# **Excel-Coat**

# **Guide Specification**

# **Pedestrian Traffic Membrane**

# PART 1- GENERAL

## **1.01 SYSTEM DESCRIPTION**

A. The Excel-Coat Pedestrian Traffic Membrane is an acrylic deck coating system specifically designed to provide a waterproof surface for exterior and interior pedestrian traffic areas, such as walking decks, balconies, stairways, and mechanical rooms.

# 1.02 SCOPE

- A. Work Included
  - 1. Preparation of substrate.
  - 2. Preparation of cracks, joints and metal flashing.
  - 3. Application of the Excel-Coat Pedestrian Membrane System.
- B. Related Work Specified Elsewhere

1.	Concrete Finishing	Division 3
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2.	Sealants	Division 7
3.	Metal Flashing	Division 7

#### **1.03 QUALITY ASSURANCE**

- A. The waterproofing materials that compose the Excel-Coat Pedestrian Traffic Membrane System are manufactured and furnished by Excellent Coatings International All component materials are tested and evaluated by an independent testing agency (U. S. Testing Company).
- B. Applicators installing the Excel-Coat Pedestrian Traffic Membrane System shall be approved in writing by Excellent Coatings International.

#### **1.04 SUBMITTALS**

- A. Samples: Applicators must provide a sample of coating system and color chart from the manufacturer.
- B. Product Data: Provide manufacturer's written data sheet, detail drawings, maintenance instructions and cleaning instructions.
- C. Certification: Provide written approval by Excellent Coatings International certifying the applicator is an Approved installer of Excel-Coat systems.

# 1.05 DELIVERY, STORAGE & HANDLING

- A. Delivery: Materials shall be delivered to the job site in sealed, undamaged containers. Each container shall be clearly marked with manufacturer's label showing type of material, expiration date, color and batch number.
- B. Storage: Store all Excel-Coat materials in a cool dry place with a temperature range of 55°F to 90° F.
- C. Handling: Handle all products carefully to avoid damage to the containers. Read all labels and Safety Data Sheets (SDS) prior to use.

# **1.06 PROJECT JOBSITE CONDITIONS**

- A. Before any work is started, the waterproofing applicator shall inspect all surfaces for any deficiencies. Should any deficiencies exist, the Architect, Owner or General Contractor shall be notified in writing and any corrections necessary shall be made.
- B. No coating shall be applied during inclement weather or when the temperature falls below 55° F or rises above 95° F.

# 1.07 WARRANTY

A. A warranty package for the Excel-Coat Pedestrian Traffic Membrane System is available upon request from the Owner or Owner's Representative prior to the installation of the deck coating system. Once all inspections (before, during and after the installation) have been completed, Excellent Coatings International will issue a written warranty and maintenance program. The manufacturer's warranty will be contingent upon the Owner's adherence to the maintenance program. This warranty covers the product performance of the waterproof deck coating only. Liability for damage to property, buildings and their contents, or to any third party is specifically excluded.

## PART 2 -PRODUCTS

# 2.01 MATERIALS FOR THE SYSTEM

- A. Excel-Coat Pedestrian Traffic Membrane System
  - 1. Primer: Excel-Coat Primer
  - 2. Fiberglass: 0.75 ounce, random chop, fiberglass mat
  - 3. Base Coat: Excel-Coat #1
  - 4. Texture Coat: Excel-Coat #200 or Excel-Crete K/D and Excel-Crete Tinted Additive
  - 5. Excel-Crete Retarder (as needed for Excel-Crete texture)
  - 6. Top Coat: Excel-Coat #300
- B. Related Materials
  - 1. Metal Flashing: Galvanized and/or Bonderized (galvanized and etched), minimum 26 gauge
  - 2. Drains: 2" copper or galvanized balcony deck drains
  - 3. Crack repair: Epoxy Crack Repair Material
  - 4. Sealant:: Urethane based, as approved by manufacturer

#### 2.02 MATERIAL PERFORMANCE CRITERIA

Tensile Strength	2855 psi	ASTM D - 2707
Impact Test	No Cracking	ASTM D - 3320
Fire Retardant Roofing	-	ASTM E - 108-87
Noncombustible	Class A	
Abrasion Resistance		ASTM D - 1242
Volume Loss	.25 cm	
Thickness Loss	2 mils.	
Water Transmission	22.6/MX 24HRS	ASTM E - 1242

## PART 3- EXECUTION

#### 3.01 INSPECTION

- A. Concrete
  - 1. General
    - a. Concrete surface shall be free of excess roughness, voids, protrusions, loose particles, dust, debris or anything that would impair the adhesion of the Excel-Coat Pedestrian Traffic Membrane System.
    - b. Concrete surface must be free from curing agents, bondbreakers, hardeners, oils, grease or foreign matter that may affect the adhesion of Excel-Coat Pedestrian Traffic Membrane System.
    - c. Concrete substrate shall be designed and constructed as to freely drain and eliminate the ponding of water. Slope: 1/4" per foot.
  - 2. New Concrete
    - a. Curing of concrete shall be by means of water cure or dissipating compounds. Curing compounds to be used shall be approved by an authorized representative of Excellent Coatings International
    - b. Concrete shall be cured a minimum of 28 days prior to installation of membrane.
    - c. Concrete shall be finished with a light steel trowel and a fine broom finish.
    - Concrete moisture content shall not exceed 10%. Moisture Vapor Transmission shall not exceed 5 lbs. per square feet per 24 hours.

- 3. Old Concrete
  - a. The following are effective means of cleaning and preparing old concrete prior to the application of Excel-Coat Pedestrian Traffic Membrane System.
  - b. <u>Surface Grinding:</u> A heavy duty, industrial grinder may be used to cleanse and abrade the concrete when the surface is dry. Loose particles and dust must then be removed by vacuum or blower.
  - c. <u>Shot Blasting and Sand Blasting:</u> These are both effective means of cleaning concrete surfaces. Before coating, area must be free from dust or any loose particles.
  - d. <u>Acid Etching:</u> A solution of commercial muriatic acid and water (3 parts water: 1 part muriatic acid) is also a satisfactory method of cleaning concrete. Pour solution over concrete surface and agitate with a firm bristle broom or brush. The solution will react with the concrete causing it to bubble. Once the bubbling has stopped, power wash the deck with water to rinse away residual salts and contaminants. To ensure complete neutralization of the concrete surface, the deck may be brushed with alkali solution (1% ammonia in water) and then rinsed.
  - e. <u>Commercial Detergents:</u> Commercial detergents, such as Excel-Coat All-Purpose Cleaner, will work well to clean light grease and grime, but these products are not recommended for heavy contamination.
- 4. Concrete Patching
  - a. Repairs to old or new concrete may be necessary to correct minor imperfections in the surface (i.e., low spots, holes, ridges and projections).
  - b. All repair areas shall be cleaned as described above, then filled with Excel-Crete Patching and Sloping Compound.
  - c. Excel-Crete patching material shall cure for a minimum of 24 hours prior to Excel-Coat application.
- 5. Expansion Joints & Cracks
  - a. Expansion joints shall be cleaned thoroughly and sealed with urethane sealant.
  - b. Cracks over 1/16 " shall be routed, primed and filled using an epoxy crack repair material.

### B. Metal Flashing

- 1. Metal flashing shall be galvanized or have a bonderized finish (galvanized and etched) and be a minimum 26 gauge.
- 2. Metal flashing must be installed in accordance with accepted waterproofing techniques as indicated on Excel-Coat Pedestrian Traffic Membrane System detail drawings.
- 3. Metal flashing shall be fastened 3" on center in a W pattern with galvanized metal on vertical surfaces, non-backing nails.
- 4. All metal flashing must have a 3" overlap at the connecting seams. Corners must be tight and the entire perimeter must be flashed. Overlaps may be treated with a 4" strip of fiberglass or deck seal tape, saturated with one coat of Excel-Coat #1.
- 5. All joints and seams must be caulked with a urethane sealant or Excel-Coat Patching Compound. Remove all excess sealant from the concrete and flashing.
- 6. Metal must be clean and dry, free from grease, oils, dirt and debris prior to application.

#### 3.02 INSTALLATION

- A. Read Excel-Coat Pedestrian Traffic Membrane Application Guide prior to application process.
  - 1. Apply Excel-Coat Primer at a rate of 350 square feet per gallon (concrete surfaces only). Allow to become tacky
  - 2. Cover surface with fiberglass mat and saturate mat with Excel-Coat #1 at a rate of 50 square feet per gallon. Allow material to dry approximately 6-8 hours. Dry times may vary.
  - 3. Check membrane for blisters and make necessary repairs.
  - 4. Water test: Water test the deck to ensure deck slopes to drain.

- 5. Apply skid resistant texture coat (Excel-Coat #200 or Excel-Crete K/D and Excel-Crete Tinted Additive) at a rate of 75 square feet per gallon. Allow material to dry approximately 6-8 hours. Dry times may vary.
- 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. Allow material to dry approximately 6-8 hours. Dry times may vary.
- 7. 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.

# 3.03 CLEAN UP

- A. Clean area and remove all debris upon completion of work. Dispose of empty containers properly according to current Local, State and Federal regulations.
- **NOTE:** Excellent Coatings has a number of other textures and decorative finishes that can be used with the Excel-Coat Pedestrian Traffic Membrane System, depending on your needs and/or requirements.
- NOTE: Do not apply over non-structural lightweight concrete without prior written approval.

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