



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 (where floors are stated = 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 comply with the European directive 2004/42/CE, which limits volatile solvent contents in paints and varnishes. It conforms 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 250 µm. Multiple coats may be used if film thicknesses over 250 µm are necessary. RapidShield™ Colours 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™ Colours requires a final top coat of RapidShield™ 0007 Clear or RapidShield 1001 WB Matte Topcoat. 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™ Colours.

Benefits

- VOC compliant (<50 g/l)
- 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 and 3°C above dew point. Optimum application temperature is 20°C. Maximum relative humidity is 85%.

Where high impact and/or aggressive wear resistance are required, please consult your Quaker representative of local CFC (Certified Flooring Contractor).

RapidShield™ 0008 High Build should not be applied to new or wet concrete floors; floor humidity above 200m (CR1.5, 75RH) would not be suitable for the RapidShield™ product.

RapidShield™ 0008 High Build should not be used in a single film thickness exceeding 300 µm.

| Property | Test Method | Typical Value |
|--|------------------------|---|
| Typical Properties - Product as Received | | |
| Appearance | GTM 2240 | Slightly Opaque, Whitish Liquid |
| Specific Gravity | GTM 1510 | 1.08 ± 0.02 kg/m ³ , 20°C |
| Viscosity (#2 Zahn Cup) | GTM 1626 | 65 ± 15 s, 25°C |
| VOC (theoretical) | Calculated | 0 g/l |
| Solids | N/A | 100% wt |
| Recommended Thickness | N/A | 125 - 250 µm |
| Coverage | N/A | 3.9 - 7.9 m ² /l |
| Typical properties - Cured film at 250 µm | | |
| Appearance | GTM 2240 | Clear film |
| Adhesion to Concrete (when used as primer) | EN 1542, ASTM D 4541-2 | >4 N/mm ² |
| Permeability to Water Vapor | ISO 7783-1 & -2 | 0.03 g/cm ² |
| Coefficient of Thermal Expansion | EN 1770, ASTM C 531 | 3 x 10 ⁻⁴ cm/cm °K ⁻¹ |



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Check For Moisture: Concrete moisture testing must occur. Calcium chloride testing or in-situ relative humidity testing is strongly recommended. Readings must be below 13.5 N per 100 square meters during a 24 hour period for 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.

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. If the storage container has been left stationary for any length of time a light mixing or shaking of the container is recommended.

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 100 to 250 µm 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 contaminants prior to mechanical preparation. Contaminated 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 vapours. 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™ 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 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™ 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.

Prior to using this product, consult the Material Safety Data Sheet for instructions regarding safe handling and environmental issues. The information contained herein is based on data available to us and is believed to be accurate. HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY USE, OR ANY OTHER WARRANTY IS EXPRESSED OR TO BE IMPLIED, REGARDING THE ACCURACY OF THESE DATA, THE RESULTS TO BE OBTAINED FROM THE USE THEREOF, OR THE HAZARDS CONNECTED WITH THE USE OF THE PRODUCT. Quaker Chemical Corporation assumes no liability for any alleged ineffectiveness of the product or any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is solely attributable to negligence on the part of Quaker Chemical Corporation.

RapidShield™

www.rapidshield.com

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