



Lancaster, Pennsylvania

DISTRICT OFFICES IN MAJOR CITIES

Low-Temperature Insulations

Corkboard—Moisture resistant, strong, durable, lightweight, easy to handle. Sizes: 36 in. long; 12 in., 18 in., 24 in., 36 in. wide; 1 in., 1½ in., 2 in., 3 in., 4 in., 6 in. thick. K factor at 60 F mean: 0.26.

Armalite*—clean, white, foamed plastic insulation for temperatures from 300 deg below zero to 175 F. Boards weigh only 1.25 lb per cu ft average. Size: 36 in. long; 12, 18, 24, and 36 in. wide; 1, 1½, 2, 3, 4 and 6 in. thicknesses.

LT® Cork Coverings—low-cost, easy-to-apply insulations for lines operating at temperatures down to -30 F. Made of precision cut segments of corkboard, cemented to 3-ply vaporproof paper. Thickness: ¾ in., 1½ in., 2 in., 2½ in.

Armaflex®—flexible plastic pipe covering for fast installation on copper tubing and other lines. For temperatures from zero to 200 F. K factor at 75 F mean: 0.28. Inside diameters: ¾ in. to 3½ in. Also available in sheet form.

Armaglas† PF Insulation—all-purpose, easy-to-apply insulation for tanks, vessels and equipment. Size: 24 in. x 48 in. Densities from 3.5 to 9 lbs per cu ft.

Armaglas AE Board—a rigid glass fiber board for cold room walls, ceilings and partitions. Coated with asphalt. Size: 12 in. x 36 in. 6-lb density.

Heat Insulations

Armatemp*—strong, mineral wool insulation for tanks, ducts and other heated surfaces. In block form for temperatures up to 1900 F; in blankets for temperatures up to 1200 F.

85 percent Magnesite Pipe Covering—for use at temperatures to 600 F. Made in sectional form for pipes to 18 in.; in segments for larger sizes. Also available in block form.

Armaglas Pipe Coverings—a glass fiber insulation for temperatures up to 400 F. In 3 ft long sections for pipes up to 33 in. Copper tubing sizes from ¾ in. to 6 in.

Armaglas WA Pipe Covering—flexible, light-weight blankets for wrapping around lines operating up to 600 F. Furnished ¾ in. thick and compressed to ½ in. in application.

* Trade-Mark
† Armaglas is manufactured by the Owens-Corning Fiberglas Corp.

Armaglas Blanket Type Pipe Covering—for irregularly shaped pipes operating up to 1000 F. 1 in., 1½ in., 2 in., 3 in., 4 in. thick. Length: 2 ft.

Armaglas Low-Pressure Pipe Covering—for cold water, hot water and low-pressure steam lines. Preformed of glass fibers in 3 ft. molded half-sections. Fits pipe sizes up to 8 in. and copper tubing up to 3 in.

Armaglas PF Insulation—an all-purpose material for use on tanks and vessels operating up to 400 F. Comes in batts and boards; in 7 densities from 2.5 to 10.5 lbs per cu ft.

Armaglas Insulating Wool—comes in rolls, batts and shredded; temperatures go up to 1000 F. Thicknesses: ¾ in. up to 3½ in.

Armaglas Metal Mesh Blankets—Made of glass fibers faced with wire mesh or metal lath. For temperatures to 1000 F. Sizes: 2 ft x 8 ft, 2 ft x 4 ft. Thicknesses from 1 in. to 6 in.

Armaglas Block Insulation—for boilers, breechings, tanks and other process equipment operating up to 400 F. 6 in. and 12 in. wide, 36 in. wide. ¾ in., 1 in., 1½ in., 2 in. thick.

Duct Insulations

Armaglas PF Duct Insulation—low-cost insulation for exterior duct surfaces. Size: 24 in. x 48 in. Thicknesses: ½ in. to 2 in. For temperatures up to 250 F.

Armaglas Coated Duct Insulation—has a neoprene finish to provide painting surface and prevent air erosion.

Armaglas Vapor-Seal Duct Insulation—both thermal insulation and sound absorber with built-in vapor barrier. For cool air ducts where condensation is a problem. 24 in. x 48 in. size; ¾ in., 1 in., 1½ in., 2 in. thicknesses.

Armaglas Flexible Duct Insulation—All-purpose insulating blanket and sound conditioning for hot or cold ducts of any size or shape. Up to 250 F.

Armaglas Flexible Duct Liner—Neoprene-coated and used as sound-absorbing insulation inside warm air or cooling ducts. 36 in. wide; ½ in. and 1 in. thicknesses. Up to 250 F.

The Dow Chemical Company

Midland, Michigan

DOW

STYROFOAM® ... THE LIFETIME INSULATION

Advantages of Styrofoam* (a Dow plastic foam)

(1) Low "k" factor. (2) Superior water and vapor resistance. (3) Light, clean, easy to handle. (4) Resists rot, mold, deterioration. (5) High compressive strength. (6) Odorless. (7) New large sizes for any job.

USES

Low temperature work • Perimeter and foundation insulation • Cavity and core walls • Roofing • Insulation-plaster base • Pipe covering • Refrigeration equipment • Vessel and tank insulation • Refrigerated vehicles • Curtain wall panels

ENGINEERING DATA

THERMAL PROPERTIES

Thermal Conductivity (k factor), Btu/(hr)(sq ft)(°F/in.)	0.23-0.27 at mean temperature of 40°F.
Linear Thermal Coefficient of Expansion	.00003 to .00004 in./in.°F between ... 0°F and 80°F
Specific Heat	0.27 Btu/(lb)(°F) at 40°F
Resistance to Heat (Maximum recommended temperature for continuous use)	Styrofoam 22-175°F Styrofoam 33-155°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	65-85
Shear Strength	(psi) 27-36	30-40
Flexural Strength	(psi) 42-61	48-99
Compressive Modulus	(psi) 1200-1700	1500-2000
Bending Modulus	(psi) 1000-1285	1250-1760
Modulus of Rigidity	(psi) 700-1600	1000-1300

WATER RESISTANCE PROPERTIES

Capillarity	None
Water absorption (When subjected to 90°F, 90 percent relative humidity for 15 days)	Less than 0.03 percent 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 area

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)
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New member of the Styrofoam family ... SCORBORD

SCORBORD* was developed by Dow specifically for perimeter and cavity wall insulation. It offers the advantages of Styrofoam plus even greater ease of handling. For Scorbord is pre-scored lengthwise at convenient intervals. The builder simply snaps it off to desired width. F.H.A. approved.

For further information on Styrofoam or Scorbord write—THE DOW CHEMICAL COMPANY, Midland, Michigan, Plastics Sales Department 1734Q.

* STYROFOAM and SCORBORD are trade marks of The Dow Chemical Company