



Technical Data Sheet:

Protec III: Chem RX
The Original Chemical Cure, Hardener, and
Densifier

Protec III: Chem RX – is a water-based highly reactive penetrating concrete treatment, which produce a permanent density change within the micro-structure of the concrete.

As a cure, Protec III: Chem RX penetrates and reacts with the poor bonds in the concrete called calcium hydroxide which make up approximately 25% of the cement paste. When Protec III: Chem RX chemically reacts with these weak bonds the result is strong bonds called calcium silicate hydrate (CSH). This chemical cure process also fills the pours of the concrete holding moisture in the concrete.

The benefit of Protec III: Chem RX over water curing and membrane forming cures is that the 25% weak bonds that were historically present in these methods of curing are not present with Protec III: Chem RX. Overall hardening, tensile strength, low porosity and high chemical resistance is achieved. Protec III: Chem RX is a non-membrane forming cure, which is a major benefit where flooring is to be installed.

Protec III: Chem RX has no harmful vapors, and it is Agriculture Food Approved for Registered Establishments. Protec III: Chem RX easily penetrates the concrete and is used to reduce vapor transmission in concrete. It is very effective in reducing radon gas by blocking the internal pores of the concrete.

Protec III: Chem RX does not leave a membrane on the surface of the concrete, if additional stain resistance is required use Dual-Tech: Densifier + Silicone.

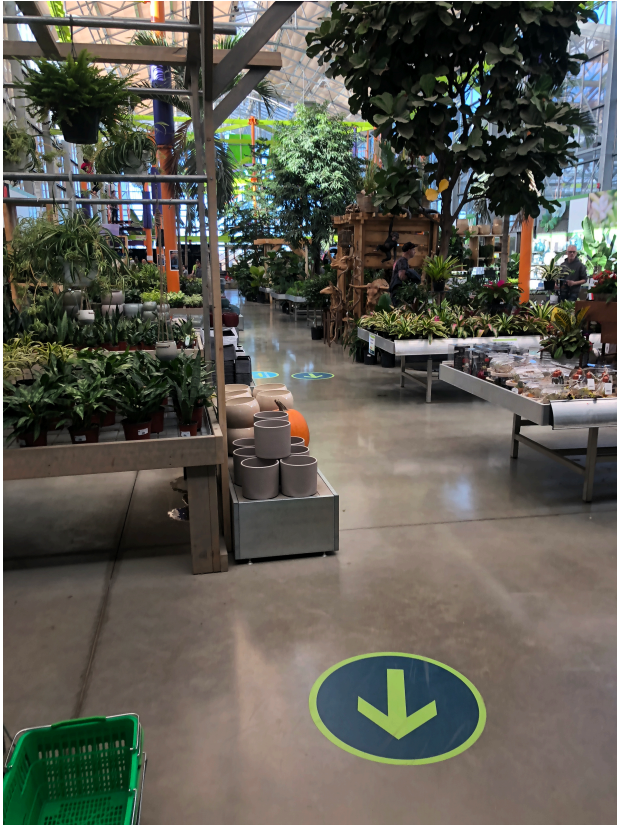
BENEFITS: Meets LEED Requirements. –
Compatible with flooring adhesives or sealants.



ASTM C418 – 67% increase in hardness of the concrete wear surface.

Curing Aid – 92 % greater moisture retention during critical 24 hour cure period. Decreases permeability of the concrete Restricts water migration through concrete.

VOC's - Zero/Eliminates dusting of concrete/Reduces Tire Squeel/Compatible with dry shake hardeners/Increases chemical resistance/Environmentally Safe and Permanent/Produces a permanent shine with use/Finishing Aid for hot windy conditions/No hazardous wastes to dispose of, unlike sodium silicates that require governmental hazardous waste disposal procedures.



SURFACE PREPARATION:

New and old dirty concrete should be cleaned and then rinsed with clean water if necessary. After washing allow the surface to dry before application of product.

APPLICATION PROCEDURE:

Apply product with a low pressure sprayer, roller, or micro-fiber mop. — Saw cuts need to be coated completely . — Apply a minimum of 2 coats for best results . — Apply 2-3 coats to high traffic floors, or floors exposed to high corrosion. — As a cure on green concrete, only apply 1 coat.

— Use as a finishing aid if moisture is needed. — Remove any puddles that will form. — For chemical resistance apply 3-4 coats depending on porosity of the concrete at 400 square feet per US gallon.

Normal wear and tear does Not include heavy abrasion from gravel and stones, therefore it is highly recommended to keep your floors clean to avoid unnecessary increased concrete wear.

BENEFITS:

Eliminates dusting of concrete/Reduces Tire Squeel/Compatible with dry shake hardeners/Increases chemical resistance/Environmentally Safe and Permanent/Produces a permanent shine with use

USES:

All green, existing surfaces, pre-cast concrete, and poured in place walls. — Compatible with any flooring adhesives. — Cures concrete for less money. — Gives a permanent shine with abrasion on concrete floors. — Use as a finishing aid to sustain moisture. — Compatible with flooring adhesives. — Anywhere a non-toxic, and low odor cure is needed.

BROOM FINISH:

As a concrete cure

Apply before first pass of the float after screeding at approximately 300 - 400 square feet per gallon, then proceed to finish the concrete as desired.

For best results (Stops Concrete Popping)

Apply the second coat after cleaning saw cuts or when pulling off forms at approximately 500 square feet per gallon.

Because concrete absorbs differently across the entire pad, we recommend a second coat for best results in order to properly coat more porous areas. Apply product with a low-pressure sprayer or roller. Apply at recommended square foot coverage. Saw cuts need to be coated thoroughly. Apply 2-3 coats to high traffic floors or floors exposed to high corrosion. Once each coat has dried to touch, let it set for an additional hour before applying your next coat. Roll out any puddles that form. For proper chemical resistance apply 3 to 4 coats depending on the porosity of the concrete.



POWER TROWEL FINISH:

For a regular set

As a Cure apply after the last pass of the power trowel - apply at approximately 500 sq feet per gallon - Immediately after finishing, apply a second coat for best results at 700 square feet per gallon after cleaning saw cuts. - mop out any puddles that remain after 20 minutes.

For a Slow Set

As a Cure/Finishing aid apply before using a pan trowel at Approximately 400 square feet per gallon - Apply a second coat for best results at 700 Square feet per gallon after cleaning saw cuts. - Mop out any puddles that remain after 20 minutes.

MAINTENANCE PROGRAM:

Add 1 part Protec III ChemRX to 5 parts water/ cleaning solution for your monthly concrete maintenance.

FOR POLISHED CONCRETE:

Apply Protec III: Chem RX at a rate of 300 - 400 ft² /gallon (7.4-9.8 m²/litre) by sprayer or micro-fiber pad. Make sure concrete stays wet for 30 minutes by re-applying more Protec III: Chem RX or re-distributing the existing product using a micro-fiber pad. Do not puddle the product. No rinsing of Protec III: Chem RX is needed. Let Protec III: Chem RX dry before polishing the concrete.

No waxes or subsequent surface treatments are necessary. It is always recommended to apply 1 coat yearly to maintain durability and protection in high traffic areas. — See maintenance program for more detailed information.

CAUTIONS:

Protect all products from freezing. — Not for colored concrete. — Do not apply to any frozen surfaces. — Protect surrounding permanent structures from over-spray.

We recommend doing a test area to observe any possible reactions. If any reactions are observed, call us at:
+1 (587) 319-0507

PHYSICAL CHARACTERISTICS:

Dilution: None, use as supplied.

Odor: Mild

VOC's: 0

Clean-up: Water

SHELF LIFE: 3 yrs in original unopened container.

PACKAGING 5 gallon (18.9 Liter) Pails, 55 gallon (208 Liter) Drums, Totes (1040 Liters), or Custom Larger Sizes If Needed.