HOLCIM

GacoONEPass 1880

LOW GWP 2 LB. CLOSED CELL FOAM

CCMC # 14373-L
Canadian Construction Materials Centre

DESCRIPTION

GacoOnePass Low GWP F1880 is a two component low GWP (Global Warming Potential) liquid spray system that cures to a medium-density rigid cellular polyurethane insulation material. It contains polyols derived from naturally renewable oils, post-consumer recycled plastics, and pre-consumer recycled materials. GacoOnePass Low GWP F1880 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. It is a Type II foam in accordance with ASTM C1029. This closed cell foam is designed to provide: excellent thermal performance; air impermeable insulation; and an integral part of an air barrier assembly.

CHEMICAL PROPERTIES

(For components)	TEST	ISOCYANATE	RESIN
Viscosity, cps 25°C (77°F)	ASTM D2196	200 ± 50	1050 ± 100
Specific Gravity 25°C (77°F)	ASTM D1638	1.24	1.23
Weight/Gallon 25°C (77°F)		10.3 lbs/gal	10.3 lbs/gal
Mixing Ratio By volume		1	1
Stability When Stored at 10°C to 21°C (50°F to 70°F)		6 Months	5 Months

PHYSICAL PROPERTIES

(Cured Material)	TEST	RESULT
Core Density	D1622	36.2 Kg/m^3 (2.3 lbs/ft^3)
Aged R-Value	C518	R 7.1 at 1" h·ft^2·°F/Btu
	C518	R 30 at 4" h·ft^2·°F/Btu
Long Term Thermal Resistance @ 50 mm	CAN/ULC-S770	1.89 RSI (m^2·°C/W) 10.7 R-Value (h·ft^2·°F/Btu)
Compressive Strength (Parallel to Rise):	D1621	30.7 psi
Tensile Strength	D1623	65 psi
Water Vapor Permeance	ASTM E96 –	40 Ng/Pa·s·m^2
Dimensional Stability		
At 158°F(70°C) and 97% RH	D2126	L=2.6%, W=-3.0%, T=5.4% linear change
Closed Cell Content	D6226	> 90 %
Air Permeance @ 75Pa (Infiltration/Exfiltration)	E2178	0.001 at 1" L/s·M^2
Water Absorption (96 hours, 2" head, 70-74°F (21-23°C)	D2842	0.29 % by volume
Water Absorption	C1763	1.63 % by volume
Fungi Resistance	C1338	Pass no growth
Surface Burning Characteristics (FSR)	CAN/ULC S102	< 500
Hot Surface Performance	C411	Pass No flaming, charring, or smoldering
Potential Heat	NFPA 259	11,141 btu/lb

LONG TERM THERMAL RESISTANCE

(Cured Material)	TEST	RSI (m^2·°C/W)	R-Value (h·ft^2·°F/Btu)
50.0 mm (1.97")	CAN/ULC-S770	1.89	10.7
50.8 mm (2.0")	CAN/ULC-S770	1.96	11.1
63.5 mm (2.5")	CAN/ULC-S770	2.42	13.7
76.2 mm (3.0")	CAN/ULC-S770	2.95	16.8
88.9 mm (3.5")	CAN/ULC-S770	3.55	20.2
102.0 mm (4.0")	CAN/ULC-S770	4.10	23.3
127.0 mm (5.0")	CAN/ULC-S770	5.73	32.5
152.0 mm (6.0")	CAN/ULC-S770	6.32	35.9
177.8 mm (7.0")	CAN/ULC-S770	7.36	41.8
203.2 mm (8.0")	CAN/ULC-S770	8.45	48.0

DISTRIBUTED BY
PINNACLE WEST INC

1-800-901-0088
www.pinnaclewest.net

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RECOMMENDED USES

GacoOnePass Low GWP F1880 will provide excellent performance in a wide range of residential, commercial and industrial applications where in service temperatures are between -40°F and 200°F (-40°C and 93°C) including:

Walls	Ceilings	Floors	Attics	Crawlspaces
Foundations	Concrete Slabs	Residential Ducts	Plenums	Cold Storage
Freezers	Piping	Storage Tanks	Flotation	Industrial Applications

GacoOnePass Low GWP F1880 is FEMA Class 5, the highest rating for flood-resistant materials.

APPLICATION

To ensure optimum performance, a minimum pass thickness of 19 mm (3/4") is recommended with the maximum not to exceed 50 mm (1.97") 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%. Follow applicable spray guides and GW 6-2 Gaco General Application Guide.

MATERIAL	SUBSTRATE TEMPERATURE
GacoOnePass F1880R	4°C to 49°C (40°F to 120°F)
GacoOnePass F1880W	-7°C to 24°C (20°F to 75°F)

PROCESS SPECIFICATIONS

Equipment pre-heater temperature		
Component A	41°C to 57°C	105°F to 135°F
Component B	41°C to 57°C	105°F to 135°F
Hose temperature	41°C to 57°C	105°F to 135°F
Spray pressure (dynamic)	1,000 to 1,200 psi	69 to 83 Bar
Cream Time	0 - 1 seconds	
Rise Time	3 - 6 seconds	
Tack Free Time	4 - 8 seconds	
Cure Time	24 hours	
Time-to-Occupancy	25 hours	

SURFACE BURNING CHARACTERISTICS

GacoOnePass Low GWP F1880 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). GacoOnePass Low GWP F1880 was also tested in accordance with ASTM E2768 for an extended time of 30 minutes and met the requirements of NFPA 13 Section 8.15.1.2.10.

SYSTEM	FLAME SPREAD INDEX	SMOKE DEVELOPED INDEX
GacoOnePass Low GWP F1880[1]	0	200

[1] Sample tested at 4" (10.2 cm) thickness.

AIR BARRIER PERFORMANCE

GacoOnePass Low GWP F1880 is an air impermeable insulation and an air barrier material based on testing in accordance with ASTM E2178 at one-inch depth or more.

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LEED INFORMATION

GacoOnePass Low GWP F1880 has a minimum of 6.5% recycled content based on weight, including 1.2% pre-consumer material and 5.3% post-consumer material. It contains 5.7% rapidly renewable content. GacoOnePass Low GWP F1880 raw materials are blended in Waukesha, WI. Actual polyurethane foam end product production is done on-site by the applicator.

STORAGE

GacoOnePass Low GWP F1880 components should be stored in sealed containers at 10°C to 21°C (50°F to 70°F) in a dry area. Avoid exposure to freezing temperatures. Store on wooden pallets to avoid direct contact with the ground. Material in containers should be maintained at 15°C to 26°C (60°F to 80°F) while in use. Material temperature should be confirmed with a thermometer or an infrared gun.

PRECAUTIONS

Protect from exposure to moisture. Water will cause the "A" component (ISO) to generate carbon dioxide with resulting high pressure in closed containers.

Please read all information in the general guidelines, product data sheets, guide specifications and material safety data sheets (MSDS) before applying material. Published technical data and instructions are subject to change without notice. Contact your Pinnacle representative or visit our website for current technical data and instructions.

Unprotected trade workers can safely reenter sprayed work areas one hour following application of GacoOnePass Low GWP F1880 formulations – given adequate ventilation.

TECHNICAL SUPPORT

We have a dedicated technical support team offering knowledgeable support for everything from preventative maintenance, equipment calibration and servicing through to coating and foam application advice. If you have any questions regarding the use of this product please call us toll free at 1-800-901-0088 or email us info@pinnaclewest.net.

ON-SITE TRAINING

Our on-site training programs provide the necessary equipment and application training, including the health and safety aspects, needed to apply a wide variety of products. The goal of our programs are to give the skills required to be a professional and productive installer.