



AUGUST 2017

APPLICATION SPECIFICATION

SPECIFICATION FOR SPRAY POLYURETHANE FOAM  
/POLYUREA & SILICONE COATINGS ROOFING SYSTEM

NOTE: This specification is to be used as a guide for the installation of a Sprayed Polyurethane Foam Roofing System and incorporating a protective combination of a Polyurea elastomeric base coat with exceptional toughness and a Silicone top coating with a proven track record of excellent weatherability and warranted system upon successful completion.

PROJECT NAME:

PROJECT ADDRESS:

PROJECT CONTACT:

PROJECT TELEPHONE NUMBER:

CONTRACTOR OF RECORD:

SQUARE FOOTAGE:

NOTE: The Contractor is solely responsible for ordering the correct amounts of products for the proper installation of the specified system. Each project must be approved by Oak Ridge Foam and Coating Systems, Inc. as a single source supplier for eligibility and issuance of a \_\_\_\_\_ Year System's Warranty.

I GENERAL

1.01 Description

- A. The intent of this specification is to outline the procedures for the application of Oak Ridge's Polyurethane Foam and Silicone Roofing System.
- B. The Contractor shall provide all necessary equipment, product and labor necessary to properly install the specified Polyurethane Foam and Silicone Roofing system.
- C. This specification may not outline all procedures for the preparation and finishing of penetrations, drains, flashings, etc. This work, if applicable shall be outlined and documented by the Contractor of Record, submitted and approved by Oak Ridge Foam and Coating Systems, Inc. before work start-up and shall be performed in accordance to industry standards and general guidelines for the installation of Sprayed Polyurethane Foam per Spray Foam Alliance.

1.02 Approved applicator

- A. All specified single source products from Oak Ridge shall be applied by a single, experienced and approved applicator.
- B. The Contractor shall have been doing business under the same company name. The Contractor shall include successful installations of equal size during the past Ten Years.

### 1.03 Quality assurance:

- A. The project applications, (if warranty requested) will require on-site inspections. The cost is not to exceed \_\_\_\_\_ per day and shall include the following:
  - 1 Video history of applications.
  - 2 The Contractor and employees shall be compliant with safety requirements and utilize Personal Protection Equipment or PPE.
  - 3 The Contractor shall be responsible for maintaining Daily Quality Control Reports. These reports shall include site personnel, climatic conditions including wind speed and direction and ambient temperatures taken at intervals during the daily operations, Equipment readings, any experienced problems during the daily operations and in total compliance with the Manufacturer's written and recommended requirements.
  - 4 The Contractor is responsible for obtaining sampling of the installed system in recorded thicknesses of the foam applications and applied mil thickness of the coating applied.
  - 5 The Contractor is responsible for the protection of surfaces not receiving the specified system and for the agreed site staging area so as to limit daily disruption to operations of the facility.
  - 6 In all cases, the Contractor shall be in complete compliance with local, state and federal requirements and codes.

## II PRODUCTS

### 2.01 Spray Foam, Coatings and related materials:

- A. All materials used shall be Manufactured and/or supplied by Oak Ridge Foam and Coating Systems, Inc. and shall meet the following requirements:  
The Contractor of Record shall adhere to the use of applicable primer over an existing substrate as required by Oak Ridge before the installation of Spray Foam Insulation.
  - 1. Spray Foam insulation: is a two-component made up of an A & B, i.e., Isocyanate (A) and a (B) Polyol Resin, 3.0 lb. density, U.L. Class A approval which is properly dispensed through plural component, high temperature, high pressure spray unit and accessory heated hoses and attached spray gun.
  - 2. POLYUREA ELASTOMERIC COATING: is a two-component pure Polyurea made up of an A & B, i.e., Pre-polymerized Isocyanate (A) and and a terminated polyol resin. This fast reactive, moisture insensitive and fast curing plural component coating is certified with Miami-Dade, UL classified as class A approved. This coating is properly dispensed through a High-pressure, High-temperature plural component spray unit and with accessory heated hoses and attached spray gun.
  - 3. Silicone elastomeric coating: is a single component low solids coating properly with excellent weatherability & UV resistance dispensed using a 65 to 1 or higher pressure spray unit and accessory spray gun.

## 2.02 Delivery, handling and storage:

- A. Materials shall be delivered in their original, tightly sealed containers or unopened packages, all clearly labeled with the Manufacturer's name, file number and lot numbers.
- B. Materials shall be stored out of the weather in accordance to Manufacturer's recommendations.
- C. All storage and handling of supplied products shall be in strict compliance with the Owner's directions so as not to interfere with daily operations.
- D. In all cases, the contractor shall be in compliance with site location requirements of the facility so as not to cause disruption to the daily operations of the facility and have pre-approved for site staging area, overspray potential and signage. A complete package shall be made available upon request in an easily accessible location of all products, emergency exit & appropriate telephone numbers in case of emergency.

## 2.03 Warranty:

- A. Upon the successful completion and final inspection of the installed and specified Polyurethane Foam/Polyurea/Silicone Roofing System, required submittals received in accordance to warranty procedures, the Owner shall receive a \_\_\_\_\_ warranty from Oak Ridge Foam and Coating Systems, Inc.

## III INSTALLATION

### 3.01 Surface preparation:

- A. Preparation shall include all requirements as stated by Oak Ridge Foam and Coating Systems, Inc. In all cases, the substrate shall be clean, dry and stable.
- B. Preparation shall include but not limited to the following:
  - 1. All non-functional equipment shall be removed from the existing roof area.
  - 2. All loose gravel, contaminated existing roofing substrate shall be removed and replaced to original. **A moisture survey is required for existing roofing substrates which have noted roof leaks.**
  - 3. Method of cleaning accomplished by mechanical broom, blowing, aqua vacuuming, pressure-washing and air blasting.
  - 4. Depending on the type of substrate, consult with Oak Ridge's technical staff for the proper primer and application rate.
  - 5. Roof stacks, roof penetrations, ridge cap and other related roof mounted equipment and accessories are to be flashed using the Spray Polyurethane foam insulation and in accordance with Oak Ridge's recommendations. The Contractor of Record shall make every effort to eliminate all ponded water areas on the roof's surfaces using the polyurethane foam. Ponding is described as any area greater than 100 sq. ft. and maintaining a depth of greater than ½ inch in depth of water 24 hours after a rainfall.

6. All vertical surfaces to be sealed using Polyurethane Foam shall extend onto the vertical surfaces a minimum of three inches.

### 3.02 Spray foam application:

- A. Install Spray Polyurethane Foam insulation at a minimum thickness of \_\_\_\_\_ inches ± \_\_\_\_\_.
- B. Spray foam applications shall be limited to only that amount of area that can be completed to full specified thickness and base coated the same day. The foam applications shall be probed by the Contractor of Record's employee confirming the specified foam thickness and incorporating for positive slope to drain. Probing of the applied system shall be obtain at random and at pass lines verifying compliance. Information obtained shall be recorded in the Daily reports.
- C. Any defects noted shall be immediately corrected by the Contractor of Record. The polyurethane foam shall be sprayed in a manner so as to achieve a full and proper spray pattern and shall be applied in passes no less than ½ inch in thickness. Core sampling of the applied foam application shall be taken by the Contractor of Record to confirm physicals as stated on the product data.
- D. The completed surfaces shall be free of defects such as foam blisters, craters, voids and blow holes. The foam surface texture shall be smooth to orange peel surface texture.

### 3.03 Coating application:

- A. Apply a base coat of Oak Ridge's Polyurea at a minimum rate of 3 gallons per 100 sq. ft. (48 dry mils). The Contractor of Record shall obtain dry mil readings and immediately repairing those sampled areas. The Contractor shall completely coat all surfaces horizontal and vertical to the specified dry mil thickness. Samplings shall be recorded on the Daily reports.
- B. Apply a Silicone Topcoat in alternate direction at a minimum rate of 1.0 gallons per 100 sq. ft. (11 dry mils). Allow 24 hours to dry.

### 3.04 Restrictions/limitations: this specified system is to be installed only in conjunction with commonly accepted roofing standards but not limited to the following:

- A. No application of materials shall commence during inclement weather or when precipitation is imminent.
- B. No materials are to be applied to wet, dirty or frozen surfaces.
- C. In conjunction with the final inspection, all debris, packaging, containers, materials and equipment are to be properly removed from the jobsite. Grounds are to be cleaned, undamaged or repaired to original and accepted by the Owner's Representative.
- D. NOTE: Reflectivity of applied protective coating may be reduced if roof surfaces are not cleaned on regular basis.