# **REFLECTIT™**



100% Acrylic Coating Providing a Pearlescent Appearance

# Reflectit Application Instructions Spray and Roller

Tools Required for Application of Reflectit – Spray Application

- 1. Stainless Steel Trowel
- 2. Palm Sander or Foam Sanding Block
- 3. Fine or Very Fine Sandpaper
- 4. Air Compressor capable of maintaining 12 CFM (5.66 L/s) or above
- 5. Wind-lock B-M1 Mixing Paddle or equivalent
- 6. High-torque 1/2 in (12.7 mm) Variable Speed Drill
- 7. Nylon Stocking or Fine Mesh Paint Screen (Trimaco Standard Paint Strainer 11583/12FF or equivalent)
- 8. Delmhorst Moisture Meter Model #BD-2100
- 9. Nursery Shade Cloth
- 10. Binks 2001 or 2100 Stainless Steel Spray Gun
- 11. 66SS Fluid Nozzle
- 12. 66SD Air Nozzle
- 13. 12 ft (3.7 m) Air and Fluid Hoses
- 14. Binks dual regulated pressure tank

Tools Required for Application of Reflectit – Roller or Brush Application

- 1. Wind-lock B-M1 Mixing Paddle or equivalent
- 2. High-torque 1/2 in (12.7 mm) Variable Speed Drill
- 3. Delmhorst Moisture Meter Model #BD-2100
- 4. Nursery Shade Cloth
- 5. 1 in (25 mm) Nap Polyester or Polyester Blend with Nylon or Lamb's Wool Roller Cover with Beveled Ends and Phenolic Core
- 6. 18 in (460 mm) Wide, Double Pressure Roller Frame with 2 1/4 in (57 mm) inside diameter
- 7. 4 in ((102 mm) Wide Roller for cutting in
- 8. 100 % Nylon Bristle Brush (very small areas only)

# Training:

The contractor applying Reflectit shall be experienced in spraying or rolling high gloss coatings and shall have been trained by Dryvit Systems, Inc. Field Service personnel in the proper application of Skimlt™, Color Prime™ and Reflectit. Dryvit Systems, Inc. does not guarantee the workmanship of trained contractors.

#### I. Spray Application Instructions

- A. General Instructions. The following instructions apply to using Binks pressure pot spray equipment.
- B. Mock-up
  - 1. It is strongly recommended that a minimum 8 ft x 8 ft (2.4 m x 2.4 m) area of actual project or mock-up wall be sprayed with Reflectit for the approval of the color and overall appearance by the owner/architect. This area should include individual panels of a minimum 2 ft x 2 ft (0.61 m x 0.61 m) to a maximum 5 ft x 5 ft (1.5 m x 1.5 m) [or 25 sq ft (2.3 m²) with the vertical height not being more than 5 ft (1.5 m)]. The mock-up serves as the basis for approval for the project done under actual project conditions using the tools and materials that will be used on the job. In addition, it allows the applicator to refine any necessary techniques specific to the project.

#### C. Material Preparation

- 1. Reflectit
  - a. Order enough Reflectit in order to complete the project with a single batch whenever possible. If more than one batch is needed, material should be boxed to minimize color differences from batch to batch.
  - b. There will be some separation in the Reflectit and soft settling. This is normal and the material can be easily mixed to uniformity. Just prior to application, mix Reflectit for 1 minute to ensure uniformity using a Windlock B-M1 mixing paddle or equivalent driven by a high-torque 1/2 in (12.7 mm) variable speed drill, at maximum 400-500 RPM, just enough to maintain a vortex. Mix all the pails the same length of time. DO NOT OVERMIX. Water addition is not necessary.
  - c. Strain the Reflectit using a nylon stocking or fine mesh paint screen. A Trimaco standard paint strainer 11583/12FF or equivalent is recommended and available at local paint stores.
- 2. Color Prime™
  - a. Color Prime is required where the substrate has been coated with Dryvit Skimlt™ (see Skimlt data sheet DS847 for application instructions). Color Prime is not required where the substrate is a new Dryvit finish, but is recommended to even out absorption of the Reflectit into the finish and improve uniformity of appearance. Just prior to application, mix Color Prime for 1 minute to ensure uniformity using a Wind-lock B-M1 mixing paddle or equivalent driven by a high-torque 1/2 in (12.7 mm) variable speed drill, at maximum 400-500 RPM, just enough to maintain a vortex. **DO NOT OVERMIX.**
  - b. Add approximately one-half gallon (1.9 liters) water per 5 gallon (19 L) pail of Color Prime. Mix all the pails the same length of time and make the same water-add to each pail for a particular batch. DO NOT OVERMIX.

#### D. Surface Preparation

- 1. A spray applied finish will accentuate surface imperfections. When attempting to replicate smooth glossy panels it is necessary to skim out the base coat a second time with the Dryvit Primus®, Genesis®, Primus® DM, Genesis® DM or Genesis® DMS mixtures to obtain a flat and level surface. It is critical that the base coat surface be smooth, flat, and free of imperfections prior to application of Skimlt or smooth finish. Refer to appropriate Dryvit product data sheet for mixing instructions and application.
- 2. Apply Dryvit finish as specified to the properly prepared clean and dry base coat. When attempting to replicate smooth glossy panels, apply a finely textured Dryvit finish such as Lymestone™ or Freestyle® in two tight passes minimizing trowel marks. Apply on controlled panel area, of a minimum 2 ft x 2 ft (0.61 m x 0.61 m) to a maximum 5 ft x 5 ft (1.5 m x 1.5 m) [or 25 sq ft (2.3 m²) with the vertical height not being more than 5 ft (1.5 m)]. Due to the reflective nature of Reflectit, larger smooth areas will be more difficult to finish and achieve acceptable aesthetics especially during critical light conditions.

~OR~

- 3. Apply SkimIt in accordance with SkimIt application instructions on product data sheet DS847 to a properly prepared base coat. Completely and carefully remove any dust from sanding of the SkimIt before applying Color Prime. Apply on controlled panel area, of a minimum 2 ft x 2 ft (0.61 m x 0.61 m) to a maximum 5 ft x 5 ft (1.5 m x 1.5 m) [or 25 sq ft (2.3 m²) with the vertical height not being more than 5 ft (1.5 m)] to ensure aesthetics will not be compromised.
- 4. The Skimlt or finish must be completely dry before applying Color Prime and/or Reflectit. Test the Skimlt or finish for dryness with a moisture meter. The meter reads zero when the probe is inserted into a dry finish. The Delmhorst Moisture Meter model #BD-2100 is recommended. Contact Delmhorst at 1-877-335-6467 or www.Delmhorst.com. Do not apply Skimlt over Color Prime or Reflectit.
- Apply a uniform coat of the specified color-coordinated Color Prime by spray using the same equipment, procedures and techniques as for the Reflectit as described below. Allow Color Prime to dry at least twelve (12) hours or until completely dry.

- E. Application Conditions
  - 1. Air and surface temperatures for application of Reflectit must be between 50 °F (10 °C) and 90 °F (32 °C) and must remain so for a minimum of 24 hours. Avoid spraying on windy days or airborne Reflectit material will mist unprotected surfaces and also result in a non-uniform appearance. To prevent "cratering" of the finish, avoid positioning the spray gun closer than 16 in (0.4 m) from the wall. Spray in the shade. When spraying on sunny days, shade the wall using nursery shade cloth or other appropriate method. Avoid spraying onto a wall surface that is over 90 °F (32 °C). Spray application over warm, hot surfaces will cause the Reflectit to dry too quickly affecting gloss and appearance compared to Reflectit spray applied over cooler surfaces.
- F. Equipment The following illustrations are provided by Binks.
  - 1. A Binks 2001 or 2100 stainless steel spray gun is required for spray application of both the Reflectit and the Color Prime. A 66SS fluid nozzle and a 66SD air nozzle, (which is an external mix air cap) are required.



2. The Binks spray gun is to be used in conjunction with a Binks dual regulation (air and fluid) pressure tank.



- 3. A compressor capable of maintaining 12 cubic feet per minute (CFM) (5.66 L/s) at 80 psi (552 kPa) or above working pressure is needed. A four horsepower compressor is usually adequate.
- G. Spray Techniques
  - 1. Attach air line from compressor to tank. Make sure both air and fluid pressures are set to zero.
  - 2. Turn up the fluid pressure to approximately 10 psi (69 kPa)
  - 3. Pull the trigger on the spray gun until a stream of Reflectit begins to flow (use a clean container to collect the Reflectit material). The stream should flow out approximately 7 1/2 in (19 cm) before it begins to fall off. Adjust the fluid pressure until this happens. The resulting fluid pressure should be in the range of 10 15 psi (69 103 kPa).

4. With the fluid pressure at the appropriate setting, turn up the air pressure to approximately 40 psi (276 kPa). Spray apply on a scrap piece of uniformly colored sheathing or other similar surface in a vertical orientation while adjusting the air pressure to achieve proper atomization of the Reflectit. The resulting air pressure should be 35 - 45 psi (241-311 kPa). Hold the gun about 16 in (40 cm) from the surface and spray for several seconds. The atomized Reflectit should appear in a uniform oval pattern approximately 20 in (51 cm) long by 4 in (10 cm) wide. See the section below, provided by Binks, to adjust if this is not the case.

#### FAULTY PATTERNS AND HOW TO CORRECT THEM

PATTERN	CAUSE	CORRECTION
	Dried material in side-port "A" restricts passage of air. Greater flow of air from cleaner side-port "B" forces fan pattern in direction of clogged side.	Dissolve material in side-ports with thinner, then blow gun clean. Do not poke into openings with metal instruments.
	Dried material around the outside of the fluid nozzle tip at position "C" restricts the passage of atomizing air at one point through the center opening of air nozzle and results in pattern shown. This pattern can also be caused by a loose air nozzle.	Remove air nozzle and wipe off fluid tip using rag wet with thinner. Tighten air nozzle.
	A split spray or one that is heavy on each end of a fan pattern and weak in the middle is usually caused by: (1) Too high an atomization air pressure (2) Attempting to get too wide a spray pattern with thin material.	Reducing air pressure will correct cause (1). To correct cause (2), open material control to full position by turning to left. At the same time, turn spray width adjustment to right. This will reduce width of spray, but will correct split spray pattern.

- 5. Mask off adjacent areas of the panel to protect from overspray. Hold the gun approximately 15 18 in (38 46 cm) from the wall to achieve a fan of 20 in 24 in (50 cm 60 cm). Hold the gun perpendicular to the wall and make steady passes parallel to the wall moving approximately 1.5 2.0 ft/sec (0.5 0.6 m/sec) horizontally across the panel with 50 % overlap. Passes should be approximately 5 in (13 cm) apart. Follow with similar passes in a vertical direction. This is considered one cross hatch pattern and is the first coat of Reflectit.
- 6. Allow the first coat of Reflectit to dry for a minimum of 30 minutes or until dry to the touch. Spray a second coat using the same procedure as the first. Remove masking tape while the Reflectit is still wet. When dry, the panel should have a uniform, shiny appearance. Protect from rain for a minimum of 24 hours, or until dry.

#### **II. Roller Application Instructions**

#### A. Mock-up

1. It is strongly recommended that a minimum 8 ft x 8 ft (2.4 m x 2.4 m) area of actual project or mock-up wall be roller applied with Reflectit for the approval of the color and overall appearance by the owner/architect. This area should include individual panels of a minimum 2 ft x 2 ft (0.61 m x 0.61 m) to a maximum 5 ft x 5 ft (1.5 m x 1.5 m) [or 25 sq ft (2.3 m²) with the vertical height not being more than 5 ft (1.5 m)]. The mock-up serves as the basis for approval for the project done under actual project conditions using the tools and materials that will be used on the job. In addition, it allows the applicator to refine the necessary techniques specific to the project.

### B. General

- 1. Roller application is only effective on more highly textured finishes, such as Sandblast® or coarser.
- 2. Two coats of Reflectit are required to achieve optimum performance.
- 3. A maximum 1 in (25 mm) nap polyester or polyester blend with nylon or lamb's wool and with beveled ends and a phenolic core is recommended.
- 4. An 18 in (460 mm) wide, double pressure roller frame with 2 1/4 in (57 mm) inside diameter is recommended.
- 5. Make sure that proper staging is provided to maintain a wet edge.
- 6. Panel sizes shall be limited to a minimum 2 ft x 2 ft (0.61 m x 0.61 m) to a maximum 5 ft x 5 ft (1.5 m x 1.5 m) [or 25 sq ft (2.3 m²) with the vertical height not being more than 5 ft (1.5 m)]
  - NOTE: As with all highly reflective coatings, under critical light conditions, a certain degree of roller marks and other variations may be visible.

#### C. Material Preparation

- 1. Reflectit
  - a. Just prior to application, mix Reflectit for 1 minute to ensure uniformity using a Wind-lock B-M1 mixing paddle or equivalent driven by a high-torque 1/2 in (12.7 mm) variable speed drill, at maximum 400-500 RPM, just enough to maintain a vortex. **DO NOT OVERMIX.**
- D. Surface Preparation
  - 1. The surface to be coated shall be free of dust, dirt, efflorescence, grease, oil, or other materials that may interfere with adhesion of Reflectit.
- E. Application
  - 1. Apply Reflectit in one continuous coat, maintaining a wet edge as the application proceeds to a natural break.
  - 2. The roller cover must be kept fully loaded as the application proceeds.
  - 3. Do not stretch out the application by rolling with a dry roller. The last leveling roller strokes should always be in the same direction to minimize lap marks and avoid directionality of the reflective pigments.
  - 4. Do not cut in around openings prior to overall application, but rather, do the cut in work as the application proceeds. A 4 in (100 mm) wide roller is recommended for cut in work. NOTE: Where cutting in, Reflectit may be thinned down with water to prevent excessive build-up. Brush application is ONLY recommended on very small areas when use of a roller or spray gun is not practical.
  - 5. Allow first coat of Reflectit to completely dry prior to applying the second coat. Second coat of Reflectit shall be applied in the same manner as the first coat.

#### **Troubleshooting Assistance**

Contact your Field Service Manager for additional information and / or recommendations.

## **DISCLAIMER**

Information contained in these application instructions conforms to standard detail and product recommendations for the installation of the Reflectit as of the date of publication of this document and is presented in good faith. Dryvit Systems, Inc. assumes no liability, expressed or implied, as to the architecture, engineering or workmanship of any project. To insure that you are using the latest, most complete information, contact Dryvit Systems, Inc., at:

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