Excel-Coat

Application Guide

Pedestrian Traffic Membrane

MATERIALS & TOOLS

MATERIALS

- Excel-Coat Primer
- Excel-Coat #1
- Excel-Coat #200
- Excel-Coat #300
- Excel-Coat Patching Compound
- 0.75 ounce Fiberglass Mat
- Urethane Sealant
- Excel-Crete K/D and Tinted Additive (alternate texture for increased skid resistance and durability)
- Excel-Crete Retarder (as needed for Excel-Crete texture)

TOOLS

- Fiberglass Roller
- Hammer
- Razor Knife
- Wallboard Scraper
- Roller Frame
- Roller Sleeves
- 4" Paint Brush
- Air Compressor (optional)
- Hopper Gun (optional)
- Caulking Gun
- Caulking Knife
- Drill Motor
- Drill Mixing Attachment

PREPARATION

NEW CONCRETE

1. Concrete shall be cured a minimum of 28 days prior to installation of the Excel-Coat system.
2. Curing shall be by means of water cure or dissipating compounds. Curing compounds shall be approved by an authorized representative of Excellent Coatings International
3. Check surface for excessive roughness, voids, protrusions or exposed aggregate. Poorly finished concrete will telegraph through the Excel-Coat finish.
4. Concrete moisture content shall not exceed 10%. Moisture Vapor Transmission shall not exceed 5 lbs. per 1,000 square feet per 24 hours.
5. All tooled and control joints shall be caulked with a urethane sealant. Structural cracks shall be routed, primed, and treated with an epoxy crack repair material.
6. Concrete surfaces must be initially treated with Excel-Coat Primer at a rate of 350 square feet per gallon prior to application of the Excel-Coat Pedestrian Membrane System.

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

OLD CONCRETE

1. Clean surface to remove all grease, oil, dust, powder or wax film with Excel-Coat All-Purpose Cleaner or detergent. Rinse and allow to dry.
2. Concrete with a hard slick surface must be bead blasted to achieve a 5-6 mil profile. Acid etching is also an acceptable method of surface preparation using a solution of at least one part muriatic acid and three parts water or commercial concrete etch. Rinse thoroughly with water and let dry. Test for neutral pH.
3. Prime concrete with Excel-Coat Primer at the rate of 350 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 foot) with Excel-Crete. See Excel-Crete Application Guide for mixing and installation instructions.

EXISTING SYSTEMS

Excel-Coat Waterproofing Systems can be installed over other waterproofing systems. Contact an Excel-Coat representative to find out what options are available for your particular application.

CRACK REPAIR

Minor / Hairline Cracks: Fill with Excel-Coat Patching Compound.

Medium Cracks (1/16" or greater): Route out and clean crack. Apply prime coat to crack. Use a two-part epoxy crack filler. Fill crack with an epoxy crack repair material; when cured, grind smooth.

Badly Damaged & Spalled Areas: Remove all loose, broken material. Prime area with Excel-Coat Primer; fill with Excel-Crete. Smooth to a feather edge.

Uneven Surfaces Such as Exposed Aggregate or Salt Finished Concrete: Prime first then fill in and level with Excel-Crete Patching and Sloping Compound.

Above Grade Control Joints, & Expansion Joints: Do not bridge opening with fiberglass mat. Apply fiberglass mat and Excel-Coat #1 over expansion joint, slice fiberglass at the joint and let the fiberglass fall into the expansion joint. Using a 4" brush, push fiberglass edges down into the joint. Protect joint during texture and topcoat application. When system is complete, install urethane caulk.

METAL FLASHING

1. Metal flashing shall be galvanized or have a bonderized finish (galvanized and etched) and be a minimum 26 gauge. Flashing shall be solvent cleaned prior to coating.
2. It is recommended that beads of caulk be placed on the concrete and the metal flashing seated into the caulk.
3. Metal flashing shall be fastened on the surface three inches on center in a W pattern with galvanized flashing nails. Flashing must be nailed down flat with no buckling.
4. All metal flashing must have a minimum 3" overlap at the connecting seams. Corners must be tight and the entire perimeter must be flashed. Overlaps shall be treated with a 4" strip of fiberglass saturated with one coat of Excel-Coat #1, or with deck seal tape saturated with Excel-Coat #1. Soldering of overlaps is also acceptable
5. All joints and seams must be caulked with a urethane sealant. Remove all excess sealant off of the concrete and flashing.

APPLICATION

EXCEL-COAT #1

PREPARATION:

1. With Excel-Coat Patching Compound, patch all joints, cracks and other imperfections in the concrete as well as deck to metal seams of the flashing. Do not build up Patching Compound greater than 1/8". In areas requiring sloping or fill greater than 1/8" use Excel-Crete.
2. Excel-Coat hides only small imperfections, so care must be taken to assure the surface is completely clean, free from all dirt, oil, grease, old coatings and debris.
3. It is recommended that where possible, run the fiberglass mat and No. 1 up the vertical flashing or down the fascia, use a separate 4"-6" strip of fiberglass for the 90° turn. A strip of fiberglass is easier to work with and will mold/adhere better to the wall to deck interface. When this strip is cured, lay out the horizontal fiberglass and laminate as usual.
4. A bead of caulk can be used at the wall to deck interface to soften the angle.

APPLICATION:
To ensure proper adhesion, surface must be dust free and clean of debris, wax, dirt and oil.

1. Cover deck surface with fiberglass mat.
2. Butt the edges of the fiberglass together. Do not overlap.
3. Fiberglass should cover the edge of the flashing, terminating ½" from outside edge. If necessary, fiberglass may be turned up the metal flashing or down the fascia edge for extra protection.
4. With a 4" brush, generously apply material around the perimeter of the deck. It is essential that the material cover all the flashing at the walls and doorjambs.
5. Saturate the fiberglass mat with Excel-Coat #1.
6. Fiberglass should be laminated into the mouths of all drains. Cut an X into wet fiberglass at drain mouth; let fiberglass fall into drain.

Note: **Do not cut in entire deck edge at one time. For best results, cut in 5'-6' at a time, making sure that you roll out the center immediately, always going wet into wet. This process will eliminate wrinkles in the fiberglass as you apply the Excel-Coat #1.**

7. With a ¾" nap roller, apply Excel-Coat #1 at a rate of 50 square feet per gallon.
8. Laminate center of section by pouring approximately ½ gallon of Excel-Coat #1 on top of fiberglass.
9. Using moderate pressure, work puddle of Excel-Coat #1 into fiberglass mat, until thoroughly saturated. Excel-Coat #1 must penetrate through mat and into substrate.
10. Roll puddle towards you.
11. Before moving to the next section of the deck, go over the wet laminated area with a metal fiberglass roller to smooth out fibers, roll down bubbles and wrinkles, and bring a little resin to top of glass for pinhole free membrane.
12. Allow material to dry approximately 6-8 hours. Dry times may vary.

Hint: **Be conscious of the amount of material you are using. Excel-Coat #1 is a low viscosity material, and it will have a tendency to run. Be generous with this material, and be sure to apply enough pressure on the roller to force the material through the fiberglass mat. However, be careful not to over roll.**
Continually rolling back and forth will cause the fiberglass mat to stretch and break apart.

Tips & Tricks:

Do Not Dry Roll:
Dry rolling is dipping roller into pail and rolling out instead of pouring material onto deck. Resin will not penetrate fiberglass or bond to surface of deck. Dry rolling causes pinholes and air bubbles.

Bubbles:
While wet, if there is foreign matter under fiberglass causing a bubble, cut fiberglass open and remove it. Brush or roll the strands back down.

Wrinkles:
While wet, wrinkles can be repaired by using a utility knife and cutting directly across top of wrinkle, and brushing or rolling area back down**.**

These repairs should be done with the metal fiberglass roller.

DECK DRAINS & SCUPPERS:

Deck drains and scuppers shall be set in caulk and securely anchored. Apply the entire Excel-Coat System around and into drain or scupper. Apply the system into the throat of the drain. For proper drainage, drain, scupper, and grate should be lower than deck surface.
Do not use plastic drains or scuppers.

DETAILING FIBERGLASS:

After fiberglass mat has been laminated and allowed to dry, surface must be detailed before proceeding with texture application. Use Excel-Coat Patching Compound to patch

seams, feather down edges of fiberglass and correct any other defects on laminated surface.

1. **Hollow Spots and Bubbles:** Suspect areas will usually have a large number of pinholes in the area of the bubble. Coating may even appear to be raised.
2. **Small Bubbles:** Bubbles no larger than a half a dollar can be cut out, patched and feathered out with two thin coats of Excel-Coat Patching Compound.
3. **Large Bubbles:** Large un-bonded areas should be completely removed and the fiberglass reapplied.
   a. Lay a piece of fiberglass mat over area to be removed. The piece should be a little larger than what is being removed.
   b. Double cut through both pieces of fiberglass mat.
   c. Replace bad piece with new piece of fiberglass mat. It should fit perfectly.
   d. Laminate patched in piece of fiberglass with paintbrush. Let dry.
   e. Patch and feather repair with Excel-Coat Patching Compound.
4. **Wrinkles:** After Excel-Coat #1 has dried, wrinkles can be repaired by shaving down top of wrinkle until it is flush with deck's surface. This can be achieved by using a 4" wide razor scraper. Fill in and feather with two thin coats of Excel-Coat Patching Compound.
5. **Patching Seams:** Fill gap between the two pieces of fiberglass by applying two thin coats of Excel-Coat Patching Compound with Bondo Spreader. Squeegee each coat on. Avoid creating a hump over seams.
6. **Edges:** On decks with flashing on the outer edges, fiberglass should stop 3/8 –1/2" back from outside edges. Feather all edges of fiberglass to edge of deck with Excel-Coat Patching Compound.

WATER TEST

1. It is recommended that once the Excel-Coat Pedestrian Traffic waterproof membrane has been installed that the deck be checked to ensure water slopes to drain.

2. Any additional fill or sloping that is necessary shall be done before the texture and top coats have been applied. Additional fill or sloping may be achieved using Excel Crete. See product Spec Data and Application Guide for guidelines and installation instructions.

EXCEL-COAT #200 (Texture)

PREPARATION:

1. Sweep in both directions or use a blower to clean the surface of any dirt or debris.

MIXING #200 TEXTURE:

1. Drill motor mix Excel-Coat #200 prior to applying to ensure color consistency.

APPLICATION OF # 200 TEXTURE (w/ HOPPER):

1. With tape and paper, mask off walls, railings, sliding doors, etc.
2. Set the air pressure on the hopper gun between 8-15 pounds per square inch (the higher the pressure, the finer the texture). Spray a little texture on a piece of cardboard or paper to check pattern of spray. Adjust gun and air pressure until you achieve desired pattern.
3. Starting with the perimeter of the deck, begin to apply texture coat at a rate of 75 square feet per gallon. Move the pattern pistol as evenly as possible to create a uniform spray and texture. Avoid spraying thick and thin spots.
4. Allow material to dry approximately 6-8 hours. Dry times may vary.

APPLICATION OF #200 (w/ ROLLER)

1. With a 4" brush, apply Excel-Coat #200 Rollable Grade around the perimeter of the deck and drains. It is essential that the material covers flashing at the wall and doorjambs, but it is not necessary to take it over the fascia edge.
2. With a 1" nap roller, apply Excel-Coat #200 at a rate of 75 square feet per gallon.
3. Pre-moisten roller cover with water. Spin out any excess water. This will help prevent roller cover from drawing moisture out of coating and will keep coating from clumping on roller.
4. Pour small amounts of Excel-Coat #200 onto deck surface and roll out.
5. To remove clumps of coating, move roller in a circular motion over clump, using moderate pressure.
6. Allow material to dry approximately 6-8 hours. Dry times may vary.

Note: **Standard Excel-Coat #200 is thick so it can be used with a hopper gun. In order to achieve a uniform appearance when rolling, you may add up to 1 gallon of Excel-Coat #300 to 5 gallons of #200 texture or request "Rollable Grade" when ordering product. This will help make rolling easier. Additionally, when rolling #200, we recommend that you roll the product evenly over the deck surface, the back roll in the same direction.**

CAUTION:
When rolling Excel-Coat #200 on hot days or hot surfaces, material will begin to cure quickly. Apply the material then leave alone. "Touch ups" should be completed after the material has dried.

EXCEL-CRETE K/D & TINTED ADDITIVE (Alternate Texture for Increased Skid Resistance and Durability)

MIXING OR EXCEL-CRETE K/D & TINTED ADDITIVE TEXTURE:

1. With a drill motor and a mixing attachment, mix 1 bag of Excel-Crete K/D (half bag at a time) with 1¼- 2 gallons of Excel-Crete Tinted Additive and 1 packet of Excel-Coat Retarder.
2. Continue mixing until both parts are thoroughly combined and a uniform consistency is achieved (approximately 3-4 minutes).

APPLICATION OF EXCEL-CRETE K/D & TINTED ADDITIVE (w/ HOPPER):

1. With tape and paper, mask off walls, railings, sliding doors, etc.

2. Set the air pressure on the hopper gun between 8-15 pounds per square inch (the higher the pressure, the smaller the texture).
3. Starting with the perimeter of the deck, apply Excel-Crete K/D texture at a rate of approximately 280-300 square feet per batch. Move the pattern pistol as evenly as possible to create a uniform spray and texture.
4. Allow 24 hours to dry. Dry times may vary.

EXCEL-COAT #300 (Top Coat)

PREPARATION:

1. With a wallboard razor, lightly scrape off any irregularities in the texture.
2. Use a blower to clean the deck surface of any remaining dirt or debris.

APPLICATION:

1. With a 4" brush, apply Excel-Coat #300 around the perimeter of the deck and drains. The material should cover all flashing at the walls, doorjambs, and fascia edges.
2. Apply two thin coats of Excel-Coat #300 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.
3. Allow material 6-8 hours to dry. Dry times may vary.
4. 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.

Note: Cold or inclement weather will effect the cure time of all Excel-Coat products. Do not install over wet substrate, in the rain or if the threat of rain exists within 24 hours.

DECORATIVE OPTIONS

EXCEL-COAT TWO-TONE FINISH

This finish is achieved by first rolling Excel-Coat #300 over the fiberglass reinforced membrane and then using a hopper gun to “shoot” two different colors of texture. The texture material can be Excel-Coat #200, which is an acrylic base with fibrous aggregate, or you can use white Excel-Crete K/D with Tinted Additive to your desired colors and sprayed over the deck. The system is completed with two coats of an Excel-Coat clear sealer.

EXCEL-COAT K/D & K/D II SYSTEMS

The Excel-Coat K/D & K/D II Systems are polymerized cement products that can be used to create durable, attractive patterns and textures.

The Excel-Coat K/D & K/D II decorative patterns may be used in conjunction with the Excel-Coat Pedestrian Traffic Membrane (over concrete) or the Fire System (over plywood). See Excel-Coat K/D & K/D II Systems Spec Data and appropriate Application Guides for application instructions.

Note: To insure uniformity of color, drill-mix all materials before using.