

ARCHITECTURAL ROOF COATINGS

SPECIFICATION FOR RE-COATING EXISTING

AGGREGATE SURFACED BUILT-UP ROOFS WITH SEBS EMULSION AND SEBS REFLECTIVE COATING

1.0 SCOPE

The intention of this specification is to outline the procedures for the application of SEBS emulsion and SEBS reflective roof coatings for the purpose of renewing aggregate 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 SEBS clay based emulsion

Type:	SEBs emulsion
Elongation:	750% ASTM D-412
Tensile Strength:	650 psi ASTM D-412
Solids:	55%
Color:	Black

ARC SEBS BASE COAT with stain blocker

Type:	Styrene ethylbutylene Styrene
Elongation:	400% ASTM D-412
Tensile Strength:	1000psi ASTM D-412
U.L. APPROVED ANSI/UL 790 CLASS A	
Solids:	65%
Color:	Aluminum

ARC SEBS REFLECTIVE FINISH roof coating

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

POND X ROOF REPAIR

Type:	Resin, Asphalt, Concrete
Elongation	Flexible ASTMD-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 SEBS 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 aggregate surfaced roofs

- 4.1 Preparation shall include all requirements specified by Architectural Roof Coatings Inc. to insure proper adhesion of the SEBS roof coatings to the existing substrate.
- 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.

4.3 Repairs to aggregate surface roof membrane

4.3.1 Remove all loose aggregate as well as all dirt, dust and other foreign matter from the roof surface. This may be done by power vacuum, brooming, high pressure air or water or any combination that assures a clean surface and blisters are to be repaired in accordance with roof manufacturer

4.3.2 Wet roof insulation and damaged membranes are to be removed and replaced to match existing.

4.3.3 All roof penetrations, curbs, soil waste stacks, vent stacks and related roof Penetrations are to be flashed with polyester reinforcing mat and SEBS coatings.

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

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

4.4 Gravel stop and copings are to receive SEBS rust inhibitor at a rate of one gallon Per two hundred square feet and allowed to dry 24 hours.

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

5.0 **Application of SEBS emulsion**

5.1 Entire roof surface must be free of dust, water, leaf matter frost or other matter.

5.1.2 SEBS emulsion shall be applied at a minimum rate of three gallons per 100 square feet and allowed to dry a minimum 48 hours depending on humidity and temperature. SEBS emulsion shall be applied uniformly in order to cover the aggregate uniformly; a minimum of three gallons per square will be required. Any areas that are not covered will require the substrate to be covered with an additional coat at the proper application rate. All aggregate must be completely covered with SEBS emulsion prior to application of SEBS stain blocker base coat A polyester-reinforcing mat may be applied between applications of emulsion two Applications using polyester must be applied in two gallons per square applications. Polyester mat is to be boomed in place while first application is still Wet. After booming polyester into wet emulsion immediately applies second application of emulsion total saturation is required. Allow 4-5 days after this application for total curing.

- 5.1.3 Coatings shall be applied using conventional airless spray equipment, brush or roller. All spray equipment must be properly grounded in accordance with manufacturers operator's manual.
- 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.
- 5.1.5 Use of pre-heaters is advised during coatings applications below 60 deg F.

6.0 Application of SEBS stain blocker base coat and SEBS reflective coatings

- 6.1 SEBS stain blocker base coat are to be applied only after the SEBS emulsion has thoroughly cured and dried. The roof must be free of dust, water, leaf, matter frost or other matter.
- 6.1.2 ARC SEBS Base coat with stain blocker shall be applied at a minimum rate of one and one half [1.5] gallons 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 SEBS emulsion completely. Areas that are not covered will require the SEBS emulsion be covered with an additional coat at the proper application rate. SEBS reflective surface coatings shall be applied at a minimum rate of one and one half gallons per 100 square feet. Stain blocker base coat that is not properly coated shall be covered with an additional coat of SEBS reflective coatings.
- 6.1.3 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 3000lbs of pressure with a pump ration of 45:1 will be required.
- 6.1.4 Application of coatings shall not commence during inclement weather, or when Perception is imminent. When temperatures are below 40 deg. F, and when relative humidity levels exceeds 88%.
- 6.1.5 Use of pre-heaters is advised during coatings applications below 60 deg. F.

7.0 Application rates for SEBS reflective coatings

7.1 10 year warranty –3 gallons of emulsion minimum, three gallons of SEBS Coatings both Stain blocker base and white reflective coatings

15 year warranty-4 gallons per square of emulsion minimum 4 gallons of SEBS coatings

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.
- 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 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 complete.
- 8.7 In conjunction with the final inspection all debris containers, materials are to be 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 regular basis.

Specifications are provided by An Independant Architectural Engineering Firm.