

Technical Bulletin # 503

Product Description

IMPAX 175 is a two component tint-able coating which combines waterborne epoxy resins and tough, fine grained abrasives to produce a self-sealing, non-slip floor and deck coating. Enhanced cleanability, chemical resistance and coverage are but a few of the reasons IMPAX 175 is the first choice for low-profile applications.

IMPAX 175 is a fire retardant in the cured state and is ideal for recreation areas as well as industrial and institutional facilities where use of a water-borne coating is desirable.

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 details.

Concrete/Wood: 1st coat: IMPAX Water based Gray or Clear Primer
2nd coat: IMPAX 175 Anti-slip

**Painted Surfaces
in Sound Condition:** 1 coat: IMPAX 175 Anti-slip

Steel: 1st coat: Use appropriate rust inhibitive epoxy primer.

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 5 minutes. Mixing time must be sufficient to thoroughly blend hardener into resin/aggregate mix. 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 thin this material. See resin can for tinting information.

ROLLER - With material freshly stirred to evenly disperse aggregate, pour substantial portion of mixture onto deck or floor in a band approximately 2' long and 6" wide. Using a phenolic roller (available from ITW Resin Technologies), roll material in one direction only in slow straight strokes pulling material toward you with a moderate amount of pressure on the handle. Do not over roll too many times or press down too heavily. Be careful that material does not build up too thickly along welds (roll across welds, not along them). Material applied too thickly may not cure properly. Higher temperatures will shorten drying time and conversely, lower temperatures and high relative humidity will lengthen drying time. Exterior applications must be protected from rain for at least 12 to 24 hours after application depending on humidity. Protect from heavy or extended exposure to water, oil and chemicals for 5 to 7 days.

SPRAY - Sprayed applications will result in uniform appearance with good non-slip characteristics. IMPAX 175 should not be thinned. Thinning could result in grit not remaining properly suspended. Specialized mastic type spray equipment is required. A recommended set-up is as follows: a) A 5 gallon bottom outlet pressure tank equipped with a double regulator and an air driven agitator along with a 1" I.D. outlet pipe. b) Twenty-five feet of 3/8" air hose with 3/8" female connectors at each end. c) Twenty-five feet of 3/4" material hose with 3/4" female connectors at each end. d) A Binks Model 7E2 spray gun equipped with 1/4" fluid nozzle and a 1/4" internal air cap or a Binks Model 52-2012 (4 foot) pole gun equipped with same fluid nozzle and air nozzle.

Minimum air supply required is 20 CFM at 90 lbs pressure. Recommended pressure is 15 to 20 PSI on material and 20 to 25 PSI on atomization. Always keep atomization air pressure higher than pot pressure. Keep agitators running slowly. Good coverage and film thickness will be obtained working at 18" or 24" distance from surface. Overlap strokes about 50%. Make sure of wet application. Very little abrasive rebound will be noticed at 15 PSI; however, it will be more noticeable at higher pressure. When temperature is above 80°F, it is advisable to flush the spray equipment with water every hour or so in order to prevent the possibility of any material setting up and plugging the equipment.

PRECAUTION: Maintain good ventilation and avoid breathing vapors. Avoid prolonged or repeated skin contact.

DO NOT FREEZE

Technical Information

COLOR:	White Tint Base, Neutral Tint Base
GLOSS:	Flat
VOLUME SOLIDS:	63% (mixed)
VOC:	0.5 lbs./gal. (60 g/L)
COEFFECIENT OF FRICTION:	Dry - 0.78 Wet - 0.86 (ASTM F609)
COVERAGE:	90 ft ² /gal Roller 120 ft ² /gal Spray
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.
APPLICATION TEMPERATURES:	50°F minimum to 130°F maximum (10°C minimum to 53°C maximum) must be 5°F (3°C) above dew point
RELATIVE HUMIDITY:	85% maximum
SERVICEABILITY:	Foot traffic: 24 hrs. @ 72°F (22°C) @ 50% RH Heavy Service: 72 hrs. @ 72°F (22°C) @ 50% RH Full Cure: 7 days @ 72°F (22°C) @ 50% RH
MIXING RATIO:	resin to hardener by weight 5.3-1 Neutral Tint Base 6.2-1 White Tint Base
INDUCTION:	None
POT LIFE:	1 hrs. @ 72°F (22°C)
FLASH POINT:	>200°F (>93°C) PMCC
VISCOSITY:	Slurry consistency
CLEAN UP:	IMPAX IXT 59 Solvent
SERVICE TEMPERATURE:	200°F (90°C) Dry Heat Resistance
SHELF LIFE:	24 months in closed container stored @ 50°F to 90°F (10°C TO 32°C)

Date

07/2006

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