

SYSTEM DESCRIPTION

GS Tough-Seal 400 is a high-build sealer system designed for use over interior or exterior concrete, acid-stained surfaces and various types of architectural concrete in high traffic environments. The use of a 100% solids epoxy primer and a high-performance polyurethane finish coat provides a finished flooring system with superior depth and gloss. Due to its high film build, Tough-Seal 400 provides a hard-wearing flooring system that can minimize the appearance of minor substrate imperfections.

USES

- Interior high-traffic areas
- Acid-stained or decorative concrete
- Showrooms and retail spaces
- Light industrial environments

ADVANTAGES

- High-build, durable finish
- Chemical and abrasion resistant
- Impact resistant
- Enhances gloss and appearance

COLORS

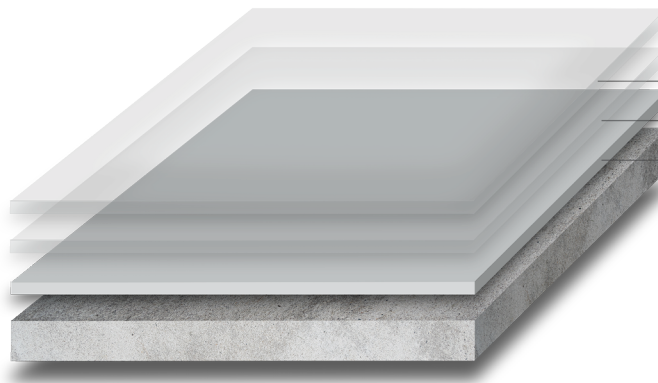
GS Tough-Seal 400 is available in clear, in satin or gloss finish.

TECHNICAL DATA

Gloss, Gloss Finish (60°)	90
Gloss, Satin Finish (60°)	50-60
Hardness, Shore D (ASTM-D2240)	78
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.

TYPICAL SYSTEM BUILD



- TopCoat (Option 1): Polyurethane 100/100 VOC
- TopCoat (Option 2): Poly 501
- Primer: Epoxy 400
- Patching, Filling, Moisture Vapor: Epoxy 300 Flex Paste, APF VaporSolve System

Note: Diagram not to scale

TYPICAL SYSTEM BUILD

COAT	PRODUCT	THICKNESS/COVERAGE
Patching, Filling, Moisture Vapor	APF Epoxy 300 Flex Paste, APF VaporSolve System	As required
Primer	APF Epoxy 400	200 sqft/gallon (8 mils WFT)
Topcoat (Option 1)	APF Polyurethane 100/100 VOC	250-300 sqft/gallon (5-6 mils WFT) *
Topcoat (Option 2)	APF Poly 501	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 Application of Primer Coat

Apply Epoxy 400 onto surface immediately after mixing in accordance with the product data sheet with a squeegee, back roll using a quality solvent resistant 3/8-inch nap roller cover. Apply at a rate of 200 sqft/gallon at 8 mils WFT. 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.)**

5.0 Application of Topcoat (Option 1)

APF Epoxy 400 must be recoated within the 24-hour recoat window. If the recoat window is exceeded, the surface must be abraded with 80-100 grit to a uniform gloss-free and dust-free texture before recoat.

Apply APF Polyurethane 100/100 VOC material 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.)**

6.0 Application of Topcoat (Option 2)

APF Epoxy 400 must be recoated within the 24-hour recoat window. If the recoat window is exceeded, the surface must be abraded with 80-100 grit to a uniform gloss-free and dust-free texture before recoat.

Apply Poly 501 material onto surface immediately after mixing in accordance with 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 sq. ft./gallon (5-6 mils WFT).

APPLICATION INSTRUCTIONS (Cont.)

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.}

If using Satin or Matte versions of this material, it is very important to achieve a uniform application rate of 300 sq. ft. per gallon.

LIMITATIONS

- Before applying, measure and ensure that the ambient temperature is at least 5°F above the dew point.
- 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.