FREEDOMTUFF® PRODUCT INFORMATION BULLETIN

FREEDOMTUFF® GUARDIAN-PD™ for Below Grade, Podium Decks, Planters, Split/Between Slab, Under Tile and HVAC applications utilizing an epoxy primer, FreedomTuff® 2214 or 2216 (Tuff® 2550-FR Fire ratings E84-17 and E108 Class A) an instant setting two-component spray polyurea that provides a waterproof membrane with a theoretical dry film thickness between 80 mils± (2032 microns) and 112 mils± (2844.8 microns) mil thicknesses are based on specification. These coatings are 100% solids, solvent free and odorless, forming a continuous seamless membrane. The FreedomTuff® Guardian-PD™ is available with a 5-year or longer leak free warranty if preapproved in writing prior to the start of the project by Freedom® Chemical Corp, and with full time independent third-party inspection service, hired by owner.

ADVANTAGES

- ASTM C836 Approved
- Miami Dade County NOA
- Chemical resistance – Excellent
- Fire ratings E84-17 and E108 Class A
- No bitumen
- No clamping rings
- No detailing sheets
- No fabric reinforcement
- No hot kettles or open flames
- No noxious odors
- No protection board required
- No root barrier required
- No seams
- No surface flashings
- No termination bars
- No VOC restrictions
- System can be applied at zero pitch
- Tenacious adhesion to most construction materials
- USGBC LEED, EQ Credit 4.2 AND 4.3: Low-emitting VOC Compliant Materials
- Withstands constant immersion in water

USES

- Podium Decks
- Planters
- Split Slabs, Between Slabs
- Below Grade
- Waterproofing

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 is required. Contact Freedom for details) prior to product application. Moisture content should be less than 5% 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 - 6 unless pre-approved in writhing with Freedom Chemical Corporation.

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.

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 and substrate temperatures are between 50° F (10° C) and 104° F (40° C) and 6° (-14.44° C) above the dew point and rising.

STEP ONE: PRIMER

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.

Aggregate the last coat of primer with minimum 0.125 pounds of washed, rounded, dry contamination free sand nominal sieve size #16-30.

Excess aggregate must be completely removed before application of the FreedomTuff® 2214 or 2216.

Do not apply more primer to substrate than can be coated with FreedomTuff® 2214 or 2216 within eighteen (18) hours of application. If primer is not coated within the allotted time, contact Freedom Chemical Corporation for recoat instructions.

STEP TWO: POLYUREA

Fit Part-A with a desiccant drying device.

Prior to application of FreedomTuff® 2214 or 2216 precondition both Part-A and Part-B drums to 75º F (23.88º C) - 100º F (37.79º C) before applying.

Apply FreedomTuff® 2214 or 2216 using a plural component, high pressure 1:1 ratio heated, spray equipment.

(OPTIONAL) Use FreedomTuff® 2550-FR for fire rating.

Proportioner Conditions:

- Capacity minimum 2 lbs. gallons per minute
- Static pressure 2800 – 3000psi
- Spraying pressure 2500psi minimum
- Pressure balance 100 variance desirable
- 300 psi variance maximum
- Temperatures preheaters & hose see data sheets

Spray apply FreedomTuff® 2214 or 2216 at a between 5 to 7 gallons (18.93 to 26.50 liters) per 100 square feet (9.290 m²) to the substrate, to achieve a theoretical dry film thickness of 80 to 112 dry mils (2032 to 2844.8 microns) over the entire surface using a cross hatch pattern.

When FreedomTuff® 2214 or 2216 is applied in sections, each application must overlap the previous one within 0 – 12 hours by a minimum six (6") to a neat straight line. Contact Freedom Chemical for detailed tie in instructions.

FreedomTuff® 2214 or 2216 should be sprayed in a smooth pattern, to establish uniform thickness and appearance (crosshatch pattern).

Recoat window is within 0-12 hours of application, if not recoated within 0-12 hours, contact Freedom Chemical for recoat instructions.

STEP 3(Mandatory): FOR STONE, TILE OR ASPHALT APPLICATIONS

On horizontal surfaces hand apply the FreedomTuff® 4300 at .75 to 1.25 gallons (2.83906 to 4.7318 liters) per 100 square feet, to the FreedomTuff® 2214 or 2216 in enough quantity to obtain 12 - 20 dry mils (304.8 to 508 microns) and spread evenly over the entire surface using 1/8" notched squeegee, then back roll using a ¼ mohair roller with a phenolic resin core.

Prior to its full set and starting to gel, broadcast to **refusal** a washed, dry, rounded, contamination free 10 - 20 nominal sieve size sand with 6.5 Moh's minimum hardness into the FreedomTuff® 4300. Excess (loose) aggregate must be completely removed before application of the thin set. If shiny spots (no sand) appear in this area, re-apply FreedomTuff® 4300 and sand.

STEP 3(Optional): FOR NEW CONSTRUCTION OR SAFTY REASONS

The application of FreedomTuff® 4300 may be a good option in new construction or high traffic application after the FT-2214 or FT-2216 have been installed. Additionally, this application step can provide non-skid surface to help with traction.

On horizontal surfaces hand apply the FreedomTuff® 4300 at .75 to 1.25 gallons (2.83906 to 4.7318 liters) per 100 square feet, to the FreedomTuff® 2214 or 2216 in enough quantity to obtain 12 - 20 dry mils (304.8 to 508 microns) and spread evenly over the entire surface using 1/8" notched squeegee, then back roll using a ¼ mohair roller with a phenolic resin core. Prior to its full set and starting to gel, 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.

DRY FILM THICKNESS
Freedom® Chemical Corporation's Guardian-PD™ with primer is a theoretical dry film thickness of 88 to 120 dry mils (2235.2 to 3048 microns).

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 IS REQUIRED FOR LEAK FREE WARRANTIES
Test the entire surface of the protective liner by spark testing at 100 volts per dry mil of lining thickness as per NACE Standard RPO 18B or ASTM D-1562 (steel) or ASTM D-4787 (concrete).

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™