

# **IMPAX 5020 TROWELABLE FLOOR RESURFACER**

## **TECHNICAL BULLETIN #1019C**

**PRODUCT DESCRIPTION:** A trowelable epoxy surfacing and leveling compound for new and old floors of concrete, wood or steel where a high degree of chemical and abrasion resistance is required. The physical properties of IMPAX 5020 FLOOR RESURFACER are much higher than those of concrete and its excellent abrasion and impact resistance recommend it for high traffic areas. It is a 100% reactive epoxy system formulated to conform to present OSHA requirements for mixing, handling and usage. Designed for use where a durable, sanitary, chemical resistant antiskid floor is required. It meets USDA standards for maintenance protective coatings not in direct contact with food in federally inspected meat and poultry plants.

### **RECOMMENDED USES:**

Food Process Industries: dairies, bakeries, breweries, bottling plants and packing houses  
Pharmaceutical Houses  
Industrial Plants  
Chemical Process and Refinery Industries  
Utilities: Sewage and Water Treatment Plants, Generating Stations

### **SURFACE PREPARATION:** (For more detailed information see Bulletin #994)

**New Concrete:** All surfaces must be firm, clean, dry and well cured before resurfacing. Newly poured concrete must age at least 30 days at temperatures over 21°C (70°F) before coating. Form release agents, curing compounds, salts, hardeners and other foreign matter will interfere with adhesion and must be removed by sandblasting, shotblasting, mechanical scarification or suitable chemical means. If a curing membrane was not used, then proceed with a 16% muriatic acid etch (3.7 liters [1 gal.] 32% muriatic acid to 3.7 liters [1 gal.] water) at a rate of 7m<sup>2</sup>/3.7 liters (75 sq.ft./gal.).

**Old Concrete:** Resurfacing older, uncoated concrete floors is done in much the same manner as new concrete. Before etching, 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.

**Steel/Wood:** Application to steel and wood floors is essentially the same as for concrete floors, however the surface preparation and structural considerations vary. Consult our Engineering and Technical Service Department for proper evaluation and recommendations.

**Previously Painted/Resurfaced Floors:** Consult our Engineering and Technical Service Department for proper evaluation and recommendations.

### **RECOMMENDED SYSTEMS:**

**Concrete/Wood:** 1st coat: IMPAX PENETRATING EPOXY PRIMER  
2nd coat: IMPAX 5020  
3rd coat (optional): IMPAX 2001 Series or IMPAX 650SL

**Steel:** 1st coat: IMPAX RUST INHIBITIVE PRIMER  
2nd coat: IMPAX 5020  
3rd coat (optional): IMPAX 2001 Series or IMPAX 650SL

**MIXING AND APPLICATION INSTRUCTIONS:** After proper surface preparation, apply Primer to an area no larger in size than can be surfaced within 6 hours. Prime all surfaces with IMPAX PENETRATING EPOXY PRIMER 2 hours before application of IMPAX 5020 FLOOR RESURFACER.

**Primer:** IMPAX 5020 FLOOR RESURFACER unit includes enough Primer for the unit area. Primer is to be applied to new or old concrete floors. Power mix Part A and Part B with a Jiffy mixer blade and drill. Pour the mixed Primer onto the area to be primed, pouring in a narrow ribbon paralleling a wall or work area. Apply Primer with a 13 mm (1/2") nap roller, rolling out a sufficient quantity to insure complete wetting of floor surface. Apply Primer in a liberal fashion on very porous surfaces. For irregular surfaces such as cracks, potholes and eroded areas and areas adjacent to walls and corners, application by brush is recommended. Check the primed area for holidays and dry spots, roll out any puddles. Primer can also be easily sprayed using conventional or airless spray equipment.

## **ITW PHILADELPHIA RESINS**

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## ITW Philadelphia Resins IMPAX 5020 FLOOR RESURFACER

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**Resurfacer:** Pour hardener into slack-filled resin can and mix 1-2 minutes until homogeneous. Then pour and scrape entire mixture into a clean 18.5 liter (5 gal.) metal pail. Mount the metal pail into an 18.5 liter (5 gal.) portable electric mixer.\* Start mixer and operate for 1 minute working mixing blade slowly through its full arc. Slowly add all aggregate from bag over a period of 2-3 minutes. Continue mixing for 2 minutes until aggregate is wet-out thoroughly. Immediately empty mixture onto primed floor surface and spread to desired thickness with a metal float or by screeding. Finish surface with a 76mm x 305mm (3" x 12") steel trowel. Keep trowel clean with IMPAX IXT-59. Pitch to drains as required.

\*If an 18.5 liter (5 gal.) portable electric mixer is not available, use conventional concrete mixing techniques. Contact our Technical Service Department for specific information, or if in doubt about procedures, techniques or equipment.

Using a steel trowel wetted with IMPAX IXT-59 Solvent and held at an angle, apply pressure to the surface. Use a sweeping motion to level, pack and close the surface. A surface free of lap marks is achieved by maintaining a wet edge through continuous application of freshly mixed material. A properly finished surface will show few trowel marks and the surface will be closed. Areas where IMPAX 5020 FLOOR RESURFACER will butt against existing concrete need to be "keyed" by saw cutting or chipping a channel 6mm (1/4") deep by 25mm (1") wide around the perimeter of the resurfaced area and beveling material down to the level of existing concrete. Clean all adjacent floor areas and equipment with IMPAX IXT-59 before IMPAX 5020 FLOOR RESURFACER cures and hardens.

**PACKAGING:** A 1.8m<sup>2</sup> (20 sq.ft.) unit contains 1 batch (coverage is 1.8m<sup>2</sup> @ 6mm) (20 sq.ft. @ 1/4"). A 44m<sup>2</sup> (480 sq.ft.) bulk unit is equivalent to 24 batches (coverage is 44m<sup>2</sup> @ 6mm) (480 sq.ft. @ 1/4"). Proportioning from a bulk unit is accomplished at the job site with the aid of a factory marked proportioning pitcher indicating correct amounts of resin and hardener to use for each batch. A 133m<sup>2</sup> (1,440 sq.ft.) special bulk unit is equivalent to 72 batches (coverage is 133m<sup>2</sup> @ 6mm) (1,440 sq.ft. @ 1/4"). With this unit the liquid components are packaged in drums. Sufficient primer is supplied with all units.

### TECHNICAL INFORMATION:

COLORS:	Cement, Haze Gray, Deck Gray, Tile Red
GLOSS:	Not Applicable
VOLUME SOLIDS:	98% (Primer); 100% (Resurfacer)
VOC: (based on mixed components)	<25 gms/ltr - (<0.2 lbs./gal.) - Primer 0 gms/ltr (0 lbs./gal.) - Resurfacer
COVERAGE:	1.8m <sup>2</sup> /batch @ 6mm thickness (20 sq.ft./batch @ 1/4" thickness)
PACKAGING:	1.8m <sup>2</sup> (20 sq. ft.) unit 44m <sup>2</sup> (480 sq.ft.) bulk unit 133m <sup>2</sup> (1,440 sq.ft.) special bulk unit
APPLICATION TEMPERATURES:	12°C minimum to 35°C maximum (55°F minimum to 95°F maximum) *Must be 3°C (5°F) above dew point
RELATIVE HUMIDITY:	85% maximum
SERVICEABILITY:	Foot Traffic -- 12 hrs. @ 22°C (72°F) @ 50% RH Full Cure -- 18 hrs. @ 22°C (72°F) @ 50% RH
MIXING RATIO:	2:1 parts resin/hardener by volume - Primer 2:1 parts resin/hardener by volume - Resurfacer
INDUCTION:	None
POT LIFE:	6 hrs. - Primer; 45 mins. - Resurfacer
FLASH POINT:	30°C (87°F) PMCC -- Primer; 90°C (200°F) PMCC -- Resurfacer
VISCOSITY:	Not Applicable
REDUCER:	Not Recommended
ABRASION RESISTANCE:	5 times concrete
COMPRESSIVE STRENGTH:	69 M Pa (10,000 psi) ASTM-D-695
FLEXURAL STRENGTH:	16.7 M Pa (2,446 psi) ASTM-D-790
SERVICE TEMPERATURE:	-23°C to 65°C (-10°F to 150°F)
SHELF LIFE:	18 months in closed container stored @ 10°C to 32°C (50°F to 90°F)
PRECAUTION:	Primer is flammable -- Keep away from heat and open flame. Maintain good ventilation and avoid breathing vapors. Practice good housekeeping procedures to avoid all skin contact. Aggregate contains crystalline silica. Proper respiratory protection must be employed to prevent over exposure to silica.