



Selecting the Right Sealing System for Concrete:

There is no one sealing method or product that will satisfy the requirements of every situation. Mojo Concrete offers two distinct sealing systems: a Thin Film Sealing System, and a Reactive Concrete Treatment. Each system has unique advantages and potential drawbacks. It is important for someone considering concrete to understand the performance characteristics of these systems and to select the system that is best suited to the needs of a particular project. The amount and type of use experienced by a kitchen countertop will be substantially different from that seen by a computer desktop or a fireplace surround. Both the type of use and the types of substances that may come into contact with the concrete must be considered in order to select between the following sealing systems.

The primary advantages and potential drawbacks of each system are outline below. A more detailed description of each system follows.

Thin Film Sealing System:	Highest stain resistance Color Enhancing Aesthetics of a coating Vulnerable to scratching
Reactive Concrete Treatment:	Highest scratch resistance Very natural look and feel Moderate stain resistance Vulnerable to acidic substances Properties take time to develop

Mojo Concrete's Thin Film Sealing System:

To prevent concrete from staining or from being etched by acidic substances, a barrier between the concrete and substances that may cause staining is needed. Mojo Concrete has selected a three-component system that is applied to the countertops after they have been ground and polished to act as this barrier. This particular system was selected because it exhibited a very high level of stain resistance while not detracting from the organic aesthetic of the concrete. The components work together to form a tough and highly stain resistant film on the surface of the concrete. The film is a low build coating that has a color enhancing effect and a satin sheen. The three components of this system are in order of their application: a bonding agent, a two-part water based epoxy, and a

two-part water based urethane. The epoxy layer provides the system's stain resistance and the urethane provides the abrasion resistance.

Because this is a film finish, it is vulnerable to scratching. Cutting boards MUST be used to prevent sharp knife-edges from scratching the finish. Abrasive cleaners (Comet, Soft Scrub) must NOT be used. Heavy objects should NOT be dragged across the counters. Pots and pans should be checked to see if there are any burrs on the bottoms that may cause scratching. Some dishware and pottery, particularly hand made items, may have sharp edges or rough bottoms. Placemats should be used for these types of objects. It is possible to repair a badly scratched finish by applying an additional coat of urethane, but trained personnel must perform this process.

The Thin Film Sealing System is recommended for use in areas that will regularly come into contact with substances that are likely to cause stains. This is the finish that Mojo Concrete recommends for kitchen counters and concrete sinks. This finish provides the highest level of stain resistance to most substances but more care must be taken with its use.

Mojo Concrete's Reactive Concrete Treatment:

An alternative to barrier concrete sealers, Mojo Concrete's Reactive Concrete Treatment chemically modifies concrete creating a very non-porous surface layer. More specifically, solutions are applied to the concrete that react with the byproducts of cement hydration (the chemical process that changes fluid concrete into a solid) to form additional chemical compounds in the surface layer. The additional compounds fill capillaries and pores in the concrete's internal structure producing a very hard and dense surface. This surface will prevent many substances from soaking into the concrete and prevent stains caused by these substances. Water and oil stain resistance is very good. Concrete treated in this way is particularly vulnerable to etching by acidic substances (citrus juices and vinegar for example).

Because there is no film on top of the concrete, this type of finish provides the most natural look and feel. Concrete treated with a reactive treatment will exhibit very high scratch resistance.

Reactive Concrete Treatments take time to develop their stain and scratch resistance properties. For the first several weeks, extra caution must be taken with pieces finished with this treatment. During this time, all spills must be wiped up immediately.

The Reactive Concrete Treatment is recommended for use in areas that are not likely to regularly come into contact with substances likely to cause stains. Mojo Concrete recommends this finish for table tops, fireplace hearths, and for most vertical applications.