



RapidShield™ 0007-2 Topcoat

Application

RapidShield™ 0007-2 Topcoat is a high gloss 100% solid, UV curing, permanent industrial floor coating intended for use on concrete floors. The RapidShield™ product range is cured using proprietary Quaker UV curing units.

RapidShield™ 0007-2 Topcoat is formulated using only reactive 100% solids materials in order to conform to LEED Guidelines.

Product Suitability

RapidShield™ 0007-2 Topcoat RapidShield™ 0007-2 Topcoat is used as a final topcoat over top of RapidShield™ 0008-2 Concrete Primer, RapidShield™ Color(s) or RapidShield™ 0007 Clear (applied as a primer/ sealer).

RapidShield™ 0007-2 Topcoat may also be used as a single coat dust sealer coat on power float floors. It is designed to provide a light to medium duty, high gloss, easily cleaned surface in industrial environments. Tire marks left by fork lift truck traffic are easily removed. It is suitable for use in industrial workshops, production warehouses, processing areas, retail stores, etc.

Benefits

- VOC compliant (<50 g/l)
- Ideal for low temperature applications
- Easily cleaned
- Instant curing
- High gloss film
- Superior wear resistance

Property	Test Method	Typical Value
Typical Properties - Product as Received		
Appearance	GTM 2240	Milky Amber
Specific Gravity	GTM 1510	1.14 +/- .1
Viscosity (#3 Zahn S90)	GTM 1626	23 +/- 2 s @ 77°F
VOC (less water and exempts)	Calculated	<0.21 lbs/gal
Solids	Theoretical	100% wt
Recommended Thickness	Theoretical	4-6 mils
Coverage	Theoretical	267 - 400 ft ² /gal
Typical Properties - Cured Film (at 5 mils)		
Appearance	GTM 2240	Clear Film
MEK Resistance*	ASTM D 5402	>100 Double Rubs
Pencil Hardness	ASTM D 3363	>2H
Gloss (at 60° observation)	ASTM D 523 - 08	>70 Gloss Units
Intercoat Adhesion**	ISO 2409, ASTM D3359	100% Adhesion
Permeability to Water Vapor	ISO 7783-1 & -2	0.06 lb/ft ²
Pendulum Slip Resistance (dry)	BS 7976-1:2002	TBD
Coefficient of Friction (for lb-f)	ASTM D 1894-08, ASTM F 609-05, ASTM C 1028-07	0.65+
Abrasion Resistance (1000 cycles, C17, 1000 g)	ISO 5470-1	<100 mg wt. loss

* Refer to our Chemical Resistance Sheet for additional information.

** on top of properly applied and cured RapidShield™ Colors, RapidShield™ 0008 High Build or RapidShield™ 0008-02 Concrete Primer



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Slip Resistance

RapidShield™ 0007-2 Topcoat meets the requirements of OSHA for flat surfaces. To increase slip resistance, a fine-to-medium textured finish can be achieved by the use of specific fine aggregates. During the final Topcoat application and prior to UV curing, an aggregate can be scattered and back rolled into the wet surface thereby encapsulating the aggregate in the coating upon cure. The size and quantity of aggregate, as well as the Topcoat film build, will affect the non-slip properties of the final coating.

Limitations

The minimum floor application temperature for RapidShield™ 0007-2 Topcoat is -5°C/23°F and 3°C above dew point. Optimum application temperature is 20°C. Maximum relative humidity is 85%.

RapidShield™ 0007-2 Topcoat should not be applied to new or wet concrete floors or used in a single application film thickness exceeding 7 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 square feet 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.

Please consult your Quaker representative or local CFC (Certified Flooring Contractor) when an application requires high impact and/or aggressive wear resistance.

General Instructions

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

Thinning: RapidShield™ 0007-2 Topcoat is a 100% solids product and is designed to be used as supplied. Thinning of this material voids all product warranties.

Mixing: RapidShield™ 0007-2 Topcoat is a 100% solids product and is designed to be used as supplied. This product contains certain ingredients that may settle or float over time. Uniformity of the product is essential to achieve optimum performance of the product. RapidShield™ 0007-2 Topcoat should be mixed for approximately five minutes using a power mixer prior to use.

Materials: RapidShield™ 0007-2 Topcoat 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 or RapidShield™ 0007 Clear (when applying as a primer) is applied to sound, clean (free of contaminants) and dry surface 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.



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General Instructions Continued

RapidShield™ 0007-2 Topcoat may be used as a single coat dust seal coat, typically at 3 to 6 mils thick. If RapidShield™ 0007-2 Topcoat is applied as a dust seal coat it may not be top coated unless it is first mechanically abraded. See your Quaker representative for further information.

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

Application: By roller or squeegee. RapidShield™ 0007-2 Topcoat should be used in a well ventilated area. Avoid breathing mist or vapors. 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™ 0007-2 Topcoat 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™ 0007-2 Topcoat is resistant to temperatures down to -40°C.

RapidShield™ 0007-2 Topcoat 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 of by a licensed contractor. The packaging material should be handled by a recognized reconditioning firm.



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