



FREEDOMTUFF® PRODUCT INFORMATION BULLETIN

FREEDOMTUFF® GUARDIAN-MR for use in mechanical rooms is an integrative group of coatings utilizing an epoxy primer and a hand applied two component polyurethane that provides an elastomeric waterproof coating with a theoretical dry film thickness of 37± mils (939.8 microns). The system is used on concrete and, properly prepared wood. Allows for light foot traffic within eight (8) Hours at 75° Fahrenheit (23.88° C) and 50% Relative Humidity.

ADVANTAGES

- ✦ No noxious odors
- ✦ Quick return to service
- ✦ USGBC LEED, EQ Credit 4.2 AND 4.3: Low-emitting VOC Compliant Materials
- ✦ Withstands constant water immersion

USES

- ✦ Flooring
- ✦ Mechanical Rooms

PROFESSIONAL USE ONLY

Read and understand all the information contained in the Product Information Bulletin's, Specifications, 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

Do not place coating over metal pan decks vented or unvented, split slab membranes, or other locations containing trapped moisture without prior written approval from Freedom® Chemical Corporation.

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 4 - 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, roughness and size of broadcast aggregate.

PACKAGING

See Product Information Bulletin's.

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

Throughout the application the sanded surface must be clean and dry.

For optimum results proceed with application while air temperatures are between 40° F (4.4° C) and 104° F (40° C). Insure that the outside temperature is at least 6° F (-14.44° C) above the dew point and rising. Apply while the outside temperature is descending, high or Low temperatures and humidity can significantly affect the cure time and pot life.

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 200 square feet per gallon (9.29030m² to 18.5806m² per liter) in enough quantity to obtain a minimum theoretical dry film thickness of 8 mils (203.2 microns) per coat.

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.

STEP TWO: Apply 1¼ gallon (4.7317 liters) of FreedomTuff® 4300 at 100 square feet per gallon (9.290 m²) or in enough 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 or squeegee.

Prior to its full set and starting to gel, broadcast to refusal a washed, dry, rounded, contamination free 30 x 70 nominal sieve size sand (.0232"/.600 millimeters, .0083"/.212 millimeters) with 6.5 Moh's minimum hardness into the FreedomTuff® 4300, or as required to achieve the specified 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 FreedomTuff® 4300 to dry prior to application of FreedomTuff® 4440.

STEP THREE: Apply ¾ gallons (2.839 liters) of FreedomTuff® 4440 top coat at 100 square feet per gallon (9.290 m²) or in enough quantity to obtain a minimum theoretical of 12 mils (304.79 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 a uniform thickness and appearance.

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

DRY FILM THICKNESS

Freedom® Chemical Corporation's FreedomTuff® *mechanical room* with primer is a theoretical 37± mils (939.8 microns) dry film thickness without sand using FreedomTuff® 4440 top coat.

SAND OR AGGREGATE

Apply sand to refusal for the FreedomTuff® *mechanical room deck* for a slip resistant finish.

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, 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. All testing should be performed by a qualified testing agency. Freedom® Chemical Corporation is not responsible for testing.

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 or guaranty that the product will conform to this description. Product specifications and performance will vary depending on application methodologies, raw materials and other factors. All published information and specifications are subject to change without notification. Technical data shown in product data sheets are typical but reflect laboratory test procedures conducted in laboratory conditions. Actual field performance and test results will depend on installation methods and site conditions. Field test results will vary due to critical job site factors. All recommendations, statements and technical data contained in this data sheet are 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 or guaranty of any kind. Satisfactory results depend upon many factors beyond the control of Freedom® Chemical Corporation. User shall rely on their own information and tests to determine suitability of the product for the intended use and user assumes all risk, loss, damage, expense and liability resulting from their direct use, indirect use or consequential to their use of the product. Freedom® Chemical Corporation shall not be liable to the buyer or any third party for any injury, loss or damage directly or indirectly resulting from use or inability to use the product. 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© January 2019 Freedom® Chemical Corporation. All Rights Reserved.

FREEDOM® CHEMICAL CORPORATION 19685 DESCARTES, FOOHILL RANCH, CA 92610 • (562) 343-9697 • GEORGIA (678) 259-9283 REVISED 1/19