



INSTALLATION GUIDE SPECIFICATION

FLUID-APPLIED WATERPROOFING

(TO RESTORE GRANULATED MODIFIED BITUMEN)

PART 1 — GENERAL

1.01 DESCRIPTION

A. Scope

Installation of a high grade and silicone roof coating system to waterproof and restore existing granulated modified bitumen roof system.

B. Related work

The scope of work includes but is not limited to the following:

1. Pressure washing of the substrate.
2. Attention to seams, flashings and penetrations.
3. Base and top coat application over entire roof field.

1.02 SUBMITTALS

A. Product data

1. Submit product technical data and material safety data sheets.
2. Submit Manufacturer's Certificate that products meet or exceed the specified requirements.

B. Shop Drawings

1. Submit drawings indicating all termination and joint conditions and interface with other materials.

C. Samples

1. Submit cured membrane sample.

D. Warranty

1. Provide Manufacturer and Applicator Warranty.

1.03 QUALITY ASSURANCE

A. Qualifications

1. Roof coating material shall be obtained from ALDO Products Company, Inc.
2. Applicator shall meet the criteria to be an Approved Applicator.
3. Any deviation from this specification must have prior written approval from ALDO Products Company, Inc.

B. Responsibility for performance

1. Applicator shall comply foremost with these specifications. Secondly, upon all matters where these specifications are silent, applicator shall proceed only with ALDO's recommendations and instructions.
2. No lesser quality, weight or degree of application to any extent than at least the minimum of such required by this specification's section is acceptable.

1.04 PRODUCT DELIVERY, STORAGE AND HANDLING

A. Delivery

1. All products shall be clearly labeled and delivered to project site in manufacturer's undamaged and unopened containers.

B. Storage and Handling

1. Store all materials at temperatures between 55° and 90° F (12° and 32° C). Keep all containers out of direct sunlight at all times.
2. ALDOCOAT 395 Silicone is classified as a combustible material. Keep away from open flame or sparks. Store in such a manner as to avoid puncturing of all pails and drums.

1.05 PROJECT SITE CONDITIONS

A. Coating Application

1. Elastomeric silicone coatings should not be applied when ambient air and substrate temperatures are below 45° or if there is imminent chance of rainfall within a 12 hour time period.

B. Humidity/Ambient Temperatures

1. Low humidity cooler ambient temperatures may retard cure time. Application should be suspended if climatic conditions prevent complete cure before rain, dew or freezing temperatures.

C. Extreme Heat

1. When ambient air temperatures exceed 100°, or substrate temperatures exceed 120°, do not continue with application. Coatings should be applied during cooler time frames, such as morning hours.
2. The substrate may also be cooled with water. Application should only be resumed after water has flashed off and substrate is completely dry.
3. Darker coating colors may blister under extreme substrate heat conditions.

1.06 WARRANTY

A. Term

1. Provide a ten year manufacturer's warranty.

B. Limitation

1. Application over wet substrate is excluded from warranty. Ponding water areas are also excluded unless otherwise stated in warranty document.
2. Commencement of work implies acceptance of all information contained in technical data sheets, material safety data sheets and this design specification and that project site conditions meet the requirements of satisfactory application and outcome of work.

PART 2 — PRODUCTS

2.01 MANUFACTURER

A. ALDO Products Company, Inc.

1604 N. Main Street

Kannapolis, NC 28081

(800) 474-6019

www.aldoproducts.com

2.02 COATING MATERIALS

A. Base Coat

1. ALDOCOAT 384 Polyurethane Aluminum (silver/gray)

B. Top Coat

1. ALDOCOAT 395 Silicone (white)

2.03 ACCESSORY ITEMS & EQUIPMENT

A. Accessory Items

1. ALDOSEAL 385 Polyurethane Sealant
2. ALDOFABRIC 272 Roofing Fabric

B. Airless Spray Equipment

1. Minimum Output of one (1) gallon per minute and two thousand psi capacity.
2. Gun: any airless hand held gun compatible with pump used.
3. Tip size: A reversible self-cleaning tip with orifice size of .035" and a fan angle of 40° to 50°.
4. Fluid hose: Nylon high pressure hose with listed inside diameter up to 3/8" for initial one hundred (100) feet; for all hose length over 100 feet and up to 300 feet use a minimum of 1/2" inside diameter added to the 3/8" to maintain pressure delivery.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that all surfaces and site conditions are ready to receive work.

3.02 SURFACE/SUBSTRATE PREPERATION

- A. It is the sole responsibility of the contractor to prepare the roof surface before application of the system begins. The following steps should be strictly adhered to for insuring maximum life of the system:
 1. Inspection of the entire surface: Inspect the entire area to be coated for structural integrity and loose layers of membrane and/or existing coating.
 2. Moisture Survey: A comprehensive moisture survey is to be conducted to locate and identify areas of trapped moisture and saturated insulation beneath the surface.
 3. Pressure washing: Pressure wash substrate to remove all dirt, dust, loose granules, algae growth, and remains of previous paint and/or coatings that may impede the coating process. Pressure washer to have a minimum working pressure of 3,000 psi. Extra cleaning may be necessary over areas with residual asphalt. Care should be taken not to damage existing roof or exasperate leak situations during pressure washing activities.
 4. Adhesion test areas: If there is any question as to the adhesion of coating product over suspect areas, such as those that may contain oil residue or those that have been previously coated with a silicone product, a test patch area is required to insure proper adhesion.

3.03 REPAIR AREAS

- A. Blisters: All must be opened and inspected for moisture content.
 1. Any wet felt material must be thoroughly dried out prior to resealing.
 2. Apply ALDOSEAL 385 Polyurethane Sealant at a rate of 16 wet mils per 100 square feet of surface area around the cut areas and lay the flap of the blister flat into the wet sealant.
 3. Apply coating 12" beyond blister cut area.
 4. Lay ALDOFABRIC Roofing Fabric into wet coating extending the mesh a minimum of 6" beyond the blister cut area.
 5. Immediately apply additional ALDOSEAL 385 Polyurethane Sealant over roofing fabric reinforcement to saturate. Feather edges to create smooth transition to area outside of repair.
 6. Allow such repair areas to cure properly (24 hours) before proceeding with base coat.
- B. Parapet Walls
 1. All joints are to be sealed with ALDOSEAL 385 Polyurethane Sealant.
 2. Coat the entire wall area with ALDOCOAT 395 Silicone to achieve a DFT of 20 mils. Coating is to be applied in two or three coats to avoid running or sagging on a vertical surface.

C. Penetrations and Curb Flashings

1. All areas of water penetration around base of mechanicals are to be sealed with ALDOSEAL 385 Polyurethane Sealant. Material is to be applied in a manner that does not impede any water flow around units.
2. Curb flashings and cricket details shall be flashed with ALDOSEAL 385 Polyurethane Sealant. Material is to be applied on all curbs and crickets in such a manner as to not impede any water flow.

3.04 SYSTEM APPLICATION

A. Flashing Details: After completion of substrate preparation and repairs, all flashing must be completely coated with ALDOCOAT 384 Polyurethane.

1. Vent Pipes: All vent pipes must be totally sealed applying foundation coat of ALDOSEAL 385 at point of penetration into roof deck.
2. Surface Cracks and "Alligatoring": Address and seal all surface cracks of $\frac{1}{4}$ " or smaller with ALDOSEAL 385. Do not apply greater than 32 wet mils. For all cracks greater than $\frac{1}{4}$ ", address and seal with ALDOFABRIC 272 Roofing Fabric. Apply ALDOCOAT 384, embed fabric and saturate with a second pass of ALDOCOAT 384.
3. Skylights: Seal all perimeters of skylights with ALDOSEAL 385 prior to base coat application.
4. Inspection: All preliminary work to be inspected carefully by applicator to insure that all work meets project planned specifications.

B. Seams

1. All seams are to be sealed prior to base coat using ALDOSEAL 385. Apply 50 wet mils of ALDOSEAL 385 and extend application at least 3" on either side of seam. Allow to cure at least 24 hours before proceeding with next step.

C. Coating Application

1. Base Coat: Apply ALDOCOAT 384 Polyurethane (silver/gray) at a rate of 1.5 gallons per 100 square feet (24 wet mils) for the 10 year warranty requirements. Allow 24 hours drying time. Inspect surface for holidays, flaws or defects and correct all such conditions prior to proceeding to topcoat application.
2. Top Coat: Apply ALDOCOAT 395 Silicone (white) at a rate of 1.5 gallons per 100 square feet (20-24 wet mils) for the 10 year warranty requirements. Allow 24 hours for drying time and inspect for holidays, flaws or defects and correct such conditions before notification of job completion.

C. Final Inspection

1. Allow a minimum of 48 hours for inspection by an authorized representative of manufacturer. All warranty documentation, including a minimum of 6 photos of before, during and after application are to be submitted to representative at this time.

3.05 PROTECTION

A. Building

1. All building surfaces are to be covered and protected against overspray or any other damage.

B. Surrounding Area.

1. All adjacent parking areas to project site are to be roped off a minimum of 75 feet from spray area. All vehicles are to be parked beyond this area.
2. Special care is to be taken not to spray during windy conditions. The applicator is solely responsible to monitor such weather conditions to insure no damage from overspray.

C. Foot Traffic

1. All areas on coated surface subject to foot traffic are to be covered. Roof coatings are not traffic resistant products.

3.06 SITE CLEAN UP

A. Responsibility

1. Complete site cleanup is the sole responsibility of the contractor.

B. Removal

1. All pails, containers, equipment, protective coverings and all other items brought on site by the contractor must be removed from the site and disposed of properly and in accordance with all federal, state and local regulations.
2. All work areas must be left in an undamaged condition and acceptable to building owner or facility manager.