FREEDOM® Chemical Corporation

PRODUCT INFORMATION BULLETIN

Sentry-DOS ™ is an integrative coating utilizing an epoxy primer and a hand applied two component polyurethane that provides an elastomeric waterproof used in showers with a theoretical dry film thickness of 121± mils (3073.4 microns) for pedestrian decks. The system is used on concrete, wood and metal. Insure that the substrate and outside air temperature is between 40º F (4.4º C) and 104º F (40º C) at least 6° (-14.44º C) above the dew point and rising. Allows for light foot traffic within eight (8) Hours at 75º Fahrenheit (23.88° C) and 50% Relative Humidity.

ADVANTAGES

- USGBC LEED, EQ Credit 4.2 AND 4.3: Low-emitting VOC Compliant Materials
- Quick return to service
- Can withstand constant water immersion
- No noxious odors
- Open to traffic in 4 hours at 75º Fahrenheit (23.88° C) and 50% R.H.

USE

- Showers

PREPARATION

NOTE: Read and understand all the information contained in the Product Information Bulletin's and SDS's prior to starting any project. Freedom ® Chemical Corporation's products are for professional use only.

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, and roughness and size of broadcast aggregate. See Product Information Bulletin's.

PACKAGING

See Product Information Bulletin's.

PRIMER

Select appropriate primer from individual Product Information Bulletin. 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

Insure that the substrate and outside air temperature is between 40º F (4.4º C) and 104º F (40º C) at least 6° (-14.44º C) above the dew point and rising.

STEP ONE:

The substrate and may require more than one coat of Freedom ® Chemical Corporation's *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 theoretical dry film thickness of 5 mils (127 microns).

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

Allow Step One (1) primer to become tack free prior to application of *FreedomTuff® FT-2190*.

STEP TW0: Prior to application of *FreedomTuff® 2190* precondition both Part-A and Part-B to 75º F (23.88º C) - 80º F (26.66º C) before applying.

Adequately blend *FreedomTuff® 2190* Part-B (Resin) making sure not to encapsulate any air until the mixture and color is consistent.

Fit Part-A with a desiccant drying device.

Apply *FreedomTuff® 2190* using a plural component, high pressure 1:1 ratio heated, spray equipment.

Proportioner Conditions:

- Capacity minimum 20 lbs. per minute
- Static pressure 2800 – 3000psi
- Spraying pressure 2500psi minimum
- Pressure balance 100 variance desirable
- 300 psi variance maximum
- Temperatures preheaters & hose 170º F (76.66º C) each

FREEDOMTUFF ® SENTRY-DOS ™

Spray apply *FreedomTuff ® 2190* at a minimum of 6.25 gallons (23.65882 liters) per 100 square feet (9.290 m²) to the substrate, to achieve a theoretical dry film thickness of 100 dry mils (2540 microns) over the entire surface.

FreedomTuff® 2190 should be sprayed in a smooth pattern, to establish uniform thickness and appearance (crosshatch pattern).

Re-coat *FreedomTuff® 2190* within 0 – 6 hours of previous coat.

STEP THREE: Apply *FreedomTuff ® 4300* within 4 – 6 hours of spraying *FreedomTuff ® 2190*. Apply 1 gallon (3.78541 liters) of *FreedomTuff® 4300* per 100 square feet (9.290 m²) in sufficient quantity to obtain a minimum theoretical 16 mils dry (406.4 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 washed, dry, rounded, contamination free 40 x 70 mesh sand (0.0165"/0.0083"), (400/210 microns), (0.400/0.210 millimeters) with 6.5 Moh's minimum hardness into the *FreedomTuff ® 4300,* or as required to achieve the specified slip-resistant finish.

Tile application: If applying tile over the Sentry-DOS™ coating skip Step Four (4).

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 ® 4000*.

STEP FOUR: *FreedomTuff ® 4000 is* applied in two coats the first coat at a rate of 200 square feet per gallon (18.5806 m²), and the second coat at a rate of 200 square feet per gallon (18.5806 m²), for a total theoretical dry film thickness of 16 mils (406.4 microns) to achieve a desired color. Coverage rates are approximate and vary based on type of substrate, porosity, roughness and size of broadcast aggregate. *FreedomTuff ® 4000* may require more than two coats.

Proceed with application of *FreedomTuff ® 4000* while air and substrate temperatures are between 40° F (4.4º C) and 104° F (40º C) and 25% 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.

Re-coating *FreedomTuff ® 4000* the surface must be properly prepared and may require priming prior to re-coating.

DRY FILM THICKNESS – PEDESTRIAN

Freedom ® Chemical Corporation's *Sentry-DOS™* coating with an aliphatic top coat is a theoretical dry film thickness of 121± mils (3073.4 microns), without sand.

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 the purpose of determining qualification for warranty.

DISPOSAL

Spilled material, unused contents and empty containers must be 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.

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.