

DESCRIPTION

ECOTITE™ PIP closed-cell insulation foam is an ideal way to insulate a wide variety of structures. It provides more insulation in less space than alternative systems and allows for greater design flexibility. It may be used to fill cavities in concrete, cinder block and masonry walls to increase insulation values. It may also be used with fabricated wall-building systems. It is also an ideal insulator for freezers and refrigeration equipment and structures.

TYPICAL APPLICATIONS

- Insulated masonry wall systems.
- Structural insulated panels (SIP).
- Door insulation.
- Refrigerated truck bodies.
- Cold storage rooms & refrigerators.
- Freezer panels.
- Void fill.

KEY FEATURES

- Available in 2.0 or 4.0 lb. densities.
- Removes gaps that allow pests and dust to infiltrate.
- Creates a seamless, water- resistant barrier that stops air infiltration.
- Promotes sustainable design.
- Provides exceptional insulation with an R-Value of 6.25 per inch..
- Environmentally neutral and inert cured material.
- Does not contribute to soil or water contamination.
- Fast installation, curing and cleanup.



ECOTITE™ PIP Cinder Block



ECOTITE™ PIP Panel Fill



ECOTITE™ PIP Pour Foam

TYPICAL PHYSICAL PROPERTIES

(For components)

	COMPONENT A	COMPONENT B
Mixing ratio by volume	1	1
Shelf Life - Unopened Containers	12 months	12 months

(For cured material)

	TEST METHOD	RESULTS
Apparent Density, min	ASTM D-1622	2 or 4 lbs/ft ³
Compressive Strength	ASTM D-1622	20 psi
Compressive Modulus	ASTM D-1622	500 psi
Dimensional Stability	ASTM D-2126	
- 40° C (- 40° F)		< 2% change
- 128° C (- 200° F)		< 15% change
Flexural Strength	ASTM D-790	30 psi
Flexural Modulus	ASTM D-790	700 psi
Shear Strength	ASTM D-273	30 psi
Shear Modulus	ASTM D-273	350 psi
Tensile Strength	ASTM D-1623	50 psi
Tensile Modulus	ASTM D-1623	700 psi
Elongation	ASTM D-1623	< 1%
% Water Absorption	ASTM D-2824	< 2%
Closed Cell Content	ASTM D-6226	90%

PROCESS SPECIFICATIONS

The system settings required to achieve quality spray foam application will vary depending on environmental and substrate conditions. The following recommended parameters will help ensure optimum foam quality.

Equipment pre-heater temperature		
Component A	120 – 140°F	49 – 60°C
Component B	120 – 140°F	49 – 60°C
Hose temperature	120 – 140°F	49 – 60°C
Spray pressure	1000 – 1400 PSI	69 – 97 Bar

APPLICATION INSTRUCTIONS

When changing between different resin systems, flush adequate amount of material through the proportioning system to clear hoses of previous material.

MIXING

Do not mix and do not recirculate.

STORAGE

ECOTITE™ PIP components should be stored in sealed containers at 18 – 29° C (65 – 85° F) in a dry area. Avoid exposure to freezing temperatures. Store on wooden pallets to avoid direct contact with the ground. Material in containers should be maintained at 18 – 29° C (65 – 85° F) while in use. Material temperature should be confirmed with a thermometer or an infrared gun.

PACKAGING

A set of ECOTITE™ PIP consists of one (1) 55 gallon (208 L) drum of 'A' component and one (1) 55 gallon (208 L) drum of 'B' component. Net weight per set is 960 pounds (435 kg).

PRECAUTIONS

Protect from exposure to moisture. Water will cause the "A" component (ISO) to generate carbon dioxide with resulting high pressure in closed containers.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your Pinnacle representative or visit our website for current technical data and instructions.

TECHNICAL SUPPORT

We have a dedicated technical support team offering knowledgeable support for everything from preventative maintenance, equipment calibration and servicing through to coating and foam application advice. If you have any questions regarding the use of this product please call us toll free at 1-800-901-0088 or email us info@pinnaclewest.net.

ON-SITE TRAINING

Our on-site training programs provide the necessary equipment and application training, including the health and safety aspects, needed to apply a wide variety of products. The goal of our programs are to give the skills required to be a professional and productive installer.

SAFETY PRECAUTIONS

Health Considerations - Consult the Material Safety Data Sheets. This chemical system requires the use of proper safety equipment and procedures. Please follow the product MSDS for detailed information and handling guidelines. In addition to reading and understanding the MSDS, all contractors and applicators must use appropriate respiratory, skin and eye Personal Protective Equipment (PPE) when handling and processing polyurethane chemical systems. Personnel should review the following documents published by Spray Polyurethane Foam Alliance (SPFA): (1) AY-104 Spray Polyurethane Foam Systems for New and Remedial Roofing and (2) AX-171 Course 101-R Chapter 1: Health, Safety and Environmental Aspects of Spray Polyurethane Foam and Coverings. Additionally, following document available from the Center for the Polyurethanes Industry (CPI): Model Respiratory Protection Program for Compliance with the Occupational Safety and Health Administration's Respiratory Protection Program Standard 29 C.F.R. §1910.134. As with all SPF systems, improper application techniques such as: excessive thickness of SPF, spraying into or under rising SPF and off-ratio material. Potential results of improperly installed SPF include: dangerously high reaction temperatures that may result in fire and offensive odors that may or may not dissipate. Improperly installed SPF must be removed and replaced with properly installed materials. Large masses of ECOTITE 3.0 should be removed to an outside safe area cut into smaller pieces and allowed to cool before discarding into any trash receptacle. AIR INTAKE UNITS SHOULD BE SHUT DOWN AND VENTS SEALED DURING POLYURETHANE SPRAY APPLICATIONS.

For Your Protection - The information and recommendations in this publication are, to the best of our knowledge, reliable. Suggestions made concerning the products and their uses, applications, storage and handling are only the opinion of Pinnacle West Enterprises Inc. Users should conduct their own tests to determine the suitability of these products for their own particular purposes and of the storage and handling methods herein suggested. The toxicity and risk characteristics of products distributed by Pinnacle West Enterprises Inc. will necessarily differ from the toxicity and risk characteristics developed when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. Because of numerous factors affecting results, Pinnacle West Enterprises Inc. makes no warranty of any kind, express or implied, other than that the material conforms to its applicable current Standard Specifications. Pinnacle West Enterprises Inc. hereby disclaims any and all other warranties, including but not limited to those of merchantability or fitness for a particular purpose. No statements made herein may be construed as a representation or warranty. The liability of Pinnacle West Enterprises Inc. for any claims arising from or sounding in breach of warranty, negligence, strict liability, or otherwise shall be limited to the purchase price of the material.