

PROFILES

METAL JACKETING SYSTEMS

Jck-44



Aluminum Roll
Jacketing
Clear And
Color Coated

DESCRIPTION

Profiles' Clear Coated Aluminum Roll Jacketing has a baked-on finish of highly durable clear, hard film acrylic paint for aesthetic beauty, color-coding and corrosion protection of piping, vessels and tanks. The special coatings used on Profiles' jacketing are chalk and fade resistant. It exhibits better resistance to oxidation and to the effects of various corrosive environments than mill aluminum. It resists water and fingerprint staining.

Coated Aluminum Jacketing is manufactured using alloys that conform to ASTM B209; specific alloys are available upon request. Profiles uses only specification alloys to produce the highest quality roll goods and fabricated items. The jacketing is available in thicknesses of 0.4mm, 0.5mm, 0.6mm, 0.8mm, 1.0mm, and 1.2mm. Profiles strongly recommends the use of polykraft moisture barrier with its jacketing.

Profiles' Coated Aluminum Roll Jacketing is available in a variety of standard and special colors. It is also available, on special order, with an outer finish of epoxy, modified polyester, vinyl and other specially pigmented coatings.

RECOMMENDED USES

Flat and 3/16 corrugated jacketing is recommended for insulated piping, tanks, and vessels less than 12 feet in diameter. Deep corrugated sheets are recommended for diameters greater than 12 feet.

a. Pipeline Applications: Thicknesses of 0.4mm, 0.5 mm and 0.6mm can be used and this is determined by the size of the pipe and by the type of insulation to be used. Greater thicknesses are used for larger pipe and for softer insulation systems. The jacketing is available with either a smooth or stucco embossed finish in a flat or 3/16" corrugation form for pipelines applications.

b. Small Equipment and vessels- Thicknesses of 0.6mm and 0.8mm can be used and this is determined by the type of insulation to be used (softer insulation systems requires greater thickness of aluminium). The jacketing is available with either a smooth or stucco embossed finish in a 1 ¼" or 2 ½" corrugation form for small equipment and vessels.

c. Large Equipment and Tanks - Thicknesses of 0.8mm, 1.0mm and 1.2mm can be used and this is determined by the type of insulation to be used (softer insulation systems requires greater thickness of aluminium). The jacketing is available with either a smooth or stucco embossed finish in a 1 ¼" or 2 ½" corrugation form for these large equipment and tanks.

POLYKRAFT MOISTURE BARRIER

Polykraft^a consists of one layer of one mil polyethylene film with a protective layer of 40-pound virgin kraft paper. The moisture barrier is factory applied by attaching the jacketing by continuous lamination to the full width of the metal. The moisture barrier is used to prevent moisture and corrosives in the insulation from coming into direct contact with the metal jacketing surface and causing galvanic or chemical corrosion. Other moisture barriers are also available^b

SPECIFICATION

All insulation subject to corrosive environments shall be weatherproofed with Profiles' Clear Coated or Color Coated Aluminium Jacketing. The jacketing is to be manufactured using aluminum alloy that conforms with ASTM B-209 with thickness as 0.4mm, 0.5mm, 0.6mm, 0.8mm 1.0mm and 1.2mm. The interior of the jacketing shall have a polykraft moisture barrier continuously laminated to the full width of the metal. A thickness of (0.5 to 0.6mm) is to be used in tanks, equipment, towers and heat exchangers less than 3m feet in diameter unless another diameter is requested.

^a 1 mil Polyethylene + 40lb Kraft Paper

This was designed to reduce the potential for corrosion of the aluminum that could arise from electrolytic reaction between the surface of the aluminum and the ionic environment existing within the insulation system underneath the metal jacketing. Years of service has shown that the longevity of the entire system has increased by factors of two or three when such a moisture barrier has been in place, particularly in aggressive situations where both environmental moisture and insulants having high chloride content are present.

^b 3 mil Polysurlyn

This moisture barrier is a significant improvement upon the original polyethylene + Kraft paper product as it is three times as thick and eliminates the pinholes that occur in the traditional material. It has the same purpose, but completely eradicates the corrosion potential and even further increases the life of the insulation system.