PART 1: GENERAL

1.01 Description of Work
- A. This specification is for the application of UNIFLEX® Reinforced Fluid Applied Coating Systems installed over existing Smooth Built-up, Modified Bitumen (smooth or granule), EPDM (non ballasted), Hypalon, TPO, PVC and concrete roofing systems. This specification is for the application of UNIFLEX® Reinforced Fluid Applied Coating Systems 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.

1.02 Quality Assurance
- A. Manufacturer Qualifications: Manufacturer shall have been in the roof coating business a minimum of ten (10) years.
- 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 meet the Approval Status Level required for the specified project and warranty requested. 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 complete cure prior to rain, fog or temperatures falling below 50°F.
  2. All surfaces to be coated must not pond water. Water that evaporates within 48 hours is not considered a pond.
  3. All surfaces shall be clean, dry and structurally sound.
- B. Protection and Coordination
  1. Owner will occupy the premises during the entire project. Cooperate with Owner during construction operations to promote continued use of the facility.
  2. Coordinate scheduling with the Owner in order to relocate or protect vehicles, building occupants, and building contents from damage during construction operations.

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

PART 2: PRODUCTS

2.01 General
- A. All coating systems must be products of UNIFLEX® Fluid Applied Roofing Systems.
  1. UNIFLEX® White Elastomeric is a 100% acrylic polymer elastomeric coating (refer to data sheet 41-300).
  2. UNIFLEX® Gray Elastomeric is 100% acrylic polymer elastomeric coating (refer to data sheet 41-320).
  3. UNIFLEX® MB Base Coat is designed as a base coat to be used on Asphalt Surfaces (refer to data sheet 41-510).
  4. UNIFLEX® SPE Gray Acrylic Base Coat is formulated from a unique cross-linking acrylic polymer for enhanced adhesion to single-ply roofs (refer to product data sheet 41-321).
  5. UNIFLEX® Seam Tape is a polyester faced, modified butyl rubber adhesive tape (refer to data sheet 20-806).
  6. UNIFLEX® Acrylic Patching Cement is a fibered reinforced acrylic cement (refer to data sheet 41-220).
  7. UNIFLEX® Polyester Fabric is a stitch bonded polyester fabric (refer to data sheet 20-385).
2.02 Roof Coating System

A. Approved Manufacturer

B. Approved Coating: UNIFLEX Elastomeric Roof Coating
   - Vehicle Base: 100% Acrylic
     - Elongation/Tensile @ 77°F
       - Initial Elongation: 200%
       - Tensile Strength: 150 psi
       - 1000 Hrs Xenon Arc: 130% @ 73°F
     - Solids by weight (ASTM 2369): 67 ± 2%
     - Solids by volume: 52 ± 2%
     - Permeance (D1653): 8 perms

C. Approved Coating – Asphalt Surfaces: Uniflex® MB
   - Vehicle Base: 100% Acrylic
     - Elongation/Tensile @ 77°F
       - Initial Elongation: 500%
       - Tensile Strength: 90 psi
       - 1000 Hrs Accelerated Weathering: no checking or cracking
     - Solids by volume: 50 ± 2%
     - Solids by weight (ASTM 2369): 63 ± 2%

D. Approved Base Coat – Hypalon, TPO, EPDM (non ballasted), PVC Roofs: Uniflex® SPE Gray Acrylic
   - Vehicle Base: 100% Acrylic
     - Elongation/Tensile @ 77°F
       - Initial Elongation: 600%
       - Tensile Strength: 150 psi
     - Solids by volume: 50 ± 2%
     - Solids by weight (ASTM 2369): 61 ± 2%

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.
   3. Slope of roof area must not be less than 1/4" per foot.
   4. Replace all wet insulation prior to beginning the coating process. For roofs with more than 20% wet insulation, other options such as re-roofings should be considered.

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.

3.02 Surface Preparation - Existing Surface

A. Any necessary repairs or replacement of deck and/ or insulation must be completed.

B. The membrane must be free of all dirt and debris prior to applying the Elastomeric Coating System.

C. EPDM, TPO and PVC (confirm adhesion to PVC and TPO prior to project start up)
   1. Prepare the membrane and flashings for coating by applying the Uniflex® Bond-It Wash Primer.
   2. Apply at a rate of 400–500 sq. ft./gal. A 2–3 gallon agricultural tank pressure sprayer is recommended to apply the Wash Primer. Adjust the nozzle to achieve a uniform spray pattern with 3–4 foot arc. Conventional airless spray equipment using a .015”–.017” tip may also be used.
   3. Allow the Wash Primer to stand 10–15 minutes to wet out and react with the EPDM surface.
   4. High pressure rinse the roof with clean water using a minimum 2,000 psi pressure washer keeping the tip within 12” of the surface. Bond-It Wash Primer, in its diluted form, is safe to rinse down drains. Refer to local regulatory agencies for disposal requirements. A squeegee is recommended to push excess water to the drains and accelerate drying. After cleaning, the roof should be “jet black” in color, indicating proper chemical reaction has occurred. If appearance is dull and weathered, re-apply Bond-It Wash Primer. Surfaces must be completely dry before coating application.
### PART 3: EXECUTION

#### D. Hypalon, BUR/Modified Bitumen (Other Approved Surfaces)
1. High pressure rinse the roof with clean water using a minimum 2,000 psi pressure washer keeping the tip within 12" of the surface. Surfaces must be completely dry before coating application.

#### E. Concrete
1. High pressure rinse the roof with clean water using a minimum 2,000 psi pressure washer keeping the tip within 12" of the surface. Surfaces must be completely dry before coating application.
2. If concrete is bare, prime using Sherwin-Williams Loxon Concrete Primer at a rate of 200 sq.ft./gallon.

#### F. Any repairs to the membrane, flashings, penetrations, etc. as determined through inspection, must be completed before coating is applied. Note: If a structurally sound, well-sealed and watertight membrane is not in place, the roof is not acceptable to receive the coating system.
1. Tighten or re-secure all terminations and assure all termination bars and reglets are properly caulked.

#### G. On mechanically fastened and fully adhered systems, replace backed out fasteners with new stress plates and fasteners. Relocate new fasteners adjacent to original location.

#### H. Repair loose, open seams, holes and splits using:
1. EPDM, TPO, PVC Hypalon (other approved Single Ply)
   a. UNIFLEX® 6" Seam Tape or Uniflex® SPE Gray Acrylic Base Coat embedding 6" or 12" Polyester Fabric.
2. BUR/Modified Bitumen
   a. UNIFLEX® MB Base Coat embedding 6" or 12" Polyester Fabric.
3. Concrete
   a. UNIFLEX® Gray Elastomeric embedding 6" or 12" Polyester Fabric.

#### I. Seal and reinforce areas around penetrations including vents, stacks, fans, curbs, drains. Secure perimeter metal drip edges and reinforce perimeter using:
1. EPDM, TPO, PVC Hypalon (other approved Single Ply)
   a. UNIFLEX® Seam Tape or Uniflex® SPE Gray Acrylic Base Coat embedding 12" Polyester Fabric.

### 2. BUR/Modified Bitumen
   a. UNIFLEX® MB Base Coat embedding 12" Polyester Fabric.

### 3. Concrete
   a. UNIFLEX® Gray Elastomeric embedding 6" or 12" Polyester Fabric.

### J. In low-lying areas, around drains or other areas where potential water accumulation is possible, apply a second coat of Gray Base Coat on top of the fabric at the rate of 1 galon per 100 sq. ft. Coating must extend a minimum of 2" beyond the edge of the fabric. If reinforcing wider areas, overlap fabric a minimum of 3".

### 3.03 Application

#### A. General
1. Inspect preliminary work relating to substrate for any additional problem areas to ensure all preparatory work is completed.

#### B. Application Method
1. Apply using airless spray equipment (recommended air pressure of 2,000 psi at the tip).
3. Hose Size: At 300' total hose length, use 250' of ¾" to 50' of ½" to 10' swivel whip end ⅛" hose.
4. General: The longer the hose, the smaller the tip orifice size.

#### C. Application Rate
10 Year Warranty: Refer to the following recommendations.

15 Year Warranty: After completion of the following recommendations. Apply a final coat of the Uniflex® Premium Elastomeric at a rate of 1 gal/100 sq.ft.

#### 1. Asphalt Roofs: BUR/Modified Bitumen
   a. Apply Elastomeric MB Base Coat (product 41-510) at a rate of 2 gal/100 sq. ft.
   b. Embed 40" Polyester Fabric, overlapping 3". Be sure to apply coating between fabric layers at overlap.

#### 1. Asphalt Roofs: BUR/Modified Bitumen
   a. Apply Elastomeric MB Base Coat (product 41-510) at a rate of 1 gal/square to cover fabric. Apply pressure to the fabric while coating to embed the fabric consistently into the base coat (no wrinkles).
   d. Apply Finish Coat of Uniflex® Premium Elastomeric (product 41-300) at a rate of 1.5 gal/square.
### PART 3: EXECUTION

2. Hypalon, EPDM, TPO, PVC  
   a. Apply SPE Elastomeric Base Coat (product 41-321) at a rate of 2 gal/100 sq. ft.  
   b. Embed 40" Polyester Fabric, overlapping 3". Be sure to apply coating between fabric layers at overlap.  
   c. Apply SPE Elastomeric Base Coat (product 41-321) at a rate of 1 gal/square to cover fabric. Apply pressure to the fabric while coating to embed the fabric consistently into the base coat (no wrinkles).  
   d. Apply Finish Coat of UNIFLEX® Premium Elastomeric (product 41-300) at a rate of 1.5 gal/100 sq. ft.  

3. Concrete  
   a. Apply UNIFLEX® Premium Elastomeric Base Coat (product 41-320) at a rate of 2 gal/100 sq. ft.  
   b. Embed 40" Polyester Fabric, overlapping 3". Be sure to apply coating between fabric layers at overlap.  
   c. Apply UNIFLEX® Premium Elastomeric Base Coat (product 41-320) at a rate of 1 gal/square to cover fabric. Apply pressure to the fabric while coating to embed the fabric consistently into the base coat (no wrinkles).  
   d. Apply Finish Coat of UNIFLEX® Premium Elastomeric (product 41-300) at a rate of 1.5 gal/100 sq. ft.  

#### 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.