

TopCoat® Restoration Specification One-Step System

Information Sheet



*Quality You Can Trust Since 1886...
From North America's Largest Roofing Manufacturer™*

TOPCOAT® RESTORATION SPECIFICATIONS ONE-STEP SYSTEM

Part 1 – General

1.01 RELATED SECTIONS/DOCUMENTS

Site specific drawings and General Provisions of the contract, including General, Supplementary, and Special Conditions found in TOPCOAT® Division 7 Specification Sections, apply to the work addressed in this section.

1.02 SYSTEM DESCRIPTION

Extent of TOPCOAT® ONE-STEP work is indicated on the drawings and is further defined by provisions of this section. ONE-STEP is a fast drying, durable, high-gloss priming treatment and rust inhibitor. Areas to be treated with TOPCOAT® ONE-STEP are as indicated on drawings. Only a member of GAFMC's Contractor Services Department may make a final determination of the fitness of TOPCOAT® ONE-STEP for any given metal roof.

1.03 SUBMITTALS

Submit copy of GAFMC'S technical product data sheets and installation instructions.

1.04 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Provide primary products, including TOPCOAT® ONE-STEP, by a single manufacturer, which has produced this type of product successfully for not less than seventeen years. Provide secondary products only as approved for use with the specified TOPCOAT® ONE-STEP rust inhibitor.
- B. Installer Qualifications: A single Installer or Firm ("Installer") shall perform all work addressed in this section, and shall be certified by for installation of the Roofing System (which includes ONE-STEP).
- C. Installer Authorization: Installer shall possess written notice of authorization from manufacturer, which certifies it is approved for installation of the Roofing System (which includes ONE-STEP).

1.05 INSURANCE CERTIFICATES

Assist owner in preparation and submittal of roof installation acceptance certification as may be necessary in connection with extended coverage insurance on roofing and associated work.

1.06 PRE-INSTALLATION MEETING

Approximately two weeks prior to scheduled commencement of TOPCOAT® ONE-STEP installation, conduct meeting at the project site with Installer, Architect/Owner, GAFMC representative and any other persons directly concerned with the performance of the work. The Installer shall record conference discussions to include decisions and agreements reached (or disagreements), and furnish copies of recorded discussions to each attending party. The main purpose of this meeting is to review foreseeable methods and procedures related to TOPCOAT® ONE-STEP application, including but not necessarily limited to the following:

- A. Tour representative areas of roofing substrates to inspect and discuss conditions of substrate and other preparatory work to be performed.
- B. Review TOPCOAT® ONE-STEP installation requirements (specifications and other contract documents).
- C. Review required submittals, both completed and yet to be completed.

- D. Review and finalize installation schedule related to roofing work, and verify availability of materials, Installer's personnel, equipment, and facilities needed to consistently make progress and avoid delays.
- E. Review required inspection(s), testing, certifications, and material usage accounting procedures.
- F. Review weather and forecasted weather conditions, as well as procedures for coping with unfavorable conditions.

1.07 DELIVERY, STORAGE AND PROTECTION

Store and handle TOPCOAT® ONE-STEP materials in a manner that shall ensure there is no possibility of contamination. Store in a dry, well-ventilated, weather tight place at temperatures between 50°F and 80°F until product is ready to be applied. Do not allow product to freeze. Do not stack material pallets more than two high. Please note that all TOPCOAT® ONE-STEP water-based products are packaged in plastic containers.

1.08 ENVIRONMENTAL CONDITIONS

Proceed with TOPCOAT® ONE-STEP application only when existing and forecasted weather conditions will permit work to be performed in accordance with recommendations as follows:

- A. Do not begin work if rain is expected within twenty-four hours of application, or if temperatures are expected to fall below 42°F during the duration of the job.
- B. High end temperature restriction (both air and substrate) for application of TOPCOAT® ONE-STEP is 120°F. If substrate temperatures exceed 120°F, the TOPCOAT® ONE-STEP should be applied during cooler periods of the day.
- C. Other weather and environmental conditions to consider are: mist, dew, condensation, and relative humidity. These factors can affect TOPCOAT® ONE-STEP drying times.

1.09 EXISTING CONDITIONS

If any questions arise regarding the compatibility of TOPCOAT® ONE-STEP with an existing substrate, installer shall prepare test patches to check adhesion (addressed in Part 3 of this specification). Always contact GAFMC's Contractor Services Department concerning questionable substrates, required additional information and recommended test patch procedures. Also, the following conditions apply for TOPCOAT® ONE-STEP application:

- A. TOPCOAT® ONE-STEP shall be applied only over rusted metal panels. Do not apply over asphalt, aluminized asphalt, asphalt emulsion, or any previous sealants.
- B. The metal roof must have a minimum slope of 1/2":12".
- C. **Substrate shall not pond water for a period longer than 48 hours. Surface shall be free of ponding water, ice, and snow prior to application of ONE-STEP.**

1.10 WARRANTY

Provide GAFMC/TOPCOAT® ONE-STEP 10-Year Limited Product Warranty per the requirement of the Building Owner and/or Project Architect. In order to be covered by any Warranty, the following conditions apply:

- A. Determination of the appropriateness of the Roofing System for any given metal roof must be obtained from GAFMC's Contractor Services Department prior to offering any warranted installation. GAFMC will refuse to offer a warranty on any product being installed over an unfit, unsound, or inappropriate substrate.
- B. Installer must be a Certified Contractor.
- C. TOPCOAT® ONE-STEP must be spray applied. Any installation where TOPCOAT® ONE-STEP will be applied by another method must be pre-approved by GAFMC's Guarantee Services Department.
- D. Gutters and roof areas which pond water for more than 48 hours are not included under warranties.

See warranty and guarantee for complete coverage and restrictions.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

GAF Materials Corporation

2.02 MATERIALS - GENERAL

Listed drying time for TOPCOAT® ONE-STEP is directly affected by environmental conditions and thickness of application. Allow additional drying time when experiencing high relative humidity, low temperatures, and/or thick product application.

A. TOPCOAT® ONE-STEP and Rust Inhibitor

TOPCOAT® ONE-STEP is a hard, fast drying, durable, high gloss, water-based roof coating which does not require a primer for application over sound rusty metal. It is VOC compliant and non-flammable, yet offers corrosion protection and chemical resistance comparable with solvent-based products. ONE-STEP is available in standard light gray and white, as well as other standard and custom colors. Apply only at temperatures between 42°F and 120°F. Do not apply over surfaces that experience ponding water or contain asphaltic materials, oils or fluoropolymer finishes.

Application Rate:	2 coats at 0.75 gallons/100 sq.ft. per coat
Application Method:	Airless sprayer
Application Temp (air, surface):	42° - 120°F
Drying Time (75°F, 50% RH):	Tack-free in 2 - 3 hours
Wet Mil Thickness:	(1.0 Gallon/100SF) - 16 wet mils
Dry Mil Thickness:	(1.0 Gallon/100SF) - 6 dry mils
Total Solids (by weight):	49% ± 2%
Total Solids (by volume):	40% ± 2%
Specific Gravity:	1.23 ± 0.1
Weight per Gallon:	10.2 ± 0.5 lbs
Salt Spray Resistance:	ASTM 8117 - 300 hours (Pass)
Weatherability:	ASTM G-26 - 1,500 hours (Pass)
	No cracking, blistering or adhesion loss
Viscosity (75°F):	5,000 ± 500 cps
Clean-up:	Water before curing

B. Airless Sprayer and Accessories

As recommended by GAFMC's Contractor Services Department for application of TOPCOAT® ONE-STEP.

PART 3 - EXECUTION

3.01 PREPARATION OF SUBSTRATE

- A. Examine substrate to receive TOPCOAT® ONE-STEP. Do not proceed with application of TOPCOAT® ONE-STEP until unsatisfactory conditions have been corrected in a manner acceptable to the manufacturer.
- B. Verify that metal substrate is sound and not perforated by rust. Completely remove all heavy flaking rust, loose scale, or deteriorated ONE-STEP by scraping or wire brushing.
- C. Rusty metal substrate must be pressure washed with water. A minimum working pressure of 3,000 psi shall be used to remove all dirt, dust, and previous paints which are delaminating waste products (oil, oil-based roof cements, solvents, grease, animal fats, etc.). Roto-spray tip is recommended to expedite metal panel cleaning.

- D. Preparation of Test Patches: Installer shall prepare no less than three test patches for all questionable roof substrates to verify adhesion of TOPCOAT® ONE-STEP. Minimum test patch size shall be one square foot. After the test patches have been applied, allow at least 7 days of drying time before checking adhesion. Check adhesion by slicing an “X” (approx. 6” in size) near the center of the test patch. Then try to remove the TOPCOAT® ONE-STEP material at the center of the “X” with a spatula. Test patches shall be labeled and photographed to document adhesion test results. Installer shall consult with GAFMC’s Contractor Services Department concerning all adhesion test results.

3.02 APPLICATION

- A. For severely rusted areas, first apply TOPCOAT® ONE-STEP by brush or roller into pitted areas, crevices and sharp edges to completely seal the rust prior to spray application of TOPCOAT® ONE-STEP. Allow this pre-treatment to dry for at least 2 - 3 hours or until it is dry to the touch.
- B. Spray apply base coat of light gray TOPCOAT® ONE-STEP at the rate of 0.75 gallon per 100 square feet (13 wet mils). Allow at least 2 - 3 hours drying time and inspect the base coat for defects, flaws, or holidays. Correct any unsatisfactory conditions prior to proceeding.
- C. Spray apply finish coat of light gray TOPCOAT® ONE-STEP at the rate of 0.75 gallon per 100 square feet (13 wet mils).
- D. After 24 hours has elapsed, inspect the final roof surface for flaws, holidays, insufficient thickness, etc. Specified TOPCOAT® ONE-STEP thickness is approximately 10 dry mils. All unsatisfactory areas must be repaired.

3.03 OTHER ITEMS

Installer shall take special care when moving spray hoses and other equipment on the roof so that previous application work is not damaged. All sprayer equipment shall remain on the ground for the duration of the job.

For application questions, please contact GAFMC Contractor Services at 1-800-766-3411.

Note: Repair leaks promptly to avoid adverse effects, including mold growth.

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