

Technical Bulletin # 434A

Product Description

A three-component, 100% solids, high build, self leveling floor coating. It is a high performance floor system that provides a high gloss, seamless, hygienic surface that is extremely hard wearing and durable. IMPAX 650 High Build should be used for applications requiring film builds greater than 30 mils DFT.

- Zero VOC, extremely low odor
- Full gloss finish
- Product is economical for applications requiring high film thickness
- Also available in tint-base formulations for a wide array of colors
- High chemical resistance
- Available in a fast-set version. Consult ITW Resin Technologies for details

Surface Preparation

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

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.

Recommended Systems

See IMPAX Product Selection Guide for more details.

Concrete Floors: 1st coat: IMPAX 33, IMPAX 3300LV-N, or IMPAX Water Based Epoxy Primers (Gray or Clear)
2nd coat: IMPAX 650 High Build Self Leveling Epoxy

**Painted Surfaces
in Sound Condition:** 1st coat: IMPAX Water Based Epoxy Primer Clear
2nd coat: IMPAX 650 High Build Self Leveling Epoxy

IMPORTANT: When recoating IMPAX 650 High Build, 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 High Build must be abraded to insure adhesion of subsequent coats.

Mixing and Application Instructions

Use electric or air mixer (approximately 250-500 rpm) with metal mixing blade (Jiffy Model ES 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. Next, pour entire epoxy mixture into 6-10 gallon mixing container. Continue mixing while slowly adding HB Additive. Mix for approximately 1 minute or until additive is evenly dispersed. 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.

APPLICATION INSTRUCTIONS: With material freshly stirred, pour substantial portion on floor in a bead 18" to 24" wide. Using a 3/16" V-notched rubber squeegee, pull through material until bead almost runs out. Pour new material onto end of bead to maintain wet edge. By holding the squeegee perpendicular to the floor and applying very little pressure, 50-55 mils DFT/WFT can be applied. By tilting the squeegee towards the applicator and applying increased pressure, thickness can be progressively decreased to a minimum of 30 mils DFT/WFT. Check film thickness frequently. An applicator wearing spiked shoes should then immediately

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back roll and cross roll the material with a 3/8" soft woven roller to facilitate leveling. After a minimum of 15 minutes, but no longer than 30 minutes set-up time, material should be rolled with a spike roller to remove any entrapped air. Do not spike roll after 30 minutes.

PRECAUTION: Maintain good ventilation and avoid breathing vapors. Avoid prolonged and repeated skin contact. High build additive contains crystalline silica. Proper respiratory protection and environmental controls must be employed to prevent overexposure to silica.

Technical Information

COLOR:	Haze Gray, Deck Gray, Sandstone, Tile Red, White and Tint Bases
GLOSS:	Full Gloss
VOLUME SOLIDS:	100%
VOC:	0 lbs./gal. (0 gr. /lt.) (Based on Mixed Components)
COVERAGE:	15 ft ² /gal. @ 100 mils DFT/WFT (1.4 m ² /gal. @ 2.54 mm DFT/WFT) 30 ft ² /gal. @ 50 mils DFT/WFT (2.8 m ² /gal. @ 1.27 mm DFT/WFT) 50 ft ² /gal. @ 30 mils DFT/WFT (minimum) (4.7 m ² /gal. @ 762 microns DFT/WFT)
PACKAGING:	6 gal. unit containing 5 gal. slack-filled resin can, 1-1/2 gal. jug hardener and 25-lb. bag of high build additive
APPLICATION TEMPERATURES:	55°F minimum to 100°F maximum *Must be 5°F above dew point
RELATIVE HUMIDITY:	80% maximum
SERVICEABILITY:	Recoat 8 hrs. min., 72 hrs. max. @ 72°F (22°C) @ 50% RH Foot Traffic 24 hrs. max. @ 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:	Epoxy Only Approximately 2.1 parts resin to 1 part hardener by volume (depending on color) Epoxy to Additive - 5 gal. mixed epoxy to 25 lbs. high build additive. Consult ITW Resin Technologies' Technical Department for details
INDUCTION:	None
POT LIFE:	45 minutes @ 72°F (22°C)
FLASH POINT:	200°F (93°C)
VISCOSITY:	6,000 cps
CLEAN UP:	IMPAX IXT 59 Solvent
SERVICE TEMPERATURE:	-10° to 120°F (-23° to 49°C)
SHELF LIFE:	18 months in closed container stored @ 50° to 90°F (10° to 32°C)

Date

07/2006

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