

Gaco Western

S I N C E 1 9 5 5

Product Data Sheet:

GacoProFill FR6500R

September 2016

Supersedes 3/16

GacoProFill® FR6500R POLYURETHANE FOAM INSULATION

DESCRIPTION

GacoProFill FR6500R is a two-component polyurethane foam that cures to a low-density cellular insulation material. It is recommended for use in a variety of empty cavities in retrofit applications in residential and commercial buildings and as part of the GacoProFill SYSTEM for use in new construction.

PHYSICAL PROPERTIES/PERFORMANCE

PROPERTY	ATM TEST	VALUE	UNIT
Core Density	D1622	0.55 ± 10%	lbs/ft ³
Thermal Resistance*	C518	R-4.04 at 1"; R-15.5 at 3.93"	hr·ft ² ·°F / Btu
		R-13.8 at 3.5" (R-3.93/in at >3.5")	
Tensile Strength	D1623	3.1	psi
Water Vapor Transmission	E96 – Method A	14	Perm-inch
Dimensional Stability (7 Days)	D2126	6%	Max linear change
Open Cell Content	D2856	92	%
Air Permeance @ 75Pa	E283	0.012 at 3.5"	L/s·M ²
Bio-Based Content	D6866	8.9	%
Fungi Resistance	C1338	Pass	no growth
VOC Emissions	UL GREENGUARD	Pass	No harmful effects
	UL GREENGUARD Gold	Pass	No harmful effects
Surface Burning Characteristics	ASTM E84 (UL 790)	25	Flame Spread Index
		400	Smoke Development Index
Critical Radiant Heat Flux	NFPA 970	Pass	>0.12 W/cm ²
Vertical and Lateral Flame Propagation	NFPA 285	Pass	Evaluation
Hot Surface Performance of High Temperature Thermal Insulation	ASTM C411	Pass	Did not flame, glow, smolder or smoke
Sound Transmission Class	ASTM E90	Wall 1 – STC 42 Wall 2 – STC 46 Wall 3 – STC 48 Wall 4 – STC 54	
Noise Reduction Coefficient	ASTM C423	NRC 0.65	

*Federal Trade Commission regulations published in the Federal Register 16 CFR Part 460 require that R value testing of polyurethane foam insulation must be conducted on aged samples at a 75°F mean test temperature. Failure to comply can result in substantial fines by the FTC.



APPLICATIONS

GacoProFill FR6500R foam plastic insulation is intended for installation in walls, ceiling and floors. The insulation must be separated from living spaces by ½ inch gypsum board or approved thermal barrier.

GacoProFill FR6500R is approved for installation on attic floors without a protective coating or ignition barrier based on testing in accordance with NFPA 970.

GacoProFill FR6500R is approved for contact with ducts in accordance with 2012 IRC Section M1601.3 based on test ASTM C411.

GacoProFill FR6500R may be used to insulate open cells in concrete masonry units where the application is not exposed to bulk water or high moisture conditions.

GacoProFill FR6500R meets the IBC Chapter 26 requirements for use in Type I, II, III, IV construction types through evaluation to NFPA 285 (Project 10318D). This evaluation is limited to installation in the cells of concrete masonry units and within light-gauge metal framing sheathed with ½ inch Type X gypsum.

TYPICAL LIQUID CHEMICAL PROPERTIES

"A" Component contains polymeric isocyanate. "B" Component contains polyol, catalysts, fire retardants, surfactants and blowing agents.

PROPERTY	TEST TEMPERATURE	ASTM TEST	VALUE	UNIT
Viscosity – "A" Component:	77°F (25°C)	D2196	200 ± 50	cps
Viscosity – "B" Component:			100 ± 20	cps
Specific Gravity – "A" Component:	77°F (25°C)		1.23	S.G.
Specific Gravity – "B" Component:			1.17	S.G.
Weight/Gallon – "A" Component:	77°F (25°C)		10.34	lbs/gal
Weight/Gallon – "B" Component:			9.77	lbs/gal
Mixing Ratio – "A" & "B" Component:			1:1	By volume
Stability When Stored at 50°F to 70°F (10°C to 21°C):			A Component – 12 B Component – 9	Months Months

APPLICATION EQUIPMENT SETTINGS AND REACTIVITY TIME

GacoProFill for Retrofit: EQUIPMENT SETTINGS		REACTIVITY TIME	
Pre-Heaters - Iso (A):	110°F to 135°F (43°C to 57°C)	Cream Time:	2 -3 seconds
Pre-Heaters - Poly (B):	110°F to 135°F (43°C to 57°C)	Tack Free Time:	6 - 10 seconds
Hose Heat:	110°F to 135°F (43°C to 57°C)	Cure Time:	4 hours
Recommended Spray Pressure:	1,000 to 1,200 psi (dynamic)		

GacoProFill SYSTEM: EQUIPMENT SETTINGS		REACTIVITY TIME	
Pre-Heaters - Iso (A):	115°F to 145°F (46°C to 63°C)	Cream Time:	3 seconds
Pre-Heaters - Poly (B):	115°F to 145°F (46°C to 63°C)	Tack Free Time:	6 - 10 seconds
Hose Heat:	115°F to 145°F (46°C to 63°C)	Cure Time:	4 hours
Recommended Spray Pressure:	1,000 to 1,200 psi (dynamic)		

GacoProFill Behind Drywall: EQUIPMENT SETTINGS		REACTIVITY TIME	
Pre-Heaters - Iso (A):	105°F to 135°F (41°C to 57°C)	Cream Time:	3 seconds
Pre-Heaters - Poly (B):	105°F to 135°F (41°C to 57°C)	Tack Free Time:	6 - 10 seconds
Hose Heat:	105°F to 135°F (41°C to 57°C)	Cure Time:	4 hours
Recommended Spray Pressure:	1,000 to 1,400 psi (dynamic)		

GacoProFill for CMU Block Fill: EQUIPMENT SETTINGS		REACTIVITY TIME	
Pre-Heaters - Iso (A):	120°F to 135°F (49°C to 57°C)	Cream Time:	1 - 2 second
Pre-Heaters - Poly (B):	120°F to 135°F (49°C to 57°C)	Tack Free Time:	6 - 10 seconds
Hose Heat:	120°F to 135°F (49°C to 57°C)	Cure Time:	4 hours
Recommended Spray Pressure:	1,000 to 1,200 psi (dynamic)		

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