FM Class: 4924

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

Mean Temperature	K Value	Test Method	
50°F (10°C)	0.257 (0.037)		
75°F (24°C)	0.266 (0.038)		
100°F (38°C)	0.276 (0.040)		
125°F (52°C)	0.283 (0.041)	ASTM C177/C518	
150°F (66°C)	0.290 (0.042)		
200°F (93°C)	0.304 (0.044)		
250°F (121°C)	0.329 (0.047)		

Physical and Operational Properties

Property	Test Value/Rating	Test Method
Service Temperature, CONTINUOUS ^{1, 2}	-70°F to 257°F	ASTM C411 ¹
Service remperature, CONTINUOUS**	-57°C to 125°C	ASTM C4II
Ozone Resistance	No cracking	ASTM D1171
Water Vapor Permeability, Max	< 0.10 (1.45 x 10[-10 power] g/Pa.s.m)	ASTM E96
Water Absorption (% by Volume), Max	0.2%	ASTM C209/C1763
Curface Durning/Flammahility/through 211 thick	FM Approval ID: PR465702	FM Approvals, Standard 4924
Surface Burning/Flammability (through 2" thick)	Pass	ASTM E84
Density	3.0-6.0 lb/ft3	ASTM D1622
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	
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	
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®	
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	













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



AEROFLEX®-EP Standard and Self-Seal Pipe Insulation R-Values (75°F / 24°C mean temperature)					
Pipe Size	Pipe Size IPS (inches)	Thickness (in)			
		1/2	1	1-1/2	2
1/4		3.7*	9.3	15.6*	
3/8	1/8	3.3	8.4	14.1	22.6
1/2	1/4	3.1	7.7	13.0	20.7
5/8	3/8	2.9	7.4	12.4	19.4
3/4		2.8	7.1	11.8	18.6
7/8	1/2	2.9	6.8	11.9	17.5
1-1/8	3/4	2.8	6.4	11.1	16.3
1-3/8	1	2.8	6.1	10.5	15.3
1-5/8	1-1/4	2.7	5.8	10.2	15.0
1-7/8	1-1/2	2.7	5.6	9.8	14.3
2-1/8		2.8	5.5	9.6	13.9
2-3/8	2	2.7	5.3	9.4	13.5
2-5/8		2.7	5.3	9.1	13.2
2-7/8	2-1/2	2.7	5.1	8.9	12.8
3-1/8		2.6	5.1	8.8	12.6
3-1/2	3	2.7	5.0	8.6	12.2
3-5/8		2.7	5.0	8.5	12.2
4-1/8	3-1/2	2.7	4.9	8.3	11.8
4-1/2	4	2.7	4.8	8.2	11.6
5-1/8			4.7	8.0*	11.3*
5-1/2	5	2.6	4.7	7.9	11.1
6-1/8		2.6	4.6	7.7	10.9
6-5/8	6	2.6	4.6	7.7	10.7

AEROF	AEROFLEX®-EP Sheet & Roll Insulation R-Values (75°F / 24°C mean temperature)				
Wall Thickness (inches)	1/2	1	1-1/2	2	
R-Value	2.1	4.0	6.1	8.0	

^{*} Standard tube only

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.