



# SPECIFICATIONS

## PART 1: GENERAL

**07140**

**TYPE ROOF MEMBRANE:**

**TYPE PRODUCTS:**

**COATING & ROOF REPAIR**

**SMOOTH BUR REPAIR**

**ACRYLASTIC 900 & SUNSHIELD 3800**

### 1.01 Work Included

- A. Work includes application of Davlin Coatings' Acrylastic Elastomeric Waterproof Roof Coating System and repair of blistered existing smooth surface built-up roofing with approved modified bituminous membrane.
- B. All parts of the "Roofing Specifications" or "General Requirements" and the manufacturer's installation details are pertinent to this specification.

### 1.02 Work Not Included

- A. Any modification to building design or roof mounted equipment and/or accessories not found to be part of this specification.

### 1.03 System Description

- A. Davlin Coatings, Inc. Acrylastic Elastomeric Waterproof Coating System.
  - 1. A waterborne system comprised of a high-performance single-component elastomeric waterproof roof coating (Acrylastic 900) and a 100% Acrylic top coat (Sunshield 3800).
- B. Repair of blistered or rotted flet using approved modified bitumen membrane system.

### 1.04 References

- A. American Society for Testing and Materials (ASTM)
  - 1. ASTM D2370 Tensile Strength p.s.i.: Acrylastic 900 ..... 800
  - 2. ASTM D2370 Tensile Elongation, % at break: Acrylastic 900 ..... 1000
  - 3. ASTM E96 Procedure B, Moisture Transmission - perms: Acrylastic 900 ..... 0.6
  - 4. ASTM D822 Accelerated Weathering, 5000 hours: Acrylastic 900 ..... slight chalking, degradation and sheen loss

### 1.05 Submittals

- A. Roofing contractor shall furnish the following documents with bid:
  - 1. Proposed start date, number of working days, and schedule of planned process across building.
  - 2. Manufacturer's installation instructions.

### 1.06 Delivery, Storage, and Handling of Materials

- A. Delivery of materials to the work site in unopened packages bearing the manufacturer's labels.
- B. All materials shall be stored in dry areas in accordance with the instructions of the manufacturer prior to their application or installation.
- C. Do not permit construction materials or equipment to be used or stored in such a manner as to damage decking or completed roofing.

### 1.07 Project Conditions/ Davlin Products

- A. Do not apply over water-saturated surfaces.
- B. Do not apply over surfaces contaminated with materials which can act as release agents.
- C. Do not apply during, or 24 hours preceding, inclement weather including rain, fog, mist, dew, or freezing temperatures.
- D. Do not apply when surface or air temperature is below 45° F.
- E. When surface or air temperature exceeds 110° F consult Davlin for special application instructions.
- F. Do not apply over old coating which is or may become loose.
- G. Do not apply over surface which contains bacteria, mold or mildew.

### 1.08 Safety / Coordination

- A. All application, material handling and associated equipment shall conform to and be operated in conformance with OSHA safety requirements.
- B. Davlin's Material Safety Data Sheets (MSDS) shall be read, understood and instructions adhered to.
- C. A sufficient number of filled and operating fire extinguishers meeting current code standards must be on the roof deck at all times during application of roofing materials.

## PART 2: PRODUCTS

### 2.01 Manufacturer

- A. Product manufactured or accepted by Davlin Coatings, Inc.

### 2.02 Materials

- A. Davlin Coatings, Inc. Acrylastic Asphalt 900
- B. Davlin Coatings Inc. Sunshield 3800
- C. Approved modified bitumen membrane

## PART 3: EXECUTION

### 3.01 Examination

- A. Verify deck surface is dry, sound, clean and smooth, free of depressions, waves or projections, properly sloped to drains.

### 3.02 Preparation

- A. Remove all rotted or wet membrane.
- B. Where rotted or wet membrane is removed, prime area with asphalt primer and apply approved modified bitumen membrane per manufacturer's specifications.
- C. Repair all cracks with a 3-course application using Acrylastic 900 and polyester mesh (Tietex T326 or equal).
- D. Thoroughly clean entire roof just prior to application of Acrylastic 900. A loose coating is often the result of the coating's adherence to loose dirt, gravel, oxidation, etc.
- E. If roof has a protective topcoat, check adhesion of topcoat in the following manner:
  - 1. Lay a water-saturated sponge on the topcoat in the area most exposed to the sun.
  - 2. Allow the sponge to stand for 15 minutes.
  - 3. After 15 minutes, remove sponge and wipe off all water until film appears dry. This should take about 10 to 15 seconds.
  - 4. Immediately attach duct tape to the coating.
  - 5. Remove duct tape quickly (not gently) and note if coating is on roof or tape.
  - 6. If coating is on tape, the topcoat will have to be removed by water blasting.
- F. If protective topcoat remains intact after duct tape test, apply Acrylastic Asphalt 900 to same test area and allow to air dry for 24 hours. After 24 hours, in same manner as above, attach duct tape to Acrylastic 900 and peel back. If either the old topcoat or Davlin's Acrylastic 900 remains on the tape, contact Davlin for further instructions.

### 3.03 Application

- A. Approved modified bituminous roofing membrane (repair areas only).
  - 1. Remove all wet, deteriorated, blistered or delaminated roofing membrane.
  - 2. Prime existing roof surfaces with asphalt primer meeting ASTM D41 specification and allow to dry prior to installing bituminous roofing materials.
  - 3. Install approved modified bituminous roofing membrane sheet with minimum 3" side laps and 6" end laps.
  - 4. The rolled membrane sheet shall be set and unrolled to align sheets. The propane torch shall then be applied to the exposed outer surface of the roll until the surface reaches the proper application temperature (generally 350°F. to 450°F.).
  - 5. Gradually unroll the roll to create a heat weld between the membrane sheet and the substrate.
  - 6. There should be approximately 1/8" to 1/2" bleed out of the adhesive at the overlaps.
  - 7. All overlaps shall be checked and sealed using a heated trowel.
  - 8. At all locations where the lap is not sealed, use the trowel to open the lap and apply heat into the lap in order to heat the adhesive on the back of the roll and seal the lap.
- B. Davlin Coatings, Acrylastic 900/3800
  - 1. In areas where roof has deteriorated and water leakage is occurring, apply a coat of Acrylastic Asphalt 900 unreduced at a rate of 1 gallon per square and immediately embed polyester sheeting material into wet coating. Allow to dry. Apply second coat of Acrylastic 900 at a rate of 1 gallon per square. Allow to dry. Apply a third coat at the rate of 1 gallon per square to all areas subject to ponding water. Allow to dry.
  - 2. In areas where roof deck is sound, apply Acrylastic Asphalt in two (2) coats at the rate of 1 gallon per square per coat. Allow to dry. In areas subject to ponding water apply a third coat at the rate of 1 gallon per square.
  - 3. Apply Sunshield 3800 topcoat at the rate of 1 gallon per 250 sq. ft.
- D. Davlin Coatings Cautions
  - 1. Acrylastic 900 and Sunshield 3800 are supplied as single component coatings. Mix cans thoroughly until homogenous.
  - 2. Avoid excessive agitation to prevent air entrapment and resultant pinholing in film.
  - 3. Acrylastic 900 and Sunshield 3800 are supplied ready mixed. Unless otherwise specified, do not reduce with water or solvents.
  - 4. Store material at room temperature to assure proper application.
  - 5. When spraying Acrylastic 900 and Sunshield 3800 be sure equipment is thoroughly purged of solvents and other foreign material. To spray Acrylastic 900 use a non-diaphragm airless pump rated at 3/4 + gallons per minute or a diaphragm pump rated at 1+ gallons per minute. Use a .0025" reversible tip or larger.
  - 6. When using a roller, unless otherwise specified, use a short nap (1/2" to 1") roller.
  - 7. Several thin films of Acrylastic 900 will cure more rapidly than one or two thick coats.

### 3.04 Field Quality Control

- A. Follow recommendations and specifications of Davlin Coatings, Inc. and the approved modified bitumen system manufacturer.

### 3.05 Cleaning

- A. Remove trash and debris. Repair damage. Remove stains from walls and walkways caused by work of this section.

### 3.06 Protection

- A. Protect finished roof areas from damage during construction.

**END OF SECTION**

**DAVLIN Coatings, Inc.**

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