

ELASTOMERIC COATING SYSTEM FOR CONCRETE

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. A five (5) or ten (10) year material warranty is available when the RGT Elastomeric System (see RG-170 or RG-180 technical data sheet) is properly applied to an approved substrate.

PART 2: PRODUCTS

2.01 General

- A. All coatings system materials must be products of Roof Guardian Technologies, Inc.
 - 1. RG-130 Grey Elastomeric Base is a 100% acrylic polymer elastomeric coating
 - 2. RG-170 White Elastomeric Finish is a 100% acrylic polymer coating utilizing a light gray base coat OR
 - 3. RG-180 Fibered White Elastomeric Coating
- B. Repair Options
 - 1. RG-110 Acrylic Flashing Compound (Refer to data sheet RG-110)
 - 2. UT-40 Universal Tape®, a polyester fabric backed, synthetic butyl rubber adhesive tape.
 - 3. One component polyether sealant such as GreatSeal PE-150.

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%

PART 3: EXECUTION

3.01 Inspection

- A. The roof surface must be clean, dry, free of ponding water, and structurally sound.
- B. Inspect condition of flashing detail adjacent to protrusions, penetrations, curbs, walls, drains and roof edges to ensure that details are acceptable and will maintain a weather-tight installation.
- C. If ventilators exist on the roof surface, determine what (if any) material is being exhausted on to the roof surface prior to coating (Contact RGT to determine if particles or matter being exhausted will interfere with adhesion).
- D. Surface must be high density, troweled smooth and fully cured.

3.02 Preparation of Concrete Surface

- A. Repair spalled concrete.

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- B. Where ponding water conditions exist, corrective measures must be taken to eliminate water build-up prior to coating.
- C. High-pressure wash the surface with clean water using a minimum 2,000-psi pressure washer to remove dust, dirt, loose coatings, foreign matter, etc. Oily and/or grease deposits will require cleaners/degreasers to remove contaminants.
- D. All cracks exceeding 1/16" wide shall be repaired with RG-110 Flashing Compound at a rate of 60 lineal ft./gallon (50 sq.ft./gallon) and feather out the edges. To repair larger cracks and protrusions, use UT-40 Universal Tape.

3.03. **Application**

A. General

RG-130 Gray Elastomeric Base, RG-170 White Elastomeric Finish Coating, and RG-180 Fibered White Elastomeric Coating are ready to be applied directly from the container with minimal stirring.

B. Application Method

Apply coating using airless spray equipment, recommended air pressure of 2,000 at the tip. Tip size of .31 - .35 and hose size 3/4" to 1/2". If applying with soft brush or 3/4" – 1" nap roller

C. Application Rate

1. Apply RG-130 light gray base coat at a rate of 1.5 gallons/100 sq.ft. Allow 24 hours prior to application of finish coat. Inspect roof surface to ensure a mil thickness of 32 wet mils. Areas of insufficient mil thickness should be recoated.

Inspect roof prior to applying RG-170 White Elastomeric finish coat to ensure roof is clean, and for proper adhesion. Apply white finish coat perpendicular to the first coat at a rate of 1.5 gallons/100 sq.ft. (again, check to ensure a mil thickness of 32 wet mils). Allow 24 hours prior to final inspection.

OR

2. Apply RG-180 Fibered White Elastomeric Coating at 2.0 gallons/100 sq.ft.

Note: These application rates are for a five (5) year warranty. For longer warranty periods, see the technical data sheets for RG-170 and RG-180 for appropriate application rates.

D. Clean Up

Keep brushes in a pail of water when not in use. Brushes and other equipment can be cleaned with soap and water while still wet.

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