



## SPRAY FOAM INSULATION AND ROOF FOAM

# GacoOnePass

### Closed Cell Foam

GacoOnePass is the first 2 lb. density Closed Cell foam in the industry which can be installed in up to 4" passes which reduces labor costs by 50% or more and offers 20-30% higher yields than standard 2 lb. foams when sprayed in one pass at 3-4" thickness. It is Appendix X approved for use without an additional ignition barrier and meets the requirement for a Class II vapor retarder at just 0.44".

GacoOnePass is ideal for use in a variety of residential and commercial applications and it can be used in deep fill applications with up to 18" in depth per pass for applications like trench fill, pipe erosion control, container filling, etc.

GacoOnePass is UL  
**GREENGUARD** and  
**GREENGUARD Gold** certified.

**Homeowner Federal Tax  
Credit Reinstated for 2015**

GacoOnePass is a two component HFC-blown (zero ozone-depleting) liquid spray system that cures to a medium-density rigid cellular polyurethane insulation material. GacoOnePass contains polyols derived from naturally renewable oils, post-consumer recycled plastics, and pre-consumer recycled materials.

GacoOnePass is a Class A (Class 1) fire rated foam that meets or exceeds the requirements of ICC-ES AC377 *Acceptance Criteria for Foam Plastic Insulation*.

See Intertek *Code Compliance Research Report CCRR-1043* for code compliant application information. GacoOnePass is a Type II foam in accordance with ASTM C1029.

GacoOnePass is designed to be installed in up to four (4) inch passes when insulation instructions are followed.

This closed cell foam is designed to provide: excellent thermal performance; air impermeable insulation; and, an integral part of an air barrier assembly.

### PHYSICAL PROPERTIES

The following physical property tests were conducted by independent certified laboratories with traceable samples in accordance ICC-ES AC377 and ASTM C1029 for Type II foam.

PROPERTY*	ASTM TEST	VALUE
Core Density	D1622	2.1 lbs/ft <sup>3</sup> ± 10%
Aged R-Value **	C518	R 6.5 at 1" ***
	C518	R 25 at 3.5" ***
Compressive Strength (Parallel to Rise):	D1621	28.5 psi
Tensile Strength	D1623	39.7 psi
Water Vapor Permeance	E96 – Method A	0.44 perm-in
Dimensional Stability (% linear change)	D2126	L=4.2%, W=5.1%, T=1.2%
		L=-0.8%, W=-1.1%, T=-1.5%
		L=0.1%, W=-0.1%, T=0.2%
Open Cell Content	D2856	4.4 %
Air Permeance @ 75Pa (Infiltration/Exfiltration)	E2178	0.00 L/s-M <sup>2</sup> at 1"
Air Barrier Assembly @ 75Pa (Infiltration/Exfiltration)	E2357	0.007 L/s-M <sup>2</sup> at 1"
Crack Bridging @ -15°F (-26°C)	C1305	Pass (No-Cracking)
Water Absorption (96 hours, 2" head, 70-74°F (21-23°C))	D2842	2.76 % by volume
Water Resistive Barrier	ICC-ES AC71, AATCC Method 127	Pass
UV Weathering	AC71	Pass (No blistering or delamination)
Accelerated Aging	AC71	Pass (No blistering or delamination)
Hydrostatic Pressure – 55 cm (21.6") water column	AATCC Method 127	Pass (No water leakage)
Adhesion		
DensDeck	D4541	39 psi
Concrete	D4541	48 psi
OSB	D4541	44 psi
Fungi Resistance	C1338	Pass (No Growth)
Hot Surface Performance	C411	Pass (No flaming, charring or smoldering)
VOC Emissions	UL GREENGUARD	Pass (No harmful effects)
	UL GREENGUARD Gold	Pass (No harmful effects)

\*These items are provided for general information.

\*\*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.

\*\*\*To determine R values for thickness not listed: a. between 1 inch and 3.5 inch can be determined through linear interpolation; or, b. greater than 3.5 inches can be calculated based on R 7.2/inch.

### VAPOR RETARDER

GacoOnePass meets the requirement of one perm or less for a Class II vapor retarder per the International Code Council and ASHRAE when installed at 0.44 inches in depth. However, minimum installed thickness recommended by Gaco Western is 0.75 inches. Water vapor permeability at various thicknesses is provided below:

THICKNESS	WVP
0.44"	1.00 perms
1.0"	0.44 perms

THICKNESS	WVP
3"	0.15 perms
4"	0.11 perms

## SURFACE BURNING CHARACTERISTICS

GacoOnePass meets Class A (Class 1) requirements when tested in accordance with ASTM E84 (UL 723) as defined in NFPA 101 and Section 803 of the International Building Code (2009, 2012, 2015).

SYSTEM	THICKNESS	FLAME SPREAD INDEX	SMOKE DEVELOPED INDEX
GacoOnePass	4" (10.2 cm)	5	350

## LARGE SCALE FIRE TESTING

TEST	PERFORMANCE	LOCATION	FOAM THICKNESS / COATING
AC377	Ignition Barrier	Vertical surfaces	Up to 8.0" (20.3 cm) / No Coating Required
		Horizontal or sloped surfaces	Up to 10.0" (25.4 cm) / No Coating Required
NFPA 286	Thermal Barrier	Vertical surfaces	Up to 7.5" (19.1 cm) / DC315 - 18 mil wet
		Horizontal or sloped surfaces	Up to 9.5" (24.1 cm) / DC315 - 18 mil wet

GacoOnePass meets or exceeds the IBC requirements for exterior walls in type I, II, III, IV and V construction. This includes NFPA 285 and NFPA 259 testing with Intertek Listings (GWL/FIP 30-02, GWL/FIP 30-01).

## AIR BARRIER PERFORMANCE

GacoOnePass is an air impermeable insulation and an air barrier material based on testing in accordance with ASTM E2178 at one-inch depth or more and has passed air barrier assembly testing in accordance with ASTM E2357 and the Air Barrier Association of America ABAA D-115-010.

## FLOTATION PERFORMANCE

GacoOnePass meets the requirements of US Coast Guard requirement for flotation materials for both bilge and engine room applications in accordance with Code of US Regulations, Navigation and Navigable Waters Article §183.114 by testing from an independent laboratory.

## LEED INFORMATION

GacoOnePass has a minimum of 9.7% recycled content based on weight, including 1.8% pre-consumer material and 7.9% post-consumer material. It contains 8.5% rapidly renewable content. GacoOnePass raw materials are blended in Waukesha, WI. Actual polyurethane foam end product production is done on-site by the applicator.

## 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
Viscosity – "A" Component: Viscosity – "B" Component:	77°F (25°C)	D2196	200 cps ± 50 1080 cps ± 100
Specific Gravity – "A" Component: Specific Gravity – "B" Component:	77°F (25°C)	D1638	1.24 1.235
Weight/Gallon – "A" Component: Weight/Gallon – "B" Component:	77°F (25°C)		10.34 lbs/gal 10.3 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)			12 Months 5 Months

## APPLICATION

To ensure optimum performance, a minimum pass thickness of 3/4" (1.9 cm) is recommended with the maximum not to exceed 4" (10.16 cm) per pass. To obtain optimum results substrate temperature should be within the ranges as stated below. All substrates must be dry at the time of application. Do not apply to wood surfaces with a moisture content of above 18%.

MATERIAL	SUBSTRATE TEMPERATURE	EQUIPMENT SETTINGS		REACTIVITY TIME	
GacoOnePass F1850R	30°F to 120°F (-1°C to 49°C)	Pre-Heaters - Iso (A):	105°F to 135°F (41°C to 57°C)	Cream Time:	1 second
GacoOnePass F1850W	20°F to 80°F (-7°C to 27°C)	Pre-Heaters - Poly (B):	105°F to 135°F (41°C to 57°C)	Rise Time:	3 - 6 seconds
		Hose Heat:	105°F to 135°F (41°C to 57°C)	Tack Free Time:	4 - 8 seconds
		Recommended Spray Pressure:	1,000 to 1,200 psi (dynamic)	Cure Time:	24 hours

# Gaco Western

SINCE 1955

Contact us today for solutions to your spray foam project needs.

Made in the USA | [gaco.com](http://gaco.com) | 877 699 4226

The information herein is believed to be reliable but unknown risks may be present. ALL WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND THAT GOODS ARE OF MERCHANTABILITY, ARE SPECIFICALLY DISCLAIMED. See Gaco Western for information concerning its limited warranty and its availability. For specific Safety and Health information please refer to Safety Data Sheet.