



Chemical® Corporation

GuardianDeck®

System Application Sheet

PRODUCT DESCRIPTION

Freedom Chemical® Corporation's *GuardianDeck®* system is a theoretical dry film thickness of 106 mils (2692.4 microns) waterproof, solvent free, odorless two-component 100% solids system. The *GuardianDeck®* is a combination of *SealFlex®* base membrane a spray applied aromatic polyurea and *StoneGrip®* a hand applied aromatic polyurethane with a aliphatic topcoat which allows quick return to service. Designed specifically to handle anticipated movement and yet durable and tough enough to withstand vehicular traffic. *GuardianDeck®* system is used on concrete, wood and metal surfaces. Its quick gel and set time is convenient and allows for application to proceed while air and substrate temperatures are between 32° F (0° C) and 104° F (40° C).

ADVANTAGES

- ✦ 10 year leak free warranty – no dollar limit for labor and materials on preapproved projects
- ✦ Abrasion resistance - excellent
- ✦ Can withstand constant water immersion
- ✦ Chemical resistance – excellent
- ✦ Complies with VOC and SCAQMD requirements
- ✦ Excellent for low temperature applications
- ✦ No noxious odors
- ✦ Open to pedestrian traffic in 4 Hours, vehicular the next day at 75° Fahrenheit (23.88° C) and 50% Relative Humidity

RECOMMENDED USES

- ✦ Between Slab
- ✦ Foundations Walls, Footings
- ✦ Loading Docks
- ✦ Mechanical Rooms
- ✦ Parking Structures, Rooftop Garages
- ✦ Plaza Decks
- ✦ Sports Complex's
- ✦ Transportation Facilities

SURFACE PREPARATION

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 well established that correct surface preparation is the most important factor affecting the total success of surface treatment. The presence of even small amounts of surface contaminants, oil, grease, oxides etc. can physically impair and prevent coating adhesion to the substrate.

Be sure that surfaces are clean, dry, and sound and given sufficient profile to obtain adequate product adhesion.

Perform an adhesion test prior to starting any coating project.

Remove all dust, efflorescence, laitance, salts, curing compounds, dirt, oil, form release agents, and other foreign matter.

Concrete should be cured for a minimum of 28 days prior to product application and have at least 3000 psi compressive and 220 psi tensile strength.

NOTE: See guide specification and individual technical data sheets for complete surface preparation, packaging, mixing and application guidelines.

MIXING/APPLICATION PROCEDURES

Mix entire/full package containers of multi-component materials. Do not measure nor mix partial containers of multi-component materials.

Do not dilute the *GuardianDeck®* system under any circumstances.

Substrate temperature should be greater than 32° F (0° C). Insure that the outside temperature is between 32° F (0° C) and 104° F (40° C) at least 6° (-14.44° C) above the dew point and rising.

STEP ONE: Mix primer Part-A and Part-B (a minimum of 2 minutes is recommended) and apply it to the surface (coverage rates are approximate and vary with the roughness/porosity of the concrete and may require more than one coat) with FT-6100-MT, FT-6160, FT-6160-FS for concrete and MT-6175 for metal only, at a rate of 1 gallon (3.78 liters) per 300 square feet (27.8709 m²). Apply with a squeegee, brush, phenolic core roller or spray.

Broadcast immediately to refusal washed dry rounded, 30 mesh (595 microns, 0.02320", 0.595 millimeters) sand or less with 6.5 Moh's minimum hardness into the wet primer.

Allow primer to become tack free prior to application of *SealFlex®*.

Do not apply more primer to substrate than can be coated with *SealFlex®* the same day or within eighteen (18) hours of application. If primer is not coated with *SealFlex®* within the allotted time, re-apply primer.

Adequately blend *SealFlex®* Part-B (Resin) with air driven power tools making sure not to encapsulate any air until the mixture and color is consistent.

STEP TWO: Prior to application of *SealFlex®*: Precondition both Part-A and Part-B to 75° F (23.88° C) - 80° F (26.66° C) before applying.

Fit Part-A with a desiccant drying device.

Apply *SealFlex*® 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 170° F (76.66° C) each
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Spray apply *SealFlex*® at 4 gallons (15.141 liters) per 100 square feet, to the substrate in sufficient quantity to obtain a minimum of 64 dry mils (1625.6 microns) over the entire surface.

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

Recoat *SealFlex*® within 0 – 6 hours of previous coat.

STEP THREE: *StoneGrip*® 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).

After mixing thoroughly, immediately pour the *StoneGrip*® onto the horizontal surface and spread evenly over the entire surface using notched trowel or squeegee.

Hand apply *StoneGrip*® at 2 gallons (7.570 liters) per 100 square feet, to the *SealFlex*® in sufficient quantity to obtain a minimum of 32 dry mils (812.8 microns). Prior to its full set broadcast to refusal washed dry rounded, 20-30 mesh (841-595 microns, 0.033110"-0.02320, 0.841-0.595 millimeters) sand with 6.5 Moh's minimum hardness into the wet *StoneGrip*® or as required to achieve a slip resistant finish. Do not hand apply more *StoneGrip*® than can be top coated the same day. If *StoneGrip*® is not top coated on the same day as applied, prime *StoneGrip*® before proceeding.

StoneGrip® is not UV stable - aromatic polyurethane are known darken in color when exposed to UV and/or sunlight. This discoloration has shown to have little to no effect on the integrity of aromatic polyurethane.

STEP FOUR: Apply 1 gallon (3.785 liters) of *GripSeal*® an aliphatic polyurethane topcoat at 200 square feet per gallon (18.5806m²) to achieve a desired color at a theoretical dry film thickness of 3.6 mils (91.44 microns) using a ¼" nap mohair roller with a phenolic resin core or flat edge squeegee and then back roll. *GripSeal*® topcoat must be applied within twenty four (24) hours of application of the *StoneGrip*® (see technical data sheet for application instructions).

FINISHED SYSTEM

Freedom Chemical® Corporation's *GuardianDeck*® system is a theoretical dry film thickness of 90 mils (2286 microns) waterproof system.

Optional: Substrate adhesion test should be performed seven days after application of *SealFlex*®.

EQUIPMENT CLEAN UP

Immediately clean equipment with an environmentally safe solvent, as permitted by local regulations. Cured or dried material may be removed by mechanical means.

SPECIFICATIONS

Contact Freedom Chemical Corporation for specification assistance.

Jobsite visits by Freedom Chemical Corporations employees or its independent agents are solely for the purpose of determining qualification for warranty.

STORAGE

SealFlex® and *StoneGrip*® have a shelf life of 1 year shelf life from the date of manufacture, in factory-sealed containers.

Storage temperature for Part-A and Part-B is between 60° F - 90° F (15.55° C - 32.22° C) on pallets, avoiding freezing temperatures.

Never store directly on concrete surface, always store on pallets.

Keep containers sealed tightly to eliminate any condensation, moisture, or water contamination in Part-A or Part-B.

LIMITATIONS

Excess moisture vapor in concrete slabs may result in primer and/or coating to delaminate, discolor or cause improper curing.

Do not open until ready to use.

Freedom Chemical assumes no liability for substrate defects.

Substrates that have previously been coated are subject to absorption, which may affect the adhesion of a new coating.

High temperatures and humidity can significantly affect pot life and the cure time.

Low temperatures and humidity can extend the cure time.

TECHNICAL DATA

See individual technical data sheets for physical properties.

The end user should check the suitability of these products prior to their application.

WARNING

The *GuardianDeck*® system contains Isocyanates.

Incredible Stuff, Friendly People and Exceptional Service™

LIMITED WARRANTY: Read all information in the product data sheets, and material safety data sheets (MSDS) before applying material. Product information and instructions are subject to change without notice. Contact your Freedom Chemical Corporation agent or visit our website for current product information and instructions. Products manufactured by Freedom Chemical Corporation are free of defects and will meet Freedom Chemical Corporations current published physical properties. There are no other warranties given by Freedom Chemical Corporation of any kind implied, or expressed, including any warranty of fitness for a particular purpose, and/or merchantability in connection with this product.

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