Johns Manville
A Berkshire Hathaway Company

JM Corbond® 2.8

CLOSED-CELL SPRAY POLYURETHANE FOAM

DESCRIPTION

JM Corbond® 2.8 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. 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
- Minimizes Sound Transmission

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	> 90%
Dimensional Stability	158˚F at 97% RH	ASTM D2126	<5%
	158˚F Ambient RH	ASTM D2126	1.5%
	-40˚F Ambient RH	ASTM D2126	No Change
R-Value per inch	Initial	ASTM C518	6.7 (°F•ft²•h/BTU)
	Aged	ASTM C518	6.5 (°F•ft²•h/BTU)
Compressive Strength		ASTM D1621	50psi
Water Absorption		ASTM D2842	2%
Water Vapor Permeance		ASTM E96	<1 perm at 1.2"
Service Temperature Maximum			180°F (82°C)
Flame Spread		ASTM E84	<20**
Smoke Development		ASTM E84	650

** These items are provided as general information only. They are approximate values and are not part of the product specifications.*
*** JM Corbond 2.8 has been tested according to ASTM E84, achieving a rating of 20/650.*

SUBSTRATE PREPARATION

For optimal results, surfaces receiving JM Corbond 2.8 SPF 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 SPF 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 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 Substrates	
	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	110-125°F	115-130°F	105-135°F	115-130°F	115-130°F
Proportioner Preheat Temperature - B	115-130°F	120-130°F	110-135°F	120-130°F	120-130°F
Hose Temperature	110-125°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 135°F be exceeded without first contacting a JM technical representative.

STORAGE

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 blowing agent, higher-density foam, and reduced yield.

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 should NOT be mixed or recirculated. Mixing or recirculating JM Corbond 2.8 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 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 may result in loss of adhesion of subsequent passes and yield.

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 SPF 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

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