

March 24, 2014

Hillyard Concrete Defense FAQ

Question	Answer
What are the main indoor products that make up the Hillyard Concrete Defense?	Hillyard Concrete Primer, LT Concrete Seal, MT Concrete Seal, HT Concrete Seal and HTG Concrete Seal.
What traffic loads are Concrete Defense Seals formulated for?	LT Concrete Seal, Light Traffic - Pedestrian, Light non-mechanical carts, two wheel dollies MT Concrete Seal, Medium Traffic - Pedestrian, Light non-mechanical carts, two wheel dollies, power dollies HT Concrete Seal, Heavy Traffic - Pedestrian, Light non-mechanical carts, two wheel dollies, power dollies, forklifts HTG Concrete Seal, Heavy Traffic - Pedestrian, Light non-mechanical carts, two wheel dollies, power dollies, forklifts
Can Hillyard Concrete Primer and Seals LT, MT, HT, and HTG be used outdoors?	No. They are designed for inside use only.
What about adhesion on top of unknown coatings?	Using Hillyard Primer, all Concrete Defense Sealers will adhere to most properly prepared coatings, but a test patch should always be applied before coating the entire floor. Any pre-existing seals and coatings that may have poor adhesion will compromise the performance of the new coatings. If existing coatings show signs of peeling, do a cross hatch test to confirm integrity of coating base.
How do I check for adhesion?	After allowing to cure for 48 hours, use a razor blade to scribe an X in the coating. The cut should go all the way through the coating to the concrete. Apply duct tape to the area and firmly press into place with your finger. After allowing the tape to sit for 60 seconds, quickly pull off the tape. If most of the seal is pulled off especially if it crosses over the cut lines, adhesion may not be sufficient for coating.
How do I properly prepare the surface for coating?	No acid etch is required. First determine if the floor is porous (open) or has been previously coated with a non porous coating. Determine this by applying a few drops of plain water on top and observing if the water is absorbed by the concrete. If the floor has been previously coated, the water will likely lay, crawl, or bead on the surface and be opaque. OPEN Concrete Scrub with an aggressive brush or black pad using SM-1 at 6 oz. per gallon of water. Then rinse thoroughly with plain water. After allowing the floor to thoroughly dry, apply a test patch of Primer, followed by the Sealer you plan on using, according to label directions. If the coating doesn't apply or dry evenly, the floor might be contaminated and you should use the alternate prep method of scrubbing with a Malish Diamabrush 25 grit Concrete Prep Plus, followed by a 100 grit poly brush. Then, reapply the test patch and check for adhesion. Previously Coated Concrete First, test that the previous coating is adhering properly. If the coating has proper adhesion, scrub the floor with 3M SPP pad (up to 500 square feet per side) using Hillyard SM-1 at 6 oz. per gallon of water. Rinse thoroughly with plain water. Then, apply a test patch and check for adhesion. If the coating is not adhering properly, use the alternate prep method of scrubbing with a Malish Diamabrush 25 grit Concrete Prep Plus, followed by a 100 grit poly brush.
How do I purchase Diamabrush?	Due to all the variations of sizes and grits available, Hillyard does not stock Malish Diamabrush in St. Joseph. We have established a program with Malish. Contact your Hillyard Representative for more information. Video link: http://www.youtube.com/watch?v=lir-gh0HBI8
How do I know if there is too much moisture in the concrete?	If a previous coating is peeling or the concrete is below grade or its less than 30 days old, it's possible that there will be hydro static pressure or moisture in the concrete that will lift the coating off the surface. Attach a 2' x 2' square of clear plastic sheeting to the floor by sealing all 4 sides with duct tape. Wait 24 hours. If moisture beads on the plastic or the floor is discolored from being damp, the floor contains excess moisture. . Note that scrubbing a floor with water just prior to coating is ok . All products are water based and will tolerate a little moisture left behind from scrubbing . It's continuous water vapor lifting underneath the coating that will cause it to peel.
What is the best way to apply HT or HTG when cutting into freshly coated areas?	With HT and HTG overlapping from freshly coated dry area to new wet area should be avoided otherwise color variations will appear. The best way to avoid this is to tape off the area you intend to cut off at. This will create a sharp smooth line to start up your next area.
What is the best way to assure that color doesn't vary when applying HTG?	Always check the process number on the box and make sure that all the HTG you are going to use is from the same process number . Also mix as much as you can apply within the hour pot life .
What is the pot life of HT and HTG?	One hour.
Can I apply these products over one another in the future?	Yes with proper floor preparation, according to label directions. No abrasion between coats is necessary if applied within 24 hours.

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How do I apply decorative flakes?	<p>Broadcast on top of coating, during application, when coating is WET.</p> <p>2-Person Application Method with Spike Slippers (best results) - As one person is coating, a second person wearing spike slippers can broadcast flakes by throwing the flakes in an upward motion and allowing them to fall and settle to the floor. Cover enough area so broadcasted flakes stay in the wet coating. Try to keep flakes from falling onto the uncoated surface by leaving about a one foot "flake-free" buffer in the coating edge next to an uncoated surface. As more area is coated, the "flake-free" buffer is coated.</p> <p>1-Person Application Method - Apply coating in 4' x 4' sections. Broadcast the flakes by throwing in an upward motion and allowing them to fall and settle on the floor. For best results, after flaking AND coating is dry, top coat with HT Clear Seal.</p>
What products can decorative flakes be used with?	Only HT and HTG.
What if I have to remove the coating I just applied?	Concrete Defense Sealers are all permanent coatings and are best removed by mechanical means using the Malish Diamabrush system. We recommend the Malish Diamabrush 25 grit Concrete Prep Plus, followed by the Malish Diamabrush 100 grit Polymer Blades. Depending on the situation and difficulty of removal, we suggest you consult with your local Diamabrush representative.
What Concrete Defense Seal can be used over stained concrete?	LT. Water-based stains should be dry for at least 48 hours. Solvent-based stains should be dry for at least 72 hours. Follow label directions, but always use a neutral cleaner and plain water to rinse. In any case, a test patch should be applied to test for compatibility. It is not recommended to apply any other Concrete Defense sealer over stained concrete. Be aware, removing LT over stained concrete, either by chemical or mechanical means, will likely damage the stain.
My floor has lots of stains in the concrete and the floor isn't sealed. Is there a way to remove those stains?	Generally, stains that are in unsealed concrete will always show up in clear coatings no matter how good they look after floor is cleaned and ready to be coated. If the expectation is to eliminate imperfections completely, use HTG pigmented high traffic seal.
Can I fill concrete pits, cracks, and depressions with Hillyard Concrete Defense Seals?	As a general rule, no. Excessive amounts of Concrete Defense used to fill pits, voids, depressions, etc, will not dry completely and trap raw materials that will cause those areas to be discolored. Resort to recommended concrete patches that are designed for that purpose.
What about filling cracks and repairing holes in concrete?	<p>For small cracks ¼ inch or less you can use clear T-88 Epoxy (HIL22014) this should be done before doing any wet prep to the concrete. First clean crack out with a steel wire brush (CSM4067100). T-88 is a clear two part epoxy that comes in a single tube and can be used with any standard caulk gun. After applying T-88 it should be smoothed out with a trowel (HIL30011). Let dry for 2 hours before wet prepping floor. T-88 should be dry at least 8 hours before coating. Coverage rate is approximately 20 linear feet when drawing a ¼ x ¼ inch bead.</p> <p>T-88 Data sheet link http://www.systemthree.com/reslibrary/tds/T-88_TDS.pdf</p> <p>For cracks, holes and spalls larger than ¼ inch use Adhesive Technologies, Miraclebond 2 part Epoxy (HIL22013). Mix A into B at 1:1 ratio with a jiffy drill mixer for 2 minutes it will form into a GRAY paste and will yield 1-1/4 sq. ft at 1" depth. Pot life is 20 minutes so only mix what you can use in that time frame. Apply paste just above the surface and feather flush with trowel (HIL30011). Let dry for 2 hours before wet prepping floor. Miraclebond should be dry at least 3 hours before coating. Coverage rate is 1-1/4 sq. ft at 1" depth.</p> <p>Link to Miraclebond data sheet http://www.atcepoxy.com/wp-content/uploads/2013/09/TDS_MB14502.pdf</p> <p>Do not use either epoxy product to fill any expansion joints.</p>
Can these seals be used during normal business hours without creating odors and smells?	Hillyard Concrete Defense Seals are all very low in VOC's and will be safe to use around all building occupants, including those applying the products.
Do you have an anti-slip additive?	Yes, use Hillyard Slip Resistant Concrete Sealer Additive HIL22000 according to label directions. Be aware that Hillyard Slip Resistant Concrete Sealer Additive will increase friction and therefore reduce the life of the coating. It will also be harder to clean so it should be used only where needed.
What paint is recommended for painting lines?	<p>We recommend Rustoleum Brand paint.</p> <p>If application is required between coats use Rustoleum 2548 latex Traffic Yellow Striping paint before the final coat. Let paint dry 8 hours before top coating.</p> <p>If application is required after final coat then use Rustoleum 7543 Yellow High Performance , Protective Enamel Oil-BASE. Let paint dry 24 hours before opening to traffic.</p>
Do I need to be aware of any special application techniques?	When applying HT and HTG it is important to always keep a wet edge. This could be a challenge for one applicator on large, wide-open floors (10,000 sq. ft.). So, for large areas, two people can apply at the same time. One person starts the application and the other person starts a new area working into the area just applied.

	LT 499	MT 492	HT 493	HTG 500
For indoor use only. For outdoors use Hillyard Repel® sub-surface penetrating sealer.	■	■	■	■
Floor must be coated with Hillyard concrete primer before seal coat. Primer coat must be dry with a slight tack to it before top coating with seal. Primer coat must not sit open without a top coat longer than 24 hours.	■	■	■	■
Recommended floor surface temperature range for coating:	50-90F	50-90F	50-90F	50-90F
Do not apply if relative humidity is higher than:	N/A	N/A	85%	85%
Do not apply unless concrete is 30 days old:	Yes	Yes	Yes	Yes
Single component system - no mixing required:	Yes	Yes	N/A	N/A
Two component system: - Combine part A & part B, drill mix for 5 minutes. - Let mixed product sit for 5 minutes.	N/A	N/A	Yes	Yes
Recommended applicator:	Flat Mop	3/8" Nap Roller**	3/8" Nap Roller	3/8" Nap Roller
Approximate coverage rate (square feet) per gallon:	1,000-1,500	500 - 1,000	500-600	300-400
Approximate dry time per coat	1 Hour	4 Hours*	12 Hours	12 Hours
Hours after dry to re-open floor to light foot traffic:	4 Hours	4 Hours	12 Hours	12 Hours
Hours after dry to re-open floor to traffic indicated on the label:	20 Hours	20 Hours	72 Hours	72 Hours
Abrade the surface between coats with a 3M SPP pad if longer than 24 hours after applying previous coat.	N/A	N/A	Yes	Yes
Recommended coats	3-4	2-3	1-2	1-2
<p>* Must wait 4 hours. Even if the coating looks dry, do not coat. Heavy white streaking can occur. ** Use 3/8" nap roller on rough concrete. For smooth concrete, a lightweight T-bar can be used.</p>				