

PRODUCT DESCRIPTION

An epoxy surfacing and leveling system specifically designed to be applied by power trowel.

- Convenient screed box/power trowel application method
- Integral cove base capabilities
- High build 1/4" finish
- Much higher physical properties than concrete
- Prepackaged kits include all coating system components

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. Shotblasting, mechanical scarification, suitable chemical means, or sandblasting should be employed to prepare substrate.

Old Concrete: Resurfacing 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.

Previously Painted/Resurfaced Floors: Consult ITW Resin Technologies' Technical Service Department for proper evaluation and recommendations.

RECOMMENDED SYSTEMS

See IMPAX Product Selection Guide for more details.

Concrete: 1st coat: Impax 3300LV-N High Solids Clear Epoxy Primer
2nd coat: Impax 5020 PT Resurfacer
3rd coat: Impax Fast Set Sealer
4th coat: Impax 650, or other IMPAX finish coat (call for recommendation).

MIXING AND APPLICATION INSTRUCTIONS

Primer: 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 3300LV High Solids Clear Epoxy Primer 1/2 - 1 hour before application of IMPAX 5020 PT Epoxy Floor Resurfacer. It is strongly recommended that only full units are used, that both components are thoroughly mixed, and that all material from the bottom and sides of the container are mixed. We do not recommend using partial kits. **Do not** scrape or drain mixing containers. **Do not** reduce this material.

The IMPAX 5020 PT unit includes enough IMPAX 3300LV-N High Solids Clear Epoxy Primer for the unit area. The primer is to be applied to new or old concrete floors. Use electric or air mixer at approximately 250 rpm and a metal mixing blade (Jiffy Model ES or equal). Pour hardener contents into slack-filled resin can and mix for 2-3 minutes until material is thoroughly blended. Immediately pour a substantial portion of the mixed product onto the floor and spread at a rate of approximately 8-9 mils with a flat rubber squeegee. Next, back-roll the material with a quality 3/8" nap roller. Apply the primer in a liberal fashion on very porous areas and application by brush may be needed for irregular surfaces such as crack, potholes, eroded areas, and areas adjacent to walls and corners. Check the primed area for holidays and dry spots and reapply to such areas if necessary.

Resurfacer: Proportion appropriate amounts of resin and hardener using supplied mixing pitcher and mix 2-3 minutes with Jiffy mixing blade until homogeneous. Then pour entire mixture into a clean 5 gal. metal pail. Mount the metal pail into a 5 gal. portable electric mixer or mortar mixer.* Start mixer and operate for 1 minute working mixing blade slowly through its full arc. Slowly add all aggregate from bag and mix over a period of 3 minutes until aggregate is wet-out thoroughly. Immediately empty mixture into a screed box and apply to the primed floor surface at desired thickness, normally 1/4".

Next, compress and finish the IMPAX 5020 PT using a well balanced power trowel with clean blades. Working from left to right, compress the screeded IMPAX 5020 PT and then finish this area working from right to left. Don't stop the power trowel on the surface of the wet trowel material, but remove it to bare concrete areas before stopping. Avoid pitching the power trowel, and keep a wet edge whenever possible. Avoid over-troweling. Pitch to drains as required.

*If a 5 gallon portable electric mixer is not available, use conventional concrete mixing techniques. Multiple bag batches should be mixed using a mortar mixer. Contact ITW Resin Technologies' Technical Department for specific information, or if in doubt about procedures, techniques or equipment.

For hand application, use 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 PT will butt against existing concrete need to be "keyed" by sawcutting or chipping a channel 1/4" deep by 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 solvent before Impax 5020 PT cures and hardens. After IMPAX 5020 PT has cured, lightly sand or grind the surface to remove or minimize trowel marks and other surface imperfections. Sweep and vacuum to remove all dust before applying the IMPAX Fast Set Sealer at a rate of approximately 170 sq. ft. per gallon.

SEALER: Apply at a rate of approximately 170 sq. ft. per gallon. Terrazzo grinding is recommended to remove trowel marks or other imperfections prior to applying Fast Set Sealer. Allow Resurfacer to cure sufficiently to allow foot traffic (12-18 hours) before applying Fast Set Sealer. To mix 1 gallon units: use electric or air mixer (approx. 250 rpm) with metal mixing blade (Jiffy Model HS or equal). Pour hardener contents into slack-filled resin can. Mix for 2-3 minutes moving blade around can while mixing. Avoid whipping in air while mixing. To mix 5-gallon units use same procedure as mixing 1-gallon units except a larger (Jiffy Model ES or equal) is required. Immediately pour a substantial portion of the mixture onto the floor and spread material using a flat rubber squeegee and sufficient pressure to work the sealer into the surface. Immediately back roll the material with quality 3/8" nap roller leaving 8-10 mils on the surface. Allow Fast Set Sealer to cure a minimum of 6 hours before top coating with IMPAX 650 at a rate of approximately 150 sq. ft. per gallon. The Sealer must be tack-free before topcoating. If pinholes or porosities are evident after initial cure, resealing may be necessary. The system MUST be applied as described. Deletion of any products or procedures will render it ineffective.

FINISH COAT: Refer to appropriate Technical Bulletin for specifics.

PACKAGING: 168 sq. ft. unit contains 7 batches (coverage is 24 sq. ft. @ a nominal 1/4"). A 912 sq. ft. standard unit is equivalent to 38 batches (coverage is 912 sq. ft. @ a nominal 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 2,808 sq. ft. large unit is equivalent to 117 batches (coverage is 2,808 sq. ft. @ a nominal 1/4"). With this unit the liquid components are packaged in drums. Sufficient primer, sealer and topcoat is supplied with all units.

power trowel epoxy floor
resurfacing system

TECHNICAL INFORMATION

	<u>PRIMER</u>	<u>RESURFACER</u>	<u>FAST SET SEALER</u>	<u>650</u>	
COLOR:	Amber	Haze Gray	Amber	See Bulletin #433	
VOLUME SOLIDS:	96%	100%	83%	100%	
VOC:	<2 lb./gal.	0 lbs./gal.	1.6 lbs./gal.	0 lbs./gal.	
COVERAGE:	200 sq. ft./gal.	24 sq. ft./mix*	170 sq. ft./gal.	110 sq. ft./gal.	
PACKAGING:	168 sq. ft. unit: 912 sq. ft. unit: 2808 sq. ft. unit:	1 gallon 5 gallons 15 gallons	7 mixes* 38 mixes* 117 mixes*	1 gallon 7 gallons 20 gallons	2 gallon 10 gallons 25 gallons
APPLICATION TEMPERATURES:	55° to 100°F	55° to 100°F	55° to 100°F	55° to 100°F	
RELATIVE HUMIDITY:	85% max	85% max	85% max	85% max	
SERVICEABILITY: @ 72°F (22°C) @ 50% RH	Immediate Full Cure 18 hrs.	Foot traffic 12 hrs.	Recoat 6-8 hrs.	Foot traffic 24 hrs. Full Service - 24 hrs. Full Cure 5-7 days	
MIXING RATIO BY VOLUME: (RESIN: HARD)	3: 1.7	2:1	4.4:1	2.1:1	
INDUCTION:	None	None	None	None	
POT LIFE (@ 72°F):	30 min.	45 min.	60 min.	40 min.	
FLASH POINT:	200°F PMCC	200°F PMCC	85°F PMCC	200°F PMCC	
CLEAN UP:	IMPAX IXT 59 Solvent				
SERVICE TEMPERATURE:	180°F (82°C) Dry Heat Resistance	180°F (82°C) Dry Heat Resistance	180°F (82°C) Dry Heat Resistance		
SHELF LIFE:	18 months in a closed container stored @ 50F to 90F for all components.				
NOTE:	*One mix of IMPAX 502PT will cover 24 sq. ft. @ nominal 1/4" thickness. 1 bag of aggregate plus sufficient Impax 5020 PT resin and hardener is supplied for each mix.				
PRECAUTION:	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 overexposure to silica.				

General: Every reasonable effort is made to insure the technical information and recommendations on these data pages are true and accurate to the best of our knowledge at the date of issuance and are subject to change without notice. Products and information are intended for use by qualified applicators that have the required background, technical knowledge, and equipment to perform said tasks in a satisfactory manner.

Warranty: ITW Resin Technologies, a division of Illinois Tool Works Inc., warrants that its products meet their printed specifications. This is the sole warranty. This warranty expires one year after the shipment.

Warranty Claims: If any product fails to meet the above, ITW Resin Technologies will, at its option, either replace the product or refund the purchase price. ITW Resin Technologies will have no other liability for breach of warranty, negligence or otherwise. All warranty claims must be made in writing within one year of date of shipment. No other claims will be considered.

Disclaimer: ITW Resin Technologies makes no other warranty, express or implied, and specifically disclaims any warranty of merchantability or fitness for a particular purpose. Suggestions concerning use of products are not warranties. The purchaser assumes

the responsibility for determining suitability of products and appropriate use. ITW Resin Technologies' sole liability, for breach of warranty, negligence or otherwise, shall be replacement of product or refund of the purchase price, at ITW Resin Technologies' election. Under no circumstances shall ITW Resin Technologies be liable for any indirect, incidental or consequential damages, even if advised of the possibility of such damages.

Modification of Warranty: No distributor or sales representative has the authority to change the above provisions. No change in the above provisions will be valid unless in writing and signed by an officer or the Technical Director of ITW Resin Technologies. No term of any purchase order shall serve to modify any provision of this document.

Mediation and Arbitration: If any dispute arises relating to products or product warranties, either the purchaser or ITW Resin Technologies may a) initiate mediation under the then current Center for Public Resources ("CPR") Model Procedure for Mediation of Business Disputes, or b) initiate non-binding arbitration under the rules of the American Arbitration Association for the resolution of commercial disputes.