

DESCRIPTION

JM GEN IV Canada closed cell spray polyurethane foam (SPF) is a HFO blown, two-component, medium-density, SPF insulation system. JM GEN IV Canada is designed to insulate commercial, residential, and industrial buildings. The HFO technology allows JM GEN IV Canada to be produced with a low Global Warming Potential (GWP) and with an Ozone Depletion Potential of zero. Its constant yield, superior thermal and moisture performance, exceptional adhesion make it an ideal choice for high-performing energy efficient buildings.

RECOMMENDED USES

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

APPEARANCE

- Blue

PHYSICAL PROPERTIES*

	Test Method	Value
Thermal Resistance (50 mm specimen)	CAN/ULC S770 LTR	R12, RSI 2.1
Aged Thermal Resistance (90 Day Aged)	ASTM C518	R14, RSI 2.45
Core Density, Nominal	ASTM D1622	30 kg/m ³ , 1.98 lb./ft ³
Compressive Strength (50 mm specimen)	ASTM D1621	180 kPa, 26.1 PSI
Tensile Strength	ASTM D1623	279 kPa, pass, 70 psi, pass
Open Cell Content	ASTM D6226	<3%
Water Absorption	ASTM D2842	0.5%
Water Vapor Permeance (50 mm specimen)	ASTM E96	23ng/(Pa-s-m ²)
Air Permeance at 75 Pa	ASTM E2178	0.0002 L/S-m ²
Dimensional Stability (-20°C)	ASTM D2126 Volume Change after 28 days	-9.0%
Dimensional Stability (80°C)		1.0%
Dimensional Stability (70°C at 97% RH)		-9.6%
Flame Spread	ASTM E83	Class 1
Hot Performance Testing	ASTM C411	90°C, 194°F
VOC Emissions	CAN/ULC S774-09	Pass
Surface Burning Characteristics	CAN/ULC-S102	Flame 5, Smoke 130
	CAN/ULC-S127	255

*All testing performed by an accredited independent third-party test Facility
 * Dimensional Stability was tested without a substrate*

LONG TERM THERMAL RESISTANCE

Thickness		Thermal Resistance	
mm	inches	R-value	RSI
50	2.0	12.3	2.2
75	3.0	18.9	3.3
100	4.0	25.6	4.5

APPROVALS / COMPLIANCES

CCMC	Material Listing	13697-L
	Air Barrier System	14030-R
ICC - ES		ESR-3809
CAN/ULC S705.1	Medium Density	Approved
CAN/ULC S705.2	ISO Certified applicator	Required
Ozone Depletion Potential	ODP	Zero
Global Warming Potential	GWP	<1
GreenGuard	Gold	Certified



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: 24 hours

PACKAGING

- 55 Gallon Drum (454 Kg per set, 1,000 lbs. per set)

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>.

The Installation Guide and Side B Safety Data Sheet must be read prior to product application.

SUGGESTED PROCESSING PARAMETERS

Drum Storage Temperature	15° – 24°C (60° – 75°F)
Drum Temperature During Application	20° – 25°C (68° – 77°F)
Proportioner Preheat Temperature	Side A: 43°C – 57°C (110°F – 135°F) Side B: 43°C – 57°C (110°F – 135°F)
Hose Temperature	43° – 55°C (110° – 130°F)
Surface Temperature	-10° – 30°C (14° – 86°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 60°C (140°F) be exceeded without contacting a JM technical expert.

DRUM TEMPERATURE

Material will perform better when its temperature is between 23-30°C. Drums may be placed into a heated room for two days before use to acclimate.

MIXING / RECIRCULATION

Mixing or recirculating JM GEN IV Canada will lead to loss of blowing agent. JM GEN IV Canada should NOT be mixed or recirculated.

HUMIDITY/ DEW POINT TEMPERATURE

Care should be taken if the relative humidity is greater than 80%. Excessive humidity will adversely affect system performance and physical properties. Do not spray when the substrate temperature is -15°C (5°F) or less than the dew point temperature.

PRESSURE SETTINGS

The finished foam properties are affected by both temperature and pressure settings. The goal of 1100 psi minimum 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 1360 psi.

PASS THICKNESS

JM GEN IV Canada may be applied in a single pass from a minimum of 15 mm (0.6") to a maximum of 50 mm (2").*

*In accordance with CAN-U/LC-S705.2

SUBSTRATE CONDITIONS

JM GEN IV Canada can only be applied to clean, dry, and structurally sound substrates.

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.

STORAGE AND SHELF LIFE

JM GEN IV Canada SPF Side B should be stored between 5-24°C. Side B has a 6 month shelf life when properly stored.