

#### Features

- Protect insulated or bare pipes
- Meets most requirements for federal, state and local fire-safety codes
- Accepted for commercial, institutional, industrial and residential projects in all parts of the US
- System is uncomplicated and easy to install
- UV-resistant for outdoor applications
- Long-lasting protection and an attractive finished appearance
- Available with Hi-Lo Temp fiber glass inserts

#### Applications

- Commercial, institutional and industrial applications

#### Construction

- Covering and jacketing manufactured from high-impact, gloss white, UV-resistant polyvinyl chloride jacketing

#### Application Recommendations

- Wrap the Hi-Lo Temp fiber glass insert completely around the pipe fitting without overly compressing it or leaving any voids
- Ensure that the insulation insert covers all exposed surfaces
- Install the Zeston PVC fitting cover over the pipe fitting and fiber glass insert by securing the throat of the Zeston PVC insert using either serrated tacks, Perma-Weld adhesive or Zeston Z-Tape
- If applied in an outdoor setting or exposed to the sun, precautions should be taken to account for expansion joints



**ZESTON 2000 SERIES WHITE PVC  
INSULATED FITTING COVERS AND JACKETING**

### QUALIFICATIONS FOR USE

#### Hot Systems

- Use proper insulation thickness to ensure PVC covers are kept below 150°F (66°C)
- PVC covers should be kept away from contact with and/or exposure to sources of direct or radiated heat
- For fittings where operating temperatures exceed 250°F (121°C) or where pipe insulation thickness is greater than 1½" (38mm), two or more layers of Hi-Lo Temp insulation inserts are required beneath the fitting cover (refer to MECH-261 Zeston Hi-Lo Temp Inserts)

#### Cold Systems

- An approved vapor-barrier compatible with PVC must be applied between pipe insulation and fitting cover and on fitting cover throat overlap seal. Please refer to Insulspec MECH-261 on jm.com
- For fittings where operating temperature is below 45°F (7°C) or where the pipe insulation thickness is greater than 1½" (38mm), two or more layers of Hi-Lo Temp insulation inserts are required beneath fitting cover (refer to MECH-261 Zeston Hi-Lo Temp Inserts)

#### Refrigerant Systems and Cold Systems In Severe Ambient Conditioning

- Mitered pipe insulation segments, fabricated or pre-molded insulation shapes may be used in lieu of Hi-Lo temp insulation inserts
- An intermediate vapor-barrier compatible with PVC is required to completely seal the insulation prior to installing the Zeston 2000 PVC fitting cover
- Care should be taken to ensure the vapor barrier mastic is applied between the pipe insulation and the fitting cover and on the fitting cover throat overlap seam

#### Totally Sealed Systems (USDA Approval)

- 20 or 30 mil (0.5 mm or 0.8mm) Zeston PVC jacketing should be applied to pipe insulation in conjunction with Zeston PVC fitting covers
- Circumferential and longitudinal jacket and fitting cover seams should be sealed with Zeston Perma-Weld solvent welding adhesive
- Circumferential seams should be a minimum of 1" (25mm) overlap and longitudinal seams should be 1½" - 2" (38mm to 51mm) overlap
- Upon completion, all seams should visually be checked for seal and, if necessary, touched up
- Slip joints are periodically required between fixed supports and on continuous long runs of straight piping.
- To implement a slip joint, increase the circumferential overlap to 8" to 10" (203 mm to 254 mm) and apply a flexible white caulking in the overlap area to maintain a sealed system
- Refer to Zeston installation instructions CI-35 at www.jm.com

### PERFORMANCE SPECIFICATIONS

Electrical Conductance	Non-conductor
Elongation at Yield (MD), %	3.0
Flame Spread	25 or less (up to 30 mil [0.8mm])
Flexural Modulus, psi (kPa)	430,000 (2,964,750)
Flexural Strength, psi (kPa)	11,000 (75,850)
	10 mil (0.3 mm) 1.3
	15 mil (0.4 mm) 1.4
	20 mil (0.5 mm) 1.5
	30 mil (0.8 mm) 1.6
Gardner – SPI Impact, in.lb./mil by Ductile Failure	50 or less (up to 30 mil [0.8 mm])
Smoke Developed	1.48
Specific Gravity	1.48
Tensile Modulus, psi (kPa)	425,000 (2,930,270)
Tensile Strength at Yield, psi (kPa)	6,000 (41,370)

### SPECIFICATION COMPLIANCE

ASTM	D257 (Electrical surface resistance)
	D638 (Tensile strength)
	D790 (Flexural Strength)
	D792 (Density & specific gravity)
	D1784 (Specification for rigid PVC)
	D3679 (Specification for rigid PVC)
	E84 (Surface burning characteristics)
	E136 25/50 non-combustibility (fiber glass inserts)
Agriculture Canada	Pass (Canada Department of Agriculture)
Canada	CGSB51-GP-53M
CAN/ULC	S102
L-P*: Composition	535E (Federal standard for PVC)
A, Type II, Grade GU	1035A (US Army standard PVC)
New York City MEA	#7-87 (Toxicity test)
USDA	US Department of Agriculture

### COMPRESSED THERMAL CONDUCTIVITY ZESTON HI-LO TEMP INSULATION INSERTS

Mean Temperature		"K"	
°F	°C	BTU•in/(hr•ft <sup>2</sup> •°F)	W/M•°C
75	24	0.23	0.033
150	66	0.27	0.039
300	149	0.40	0.058

#### FOR ADDITIONAL INFORMATION CONSULT THE FULL PRODUCT MANUAL.

The physical and chemical properties of 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 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 including Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions, Limited warranty and Limitation of Remedy, and information on other Johns Manville thermal insulations and systems, call (800)-654-3103 Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions, Limited Warranty and Limitation of Remedy, and information on other Johns Manville thermal insulations and systems, call (800) 654-3103.