RUST-OLEUM®

Concrete Protection Systems

8000 SYSTEM OVERKRETE® HD

100% SOLIDS EPOXY HEAVY-DUTY FLOOR TOPPING

DESCRIPTION

OverKrete® HD is a heavy-duty floor topping, designed for moderate chemical and severe mechanical abuse. It is essentially odorless and is suitable for use in federally inspected food and beverage facilities. OverKrete® HD is a tough, abrasion resistant, virtually 100% solids copolymer resin system. When applied at a thickness of 1⁄4 inch, OverKrete® HD will withstand steel wheeled traffic and severe mechanical abuse.

This CPS Type II product is typically installed by factory trained contractors. Be sure you are fully aware of all application procedures and have all the required application equipment available prior to beginning application of this product.

FEATURES AND BENEFITS

- Suitable for food and beverage facilities: Essentially odorless and nonporous. OverKrete® HD will not support bacterial growth, making it ideal for food and beverage applications.
- Freedom from porosity: OverKrete® HD is nonporous and does not require a sealer coat to prevent chemical penetration to the concrete. OverKrete® HD is a resin rich floor topping material. This feature allows the material to completely absorb and flow around the broadcasted aggregate, which eliminates 99% of all porosity. With this benefit and proper application, consistent physical properties will be achieved.
- Ease of application: OverKrete® HD flooring material can be applied by a trowel or screed rake. It can be applied at full thickness in one pass over the floor; no primer or sealer is required. However, if easier surface cleaning is desired, glaze coats are recommended.
- Ability to bond to 10 day old concrete: OverKrete® HD is typically applied to new concrete that has been cured for a minimum of 28 days at a minimum of 70°F. However, OverKrete® HD may be applied to 10 day old concrete. For details and bonding limitations, consult the technical service department. The bond strength of the OverKrete® HD to the concrete will exceed the tensile and shear strengths of the concrete itself.

FEATURES AND BENEFITS (cont.)

- Adhesion to damp concrete: OverKrete® HD can be applied to damp concrete (with no standing water). Its bond strength is lessened somewhat, but still exceeds the tensile and shear strengths of the concrete. This unique characteristic of since OverKrete® HD eliminates a major uncertainty in applying flooring moisture conditions are difficult to control in the field.
- Nonwicking: OverKrete HD applied to concrete at 1⁄4 inch will not crack or craze when subjected to impact from heavy loads. This characteristic is built into the resin system without the need for fiberglass cloth, eliminating the problem of chemicals wicking along the length of the fibers, causing deterioration and delamination.
- Corrosion resistance: While the highest corrosion resistant Rust-Oleum Concrete Protection Systems products are OverKote® HD and OverKote® Plus HD, OverKrete® HD is the economical choice where less severe chemical service is encountered. The Corrosion Resistance Chart in the Product Recommendation Guide is based on continuous exposure for unlimited service life at ambient temperatures. For chemicals not listed on the chart, consult your Rust-Oleum contract flooring representative.
- Rapid turn around time: At application temperatures above 65°F, the OverKrete® HD floor can support foot traffic in 10-14 hours, full physical use after 24-48 hours, and full chemical exposure in 4 days.
- For vertical (wall) application: Use OverKote® HD V at 1/8 inch because the standard OverKrete® HD product cannot be applied to vertical surfaces. OverKrete® HD would slump and sag before curing.
- The minimum application temperature for OverKrete® HD is 65°F. Use OverKrete® 45/65 for temperatures ranging from 45-65°F. It will apply and cure with the same ease and speed as the standard OverKrete® HD. See the OverKrete® 45/65 Technical Data Sheet for more information.

Note: Application temperatures refer to the air, material, aggregate, and the floor.

AVAILABLE COLORS

OverKrete® HD is available in standard colors shown separately on the Product Color Guide. Custom colors are available upon request.

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PACKAGING

20 sq. ft. kit at 1/4 inch thickness

Liquid (total A & B)	1.14 gallon (4.31 L)
Sand	40 lbs. (18.16 kg)

100 sq. ft. kit at 1/4 inch thickness

Liquid (total A & B)	5.72 gallon (21.62 L)
Sand	200 lbs.: sold separately (90.80 kg)

1000 sq. ft. kit at 1/4 inch thickness

Liquid (total A & B)	57.2 gallon (216.2 L)
Sand	2000 lbs.: sold separately (908.0 kg)

OverKote HD V 25 sq. ft. kit at 1/8 inch thickness

Liquid (total A & B)	1.9 gallon (7.18 L)
Sand	18.5 lbs. (8.40 kg)

Sand quantities listed are exact.
Actual usage typically requires 10-15% more.

COMPANION PRODUCTS

BlokFil
OverDrive
OverKrete® S/OP
OverKrete® Xtra S/OP/V

PRODUCT APPLICATION

SURFACE PREPARATION

NEW CONCRETE: Laitance must be removed by muriatic acid etching or shot blasting. On concrete that has been cured with curing compounds or has had a hard steel troweled finish, shotblasting, sandblasting or other methods of mechanical preparation will be required. New concrete should be cured for a minimum period of 28 days at 70°F prior to application.

EXISTING CONCRETE: Concrete must be clean and sound. Old coatings and toppings must be removed. Concrete must be clean and free of previous coatings, oil, wax, paint, and other contaminants. The surface of the concrete must be clean and properly profiled to enable the coating to achieve maximum bond. Water soluble contaminants can be hosed off with water. Some water insoluble materials are difficult to remove and may require sandblasting, scabbling, or other methods of removal.

For either new or existing concrete, when preparation is complete, the surface texture should be similar to 60-80 grit sandpaper.

Concrete must be visibly dry at time of application.

PRODUCT APPLICATION (cont.)

MIXING EQUIPMENT

20 sq. ft. kit: Drill motor and CPS 4 mixer.

25 sq. ft. kit: 5 gallon bucket mixer that rotates the pail and has a side and bottom scraping attachment.

100 sq. ft. kit: 2.5-3.0 cubic foot mortar mixer or 100 sq. ft batch mixer available through Rust-Oleum.

1000 sq. ft. kit: Use same as 100 sq. ft. kit except parts must be pre-measured to 100 sq. ft. batch sizes.

Important: Hand mixing will produce inconsistent results and is not an approved method.

MIXING

Note: Before starting, ensure that the material, concrete surface, and the ambient air are all at 65-90°F. Mixing ratios are provided on container labels and page 4.

Part “A” preparation: Premix part “A” to disperse pigment to ensure consistent color. Roll drums or use a drum mixer to premix drummed material before use.

Add part “A” (resin) to the mixer. Mix only long enough to clean the mixer from the previous batch, about 30 seconds.

Add part “B” (hardener) to part “A”. Mix for about 30 seconds.

Add part “C” (silica) to part “A” and “B”. Mix until homogenous, about 1 to 2 minutes. Immediately pour on floor.

THINNING

No thinning required.

FILLING AND PATCHING

When filling or patching holes or voids in the concrete surface prior to the actual application, use the same procedures as above with the following exceptions: add part “D” (silica) directly to the mix before pouring. TurboKrete®, OverDrive®, or Blokfil™ may also be used.

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PRODUCT APPLICATION (cont.)

APPLICATION EQUIPMENT

Trowel or screed rake

APPLICATION

Use a trowel or screed rake to spread material over required area. Spike roll or trowel to remove rake tracks. Within 5 to 15 minutes, broadcast part "D" (silica) until flooring is saturated.

More detailed information can be found in the Application Instructions (Form #AI9800), which should be consulted prior to beginning.

CLEAN UP

Xylene can be used to remove material from equipment if it is cleaned before the material has started to set up. Otherwise, stronger solvents will be necessary.

SHELF LIFE

Unopened, properly stored containers: 2 years

SAFETY

OverKrete® HD contains amine curing agents. Avoid skin contact by using protective clothing and gloves. In case of eye contact or ingestion, contact a physician immediately.

OverKrete® HD is intended for industrial use only. This product should not be used by untrained or non-professional personnel.

MATERIAL SAFETY DATA SHEETS

The Material Safety Data Sheets can be found at www.rustoleum.com. It is strongly recommended that the Material Safety Data Sheets be read by all persons handling OverKote® HD.

PERFORMANCE CHARACTERISTICS

COMPRESSIVE STRENGTH

METHOD: ASTM C579

TYPICAL VALUE: 11,800 psi

FLEXURAL STRENGTH

METHOD: ASTM C580

TYPICAL VALUE: 4,500 psi

MODULUS OF ELASTICITY

METHOD: ASTM C580

TYPICAL VALUE: 13.2×10^5 psi

PERFORMANCE CHARACTERISTICS

TENSILE STRENGTH

METHOD: ASTM C307

TYPICAL VALUE: 2,200 psi

BOND STRENGTH TO CONCRETE

METHOD: ASTM D4541

TYPICAL VALUE: Exceeds tensile strength of concrete (concrete fails first)

TABER ABRASION

METHOD: ASTM 4060, CS 17

TYPICAL VALUE: Loss/1000 cycles = 22 mg.

WATER ABSORPTION

METHOD: ASTM C413

TYPICAL VALUE: 0.1% maximum

LINEAR SHRINKAGE

METHOD: ASTM C531

TYPICAL VALUE: 0.24% maximum

LINEAR COEFFICIENT OF THERMAL EXPANSION

METHOD: ASTM C531

TYPICAL VALUE: 3.94×10^{-5} in./in./°F

FLAMMABILITY

METHOD: ASTM D635

TYPICAL VALUE: 1.2 cm./min.

IMPACT RESISTANCE

METHOD: Mil-D-3134J

TYPICAL VALUE: Satisfactory per 3.15

COEFFICIENT OF FRICTION

METHOD: ASTM D2047

TYPICAL VALUE: 0.77 unglazed

FILM HARDNESS, SHORE D

METHOD: ASTM D2240

TYPICAL VALUE: 88

POROSITY WITH NO SEALER COAT

METHOD: NACE Stand TM0174

TYPICAL VALUE: 0.0

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PHYSICAL PROPERTIES

		OVERKOTE® HD
Resin Type		Epoxy
Mixing Ratio		2.3:1
Induction Period		None
Pot Life @ 77°F & 50% RH		20 minutes
Dry Times at 70-80°F (21-27°C) and 50% rel. hum.	**Foot Traffic**	10-14 hours
	Vehicle Traffic	24-48 hours
	Full Cure*	4-5 days

*Coating achieves its full physical can chemical resistant properties.

Calculated values are shown and may vary slightly from the actual manufactured material.

The technical data and suggestions for use contained herein are correct to the best of our knowledge, and offered in good faith. The statements of this literature do not constitute a warranty, express, or implied, as to the performance of these products. As conditions and use of our materials are beyond our control, we can guarantee these products only to conform to our standards of quality, and our liability, if any, will be limited to replacement of defective materials. All technical information is subject to change without notice.

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