

## DESCRIPTION

Zeston 300® Series PVC heavy-duty fitting covers and Zeston PVC jacketing are specifically designed for industrial and commercial applications.

Because of their added thickness and improved thickness distribution, they exhibit excellent impact resistance, increased durability, superior UV resistance and reduced chance of “burn through” when solvent welding.

Zeston 300 Series PVC fitting covers are produced from a white, glossy, high-impact, UV-resistant polyvinyl chloride compound. Available in many shapes and sizes, they fit quickly and snugly over a variety of pipe fittings.

A variety of fitting covers and jacketing are available in color. They are recommended for indoor use only and are not UV resistant. Call for availability.

Made from the same rugged, pliable PVC material, Zeston PVC jacketing is designed to match the Zeston 300 Series fitting covers. For use over insulated pipe and bare metal, the PVC jacketing is easy to install and maintain, provides an inherent vapor retarder and will withstand water and most chemical and low-solvency washdowns.

## AVAILABLE SHAPES AND SIZES

**Fitting Covers.** Zeston 300 Series heavy-gauge PVC fitting covers are available in many shapes and sizes. Its two-piece or two-piece welded construction provides ease of fabrication in the field not available in a traditional one-piece fitting cover. This construction is engineered to accommodate various types of fabricated insulation fittings and an improved “matched” fit in the fitting throat area when solvent welding.

Zeston 300 Series heavy gauge is available in shapes for 90° and 45° (1.6 and 0.8 rad.) short- and long-radius elbows, tees and valves plus a wide variety of other fittings, flanges, reducers, end caps, soil pipe hubs, traps and mechanical line fittings. IPS sizes are available from ½" through 24" (13 mm through 610 mm); CT sizes from s" through 68" (16 mm through 156 mm).

**Rolls.** Zeston PVC jacketing is available in standard thicknesses of 10, 15, 20, 30 and 40 mil (0.3, 0.4, 0.5, 0.8 and 1.0 mm) and in standard widths. Nonstandard sizes are available on special request.

**Cut & Curled™ Jacketing.** Zeston 300 Series heavy-gauge fitting covers may be used with Zeston PVC Cut & Curled jacketing for perfect fit and color match. The jacketing is available in both white and colors (indoor use only) for Zeston 300 Series fitting applications.

The 30 mil (0.8 mm) thickness is recommended for outdoor applications.



## Operating Temperature Limits:

**PVC:** up to 150°F (66°C)

**Flame Spread:** 25 or less

**Smoke Developed:** 50 or less

**Grade:** weatherable

**Color:** white and colors (color for indoor use only)

**Finish:** gloss

## APPLICATIONS

For insulating and protecting indoor and outdoor industrial and commercial piping systems. For use with Micro-Lok® HP fiber glass pipe insulation and a variety of other pipe insulations. The fitting covers, combined with Zeston PVC jacketing and Perma-Weld® Adhesive form a completely sealed system that meets the requirements of USDA and FDA for use in the food processing, beverage and pharmaceutical industries.

## ADVANTAGES

**Exceptional Durability.** The tough, durable Zeston 300 Series PVC coverings resists damage from impact and will withstand humidity, salt water, adverse weather conditions and most industrial fumes. In addition, the jacketing will not support combustion. Unlike aluminum or most stainless steel jacketing materials, Zeston PVC coverings is immune to galvanic or electrolytic corrosion.

MECHANICAL INSULATION  
**ZESTON® 300 SERIES PVC**  
 INSULATED FITTING COVERS AND JACKETING FOR  
 COMMERCIAL AND INDUSTRIAL APPLICATIONS

**Ease of Maintenance.** The jacketing and fitting covers are easily washed down with soap and water and most commercial cleaners. The ability to be easily cleaned, combined with the nontoxic, odorless and tasteless properties of the material and its attractive appearance, make it especially suitable for food, beverage and pharmaceutical applications.

**Simple, Fast Installation.** The Zeston 300 Series fitting cover and jacketing are easy to apply with the special Perma-Weld 300 adhesive, which is similar in composition to the PVC jacketing material. The result is a monolithic system. Suitable bands may be used when required.

**SPECIFICATION COMPLIANCE**

USDA, Agriculture Canada New York City MEA #7-87	L-P-535E,* Composition A, Type II, Grade GU
ICBO SBCCI BOCA ASTM D1784, Class 16354-C	L-P-1035A,* Composition A, Type II, Grade GU Canada: CAN S102-M88 CGSB 51-GP-53M

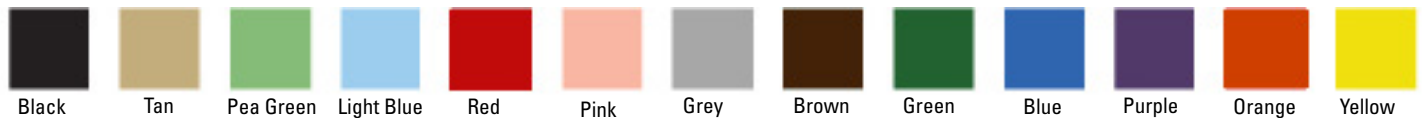
\*Impact strength determined by Gardner—SPI test method rather than Izod, since Gardner is more appropriate for PVC sheeting materials.

**PHYSICAL PROPERTIES**

Property	Value	ASTM Test Method
Specific Gravity	1.48	D792
Tensile Strength at Yield, psi (kPa)	6,000 (41370)	D638
Elongation at Yield (MD), %	3.0	D638
Tensile Modulus, psi (kPa)	470,000 (3,240,650)	D638
Flexural Strength, psi (kPa)	11,600 (79,982)	D638*
Flexural Modulus, psi (kPa)	460,000 (3,171,700)	D790
Flame Spread	25 or less	E84
Smoke Developed	50 or less	E84
Electrical Conductance	Non-Conductor	D257
Gardner - SPI Impact, in. lb/mil by Ductile Failure	10 mil (0.3mm) 1.3 15 mil (0.4mm) 1.4 20 mil (0.5mm) 1.5 30 mil (0.8mm) 1.6	D3679**

Note: Chemical resistance data available on request.  
 \* min 0.125" (3mm) thick specimen  
 \*\* 4 lb. [1.8 kg] weight, 8 lb. [3.6 kg] for 30 mil [0.8 mm]

**AVAILABLE COLORS**



717 17th St.  
 Denver, CO 80202  
 (800) 654-3103  
 JM.com

**NORTH AMERICAN SALES OFFICES,  
 INSULATION SYSTEMS**

**Eastern Region**  
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**Western Region and Canada**  
 P.O. Box 5108  
 Denver, CO 80217  
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The physical and chemical properties of Zeston® 300 Series PVC Fitting Covers and Jacketing listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Numerical flame spread and smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you to assure current information.

**All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit [www.jm.com/terms-conditions](http://www.jm.com/terms-conditions) or call (800)654-3103.**

## DESCRIPTION

Zeston® Hi-Lo Temp fiberglass insulation inserts are flexible, pre-cut inserts for PVC pipe fittings. They are sized for each specific PVC fitting and are a lower-cost alternative to preformed or fabricated insulated elbows. The inserts are designed to meet the thermal requirements of ASTM C553 and ASHRAE 90.1.

Zeston Hi-Lo Temp Insulation Inserts are manufactured from rotary-process fiberglass bonded with a Formaldehyde-free™ resin. They are cut to size to be used in conjunction with JM's Zeston PVC fittings. Zeston Hi-Lo Temp Insulation Inserts are flexible, odorless, and vibration resistant. They can save time and labor during installation and are designed to meet corresponding pipe insulation thermal value. The Zeston Hi-Lo Temp Insulation Inserts are made with a formaldehyde-free binder; however, all bonded fibrous insulation products made with formaldehyde-free binders will result in some formaldehyde emissions at temperatures that exceed 450°F.

## USES

Zeston Hi-Lo Temp Insulation Inserts are used to insulate PVC fittings in operating temps between 0°F-850°F/-18°C-454°C. JM recommends installing one (1) Zeston Hi-Lo Temp Insulation Insert for every 1" of corresponding pipe insulation thickness. The insulation insert may emit minimal smoke and odor during the initial exposure to elevated temperatures. Keep the area well-ventilated during the initial heat-up.

## PHYSICAL PROPERTIES

- 2" thick 1.0 PCF density
- Formaldehyde-free™ binder
- Insulation is a white, light-weight, highly resilient, blanket-type thermal insulation manufactured from rotary process fiber glass
- Inserts are tabbed on sizes 2-10 and cut all the way through for large-size fitting inserts, to accommodate easy separation and resist tearing
- Service Temp. Range (ASTM C411) 0°F - 850°F/-18°C - 454°C
- Corrosivity (ASTM 1617) Pass
- Limited Combustibility <3500 BTU/LB
- Microbial Growth (ASTM C1338) Pass
- Moisture Sorption <5% by weight
- pH 7.5 - 12
- Surface Burning Characteristics (ASTM E84) ≤ 25/50 (flame/smoke)
- Uncompressed Insulation thickness/density 2" Thick/1 PCF Density



## COMPRESSED THERMAL CONDUCTIVITY

Mean Temperature		K	
°F	°C	BTU • in/(hr • ft <sup>2</sup> • °F)	W/m•°C
75	24	.23	.033
150	66	.27	.039
300	149	.40	.058

## SPECIFICATION COMPLIANCE

ASTM C553  
 ASHRAE 90.1  
 ASTM E84 25/50 rating  
 NRC 1.36, ASTM C795, MIL-DTL-24244\*

\*Before ordering material to comply with these specifications, a statement of the fact must appear on the purchase order. Specific lot testing will be conducted and a certification of compliance can be provided.

## SUSTAINABLE BUILDING ATTRIBUTES

Recycled Content: 20%



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 Denver, CO 80202  
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 JM.com

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of the product listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the Regional Sales Office nearest you for current information.

**All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville thermal insulation and systems, visit [www.jm.com/terms-conditions](http://www.jm.com/terms-conditions) or call (800)654-3103.**