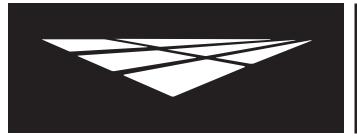




GRIND & SEAL







GRIND & SEAL SUBMITTAL PACKAGE

DIVISION 9 – FINISHES
SECTION 09 97 23 CONCRETE SEALERS AND COATINGS

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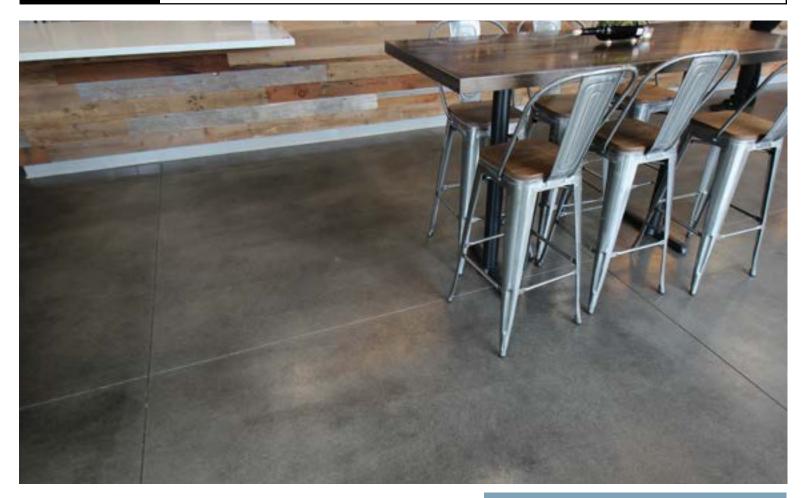




SYSTEM BROCHURE



GRIND & SEAL





ABOUT GRIND & SEAL

Westcoat's Grind & Seal System is a process of grinding interior concrete floors and applying a clear topcoat or sealer. Designed to be applied directly on existing concrete, Westcoat's Grind & Seal System is a perfect way to renew and protect plain or old concrete in showrooms, salons, restaurants and offices, as well as residential and commercial concrete floors.



- Low VOC
- Cost Effective
- Alternative to Polished Concrete
- Water-Based or Solvent-Based
- USDA & FDA Compliant
- May Contribute to LEED Credits
- Chemical Resistant Finish



FOR PROFESSIONAL USE ONLY.







The System

Westcoat's Grind & Seal System is a chemical resistant and cost-effective alternative to polished concrete. Concrete must be clean, dry and free of any foreign material that will prevent proper adhesion while able to absorb water. A minimum of 28 days curing time is required on all concrete.



Prior to starting work, test existing concrete slab for efflorescence, moisture and hydrostatic pressure. Before or after grinding, the concrete can be patched with TC-29 Concrete Patch.

The standard sealer in this system is EC-11, which is suitable for light and medium duty traffic areas. Alternative sealer options EC-32 and SC-65 are suitable for medium duty traffic areas. For medium to heavy duty traffic areas, EC-95G or EC-95F may be used in lieu of EC-11.

Light foot traffic at 12-24 hours but allow 24-48 hours for normal foot traffic. Wait 72 hours before placing heavy objects on the surface. For vehicle traffic, allow 7 days.

Interior Floors can be dust mopped daily or mopped using a neutral pH cleaner. The system should be inspected and resealed with the appropriate Westcoat clear sealer every 3 to 5 years depending upon traffic and UV exposure.







SYSTEM SPECIFICATION SHEET





Grind & Seal

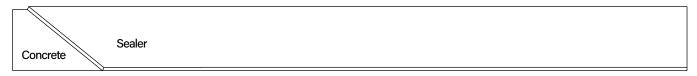
Description

Westcoat's Grind & Seal System is a process of grinding interior concrete floors and applying a clear topcoat or sealer.

Uses

Designed to be applied directly on existing concrete, Westcoat's Grind & Seal System is a perfect way to renew and protect plain or old concrete in showrooms, salons, restaurants and offices, as well as residential and commercial concrete floors. This system is recommended for use on medium to heavy foot traffic, interior floors and provides a fast and durable solution for sealing concrete floors. Westcoat's Grind & Seal System is a chemical resistant and cost-effective alternative to polished concrete. The standard sealer in this system is EC-11, which is suitable for light and medium duty traffic areas. Alternative sealer options EC-32 and SC-65 are suitable for medium duty traffic areas. For medium to heavy duty traffic areas, EC-95G or EC-95F may be used in lieu of EC-11.

System Overview



System Data

Coverages Sealer

300-600 ft² per gallon

Components TC-29 Concrete Patch

EC-11 WB Epoxy Topcoat

Shelf Life

1 year 3 years

Advantages

Low VOC • Medium to High Durability • Revives and Protects Old Concrete • Low or High Gloss Sealers • Cost Effective • Water-Based & Solvent-Based Options • USDA & FDA Compliant • May Contribute to LEED Credits • Fast Turnaround • Chemical Resistant Finish • Alternative to Polished Concrete

Inspection

Concrete must be clean, dry and free of grease, paint, oil, dust, curing agents, laitance or any foreign material that will prevent proper adhesion. The concrete should be at least 2,500 PSI, porous and able to absorb water. A minimum of 28 days curing time is required on all concrete. Prior to starting work, test existing concrete slab for efflorescence, moisture and hydrostatic pressure.

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.







SYSTEM SPECIFICATION



Grind & Seal

Concrete Patch

Before or after grinding, the concrete can be patched with TC-29 Concrete Patch. In a clean, dry bucket add four parts TC-29 Concrete Patch to one and a half parts water (by Volume) or a ten pound bag to 40-50 ounces of water, depending on the desired consistency. Mix thoroughly for 1-2 minutes with a low rpm drill. Allow 2-4 hours at 72 degrees before grinding. Cracks, spalls, holes and pits should be overfilled and allowed to dry properly. This remedial approach to patch cracks is not guaranteed and it should be noted that when the substrate moves, the crack may reappear. Repaired areas will be visible.

Moisture

All concrete should be tested for moisture before applying a seamless coating. If moisture emissions exceed 5 lbs/1000 square feet (ASTM F1869) or if the relative humidity (RH) exceeds 75% (ASTM F2170), contact the manufacturer before application.

Concrete Repair

For concrete that needs repairs beyond just dormant cracks, TC-23 Mortar Mix can be used. TC-23 is designed to be used as a general concrete repair mix for horizontal and vertical applications and can be used as a patching/underlayment material under most Westcoat systems. Please refer to the TC-23 Mortar Mix Product Specification Sheet for details.

Preparation

Prepare surface by diamond grinding with 60-80 grit tools to achieve a clean, uniform, porous surface that will allow the sealer to soak into the concrete. Sweep and vacuum surface entirely. Any dust or contaminates will deter adhesion.

Sealer

Mix EC-11 (2 parts A with 1 part B together) thoroughly, in a clean bucket. Mix slowly for at least 3-5 minutes and until completely combined. Only prepare the amount that you can use in 4 hours. You may thin up to 50% with water. EC-11 can be applied by rolling or spraying and backrolling with a 3/8 inch nap, non-shedding roller cover at a rate of 300-600 square feet per gallon.

For added slip resistance, add up to 1 quart of CA-30 Safe Grip per 3 gallons of sealer. #30 Silica sand may be broadcast when extra traction is needed. Quantities may vary.

Sealer Dry Time

When using EC-11, allow 1-4 hours between coats and 12-24 hours before light foot traffic. Normal traffic may be permitted after 24-48 hours. For vehicle traffic, allow 7 days. Allow 72 hours before placing heavy objects on the surface.

Clean Up

Uncured material can be removed with soap and warm water. If cured, material can only be removed mechanically or with an environmentally safe solvent.

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SYSTEM SPECIFICATION



Grind & Seal

Optional Materials

Cement Options

 TC-23 Mortar Mix may be used as a general concrete repair mix for horizontal and vertical applications and can be used as a patching/underlayment material.

Sealer Options

- SC-65SG WB Semi-Gloss Polyurethane Sealer can be used for a low odor, solvent free, mar and chemical resistant finish.
- EC-32 Clear Epoxy Topcoat can be used in lieu of EC-11 when a 100% solids epoxy topcoat is required.
- EC-95G Gloss Polyurethane Topcoat can be used in lieu of EC-11 when a solvent-based polyurethane is required.
- EC-95F Flat Polyurethane Topcoat can be used over EC-95G Gloss when a low gloss, solvent-based polyurethane topcoat is required.

Skid Resistance

- CA-29 Mini Safe Grip, CA-30 Small Safe Grip or CA-31 Large Safe Grip can be added to the final coat
 of sealer for added skid resistance.
- CA-33 Aluminum Oxide can be used for skid resistance in heavy traffic areas.
- * Please read Product Specification Sheets on these products prior to use.

Maintenance

Interior Floors can be dust mopped daily or mopped using a neutral pH cleaner. For more information on floor care & maintenance, please refer to the General Maintenance sheet.

The Grind & Seal System should be inspected for wear every 2 to 4 years. The system should be resealed with the appropriate Westcoat clear sealer every 3 to 5 years depending upon traffic and UV exposure. Contact the original Installer of Westcoat for complete re-coating instructions.

Health Precautions

Inhalation of vapor or mist can cause headache, nausea, irritation of nose, throat and lungs. Avoid breathing vapors. It is strongly recommended that respirators are worn. Prolonged or repeated skin contact can cause slight skin irritation. All epoxies have the potential of causing skin irritation or allergic reactions. Be careful not to get on skin, clothes or in eyes. Gloves are strongly recommended. If splashed in the eye, flush with warm water and contact a physician if blurring persists.

Solvent based products such as EC-95G and EC-95F are extremely flammable. Extinguish all pilot lights and sources of ignition, such as electrical motors. Be sure to have adequate cross ventilation prior to installing.

DISCLAIMER: PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST THE MANUFACTURER OF WESTCOAT, SHALL BE LIMITED SOLELY TO THE REPLACEMENT OF ANY DEFECTIVE MATERIAL OR A PAYMENT BY THE MANUFACTURER IN AN AMOUNT EQUAL TO THE COST OF THE ORIGINAL MATERIAL.







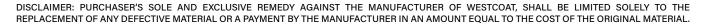
SYSTEM SPECIFICATION



Grind & Seal

Limitations

- This system is designed for professional use only.
- Read Product Specification Sheets for every product you will be using before beginning the project.
- Do not apply at temperatures below 50°F or above 90°F.
- For interior use only.
- Sealers may enhance or alter the color of the concrete. Be sure to perform a mock-up prior to installation.
- Will not hide imperfections or stains in concrete.
- Sealers will make the surface slippery, please be aware of the existing texture of the concrete and how the sealer will affect the look and feel.
- Approval and verification of proposed colors, textures and slip resistance is recommended.
- Do not allow Westcoat products to freeze.









CSI SPECIFICATION

MADE IN THE USA | SINCE 1981

4007 Lockridge Street • San Diego, CA 92102 800.250.4519 • westcoat.com

SECTION 099723

CONCRETE SEALERS AND COATINGS

PART 1 GENERAL

1.01 SUMMARY

A. Section includes: Provide a complete sealed concrete floor system that meet the requirements for specific use indicated in the contract documents. Include all applicable substrate testing, surface preparation, and detail work.

1.02 RELATED SECTIONS

- A. Section 033000 Cast-In-Place Concrete
- B. Section 030130 Maintenance of Cast-In-Place Concrete

1.03 SUBMITTALS

- A. Submit under provisions of Section 013300.
- B. Product Data: Submit manufacturer's product data sheets on each product and system to be used including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements.
 - 3. Installation methods.
 - 4. Maintenance requirements.
- C. Selection Samples: For each system specified, provide two samples, representing manufacturer's full range of colors.

1.04 QUALITY ASSURANCE

- A. All materials used on the sealed concrete floor system shall be manufactured and provided by a single manufacturer to ensure compatibility and proper bonding.
- B. Use adequate numbers of skilled workmen thoroughly trained and experienced in the necessary crafts and completely familiar with the specified requirements and methods needed for proper performance of the work of this section.
- C. Contractor shall have a minimum of 3 years experience installing concrete floor coatings similar to that which is required for this project and who is acceptable to the manufacturer.
 - 1. Applicator shall designate a single individual as project foreman who shall be on site at all times during installation.
 - 2. Contractor must show and have QCA Qualified Contractor/Applicator paperwork from the manufacturer of the coating system.
- D. Convene a pre-application meeting before the start of application of coating system. Require attendance of parties directly affecting work of this section, including: Architect, contractor, applicator, and authorized representative of the coating system manufacturer and interfacing trades. Review the following:
 - 1. Drawings and specifications affecting work of this section.
 - 2. Protection of adjacent surfaces.
 - 3. Surface preparation and substrate conditions.
 - 4. Application.
 - 5. Field quality control.
 - 6. Cleaning.

- 7. Protection of coating system.
- 8. Repair of coating system.
- 9. Coordination with other work.

1.05 DELIVERY, STORAGE & HANDLING

- A. Delivery: Materials shall be delivered to the job site in sealed, undamaged containers. Each container shall be clearly marked with manufacturer's label showing type of material, color, and lot number.
- B. Storage: Store all materials in a clean, dry place with a temperature range in accordance with manufacturer's instructions
- C. Handling: Handle products carefully to avoid damage to the containers. Read all labels and Material Safety Data Sheets prior to use.

1.06 PROJECT SITE CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within the limits recommended by the manufacturer.
- B. Schedule coating work to avoid excessive dust and airborne contaminates. Protect work areas from excessive dust and airborne contaminates during coating application.
- C. All concrete should be tested for moisture before applying a seamless coating. If moisture emissions exceed 5 lbs/1000 square feet (ASTM F1869) or if the relative humidity (RH) exceeds 75% (ASTM F2170), contact the manufacturer before application.
- D Concrete must be at least 2500 psi.
- E. Concrete must be cured for a minimum of 28 days before coating is applied
- F. Before any work is started, the applicator shall examine all surfaces for any deficiencies. Should any deficiencies exist, the architect, owner or general contractor shall be notified in writing and any corrections necessary shall be made.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Acceptable manufacturer: Westcoat Specialty Coatings; 4007 Lockridge Street, San Diego, CA 92102. Telephone 800-250-4519. Fax 619-255-7187. Website: www.westcoat.com.

2.02 MATERIALS

A. As basis of design Westcoat Grind and Seal System (no substitutions will be accepted): A process of grinding interior concrete and applying a water based sealer.

2.03 COMPONENTS

- A. Grind and Seal System:
 - 1. Sealer: EC-11 Water-Based Epoxy 300-600 square feet per gallon.

2.04 ACCESSORIES

- A. Supplemental Materials:
 - 1. Patching materials shall be TC-29 Concrete Patch
 - 2. Concrete repairs can be made with TC-23 Mortar Mix as needed.
 - 3. Optional aggregate shall be CA-30 Small Safe Grip, CA-31 Large Safe Grip, or other sand designed to meet the owners skid resistance requirements.

 Optional Topcoats:
 - 4. EC-32 High Build Clear Epoxy Topcoat may be used IN LIEU of the EC-11, when a two-component, 100% solids, high-build, chemical resistant epoxy is required.

- 5. SC-65G WB Gloss Polyurethane may be used IN LIEU of the EC-11. It may also be applied over the EC-11 or EC-32 when a low odor, solvent free, mar and chemical/UV resistant gloss finish is required.
- SC-65SG WB Semi-Gloss Polyurethane may be used IN LIEU of EC-11. It may also be applied over the EC-11 or EC-32 when a low odor, solvent free, mar and chemical/UV resistant semi-gloss finish is required.
- SC-65F WB Flat Polyurethane may be applied OVER the EC-11, EC-32, SC-65G Gloss or SC-65SG Semi- Gloss when a low odor, solvent free, mar and chemical/UV resistant flat finish is required.
- 8. EC-95G Gloss Polyurethane may be used IN LIEU of the EC-11. It may also be applied over the EC-32 when a chemical/UV resistant, solvent-based gloss finish is required.
- EC-95F Flat Polyurethane may be applied OVER the EC-32 or EC-95G when a chemical/UV
 resistant, solvent-based flat finish is required.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verification of Conditions.
 - 1. Inspect all surfaces to receive sealed concrete flooring. Concrete must be clean, dry and free of grease, paint, oil, dust, curing agents, laitance or any foreign material that will prevent proper adhesion.
 - Before starting work, report in writing to the authority having jurisdiction any unsatisfactory conditions.

3.02 SURFACE PREPARATION

- A. Prepare surfaces using methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.
- B. Create a surface profile by mechanically diamond grinding the surface with 60-80 grit tools to achieve a clean uniform surface.
- C. Sweep and vacuum surfaces entirely prior to installation.
- D. Rout and clean moving cracks and joints: patch with manufacturer's recommended concrete patch material.
- E. Repair any non-moving surface deviations with manufacturer's recommended patching material.

3.03 INSTALLATION

- A. Install coatings in accordance with manufacturer's instructions.
- B. Mix multi-component materials in accordance with manufacturer's instructions.
- C. Use application equipment, tools, and techniques in accordance with manufacturer's instructions.
- D. Uniformly apply coatings at spread rates and in number of coats to achieve specified coverage rates recommended by the manufacturer.
- E. Broadcast aggregates in accordance with the specified system and manufacturer's instructions.
- F. Adhere to all limitations, instructions, and cautions for sealed concrete floor coating as stated in the manufacturer's published literature.

3.04 FIELD QUALITY CONTROL

- A. Verify coatings and other materials are as specified.
- B. Verify coverages of the system as work progresses. Areas found not to meet the required coverage rates shall receive additional material until specified coverage is attained.
- C. Manufacturer's representative shall provide technical assistance and guidance for surface preparation and application of coating systems.

3.05 PROTECTION AND CLEAN-UP

- A. Installation areas must be kept free from traffic and other trades during the application procedure and cure time.
- B. Protect finished surfaces of coating system from damage during construction.
- C. Touch-up, repair or replace damaged flooring system after substantial completion.
- D. Clean area and remove all debris upon completion of work. Dispose of empty containers properly according to current Local, State and Federal regulations.

3.06 MAINTENANCE

A. Contractor shall provide to owner, maintenance and cleaning instructions for the floor system upon completion of work. Owner is required to clean and maintain the surfaces to maintain manufacture's warranty.

END OF SECTION

This guide specification has been prepared by Westcoat Specialty Coating Systems to assist design professionals in developing a project specific specification. This guide is a template that must be reviewed and adapted by specifiers to comply with project requirements. This guide specification is not to be copied directly into a project specification manual without review.





GENERAL MAINTENANCE





CARE & MAINTENANCE

INTERIOR COATINGS

Westcoat interior coating systems (including systems such as Thin Film, Grind and Seal, Dubro Quartz, etc.) offer durable, high-performance, long lasting surfaces that are designed to provide years of service against normal wear and usage. Seamless flooring allows for greater ease of cleaning, compared to traditional resilient flooring, due to the absence of cracks, seams, and crevices that can trap dirt and contaminants. To extend the service life of your Westcoat system, it is recommended to implement a routine cleaning regimen and have periodic inspections. This information is a basic guideline only.

Routine Cleaning

All coating systems require maintenance and upkeep to ensure continued performance and to maximize the life of the system. Maintenance methods may vary depending on the system, texture, topcoat or sealer, environment conditions, slope, drainage, volume and type of traffic, and use of space.

Ensure that the coating surface is free from debris, such as sand, gravel, metals, or other abrasives that can result in premature wear of the topcoat or sealer. Grease, oils, and other contaminants should be removed promptly to maintain the surface. Establish a routine maintenance schedule for all flooring systems. Be sure to test all cleaning agents in an unnoticeable area to ensure compatibility. Refer to the manufacturer's instructions and dilution rates for all cleaning agents. Routine cleaning can be achieved by using a mild cleaning solution, such as "Simple Green", neutral pH detergent, or soap. Be sure to use clean mops and change out cleaning solution regularly. Utilize a brush, broom, or mechanical scrubber to help agitate and loosen up dirt and debris, especially on textured floors. Ensure that the surface is rinsed with clean water thoroughly. Do not allow cleaning agents to dry on the surface. Buildup of residue or other foreign elements can make cleaning more difficult and can also negatively affect the slip-resistance of the surface.

Floor auto-scrubbing machines can be used for larger areas. Avoid using abrasive pads or brushes and use long, soft brushes. Do not allow buildup of residue or other foreign materials, as this can result in a surface that is slippery when wet. Do not use metal-based or coarse brushes, as they may damage the surface.

Wax and Floor Finishes

Westcoat interior coating systems do not typically require a wax or a floor finish material. That said, in some cases where heavy traffic is present or where you may desire to enhance the finish, a standard, commercial floor finish that is intended for use with resinous materials can be applied. Prior to application, ensure that the surface is clean and free from any debris or wax. Apply and







CARE & MAINTENANCE

INTERIOR COATINGS

maintain wax or floor finish per the manufacturer 's guidelines. Wax or floor finishes will need to be completely removed prior to reseal application.

Maintenance and Inspections

All interior coating systems should be periodically inspected and regularly maintained by a Westcoat Qualified Contractor Applicator (QCA). Inspections are required one year after installation and every two years thereafter by a factory authorized representative. After 3-5 years, a "reseal" (thorough cleaning and reapplication of Westcoat topcoat/sealer) may be required. Existing sealer or coating should be abraded and wiped with solvent before application of topcoat or sealer. Some topcoats and sealers may require additional preparation prior to recoating. Should damage occur, be sure to contact the original Westcoat applicator to inspect and repair the coating system immediately.

Best Practices

- Do not expose the coating surface to traffic, moisture, or chemical agents until system is fully cured.
- Immediately clean up and rinse off any chemical solutions that may stain or damage the surface.
- Do not subject the floor coating system to chemicals that it is not compatible or resistant to.
- Avoid dragging metal, concrete, pallets, or other types of objects with sharp edges across the floor.
- Rolling loads with steel casters can potentially damage the surface and should be avoided.
- Avoid ponding or standing water by ensuring that positive drainage is present before applying the floor coating system.
- Water should not be allowed to enter the flooring system through penetrations, joints, or edges.
- Furniture should have protective coasters or pads to prevent from indentations or damage.
- Tape and other adhesives should not be applied to finished floors as, this may damage the surface.

Any information provided by Westcoat Specialty Coating Systems is for general purposes only. Nothing presented by Westcoat Specialty Coating Systems constitutes design advice or a recommendation specific to a particular situation. Westcoat Specialty Coating Systems directs you to consult with the appropriate qualified design professional to ensure any product or information meets the requirements for the specific intended use, and complies with all building plans, specifications, codes or regulations. Westcoat Specialty Coating Systems expressly and specifically disclaims responsibility for any damages arising from the use of any information, and each recipient of this information agrees that there is no express or implied warranty, including any implied warranty of merchantability or fitness for a particular purpose, arising from any information provided by Westcoat Specialty Coating Systems.

