

# AP Coilflex<sup>™</sup> Conformable Duct Liner

## Patent Pending! For factory application. Fiber free, mold resistant.



- Soft elastomeric foam easily conforms to fabricated corners
- Engineered for sheet metal shops
- Cost-effective alternative, half the hand labor (cutting)
- Fiber free and noise reducing
- Water-based adhesives compatible
- Now in 1-1/2" thickness. Coming soon in 2" thickness









#### **Duct Liner**

Patent pending **AP Coilflex Duct Liner** is engineered for automated applications with water-based adhesives.

- Practical: Easily conforms to fabricated duct corners without stiffness or compression; cuts easier and faster
- Mold Resistant: Made with Microban antimicrobial product protection
- Indoor Air Quality: Fiber-free, formaldehyde-free, low VOC's, non-particulating
- Plenum rated: Safe for institutional air ducts, meets NFPA standards
- . Noise blocking and vibration dampening

#### **Description**

AP Coilflex Duct Liner is a patent pending, highly conformable, pliable elastomeric thermal insulation. It is manufactured without the use of CFCs, HFCs or HCFCs. The Microban® antimicrobial protection is registered by the Environmental Protection Agency for use in air ducts (EPA Reg. No. 1258-840-42182). It is added during manufacturing to provide an extra level of defense to the natural mold resistance of AP Coilflex.

AP Coilflex is effective for reducing HVAC noise.

It is supplied in rolls  $46^\circ$ ,  $47^\circ$ ,  $48^\circ$ ,  $56-1/4^\circ$ ,  $59^\circ$  and  $60^\circ$  wide, in  $1^\circ$  (or  $1/2^\circ$  special order) thicknesses and in  $48^\circ$  rolls in  $1-1/2^\circ$  thickness.

#### **Approvals and Compliance**

AP Coilflex Duct Liner meets requirements of NFPA 90A and 90B for Duct Coverings and Linings, and UL 181 for Mold Growth. Approved for use in air plenums, conforms to ASTM C

1534 requirements and withstands temperatures of 250°F.

Like all AP Armaflex insulation, AP Coilflex meets requirements of International Energy Conservation Code (IECC) and ASHRAE for R-Value 4.2 at 1" thickness and 6.0 at 1-1/2" thickness.

#### **Uses and Applications**

AP Coilflex Duct Liner is ideal for air handling systems, VAV units, ducts and other air system components requiring condensation control and resistance to moisture, damage or heat gain. It also reduces noise generated by fans and air movement as well as the rattle or popping of sheet metal air ducts. Due to its exceptional conformability, the insulation is bendable together with the sheet metal on automated coil lines. The structure of Coilflex helps prevent compression. Coilflex is especially effective factory-applied, including on automated coiling lines, for end use in areas like schools, hospitals, hotels, commercial and government buildings.

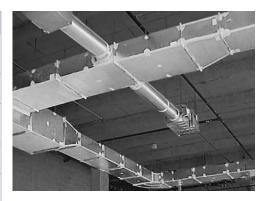
#### Installation

AP Coilflex can be applied with current water-based adhesives. Secure with metal fasteners in accordance with SMACNA publication, "HVAC Duct Construction Standards, Metal and Flexible". If installed using Armaflex 520 Adhesive, no pinning is required.

When air stream velocities exceed 4,000 FPM (20.3m/second), metal nosing should be applied to every leading edge. Nosing may be formed on ducts or be channeled or zee-attached by screws, rivets or welds.

ALL ARMACELL FACILITIES IN NORTH AMERICA ARE ISO 9001:2008 CERTIFIED.

Features	Benefits
Conformable nonfibrous structure	Nondusting Longer life Won't contribute to air quality problems
Made with Microban antimicrobial product protection	Resists mold on the insulation EPA registered for use in air duct insulation
Noise reducing, higher-density material	More productive work environment Reduces or blocks HVAC noise Helps prevent metal duct vibration, sound transfer
Smooth surface that reduces dirt and debris accumulation	Inhibits amplification of biological contaminants Basis for continuing system hygiene
Elastomeric foam	Fiber free Resistant to incidental damage No special tools; no dust mask required during fabrication and installation, no itch
Inherent vapor retarder	Requires no mastics Competitive total installed cost



### **Physical Properties\***

Specifications	Values		Test Method		
Thermal Conductivity, Btu • in./h • ft² • °F (W/mK) 75°F mean temperature (24°C) 90°F mean temperature (32°C)	1/2", 1" thickness 0.25 (0.036) 0.256 (0.037)	1-1/2" thickness 0.28 (0.040)	ASTM C 177 or C 518		
Flame Spread and Smoke Developed Index ① Through 1" (25 mm)	25/50		ASTM E 84		
Mold Growth Fungi Resistance Bacterial Resistance	UL181 ASTM G21/C1338 ASTM G22		Meets requirements Meets requirements Meets requirements		
Upper Use Limit ②	180°F (82°C)				
Lower Use Limit ③	-297°F (-183°C)				
Erosion Resistance	Does not break away, flevidence or delamination 10,000 ft/min		ASTM C 1071		
Corrosiveness	Noncorrosive		ASTM C 665		
Odor Emissions	No objectionable odors		ASTM C 665		

#### **Sound Absorption Coefficients at Frequency**

Thickness	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	NRC†
Nom. 1" (25mm)	0.08	0.22	1.03	0.37	0.68	0.50	0.60

#### **Sound Transmission Class (STC)**

Thickness	STC Class			
Nom. 1/2" (13 mm)	25			
Nom. 1" (25mm)	25			

#### **Sizes**

Wall Thickness	Roll Width					
	46"	47"	48"	56-1/4"	59"	60"
1/2" (Special Order)	•	•	•	•	•	•
1"	•	•	•	•	•	•
1-1/2"			•			

#### Notes

- ① AP Coilflex Duct Liner has a flame spread index of less than 25 and a smoke developed index of less than 50 for all thicknesses up to and including 1" (25 mm) when tested according to ASTM E 84. Numerical flammability ratings alone may not define the performance of products under actual fire conditions. They are provided only for use in the selection of products to meet limits specified.
- Withstands 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 Coilflex Duct Liner 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 of Coilflex insulation.
- ④ Reference Only

\* AP Coilflex is a patent pending product





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AP COILFLEX SUBMITTAL 075 USA ENG 1/12