CONCRETE CURING BASICS

WHY CURE CONCRETE?

Concrete Curing Serves Two Main Purposes:

• To **retain moisture** in freshly placed concrete so that it can continue to **gain strength** as it hardens.

• To **delay shrinkage** due to rapid drying until the concrete is strong enough to **resist cracking** from shrinkage.

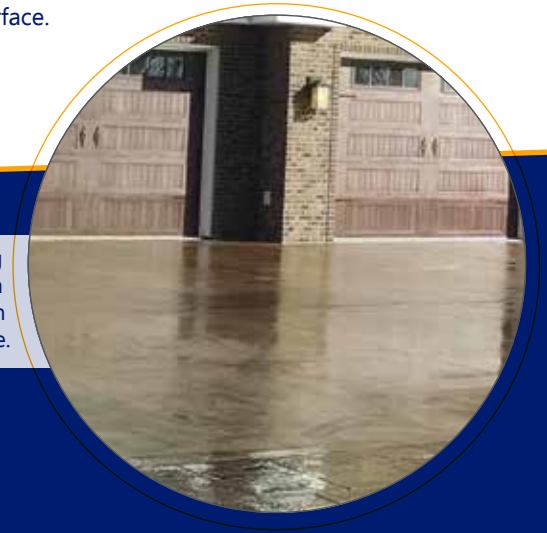
The concrete curing process allows time for the chemical reaction of cement and water to produce a hard, strong surface. When the water fully evaporates, the chemical reaction stops. This is why the initial 7 days of concrete curing are critical to the outcome - yet the entire curing process continues for 28 (or more) days.

CONCRETE CURING METHODS

1 **WATER CURE**
The concrete is flooded, ponded, or mist sprayed and kept continuously wet for 3 to 7 (or more) days.

2 **WATERPROOF PAPER OR PLASTIC FILM SEAL**
Applied as soon as the concrete is hardened sufficiently to resist surface marring or damage.

3 **LIQUID MEMBRANE CURING COMPOUNDS**
Chemical compounds that are applied to finished concrete and form a membrane film on its surface.



Liquid curing compounds form a membrane film on the surface.

TK CURING COMPOUNDS

ACHRO SEAL AS-1 1315
A premium quality curing, sealing and hardening compound for new or existing concrete. Achro Seal forms a durable membrane film for superior sealing and retainment of water to provide maximum surface hardness, density, and resistance to abrasion, chemicals and stains.

TRI-SEAL
A water-based, acrylic membrane-forming compound for curing, sealing, and hardening new or existing concrete. Its high quality resins provide outstanding surface hardness and traffic abrasion. As a water-based product, Tri-Seal is the ideal sealer for interior areas where solvent based systems are difficult or dangerous for use.

DC WB DISSIPATING CURING COMPOUND 2519
A curing compound for freshly placed concrete surfaces. It restricts the evaporation of water for a minimum of 72 hours, ensuring that moisture will be retained sufficiently for the complete hydration of the cement. As the compound interacts with UV light and natural surface abrasion and weathering, it gradually dissipates to prepare the surface for coating with a concrete sealer.

TK Products manufactures a full line of curing compounds for concrete - please visit www.tkproducts.com for more details.

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TK® PRODUCTS
CONSTRUCTION COATINGS
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NEW CONCRETE CARE GUIDE

The EASY & Cost-Effective Approach to New Concrete Care

A quick guide to curing and sealing concrete:

- To ensure optimal results
- To extend the life of new concrete surfaces
- To minimize maintenance and repair

CONCRETE SEALING BASICS

WHY SEAL CONCRETE?

Concrete sealers act as a final layer of protection against damage from the elements such as: contamination from deicing chemicals, water damage, corrosion and stress caused by freeze/thaw cycles.

Concrete sealers not only **prolong the life** of the concrete, but can also **enhance and preserve the appearance** of decorative concrete surfaces such as stamped, colored, stained/dyed concrete and exposed aggregate.

Simply put - proper sealing of concrete protects it from the elements, prolongs its life and enhances its beauty.

CONCRETE SEALER TYPES

Concrete Sealers Fall Into Two Broad Categories:

1 **PENETRATING SEALERS**
Such as silanes and siloxanes which react chemically within the capillaries of the concrete to shield against moisture penetration and deicing chemicals. Penetrating sealers are typically invisible and do not alter the appearance of the surface making them ideal for exterior concrete subject to corrosion and freeze/thaw damage.

2 **FILM-FORMING SEALERS**
Such as acrylics, polyurethanes and epoxies which form a protective film on the surface of the concrete. Film-forming sealants impart a sheen or "wet look" to the surface which is ideal for enhancing and highlighting the beauty of decorative concrete surfaces.

Film forming sealers add shine while enhancing the colors of the concrete.

TK SEALING COMPOUNDS

PENETRATING SEALERS

TRI-SILOXANE 290 WATER REPELLENT
A deep penetrating water repellent that chemically bonds with the concrete to form an invisible and impenetrable barrier against damage from water, chemicals and freeze/thaw exposure.

FINAL SEAL WATER REPELLENT
A final sealer for surfaces previously applied with a cure and seal compound. Final Seal resolvates coating membranes to penetrate the surface. As it chemically bonds with the concrete, it forms an invisible and impenetrable barrier against damage from water, chemicals and freeze/thaw exposure.

With a penetrating sealer applied, water and salt will bead on the surface.

FILM FORMING SEALERS

BRIGHT KURE & SEAL
A premium concrete and masonry sealing compound that highlights the natural colors of the substrate and imparts a rich "wet look". The durable membrane film resists water, chemicals, abrasion and stains.

BRIGHT GLAZE
A high viscosity, high gloss sealing compound that is ideal for decorative concrete and masonry. Bright Glaze may be used as a stand alone product or can be applied over Bright Kure & Seal where a higher gloss finish is desired.

TK Products manufactures a full line of sealing compounds for concrete - please visit www.tkproducts.com for more details.