

Zeston® Hi-Lo Temp Fiber Glass Insulation Inserts

Description

Zeston® Hi-Lo Temp fiber glass 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 specifications required by ASTM C547 and ASHRAE 90.1.

Features

- Rotary-process fiber glass bonded with a bio-based resin that satisfies the industry’s growing demand for agriculturally-sourced products
- Pre-cut to size PVC fittings
- Flexible
- Odorless
- Vibration Resistant
- Saves time and labor
- Designed to meet corresponding pipe insulation thermal value

Applications

- Insulate PVC fittings in operating temps between 0°F-850°F/-18°C-454°C

Construction

- 2” thick 1.0 PCF density
- Bio-based binder made mostly from rapidly renewable, plant-based materials
- Insulation is a brown, 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

Application Recommendations

- Recommended installation compliance is one Zeston insert for every 1” of corresponding pipe insulation thickness
- Hi-Lo inserts emit minimal smoke and odor during initial exposure to elevated temperatures. Keep area well ventilated

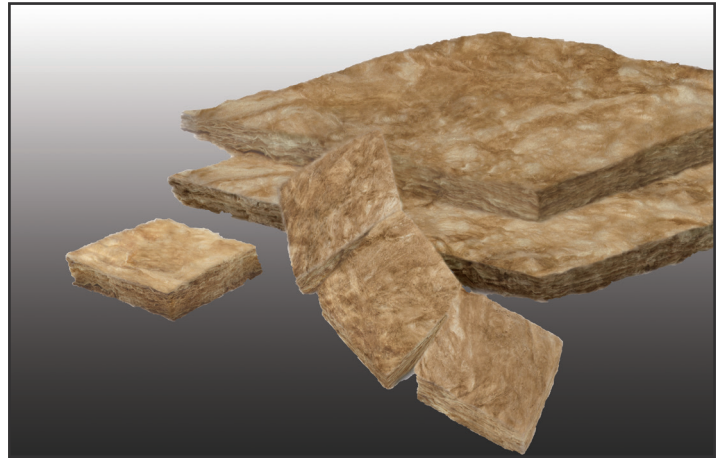
Sustainable Building Attributes

GREENGUARD Certified



Recycled Content

15% Post Consumer



ZESTON HI-LO TEMP
FIBER GLASS INSULATION INSERTS

Compressed Thermal Conductivity

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

Performance Specifications

Service Temp Range (ASTM C411)	0°F - 850°F/-18°C - 454°C
Alkalinity	<0.6%
Corrosivity (ASTM C665 & C1617)	Pass
Indoor/Outdoor	Indoor: Color & White PVC Fitting Outdoor: White PVC Fitting Only
Limited Combustibility	<3500 BTU/LB
Microbial Growth (ASTM C1338)	Pass
Moisture Sorption	<5% by weight
PH	7.5 - 12
Surface Burning Characteristics	≤ 25/50 rating (flame/smoke)
Uncompressed insulation thickness/density	2" Thick/1 PCF Density

ASHRAE 90.1 2013 Requirements

Fluid Temp Range	Nominal Pipe Size					Thermal Conductivity
	<1"	1" to 1.5"	1.5" to < 4"	4" to <8"	≥ 8"	
Cold <40°F	.5"	1"	1"	1"	1.5"	.20 - .26
Cold 40°F - 60°F	.5"	.5"	1"	1"	1"	.21 - .27
105°F - 140°F	1"	1"	1.5"	1.5"	1.5"	.22 - .28
141°F - 200°F	1.5"	1.5"	2"	2"	2"	.25 - .29
201°F - 250°F	2.5"	2.5"	3"	3"	3"	.27 - .30
251°F - 350°F	3"	4"	4.5"	4.5"	4.5"	.29 - .32
>350°F	4.5"	5"	5"	5"	5"	.32 - .34

Specification Compliance

ASTM	C547 (Mineral fiber pipe specification) C665 (Corrosion on plain steel - test method) C1338 (Fungi resistance – test method) C1617 (Corrosion on plain steel – test method)
ASHRAE	90.1 (Energy requirements for pipe insulation for commercial buildings)
Canada	CAN/ULC S102 (Tunnel test for flame and smoke - test method [Canadian version])
Fire Safety	Meets most requirements of federal, state, and local codes. Accepted for commercial, institutional, industrial, and residential projects in the U.S. The fiber glass inserts have ASTM E84 25/50 rating.

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 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.