



Description:

Stainless-Steel Jacketing is manufactured from AISI-304, AISI-304L, AISI-316 and AISI-316L prime grade Austenitic Stainless Steel with regular 2B finish for flatness and reduced glare. The yield strength is 30,000/45,000 Psi, the tensile 75,000/100,000 Psi. For easy field fabrication, Stainless Steel Jacketing is supplied in the annealed or soft condition. AISI-304 AND AISI-304L is normally used except in the most corrosive areas where AISI-316 and AISI-316L is justified. All AISI-304, AISI-304L, AISI-316 AND AISI-316L Stainless steel are described in ASTM A-240M/480.

Stainless Steel Jacketing has a melting point of approximately 2500°F Stainless Steel offers the best fire protection of all metals used for metal jacketing.

Thickness	010", 016", 020", 024", 032", 040", 050"
Width and Description	Coils and flat Sheets 24" through 48", 2-1/4 and 2-1/2" deep Corrugated sheets 33", 4" x 1" Box Rib – 28", 38- 1/2"

Finish

Stainless Steel jacketing is available in several finishes, which include smooth, stucco embossed, and in the lighter gauges, 3/16" corrugated. The stucco embossed finish on Stainless Steel Jacketing reduces glare from sunlight, adds strength and has more potential for masking application fingerprints, scratches, dents and other minor surface blemishes.

Applications

The primary use of Stainless Steel sheet and jacketing is for hostile environments such as the pulp, paper, textile, refinery and Petro-Chemical applications.

Moisture Barrier Prevents galvanic corrosion caused by contact of dissimilar metals in the presence of moisture, and also chemical corrosion caused by contact of dissimilar metals in the presence of moisture, and by certain insulation materials when the sheets are installed over damp insulation materials. This is provided on the interior of the jacketing.

Moisture Barrier Types:

Kraft Paper: Stainless Steel jacketing is supplied with a moisture barrier, consists of 40-pound Kraft paper coated with one-mil thick, low density polyethylene film, heat and pressure bonded to the interior surface.

Poly-Surlyn: For increased galvanic and corrosion protection, three mil polyethylene moisture barrier are available.

Exterior Protection Metal jacketing can be externally protected against salty moisture and chemical attacks

Exterior Protection Types:

Acrylic Coating/Film

Polyester Coating/Film

PolyVinylidene Fluoride (PVDF) Coating/Film

Polyurethane (PU) Coating/Film

Polyamide high build epoxy coating

Stainless Steel Characteristics

AISI-304: Most widely used steel type. SS 304 are known for good corrosion resistance, thermal resistance, low-temperature strength and mechanical properties. SS 304 have good draw ability such as deep drawing and bending. SS 304 is not hardened by heat treatment. (Non-magnetic, usable temperature: -196~800°C)

AISI-316: Excellent corrosion resistance, pitting corrosion resistance and high temperature strength by adding Mo. Useful in severe/harsh conditions. Excellent work hardening (non-magnetic)

AISI-316L: Low carbon steel type. Has the normal properties of 316 plus excellent inter-granular corrosion resistance.

**DESCRIPTION**

Aluminum Jacketing is manufactured from alloys 1100, 3105, 3003 or 5005, conforming to ASTM B-209 designation, within (H-14) half hard temper and heavier gauges quarter-hard (H-12 lock-forming quality). **Aluminum jacketing is available in Smooth, Stucco Embossed, Corrugated and Cross-Crimped finishes.** It is also available totally uncoiled and dried, with level tensioning. Available Corrugated Size 6 x 32mm, 16 x 64mm and 19 x 76mm while Cross-Crimped is available in 3/16" size only. Also available 20 /100, 35/200, 45/250 & 45/150.

COMPOSITION

Commercially pure aluminum is relatively soft as structural material. Its strength can be greatly improved by alloying aluminum with small percentages of one or more other elements such as manganese, silicon, copper, magnesium or zinc. Additional strength can be achieved by cold working, such as cold rolling. Unless a specific alloy is requested we reserve the right to ship whichever alloy is in stock at time of order placement. Other alloys are special order and minimum quantities and extended lead-time is required.

MOISTURE BARRIER

Prevents galvanic and chemical corrosion caused by contact of dissimilar metals in the presence of moisture, and by certain insulation materials when the sheets are installed over damp insulation materials. This is provided on the interior of the jacketing. The moisture barrier types are as follows:

- **Kraft Paper:** Aluminum jacketing is supplied with a moisture barrier, consists of 40-pound Kraft paper coated with one-mil thick, low density polyethylene film, heat and pressure bonded to the interior surface. This is moisture barrier.
- **Poly-Surlyn:** For increased galvanic and corrosion protection, three **mil polyethylene** moisture barrier are available.

Exterior Protection

Metal jacketing can be externally protected against salty moisture and chemical attacks. Exterior Protection Types include:

- **Acrylic Coating/Film**
- **Polyester Coating/Film**
- **PolyVinylidene Fluoride (PVDF) Coating/Film**
- **Polyurethane (PU) Coating/Film**

COMPLIANCE TO STANDARDS

All Aluminium Jacketing complies with the requirements of the ASTM B209 (Aluminium Alloy Standard) which includes all the necessary strength and chemical composition requirements.

RECOMMENDED USES

Aluminum Jacketing is recommended for HVAC, Insulated Piping, Tanks & vessels less than 8 feet in diameter. Deep corrugated sheets are recommended for diameters greater than 8 feet.