

# AP Coilflex™

## 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

# Duct Liner

Patent pending **AP Coiflex Duct Liner** is engineered for automated applications with water-based adhesives in accordance with SMACNA pinning and spacing guidelines, or unpinned applications using an Armaflex 520 Adhesive. Available in rolls in a range of widths including 59" and 60", in 1" thickness (or 1/2" special order).

- **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 Coiflex 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 Coiflex.

AP Coiflex is effective for reducing HVAC noise.

It is supplied in rolls 46", 47", 48", 56-1/4", 59" and 60" wide, in 1" (or 1/2" special order) thicknesses. It can be applied with current water-based adhesives and pinning per SMACNA requirements or unpinned using Armaflex 520 Adhesives.

## Approvals and Compliance

AP Coiflex 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 Coiflex meets requirements of International Energy Conservation Code (IECC) and ASHRAE for R-Value 4.2 at 1" thickness.

## Uses and Applications

AP Coiflex Duct Liner, like AP Armaflex Duct Liners, 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. They also reduce noise generated by fans and air movement as well as the rattle or popping of sheet metal air ducts. Coiflex is especially effective factory-applied, including on automated coiling lines, for end use in areas like schools, hospitals, hotels, commercial and public buildings.

## Installation

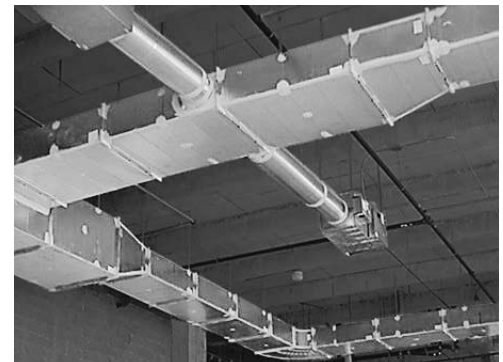
AP Coiflex can be applied with current water-based adhesives. Secure with metal fasteners in accordance with SMACNA publication, "HVAC Duct Construction Standards, Metal and Flexible". If installed using Armaflex 520 Adhesive, no pinning is required.

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.

Due to its exceptional conformability, the insulation is bendable together with the sheet metal on automated coil lines. The structure of Coiflex helps prevent compression.

ALL ARMACELL FACILITIES IN NORTH AMERICA ARE ISO 9001:2000 CERTIFIED.

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



## Duct Liner

[www.armacell.com/us](http://www.armacell.com/us)

For the latest document, please refer to our website.

## Physical Properties\*

Specifications	Values	Test Method
<b>Thermal Conductivity, Btu • in./h • ft<sup>2</sup> • °F (W/mK)</b> 75°F mean temperature (24°C) 90°F mean temperature (32°C)	0.25 (0.036) 0.256 (0.037)	ASTM C 177 or C 518
<b>Flame Spread and Smoke Developed Index ① Through 1" (25 mm)</b>	25/50	ASTM E 84
<b>Mold Growth</b> <b>Fungi Resistance</b> <b>Bacterial Resistance</b>	UL181 ASTM G21/C1338 ASTM G22	Meets requirements Meets requirements Meets requirements
<b>Upper Use Limit ②</b>	180°F (82°C)	
<b>Lower Use Limit ③</b>	-297°F (-183°C)	
<b>Erosion Resistance</b>	Does not break away, flake off or show evidence or delamination at velocities of 10,000 ft/min	ASTM C 1071
<b>Corrosiveness</b>	Noncorrosive	ASTM C 665
<b>Odor Emissions</b>	No objectionable odors	ASTM C 665
<b>Density, Typical Range ④</b>	3.0 – 6.0 lbs/ft	ASTM D 1622 ASTM D 1667

### Notes

- ① AP Coifflex 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.
- ② 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 Coifflex 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 Coifflex insulation.

④ Reference Only

\* AP Coifflex is a patent pending product

### 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

Roll Width	46, 47", 48", 56-1/4", 59" and 60"
Wall Thickness	1" and 1/2" (special order)



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