

Armstrong

CORK COMPANY
Lancaster, Pennsylvania



ARMSTRONG ARMAFLEX PIPE INSULATION

for all air-conditioning, refrigeration,
and plumbing and heating lines

Armstrong Armaflex is a flexible foamed plastic insulation in pipe covering and sheet form. Pipe covering is manufactured in nominal $\frac{3}{8}$ in., $\frac{1}{2}$ in., and $\frac{3}{4}$ in. thicknesses. These thicknesses are calculated to prevent condensation on cold lines within their individual recommended usage ranges at temperatures down to zero. Armaflex also can be used on heating lines, where it will withstand temperatures to 200° F. On outdoor installations, consideration should be given to weather-proofing. In sheet form, Armaflex is used for insulation of larger pipe sizes and for covering tanks and vessels of any size or shape.

The closed cell structure of Armaflex gives it a low k value of 0.28 at 75° F. mean temperature. Armaflex resists deterioration, so efficiency remains high in service.

The uniformly sized closed cells of Armaflex seal out air and moisture. The result is a vapor transmission rating of less than 0.1 perm.

Shrinkage of Armaflex when the inner surface is exposed to temperatures to 200° F. is negligible. Armaflex is only slightly affected by solvents and for all practical purposes is unaffected by oils, common corrosive chemicals, or fungus.

The extreme flexibility of Armaflex Pipe Covering and Sheets makes application very rapid. They can be applied in close quarters. Pipe covering can be slipped onto pipe and tubing prior to its installation or slit and snapped over piping that is already in place. The only sundry material required is Armstrong 520 Adhesive. Scotch Brand #472 Tape may be used to

seal Armaflex joints on straight piping. Fittings are insulated with miter cut pieces of covering, quickly cut and assembled on the job, using 520 Adhesive to adhere joints.

Physical Properties of Armaflex

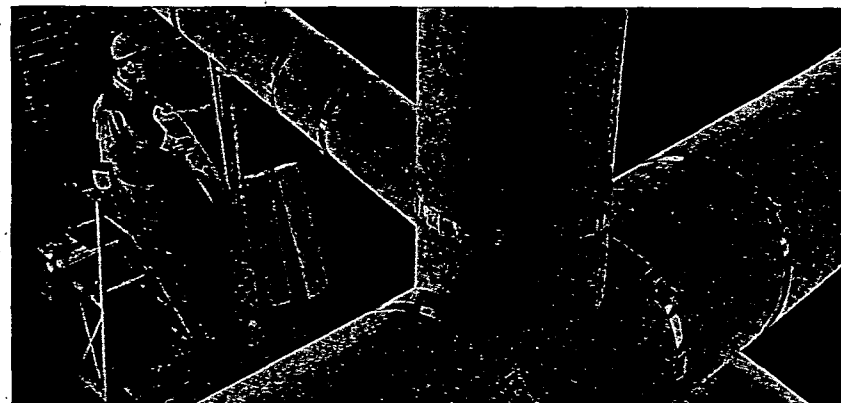
Pipe Covering	
Wall thickness—inches (nom)	$\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$
Inside diameter—inches	$\frac{3}{8}$ to $3\frac{1}{2}$
Length of section—feet	6
Sheet Armaflex	
Size—inches	30 x 36
Thickness—inches	$\frac{3}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{1}{2}$
Thermal conductivity	0.28
Btu-in./sq ft-hr-°F-k,	0.30
Water vapor transmission	
Perms (Grains-in./sq ft-hr-in.-Hg.)	less than 0.1
Air transmission—static pressure at 10 in. Hg. cu ft-in./hr-sq ft	less than 0.03
Water absorption—28 days submer-	3.9
sion—percent by volume	
Density—lb-cu ft	pipe covering 7.5 sheets 9.5
Fire rating	self-extinguishing

For complete application instructions and specifications, write today to Armstrong Cork Company, 5800 Preston Avenue, Lancaster, Pennsylvania.

THE DOW CHEMICAL COMPANY

Plastics Sales, Midland, Michigan

DOW



STYROFOAM® STOPS MOISTURE, REPELS HEAT

Advantages of Styrofoam* as a Low Temperature Pipe Covering

(1) Low "k" factor stays low because Styrofoam (a Dow plastic foam) resists water and water vapor. (2) Prevents condensation and dripping. (3) Light, clean, easy to handle, economical to apply. (4) Resists rot, mold, deterioration. (5) Will not split or crack nor is it subject to ice build-up around valves in extreme cold.

USES

Pipe covering • Wall, floor and ceiling insulation for low temperature work • Cavity and core walls • Insulation-plaster base • Refrigerated vehicles • Curtain wall panels • Perimeter and foundation insulation

ENGINEERING DATA

THERMAL PROPERTIES

Thermal Conductivity (k factor), Average less than 0.28 at
Btu/(hr) (sq ft) (°F/in.) mean temperature of 40° F.
Linear Thermal Coefficient of
Expansion .00003 to .00004 in./in.° F.
Specific Heat between .0° F. and 80° F.
Resistance to Heat (Maximum 0.27 Btu/(lb.) (°F.) at 40° F.
recommended temperature Styrofoam 22-170° F.
for continuous use) Styrofoam 33-160° F.

PHYSICAL PROPERTIES

	Styrofoam 22	Styrofoam 33
Density (lb/cu ft)	1.6-2.0	1.7-2.3
Compressive Yield Strength (psi)	16-32	16-38
Tensile Strength (psi)	45-61	65-95
Shear Strength (psi)	27-38	30-40
Flexural Strength (psi)	42-61	48-99
Compressive Modulus (psi)	1200-1700	1500-2000

* STYROFOAM and SCORBOARD are trademarks of The Dow Chemical Company

Bending Modulus (psi)	22	33
Modulus of Rigidity (psi)	1000-1285	1250-1760
	700-1800	1000-1300

WATER RESISTANCE PROPERTIES

Capillarity	None
Water absorption (When subjected to 90° F., 90 per cent relative humidity for 15 days)	Less than 0.03 per cent by volume
Water absorption (When completely submerged for one week)	Water pick-up only on surface cells less than 0.15 lb./sq. ft. of areas

VAPOR TRANSMISSION

When Styrofoam acts as a barrier between spaces having different atmospheric conditions 1.0-2.0 grains/(sq ft) (hr) (in. thickness) (in. of Hg. vapor pressure difference)

MANUFACTURERS

Styrofoamics, Inc., 17 Hawkins Street, Somerville, Mass. • Globe Products Incorporated, 6415 North California Avenue, Chicago, Illinois • Tuffite, Inc., Ballston Spa, New York • Styro-Fabricators, 1401 Fairfax Trafficway, Kansas City, Kansas • Robinson Industries, 3051 Curtice Road, Coleman, Michigan • MMM, Incorporated, P.O. Box 968, Portsmouth, Ohio • Kennedy Industries, 4447 Alger Street, Los Angeles, California • Fastab Insulation, Inc., 304 Cleveland Transit Building, Cleveland 14, Ohio • Fibrous Glass Products, Inc., Hicksville, L. I., New York • Kransco Manufacturing Company, South San Francisco, California

For further information on Styrofoam in any application write to THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastics Sales Department 1941R. We can also give you information on Scorbord®, the new easy-to-apply member of the Styrofoam family specifically designed for perimeter and cavity wall applications.

YOU CAN DEPEND ON

DOW