

# FREEDOM

## Chemical® Corporation

**GUARDIANGREEN™** is an instant setting, two-component spray applied, elastomeric waterproof system that has with a theoretical dry film thickness of 145 mils± (3683 microns), 100% solids, solvent free and odorless. *GuardianGreen™* is a combination of *FreedomTuff™* Primer, *SealFlex™* base membrane a spray applied aromatic polyurea and *StoneGrip™* a hand applied aromatic polyurethane with an (optional) aliphatic topcoat which allows quick return to service. *GuardianGreen™* system is used on concrete, wood and metal surfaces. Its quick gel and set time allows for application to proceed while air and substrate temperatures are between 32° F (0° C) and 104° F (40° C).

### ADVANTAGES

- + 30 year leak free limited warranty – on preapproved projects
- + Can withstand constant water immersion, never rots
- + Chemical resistance – excellent
- + Complies with VOC and SCAQMD requirements
- + Excellent for low temperature applications
- + No bitumen, hot kettles, or open flames
- + No detailing sheets, surface flashings, clamping rings or termination bars.
- + No noxious odors
- + No Protection board or Root barrier required
- + No restrictions on the type of overburden
- + Open to foot traffic in 4 Hours, vehicular the next day at 68° Fahrenheit (20° C) and 50% Relative Humidity
- + Seamless, instant setting, spray applied membrane with 100% solids epoxy primer with silica sand.
- + System can be applied at zero pitch
- + System can be driven on by landscaping vehicles.

### RECOMMENDED USES

- + Split slab
  - + Green roofs
  - + Planters
  - + Plaza deck
- ❖ Prior to use read MSDS's, typical properties, and instructions for all products selected.

### 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 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, for best results shot blasting is recommend to obtain sufficient profile and product adhesion.

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

Perform an adhesion test prior to starting any coating project.

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.

### MIXING/APPLICATION PROCEDURES

Mix entire/full package containers, do not measure or mix partial containers of multi-component materials.

Do not dilute under any circumstances.

Primer is required on all substrates, except wood and on properly prepared steel (immersion requires a primer).

Coverage rates are approximate and may vary based on the aggregate size, roughness and porosity of the substrate.

Insure that the substrate and outside air 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:** Primer mix part-A and part-B and apply the primer to the surface (coverage rates are approximate and may vary based on the roughness/porosity of the concrete and may require more than one coat of primer). See technical data sheets for the appropriate primer, mixing, coverage rates and application instructions.

Apply two (2) coats Freedom Chemical® Corporation's *FreedomTuff™* primer over the entire surface, apply the first coat at a rate of 1 gallon (3.78 liters) per 300 square feet (27.8709 m<sup>2</sup>). Allow first coat of primer to become tack free prior to application of the second coat of primer at a rate of 1 gallon (3.78 liters) per 400 square feet per gallon (37.1612 m<sup>2</sup>) and broadcast (fully aggregated) a washed, rounded, dry and contamination free 30 mesh sand (595 microns, 0.2320", 0.595 millimeters) into the second coat of wet primer until the primer is fully filled approximately .25 lb. (0.1 kg) per square foot (0.092903m<sup>2</sup>). Excess aggregate must be completely removed before application of the *SealFlex™*, and if shiny spots appear these areas must be primed and sanded again.

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

Do not apply more primer to substrate than can be coated with *SealFlex™* within twelve (12) hours of set time. If primer is not coated within the allotted time, re-apply primer.

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

**STEP TW0:** 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.

GUARDIANGREEN™ SYSTEM

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)

Spray *SealFlex™* at 7 gallons (26.4979 liters) per 100 square feet, to the substrate in sufficient quantity to obtain a theoretical dry film thickness of 112 mils (2844.8 microns) over the entire surface.

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

Re-coat *SealFlex™* within 0 – 6 hours of previous coat.

**STEP THREE:** Apply *StoneGrip™* on horizontal and vertical surfaces, Part-B should be mixed individually prior to combining, adds 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 apply the *StoneGrip™* onto the horizontal and vertical surfaces and spread evenly over the entire surface using 1/8" notched squeegee and back rolled with a medium pile roller 1/2" nap.

On horizontal and vertical surfaces hand apply *StoneGrip™* at 1½ gallons (5.67812 liters) per 100 square feet, to the *SealFlex™* in sufficient quantity to obtain a minimum of 24 dry mils (609.6 microns). Prior to its full set broadcast (fully aggregate) with a washed, rounded, dry and contamination free 30 mesh sand to refusal (595 microns, 0.0232", 0.595 millimeters) sand with 6.5 Moh's minimum hardness into the wet *StoneGrip™*.

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.

**Note:** Overburden – Growth Medium, Pavers, Insulation, Vegetation, Drainage mat and Filter Fabric is not supplied by Freedom Chemical Corporation.

**STEP FOUR (optional):** on exposed surfaces *SealFlex™* maybe top coated to achieve a desired color with *GripSeal™* aliphatic polyurethane, *GripSeal™* must be applied within twenty four (24) hours of application of the *StoneGrip™* (refer to technical data sheet for application instructions).

#### **FINISHED SYSTEM**

Freedom Chemical® Corporation's *GuardianGreen™* system with primer is a theoretical dry film thickness of 145 mils± (3683 microns).

If required a substrate adhesion test should be performed seven days after application.

#### **EQUIPMENT/MATERIAL CLEAN UP**

Immediately clean equipment with an environmentally safe solvent.

Cured or dried material may be removed by mechanical means.

Dispose in accordance with local, state and federal regulations.

#### **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.

#### **STORAGE/LIMITATIONS/PRODUCT SHEETS**

See individual product sheets for substrate preparation, packaging, coverage rates, primer, mixing and application instructions for all products selected.

#### **WARNING**

The *GuardianGreen™* system contains Isocyanates.

*Incredible Stuff, Exceptional Service, and Friendly People™*

DISCLAIMER: Please read all information in the typical properties sheet, application guides and material safety data sheets (MSDS) before applying 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. All published information is subject to change without notice Contact Freedom Chemical Corporation. All guidelines, recommendations, statements, and information contained herein is based on information and 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 himself, by his own information and tests, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his 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. Test 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 Inc. 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.