

# STAINLESS STEEL ROLL & SHEET STAINLESS STEEL METAL JACKETING

## **DESCRIPTION**

JM's Stainless Steel Roll Jacketing is manufactured from T-304 and T-316 prime grade Stainless Steels. These alloys comply with ASTM A-240, and are supplied with a regular dull finish for reduced glare. The yield strength is 30,000-45,000 PSI and the tensile strength is 75,000-110,000 PSI. These alloys are of a special soft-annealed temper, for ease in fabrication. T-304 is normally used in all except the most corrosive areas, where T-316 is recommended.

The 300 series Stainless Steels have a melt point of approximately 2500°F, providing optimum fire protection. Stainless Steel has a higher emittance value than Aluminum, and has physical properties superior to all other metal used as insulation protective jacketing. T-304 contains 18% chromium and 8% nickel. T-316 contains 16.5% chromium, 10% nickel and 2.2% molybdenum.

Stainless Steel is available in smooth, stucco em- bossed, or 3/16" corrugated roll jacketing, and deep corrugated sheets. Jacketing is recommended for insulated piping, tanks, and vessels less than 8 feet in diameter. Deep corrugated sheets are recommended for diameters greater than 8 feet. It is recommended that the roll jacketing be 3/16" corrugated for the following reasons: it is stronger than smooth, it reduces glare from external light sources, it eliminates "coil break" when applied over small size piping and does not show dents readily. In extremely corrosive environments, smooth jacketing is recommended to facilitate run-off.

# SUGGESTED SPECIFICATION

All insulation shall be weatherproofed with JM's Stainless Steel jacketing. The jacketing is to be manufactured from T-304 (T-316 option) Stainless Steel with 3/16" corrugations (or smooth option) in .010 and .016" thickness (.020 and .024 available). All jacketing shall have an integrally bonded moisture barrier over the surface in contact with the insulation

# **RECOMMENDED USES**

# **Chemical Plants and Refineries:**

Urea units, fertilizer plants, caustic facilities, petrochemical plants and aluminum refineries.

## **Steel Mills:**

Coke ovens, oxygen steel making furnaces, by- product plants, aromatic plants and steam distribution facilities.

## **Paper Mills:**

Digester areas, white and black liquor tanks, bleach tanks, chemical pulping and waste treatment tanks.

## Miscellaneous:

Areas of high incidence of abuse on bridges, walkways and service roads, areas of high fire incidence, food processing facilities, packing plants and freeze facilities.

## **POLYFILM MOISTURE BARRIER**

Polyfilm consists of a 3 mil thickness of a co-extrusion of polyethylene and DuPont's Surlyn\* which is heat laminated to the metal jacketing. Due to its superior performance characteristics, it replaces the old standard 1 mil and 3 mil polykraft moisture barriers. For cold rooftop and hot work cyclical applications, refer to Technical Information for recommendations.

## **COMPLIANCE TO STANDARDS**

All bare and polyfilm lined JM Stainless Steel Jacketing complies with the requirements of ASTM C1767 (Stainless Steel Jacketing Material Standard) which includes the strength and chemical composition requirements for compliance to ASTM A240 (Stainless Steel Alloy Standard).

\*Surlyn is a trademark of DuPont

Formerly Pabco/Childers Metals



717 17th St. Denver, CO 80202 (800) 866-3234 JM.com Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

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