

## SUBSTRATE

The substrate must be free of curing membranes, silicate surface hardener, paint, or sealer and be structurally sound. If the concrete has been treated or sealed, proceed with complete removal process. Contact StaticWorx for further instruction if silicate hardeners or membranes have been utilized.

## LIMITATIONS

If contaminates of oils, silicones, mold release agents, and/or others are present, GroundWorx Ultra HB primer may fisheye or delaminate from the surface. Surface contaminates should be removed with a suitable detergent prior to application. Solvent cleaning of silicone contaminates may make the situation worse and is not recommended. Contact StaticWorx for additional recommendations. NOTE: GroundWorx Ultra ESD primer may amber over time from UV exposure unless coated with GroundWorx Ultra ESD top coat.

## MOISTURE

Moisture and vapor transmission rates are dynamic in nature and may change over time. Initial testing does not guarantee future results. StaticWorx requires that all concrete slabs are tested using in-situ probes per ASTM F-2170 and with calcium chloride tests per ASTM F-1869. If the relative humidity of the concrete substrate is over 75% (per ASTM F-2170) or 3lbs/1,000ft<sup>2</sup>/24 hours (ASTM F-1869), contact StaticWorx for a moisture mitigation recommendation prior to product use.

## VAPOR/CONTAMINATION

If there is no known vapor barrier or the vapor barrier is inadequate, there is an elevated risk of bond failure. Other factors including the migration of oils, chemicals, excessive salts or Alkali Silica Reaction (ASR) from the concrete may also elevate the risk of adhesion difficulties. Contact StaticWorx for approved mitigation treatments.

## TEMPERATURE & HUMIDITY

During the application and curing of the coating, the substrate temperature, material temperature, and room conditions must be maintained between 65°F (18°C) and 90°F (32°C). Relative Humidity (RH) should be limited to 30- 80%. DO NOT apply coatings unless the surface temperature is more than five degrees over the dew point.

## EQUIPMENT

- Protective equipment and clothing
- Jiffy mixer blade, model ES
- Clean container for mixing
- Low speed high torque drill motor
- High quality 1/2" – 3/8" -nap 18" wide roller
- Squeegee

## SURFACE PREPARATION

Surface dirt, grease, oil, and contaminants must be removed by detergent scrubbing and rinsing with clean water. Shot blasting or grinding the surface to a profile of CSP 2 - CSP 3 is the preferred method of preparation. The success of industrial diamond grinding as a concrete preparation method will vary depending on technique and the hardness of the concrete.

NOTE: Concrete is inherently porous and permeable. It can absorb and release water, vapor, and air due to naturally occurring conditions. Concrete substrates contain a network of voids, capillaries, microscopic air pockets, and stress cracks where air, moisture, and contaminants can become trapped during the curing process. Shot blasting or grinding a sealed concrete slab opens up the surface and can allow for transmission of trapped air and gasses for an undetermined period of time. It is always best practice to test for outgassing before applying a primer. Bubbles, pinholes, and other deformations may occur in GroundWorx Ultra HB ESD primer when applied over an outgassing concrete slab.

## JOINT TREATMENT

All control joints can be filled with a rigid or semi-rigid joint compound. Construction joints may be filled with semi-rigid joint filler and might need to be re-built and re-cut depending on conditions.

## MIXING INSTRUCTIONS

- Mix ratio is 2 Parts A to 1 Part B by volume.
- Pre-mix part B at a slow speed until a uniform viscosity is achieved.
- In a clean, empty 5-gallon pail, combine Part B and 1 pint colorant. Mix until well blended.
- Add part A and mix with a Jiffy® ES mix blade attached to a slow speed drill, until the blend is consistent (2-3 minutes).
- Mix only enough material at one time to avoid exceeding the pot life. Once the material is opened and mixed, it cannot be resealed for later use.

## APPLICATION INSTRUCTIONS

GroundWorx Ultra ESD primer must be top coated within 24 hours (at 70-75°F, 30% RH) in order to avoid sanding. If the re-coat window has expired, the prior cured coating surface must be sanded with 100 grit sand paper or sanding screen installed on a swing-type floor buffer. Sand to a uniform dulled surface. Remove all sanding debris with a vacuum and damp mop. Scrub with detergent and rinse with clean water. Surface must be dry before coating.

- Pour directly onto the floor in a ribbon across the application area.
- Use a notched squeegee to spread at 10 mils thickness.
- Back-roll with no-shed, 1/4" – 3/16" nap rollers. Overlap and cross lap. Avoid over-rolling and introducing air bubbles.
- Each gallon covers approximately 165-170 SF @ 10 mils thickness.
- Viscosity doubles in ~40 min @ 72°F. Apply the material as quickly as possible once mixed, not to exceed a maximum working time of 40 minutes. It will get harder to spread evenly the longer it sits.
- Average dry time (tack-free) is 4-6 hours (colder conditions require more time, warmer conditions require less).

**Note:** Industry best practice dictates lightly sanding the cured primer with a fine pad or screen (100-120 grit) prior to applying top coat. Maximum re-coat time without physical prep is 24 hours. After 24 hours, sanding with an 80-100 grit screen pad is required for a proper mechanical bond.

## SPREADING

When GroundWorx Ultra ESD primer is applied, surface irregularities and porosity in the concrete may affect the coverage rate. Be sure to plan accordingly as there may be a need for extra material to provide proper coverage. Material applied too heavily may blister or can remain soft during curing. Too little material may produce dry spots and a non-uniform look. The best practice is to measure and grid the floor to be sure of proper application rate.

## CURE TIME

Unless top coating, allow GroundWorx Ultra primer to dry for a minimum of 24 hours after application at 75°F (24°C) and 50% RH before opening the floor to light traffic, allow more time for low temperatures and higher humidity or for heavier traffic. Full coating properties may take up to 7 days to develop.

## HANDLING PRECAUTIONS

Use only with adequate ventilation. Appropriate cartridge-type respirator should be used during application in confined areas. Avoid contact with skin; wear protective gloves. Read Material Safety Data Sheet before using.

## DISPOSAL

Dispose in accordance with federal, state, and local regulations.