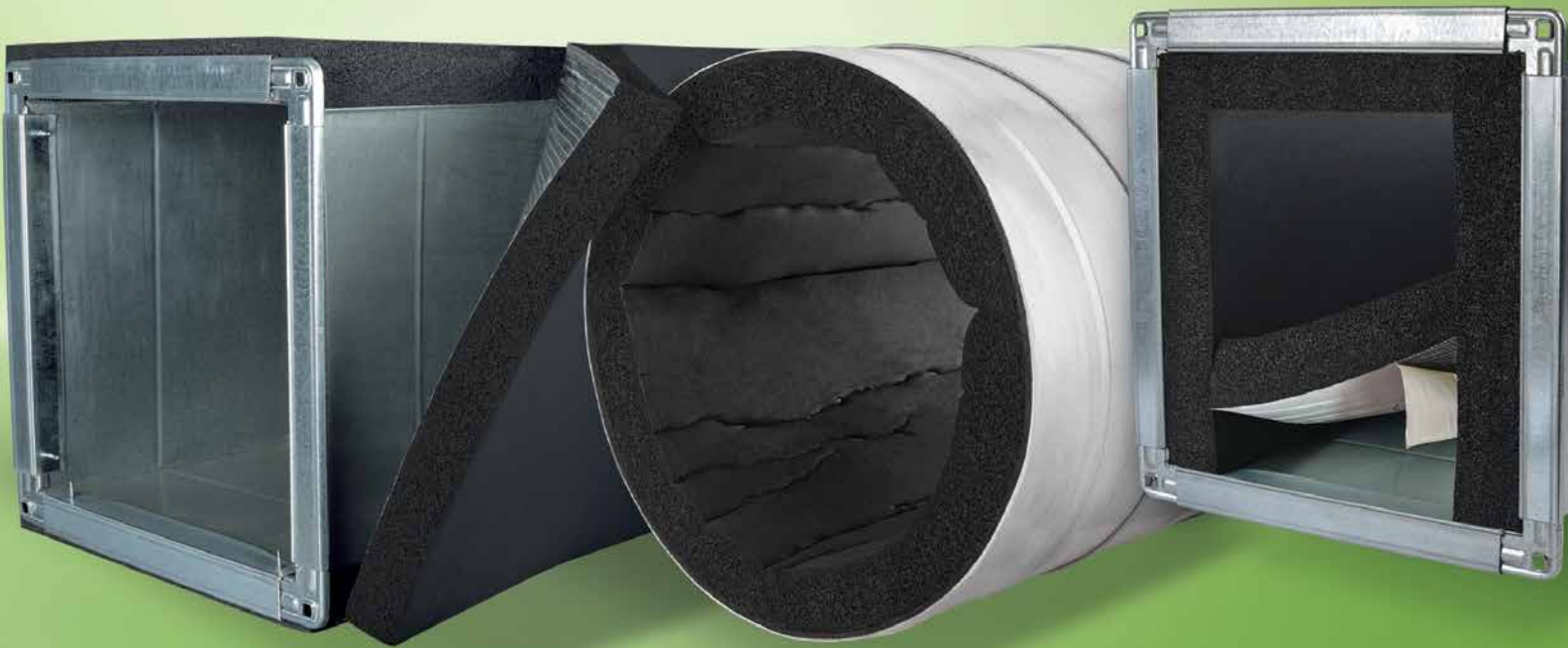


# AP/Armaflex® AP/Armaflex® FS AP/Coilflex® AP/Spiralflex®

Duct Liner/Wrap Solutions

Fiber Free

Armacell's elastomeric foam duct wrap and liners are specified by engineers who recognize the value of thermal and acoustical insulation that also protects indoor air quality



- Fiber free and non-particulating
- Suitable for air plenums; 25/50 fire and smoke rated
- Saves energy, controls condensation
- Long lasting, requires fewer replacements over time
- Superior acoustic performance at critical low frequencies

 armacell®



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](http://ul.com/gg).

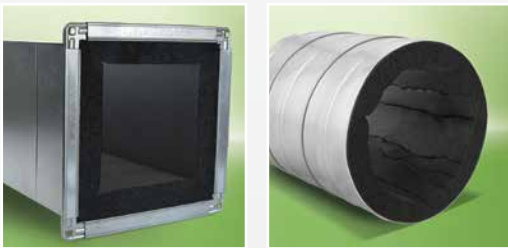
Microban antimicrobial product protection is limited to the product itself and is not designed to protect the users of these products from disease causing microorganisms, or as a substitute for normal cleaning and hygiene practices.\*

# Properly Insulate Ducts for Higher Performance

## A Higher Level of Protection against Energy Waste

Armacell elastomeric foam duct liners reduce energy costs associated with the loss of BTU's between the HVAC equipment and occupant spaces. Lining duct systems results in more comfortable residential and commercial spaces and reduced energy costs for building operation.

- » Maintains thermal effectiveness and resists long-term compaction or erosion, unlike fibrous insulation.
- » Meets ASHRAE 189.1 and 90.1, IECC 2012 and California Title 24



## A Higher Level of Protection for the Indoor Environment

Fiber-free Armacell elastomeric foam duct liners help protect the indoor environment.

- » Fiber-free and non-particulating; will not erode, crack, flake or delaminate under increased air velocity
- » Better moisture mitigation than fibrous insulation
- » GREENGUARD Gold Certified®: Suitable for environments like schools and healthcare facilities.
- » Low VOC and formaldehyde-free
- » "Plenum-rated": Meets ASTM E 84 25/50 fire and smoke ratings



## A Higher Level of Protection against Background Noise

Sound-absorbing Armacell elastomeric foam duct liners reduce disturbing HVAC noise that undermines concentration and intrudes on adjoining spaces.

- » All AP products provide good noise blocking (Sound Transmission Class 25) and dampening of HVAC vibration and metal duct rattle
- » AP Coilflex Acoustic Duct Liner provides excellent sound absorption (NRC 0.60) with performance superior to fibrous insulation at low frequencies



## A Higher Level of Cost Savings

Durable Armacell elastomeric foam duct liners are designed to last the life of the system resulting in a significant reduction of total life cycle costs.

- » AP Coilflex eliminates added expense, time and labor in dual wall duct fabrication
- » Unlike fibrous insulation, AP Armaflex, AP Coilflex and AP Spiralflex do not require expensive encapsulating film to contain any fibers
  - No need for additional inner metal wall with round or rectangular ducts resulting in ducts that are much lighter than double wall systems. May reduce related construction support costs
  - Compressibility and non-fibrous composition allow for a simplified one-step installation in spiral duct assembly

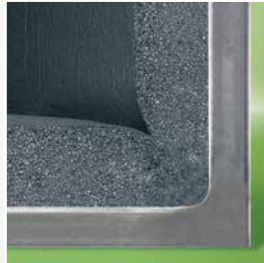
## AP Coilflex® Acoustic Duct Liner

The next-generation, all-inclusive duct insulation

The next-generation, all-inclusive duct insulation.

With the introduction of AP Coilflex, the industry had even more reason to specify elastomeric foam duct lining for energy efficiency, sustainability and the indoor environment.

- » Uniquely flexible and conformable for easier, labor-friendly fabrication:
  - The only elastomeric foam duct liner engineered for coil lines
  - Quick, gap-free, no-bulge bending on brake presses
  - Less cutting in hand assembly applications
- » Highest acoustic values of any elastomeric insulation:
  - NRC 0.60 sound absorption, STC 25 noise blocking



Developed especially for automated coil line operations, AP Coilflex is the new labor-saving, cost-saving alternative to fibrous duct lining.

## AP Spiralflex® Spiral Duct Liner

The first fiber-free, elastomeric duct liner for round ducts.

Armcell's newest duct liner innovation exclusively for round ducts is AP Spiralflex. This revolutionary product answers the demand for a fiber-free elastomeric duct liner for spiral ducts, considered to be the most efficient ducts made. An easy-to-cut, flexible olefin backing is pre-laminated to the foam and shipped in convenient rolls.

- » Fiber free and easier to clean than fibrous duct lining
- » Good at attenuating airborne noise from HVAC systems
- » Ducts with AP Spiralflex liners are 20% lighter than dual wall ducts. This can translate to cost savings in duct hangers, construction supports and other building costs
- » Simplified one-step installation: Eliminates costly encapsulating films and the inner metal wall for round ducts
- » ASTM E 84 25/50 rated for smoke and flame

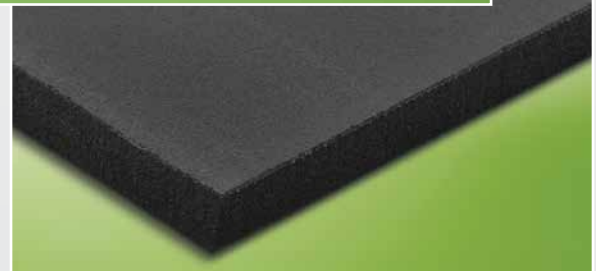
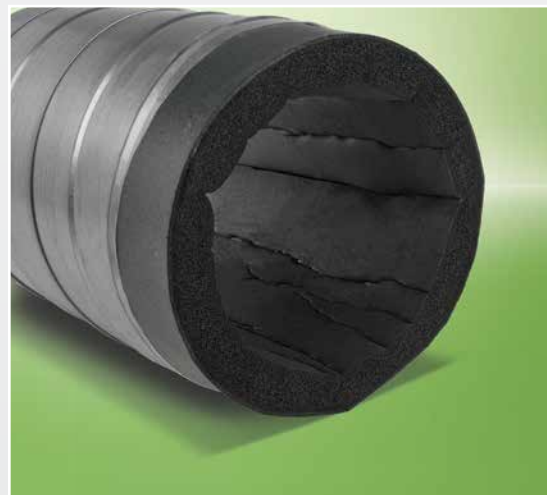
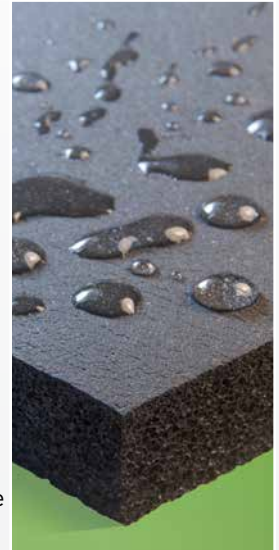
## AP Armaflex® and AP Armaflex FS Duct Liners

The original proven alternative for fiber-free, mold resistant air ducts: Now 25/50-rated through 2"

From schools, hospitals and government facilities nationwide, to landmarks like the Empire State Building and the Louisiana Superdome, original AP Armaflex duct liner adds huge long-term value and peace of mind performance.

AP Armaflex SA and FS SA combine our breakthrough foam technology with a patented and labor saving low VOC, self-adhering (PSA) system.

- » NRC 0.40 and STC 25, excellent sound blocking and vibration dampening.
- » Up to 1" (R-4.2) 25/50 rated available in AP Armaflex
- » 1-1/2" (R-6) and 2" (R-8) 25/50 rated available in AP Armaflex FS
- » Recommended by duct cleaners nationwide for more than a decade
- » Exclusive built-in EPA-registered Microban® antimicrobial protection to inhibit growth of mold in the insulation



## Physical Properties

Specifications	Values	Test Method
<b>Flame Spread and Smoke Developed Index</b>	AP Armaflex: ① through 1" (25 mm) 25/50 AP Armaflex FS: through 1-1/2" and 2" (38 mm and 50 mm) 25/50 AP Coilflex: through 1-1/2" (38 mm) 25/50 AP Spiralflex: through 1" (25 mm) 25/50	ASTM E 84 CAN ULC S-102 – AP Armaflex: through 1"
<b>Mold Growth Fungi Resistance Bacterial Resistance</b>	Meets Requirements	UL181 ASTM G21/C1338 ASTM G22
<b>Upper Use Limit</b>	180°F (82°C)	NFPA 90A, 90B
<b>Lower Use Limit</b>	-297°F (-183°C)	ASDTM C 534
<b>Erosion Resistance</b>	Does not break away, flake off or show evidence of 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

### Notes

- ① AP Armaflex Duct Liners have 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; CAN ULC S-102 through 1" (25 mm).

### Sound Absorption Coefficients at Frequency

Thickness	125Hz	250Hz	500Hz	1000Hz	2000Hz	4000Hz	NRC†
Nom. 1" (25 mm)	0.01	0.13	0.39	0.69	0.29	0.26	0.40 (AP Armaflex)
	0.08	0.22	1.03	0.37	0.68	0.50	0.60 (AP Coilflex)
	0.03	0.25	0.84	0.27	0.30	0.17	0.40 (AP Spiralflex)

### Sound Transmission Class (STC)

	Thickness	STC Class
AP Armaflex	Nom. 1/2" (13 mm)	25
AP Armaflex	Nom. 1" (25 mm)	25
AP Spiralflex	Nom. 1" (25 mm)	31

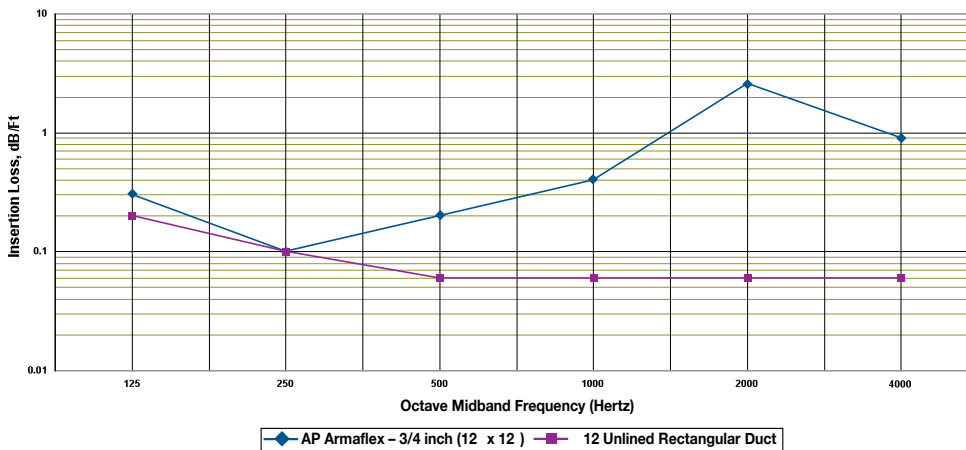
### Sizes

<b>Sheet Width / Length</b>	36" x 48"
<b>Roll Width</b>	46", 47", 48", 56-1/4", 59", and 60"
<b>Wall Thickness</b>	AP Armaflex: 1/2", 1" AP Armaflex FS: 1-1/2" and 2" AP Coilflex: 1", 1-1/2" AP Spiralflex: 1"

### R-Values

Thickness	R-Value
1" (13 mm)	R-4.2
1-1/2" (38 mm)	R-6
2" (50 mm)	R-8

### Acoustics: Insertion Loss



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