

ARCHITECTURAL ROOF COATINGS

SPECIFICATION FOR COATING

SMOOTH SURFACED BUILT-UP ROOFS WITH ARC SEBS REFLECTIVE ROOF COATINGS

1.0 SCOPE

The intention of this specification is to outline the procedures for the application of ARC SEBS reflective roof coatings for the purpose of coating new or, renewing existing smooth surfaced built-up roofs, fiberglass felts and asphalt. This specification describes materials, methods and conditions necessary for the proper application of Architectural Roof Coatings.

2.0 MATERIALS

All materials used shall be manufactured by and or approved by Architectural Roof Coatings Inc. and shall meet the following specifications.

2.1.1 Elastomeric Coating System

ARC SEBS reflective roof coating

Type:	Styrene Ethylbutylene Styrene
Elongation:	600% ASTM D-412
Tensile strength:	1000 psi ASTM D-412
U.L APPROVED ANSI/UL 790 CLASS A	
Solids:	65%
Color:	White or color tinted

ARC SEBS BASE COAT with stain blocker

Type:	Styrene Ethylbutylene Styrene
Elongation:	400% ASTM D-412
Tensile Strength:	800 psi ASTM D-412
U.L APPROVED ANSI/UL 790 CLASS A	
Solids	65%
Color:	Aluminum

ARC SEBS Modified Emulsion

Type:	SEBS
Elongation:	650% ASTM D-412
Tensile Strength:	650 psi ASTM D-412
Solids:	55%
Color:	Black

ARC SEBS RUST INHIBITOR rust inhibitive primer

Type:	SEBS
Solids	35%
Finish:	Flat
Color	Clear

POND X REPAIR

Type:	Resin, Asphalt, Concrete
Elongation:	Flexible ASTM D-1353
Tensile Strength:	4000 psi after 24 hours
Solids:	97% +/- 2%
Color:	Black/gray

2.2 Delivery and storage

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

3.0 Contractor

- 3.1 The ARC SEBS reflective roof coatings shall be applied by a single, experienced and competent contractor or applicator approved by Architectural Roof Coatings Inc.
- 3.2 Contractor shall be in business a minimum of five years doing business under The same company name. Financial stability shall include no filing of bankruptcy during the past twelve years.

4.0 Surface Preparation for smooth surfaced roofs.

4.1 Preparation shall include all requirements specified by architectural Roof coatings to insure proper adhesion of the ARC SEBS reflective roof coatings to the existing substrate. **New roofs must be allowed to cure a minimum of 60 days prior to application.**

4.2 Preparation shall include but not limited to the following:

4.2.1 All unnecessary and non-functional equipment and debris shall be removed from the roof.

4.2.2 HVAC condensate drains shall be properly routed to roof drains to allow roof membrane and coatings to properly cure and dry.

4.2.3 Pressure wash entire roof surface to be coated using a suitable cleaner such as TSP and using a broom as required to remove all dirt, debris, chalk or loose granules from the substrate surface.

4.3 Repairs to smooth surface roof membrane

4.3.1 Blisters are to be repaired in accordance with roof manufacturers specifications good workmanship practices

4.3.2 Wet roof insulation and damaged membranes are to be removed and replaced to match existing. One way vents are to be installed every 10 squares of roof area.

4.3.3 All roof penetrations, curbs, soil waste stacks, vent stacks and related roof penetrations are to be flashed in accordance with roof manufactures specifications.

4.3.4 All wall flashings are to be repaired in with roof manufactures specifications.

4.3.5 Low areas that pond water are to be filled with Pond-X Material.

4.4 Preparation of surface currently coated with aluminized asphalt coating.

4.4.1 In the event the aluminized asphalt cannot be completely removed by pressure washing the area covered by aluminized asphalt coating shall be primed with asphalt primer.

4.4.2 Area shall be primed with asphalt primer at a rate of one gallon per 300-400 square feet and allowed to dry completely.

4.5 Preparation of surface currently coated with acrylic water based coating.

4.5.1 In the event the acrylic coating cannot be removed by pressure washing the area covered by acrylic coating shall be covered with Architectural

Roof Coatings SEBS emulsion.

- 4.5.2 Area shall be coated with SEBS Modified Emulsion at a rate of 1.50 gallons per 100 square feet and allowed to dry 24-48 hours depending on humidity and temperature.

4.6 Preparation of surface that has crazed, alligatored or cracked

- 4.6.1 Damaged area shall be coated with SEBS modified Emulsion at a rate of 2.0 gallons per 100 square feet and allowed to dry 24-48 hours depending on humidity and temperature. Contractor has the option to fill these areas with ARC SEBS stain blocker in lieu of emulsion.

4.7 Metal surfaces to be coated with ARC SEBS reflective roof coatings [copings metal panels]

- 4.7.1 Metal surfaces to be coated shall be clean of all rust and scale by abrasive cleaning or wire brushing.
- 4.7.2 Surfaces cleaned of rust and scale must be primed with Architectural Roof Coatings Inc., SEBS Rust Inhibitive primer at a rate of one gallon per 200-300 square feet and allowed to dry.
- 4.7.3 Metal surfaces that have residual asphalt must be coated with ARC SEBS stain blocker at a rate of 1 gallon per 100 square feet [15] wet mils minimum and allowed to dry 24-48 hours depending on humidity and temperature.
- 4.7.4 Apply two Coats of ARC SEBS reflective roof coating to metal surfaces at a rate of one gallon per 100 square feet (15 wet mils minimum) and allowed to dry 24-48 hours depending on humidity and temperature.
- 4.7.5 Stacks or lines that are heated are not to be coated with ARC SEBS coatings. These are to be prepared as indicated in 4.7.2 and primed and painted with heat resistant primer and paint.

5.0 Application of ARC SEBS BASE COAT with stain blocker

- 5.1 Entire roof surface must be free of dust, water, leaf matter, frost or other matter.
 - 5.1.2 ARC SEBS base coat with stain blocker shall be applied at a minimum rate of one and one half gallon per 100 square feet (22 wet mils minimum) and allowed to dry 24-48 hours depending on humidity and temperature. ARC SEBS base coat shall be applied uniformly in order to cover the substrate uniformly. Areas that are

not properly covered will require the substrate to be covered with an additional coat at the proper application rate.

5.13 ARC coatings shall be applied using conventional airless spray equipment. All spray equipment must be properly grounded in accordance with manufacturer's operator's manual. A minimum of 3000 lbs. of pressure with a pump ratio of 45:1 will be required.

5.1.4 Application of coatings shall not commence during inclement weather, or when precipitation is imminent. When temperature is below 40 deg F, or when relative humidity exceeds 88%. No application of materials above 100 deg F. No thinning of materials is permitted.

5.1.5 Use of pre-heaters is advised during coatings applications below 60 deg F.

6.0 Application of ARC SEBS reflective finish coat

6.1 ARC SEBS reflective finish coatings are to be applied only after the base coat has thoroughly cured and dried.

6.2 ARC SEBS finish coat applications to be in accordance with 5.1.2-5.1.5 for application rates equipment and weather conditions.

6.3 Each coat must be allowed to cure 24-48 hours depending on humidity and temperature. The roof is to be inspected and repaired if necessary before a subsequent coat is applied.

7.0 Required application rates for ARC SEBS reflective roof coating.

7.1 5 year warranty –1.50 gallons per square SEBS stain blocker (22 wet mils average,)

7.2 10 year warranty –3 gallons per square total, 1.5 gallons base, 1.5 gallons finish (21 dry mils average, 18 dry mils minimum).

7.3 15 year warranty-4 gallons total per square, 2 base, 2 finish (32.0 dry mils average, 27 dry mil minimum).

8.0 Limitations

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

8.1 No application of materials shall commence during inclement weather or when precipitation is eminent. No thinning of materials is permitted.

8.2 No materials shall be applied to wet, dirty, or frozen surfaces.

- 8.3 No materials are to be applied at temperatures below 40 deg. F
- 8.4 No materials are to be applied at ambient air temperatures above 100 deg. F.
- 8.5 No materials are to be applied at relative humidity levels above 88%.
- 8.6 Application shall not commence until all other trades are off the roof.
- 8.7 In conjunction with the final inspection, all debris, containers materials, equipment is to be properly removed from the job site .Grounds are to be cleaned, undamaged and acceptable to the owner.
- 8.8 Reflectivity of coatings will not be effective if roof surface is not cleaned on a regularly scheduled basis.
- 8.9 Known ponding water areas are to receive and additional coat of one gallon per square of either SEBS stain blocker or SEBS white.
- 8.10 Mineral cap sheet (West Coast roofs) are to be repaired and coated in accordance With above referenced specifications and in accordance with original manufacturers specifications.

Specifications are provided by An Independant Architectural Engineering Firm.