

## PRODUCT DESCRIPTION

APF CastorCrete® Trowel Grade (TG) is a trowel applied, cementitious polyurethane mortar, formulated to protect concrete from extreme physical and chemical abuse. It is resistant to impact, abrasion, steel wheeled cart traffic, hot cooking oils, animal fats, common solvents. APF CastorCrete TG is formulated to compensate for the difference in the coefficient of thermal expansion of concrete. APF CastorCrete TG can endure regular cleaning and water temperatures reaching up to 250°F (121 °C). APF CastorCrete TG contains low VOCs, and is made with a natural, sustainable raw material. APF CastorCrete TG is applied 1/4- to 1/2-inch.

APF CastorCrete TG may be applied to green concrete (7 - 10 days @ 70°F) and concrete substrates indicating 100% moisture (ASTM F2170).

APF CastorCrete TG is a rapid turnaround flooring solution to minimize downtime. APF CastorCrete TG is installed as a one-step system without a primer and returned to service quickly after installation. APF CastorCrete TG may be top coated with APF CastorCrete TC or TC Aliphatic, a cementitious polyurethane top coat to create uniformity of performance and appearance. APF CastorCrete TG may also be top coated with APF POLYASPARTIC 7500, POLYUREA 5100, EPOXY 600 or 900 for enhanced chemical, abrasion, and UV resistance.

## USES

- Food & Beverage Manufacturing
- Meat, Poultry, Fish Processing
- Commercial Kitchens
- Pharmaceutical

## ADVANTAGES

- Resistant to sanitizing chemicals, hot water, steam
- Capable of resisting extreme thermal cycling
- Very low odor, easy to clean, sanitary

## COLORS

Available in Natural and 4 Standard Colors.

## TECHNICAL DATA

Compressive Strength ASTM C579	8,500 psi
Tensile Strength ASTM C307	1,400 psi
Flexural Strength ASTM C580	2,700 psi
Shore D Hardness ASTM D2240	75 - 80
Tabor Abrasion (1000 gm. load 1000 cycles, CS 17 wheel)	32 mg Loss
Thermal Compatibility with Concrete ASTM C884	Passes
Coefficient of Thermal Expansion ASTM C513	1.1 x 10 <sup>-5</sup> in/in/°F minimum
VOC	<50g/l
Flammability when Bonded to Concrete ASTM D635	Self-Extinguishing
Cure Time	Working Time ~15 - 20 Minutes
	Dry to touch ~3 - 4 Hours
	Return to full service ~24 - 36 Hours

Higher temperature and lower humidity will shorten cure time.  
Lower temperatures and higher humidity will increase cure time.

## PACKAGING

Supplied in complete kits:  
Natural is comprised of 3 components, A+B+D (aggregate).  
Standard Color kits are comprised of 4 components, A+B+C (color pack) +D (aggregate).  
Use only as complete kits, do not break down into partial kits.

## COVERAGE

Floor Thickness	Coverage Per 66 lbs. (30 kg) Kit
1/4-inch (6.3mm)	25 sq. ft (2.3 sq. m.)
1/2-inch (12.7mm)	12.5 sq. ft (1.2 sq. m.)

## SURFACE PREPARATION

Concrete must be cured for at least 7-10 days and be clean, structurally sound, and free of wax, loose coatings or curing compounds. Concrete should be properly prepared to achieve a surface Minimum Texture of ICRI/CSP 3. Refer to ICRI technical guidelines 310-330 Selecting and specifying concrete surface preparation for sealer, coatings, polymer overlays, and concrete repair. Vacuum the prepared concrete surface to remove all dust. Acid etching is not recommended and will void manufacturers' warranty.

## MIXING

Pour entire contents of components A,B, and C (color pack) into mixing container and mix for 30-60 seconds. While mixing, slowly add component D (aggregate). After all of the components are fully incorporated, mix for an additional 30-60 seconds using a mixer designed to mix heavy mortars. Multiple mixing containers are recommended to ensure an adequate supply of fresh material. DO NOT thin product, addition of thinners will void Manufacturer's warranty.

## APPLICATION

Pour material onto the surface immediately after mixing is finished. Do not apply to previously coated surfaces; apply directly to concrete except when priming is necessary. Key-ways must be cut 1/4 inch (6.3mm) deep by 3/16-inch (4.8mm) wide, 6-inch (15.2 cm) from all perimeter walls, machinery pedestals, and both sides of all control joints, and at regular intervals spaced 10 feet (3 m) to 12 feet (3.7 m) apart throughout the flooring system. All floor drains, penetrations, transitions and termination points must have a 1/4-inch (6.35 mm) deep by 1/4-inch (6.35 mm) wide key-way. Never feather the edge of APF CastorCrete SL, always turn it into a key-way.

In typical applications, APF CastorCrete TG is applied directly to the concrete without a primer. However, if the concrete is damaged or excessively porous, the use of APF EPOXY 100 as a primer can reduce out-gassing, pinholes, and blisters. Refer to APF Epoxy 100 Product Data Sheet for additional information. A test area is recommended to determine if a primer is necessary. Heavily damaged surfaces may be repaired and leveled with a scratch coat of APF CastorCrete TG. Allow scratch coat to cure for a minimum of 6 hours (at 70°F before applying top coat).

## APPLICATION (Cont.)

For small areas, APF CastorCrete TG can be spread and finished with a steel trowel. Alternatively, distribute with a standard mortar box. As soon as the mortar is relatively closed, immediately roll the surface with a looped or spiked roller to remove trowel marks and bring the resin to the top. When placing the cementitious polyurethane mortar, keep a wet edge between mixes. Apply each batch within the working time of the prior batch. Failure to do this could result in a visible tie-in line. Excessive troweling or rolling can bring more resin to the top and reduce slip resistance.

## LIMITATIONS

- Will yellow and fade from UV exposure.
- Do not apply in direct sunlight.
- Do not apply below 45°F (7.2°C) or above 90°F (32°C).
- Use of kerosene or propane forced air heating equipment during application may cause discoloration and finish defects.

## SHELF LIFE

Part A: 12 months at 50-85°F { 10-30°C }

Part B: 12 months at 50-85°F { 10-30°C }

Part C: 36 months at 50-85°F { 10-30°C }

Part D: 36 months at 50-85°F { 10-30°C }

\*When kept at recommended storage conditions and in original unopened containers. DO NOT ALLOW TO FREEZE. Frozen material is unusable and must be properly disposed of.

## HANDLING, SAFETY & STORAGE

- Avoid contact with skin; wear protective gloves. Application personnel must read and fully understand product Safety Data Sheet before using. APF Safety Data Sheets are available at [www.apfepoxy.com](http://www.apfepoxy.com).
- Store away from heat sources. Store between 50°F and 85°F (10°C-30°C). DO NOT FREEZE. Frozen material is unusable and must be properly disposed of.

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#### STANDARD WARRANTY STATEMENT

ICP Construction, Inc. ("we" "us" or "our"), manufacturer of Arizona Polymer Flooring, warrants that the product is produced within specifications and is free from defects in material only. No warranty shall be in effect until our Terms and Conditions of Sales (<https://www.icpgroup.com/wp-content/uploads/ICP-Group-Terms-and-Conditions-of-Sale.pdf>) are met, including payment and cooperative promotional considerations. We warrant that the covered product is free of defects in material only and suitable for the specified purpose for a period of one (1) year from the date of shipment, provided the product is (a) installed within its published shelf life, in strict conformance with specifications, and (b) handled, stored, mixed, and applied in accordance with our written instructions. It is your responsibility to initiate any claim against this warranty within the time frame specified below. If we determine that the product meets the requirements of this warranty, then we will, at our sole discretion, either refund the purchase price of the product or provide replacement product, in each case not to exceed the affected area as determined by our authorized technical representative. To obtain replacement or refund you must (a) provide timely written notice to us specifying in detail the non-conformity suspected (no later than five (5) working days after discovery), and (b) provide proof of purchase. We reserve the right to inspect the product prior to replacement. EXCEPT FOR THE EXPRESS WARRANTY ABOVE, THERE ARE NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PURPOSE. IN NO EVENT SHALL WE OR OUR AFFILIATES BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY NATURE, REGARDLESS OF THE FORM OF ACTION OR THEORY OF LAW, INCLUDING, WITHOUT LIMITATION, BREACH OF ANY OBLIGATION OR WARRANTY IMPOSED ON US HEREUNDER OR IN CONNECTION HERewith, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES IN ADVANCE AND EVEN IF A REMEDY SET FORTH HEREIN IS FOUND TO HAVE FAILED OF ITS ESSENTIAL PURPOSE. "CONSEQUENTIAL DAMAGES" SHALL INCLUDE, WITHOUT LIMITATION, LOSS OF USE, INCOME, OR PROFIT, OR LOSSES SUSTAINED AS THE RESULT OF INJURY TO ANY PERSON, OR LOSS OF OR DAMAGE TO ANY PROPERTY (INCLUDING, WITHOUT LIMITATION, PROPERTY HANDLED OR PROCESSED THROUGH THE USE OF THE PRODUCTS), DAMAGES OR LOSSES RESULTING FROM CLAIMS OF OTHER PERSONS AGAINST YOU, OR DAMAGES OR LOSSES SUSTAINED AS THE RESULT OF WORK STOPPAGE, OR REMOVAL AND REPLACEMENT COSTS AND COSTS OF LABOR. IN NO EVENT SHALL OUR LIABILITY ARISING IN CONNECTION WITH OR UNDER THIS WARRANTY (REGARDLESS OF THE FORM OF ACTION OR THEORY OF LAW) EXCEED THE AMOUNT PAID BY YOU FOR THE DEFECTIVE PRODUCT ONLY. THIS LIMITED WARRANTY PROVIDES YOUR EXCLUSIVE REMEDY FOR ANY DEFECT IN THE PRODUCT. If you do not agree with these terms, you may return the product within thirty (30) days of purchase for a full refund, provided the product is not opened, altered, or adulterated in any manner, less any shipping and handling charges of any sort. Use of the product, or retention of the product beyond thirty (30) days, constitutes your acceptance of this limited and exclusive warranty. No customer, distributor, or representative of ours is authorized to change or modify the published data sheets or this warranty in any way. No one is authorized to make oral warranties on behalf of us.