

# GUARDFOAM™ 55

## OPEN CELL SPRAY INSULATION

### PRODUCT DESIGN

GuardFoam 55 OC is an open-cell spray applied foam, which when installed following application guidelines adheres tenaciously to framing members and substrates. GuardFoam 55 OC open-cell provides superior energy economy and durability while significantly reducing unmanaged moisture and air infiltration.

### PRODUCT USE

GuardFoam 55 OC forms a completely sealed air barrier in wall cavities and can be used to fill 2" x 6" stud wall construction in a single application. It adheres well to most building materials and will provide a continuous barrier against air infiltration for the life of the building. As a component of a "systems approach" to proper building envelope construction in both residential and commercial construction, GuardFoam 55 OC provides exceptional performance in reducing heat transfer, moisture gain and improving racking strength.

### RECOMMENDED PRODUCT APPLICATIONS

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

### RECOMMENDED PROCESSING PARAMETERS

**Processing Designation:** Regular

**Ambient Temperature:** 50° - 120°F

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 acceptable combinations of gun chamber size, proportioner output, and material pressures.

Processing Designation	GuardFoam CC
Equipment Dynamic Pressure	1,100 - 1,500 psi
Preheat Temperature	125° - 140° F (52° - 60° C)
Hose Heat Temperature	125° - 140° F (52° - 60° C)
Drum Temperature Storage	65° - 85° F (18° - 29° C)

The shelf life will be 4 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 to reverse the "A" and "B" components. Do not configure equipment to recirculate GuardFoam 55 OC from proportioner back into drum. Do not recirculate or mix other suppliers' "A" or "B" component into GuardFoam containers. The plural component proportioner must be capable of supplying each component within  $\pm$  2% of the desired 1:1 mixing ratio by volume.

### PHYSICAL PROPERTIES

Properties	Test Method/Requirements	Value
Aged "R" Value	ASTM C 518	3.9 per inch
Core Density	ASTM D 1622	.4-.6 lbs./ft <sup>3</sup>
Open Cell Content	ASTM D 2856	>94%
Tensile Strength	ASTM D 1623	3 psi
Dimensional Stability: 28 days at 160°F, 100%RH	ASTM D 2126 15% max by volume change	3%
Sound Transmission Co-Efficient	ASTM E 90-85/E 413 Sound Transmission Loss in dB	41

### CREDENTIALS/CERTIFICATIONS\*

- ICC ESR-2847

GuardFoam 55 OC is a Class I formulation, as Tested per ASTM E84, and possess the flammability characteristics shown:

ASTM Method E84	Class I	Class II	Class III
Flame Spread	≤25	≤75	Non Rated
Smoke Development	≤450	≤450	Non Rated

\* Manufactured by Lapolla Industries, Inc. (FL 500)

Applicators should limit GuardFoam 55 OC thickness to 6 inches per pass for optimal processing and physical properties. Second passes if necessary should be applied after 10 minutes of cure time. If additional passes are needed, applicators should wait 30 minutes between passes for optimal foam processing.

### **THERMAL BARRIER**

IRC and IBC codes require that SPF be separated from the interior of a building by an approved fifteen (15) minute thermal barrier, such as 1/2" gypsum wall board or equivalent, installed per manufacturer's instructions and corresponding code requirements. There are exceptions to the thermal barrier requirement: (1) Code authorities may approve coverings based on fire tests specific to the SPF application. For example, covering systems that successfully pass large scale tests may be approved by code authorities in lieu of a thermal barrier; (2) SPF protected by 1" thick masonry does not need a thermal barrier. Certain materials that offer protection from ignition, called "ignition barriers," may not be considered as thermal barrier alternatives unless they comply with NFPA 286 or other similar full scale tests. Applicators should request test data and code body approvals or other written indications of acceptability under the code to be sure that the product selected offers code-compliant protection. 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.

### **HANDLING AND SAFETY**

Respiratory protection is MANDATORY! Contact Guardian Building Products for a copy of the Model Respiratory Protection Program developed by API or visit their website 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. 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.

### **IN CASE OF SPILLS OR LEAKS**

#### **Steps To Be Taken-**

- Utilize appropriate personal protective equipment (PPE).
- 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.
- Ventilate area to remove vapors.
- Report sizeable spills to proper environmental agencies.

### **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**

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