



DECK Pro-3545 FC

FAST CURE ELASTOMERIC WATERPROOFING DECK COATING SYSTEM

Application/Specification/Properties Guide

SYSTEM DESCRIPTION

1.01 DECK Pro-3545 FC is a fast cure liquid applied, high solids, water catalyzed and two component polyurethane, waterproof Deck System that can be applied in low temperatures.

A. The system utilizes a primer, one coat of a water induced urethane basecoat, and one or two coats of an aliphatic polyurea two component top coat depending on surface requirements. **DECK Pro-3545 FC** can be applied to protect surfaces against spalling, freeze-thaw damage and chemicals commonly encountered on these surfaces. It is an elastomeric system designed to expand and contract with normal structural movements. It will not soften in heat nor become brittle in cold. **DECK Pro-3545 VFC** is a proven waterproofing system primarily used on plywood, concrete and metal surfaces. This system conforms to ASTM C957 and UL 790-Class A Rating for non-combustible substrates.

1.02 FEATURES

- Seamless
- Elastomeric
- Non-Gassing
- Fast-Curing
- Recoatable
- Good Weatherability
- Low VOC

1.03 TYPICAL USES

- Parking Decks
- Balconies
- Over Occupied Space
- Sun Decks
- Patios
- Roof Decks

1.04 PRODUCT INSTRUCTION

A. For complete information associated with the application of **DECK Pro-3545 FC**, refer to the general guidelines section of the **BESSERN** catalog which describes the surface preparation, job conditions, finishing details and other necessary information.

B. All products/materials to be used on this system should be purchased from **BESSERN Building Products (BESSERN)** or its distributors or resellers approved by **BESSERN**. For details on individual products, please refer to Product Technical Data Sheet.

APPLICATION

2.01 Surface Preparation

A. Surfaces shall be broom clean, dry, sound and free of voids, bugholes, rockpockets, honey-combs, protrusions, excessive roughness, foreign matter, frost, ice and other contaminants which may inhibit application or performance of the waterproofing coating system.

B. Use suitable abrasive methods, remove residue of form release, curing compound, chemical retarders and other surface treatments, mortar smear, saw-cutting residue, mill scale, rust, loose material and other contaminants from concrete, masonry and ferrous metal surfaces to receive the work of this section.

C. Concrete: Where work of this Section will be applied to concrete, provide surfaces that are smooth with finish equal to one that is light steel troweled followed by a fine hair broom.

D. Decks:

1. Slope deck surfaces to drains that have flanges at coating level which are flush with deck surfaces.

2. Rigidly install pipe, vents and other surface protrusions, properly flash them, and cover to prevent entry of coating materials.

E. Metal flashings: Where metal flashings are substrate to waterproofing coating, set the flashings in continuous bedding bead of urethane sealant; install sealant S-bead between metal laps and mechanically fasten to substrate along leading edges at every 4" on center, staggered linearly, to lay flat without fishmouths.

F. Joints: Configuration shall be consistent with this Section and with all other requirements of the Contract Documents.

G. Check area of application to ensure that it conforms to the substrate requirements, as stated in the general guidelines section.

2.02 Repairs

A. Apply a polyurethane caulk or **DECK Pro-55BC** mixed material over all joints, cracks and flashing. **DECK Pro-55BC Mixed Material** is a mixture of 4 parts **DECK Pro-55BC** and 1 part of water by volume.

B. Bridge the saw joints and small cracks, using **DECK Pro-55BC** mixed material as a caulking compound for an appreciably shorter cure time over conventional polyurethane caulks.

C. Allow the surface to cure for 1 to 2 hours.

2.03 Priming

A. Prime surface with **DECK Pro Primer-55** or **55LT** at a rate of 1 gallon / 300 sq. ft. Apply using a brush or phenolic core roller. This will result in 5 dry mils of coating.

B. Allow **Deck Pro Primer-55** or **55LT** to become thumbprint tacky before proceeding to Coating Application.

C. Metal flashings should only be primed with **DECK Pro Primer-55** or **Primer-55LT**. All metal flashings should be mechanically abraded with an angle grinder and wire brush cup, followed by a rag with xylene solvent wipe to remove loose particles or oil film. **Supersal** tape may be used in lieu of primer.

2.04 Coating Application

A. Apply **DECK Pro-55BC** mixed material to substrate at a rate of 1 gallon/64 sq. ft. Application will require more or less material depending on substrate conditions.

B. Use a notched trowel or squeegee to spread **DECK Pro-55BC** mixed material evenly over the entire deck resulting in a min. 25 ± 2 wet mils thick membrane and backroll.

C. When **DECK Pro-55BC** mixed material begins to slightly gel, broadcast 16-30 mesh dried silica sand. The amount of sand used will vary. (Normal usage is 18-20 lbs of sand /100 sq. ft.) **DECK Pro-55BC** mixed material is stiff enough to support the weight of the installer without damaging the coating, or when coating is dry (approximately 2-3 hours), remove loose aggregate.

D. When the **DECK Pro-55BC** mixed material is stiff enough to support the weight of the installer without damaging the coating, or when coating is dry (approximately 2-3 hours), remove loose aggregate.

2.05 Top Coat Application Medium Duty Traffic

A. Apply desired color of or DECK PRO-55ALT2C at a rate of 1 gallon/133 sq. ft. This coat will result in an additional 12 ± 2 dry mils thick coating. Broadcast additional aggregate as needed to cover any bare or insufficient aggregate placement and backroll. Allow top to cure for 12 hours before opening to traffic

2.06 Top Coat Application Heavy Duty Traffic

A. Apply a second coat of desired color top coat of DECK Pro-55ALT2C at a rate of 1 gallon/133 sq. ft. This coat will result in an additional minimum 12 ± 2 dry mils thick coating. Allow top to cure for 12 hours before opening to traffic

2.07 FINISHED SYSTEM

A. When applied as directed above, Deck Pro-3545 FC decking system will provide a minimum of 35 to 45 ± 2 dry mils, exclusive of aggregate and primer, of superior waterproofing protection

2.08 LIMITATIONS

A. Concrete:

1) The following conditions should not be coated with DECK Pro deck coating systems without prior consultation with BESSERN: on grade or below grade slabs, split slabs with buried membrane, sandwich slabs with insulation, slabs over unvented metal pan, suspended pool decks, lightweight concrete, swimming pools, (Deck Pro Primer-55LT is required for these installs) magnesite, gypsum, asphalt surfaces, asphalt overlays(consult BESSERN for asphalt surfaces) and where chained or studded tires may be used.

2) Concrete must exhibit 3000 psi minimum strength Concrete surfaces to be coated must be trowel finished in compliance with the American Concrete Institute (except that hand troweling is not required), followed by a fine hair broom finish, left free of loose particles, and shall be without ridges, projections, voids and concrete droppings that would be mechanically detrimental to coating application or function.

3) New concrete must be cured for 7 days minimum or desired 28 days and no curing agents used (green concrete requires the use of Deck Pro Primer 55LT).

4) Concrete cleaning (see general guidelines).

B. DECK Pro Decking Systems will not withstand hydrostatic pressure on slab-on-grade decks.

C. Uncured materials are sensitive to heat and moisture.

D. A continuous coating application should ensure a deck with no lines or streaks.

E. The substrate must be structurally sound and sloped for proper drainage.

F. BESSERN assumes no liability for substrate defects.

2.09 Job Completion

A. Equipment should be cleaned with an urethane grade environmentally safe solvent, as permitted under local regulations, immediately after use.

B. Field visits by BESSERN personnel are for the purpose of making technical recommendations only and are not to supervise or provide quality control on the job site.

WARNING: The products in this system contain Isocyanates, Solvent, Epoxy Resin and Curatives.

WARRANTIES

BESSERN warrants that its product shall be in accordance with the specifications published in the current product data sheet. BESSERN will, in the event any of its products fail to meet their published specifications, replace those products proved to be defective.

BESSERN shall not be responsible for any incidental or consequential damages due to the breach of its warranties. Notwithstanding the foregoing, BESSERN’s sole liability hereunder shall not exceed the cost of the defective product originally purchased.

EXCEPT AS SET FORTH ABOVE, BESSERN MAKES NO OTHER WARRANTIES EXPRESS OR IMPLIED AND MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS OF THE PRODUCT FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

The user must determine if the product is suited for the intended use and the user must bear the risks and liabilities associated with it.

TYPICAL PHYSICAL PROPERTIES

Property	Test Method	DECK Pro 55BC	DECK Pro 55APT2C
Maximum VOC	ASTM D-2369	55 grams/Liter	15 grams/Liter
Solids (by Volume)	ASTM D-2397	93%	100%
Solids (by Weight)	ASTM D-2369	95%	100%
Tear Resistance Die C	ASTM D-624	250 pli	300 pli
Elongation	ASTM D-412	675%	450%
Tensile Strength	ASTM D-412	1350 psi	3200%
Hardness	ASTM D-2240	60 Shore A	85 Shore A
Water Absorption (wt)	ASTM D-471	0.05%	1.30%
Adhesion (pull off)	ASTM D-903	40 pli cohesive fail	40 pli cohesive fail
UV Stability 2000 hrs	Q Panel	No cracking or crazing	No cracking or crazing
Cure Time	ASTM D-1640	2-4 hours (cat.)	2-4 hours



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