

# ELASTOMERIC COATING SYSTEM FOR BUR AND MODIFIED BITUMEN ROOFS

## PART 1: GENERAL

### 1.01 Description of Work

- A. This specification is for the application of Roof Guardian Technologies (RGT) products and should be used only as a general guide. Additional details and specific areas of repair are to be selected, modified or added, as necessary.

### 1.02 Quality Assurance

- A. *Manufacturer Qualifications:* Manufactured product shall have been commercially available a minimum of ten years.
- B. *Requirements of Regulatory Agencies:* Furnish and apply all roofing materials in accordance with all regulatory agencies and approved building codes.
- C. *Contractor Qualifications:*
  - 1. Contractor shall have business stability and own proper equipment to prepare and apply materials as described herein.
  - 2. Contractor must provide proof of insurance including liability and workers compensation certificates.
  - 3. Contractor must be an approved applicator of RGT or other approved coatings supplier.

### 1.03 Conformance Standards

- A. Underwriters Laboratory (UL), Class A
- B. Factory Mutual (FM) Approval Guide

### 1.04 Submittals

- A. *Product Data:* Technical product data, literature and drawings will be submitted.

### 1.05 Product Storage And Handling

- A. Deliver materials in manufacturer's original unopened containers bearing manufacturer's original label.
- B. Store and handle products in a manner ensuring no possibility of contamination.
- C. Store Materials at a minimum of 50°F prior to use.

### 1.06 Job Condition

- A. Environmental Requirements
  - 1. Do not begin work if rain is expected within 24 hours of application. Do not apply if weather does not permit complete cure prior to rain, fog, or temperatures falling below 50°F.
  - 2. All surfaces to be coated must not pond water. Water that evaporates within 48 hours is not considered ponding.
  - 3. All surfaces shall be clean, dry and structurally sound.

### 1.07 Protection And Coordination

- A. Owner will occupy the premises during the entire period of the roof retrofit. Cooperate with Owner during the construction operations to facilitate continued use of the facility.
- B. Coordinate scheduling with the Owner in order to relocate or protect vehicles, building occupants and building contents from damage during the construction operations.

### 1.08 Warranty

- A. Contact Roof Guardian Technologies for available warranties.

## PART 2: PRODUCTS

### 2.01 General

- A. All coatings system materials must be products of Roof Guardian Technologies, Inc.
  - 1. RG-170 Elastomeric White is a 100% acrylic polymer elastomeric coating OR
  - 2. RG-180 Fibered White Elastomeric Coating

- 3. RG-300 Acrylic Primer
- B. Repair Options
  - 1. RG-110 Flashing Compound is fibered reinforced acrylic cement
  - 2. UT-40 Universal Tape®, a polyester fabric backed, synthetic butyl rubber tape
  - 3. GreatSeal PE-150 Polyether sealant

**2.02 Roof Coating System**

- A. Approved Manufacturer
- B. Approved Coating: RG-170 Elastomeric Roof Coating.
  - Vehicle Base ..... 100% Acrylic Resin
  - Tensile Strength @ 77°F (25°C) 170 p.s.i.
  - Elongation ..... 300% @ 75°F (24°C)
  - ..... 165% @ 0°F (-18°C)
  - Solids by wt ..... 67 ± 2%
  - Solids by vol ..... 52 ± 2%
  - Permeability ..... (ASTM E-96) 5 perms
  - VOC ..... < 50 g/l
- C. Approved Coating: RG-180 Fibered Elastomeric Roof Coating
  - Vehicle Base ..... 100% Acrylic Resin
  - Weight per gallon (approx.) ..... 11.7 lbs.
  - Solids by weight (ASTM 1644) ..... 67.8%
  - Solids by volume ..... 52 ± 2%
  - Recycled content ..... 28.5%
  - Elongation/Tensile @ 73°F ASTM D 2370
  - Initial Elongation ..... 187%
  - Initial tensile Strength ..... 288psi
  - 1000 Hrs. Accelerated Weathering
  - Elongation ..... 112%
  - Permeance ASTM D 1653 A ..... 18.4 perms
  - Dry Time Sets to touch ..... 1 hour
  - Between Coats ..... 24 hrs minimum
  - VOC ..... < 50 g/l
  - Reflectivity ..... 86%
  - Therm. Emit. .... 89%
- D. Approved Primer: RG-300 Acrylic Primer.
  - Vehicle Base .. Rubber Modified Acrylic
  - Tensile Strength @ 77°F (25°C) 130 p.s.i.
  - Elongation ..... 135% @ 75°F (24°C)
  - Solids by wt ..... (ASTM 2369) 51 ± 2%
  - Solids by vol ..... 40 ± 2%
  - VOC ..... < 50 g/l

**PART 3: EXECUTION**

**3.01 Inspection**

- A. The roof surface must be clean, dry, free of ponding water, and structurally sound.
- B. Any discharge of fumes or possible contaminants must be noted. Contact RGT to determine if fumes or matter being exhausted will interfere with adhesion.

**3.02 Surface Preparation**

- A. High-pressure wash the roof with clean water using a minimum 2,000-psi pressure washer to remove dust, dirt, loose coatings, foreign matter, etc.
- B. Probe roof laps and penetrations to identify points of water entry.
- C. Use UT-40 Universal Tape to repair flashings, blisters, splits and “fishmouths”.
- D. Areas around drains and low-lying areas that may exhibit intermittent ponding water can be reinforced with UT-40 Universal Tape.

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- E. Heavily “alligatored” areas can be sealed by reducing Flashing Compound with White Elastomeric Coating to provide a more “brushable” version of the Flashing Compound that will easily fill the “alligatored” profile and provide a much smoother surface. Amount of coating to Flashing Compound ratio will be determined by user. Add small amounts of coating gradually to the Flashing Compound and mix to obtain proper consistency being careful not to get the Flashing Compound viscosity too thin.

### 3.03. Application

#### A. General

1. Inspect preliminary repairs relating to substrate for any additional problem areas to ensure all preparatory work has been completed properly.
2. Inspect the roof prior to applying finish coat to ensure roof is clean and dry before applying finish coat.
3. When applying RG-300, wet mil thickness should be 32 wet mils. Areas of insufficient mil thickness must be re-coated. Apply using airless spray equipment with pressure at approximately 2000 psi, tip size should be .31 to .35 and a hose size between 3/8” and 1/2”. If applying primer with brush or roller, two coats will be necessary to achieve optimum coverage of the primer. Utilize soft brushes or standard medium or coarse nap rollers.
4. Inspect the roof prior to applying finish coat to ensure roof is clean and dry before applying finish coat.

#### B. For a five (5) year warranty:

1. Apply the RG-300 Acrylic Primer at 1.0 gallons per 100 square feet (16 wet mils, 8.0 dry mils)
2. Apply RG-170 Elastomeric White Finish Coating at the rate of 2.0 gallons per 100 sq. ft. (32 wet mils, 16.6 dry mils)

OR

3. Apply RG-300 Acrylic Primer at 1.0 gallons per 100 square feet (16 wet mils, 8.0 dry mils)
4. Apply RG-180 Fibered Elastomeric White Coating at the rate of 1.0 gallons per 100 sq.ft. (16 wet mils, 8.3 dry mils)

#### C. For a ten (10) year warranty:

1. Apply the RG-300 Acrylic Primer at 1.5 gallons per 100 square feet (24 wet mils, 12.5 dry mils) .
2. Apply RG-170 Elastomeric White Finish Coating at the rate of 1.5 gallons per 100 sq. ft. (24 wet mils, 12.5 dry mils)

OR

3. Apply the RG-300 Acrylic Primer at 1.0 gallons per 100 square feet (16 wet mils, 8.0 dry mils).
4. Apply RG-180 Fibered Elastomeric White Coating at the rate of 1.5 gallons per 100 sq.ft. (24 wet mils, 12.5 dry mils)

#### D. Use a wet mil gauge to ensure proper coating requirement.

- E. Apply using airless spray equipment, recommended air pressure of 2,000 at the tip. Tip size of .35 - .45 and hose size 3/4” to 1/2”. If applying with brush or roller, two coats will be necessary to achieve optimum coverage of the primer. Utilize soft brushes or standard medium or coarse nap rollers.

**NOTE: When applying coatings and primers to rough and weathered surfaces, coverage becomes theoretical. Add additional product when surface roughness exceeds what is considered normal. The surface will dictate your actual coverage.**

### 3.04. Job Completion

- A. Inspect completed application and correct any defects.
- B. Manufacturer’s representative may inspect the completed roofing system and notify the Contractor of any defects in the application.
- C. Clean up all debris, excess materials, and equipment and remove from site.
- D. Restrict traffic to only essential personnel. Provide appropriate protection against traffic and construction activities on completed roofs.

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