INSULATION MATERIALS

BASIC

LO-TEMPERATURE

Polystyrene

Styrofoam is a rigid, unicellular or closed cell material produced by expanding Polystyrene approximately 40 times, by volume. It has a temperature range from - 100°F to 150°F and a "K" factor of 0.29 at 75°F.

It is produced in two types. A type 22, which is white and will burn, and type 33, which is blue and is self-extinguishing, but will melt at about 300°F. The flame spread rating of type 33 is indexed at zero.

Styrofoam pipe insulation is available in dimensional standard sizes from 1/4" IPS to 8" IPS in sectional form, from 1" to 4" thick. Larger pipe sizes are available in tri-segmental, quad-segmental and in beveled lag form, depending upon size and thickness required. All the pipe insulation is made in 36" lengths. Board or sheet form comes in widths of 12", 16" and 24" up to 9 ft long in thicknesses from 1" to 4".

Styrofoam being of a unicellular structure will not absorb water and the transmission of vapors thru it is negligible. But as with most of the foam insulations, it has poor resistance to mechanical abuse and where exposed to such, it must be protected or a more rigid insulation used in that location.

Styrofoam is not compatible to mastics and adhesives having a solvent content and care must be exercised in the selection of a mastic vapor barrier and a joint cement. Solvents will cause the cell structure to either shrink, melt or disintegrate.

Styrofoam is available with various factory applied laminate or film, vapor barrier finishes. Also, it is being manufactured with various types of tongue and groove joints, both longitudinal and butt which eliminates the necessity of joint cements for application having an operating temperature above 40°F up to ambient.