

UltraTite 500



Description

UltraTite 500 is a two component, Open Cell polyurethane foam system which utilizes a Zero Ozone-depleting blowing agent and has a low (less than 1) Global Warming potential. Ultratite 500 can be used on the Interior of Commercial, Residential, Agricultural and Industrial Applications to improve the performance of the building envelope. Ultratite 500 has excellent self-adhering properties and can be installed on various substrates including but not limited to Plywood, OSB, Wood Studs, Metal Studs, Metal Panels and Metal Buildings as intended within the IRC and IBC code requirements.

Typical Physical Properties ¹

| Test Method | Property | Result |
|-----------------------|---|---|
| ASTM C518 | Thermal Resistance (R-Value) @ 1" | 3.7 at 1 inch |
| ASTM D1622 | Core Density | 0.5 pcf ± 0.05 |
| ASTM E96 | Water Vapor Permeance | 8.4 perms @ 2" |
| ASTM E2178 | Air Permeance @75 Pa | 0.00431 |
| ASTM D1623 | Tensile Strength | 4.34 lbf/in2 |
| ASTM D2126 | Dimensional Stability 168 days @ 158°F 100% RH 28 days @ 158°F 100% RH | - 2% - 2% |
| ASTM E84 | Flame Spread | 10 @ 4" |
| ASTM E84 | Smoke Development | 350 @ 4" |
| AC377 Appendix X | Ignition Barrier | Pass |
| NFPA 286 | Thermal Barrier | Pending |
| NFPA AC377 Appendix U | Unvented Attic Assembly with a Downward Facing Opening Hatch | Pass |
| | Viscosity at 70°F | 190 ± 30 cps "B: Component 200-250 cps "A" Component |

¹ - Typical properties and characteristics are based on samples tested and are not guaranteed for all samples of this product. This data and information is intended as a guide and does not reflect the specification range for any particular property of this product.

ALTERNATIVE IGNITION BARRIER ASSEMBLIES

| FIRE-PROTECTIVE COATING/COVERING ¹ | | | SPRAY-APPLIED POLY-URETHANE FOAM PLASTIC INSULATION | MAXIMUM SPF THICKNESS (inch) | |
|---|-----------------------|--|---|------------------------------|--------------------------------|
| TYPE | MINIMUM THICKNESS | THEORETICAL APPLICATION RATE (COATINGS ONLY) | | WALLS AND VERTICAL SURFACES | CEILING AND OVER-HEAD SURFACES |
| DC315 ² | 4 mils WFT 3 mils DFT | 0.25 gal/100 ft ² | UltraTite 500 spray foam | 10 | 14 |
| No-Burn Plus ThB ³ | 6 mils WFT 4 mils DFT | 0.37 gal/100 ft ² | UltraTite 500 spray foam | 10 | 14 |

For SI: 1 inch = 25.4 mm, 1 gal = 3.785 L, ² = 0.0929² Fire-protective coatings and coverings shall be applied over all exposed SPF surfaces in accordance with the coating/covering manufacturer's instructions and this report.

UltraTite 500



Processing Parameters

| | |
|------------------------|--------------------------------|
| Pre-Heater Temperature | "A" 120-130°F "B" 120-130°F |
| Hose Temperature: | 120-130°F |
| Pressure | 1200-1400 psi (dynamic)* |
| Mix Ratio Parts | 1 by 1 volume "A" to "B" |

Shipping Information

| | |
|--|---|
| 55-gallon drum | A Component - 500 lbs. B Component - 435 lbs. B Component - 450 Lbs |
| D.O.T. Classification; Liquid Plastic Material - NOIBN | Protect from freezing |

Reactivity

| | | | |
|-------------|--------------|--------------|-------------|
| Cream Time | Gel Time | Tack Free | End of Rise |
| 2-3 Seconds | 3 -4 Seconds | 7 -8 Seconds | 7-8 Seconds |

Storage and Use of Chemical

Keep the temperature of the chemicals above 70°F for several days before use. Cold chemicals can cause poor mixing, pump cavitation or other process problems due to higher viscosity at lower temperatures. The storage temperature should not exceed 85°F - 95°F. Do not store in direct sunlight. Keep drums tightly closed when not in use. Verify material temperature with a infrared gun or a thermom-

Safe Handling of Liquid Components

Avoid prolonged breathing of vapors. In case of chemical contact with eyes, flush with water for at least 15 minutes and get medical attention. All contractors and applicators must use appropriate respiratory, skin and eye Personal Protective Equipment (PPE) when handling and processing spray foam (SPF) systems. Read and become familiar with available information prior to use this product. For further information refer to www.spraypolyurethanes.org

Health and Safety Product Stewardship Workbook for High-Pressure Application of SPF.

Equipment and Components

UltraTite 500 is formulated for spraying with a two component pump specifically designed for spray polyurethane foam systems. The B-drum is connected to the resin pump and the A-drum is connected to the isocyanate pumps. The plural component proportioner must be capable of supplying each component within $\pm 2\%$ of the desired 1:1 mixing ratio by volume. The dispensing temperature should be set between 120°F and 130°F to the spray gun.

Application Recommendations and Cautions

- UltraTite 500 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.
- 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.
- UltraTite 500 is a class III Vapor Retarder and may need an additional vapor retarder in certain building envelopes. Please refer to the IRC Table 402.5.1 and any applicable local building codes.
- Applicators should apply a minimum pass thickness of 3 inches, maximum pass thickness of 6-8 inches.
- Substrate must be at least 5 degrees above dew point, with best processing results when ambient humidity is below 80%.
- Substrate must also be free of moisture (dew or frost), grease, oil, solvents and other materials that would adversely affect adhesion of the polyurethane foam.
- UltraTite 500 must not be used when the continuous service temperature above 180°F (82°C) and should not be used in contact with bulk water, below grade or to cover flexible ductwork.

Disclaimer: The information herein is to assist customers in determining whether our products are suitable for their applications. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, expressed or implied, including any warranty of merchantability or fitness, nor is protection from any law or patent inferred.