

# RapidShield™ 0008 High Build

## **Application**

RapidShield™ 0008 High Build is a 100% solid, UV curing, permanent industrial floor coating intended for use as primer/sealer on concrete floors. The RapidShield™ product range is cured using proprietary Quaker UV curing units.

RapidShield™ 0008 High Build is formulated using only reactive 100% solids materials in order to conform to LEED Guidelines.

## **Product Suitability**

RapidShield™ 0008 High Build is used as a sealer/ primer coat on freshly prepared concrete. RapidShield™ 0008 High Build is used when the concrete is pitted or has small divots. It should be used at a nominal film thickness of 10 mils. Multiple coats may be used if film thicknesses over 10 mils are necessary. RapidShield™ Colors are applied directly to RapidShield™ 0008 High Build for purposes such as demarcation lines, designation of safety areas, truck traffic ways and walkways.

RapidShield™ 0008 High Build that has been coated with RapidShield™ Colors requires a final top coat of RapidShield™ 0007 Clear. RapidShield™ 0007 Clear may be applied directly over top of RapidShield™ 0008 High Build as a top coat or over top of RapidShield™ 0008 High Build that has been coated with RapidShield™ Colors.

## **Benefits**

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

#### Limitations

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

RapidShield™ 0008 High Build should not be applied to new or wet concrete floors or used in a single film thickness exceeding 12 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	Clear Amber liquid
Specific Gravity	GTM 1510	1.08 +/02
Viscosity (#3 Zahn S90)	GTM 1626	70 +/- 10 s @ 77°F
VOC	Calculated	0 lbs/gal
Solids (100%)	N/A	100% Wt.
Recommended Thickness	N/A	5 - 10 mils
Coverage	N/A	160 - 321 ft²/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	>580 psi
Permeability to Water Vapor	ISO 7783-1 & -2	0.06 lb/ft <sup>2</sup>
Coefficient of Thermal Expansion	EN 1770/ASTM C531	1.67 in x 10 <sup>-4</sup> in °R <sup>-1</sup>





# RapidShield™ 0008 High Build



#### **General Instructions**

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

Thinning: Use as received.

Mixing: RapidShield™ 0008 High Build is a 100% solids product and is designed to be used as supplied. The product should be stirred for approximately five minutes using a power mixer prior to use.

Materials: RapidShield™ 0008 High Build 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 High Build is applied to sound, clean and dry surfaces to ensure maximum adhesion. RapidShield™ 0008 High Build is designed for coating application, which requires typically 10-12 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 ideal substrate for application is a lightly textured, clean concrete surface.

The concrete surface should be hard, sound and free from dust and other barrier materials such as paint, wax, grease, oil and similar contaminates 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.

Any joints or cracks in the concrete base should be repaired and cleaned prior to application.

Application: By roller or squeegee. Use with adequate ventilation. Avoid breathing mist or vapors. RapidShield™ 0008 High Build 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<sup>TM</sup> 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<sup>™</sup> 0008 High Build 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<sup>™</sup> 0008 High Build is resistant to temperatures down to -40°C.

RapidShield™ 0008 High Build 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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