

AEROCEL[®] FACED SHEET

Laminated EPDM Elastomeric Sheet Insulation

Description

AEROCEL[®] Laminated EPDM Elastomeric Sheet Insulation is a flexible closed cell and lightweight elastomeric material designed for insulating large pipes, tanks, vessels, air ducts, inside air handling panels and more. It is available in 3' x 4' flat sheets and rolls in thicknesses of 1/8", 1/4", 3/8", 1/2", 3/4", 1", 1-1/4", 1-1/2" and 2". Aerocel[®] Laminated EPDM Elastomeric Sheet Insulation can be supplied with several varieties of facing materials applied, self-adhesive and facing, and with a pressure sensitive-adhesive-only to speed installation of the insulation system.

Facings

Aerocel[®] Laminated EPDM Elastomeric Sheet Insulation is used when the standard smooth, surface of Aerocel sheet insulation is not aesthetically compatible, when enhanced vapor barrier properties are desired, or in installations requiring added abuse protection. Aerocel Laminated EPDM Elastomeric Sheet Insulation is supplied with a zero-perm, 6 mil, high-strength, aluminum-colored or white laminated facing material that is embossed to enhance installed appearance as standard. Non-standard facings are available as follows: *Smooth Aluminum, Smooth White, Smooth Black, and Embossed Black and heavy thickness.*

Self-Adhering(Pressure Sensitive Adhesive) Sheet/Roll

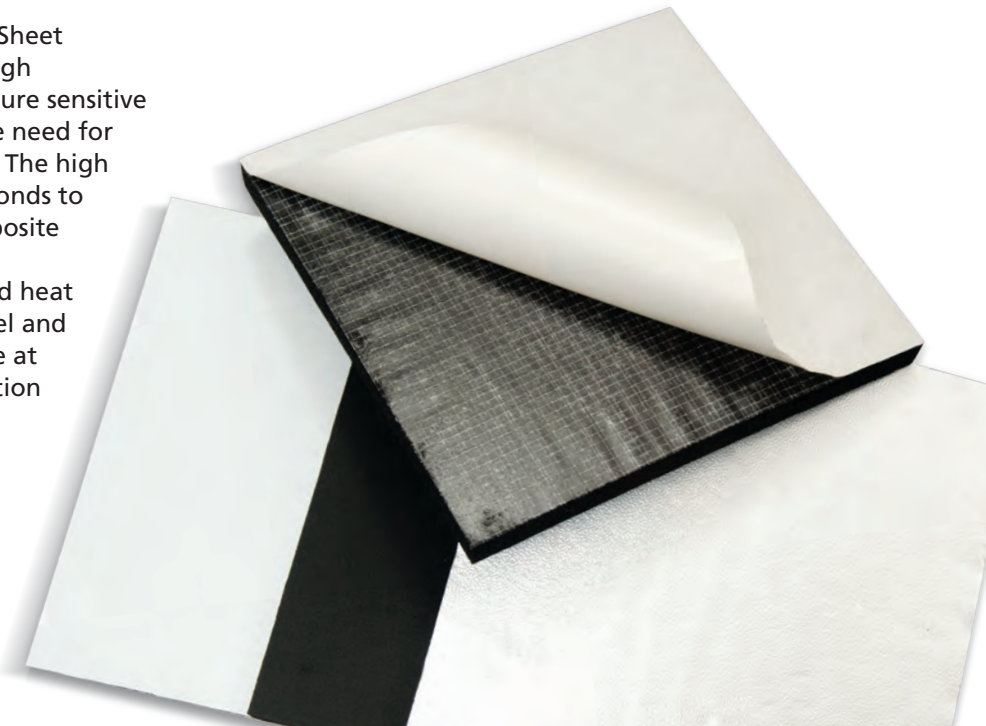
Aerocel[®] Self-Adhering EPDM Elastomeric Sheet Insulation is provided with a 3-mil thick, high performance scrim reinforced, acrylic pressure sensitive adhesive, allowing installation without the need for extensive application of contact adhesive. The high performance pressure sensitive adhesive bonds to a wide variety of metals, plastics and composite materials. The specially formulated and reinforced adhesive offers excellent UV and heat resistance, durability under stress, high peel and tack properties, and excellent performance at high and low temperatures. The combination of the superior performance of Aerocel[®] EPDM Elastomeric Sheet Insulation and the high-performance pressure sensitive adhesive makes the most versatile and long-lived self-adhering elastomeric insulation available.

Air Duct Systems

Aerocel[®] Laminated EPDM Elastomeric Sheet is an excellent choice for insulating duct work. Aerocel[®] has been favored over fibrous insulating materials because of the superior performance of Aerocel[®], and possible concerns with the use of fibrous duct insulation materials. Aerocel[®], made from special modified elastomeric material, ensures a long service life and can be safely handled without any concern of skin irritation. It is also not hazardous to health, so no special precautions are needed for application or service. Aerocel[®] offers superior resistance to moisture, fungus growth, vermin and rodent attack. Aerocel[®] sheet also meets the standards stated in UL 181 for mold growth/humidity, air erosion and passes ASTM G 21 Fungal Resistance. See the complete list of specifications listed in the data table on the back of this page.

Application

Aerocel[®] Laminated EPDM elastomeric sheet is flexible and easy to use for a wide variety of jobs including large OD pipes, tanks, vessels, air ducts and inside air handling panels. The sheets of insulation are applied to the surface to be insulated, the insulation seams are to be glued, then taped with matching facing tape. ***SELF ADHESIVE PRODUCTS REQUIRE A CLEAN, DRY SURFACE TO PROPERLY ADHERE. SUFFICIENT PRESSURE MUST BE APPLIED TO THE ENTIRE SURFACE TO ENSURE A PROPER BOND TO THE SURFACE BEING INSULATED.***



Aerocel Sheet insulation meets the energy savings requirements of International Energy Conservation Code (IECC) and ASHRAE of R-4 at 1" wall thickness.

Aerocel EPDM Elastomeric Sheet Insulation has inherent Microbial Resistance based on the standard composition of this superior insulator.

Aerocel® EPDM sheet also conforms to the following standards or holds the following approvals/acceptances: ASTM C 534, ASTM C 1534, ASTM G 21 Fungal Resistance, UL 181 Section 12 Mold Growth/Humidity, UL 181 Section 17 Air Erosion, NY City MEA #171-04-M, City of LA RR-8413, NFPA 90A & 90B, and MIL 15280J.

AEROCEL® SHEET INSULATION SPECIFICATIONS

Physical Property	Result	Test Method
Apparent Thermal Conductivity @ 75°F Mean	0.245 k-Value	ASTM C 177 / C 518
Surface Burning Characteristics, Through 2" Thick	Flame Spread – 25 Max. Smoke Dev. – 50 Max.	ASTM E 84
	UL 94 5V-A, V-O	UL File E228536
	Self-Extinguishing	ASTM D 635
Service Temperature, Continuous Non-Adhesive, Self Adhering	-297°F to +300°F (-57°C to +125°C) -50°F to +280°F	ASTM C 411
Water Vapor Sorption	0.00 % max.	ASTM C 1104
Water Absorption	0.2% max	ASTM C 209
Water Vapor Permeability	.03 perm	ASTM E 96
Dimensional Stability	7% max.	ASTM C 356
Odor Emission	Pass	ASTM C 1304
Corrosiveness	Pass	ASTM C 665/C 692/DIN 1988
Fungi/Resistance	No Growth	ASTM C 1338/G 21/ UL181
Erosion Resistance	Pass	ASTM C 1071/UL181
Noise Reduction Coefficient	½" thick - .20 1" thick - .35	ASTM C 423
UV Resistance	Good	ASTM G 7/ G 90
Ozone Resistance	No Cracking	ASTM D 1171
Nitrosamine Content	None Detected	U.S. FDA CPG No. 7117.11 BSEN 12868
Thickness	3/8" 1/2" 3/4" 1" 1-1/2" 2"	
R-value	1.5 2 3.1 4.1 6.1 8.2	

STANDARD FACING SPECIFICATION

Material Thickness	6 mils	PSTC-133
Tensile Strength	68 lb/in width	PSTC-131
Puncture Resistance	35.4 lb	ASTM D 1000
Minimum Cont. Use Temperature	-30°F	
Maximum Cont. Use Temperature	300°F	
Flame Spread/Smoke Developed	10/20	UL 723
Water Vapor Permeability	0.00 perms	ASTM E 96, Procedure A, B

PRESSURE SENSITIVE ADHESIVE SPECIFICATION

Thickness (Adhesive)	3.0 mils	PSTC-133
Peel Adhesion	116 oz/in	PSTC-101
Shear Strength	>6 hours	PSTC-107
Minimum Application Temperature	-15 °F	
Max. Continuous Service Temp.	280 °F	



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