



Level-It™

Grind, Stain & Seal

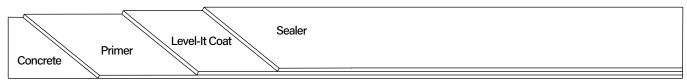
Description

Westcoat's Level-It™ Grind, Stain and Seal is an interior, self-leveling flooring system that provides a finished floor with the look and feel of stained and sealed concrete. It can be installed from 3/8 to 2 inches thick, then ground, stained and sealed with a variety of colors and sheens. Level-It™ Grind, Stain and Seal provides a high-build, quick drying solution for uneven interior floors or where existing concrete substrates may not be suitable for staining and sealing. Level-It™ Grind, Stain and Seal can be installed in both commercial and residential environments, features an optional concrete stain and can be sealed with a variety of Westcoat sealers that provide mar and chemical resistance.

Uses

Level-It™ is designed to transform rough, uneven or unattractive interior concrete into a decorative surface. For use over existing concrete substrates such as sun-rooms, interior floors, restaurant floors, offices and showrooms. Level-It™ can be installed in both the commercial and residential environments with foot and light wheel traffic. 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 | Primer Up to ¾" thick: 120-160 ft² per gallon Greater than ¾" thick: 60-100 ft² per gallon | Level-It™ Coat 16 ft² at ¾ inch 12 ft² at ½ inch per batch | Fast Stain 300-500 ft ² per gallon | Sealer 400-600 ft² per gallon |
| Components | EC-72 Epoxy Patch Gel EC-12 Epoxy Primer TC-27 Level-It™ Cement TC-29 Concrete Patch SC-36 Fast Stain EC-11 Water-Based Epoxy Note: System components may vary on desired result. *** Must Mix TC-27 for a minimum of | | | |









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Advantages

Minimal Downtime • Cost Effective • High Build • High Strength • Variety of Colors and Sheens • Low VOC's

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. The concrete should be 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.

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), please refer to the EC-15 Moisture Vapor Barrier Product Specification Sheet.

Preparation

Remove all coatings to a sound, concrete base. Prepare concrete to a profile equal to CSP 3-5 as specified by ICRI. Surface and environmental temperature should be between 50F degrees and 85F degrees.

Joints

All joints or moving cracks should be honored up through the TC-27 and treated with an appropriate compound that is designed for moving joints. Failure to properly address joints and moving cracks may cause the TC-27 to fracture or disbond from the substrate.

Crack Treatment

The treatment of dormant cracks can help minimize their appearance through the TC-27, but should movement occur, these cracks may return. Dormant cracks can be treated as follows. Cut out cracks and fill with EC-72 Epoxy Patch Gel. Broadcast #30 silica sand onto the wet epoxy to provide a rough surface for the TC-27 to bond.

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.







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Primer

Mix 2 parts A with 1 part B (by volume) of EC-12 Epoxy Primer together for 3-4 minutes with a low speed drill. Be sure to scrape the sides and bottom of the container during mixing. For applications up to ³/₄ inches thick, Immediately apply at a rate of 120-160 square feet per gallon using a trowel or squeegee and then back roll to ensure complete coverage. Promptly, broadcast the surface with #20 silica sand till refusal. This will aid in the adhesion of the Level-It™ Coat. For applications greater than ³/₄ inch thickness, it is recommended to apply the EC-12 at 60-100 square feet per gallon and broadcast the surface with #16 silica sand till refusal. Allow ~8 hours to dry (at 70F degrees) and then vacuum all excess sand. Ensure there are no bald or bare spots without sand, before proceeding with the application of the Level-It™ Coat.

Level-It™ Coat

Prior to application, acclimate material to 50-75F degrees before use. In a clean mixing vessel, add 4½ to 4¾ quarts of potable water (DO NOT EXCEED 4¾ quarts of water), then slowly add (1) 60 pound bag of TC-27 and mix thoroughly using a helix/spiral mixing paddle (designed for use with Self-Leveling Cements) for a minimum of 3-5 minutes, ensuring a homogeneous mix is achieved. Do not overmix and avoid moving the mixing paddle excessively, as this can entrap air and may lead to pinholes in the TC-27. Cold water can be substituted in the mix to help extend working time in warmer temperatures. Multiple bag batches can be made if needed and can provide a more consistent result. If an integral color is desired, 1-4 ounces of TC-40 Liquid Colorant may be added to the water addition, prior to adding the TC-27.

Coverage

One 60 pound bag will cover ~16 ft2 at 3/8 inch or ~12 ft2 at 1/2 inch. Coverage will vary depending on use.

Applying Product

TC-27 can be installed from $\frac{3}{6}$ inches up to 2 inches thick. For foot traffic and light duty areas, apply at a minimum thickness of $\frac{3}{6}$ inch. For medium duty areas with heavier rubber-wheel traffic, apply at a minimum thickness of $\frac{1}{2}$ inch. The maximum thickness should not exceed 2 inches. After thoroughly mixing, pour material onto the substrate and place with a gauge rake to the desired elevation. After placing with a gauge rake, a spike roller can be used to help reduce entrapped air. Do not over work the spike roller. Finally, use a smoother to flatten and finish the surface. If a spike roller is used, a smoother must be used across the entire surface to eliminate discoloration caused by the spike roller. TC-27 has a flow life of 5-10 minutes (@ 70F degrees) and each mix should be tied in within 5 minutes. Always maintain a wet edge.

Level-It™ Coat Dry Time

Light foot traffic may be permitted in 3 to 5 hours @ 70F degrees. Allow a minimum 24 hours before grinding. For best results, allow 72 hours before grinding. The surface should be protected from other trades, dirt and other foreign materials until final topcoat or sealer has fully cured. Do not permit forklifts, scissor lifts or other heavy loads for at least 48 hours. Dry time will vary depending on use and climate.







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Metal Bond Tooling - TC-27

After allowing the TC-27 to properly dry, proceed with an initial cut using 30/40 metal bond tooling. Next proceed with 60/80 metal bond tooling. Vacuum the surface entirely and ensure that any dust or contaminants are removed, as these will deter adhesion.

Patching

If pinholes or imperfections occur after the Level-It™ coat dries, fill them with TC-29 Concrete Patch. Mix 4 parts TC-29 with 1½ parts water with a mechanical mixer at a low rpm for 1-2 minutes. Apply TC-29 with a rubber float over pinholes or imperfections and let dry for 2-3 hours before grinding. Additional patching may be required after grinding. Be sure to vacuum thoroughly after grinding.

Metal Bond Tooling - TC-29

After the TC-29 has dried, proceed with a final pass using 60/80 metal bond tooling, to achieve a clean, uniform, porous surface that will allow the stain and sealer to soak in. Additional tooling and passes may be required, depending on the overall desired finish. Care should be taken to avoid grinding the surface too smooth, as this can prevent the stain and sealer from adhering.

Staining

For ease of mixing, begin by adding a small amount of acetone into the SC-36 Fast Stain powder container. Pour approximately 6 ounces of acetone into the half pint container of pre-measured Fast Stain powder (1 gallon unit) or 12 ounces of acetone into the pint container of pre-measured Fast Stain powder (5 gallon unit). Replace the lid and shake to dissolve the powder. Once powder has dissolved, place a funnel in the opening of the 1 or 5 gallon acetone and pour contents of first mix into remaining acetone. Shake entire mixture and let sit for 15 minutes, then shake again. Fast Stain is now ready to apply. Colors may be varied by adding more or less acetone. The coverage will vary depending on the surface and desired look, but typical coverage should be ~300-500 square feet per gallon mix.

SC-36 Fast Stain may be applied with a solvent safe pump or HVLP sprayer. Additional coats may be applied after first coat has dried for 10 to 20 minutes. Additional coats will produce a darker color. Multiple colors may be layered or sprayed at the same time to create a variegated finish. Be sure to paper off any areas that you do not want dyed. Allow stain to dry for 1 hour at 70F degrees before applying sealer.

Sealer

Mix EC-11 (2 parts A with 1 part B together) thoroughly, in a clean bucket. Mix slowly for 3-5 minutes, until completely combined. You may thin with up to 50% water. Immediately after mixing, spread a swath of material onto the surface along the edges, where it will be "cut in" using a brush. Pour the remaining material near the "cut in" and roll using a 3/8 inch nap non-shedding roller. Apply at a rate of 400-600 square feet per gallon. Depending on the look, thickness, chemical and abrasion resistance desired, 1 to 2 coats may be applied.









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Sealer Dry Time

You may re-coat as soon as the surface is dry to the touch or in approximately 4 hours, but no later than 24 hours. Light foot traffic may be permitted in 12 hours, normal traffic in 24 hours, heavy traffic in 48 hours and 5 days before vehicular traffic. Allow 72 hours before placing heavy objects on the surface and a minimum of 5 days to cure before exposing to moisture or cleaning agents. All times are based on average temperature of 70F degrees and 50% humidity. Cooler temperatures will increase drying time.

Clean Up

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

Optional Materials

Primer Options

• EC-11 Water-Based Epoxy may be used in lieu of EC-12, when a water-based epoxy is required. Please note, EC-12 is highly recommended for improved adhesion and aesthetics.

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.
- TC-26 Cement may be used in lieu of TC-27 when a Gray Self Leveling Cement without aggregate look is desired. TC-26 may also be used with other aggregates like glass, shell, rock, etc, as needed.

Integral Coloring Options

• TC-40 Liquid Colorant may be added to the TC-27, when an integral color is desired. The typical amount is 1-4 ounces per 60 pound bag of cement, not to exceed 10 ounces.

Stain Options

 SC-37 Nano Stain may be used in lieu of SC-36 when a low odor, non-flammable stain is required. Be sure not to over apply the SC-37 or allow it to puddle. SC-37 should cure for at least 4 hours before sealing.
 Sealer Options

- SC-65G WB Gloss Polyurethane Sealer, SC-65F WB Flat Polyurethane Sealer and SC-65SG WB Semi-Gloss Polyurethane Sealer can be used for a low odor, solvent free, mar and chemical resistant sealer.
- 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 refer to Product and System Specification Sheets for additional information.





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Maintenance

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

The Level-It™ 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. Prolonged or repeated skin contact can cause slight skin irritation. Contains portland cement. Wear rubber gloves and eye protection. Avoid eye contact and prolonged contact with skin. Wash thoroughly after handling. If eye contact occurs, flush with water for 15 minutes. Call a physician immediately.

If using solvent based products, they 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.

Limitations

- This system is designed for professional use only.
- Read Product Specification Sheets for every product you will be using before beginning the project.
- All materials should be kept between 50°F-75°F.
- Do not apply at temperatures below 50°F or above 85°F.
- Temperatures should remain stable within 50°F and 85°F for at least 72 hours after installation of the TC-27
- Not designed to be used for exterior applications or areas with constant water exposure.
- Use dustless equipment in well-ventilated areas.
- Level-It™ Grind, Stain & Seal is not recommended in locations where freezing temperatures may occur.
- Level-It™ Grind, Stain & Seal will produce a highly durable and hard surface, but damage can occur
 due to impact by metal objects, such as steel casters or wheels, metal equipment or nails projecting
 out of pallets.
- Westcoat cannot be responsible for issues related to improper joint treatment or cracks.
- Pinholes may occur due to substrate, temperatures, varied batches and application methods.
- Level-It™ Grind, Stain & Seal is designed to have a non-uniform appearance and variances in appearance should be expected.
- Cracking in cementitious overlays can occur and it is not possible to foresee the appearance of cracking in these non-structural slabs. Reflective cracking, map cracking, crazing or hairline cracking may occur. These types of cracking can occur due to numerous reasons, such as vibration, deflection, substrate movement, joints and cracks and rapid evaporation during curing.
- Do not allow Westcoat products to freeze.
- Must mix TC-27 material for a minimum of 3 minutes.





DECORATIVE TEXTURED SURFACES



SYSTEM SPECIFICATION



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Slip Precaution

Westcoat Specialty Coatings Systems highly recommends the use of a slip-resistant additive to all coatings/systems that may be exposed to wet, oily, greasy or slippery conditions. It is the end user's responsibility to provide a flooring system that meets current safety standards. Westcoat and its distributors will not be responsible for injury incurred during a slip and fall incident. For the current coefficient of friction requirements, please consult your local building codes.

Technical Data

TC-27 Properties

| Color | Gray | |
|--------------------------------|--------------------|--|
| Grade of Sand | Course | |
| Polymer Needed | No, just add water | |
| Stampable | No | |
| Indoor/Outdoor Use | Indoor | |
| Tensile Strength ASTM C307 | 597 | |
| Compressive Strength ASTM 109M | 4,500 | |
| Flexural Strength ASTM C580 | 2,294 | |
| Dry Time (hours) | 1-4 | |
| Shelf Life | 6 months | |

EC-11 Chemical Resistance

| | Clear & Pigmented |
|------------------------------|-------------------|
| Muriatic Acid (31.5% HCL) | 2 |
| Sulfuric Acid (50% H2SO4) | 4 |
| Sulfuric Acid (93% H2SO4) | 1 |
| Nitric Acid (10% HNO3) | 2 |
| Sodium Hydroxide (50% NaOH) | 5 |
| Bleach (sodium hypochlorite) | 5 |
| Vinegar (3-5% acetic acid) | 2 |
| Transmission Fluid | 5 |
| Gasoline | 5 |
| Brake Fluid | 5 |
| 409 Surface Cleaner | 5 |
| Pine Sol Solution | 5 |
| Blood & Body Fluids | 5 |
| Iodine Solution | 5 |
| Mustard | 5/5s |
| Ketchup | 5/5 |
| Red Wine | 5/5 |
| Acetone | 4 |
| Methyl Ethyl Ketone (MEK) | 5 |
| Xylene | 5 |
| Ethanol | 5 |
| Methanol | 5 |

Key:

5 = Best (no effect)

4 = Softens (recovers)

3 = Softens (no recovery)

2 = Blistered (no recovery)

1 = Worst Destroyed

s = With Stain * Contact time > 5hrs = 1

