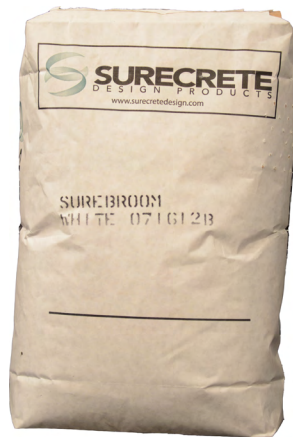


SUREBROOM



View More Info for this Product at
<http://www.surecretedesign.com/surebroom/>

SUREBROOM

DESCRIPTION

SureBroom is the premier high-strength thin overlay for extreme trafficked areas. Its formulation is designed to transform old, spalled, dull concrete to a freshly broomed surface. Typical areas requiring **SureBroom** include high rise parking decks, driveways, sidewalks, parking lots, and retail store fronts. Although designed to be broomed, it may also emulate the many designer looks of other thin overlays. **SureBroom** may be applied with a concrete broom or by a combination of compressed air spray equipment and/or trowel / squeegee. Restoration, repair, resurfacing, architectural accenting, surface protection, and creating slip resistance of existing concrete are all realized through **SureBroom**. It is prepared with gray cement or white cement to accept **Color Packs**.

SURFACE PREPARATION

The principles for surface preparation for **SureBroom** are aligned with other cement-based overlays placed on concrete and remain constant; the substrate must be:

- 1. Clean:** The surface must be free of dust, dirt, oil, grease, paints, glues, sealers, curing agents, efflorescence, chemical contaminants, rust, algae, mildew and other foreign matter that may serve as a bond breaker.
- 2. Cured:** Any concrete must be sufficiently cured to have complete hydration, approximately 7 - 14 days depending on temperatures and humidity.
- 3. Sound:** No system should be placed upon concrete or an existing cement-based overlay that is flaking, spalling, or has hibernating spalling.
- 4. Profiled:** Proper profile should follow the standard established by the International Concrete Repair Institute (ICRI) Technical Guideline no. 03732 for Concrete Surface Profile (CSP). The established profile is categorized as CSP-1 through CSP-4.
The most common means to properly profile many concrete slabs (especially exterior slabs) is through the use of a pressure washer equipped with a turbo-tip and the use of **SCR** (see **SCR TDS**). Some concrete slabs that are hard troweled or that are not sound may require more aggressive profiling through diamond grinding or shot blasting.
Customarily profiling is not required for application over another cement-based overlay.

TEMPERATURE/CURE

1. Air and substrate surface temperatures shall remain between 50°F (10°C) and 90°F (32°C) during and within 48 hours of placement.
2. No precipitation should occur during or within 48 hours of placement. If **SureBroom** becomes wet prior to sealing, pigments will fade excessively and whiting will occur.
3. Avoid high heat and / or windy conditions. Attempt to minimize application during such harsh conditions by working



PACKAGING

50 pound (22.7 kg) bag (available in gray or white)

MIXING RATIO

4 – 6 ½ qt. (3.8 – 6.2 liter) water to 1 – 50 pound (22.7 kg) bag of **SureBroom**
(optional) .5 pound (227 g) **Color Pack** – 30 standard colors (see **Color Pack TDS**)

COVERAGE

Depends upon application and substrate
1 - 50 lb. (22.7 kg) bag of **SureBroom**
90 ft² (8.4 m²) @ 1/16" (1.6 mm) @ 2 thin broomed coats

DENSITY

132 pounds/ft² (2114 kg/m²)

COMPRESSIVE STRENGTH ASTM C-109

28 day 6128 PSI (42251 kPa)

FLEXURAL STRENGTH ASTM C-348

28 day 1575 PSI (10859 kPa)

TENSILE STRENGTH ASTM C-190

28 day 910 PSI (6274 kPa)

ABRASION RESISTANCE ASTM D-4060

1 day – 1 gram lost
7 day – 1 gram lost

SHEAR BOND ASTM C-882

Modified / mortar scrubbed into substrate
7 day – 1232 PSI (8494 kPa)
28 day – 1695 PSI (11686 kPa)

SHELF LIFE

Under normal conditions: when kept dry and moisture free, out of direct sunlight, the shelf life of an unopened bag is (12) months from the date of purchase. Storage must be under roof and off the floor. Rotate inventory to maintain product that is within limits

during cooler hours. Keep materials shaded prior to mixing, running water until cool, and setting up temporary walls for wind blocks.

4. Interior applications and cool, shaded areas will take significantly longer to cure. Even in summer months, the winter mix design should be considered for these applications.

5. This product (depending on weather conditions) should achieve initial set within 6 – 8 hours. Like concrete full cure is reached at 28 days.

6. Sealer selection for a finished **SureBroom** project will require different cure times:

a. **SureSeal** products for exterior applications requiring vapor permeability, may be applied as soon as overnight. See specific sealer TDS.

b. **Dura-Kote** products for interior applications may require longer cure times, perhaps 24 hours or more. See specific sealer TDS.

APPLICATION

Patching

Upon surface preparation, some areas may require patching prior to application of **SureBroom**. **Flash Patch** or **Deep Level** is an excellent choice as a patching product to restore concrete to a sound state. Refer to **Flash Patch** or **Deep Level** TDS.

Crack Treatment / Construction Joints

Cracks may require treatment: Refer to **SCT-22 Crack and Spall Treatment** and **SCT-EP Epoxy Crack Treatment** TDS to evaluate crack as static or structural to set expectation of treatment.

Never bridge **SureBroom** across any joint in concrete. Construction Joints in concrete have sufficient movement to “telegraph” through **SureBroom** applications. Large expansive slabs should have planned appropriate flexible caulks to allow for this movement.

Mixing and handling

Due to **SureBroom's** diverse applications, there can be a significant difference in water demand between systems. Weather conditions and porosity of substrate will affect water demand as well. Approximate water demands for different systems per 50 pound (22.7 kg) bag **SureBroom** = 4 – 6 ½ qt. (3.8 – 6.2 liter)

While water demands vary the steps for mixing remain constant:

1. Add desired water, to a 5 gal. (18.9 liter) pail.
2. Add 1 - **Color Pack** if desired
3. Mix with a handheld concrete mixer, such as an Eibenstock model #EHR 20R or a ½” (12.7 mm) 450 – 600 rpm drill equipped with a cage mixing blade for a minimum of 15 seconds.
4. Slowly introduce **SureBroom** into the pail with mixer running.
5. Scrape side of pail with a margin trowel to ensure all dry product is incorporated into the wet mix.
6. Continue to mix for a minimum of 1 minute after all ingredients are combined to achieve a lump-free consistency. Additional water may be added up to a total of 6 ½ qt. (6.2 liter) per 50 pound (22.7 kg) bag.

Base Coat

All **SureBroom** applications are recommended to have a base coat. Base coats may be broomed, troweled/squeegeed, or sprayed.

Concrete Broom

1. The surface should be saturated, surface dry (SSD or damp, no puddles).
2. Pour a generous ribbon of **SureBroom** and tightly trowel or squeegee product over entire area or cover entire area by pushing product in place with concrete broom.
3. While base coat is still wet, broom evenly in desired pattern.

Trowel / Squeegee

1. The surface should be saturated, surface dry (SSD or damp, no puddles).
2. Pour a generous ribbon of **SureBroom** and tightly trowel or squeegee product over entire area.

Spray (utilizing a hopper gun such as Marshalltown Sharpshooter Hopper gun)

1. The surface should be saturated, surface dry (SSD or damp, no puddles).
2. Common setting for spray gun orifice is approximately ¼” (6.3mm).
3. Setting for air compressor should be approximately 8 ft³(.23m³) per minute at 40 psi (276 kPa) continuous.
4. Spray 100% coverage, leaving no bare spots.

(Optional) Stencils and grout tape patterns

1. Stencils and tape patterns may be placed after scraping and sweeping of base coat, and prior to application of finish coat.
2. Stencils and tape patterns may be removed as soon as product dries sufficiently to bear the foot traffic of the applicator, prior to sealing.

Finish Coat

1. The base coat must set sufficiently to bear the foot traffic of the applicator, approximately 2 – 6 hours (depending upon weather).
2. Scrape the surface of base coat with a heavy-duty floor scraper and remove any loose material.
3. The finish coat applies as the base coat described above. Alterations of broom techniques, troweling / squeegeeing, air pressure, and spray gun orifice size will yield numerous pleasing finish coats.

Secondary coloring

Depending upon the application selected, secondary coloring will provide aesthetic appeal to a project. There are several products available:

- **Eco-Stain** - 30 water base stain colors. Refer to **Eco-Stain** TDS.
- **Eco-Accent** – 10 dry antiquing colors. Refer to **Eco-Accent** TDS.
- **SureStain** - 8 acid stain colors. Refer to **SureStain** TDS.
- **Translucent Highlighting** – solvent antiquing. Refer to **Translucent Highlighting** TDS.

(Note: Before secondary coloring, the finish coat must dry sufficiently to bear the foot traffic of the applicator, approximately 2 – 6 hours [depending upon weather].)

Scrape the surface of finish coat with a heavy-duty floor scraper and remove any loose material.)

Sealing

To complete a **SureBroom** project sealing is required. While “designer finishes” may seal clear, for simple broomed projects, a pigmented sealer will yield the most pleasing results. Exterior jobs will require the sealing with an acrylic sealer, due to its vapor permeability. Excellent choices for exterior sealer include:

- **SureSeal HS-360** - 30% solids, 600 g/L solvent
 - **SureSeal HS-340** - 30% solids, 400 g/L solvent
 - **SureSeal Super 30** - 30% solids, 600 g/L solvent
 - **SureSeal Pigmented SB** – color sealer, 600 g/L
 - **SureSeal Pigmented SBL** – color sealer, 400 g/L
 - **SureSeal Super WB** – 30% solids water based
 - **SureSeal Super Pigmented WB** – color sealer water based
- Refer to the appropriate TDS for details.

For interior jobs there are more sealer choices available, as customarily vapor permeability is not a consideration. The above listed sealers will work fine as interior sealers, but other sealers with enhanced durability properties include:

- *Dura-Kote Polyurethane Solvent Base Clear Gloss*
- *Dura-Kote Epoxy 100*
- *Dura-Kote Polyurethane Water Base Clear*
- *Dura-Kote PFC 120 Hybrid Solvent Based Polyaspartic*
- *Dura-Kote PFC 180 Hybrid Solvent Based Polyaspartic*
- *Dura-Kote PFC 180 Hybrid Solvent Based Pigmented Polyaspartic*
- *XS-327*

Refer to the appropriate TDS for details.

(Note: if secondary coloring is not utilized before sealing, scrape the surface of finish coat with a heavy-duty floor scraper and remove any loose material.)

SLIP RESISTANCE

Two recognized US agencies have issued directives on minimum coefficient of friction, OSHA (Occupational Safety and Health Administration) and Department of Justice through the ADA (Americans with Disabilities Act). ADA is the more stringent of the two. ADA directs that accessible walkways have a minimum coefficient of friction of 0.6. Ramps have been directed to be 0.8. The applicator assumes the responsibility to meet these standards. Especially exterior surfaces or surfaces that may become wet, oily, or greasy require attention. Refer to spec. sheets on **SureGrip (Additive)** and its accompanying coefficient of friction table.

SUITABILITY SAMPLE

Due to condition specific sites, always prepare an adequate number of test areas. Wear protection system and aesthetic suitability for products' intended use should be included. On site sample approval is especially critical on substantial, heavy traffic situation or custom coloration.

CLEAN-UP

Before **SureBroom** dries; spills and tools can be cleaned up with water.

DISPOSAL

Contact your local government house-hold hazardous waste coordinator for information on disposal of unused product.

LIMITATIONS

For use by trained professionals that have read the complete SDS. A completed **SureBroom** project requires a sealer. The sealer selected may have limitations that affect the finished system. Refer to the appropriate sealer TDS for details.

WARRANTY

Warranty of this product, when used according to the directions, is limited to refund of purchase price, or replacement of product (if defective), at manufactures/seller's option. Sure-Crete Design Products shall not be liable for cost of labor or direct and/or incidental consequential damages.

CAUTIONS

KEEP OUT OF REACH OF CHILDREN. **Inhalation:** Avoid prolonged breathing of airborne dust, particularly present during mixing. Use NIOSH approved respirator for nuisance if threshold limit values are unsafe. **Skin Contact:** **Skin contact** may cause irritation. Remove contaminated clothing and wash affected skin with soap and water. Launder clothing before reuse. If symptoms persist, seek medical attention. **Eyes:** Wear safety eye protection when applying. Contact with eyes may cause irritation. Flush eyes with water for 15 minutes. If symptoms persist, seek medical attention.

SAFETY DATA SHEETS

The following are links to all available safety data sheets related to this product:

- [bag-mix-surebroom-sds.pdf](#)