Excel-Coat F/S

Guide Specification

Fire System-Heavy Duty Pedestrian Traffic Membrane
ICC-ES Evaluation Report #ESR-2505

PART 1 - GENERAL

1.01 SYSTEM DESCRIPTION

A. The Excel-Coat Fire System is a fire retardant coating specifically designed to provide a waterproof surface for exterior and interior pedestrian traffic areas such as walking decks, balconies and stairways.

B. THE EXCEL-COAT FIRE SYSTEM HAS A “CLASS A” ONE-HOUR FIRE RATING OVER A COMBUSTIBLE PLYWOOD SUBSTRATE (ICC-ES Evaluation Report #ESR-2505).

1.02 SCOPE

A. Work Included
1. Preparation of substrate.
2. Preparation of metal flashing.
3. Application of the Excel-Coat Fire System.

B. Related Work Specified Elsewhere

1. Plywood Framing	Division 6
2. Sealants	Division 7
3. Metal Flashing	Division 7

1.03 QUALITY ASSURANCE

A. The waterproofing materials that compose the Excel-Coat Fire System are manufactured and furnished by Excellent Coatings International. All component materials are tested and evaluated by an independent testing agency.

B. Applicators installing the Excel-Coat Fire System shall be approved in writing by Excellent Coatings International.

1.04 SUBMITTALS

A. Samples: Applicators must provide a sample of the deck coating system and color chart from the manufacturer.

B. Product Data: Provide manufacturer's written data sheet including application instructions along with required detail drawings and maintenance requirements.

C. Certification: Provide written approval by Excellent Coatings International certifying applicator as an Approved installer of the Excel-Coat Fire System.

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 lot number.

B. Storage: Store all Excel-Coat materials in a cool dry place with a temperature range between 55°F and 90°F.

C. Handling: Handle products carefully to avoid damage to the containers. Read all labels and Safety Data Sheets prior to use.

1.06 PROJECT JOBSITE CONDITIONS

A. Before any work is started, the waterproofing applicator shall examine all surfaces for any deficiencies. Should any 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 Fire System is available upon request from the 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 or their contents, or to any third party is specifically excluded.

PART 2 - PRODUCTS

2.01 MATERIALS FOR THE SYSTEM

A. Excel-Coat Fire System
1. Lath: 2.5 or 3.4 galvanized, expanded metal lath
2. Staples: minimum of 1" crown, minimum of 5/8" leg, galvanized metal staples
3. Underlayment: Excel-Crete, latex modified cement
4. Sloping (if required): Excel Crete latex modified cement
5. Fiberglass: 0.75 ounce, random chop, fiberglass mat
6. Base Coat: Excel-Coat #1
7. Texture Coat: Excel-Coat #200 or Excel-Crete K/D and Excel-Crete Tinted Additive
8. Top Coat: Excel-Coat #300
9. Excel-Crete Retarder (as needed for Excel-Crete Texture)

NOTE: Thickness of substrate may require change in the length of the staple leg.

B. Related Materials
1. Plywood: Minimum 5/8" exterior exposure 1, CDX or better, all edges supported on framing and blocked or tongue in groove, fastened with screws, ring-shank or equivalent non-backing nails
2. Metal Flashing: galvanized and/or bonderized (galvanized and etched), minimum 26 gauge
3. Drains: 2" copper or galvanized balcony deck drains
4. Sealant: Urethane based or as approved by manufacturer

2.02 MATERIAL PERFORMANCE CRITERIA

ICC-ES Evaluation Report	#ESR-2505	
Tensile Strength	2855 PSI	ASTM D-2707
Impact Test	No Cracking	ASTM D-3320
Fire Retardant Roofing		ASTM E-108-87
Spread of Flame	Class A	
Intermittent Flame	Class A	
Burning Brand	Class A	
Abrasion Resistance		ASTM D-1242
Volume Loss	.25 cm^2	
Thickness Loss	2 mils	
Water Transmission	22.6/Mx/24hrs	ASTM E-1242
Fire Endurance	1 Hour	ASTM E-119-88

PART 3 - EXECUTION

3.01 INSPECTION

A. Plywood

1. All plywood to be coated shall carry the grade trademark of APA exterior exposure 1 CDX or better.

2. Plywood substrate shall be a minimum of 5/8" thick, laid over joists on 16" center and secured at all edges with screws, ring shank nails or equivalent non-backing nails. All edges shall be supported on framing and blocked or tongue in groove.

3. Plywood surface should be clean and dry, free from voids or loose particles.

4. Plywood shall be protected from moisture to prevent weathering and delamination of the substrate. A protective construction coat of Excel-Coat #1 may be applied to the plywood substrate at a rate of 75 square feet per gallon. Do not apply non Excel-Coat protective sealers, varnishes, water repellent coatings or hot mops without prior written approval from Excellent Coatings International.

5. Plywood substrate shall be designed and constructed as to freely drain and eliminate the ponding of water. Slope: 1/4" per foot.

NOTE: Oriented Strand Board (OSB) is not recommended for use with Excel-Coat Waterproofing Systems.

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 acceptable waterproofing techniques as indicated on Excel-Coat Fire System detail drawings.

3. Metal flashing shall be fastened 3" on center in a W pattern with galvanized metal, non-backing nails. Flashing must be nailed down flat with no buckling.

4. Flashing must have a 3" overlap at the connecting seams. Corners must be tight and the entire perimeter must be flashed. Overlap may be treated with a 4" strip of fiberglass or deck seal tape, saturated with one coat of Excel-Coat #1.

5. Joints and seams must be caulked with a urethane sealant. Remove excess sealant from the plywood and flashing.

6. Metal must be clean and dry prior to application (free from grease, oils, dirt and debris).

3.02 INSTALLATION

A. Read Excel-Coat Fire System Application Guide prior to installation process.

1. Install expanded metal lath over plywood substrate. Fasten lath with galvanized staples in a checker pattern in the field, using 20 25 staples per square foot. Staple 1” on center along seams that are butted together. Galvanized roofing nails may be used to anchor perimeter areas that are difficult to access with staple gun.

2. Apply Excel-Crete underlayment with trowel to minimum 1/4" depth so that all lath is covered. Allow material to cure approximately 24 hours. Dry times may vary.

3. Water test underlayment to ensure water slopes to drain. Ponding or low spots may be picked up by applying additional Excel-Crete material. Excel-Crete may be applied up to 1 inch lift per application and feathered to an edge.

4. 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.

5. Check for blisters and make any necessary repairs. Patch fiberglass seams.

6. 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.

7. 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.

8. 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 Fire System, depending on your needs and/or requirements.*

NOTE: *Excel-Coat #200 and #300 are formerly known as #2 and #3.*