



INSTALLATION GUIDE SPECIFICATION

FLUID-APPLIED WATERPROOFING

(OVER CONCRETE ROOF DECK)

PART 1 — GENERAL

1.01 DESCRIPTION

A. Scope

Installation of a high grade reinforced acrylic roof coating system to waterproof and protect existing concrete decks.

B. Related work

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

1. Pressure washing and cleaning of the substrate.
2. Bonding agent application with roofing fabric.
3. Attention to flashings and penetrations
4. 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 as outlined below.

B. Shop Drawings

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

C. Samples

1. Submit cured membrane sample (optional).

D. Warranty

1. Provide Manufacturer and Applicator Warranty.
2. Submit Preliminary Warranty Bid Application to ALDO Products Company, Inc., for approval prior to starting any work.

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1.03 QUALITY ASSURANCE

A. Qualifications

1. Roof coating material shall be obtained from ALDO Products Company, Inc.
2. Applicator shall be an ALDOCOAT 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 the approved material manufacturer'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.

C. Material Requirements

1. Acrylic coating requirements, as follows:

Property	ASTM Test	Result
Tensile Strength	D412-97A	400 psi
Elongation	D412-97A	302%, 195% w/ fabric
Water Vapor	E96-95	3.4 perms
Weathering	G26-95	No Effect (3800 hours)
Gloss Value	D523-89(94)	Slight Loss(3800 hours)
Coloration	D2244-93	Slight Loss (3800 hours)
Algae Resistance	G29-96	No Growth Supported
Fungi Resistance	G21-96	No Growth Supported
Salt Spray	B117	No Effect (3000 hours)

2. Topcoat to meet ASTM D6083.
3. System to meet FM4470 Class 1 Roof Cover.

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.

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C. Acrylic Coatings and Freezing Temperatures

1. All acrylic coating and seam seal products must be protected from freezing temperatures during shipment and storage. Subjecting products to freezing conditions may result in the material being damaged and unfit for use.

1.05 PROJECT SITE CONDITIONS

A. Coating Application

1. Acrylic coating should not be applied when ambient air and substrate temperatures are below 45° or if there is a possibility of temperatures falling below 35° within a 24 hour period after application.

B. High Humidity

1. High humidity (above 85%) 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 standard 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 sheets and this specification and that project site conditions meet the requirements for satisfactory application and outcome of work.

PART 2 — PRODUCTS

2.01 MANUFACTURER

A. ALDO Products Company, Inc.

1604 N. Main Street
Kannapolis, NC 28081

ALDOCOAT Concrete Roof Restoration FM4470 System

(800) 474-6019

www.aldoproducts.com

2.02 COATING MATERIALS

A. Primers

1. ALDOBOND 767 Bonding Agent.

B. Base & Top Coat Product

1. ALDOCOAT 374 Acrylic Contractor Grade.
2. ALDOCOAT 400 Premium Acrylic.

2.03 ACCESSORY ITEMS & EQUIPMENT

A. Accessory Items

1. ALDOFABRIC 272 Polyester.
2. ALDOSEAL 750 Acrylic Sealant.
3. ALDOSEAL 1602 Seam Tape.

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 .027" to .039" and a fan angle of 40° to 50°.
4. Fluid hose: Nylon high pressure hose with listed inside diameter up 3/8" for initial seventy-five (75) feet; for all hose length over 75 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.
- B. A moisture survey is to be conducted to insure substrate is dry. All areas of trapped moisture are to be identified.
- C. Verify that all penetrations, rooftop units, HVAC equipment are secured to roof system. All HVAC intake vents are to be secured or closed during system installation.
- D. Verify that the immediate surrounding environment is protected against overspray.
- E. Verify that all drainage systems, gutters, scuppers and downspouts are cleaned and in working order.

3.02 SURFACE/SUBSTRATE PREPERATION

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- 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. Pressure washing: Pressure wash substrate to remove all dirt, dust, and remains of previous paint and/or coatings. Pressure washer to have a minimum working pressure of 3,000 psi. Extra cleaning may be necessary over areas with residual asphalt repairs, if any. Care should be taken not to damage existing roof or exasperate leak situations during pressure washing activities.
 2. Ponding water areas: Contractor shall make all efforts to eliminate ponding water areas on the concrete roof substrate prior to application of the coating and fabric system described herein.
 3. 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 for an adhesion test.

3.03 SYSTEM APPLICATION

A. Primer / Fabric Application:

1. Roof is to be primed with ALDOBOND 767 Bonding Agent at a rate of 1 gallon per 100 square feet.
2. Embed ALDOFABRIC 272 (desired width) into primer while still wet.
3. Immediately apply second coat of ALDOBOND 767 at a rate of 1 gallon per 100 square feet. Allow a minimum of 24 hours for product to set up before proceeding.

B. Coating Application:

1. Base Coat: Apply ALDOCOAT 374 Acrylic at a rate of 1.5 gallons per 100 square feet in accordance with the requirements of the warranty requested. Allow 12-24 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 400 Premium Acrylic at a rate of 1.5 gallons per 100 square feet in accordance with the requirements of the warranty requested. 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.
2. 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

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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.