

Cemseal WB

Technical Data Sheet



Helix Color Systems is a premier line of specialty decorative concrete admixtures manufactured by ChemSystems Inc. Helix Color Systems is manufactured for the discriminating installer or designer who values service and quality. Specializing in custom colors, specialty products, and superior service, Helix Color Systems offers an innovative alternative in the decorative concrete industry.

Description

Cemseal WB is a high quality pure acrylic water based sealer designed to protect both interior and exterior concrete and masonry surfaces. CemSeal WB forms a tough water clear semi-gloss protective acrylic film that resists water, dirt and common day-to-day contamination at the same time eliminating concrete dusting. This product is a good choice for sealing all types of gray or colored concrete and masonry surfaces. It can be tinted using Helix water based Tint Packs to achieve a translucent tinted sealer.

Product Benefits

- A water-based 100% acrylic emulsion, Cemseal WB can be used both as a base coat for other water-based sealers or as a topcoat to dust-proof and protect concrete.
- When sealing or finishing existing concrete, Cemseal WB is an excellent sealer for the following surfaces: ■ Colored, imprinted concrete ■ Colored concrete that has been uncoated or stripped ■ acid-stained or color hardened concrete that has been uncoated or stripped ■ Uncolored concrete that has been uncoated or stripped ■ Interior concrete surfaces that will be regularly maintained and recoated ■ exterior concrete surfaces that will weather naturally ■ exterior concrete surfaces that will be regularly maintained and recoated ■ exposed aggregate.
- Cemseal WB increases durability of concrete surfaces.
- Cemseal WB is ideal for interior surfaces where solvent-based material cannot be used.
- Cemseal WB will not yellow, haze or flake.
- Cemseal WB can be tinted with CSI Tint Concentrate WB to enhance concrete that has been colored. (Tinted Cemseal WB is designed to enhance the look of concrete that has been colored, not to function as the primary coloring system.)

Pre-Application

1. The surface should be clean and dry. If the surface is not completely dry, the product may turn white or hazy. If aggressive moisture movement on interior concrete is suspected, exact moisture movement levels can be measured using a moisture test kit in accordance with ASTM D4263 standards, following the manufacturer's instructions. moisture measurements of five pounds and below are acceptable. If measurements fall outside of this range, Cemseal WB should not be applied.

In addition, a pH test should be done, using an appropriate pH pencil and following the manufacturer's instructions. an acceptable pH range is between 8-9. If measurements fall outside of this range, do not proceed. In most cases, applications cannot be completed.

For exterior surfaces, there is no method to effectively test for moisture movement and related problems. It is beneficial to look for visible signs of moisture problems—such as surrounding landscape that has been heavily irrigated, concrete adjoining steep hillside areas, poor surface drainage of landscape, dark blotchy areas, variegated surface color, etc. If moisture problems are suspected, pretreat the surface with a penetrating silicate hardening sealer. This material is dependent on proper penetration, any existing curing agents, coatings, sealers, oils, paints, dirt and/or efflorescence will inhibit penetration of Cemseal WB. any materials that would prevent penetration must be removed before application. In the case

of sealers, cures, and coatings, mechanical removal—such as shot-blasting, sand-blasting or terrazzo-grinding—is advisable. Use CSI Neutralizer/Degreaser to help remove grease and oil. Harsh chemicals should never be used to remove any of the materials cited here.

2. To clean uncoated or stripped surfaces, use one part CSI Neutralizer/Degreaser to eight parts water. on smooth surfaces, scrub in with automatic scrubber or use a lowspeed buffer equipped with scrubbing pads or brushes. after scrubbing surface, rinse with clean water or vacuum up CSI Neutralizer/Degreaser and rinse with clean water. allow surface to dry thoroughly before application. on rough surfaces or textured concrete, use the same equipment as with smooth surfaces but rinse with pressure washer.

3. Before applying product, test Cemseal WB in an inconspicuous area for desired results. If applying Cemseal WB over old sealer, paint or other coating, it is also important to test for compatibility in an inconspicuous area. If in doubt about application, contact ChemSystems, Inc.

Application to New Concrete

1. For smooth-troweled concrete, a lambswool applicator may be used. For rough surfaces or textured concrete, a 1/2 inch nap roller is recommended. For small areas, a low nap roller may be used without the sprayer. apply the sealer uniformly.

2. **Important:** When applying Cemseal WB, do not allow the sealer to puddle. apply the sealer as uniformly as possible, without leaving either spaces or puddles. It is better to apply two thin coats rather than one single, heavy coat. allow each coat to dry before applying subsequent coats.

3. For acceptable oil and water resistance, a minimum of two coats must be applied.

4. For best results on interior surfaces with medium to high traffic, apply Cemseal WB and then apply a surface finish product such as CSI Interior Floor Finish plus gloss or matte.

Application to Existing or Old Concrete

1. Follow application steps listed in the “Pre-Application” section.

2. If applying sealer to existing concrete, paint or other coating, test prior to application in an inconspicuous area to ensure compatibility. If in doubt about compatibility with surface on existing concrete, contact ChemSystems, Inc.

3. After cleaning and testing surface, follow application steps listed above in the “Application to New Concrete” section.

Surface Protection and Maintenance

• *Day-to-Day Cleaning* – Cemseal WB, like all surface sealers, must be kept clean for maximum durability and protection. Frequent sweeping or vacuum-removal of loose soils will significantly increase the wear-life of Cemseal WB or any surface coating.

• *Maintenance Cleaning* – Surfaces sealed with Cemseal WB should be cleaned with a water-based detergent cleaner, rinsed and allowed to dry. on interior surfaces where routine maintenance is required, use a lowspeed buffing maintenance system.

• Cemseal WB may be removed using CSI Sealer Stripper.

- *Removing Ground-in Soils* – For removal of ground-in soils, use CSI Floor Cleaner diluted to two to four ounces per gallon of water. For interior surfaces, use an automatic scrubber equipped with light-cleaning scrub pads. Pick up cleaner residue with a wet vacuum or automatic scrubber. For outdoor surfaces, scrub with a low-speed buffer. Rinse by pressure-washing thoroughly. For both indoor and outdoor surfaces, let dry before opening to traffic.

Limitations and Precautions

- Cemseal WB is not a curing compound. Do not apply product to freshly placed concrete. Allow at least 14 days for concrete to cure. For optimum results, allow concrete to cure for 28 days or longer.
- If applying Cemseal WB to existing extremely hard-troweled concrete, call ChemSystems, Inc. for technical assistance.
- Cemseal WB will protect concrete from dusting and soiling if applied properly, evenly, and with sufficient coverage as outlined in the application directions.
- Inadequate coverage will dramatically reduce the performance of Cemseal WB.
- Failure to remove dirt and debris from the surface or failure to properly clean the surface will result in premature wear and will limit your ability to protect the concrete.
- It is very important that Cemseal WB be allowed to completely dry before temperature drops below 40 °F or before contact with water.
- Concrete cured with CSI Color Cure should not be covered with plastic sheeting or waterproofing paper. If concrete needs further curing after a period of four days, then new, nonwrinkled, nonstaining, reinforced, kraft-curing paper can be used.
- Do not apply Cemseal WB if the surface or ambient temperature is below 45 °F, above 95 °F, or if the temperature is expected to fall below freezing (32 °F) within the 24-hour curing cycle.
- Adhesive-backed tape (such as duct tape) left on Cemseal WB over an extended period of time will create a chemical “weld” between the tape and the sealed substrate. If this happens, the sealer may be subject to delamination. Delamination can also occur when plastic or synthetic rubber mats are placed on the surface and left undisturbed over extended periods and when rubber tires on the sealed surface have been exposed to heat.

Coverage Rate and Drying Times

Coverage rates may vary depending on surface porosity, texture, age and condition of the concrete, the application method, and other local conditions.

- *Smooth Finish, Per Coat* – Material usage, per coat, is approximately 600-800 square feet per gallon.
- *Rough or Broom Finish, Per Coat* – Material usage, per coat, is approximately 400-600 square feet per gallon.

Drying times below will vary depending on surface porosity, temperature,

humidity and local conditions.

- *Set to Touch* – Surface can be lightly touched 30-45 minutes after application.
- *Recoat* – Surface can be recoated one to two hours after each application.
- *Light Traffic* – Light traffic can be allowed eight to twelve hours after final coat.
- *Vehicle Traffic* – Vehicle traffic can be allowed two to three days after final coat, depending on temperature. Hot tire traffic or extreme turning of vehicles on the surface prior to proper drying time may leave permanent black marks or may remove sealer.

Package Sizes

Cemseal WB is available in 1-, 5-gallon units.

Applicable Standards

- Cemseal WB exceeds coefficient of friction per ASTM D2047 standards for slip-resistance.

Technical Data

Please refer to the corresponding MSDS for hazard-related information.

ColorWhite (unless tinted to CSI specification colors)

FormStable liquid emulsion, dries clear

Solids Content18%

Flash PointNone

VOC ContentLess than 250 grams per liter

Gloss98 (ASTM D523-89)

PowderingNil (ASTM D2048-92)

RecoatibilityExcellent (ASTM D3153-87)

Shelf Life and Storage

Store between 50-80 °F in sheltered environment; do not store in sunlight; sealed, unopened product has a shelf life of one year.

Product Handling

For complete instructions on handling and use, consult the corresponding Material Safety Data Sheet before using product.

Warranty

Cemseal WB a proprietary product, is warranted to be of uniform quality within manufacturing tolerances. Since control is not exercised over its use, no warranty, expressed or implied, is made as to the effects of such use. Seller's and manufacturer's obligation under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. The user assumes all other risks and liabilities resulting from use of this product. If you have any questions, please contact ChemSystems, Inc.



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*For complete information on all CSI products—including product information catalogs, product brochures, color charts, technical specifications, sales aids and more—contact ChemSystems, Inc.

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