

# EXPANDOTHANE

Seamless Roof System

*With the SprayEZ Silicone Seal 3000™ Roof Coating*

ExpandoThane Seamless Roof System is a waterproofing material. It creates a tough and flexible waterproofing membrane capable of expanding 5 to 7 times its volume.



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ExpandoThane Seamless Roof System when applied at 2 1/2 gallons per hundred square feet cures in seconds to leave you with a full 1/4" Waterproof Membrane ExpandoThane Seamless Roof System may be applied as a secondary roof covering over metal roofs, modified bitumen, tar and gravel TPO, EPDM roofs, BUR, Concrete and Spray Urethane Foam. ExpandoThane is a VOC free Seamless Roof System.



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ExpandoThane is available in the DIY cartridge material or in our 55 gallon drum sets. Please visit [ExpandoThane.com](http://ExpandoThane.com) for more details on how to order.



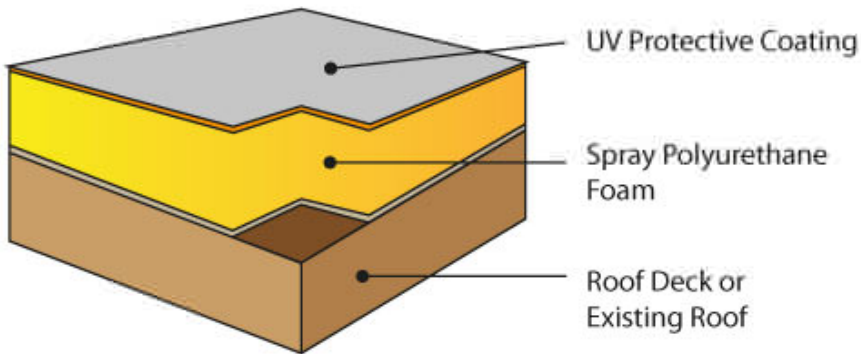


# EXPANDOTHANE

*Seamless Roof System*



# SILICONE SEAL 3000 ROOF COATING

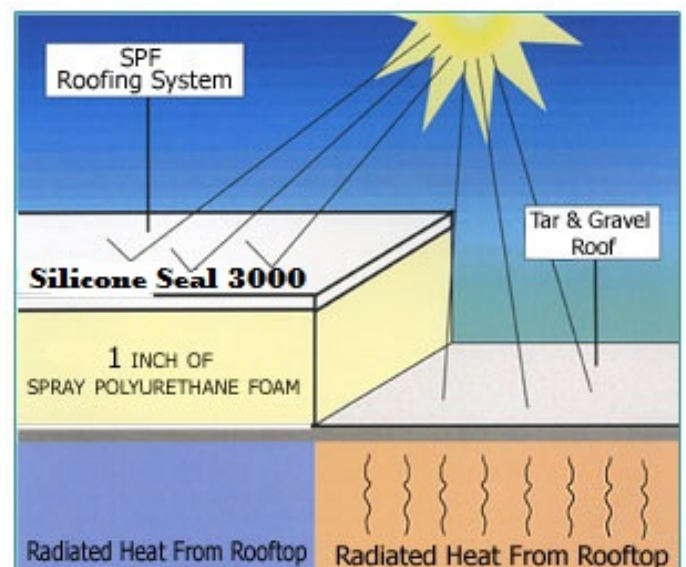


## Features

- Saves energy by reflecting heat
- Excellent adhesion and flexibility
- Long-lasting waterproof seal
- 1 coat application
- Rain-safe in 2 hours
- Permanent water resistant
- Excellent UV resistance
- VOC compliant - solvent-free
- Mold and mildew resistant
- Easy to apply by spray, roller, or brush

Silicone Seal 3000 Roof Coating is a single component spray grade high solids VOC free material available in white, and light or dark grey colors.

At SprayEZ we spend a lot of time and effort on researching and developing superior quality and effective products for the roofing and waterproofing industry. Our Silicone Seal 3000 material has been tested and proven as the most effective topcoat material for our ExpandoThane Roof Coating.







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**SILICONE SEAL 3000**  
**ROOF COATING**





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Seamless Roof System

## SILICONE SEAL 3000

*Quality products,  
tested, proven  
technologies,  
superior customer  
service. Call  
SprayEZ for all  
your roofing needs.*



Miami-Dade County Product Control Approved  
NOA No. 14-0220.10 Exp. Date 4/03/18

Florida Approval: FL# 13816-R2





 **EXPANDOTHANE**  
*Seamless Roof System*

**SILICONE SEAL 3000**  
**ROOF COATING**

At SprayEZ,  
we want to make sure you have the  
information to make the right  
decision about spray foam  
insulation, roof sealants and  
waterproofing for your home or business.  
Please feel free to contact the representative  
listed below, or call our office at  
1-877-772-9629.

Representative Name _____
Contact Number (____) _____ - _____
Notes _____
_____
_____
_____
_____



## ExpandoThane Tech Data Sheet

### ExpandoThane

ExpandoThane is the first generation of Aromatic Polyurea to combine both the Waterproofing and chemical resistance of a Polyurea Instant set membrane with the addition of a micro blowing agent to create a Polyurea that expands between 5 to 7 times its original volume. Primary uses include but are not limited to: Complete seamless, self-flashing roofing systems as a standalone product or sprayed over most existing roof systems. On sloped visible Roof Applications an application of THpolymer 101 single component colored Aliphatic can be applied if special colors are desired. Foundation Waterproofing: ExpandoThane is self-priming and eliminates the need for bug hole fillers.



### Physical Properties

Tensile Strength D412 1395

Elongation D412 300%

100% Modulus D412 1300

Tear Strength (PLI) D2240 162

Hardness (Shore D) D1737 30

Flexibility (1/8" Mandrel) D1737 85

Flashpoint (F) Pensky-Martin >200

Taper Abrasion (mg loss) CS18

Wheel

1kg per 1000 cycles 22

Hail Stone E822 Pass

Thermal Resistance Summer Flow R 2



ExpandoThane is to be applied by a Hot High Pressure Plural Component Machine

A – Side Temperature 120 Degrees F

B – Side Temperature 120 Degrees F

Hose Heat – 120 Degrees F

Pressure at Machine – 1500PSI

\*Temperature degrees and pressure may need adjusting due to ambient temperature



# Silicone Seal 3000

For Professional Use Only

## PRODUCT INFORMATION

**Product Type:** A ready-to use, high solids, single component, solvent borne, moisture cure fluid applied silicone coating.

**General Properties:** Breathable membrane possessing superior weathering and water resistance characteristics.

**Recommended Uses:** Provides elemental protection for architectural surfaces such as vertical walls, masonry, concrete, metal, single ply roof membranes and sprayed-in-place urethane foam systems.

**Product Limitations:** Not recommended for continuous immersion service, for use in cryogenic tank, or cold storage roofing applications without a vapor barrier, or directly over Modified Bitumen, Asphalt or Coal Tar Built-Up roofing systems without a sealer. Note: Roof-Tek® recommends any subsequent coats of silicone be completed within 24 hours to ensure good adhesion of the silicone to the previous coat.

### Ponding Water:

- The Silicone Seal 3000 Membrane is not affected by ponding! water, however:
- The National Roofing Contractors Association considers! ponding water on any roof undesirable and recommends that! all roof systems be designed and built to ensure positive! drainage. (See the NRCA Roofing and Waterproofing! Manual).

Please consult SEC Technical Department for any specific questions regarding the application of this product.

**Flammability Characteristics:** Silicone Seal 3000 Series Silicone Coatings carry Class "A" Non-Combustible and Class "B" Combustible credentials as tested under UL 790 procedures over spray foam and single ply roofing systems. Contact Coating & Foam Solutions, LLC. or refer to the UL directory for specific information.

### Additional Approvals:

- Building Envelope Reflective Roofing Approved Technologies
- California Title 24 Compliant.
- CRRC
- ENERGY STAR®
- Factory Mutual
- Florida Power & Light listed
- Miami-Dade Co.
- Tested and Certified by NSF International

Contact SEC Technical Dept. for details



NSF Protocol P151  
Health Effects from Rainwater  
Catchment System Components

**Standard Colors:** White, Light Grey, and Dark Grey. Special colors upon request at an additional charge. Allow additional 15 days for non-standard colors.

Miami-Dade County Product Control Approved

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## PHYSICAL PROPERTIES:

Material tested complies with all of the requirements of **ASTM D 6694-08 and -07** Standard Specification Liquid-Applied Silicone Coating.

**Passed: ASTM C1305** Crack Bridging Ability

<b>Tensile Strength:</b>	486 psi at 73°F. ± 20 700 psi at 0 °F. ± 20	(ASTM D-412)
<b>Elongation:</b> (break)	267% at 73°F. ± 20 282% at 0°F. ± 20	(ASTM D-412)
<b>Tear Resistance:</b> (Die C), lb f/in	33.7	(ASTM D-624)
<b>Reflectivity: (White)</b>	.66 Aged 3 yr	(ASTM C-1549)
<b>Emissivity: (White)</b>	.90 Aged 3 yr	(ASTM C-1371)
<b>SRI Value:</b>	106 Initial	
<b>Permeability:</b>	5.9	(ASTM E-96) Procedure B
<b>Tensile, set at 100%</b>	Nil.	
<b>Elongation:</b>		
<b>Temperature Stability Range:</b>	-80 °F. to 350°F. (-37°C. to 177°C)	
<b>Water Absorption:</b>	0.1 weight % after 2 weeks at 75 °F. (24 °C)	(ASTM D-471)
<b>Weathering/UV Resistance:</b>	No degradation after 8,760 hours	(ASTM G-53)
<b>Tack Free Time:</b>	1 Hour	Temp. & Humidity Dependent
<b>VOC:</b>	<250 Grams/Liter	EPA Method 24
<b>Durometer Hardness:</b>	50± 5 points	(ASTM D-2240) Shore A
<b>Solids Content By Weight:</b>	80% ± 2	(ASTM D-1644)
<b>Solids Content By Volume:</b>	69% ± 2	(ASTM D-2697)
<b>Maximum Continuous Service Temperature:</b>	185°F (85°C)	
<b>Flash Point:</b>	>105°F.	(ASTM D-93)
<b>Cure Time:</b>	Minimum 2 hrs	@100 Deg F & 90% Humidity
	Maximum 8 hrs	@ 40 Deg F & 20% Humidity
<b>Shelf Life:</b>	(UNOPENED CONTAINERS): 1 Year *** When Stored Between 35°F. and 85° F ***	

## ORDERING INFORMATION:

This product is available in 5-gallon pails (19 liters), and in 55-gallon drums containing 50 gallons (189.3 liters).

## SHIPPING INFORMATION:

Container Size	Class
5 Gal.	55
50 Gal.	55

**D.O.T. Classification:** Roof Coating, Not Regulated  
NFMC #170080

## HMIS® Rating:

Health 2, Flammability 2, Reactivity 0, Protection X  
0= Minimal 1=Slight 2=Moderate 3=Serious 4=Severe  
(\* ) Indicates potential for chronic health effects.



## **APPLICATION PROCEDURES *Silicone Seal 3000***

### **Do Not Thin**

**SURFACE PREPARATION:** All surfaces to be coated must be clean, dry, and paintable. It may be necessary to power wash and/or prime to enhance adhesion. See application specification for more details.

**MIXING PROCEDURES:** **No thinning or reducing is necessary.** Product may separate after shipping and storage, though it may still look mixed. **Mix well before using.** When mixing becomes necessary we recommend the use of a 3/4 horsepower or larger air operated mixer with a blade capable of uniformly mixing the entire container. When product is in 5-gallon pails use a 3" minimum diameter-mixing blade, or hand mixing with a suitable blade is acceptable. When product is in drums, use a 6" minimum diameter-mixing blade.

Containers are packaged with a layer of dry nitrogen gas, to keep latent moisture from prematurely starting the curing process. After opening a container, try to use it up as soon as possible, or reseal with a layer of dry nitrogen gas.

**Caution:** Due To The Combustible Nature Of This Product, Do Not Use An Electric Mixer.

**WEATHER RESTRICTIONS:** It is not recommended that this product be applied at temperatures below 50° F. (10° C.), or if rain is expected within 1 hour of application. Silicone Seal 3000 may be applied at lower temperatures; however the cure time will be extended.

**APPLICATION EQUIPMENT:** This product may be sprayed, brushed, or rolled. Due to the high viscosity of the material, a high-pressure airless paint pump capable of producing a minimum of 3500 PSI at the spray gun head should be used. The pump should have a minimum of 3 gallons per minute output and be fed by a 5:1 transfer pump to prevent cavitation. Always use components rated for pump pressure. Hoses should be BUNA-N jacketed for prevention of moisture contamination. Hoses should have a minimum I.D. of 3/4" and an adequate working pressure. The spray gun should be high pressure (5000 PSI) with reverse-a-clean spray tip, having a minimum orifice of .030 and a 50° fan tip.

**DO NOT USE** hose that has been used for Acrylics because the liner absorbs moisture and initiates the silicone cure process.

**SYSTEM OPTIONS:** This product can be used as a topcoat over polyurethane elastomeric base coats where improved traffic and impact resistant characteristics are required.

**APPLICATION PROCEDURES:** This product may be applied directly to any clean, dry surface. Polyurethane foam should be coated within 24 hours of application.

Subsequent coats should be applied within 24 hours of prior applications to insure full and uniform adhesion. Coating may be applied in 2 or 3 separate applications of contrasting colors, each applied at right angles to the previous coat. Coating must be evenly applied and pinhole-free.

Before applying a subsequent coat of this product the previous coat must be completely dry and cured. If any contamination of a thoroughly cured surface occurs, it must be washed with a chemical cleaner before applying subsequent coats. Coating must be extended beyond the substrate to create a self-terminating flashing. Consult SEC for recommended dry film thickness.

Due to the bond agent present in all coating, colors may be used as either a base or a topcoat. The coating will cure in 2-8 hours, dependent on weather conditions (such as temperature and humidity), after which another coat can be applied. A #11 ceramic roofing granule may be installed in the topcoat to improve aesthetics, traffic resistance and impact resistance.

**RECOATING PROCEDURES:** This product may be used to re-coat existing spray-in-place roofing systems. The surface to receive re-coat must be thoroughly cleaned using power scrubber, pressure washer, chemical cleaners, or air wand. Surface must be completely dry before applying re-coat.

**SAFETY PRECAUTIONS:** This product contains combustible solvents. Keep coating material and cleaning solvents away from all sources of heat, sparks, flame, lighted smoking materials, or any other ignition source. Pumping equipment should be grounded to avoid accidental ignition due to static sparks.

Avoid breathing solvent vapors. Use an appropriate MESA/NIOSH approved respirator when exposure can exceed recommended PEL. This product is not recommended for interior use. Additional care must be taken to prevent roof top HVAC equipment from introducing evaporating solvent into interior areas during application. Building occupants should be warned of spray operations in process.

Installers should exercise caution during spray processes to avoid falls caused by stepping into slippery wet coating. Installers should read and understand all technical and informational literature on this product, including the MSDS, prior to use of the product.

**CLEAN UP:** Cleanup of spray equipment containing uncured material may be accomplished by flushing with VM&P Naphtha or mineral spirits. Silicone Seal 3000 cures by reacting with moisture and should not be left in spray guns, pump equipment and hoses for prolonged periods unless equipment contains moisture lock hoses, fittings and seals. Equipment without these components will transmit sufficient moisture vapor to gradually form cured material on hose walls and at unsealed connections potentially causing an increase in operating pressure and material flow restriction.