

APPLICATION SHEET

DEEP SUBSURFACE / WATER RESISTANT DENSIFIER/ HIGHLY ABRASION RESISTANT

GREEN UMBRELLA® HYDROSHIELD

Application Ratio:

400-600 sq.ft. per gallon

Application Ratio

w/GreenCut™:

500-700 sq.ft. per gallon.

Drying Time:

30-60 min.@75F & 50% RH

IMPORTANT:

Read Technical Data Sheet and SDS prior to application. Follow all directions, including safety information. Installer education, training and appropriate handling is necessary for product success. Due to the variety of concrete, the applicator must test the product for compatibility prior to full application.



Indoor



Outdoor



Sprayer



Broom



Autoscrubber



Burnisher



Grinder

Surface Preparation

Early age and mature concrete should be free of all debris and potential contaminants—including film-forming cure and sealer, wax, topical coatings or sealers and oil or food spills—prior to application.

Environmental Conditions

For Green Umbrella® HydroShield™ to effectively penetrate the substrate, the temperature should not be less than 40°F. If the temperature of the slab exceeds the recommended maximum 95°F, or if conditions are windy, the treatment could react and dry before penetrating the substrate. In such circumstances, keep floors hydrated with water for 30 minutes.

Early Age Concrete To Be Abrasively Polished:

1. Use Green Umbrella IceStart™ cure and IceStop™ fixative during and immediately after concrete placement & finishing.
2. Hone abrasively to achieve a specified or desired class of grind with GreenCut™ cutting agent and GC™ abrasives.
3. Double-scrub with an auto-scrubber equipped with GU recommended pads/brushes.
4. For color application: Green Umbrella NanoDye™ colorants should be applied before proceeding to the next step as directed. Dye application using acetone as a carrier is recommended when using HydroShield.

Important: HydroShield is hydrophobic and will resist the introduction of any colorant once it is applied.

5. **Important:** For high temperature or windy application, see *Note to Applicator: Time, Temp. & Humidity.*

6. HydroShield is R.T.U. and should be applied S.O.L.O. to a clean surface with a dedicated GU recommended (non-metal) sprayer evenly on the surface at a rate of 400-500 sf per gallon. No need for agitation.
7. If necessary to break the surface tension, distribute treatment with a new, clean, GU T-Bar to ensure uniform coverage. Keep substrate wet, allowing for a dwell time of 30 minutes for full reaction.
8. Allow product to air dry. If treatment is not drying within one or two hours, blowers or fans may reduce dry time.
9. Double-scrub with an auto-scrubber equipped with GU recommended pads/brushes. Proceed to honing abrasive cut. This is required if a sub-topical or penetrating surface treatment is applied for HydroShield to bond properly.
10. Double-scrub with an auto-scrubber, equipped with GU recommended pads/brushes.

EarlyAge Concrete To Be Abrasively Polished (continued):

11. Proceed to polish abrasive cut, if specified.
12. Apply surface treatment such as Green Umbrella Microfilm™ according to instructions.

Note: If a concrete slab is abrasively opened, Green Umbrella HydroShield™ should be applied even when Green Umbrella IceStart™ (cure) and IceStop™ (fixative) were used during placement.

MatureAge Concrete (28 days or later):

1. **Important:** For high temperature or windy application see *Note to Applicator: Time, Temp. & Humidity*.
2. Green Umbrella HydroShield is R.T.U. and should be applied S.O.L.O. to a clean surface with a dedicated GU recommended (non-metal) sprayer evenly on the surface at a rate of 400-500 SF per gallon. Note time and temp above.
3. If necessary to break the surface tension, or to disperse puddles, distribute the product with a clean, dedicated GU T-Bar or exploded-tip bristle broom to ensure uniform coverage—no need for agitation.
4. Keep substrate wet, adding more product as needed, allowing for a dwell time of 30 minutes for full reaction.
5. Allow product to air dry. If the product is not drying for an hour or two, the use of blowers or fans can reduce dry time. No gelling or rinsing required.
6. If unreacted material would exist, remove it with a broom after the product has dried.

MatureAge Concrete To Be Abrasively Polished (PHP):

1. Profile or Hone abrasively to achieve a specified or desired class of grind with GreenCut™ cutting agent and GC™ abrasives.
2. Double-scrub with an auto-scrubber equipped with GU recommended pads/brushes.
3. For Color application: Green Umbrella NanoDye™ colorant should be applied before proceeding to the next step as directed. Dye application using acetone as a carrier is recommended. **Important: HydroShield is hydrophobic and will resist the introduction of any colorant once it is**

applied.

4. **Important:** For high temperature or windy application, see *Note to Applicator: Time, Temp. & Humidity*.
5. HydroShield is R.T.U. and should be applied S.O.L.O. to a clean surface with a dedicated GU recommended (non-metal) sprayer evenly on the surface at a rate of 400-500 SF per gallon. No need for agitation. If necessary to break the surface tension, or to remove puddles, distribute the product with a clean, dedicated GU T-Bar or exploded-tip bristle broom to ensure uniform coverage—no need for agitation.
6. Allow product to air dry. If the product is not drying within a few hours, blowers or fans may reduce dry time.
7. Double-scrub with an auto-scrubber equipped with GU recommended pads/brushes.
8. Proceed to abrasive cut. This is required if a sub-topical or penetrating surface treatment is applied for HydroShield to bond properly.
9. Double-scrub with an auto-scrubber equipped.
10. Proceed to polish abrasive cut, if specified.
11. Apply surface treatment such as Green Umbrella Microfilm™ according to instructions.

Note: If a concrete slab is abrasively opened, Green Umbrella HydroShield should be applied even when Green Umbrella IceStart™ (cure) and IceStop™ (fixative) were used during placement.

For a chemical reaction to take place successfully, time must be allocated for the full reaction. Likewise, when applying Green Umbrella HydroShield to concrete, there must be an adequate amount of dwell time for the reaction to take place. Doing so will help to achieve the best result.

Humidity also plays a role in the 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. Please consult a Green Umbrella consultant with any questions. The use of on-site hygrometers and thermometers can provide meaningful data to facilitate treatment application success.