**SECTION 07 56 00 - FLUID-APPLIED ROOFING**

1. **GENERAL**
   1. SUMMARY
      1. Section Includes: Remedial roof coating system applied over existing metal roof systems.
   2. SUBMITTALS
      1. Action Submittals:
         1. Product Data: Manufacturer’s current technical data sheet for proposed products.
         2. Shop Drawings: Illustrate scope of work; include roofing details.
      2. Informational Submittals:
         1. Sample warranty.
   3. QUALITY ASSURANCE
      1. Manufacturer Qualifications:
         1. Minimum 25 years experience in manufacture of silicone roof coatings.
         2. ISO 9001 certified.
      2. Roof Coating:
         1. UL Listed.
         2. FM Class 1, 4470 approved.
         3. NSF P151 Certified.
      3. Applicator Qualifications:
         1. Approved by roof coating manufacturer.
         2. Eligible to offer manufacturer’s warranty.
   4. DELIVERY, STORAGE AND HANDLING
      1. Handling and Storage:
         1. Store roof coating containers between 15 and 109 degrees F (minus 9 to 43 degrees C).
         2. Store other materials in accordance with manufacturer’s instructions.
         3. Keep products out of direct sunlight.
   5. PROJECT CONDITIONS
      1. Rooftop equipment and accessories in place prior to surface preparation and roof coating application.
      2. Apply roof coatings at temperatures above 0 degrees F (minus 18 degrees C).
      3. Contact manufacturer for recommendations if applying coating to substrates over 120 degrees F (49 degrees C).
   6. WARRANTIES
      1. Provide roof coating manufacturer’s labor and material warranty for period of [10] [15] [20] years.
2. **PRODUCTS**
   1. MANUFACTURERS
      1. Contract Documents are based on products by Momentive Performance Materials, Inc., 260 Hudson River Rd., Waterford, NY 12188, (877) 943-7325, [www.siliconesforbuildings.com](http://www.siliconesforbuildings.com)
      2. Substitutions: [Under provisions of Division 01.] [Not permitted.]
   2. MATERIALS
      1. Silicone Roof Coating:
         1. Source: Enduris 3500 or 3525.
         2. Description: High solids, solvent-free, alkoxy-based, moisture-cured, silicone roof coating by Momentive Performance Materials.
         3. Physical properties, tested to ASTM D6694:
            1. Tensile strength: 200 PSI, tested to ASTM D2370.
            2. Elongation at break 500 percent, tested to ASTM D2370.
            3. Volume solids: Minimum 90 percent, tested to ASTM D2697.
   3. ACCESSORIES
      1. Seam Treatment Materials:
         1. GE Enduris Silicone Seam Sealant by Momentive Performance Materials.
         2. GE UltraSpan UST / USM pre-cured silicone transition sheets and molded corners by Momentive Performance Materials.
         3. Reinforcement fabric: GE RF100 series, 100 percent polyester spun-laced textile reinforcing fabric.
         4. GE SWS Silicone Seam Sealant by Momentive Performance Materials.
3. **EXECUTION**
   1. PREPARATION
      1. Prior to beginning coating, conduct adhesion test in accordance with manufacturer’s adhesion testing procedures; determine if primer or other surface preparation is required.
      2. Mask or otherwise protect surfaces not to be coated.
      3. Review existing and imminent weather conditions including potential for extreme temperatures, relative humidity, frost, dew, and precipitation; ensure that coating and accessory materials will have sufficient curing time.
      4. Surface Preparation:
         1. Inspect underside of deck for rot, rust, and deterioration. Take corrective measures before beginning coating preparations.
         2. Remove water-saturated insulation and replace insulation and roof membrane with similar materials.
         3. Mechanically remove loose and flaking rust.
         4. Seal curbs, gaps, flashings, angle changes, and penetrations with minimum 60 mils of liquid flashing or seam sealant.
         5. When possible remove coping caps and seal walls below with liquid flashing before reinstalling coping cap.
         6. Pressure wash roof surface at 2500 to 4000 PSI utilizing manufacturer’s recommended roof preparation wash or approved biodegradable detergent; remove oils and other materials that could interfere with adhesion. Rinse with clean water. Allow to dry thoroughly.
         7. If gutters and ridge closures do not have foam closures, fill with polyisocyanurate roof insulation or expanding foam. Cut flush and treat with seam sealant.
         8. Treat panel seams over 1/16 inch in width reinforcement fabric or pre-cured transition sheets and liquid flashing.
         9. Fill new pitch pockets with minimum 3 inches of self-leveling silicone sealant or approved equivalent.
         10. Restore existing pitch pockets with liquid flashing.
      5. Required Condition of Surfaces: Clean, sound, dry, and free of materials, laitance, membrane chalk, and loose coatings that could inhibit proper adhesion of coatings or sealants.
   2. APPLICATION
      1. Apply roof coating in accordance with manufacturer’s instructions and approved Shop Drawings.
      2. Apply roof coating at rate of 1.5 gallons per 100 square feet to minimum 21 mils cured coating thickness.

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* + 1. Apply roof coating at rate of 2.0 gallons per 100 square feet to minimum 28 mils cured coating thickness.

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* + 1. Apply roof coating at rate of 2.5 gallons per 100 square feet to minimum 36 mils cured coating thickness.
    2. Apply coating by brush, roller, or airless sprayer. Minimize back-rolling.
    3. Apply seam sealant by brush, trowel, or gloved hand.
    4. Final Roof Coating: Monolithic and seamless, encapsulating entire roof surface.
  1. CLEANING
     1. Clean finished roof surface after completion; ensure that drainage components are not clogged.
  2. PROTECTION
     1. Protect roof coating from foot traffic and damage during curing process.
  3. FIELD QUALITY CONTROL
     1. Roof coating is subject to pre-job, progress, and final inspections by coating manufacturer or its designated third-party inspectors.

END OF SECTION