



CEMENTONE® Clear Sealer

A clear, low-gloss, environmentally sound sealer for protecting multicolored, colored or uncolored concrete and cementitious toppings.

TECH-DATA BULLETIN A-764.07

1. Product Description:

CEMENTONE® Clear Sealer is developed for sealing and protecting new or old concrete exterior hardscapes or interior floors, and for use on cementitious toppings used for resurfacing concrete, such as SCOFIELD® Overlay™ and SCOFIELD® Texturetop®. Where a low-gloss finish is desired, it is compatible for use on multicolored, antiqued, imprinted, textured, stamped, acid-stained or exposed-aggregate horizontal surfaces to enhance the appearance. CEMENTONE Clear Sealer is a low-maintenance film that can improve resistance to deicing salts, many chemicals, weather and ultraviolet (UV) radiation. It is effective for exterior use in areas not subjected to vehicular traffic, and the sealer also is effective on interior floor surfaces where a commercial floor finish will be used and regularly maintained. Prior to application of CEMENTONE Clear Sealer, the surface must be carefully prepared according to the instructions in section 12. Preparation.

CEMENTONE Clear Sealer is an environmentally sound sealer and protective finish that will meet current air quality regulations. It reduces surface staining from materials such as automotive oil, grease, and food spills. The sealer is effective in preventing concrete dusting and making the surface easier to clean and maintain than untreated concrete.

2. Coverage:

CEMENTONE Clear Sealer must be applied full strength without thinning by airless sprayer or roller. On flat interior floors only, a rotary floor machine or SCOFIELD® Sealer Applicator may be used. The coverage will vary depending on the method of application and the porosity and texture of the surface. Two coats are normally required on untreated or stripped concrete or SCOFIELD Overlay and SCOFIELD Texturetop toppings. One coat is usually sufficient on concrete previously sealed with CEMENTONE Clear Sealer. Three coats are required when applied to flat interior floors with a rotary floor machine. Application of more than two spray coats is not normally recommended. If required, additional coats may be applied to flat interior floors with a SCOFIELD Sealer Applicator.

For application by airless sprayer, the recommended coverage rate per coat is 300–400 square feet per gallon (7–10 m²/L).

For application by roller, the recommended coverage rate for the first coat is 300–600 square feet per gallon (7–15 m²/L). The recommended coverage rate for additional or maintenance coats is 800–1000 square feet per gallon (20–25 m²/L).

For application by rotary floor machine on flat interior floors only, three coats are required at the recommended coverage rate per coat of 1000 square feet per gallon (25 m²/L).

For application by SCOFIELD Sealer Applicator on flat interior floors only, the recommended coverage rate for the first coat is 400–600 square feet per gallon (10–15 m²/L). The recommended coverage rate for additional or maintenance coats is 600–800 square feet per gallon (15–20 m²/L).

3. Limitations:

CEMENTONE Clear Sealer must be protected from freezing. Once frozen and thawed, it must not be used. All clear sealers will accentuate any nonuniformity in concrete color, texture, or finish.

CEMENTONE Clear Sealer must only be used on concrete that is placed on a well-drained subgrade and is not subject to hydrostatic pressure. Alkali or hard-water deposits may form on or under the sealer at edges, cracks, joints, depressions or other locations where water collects or enters the concrete substrate. Potted plants or other damp objects may leave deposits, stains, or discolorations if allowed to remain on the sealed concrete for an extended period of time.

Due to greater retention of moisture in the slab, CEMENTONE Clear Sealer should not be used to seal concrete that contains reactive aggregates since the possibility of pop-outs will be increased.

CEMENTONE Clear Sealer should not be used in areas subject to continuous water submersion or chemical exposure, significant abrasion or scratching, or metal-wheeled traffic. In areas that require the application of adhesives for floor coverings, CEMENTONE Clear Sealer must be tested for compatibility with the adhesive or removed if necessary.

CEMENTONE Clear Sealer must be allowed to dry completely before it is subjected to temperatures below 42° F (6° C) or to water from any source. Water-based sealers that are applied to improperly prepared surfaces, applied too heavily, allowed to puddle in joints and indentations, or that cannot dry properly may become sensitive to water. Adhesion failure or whitening and softening of the sealer may result. Application must not be made on surfaces previously treated with a water or stain repellent.

CEMENTONE Clear Sealer is a premium quality sealing formulation, and like all such products, will require periodic maintenance and reapplication. Spills should be removed promptly and floors cleaned regularly to minimize possible staining and damage to the sealer.

WARNING!

CEMENTONE Clear Sealer must only be used in thin coats on surfaces adequately textured for slip resistance. Unless the surface was previously sealed with CEMENTONE Clear Sealer, it must be porous to allow penetration. If applied improperly or too heavily, the surface may whiten, peel, or become slippery, particularly on pool decks or other areas where water may stand on the surface.

TEST SECTION

Sealing concrete flatwork takes skill and practice. Prior to general application, a representative jobsite test section must be prepared and sealed to verify and approve suitability, proper surface preparation methods, adhesion, safety, performance, wet and dry slip resistance, application techniques, and coverage.

4. Composition and Materials:

CEMENTONE Clear Sealer is a proprietary, waterborne, modified acrylic emulsion. The formulation is optimized for surface penetration, leveling ability, and ease of application by airless sprayer without thinning. Cleanup is with soap and water.

**5. Applicable Standards:**

CEMENTONE Clear Sealer complies with all applicable air quality management regulations.



Floor coating and finishing material as to slip resistance only. 6L90

6. Sizes:

CEMENTONE Clear Sealer is available from stock in 1-gallon (3.8 L) and 5-gallon (18.9 L) pails.

7. Storage and Shelf Life:

When stored indoors in the original unopened containers and protected from freezing and extreme heat, the shelf life of CEMENTONE Clear Sealer is at least 1 year from the date of purchase. Inventory must be rotated to maintain product that is within shelf life limits. Some separation occurs during storage that will be easily reincorporated when stirred before using.

8. Cautions:**WARNING!**

MAY CAUSE EYE, SKIN, AND RESPIRATORY TRACT IRRITATION. DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN. Contains Diethylene Glycol Monobutyl Ether and Propylene Glycol. Use only with adequate ventilation. Do not breathe vapors or spray mist. Do not get in eyes, on skin or clothing. Ensure fresh air entry during application and drying. If you experience eye watering, headaches or dizziness or if air monitoring demonstrates vapor/mist levels are above applicable limits, wear a properly fitted P100/organic vapor respirator (NIOSH TC-84A approved) during and after application. Follow respirator manufacturer's directions for respirator use.

First Aid: Eyes—DO NOT RUB EYES. FLUSH IMMEDIATELY WITH WATER. Hold eyelids apart while flushing material out thoroughly with large amounts of water. Skin—Wash thoroughly with soap and water. Remove soiled clothing and footwear and wash before reuse. Inhalation—Move to fresh air. If symptoms persist or develop or if ingested, get medical attention.

Wash thoroughly immediately after handling. Close container after each use. In case of spillage, absorb with inert material and dispose of in accordance with applicable regulations. Do not reuse empty container. Before using or handling, read the *Material Safety Data Sheet and Warranty*.

9. Textures and Slip Resistance:

Only uniformly slip-resistant concrete surfaces, such as broomed, swirl or sponge floated, sandblasted, acid-etched, exposed-aggregate, most imprinted concrete, or concrete topped with SCOFIELD Overlay or SCOFIELD Texturetop toppings, should be considered for application. Textures that are not slip resistant must be roughened by some texturing method such as acid etching, sandblasting, or machine scarifying. On flat interior floors extra precautions should be taken to ensure that the surface is uniformly finished so that it will not be slippery.

For safety considerations, a representative test section must be prepared and sealed prior to general application and the entire surface inspected after completion to verify and approve the adequacy of wet and dry slip resistance.

10. Chemical Resistance and Staining:

Chemical resistance may vary depending on the condition of the concrete substrate, curing techniques, surface preparation, method of application, the length of time the chemical remains on the surface, and other factors.

When chemical protection is required or resistance to staining is important, a representative test application should be made on the jobsite substrate to determine if the sealer has suitable resistance. After the test application of CEMENTONE Clear Sealer has fully cured, a minimum of 14 days, the chemical in question should be applied and left on the surface for the maximum possible time it would remain under the expected conditions of service.

11. Equipment for Preparation and Application:

When using equipment and materials during preparation and application, suitable protective gear must be worn and government regulations, manufacturer's instructions, and all applicable safety requirements must be followed.

The use of a pressure washer, a rotary floor machine, or a walk-behind scrubbing machine will facilitate surface preparation. An airless sprayer or roller is required for most applications of CEMENTONE Clear Sealer. On flat interior floors, a rotary floor machine or SCOFIELD Sealer Applicator is recommended. Hand-pump sprayers are not recommended for general application because they cannot be used to apply the material uniformly. However, a hand-pump sprayer may be used to apply CEMENTONE Clear Sealer prior to scrubbing with a rotary floor machine on wet-scrub applications. All equipment should be rinsed regularly with water and periodically washed with soap and water.

For preparation, the pressure washer must be equipped with a fan tip and have a minimum pressure capability of 2000 psi (14 MPa). Hot water capability may facilitate cleaning of existing concrete. Nonmarking hoses are helpful.

For preparation and for wet-scrub applications on flat interior floors, the rotary floor machine must be heavy duty and operate at approximately 175 rpm. It may be equipped with brushes or with a pad driver that securely holds pads in place.

For cleaning or stripping, a stiff-bristled bassine or nylon scrub brush is recommended. On flat interior floors, blue scrubbing or black stripping pads may be required. Walk-behind scrubbing machines should be considered for cleaning larger areas.

For wet-scrub applications on flat interior floors a white buffing pad is recommended. A good-quality, soft-bristled polishing brush, such as one with a mixture of palmyra and tampico fibers, may also be used and is required for uneven floors. Use a hand-pump sprayer to apply CEMENTONE Clear Sealer to the floor before scrubbing with a rotary floor machine.

For general application, the airless sprayer must be of professional quality with a variable output fluid pressure of 1500–2500 psi (10–17 MPa). The sprayer must be fitted with a fan tip of 0.013–0.018 inches (0.33–0.46 mm).

For application by roller, the roller must be short-napped with a maximum pile depth of $\frac{3}{8}$ inch (10 mm), of professional quality, and a suitable size. An adequate supply of refill rollers should be available so they may be changed whenever necessary.

For application by SCOFIELD Sealer Applicator on flat interior floors only, the applicator must be in good condition to ensure that the sealer is applied at a uniform thickness and that even coverage is obtained. An adequate supply of refill covers should be available so they may be changed whenever necessary. SCOFIELD Sealer Applicators for general application and SCOFIELD Sealer Trim Applicators for application on small areas are available from Scofield.

12. Preparation:

During cleaning and stripping procedures, all surrounding areas should be closed to traffic, roped off, and protected. Testing should be performed to verify that the cleaning or stripping methods and materials will not damage the concrete.

Before sealing concrete surfaces that have not been previously sealed with CEMENTONE Clear Sealer, all dirt, oil, and previously applied sealers, curing compounds and coatings must be completely removed. Failure to remove all contaminants and coatings that impede the penetration of the



initial coat of CEMENTONE Clear Sealer into the concrete will cause appearance defects, adhesion loss, peeling, and reduced durability. Water-based sealers must not be applied over a surface previously treated with a water or stain repellent.

To reduce hard-water and alkali deposits, sprinklers and fountains should be adjusted to avoid wetting of the surface. In hard-water areas, soft water should be considered for use in water features. Construction joints should be sealed with LITHOSEAL™ Trafficalk-3G™, a high quality, color-matched joint sealant for areas subject to pedestrian or vehicular traffic. Additional information about designing and sealing joints is available in Scofield's Tech-Data Bulletin *S-404-3G LITHOSEAL Trafficalk-3G*.

All washed or wet areas must be allowed to dry thoroughly before application of CEMENTONE Clear Sealer.

Newly placed concrete must be uniformly and adequately textured for slip resistance as described in section 9. *Textures and Slip Resistance*.

The concrete should be cured by the use of new and unwrinkled, nonstaining, kraft curing paper that conforms to ASTM C 171 *Sheet Materials for Curing Concrete*. Before application of the sealer, the moisture content of the concrete must be low enough so alkali and other salts do not become trapped beneath the sealer causing discoloration or clouding, normally 14–28 days after placement.

Immediately prior to sealing, the concrete must be thoroughly cleaned. The surface should be swept and then pressure washed or scrubbed using a rotary floor machine. Use of a suitable, high quality commercial detergent will facilitate cleaning. Additional cleaning methods are described below and in section 14. *Maintenance and Removal*. The surface must be rinsed after cleaning until the rinse water is completely clean.

Care should be taken in preparing a surface to which an antiquing release has been applied. The antiquing release may affect the adhesion of the sealer to the concrete, particularly if excess release has not been adequately removed from the surface prior to application.

Existing concrete must have a uniformly slip-resistant surface. Textures that are not slip resistant must be roughened by some texturing method as described in section 9. *Textures and Slip Resistance*.

Before receiving the initial coat of CEMENTONE Clear Sealer, concrete not previously sealed with CEMENTONE Clear Sealer must be cleaned completely so that the surface is penetrable. An indication of whether the concrete is penetrable can be obtained by spotting the surface with water. The water should immediately darken the substrate and be readily absorbed. If the water beads and does not penetrate or only penetrates in some areas, additional surface preparation and testing must be performed.

The cleaning method to be used depends on the surface finish and the condition of the concrete. Detergents, paint removers, or other commercial cleaners should be considered and tested. Pressure washing or scrubbing with a rotary floor machine is normally required. After cleaning, the surface must be rinsed to remove any remaining residue. Rinsing should continue until the rinse water is completely clean. Wet vacuums may be helpful to remove dirty water, particularly from interior floors. After drying, the surface must be carefully inspected and retested for penetrability. Additional general or spot cleaning and rinsing should be performed if necessary.

Acid washing may be required when the above surface preparation does not yield adequate penetration or if there are excessive alkali deposits or surface discoloration. Acid washing may also be beneficial to clean and brighten exposed-aggregate finishes. Since acid washing may affect the appearance or uniformity of the color, a representative area should first be tested. After preparation as described above, the surface should be acid washed using a solution of one part muriatic acid (20° Baume or 31.4% hydrochloric acid) to 20 parts water. Proper protective gear as recommended by the acid supplier must be worn. The reacted residue must be scrubbed using a low-speed floor machine equipped with a

black pad and then thoroughly rinsed until the rinse water is clear and free of solids, a minimum of two times. After rinsing, neutralize the surface by washing with a solution of baking soda (sodium bicarbonate) and water, using 1 pound of baking soda per 5 gallons of water (454 g/19 L). Apply the solution until it stops fizzing. After neutralization, the surface must be rinsed thoroughly with clean water several times to remove soluble salts. Rinsing must continue until the rinse water is clean. Rinse water must be removed with a wet vacuum; rinse water left on the surface to evaporate may cause efflorescence. After rinsing is complete, a pH test must be performed using pH paper, litmus paper or a properly calibrated surface pH meter. A pH value of 7 or higher indicates that all acid has been neutralized. If the tested pH value is below 7 the neutralization step outlined above must be repeated until a pH value of 7 or more is obtained. After drying, the surface must be retested for penetrability as described above. Additional acid washing and rinsing must be performed if necessary.

All applicable federal, state, and local safety, disposal, and other regulations, including OSHA, must be followed.

For preparation of SCOFIELD Overlay or SCOFIELD Texturetop surfaces, refer to the appropriate Scofield Tech-Data Bulletin *C-504 SCOFIELD Overlay*, *C-734 SCOFIELD Texturetop Stamp Grade*, *C-744 SCOFIELD Texturetop Stencil Grade*, or *C-754 SCOFIELD Texturetop Trowel & Spray Grade*.

■ 13. Application:

All surfaces must be properly prepared as described in section 12. *Preparation*. Surrounding areas, landscaping, and adjacent surfaces must be masked or protected from overspray, spills, tracking, and equipment contact. The work area should be roped off, nearby vehicles removed, and appropriate sections closed to traffic. The surface should be divided into work sections using walls, joint lines, or other stationary features as natural stopping points. This allows for easier control of coverage, wet edge, and overlap.

An airless sprayer or roller must be used to seal most concrete surfaces. An airless sprayer produces an abrasion-resistant application with a low-gloss finish. Curbs and risers are easily spray coated.

On flat interior floors, use of a SCOFIELD Sealer Applicator is recommended. It produces an easy to apply, wear-resistant, low gloss finish. The sealer must be spread thinly and evenly as far as possible without leaving streaks.

Alternatively on flat interior floors, a rotary floor machine may be used to wet-scrub the liquid sealer into the surface, producing a low-gloss finish that is attractive and durable. Working in small sections, the sealer should be applied just ahead of the floor machine using a hand-pump sprayer and immediately scrubbed in while wet. Matching risers and curbs may be coated and the wet sealer scrubbed in by hand.

CEMENTONE Clear Sealer must be stirred immediately prior to using and applied full strength (unthinned). It will have a milky appearance when wet, but when properly applied will dry to a clear finish. If allowed to puddle, the milky appearance will remain.

Application must be made at the coverage rate recommended in section 2. *Coverage* using the equipment described in section 11. *Equipment for Preparation and Application*. The sealer must be applied thinly and uniformly. A wet edge should be maintained, and overlap controlled. Material should not be overapplied or allowed to puddle or collect in joint indentations. A brush or rag should be kept available to brush out or mop up excess material.

The sealer should be applied on a calm day when concrete and air temperatures are between 50 and 90° F (10–32° C) and will not fall below 42° F (6° C). When interior heaters are required, temperatures and humidity should be moderate and consistently maintained. The surface must be dry and not subject to moisture that may interfere with the sealer drying properly. Application should not be made during rainy, foggy, or very humid weather when water condensation forms on the surface. On hot, dry days, application should be made during the cooler part of the day and when the concrete is in the shade.



The second coat may be applied after the first coat is tack-free, normally from 2–24 hours after application of the first coat depending on temperature and humidity. For a more even spray application, the second coat should be applied at 90 degrees to the direction of the first coat. If desired on flat interior floors, a rotary floor machine or SCOFIELD Sealer Applicator may be used to apply subsequent coats over an initial spray coat.

CEMENTONE Clear Sealer must be allowed to dry completely, normally 12–48 hours, before it is subjected to temperatures below 42° F (6° C) or to water from any source, such as hoses, sprinklers, condensation, or rain.

Sealed surfaces will be tack-free after approximately 1–2 hours at an ambient temperature of 75° F (24° C) and 50% relative humidity. Under these conditions, the area may be walked on gently after a minimum of 4 hours.

After the sealer is completely dry, the area may be opened to light use after a minimum of 24 hours and to general use after a minimum of 72 hours. The sealer gains strength during the first several days after application. Longer drying times are helpful and will be necessary if temperatures are lower or the humidity is higher.

All sealed surfaces must be thoroughly inspected to verify and approve installation and safety, including wet and dry slip resistance, before the area is opened to traffic.

Sealed surfaces should be protected from damage by other trades. Contaminants such as cutting oil will stain the surface and heavy objects dropped or dragged will abrade it.

■ 14. Maintenance and Removal:

All maintenance and removal methods should be tested, and all surrounding areas should be closed to traffic, roped off, and protected.

A maintenance application of CEMENTONE Clear Sealer should be made periodically as the sealer is worn off the surface. The need for maintenance applications will be accelerated in areas of heavy use or that receive frequent or aggressive cleaning. To protect the original appearance and extend the period between reapplications of CEMENTONE Clear Sealer, sealed interior surfaces should be maintained by using a compatible, slip-resistant, emulsion-type, commercial floor finish following the manufacturer's instructions and safety requirements. For recommendations, based on extensive product testing, or answers to your floor care questions, call the JohnsonDiversey 24-hour hot line: 800-558-2332.

It is not necessary to strip the previously applied sealer unless film buildup is heavy or the surface cannot be cleaned sufficiently. If floor finish has been applied, it should be completely removed following the manufacturer's instructions

and safety requirements. All dirt and contaminants must be completely removed from the surface of the sealer, and the surface thoroughly rinsed and allowed to dry. Wear paths, scratches, scrapes, and other areas where the sealer has been removed by wear or cleaning should be spot-sealed with CEMENTONE Clear Sealer, using a fine-bristle brush or airless sprayer and feathering the sealer into the surrounding surface. After the spot-sealed areas are completely dry, the sealer may be reapplied and slip resistance verified following the instructions in section 13. *Application*. Care must be taken so that excessive buildup of the sealer does not occur.

When complete removal of CEMENTONE Clear Sealer is necessary, the old sealer may be removed by using LITHOCHROME™ Coating Remover. Scrubbing with a rotary floor machine equipped with a stiff-bristled bassine or nylon brush, or on flat interior floors a black stripping pad, will facilitate removal. Abrasive stripping may wear away softer concrete and test areas are recommended. Multiple applications of remover may be required. Following the stripping procedure, the concrete surface must be thoroughly rinsed and allowed to dry. CEMENTONE Clear Sealer should then be reapplied and slip resistance verified following the instructions in section 13. *Application*. Additional information about stripping and cleaning concrete surfaces is available in Scofield's Tech-Data Bulletin M-544 LITHOCHROME Coating Remover.

■ 15. Availability:

CEMENTONE Clear Sealer is marketed nationwide and internationally, directly to the user and through strategically located warehouses, dealers, and representatives. Contact Scofield for its nearest representative.

Scofield offers a complete line of engineered systems for coloring, texturing, and improving performance in architectural concrete. Scofield Systems address specialized requirements for interior, exterior and vertical uses with compatible systems of complementary products including coloring admixtures, color hardeners, colored cementitious toppings, stains, curing compounds, sealers, coatings, repair products and texturing tools. Visit the Scofield website at www.scofield.com for further information.

■ 16. Warranty Summary:

For the complete warranty statement and important limitations, read the *Material Safety Data Sheet and Warranty*. Generally, Scofield represents and warrants only that its products are of consistent quality. No other oral or written statement is authorized. Any liability is limited to refund or replacement of defective product. The end user shall determine product's suitability and assume all risks and liability.

Suggested Short Form Specification for Sealing Concrete Flatwork:

All concrete, SCOFIELD® Overlay™, or SCOFIELD® Texturetop® flatwork designated as being sealed in the plans and specifications shall be sealed with two coats of CEMENTONE® Clear Sealer manufactured by L. M. Scofield Company, (800) 800 9900, Los Angeles, CA, (323) 720-3000, and Atlanta, GA, (770) 920 6000. CEMENTONE® Clear Sealer shall be applied full strength in accordance with Scofield's Tech-Data Bulletin A-764.



1 800 800 9900 or www.scofield.com

SCOFIELD PRODUCTS ARE INTENDED FOR PROFESSIONAL USE ONLY

■ L. M. Scofield Company customer service: 1 800 800 9900

Western Headquarters: 6533 Bandini Blvd., Los Angeles, CA 90040 **voice:** 323 720 3000 **fax:** 323 720 3030

Eastern Headquarters: 4155 Scofield Road, Douglasville, GA 30134 **voice:** 770 920 6000 **fax:** 770 920 6060

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