



RapidShield™ 0008-2 Concrete Primer

Application

RapidShield™ 0008-2 Concrete Primer is a 100% solid, UV curing, permanent industrial floor coating intended for use as a primer on concrete floors. The RapidShield™ product range is cured using UV curing units approved for use by Quaker Chemical Corp.

RapidShield™ 0008-2 Concrete Primer is formulated using only reactive 100% solids materials and conforms to LEED Guidelines.

Product Suitability

RapidShield™ 0008-2 Concrete Primer is used as a primer coat on freshly prepared concrete. It is typically used at a nominal film thickness of 5 to 10 mils but may be used to a maximum thickness of 15 mils in a single coat. Multiple coats may be used if film thicknesses over 15 mils are necessary.

RapidShield™ 0008-2 Concrete Primer is not a suitable final coating and must be further over-coated with a RapidShield Topcoat or RapidShield™ Color(s). RapidShield™ Color(s) may be applied directly to RapidShield™ 0008-2 Concrete Primer for purposes such as demarcation lines, designation of safety areas, truck traffic ways and walkways, logos, etc. RapidShield™ 0008-2 Concrete Primer, and those areas that have been coated with RapidShield™ Color, require a final top coat of RapidShield™ 0007 Clear, RapidShield™ 0007-2 Topcoat or RapidShield™ 1001 WB Matte Topcoat before they can be returned to normal service conditions.

Benefits

- VOC compliant (<50 g/l)
- Suitable for low temperature applications
- Instant curing
- Fills lightly textured or pitted concrete surface

Limitations

The minimum floor application temperature for RapidShield™ 0008-2 Concrete Primer is -5°C/23°F and 3°C above dew point. Optimum application temperature is 20°C. Maximum relative humidity is 85%.

RapidShield™ 0008-2 Concrete Primer should not be applied to new or wet concrete floors or used in a single film thickness exceeding 15 mils.

Check For Moisture: Concrete moisture testing must occur. Calcium chloride testing or in-situ relative humidity testing is strongly recommended. Readings must be below 3 pounds per 1,000 ft² over a 24-hour period on the calcium chloride test, or below 70% relative internal concrete humidity (not to exceed 2.0% Core Moisture (CM)). Test methods can be purchased at www.astm.org, see ASTM F1869 or F2170, respectively or follow manufacturer's instructions.

Note: Although testing is critical, it is not a guarantee against future problems. This is especially true if there is no vapor barrier or the vapor barrier is not functioning properly and/or you suspect you may have concrete contamination from oils, chemical spills or excessive salts.

| Property | Test Method | Typical Value |
|---|----------------------|---|
| Typical Properties - Product as Received | | |
| Appearance | GTM 2240 | White Liquid |
| Specific Gravity | GTM 1510 | 1.12 +/- .1 |
| Viscosity (#4 Zahn S90) | GTM 1626 | 50 +/- 5 s @ 77°F |
| VOC (less water and exempts) | Calculated | <0.21 lbs/gal |
| Solids | Theoretical | 100% wt |
| Recommended Thickness | Theoretical | 5 - 10 mils |
| Coverage (@ 8 mils) | Theoretical | 200 ft ² /gal |
| Typical Properties - Cured Film (at 10 mils) | | |
| Appearance | GTM 2240 | Clear Film |
| Adhesion to Concrete (when used as primer) | EN 1542/ASTM D4541-2 | >500 psi |
| Permeability to Water Vapor | ISO 7783-1 & -2 | 0.06 lb/ft ² |
| Coefficient of Thermal Expansion | EN 1770/ASTM C531 | 1.7 in x 10 ⁻⁴ in °R ⁻¹ |



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General Instructions

The following directions and recommendations are intended to serve as a guide and may require modifications to meet local needs:

Thinning: RapidShield™ 0008-2 Concrete Primer is a 100% solids product and is designed to be used as supplied. Thinning of this material voids all product warranties.

Mixing: RapidShield™ 0008-2 Concrete Primer contains a pigment that helps the applicator judge if excessive wet film thickness has been applied (the product becomes hazy). This pigment may settle over time and must be uniformly distributed throughout the coating in order to perform as intended. Consequently, RapidShield™ 0008-2 Concrete Primer should be mixed for approximately five minutes using a power mixer prior to use.

Materials: RapidShield™ 0008-2 Concrete Primer is primarily designed for coating of concrete floors. Please contact your Quaker representative or local CFC for advice on any other substrates.

Surface Preparation: It is essential that RapidShield™ 0008-2 Concrete Primer is applied to sound, clean (free of contaminants) and dry surfaces to ensure maximum adhesion. RapidShield™ 0008-2 Concrete Primer is designed for coating applications which require typically 5 to 10 mils per coat. The product is used when it is desired that the surface texture of the substrate be completely hidden or when the substrate is lightly textured or pitted.

The concrete surface should be hard, sound and free from dust and other barrier materials such as paint, wax, grease, oil and similar contaminants prior to mechanical preparation. Surfaces should be mechanically prepared, either by grinding or enclosed dust free shot blasting equipment (or similar) and vacuumed clean prior to applying. Ideally a combination of enclosed blasting and spiral/multi-headed grinding would leave a flat clean surface.

Application: By roller or squeegee. Use with adequate ventilation. Avoid breathing mist or vapors.

RapidShield™ 0008-2 Concrete Primer should be used in a well ventilated area. Consult Material Safety Data Sheet for handling and safety information.

Shelf life: Shelf life is limited to one year in the original packaging and when stored under conditions described below.

Curing instructions

Only UV curing equipment authorized by Quaker Chemical Corporation and verified to be in proper operating condition may be used to cure RapidShield™ Products. Curing instructions and parameters are supplied during the (CFC) Certified Flooring Contractor Training Session. Failure to comply with any of these conditions may impact product performance.

Storage, Safety & Disposal

Quaker supplies this quality product in pails. Other packaging can be made available by Quaker or by your local CFC upon request.

RapidShield™ 0008-2 Concrete Primer should be stored in dry conditions and protected from direct sunlight. Avoid temperatures below 0°C and above 35°C during storage. For the purposes of shipping, RapidShield™ 0008-2 Concrete Primer is resistant to temperatures down to -40°C.

RapidShield™ 0008-2 Concrete Primer is unlikely to present any significant health or safety hazard when used as recommended by Quaker. Good standards of personal and industrial hygiene are to be maintained by the user (see Material Safety Data Sheet). In order to protect the environment, the product should be safely disposed by a licensed contractor. The packaging material should be handled by a recognized reconditioning firm.

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RapidShield™

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TECHNICAL DATA SHEET RAPIDSHIELD™