

SECTION 03 53 00

Formatted Specification Addendum for PC-5614 Topping ULTRAFLO[®]R DIAMATIC[®] PC-5614 Polished Concrete Topping / Color

PART I – GENERAL

1.01 SUMMARY

- A. This is the recommended addendum for the ULTRAFLO[®]R DIAMATIC[®] PC-5614 Topping System with Color.
- B. Complete installation details are provided in the DIAMATIC[®] Technical Brochures available at www.diamaticusa.com.

1.02 SECTION INCLUDES

- A. Products and procedures for the installation of the ULTRAFLO[®]R DIAMATIC[®] PC-5614 Polished Concrete Topping System with color.

1.03 QUALITY ASSURANCE / WARRANTY

- A. Manufacturer Qualifications: The ULTRAFLO[®]R DIAMATIC[®] PC-5614 Topping System consists of a process and products engineered and manufactured by DIAMATIC[®]. Any substitutions are not permitted and void warranty.
- B. Installer Qualifications:
 - a. Installer must be a DIAMATIC[®] ELITE installer for the ULTRAFLO[®]R PC-5614 Topping System, including the use of DIAMATIC[®] equipment and diamond abrasives, and DIAMATIC[®] concrete preparation, priming, Topping installation, chemical hardening and finishing materials.
 - b. Installer must be experienced in performing specified work similar in design, products and scope of this project, with a documented track record of successful, in-service performance and with sufficient production capabilities, facilities and personnel to produce specified work.
 - c. A factory-trained, competent supervisor must be maintained on site during all times during which specified work is performed.
 - d. National brand specific projects must have DMS (Diamatic Management Services) personnel present during the pre-construction conference to insure quality control standards are in compliance.
 - e. A current list of qualified installers may be obtained through DIAMATIC MANAGEMENT SERVICES, DIAMATIC USA 866-295-5512

3.04 TOPPING ADDENDUM

A. DIAMATIC UF-CONCRETE PRIMER INSTALLATION

1. Prepare the surface to Concrete Surface Profile to a CSP 3 in accordance with ICRI-03732.
2. Completely clean the surface to remove any loose particles or debris from the surface. The surface must be completely dry before the Epoxy application.
3. Mix the Epoxy Primer according to the installation guidelines and apply immediately to the surface using a ½" nap roller at the rate of 400 square feet per 3 gallon kit.
4. Broadcast the #20-30 kiln dried sand into the surface to the point of refusal, or at the rate of 1 pound per square foot. Walking on the surface with spiked shoes is permitted.
5. Allow the primer to dry a minimum of 16 hours.
6. Remove any excess sand that is not bonded to the surface.

B. DIAMATIC PC-5614 TOPPING INSTALLATION

1. Mix the Topping according to the technical data sheet. The drill should be equipped with a football style paddle, and should run at a minimum speed of 800 RPM. The material shall be mixed for a minimum time of 3 minutes. Generally a 2 bag mix should be done to insure consistency in the application.
2. Using a gauged rake (Mid-West Rake with 3/8" cams) spread the material evenly over the primed surface.
3. The material may be smoothed using a standard overlay stainless smoothing tool. Be sure to fill any holes or low areas in the surface during the installation. Do not overwork the surface.
4. Any smoothing or finishing should be done within 20 minutes of the application. After 20 minutes the surface should not be touched.
5. Allow the material to dry for a minimum of 12 hours before grinding begins, or until a rebound test result produces 2,500 PSI or greater.

3.05 POLISHING ADDENDUM

A. POLISHING STEPS

1. GRIND/POLISH #1: DIAMATIC 50 Grit Hard Bond Ceramic Diamond.
2. Clean the floor to remove all residual dust.
3. GRIND/POLISH #2: DIAMATIC 100 Grit Hard Bond Ceramic diamonds. Apply the DIAMATIC REACTIVE SURFACE GROUT at the rate of 300 square feet per gallon in front of the grinder. Refer to the RSG Technical Information Sheet for complete details.
4. Allow the RSG (Reactive Surface Grout) to dry completely before continuing. The bottom of the grinder should also be thoroughly cleaned before running the next pass.
5. GRIND/POLISH #3: DIAMATIC 200 Grit FLEX-RES Resin bonded diamonds.
6. Clean the floor to remove all residual dust.
7. GRIND/POLISH #4: DIAMATIC 400 Grit FLEX-RES Resin bonded diamonds.
8. Clean the floor to remove all residual dust.
9. Apply the DIAMATIC FLOR-COLOR at the rate of 400-500 square feet per gallon. Consult the technical information sheet for complete details.
10. Allow the FLOR-COLOR to dry for a minimum time of 1-2 hours before proceeding.
11. GRIND/POLISH #4: DIAMATIC 800 Grit FLEX-RES Resin bonded diamonds.
12. Clean the floor to remove all residual dust.
13. MICROPOLISH/BURNISH #1: FLOR-GRIT 800 Diamond Impregnated Pad.
14. Apply DIAMATIC FLOR-GUARD EX per application instructions at a rate of 350-450 square feet per gallon.
15. Allow the FLOR-GUARD EX to dry for a minimum of 30-60 minutes or until tack free.
16. Apply DIAMATIC FLOR-FINISH (High Gloss) per application instructions at a rate of 3,000 square feet per gallon.
17. Allow the FLOR-FINISH to dry for a minimum of 15-20 minutes.
18. MICROPOLISH/BURNISH #2: FLOR-GRIT 800 Diamond Impregnated Pad. Must be able to produce 100 degrees F.
19. Apply DIAMATIC FLOR-FINISH (High Gloss) per application instructions at a rate of 3,000 square feet per gallon.
20. MICROPOLISH/BURNISH #3: FLOR-GRIT 1500 Diamond Impregnated Pad. Must be able to produce 100 degrees F.

END OF SECTION