



QC Etch-Rite (Top-Surface Retarder)

Product Information Bulletin 38.1008P

QC ETCH-RITE

QC ETCH-RITE is a unique product applied to the surface of freshly placed concrete that slows the hardening of the cement by temporarily deactivating the hydration process. It is not a simple sugar-based product but rather a complex combination of materials mixed to a particular pH that counteracts the high pH of Portland cement. This exacting pH makes for consistent depths of etch that are unachievable with traditional exposing products. QC ETCH-RITE develops a polymer film that acts as a water barrier and curing compound which protects the concrete from incidental rain while inhibiting the evaporation of the mix water. The top of the cast concrete has a resulting sand finish unlike any hand-washed or sandblasted concrete finish on the marketplace.

QC ETCH-RITE is available in three degrees of surface etch:

- **Light Etch:** Acid etch to light sandblast. Color coded: Purple
- **Medium Etch:** Aggressive sandblast. Color coded: Blue
- **Aggressive Etch:** Bead blast to scarify. Color coded: Yellow

Uses and Benefits

- Superior consistency
- Environmentally friendly
- User friendly
- Built in rain barrier
- Contains no solvents
- Zero VOCs
- Color coded for ease of use

Before Any Application

1. Follow all of the American Concrete Institute (ACI) recommended good concreting practices including, but not limited to, sub-base preparation, forming, placement and finishing.
2. Use a concrete mix design that includes a minimum of 564 lbs. of cement per yard of concrete (6 sack mix).
3. Avoid the excess use of fly ash, silica fume, and other non-cement based pozzolans. If pozzolans are used, do not exceed 25%.
4. Concrete slump should be 4 to 6 inches.
5. Avoid the use of additional water at time of placement or during concrete finishing.
6. Concrete admixtures such as, but not limited to, integral color, surface dry-shake color hardener, set retarder, non-chloride accelerator, plasticizer, surface evaporative retarder, and water reducer are approved for use with QC ETCH-RITE.
7. To achieve the desired results, we recommend that the concrete finish be steel troweled.

Application

1. Mix QC ETCH-RITE thoroughly before use. Assure there are no solids or clumps prior to use. If solid clumps are present, break them up with a mechanical mixer.
2. Apply QC ETCH-RITE with a good quality pump-style sprayer. Shake occasionally during application to assure proper product consistency.
3. Apply QC ETCH-RITE once the concrete can support light traffic (in socks or soft shoes) but can still be easily marked by dragging your fingers across the surface.

4. Apply QC ETCH-RITE in a light uniform coat at a rate of 200-400 square feet per gallon. A light uniform application of QC ETCH-RITE is superior to a heavy application that is uneven or blotchy.
5. Once dry, QC ETCH-RITE provides excellent protection against intermittent rain.
6. QC ETCH-RITE can also be used on stamped concrete, cast-in-place, curb and gutter, and any precast applications.
7. After 12 to 24 hours, depending on temperature and humidity, clean QC ETCH-RITE from the concrete surface. Use a walk-behind low RPM auto scrubber or low power washer (less than 1500 psi) to expose the concrete surface. In warm conditions, it may be necessary to remove QC ETCH-RITE the same day.
8. Repeat as necessary until the surface is uniform and water runs clear.
9. Rinse with clean water and let the surface thoroughly dry.
10. Once dry, cure or seal according to the application guidelines for the cure or sealer being used.

Surface Protection and Maintenance

- For curing concrete treated with QC ETCH-RITE, choose from a variety of QC cures appropriate to the project's needs: QC CLEAR CURE* or QC CURE & SEAL SB*.
- For sealing concrete, choose from a variety of QC sealers appropriate to the project's needs: QC ULTRA SEAL*, QC ULTRA SEAL 100 VOC*, QC SOLVENT SEAL VOC III*, QC SOLVENT SEAL 18*, QC SOLVENT SEAL 23*, QC SOLVENT SEAL 27*, QC CEMSEAL*, QC PERMASEAL*, QC VOC 100 WB*.

All decorative concrete installations should be maintained on a routine basis with the use of QC sealers to ensure the preservation of a high-quality, long-lasting surface. Maintenance schedules will vary depending on a number of factors, including volume and intensity of traffic, ultraviolet light exposure, geographical location and weather conditions. Colored surfaces should be routinely swept and damp-mopped of dirt/loose debris to avoid unnecessary wear to the surface. Resealing will be required periodically, depending on the amount of foot traffic. As with any other surface treatment, the lifetime of this product is dependent on the care it is given. The use of a qualified flooring maintenance contractor is recommended for resealing, especially in commercial applications.

Limitations

- Final appearance of QC ETCH-RITE treated concrete is highly dependent upon the placing, finishing and application techniques of the installer.
- Apply only when temperature is above 40 °F. Consult QC CONSTRUCTION PRODUCTS prior to application in temperatures greater than 95 °F.
- Do not allow QC ETCH-RITE to freeze.
- In warm conditions, it may be necessary to remove QC ETCH-RITE the same day.

Coverage Rates and Drying Times

Coverage rates may vary depending on the texture, porosity and condition of the concrete, application method, and other local conditions.

QC ETCH-RITE is applied at a rate of 200-400 feet per gallon, per coat.

Drying times will vary depending on surface permeability, temperature, humidity and local conditions.

■ Dry time is approximately 10 to 30 minutes depending on temperature and humidity.

Package Sizes

QC ETCH-RITE is available in 1-gallon, 5-gallon and 55-gallon unit sizes.

■ **Light Etch:** Acid etch to light sandblast. Color coded: Light Purple

■ **Medium Etch:** Aggressive sandblast. Color coded: Light Blue

■ **Aggressive Etch:** Bead blast to scarify. Color coded: Light Yellow

Technical Data

Please refer to corresponding MSDS for hazard-related information.

Form	Liquid
Odor	Slight acetic odor
Color	Opaque – Various Pastel Colors
pH value	<7
Water content	>50%
Total solids/Non-volatiles	<50%
Total VOC	0 grams per liter
Specific gravity	1.06 – 1.1
Freezing point	32 °F
Boiling point	>212 °F (100 °C)
Vapor density	Heavier than air
Vapor pressure	As water
Evaporation rate	<1.0 (Butyl acetate = 1)
Solubility in water	Miscible

Shelf Life and Storage

QC ETCH-RITE has a shelf life of approximately one year if stored in its original container and protected from temperatures less than 32 °F or more than 90 °F for extended periods of time. The ideal storage temperature is 72 °F.

Product Handling

For complete instructions on handling and use, consult the corresponding Material Safety Data Sheet before using product.

Warranty

QC ETCH-RITE, a proprietary product, is warranted to be of uniform quality within manufacturing tolerances. Since control is not exercised over its use, no warranty, expressed or implied, is made as to the effects of such use. Seller's and manufacturer's obligation under this warranty shall be limited to refunding the purchase price of that portion of the material proven to be defective. The user assumes all other risks and liabilities resulting from use of this product. If you have any questions, please contact QC CONSTRUCTION PRODUCTS.

*PLEASE REFER TO THE QC WEBSITE FOR THE CORRESPONDING PRODUCT INFORMATION BULLETIN CONTAINING TECHNICAL AND APPLICATION DATA.

www.qcconstructionproducts.com

For complete information on all QC products—including product information catalogs, product brochures, color charts, technical specifications, sales aids and more—contact QC CONSTRUCTION PRODUCTS.

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