

# Aerocel® WG

White/Gray Pipe Insulation





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Refrigeration | HVAC | VRF Hot and Cold Water Plumbing

Reliable, EPDM-rubber pipe insulation in a white/ gray color. Ideal for clean environments or anywhere a lighter color insulation is desired for aesthetics. Aerocel WG 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 un-slit and Stay-Seal® with Protape® (SSPT™) dual-tape closure. Wide range of sizes and thicknesses to meet all your piping insulation needs! (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 protective finish or vapor barrier required\*

# Stable, efficient performance

Low thermal conductivity

Non-polar - does not induce or react with water!

Stands up to high humidity

Excellent UV resistance

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

GREENGUARD Gold Certified for low chemical emissions (VOCs)

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

Naturally mold-resistant: no biocides required



#### All-inclusive insulation 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. Available in black only.



#### AeroFit™

Pre-fabricated fitting insulators made of closed-cell EPDM rubber for fast installation on hot/coldwater and refrigerant piping. Available in black and white/gray.



# **Protape®**

EPDM-based, self-adhering rubber tape for sealing butt joints and termination points. (Available in black and white/gray)



#### **Aeroflex Adhesives**

Specially formulated adhesive for bonding of Aerocel insulations. Fast tack and LVOC formulations available.

\*Vapor barrier may be required in extreme low-temperature or extreme high-humidity applications. Protective jacket required for direct-bury applications and if insulation may be subjected to mechanical damage. Product: Closed-cell EPDM (Ethylene Propylene Diene Monomer)-based rubber elastomeric foam pipe insulation for HVAC piping (including VRF variable refrigerant systems), plumbing and refrigeration piping.

Standard Specification: ASTM C534 Type I Grade 1

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

75°F (24°C) 0.250 (0.0360) 90°F (32°C) 0.260 (0.0375) ASTM C518 /C177	Mean Temperature	K Value	Test Method
	75°F (24°C)	0.250 (0.0360)	ASTM CE10 /C177
	90°F (32°C)	0.260 (0.0375)	ASTM CSIO/CITT

# **Physical and Operational Properties**

Test Value/Rating	Test Method
-297°F to +257°F -183°C to +125°C	ASTM C411
Minimal Cracking or color change	ASTM G7
No cracking	ASTM D1171
$0.03 \text{ perm-inch } (4.38 \text{ x } 10^{-10} \text{ g/Pa.s.m})$	ASTM E96
0.2%	ASTM C209
Class V-O	UL 94
25/50	ASTM E84
Pass	NFPA 90A/90B
Self-extinguishing	ASTM D635
Non-corrosive	ASTM C692, DIN 1988
No Growth	ASTM C1318/G21
No Growth	UL181 Section 13
Pass	ASTM C534
Pass	UL181 Section 18
	-297°F to +257°F -183°C to +125°C  Minimal Cracking or color change  No cracking  0.03 perm-inch (4.38 x 10 <sup>-10</sup> g/Pa.s.m)  0.2%  Class V-0 25/50  Pass  Self-extinguishing  Non-corrosive  No Growth  No Growth  Pass

## Additional Approvals, Compliances, Etc.

ASTM D1056, 2C1	Standard Specification for Flexible Cellular Materials-Sponge or Expanded Rubber (2C1- Closed Cell Rubber, Oil resistant with medium mass change, Compression Deflection of 2 - 5 psi.				
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				
IECC®	International Energy Conservation Code®				
CA Title 24	California Building Energy Efficiency Standards				
MEA #171-04-M	City of New York Material and Acceptance Pipe Insulation				
CDPH Specification 01350	California Department of Public Health (VOC Emissions)				
LEED®	U.S. Green Building Council - Leadership in Energy and Environmental Design				
REACH	European Chemicals Agency (ECHA) - Registration, Evaluation, Authorization and Restriction of Chemicals				
RoHS	European Union - Restriction of Hazardous Substances				
MIL-P-15280 (Form S, Form T)	U.S. Department of Defense - Qualified Products List (06/24/2005)				

## **Potential LEED® Credit Contributions**

Occided ELES Of Care Softer Battons				
Energy & Atmosphere (EA)	Prerequisite: Minimum Energy Performance Credit: Optimize Energy Performance			
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			

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<sup>&</sup>lt;sup>1</sup> AEROCEL flexibility begins to decrease at -70°F and below. This does not impact the insulating properties of the material.



Aerocel® WG Pipe R-Values (Un-slit Tube)						
Dia - Cia - (ia)	Wall Thickness					
Pipe Size (in)	IPS (in)	1/2 in	3/4 in	1 in	1-1/2 in	2 in
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® WG Pipe R-Values (Stay-Seal® with Protape® - SSPT™) Tube						
Pipe Size (in)	IPS (in)	Wall Thickness				
	IP3 (III)	1/2 in	3/4 in	1 in	1-1/2 in	2 in
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