

## PRODUCT DESCRIPTION

APF CASTORCRETE® RT is a resin-rich, cementitious polyurethane mortar, formulated to protect concrete from extreme physical and chemical abuse. It is resistant to impact, abrasion, and steel wheeled cart traffic. It is resistant to hot cooking oils, animal fats, and common solvents. APF CASTORCRETE RT is formulated to compensate for the difference in the coefficient of thermal expansion of concrete. When properly applied, it withstands extreme thermal cycling and withstands constant service temperatures up to 212°F (100°C).

APF CASTORCRETE RT is available with an anti-microbial additive to inhibit the growth of fungi and other micro-organisms. APF CASTORCRETE RT is an environmentally friendly product, made with natural, sustainable raw materials. It contains low VOC and has very low odor. APF CASTORCRETE RT is applied 3/16- to 1/4-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 RT is a rapid turnaround flooring solution to minimize downtime. APF CASTORCRETE RT is installed as a one-step system without a primer and returned to service quickly after installation. APF CASTORCRETE RT 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 RT may also be top coated with APF POLYASPARTIC 7500, POLYUREA 5100, EPOXY 600 or 900 for enhanced chemical, abrasion, and UV resistance.

## ADVANTAGES

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

## USES

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

## 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
Microbial (Fungi) Resistance ASTM G21	Passes #1
VOC	35 g/l
Flammability when Bonded to Concrete ASTM D635	Self-Extinguishing
Standard Version	Dry to touch ~12 Hours
	Full Service ~24 - 36 Hours

Higher temperatures will shorten cure time. Lower temperatures will increase cure time.

## COLORS

Available in 6 Standard Colors

## PACKAGING

Supplied in complete A+B+C (color pack)+D (aggregate) - 55 lb (24.9 kg) complete mixed units. Use only as complete mixed unit, do not break down into partial mixes.

## COVERAGE

Floor Thickness	Coverage Per 55 lbs. (24.9 kg) Kit
3/16-inch (4.8 mm)	31 sq. feet (2.9 m <sup>2</sup> )
1/4-inch (6.3 mm)	21 sq. feet (2.0 m <sup>2</sup> )

## **SURFACE PREPARATION, Cont.**

Concrete must be cured for at least 7 days and be clean, structurally sound, and free of wax, loose paint, or curing compounds. Concrete should be properly prepared to achieve a minimum surface texture of ICRI 3. Refer to ICRI Technical Guidelines 310-330 Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair. Acid etching is not recommended and will void Manufacturer's warranty. Carefully follow the guidelines listed in the Arizona Polymer Flooring published application instructions available at [www.apfepoxy.com](http://www.apfepoxy.com).

Vacuum prepared concrete surface to remove all dust. Do not apply to previously coated surfaces; apply directly to concrete except when priming is necessary. Key-ways must be cut 1/4-inch (6.3 mm) deep by 3/16-inch (4.8 mm) 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 edge APF CastorCrete® RT, always turn it into a key-way.

## **MIXING**

Pour entire contents of parts A, B, and C (color pack) into mixing container and mix for 30 seconds. While mixing, slowly add part D (aggregate). After all of the components are fully incorporated, mix for an additional 30 seconds. Mixing should be done with a COLLOMIX® CX 44 DUO Set with MKD 140 HF paddles, or a KOL type bucket mixer, or any other mixer designed to mix heavy mortars. Place mixed material immediately. 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**

In typical applications, APF CASTORCRETE RT is applied directly to the concrete without a primer.

For small areas, APF CASTORCRETE RT can be spread and finished with a steel trowel. Rake the material with a cam-gauge rake to the desired thickness, use a finishing trowel to compact and smooth out the rake marks. As soon as the mortar is relatively closed, immediately roll the surface with a looped roller to remove trowel marks and bring the resin to the top. When placing the cementitious polyurethane mortar, keep a wet edge between mixes. Place each batch within the working time of the prior one. 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.

## **SHELF LIFE**

One [1] year from date of manufacture, in original unopened container. Store away from heat sources. Store between 50°F and 85°F (10°C – 30°C). Do not allow to freeze. Frozen material is unusable and must be properly disposed of.

## **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).

## **HANDLING & SAFETY**

Avoid contact with skin; wear protective gloves. Application personal 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)

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#### STANDARD WARRANTY STATEMENT

ICP BUILDING SOLUTIONS GROUP, the owner of Arizona Polymer Flooring, warrants that the product is produced within specifications and is free from defect. No warranty shall be in effect until ICP Building Solutions Group Terms and Conditions of Sales are met, including payment and cooperative promotional considerations. ICP Building Solutions Group warrants that the covered product is free of defect and suitable for the specified purpose for a period of one (1) year from the date of shipment, provided the product is installed within its published shelf life, in strict conformance with specifications, and/or written project-specific installation guidance from authorized representation. ICP Building Solutions Group warrants only when product is handled, stored, mixed and applied in accordance with published recommendations. It is purchaser responsibility to initiate any claim against this warranty within a reasonable time. If determined by ICP that the product does not meet this warranty, the liability of ICP Building Solutions Group shall be limited to refund of the purchase price or provision of replacement product, neither needing to exceed the affected area as determined by a person authorized to perform technical representation for ICP Building Solutions Group. To obtain a replacement or refund the customer must provide written notice containing full details of the non-conformity suspected. The purchaser, owner or their representative shall notify ICP Building Solutions Group, in writing, within five (5) working days concerning any potential defect, or as needed before conditions deteriorate and increase repair costs. ICP Building Solutions Group reserves the right to inspect the non-conforming material prior to replacement. ICP Building Solutions Group may in its discretion refund the purchase price received by ICP Building Solutions Group in lieu of replacing the material. Except for the expressed warranty stated above, there are no other warranties, expressed or implied, including without limitation, any implied warranty of merchantability or fitness for purpose. ICP Building Solutions Group's obligation shall not extend beyond the obligations expressly undertaken above and ICP Building Solutions Group shall have no liability or responsibility to purchaser or any third party for any loss, cost, expense, damage or liability, whether direct or indirect, or for incidental or consequential damages. No customer, distributor, or representative of ICP Building Solutions Group 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 ICP Building Solutions.

