

RUST-OLEUM®



8300 SYSTEM

OVERKOTE® PLUS HD

NOVOLAC EPOXY HEAVY-DUTY FLOOR TOPPING

DESCRIPTION AND USES

OverKote® Plus HD is a heavy-duty floor topping, designed for moderate chemical and severe mechanical abuse. OverKote Plus HD is a tough, abrasion resistant, virtually 100% solids copolymer resin system. When applied at a thickness of 1/4", OverKote Plus 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. OverKote Plus HD will not support bacterial growth, making it ideal for food and beverage applications.
- Freedom from porosity: OverKote Plus HD is nonporous and does not require a sealer coat to prevent chemical penetration to the concrete. OverKote Plus 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: OverKote Plus 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: OverKote Plus HD is typically applied to new concrete that has been cured for a minimum of 28 days at a minimum of 70°F. However, OverKote Plus HD may be applied to 10 day old concrete. For details and bonding limitations, consult the technical service department. The bond strength of the OverKote Plus HD to the concrete will exceed the tensile and shear strengths of the concrete itself.
- Adhesion to damp concrete: OverKote Plus 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 OverKote Plus HD eliminates a major uncertainty in applying flooring moisture conditions are difficult to control in the field.

FEATURES AND BENEFITS (cont.)

- Non-wicking: OverKote Plus 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.
- Corrosion resistance: OverKote Plus HD has the highest overall chemical resistance of the Rust-Oleum Concrete Protection Systems product line. 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 OverKote HD floor can support foot traffic in 5-8 hours, full physical use after 12-24 hours, and full chemical exposure in 4 days.
- For vertical (wall) application: Use OverKote Plus HDV at 1/8" because the standard OverKote Plus HD product cannot be applied to vertical surfaces.

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

AVAILABLE COLORS

8300 System OverKote Plus 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.

<u>20 sq.ft. Kit</u>	<u>100 sq.ft. Kit</u>	<u>Description</u>
236437	236438	Natural
236446	236447	National Blue
236452	236453	Light Green
236458	236459	Safety Yellow
236464	236465	Tile Red
236470	236471	Black
236476	236477	Dunes Tan
236482	236483	Dark Gray
236488	236489	Light Gray
236494	236495	Navy Gray
236500	236501	White
241678	241680	Super Light Gray



TECHNICAL DATA

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PACKAGING

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

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

100 sq. ft. kit at 1/4" 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" 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" 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
OverKote Plus S
OverKote Plus 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 30" Bird cage 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 square foot batch mixer.

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

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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

OverKote Plus 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.

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

SAFETY DATA SHEETS

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

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: 3.94×10^{-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

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PHYSICAL PROPERTIES

		OVERKOTE PLUS HD
Resin Type		Polyamine Converted Epoxy
Pigment Type		Varies depending on color
Solvents		Benzyl Alcohol
Weight*	Per Gallon	9.6-9.7 lbs.
	Per Liter	1.15-1.16 kg
Solids*	By Weight	100%
	By Volume	100%
Volatile Organic Compounds*		<70 g/l (0.58 lbs./gal.)
Recommended Dry Film Thickness (DFT) Per Coat		¼" thickness (250 mils)
Practical Coverage at Recommended DFT		20 square feet at ¼" thickness per 1.14 gallons 100 square feet at ¼" thickness per 5.72 gallons
Mixing Ratio		4.8:1 base to activator by volume
Induction Period		None
Pot Life @ 70-80°F (21-27°C) & 50% Relative Humidity		20 minutes
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	Foot Traffic	5-8 hours
	Vehicle Traffic	12-24 hours
	Full Cure**	4 days
Shelf Life		2 years
Flash Point		>185°F (85°C)
Safety Information		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 SAFETY DATA SHEET (SDS) AND LABEL WARNINGS FOR ADDITIONAL SAFETY INFORMATION.

* Activated material

**Coating achieves its full physical and chemical resistant properties.

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

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