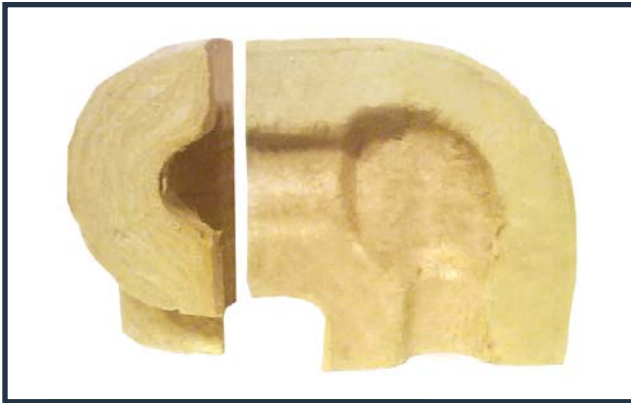


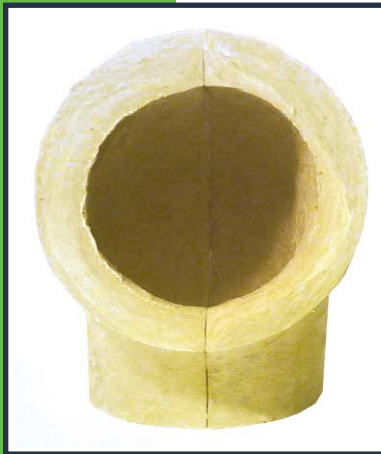
# ICA M.W. 1200° HI-TEMP PIPE INSULATORS



## ICA M.W. 1200°



Long-radius weld-L half section highlighting smooth interior and exterior contours and close tolerance to pipe arc.



View of fitting demonstrating the precise match of the two-piece unit.



Short-radius screwed fitting schedule 80 in ICA M.W. 1200° and conformance to aluminum cover.

## Dual-Temperature, Premolded, Top Quality, Two-Pieced Thermal-Acoustical Pipe Fitting Insulators

### TECHNICAL DATA

The ICA M.W. 1200° is a unique product in the realm of high-temperature preformed insulation for pipe fitting areas.

The ICA M.W. 1200° pipe fitting insulator is serviceable to 1200°F and was designed to be utilized in conjunction with any high temperature straight-run insulation of equal surface temperature capabilities. ICA M.W. 1200° pipe fitting insulators have been employed successfully in mineral wool, calcium silicate, and expanded perlite systems.

ICA's molding process yields a fitting insulator which is completely different from the routed fitting insulators which have been extensively marketed in the past. In a routed insulator the finished product is cut from a section of block insulation with comprising fibers being oriented in a single direction, hence, extreme fragility in the finished product. In contrast, the ICA product is molded under extreme heat and pressure from uncured green felt which is impregnated with a thermo-setting resin. Thus the ICA M.W. 1200° fitting insulator is composed of fibers that are interbonded and intermeshed in many different directions; the resulting strength means that the ICA insulation cover can be and is produced in fitting sizes never before realized.

Unlike a routed insulator, the ICA fitting insulator will not readily delaminate. When coating of the fitting's exterior surface is desired or required, fibers will not dust or fuzz up. This remarkably durable insulator exhibits superior load-bearing characteristics when compared to previous applications, for fitting areas. Extensive on-the-job loss due to breakage is a thing of the past. The ICA M.W. 1200° is actually strong enough to be utilized on line, removed for inspection or maintenance purposes, and utilized once again.

ICA M.W. 1200° pipe fitting insulator are molded in two half sections, matching the density and thickness standards of the adjoining pipe covering. All fitting insulators are currently manufactured in weld, screwed, socket, and copper tubing types; all in 90° and 45° and tee configurations. For pipe sized presently unavailable and for further speciality application requirements, consult with ICA's Research and Development Department regarding our design and engineering capabilities.

# ICA M.W. 1200°



## APPLICATIONS:

Since the ICA M.W. 1200° is not a mitered or segmented unit, there are no cracks or voids to fill on the exterior surface. The fitting insulators are simply and quickly applied by placing two premolded matching half sections over the pipe fitting and joining them together using tape, wire or adhesive.

## BENEFITS OF USING PRE-FORMED ICA M.W. 1200° FITTING COVERS:

- Two-piece, pre-formed design minimizes guess work in estimates of labor and fitting costs.
- **Insulation can be applied prior to pressure of the mechanical systems, thus saving weeks of delay in application time.** Where necessary, fitting insulators can be removed, the testing completed, and the same covered wired back on the system intact.
- Superior tensile strength and load bearing qualities.
- Excellent K factor. Mineral wool has always been a known performer in regards to thermal efficiency.
- Easy to handle and install in the field - resulting in fast, economical application.
- Eliminates costly blanket wrapping or mitering.
- Composite system provides a natural expansion joint. Allows damage free expansion/contraction/deflection in fittings and covering.
- All interior surfaces are stamped with the ICA "H" and the proper pipe and thickness size for quick field identification.

## PHYSICAL PROPERTIES:

Service Temperature Limit, °F .....	1200°
ASTM E84 Flame Spread/Smoke Development .....	5/0
ASTM E136/CAN4-S114-M .....	Noncombustible
ASTM C585 .....	Complies
Density, Lbs./Cu. Ft. (Nominal) .....	9.0±1.0
Moisture Absorption .....	Non-hydroscopic
Linear Shrinkage, % (@1200°F) .....	Less than 2%
pH .....	Approximately neutral
Mold Resistance .....	Does not support mold growth

## ASBESTOS FREE

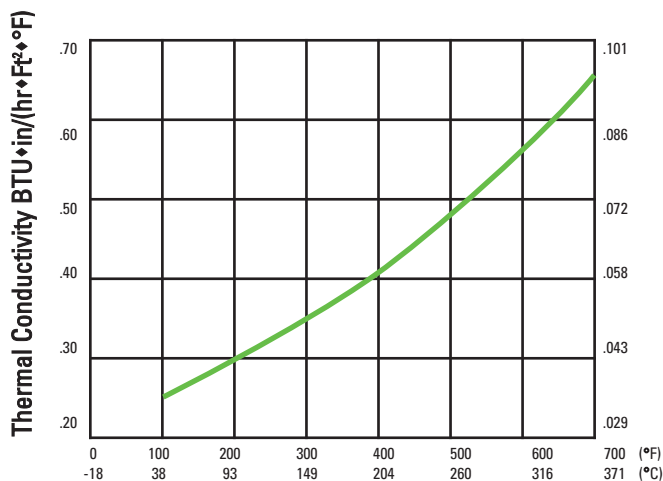
## AVAILABILITY CHART

Pipe Fitting Covers Available For...

Type	Pipe Size	Insulation Thickness
Screwed & Socket 90° & 45° Elbows	1/2" through 4"	1"-1 1/2"-2"- 2 1/2"-3-3 1/3"
Screwed & Weld Tees*	1/2" through 6"	1"-1 1/2"-2"- 2 1/2"-3-3 1/3"
Long Radius Weld 90° & 45° Elbows	1/2" through 24"	1"-1 1/2"-2"- 2 1/2"-3-3 1/3" 4"-4 1/2"-5"-5 1/2"- 6"-6 1/2"

\*Larger T's up to 12" available in the near future.

## THERMAL CONDUCTIVITY ("k")



Mean	°F	75	100	200	300	400	500	600	700
Temperature	°C	24	38	93	149	204	260	316	371
Btu-in/(hr-ft²-°F)		.23	.25	.30	.35	.41	.48	.56	.65
W/m-°C		.033	.036	.043	.050	.059	.069	.081	.094

Thermal conductivity and physical properties based on unfaced mineral wool fittings. Technical data as supplied by Eagle-Pitcher.

## SPECIFICATION COMPLIANCE:

<b>ASTM Specifications</b>	<b>MIL Specifications</b>
ASTM E84	MIL-22344-B
ASTM C585	MIL-24244-B*
<b>NRC Specifications</b>	<b>Federal Specifications</b>
NRC 1.36*	HH-I-558B, Type III, Form E, Class 17

\*Please contact ICA Headquarters before order placement, reference compliance to NRC reg. guide 1.36 and MIL-24244B for special handling.

**\*NOTE\* Consult ICA regarding further specification information.**