



SRC Silicone Roofing System

Installation Guide Specification 07560

For Preserving Metal Roofs

Saving Money, Safeguarding the Environment...One Roof at a Time.®

I. GENERAL

1.01 SUMMARY

- A. Provide labor, materials, equipment and supervision necessary to install The SRC Silicone Coating System as outlined in this specification to preserve and extend the service life of metal roofing.
- B. The manufacturer's application instructions for each product used are considered part of these specifications and should be followed at all times.

1.02 SUBMITTALS

- A. Submit product data sheets and literature verifying physical properties of materials.
- B. Submit material safety data sheets.

1.03 QUALITY ASSURANCE

- A. Supplier Qualifications: The SRC Silicone Roofing System for metal roofs, as supplied by National Coatings Corporation, is approved for use on the project.
- B. Applicator Qualifications: The applicator shall be approved by National Coatings Corporation to apply the system. Manufacturer's written verification of applicator approval is required.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Containers and Packaging: Deliver materials in original sealed containers, clearly marked with: manufacturer's logo; full product name; and lot number(s).
- B. Storage: Store materials between 40°F and 100°F with careful handling to prevent damage to products. If conditions exceed these ranges, special consideration in storage must be taken. Do not store at high temperatures in direct sunlight.
- C. Store and dispose of solvent-based materials, and materials used with solvent-based materials, in accordance with requirements of local authorities having jurisdiction.
- D. Protection: Protect all materials from freezing and other damage during transit, handling, storage, and installation.

1.05 PROJECT CONDITIONS

- A. These minimum recommendations for material usage are for ideal conditions. The number of gallons per 100 square feet may need to increase due to uneven application, rough surface texture, wind conditions while spraying and/or other variables.
- B. Wet insulation must be thoroughly evaluated and then addressed with removal or other measures. Consult a National Coatings Technical Consultant regarding the need for moisture surveys and other assessments.

- C. Structural cracks should be referred to the appropriate National Coatings Technical Consultant.
- D. This installation guide specification assumes that the deck is in sound condition, or has been repaired.
- E. Do not apply materials unless surface to receive silicone roofing system is clean, dry and prepared as specified.
- F. Install all material in strict accordance with all published safety, weather, or applicable regulations of the manufacturer and/or local, state, and/or federal agencies which have jurisdiction.
- G. The entire system shall be fully adhered to the surface on which it is applied. Voids left under the system by creating bridges are not acceptable.
- H. Do not proceed with application of coating or sealing materials when temperature is less than 50°F. No coating system shall be applied if weather will not permit it to dry prior to exposure to precipitation or freezing.
- I. Heavy puddles of coating on the roof are not acceptable.
- J. Instructions for use of all roofing materials and application equipment should be read and followed at all times.
- K. As a general principle, to prevent the ponding of water, install additional drains as necessary or install drainage systems with sprayed polyurethane foam (SPF).

1.06 DETAIL WORK

- A. This specification does not extensively outline procedures for preparation and finishing of drains, vents, ducts, flashings, parapet walls, sheet metal work, etc. This work should be outlined by the contractor before work commences, and shall be performed observing good trade practices.

II. PRODUCTS

2.01 SRC SILICONE ROOFING SYSTEM

- A. The roofing system is the SRC Silicone Roofing System Provided by National Coatings Corporation.
 - B. Physical Properties of Cured Roofing System:
 1. The roofing system shall have good resistance to ponding water.
 2. The roofing system shall contain no plasticizers.
 3. The roofing system shall contain no migrating fire retardants.
 4. The roofing system shall have a Class A fire rating on a noncombustible deck when tested according to the procedures outlined in ASTM E-108.

5. The roofing system shall also meet the following physical property requirements:

Property	ASTM Method	Results
Tensile Strength, psi (Max @ 73°F)	D-412	Minimum 247
% Elongation @ Break (73°F)	D-412	Minimum 237
Weathering/UV Resistance:	D-6694	No degradation - 5000 hrs
Permeance, perms	E-96	10.7
Volume Solids %	D-2369	92+/-3
Weight Solids %		92+/-3

C. The reinforcing fabric shall be Tietex T272 or an equivalent that meets the following physical property requirements:

Properties	Test Method	Average Value
		T272
Weight (per sq. yard)	Calculated by formula	3 ounces
Bursting Strength (lbs)	ASTM D3786	177
Tensile Strength (psi)	ASTM D1682	57.1
Tear Strength (lbs)	ASTM D1117	16.1
Elongation (%)	ASTM D1682	62
Conformability		Excellent
Ease of Saturation		Excellent

2.02 RELATED MATERIALS

A. Flashing, adhesives, thinners, elastomeric caulking compounds, primers, and similar materials shall be approved by the manufacturer of the coatings. All materials used shall be applied in accordance with its manufacturer's recommendations.

2.03 EQUIPMENT

A. For recommended spray equipment guidelines, please refer to National Coatings Technical Paper "TP-117 Silicone Coatings Spray Guide", or consult the spray equipment manufacturer directly.

III. EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's product data, including product technical bulletins and product guide specification instructions.

3.02 EXAMINATION

A. Inspect surfaces which will receive the SRC Silicone Roofing System to make sure they are clean, smooth, sound, properly prepared, and free of moisture, dirt, debris, or other contamination.

B. Verify that all roof penetrations, mechanical equipment, cants, edge metal, and other on-roof items are in place and secure.

- C. Verify that all critical areas around the immediate vicinity of the spray area are suitably protected.
- D. Verify all roof drains are clean and in working order.
- E. Verify that all air conditioning and air intake vents are suitably protected or closed.
- F. When properly applied, SRC silicones from National Coatings are not affected by ponding water. However, the National Roofing Contractors Association (NRCA) considers ponding water objectionable due to structural and health concerns. The NRCA recommends that all roof assemblies have positive drainage. NCC strongly recommends following established NRCA guidelines.

3.03 PREPARATION

- A. The entire surface must be clean, sound, dry and free of any contaminants that would interfere with proper adhesion of the coating. All loose paint and loose rust must be removed prior to the application of coating or sealant. Achievement of this condition may require the use of INDUSTRIAL CLEANER, scraping, wire brushing, power brooming, vacuuming, sweepblasting, sandblasting or other means, and shall always be performed observing responsible trade practices.
- B. Spot prime rusty areas with RUSTSHIELD A120.
- C. Metal that has corroded to the point of being weak or broken must be replaced.
- D. Any new metal must be clean and oil-free. Prime ferrous metal with RUSTSHIELD A120 at the rate of 1 gallon per 200 square feet.
- E. Tighten or replace all fasteners where necessary. In no case shall joints or seams be allowed to separate greater than 1/16 inch.
- G. Seal all joints and seams with BUTYL SEAM TAPE. Seal all nails and fasteners with BUTYL CAPS.
- H. All detail areas unable to be sealed with BUTYL SEAM TAPE or BUTYL CAPS must be sealed with **Flashing Grade Silicone Sealant** using the method described below.

FLASHING GRADE SILICONE SEALANT SEALING METHOD

- I. Seal all joints and seams with Flashing Grade Silicone Sealant extending the sealant at least 2” beyond joints and seams in each direction. Seal all nails and fasteners with Flashing Grade Silicone Sealant. After application of the Flashing Grade Silicone Sealant, immediately embed 4 inch, 6 inch or 10 inch T272 polyester reinforcing fabric into the wet Flashing Grade Silicone Sealant. T272 mesh width shall extend beyond the detail by at least 2 inches. Work the Flashing Grade Silicone Sealant into the mesh to cause good saturation of the fabric. After drying, apply SRC roof coating to those areas at the rate of at least 1.5 gallons per 100 square feet. The edges of the reinforcing fabric shall be well sealed. Overlap the edges by at least 2 inches with the SRC roof coating.
- J. Allow all coating to dry thoroughly, (normally 6 to 24 hours), before further application of the system.

3.04 APPLICATION

- A. After thorough preparation as necessary, the entire roof shall receive the SRC Silicone Roofing System consisting of silicone coating in one or two passes over entire roof surface to achieve a final thickness of:

22 mils (1.5 gallons per square) minimum for a 10 year warranty

30 mils (2.0 gallons per square) minimum for a 15 year warranty

38 mils (2.5 gallons per square) minimum for a 20 year warranty

- B. All coating edges shall be cut in evenly in a uniform manner so as to provide an aesthetically pleasing appearance.

3.05 FIELD QUALITY REQUIREMENTS

- A. In case of manufacturer's labor and material warranty - Manufacturer's Field Services: Inspection by the coating manufacturer's representative shall be made to verify the proper installation of the system. Any areas that do not meet the minimum standards for application as specified herein shall be corrected at the contractor's expense. Manufacturer's inspection or verification shall not constitute acceptance of responsibility for any improper application of material.

3.06 CLEANING

- A. Surfaces not intended to receive the SRC Silicone Roofing System shall be protected during the application of the system. Should this protection not be effective, or not be provided, the respective surfaces shall be restored to their proper conditions by cleaning, repairing or replacing. All debris from completion of work shall be completely removed from the project site.

IV. MATERIALS

The following materials listed in these recommendations are available from National Coatings Corporation:

1. SRC 740 or SRC 750 high solids silicone roof coating
2. RUSTSHIELD A120 water-based, rust-inhibitive primer
3. Flashing Grade Silicone Sealant
4. BUTYL CAPS polyester-reinforced roof fastener seals
5. BUTYL SEAM TAPE polyester-reinforced waterproofing tape
6. T272 polyester reinforcing fabric, 6-inch, 10-inch, 20-inch and 40-inch
7. INDUSTRIAL CLEANER water-based, biodegradable cleaner

The suggestions and data in this specification are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and methods of use are beyond our control. The prospective user should determine the suitability of our materials and installation recommendations before adopting them for commercial use.



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