



## High Solids, No Mix, Silicone Elastomeric Coating For Professional Use Only

**Energy Shield**  
Systems

### DESCRIPTION

- A high-solids, single component, moisture cure, low viscosity fluid-applied silicone coating that's ready to use.
- Best-in-class flexibility. Double the elongation of all major competitors and ensure long-term crack resistance even in high-movement situations.
- Shelf life of 18 months.
- Typically, no mixing is required for up to 6 months.
- Superior weathering and excellent water resistance in a breathable membrane.
- Exceptional adhesion to unprimed weathered TPO, PVC, and EPDM.
- Less viscous to allow for ease of application.

### RECOMMENDED USES

ENERGYSIL-EZ is designed as a protective coating for most roof membranes. Un-matched adhesion to unprimed TPO, PVC, and EPDM along with excellent performance over primed Cap sheet and Mod Bit membranes.

Property	Test Method	Result
Tensile Strength	ASTM D-2370	205 PSI @ 73°F ± 20
Elongation: (break)	ASTM D-2370	468% @ 73°F ± 50
Tear Resistance: (Die C) lb f/in	ASTM D-624	25
SRI	CRRC	110
Reflectivity (White)	ASTM C-1549	.87
Emissivity: (White)	ASTM C-1371	.89
Permeance US Perms	ASTM E-96 (Procedure B)	6.7
Temperature Stability Range		-80°F to 350°F (-37°C to 177°C)
Weathering/UV Resistance	ASTM D-6694	No degradation 5000 hours
Specific Gravity		1.30 @ 77°F (25°C)
Tack Free Time	Temp. & Humidity Dependent	20-30 min.
VOC	ASTM D-3960 EPA Method 24	<50 Grams/Liter
Durometer Hardness	ASTM D-2240 Shore A	36
Solids Content by Weight	ASTM D-1644	91%
Solids Content by Volume	ASTM D-2697	90%
Max Continuous Service Temperature		185°F (85C)
Shelf Life - Unopened Containers	18 Months	Stored @ 35°F to 75°F

### COLORS

White and Light Gray.  
Custom colors are available for an additional charge.  
Allow additional 15 days for custom colors.

### SURFACE PREPARATION

**General:** Surfaces to be coated should be clean, dry, free of dust, dirt, oil, loose granules, peeling coating, or other foreign matter. It may be necessary to power wash and/or prime to enhance adhesion.

### PACKAGING/SHIPPING INFORMATION

CONTAINER SIZE	SHIPPING CLASS
55 Gallon drum (208.2 liters)	Class 55
5 Gallon pail (18.9 liters)	Class 55



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### APPLICATION

This product may be brushed, rolled, or sprayed on a clean, dry surface. For details, see Equipment Recommendations at the end of this sheet. Polyurethane foam should be coated within 24 hours of application. Coatings may be applied in 2 or 3 separate applications of contrasting colors, each applied at right angles to the previous coat. The coating must be evenly applied and pinhole-free. Before applying an additional coat, the previous coat must be completely dry and cured. If any contamination is present on the cured surface, it must be washed and completely dry before the application of subsequent coats.

### APPLICATION PROPERTIES

Yield (1 gal to 100 sq ft)	14 dry mils
Dry Time (100° F)	2 hours @ 90% Humidity
Dry Time (40° F)	8 hours @ 20% Humidity
Recoat Window	>8 hours
Complete Cure	48 hours

### COVERAGE RATE

Apply at a maximum rate of 1.5 gallons per square per coat.

### ENVIRONMENTAL CONDITIONS

Product must not be applied when the ambient temperature is below 0° F. Application is not recommended if rain or dew is likely to occur before product dries.

### LIMITATIONS

The surface must be clean and dry. Do not apply over wet substrates or when inclement weather is imminent. In addition, this product is not recommended for use without a vapor barrier in cryogenic tanks or cold storage roofing applications or directly over modified bitumen, asphalt, or coal tar built-up roofing systems without a sealer. This product carries Class "A" Non-Combustible and Class "B" Combustible credentials as tested under UL 790 procedures over spray foam and single ply roofing systems.

Contact Energy Shield Systems or refer to the UL directory for specific information.

### SAFE PRACTICES

This product is designed for professional installation. Before working with this product, you must read and become familiar with the available information on its risks, proper use, and handling. Information sources include but are not limited to MSDS and product labels. More resources are available at polyurethane.org, sprayfoam.org, energysieldsystems.com, or by contacting Energy Shield Systems directly.

### EQUIPMENT

Minimum requirements:

#### Brush

- Synthetic filament

#### Roller

- 1¼" nap roller

#### Spray

- Minimum 6500 PSI high-pressure airless pain pump
- 3 gallons or more per minute (continuous) output
- 5:1 transfer pump to prevent cavitation
- Hose rated to 2x maximum pump pressure
- Hose should be BUNA-N jacketed to prevent moisture contamination
- Hose lengths: (Largest diameter at pump)
  - ¾ minimum
- Spray gun: High-pressure 7000 PSI
- Spray Tip:
  - Reversible self-cleaning type
  - Orifice size of .030
  - Fan angle of 40° to 50°
- Always use components rated for pump pressures.
- Do not use a hose that has been used for Acrylics. The liner will absorb moisture and start the silicone cure process.

### CLEAN UP

Clean spray equipment containing uncured material by flushing with VM&P, Naphtha, or mineral spirits.

ENERGYSIL-EZ cures by reacting with moisture. Do not leave in spray guns, pump equipment, and hoses for prolonged periods unless the equipment contains moisture lock hoses, fittings, and seals. Without these, the material will cure on hose walls and at unsealed connections possibly causing an increase in operating pressure and material flow restriction.

To the best of our knowledge, all technical data contained herein is true and accurate as of the date of issuance and subject to change without prior notice. Users must contact Energy Shield Systems to verify correctness before specifying or ordering. We guarantee our products to conform to the quality control standards established by Energy Shield Systems Products. We assume no responsibility for coverage, performance, or injuries resulting from use. Liability, if any, is limited to the replacement of the product. NO OTHER WARRANTY OR GUARANTEE OF ANY KIND IS MADE BY ENERGY SHIELD SYSTEMS EXPRESSED OR IMPLIED; STATUTORY, BY OPERATION OF LAW, OR OTHERWISE, INCLUDING MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.