

# SPECIFICATION SHEET

# ALUMINIUM ROLL JACKETING



## DESCRIPTION

Aluminum Jacketing is manufactured using alloy that conform to ASTM B-209; specific alloys are available upon request. Profiles uses only specification alloys to produce the highest quality roll goods and fabricated items. The jacketing is available in thicknesses of 0.4mm, 0.5mm, 0.6mm, 0.8mm, 1.0mm and 1.2mm. Profiles strongly recommends the use of polykraft moisture barrier with its jacketing.

## RECOMMENDED USES

Flat and 3/16" corrugated jacketing is recommended for insulated piping, tanks, and vessels less than 12 feet in diameter. Deep corrugated sheets are recommended for diameters greater than 12 feet.

**a. Pipeline Applications:** Thicknesses of 0.4mm, 0.5 mm and 0.6mm can be used and this is determined by the size of the pipe and by the type of insulation to be used. Greater thicknesses are used for larger pipe and for softer insulation systems. The jacketing is available with either a smooth or stucco embossed finish in a flat or 3/16" corrugation form for pipelines applications.

**b. Small Equipment and vessels** - Thicknesses of 0.6mm and 0.8mm can be used and this is determined by the type of insulation to be used (softer insulation systems requires greater thickness of aluminium). The jacketing is available with either a smooth or stucco embossed finish in a 1/4" or 2 1/2" corrugation form for small equipment and vessels.

**c. Large Equipment and Tanks** - Thicknesses of 0.8mm, 1.0mm and 1.2mm can be used and this is determined by the type of insulation to be used (softer insulation systems requires greater thickness of aluminium). The jacketing is available with either a smooth or stucco embossed finish in a 1/4" or 2 1/2" corrugation form for these large equipment and tanks.

## POLYKRAFT MOISTURE BARRIER

Polykraft<sup>a</sup> consists of one layer of one mil polyethylene film with a protective layer of 40-pound virgin kraft paper. The moisture barrier is factory applied by attaching the jacketing by continuous lamination to the full width of the metal. The moisture barrier is used to prevent moisture and corrosives in the insulation from coming into direct contact with the metal jacketing surface and causing galvanic or chemical corrosion. Other moisture barriers are also available.<sup>b</sup>

## SPECIFICATION

Aluminum Jacketing is manufactured using alloy that conform to ASTM B-209, with thickness as 0.4mm, 0.5mm, 0.6mm, 0.8mm, 1.0mm and 1.2mm. The interior of the jacketing shall have a polykraft moisture barrier continuously laminated to the full width of the metal. A thickness of (0.5 to 0.6mm) is to be used in tanks, equipment, towers and heat exchangers less than 3m feet in diameter unless another diameter is requested.

### <sup>a.</sup> 1 mil Polyethylene + 40lb Kraft Paper

This was designed to reduce the potential for corrosion of the aluminum that could arise from electrolytic reaction between the surface of the aluminum and the ionic environment existing within the insulation system underneath the metal jacketing. Years of service has shown that the longevity of the entire system has increased by factors of two or three when such a moisture barrier has been in place, particularly in aggressive situations where both environmental moisture and insulants having high chloride content are present.

### <sup>b.</sup> 3 mil Polysurlyn

This moisture barrier is a significant improvement upon the original polyethylene + Kraft paper product as it is three times as thick and eliminates the pinholes that occur in the traditional material. It has the same purpose, but completely eradicates the corrosion potential and even further increases the life of the insulation system.



**CHEQUERED PLATES - Five Bars Treadplates**

Chemical composition as per EN 573-3

Mechanical properties as per EN 485-2

Dimensions tolerances as per EN 485-3

Alloy 3105

Temper F

**Dimensions:**

2,00/3,25 x 1000 x 2000

2,00/3,25 x 1000 x 2500

2,00/3,25 x 1000 x 3000

2,00/3,25x 1220 x 2000

2,00/3,25x 1220 x 2500

2,00/3,25x 1220 x 3000

# DATA SHEET

# ALUMINIUM EMBOSSED



## EMBOSSED ALUMINIUM - Stucco Pattern

Chemical composition as per EN 573-3

Mechanical properties as per EN 485-2

Dimensions tolerances as per EN 485-3

Alloy 1050,1100,3003,3005,3105,8011

Temper F,O,H12,H14,H16,H18

### Dimensions:

0.40-1.00 x 500-1500 x Coil

0.40-1.00 x 1000-1220 x 2440 Sheet

Coil ID: 508mm

Coil weight: 4200 kgs +/-10%



**MILL FINISH ALUMINIUM**

Chemical composition as per EN 573-3

Mechanical properties as per EN 485-2

Dimensions tolerances as per EN 485-3

Alloy 1050,1100,3003,3005,3105,8011

Temper F,O,H12,H14,H16,H18

**Dimensions:**

0.18-6.00 x 500-1500 x Coil

0.40-3.00 x 1000-1220 x 2440 Sheet

Coil ID: 508mm

Coil weight: 4200 kgs +/-10%



## POLYESTER

Aluminium Alloy	EN AW 3105 (Al Mn0,5Mg0,5) in accordance with EN 573/3
Metal Thickness	in accordance with order specifications
Temper	H46 in accordance with EN1396
Colour Top side	in accordance with order specifications
Colour Reverse	in accordance with order specifications
Top coat	Polyester
Backing coat	Epoxy
Width & Length	in accordance with order specifications

### Metal Specifications

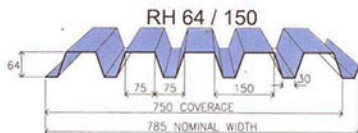
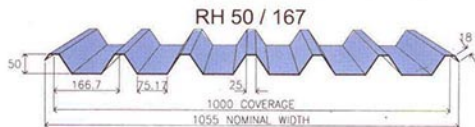
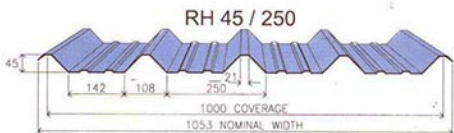
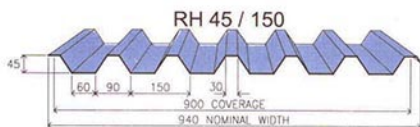
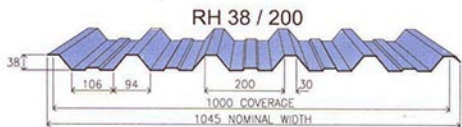
Mechanical properties after coating (traverse to rolling direction)

Rm:	160/210 Mpa
Rp0,2:	135 Mpa Min.
A50mm	2% Min

Pre-treatment: Degreasing and treatment on top and back side

### Organic Coating Specifications (EN1396)

Thickness	: 20+4microns top side & 5microns reverse side - ECCA T1
Pencil Hardness	: H - ECCA T4
Specular gloss to 60°	: 30+7% - ECCA T2
Adhesion	: 100%
Mek Test	: >60 DR
Impact Test	: >60 in/lb top coate and >30 in/lb reverse coat - ECCA T5
T Bend Test	: 2T - ECCA T7

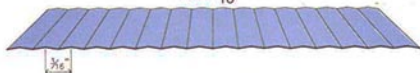




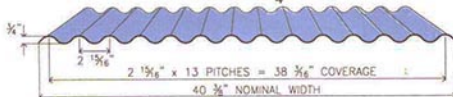
RH 1  $\frac{1}{4}$ " x  $\frac{1}{4}$ "



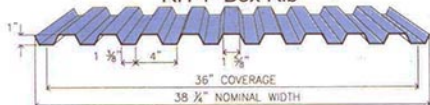
RH  $\frac{3}{16}$ "



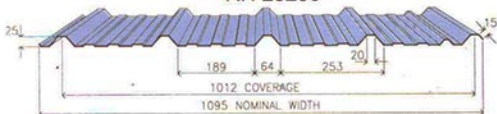
RH 3" x  $\frac{3}{4}$ "



RH 4" Box Rib



RH 25253



RH 35 / 207

