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:
   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 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
C. Miami-Dade
D. FBC – Florida Building Code
E. California Title 24
F. NSF P151

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 4-6 hours dry time prior to rain, fog or temperatures below 50°F.
   2. All surfaces to be coated must not pond water (water that evaporates within 48 hours is not considered a pond) and 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® Elastomeric Coating is a 100% acrylic polymer coating utilizing a gray Elastomeric and white Elastomeric finish coat. (Refer to data sheet 41-300 and 41-320).
   2. UNIFLEX® Rust Inhibitive Metal Primer must be applied to all areas where existing rust was cleaned after power washing and/or wire brushing. (Refer to data sheet 34-520).
   3. UNIFLEX® Acrylic Rust Inhibitive Primer is a corrosion resistant primer for metal roofs. (Refer to data sheet 36-520).
   4. UNIFLEX MB Base Coat must be applied to existing asphalt repairs and Fibered Aluminum Coatings (refer to data sheets 41-510/41-512). This product in white is also recommended as a finish coat in ponding areas to allow for additional protection.
**PART 2: PRODUCTS**

**B. Repair Options**

1. UNIFLEX® Seam Tape, a polyester fabric backed, modified butyl rubber adhesive tape. (Refer to data sheet 20-806).
2. UNIFLEX® Acrylic Patching Cement (refer to product data sheet 41-220) reinforced with Polyester Fabric (refer to product data sheet 20-385).
3. UNIFLEX® Slope Builder is designed to build up low lying roof areas to eliminate water ponding. (Refer to data sheet OSLPBD)

**2.02 Roof Coating System**

**A. Approved Manufacturer**

**B. Approved Coating:** UNIFLEX Elastomeric Roof Coating

**Vehicle Base**

- Elongation/Tensile @ 77°F
  - Initial Elongation: 180%
  - Tensile Strength: 240 psi
  - 1000 Hrs. Xenon Arc: 130%@73°F
- Solids by weight: 67 ± 2%
- Solids by volume: 52 ± 2%
- Permeance (ASTM D1653): 4 perms
- Initial Solar Reflectance: 0.86
- Initial Thermal Emittance: 0.91
- SRI: 108

**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.
2. Contact Uniflex® to determine if fumes or matter being exhausted will interfere with adhesion. **NOTE:** Slope of roof area must not be less than 1/4" per foot.

**C. Kynar™ and Pre-Finished Metal**

Adhesion test are recommended for factory finished metal roofs. Consult your UNIFLEX® Representative for testing procedures.

**3.02 Surface Preparation**

**A. Note:** If a leakproof system is being installed, all of the following procedures are **mandatory. Otherwise, as needed.** 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® to remove oil residue.

**B. Prime all rusted areas with UNIFLEX® Rust Inhibitive Metal Primer or UNIFLEX® Acrylic Rust Inhibitive Primer. Kynar® and Pre-Finished Metal:** Once adhesion test has been conducted and accepted by Uniflex®, Apply UNIFLEX® Acrylic Primer at a rate of 200 sq.ft./gal.

**C. Replace loose or missing fasteners with oversized “Repair Type” fasteners.**

**D. Repair Options:**

1. **3 – Course Method:** Acrylic Patch and Polyester Fabric.
   a. **6” Polyester Fabric:** Apply Uniflex® Acrylic Patching Cement at a total rate of 25 sq.ft./gallon (30 lineal ft/gallon at 8”-10” wide). Apply a layer of Acrylic Patch Cement at a rate of 60 lf/gallon. Be sure to extend the Acrylic Patch Cement a minimum of 1 1/2” beyond the width of the fabric on each side. Embed Polyester Fabric into wet cement, smoothing fabric carefully without stretching. Apply a second layer of UNIFLEX® Acrylic Patching Cement at a rate of 60 lf/gallon, completely covering fabric ensuring all edges are firmly embedded.
   b. **12” Polyester Fabric:** Apply Uniflex® Acrylic Patching Cement at a total rate of 25 sq.ft./gallon (16 lineal ft/gallon at 14” - 16” wide). Apply a layer of Acrylic Patch Cement at a rate of 32 lf/gallon. Be sure to extend the Acrylic Patch Cement a minimum of 1 1/2” beyond the width of the fabric on each side. Embed Polyester Fabric into wet cement, smoothing fabric carefully without stretching. Apply a second layer of UNIFLEX® Acrylic Patching cement at a rate of 32 lf/gallon, completely covering fabric ensuring all edges are firmly embedded.
   2. Install 2”, 4”, 6” or 8” Seam Tape. At time of installation, apply a thin coat of UNIFLEX® Elastomeric to all Seam Tape at a rate of 1 gal/100 sq. ft.
## PART 3: EXECUTION

### E. End laps (horizontal seams) must be sealed with Seam Tape or Uniflex® 3-Course Method using Acrylic patch and Polyester Fabric. **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, by pushing slightly with a ratchet drive socket or similar tool, or by cutting the tape to allow it to form around fastener. When fasteners are a minimum of 1 ½" from end lap, install 4" Seam Tape. Align tape below fastener line – do not seal fasteners.

### F. 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.

### G. Ridge vents must be sealed with 6" Seam Tape or 3 – Course Method using UNIFLEX® Acrylic Patch embedding Polyester Fabric.

### H. Formed ridge caps must have seams sealed both horizontally with 4" or 6" Seam Tape and vertically with 2" Seam Tape or 3 – Course Method using Uniflex® Acrylic Patch embedding Polyester Fabric.

### I. Flat ridge caps must have closures in place, or replaced, if originally installed. Open 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 or 3 – Course Method using UNIFLEX® Acrylic Patch embedding Polyester Fabric.

### J. All penetrations including curbs, stacks, vents, and pipes must be sealed with Seam Tape or 3 – Course Method using UNIFLEX Acrylic Patch embedding Polyester Fabric.

### K. Skylights must be sealed around perimeter with 4" or 6" Seam Tape or 3 – Course Method using UNIFLEX® Acrylic Patch embedding Polyester Fabric.

### L. Rake flashings must be sealed with 4" or 6" Seam Tape or 3 – Course Method using UNIFLEX® Acrylic Patch embedding Polyester Fabric.

### M. Wall flashings must be sealed with 4" or 6" Seam Tape or 3 – Course Method using UNIFLEX® Acrylic Patch embedding Polyester Fabric.

### N. Apply Acrylic Patch Cement to the metal closures on a standing seam roof.

### O. Tighten or re-secure all terminations and assure all termination bars and reglets are properly sealed using the appropriate UNIFLEX Roofing Sealant.

### P. Apply UNIFLEX MB Base Coat to all existing asphalt at a rate of 1 gallon/100 sq.ft. (16 wet mils).

### Q. Apply UNIFLEX® Slope Builder to build up low lying areas to eliminate ponding water.

### 3.03 Application

**A. General**
- Inspect preliminary work relating to substrate for problem areas to ensure all preparatory work is completed properly.

**B. Application Method**
- 1. Apply using airless spray equipment (recommended air pressure of 2,800 psi at the tip).
   - b. Hose Size: At 300' total hose length, use 250' of ¾" → 50' of ½" → 10' swivel whip end ½" hose.
   - c. General: The longer the hose, the smaller the tip orifice size.
- 2. Soft brushes or a ½" nap roller may be used. May require multiple coats to achieve proper coverage rates.
- 3. Allow a minimum of 24 hours between coats to cure prior to recoating.

**C. Application Rate**
- 1. 10 Year Warranty: Apply Gray Elastomeric parallel to the to the ribs at the rate of 1 gallon/100 sq. ft. (16 wet mils). Allow 24 hours prior to application of finish coat. **Existing Fibered Aluminum Coated Roofs:** Substitute Gray Elastomeric with UNIFLEX MB Base Coat, White or Gray at a rate of 1 gal/100 sq.ft. (16 wet mils).
- 2. Inspect base coat prior to applying finish coat to ensure proper adhesion and that surface is clean. Apply Premium White Elastomeric finish coat parallel to the ribs at a rate of 1.5 gallons/100 sq. ft. (24 wet mils). Allow 24 hours prior to final inspection.
- 3. 15 Year Warranty: Apply a third coat of the UNIFLEX® Premium Elastomeric at a rate of 1 gal/sq. square.

**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.**  

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