

# ALUMINUM ELBOWS

## WEATHERJACS®



### PRODUCT DESCRIPTION

Ideal Products' Aluminum WeatherJacs® elbows are produced in two half shell sections from 1100 series Aluminum, meeting ASTM B-209 standards. 1100 aluminum alloy is among the commercially pure wrought family (1000 or 1xxx series). With a minimum of 99.0% aluminum, it is the most heavily alloyed of the 1000 series. It is also the mechanically strongest alloy in the series. At the same time, it keeps the benefits of being relatively lightly alloyed (compared to other series), such as high electrical conductivity, thermal conductivity, corrosion resistance, and workability.

WeatherJacs® are precision-formed in a state of the art; computer controlled hydraulic press, which produces two equal half shell pieces in 45 & 90 degree angles. All WeatherJacs® are dimensionally formed in conformance to ASTM C-585 and C450 standards.

WeatherJacs® are produced with a patented system to help prevent water intrusion when installed correctly. All WeatherJacs® come with a factory applied; heat cured, clear polyester or acrylic or coating on the interior for a high performance moisture barrier. The same coating is also applied to the exterior to help resist oxidation and corrosion.

### PRODUCT APPLICATION

In accordance with ASTM 1729, WeatherJacs® are 2-piece pressed fittings which are pre-formed for 45 & 90 degree insulated bends conforming to ASTM, C-585 & C-450 standards. Available sizes range from ½" up through 30" NPS in long and short radius. Socket weld sizes are available from ½" through 3".

Large Bore WeatherJacs® (12" through 30" NPS) not only come with the patented water barrier system, but all 4 and 8 piece pressed half sections come with special alignment ribs for quick and easy installation.

WeatherJacs® are secured by the use of strapping, screws, or rivets. The amount of straps, screws or rivets, is dependent on the size of the elbow. When fastening with screws or rivets, the exterior and interior center points should be started first, then working outwards towards the two ends. For the best protection it is recommended that appropriate joint sealant be used on all overlaps when installing WeatherJacs®.

For applications where maximum corrosion resistance, elevated temperatures, or fire ratings are required, Ideal Products stainless steel elbows should be used.

### PRODUCT COMPLIANCES SUMMARY

ASTM B 209	Standard Specification for Aluminum and Aluminum-Alloy Sheet and Plate	Conforms
ASTM C 585	Standard Practice for Inner and Outer Diameters of Thermal Insulation for Nominal Sizes of Pipe Tubing	Conforms
ASTM C 450	Standard Practice for Fabrication of Thermal Insulating Fitting Covers for NPS Piping, and Vessel Lagging	Conforms
45 & 90° Bends	Standard Long Radius bends (R = 1.5 x diameter of NPS)	Conforms
ASTM C1729 5.1.2.3; 5.1.3.3; 10.5.1	Standard Specification for Aluminum Jacketing for Insulation Grade 3. Alloy 1100, Dead Soft Temper Class D, Painted Moisture Barrier Pressed Fittings	Conforms
ASTM C1729 10.5.2.2	Grade 3; Thickness, 0.024"(0.6mm)	Conforms
ASTM E84	Flame Spread/Smoke Development	25/50 or less
ASTM C1371	Surface Emittance	0.5

### PHYSICAL PROPERTIES

#### FINISHES

##### SMOOTH PLAIN MILL

Standard finish with a clean smooth look, while also best suited for water shed and ease of cleaning the surface. Smooth surfaces however, can readily show dirt or damages especially in an exposed environment. Smooth finishes can be highly reflective of sunlight therefore can pose issues in certain environments.

##### STUCCO EMBOSSED

Stucco embossed finishing is rapidly becoming more prevalent and choice of finishes as the embossed pattern not only increases rigidity and strength, but also reduces visual imperfections caused by increased handling, higher traffic areas, or general installation. The pebble finish also provides a surface which diffuses light reducing reflectivity and glare.

#### COLORS

A large variety of colored exterior finishes can be added to Ideal Products WeatherJacs® to enhance the appearance of the finished product. Please contact your local representative for color availability.

**Safer. Smarter. Faster.**

