Buddy Rhodes™ Sealing System Application Guide

Introduction

The Buddy Rhodes Sealing System comprises a Penetrating Sealer used as a primer, a Satin Sealer, and an optional sacrificial layer of Beeswax.

Buddy Rhodes Penetrating Sealer is an aqueous copolymer chemically reactive dispersion that provides a durable and transparent protective barrier against oil and water on concrete surfaces. Its chemistry offers invisible protection to both dense and porous concrete and is extremely effective as a water sealer. It provides a base layer of protection in case of either a failure of the Satin Sealer, or a prolonged exposure to staining agents and is used as a primer for the next layer. Coverage is approximately 100 ft² (9.29 m²) per quart (0.95 l).

Buddy Rhodes Satin Sealer is a water based acrylic micro emulsion technology for concrete countertops. It creates a barrier coating that seals and protects while enhancing the natural beauty of the concrete. The sealer will resist most stains up to 72 hours, however, oils and solvents should be wiped up promptly. It provides the main source of protection in the Buddy Rhodes Sealing System, especially against acids. Coverage is approximately 50 ft² (4.65 m²) per quart (0.95 l).

Buddy Rhodes Beeswax is an optional sacrificial layer of protection that is regularly reapplied. It helps resist stains and enhances the color of concrete surfaces. The wax acts as a barrier to protect the sealer from abrasion and wear. It may be used for maintenance over the life of the concrete project. The only downside is that once applied, wax is very difficult to remove if you wish to reseal your countertops. It comes in a hard wax "puck" and is applied with a microfiber cloth, much like car wax. And like car wax, it is then buffed by hand or with a mechanical buffer. It is packaged in 12 oz (340.2 g) jars.

Penetrating Sealer

Color: Amber liquid

Solids: 3.8 ± 0.5% by weight
3.0 ± 0.5% by volume

Coverage (approximate):
Porous Surface: 37.5-75 ft²/qt (3.4-7 m²/l)
Dense Surface: 150-250 ft²/qt (14-23.2 m²/l)

Dry Schedule (at 50% RH):

	50°F/10°C	60°F/16°C	75°F/24°C
Dry to Touch	4 hrs	3 hrs	2 hrs
Cured	24 hrs	24 hrs	8 hrs

Satin Sealer

Color: Milky liquid

Odor: Mild acrylic

Solids: 18.38 ± 1% by weight
17.72 ± 1% by volume

Coverage (approximate):
Porous Surface: 12.5-50 ft²/qt (1.16-4.65 m²/l)
Dense Surface: 150-200 ft²/qt (13.9-18.6 m²/l)

Dry Schedule (at 50% RH):

	50°F/10°C	60°F/16°C	75°F/24°C
Dry to Touch	3 hrs	2 hrs	1 hr
Cured	24 hrs	24 hrs	24 hrs

Concrete Surface Preparation

Preparing the concrete surface before sealing is an important first step to ensure success with any sealer. The concrete must meet three conditions before starting with the sealer application:

- It should be properly cured.
- It should be properly processed.
- It should be clean and dry.

Curing

Standard practice is to allow the concrete to cure for 5-7 days after casting, adhering to good concrete curing practices. This ensures the cement matrix is maturing and the internal moisture levels have been reduced to low levels. For some concrete mixes this happens in a few days, for others it will take longer. You will need to set the time between casting and sealing based on the habits of the concrete you are working with. With Buddy Rhodes mixes, 5 days

following casting is a good start, although more time should be given during cooler periods, and more time is always better if you have time to give. For best results, let your concrete cure for at least 7 days.

Processing

The surface of the bare concrete should be processed to a visually matte finish, with a profile, or "tooth," prior to sealing. This ensures the sealer develops a good mechanical bond with the surface. The rougher the surface is, the better the sealer will adhere. Profiling also removes residual material or contaminants that would interfere with forming a good bond. Wax and form release agents routinely transfer to the surface of the concrete during casting, and these must be removed before sealing.

There are several ways to profile concrete surfaces. Acid Etching, Wet Sanding and Dry Sanding are three good options, described below.

- **Acid Etching:** Acid etching provides a "tooth" for the sealer and dissolves any weak material in the substrate that may prohibit sealer from fully penetrating and adhering. Etching is most often performed on cream finishes, or concrete that's left untouched after it is demolded. Keep in mind acid etching mainly affects the cement paste, and will not change the surface of exposed glass, tile, or exposed stone such as quartz or granite. Etching may not entirely remove surface residue like wax or form release agents. For that we recommend light scrubbing with a non-woven abrasive pad. Muriatic acid substitutes are not recommended as these types of acids can cause inconsistent reactions with the sealer. After acid etching, rinse well with clean water to remove any acid residue.
- **Wet Polishing or Sanding:** A popular and easy way to lightly work the surface without exposing sand grains is to hand-sand the surface using Buddy Rhodes hand pads. Use a 400-grit hand pad, as coarser grit can leave scratches and can be too aggressive. The hand pads should always be used wet to prevent scratching the concrete surface. They're a great way to remove surface residue and to lightly smooth the concrete's surface. A wet-sanded surface can be etched to further enhance the microscopic tooth. When polishing a larger area or to remove material faster and efficiently, a pneumatic or electric polisher could be used.
- **Dry Sanding:** A method of opening the surface of the concrete or smoothing the surface of the concrete with processing methods that do not depend on the use of water. These methods include using the BR hand pads dry, or using mechanical equipment such as orbital sanders or rotary polishers with dry diamonds pads. All tooling should be attached to vacuum equipment to control any dust that may occur during the surface processing.

Cleaning & Drying

The concrete surface should be cleaned after it has been profiled, since etching or sanding concrete creates very fine residue that must be removed before sealing. Non-woven abrasive pads can be used to remove the fine residue. Rinse well with clean water. After cleaning, allow the concrete to fully dry prior to applying sealer. Dry concrete lets the sealer penetrate into the concrete, whereas wet, damp or barely dry concrete does not. A good rule of thumb is to wait a minimum of 12 hours for the concrete to dry following total saturation. Cooler shop temperatures will slow evaporation, so if the temperature is below 70˚F/21˚C, give the concrete more time to dry out. When in doubt, wait 24 hours.

Environment

The Buddy Rhodes Sealing System should be applied at normal room temperature and humidity, and care should be taken to minimize airborne dust. Air and surface temperature should be between 50˚F (10˚C) and 80˚F (26.7˚C) for 24 hours following application.

Tools and Materials Required for Sealer Application

- Microfiber Sponges
- Foam Rollers
- Microfiber Cloths

Application of Penetrating Sealer

The Buddy Rhodes Penetrating Sealer can be applied with microfiber cloths or sponges, or with a foam roller. Apply a single, uniform coat and allow to dry completely before moving on to the next step, which usually takes about an hour depending on conditions. Do not apply in direct sunlight when temperature exceeds 80°F (26.7°C). Cleanup when wet with fresh water.

Application of Satin Sealer

The Buddy Rhodes Satin Sealer is applied using microfiber cloths, sponges, or a foam roller. Apply several thin, uniform layers, allowing material to dry between each coat, which usually takes an hour depending on conditions. Test each layer by sprinkling a small amount of water on the sealed surface. If water penetration occurs or if water does not bead up on the surface, apply an additional layer. This test should be performed after each coat. Do not apply in direct sunlight when temperature exceeds 80°F (27°C). Cleanup when wet with fresh water. If dried, use lacquer thinner or xylene.

Application of Beeswax

Apply with a soft microfiber cloth or sponge. Buff with a soft cloth or mechanical buffer to an even sheen.

Care and Maintenance

- Wipe up spills as they occur.
- Clean regularly with recommended non-abrasive cleaners such as Clorox Kitchen Cleaner or Windex Vinegar Multi-Surface Cleaner
- Soft abrasive cleaning sponges can be used such as Scotch-Brite Non-Scratch Scrub Sponges
- Never used a sealed countertop as a cutting board.
- Always use coasters or felt pads below anything with sharp edges.
- Avoid leaving potted plants or objects that will maintain wet contact in one spot with the counters for extended periods of time.
- Reapply beeswax once per month or as necessary to maintain protection and appearance.

Download our Catalog of Concrete Products and Techniques available at:

www.buddyrhodes.com

Call us at: (877) 706-5303 or (610) 252-5800