

MOISTURE RETARDERS
Polykraft & Polysurlyn

BELOW ARE DEFINITIONS ACCORDING TO THE ASTM C1729 STANDARDS FOR ALUMINUM JACKETING FOR INSULATION:

MOISTURE RETARDER (*also known as moister barrier*): layer of plastic film or other material applied to the inner side of metal jacketing to inhibit jacket corrosion by interfering with the formation of a galvanic cell between the dissimilar metal of the pipe and jacket or by preventing crevice corrosion.

POLYKRAFT: multilayer composite film used as a moisture retarder on metal jacketing consisting of at least one layer of minimum 40 LB kraft paper and one or more layers of plastic film, usually polyethylene at a minimum thickness of 1.5 mils.

POLYSURLYN: a multilayer film used as a moisture retarder on metal jacketing consisting of at least one layer of acid copolymer, surlyn and one or more layers of other polymers, usually polyethylene.

Physical Property of Polysurlyn Moisture Barrier and ASTM Test Method	Value	ASTM C1729 Requirement
Total Film Thickness, D6988, mils (µm)	3 mil (76)	3 mil (76)
Pinholes, C1729, number per 50 ft ²	0	<5
Water Vapor Transmission Rate, F1249, 0/100% r.h., 73°F (g/100 in ^d -day)	0.048 ^d	<0.1
Water Vapor Transmission Rate, F1249, 0/100% r.h., 100°F (g/100 in ^d -day)	0.19 ^d	---

Data shown are typical values obtained from representative samples. This data may be used as a guide for design purposes but should not be construed as specifications.

The above moisture retarders can be applied to aluminum, stainless, AZ 60 galvalume, galvanized and aluminized steel. The intended purpose of applying a moisture retarder is to provide additional protection and prevent the migration of moisture to the metal. It acts as a mechanical, moisture and electrical barrier between the insulation and the metal to help prevent corrosion of the interior surface to the metal jacketing.

