



FREEDOMTUFF® PRODUCT INFORMATION BULLETIN

FREEDOMTUFF® FREEDOM-DEK™ is an integrative group of coatings utilizing an epoxy primer and two hand applied two component polyurethanes for the intermediate and top coats that provides an elastomeric waterproof with a theoretical dry film thickness of 45 mils (1143) 60± mils (1651 microns), primary use on concrete. These coatings are 100% solids, solvent free and odorless, applied on vertical and horizontal surfaces forming a continuous seamless membrane.

ADVANTAGES

- ✦ USGBC LEED, EQ Credit 4.2 AND 4.3: Low-emitting VOC Compliant Materials
- ✦ 5 years or 5+ year leak free warranty preapproved in writing
- ✦ Quick return to service
- ✦ Withstands constant water immersion
- ✦ No noxious odors

USES

- ✦ Vehicular Decks, Parking Structures and Loading Docks

PROFESSIONAL USE ONLY

Read and understand all the information contained in the Product Information Bulletin's, SDS's and product labels prior to starting any project. Nothing contained in any of Freedom® Chemical Corporation's materials relieves the end user of the obligation to read and follow the warnings and instructions for each of Freedom® Chemical Corporation's products.

PREPARATION

Concrete should be cured for 28 days (less than 28 days a Moisture Vapor Reducing primer maybe required) prior to product application and have at least 3000 psi compressive and 220 psi tensile strength.

Surface preparation is the essential first stage treatment of a substrate before the application of any coating. The performance of a coating is significantly influenced by its ability to adhere properly to the substrate material. It is generally established that correct surface preparation is the most important factor affecting the total success of surface treatment. Surfaces will be clean, dry, and sound, the presence of even small amounts of surface contaminants, dust, efflorescence, laitance, salts, curing compounds, dirt, oil, form release agents, and other foreign matter can physically impair and prevent coating adhesion to the substrate.

Shot Blast concrete between CSP 3 - 7
Profile steel between 4-6 mils

Grinding is permitted only in areas that are inaccessible to shot blasting equipment.

COVERAGE RATE

Freedom® Chemical Corporation's coverage rates for all products are approximate and vary based on type of substrate, substrate porosity, and roughness and size of broadcast aggregate. See individual Product Information Bulletin.

PACKAGING

See individual Product Information Bulletin.

PRIMER

Select appropriate primer from individual Product Information

Bulletin's. FreedomTuff® primer is required on all substrates, except on properly prepared steel (immersion requires primer).

MIXING

See Product Information Bulletin's.

Do not mix partial containers of multi-component materials.

Do not dilute under any circumstances.

APPLICATION

STEP ONE: The substrate may require more than one coat of FreedomTuff® primer. After selection of primer, mix and immediately pour primer onto the substrate at a rate of 100 to 300 square feet per gallon (9.29030m² to 27.8709m² per liter) in sufficient quantity to obtain a minimum theoretical dry film thickness of 5 mils (127 microns) per coat.

NOTE: FreedomTuff® Freedom-Dek™ over non-occupied space apply selected FreedomTuff® primer in sufficient quantity to obtain a minimum theoretical dry film thickness of 8 mils (203.2 microns).

Do not apply more primer to substrate than can be coated with FreedomTuff® 4300 within eighteen (18) hours of application. If primer is not coated within the allotted time, sand and re-apply primer.

Allow primer to become tack free prior to application of FreedomTuff® 4300.

NOTE: Skip step two and proceed to step three if FreedomTuff® Freedom-Dek™ is being applied over non-occupied space.

For optimum results proceed with application while air and substrate temperatures are between 32° F (0° C) and 104° F (40° C) 6° (-14.44° C) above the dew point and rising.

STEP TWO: FreedomTuff® 4300 Part-B should be mixed individually prior to combining, add Part-A to Part-B while mixing, using a mechanical mixer at medium speed making sure not to encapsulate any air. Mix until a homogeneous mixture and color is obtained (a minimum of 2 minutes is recommended).

Apply 1¼ gallons (4.731 liters) of FreedomTuff® 4300 per 100 square feet (9.290 m²) or in sufficient quantity to obtain a minimum theoretical 20 mils dry (508 microns) film thickness. Immediately pour the FreedomTuff® 4300 onto the horizontal surface and spread evenly over the entire surface using notched trowel then back roll using a ¼ " mohair roller with a phenolic resin core.

Recoat window is within 18 hours of application, if not recoated within 18 hours, sand and re-prime the surface and proceed with recoat.

FREEDOMTUFF® FREEDOM-DEK™

NOTE: Warranties over one (1) year require an additional coat at the turn radii, and ramps. Contact Freedom® Chemical Corporation for assistance.

STEP THREE: Apply 1½ gallons (5.678 liters) of FreedomTuff® 4300 at 100 square feet per gallon (9.290 m²) or in sufficient quantity to obtain a minimum theoretical 24 mils dry (609.59 microns) film thickness. Immediately pour the FreedomTuff® 4300 onto the horizontal surface and spread evenly over the entire surface using notched trowel or squeegee then back roll using a ¼" mohair roller with a phenolic resin core.

Prior to its full set, broadcast to refusal a washed, dry, rounded, contamination free 20 x 40 nominal sieve size sand (0.0331"/.850 millimeters, .0165"/.425 millimeters) with 6.5 Moh's minimum hardness into the FreedomTuff® 4300, to achieve a slip-resistant finish.

Excess aggregate must be completely removed.

Do not apply more FreedomTuff® 4300 than can be top coated within twenty-four (24) hours.

Allow Step three to dry prior to application of FreedomTuff® 4300.

STEP FOUR: Apply ¾ gallon (2.83906) of FreedomTuff® 4000 aliphatic top coat at 100 square feet per gallon (9.290 m²) or in sufficient quantity to obtain a minimum theoretical of 12 mils (304.8 microns). Immediately pour the FreedomTuff® 4000 onto the horizontal surface and spread evenly over the entire using a flat edge squeegee and then back roll using a ¼" mohair roller with a phenolic resin core.

Proceed with application while air and substrate temperatures are between 40° F (4.4° C) and 104° F (40° C) and 50% Relative Humidity.

When FreedomTuff® 4000 is used as a top coat it must be applied within twenty-four (24) hours of the application of any Freedom® Chemical Corporation's products.

(OPTIONAL AROMATIC TOP COAT): Apply ¾ gallon (2.83906 liters) of FreedomTuff® 4440 top coat at 100 square feet per gallon (9.290 m²) or in sufficient quantity to obtain a minimum theoretical of 12 mils (304.8 microns). Immediately pour the FreedomTuff® 4440 onto the horizontal surface and spread evenly over the entire using a flat edge squeegee and then back roll using a ¼" mohair roller with a phenolic resin core.

FreedomTuff® 4440 should be applied in a smooth pattern to establish uniform thickness and appearance.

Re-coating FreedomTuff® 4440 the surface must be properly prepared and primed prior to re-coating.

Proceed with application while air and substrate temperatures are between 40° F (4.4° C) and 104° F (40° C) and 50% Relative Humidity.

FreedomTuff® aromatic polyurethanes are UV stable – but are known to darken or change color when exposed to UV and/or sunlight. This discoloration has shown to have little to no effect on the integrity of aromatic polyureas.

DRY FILM THICKNESS

Over occupied space Freedom® Chemical Corporation's FreedomTuff® Freedom-Dek™ is a theoretical dry film thickness of 60 ± 2 mils (1524 microns) without sand using FreedomTuff® 4000, or FT-4440 top coats.

Over non-occupied space is a theoretical dry film thickness of 45± mils (1143 microns) without sand using FreedomTuff® 4000 or FreedomTuff® top coats.

AGGREGATE, COLOR QUARTZ AND PAINT CHIPS

Apply aggregate to refusal for a slip resistant finish. Decorative coatings (i.e. colored aggregate, quartz or paint chips) require a clear aliphatic top coat. The FreedomTuff® 4300 base coat is an aromatic base coat and if not completely covered with a colored aggregate, color quartz or paint chips you will see this color change in the FreedomTuff® 4300.

STRIPING

Striping or application of any other finishing products should be applied within eighteen (18) hours of the after applying FreedomTuff® 4440 or FreedomTuff® 4000. It is recommended that an epoxy paint be used.

SPECIFICATION AND FIELD ASSISTANCE

Contact Freedom® Chemical Corporation for assistance.

Jobsite visits by Freedom® Chemical Corporation's employees or its independent agents are solely for determining qualification for warranty.

DISPOSAL

All spilled material, unused contents of containers, empty containers and secondary containment spills/leaks, must be cleaned up and disposed of in accordance with local, state and federal regulations.

PRODUCT INFORMATION

See Product Information Bulletins for substrate preparation, packaging, coverage rates, primer, mixing and application information for each product selected.

FreedomTuff® products have a shelf life of 1 year from the date of manufacture, in factory-sealed containers.

TESTING

Substrate adhesion test should be performed seven days after application.

WARNING

The products listed in this Product Information Bulletin contain Isocyanates and Epoxy Resins.

Incredible Stuff, Exceptional Service, and Friendly People™

Read all the information in this product information bulletin, and material safety data sheet (MSDS) before applying any material. The information contained herein is for purposes of identifying the product and does not constitute a warranty that the product will conform to this description. Product specifications and performance will vary depending on application methodologies, raw materials and other factors. Guidelines, recommendations, statements, and information contained herein is based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the user's responsibility to satisfy themselves, by their own information and tests, to determine suitability of the product for their own intended use, application and job situation and the user assumes all risk and liability resulting from their own use of the product. We do not suggest or guarantee that any hazards listed herein are the only ones that may exist. Neither seller nor manufacturer shall be liable to the buyer or any third party for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether verbal or in writing, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of Freedom® Chemical Corporation. Typical properties and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Performance results were obtained in a controlled environment and Freedom® Chemical Corporation makes no claim that these tests or any other tests accurately represent all environments. Products manufactured by Freedom® Chemical Corporation are free of defects for a period of one (1) year, liability and buyer's remedy under this limited warranty shall not exceed the purchase price of the materials in question. † Freedom® Chemical and FreedomTuff® are trademarks registered in the US Patent and Trademark Office. ‡ The marks of Freedom® Chemical Corporation, its divisions, slogans, emblems, other marks appearing in this document are the trademarks and/or service marks of Freedom® Chemical Corporation, its subsidiaries, affiliates or licensors Copyright © March 2015 Freedom® Chemical Corporation. All Rights Reserved. All published information is subject to change without notice.