



## HFC Pro (CC-HFC-S) TECHNICAL DATA SHEET

PolyRite HFC Pro is a two-part, closed cell, rigid polyurethane spray foam product. This product uses recycled plastic materials, renewable soy oils, and a non-ozone depleting blowing agent. PolyRite HFC Pro conforms with the International Code Council's residential and commercial building codes when used for thermal insulation, vapor retarder, air barrier, and a water resistant barrier in below & above grade applications.

PHYSICAL PROPERTIES			
1	Core Density	2.18 lb/ft <sup>3</sup>	34.92 kg/ <sup>3</sup>
2	Initial Thermal Resistance (R-value@ 1 inch )	6.8 ft <sup>2</sup> h°F/BTU	.021 W/(m*K)
3	Air Leakage @75Pa@1"	<0.002 L/sm <sup>2</sup>	
4	Air Permeance @75 Pa@1"	<0.002 L/sm <sup>2</sup>	
5	System Air Leakage Rating ,After wind Conditioning @ Δ	<0.0022 L/sm <sup>2</sup>	
6	Closed Cell Rate	≥90%	
7	Water vapor Permeance @1.42" Qualifies as a Class II vapor barrier per IBC Section 202	1 perms	<57.2 ng/Pa•s•m <sup>2</sup>
8	Compressive Strength	21.7 psi	150 kPa
9	Tensile Strength	46.2 psi	319 kPa
11	VOC Emissions Standard	Complaint	
12	<b>Dimensional Stability @158°F(70°C)97% R.H</b> (24 hrs,sample without any substrate)	(% volume change) -1.37/-0.42/+0.27	
13	Water Absorption	≤3%	
14	Adhesive Strength	≥17.4 psi	≥120 kPa

FIRE TEST RESULTS		
1	Surface Burning Characteristics ,4"thick Flame Spread Index Smoke Developed	Class I 20 400
2	Ignition Barrier -Compliant with 2009,2012,2018&2018 IBC, and ICC-ES AC-377 Appendix, for use in attics and crawl spaces without aprescriptive ignition barrier, thermal barrier or intumescent coating	Pass
3	Thermal Barrier -Compliant with the 2009, 2012, 2015, 2018 and IRC, as an interior finish without a 15 minutes thermal barrier with DC-315 at 18 mils wet film thickness, 12 mils dry film thickness or Blazelok "TBX at 18 mils wet film thickness,12 mils dry film thickness	Pass
4	Ignition Properties (spontaneous ignition temperature)	932°F(500°C)

RECYCLED & RENEWABLE CONTENT	
Polyols Containing Recycled and Renewable Content	40%
Renewable Content	13.5%

REACTIVITY PROFILE			
Cream Time	Gel Time	Track Free Time	End of Rise
0-1 seconds	2-4 seconds	3-5 seconds	4-6 seconds

LIQUID COMPONENT PROPERTIES		
PROPERTY	A-PMDI ISOCYANATE	HFO Pro RESIN
Color	Brown	Yellow-Brown
Viscosity @ 77°F (25°C)	180-220cps	350-550cps
Specific Gravity	1.24	1.18-1.21
Shelf Life of unopened drum properly stored	12 months	6 months
Storage Temperature	50-100°F(10-38°C)	<70°F(21°C)
Mixing Ratio(volume)	1:1	1:1

RECOMMENDED PROCESSING CONDITIONS		
Initial Primary Heater Setpoint Temperature	110°F	43°C
Initial Heat Setpoint Temperature	110°F	43°C
Initial Processing Setpoint Pressure	1200psi	8274Kpa
Substrate & Ambient Temperature	Summer>50°F Winter>-20°F	Summer>10°C Winter>-7°C
Moisture Content of Substrate	≤19%	≤19%
Moisture Content of Concrete	Concrete must be cured and free of dust form release agents	

**Note:** Spray foam is manufactured on the job site, not tightly controlled manufacturing environment like of the self-rigid foam panels. Proportioner settings such as pressure and temperature can vary widely depending on various environmental conditions. While spraying, the applicator must continuously observe the characteristics of the foam and adjust processing temperatures, pressures, and proper functioning of the equipment itself to achieve proper cell structure, adhesion, and aesthetic uniformity. It is sole responsibility of the applicator to apply HFC Pro within specification.

**General Requirements:** Applicator's equipment must be able to provide the proper a 1:1 ratio of polymeric isocyanate (pMDI) and polyol blend at adequate temperatures and spray pressures. The substrate must be at least 5 degrees above dew point and best results are achieved when the ambient humidity is below 80%. The substrate must also be free of moisture (frost or condensation), lubricants, solvents and other materials that would hinder the adhesion of the spray foam. This product should be applied in layers with a maximum of 3" thickness per layer. Allow the exothermic reaction to complete and cool completely before applying additional layers.

**HFC Pro** must be separated from the interior of the building by an approved thermal barrier or approved finishing material equivalent to a thermal barrier in accordance with applicable codes. HFC Pro must be sprayed at a minimum thickness of 1" per pass. This product must not be used if the continuous service temperature of the substrate or foam is below -60°F (-51°C) or above 180°F (82°C). HFC Pro should not be used to cover high temp ridged ductwork (ex: wood stove), flexible ductwork, recessed lights not rated for foam encapsulation, etc.

**Disclaimer:** The aforementioned information is to assist customers in deciding if this product is suitable for their applications. Nothing herein shall constitute a warranty, expressed or implied, including any warranty of merchantability or fitness. The foam product is combustible and must be protected in accordance with applicable codes and applied to specification to mitigate this risk. The only remedy offered for all proven claims is replacement of the product.