



# THERMO-FLEX 1000

## GUIDE SPECIFICATIONS

07 55 53 Elastomeric Protected Membrane Roofing  
07 55 56 Fluid-Applied Protected Membrane Roofing

Acrylic Coating System for BUR and Modified Bit Roofs

### PART 1 - GENERAL

#### 1.1 SUMMARY

- A. This specification covers the preparation and application to Asphalt Emulsion Roof surfaces of a monolithic, spray-applied elastomeric acrylic coating system, for the purpose of preserving the existing roof system.
- B. The applicator shall furnish all labor, materials and equipment and perform all operations required as
- C. The manufacturer's application instructions for each product used are considered part of these Specifications and should be followed at all times

#### 1.2 SUBMITTALS

##### ACTION SUBMITTALS / INFORMATIONAL SUBMITTALS

- A. MANUFACTURER'S DATA: Submit technical data sheets, independent testing reports, application instructions and precautions.
- B. PRIOR APPROVAL: Materials other than that specified shall be submitted to the Architect/owner for approval no later than ten days prior to bid date. In requesting prior approval, it shall be necessary to submit:
  - 1. A letter of certification signed by an officer of the manufacturer, stating that the substitute material is equal to or better in features or performance, which the job requires, than the specified product will provide.
  - 2. Independent Laboratory test data giving physical property values.
  - 3. A coated 12" X 12" sample.

#### 1.3 QUALITY ASSURANCE

- A. All roofing contractors and subcontractors bidding work shall be licensed by the State Contractors License Board, and shall have a license currently in effect, which covers work called for in the specifications (where applicable).
- B. Qualified Applicators: Bidding and application shall be made only by contractors who are currently qualified by the fluid applied material manufacturer for warranty projects. The contractor shall furnish to the owner a letter confirming that the contractor is an approved applicator for the material manufacturer.
- C. The contractor shall have a minimum of three years experience in applying acrylic roof coatings and should be able to document, if requested, at least 500,000 square feet of successful applications using similar roofing materials as that specified.

- D. The building owner/architect shall also reserve the right to reject any and all bids.

#### **1.4 DELIVERY, STORAGE, AND HANDLING**

- A. Deliver products in manufacturer's original sealed containers, with seals and labels intact.
- B. Store materials in an enclosed space protected from weather and out of the direct rays of the sun. Store where temperatures will not be less than 50°F or more than 100°F.
- C. Protect from freezing during shipping and storage.
- D. All materials shall be stored in compliance with local safety requirements.

#### **1.5 SITE CONDITIONS**

- A. All materials to be installed 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.
- B. Do not apply materials at temperatures below 50°F, when wind velocities exceed 12 mph, or when there is a possibility of temperatures falling below 32°F within a 24 hour period. Do not apply if weather conditions will not permit complete cure before rain, dew, fog, or freezing temperatures.
- C. Do not apply coating when the substrate temperature falls below 50°F.
- D. 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, and wind conditions while spraying or other variables.
- E. Wet insulation must be thoroughly evaluated and then addressed with removal or other measures. Consult Huntsman Building Solutions technical department regarding the need moisture surveys and other requirements.
- F. Structural cracks in the roof deck should be communicated to Huntsman Building Solutions technical department for application guidance.
- G. This guide Specification assumes that the roof deck, if wood, is in sound condition without any rot, or has been repaired.
- H. As a general rule, to prevent the ponding of water, install additional drains or drainage systems as necessary.
- I. **DETAIL WORK** - This specification does not outline guidance for preparation and finishing of drains, vents, parapet walls, ducts, flashing, etc. This work should be outlined by the contractor before work commences, and shall be performed in accordance with good roofing practices.

#### **1.6 SAFETY REQUIREMENTS**

- A. All personnel spraying coating materials in exterior applications must wear acceptable organic respirators or other protective equipment to ensure good safety precautions at all times. Contractor shall perform all work in accordance with OSHA regulations and safety regulations governing the location of the jobsite.
- B. Proper disposal of waste materials and containers must be done in compliance with federal, state and local regulatory agencies.
- C. Contractor shall perform all work in accordance with OSHA regulations and safety regulations governing the location of the jobsite.

## PART 2 - PRODUCTS

### 2.1 OWNER-SUPPLIED PRODUCTS

- A. Provide 100% Acrylic TF 1000 Series by Huntsman Building Solutions 3315 E Division St., Arlington, Texas 76011  
Telephone: 817-640-4900

### 2.2 PRIMER

Consult Huntsman Building Solutions's area representative of the technical department at 817-640-4900

### 2.3 SEAMTAPE

- A. Tape shall be a self-adhesive butyl fabric-reinforced tape for use on sloped and vertical surfaces.

### 2.4 COATING

- A. TF 1000 Series is a technologically advanced, high solid, thixotropic, acrylic elastomeric coating uniquely formulated to withstand the intense heat and ultra-violet rays.
- B. Elastomeric roof coatings shall contain no migratory plasticizers, vegetable oils, marine oils or cementitious materials. Use of non-elastomeric resins is not permitted.
- C. The coating materials shall meet the following minimum physical properties:

#### TF 1000 Series Acrylic Elastomeric Roof Coating

Properties	Test Method/Requirements	Value
Standard Colors:		STANDARD COLORS: TF 1001, 1002, 1003
Tensile Strength:	ASTM D2370	260psi (±25)
Elongation:	ASTM D2370	200% (±25)
Permeability:	ASTM D1653A	28 U.S. Perms @ 20mils
Solids by Weight:	ASTM D1644	67% (±3)
Solids by Volume:	ASTM D 2697	55% (±3)

Weight per Gallon:		11.95 (± .2)
Theoretical Coverage:	13-14 dry mills	1.5 gallons
Viscosity (cps):	ASTM D 562	110 K.U. (±8)
Reflectivity:		NEW: .085
Emmissivity		NEW.89
Dry to Touch:		4 hours
Tack Free:		12 hours
Recoat Window:		12 hours
Shelf Life:	When properly stored	12 months

## PART 3 - EXECUTION

### 3.1 SURFACE PREPARATION

- A. All surfaces must be clean, dry, and sound; free of loose and peeling coatings, grease, oil, dirt, mildew, rust, and other detrimental foreign matter that will adversely affect adhesion and product performance of system components being applied. Manually or mechanically remove excessive amounts of deteriorated patching, flashing, or caulking materials before cleaning commences. Observe responsible trade practices during performance of all work.
- B. Cleaning – Thoroughly power wash the roof surface and all other areas to receive new coating with a minimum of 2000 psi water pressure. Any areas of grease or oil should be cleaned using an industrial strength detergent such as Simple Green®.
- C. Prevent mechanical units - from distributing fumes or vapors from the coating application into the building.
- D. NOTE. Adhesion tests must be conducted prior to installation of the coating. If adhesion is found to be insufficient for the roofing system for the area in which it is located, the roofing system must be refastened to the roof deck. Engineering calculation for the proper fastening pattern to meet wind load requirements may be required. This engineering is at the expense of the contractor and may be conducted by a credentialed and approved engineer for the area in which the roof is located.

### 3.2. APPLICATION OF THERMO-SIL PRO BLEED BLOCKER/P

1. Primer: THERMO-SIL Bleed Blocker /Primer. Recommended coverage rate of 1.5 - 2.0 gallons per 100 sq. feet per coat dependent upon roof porosity. Application rates may vary by surface, porosity and job conditions. Please contact your HBS Representative for primer requirements.
2. Base Coat: Apply the TF 1000 Series base coat over the entire system at the rate of 1.5 gallons per 100 square feet and allow 24 hours dry time before application of the top coat of TF 1000 Series.  
Note: Backroll the base coat of TF 1000 Series into all masonry, stucco and concrete walls
3. Top Coat: After thorough drying of the base coat the second coat (top coat) shall be applied using a crosshatch technique. Apply TF 1000 Series white topcoat at the rate of 1½ gallons per square. All coating edges shall be cut in evenly, in a uniform manner to provide an aesthetically pleasing appearance.
4. The 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, and wind conditions while spraying. Ensure a total application of a minimum of 24 dry mils.

### 3.3. FIELD QUALITY ASSURANCE:

1. Inspection by the coating manufacturer's representative shall be made to verify proper installation of the TF 1000 Series coating 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 materials.

### 3.4. WARRANTY:

The physical properties of Asphalt emulsion membrane system shall not be covered under this warranty by Huntsman Building Solutions.

5 Year Product	5 Year Product & Labor	10 Year Product	10 Year Product & Labor	15 Year Product	15 Year Product & Labor
20 Mil	22 Mil	24 Mils	28 Mil	28 Mil	28 Mil
2.1 Gal	2.3 Gal	2.5 Gal	3.5 Gal	3.5 Gal	3.5 Gal

### 3.5. CLEANING

- A. At the end of each work day, remove rubbish, empty containers, rags, and other discarded items from the site. After completing work, clean glass and spattered surfaces. Remove spattered coatings by washing, scraping, or other methods, being careful not to scratch or damage adjacent finished surfaces.

END OF SECTION