

OPEN-CELL SPRAY FOAM

For Professional Use Only

DESCRIPTION

FortiSeal OC is a two component, No Mix, water blown (zero ozone depleting chemical) light density, open-cell spray polyurethane (SPF) system designed to improve the performance of the building envelope for interior commercial, residential and industrial applications.

As with any product, materials should always be tested prior to use (including, but not limited to, field testing) in advance by the user to determine suitability.

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	Result
R Value (aged):	ASTM C-518	3.7 at 1 inch
Air Permeance	ASTM E-2178 @ 75 PA	0.00431
Core Density:	ASTM D-1622	0.5 pcf ± 0.05
Tensile Strength:	ASTM D-1623	4.34 lbf/in²
Moisture Vapor Transmission:	ASTM E-96	8.4 perms @ 2"
Dimensional Stability: 168 days @ 158°F 100% RH 28 days @ 158°F 100% RH	ASTM D-2126	% Change in Volume - 2 % - 2 %

FIRE TEST RESULTS

Property	Test Method	Result
Flammability	ASTM E84 @ 4"	10 Flame Spread
Flammability	ASTM E84 @ 4"	350 Smoke Development
Large Scale Fire	AC377 Appendix X	PENDING
Large Scale Fire: Ignition Barrier	AC377 Appendix X	PASS, DC-315 or No Burn
Large Scale Fire: Thermal Barrier	NFPA 286	PENDING
Oxygen Depletion Test	Appendix U	PASS

REACTIVITY PROFILE

Cream Time	Gel Time	Tack Free	End of Rise
2 – 3 seconds	3 – 4 seconds	7 – 8 seconds	7 – 8 seconds

To the best of our knowledge all technical data contained herein is true and accurate as of the date of issuance and subject to change without prior notice. Used must contact Everest systems Company to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by Everest Systems Products. We assume no responsibility for coverage, performance or injuries resulting from use. Liability if any, is limited to replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND

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CAUTIONS AND RECOMMENDATIONS

FortiSeal OC is designed for insulation in most standard construction configurations using common materials such as concrete, metal and wood products. Foam plastic installed in walls or ceilings may present a fire hazard unless protected by an approved, fire-resistant thermal barrier with a finish rating of no less than 15 minutes as required by building codes. Rim joist/header areas in accordance with the IRC® and IBC®, may not require additional protection. Foam plastics must also be protected against ignition by code-approved materials in attic and crawl spaces, or as code approved alternatives apply.

As with all SPF systems, improper application techniques should be avoided and any defective product replaced with properly installed materials. Examples of improper applications techniques include but are not limited to, excessive application thickness, off-ratio materials and spraying into or under rising liquid foam. Additionally, off-ratio materials can result in offensive odors that may not dissipate. It is the responsibility of the applicator to understand how their equipment works.

JOB SITE WARNINGS

Applicators should ensure the safety of the jobsite and construction personnel. SPF insulation is combustible and appropriate signs shall be posted warning that all "hot work" such as welding soldering, and cutting with torches should not take place until a thermal barrier or approved equivalent is installed over any exposed polyurethane foam.

Processing Parameters and Physical Characteristics

Pre-heater Temperature:	"A" 120-130°F "B" 120-130°F
Hose Temperature:	120-130°F
Pressures:	1200-1400 psi (dynamic)*
Mix Ratio Parts:	1 by 1 volume "A" to "B"
Viscosity at 70°F	190 ± 30 cps "B: Component" 200-250 cps "A" Component
Shelf Life	6 months @ 70°F to 80°F

*Dependent upon hose length

PER LIFT APPLICATIONS

Applicators should apply a minimum pass thickness of 3 inches, maximum pass thickness of 6-8 inches before splash back may occur.

STORAGE CONDITIONS

Store drums at 70°F to 80°F for a minimum of 48 hours before use. Materials in containers should be maintained at 85°F to 95°F while in use. Conditioned trailers or tanks may be necessary. Material temperature should be confirmed with a thermometer or an infrared gun.

VAPOR RETARDER

FortiSeal OC is intended for indoor applications and is a class III vapor retarder. It is vapor semi-permeable and will allow for some diffusion of moisture through the insulation. The following consideration are needed.

- (1) An additional vapor retarder may be needed in certain building envelopes in climate zone 5 and higher when not meeting the conditions of IRC Table 402.5.1 Refer to local building codes.
- (2) A vapor retarder also needs to be considered where high interior humidity conditions exist.

PROCESSING EQUIPMENT

2:1 transfer pumps are recommended for material transfer from container to proportioner. The plural component proportioner must be capable of supplying each component within ±2% of the desired 1:1 mixing ratio by volume. Hose heaters should be set to deliver 110°F to 130°F materials to the spray gun. These settings will ensure thorough mixing in the spray gun mix chamber in typical applications. Optimum hose pressure and temperature will vary with equipment type and condition, ambient and substrate conditions, and the specific application. It is the responsibility of the applicator to properly interpret equipment technical literature, particularly information that relates to the acceptable combinations of gun chamber size, proportioner output and material pressures. The relationship between proper chamber size and the capacity of the proportioner's pre-heater is critical. Mechanical purge spray guns (specifically direct impingement or DI type) are recommended for highest foam quality.

CAUTION: Extreme care must be taken when removing and reinstalling drum transfer pumps so as NOT to reverse the "A" and "B" components.

HEALTH AND SAFETY INFORMATION

Before working with this product, you must read and become familiar with available information. Including the Safety Data Sheet (SDS). Regarding the risks, proper use and safe handling. All contractors and applicators must use appropriate respiratory, skin and eye Personal Protective Equipment (PPE) when handling and processing spray foam (SPF) systems.

Contractors can refer to the Center for the Polyurethane Industries (CPI): "Guidelines for Developing a Written Respiratory Protection Plan".