Sealing with the ICT System

The combination of ICT Prep (Counterhard) and ICT SealZ are a REACTIVE sealing system based on silicates and proprietary polymers. It is a sealing system that is easy to apply, maintain, and repair if necessary.

The ICT process:

1. Condition with ICT PREP
2. Seal with ICT SealZ or XTP (exterior application)
3. Lock with Clean and Set

It is important to understand:

• This sealing process is a way of treating your concrete, not coating your concrete with a thick film. For optimum performance use the “Z” System to produce dense and stain resistant concrete.

• It is recommended tops be properly cured (proper curing techniques), hydrated a minimum of 4 days. Keep surfaces dry 24 hours dry before sealing for best results. Your tops need to be dry enough for maximum penetration and reactivity with the sealer. Surface moisture should be below 3%. Use a Moisture meter to know where you are.

• We recommend that the surface temperature of the surface to be sealed is 100-120 degrees. These reactions are enhanced with heat. Heat opens the surface of the concrete and facilitates the silicate bonding. Heat blankets are highly recommended.

• The more applications you apply, the glossier and more stain resistant it will be. However, with each coat you are increasing the polymer amounts. Increased polymer requires longer cure time to achieve maximum abrasion resistance. We recommend 4 treatments of ICT SealZ for a total of 2 grams per square foot.

Oil, Mustard, Red Wine

5 Hours Later

Wiped Clean!!
1. Conditioning with ICT Prep (Counterhard)

ICT Prep (Counterhard) is a clear liquid and can be diluted 50/50 with water and applied to surfaces that have been warmed to a minimum of 100 degrees. Always clean and rinse out the applicator between applications to remove any reactive material picked up from the concrete. Start from one area and move forward, keeping a wet edge as you move across surface being sealed. The idea is to move forward across the piece, keeping a wet edge….don’t go back over an area.

*Typical applications are 1-2 grams per sq. ft.*

**Conditioning Steps**

**Firm rub a dilute ICT Prep solution. (50/50 Counter Hard/Distilled water)**
Wait 10-15 minutes until surface is completely dry.

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**Firm rub 100% ICT Prep.**
Wait 10-15 minutes until surface is completely dry.

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Wait 10-15 minutes until surface is completely dry.

**Darkening Test** – Spray water droplets on the surface and observe for darkening of the concrete. If darkening occurs, repeat with CH application until no darkening is seen.

| on raw concrete | slight darkening almost done | ready to move to sealing |

**Note** – When surface temperature is lower than the suggested range consider:

- ICT Prep may tend to bead on the surface. A spritz of First Sealz will break the surface tension and allow for even penetration of ICT Prep.
- Burnishing with 3000 CPS or hogs hair between applications will aid in reacting the ICT Prep application.
- Sealers may be warmed in a microwave oven, especially in winter months and cold shop temperatures.
2. Sealing with ICT SealZ (FirstSealZ)

We recommend 4 treatments of sealer rubbed vigorously to concrete that has been warmed to a minimum of 100 degrees. The desired application rate is .5 gram per square foot for a total of 2 grams per sq. ft. ! Do test samples to make sure how many coats are best for you based on your application technique. Start from one area and move forward, keeping a wet edge as you move across surface being sealed. The idea is to move forward across the piece, keeping a wet edge….don’t go back over an area.

**ICT SealZ Application**

- Firm rub ICT SealZ - .5 grams a square foot.
  Wait 10-15 minutes until surface is completely dry .
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  Wait 10-15 minutes until surface is completely dry .

*Total 2 grams per square ft.!!*

**Note** - To avoid streaking, maintain firm pressure with recommended application rate.

**Note** - Excess application of ICT SealZ leaves unreacted sealer that will find moisture to form streaks, rings, etc..

**XTP Application - Exterior Concrete**

- Firm rub XTP - .5 grams a square foot.
  Wait 10-15 minutes until surface is completely dry .
- Firm rub 50/50 solution XTP/solvent based enhancing sealer - .5 grams a square foot
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- Firm rub 50/50 solution XTP/solvent based enhancing sealer - .5 grams a square foot
  Wait 10-15 minutes until surface is completely dry .

**Solvent based enhancing sealers recommended:**

- Miracle Sealants - Seal & Enhance
- Dupont - Stone Tech Professional
- Dry Treat - Stain Proof Original
3. Clean & Set - aids to react any excess sealer.

- Wipe down with Clean & Set using a microfiber cloth that is barely damp with Clean & Set. (Clean & Set vapor wipe). Only put enough Clean & Set in the cloth (tight fist wrung out), so that it doesn’t leave any wet residue behind the wipe area, approximately 5 seconds of exposure.
- Immediately wipe with dry cloth (remove any liquid Clean & Set if there is any)
- Wait for Clean & Set residue to dissipate (light haze to dissipate), about 5 minutes.
- Repeat until Clean & Set is beading on the surface. Let residue dry.
- Wipe clean with damp cloth.

Annual Maintenance - XTP Application

- Clean up the tops. Use a quick burnish of 400 or 800 cps pads. Just enough to get anything off that is more powder like.
- Scrub the tops down with 511 Seal and Enhance, use a scotch brite pad. This cleaning removes the rest of the white crystals that are on the tops.
- Burnish back to a luster using 800 or 1500 cps pads.
- Perform the darkening test mentioned in the ICT Prep application procedure. It would be normal to apply 1 application of ICT Prep (Counterhard).
- Apply 1 application of XTP per above procedure.
- Apply 1-2 HARD SCRUB applications of 511 Seal and Enhance and XTP. You have to physically scrub the 2 together on the surface. They are like oil and water, but the will bind together. It takes just a little bit of each, about 50/50 amounts of each. You still base it on the normal application rate, it is just that you are using a combination of sealers. Meaning, .5 grams a square foot of application rate......which would mean .25 grams of 511 and .25 grams of XTP.
ICT APPLICATION GUIDE 4.0

ICT Care and Maintenance Guide

Sealer Information:

• Water-Based, Non-Emitting Penetrating Sealer
• Chemical Reactive Technology- Impregnates and chemically alters concrete to create a hardened crystal-like surface.
• High Resistance to Etching from Acidic Products Such As Wine, Lemon’s…
• Ultra-Low VOC, similar to water
• Extremely Stain Resistant
• The above sealers are in accordance with USDA regulations 9 CFR, Section 416.4 and the Food Safety Inspection Service’s “Sanitation Performance Compliance Guide”.
• Material Safety Data Sheet: Counter-Hard: 11/22/05, 2/24/01, Counter-Guard First Seal: 10/23/03, 3/25/03.

Do’s and Don’ts

• Wipe up spills as they occur. Use a damp cloth or a natural cleaning solution.
• Clean regularly with vinegar and water. (or other “Green Cleaners”)
• Never use a sealed countertop as a cutting board.
• Use coasters or felt pads below anything with sharp edges.
• Avoid pots and pans directly from stove or oven onto the surface
• For indoor countertops reapplication of sealer is recommend every 5-10 years….no stripping required.
• For outdoor countertops continued maintenance and reapplication of sealer is recommended every year…..no stripping required.

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Important Notes:

For several weeks after applying the sealer you may notice the concrete darken in the areas where water and things are left on the surface. This is normal as the cross linking if the sealer continues. Darkening of the surface is not an indication that the sealer is not working, in fact it is a normal reaction as the sealer continues to cure.

If you have any questions or suggestions about sealing our product, we would like to hear from you. Please e-mail “support@blueconcrete.com” if you would like to give us your feedback.
Reasonable Expectations with Chemical Reactive Technology:

- Good water resistance 24-48 hours, as in 1 hour of exposure. Any moisture beyond this point needs to be dried, and not left on surface to puddle.

- Good chemical resistance 8-12 days. Chemical as in any form of a chemical…acids, lemon juice, coffee, alcohols…etc.

- Full cure time is typically 10-14 days, with increasing protection as time goes on. First SealZ does take 7-14 days for good cure at 65 to 75 degrees Fahrenheit. Avoid standing water on the concrete for at least 72+ hours.

- Concrete Darkens: For several weeks after applying the sealer you may notice the concrete darken in the areas where water and things are left on the surface. This is normal as the cross linking of the sealer continues. Darkening of the surface is not an indication that the sealer is not working; in fact it is a normal reaction as the sealer continues to cure. To avoid this issue concentrate on using more of the Pre-conditioning steps to help lock up surface prior to sealing.

- Georgette, Fine finishes, Vibrated finishes and Food Prep Areas: Pre-conditioning steps are recommended. This will make the top very hard and preserve the cement finish, (fine finish), and really lock the top for food prep areas. Let the tops dry overnight, then use a CPS pad, green burnishing pad, or light dry grinding with a higher grit, to open the surface back up prior to sealing. Then continue with sealing normal sealing application.

- Waxing: Waxing is not recommended with these sealers as a maintenance product. Applying wax over the sealer will slow the chemical reactive nature of the sealer.
Preferred application tools:

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Image</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spray Bottles - Calibrate and know how much one spray generates. It is not unusual for 1 spray to equal 1 gram of material.</td>
<td><img src="image1.png" alt="Spray Bottle" /></td>
</tr>
<tr>
<td>12” small loop microfiber clothes. Microfiber sponge, small 4”X3” sponges with microfiber wrapped around them. Average microfiber clothes found at any Wal Mart or Auto Parts. (small tight loops)</td>
<td><img src="image2.png" alt="Microfiber Sponge" /></td>
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<tr>
<td>HTC CPS pads (400 to 3000 grit polishing pads) HTC Polishing Equipment</td>
<td><img src="image3.png" alt="HTC CPS Pads" /></td>
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<td>Power Blanket</td>
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<td>Moisture Meter</td>
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<tr>
<td>IR Thermometer</td>
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