armacell

the makers of **Armafle**x®

advanced insulation and engineered foams

Description

AP/Armaflex Insulation Tape is made of high-quality AP Armaflex Insulation, an elastomeric thermal insulation material. The self-adhering tape is supplied in convenient strip form, 2" (50mm) wide, 30' (9.1m) long, and 1/8" (3mm) thick. No bands, wires, or additional adhesive needed. Available in standard cartons and tape dispensers.

Uses

AP/Armaflex Insulation Tape provides a fast, easy method of insulating pipes and fittings. It is used to control condensation drip from domestic cold-water, chilled-water, and other cold piping and fittings and to reduce heat loss when applied to hot-water lines that will operate up to 180°F (82°C). AP Armaflex Insulation Tape may be used in conjunction with AP Armaflex Pipe and Sheet Insulation. Its greatest advantage, however, is the ease with which it can be used to insulate short lengths of pipe and fittings in congested or hard-to-reach areas.

Application Instructions

AP/Armaflex Insulation Tape is applied by removing

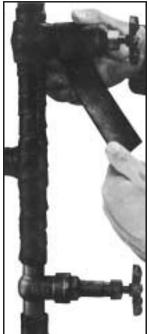
release paper as the tape is spirally wrapped around the piping or fittings and pressed firmly in place. Avoid stretching the tape as it is being wrapped. Pressure-sensitive adhesive adheres firmly and forms a long-lasting bond with metal surfaces. On cold piping, the number of wraps

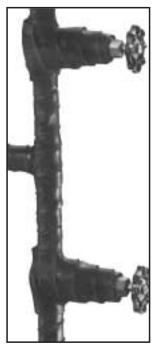


AP Armaflex Insulation Tape is available in standard cartons and tape dispensers.

required must be sufficient to keep the outer insulation surface above the dew point of the air so that sweating will be controlled. On hot lines, the number of wraps is dictated only by the amount of heat loss control that is desired. On dual-temperature lines, any number of wraps sufficient to control sweating on the cold cycle is usually adequate for the heating cycle.







Multiple wraps are recommended. (See table.) Tape should be applied with a spiral wrap to obtain a 50% overlap. Additional layers are added to build up insulation to the required thickness.

To insulate valves, tees, and other fittings, small pieces of tape should be cut to size and pressed into place, with no metal exposed. The fitting then is additionally overwrapped with longer lengths for a durable and efficient job.





Physical Data

Average Properties of AP Armaflex Insulation Tape

Thermal Conductivity, Btu • in./h • ft² • °F [W/(m • K)] 75°F (24°C) mean temperature 90°F (32°C) mean temperature	0.27 (0.039) 0.276 (0.040)
Upper temperature use limit, °F (°C)	up to 180 (82°C)
Water vapor permeability, perm-in. [Kg/(s•m•Pa)]	0.08 (1.16 x 10 ⁻¹³)
Ozone resistance	Good

Armaflex Pipe Insulation Thickness Recommendations

Thickness to Control Sweating and Dripping

Air Temperature and Relative Humidity	Pipe Temperature				
	50°F* (10°C)	35°F** (2°C)			
80°F (27°C) & 50% RH	50% overlap	50% overlap			
85°F (30°C) & 70% RH	50% overlap plus single layer	50% overlap plus 50% overlap			

^{*}Up to 2-5/8" ID - 3/8" (10mm) required; 3-1/8" ID - 5" IPS - 1/2" (13mm) required

Approximate Coverage

Linear Feet (Linear Meters) of Pipe—One 30-Ft (9.1m) Roll

Copper Tubing Size		Insta	allatio	n Meth	ods*		Iron Pipe Size		Insta	allatio	n Meth	ods*	
	Α		A B		(C		-	4	ı	3	(C
	lin. ft.	lin. m	lin. ft.	lin. m	lin. ft.	lin. m		lin. ft.	lin. m	lin. ft.	lin. m	lin. ft.	lin. m
3/8" OD	15-1/4	(4.6)	8-1/2	(2.6)	5-1/2	(1.7)	1/4" IPS	12	(3.7)	7	(2.1)	4-1/2	(1.4)
1/2" OD	12-3/4	(3.9)	7-1/4	(2.2)	4-3/4	(1.5)	3/8" IPS	10-1/4	(3.1)	6	(1.8)	4	(1.2)
5/8" OD	11	(3.4)	6-1/2	(2.0)	4	(1.2)	1/2" IPS	8-3/4	(2.7)	5-1/4	(1.6)	3-1/2	(1.1)
3/4" OD	9-1/2	(2.9)	5-3/4	(1.8)	3-3/4	(1.1)	3/4" IPS	7-1/4	(2.2)	4-1/4	(1.3)	3	(0.9)
7/8" OD	8-1/2	(2.6)	5	(1.5)	3-1/2	(1.1)	1" IPS	6	(1.8)	3-3/4	(1.1)	2-1/2	(0.8)
1" OD	7-1/2	(2.3)	4-1/2	(1.4)	3-1/4	(1.0)	1-1/4" IPS	5	(1.5)	3	(0.9)	2-1/4	(0.7)
1-1/8" OD	7	(2.1)	4-1/4	(1.3)	3	(0.9)	1-1/2" IPS	4-1/2	(1.4)	2-3/4	(0.9)	2	(0.6)
1-3/8" OD	6	(1.8)	3-1/2	(1.1)	2-1/2	(0.8)	2" IPS	3-1/2	(1.1)	2-1/4	(0.7)	1-3/4	(0.5)
1-5/8" OD	5	(1.5)	3-1/4	(1.0)	2-1/4	(0.7)	_	-	l —	—	—	—	—
2-1/8" OD	4	(1.2)	2-1/2	(0.8)	1-3/4	(0.5)	_	—	l —	—	—	—	—

^{*}INSTALLATION METHODS: A—50% overlap wrapping; B—50% overlap plus single-layer wrapping; C—50% overlap plus 50% overlap wrapping



ARMACELL LLC 7600 Oakwood Street Extension P. O. Box 1038, Mebane, NC 27302

TEL. 919 304-3846 • FAX 919 304-3847 E-MAIL info.us@armacell.com INTERNET www.armacell.com

^{**}Up to 2-5/8" ID - 1/2" (13mm) required; 3-1/8" ID - 5" IPS - 3/4" (19mm) required