**Excel-Coat BC-100 Application Guide**

**Decorative Quartz Broadcast Finish**

---

### MATERIALS & TOOLS

**MATERIALS (for BC-100 Finish)**

- Excel-Coat Primer (Concrete)
- Excel-Coat MERT Clear
- Excel-Coat #300 Tinted
- Excel-Coat Clear Sealer
- Epoxy Crack Repair Material
- Urethane Sealant
- Broadcast Colored Quartz (rounded)

**Note:** Additional waterproofing materials and application equipment are required for Waterproofing Systems. Refer to appropriate waterproofing system Application Guides, i.e. Excel-Coat Pedestrian Traffic Membrane for concrete substrates and the Excel-Coat Fire System for plywood substrates.

**TOOLS**

- Hammer
- Razor Knife
- Wallboard Scraper
- Roller Sleeves
- Roller Frame
- 4” Paint Brush
- Caulking Gun
- Caulking Knife

---

### PREPARATION

**PLYWOOD**

**EXCEL-COAT FIRE SYSTEM (WATERPROOFING)**


**CONCRETE**

**PEDESTRIAN TRAFFIC MEMBRANE (WATERPROOFING)**

Refer to the Excel-Coat Pedestrian Traffic Membrane Spec Data and Application Guide for instructions. Upon installation and cure of the base membrane with fiberglass reinforcement and patching as needed, begin installation of the BC-100 finish.

---

### NEW CONCRETE SURFACE PREP

**BC-100 AS A FINISH ON GRADE (NO WATERPROOFING)**

1. Concrete shall be cured a minimum of 28 days prior to installation of the Excel-Coat system.
2. Curing of new concrete shall be water cure method or the use of water based pure sodium silicate solution. Curing compounds shall be approved by Excellent Coatings International
3. Concrete moisture content shall not exceed 10%. Moisture Vapor Transmission shall not exceed 5 lbs. per 1,000 square ft. per 24 hours.
4. Check surface for excessive roughness, voids, protrusions or exposed aggregate. Poorly finished concrete will telegraph through the Excel-Coat finish and should be repaired appropriately.
5. Concrete with a hard slick surface must be etched with a solution of at least one part muriatic acid and three parts water or commercial concrete etch. Rinse thoroughly with water and let dry. Shot blasting is also an acceptable surface preparation.
6. All tooled and control joints shall be caulked with a urethane sealant. Structural cracks shall be routed, primed, and filled with epoxy crack repair material.
7. Concrete surfaces must be initially treated with Excel-Coat Primer 120 at a rate of 300 square feet per gallon prior to application of the waterproofing systems or the BC-100 as a concrete topping.

**Note:** Do not apply over non-structural lightweight concrete without prior written approval.

---

### OLD CONCRETE SURFACE PREP

**BC-100 AS A FINISH ON-GRADE (NO WATERPROOFING)**

1. Clean surface to remove all grease, oil, dust, powder or wax film with Excel-Coat All-Purpose Cleaner or detergent. Rinse and let dry.
2. Concrete with a hard slick surface must be etched with a solution of at least one part muriatic acid and three parts water or commercial concrete etch. Rinse thoroughly with water and let dry. Shot blasting or mechanical grinding are the preferred method of surface preparation.
3. Check surface for excessive roughness, voids, protrusions or exposed aggregate. Poorly finished concrete will telegraph through the Excel-Coat finish and should be repaired appropriately.
4. All tooled and control joints shall be caulked with a urethane sealant. Structural cracks shall be routed, primed, and filled with epoxy crack repair material.
5. Prime concrete with Excel-Coat Primer 120 at the rate of 300 square feet per gallon.

**Note:** If the substrate holds water, proper drainage must be achieved. Install drains and scuppers where possible, and slope to drain (1/4” per
1. **Concrete Traffic on Concrete Membrane:**

   All expansion joints shall be honored and protected during system application. Upon completion of the system, expansion joints shall be detailed with a urethane caulk.

2. **Concrete Traffic on Existing Systems:**

   Expansion joints shall be detailed with a urethane caulk. All expansion joints shall be honored and protected during system application.

3. **Concrete Traffic on Plywood Substrate:**

   Plywood substrate shall meet criteria set forth for the Excel-Coat Fire System applications. The Excel-Coat F/S Lath, Mortar and Waterproofing Membrane shall be installed cured and patched as needed.

4. **Concrete Traffic on Aggregate:**

   Aggregate coverage: The approximate yield for the Excel-Coat BC-100 aggregate is 75-125 square feet per bag for the double broadcast.

5. **Concrete Traffic on Treated Aggregate:**

   Sweep excess aggregate off deck. Apply a coat of Primer over aggregate. Again broadcast to refusal, allow to dry 12-24 hours.

6. **Concrete Traffic on Unprimed Aggregate:**

   Sweep excess aggregate off deck. Apply a coat of Clear MERT over the treated aggregate. Roll a coat of Clear MERT and allow to dry 12-24 hours.

7. **Concrete Traffic on Primed Aggregate:**

   Roll Tinted MERT or Excel-Coat 300 (tinted) over the wet Excel-Coat #300 primer and allow to dry 6-8 hours.

8. **Concrete Traffic on Unprimed Concrete:**

   Apply a coat of Primer over aggregate. Again broadcast to refusal, allow to dry 12-24 hours.

9. **Concrete Traffic on Primed Concrete:**

   Apply a coat of Clear MERT and allow to dry 12-24 hours.

10. **Concrete Traffic on Unprimed Concrete Membrane:**

    Allow completed system to cure 24 hours before heavy foot traffic is permitted and an additional 72 hours before heavy objects are placed on the surface.

11. **Concrete Traffic on Primed Concrete Membrane:**

    All completed system to cure 24 hours before heavy foot traffic is permitted and an additional 72 hours before heavy objects are placed on the surface.

### APPLICATION FINISH

**Application to Concrete as a Finish (No Waterproofing):**

1. All expansion joints shall be honored and protected during system application. Upon completion of the system, expansion joints shall be detailed with a urethane caulk.

2. Prime all concrete surfaces with Excel-Coat Primer 120. Primer must be clean and slightly tacky when starting the Excel-Coat 100 application process.

3. Roll Tinted Mert or Excel-Coat #300 (tinted) over the primer at a rate of 125 square feet per gallon. Allow to dry 6-8 hours.

4. Immediately broadcast the Excel-Coat BC-100 aggregate onto the wet Excel-Coat #300 (tinted) at a rate of 125 square feet per gallon. Roll a coat of Clear MERT, allow to dry 12-24 hours.

5. Sweep excess aggregate off deck. Excess aggregate may be saved and screened to use again.

6. For the second broadcast, roll a coat of Clear MERT over aggregate working one section at a time. Broadcast to refusal the BC-100 quartz aggregate and allow to dry 12-24 hours.

7. Sweep excess aggregate off deck. Apply a coat of Excel-Coat Clear MERT over the second broadcast at a rate of 125-150 square ft. per gallon and allow to dry 6-8 hours.

8. Apply two thin coats of Excel-Coat Clear Sealer by roller or airless sprayer at the rate of 250 square feet per gallon for a net yield of 125 square feet per gallon total coverage.

### APPLICATION OVER CONCRETE FIRE SYSTEM:

1. Plywood substrate shall meet criteria set forth for the Excel-Coat Fire System applications. The Excel-Coat F/S Lath, Mortar and Waterproofing Membrane shall be installed cured and patched as needed.

2. Seams of fiberglass membrane must be patched and all imperfections shall be made smooth prior to applying the BC-100 finish.

3. Roll Tinted MERT or Excel-Coat 300 (tinted) over the membrane system at a rate of 125 square feet per gallon. Roll at approximately 3-4 feet length sections on the deck and broadcast immediately. Leave a 2-3 inch wet edge at each section to prevent seams.

4. Immediately broadcast the Excel-Coat BC-100 colored quartz aggregate onto the wet #300 (tinted) to refusal, allow to dry 12-24 hours.

5. Sweep excess aggregate off deck. Excess may be saved and then screened to use again.

6. For the second broadcast, roll a coat of Clear MERT over aggregate working one section at a time. Broadcast BC-100 quartz aggregate into wet material and allow to dry 12-24 hours.

7. Sweep excess aggregate off deck. Apply a coat of Excel-Coat Clear MERT at a rate of 125-150 square ft. per gallon over the second broadcast. Allow to dry 6-8 hours.

8. Apply two thin coats of Excel-Coat Clear Sealer by roller or airless sprayer at the rate of 250 square feet per gallon per coat, for a net yield of 125 square feet per gallon total coverage.

9. Allow material to dry approximately 4-8 hours between coats. Dry times may vary.

10. Allow completed system to cure 24 hours before heavy foot traffic is permitted and an additional 72 hours before heavy objects are placed on the surface.

### APPLICATION OVER PEDESTRIAN TRAFFIC ON CONCRETE MEMBRANE:

1. All expansion joints shall be honored and protected during system application. Upon completion of the system, expansion joints shall be detailed with a urethane caulk.

2. Concrete surfaces shall meet the preparation criteria set forth in the Pedestrian Traffic Membrane Application Guide. Primed concrete surfaces shall be tacky when first coat of BC-100 is applied.

3. Seams of fiberglass membrane must be patched and all imperfections shall be made smooth prior to applying the BC-100 finish.

4. Roll Tinted MERT or Excel-Coat 300 (tinted) over the membrane system at a rate of 125 square feet per gallon. Roll in approximately 3-4 feet length sections on deck and broadcast immediately. Leave a 2-3 inch wet edge at each section to prevent seams.

5. Immediately broadcast the Excel-Coat BC-100 colored quartz aggregate onto the wet Excel-Coat #300 (tinted) to refusal, allow to dry 12-24 hours.

6. Sweep excess aggregate off deck. Excess aggregate may be saved and screened to use again.

7. For the second broadcast, roll a coat of Clear MERT over aggregate working one section at a time. Broadcast to refusal the BC-100 quartz aggregate and allow to dry 12-24 hours.

8. Sweep excess aggregate off deck. Apply a coat of Excel-Coat MERT over the second broadcast at a rate of 125-150 square ft. per gallon and allow to dry 6-8 hours.

9. Apply two thin coats of Excel-Coat Clear Sealer by roller or airless sprayer at the rate of 250 square feet per gallon per coat, for a net yield of 125 square feet per gallon total coverage.

### APPLICATION OVER CONCRETE AS A FINISH

1. All expansion joints shall be honored and protected during system application. Upon completion of the system, expansion joints shall be detailed with a urethane caulk.

2. Prime all concrete surfaces with Excel-Coat Primer 120. Primer must be clean and slightly tacky when starting the BC-100 application process.

3. Roll Tinted Mert or Excel-Coat #300 (tinted) over the primer at a rate of 125 square feet per gallon. Allow to dry 6-8 hours.

4. Immediately broadcast the Excel-Coat BC-100 aggregate onto the wet Excel-Coat #300 (tinted) at a rate of 125 square feet per gallon. Roll a coat of Clear MERT, allow to dry 12-24 hours.

5. Sweep excess aggregate off deck. Excess aggregate may be saved and screened to use again.

6. For the second broadcast, roll a coat of Clear MERT over aggregate. Again broadcast to refusal the BC-100 aggregate and allow to dry 12-24 hours.

7. Sweep excess aggregate off deck. Apply a coat of Excel-Coat Clear MERT at a rate of 125-150 square ft. per gallon over the second broadcast. Allow to dry 6-8 hours.

8. Apply two thin coats of either Excel-Coat Clear Sealer by roller or airless sprayer at the rate of 250 square feet per gallon per coat, for a net yield of 125 square feet per gallon total coverage.
9. Allow material to dry approximately 4-8 hours between coats. Dry times may vary.
10. Allow completed system to cure 24 hours before heavy foot traffic is permitted and an additional 72 hours before heavy objects are placed on the surface.

**Decorative Option**

BC100 may be applied using a taped pattern to create a tile-like pattern. Contact Excellent Coatings for information on this finish option.

09/16