

# FOAM-LOK™ FL 2000-4G EU

## Closed-Cell Spray Insulation

# FOAM-LOK™

## SPRAY FOAM INSULATION

### Product Use and Design

**FOAM-LOK™ FL 2000-4G EU** is a Closed-Cell polyurethane foam, which when installed following application guidelines, adheres tenaciously to framing members and substrates. **FOAM-LOK™ FL 2000-4G EU** has been tested in accordance with EN 14315-1:2013.

As a component of a "systems approach" to proper building envelope construction, **FOAM-LOK™ FL 2000-4G EU Closed-Cell** spray foam provides exceptional performance in minimizing heat transfer, moisture gain, air leakage and improving racking strength. **FOAM-LOK™ FL 2000-4G EU** provides an energy conserving solution to most structures.

### Recommended Product Applications

- Walls
- Ceilings
- Attics
- Partitions
- Floors
- Roofs
- Lofts
- Suspended Ceilings

### Product Advantages

- Better R-Value (8-10% higher)
- Zero Ozone Depletion Potential (ODP)
- Enriched Yield
- 1-Global Warming Potential (GWP)

### Recommended Processing Parameters

Processing Designation	FOAM-LOK™ 2000-4G EU
Winter	6-10°C
Regular	10-35°C
Summer	35°C- and above

Optimum hose pressure and temperature may vary as a function of the type of equipment, ambient and substrate conditions and the specific application. It is the responsibility of the applicator to properly interpret equipment technical literature, particularly information that relates to acceptable combinations of gun chamber size, proportioner output and material pressures.

Processing Designation	FOAM-LOK™ 2000-4G EU
Equipment Dynamic Pressure	1,000 - 1,400 psi
Preheat Temperature	(52 - 57° C)
Hose Heat Temperature	(52 - 57° C)
Drum Storage Temperature	(18 - 30° C)
Material Shelf Life	(6) months when stored within recommended temperature range.

- **2:1** transfer pumps are recommended for material transfer from container to the proportioner.
- **CAUTION:** Extreme care must be taken when removing and reinstalling drum transfer pumps so as **NOT** reverse the "A" and "B" components.
- **DO NOT** circulate or mix other suppliers' "A" or "B" component into **FL 2000-4G EU** containers.
- The plural component proportioner must be capable of supplying each component with  $\pm 2\%$  of the desired 1:1 mixing ratio by volume.

**FOAM-LOK™ 2000-4G EU** should not be applied in excess of 140 mm per application. The foam should be allowed to cool for 20-30 minutes or until the surface temperature has returned to ambient before additional applications of foam are attempted. Foam applied in excess of 140 mm or without allowing for cooling may result in, but not limited to excess heat build-up and result in fire or generation of offensive odors that may not dissipate with time.

### LIMITATIONS:

ONLY WOOD AND CONCRETE MAY FOAM BE APPLIED IN 5.5 INCHES PER APPLICATION. METAL THINNER THAN 22 GAUGE AND SHEET ROCK SUBSTRATES SHOULD BE APPLIED AT 1 INCH FOR THE FIRST PASS. LOW VOLTAGE WIRING SHOULD NOT BE ENCASED IN A SINGLE 5.5 INCH PASS.

### Credentials/Certifications

Evaluation Report(s):	
<b>Trade Name:</b>	<b>FOAM-LOK™ FL 2000-4G EU</b>
<b>Holder of Approval:</b>	Lapolla Industries, Inc. 15402 Vantage Parkway E., Ste. 322 Houston, TX 77032
<b>Generic Type &amp; Use of Construction Product:</b>	Sprayed Applied Rigid Urethane Foam For Use As An Insulation Material In Walls, Attic or Loft Applications.
<b>TZUS Evaluation Report(s):</b> No. 1020-CPR-010-036109	5 Pages: Including 4 Annexes

### Physical Properties

Characteristics	Test Results	Test Method
<b>Reaction to Fire</b> <i>Foam Only:</i> <i>Protected by 9.5mm Gypsum:</i>	Class E 4 <sub>2</sub> #IV"	(EN 13501-1+A1)
<b>Release of Dangerous Substances</b>	Does Not Contain Or Release Dangerous Substances	Written Declaration By The Manufacturer
<b>Compressive Strength</b> at 10% Linear Deformation	223.56 kPa	EN 826
<b>Water Absorption</b>	0.20 kg/m <sup>2</sup>	EN 1609, method B
<b>Apparent Density</b>	? [ % ] Y! ? %	EN 1602
<b>Closed Cell Content</b>	$\geq 90\%$	ISO 4590
<b>Thermal Conductivity</b> According to Clause C.5 (fixed increment procedure) a) $\lambda_{mean}$ -thickness 25mm -thickness 120mm -thickness 200mm	0.0221 W/(m.K) 0.0221 W/(m.K) 0.0221 W/(m.K)	

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Rev Date 04/05/17

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SPRAY FOAM INSULATION

### Thermal Barrier / Vapor Retarder

Refer to local building codes and requirements for definitions.

### Safety and Handling

Respiratory protection is **MANDATORY!** Lapolla requires that supplied air and a full face mask be used during the application of any spray applied foam system. Contact Lapolla Industries for a copy of the Model Respiratory Protection Program developed by CPI or visit their web site at [www.polyurethane.org](http://www.polyurethane.org). Persons with known respiratory allergies should avoid exposure to the "A" component. The "A" component contains reactive isocyanate groups while the "B" component contains amine and/or catalysts with blowing agents. Both materials must be handled and used with adequate ventilation. The vapors must not exceed the TLV (0.02 parts per million) for isocyanates. Avoid breathing vapors. Wear a NIOSH approved respirator. If inhalation of vapors occur, remove victim from contaminated area and administer oxygen if breathing is difficult. Call a physician immediately. Avoid contact with skin, eyes, and clothing. Open containers carefully, allowing any pressure to be relieved slowly and safely. Wear chemical safety goggles and rubber gloves when handling or working with these materials. In case of eye contact, immediately flush with large amounts of water for at least fifteen minutes. Consult a physician immediately. In case of skin contact, wash area with soap and water. Wash clothes before reuse. The standards and values shown are based on U.S. information and testing. European or regional information and requirements may vary, please consult your local authority for additional information.

Positive pressure ventilation of the work area is required to minimize the accumulation of vapors in the work area during the application. Improper application techniques of this foam system must be avoided. This includes excessive thickness, off ratio material and spraying into rising foam. The potential results of improperly applied materials may include but is not limited to, excessive heat build-up, and may result in a fire or offensive odors which may not dissipate with time and/or poor product performance due to improper density of the applied material. Large masses of sprayed materials should be avoided. When large masses are generated they should be removed from the area, cut into small pieces and allowed to cool before disposal. Failure to follow this recommendation may result in a fire. It is recommended that a fire extinguisher be located in an easily accessible portion of the work area.

Applicators should ensure the safety of the jobsite and construction personnel by posting appropriate signs warning that all "hot work" such as welding, soldering, and cutting with torches should take place no less than 35 feet from any exposed foam. If "hot work" must be performed all spray polyurethane foam should be covered with an appropriate fire or welder's blanket, and a fire watch should be provided.

### In Case of Spills or Leaks

- Utilize appropriate personal protective equipment
- Ventilate area to remove vapors
- Contain and cover spilled material with a loose, absorbent material such as oil-dry, vermiculite, sawdust or Fuller's earth
- Shovel absorbent waste material into proper waste containers
- Wash the contaminated areas thoroughly with hot, soapy water
- Report sizable spills to proper environmental agencies in compliance with local or regional regulations

### In Case of Fire

**Extinguishing Media:** Dry chemical extinguishers such as mono ammonium phosphate, potassium sulfate, and potassium chloride. Additionally, carbon dioxide, high expansion (proteinic) chemical foam, or water spray for large fires.

### DISCLAIMER

The data presented herein is not intended for use by nonprofessional applicators, or those persons who do not purchase or utilize this product in the normal course of their business. The potential user must perform any pertinent tests in order to determine the product's performance and suitability in the intended application, since final determination of fitness of the product for any particular use is the responsibility of the buyer.

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