

SYSTEM DESCRIPTION

The GS Tough-Seal 100 sealer system is designed for use over concrete, acid-stained surfaces and various types of architectural concrete in high-traffic environments. It's especially suitable over acid-stained concrete because it is unaffected by pH drifts that can impact the adhesion of other types of sealer systems.

When used over acid stains or integrally colored concrete, Tough-Seal 100 gives color enhancement similar to solvent acrylic sealers. When used as a finish coat in vehicle areas, it resists tire tracking and provides easy soil release.

The use of special solvents and adhesion promoters gives this material excellent penetration and adhesion to minimally profiled concrete.

Tough-Seal 100 is UV stable and offers unmatched chemical and abrasion resistance. A special version of this material is available to meet the 50 grams/liter VOC limit in California.

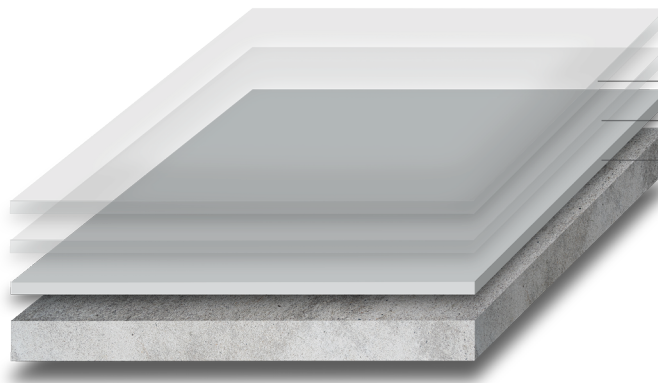
USES

- Interior or exterior architectural concrete
- High-traffic areas
- Acid-stained or colored concrete
- Vehicle areas

ADVANTAGES

- Protective sealant
- Chemical resistant
- Abrasion resistant
- Impact resistant
- Exceptional exterior durability

TYPICAL SYSTEM BUILD



- **TopCoat:** Polyurethane 100/100 VOC
- **Primer:** Polyurethane 250/250 VOC
- **Patching, Filling, Moisture Vapor:** Epoxy 300 Flex Paste, APF VaporSolve System

Note: Diagram not to scale

TECHNICAL DATA

Gloss (60)	90
Gloss (satin material, 60°)	50-60
Hardness (ASTM-D4366 Konig)	122
Impact Resistance (ASTM D-2794)	Passes 3/8 inch-pounds direct impact
Tabor Abrasion (1000 gm. Load, 1000 cycles, CS 17 wheel)	33 Mg. Loss
Adhesion to Concrete (ASTM D-4541)	Concrete fails before loss of bond

Refer to product data sheet of individual system component for more information.

COLORS

GS Tough-Seal 100 is available in clear, in satin or gloss finish.

TYPICAL SYSTEM BUILD

COAT	PRODUCT	THICKNESS/COVERAGE
Patching, Filling, Moisture Vapor	APF Epoxy 300 Flex Paste, APF VaporSolve System	As required
Primer	APF Polyurethane 250/250 VOC	250-300 sqft/gallon (5-6 mils WFT)
Topcoat	APF Polyurethane 100/100 VOC	250-300 sqft/gallon (5-6 mils WFT)*

*Topcoat coverage determines final texture.

APPLICATION INSTRUCTIONS

1.0 Concrete Moisture

It is the applicators responsibility to test for concrete moisture in accordance with ASTM F2170-19. If moisture is indicated to be in excess of 85%, apply APF VaporSolve system in accordance with the published system data sheet. Consult APF Technical Service for further information.

2.0 Surface Preparation

Concrete must be cured for at least 30 days 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 2-3. 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.

3.0 Crack Repair

Use Epoxy 300 Flex Paste immediately after mixing. Spread the product using a flat trowel, margin tool, or broad putty/plaster knife. Gunning is not recommended for this material. Apply it to completely fill the joint. If the product settles below the concrete surface, add more material. The cured product must be level with the concrete surface. Allow it to cure before applying the final coat.

4.0 Priming

Apply APF Polyurethane 250/250VOC onto surface immediately after mixing in accordance with the product data sheet, with a brush or roller, back roll with using a quality solvent resistant 3/8-inch nap roller cover, at a rate of 250-300 sqft/gallon (5-6 mils WFT). DO NOT allow puddling or accumulation in joint areas. A "wet edge" is recommended when applying product, do not attempt to roll over material that has begun to set. An applicator wearing spiked shoes will back roll the wet material using a quality solvent resistant 3/8-inch nap roller cover to distribute the material uniformly.

The material must be thoroughly rolled twice to achieve optimal substrate wetting {using North-South, East-West Method.}. Recoat within 24 hours; if the recoat window is exceeded, the surface must be abraded with 80-100 grit to a uniform gloss free and dust free texture prior to recoat.

5.0 Application of Polyurethane 100/100VOC

Apply APF Polyurethane 100/100 VOC onto surface immediately after mixing with a brush or roller, back roll with using a quality solvent resistant 3/8-inch nap roller cover, at a rate of 250-300 sq. ft./gallon (5-6 mils WFT). DO NOT allow puddling or accumulation in joint areas. A "wet edge" is recommended when applying product, do not attempt to roll over material that has begun to set. An applicator wearing spiked shoes will back roll the wet material using a quality solvent resistant 3/8-inch nap roller cover to distribute the material uniformly. **The material must be thoroughly rolled twice to achieve optimal substrate wetting {using North-South, East-West Method.}**

Apply a second coat, if necessary, within 24 hour recoat window. If the recoat window is exceeded, the surface must be abraded with 100 grit to a uniform gloss free and dust free texture prior to recoat.

LIMITATIONS

- Before applying, measure and ensure that the ambient temperature is at least 5°F above the dew point.
- Do not apply POLYURETHANE 250 Satin direct to concrete, apply only to primed surface (contact Technical Service for alternative products if direct to concrete application is desired).
- High humidity/low temperature will prolong cure time.
- Use of kerosene or propane forced air heating equipment during application may cause discoloration and finish defects.

HANDLING & SAFETY

Use only with adequate ventilation. Appropriate cartridge-type respirator must be used during application in confined areas. Avoid contact with skin; wear protective gloves. User must read and

understand Safety Data Sheet before using. APF Safety Data Sheets are available at www.apfepoxy.com.

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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.