

SYSTEM DESCRIPTION

Armor-Rez HD is a five-component, high performance troweled epoxy mortar system consisting of a low viscosity epoxy resin combined with a proprietary blend of graded aggregates. The Armor-Rez HD system is engineered to be installed at 3/16 to 1/4 inch thickness and can be sealed with various topcoat choices specific to environmental and performance demands. It cures to a hard, impact-resistant flooring system with good abrasion and chemical resistance.

USES

- Designed for heavy-use environments that require protection against impact and abrasion and good chemical resistance
- Can be used to resurface older or damaged floors
- Commonly used in heavy manufacturing facilities and aircraft environments

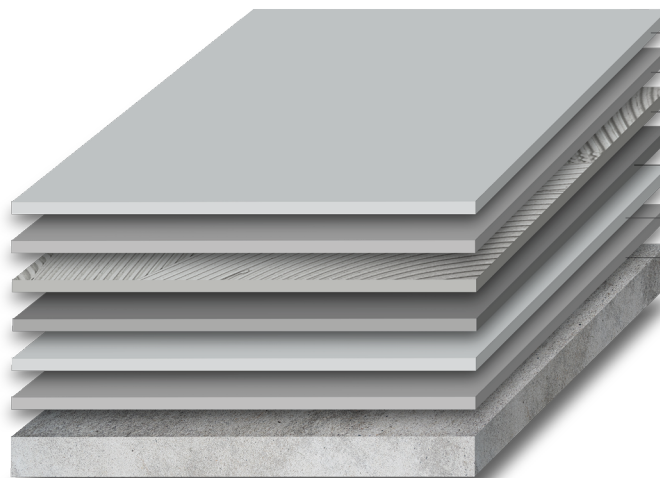
ADVANTAGES

- High Solids, Low VOC
- Impact Resistant
- Abrasion Resistant
- Chemical Resistant
- Available in Fast Cure Formulas

COLORS

APF ARMOR-REZ HD is Available in 12 Standard Colors, Safety Red, Safety Yellow, and Safety Blue. Refer to APF Standard color chart.

TYPICAL SYSTEM BUILD



Optional 2nd Topcoat: Polyurethane 100/100 VOC, 501, 600 or 7500

Topcoat: Epoxy 400

Grout Coat: Epoxy 400 Thixo

Epoxy Mortar Base: Epoxy 400 & Trowel Mortar Sand

Primer: Epoxy 400

Patching, Filling, Moisture Vapor: Epoxy 300 Flex Paste, APF VaporSolve® System

Note: Diagram not to scale

TECHNICAL DATA

| | |
|-----------------------------------|------------|
| Compressive Strength (ASTM C-579) | 11,500 psi |
| Tensile Strength (ASTM C-307) | 2,500 psi |
| Flexural Strength (ASTM C-580) | 4,000 psi |
| Impact Resistance (ASTM D-2794) | 160 in-lb |

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

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 sq. ft./gallon @ 8mils WFT |
| Epoxy Mortar Base | APF Epoxy 400 & Trowel Mortar Sand | 3/16 - 1/4-inch (4.75 - 6.3mm) 40-50 sqft/1.5 gallon mix |
| Grout Coat | APF Epoxy 400 Thixotropic | 160 sqft/gallon (10 mils WFT) |
| Topcoat | APF Epoxy 400 | 100 sqft/gallon (16 mils WFT) |
| Optional 2nd Topcoat | APF Polyurethane 100/100 VOC, Poly 501, 600 or 7500 | 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 more than 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

After the initial preparation has been completed, inspect the surface for indentations and holes. These must be filled prior to application using Epoxy 300 Flex Paste. After mixing Epoxy 300 Flex Paste according to the product data sheet, use the Epoxy 300 Flex Paste immediately. Spread the product with a flat trowel, margin tool, or broad putty/plaster knife. Gunning is not recommended for this material.

Apply to fill joint completely. Apply additional material if product settles into joint below the concrete surface. Cured product must be level with concrete surface. Allow to cure completely prior to applying primer.

4.0 Priming

After any patchwork/crack repair has cured, apply one coat of Epoxy 400 after mixing according to mixing instructions on the applicable product data sheet. Apply material onto surface immediately after mixing 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 the Epoxy Mortar

All drains, grease traps, and other similar fixtures must be completely sealed with tape before applying epoxy mortar. Tape should be pulled as the application proceeds. Combine epoxy 400 clear components and mix for 2-3 minutes using a slow-speed drill with a mixing blade. Using a mortar mixer, blend 1.5 gallons of epoxy mix with 100 lbs of trowel-grade sand, and mix for an additional 2-3 minutes. This mix ratio, applied at 5/16" and compressed to 1/4", will cover 40-50 sqft. Place the entire batch of mortar on the floor and spread it to the desired thickness using a screed box or gauge rake. Finish smooth with either a hand or power trowel. Apply adequate pressure to compact the mortar as much as possible. Clean trowels frequently with solvent, as using a dirty trowel can result in a less desirable finish.

6.0 Grinding the Floor

The purpose of grinding the floor is to remove any trowel marks and imperfections. This can be done using a planetary type grinder using 30-grit diamonds. It is important to grind the floor moving from east to west and then north to south. Once all the grinding is complete, vacuum the floor thoroughly.

7.0 Application of the Grout Coat

After removal of all dust and debris as well as vacuuming the floor, mix the Epoxy 400 Thixotropic in accordance with the instructions on the product data sheet. Once the Epoxy 400 Thixo is completely mixed, apply to floor immediately using a squeegee, back roll utilizing a quality solvent resistant 3/8-inch nap roller cover. Apply at a rate of 160 sqft/gallon (10 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.}** Epoxy 400 thixotropic must be recoated within a 24-hour recoat window. If this window is exceeded, the surface must be abraded with 80-100 grit to achieve a uniform, gloss-free, and dust-free texture before recoating.

8.0 Application of the Topcoat

Once the grout coat material has cured hard, sand out any imperfections, make sure to remove all dust prior to installing the Topcoat. Mix the Epoxy 400 according to mixing instruction on the product data sheet. Apply Epoxy 400 onto surface immediately onto the floor in usable ribbons. Using a flat trowel or squeegee, spread the material at a rate of 100 sqft/gallon (16 mils WFT). 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.} 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. Epoxy 400 must be recoated within a 24-hour recoat window. If this window is exceeded, the surface must be abraded with 80-100 grit to achieve a uniform, gloss-free, and dust-free texture before recoating.

The application rate of the topcoat will affect the finished texture of the floor. Therefore, special care must be taken during this step to ensure that proper texture is achieved.

9.0 Application of the Optional 2nd Topcoat

After an overnight cure, mix the Polyurethane 100 or 100 VOC, Poly 501, Polyurethane 600, or Polyaspartic 7500 in accordance with the applicable product data sheet. Apply 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.}**

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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.