OVERKOTE® PLUS HD



CONCRETE PROTECTION SYSTEMS HEAVY DUTY INDUSTRIAL FLOOR TOPPING OVERKOTE PLUS HD

DESCRIPTION

OVERKOTE PLUS HD is a heavy-duty floor topping material, designed for the most severe chemical service, including immersion in 98% sulfuric acid and many other strong chemicals and solvents. OVERKOTE PLUS HD is a tough, abrasion resistant, virtually 100% solids copolymer resin system. When applied at a thickness of ¼ inch, OVERKOTE PLUS HD will withstand steel wheeled traffic and severe mechanical abuse.

FEATURES AND BENEFITS

- Suitable for food and beverage facilities: Being essentially odorless and nonporous, OverKote Plus HD will not support bacterial growth, making it ideal for food and beverage applications.
- Freedom from porosity: Porosity is a common cause of flooring failures. 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. Sealer coats are necessary on porous floor toppings and are subject to breakdown due to wear, fracture, or chemical attack. When this occurs on porous flooring, it can result in concrete degradation, topping delamination and ground contamination.
- 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 OverKote Plus HD eliminates a major uncertainty in applying flooring since moisture conditions are difficult to control in the field.

- Nonwicking: OverKote Plus HD applied to structurally sound 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: 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 contract flooring representative.

- **Rapid turn around time**: At application temperatures above 65°F, the OverKote Plus 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 V at 1/8" because the standard OverKote Plus HD product cannot be applied to vertical surfaces. OverKote Plus HD would slump and sag before curing.
- Note: Application temperatures refer to the air, material, aggregate, and the floor.

AVAILABLE COLORS

OverKote Plus HD is available in ten standard colors shown separately on the Product Color Guide. Custom colors are available upon request.



CONCRETE PROTECTION SYSTEMS OVERKOTE PLUS HD

PACKAGING

20 Sq. Ft. Kit @ ¼ inch thickness		
Liquid (Total A & B) Sand	1.14 Gallon 40 Pounds	
100 Sa Ft Kit@¼incl	h thickness	

Liquid (Total A & B) Sand

ckness 5.72 Gallon 200 Pounds - Sold separately

1000 Sq. Ft. Kit @ ¼ inch thicknessLiquid (Total A & B)57.2 GallonSand2000 Pounds - Sold separately

OverKote Plus V 25 Sq. Ft. Kit @ 1/8 inch thicknessLiquid (Total A & B)1.9 GallonSand18.5 Pounds

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

COMPANION PRODUCTS

BlokFil OverDrive OverKote Plus E-100 OverKote Plus E-100 V

PREPARATION, MIXING, AND 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 may be damp, as long as there is no standing water at time of application.

MIXING EQUIPMENT

20 Sq. Ft. Kit: Drill motor and CPS 4 mixing whip

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 $^{1\!\!/}_2$ to 3 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 on page 4.

<u>Part "A" Preparation:</u> Premix Part A to disperse pigment to ensure consistent color. Roll drums or use a drum mixer to pre-mix 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 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 **OverKote Series Application Instructions (Form #AI9800),** which should be consulted prior to beginning.



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PREPARATION, MIXING, AND APPLICATION (cont'd)

<u>Vertical Surfaces Application</u>: Use OverKote Plus V at 1/8" because the standard OverKote Plus HD product cannot be applied to vertical surfaces. OverKote Plus HD would slump and sag before curing.

For special textures or decorative effects, consult the application instructions.

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. Refer to the Material Safety Data Sheets (MSDS) for clean up materials.

If there are any questions on the use of this product, please consult our technical service department.

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.

Material Safety Data Sheets

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



CONCRETE PROTECTION SYSTEMS OVERKOTE PLUS HD

PERFORMANCE / PHYSICAL STRENGTH CHARACTERISTICS

PROPERTY	TYPICAL VALUE
COMPRESSIVE STRENGTH	15 200 pai
METHOD: ASTM C579	15,200 psi
FLEXURAL STRENGTH	6 400 pci
METHOD: ASTM C580	0,400 psi
MODULUS OF ELASTICITY	20.2 x 105 psi
METHOD: ASTM C580	20.2 × 10° psi
TENSILE STRENGTH	2.640 psi
METHOD: ASTM C307	2,040 psi
BOND STRENGTH TO CONCRETE	Exceeds tensile strength of concrete
METHOD: ASTM D4541	(Concrete fails first)
TABER ABRASION	$l \cos(1000 \text{ cycles} = 26 \text{mg})$
METHOD: ASTM 4060, CS 17	Loss Tood Cycles – Zonig
WATER ABSORPTION	0.10% maximum
METHOD: ASTM C413	0.10 /0 maximum
LINEAR SHRINKAGE	0.08% maximum
METHOD: ASTM C531	0.00 /0 maximum
LINEAR COEFFICIENT OF THERMAL EXPANSION	1 79 X 10-5 in/in/0F
METHOD: ASTM C531	
FLAMMABILITY	Self extinguishing
METHOD: ASTM D635	
IMPACT RESISTANCE	Satisfactory per 3 15¶
METHOD: Mil-D-3134J	
COEFFICIENT OF FRICTION	0.6 minimum
METHOD: ASTM D2047	
FILM HARDNESS, SHORE D	85
METHOD: ASTM D2240	
POROSITY WITH NO SEALER COAT	0.00
METHOD: NACE Stand TM0174	0.00

PHYSICAL PROPERTIES

Resin Type		Novalac
Dry Times at 70°-	Foot Traffic	5-8 hours
80ºF (21º-27ºC) and 50% Relative	Vehicle Traffic	12-24 hours
Humidity	Full Cure*	4-5 days
Mixing Ratio		4.8:1
Pot Life @ 70-80ºF (21-27ºC) & 50% RH		20 minutes
Induction Period		None

Calculated values are shown and may vary slightly from the actual manufactured material. * Coating achieves its full physical and chemical resistant properties.



Rust-Oleum Corporation 11 Hawthorn Parkway | Vernon Hills, Illinois 60061 | Phone: (847) 367-7700 | <u>www.rustoleum.com</u> An RPM Company Form: TB9800 Rev. 12/04 Printed in USA