



PO Box 6256  
Mobile AL, 36606  
1-800-771-6643

## **APPLICATION SPECIFICATIONS**

### **Coating Structural Concrete Roof Decks — Urethane System**

*Each job must be approved by American WeatherStar before the project begins to be eligible for a warranty.*

#### **PART 1 — GENERAL**

##### **1.01 DESCRIPTION**

- A. The intention of this specification is to outline the procedures for the application WeatherStar Coatings reflective roof coatings for the purpose of coating **Structural Concrete deck roofs and other concrete surfaces**. These suggested specifications describe materials, methods and conditions necessary for the proper application of WeatherStar Coatings. Actual application requirements may vary and are the responsibility of the contractor.
- B. This specification may not outline all procedures for preparation and finishing of penetrations, drains, flashings, etc. This work should be outlined separately by the contractor before the work commences and shall be performed observing good trade practices.

##### **1.02 APPROVED APPLICATOR**

- A. All WeatherStar Coatings products shall be applied by a single, experienced and competent Approved Applicator or applicator approved by WeatherStar Coatings.
- B. Contractor shall be an Approved Applicator of WeatherStar Coatings and doing business under the same company name. Financial stability shall include no filing of bankruptcy during the past seven years.

#### **PART 2 — PRODUCTS**

##### **2.01 COATINGS AND RELATED MATERIALS**

All Materials used shall be manufactured by and or approved by WeatherStar Coatings and shall meet the following specifications.

##### **2.02 ELASTOMERIC COATING SYSTEM**

###### URETHANE 520

Type: Single Component Moisture Cure Urethane  
Elongation: 350%  
Viscosity: 2,000 cps  
Density: 9.2 lbs./gal.  
Tensile Strength: 975 psi  
Volume Solids: 70% ± 1%  
Color: Silver



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#### URETHANE BRUSH GRADE 522

Type: Single Component Urethane flashing material  
Elongation: 350%  
Viscosity: 2,000 cps  
Density: 9.2 lbs./gal.  
Tensile Strength: 975 psi  
Volume Solids: 70% ± 1%  
Color: Silver

#### SBS PRIMER 950

Type: Primer / Surface conditioner  
Viscosity: 100-150 cps  
Density: 7.1 ± .1 lbs./gal.  
Color: Gray or Black

#### POLYESTER FABRIC

Type: Spunbound polyester  
Tensile: 57 lbs.  
Elongation: 61%

### 2.03 DELIVERY AND STORAGE

- A. Materials shall be delivered in their original, tightly sealed containers or unopened packages, all clearly labeled with the manufacturer's name, file number, and lot numbers.
- B. Materials shall be stored out of the weather in their original tightly sealed containers or unopened containers as recommended by the manufacturer.

### 2.04 WARRANTY

- A. American WeatherStar warrants that the material supplied will meet or exceed physical properties as published. The contractor guarantees that workmanship will be free of defects in coating application. Since performance of existing roof substrate or previously applied coatings are beyond the control of American WeatherStar or the contractor, requests for additional warranty coverage shall be subject to prior approval by American WeatherStar.
- B. Comply with manufacturer's warranty application procedures. A Pre-Project Inspection Report should be submitted and approved prior to job commencement.
- C. Protection of building and occupants: All surfaces not to receive system specified shall be protected from overspray hazard, i.e. windows, doors, exterior and vehicles. Protective coverings shall be secured against wind and shall be vented if used in conjunction with applications preventing collection and moisture.



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#### **PART 3 — INSTALLATION**

##### **3.01 SURFACE PREPARATION**

- A. Preparation shall include all requirements specified by American WeatherStar to ensure proper adhesion of the American WeatherStar products to the substrate. (An [adhesion test](#) may be necessary.)
- B. Preparation shall include, but not be limited to the following:
  - 1. All unnecessary and non-functional equipment and debris shall be removed from the roof.
  - 2. Substrate must be pressure-washed. A minimum working pressure of 3,000 psi shall be used to remove all dirt, dust, previous paints and coatings which are delaminating as well as waste products (oil, oil-based roof cements, solvents, grease, animal fats, etc). Use TSP (Tri Sodium Phosphate). Contact WeatherStar Coatings for additional information.
  - 3. HVAC condensate drains shall be properly routed to roof drains or plumbed off the roof.
  - 4. All roof penetrations, curbs, vent stacks and related roof penetrations are to be flashed in accordance with roof manufacturer's specifications. All laps and wall flashings are to be repaired in accordance with roof manufacturer's specifications.
  - 5. Contractor shall make every effort to mechanically eliminate all ponding water areas on the roof surface prior to application of any roof coating product.

##### **3.02 PRIMER APPLICATION**

- A. Examine substrate to receive roof coating. Do not proceed with installation of the WeatherStar Coatings roof coating until all problem areas have been corrected in a manner acceptable to the manufacturer.
- B. Entire roof shall be primed with [SBS Primer 950](#) at a rate of 100 square feet per gallon. Contact WeatherStar Coatings for additional information or substitute primer.



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#### 3.03 COATING APPLICATION

- A. Examine substrate to receive roof coating. Do not proceed with installation of WeatherStar Coatings until unsatisfactory conditions have been corrected.
- B. Penetrations, transition points and parapet walls showing are to be flashed using [Polyester Fabric](#) and [Urethane 520](#). Apply a thin layer of coating into each seam, roll out 4" or 6" [Fabric](#) into the wet coating then apply another layer of coating over the fabric. [Urethane 520](#) should be three inches wider and feathered so that the fabric is encapsulated and water is able to flow properly.
- C. Repair all cracks and splits in concrete using [Urethane 520](#) and 4" or 6" [Fabric](#) in the same manner as each seam is repaired.
- D. [Urethane Brush Grade 522](#) may be used as a substitute to the above mentioned waterproofing methods and should be used when [Polyester Fabric](#) cannot be laid smoothly and without wrinkles and/or fish-mouths. Please contact American WeatherStar for details.

#### 3.04 APPLICATION RATES (30-33 MIL SYSTEM)

- A. BASE COAT: Apply base coat of [Urethane 520](#) roof coating at a rate of 1.5 gallons per 100 square feet. Dry film thickness shall be approximately 16 mils.
- B. TOP COAT: Apply a top coat of [Urethane 520](#) roof coating at a rate of 1.5 gallons per 100 square feet. Dry film thickness shall be approximately 16 mils.
- C. Each coat must be allowed to dry for 24-48 hours depending on humidity and temperature. The roof is to be inspected for defects, flaws or holidays and repaired if necessary.
- D. Base coat and final coat are to be applied at a rate of 3 gallons per 100 square feet - 1 base coat, 1 final coat. (30-33 dry mil average)

#### 3.05 PONDING

- A. Known ponding water areas are to be repaired using commonly acceptable roofing practices so as to allow proper drainage of roof area.
- B. Ponding water areas are a sign of possible mechanical failure in the roof. Water is to be intentionally diverted from ponding areas using accepted roofing practices. Ponded areas which evaporate within 7 days (under 1/2" deep) can be top coated with [Urethane 520](#) to increase water resistance.
- C. Application of [Urethane 520](#) is to be made at 100 square feet per gallon.



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#### 3.06 RESTRICTIONS / LIMITATIONS

This system is to be used only in conjunction with commonly accepted roofing standards but not limited to the following:

- A. No application of materials shall commence during inclement weather or when precipitation is imminent.
- B. No thinning of materials is permitted.
- C. No materials are to be applied to wet, dirty, or frozen surfaces.
- D. In conjunction with the final inspection, all debris, containers, materials and equipment are to be properly removed from the job site. Grounds are to be cleaned, undamaged, and acceptable to the owner.
- E. Reflectivity of coatings may be reduced if roof surface is not cleaned on a regularly scheduled basis.

**CAUTION: Do not apply within two hours of sunset, rain, fog or freezing temperatures. WeatherStar Coatings must be completely dry before exposing to water or foot traffic. Keep WeatherStar Coatings containers covered when not in use. Dispose of all containers in accordance with state and local environmental regulations. Keep away from children. If ingested, DO NOT induce vomiting. Call Physician immediately.**