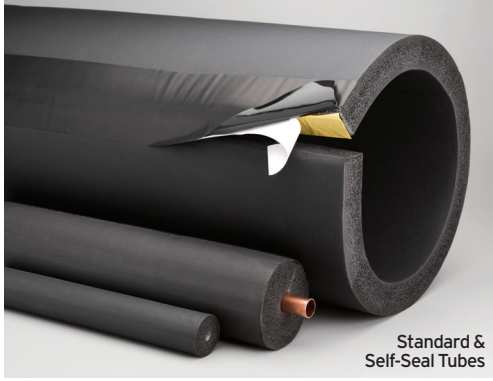




# AEROFLEX®

EPDM Pipe & Duct Insulation



Standard &  
Self-Seal Tubes



Sheets & Rolls  
Standard & PSA

## AEROFLEX®-EP

FM Approved

FM Approvals Class: 4924 Pipe and Duct Insulation

FM Approval ID: PR465702



APPROVED



Build America,  
Buy America Act  
(BABA) Compliant





# 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

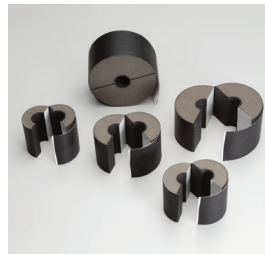
Naturally mold-resistant: no biocides required

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.

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

**Installation  
Instructions:**



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

| Mean Temperature | K Value       | Test Method    |
|------------------|---------------|----------------|
| 50°F (10°C)      | 0.257 (0.037) | ASTM C177/C518 |
| 75°F (24°C)      | 0.266 (0.038) |                |
| 100°F (38°C)     | 0.276 (0.040) |                |
| 125°F (52°C)     | 0.283 (0.041) |                |
| 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 <sup>1,2</sup>  | -70°F to 257°F<br>-57°C to 125°C                   | ASTM C411 <sup>1</sup>      |
| Ozone Resistance                                | No cracking                                        | ASTM D1171                  |
| Water Vapor Permeability, Max                   | < 0.10 (1.45 x 10 <sup>-10</sup> power) g/(Pa.s.m) | ASTM E96                    |
| Water Absorption (% by Volume), Max             | 0.2%                                               | ASTM C209/C1763             |
| Surface Burning/Flammability (through 2" thick) | FM Approval ID: PR465702                           | FM Approvals, Standard 4924 |
| Density                                         | 3.0-6.0 lb/ft <sup>3</sup>                         | ASTM D1667                  |
| Linear Shrinkage                                | < 7.0%                                             | ASTM C534                   |

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

<sup>2</sup> 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                                                                                                                            |
| 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                                                                                                                       |





### AEROFLEX®-EP Standard and Self-Seal Pipe Insulation R-Values (75°F / 24°C mean temperature)

| Pipe Size<br>(inches) | IPS<br>(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  |

### AEROFLEX®-EP Sheet & Roll Insulation R-Values (75°F / 24°C mean temperature)

| Wall Thickness<br>(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.



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