



FOAMLOK™ LPA 3000-4G

TECHNICAL DATA SHEET

Roofing Foam

Product Use and Design

Huntsman Building Solutions FOAM-LOK LPA 3000-4G Roofing Spray Foam is a closed-cell, polyurethane foam, which was developed using an EPA approved fourth generation blowing agent, specifically designed to provide a high performance, fully adhered roofing system providing insulation and waterproofing over a variety of roof deck substrates and configurations.

FOAM-LOK LPA 3000-4G locks in every portion of the roof creating a seamless membrane thus eliminating the need for mechanical fasteners; the number one cause of conventional roof leaks. FOAM-LOK LPA 3000-4G spray foam roofing can also be applied to vertical surfaces making the seamless coverage self-flashing. In addition to roofing applications, FOAM-LOK LPA 3000-4G is also recommended for tank insulation applications.

Product Advantages

- Offers a high R-value per inch
- Reduces installation time and costs
- Provides a waterproof monolithic roof system
- Enhances resistance to wind uplift and hail damage
- Decreases energy expenses compared to alternative solutions

Reactivity Selection			
Processing Designation	Winter	Regular	Summer
Surface Temperature:	50°F - 75°F	60°F - 90°F	above 85°F

Heated trailers, hotboxes, or heated tank storage may be necessary. Material temperature should be confirmed with a thermometer.

Processing Parameters

Optimum pressure, preheat and hose temperature will vary from machine to machine. The performance of the foam system being applied will also be affected by the ambient and substrate temperatures as well as wind. It is the responsibility of the applicator to determine the optimum processing requirements of his machinery as these will change over the course of the day. The guidelines shown below should be used to determine a starting point for this optimization process.

Dynamic Pressure	Preheat Temperature	Hose Heat Temperature
1,000 - 1,400 psi	120 - 130°F (49 - 54° C)	120 - 130°F (49 - 54° C)
Drum Temperature: In Use	Surface Temperature	Drum Temperature: Storage
65 - 85°F (18 - 30° C)	50 - 150°F (10 - 66° C)	60 - 80°F (15 - 26° C)

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 to reverse the "A" and "B" components.

Do not recirculate or mix other suppliers' "A" or "B" component into FOAM-LOK LPA 3000-4G containers.

The plural component proportioner must be capable of supplying each component within $\pm 2\%$ of the desired 1:1 mixing ratio by volume.

FOAM-LOK LPA 3000-4G should be applied in lifts or passes of no less than 1.0 inch and no more than 2.0 inches thickness per pass or lift. Minimal passes or reduced thickness will result in elevated density and may not cure properly, reducing the physical performance properties of the system. Applications of greater than 2.0 inches will result in reduced density and physical properties and may also create scorching of the foam as a result of the exothermic reaction, both of which will reduce the physical performance characteristics of the foam.

Physical Properties		
Properties	Test Method/Requirements	Value
Aged "R" Value	ASTM C 518	6.8 per inch
Compressive Strength	ASTM D 1621 (40 min.)	45-55 psi
Core Density	ASTM D 1622	2.9-3.1 lbs./ft ³
Closed Cell Content (% Volume)	ASTM D 2856 (90 min.)	> 90%
Tensile Strength	ASTM D 1623 (60 min.)	75-85 psi

Water Absorption	ASTM D 2842 (1.0 max per volume)	.44 lbs/ft ³
Water Vapor Permeability @ 74°F, perm inch	ASTM E 96 (2.5 max)	1.1 perms @ 1"
Dimensional Stability 28 days at 158°F, 98%RH	ASTM D 2126	1.20% change in volume
Shelf Life	6 months when stored within recommended temperature range	
Coating Recommendation	Thermo-Flex Series Acrylic or Silicone	

Credentials/Certifications

- ICC ESR-3916
- Underwriters Laboratories Inc. File R14353
- ASTM E-84 @ 4":
Flame Spread Index ≤10
Smoke Development ≥500

Safety and Handling

Respiratory protection is MANDATORY! Contact Huntsman Building Solutions Industries for a copy of the Model Respiratory Protection Program developed by API or visit their website at 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. In case of skin contact, wash area with soap and water. Wash clothes before reuse.

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 sizeable spills to proper environmental agencies

In Case of Fire

Extinguishing Media: Water, Carbon Dioxide, Foam or Dry Powder

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