

TECHNICAL DATA SHEET

SUBSURFACE / WATER RESISTANT HARDENER/ SALT RESISTANT SEALER

GREEN UMBRELLA® SHIELD & PROTECT

PRODUCT DESCRIPTION

Green Umbrella® Shield & Protect™ is an environmentally formulated, premium hardener and concrete surface protectant. Engineered as a chloride and water repellent for any concrete substrate, road or bridge substantially preserving and increasing lifecycle. Prevents concrete off-dusting and does not contribute to alkali-silica reaction, while at the same time providing exceptional resistance to the damaging effects of water and salt, with over ninety-percent chloride intrusion prevention. The addition of a chloride screen significantly protects industrial and infrastructure concrete in applications where salt-water and deicers are present. Shield & Protect™ takes only one S.O.L.O™ application and is packaged R.T.U.², resist contaminants in all concrete applications a for sustainable, maintainable concrete.

BASIC USE

Shield & Protect is part of Green Umbrella's® line of versatile concrete treatments meeting both architectural and engineering design professionals' need for environmentally friendly, lifecycle enhancing concrete products. Shield & Protect™ basic use is as a *Penetrating, Completely Reactive, Silane Modified Densifier*, Penetrating, Completely Reactive, Chloride Resistant, Insoluble, Nano-Densifier Sealer. The silane modified treatment increases surface abrasion as a wear guard and impermeability as a chloride intrusion sealer. Use in applications where basic densifiers and hardeners are specified and where a water resistant, odorless, high-performance concrete sealer is desired. Outperforms higher VOC, low square footage yield water and salt repellants.

@EarlyAge Concrete: Green Umbrella Shield & Protect can be used as a stand-alone concrete hardener and densifier sealer to prevent concrete off-dusting and disintegration, increase chloride resistance and hydrophobicity and reducing

damage from freeze/thaw cycles. Unlike conventional formulations, this early application has unparalleled success, not requiring the concrete to cure 28 days prior to application.

@MatureAge Concrete: Green Umbrella Shield & Protect can be used as a stand-alone concrete hardener and densifier sealer applied to concrete aged beyond 28 days to prevent concrete off-dusting and disintegration, increase chloride resistance and hydrophobicity and reducing damage from freeze/thaw cycles.

ARCHITECTURAL APPLICATIONS

Ideal for **interior** or **exterior**, vertical or horizontal concrete, precast or cementitious surfaces. Demanding Applications, warehouse/distribution centers, food service, parking decks, parking lots, bridge decks, roadways, garages, hospitals, or similar, retail spaces & showrooms, restaurants, business offices, lobby areas, museums, municipalities, airports, hospitals, schools, fire-stations, masonry or most concrete surfaces.

FEATURES & BENEFITS

Primary Features & Benefits of One of The Industry's Most Versatile CrossOver Concrete Densifier, Surface and Subsurface treatment

- SUPERIOR CHLORIDE INTRUSION PREVENTION
- PRODUCT PERMANENCE - INSOLUBLE - WILL NOT WASH OUT
- UNIQUE PROTECTION FOR FREEZE/THAW EXPOSURE
- UNIQUE NANOTECHNOLOGY PHYSICAL/CHEMICAL BONDING TECHNOLOGY - SUPERIOR PERFORMANCE
- RESISTS PENETRATION OF OILS, CHEMICALS AND STAIN-CAUSING CONTAMINANTS.
- 100% REACTIVE - MORE THAN A "SHELL"

TECHNICAL INFORMATION

Formulation	Penetrating Completely Reactive Insoluble Chloride Resistant Hydrophobic Sealer Densifier
Chemical Family	Lithium
Substrate Location	Subsurface
Appearance	Translucent
Odor	None
FilmForming	No
Active Ingredients	100%
Specific Gravity	Chloride Screen, Sealer, Densifier
Type	11
pH	212°F
Boiling Point	5-gal bucket, 55-gal drum, 275-gal tote
Packaging	2 years
Shelf Life	<50
VOC(grams/liters)	<50g/L
Freezing Point	32°F

SAFETY DATA SHEETS FOR ALL PRODUCTS ARE AVAILABLE AT
WWW.GREENUMBRELLASYSTEMS.COM

SURFACE"

- 100% ABSORBED - REDUCING WASTE
- LOW NANO-SOLIDS FORMULATION, DEEPER PENETRATION
- REDUCES POROSITY, RESISTING DAMAGE FROM FREEZE/THAW - INCREASING LIFECYCLE
- ENHANCES THE NATURAL BEAUTY OF CONCRETE
- EFFICACY & PERFORMANCE NOT AFFECTED BY UV EXPOSURE
- INCREASES HARDNESS 1/4 INCH DEEP, WHILE REDUCING POROSITY
- PREVENTS DANGEROUS OFF-DUSTING - SAFER FOR BUILDING OCCUPANTS
- IMPROVES EASE OF MAINTENANCE
- REQUIRES NO RINSING & DISPOSAL AND WILL NOT GEL ON SURFACE — CAN BE ALLOWED TO AIR DRY
- DECREASES BLACK TIRE MARKING FROM LIFT TRUCKS AND EQUIPMENT — IMPROVING APPEARANCE
- STANDS UP TO HEAVY ABRASION AND FOOT TRAFFIC WHILE PROVIDING EXCELLENT SLIP RESISTANCE
- RESISTANT TO MOST DEICERS
- PREVENTS SCALING OF CONCRETE
- DOES NOT CONTRIBUTE TO ASR
- CREATES A BREATHABLE SURFACE - NO FLAKE OR PEEL
- NATURAL APPEARANCE - REDUCES CLEANING

SCHEDULE

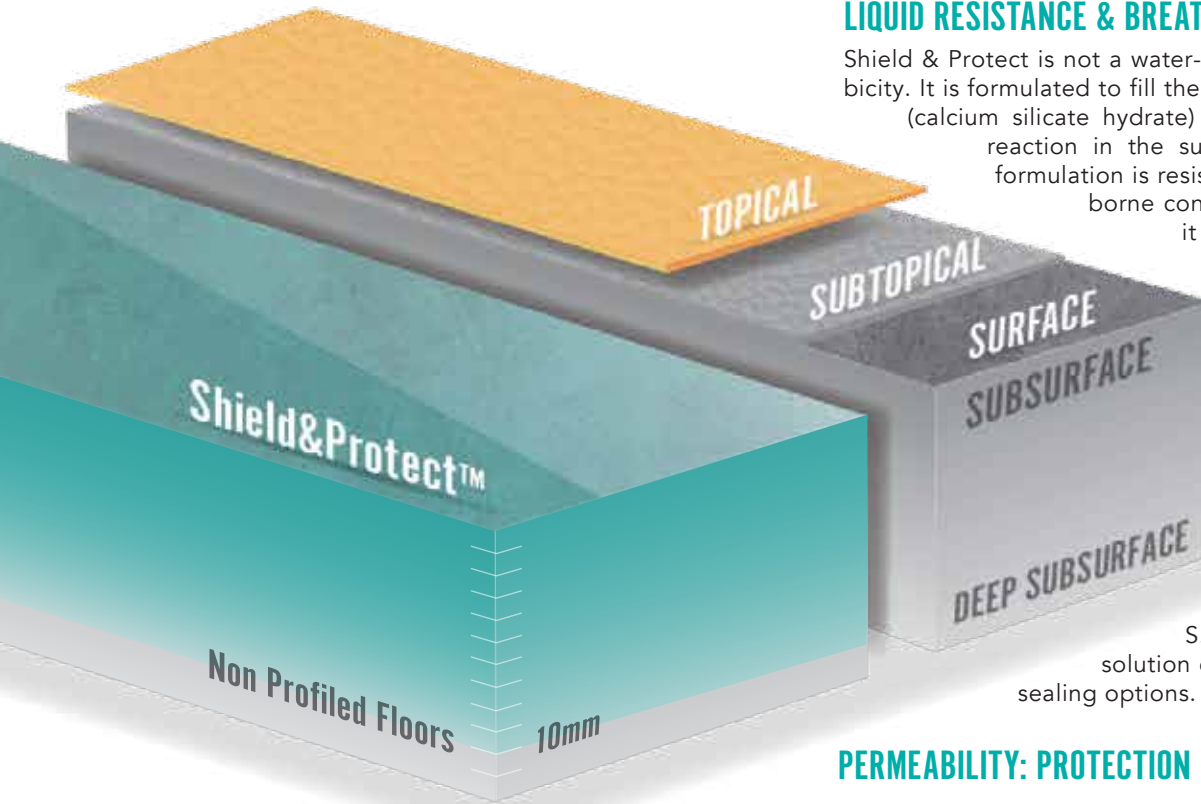
- REQUIRES NO RINSING & DISPOSAL - CUTS ENVIRONMENTAL IMPACT
- SIMPLY AIR DRY - CUTS LABOR
- HIGHLY ABRASION-RESISTANT TO FOOT & WHEELED TRAFFIC - INCREASES LIFE CYCLE
- S.O.L.O. APPLICATION & BRIEF DWELL TIME - CUTS DOWNTIME
- NON-SODIUM - DOES NOT CONTRIBUTE TO ALKALI-SILICA REACTION
- NO EFFLORESCENCE OR WHITENING COMMON WITH CONVENTIONAL HARDENERS - CUTS DOWNTIME
- NO VOC'S - ENVIRONMENTALLY RESPONSIBLE
- NON-RESINOUS POLYMER FORMULATION - PREVENTS YELLOWING & TIRE MARKING
- 5X GREATER COVERAGE RATIO VS. CONVENTIONAL DOT CHLORIDE SCREENS
- R.T.U.** - READY TO USE - REDUCING LABOR

ADDITIONAL BENEFITS

@EarlyAge Concrete

- NOT A DESICCANT - WILL NOT DAMAGE CURE OF NEAR SURFACE
- PROTECTS SURFACES DURING CONSTRUCTION
- WILL NOT GEL ON SURFACE - NO SWELLING IN PORES THAT CREATES CRAZE CRACKING

SUBSTRATE INDEX



LIQUID RESISTANCE & BREATHABLE

Shield & Protect is not a water-proofer but increases hydrophobicity. It is formulated to fill the concrete voids by creating c-s-h (calcium silicate hydrate) through a permanent chemical reaction in the substrate with silica. The unique formulation is resistant to surface water and water-borne containments. Yet after it has cured it is insoluble, completely reacted.

Shield & Protect shines as a chloride screen providing much needed protection in harsh environments. The unique breathability allows for the passage of moisture through the slab @EarlyAge when protection is critical early in construction or where there are moisture issues that necessitate a breathable surface. Shield & Protect is an economical

S.O.L.O. densifier treatment solution compared to high VOC concrete sealing options.

NOT A CANDY SHELL

Concrete treatments are designed for surface protection. Shield & Protect provides industrial and infrastructure projects with maximum protection without negative side-effects common to conventional hardener/sealers. Many conventional hardeners create a shallow, thin, "shell" of hardness at the sub-surface; when this "candy shell" is breached by abrasion, wear or freeze/thaw, a softer than original surface may be exposed leading to failure or increased maintenance cost. Negative lifecycle impact may be exaggerated when concrete products are introduced @EarlyAge™. However, Shield & Protect does not create @EarlyAge™ negatives, it does not react as a desiccant — absorbing water of convenience contributing to early failures. Shield & Protect provides industry-leading surface and subsurface chloride and water intrusion protection without scavenging water @EarlyAge™ or washing out during routine maintenance.

PENETRATION

Shield & Protect "Resists Salt & Prevents Corrosive Breakdown" at both a surface and subsurface level, penetrating and filling voids due to its nano structure and low solid content. All concrete matrices are not the same - thus the depth of penetration will vary. Frequently, Shield & Protect penetrates 2x-3x deeper than conventional products, penetrating and reacting as deep as 6 mm below the surface. This allows for maximum protection against chloride and water penetration preserving not only concrete wear surface but also reinforcement.

PERMEABILITY: PROTECTION & PREVENTION

The causes of the surface weakening of concrete vary. Concrete permeability plays a large role in the integrity of concrete from surface to deep subsurface. The detrimental effects of chloride, salt and de-icers are well documented. Arguably, the primary reason concrete treatments are applied is to increase impermeability and prevent freeze/thaw damage. Green Umbrella Shield & Protect is "Filling the Voids" to eliminate weak porosities and produce an umbrella of protection for environmental protection and increased life cycle.

S.O.L.O.™ APPLICATION AND DWELL TIME

Green Umbrella Shield & Protect is applied once and does not require a lengthy 24-48 hour cure time after application, like many concrete sealers. A Spray-On Leave-On treatment, with only one surface application needed. There is no scrubbing, gelling, or re-wetting of the surface. The initial 30 minute dwell time is all that is required. Once dried, the reaction is permanent within the surface and may be open to all traffic.

INCREASED HARDNESS

A superior stand-alone densifier and sealer. In its natural state, the active ingredients in Shield & Protect improve the hardness and outperform the chloride resistance of conventional formulations without the need for harmful VOC's. The surface, subsurface and deep subsurface will be harder and more durable with Shield & Protect due to its unique ability for "Resisting Water, Salts, & Filling the Voids".

MANUFACTURE & PRODUCT CONSULTING

Green Umbrella

20 Jetview Drive
Rochester, NY 14624
(844) 200-7336

Website & Documents Available At:

GreenUmbrellaSystems.com
CutSheet, Application Sheet, Feature Brochure,
Technical Data Sheet, Safety Data Sheet

Product Consulting Email:

Info@GreenUmbrellaSystems.com

ESTIMATING

Container Size:

5 gallon (18.9L) - 43 lbs. (19.5 kgs)
55 gallon (208L) - 469.1 lb (212.8 kg)
275 gallons (1,041 L) - 2,345.6 lb (1,064 kg)

Each Green Umbrella Shield & Protect container is properly labeled with information, including the product name, description, batch number, and application instructions.

Dilution:

None. R.T.U. (Ready-To-Use).

Coverage Rates:

Green Umbrella Shield & Protect has an average coverage rate of 400 SF per gallon. On hard troweled concrete, the coverage rate may be increased to a max of 800 SF per gallon. Broom finish concrete may have an average coverage of 250 SF per gallon. Under normal conditions, only one application is necessary. Coverage depends on the porosity of the concrete substrate, time, temperature, and humidity.

SPECIFICATIONS

GreenUmbrella® CUTSPEC™

Simplified Product Spec

@EarlyAge Conventional Concrete (28 days or earlier):

Shield & Protect™ by Green Umbrella® of Rochester, NY (844) 200-7336 is a R.T.U. (Ready to Use), S.O.L.O.

(Spray-On, Leave-On), Penetrating Completely Reactive Chloride Intrusion Resistant Hydrophobic Insoluble Nano Densifier silica solution to strengthen, seal, densify and protect the concrete surface and subsurface. Clean and sweep all debris and potential contaminants—including sealers, wax, coatings, and oil or food spills—before application. Place on @EarlyAge™ concrete the same day of concrete placement and finishing; once the concrete is hard enough for walking or as specified in the construction process. Do not apply using a broom on hard trowel finish concrete. Shield & Protect™ is NOT a cure & seal. Apply Shield & Protect™ in temperatures 40°F (and rising) -95°F (4-35°C) at 250-800 SF per gallon. Keep wet for a dwell time of 30 minutes. Allow to air dry. (For certified installers and manufacturer instructions visit www.GreenUmbrellaSystems.com)

@MatureAge Conventional Concrete (28 days or earlier):

Shield & Protect™ by Green Umbrella® of Rochester, NY (844) 200-7336 is a R.T.U. (Ready to Use), S.O.L.O. (Spray-On, Leave-On), Penetrating Completely Reactive Chloride Intrusion Resistant Hydrophobic Insoluble Nano Densifier silica solution to strengthen, seal, densify and protect the concrete surface and subsurface. Clean and sweep all debris and potential contaminants—including sealers, wax, coatings, and oil or food spills—before processing. Place on @MatureAge™ concrete as specified in the construction process. Shield & Protect™ is NOT a cure & seal. Apply Shield & Protect™ in temperatures 40°F (and rising) -95°F (4-35°C) at 400-500 SF per gallon. Keep wet for a dwell time of 30 minutes. Allow to air dry. (For certified installers and manufacturer instructions visit www.GreenUmbrellaSystems.com)

CSI SPECIFICATIONS

DIVISION 03 & 09

Section 03 3536

EarlyAge Concrete
Mature Concrete or Retrofit

Coordinate with section:

Section 03 2400

Synthetic Fiber Reinforcement

Section 03 3119

Shrinkage Compensating Concrete

Section 03 3550

Integrally Colored Concrete

Section 03 3500

Concrete Finishing

Section 03 3900

Concrete Curing

Section 07 9200

Joint Sealer

**For CSI Specifications Contact a Consultant:
info@greenumbrellasystems.com**

NOTE TO SPECIFIER

Green Umbrella Concrete System treatments like Green Umbrella® Shield & Protect™ form an integral part of a successfully specified concrete placement, environmentally installed with extended expected lifecycle and reduced maintenance.

The specifier must keep in mind several construction disciplines: the concrete mix design, concrete placement, concrete finishing and concrete maintenance program. We encourage you to carefully specify these elements, even if Green Umbrella products are not used. Each of these disciplines is critical for the overall success of this design element. Ways and means generally need to be specified. Green Umbrella Architectural Concrete System is an approach from design to completion, created to help the specifier succeed, covering stages from the concrete pour through to the floor's maintenance.

There are six major components to the Green Umbrella Architectural Concrete System: knowledgeable CONSULTANTS, the CANVAS, the PROCESS made up of 'ways and means,' high productivity EQUIPMENT, TREATMENTS and finally, qualified flatwork and polishing CRAFTSMEN.

All of its components follow the Nine Fundamentals of Green Polishing (www.theconcrete9.com) that educate a specifier on these principles. Consulting ACI Guide to Decorative Concrete (ACI 310R-19) can be helpful.

Designing the canvas or concrete slab: Green Umbrella GreenCanvas™ shrinkage compensating concrete can be specified in the mix design (ACI 223R-10) to ensure that the surface is ideal for a jointless, non-curling floor when used in slab on grade or elevated deck applications. This is also a sustainable solution for tank farm, industrial and infrastructure projects including roadways and bridges.

For conventional concrete, consult American Concrete Institute Guide to Design of Slabs on Ground (ACI 302.1R-15) for joint spacing if shrinkage compensating concrete is not used. The specification should separate concrete slabs into 03 30 00 Cast-In-Place concrete for surfaces not designated for polished concrete and SECTION 033509 – CONCRETE CURE AND PROFILE FINISHING SYSTEMS for surfaces selected for polished concrete.

Hardeners & Densifiers: Research shows that these treatments are effective against concrete dusting and provide needed hardening of the surface, accepted as a standard. Green Umbrella concrete treatments are non-sodium and do not generate hazardous waste. The Green Umbrella line of densifiers are not water-soluble and do not contribute to alkali-silica reaction. A unique benefit of Shield & Protect™ is the moisture and chloride intrusion resistance properties.

Colorants: Green Umbrella treatments that are pH neutral will not resist color introduction or promote "walk-off" common with many color and hardener combinations; this is why it is essential to match the family of treatments to the colorants. Otherwise, the specifier may unknowingly specify treatments that do not work well together. Green Umbrella colorants, dyes, and micro-pigments have superior color fastness compared to traditional stains and dyes. FROM DESIGN TO COMPLETION, YOU EXPERIENCE A COMPLETE SYSTEM.

Environmental Responsibility and LEED Considerations

A Green Umbrella Architectural Concrete Systems specified process is specially designed to require less labor and downtime while lowering environmental impact. Green Umbrella Shield & Protect™ is easy and quick to apply, requiring less labor. Shield & Protect™ has low VOC's with no impact on indoor air quality.

Human Health - Indoor Environmental Quality (IEQ)

- Architectural Concrete may be finished so as to dramatically reduce bacterial adhesion and the presence of biofilms, creating a healthier environment free of harmful bacteria and viruses.

Human Health - Indoor Air Quality (IAQ)

- Many studies indicate that indoor air quality is enhanced with properly maintained Architectural Concrete vs. carpet or other floor coverings
 - Architectural concrete does not support combustion, nor does it produce smoke or toxic fumes (LEED v4.1 Operations and Maintenance, propane equipment)
- Architectural Concrete can eliminate moisture issues, shrinking possible growth of mold and fungus.

Building Reuse/Construction Waste Management/Recycled Content

- Existing Buildings — Environmental stewardship through the reuse of the existing floor.
- New or Existing Buildings — Not wasting materials or energy required to produce a floor covering or topical coating.

VOC/IAQ/Long-term Maintenance

- Low VOC content densifier/sealer
 - Many studies indicate that indoor air quality is enhanced with properly maintained hard surfaces vs. carpet
 - Polished concrete does not support combustion, nor does it produce smoke or toxic fumes (LEED v4.1 Operations and Maintenance, propane equipment)
- Polished concrete has a lower maintenance cost and zero replacement cost compared to traditional floor coverings.

Life Cycle Cost

Producing an impermeable surface that is resistant to chloride and freeze/thaw improves the lifecycle, durability and performance of the surface.

TESTING



For all independent lab testing contact us at: Info@GreenUmbrellaSystems.com

Chemical Resistance Of Finishes

Green Umbrella MaxDefense™ System
 Chemical resistance to JP-8+100 fuel - 0.1% weight gain
 Chemical resistance to 30 wt motor oil — 0.007% weight gain

Chemical resistance to Skydrol 500 B-4 - 0.05% weight gain

ASTM C779-05 Standard Test Method For Abrasion Resistance Of Horizontal Concrete

ASTM C1583 Standard Test Method For Tensile Strength Of Concrete Surfaces And The Bond Strength Or Tensile Strength Of Concrete Repair And Overlay Materials By Direct Tension (Pull-Off Method)

ASTM 1308 Standard Test Method For Effect Of Household Chemicals On Clear And Pigmented Organic Finishes (Aviation Fluid Resistance With Green Umbrella Max- Defense™ System)

ACI 302 Standard Guide For Concrete Floor And Slab Construction

Mohs Scale Of Mineral Hardness
 USDA Compliant
 FDA Compliant

Performance: The untreated control sample is listed first, followed by the treated sample

	Control	Shield & Protect
Chloride Ion Reduction	0%	91%
Flexural Strength (lbs.)	430	635
Abrasion Resistance (increase)	0%	45%
Water Penetration (inches) <small>(Rilem tube method—inches absorbed)</small>	.7	.1
Mohs Hardness	3.5	7.0
Water Vapor Transmission	1.40	1.13

Flexural Strength: Results are expressed in pounds per square inch (psi) and carried out per ASTM C-78-94 "Standard Method for Flexural Strength of Concrete (Using Simple Beam with Third-Point Loading)."

Untreated 430 Shield & Protect 600

Water Permeability: Performed in accordance with CRD-C 48-73 " Method of Test for Water Permeability of Concrete," shows Shield & Protect reduces the permeability of concrete over the control.

Untreated 4.8E-10 (cm/sec) Shield & Protect 6.9E-11

Water Vapor Transmission: Performed in accordance with ASTM E-96-94, "Standard Test Methods for Water Vapor Transmission of Materials." These figures are reported in grains/hour per square foot and show reduced vapor transmission

Untreated 1.40 Shield & Protect 1.20

Stain Resistance: All samples were exposed to the listed materials then scrubbed with water, a non-abrasive cleaner, and an abrasive cleaner. Values listed are for abrasive cleaners only with 0 representing no change in stain and 10 indicating the stain is completely gone.

Untreated Shield & Protect Tomato Paste 3 8 Gum 3 8
Coffee 8 10 Tea 8 8

Chloride Ingress: Research project of the National Cooperative Highway Research Program as reported in NCHRP No. 244, "Concrete Sealers for Protection of Bridge Structures." For a sealer to meet this standard, it must reduce chloride content by at least 75%.

Untreated 0% reduction Shield & Protect 91% reduction

Hardness/Abrasion: The absolute scale of hardness equivalent is given in parentheses following the Mohs number.

Untreated 3.5 (9) Shield & Protect 6.5 (86)

Water Penetration:

Untreated .7 (1.78cm) Shield & Protect .1 (.25cm)

USDA regulations 9 CFR, Section 416.4 and the Food Safety Inspection Services, "Sanitation Performance Compliance Guide".



All products can be seen at
GreenUmbrellaSystems.com

End Note to Specifier

PRODUCT PLACEMENT

@EarlyAge Conventional Concrete: Place Shield & Protect™ post concrete finishing seven days or later, as a stand-alone hardener, hydrophobic and chloride intrusion resisting treatment.

@MatureAge Conventional Concrete:

Place Shield & Protect™ on an adequately prepared substrate as noted above - 'Substrate Condition'.

Note to Applicator & Specifier:

TIME, TEMPERATURE & HUMIDITY

For a chemical reaction to take place successfully, time must be allocated for the full reaction. Likewise, when applying Green Umbrella® Shield & Enhance™ to concrete, there must be an adequate amount of dwell time for the reaction to occur. Proper dwell time will help to achieve the best result. For Shield & Enhance to penetrate the substrate effectively, the temperature should be 40°F (4°C) and rise for several hours from application forward. If temperatures are lower than recommended, the chemistry may take much longer to react and penetrate the concrete substrate. If the temperature exceeds the recommended maximum of 95°F (35°C), or if conditions are windy, the chemistry could react and dry before penetrating the substrate.

Humidity also plays a role in dry time. The product applied to a dry slab of concrete in an arid climate will dry faster than in a humid environment. In dry climates with low humidity, it may be necessary to hydrate the slab to allow for proper dwell time. If several treatments are being applied, product staging should be planned to meet all treatment dwell times and dry times. It is recommended to use dew point data from a mobile hygrometer to determine the best staging of concrete treatments to eliminate needless downtime. The use of on-site hygrometers and thermometers can provide meaningful data to facilitate treatment application success.

Time for traffic: For best results - light foot traffic when dry, or after 1 hour. Wheeled traffic after 3 hours.

High Temperature or High Wind Application [(Above 95°F or 35°C) (Consult ACI 305R-20 for Wind Advisory)] @EarlyAge Next-day & @MatureAge Concrete Hot Slabs:

(Consult ACI 305R-20 for Wind Advisory)

Reduce slab temperature: Hydrate a hot slab to reduce the surface temperature, preventing flash drying of Shield & Enhance. Hydrate for an hour in the most arid of conditions, clean and dry any surface moisture, then immediately proceed to high temperature and high

wind instructions below.

Apply after Reduced Slab Temperature: Test before full application. Apply Shield & Enhance with a single S.O.L.O. application at the rate of 400 SF per gallon, more if needed, and disperse using a GU recommended, dedicated and clean T-Bar on troweled slabs. Unlike other Green Umbrella Densifiers - **Do Not** mist with water or re-apply to a partially wet, treated surface.

PRODUCT APPLICATION

(Review Placement and Applicator Note Above)

Mock-up: Perform a mock-up to identify variables or contaminants that may be incompatible with Shield & Enhance. Manufacturer recommended dwell-time and dry-time must be adhered to for all applications for accurate performance testing.

Two technicians are recommended for installation: Technician One - Apply using a GU recommended, non-metal sprayer - dedicated, clean, dry, with a conical tip. and not allowing puddling.

Spray and apply, and not walking or tracking over any completed areas, work toward the exit. Introduce and apply evenly to achieve proper dwell time and reactivity. Do not attempt to re-wet or re-apply treatment to quick dry areas.

Mixing: None. Packaged R.T.U. **Do not mix or dilute.**

Sprayer: Treatment-dedicated, clean, non-metal, with a conical, drip-free tip. Pump-up, back-pack, handheld, battery, or pneumatically powered. (Note equipment section)

Applicator: Treatment-dedicated, new or clean pad on a heavyweight GU T-bar or clean exploded-tip soft bristle broom.

@EarlyAge Conventional Concrete:

1. For best penetration, thoroughly clean and sweep all debris and remove potential contaminants before application. Exercise care on @EarlyAge concrete not to excessively abrade the fresh surface.
2. Apply treatment using a non-metal sprayer. If using an applicator, use a new, clean pad on a heavyweight GU T-Bar. Do not apply to @EarlyAge concrete using a broom. Guard against tracking.

3. **Application Ratio:** 250-600 SF per gallon. Yield will vary depending on the concrete surface. Broom finish 250-400, Trowel finish 400-600.
4. **Dwell Time:** 20 minutes for full reaction. The product will not gel and does not require rinsing.
5. **Dry Time:** 1 hour. Allow product to air dry. If treatment is not dry within one or two hours, indirect blowers or fans may reduce dry time. Do not attempt to use direct air movement over the treated surface; doing so may produce an undesirable finish that may require grinding to remove.
6. **Time to Traffic:** For best results - light foot traffic when dry, or after 1 hour. Wheeled traffic after 1-3 hours.

@MatureAge Conventional Concrete:

Important: For high temperature or high wind application, see Note to Applicator or Specifier: Time, Temperature & Humidity.

1. For best penetration, thoroughly clean and sweep all debris and remove potential contaminants—including sealers, wax, coatings, and oil or food spills—before application. Use GreenClean and Degreaser™; do not use citric, d-limonene, or acidic cleaners.
2. The surface may be cleaned and prepped using a power washer, water broom, auto-scrubber, or concrete grinder. Always perform a mock-up.
3. Introduce treatment using a non-metal sprayer at 400 SF per gallon. Use a clean, exploded tip soft bristle broom on broom finished concrete, or a clean T-bar applicator on troweled concrete, to ensure even coverage. Avoid tracking.
4. **Application Ratio:** 250-600 SF per gallon. Yield will vary depending on the concrete surface. Broom finish 250-400 SF, Trowel finish 400-600 SF.
5. **Dwell Time:** 20 minutes for full reaction. Allow product to air dry. Additional product may be required for performance-based upon concrete state and/or porosity.
6. **Dry Time:** 1 hour. If treatment is not dry within one or two hours, indirect blowers or fans may reduce dry time. The product will not gel or require rinsing.
7. **Time to Traffic:** For best results - light foot traffic when dry, or after 1 hour. Wheeled traffic after 1-3 hours.

Damaged and Weak Surface Floors

See Green Umbrella treatment: DryShield or PCR

warranty. If any, product demonstrations are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. The Buyer shall be responsible for determining Green Umbrella products' suitability for the Buyer's intended purposes.

FOR PROFESSIONAL USE ONLY