

ULTRATITE 2000

TECHNICAL DATA SHEET

PRODUCT DESCRIPTION

UltraTite 2000 is a two-component, closed-cell polyurethane foam system which utilizes an HFO Zero Ozone depleting blowing agent and has a low (< 1) Global Warming potential. Ultratite 2000 can be used on buildings to improve the performance of the building envelope. Ultratite 2000 has excellent self-adhering properties and can be installed on various substrates including but not limited to: Plywood, OSB, wood studs, concrete, metal studs, metal ductwork, metal panels, & metal buildings. **For use in Types I - V on the Interior or Exterior of Commercial, Residential, Agricultural, and Industrial Applications as per the 2021 IRC & IBC code requirements.**

TYPICAL PHYSICAL PROPERTIES¹ Evaluation Service Report UES ER-989

Test Method	Property	Result
ASTM C518	Thermal Resistance (R-Value)	7.1 @ 1"
ASTM D1622	Core Density	2 pcf ± 0.05
ASTM E96	Water Vapor Permeance	1.3 perms @ 1"
ASTM E2178	Air Permeance @ 1/2" & 75 Pa	< 0.02 perms
ASTM D6226	Closed Cell Content	> 90%
ASTM D1621	Compressive Strength	28 psi
ASTM C1623	Tensile Strength	45 psi
ASTM C1338	Bacterial & Fungal Growth	No Growth ²
ASTM E84	Flame Spread	≤ 25 @ 4"
ASTM E84	Smoke Development	≤ 450 @ 4"
AC377 Appendix X	Ignition Barrier	Passed
NFPA 286	Thermal Barrier	Passed
NFPA 285 ²	Exterior Wall Assembly	Passed
ASTM E 283	Infiltration @ 1.57 psf	1" thickness 0.0087 cfm/ft ²
ASTM E 2178	Exfiltration @ 1.57 psf	1" thickness 0.0000 cfm/ft ²
AATCC 127-98	@ 56.5 ft	1" – No Failure
ASTM E 331	6.24 psf	1" – No Penetration
ASTM C 1029	Standard Spec for Spray-Applied Rigid Cellular Polyurethane Thermal Insulation	Meets Criteria

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.

² The anti-microbial properties do not protect occupants of spaces insulated with Ultratite 2000 from potential deleterious effects of molds, mold spores, or disease organisms that may be present in the environment.

ALTERNATIVE IGNITION BARRIER ASSEMBLIES

Type	Minimum Thickness	Theor. Application Rate	Walls & Vertical Surfaces	Ceilings & Overheads
DC315	14 mils WFT; 9 mils DFT	.88 gal/100 ft ²	max spf @ 5.5"	max spf @ 9.5"
No-Burn Plus ThB	14 mils WFT; 9 mils DFT	.87 gal/100 ft ²	max spf @ 6"	max spf @ 9.5"
Flame Control 60-60A	14 mils WFT; 9 mils DFT	.87 gal/100 ft ²	max spf @ 8"	max spf @ 12"
Staycell One Step 502	–	–	3" UT2000; 1" OS 502	8" UT2000; ½" OS 502

PROCESSING PARAMETERS

Pre-heater Temperature	"A" 125 - 135°F "B" 125 - 135°F
Hose Temperature	125 - 135° F
Pressure	1100 - 1300 psi (dynamic)
Mix Ratio Parts	1 by 1 volume: "A" to "B"

SHIPPING INFORMATION

55-gallon drum	"A" component - 500 lbs. "B" component - 480 lbs.
D.O.T. Classification; Liquid Plastic Material - NOIBN	Protect from freezing

REACTIVITY

SLOW	REGULAR	FAST
70°F and higher	40°F - 80°F	10° F - 50° F

STORAGE & USE OF CHEMICAL

Store the chemicals between 65°F and 80°F. 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 80°F. Do not store in direct sunlight. Keep drums tightly closed when not in use. Verify material temperature with an infrared gun or thermometer.

EQUIPMENT & COMPONENTS

UltraTite 2000 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 140°F to the spray gun. Drum temp should be 90°F prior to spraying.

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.

APPLICATION RECOMMENDATIONS/CAUTIONS

- UltraTite 2000 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 may also require additional protection by code-approved thermal barrier in attic and crawl spaces, or as approved alternatives apply.
- SPF insulation is combustible. 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 2000 is a Class II 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 spf at a minimum pass thickness of 1", a maximum pass thickness of 4" is recommended. When passes are greater than 2" it is advised wait 10 minutes for surface to cool to ambient temp before proceeding with additional passes.
- 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 2000 must not be used when the continuous service temperature above 180°F (82°C)
- May be used to cover metal ductwork, please refer to M1601.3 - 4 of the IRC. Additional Thermal Protect may be required.

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.