

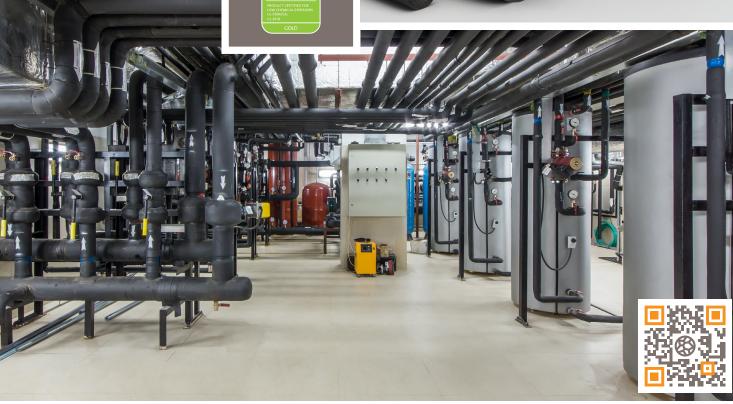
AEROFLEX Self-Seal LDP™ for large diameter piping (8"-16" IPS)



# AEROFLEX Self-Seal™

Pre-Slit EPDM Pipe Insulation







# **AEROFLEX Self-Seal™**

**Pre-Slit EPDM Pipe Insulation** 

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

Closed-cell elastomeric foam pipe insulation with self-seal, dual-tape closure system.

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.

Available in Black and White/Gray.

## Fast, simple to install

Double-closure system saves labor by eliminating need for field-applied adhesives on longitudinal seams

### ID range from 3/8" to 16" IPS (LDP = 8" to 16" IPS)

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)

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

Compliant with EPA TSCA - does not contain PFAS, PBT, and POP chemicals Naturally mold-resistant: no biocides required

Ultra-low PVC content - less than 1%





#### **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 insulation fittings made of AEROFLEX EPDM™ rubber for a high-quality installation on HVAC and plumbing piping.



#### **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 lowtemperature 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.

#### Installation Instructions:



# **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 <sup>1,2</sup>	-297°F to 257°F -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	<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 Burning/Flammability (through 2" thick)	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		
Density	3.0-6.0 lb/ft3	ASTM D1622		
Linear 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
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
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), Persistent Organic Pollutants (POP)
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
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

#### **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			























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



	AEROFLEX Self-Seal™ EPDM Pipe Insulation R-Values (75°F / 24°C mean temperature)							
Pipe Size	Pipe Size (inches) *LDP IPS (inches)	Wall Thickness (inches)						
*LDP		3/8	1/2	3/4	1	1-1/2	2	
1/4				6.7	10.1			
3/8	1/8	2.7	3.6	6.1	9.1	15.3	24.5	
1/2	1/4	2.5	3.3	5.6	8.3	14.1	22.4	
5/8	3/8	2.4	3.2	5.2	8.1	13.4	21.1	
3/4		2.3	3.0	5.0	7.7	12.8	20.2	
7/8	1/2	2.3	3.2	5.3	7.4	12.9	18.9	
1-1/8	3/4	2.2	3.0	5.0	7.0	12.1	17.7	
1-3/8	1	2.1	3.1	5.1	6.6	11.4	16.6	
1-5/8	1-1/4	2.3	3.0	4.9	6.3	11.1	16.3	
1-7/8	1-1/2	2.3	2.9	4.7	6.1	10.7	15.5	
2-1/8		2.2	3.0	4.6	6.0	10.4	15.1	
2-3/8	2	2.2	3.0	4.5	5.8	10.2	14.6	
2-5/8		2.2	2.9	4.4	5.7	9.9	14.3	
2-7/8	2-1/2	2.1	2.9	4.4	5.6	9.7	13.9	
3-1/8		2.1	2.9	4.3	5.5	9.5	13.7	
3-1/2	3	2.1	3.0	4.2	5.4	9.3	13.3	
3-5/8		2.1	3.0	4.2	5.4	9.3		
4-1/8	3-1/2		2.9	4.1	5.3	9.0	12.8	
4-1/2	4	2.1	2.9	4.1	5.2	8.9	12.5	
5-1/8			2.9	4.0	5.1			
5-1/2	5		2.8	4.0	5.0	8.5	12.0	
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	
8-5/8*	8		2.8	3.8	4.8	8.0	11.1	
10-3/4*	10		2.7	3.8	4.7	7.8	10.8	
12-3/4*	12				4.7	7.7	10.5	
14*	14				4.6	7.6	10.4	
16*	16				4.6	7.5	10.3	

**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 <u>here</u> to learn more.