# **REFLECTIT™**



**100% Acrylic Coating Providing a Pearlescent Appearance** 

# Reflectit Spray Application Instructions



## I. General Instructions

The following instructions apply to using Binks pressure pot spray equipment.

#### A. Mock-up

1. It is strongly recommended that a minimum 2.4 m x 2.4 m (8 ft x 8 ft) area of actual project or mock-up wall be sprayed with Reflectit for the approval of the colour and overall appearance by the owner/architect. This area should include individual panels of no more than 1.5 m x 1.5 m (5 ft x 5 ft). 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 become familiar with the product to establish and refine the necessary techniques.

# B. 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 12.7 mm (1/2 in) variable speed drill, at maximum 400-500 RPM, just enough to maintain a vortex. **DO NOT OVERMIX.**
- b. Add approximately 0.95 litres (one quart) water per 5-gallon pail of Reflectit. Check the viscosity with a #4 Zahn cup (available from BYK-Gardner USA, Tel: 1-301-483-6500). The viscosity should be in the range of 25-35 seconds flow through a #4 Zahn cup. Mix all pails for the same length of time and add the same amount of water to each pail of that batch. **DO NOT OVERMIX.**
- 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 Ultrafil<sup>TM</sup> (see Ultrafil data sheet DSC483 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 the uniformity of the appearance. Prior to application, mix Color Prime for 1 minute to ensure uniformity. Use a Wind-lock B-M1 mixing paddle or equivalent driven by a high-torque 12.7 mm (1/2 in) variable speed drill, at maximum 400-500 RPM, just enough to maintain a vortex. **DO NOT OVERMIX.**
- b. Add approximately 0.95 litres (one quart) of water per 5-gallon pail of Color Prime. Check the viscosity with a #4 Zahn cup. The viscosity should be in the range of 25-35 seconds flow through a #4 Zahn cup. Mix all pails for the same length of time and add the same amount of water to each pail of that batch. **DO NOT OVERMIX.**

#### C. Surface Preparation

- 1. A spray 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<sup>®</sup>, Genesis<sup>®</sup>, Primus<sup>®</sup> DM, Genesis<sup>®</sup> DM or Genesis<sup>®</sup> 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 Ultrafil 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 areas, not more than 1.5 m (5 ft) in either direction. 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 Ultrafil in accordance with the Ultrafil application instructions on product data sheet DSC483 to a properly prepared base coat. Carefully remove any dust and sand from the Ultrafil before applying Color Prime. Apply on controlled panel areas, no more than 1.5 m (5 ft) in either direction to ensure that the aesthetics will not be compromised.
- 4. The Ultrafil or finish must be completely dry before applying the Color Prime and/or Reflectit. Test the Ultrafil or finish for dryness with a moisture metre. The metre should read 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.
- 5. Apply a uniform coat of the specified colour-coordinated Color Prime by spray. Use the same equipment, procedures and techniques as for the Reflectit, described below. Allow Color Prime to dry at least twelve (12) hours or until completely dry.

### D. Application Conditions

1. Air and surface temperatures for the application of Reflectit must be 10°C (50°F) or higher and must remain so for a minimum of 24 hours. Avoid spraying on windy days or airborne Reflectit material will mist unprotected surfaces and result in a non-uniform appearance. To prevent "cratering" of the finish, avoid positioning the spray gun closer than 0.4 m (16 in) 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

32°C (90°F). Spraying application over warm, hot surfaces will cause the Reflectit to dry too quickly affecting the gloss and appearance, as compared to Reflectit spray applied over cooler surfaces.

- E. 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) or above working pressure is needed. A four horsepower compressor is usually adequate.

#### F. Spray Techniques

- 1. Attach the air line from the compressor to the tank. Make sure both air and fluid pressures are set to zero.
- 2. Turn up the fluid pressure to approximately 69 kPa (10 psi)
- 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 19 cm (7 1/2 in) before it begins to fall off. Adjust the fluid pressure until this happens. The resulting fluid pressure should be in the range of 69 103 kPa (10-15 psi).
- 4. With the fluid pressure at the appropriate setting, turn up the air pressure to approximately 276 kPa (40 psi). Apply spray on a scrap piece of uniformly coloured 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 241-311 kPa (35-45 psi). Hold the gun about 40 cm (16 in) from the surface and spray for several seconds. The atomized Reflectit should appear in a uniform oval pattern approximately 51 cm (20 in) long by 10 cm (4 in) 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.                                                                                                                                          |
| ikushin (5.72 k) | 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 38-46 cm (15-18 in) from the wall to achieve a fan of 50 cm 60 cm (20 in 24 in). Hold the gun perpendicular to the wall and make steady passes parallel to the wall moving approximately 0.5-0.6 m/sec (1.5 2.0 ft/sec) horizontally across the panel with 50 % overlap. Passes should be approximately 13 cm (5 in) 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. 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 Canada, at:

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