INDUSTRIAL FLOOR COATINGS

ITW resin TECHNOLOGIES

IMPAX 650 SL

100% solids, self leveling epoxy

Technical Bulletin # 433A

Product Description

A two-component, 100% solids, high performance, self leveling floor coating. This product provides a high gloss, seamless, hygienic surface that is extremely hard wearing and durable. The coating can also be applied to provide an anti-slip texture.

- Zero VOC, extremely low odor
- Full gloss finish
- Film thickness can be varied to accommodate a wide range of flooring conditions
- Also available in tint base formulations for a wide array of colors
- Available as an anti-slip finish
- High chemical resistance

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. Holes and cracks should be filled with IMPAX Crack Fillers 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: Consult ITW Resin Technologies' Technical Department.
Wood: Consult ITW Resin Technologies' Technical Department.

Previously Painted Surfaces: If the paint is peeling or degrading in any way, it should be completely removed by sanding, blasting or stripping. If the previous 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 and compatibility. 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 details.

Concrete/Wood:	1st coat: IMPAX 33, IMPAX 3300LV-N, or IMPAX Water Based Epoxy Primers (Clear or Gray) 2nd coat: IMPAX 650
Painted Surfaces in Sound Condition:	1st coat: IMPAX Water Based Epoxy Primer Clear 2nd coat: IMPAX 650
IMPORTANT:	When recoating IMPAX 650, it must be done no less than 8 hours after application of the previous coat and no more than 72 hours at 72°F (22°C) @ 50% RH. If this "window" has passed, the surface of the cured IMPAX 650 must be abraded to insure adhesion of subsequent coats.

Mixing and Application Instructions

To mix 1 gallon units: Use electric or air mixer (approximately 250 rpm) with metal mixing blade (Jiffy Model HS or equal). Premix resin for 1/2 minute then pour hardener contents into slack-filled resin can. Mix for 2 to 3 minutes moving blade around can while mixing. Avoid whipping air into material. To mix 5-gallon units, use same procedure, as mixing 1-gallon units except a 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 mixing containers. Do not reduce this material.

Pour mixed material directly on the surface in a long puddle and spread using either a flat or a notched rubber squeegee, depending on film thickness requirements. An applicator wearing spiked shoes should then immediately back roll and cross roll the material with a quality "lint-free" 3/8" nap roller cover. Finish application by "laying off" in one direction. Check film thickness frequently. After a minimum of 15 minutes but no longer than 30 minutes, material should be rolled with a spiked roller to remove any entrapped air. Do not spike roll after 30 minutes.

If an anti-slip texture is desired, broadcast a clean, dry, 30 to 50 mesh silica sand into the selected high build primer immediately after application. Broadcast sand until the primer is saturated (approximately 1/2 lb. per sq. ft.) and only dry sand is showing. After

ITW POLYMER TECHNOLOGIES
130 Commerce Drive • Montgomeryville, PA 18936 • 215-855-8450 • Fax 215-855-4688
www.itwresintech.com

the primer has set (6 hours minimum), sweep excess sand off the surface then topcoat with 15-25 mils of IMPAX 650. Lower topcoat thickness will produce more pronounced nonskid profile. Heavier topcoats will produce smoother profiles. Spike rolling is not necessary when IMPAX 650 is applied as an anti-slip system.

PRECAUTION:
Maintain good ventilation and avoid breathing vapors. Avoid prolonged and repeated skin contact. Wear safety glasses and impervious gloves.

Technical Information

COLOR:	Clear, Haze Gray, Deck Gray, Sandstone, Tile Red, White, Clear, Crystal Clear and Tint Bases
GLOSS:	Full Gloss
VOLUME SOLIDS:	100%
VOC:	0 lbs./gal. (0 gr. /lt.) (Based on Mixed Components)
COVERAGE:	160 sq.ft. /gal. @ 10 mils WFT/DFT (minimum) (15 m^2/gal. @ 254 mm DFT/WFT)
PACKAGING:	1 gal. unit containing 1 gal. slack filled resin can, 1/2 gal. slack filled hardener can (3.7 liters unit volume), 5 gal. unit containing 5 gal. slack-filled resin can, 1-1/2 gal. hardener jug (18 liters unit volume)
APPLICATION TEMPERATURES:	55°F minimum to 100°F maximum (12°C minimum to 35°C maximum) *Must be 5°F above dew point
RELATIVE HUMIDITY:	85% maximum
SERVICEABILITY:	Recoat 8 hrs. minimum, 72 hrs. maximum @ 72°F (22°C) @ 50% RH Foot Traffic 24 hrs. maximum @ 72°F (22°C) @ 50% RH Heavy Service 72 hrs. @ 72°F (22°C) @ 50% RH. Full Cure 5 days @ 72°F (22°C) @ 50% RH
MIXING RATIO:	Approximately 2.1 to 1 parts resin/hardener by volume (depending on color), consult ITW Resin Technologies for details
INDUCTION:	None
POT LIFE:	30 minutes @ 72°F (22°C)
FLASH POINT:	200°+F (93°C)
VISCOSITY:	2,700 cps (mixed colors); 600-800 cps (clear)
CLEAN UP:	IMPAX IXT 59 Solvent
SERVICE TEMPERATURE:	-10° to 180°F (-23° to 82°C) Dry Heat Resistance
SHELF LIFE:	18 months in closed container stored @ 50° to 90°F (10° to 32°C)

Date

07/2006