

UNIFLEX 500 ALUMINUM COATING SYSTEM FOR METAL ROOFS

PART 1: GENERAL

1.01 Description of Work

- A. This specification is for the application of UNIFLEX®
 ® 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.
- B. The coating system is designed to restore and protect Metal roofs from further degradation and extend the useful life of the roof.
- C. Additional details and specific areas of repair are to be selected, modified, or added as necessary

1.02 Quality Assurance

- A. Manufacturer Qualifications: Manufacturer shall have been in the roof coating business a minimum of 20 years. Manufacturer must be ISO 9001:2008 Certified.
- B. Requirements of Regulatory Agencies: Furnish and apply all roofing materials in accordance with all regulatory agencies and approved building codes.
- C. Contractor Qualifications:
 - Contractor shall have business stability and own proper equipment to prepare and apply materials as described herein.
 - Contractor must provide proof of insurance including liability and workers' compensation certificates.
 - Contractor must be an approved UNIFLEX®
 Applicator for the specific project and Warranty
 Requirements. Systems warranties available only
 to UNIFLEX® Authorized Premier or Premier Elite
 Contractors.

1.03 Conformance Standards

- A. Underwriters Laboratory (UL), Class A
- B. FM Global approved

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

- Do not begin work if rain is expected within 24 hours of application. Do not apply if weather does not permit 4-6 hours dry time prior to rain, fog or temperatures below 50°F..
- B. All surfaces to be coated must not pond water (water that evaporates within 48 hours is not considered a pond) and must 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. Coordinate with Owner during 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 construction operations.

1.08 Warranty

 A. Contact your UNIFLEX® Representative to discuss roof system warranty options.

PART 2: PRODUCTS

2.01 General

- A. All materials must be products of UNIFLEX® Fluid Applied Roofing Systems.
 - 1. UNIFLEX® 500 Aluminum Roof Coating meets the composition requirements of ASTM D-2824-85 Type III.
 - UNIFLEX® 300 Aluminum Roof Coating is a cost effective alternative to Uniflex® 500 Aluminum. (Refer to product data sheet 20-480).
 - 3. UNIFLEX® Red Zinc Primer must be applied to all areas where existing heavy rust was cleaned after power washing and/or wire brushing. (Refer to data sheet 34-520).

B. Repair Options

- UNIFLEX® Seam Tape, a polyester fabric backed modified butyl rubber adhesive tape. (Refer to data sheet 20-806).
- 2. UNIFLEX® White Elastomeric is a 100% acrylic elastomeric coating (refer to data sheet 41-300).
- UNIFLEX® Acrylic Patching Cement (refer to product data sheet 41-220).



UNIFLEX 500 ALUMINUM COATING SYSTEM FOR METAL ROOFS

PART 2: PRODUCTS

2.02 Roof Coating System

- A. Approved Manufacturer
- B. Approved Coating: UNIFLEX® 500 Aluminum Roof Coating

PART 3: EXECUTION

3.01 Inspection

- A. General Requirements: Inspect roof surface prior to application. Surface must be:
 - 1. Clean, dry and structurally sound.
 - 2. Free of ponding water.
- B. Contaminants
 - 1. Any discharge of fumes or possible contaminants must be noted.
 - Contact UNIFLEX® to determine if fumes or matter being exhausted will interfere with adhesion.

Note: Slope of roof area must not be less than $\frac{1}{4}$ " per foot.

3.02 Surface Preparation

Note: If a <u>leakproof</u> system is being installed, all of the following procedures are <u>mandatory</u>. Otherwise, as needed.

- A. High pressure wash utilizing a 2,000 psi pressure washer to remove all dust, dirt, loose rust and/or coatings, foreign matter, etc. **Note:** New metal must be allowed to weather a minimum of six (6) months due to residual oils on the surface resulting from the manufacturing process. If necessary to coat sooner, use an industrial cleaner/degreaser such as Simple Green®.
- B. All areas where heavy rust exists must be primed with UNIFLEX® Red Zinc Primer.
- C. Replace loose or missing fasteners with oversize "Repair Type" fasteners.
- D. End laps (horizontal seams) must be sealed with Seam Tape. **Note:** Install 6" Seam Tape when fasteners are within 1" of end lap. Center tape to include sealing fasteners. Tape can be molded around fastener with fingers or by pushing slightly with a ratchet drive socket or similar tool. When fasteners are a minimum of 1 ½" from end lap, install 4" Seam Tape. Align tape below fastener line *do not* seal fasteners.

- E. Side laps (vertical seams) must be sealed with 2" Seam Tape. Specific circumstances may not require seam tape on vertical seams. Contact your UNIFLEX® Representative for prior approval. Note: It is not necessary to seal vertical seams on standing seam roofs.
- F. Ridge vents must be sealed with 6" Seam Tape.
- G. Formed ridge caps must have seams sealed both horizontally with 4" or 6" Seam Tape and vertically with 2" Seam Tape.
- H. Flat ridge caps must have closures in place, or replaced, if originally installed. Other voids can be filled with foam closures, sprayed-in-place polyurethane foam, or other materials to provide a solid backing prior to sealing with 6" Seam Tape.
- I. All penetrations including curbs, stacks, vents and pipes must be sealed with Seam Tape.
- J. Skylights must be sealed around perimeter with 4" or 6" Seam Tape.
- K. Rake flashings must be sealed with 4" or 6" Seam Tape.
- L. Wall flashings must be sealed with 4" or 6" Seam Tape.
- M. Apply Acrylic Patching Cement to the metal closures on a standing seam roof.
- N. Tighten or re-secure all terminations and assure all termination bars and reglets are properly sealed using the appropriate UNIFLEX Roofing Sealant.

Note: All Seam Tape installations <u>must</u> be coated with either 41-320 Gray or 41-300 White Elastomeric Coating as soon as possible after installation to ensure a highly elastic watertight seal and prevent the polyester facing from becoming damaged.

3.03 Application

- A. General
 - Inspect preliminary work relating to substrate for problem areas to ensure all preparatory work has been properly completed.
- B. Application Method
 - 1. Apply using airless spray equipment (recommended air pressure of 2,800 psi at the tip).
 - a. Spray Tip: Reversible, self-cleaning tip without diffuser pin. Size .045 - .055 with a fan angle of 60° (ex: 645-655).
 - b. Hose Size: At 300' total hose length, use 250' of $^3\!\!4$ " \to 50' of $^1\!\!2$ " \to 10' swivel whip end $^1\!\!4$ " hose.
 - c. General: The longer the hose, the smaller the tip orifice size.
 - Soft brushes or a ¾"-1" nap roller may be used. (Roller application may be difficult because of irregular surfaces and may also require two applications to obtain required thickness.)



UNIFLEX 500 ALUMINUM COATING SYSTEM FOR METAL ROOFS

PART 3: EXECUTION
Coating must be thoroughly mixed before and
during application. 4. Allow a minimum of 24 hours between coats to cure prior to recoating.
C. Application Rate*
Apply Aluminum Roof Coating at a rate of 2.0 gallons/100 sq. ft. (32 wet mils)
Areas of insufficient mil thickness should be recoated.
*IMPORTANT: Allow for additional surface area by multiplying total square feet by 1.15. This figure factors for corrugated and irregular metal surfaces.
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.3.01 Inspection