

JM Corbond® 2.8 HFO CLOSED-CELL SPRAY POLYURETHANE FOAM

DESCRIPTION

JM Corbond® 2.8 HFO closed-cell spray polyurethane foam (SPF) is a premium, two-component, 2.8 pcf insulation system designed for applications such as storage tanks, agricultural and other Class U buildings, underground, and geological operations. The fourth-generation technology allows JM Corbond 2.8 HFO to be produced with a low Global Warming Potential (GWP) and with an Ozone Depletion Potential (ODP) of zero. Its high compressive strength and outstanding dimensional stability, superior thermal and moisture performance, and exceptional sprayability and adhesion make it an ideal choice for situations where a high-performance foam is paramount.

RECOMMENDED USES

- Class U buildings such as those used for agriculture
- Storage tanks
- Underground facilities
- Geological applications such as pipe breakers and guards

PERFORMANCE ADVANTAGES

- Improves Energy Efficiency
- Provides an Effective Air Barrier
- Increases Racking Strength
- Excellent Adhesion

INSTALLER ADVANTAGES

- Superior Sprayability
- Wide Processing Window
- Low Application Odor
- Excellent Adhesion

PHYSICAL PROPERTIES*

Property	Test Method	Value
Core Density	ASTM D1622	2.8 pcf
Closed-cell Content	ASTM D6226	>94%
Dimensional Stability 158°F at 97% RH	ASTM D2126	<5%
R-Value per inch (Initial)	ASTM C518	6.3 (°F∙ft²•h/BTU)
Compressive Strength	ASTM D1621	47 psi
Service Temperature Maximum	•	180°F (82°C)

^{*} These items are provided as general information only. They are approximate values and are not part of the product specifications.

SUBSTRATE PREPARATION

For optimal results, surfaces receiving JM Corbond 2.8 HFO should be clean and dry, free of dirt, oil, solvent, grease, loose particulate, peeling coating or other foreign matter. Untreated wood, plywood, and oriented strand board (OSB) typically do not need primer. JM Corbond 2.8 HFO also adheres well without primer to expanded polystyrene, extruded polystyrene, foil-faced insulation boards, concrete masonry units (CMU), and cured concrete. Ferrometallic substrates (especially mild steel) may be sand-blasted for increased adhesion in accordance with SSPC-SP6. Sand-blasted surfaces should be immediately primed with an epoxymide primer as recommended by the primer manufacturer. Galvanized and stainless steel and aluminum substrates may be treated with an appropriate wash primer or adhesive prior to application of JM Corbond 2.8 SPF. Consult your primer manufacturer and JM for a specific recommendation. Acid wash or other pre-wash may also be needed.

HEALTH AND SAFETY

For information on Health and Safety, refer to Johns Manville Safety Data Sheets and the Spray Polyurethane Foam Alliance Health and Safety guidance documents at https://spraypolyurethane.org.



APPLICATION GUIDE

Metal Buildings and Storage Tanks

JM Corbond 2.8 HFO can be sprayed on metal buildings with a slight increase in proportioner temperature based on the substrate temperature. Care should be taken at low temperatures not to do a thin "flash" pass as this may cause dripping and adhesion issues. Passes of 2-3" are recommended to ensure proper exotherm buildup.

REOCCUPANCY

- All occupants must vacate the building or the spray area must be cordoned off and remain separated from the occupied space for 24 hours after application
- The application area should be properly ventilated during application and for 24 hours post application
- Re-entry time for non-SPF trade workers: 12 hours
- Re-entry time for building occupants: 24 hours

PACKAGING

- 55 Gallon Drum (1,000 lbs per set)
- 250 Gallon Tote (5,000 lbs per set)



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The Side A and Side B Safety Data Sheets must be read prior to product application.

PROCESSING PARAMETERS

	Metal Buildings & Storage Tanks		Wall Sub		bstrates
	Summer	Winter	Geological	Summer	Winter
Drum Storage Temperature	50-75°F	50-75°F	50-75°F	50-75°F	50-75°F
Drum Temperature During Application	65-80°F	65-80°F	65-80°F	65-80°F	65-80°F
Proportioner Preheat Temperature - A	110-130°F	115-135°F	105-135°F	115-130°F	115-130°F
Proportioner Preheat Temperature - B	115-135°F	120-135°F	110-135°F	120-135°F	120-135°F
Hose Temperature	110-130°F	115-130°F	110-135°F	115-130°F	115-130°F
Surface Temperature	45-90°F	10-70°F	10-70°F	50-90°F	10-70°F

The initial settings are a guideline and ambient and substrate temperatures may require settings outside of the suggested range. Under no circumstances should a temperature of 140°F be exceeded without first contacting a JM technical representative.

DO NOT MIX ANY OTHER PRODUCTS INTO A SIDE OR B SIDE DRUMS. Materials should be stored in their original containers, away from heat and moisture, between 50-75°F. Side A has a 12-month shelf life and Side B has a 6-month shelf life when properly stored. Storage at temperatures below 50°F may result in stratification of the Side B and/or crystalline formation in the Side A. Storage at temperatures above 75°F may decrease shelf life. Containers should be opened carefully to allow any pressure buildup to be vented safely. Extensive venting of the B component may result in loss of adhesion of subsequent passes and yield. may result in loss of blowing agent, higher-density foam, and reduced vield.

Both components are adversely affected by water and humidity. Store empty drums on their sides with bungs secured to avoid moisture entering. "Empty" is defined as product residue at the bottom of the drum no deeper than ½ inch and 8 inches or less across.

Recyclers require drums to be "drip-dried" before accepting them.

DRUM TEMPERATURE DURING APPLICATION

Material will perform better when its temperature is between 65° – 80°F. Drums may be placed into a heated room for two days before use to acclimate.

MIXING / RECIRCULATION

JM Corbond 2.8 HFO should NOT be mixed or recirculated. Mixing or recirculating JM Corbond 2.8 HFO will lead to loss of blowing agent.

HUMIDITY

Care should be taken if the relative humidity is greater than 80%. Excessive humidity will adversely affect system performance and physical properties.

TEMPERATURE AND PRESSURE SETTINGS

See Application Guides for application-specific temperature settings. The temperature settings are a guideline and ambient and substrate temperatures may require settings outside of the suggested windows for each application type.

The finished foam properties are affected by both temperature and pressure settings. To obtain a proper mix, installers should strive to achieve a minimum of 1100 psi at the gun when the trigger is pulled. This requires installers to adjust the pressure drop from the machine to the gun. A general guideline is that the pressure will drop approximately 1 psi per foot of hose.

Therefore, set the pressure at the machine so that when the trigger is pulled, the pressure maintained is the target gun pressure (1100 psi) plus the pressure drop across the hose length. For example, a machine with 260 feet of hose should have a dynamic spray pressure of 1360 psi. Additionally, it should be understood that proportioners vary, and while pressure readings are typically representative of the pressure at the machine, there are some pieces of equipment that monitor pressure at the gun and thus the pressure setting would be different.

PASS THICKNESS

JM Corbond 2.8 HFO may typically be applied in a single pass from a minimum of 0.5" to a maximum of 3". Exceptions exist with sheet metal, gypsum wallboard, and soil substrates. Please see the Application Guide or consult JM Field Technical Services.

On cold surfaces, passes less than 1" thick should be avoided and

SHUT DOWN

For breaks in application longer than 60 minutes:

- 1. Park the proportioner according to the manufacturer's instructions.
- 2. Close the fluid shut off valves on the gun and grease the spray gun according to the manufacturer's instructions when applicable.

PARTIAL DRUM POUR-UP

Residual materials should be properly handled and transferred to a new drum immediately for use within 3 - 5 days. Collecting multiple partially full drums for combining later is NOT recommended and may result in poor quality foam.

CLEANUP

Nonflammable solvents should be used for cleanup. Consult your solvent manufacturer SDS for handling precautions.

CLEARANCES TO HEAT SOURCES

A minimum of 3" of clearance is required between JM Corbond 2.8 HFO spray foam and heat-producing sources.



Visit our website at www.JM.com or call 800-654-3103 | Building Insulation Division P.O. Box 5108 | Denver, CO 80217-5108

Technical specifications as shown in this literature are intended to be used as general guidelines only. Please refer to the Safety Data Sheet and product label prior to using this product. The physical and chemical properties of closed-cell spray polyurethane foam listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. They are supplied as a technical service and are subject to change without notice. Any references to numerical flame spread or smoke developed ratings are not intended to reflect hazards presented by these or any other materials under actual fire conditions. Check with the sales office nearest you for current information. All Johns Manville products are sold subject to Johns Manville's standard Terms and Conditions, which includes a Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville standard Terms and Conditions or for information on other Johns Manville insulation and systems, visit www.jm.com/terms-conditions or call 800-654-3103.