

How to Apply DCI Penetrating Lithium Based Sealer/Hardener

DCI Penetrating Lithium Based Sealer/Hardener is a clear, odorless VOC compliant, water-based, environmentally safe-to-use salt protectant and dust proofer that hardens, seals and densifies concrete and masonry surfaces. It provides all the protection of a high end penetrating water repellent sealer and offers all the benefits of a surface hardener, sealer, and densifier.

DCI Penetrating Lithium Based Sealer/Hardener is a surface treatment that penetrates and seals by reacting chemically with the concrete surface forming a clear, dense and durable inorganic topical surface layer that is breathable, abrasion-resistant, and hydrophobic.

DCI Penetrating Lithium Based Sealer/Hardener provides superior protection against water and water-carried salts that cause erosion, deterioration, and corrosion. DCI Penetrating Lithium Based Sealer/Hardener seals micro-channels making the concrete harder, stronger, more abrasion resistant, dust proof and easier to maintain. Substrates become resistant to staining, spalling, weathering, efflorescence, water intrusion, fungi and mildew, deterioration, freeze-thaw scaling and reinforcing steel corrosion. DCI Penetrating Lithium Based Sealer/Hardener will harden to the surface and is extremely abrasion resistant. The permanent bond lasts longer than silanes and reduces maintenance costs.

DCI Penetrating Lithium Based Sealer/Hardener can be used as an interior or exterior treatment for both horizontal and vertical concrete and masonry and is not hazardous.

Note: If your floor has been heavily treated with chemicals, particularly citrus cleaners, in the past, **DCI Penetrating Lithium Based Sealer/Hardener** may not be the most suitable sealer for your project. Contact Direct Colors at 877-255-2656 with questions or for more information.

KEY BENEFITS

Chloride-ion Protection: meets industry standards for protecting concrete against chloride intrusion. Ideal for applications in coastal areas.

Sealing: penetrates the micro-channels in concrete, it reacts to form insoluble silicate structures that seal the concrete. This helps protect the concrete from water penetration and makes it more resistant to many types of chemicals.

Hardening & Dust Proofing: hardens the concrete making it stronger and more abrasion resistant. It also dust proofs the concrete, so particles of dust will not circulate within a building creating a health and maintenance problem.

Environmentally Safe: contains no carcinogens and minimal VOC's. Application is fast and the

floor is ready to use within hours. **Conforms to “Green Leaf/LEED Qualifying” and is one of the industry’s most environmentally-friendly sealers.**

Economical: incorporates the hardening of a densifier with the chloride protection of a silane, all in a single permanent application. Epoxies and urethanes need to be regularly stripped and re-applied.

APPLICATION PROCEDURES AND INSTRUCTIONS

DCI Penetrating Lithium Based Sealer/Hardener may be applied to new or existing acid stained floors, integrally-colored or polished concrete surfaces of any age to create a more durable, lasting shine. **On acid-stained floors, the surface must be fully neutralized and all remaining debris or excess color removed before sealing. If the floor or countertop has not been properly neutralized and cleaned, a temporary surface dust or whitening effect can occur on the surface. The dust will disappear within two to four weeks at the most.** Always test each concrete surface for suitability and desired results. Let surface dry before inspection.

Depending on the porosity of the concrete surface, the typical estimated coverage is between 400 – 450 square feet per gallon but can be as little as 150 square feet on porous surfaces.

Apply by sprayer or sealer applicator to either new or old concrete. Surfaces should be clean and dry; free of all foreign materials such as bond breakers, curing agents, form release oils, grease, dust, pet waste residue, drywall residue, or similar contaminants prior to sealing. Wax is not required for indoor applications using DCI Penetrating Lithium Based Sealer/Hardener.

HORIZONTAL APPLICATION

Use a low pressure (pump-up deck sprayer) or HVLP sprayer to apply DCI Penetrating Lithium Based Sealer/Hardener to form an even, glistening sheen. **Apply enough DCI Penetrating Lithium Based Sealer/Hardener to keep the surface wet for 20 minutes.** DO NOT OVER-APPLY. If the surface begins to dry prematurely, apply more product as needed. If pooling occurs in areas where the concrete is uneven, use a squeegee or similar tool to smooth the sealer evenly across the surface. Apply when surface and air temperatures are 40° F to 100° F. In hot, dry or windy conditions dampen concrete before application to prevent flash drying. For countertop applications, a Padco™ Smoother can be used to apply the sealer.

VERTICAL APPLICATION

Apply from the bottom up using a low pressure, 10-25 psi sprayer with a fan-type nozzle. Flood the surface until excess runs down 6” to 8” below spray pattern nozzle or sponge surfaces sufficiently to create a uniform wet-look.

FINAL RESULTS

Typical drying time is 1 to 2 hours for both vertical and horizontal surfaces.

Floors are ready for traffic and use when dry. Water repellency and hardness continues to develop for up to 7 days following the application; however, significant results should be visible within 24 hours.

A light lithium residue may form on the surface after drying. This is excess product that was not absorbed and can be removed with a stiff broom, power sweeper or floor buffer. If the residue cannot be removed with a broom, a high speed floor buffer using black and red pads will be required.

For an immediate shine on smooth, indoor concrete, allow the Lithium Hardener/Sealer to dry overnight and polish with a high-speed buffer equipped with a black pad followed by a red pad. Buffing will bring a "light shine" to the floor. Lithium Hardener/Sealer will never achieve a high gloss finish. If a semi or high gloss finish is desired, another sealer should be selected.

Second applications are rarely needed; however, if concrete is very porous or if a quicker sheen is desired, you may apply a second, very light application. Lightly mist the surface with product, spread evenly with a Padco™ trim pad applicator or squeegee and let dry.

Because the porosity of substrates and application conditions can vary greatly, coverage rates are a proximal. No absorption and coverage estimates can take the place of a pre-application test.

CLEAN UP

Use water and a light detergent to clean applicators. DCI Penetrating Lithium Based Sealer/Hardener treatments are environmentally friendly and require no special or hazardous disposal methods.

MAINTENANCE

Routine sweeping, mopping, washing and mechanical scrubbing of floors with neutral PH cleaners/water is recommended. **DO NOT USE acidic or citrus cleaners to maintain the floor.** Although it is chemically resistant and helps reduce staining, these cleaners may etch the surface causing a residual stain. Regular maintenance will improve surface shine. This will prolong the life of the floor surface and over time will increase the sheen. Wipe up any chemical spills as soon as possible. Wait 24 hours after application before applying any other surface applications.