RUST-OLEUM®

6600 SYSTEM
100% SOLIDS EPOXY FLOOR COATING

DESCRIPTION AND USES

The 6600 System is a 100% solids two-component, low odor, low VOC epoxy floor coating designed for heavy duty protection. This coating system is designed for new or old uncoated or previously coated industrial concrete floors exposed to heavy foot and rubber-tired vehicle traffic. The coating is also suitable for use in areas of intermittent chemical spills, splashes and power washings. The coating has excellent abrasion, impact and chemical resistance.

The 6600 System is a self priming floor coating, however it can be used in conjunction with Rust-Oleum Penetrating Prime and Seal Primer on bare concrete floors. The use of the primer will optimize the adhesion of the coating system to the concrete and is suggested in high traffic areas.

NOTE: For striping lines use 9100 High Performance Epoxy, except colors made with 9107 tint base.

NOTE: Risk of batch-to-batch color variation can be reduced by use of a single lot or batch code whenever possible. Finish and surface texture of the concrete can alter the appearance of the coating.

APPEARANCE

High gloss finish

PACKAGING

The base and activator components are sold separately.

The color finishes are available to yield 3 gallons (384 fl. oz.) or 0.94 (120 fl. oz.) gallons of activated material.

The Clear finishes use a different mix ratio than the color finishes, so the yield is less. The activated Clear finish yields 2.5 gallons (320 fl. oz.), or 0.78 gallon (100 fl oz).

The container for the Base components is large enough to accommodate the addition of the Activator component into it.

PRODUCTS

SKU (3 gallon)	Description
283587	Silver Gray – 2 gal. (256 fl. oz.)
283589	Dunes Tan – 2 gal. (256 fl. oz.)
283590	Navy Gray – 2 gal. (256 fl. oz.)
283588	Super Light Gray – 2 gal. (256 fl. oz.)
283586	Light Gray – 2 gal. (256 fl. oz.)
283585	Clear – 1.5 gal. (192 fl. oz.)
283591	Activator – 1 gal. (128 fl. oz.)

SKU (SF gallon)	Description
282111	Silver Gray – 0.62 gal. (80 fl. oz.)
282113	Dunes Tan – 0.62 gal. (80 fl. oz.)
282112	Navy Gray – 0.62 gal. (80 fl. oz.)
282109	Super Light Gray – 0.62 gal. (80 fl. oz.)
282110	Light Gray – 0.62 gal. (80 fl. oz.)
282107	Clear – 0.47 gal. (60 fl. oz.)
282115	Activator – 0.31 gal. (40 fl. oz.)

PRODUCT APPLICATION

SURFACE PREPARATION

NEW, UNCOATED CONCRETE: New concrete should be allowed to cure for a minimum of 30 days before application of any coating. If there is any doubt about the dryness of the concrete, conduct a test by simply taping a piece of 4 mil plastic sheet 18" by 18" on the bare concrete for 24 hours. Be sure to tape all four sides. After 24 hours, check the concrete for signs of moisture. The concrete will be darker if damp. If moisture persists, contact Rust-Oleum Technical Service.

Remove oil, dirt, grease and other chemical contamination. Scrub the concrete with a cleaner/degreaser solution such as Krud Kutter® Original and thoroughly flush with fresh water. One scrubbing may not be sufficient. Wash the surface with a high pressure washer (2500 psi or greater) and fresh water to remove surface dirt. Apply 108 Cleaning and Etching Solution using a plastic garden sprinkling can or a plastic spray can. Leave the solution undisturbed for 2 or 3 minutes, allowing it to react with the concrete. Bubbling will be evident. Use a stiff broom or mechanical scrubber to agitate the acid solution to help remove surface laitance.

Finally, thoroughly flush the surface by power washing using a power washer (2500 psi or greater). See the Technical Data Sheet for the 108 Cleaning and Etching Solution for additional product information.

Very dense, non-porous or chemically treated concrete may require mechanical methods such as abrasive blasting, sanding, or diamond grinding to assure proper coating adhesion. Determine porosity by pouring one ounce of water onto the concrete. If water soaks in, the surface is porous enough for coating. If water beads up on the concrete, the surface is not porous and additional treatment is needed.

PREVIOUSLY COATED CONCRETE: Remove loose dirt, dust and paint by sweeping or vacuum cleaning. Remove grease, oil, floor compound or wax as indicated above, in the new, uncoated concrete section. Very glossy or hard coatings should be lightly sanded to insure maximum adhesion. The 6600 system will not lift most previous coatings. Concrete floor areas which require patching should be free of dirt, oil, grease and other chemical contaminants as indicated above, in the new, uncoated concrete section. The 5499 Concrete Patching Compound or TurboKrete® Concrete Patching Compound can be used to repair damaged areas of the floor. Refer to the product Technical Data Sheet for more information.

MIXING

Power mix only, hand mixing is not adequate. Using either a 3" Jiffler Mixer or Hanson Plunge Mixer. Mix at 500-750. Do not over mix or use higher speeds. This can introduce air into the coating causing small bubbles in the finish. Mix the Base Component for approximately 1 minute prior to adding the activator to ensure all the pigments are dispersed evenly. Add the Activator and continue to mix. It is very important to transfer as much activator as possible, scrape the sides and bottom of the container thoroughly. Mix the two components together for 1-3 minutes being careful to not pull air into the mixture. Begin application immediately after mixing.

PRODUCT APPLICATION (cont.)

APPLICATION

Apply only when air, material and floor temperatures are between 60-90°F (15.5-32°C). Because of the short pot life, it is recommended the application of the coating be limited to small sections. One activated gallon of 6600 System will cover 100 square feet at 16 mils. A film thickness of 16 mils is required for best performance. Mark the floor off into 100 sq ft sections. Do not try to work out of the container or put the material in a roller pan as heat will build up and shorten pot life and working time, and could be hazardous. The material on the floor will be workable for about 20 minutes.

Light Duty Areas, limited fork truck traffic

A single coat application is acceptable for floors in a light duty areas with only limited fork lift traffic, or over a primed surface or a previously coated floor in good sound condition.

Immediately after mixing, pour the mixture out onto the floor in a long thin stripe within the 100 sq ft section. Use a rubber squeegee to spread the material out over the section, and then back roll the material smooth using a short nap (3/8") lint free roller with a phenolic core. Make all final passes parallel and in the same direction. Do not roll excessively and do not re-roll the material after the final passes are made. Doing so may result in color variations.

Heavy Duty Areas, daily fork lift traffic

In heavy duty areas with daily fork lift traffic it is recommended that S6511 System Penetrating Prime & Seal™ Primer is used prior to application of the 6600 System. See separate Technical Data Sheet for the primer. The use of the S6511 will optimize coating adhesion.

Another option would be to apply the 6600 System in a two step process. Apply the first coat at a film thickness of 4 mils, spread rate of 400 sq ft per gallon. Use a rubber squeegee to pull the coating 'tight' to the floor, then back roll. Allow to dry approximately 6-8 hours. Apply a second coat at a film thickness of 12 mils, spread rate of 133 sq ft per gallon. Spread the coating out with a rubber squeegee, then back roll.

NOTE: Do not scrape the sides or bottom of the container. Use only the material that flows naturally out of the container. Also, do not turn the container upside down and leave on the floor to drain. Doing so may result with unactivated material from the sidewall of the container being applied. This will cause soft spots in the coating

NOTE: Change the roller cover every 30 minutes and always mount it on the roller frame in the same direction. After completing the section repeat the process on the adjacent section, overlapping the prior application approximately 6 inches to blend the coating together. Natural breaks in the floor, such as control joints or expansion joints, should be used as stopping points if the entire floor cannot be completed in one day. The coated floor will be ready for foot traffic 10 hours after application of the final coat. The coating will be ready for full use in 48-72 hours at 70-80°F and 50% relative humidity. Do not wash the floor with detergent for 5 days after application.

PRODUCT APPLICATION (cont.)

NON-SLIP SURFACES

To obtain a non-slip surface, a two coat application is required. The same basic procedure is followed as for application of the regular high gloss finish. Apply the first coat of 6600 System at 16 mils, or 1 activated gallon per 100 square foot section, by rubber squeegee and roller. Within 10-15 minutes after rolling of the first coat, broadcast silica, totally saturating the coated surface. If the floor is being coated in multiple sections, then leave a 6-12 inch area un-sanded along the edge of the section to allow for blending of the coating in the next section. Use 50 lbs. of round particle, 30-40 mesh sand (like Wedron 480) per 100 square foot section (½ lb./sq.ft.). After 6-8 hours, sweep off the excess silica thoroughly. Apply a second coat of 6600 System within 10-24 hours at the same spread rate of 16 mils, or 1 gallon per 100 square feet. This second coat anchors the silica and improves the appearance while maintaining the non-slip surface. The floor will be ready for foot traffic in about 10 hours after the application of the second coat, and is ready for full use in 48-72 hours.

THINNING

Do not thin this product.

CLEAN-UP

Use 160 Thinner or Xylene.

EQUIPMENT RECOMMENDATIONS

SQUEEGEE: Use a high quality rubber squeegee.
ROLLER: Use a high quality short nap (⅜") lint-free roller with a phenolic core.

COATING MAINTENANCE

Maintain a clean surface to ensure that the anti-slip performance is maximized. For general purpose cleaning, use Industrial Pure Strength 3599 Cleaner/Degreaser, detergent or other suitable cleaner. Scrub the surface with a stiff-bristled brush or broom. Rinse with clean water and allow to dry. Periodic touch up may be necessary in heavy traffic areas

PERFORMANCE CHARACTERISTICS

PENCIL HARDNESS

METHOD: ASTM D3363
TYPICAL VALUE: HB

ADHESION

METHOD: ASTM D4541
TYPICAL VALUE: 850 psi

TABER ABRASION

METHOD: ASTM 4060, CS 17, 1000 cycles
TYPICAL VALUE: Loss 63 mg.

FILM HARDNESS, SHORE D

METHOD: ASTM D2240
TYPICAL VALUE: 78

RUST-OLEUM®

TECHNICAL DATA

6600 SYSTEM 100% SOLIDS EPOXY FLOOR COATING

PHYSICAL PROPERTIES

		100% Solids Epoxy Floor Coating
Resin Type		Epoxy Amine
Pigment Type		Various depending on color
Solvents		Ethanol in Activator
Weight*	**Per Gallon**	8.8-11.3 lbs.
	Per Liter	1.05-1.35 kg
Solids*	**By Weight**	100%
	By Volume	100%
Volatile Organic Compounds*		<100 g/l (0.83 lbs./gal.)
Mix Ratio		2:1 Base to Activator by Volume (colors) 1.5:1 Base to Activator (clear)
Recommended Dry Film Thickness (DFT) Per Coat		16 mils (400µ)
Wet Film to Achieve DFT (Unthinned Material)		16 mils (400µ)
Theoretical Coverage at 1 mil DFT (25µ)		1604 sq.ft./gal. (39.5 m^2/l)
Practical Coverage at Recommended DFT (assumes 15% material loss)		100 sq.ft./gal. (2.5 m^2/l)
Spread Rate @ 16 Mils DFT		3 gal. colors – 300 sq. ft. 3 gal. short filled Clear – 250 sq. ft Short filled gallon colors – 94 sq. ft. Short filled gallon Clear – 78 sq. ft.
Induction Period		None required
Pot Life*		20 minutes @70°F (21°C)
Dry Times at 70-80°F (21-27°C) and 50% Relative Humidity	**Recoat**	10-24 hours
	Light Traffic	10 hours
	Vehicle Traffic	48-72 hours
Shelf Life		Base Component : 3 years; Activator: 2 years Unopened containers
Safety Information		See Material Safety Data Sheet

* Pot life is affected by air temperature and amount of material activated. Immediately after mixing, pour the entire material on the marked-out section of floor in a long, thin stripe. Do not work out of a pan or container, as the build-up of heat could shorten the pot life and create a hazardous condition.

RUST-OLEUM INDUSTRIAL BRANDS

Rust-Oleum Corporation
11 Hawthorn Parkway
Vernon Hills, Illinois 60061
An RPM Company

Phone: 877•385•8155
www.rustoleum.com/industrial

Form: GDH-488
Rev.: 042816