Harden X
Lithium Hardener/Sealer/Densifier

SEALSOURCE
1411 E 840 N Orem, UT 84097
Office: 801-224-3800
Toll Free: 800-305-9144
www.sealsource.com

PRODUCT APPLICATION

Harden X™ may be applied to new concrete immediately after final trowel or to existing concrete of any age. Proper surface preparation and product application is essential to performance. For optimum results, please read instructions in full and contact our Technical Support department at (800) 305-9144

Always test the surface to be treated for suitability and desired results. Let surface dry before assessing results of test application.

EQUIPMENT NEEDED FOR APPLICATION

- Soft broom or 100% polyester microfiber pads (to spread out any excess material)
- Horizontal Application: high-volume/low-pressure, pump-up, airless, backpack, or mechanical sprayer
- Vertical Application: Sprayer or roller with a ¾" nap

SURFACE PREPARATION & PRODUCT APPLICATION

New Concrete

Harden X™ may be applied to new concrete immediately after final trowel or at any point thereafter. If applying to acid-stained or integrally-pigmented concrete floors, please take note of the modifications below.

1. Thoroughly clean and scrub the surface to be treated, removing any substance that may interfere with penetration—including any bond breakers, form release oils, wax, surface laitance, curing compounds, drywall residue, dust, or other contaminant. Acid-stained surfaces must be neutralized prior to application by washing and scrubbing with a neutralizing agent followed by a water rinse. Allow surface to dry completely before application.

(If applying to new concrete floors after joints have been cut, carefully clean saw-cut residue from the surface with vacuums, sweepers, blowers, or brooms. A scrubbing machine with a red pad may be used to remove any remaining residue from the joints. If necessary, damp mop the joints and around columns to ensure surface is thoroughly clean. Allow surface to dry completely before application.)

2. Using a high-volume/low-pressure, pump-up, airless, backpack, or mechanical sprayer, apply Harden X™ at 400-500 sq/ft per gallon (10-12 m2 per liter), maintaining a consistent, even spray. Do not allow the material to puddle (lightly broom out any pooling material immediately after spraying).

3. The entire surface MUST remain wet with Harden X™ for 30 minutes to allow the material to react properly with the surface. DO NOT LET ANY AREA DRY OUT – apply more Harden X™ if necessary to keep the surface wet - DO NOT USE WATER. After the wet material has reacted with the surface for 30 minutes, allow material to dry unless applying to acid-stained or integrally-colored concrete (see modification below). Material should dry in 1-2 hours and will be ready for traffic as soon as it dries.

Modification for Acid-Stained or Integrally-Colored Concrete: After keeping surface wet for 30 minutes, spray water on the surface to saturate it completely. To ensure a uniform finish, do not let any area of the surface dry prior to cleaning. Remove excess residue using a scrubber equipped with a red pad. With the squeegee down, vacuum on, and light head pressure, add water, scrub, and clean the surface to remove all excess residue. Dispose of excess material according to local regulations.

Tilt-Up Construction Applications

Please contact SealSource® technical support services for specific instructions.

Existing (Cured) Concrete

Harden X™ may be applied to existing, cured concrete of any age that is structurally sound.

1. Mechanically remove any surface laitance and patch or fill any cracks or other surface damage.

2. Remove dirt, dust, oil, grease, membrane-forming curing compounds, coatings, sealers, or other contaminants or substances that may interfere with penetration.

3. For maximum penetration, sand blast or shot blast concrete with a 60-100 grit sanding screen or diamond abrasive pad. SealSource® recommends mechanical surface preparation when possible, however older concrete may require more aggressive preparation. If using acid etch or other chemical preparation, the surface MUST be neutralized with a pH neutral cleanser to prevent whiting. (Please call SealSource® technical support services for specific instructions.)

4. Remove any remaining dirt, contaminants, and dust caused by grinding with a riding or walk-behind scrubbing machine with water or broom following by a water rinse. Squeegee dry or allow to dry completely prior to application.

5. Using a low-pressure, pump-up, airless backpack, or mechanical sprayer apply Harden X™ at 400-500 sq/ft per gallon (10-12 m2 per liter), maintaining a consistent, even spray. Do not allow the material to puddle (lightly broom out any excess material immediately after spraying).

6. The entire surface MUST remain wet with Harden X™ for 30 minutes to allow the material to react properly with the surface. DO NOT LET ANY AREA DRY OUT – apply more Harden X™ if necessary to keep the surface wet - DO NOT USE WATER. After the wet material has reacted with the surface for 30 minutes, allow material to dry. Material should dry in 1-2 hours and will be ready for traffic as soon as it dries.

Vertical Application

Prepare surface as directed above for either new or existing concrete and apply using one of the following methods:

Spray Method: Apply Harden X™ from the bottom up using a low pressure, 10-24 psi sprayer (68.9 – 172 kPa). Flood surface until excess runs down 6-8 inches (15-20 cm) below spray pattern, or sponge to create a uniform wet appearance. On horizontal surfaces, property quantity is indicated when the material stands on the surface for a few seconds before completely penetrating. or maximum vertical penetration and desired coverage rates, "wet-on-wet" application is recommended. Re-apply Harden X™ as above within 3-5 minutes after initial application. Use a broom to distribute any accumulated material.

Roller Method: If applying with a roller, apply in multiple coats until the surface remains moist for approximately one minute before the material disappears. accumulated material.

APPLICATION IN EXTREME WEATHER CONDITIONS

High Humidity – Apply Harden X™ as above. After the material has reacted for 30 minutes, remove any excess material that has not penetrated the surface. Do not allow excess material to air- dry.

High Temperatures (Above 90°F or 32°C) – To prevent Harden X™ from flashing/drying too quickly, the area to be treated may be sprayed with water to cool the surface prior to application. Allow the surface to dry completely before applying the material. Harden X™ may also be applied by spraying out at 800-1000 sq/ft per gallon (30-40 m2 per liter) in three thin coats, using 100% polyester microfiber pads to spread the material.

Low Temperatures (Below 40°F or 4°C) – Apply Harden X™ as above. While keeping the surface wet for 30 minutes, agitate the material using red pads on a scrubbing machine, floor machine or swing buffer. Because of the need to agitate the material once it has been applied, apply to a smaller square footage which can be successfully managed.

PRODUCT DISCLAIMERS

Harden X™ is not suitable for asphalt or other non-concrete surfaces.

Harden X™ will not bridge or fill cracks and will not salvage structurally unsound surfaces.

Harden X™ is not recommended for plastic concrete or mortar- or resin-based terrazzo mixes.

Do not allow Harden X™ to come in contact with any glass, fabric, metal, or painted surfaces. Immediately wipe contaminated surfaces with a clean, water-saturated cloth, then wipe dry with a second clean cloth.

Application and coverage rates are estimated and may vary depending on the porosity of substrate and environmental conditions present during application (such as extreme temperatures or humidity). For precise rates of consumption, a pre-application field test should be performed.

It is highly recommended that the installer contact our Technical Support department at (800) 305-9144 for customized instructions prior to application. Proper application is the responsibility of the user.

DO NOT ALLOW SEALSOURCE® PRODUCTS TO FREEZE