

### Aluminum Jacket with Polysurlyn Moisture Barrier | Haomei

Aluminum roll jacketing with polysurlyn moisture barrier is recommended for insulated piping, tanks and vessels. The aluminum roll laminated with polysurlyn composite materials with high strength and corrosion resistance already replaces the polykraft moisture retarders. The aluminum with polysurlyn composite material's service life can reach 7 years without any maintenance, it has excellent resistance to corrosion.

#### **POLYSURLYN MOISTURE RETARDER**

Polysurlyn consists of 50-200um thickness of a polyethylene or a DuPont's Surlyn which is heat and pressure bonded to the interior surface, provides a highly effective moisture retarder. Polysurlyn Moisture Barrier is heat laminated in the factory to the interior surface of all types of metal jacketing for mechanical insulation to help prevent pitting, crevice, and galvanic decomposition of the interior apparent of the metal jacketing and the underlying insulated pipe, tank, or equipment. This corrosion can occur when water enters the installed insulation system through joints or damage in the metal jacketing.

Polysurlyn is manufactured from 3 layers of film: 1 mil high-density polyethylene, 1 mil Surlyn, and 1 mil low-density polyethylene, with each layer carefully selected to yield optimum performance. This multilayer film is laminated to the interior side of aluminium and stainless steel jacketing using precise pressure and heat. Use of 3 mil thick three layer Polysurlyn Moisture Barrier (PSMB) film avoids the pinholes present in standard 1 mil single layer Polykraft Moisture Barrier (PKMB). When water is present and touching the metal jacket, corrosion can and does occur. This can happen in all applications (hot, cold, rooftop, industrial, commercial, etc.) and with all insulation types.

#### **Polysurlyn advantages:**

- 1, Simple, low cost, and effective resistance to metal jacket and pipe corrosion;
- 2, Provides a barrier to crevice or pitting corrosion on the inner jacket surface in cold and hot pipe/tank applications;
- 3, Provides a barrier to galvanic corrosion of jacket or pipe in hot applications;
- 4, Minimal water absorption compared to kraft paper;
- 5, Will not deteriorate, discolor or shred when exposed to water;
- 6, Provides abrasion resistance during installation;
- 7, Long term durability and resistance to a wide range of environmental contaminants.

#### **Specification of aluminium jacket with PSMB:**

Alloy: 1050, 1060, 1100, 1200, 3003, 3015, 5005

Temper: H14, H16, H24, H26,

Thickness: 0.4mm-1.5mm

Standard width: 914mm 1000mm 1200mm 1219mm

Surface: Plain, Flat, Mill finish, Smooth, Stucco embossed

Coatings: PE/PVDF Coated, PolySurlyn Polykraft paper Laminated

Kraft paper thickness: about 0.1mm

Polysurlyn thickness: about 0.076mm (3mil)

Inner diameter: 305mm, 405mm or 505mm with paper core or without core

Out diameter: 125m, 150m, 250m ,300m, 500m, 1000m, 2540m or according to coil weight

Quality standard: ASTM B209 EN573-1

Quantity: have ready stock, small quantity order are acceptable.

Application: Industrial insulation jacketing, cover, insulation protective jacketing

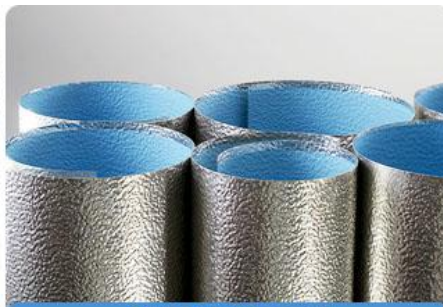
Alloy	Temper	Thickness(inch)	Thickness(mm)	Width(mm)	Length(m)	Suggested Application
1100, 1060, 3003, 3105, 5005	H14,	0.012	0.3	914, 1000,	20, 25,30,	OD below 36"(914mm) insulated pipe lines.
	H16,			1219	60, 90, coil	
	H24,	0.016	0.4	914, 1000,	20, 25,30,	OD below 36"(914mm) insulated pipe lines.
	H26			1219	60, 90, coil	
		0.020	0.5	914, 1000,	20, 25,30,	OD below 36"(914mm) insulated pipe lines.
		0.024	0.6	914, 1000,	20, 25,30,	OD 36"-8' (914mm-2.43m) insulated pipe lines&equipment.
		0.032	0.8	914, 1000,	20, 25,30,	Special applications where extra thickness and protection is required, such as fabricated tank head covers and other special fabrications.
	0.040	1.0	914, 1000,	20, 25, 30,	Special applications where heavy mechanical is required.	
	0.050	1.2	914, 1000,	20, 25, 30,	Flat ducts or precipitators. Also recommended for areas subject to high wind conditions.	

### Chemical Composition

Alloy	Si	Fe	Cu	Mn	Zn	Mg	Ti	Cr	Other Elements		Al
									Each	Total	
1060	0.25	0.35	0.05	0.03	0.05	0.03	0.03	-	0.03		99.6min
1100	Si+Fe=0.95		0.05-0.20	0.05	0.10	-	-	-	0.05	0.15	99.0min
3003	0.6	0.7	0.05-0.20	1.0-1.50	0.10	-	-	-	0.05	0.15	remainder
3105	0.6	0.7	0.30	0.30-0.80	0.40	0.20-0.80	0.10	0.20	0.05	0.15	remainder
5005	0.3	0.7	0.20	0.20	0.25	0.50-1.10	-	-	0.05	0.15	remainder



Plain Jacketing roll



Stucco Embossed



Polysurlyn Moisture Barrier



Polykraft Moisture Barrier

Features of aluminum with polysurlyn are:

1. Customized packaging solutions for extended shelf life
2. Excellent barrier against moisture, oxygen & odour
3. Excellent mechanical properties even at low thickness
4. High burst strength and puncture resistant.

Application of aluminum sheet with polysurlyn

- Standard outdoor use on all pipe, vertical tank insulation systems up to 8 ft outer diameter, and all horizontal tanks.
- Indoor insulation system applications up to 8 ft outer diameter where increased damage resistance is desired.



**Why Choose Us :**

**1. Verified supplier:**

We are verified supplier, with quality assurance. Production process is approved by SGS and BV.

**2. Price Competitive:**

We provide factory price to save your purchase cost.

**3. Customized size:**

We can produce any size according to clients requirement. We further provide clients with aluminium sheet/coil further process, such as anodizing, brush, polish, stucco emboss, corrugation, mirror, color coating etc.

**4. Safe package and Fast delivery:**

About 25-40 days after receipt client LC or deposit.

**5. Existing clients reference:**

Our aluminium products are exported to all over the world, we can give you our existing customer name in your region for you to check our company and our quality.

**6. Free samples:**

Haomei supply free sample available for test at first.

**7. After sales service:**

We have good reputation for all customer; If any quality problem with third party inspection report, We will take full responsibility.