

ARCHITECTURAL ROOF COATINGS

SPECIFICATION FOR COATING

EPDM, HYPALON, TPO AND PVC ROOFS WITH ARC SEBS REFLECTIVE COATING

1.0 SCOPE

The intention of this specification is to outline the procedures for the application of ARC SEBS Elastomeric roof coatings for the purpose of coating EPDM/HYPALON roofs. Recommended roof types are EPDM, CSPE, TPO, CPA, NFB, NIB and modified polymer reinforced PVC. 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 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 RUST INHIBITOR Rust inhibitive primer

Type:	SEBS
Solids	35%
Finish:	Flat
Color	Clear

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 reflective 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 EPDM, HYPALON and PVC roofs.

4.1 Preparation shall include all requirements specified by Architectural Roof Coatings Inc., to insure proper adhesion of the ARC SEBS reflective 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.

4.2.3 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 roof membrane

4.3.1 Blisters are to be repaired in accordance with roof manufacturer specifications. Damaged seams are to be repaired with Polyester membrane and ARC SEBS reflective roof coating. Apply ARC SEBS reflective roof coating over the seam area and embed polyester mat and allow it to dry.

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 in accordance with roof manufactures specifications.

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

4.4 Preparation of surface currently coated with aluminized asphalt coating.

4.4.1 In the event the asphalt cannot be completely removed by pressure washing the area covered by aluminized asphalt 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 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 Metal surfaces [copings, etc] to be coated with ARC SEBS roof coatings.

4.6.1 Metal surfaces to be coated shall be clean of all rust and scale by abrasive cleaning or wire brushing.

4.6.2 Surfaces cleaned of rust and scale must be primed with Architectural Roof Coatings Inc., Rust Inhibitive primer at a rate of one gallon per 200-300 square feet and allowed to dry.

4.6.3 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.

4.6.4 Apply two Coats of ARC SEBS reflective roof coatings 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.

4.6.5 Stacks or lines that are heated are not to be coated with Sun Shield. These are to be prepared as indicated in 4.6.2 and primed with heat resistant primer and paint.

5.0 Surface preparation PVC Reinforced Roof Membranes

5.1 Preparation shall include all requirements specified by Architectural Roof Coatings Inc., to ensure proper adhesion of the ARC SEBS reflective roof coatings to the existing substrate.

5.2 Preparation shall include but not limited to the following.

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

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

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

5.3 Repairs to roof membrane

5.3.1 Blisters are to be repaired in accordance with roof manufacturer's specifications. Damaged seams are to be repaired with Polyester membrane and ARC SEBS reflective roof coatings. Apply ARC SEBS reflective roof coatings over the seams and embed polyester mat and allow it to dry. Carlisle EPDM roofs with raised fasteners/supports are to be completely covered with SEBS. Active roof leaks are to be repaired with two (2) plies of polyester and SEBS coatings

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

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

5.3.4 All flashings are to be repaired in accordance with manufacturers specifications.

5.4 Application of PVC primer to Hypalon Membranes

5.4.1 Hypalon roof membranes that are eight years [8] in age and less are to be coated with ARC PVC primer at a rate of two [2] gallons per square. Application will be at a rate of one gallon [1] per square and allowed to dry before second application is made. Roof membranes that are eight [8] years and older are to be coated with ARC PVC primer at a rate of one gallon [1] per square and allowed to dry. Each application must be allowed to cure a minimum of 24 hours depending on temperature and humidity.

5.4.2 Application of base coat will be applied at a rate of one [1] gallon per square. ARC Stain Blocker base coat must be applied over roofs that are coated with ARC PVC primer

6.0 Application of ARC SEBS BASE COAT (White).

6.1 Entire roof surface must be free of dust, water, leaf matter frost or other matter. No thinning of materials is permitted. Do not use solvents to clean membrane. Wash surface with pressure washer and solutions recommended by membrane manufacturer.

6.1.2 ARC SEBS base coat shall be applied at a minimum rate of one gallon per 100 square feet (15 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. Any areas that are not covered will require the substrate to be covered with an additional coat at the proper application rate.

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

6.1.4 Application of coatings shall not commence during inclement weather, or when Precipitation is imminent. When temperatures is below 40deg F, when relative humidity levels exceed 88%.

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

7.0 Application of ARC SEBS reflective finish coat.

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

7.2 ARC SEBS finish coat applications to be in accordance with 6.1.2-6.1.5 for application rates equipment and weather conditions.

7.2 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.

8.0 Required application rates for ARC SEBS reflective roof coatings.

8.1 10 year warranty –2 gallons per square total (21 dry mils average, 18 dry mils minimum).

8.2 15 year warranty-3 gallons total per square, 1 base, 2 finish (32.0 dry mils average, 27 dry mils minimum).

9.0 Limitations.

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

9.1 No application of materials shall commence during inclement weather or when precipitation is imminent. **No thinning of materials is permitted.**

9.2 No materials are to be applied to wet, dirty, or frozen surfaces.

9.3 No materials are to be applied at temperatures below 40 deg F.

9.4 No materials are to be applied at ambient air temperatures above 100 deg F.

9.5 No materials are to be applied at relative humidity levels above 88%.

9.6 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

9.7 Reflectivity of coatings will not be effective if roof surface is not cleaned on a regularly scheduled basis.

9.8 Known ponding water areas are to receive an additional application of one [1] gallon per square of either SEBS stain blocker or SEBS white.

9.9 Note: Carlisle roofs with raised supports that are loose and or missing are to be replaced with standard galvanized fasteners and plates prior to application.

Specifications are provided by An Independent Architectural Engineering Firm.