

DESCRIPTION

ITW Insulation Systems Multi-Fit Aluminum Elbow Covers are made in two precision formed matching halves to cover and weatherproof insulated 90° pipe elbows. These elbow covers were formerly known as Childers Ribbed Unifers-Ells.

Each ITW Multi-Fit Aluminum Elbow Cover is designed to fit over 90° insulation elbows with a specific outer diameter regardless of the pipe size, use of long or short radius pipe elbows, or insulation thickness. The thirteen sizes of ITW Multi-Fit Aluminum Elbow Covers will fit 111 combinations of NPS and insulation thickness up to a nominal outer insulation diameter of 12.75 inches.

Like ITW Aluminum Jacketing, Multi-Fit Aluminum Elbow Covers are a premier protective outer surface for mechanical insulation systems on pipe and are an excellent performing and critical accessory to complement the aluminum jacketing. ITW Multi-Fit Aluminum Elbow Covers protect the insulation and underlying pipe from physical damage, UV exposure, corrosive atmospheres, and water and reduce the labor necessary to install the metal jacketing system.

GAUGE, COMPOSITION, FINISH, MOISTURE BARRIER, EXTERIOR PAINT, EMITTANCE, FLAMMABILITY, & PACKING

ITW Multi-Fit Aluminum Elbow Covers are made from 0.024 inch thick 1100 aluminum alloy with a smooth (mill) surface finish, have a painted moisture barrier, come standard with a clear painted exterior surface with an emittance of 0.5, have a very low flammability, and are packed with 15 elbow sets (30 elbow halves) per carton. For details on these features, please consult the ITW data sheet on standard Aluminum Elbow Covers.

FIT, SIZE SELECTION, & INSTALLATION

The table to the right shows the nominal outer insulation diameter each ITW Multi-Fit Aluminum Elbow Cover is designed to fit. For detailed information on selecting ITW Multi-Fit Aluminum Elbow Covers for various combinations of NPS and insulation thickness, consult the ITW Fitting Selection Guide. For details on installation, see the ITW data sheet on Aluminum Elbow Sizes and Installation and the diagram on the next page.



ITW Multi-Fit Aluminum Elbow Covers are designed to yield a 5/8" overlap at the heel and throat joints when used over insulation that complies with the target diameters in ASTM C585 and C450. If the insulation outer diameter deviates significantly from that specified in these standards, the overlap size may change and the fit may be compromised.

RECOMMENDED USES

ITW Multi-Fit Aluminum Elbow Covers are recommended for use when a reduced number of possible elbow sizes are desired and aluminum jacketing is used on the associated straight sections of pipe.

Multi-Fit Size Chart

| Nominal Outer Insulation Diameter (inches) | ITW Multi-Fit Elbow Number |
|--|----------------------------|
| 2.875 | 3 |
| 3.5 | 3-1/2 |
| 4.0 | 4 |
| 4.5 | 4-1/2 |
| 5.0 | 5 |
| 5.563 | 5-1/2 |
| 6.625 | 6 |
| 7.625 | 7 |
| 8.625 | 8 |
| 9.625 | 9 |
| 10.75 | 10 |
| 11.75 | 11 |
| 12.75 | 12 |

LIMITATIONS ON USE

ITW Multi-Fit Aluminum Elbow Covers are not appropriate for the following applications:

- For applications where a maximum resistance to fire is required, ITW stainless steel elbow covers should be used
- Where maximum resistance to corrosion is required, ITW stainless steel elbow covers should be used

COMPLIANCE TO STANDARDS

All Multi-Fit Aluminum Elbow Covers from ITW Insulation Systems comply with the applicable requirements of ASTM C1729 (Aluminum Jacketing Material Standard), Type III, Grade 3, Class D, which includes the strength and chemical composition requirements for compliance to ASTM B209 (Aluminum Alloy Standard).

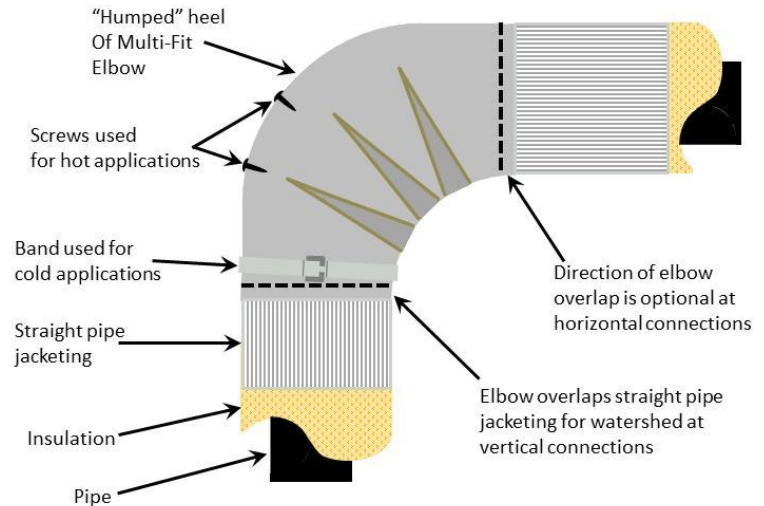
EXTERIOR COLORS

The standard exterior color for ITW Multi-Fit Aluminum Elbow Covers is a clear paint which reveals the natural aluminum color. ITW Multi-Fit Aluminum Elbow Covers are also available via special order with a white or gray painted exterior surface to match the colors of our standard painted aluminum jacketing or other colors.

SEALING OF JOINTS

For best insulation system performance and resistance to water infiltration, ITW recommends that all joints in Multi-Fit Aluminum Elbow Covers be sealed with an appropriate joint sealant. This should be applied between the overlapping pieces of metal in the joint and not as a caulking bead on the exterior lip of the joint.

Installed ITW Multi-Fit Aluminum Elbow Cover



ITW Multi-Fit Aluminum Elbow Size Selection Guide for Both Long and Short Radius Elbows

| NPS | Insulation Thickness (inches) | | | | | | | | | |
|-------|-------------------------------|-------|-------|-------|----|-------|----|-------|----|--|
| | 1 | 1-1/2 | 2 | 2-1/2 | 3 | 3-1/2 | 4 | 4-1/2 | 5 | |
| 1/2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| 3/4 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | |
| 1 | 3-1/2 | 4-1/2 | 5-1/2 | 6 | 7 | 8 | 9 | 10 | 11 | |
| 1-1/4 | 3-1/2 | 5 | 5-1/2 | 6 | 7 | 8 | 9 | 10 | 11 | |
| 1-1/2 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 2 | 4-1/2 | 5-1/2 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | |
| 2-1/2 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| 3 | 5-1/2 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | |
| 3-1/2 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | |
| 4 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | | | |
| 4-1/2 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| 5 | 7 | 8 | 9 | 10 | 11 | 12 | | | | |
| 6 | 8 | 9 | 10 | 11 | 12 | | | | | |
| 7 | 9 | 10 | 11 | 12 | | | | | | |
| 8 | 10 | 11 | 12 | | | | | | | |
| 9 | 11 | 12 | | | | | | | | |
| 10 | 12 | | | | | | | | | |

Sizes in grey are not available in ITW Multi-Fit Aluminum Elbow Covers. For these sizes, use either standard ITW aluminum elbow covers where available in the required size or mitered (gore) elbows will have to be constructed by the insulation contractor.