

Fiber Free

AP/Armaflex® SA AP/Armaflex® FS SA Self-Adhesive Duct Liner/Wrap

The original, fiber-free, closed-cell thermal and acoustical duct insulation – with a labor-saving pressure sensitive system – engineered to safeguard IAQ, attenuate HVAC noise and reduce energy waste. AP Armaflex FS SA is PVC free.



- Fiber-free, non-particulating, formaldehyde-free, free of PDBE flame retardants, and low VOC
- Attenuates airborne noise to reduce background noise from HVAC systems
- Meets ASHRAE 90.1 - 2010, ASHRAE Standard 189.1,
- IECC 2012 and California Title 24 for increased energy efficiency
- Designed to last the useful life of mechanical equipment
- Pressure sensitive adhesive system saves installation labor costs
- Microban® antimicrobial product protection inhibits the growth of mold and mildew in the insulation

GREENGUARD Certified products are certified to GREENGUARD standards for low chemical emissions into indoor air during product usage. For more information, visit ul.com/gg.

 armacell®



Microban antimicrobial product protection is limited to the product itself and is not designed to protect the users of these products from disease causing microorganisms, or as a substitute for normal cleaning and hygiene practices.*

Technical Data: AP Armaflex® SA and AP Armaflex® FS SA Duct Liner and Wrap – Self Adhesive

Description:

Black flexible closed-cell elastomeric thermal and acoustical duct insulation in sheet and roll form with a self-adhering backing

Specifications Compliance:

ASTM C 534, Type II — Sheet Grade 1 ASTM C 1534 ASTM D 1056, 2B1	ASTM E 84, NFPA 255, UL723 ASTM G21/C1338 ASTM G22 CAN/ULC S102 ¹	MEA 107-89M MIL-P-15280J, FORM S ² MIL-C-3133C (MIL STD 670B) Grade SBE 3 ²	NFPA 90A, 90B UL 181 City of LA – RR 7642
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Approvals, Certifications, Compliances:

- Key physical properties are approved by Factory Mutual.
- GREENGUARD Gold Certified
- Manufactured without CFCs, HFCs, HCFCs, PBDEs, or Formaldehyde.
- Made with EPA registered Microban® antimicrobial product protection.
- All Armacell facilities in North America are ISO 9001:2008 certified.

Typical Properties

Specifications:	Values			Test Method:
	AP Armaflex SA Through 1" Duct Liner and Wrap	AP Armaflex FS SA 1-1/2 and 2" Duct Liner	AP Armaflex SA 1-1/2 and 2" Duct Wrap	
Thermal Conductivity: Btu • in./h • ft ² • °F (W/mK)				
75°F Mean Temperature [24°C]	0.245 [0.0353]	0.28 [0.040]	0.25 [0.036]	ASTM C 177 or C 518
90°F Mean Temperature [32°C]	0.254 [0.0366]	0.28 [0.040]	0.256 [0.037]	
Water Vapor Permeability: Perm-in. [Kg/(s • m • Pa)]	0.05 [0.725 x 10 ⁻¹³]	0.08 [1.16 x 10 ⁻¹³]	0.05 [0.725 x 10 ⁻¹³]	ASTM E 96, Procedure A
Flame Spread and Smoke Developed Index:	25/50 rated	25/50 rated	Does not pass	ASTM E 84 CAN/ULC S102 ¹ - AP through 1"
Water Absorption, % by Volume:	0.2%	0.2%	0.2%	ASTM C 209
Mold Growth: Fungi Resistance : Bacterial Resistance:	Passed	Passed	Passed	UL181 ASTM G21/C1338 ASTM G22
Upper Use Limit: ²	180°F [82°C]	180°F [82°C]	180°F [82°C]	
Lower Use Limit: ³	-297°F [-183°C] ⁴	-297°F [-183°C] ⁴	-297°F [-183°C] ⁴	
Ozone Resistance:	GOOD	GOOD	GOOD	
Erosion Resistance:	Does not break away, flake off or show evidence of delamination at velocities of 10,000 ft/min			ASTM C 1071

R-Value	R-1.4	R-2.1	R-3.1	R-4.2	R-6	R-8
Thickness:	3/8"	1/2"	3/4"	1"	1-1/2"	2"

Sound Absorption Coefficients Frequency	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	NRC	SAA
Thickness Nom. 1" [25mm]	0.01	0.13	0.39	0.69	0.29	0.26	0.40	0.38

Sizes:

Sheet: Width x Length	36" x 48"
Roll: Width	48" (all thicknesses) and 60" (1" only)
Thickness	AP Armaflex SA Duct Liner and Wrap: 1/2", 3/4", and 1" AP Armaflex FS SA Duct Liner: 1-1/2" and 2" AP Armaflex SA Duct Wrap: 1-1/2" and 2"

Outdoor Use

Painting with WB Finish or other protective jacketing is required to prevent damage to the insulation in exterior applications and to comply with the insulation protection sections of the International Energy Conservation Code (IECC) and ASHRAE 90.1.

¹ AP Armaflex meets CAN/ULC S102 through 1" thickness.

² AP Armaflex and AP Armaflex FS Black Duct Liner/Wraps withstand temperature of 250°F (121°C) when tested according to ASTM C 411. "Test Method for Surface Performance of High-Temperature Insulations". At this temperature, AP/ Armaflex Duct Liner/Wrap insulation shows no evidence of flaming, glowing, smoldering, delamination, melting or insulation collapse. Although this insulation will withstand high temperatures, continuous use temperature should be limited to 180°F [82°C].

³ At temperatures below -20°F (-29°C), elastomeric insulation starts to become less flexible. However, this characteristic does not affect thermal efficiency and resistance to water vapor permeability of Armaflex insulation.

⁴ For applications of -40°F to -297°F (-40°C to -183°C), contact Armacell.

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AP Armaflex and FS	Self-Adhesive Duct Liner and Wrap	Submittal	031	Eng/USA	5/2016
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