



TECHNICAL BULLETIN CP-05

CONCRETE SEALER TROUBLESHOOTING

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When a concrete cure and seal or sealer does not perform properly, or the appearance is not what was expected, the list of possible causes is surprisingly short: the wrong product was selected, the product was applied too thick, the product was applied in non-ideal conditions, or the product was applied in too many coats. All of these circumstances can be avoided by carefully following the instructions on the product's technical data sheet before use

NOTE: All of the information in this publication is supplied as a general guide to solving concrete cure & seal issues. Each situation is different, and results may vary. Whatever remediation method is chosen should be performed on a small test section before addressing the entire area to determine if the results are acceptable.

PROBLEM: CURE AND SEAL HAS BUBBLED

Cause: Product was applied too heavily, or in hot weather/direct sun.

Prevention: Carefully follow manufacturer's recommended coverage rate and apply during the coolest part of the day when concrete is not in direct sun. Two thin coats should be applied rather than one heavy coat.

Solution: Perform a solvent wash (see below) and allow to dry.

PROBLEM: SOLVENT BASED CURE AND SEAL TURNED WHITE

Cause: Product was applied too heavily or there are too many coats of sealer on the concrete, and moisture trapped underneath the sealer has caused it to lose adhesion from the concrete.

Prevention: Follow manufacturer's recommended coverage rate; do not re-seal concrete until previous coat(s) have worn away or have been stripped off.

Solution: Solvent wash and allow to dry.

PROBLEM: CURE AND SEAL IS PEELING OR FLAKING OFF

Cause: Product was applied too heavily or there are too many coats of sealer on the concrete OR concrete was not prepared properly before application. Also, because concrete cure and seal products last 1-3 years, some peeling and flaking should be expected as the product wears away, especially in areas of high traffic or direct sunlight.

Prevention: Follow manufacturer's recommended coverage rate and preparation methods; do not reseal concrete until the previous coats have worn away.

Solution: Pressure wash or scrub concrete to remove any loose material. Allow to dry completely. Perform a solvent wash to bring remaining product back to the surface and reestablish the seal. If solvent wash does not provide the gloss and seal desired, apply a LIGHT coat of sealer after solvent wash has dried.

PROBLEM: WATER-BASED CURE AND SEAL IS MILKY-WHITE OR POWDERY

Cause: Product was applied in low temperature or high humidity conditions or where air flow is low (basement, closed garage, etc.) OR product was applied too heavily.

Prevention: Follow manufacturer's recommended coverage rate and application conditions.

Solution: Cure and seal may need to be completely removed with a chemical stripper or mechanical means. Reapply in proper conditions.



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PROBLEM: CONCRETE SHOWS STREAKS, ROLLER MARKS, OR DRIPS AFTER CURE AND SEAL IS APPLIED

Cause: Careless or sloppy application; product was applied unevenly without keeping a "wet edge"; wrong type of sprayer or spray tip was used.

Prevention: Carefully follow application instructions on product's technical data sheet.

Solution: Perform a solvent wash to redistribute heavy areas of product.

PROBLEM: WATER SPOTS ON SEALED CONCRETE

Cause: Hard water from landscape sprinklers dries on concrete and leaves minerals behind upon drying.

Prevention: Avoid sprinkling on concrete as much as possible.

Solution: Squeegee concrete dry in areas where hard water dwells on concrete.

PROBLEM: CURE AND SEAL IS STAINED FROM OIL, TREE DEBRIS, FERTILIZER, ETC.

Cause: Cure and seals and penetrating sealers will not prevent stains.

Prevention: Prevent oil and other chemical drips from cars and equipment. Sweep tree debris and fertilizer granules from concrete as often as possible.

Solution: Use a commercial concrete cleaner or stain remover to clean stained concrete. Sealer product may require reapplication if cleaner or stain removal process removes the sealer as well.

PROBLEM: SEALER IS SHOWING SCRATCHES OR SCUFF MARKS FROM TRAFFIC OR FURNITURE

Cause: Concrete cure and seal products have moderate durability and should be expected to wear under abrasive traffic or moving furniture. An epoxy or urethane coating system should be considered for interior applications where more durability is desired.

Prevention: A concrete or tile floor wax/polish can be applied over sealed concrete to improve scratch and scuff resistance. Use non-scuff pads on furniture legs to prevent scratches.

Solution: Scuffed or scratched sealer can be repaired by lightly wiping the area with solvent and applying a LIGHT coat of sealer over the area.

PROBLEM: CONCRETE IS DARK AND BLOTCHY AFTER CURE AND SEAL IS APPLIED

Cause: Uneven application or wrong product choice.

Prevention: Follow the application methods on the product technical data sheet.

Solution: Perform a solvent wash to redistribute heavy areas of product. If appearance is not acceptable after solvent wash, allow product to wear away over time or chemically strip and re-apply appropriate product. Only use sealers that are specifically listed as acceptable for sealing existing, cured concrete.

PROBLEM: CARPETS, MATS, OR GARAGE DOOR WEATHER STRIPPING IS STICKING TO CONCRETE THAT HAS A CURE AND SEAL APPLIED ON ITS SURFACE. VEHICLE TIRES ARE LEAVING MARKS.

Cause: Plasticizers in rubber mats, tires, carpet backing, or weather stripping can chemically react with concrete sealers, resulting in the sealer becoming sticky or stained by rubber marks. This problem is greatly exaggerated when the sealer has been applied too heavily.

Prevention: Do not place rubber backed mats or carpet on sealed concrete. Do not seal area of concrete where garage door weather stripping will be in contact. Apply sealers THIN to avoid tire marking.

Solution: Remove sources of direct rubber to cure and seal contact.



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INSTRUCTIONS FOR PERFORMING A SOLVENT WASH

The solvent most commonly used to remedy concrete cure and seal appearance issues is xylene (sometimes labeled xylol), which is available at home improvement stores in the paint department where paint thinners are sold. FOLLOW ALL SAFETY AND PERSONAL PROTECTION PRECAUTIONS ON THE CONTAINER as xylene is a flammable material. Best results are achieved when the wash is done on a cool, overcast day (not in hot, direct sunlight). In continuous hot weather, performing the solvent wash early in the morning is best.

Before the solvent wash, sweep all dirt, debris, and loose sealer off the concrete to be treated. Pour the solvent into a metal or solvent-resistant paint tray and use a short-nap, solvent resistant roller to apply the xylene to the areas of sealer to be treated at a coverage rate of approximately 200 ft²/gallon (4.9 m²/liter). Use steady, even strokes to apply the solvent but do not "over-roll" back and forth aggressively as this can cause bubbling. After a few minutes, the solvent will re-wet the sealer, turning it back to its original liquid form. At this point, any excess sealer can be pulled or wiped off the concrete with the roller, a squeegee, or rags. When the entire area to be washed is complete, allow the concrete to dry. Typically, no additional coats of product should be applied since most problems are caused by over-application of the sealer initially.