

DESCRIPTION

JM Corbond® Open-cell Spray Polyurethane Foam (oc SPF) insulation is a two-component, low-density, Class 1 rated, nonstructural insulation system designed for interior commercial, residential and industrial applications. JM Corbond oc SPF is 100% water blown. Its high yield, superior performance, and exceptional sprayability make it an ideal choice for high-performing energy efficient buildings.

RECOMMENDED USES

- Walls
- Floors
- Ceilings
- Unvented Attics
- Vented Attics
- Crawl Spaces

PERFORMANCE ADVANTAGES

- Improves Energy Efficiency
- Provides an Effective Air Barrier
- Minimizes Sound Transmission
- Exceptional Adhesion

INSTALLER ADVANTAGES

- Superior Sprayability
- High Yield
- Wide Processing Window
- Low Application Odor

PHYSICAL PROPERTIES*

| Property | Test Method | Value |
|--------------------------------|------------------------|------------------------|
| R-value at 1" | ASTM C518 (aged) | 3.8 (°F·ft²·h/BTU) |
| R-value per inch at > 3.5" | ASTM C518 (aged) | 3.6 (°F·ft²·h/BTU) |
| Core Density | ASTM D1622 | 0.5 pcf |
| Open-cell Content | ASTM D6226 | > 92.7% |
| Tensile Strength | ASTM D1623 | 4.7 psi |
| Dimensional Stability | ASTM D2126 | -4.1% Change in Volume |
| Air Permeance at 75 Pa (3.75") | ASTM E90 | < 0.02 (L/s)/m |
| Sound Transmission Coefficient | ASTM E2179 | 38** (STC) |
| Emissions | | |
| School Classroom | CA Specification 01350 | Pass |
| Private Office | CA Specification 01350 | Pass |
| Single Family Residence | CA Specification 01350 | Pass |

FLAMMABILITY CHARACTERISTICS***

| Property | Test Method | Value |
|----------------------------|---------------------|-----------------------------|
| Surface Burning at 4" | ASTM E84 | Class 1 |
| Flame Spread Index | | Flame Spread Index < 25 |
| Smoke Developed Index | | Smoke Developed Index < 450 |
| Commercial Fire Resistance | NFPA 285 | Assembly Passed |
| TPR2 Thermal Barrier | NFPA 286 | Assembly Passed |
| DC 315 Thermal Barrier | | |
| TPR2 Ignition Barrier | NFPA 286 Appendix X | Assembly Passed |
| DC 315 Ignition Barrier | | |
| Unvented Unoccupied Attics | Special Approval | > 3.75" thickness |

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

** Residential exterior wall with 16" o.c. 2x4 wood studs, OSB sheathing, and ½" gypsum board. STC 40 with fiberboard siding.

*** Numerical flame spread and all other data presented are not intended to reflect the hazards presented by this or any other material in actual fire situations.



APPROVALS / COMPLIANCES

- 2015, 2012, 2009 International Building Code (IBC) Types I, II, III, IV, V Construction
- 2015, 2012, 2009 International Residential Code (IRC)
- 2015, 2012, 2009 International Energy Conservation Code (IECC)
- 2013 Abu Dhabi International Building Code (ADIBC)
- ICC-ES AC377 Acceptance Criteria for Spray-Applied Foam Plastic Insulation
- California Department of Public Health VOC Emission Testing Compliance
- ICC-ES Evaluation Report ESR-3776
- Intertek Code Compliant Research Report CCRR-1079
- IRC Section 316.6, Ignition barrier not required in unvented and unoccupied attics per CCRR-1079 section 4.4.2.3

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 (950 lbs per set)
- 250 Gallon Tote (4,740 lbs per set)

The [Installation Guide](#) and the [Side A](#) and [Side B Safety Data Sheets](#) must be read prior to product application.

SUGGESTED PROCESSING PARAMETERS

| | |
|-----------------------------------|---------------------------|
| Drum Storage Temperature | 40° - 85°F (4° - 29°C) |
| Drum Preheat Temperature | 75° - 95°F (24° - 35°C) |
| Surface Temperature | 45° - 120°F (7° - 49°C) |
| Proportioner Temperature | 105° - 135°F (43° - 57°C) |
| Hose Temperature | 105° - 135°F (43° - 57°C) |
| Maximum Agitator Working Pressure | 100 psi |
| Maximum Agitator Speed | 500 rpm |
| Proportioner Pressure (Dynamic) | 800 - 1450 psi |
| Viscosity at 77°F | 300 cps "B" |

STORAGE AND SHELF LIFE

JM Corbond oc SPF Part A and Part B should be stored between 40 - 85°F. Part B has a 6 month shelf life, and Part A has a 12 month shelf life when properly stored.

The initial settings are a guideline and ambient and substrate temperatures may require settings outside of the suggested window.

DRUM TEMPERATURE

Material will perform better when its temperature is between 75° - 95°F. Drums may be placed into a heated room for two days before use to acclimate. Alternatively, material may be preheated by recirculating during the 20 - 25 minute mixing stage of setup; set the machine heaters at 135°F and then pump material through the proportioner and back to the drums via circulation lines or a re-circulation manifold. Caution must be exercised to avoid cross-contamination. See "JM Corbond SPF Change-Over Procedure" for more information.

MIXING / RECIRCULATION

JM Corbond oc SPF should be mixed thoroughly prior to application; continuous mixing during application is not necessary. If recirculation is being used as a means of heating the material in the drum, the drum should be agitated for 1 - 2 minutes before beginning recirculation. Adequate mixing before beginning spray is critical to successful application.

HUMIDITY

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

PRESSURE SETTINGS

The finished foam properties are affected by both temperature and pressure settings. The goal of 1000 psi at the gun when the trigger is pulled is an important part of proper mix. To achieve, you must take into account the pressure drop from the machine to the gun. A rough rule of thumb (depending on several parameters) 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 plus the pressure drop across the hose length. For example, a machine with 260 feet of hose should have a dynamic spray pressure of 1260 psi.

PASS THICKNESS

JM Corbond oc SPF may be applied in passes of uniform thickness from a minimum of 1". Open cell spray foam is different from closed cell spray foam; the finished product does not retain heat so there is no need to limit pass thickness. The greatest limiting factor in pass thickness with open cell is that if the applicator attempts to spray back into the rising foam, the foam will blow out of the cavity. Given the right conditions, a pass thickness of as much as 12" may be possible. Cooling time between passes is not necessary.

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 a recommended practice and may result in poor quality foam.

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. The physical and chemical properties of JM Corbond oc SPF insulation listed herein represent typical, average values obtained in accordance with accepted test methods and are subject to normal manufacturing variations. The properties are based on using appropriate spray foam application equipment settings for mixing, temperature and pressure. 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 Limited Warranty and Limitation of Remedy. For a copy of the Johns Manville Limited Warranty and Limitation of Remedy or for information on other Johns Manville thermal and acoustical insulation and systems, call the 800 number or write to the address above.