

Aluminium Jacketing

Aluminium Jacketing from Sealumet is a proven protective outer surface on mechanical insulation systems such as pipe, vessel and equipment used in industrial and commercial applications.

Aluminium Jacketing (Also referred as Cladding) are chosen as metal jacketing for their easier forming and better resistance to corrosion areas. It protects the insulation and underlying pipe/vessel from physical damage, UV exposure, corrosive atmospheres, and water.

Alloys available

Aluminium Sheets are widely used in fabricating Metal Insulation Jacketing. Aluminium is very soft in its pure form and its strength can be greatly improved by alloying with small percentages of one or more other elements such as manganese, silicon, copper, magnesium or zinc.

Aluminium Alloy (AA) 3003 is universally used alloy for Metal Jacketing and Sealumet maintains minimum stock levels to fulfill immediate requirements. Other alloys tabulated below are available upon order.

Other Alloys*	Temper	Applicable Standards
1050,1060,3105,5052,5005,6061,5086 Alclad 3003-7072, Alclad 3004-7072	Temper "O", Quarter/Half/ Three Quarter/Full Hard	ASTM B209 and ASTM C1729

*The above shown alloys are available on specific request. Lead time for these specific alloys are significantly longer.

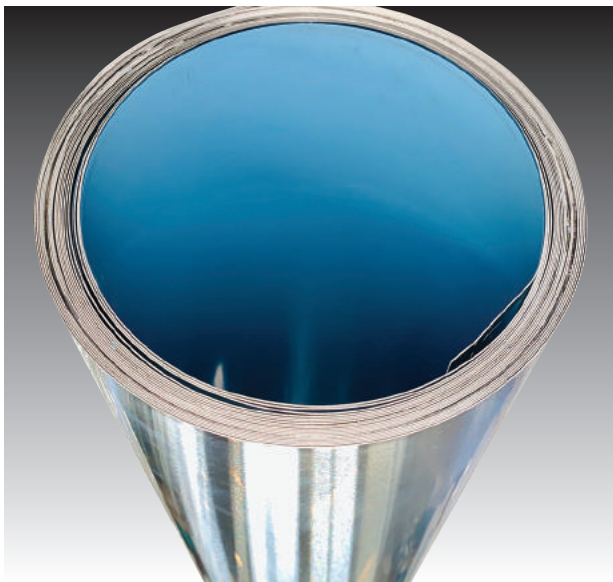
ASTM B209- Reference Standard for Chemical and Mechanical properties of Aluminium Alloy

ASTM C1729- Reference Standard for Aluminium Jacketing for Thermal Insulation

Moisture barrier (For Internal Protection)

Metal Jacketing is generally prone to galvanic corrosion which can be prevented by using a moisture barrier such as Polysurlyn, Polykraft or in rare case a painted surface.

- **Polysurlyn**Moisture barrier (PSMB):** Polysurlyn is a Moisture Barrier which is an engineered 3-layer coextruded film of polyethylene (HDPE+LDPE) and methacrylic acid co-polymers with a total film thickness of 3 mils (76 μm). PSMB is heat laminated in the factory to the interior surface of Aluminium jacketing. Aluminium Jacketing from Sealumet with Polysurlyn Moisture barrier is one of the premium grade metal jacketing, best suited for prevention of Galvanic corrosion.
- **Poly-Kraft Moisture barrier (PKMB):** Moisture barrier consisting of 40-pound Virgin Kraft paper coated with one-mil thick, low density polyethylene film, heat laminated to the interior surface. Polykraft is however not used in certain cases because of its hygroscopic nature leading to corrosion. It is also not recommended as a moisture barrier in Fire hazardous areas.



External Protection - Coated Jacketing

Under hostile areas with extreme corrosion***, Sealumet's Coated Aluminium Jacketing can be provided with a factory applied and baked on finish of highly durable hard film with various paint systems like

- PVDF (Polyvinylidene difluoride)
- Polyester
- Acrylic
- Epoxy

These painted surfaces comes with a coating thickness of 15-25 microns (0.6 -1.0 mil). The above finishes provides improved aesthetics, color-coding, increased emittance, and improved corrosion protection to the jacketing used on pipe, tanks, and equipment. Various colours for external coating are available on request.

- Premium Finish - DuPont™ **Tedlar®** (PVF Film) and Arkema™ **Kynar®** (PVDF Film)

Apart from the above coatings, Sealumet also offers Tedlar** (PVF Film - 1.5 Mil) and Kynar ** (PVDF Film) over Aluminium Jacketing. Tedlar and Kynar coated Metal Jacketing is recommended for use in insulation system applications where additional resistance to extreme corrosion from the external environment is required. In certain cases, it is also used where a minimum emittance level is desired for Metal Jacketing applications. The standard color for Tedlar** coated jacketing is Gray. Kynar Film is available in different colors depending standard lead times. For Tedlar coated Aluminium Jacketing, the standard width shall be 914 mm.



Product Range - Aluminium Jacketing

Finish/Profiles	Thickness (mm)	Nominal Width (mm)	Forms Available
Smooth	0.4 through 1.3	914,1000,1220	Coils, Rolls, Sheets
Stucco Embossed	0.4 through 1.3	914,1000,1220	Coils, Rolls, Sheets
X Crimped/Mini Orb/3/16", Reeded	0.4 through 0.8	914,1000,1220	Coils, Rolls.
Deep Corrugated (1-¼" x ¼") and (2-½" x 5/8")	0.4 through 1.3	840, 860	8/10/12 Feet Sheets Other lengths available on request
Box Rib Profile (4" x 1")	0.4 though 1.3	730, 960	8/10/12 Feet Sheets Other lengths available on request
a) X Crimped and Stucco embossed finish is not recommended for horizontal pipes due to water accumulation b) Deep Corrugated sheets are recommended for large vessels and equipment over 8 feet diameter c) Box Rib Sheets are recommended for areas which require extra structural rigidity.			

** Surlyn and Tedlar are Trademarks of Dupont Inc. Kynar is a trademark of Arkema and above information is given for informational purposes only. Sealumet or any of its affiliate companies does not exercise any right over these trademarks.

***Extreme Corrosive Environments (C3 and above) require an additional thickness of external coating over. Please contact us for our recommended jacketing specification.

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