



# TECHNICAL DATA SHEET

## SES FOAM 1 LB SPRAY

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### Product Description

SES Foam 1 lb Spray is an open-cell, nominal one lb/ft<sup>3</sup> density, water-blown spray-applied polyurethane foam suitable for use as a construction thermal insulation and air barrier material. It is a two-component system and sprayed in place using high pressure, plural component SPF application equipment. Additional characteristics include high yield, high R-value, high renewable content and excellent fire resistance.

SES Foam 1 lb Spray is designed for interior use only and should not be used in situations where it will be exposed to exterior environments. Vapor retarders may be required in certain applications; contact SES Foam for specific recommendations.

**SES Foam 1 lb Spray has been formulated with a proprietary A-side. Do not use other A-side materials or generic pMDIs with SES Foam 1 lb Spray.**

### Physical Properties\* (Typical)

Core Density (ASTM C 1622)	1.0 lb/ft <sup>3</sup> nominal
R-Value (ASTM E 518)	4.1 nominal
Maximum Service Temperature	180 °F
Flame Spread** (ASTM E 84)	15 @ 4-inch thickness
Smoke Developed** (ASTM E 84)	400 @ 4-inch thickness

\*The physical properties expressed herein are based on average values obtained from laboratory prepared samples and should serve only as a guide.

\*\*ASTM E 84 values do not reflect hazards presented by this or any other material under actual fire conditions. These numerical values are used solely to measure and describe a product's response to heat and flame under controlled laboratory conditions.

### Building Code References

SES Foam 1 lb Spray conforms to the requirements of the following model building codes:

- 2006 and 2009 International Building Code, Chapter 26
- 2006 and 2009 International Residential Code, Section R316.

### Thermal Barriers

In accordance with the applicable building code, SES Foam 1 lb Spray must be separated from interior spaces by an approved thermal barrier (such as ½-inch gypsum wallboard) unless specifically excluded by the code. **SES Foam 1 lb Spray may be installed in thicknesses up to 11.25 inches when protected by an approved thermal barrier.** Refer to local building codes and authorities for specific requirements and exclusions.

### Ignition Barriers

Model building codes exclude the use of thermal barriers over SPF in attics and crawlspaces where entry is limited. Under these conditions, **SES Foam 1 lb Spray may be installed in nominal thicknesses up to 10 inches and left exposed in attics and crawlspaces** (per testing in accordance with AC 377, Appendix X). Additional restrictions may apply; contact SES Foam for specific recommendations and refer to local building codes and authorities for specific requirements and limitations.

### Storage and Handling

Store A- and B-side components in a conditioned area, away from exposure to direct sun light and precipitation and between 50 and 90°F. Keep material containers tightly closed. Keep material in opened containers under a blanket of dry air or nitrogen.

Store both components between 70 and 90°F for several days prior to use. Do not use band heaters or other heating devices to pre-heat material in containers without first consulting with SES Foam.

Shelf life of SES Foam 1 lb Spray is six months when stored and handled as recommended.

Wear appropriate personal protective equipment when handling or applying these materials. Use caution when removing bungs or opening material containers. Avoid prolonged breathing of vapors; avoid contact with skin, eyes and mucous membranes. Do not ingest spray foam components or finished materials. Refer to MSDSs for specific hazards.

**Application Information**

SES Foam 1 lb Spray is supplied as a two-component system identified as the A-side and B-side.

**SES Foam 1 lb Spray has been formulated with a proprietary A-side. Do not use other A-side materials or generic pMDIs with SES Foam 1 lb Spray.**

Use Graco plural component SPF application equipment or equal. Proportioning pump ratio is 1:1 by volume. Processing recommendations are:

Pressure	1000 to 1350 psi
Pre-heater temperature	115 to 125°F
Hose temperature	115 to 125°F

Adjust the above settings as required to achieve good mix and spray pattern with your particular equipment.

The maximum recommended per pass application thickness is 6 inches. Additional passes may be applied to achieve the designated R-value or thickness.

**Surface Conditions and Preparations**

SES Foam 1 lb Spray may be applied to most construction materials such as wood, concrete, masonry, metals and plastics. All surfaces must be clean, dry and free of substances that would adversely affect the adhesion of the spray foam.

Surfaces receiving application of SES Foam 1 lb Spray should be between 50 and 120°F. Colder or hotter surfaces may affect yield, density and other physical properties.

**Environmental Conditions**

Protect adjacent areas from overspray by masking or other suitable means. Best results occur when applying SES Foam 1 lb Spray between 50 and 120°F. Ambient temperatures should be at least 5°F above the dew point.

**Precautions**

Take extreme care not to accidentally mix A- and B-sides. Color code all equipment hoses and components. Do not accidentally switch transfer pumps when changing material drum sets.

Certain high humidity and/or low temperature conditions require the use of vapor retarders to avoid condensation within the SPF insulation. Contact SES Foam for specific recommendations in these situations.

Complete all hot work (welding, etc.) prior to applying spray foam. If hot work is required after spray foam has been installed, special fire preventative measures must be taken. Contact SES Foam for specific requirements.

Always use appropriate personal protective equipment when working with SES Foam 1 lb Spray. Keep other trades out of the work and application areas.

The information contained within this Technical Data Sheet is provided to assist customers in the selection of SES Foam’s insulation products. Those customers must make the final decision as to this material’s suitability for the specific end use. SES Foam warrants only that when this material is applied in accordance with SES Foam’s specifications and recommendations it will conform to the description contained herein. This warranty is in lieu of all other warranties, written or unwritten, expressed or implied. SES Foam expressly disclaims any warranty of merchantability, fitness for a particular purpose, or freedom from intellectual property infringement. The buyer assumes all risk as to the use of this material. Buyer’s exclusive remedy for any breach of warranty, negligence or other claim shall be limited to the purchase price of the material. Failure to follow SES Foam’s specifications and recommendations relieves SES Foam of all liability with respect to this material.