



Polish

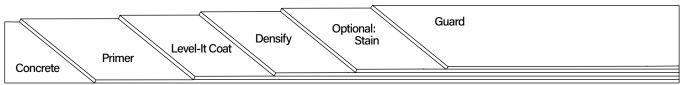
# **Description**

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

#### Uses

Level-It™ Polish System 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, offices and showrooms. Level-It™ Polish System can be installed in both the commercial and residential environments.

# **System Overview**



System Data					
Coverages	Primer Up to 3/4" thick: 120- 160 ft² per gallon Greater than 3/4" thick: 60-100 ft² per gallon	Level-It™ Coat 16 ft² at ¾ inch 12 ft² at ½ inch per batch	<b>Densify</b> 200-400 ft <sup>2</sup> per gallon	Optional: Stain 200-400 ft <sup>2</sup> per gallon	Guard 2000-2500 ft <sup>2</sup> per gallon
Components	EC-12 Epoxy Primer TC-27 Level-It™ Cemen TC-29 Concrete Patch SC-21 Lithium Silicate SC-36 Fast Stain SC-24 Polish Guard  Note: System compo on desired result.  *** Must Mix TC-27 for	t nents may vary,			







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# **Advantages**

Minimal Downtime - Cost Effective - High Build - High Strength - Polished Concrete Aesthetic - 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 Level-It™ System 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 Level-It™ System, 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.

#### **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 <sup>3</sup>/<sub>4</sub> 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 <sup>3</sup>/<sub>4</sub> 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.







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#### 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.

# **Metal Bond Tooling**

After allowing the TC-27 to properly dry, proceed with an initial cut using 30/40 metal bond diamonds. Next proceed with 60/80 metal bond diamond 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 desired finish. Care should be taken to avoid grinding the surface too smooth, as this can prevent the stain and sealer from adhering. Vacuum the surface entirely and ensure that any dust or contaminants are removed, as these will deter adhesion.

#### Densify

Apply SC-21 Lithium Silicate at a rate of 200 to 400 square feet per gallon, wetting the surface evenly. Do not allow the SC-21 to puddle. For best results, spray the densifier and spread with a microfiber pad or broom, keeping it wet for 20 minutes. When applying to a very porous surface, a second coat may be applied after the first coat has dried. Allow the SC-21 to dry before continuing.







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# **50 Grit Transitional Tooling**

Once densifying is complete, grind the entire floor with 50 grit ceramic transitional diamonds. Vacuum the entire floor to remove dust.

# **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.

# **100 Grit Transitional Tooling**

Once patching is complete, grind the entire floor with 100 grit ceramic transitional diamonds. Vacuum the entire floor to remove dust.

#### **Diamond Resins**

Continue the polishing process with 100 grit resin, then move to 200 grit resin and then 400 grit resin. Be sure to clean the floor after each pass to remove all dust. After the 400 grit resin, you are ready for coloring. Be sure all dust has been removed and the surface is clean, prior to staining.

# **Fast Stain Polish Coloring (Optional)**

The Fast Stain should be applied after using 400 grit resin diamonds. This will allow the Fast Stain to penetrate and to be polished up to meet the desired gloss. Mix SC-36 Fast Stain with acetone and place material into a solvent safe, pump style sprayer. Apply at a rate of 200 to 400 square feet per gallon. Coverage will vary due to porosity and desired effect. Let the SC-36 dry for 20 minutes before applying additional colors. Be sure to cross ventilate and allow the solvent to dissipate prior to polishing.

#### **Final Polish**

Continue to polish with 800 grit resin. Once polishing is complete, broom and vacuum to remove dust. Fast Stain may be reapplied to achieve the final color desired. For a higher gloss level, polish up to 3000 grit. Be sure to clean and remove all dust prior to applying Guard.

#### Guard

SC-24 Polish Guard can be applied once the floor is polished to the desired level. Before applying, be sure the floor is clean and free of dirt, dust or debris. For best results, thin SC-24 with equal parts water, spray material onto the surface and spread thin and evenly with a microfiber pad. Coverage is approximately 2000 to 2500 square feet per gallon.

Allow the SC-24 Polish Guard to dry completely before burnishing. Additional coats may be applied. Burnishing is recommended in between coats. For best results, burnish the same day.







# SYSTEM SPECIFICATION



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#### **Burnish**

Once guard is completely dry, burnish with 800 and then 1500 burnishing pads. If the floor was polished greater than 800 grit diamond resin, use a burnishing pad that is equal or greater to the highest grit resin used. Be sure to clean pad between each diamond change. When final burnish is completed, you can reoccupy the space.

#### 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**

**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.

**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.
- \* Please refer to Product and System Specification Sheets for additional information.

#### Maintenance

The Level-It Polish System is a low maintenance flooring system, but still requires basic care and scheduled cleaning. Floors should be swept daily with a dust mop or microfiber pad. Spills should be cleaned up promptly.

Additional cleaning with water and/or a pH neutral cleaner may be performed as needed. Be sure to test any cleaning agents in an inconspicuous area prior to use. Polished floors can be rejuvenated by repeating the final steps of the polishing process. In some cases, simply burnish with a high speed burnisher equipped with a diamond impregnated pad to rejuvenate the gloss.

SC-24 Polish Guard can be applied quarterly or as required per scheduled maintenance. Floors should be scrubbed and cleaned before reapplying SC-24 Polish Guard.

#### **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.





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#### 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™ Polish System is not recommended in locations where freezing temperatures may occur.
- Level-It™ Polish System 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™ Polish System is designed to have a non-uniform appearance and variances in appearance should be expected.
- Level-It™ Polish System is not designed for chemical environments, that require a chemically resistant topcoat or sealer. Please refer to our Level-It™ Grind, Stain and Seal System for more information on this option.
- 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.

#### 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.

