

Low VOC, rapid cure, epoxy anti-slip

Technical Bulletin # 410

Product Description

Rapid curing, self-sealing, heavy duty, anti-slip deck coating designed for application in slippery areas to make them safer for operation of pedestrian and rolling traffic. It was developed for use in marine and industrial environments to provide a durable surface with the highest possible anti-slip profile. Able to cure rapidly at 70°F to withstand heavy traffic in 24 hours, and cure down to 35°F in 48 to 72 hours, making it suitable for application where minimal down time is important.

Formulated with epoxy resins to provide optimal toughness and corrosion resistance, IMPAX 350 is resistant to acids, alkali, solvents, grease, oil, saltwater, alcohol, gasoline, jet fuels, Cellutube and other hydraulic fluids. It is unaffected by extreme temperature changes and because of its tenacious bond, rust will not creep under the coating if fractured. Refer to ITW Resin Technologies' Chemical Resistance Table for detailed performance data.

Surface Preparation

New Concrete: All surfaces must be firm, free of any laitance or efflorescence, clean, free of any adverse moisture conditions, have an appropriate surface profile, and be well cured before coating. Newly poured concrete must age at least 30 days at temperatures over 70°F before coating. Form release agents, sealers, curing compounds, salts, hardeners and other foreign matter will interfere with adhesion and must be removed. Shot-blasting, mechanical scarification, suitable chemical means, or sandblasting should be employed to prepare substrate.

Old Concrete: Coating older, uncoated concrete floors is done in much the same manner as new concrete. Before preparation, the concrete surface must be thoroughly cleaned with a strong detergent cleaner to remove all grease, oils, etc. All loose concrete must be removed. Form release agents, hardeners, etc., must be removed, using same procedure as for new concrete. Holes and cracks should be filled with IMPAX Crack Filler before application of a coating. If surface deterioration presents an unacceptably rough floor, IMPAX 5020 Floor Resurfacer is recommended to patch and resurface damaged concrete.

Steel: All surfaces must be dry, clean and free of all previous coatings, rust and surface contamination. Minimum surface preparation is abrasive blast to Commercial Grade SP-6. Blasted surfaces must be coated within 8 hours. Prior to blast cleaning, remove all deposits of oil or grease using Solvent Clean method SP-1.

Wood: A clean, sound wood surface is required. Remove any oils and dirt from the surface, using degreasing solvent or strong detergent. Follow with sanding to remove loose or deteriorated surface wood and to obtain the proper surface profile. Consult ITW Resin Technologies' Technical Department for specific recommendations.

Previously Painted Surfaces: If the paint is peeling or degrading in any way, it should be completely removed by sanding, blasting or stripping. If previous paint coating is completely intact, the surface may be cleaned with a strong detergent or solvent and scuff sanded to remove the gloss. A spot test should be made by applying a small amount of coating over old paint. The old finish may wrinkle or lift within 60 minutes. If it does not, wait 5 days and test for adhesion. Do this by cutting an "X" into the coating, place tape firmly over the cut then strip with a hard, fast pull. If the old finish fails, it must be removed or an appropriate barrier coat should be considered.

(For more detailed information, see Bulletin #400B)

Recommended Systems

See IMPAX Product Selection Guide for more information.

Concrete/Wood: 1st coat: IMPAX Water based Gray or Clear Primer
2nd coat: IMPAX 350 Anti-Slip

Painted Surfaces
in Sound Condition: 1 coat: IMPAX 350 Anti-Slip

Steel: 1st coat: Use appropriate rust inhibitor epoxy primer
2nd coat: IMPAX 350 Anti-Slip

Mixing and Application Instructions

To mix 1 gallon (3.8 liter) units: Use electric or air mixer (250 to 500 rpm) with metal mixing blade (Jiffy Model HS or equal). If aggregate has settled in resin container, it is necessary to mix this material for 1 or 2 minutes prior to adding the hardener. Pour hardener contents into resin pail and mix for 3 to 4 minutes. Mixing time must be sufficient to thoroughly blend hardener into resin/aggregate mix. To mix 5 gallon (19 liters) units: Use same procedure as mixing 1 gallon (3.8 liter) units except larger blade (Jiffy Model ES or equal) is required. It is strongly recommended that only full units be used, that both components are thoroughly mixed, and that all material from the bottom and sides of the container is mixed. We do not recommend using partial kits. Do not scrape or drain pails. Do not reduce this material.

With material freshly stirred to evenly disperse aggregate, pour substantial portion of mixture onto deck or floor in a band approximately 18" to 24" (450 mm to 600 mm) wide. Using a trowel or squeegee, a 1/4" (6mm) nap roller or a core roller, spread nonskid evenly by pulling puddle toward applicator. Press down on roller. Avoid back and forth roller motion. Watch for thick, thin or

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130 Commerce Drive • Montgomeryville, PA 18936 • 215-855-8450 • Fax 215-855-4688



uneven spots and immediately pull roller over these imperfect areas. With puddle nearly rolled out, pour additional mixed material over remaining puddle and continue application as above. Nominal applied thickness is 1/32" to 1/16" (0.8 to 1.6 mm). Mixing and application process should be coordinated and continuous so wet edge is maintained to provide a uniform anti-slip surface texture and appearance. Mix only enough material for immediate application.

IMPAX 350 will begin to set shortly after application. Correct imperfections immediately upon application then allow coating to cure undisturbed. Allow coating to cure 8 hours with ventilation before allowing foot traffic. Allow 24 hours for full cure. Higher relative humidity provides reduced cure time. IMPAX 350 may be applied at temperatures down to 40°F (4°C). Trowel applications will produce a smooth, uniform surface. A 1/4" (6mm) nap, mohair roller will provide a randomly ridged profile and a bare core roller will provide a uniform ridged surface.

PRECAUTION: Flammable - Keep away from heat and open flame. Maintain good ventilation and avoid breathing vapors. Avoid prolonged or repeated skin contact. Contains toluene diisocyanate which can cause lung sensitization. Allergic respiratory reaction may occur in sensitized individuals when exposure to TDI is below TLV. Prolonged or repeated skin contact can cause dermatitis and possibly skin sensitization.

Technical Information

COLOR:	Gray, Yellow, Black, Tile Red
VOC:	0.6 lbs/gal (80 gr./ltr)
VOLUME SOLIDS:	90%
DRY TIME:	Light Traffic - 12 hours @ 70°F (21°C) Heavy Traffic - 24 hours @ 70°F (21°C) Light Traffic - 36-48 hours @ 35°F (2°C) Heavy Traffic - 72 hours @ 35°F (2°C)
ESTIMATED COVERAGE:	60 sq. ft. per gallon - spray (5.6m ² /gal) 45 sq. ft. per gal. - trowel (4.2m ² /gal) 30 sq. ft. per gal. - roller (2.8m ² /gal)
WEIGHT PER GALLON:	18.6 lbs. per gal. (2.22 kg./liter)
COEFFICIENT OF FRICTION:	Dry - 0.88 Wet - 0.93 (ASTM F609)
PACKAGING:	1 gal (3.8 liters) unit containing 1 gal (3.8 liters) slack-filled can resin/aggregate and 1 qt. (.95 liter) can hardener. 5 gal. (19 liters) unit containing 5 gal. (19 liters) slack-filled can of resin/aggregate and 1 gal (3.8 liters) bag of hardener. nested in the resin
APPLICATION TEMPERATURES:	40°F minimum to 90°F maximum (4°C minimum to 32°C maximum) *Must be 5°F (3°C) above dew point
RELATIVE HUMIDITY:	85% maximum
MIX RATIO:	7.1:1 resin to hardener by volume
INDUCTION:	None
POT LIFE:	45 min. @ 72°F (22°C) @ 70% RH
FLASH POINT:	108°F (42°C) SETA Closed Cup
VISCOSITY:	Slurry consistency
CLEAN UP:	IMPAX IXT 59 Solvent
SERVICE TEMPERATURE:	200°F (90°C) Dry Heat Resistance

Date

07/2006

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