



# HEATLOK® HFO EZ TECHNICAL DATA SHEET

The application of Heatlok® HFO EZ is limited to AL, AR, AZ, CA, FL, GA, LA, MS, NM, NC, NV, OK, SC, TN, and TX.

Heatlok® HFO EZ is a two component, closed cell, spray applied, rigid polyurethane foam system. This product uses recycled plastic materials, rapidly renewable soy oils, and the blowing agent has zero ozone depleting potential. Heatlok HFO EZ complies with the intent of the International Code Council's residential and commercial building codes and is commonly used as a thermal insulation, air barrier, vapor retarder and water resistive barrier in above grade, below grade, interior and exterior applications.

PHYSICAL PROPERTIES			
ASTM D 1622	Core Density	2.0 – 2.3 lb/ft <sup>3</sup>	
ASTM C 518	Aged Thermal Resistance	R-Value 7.0 @ 1" R-Value 24 @ 3.5"	
ASTM E 2178	Air Permeance @ 75 Pa @ 1	< 0.02 L/sm <sup>2</sup>	
ASTM E 96	Class II vapor retarder @ ≤ 1 perm	1"	25.4mm
ASTM D 1621	Compressive Strength	31 psi	214 kPa
ASTM D 1623	Tensile Strength	44 psi	303 kPa
VOC Emissions	UL Environment (Greenguard Gold)	Meets Criteria	

FIRE TEST RESULTS															
ASTM E 84	Surface Burning Characteristics, 4" thick Flame Spread Index Smoke Developed	Class I <25 <450													
AC 377 Appendix X	Ignition Barrier – Compliant with 2012, 2015, 2018 & 2021 IBC and IRC, and ICC-ES AC-377 Appendix X, for use in attics and crawl spaces without a prescriptive ignition barrier or intumescent coating.	Pass													
NFPA 286	Thermal Barrier – Compliant with the 2012, 2015, 2018 & 2021 IBC and IRC, as an interior finish without a 15 minute thermal barrier when coated with: <table border="1" data-bbox="662 1255 1334 1392"> <tbody> <tr> <td>DC-315</td> <td>wet film thickness</td> <td>18 mils</td> </tr> <tr> <td></td> <td>dry film thickness</td> <td>12 mils</td> </tr> <tr> <td>No-Burn Plus ThB</td> <td>wet film thickness</td> <td>16 mils</td> </tr> <tr> <td></td> <td>dry film thickness</td> <td>11 mils</td> </tr> </tbody> </table>	DC-315	wet film thickness	18 mils		dry film thickness	12 mils	No-Burn Plus ThB	wet film thickness	16 mils		dry film thickness	11 mils	Pass	
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REACTIVITY PROFILE			
Cream Time 0 – 1 seconds	Gel Time 2 seconds	Tack Free Time 3 – 4 seconds	End of Rise 3 – 4 seconds

LIQUID COMPONENT PROPERTIES		
PROPERTY	A-PMDI ISOCYANATE	HEATLOK HFO EZ RESIN
Color	Brown	Amber
Viscosity @ 77°F (25°C)	180 – 220 cps	500 – 800 cps
Specific Gravity	1.24	1.17 – 1.21
Shelf Life of unopened drum properly stored	12 months	6 months
Storage Temperature	50 – 100°F (10 – 38°C)	59 – 77°F (15 – 25°C)
Mixing Ratio (volume)	1:1	1:1

\*See SDS for more information.

### RECOMMENDED PROCESSING PARAMETERS

Initial Primary Heater Setpoint Temperature	105 - 115° F
Initial Hose Heat Setpoint Temperature*	105 - 115° F
Initial Processing Setpoint Temperature	1200 - 1400 PSI
Substrate & Ambient Temperature	> 50° F
Moisture Content of Substrate	≤19%
Moisture Content of Concrete	Concrete must be cured, dry, and free of dust and form release agents.

\*Foam application temperatures and pressures can vary widely depending on temperature, humidity, elevation, substrate, equipment and other factors. While processing, the applicator must continuously observe the characteristics of the sprayed foam and adjust processing temperatures and pressures to maintain proper cell structure, adhesion, cohesion and general foam quality. It is the sole responsibility of the applicator to process and apply Heatlok HFO EZ within specification.

**General Requirements:** The application of Heatlok HFO EZ is limited to AL, AR, AZ, CA, FL, GA, LA, MS, NM, NC, NV, OK, SC, TN, and TX.

Equipment must be capable of delivering the proper ratio (1:1 by volume) of polymeric isocyanate (PMDI) and polyol blend at adequate temperatures and spray pressures. 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. Applicators should limit the application of this product to no more than a thickness of 2" (50mm) per pass (after expansion) to avoid fire hazards (including spontaneous combustion) resulting from excessive heat generation. A second 2" (50mm) layer may be applied immediately after the first one has fully risen. If subsequent passes are needed, applicators should wait until the core temperature of the foam has dropped below 100°F to allow any reaction heat to dissipate from the prior applications before attempting to reapply the product.

### RECOMMENDED MAXIMUM PASS THICKNESSES

Maximum Pass	2"	50mm
Dual Pass (x" + x")	2" + 2"	50mm + 50mm

Heatlok HFO EZ must be separated from the interior of the building by an approved thermal barrier or an approved finish material equivalent to a thermal barrier in accordance with applicable codes. Heatlok HFO EZ must be sprayed at a minimum thickness of 1" per pass. This product must not be used when the continuous service temperature of the substrate or foam is below -60°F (-51°C) or above 180°F (82°C). Heatlok HFO EZ should not be used 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. All patent rights are reserved. The foam product is combustible and must be protected in accordance with applicable codes. Protect from direct flame and spark contact, around hot work for example. The exclusive remedy for all proven claims is replacement of our materials.



EXTERIOR WALL SYSTEM COMPONENT  
IN ACCORDANCE WITH NFPA 285  
SEE BUILDING MATERIALS DIRECTORY  
ALSO CLASSIFIED IN ACCORDANCE WITH ASTM D1929  
FILE R39893