



# Aerocel® WG

White/Gray Pipe Insulation







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

EPDM rubber pipe insulation in a white/gray color. Ideal anywhere a lighter color insulation is desired for aesthetics. Aerocel White/Gray is manufactured with a proprietary blend of non-polar EPDM rubber for the long-lasting thermal performance and protection against moisture and environmental stresses.

Available in unslit and Stay-Seal® with Protape® (SSPT™) dual-tape closure. Wide range of sizes and thicknesses to meet energy code and condensation control requirements. See back cover.

## Perfect for open ceilings & clean environments

White/gray color blends into light-color ceilings

Supports a clean, sterile aesthetic design

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

#### Stable, efficient performance

Non-polar - does not induce or react with water

Low thermal conductivity - reduced insulation thicknesses

Suitable for interior and exterior applications\*\*

Greater UV resistance than NBR/PVC insulation

Non-corrosive on copper and stainless steel piping

#### Safe for indoor environments

Superior fire safety - 25/50 rated (ASTM E84) and selfextinguishing (ASTM D635) thru 2-inch thick

Indoor Advantage™ 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 insulation system solutions



#### **Aerofix®**

Light-weight, rigid pipe supports, pre-insulated with closed-cell EPDM foam rubber and encased with zero-perm EPDM polymer membrane. Includes built-in pressure sensitive Protape® closure system.



#### AeroFit™

Pre-fabricated fitting covers made of closed-cell EPDM rubber for fast 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 Aerocel 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. **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:** www.aeroflexusa.com/wp-content/uploads/2021/06/Aeroflex\_Installation-Guide\_062521-1.pdf **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 C518/C177
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		
Comition Towns and the CONTINUOUS	-297°F to 257°F	ASTM C411 <sup>1</sup>		
Service Temperature, CONTINUOUS	-183°C to 125°C			
UV Resistance	Minimal cracking or color change	ASTM G7		
Ozone Resistance	No cracking	ASTM D1171		
Water Vapor Permeability, Max	$0.03 \text{ perm-inch } (4.38 \text{ x } 10^{-11} \text{ g/Pa.s.m})$	ASTM E96		
Water Absorption (% by Volume), Max	0.2%	ASTM C209	ASTM C209	
	Class V-O	UL 94		
Fire Safety Characteristics thru 3" thickness	25/50	ASTM E84		
Fire Safety Characteristics thru 2" thickness	Pass	NFPA 90A/90B		
	Self-extinguishing	ASTM D635		
Corrosion of Stainless Steel	rosion of Stainless Steel Non-corrosive			
Fungi Resistance	No Growth	ASTM C1318/G21		
Mold Resistance No Growth		UL181 Section 13		
Flexibility	Pass	ASTM C534		
Air Erosion	Pass	UL181 Section 18		

AEROCEL 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
CDPH Specification 01350	California Department of Public Health (VOC Emissions)
EPA TSCA Section 6(h)	Toxic Substances Control Act Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
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
MIL-P-15280 (Form S, Form T)	U.S. Department of Defense - Qualified Products List (06/24/2005)
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)	Prereguisite: Minimum Energy Performance
Energy a ramosphere (Ert)	,
	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

















	Aerocel® White/Gray Unslit Pipe Insulation R-Values						
Pipe Size	IPS	Wall Thickness (inches)					
(inches)	(inches)	1/2	3/4	1	1-1/2	2	
1/4		3.9	6.5	9.8	17.1	25.9	
3/8		3.6	5.9	8.9	15.5	23.5	
1/2	1/4	3.3	5.4	8.1	14.1	21.5	
5/8	3/8	3.1	5.1	7.8	13.3	20.2	
3/4		3.0	4.9	7.5	12.7	19.3	
7/8	1/2	3.1	5.2	7.2	12.7	18.2	
1-1/8	3/4	3.0	4.9	6.8	11.8	16.9	
1-3/8	1	3.0	4.9	6.4	11.1	15.9	
1-5/8	1-1/4	2.9	4.7	6.1	10.8	15.6	
1-7/8	1-1/2	2.8	4.6	5.9	10.4	14.9	
2-1/8		3.0	4.5	5.8	10.1	14.5	
2-3/8	2		4.4	5.6	9.8	14.0	
2-5/8		2.9	4.3	5.5	9.6	13.7	
2-7/8	2-1/2		4.2	5.4	9.3	13.3	
3-1/8		2.8	4.2	5.4	9.2	13.1	
3-1/2	3	2.9		5.2	9.0	12.7	
3-5/8			4.1	5.2	8.9	12.6	
4-1/8			4.0	5.1	8.7	12.3	
4-1/2	4		4.0	5.0	8.5	12.0	
5-1/8							
5-1/2	5				8.2	11.5	
6-1/8		2.8			8.1	11.3	
6-5/8	6	2.8		4.8	8.0	11.1	

	Aerocel® White/Gray SSPT™ Pipe Insulation R-Values						
Pipe Size (inches)	IPS (inches)	Wall Thickness (inches)					
		1/2	3/4	1	1-1/2	2	
1/4			6.5	9.8			
3/8		3.6	5.9	8.9	15.5		
1/2	1/4	3.3	5.4	8.1	14.1		
5/8	3/8	3.1	5.1	7.8	13.3	20.2	
3/4		3.0	4.9	7.5	12.7	19.3	
7/8	1/2	3.1	5.2	7.2	12.7	18.2	
1-1/8	3/4	3.0	4.9	6.8	11.8	16.9	
1-3/8	1	3.0	4.9	6.4	11.1	15.9	
1-5/8	1-1/4	2.9	4.7	6.1	10.8	15.6	