



**8600 SYSTEM  
OVERKRETE® 45/65 HD  
LOW TEMPERATURE EPOXY HEAVY-DUTY FLOOR TOPPING**

**DESCRIPTION AND USES**

OverKrete® 45/65 HD is a heavy-duty floor topping, designed for application in temperatures between 45-65°F. Similar to OverKrete HD, it is designed for areas in moderate chemical exposure and severe mechanical abuse. OverKrete 45/65 HD is a tough, abrasion resistant, virtually 100% solids copolymer resin system. When applied at a thickness of 1/4", OverKrete 45/65 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 equipment available prior to beginning the installation of this product.

**FEATURES AND BENEFITS**

- Suitable for food and beverage facilities: Essentially odorless and nonporous. OverKrete 45/65 HD will not support bacterial growth, making it ideal for food and beverage applications.
- Freedom from porosity: OverKrete 45/65 HD is nonporous and does not require a sealer coat to prevent chemical penetration to the concrete. OverKrete 45/65 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 45/65 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 45/65 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 45/65 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 45/65 HD to the concrete will exceed the tensile and shear strengths of the concrete itself.
- Non-wicking: OverKrete 45/65 HD applied to concrete at 1/4" 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.

**FEATURES AND BENEFITS (cont.)**

- Corrosion resistance: While the highest corrosion resistant Rust-Oleum Concrete Protection Systems products are OverKrete HD and OverKrete Plus HD, OverKrete HD is the economical choice where less severe chemical service is encountered. OverKrete 45/65/ HD offers chemical resistance equal to that of OverKrete HD. 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 CPS representative.
- Rapid turn-around time: At application temperatures above 65°F, the OverKrete 45/65 HD floor can support foot traffic in 8-10 hours, full physical use after 24-48 hours, and full chemical exposure in 4 days.  
Use this floor topping for temperatures ranging from 45-65°F. It will apply and cure with the same ease and speed as the standard OverKrete HD.
- For vertical (wall) application: Use OverKrete 45/65 HDV at 1/8" because the standard OverKrete 45/65 HD product cannot be applied to vertical surfaces.
- Note: Application temperatures refer to the air, material, aggregate, and the floor.

**AVAILABLE COLORS**

8600 System OverKrete 45/65 HD is available in twelve standard colors. Custom colors are available upon request. Refer to the Rust-Oleum color chart. Product codes listed below are 20 sq.ft. Kits and 100 sq.ft. Kits. Standard colors are also available for 1000 sq.ft. Kits. Aggregate is sold separately for 100 and 1000 sq.ft. Kits.

<b>20 sq.ft. Kit</b>	<b>100 sq.ft. Kit</b>	<b>Description</b>
236980	236981	Natural
236989	236990	National Blue
236995	236996	Light Green
237001	235925	Safety Yellow
237007	237002	Tile Red
237013	237014	Black
237019	237020	Dunes Tan
237025	237026	Dark Gray
237031	237032	Light Gray
237037	237038	Navy Gray
237043	237044	White
241704	241707	Super Light Gray



## TECHNICAL DATA

### 8600 SYSTEM OVERKRETE® 45/65 HD LOW TEMPERATURE EPOXY HEAVY-DUTY TOPPING

#### PACKAGING

##### 20 sq. ft. kit at ¼" thickness

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

##### 100 sq. ft. kit at ¼" thickness

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

##### 1000 sq. ft. kit at ¼" thickness

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

##### OverKrete 45/65 HDV 25 sq. ft. kit at ⅛" 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 45/65 S/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 trowelled finish, shot blasting, sandblasting or other methods of mechanical preparation will be required. New concrete should be cured for a minimum period of 10 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.

##### APPLICATION EQUIPMENT

Trowel, cam rake 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.



## TECHNICAL DATA

### 8600 SYSTEM OVERKRETE® 45/65 HD LOW TEMPERATURE EPOXY HEAVY-DUTY TOPPING

#### PRODUCT APPLICATION (cont.)

##### 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 45/65 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 45/65 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](http://www.rustoleum.com). It is strongly recommended that the Material Safety Data Sheets be read by all persons handling OverKrete 45/65 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:  $13.2 \times 10^5$  psi

##### 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)

#### PERFORMANCE CHARACTERISTICS (cont.)

##### 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:  $3.94 \times 10^{-5}$  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



# TECHNICAL DATA

## 8600 SYSTEM OVERKRETE® 45/65 HD LOW TEMPERATURE EPOXY HEAVY-DUTY TOPPING

### PHYSICAL PROPERTIES

		OVERKRETE 45/65 HD
<b>Resin Type</b>		Polyamine Converted Epoxy
<b>Pigment Type</b>		Varies depending on color
<b>Solvents</b>		Furfuryl Alcohol
<b>Weight*</b>	<b>Per Gallon</b>	9.35-9.45 lbs.
	<b>Per Liter</b>	1.12-1.13 kg
<b>Solids*</b>	<b>By Weight</b>	100%
	<b>By Volume</b>	100%
<b>Volatile Organic Compounds*</b>		<165 g/l (1.37 lbs./gal.)
<b>Recommended Dry Film Thickness (DFT) Per Coat</b>		250 mils (¼" thickness)
<b>Wet Film to Achieve DFT</b>		250 mils (¼" thickness)
<b>Practical Coverage at Recommended DFT</b>		200 square feet per 1.14 gallons 100 square feet per 5.72 gallons
<b>Mixing Ratio</b>		6.9:1 base to activator by volume
<b>Induction Period</b>		None
<b>Pot Life</b>		20 minutes
<b>Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity</b>	<b>Foot Traffic</b>	10-14 hours
	<b>Vehicle Traffic</b>	24-48 hours
	<b>Full Cure**</b>	4-5 days
<b>Shelf Life</b>		2 years
<b>Flash Point</b>		>185°F (85°C)
<b>Safety Information</b>		<b>CAUSES NOSE, THROAT, EYE AND SKIN IRRITATION. CAUSES EYE AND SKIN BURNS. HARMFUL IF SWALLOWED. MAY CAUSE ASTHMA, SKIN SENSITIZATION OR OTHER ALLERGIC RESPONSES. FOR INDUSTRIAL OR COMMERCIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN. SEE THE PRODUCT MATERIAL SAFETY DATA SHEET (MSDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.</b>

\* Activated material

\*\*Coating achieves its full physical and 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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