



## ALUMINUM ROLL JACKETING (CLADDING)

### DESCRIPTION

If you want to have an outer protective covering surface for your mechanical insulation systems such as storage tanks, vessels, and pipes then at Paragon Coatings you get the best aluminum roll jacketing cladding. Protecting your pipes, vessels, and tanks from physical damage, UV exposure, and corrosion this solution is exhaustive and is highly durable. We provide you with three types of finishes that are smooth, stucco, and embossed. If you have a tank or pipe with a larger surface area, then you can go with our box rib and deep corrugated aluminum sheets too. The outer surface of the jacketing is made up of a 3-millimeter thick Polyfilm moisture barrier and at the time of applying this coat of paint, it is heat laminated to make it durable and attain a high level of finish.

### COMPOSITION

The best metal for roll jacketing is soft graded aluminum. The strength parameter of soft aluminum is increased when it undergoes an alloy formation with manganese, copper, silicon, zinc, and magnesium. To add to the strong cold working mechanism is applied at Paragon Coatings. The type of alloy that we use is either the 3105 or the 3003 as they are highly compatible and have very good corrosion-resistant capabilities. Moreover, it can give you better insulation properties as well. At Paragon Coatings you can come and choose the type of composition you want. Even our experts will suggest and guide you based on the weather conditions or whether they are to be used domestically or commercially.

COMPOSITION DIFFERENCES IN ALUMINUM ALLOYS (%)

Alloy	Cu	Mn	Mg	Zn
3105	≤0.3	0.3 - 0.8	0.2 - 0.8	≤0.4
3003	0.05 - 0.2	1 - 1.5	—	≤ 0.1

### COMPLIANCE TO STANDARDS

The aluminum roll jacketing procedure at Paragon Coatings implies and uses the industry-standard specifications as mentioned on the ASTM C-1729.

The strength and the chemical composition areas per the ASTM B 209 process.

### RECOMMENDED USES

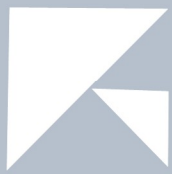
This procedure is suggested by us for all clients where the diameter of the tank or the vessel is less than 8 feet in diameter.

### LIMITATIONS IN USE

There are some limitations to this process and thus we do not recommend this process for all clients based on the conditions and the requirements. The limitations are-

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It is only best when the diameter of the tank or the vessel is less than 8 feet in diameter. Exceed this and it's better to use deep corrugated aluminum sheets. This is also not the ideal solution for increased emissivity. For this, you should better go with paint aluminum jacketing. For higher fire resistance you should use the stainless-steel jacketing procedure.

### POLYFILM MOISTURE BARRIER

PFMB or Polyfilm moisture barrier is a highly engineering process that involves a co extruded film of polyethylene and Surlin polymers. The total thickness of the film is 3 mil which are heat laminated on the interior surface of the aluminum jacketing. At Paragon Coatings we recommend that PFMB be used as it prevents crevice or crack occurring, gives aesthetic value, and increases the efficiency of the overall insulation system. Recommended thickness. At Paragon Coatings we usually follow the guidelines and standards stated in the industry guideline procedure ASTM B209.

### EMITTANCE

The emittance is measured as per the industrial guideline standard procedure. The emittance of the bare aluminum jacketing is 0.1.

### SURFACE FINISHES

We have got three types of finishes which cater to the needs and requirements of all the clients. These are-

1. Smooth (Plain Mill) Finish
2. Stucco Embossed Finish
3. 3/16" Corrugated Finish

Remember that all the finishes could have the PFMB paint coated on the exterior surface if the customer required the same.

### SMOOTH FINISH OR THE PLAIN MILL FINISH

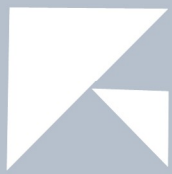
It is the default look that is gained after the procedure is finished. This is best for those who prefer a simple and clean-looking finish. Remember that it can shed off rainwater the best. But when it is put to hailing conditions then it might not sustain very long. Due to the smooth surface accumulation of dirt is more on this surface. It also has a high reflective glare and thus it poses a safety risk when installed near busy roads and highways.

### STUCCO EMBOSSED FINISH

The stucco embossed finish can be good for those who need a repair of the scratches and physical imperfections all these years after installation. This can also reduce the reflective glare of the surface considerably. Stucco and embossed finish can also increase the strength and rigidity of the aluminum jacketing.

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### 3/16" CORRUGATED FINISH

It has parallel grooves running the entire length of the pipe. It also hides off all the damages and scratches on the external surface of the pipe or vessel while also reducing the reflective glare. It also gives the jacket more expanding capability and adapts to temperature changes. The rigidity and strength of this variant are substantially high and are good for large tanks and vessels which are up to 8 feet in diameter.

### FLAMMABILITY

At Paragon Coatings we have conducted the 3 mm Polyfilm moisture coating flammability test as per the industrial standard procedure of the ASTM E 84 process. The results show the following results- ASTM E 84 flame spread index- 0 ASTM E 84 smoke-developed index- 5

Outer Insulation Diameter (in)	Minimum Aluminum Jacket Thickness, inches (mm)	
	Rigid Insulation	Non- Rigid Insulation
≤ 8	0.016 (in) (0.41(mm))	0.016 (in) (0.41(mm))
Over 8 thru 11	0.016 (in) (0.41(mm))	0.020 (in) (0.51(mm))
Over 11 thru 24	0.016 (in) (0.41(mm))	0.024 (in) (0.61(mm))
Over 24 thru 36	0.020 (in) (0.51(mm))	0.032 (in) (0.81(mm))
>36	0.024 (in) (0.61(mm))	0.040 (in) (1.01(mm))

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