

## PRODUCT DESCRIPTION

APF STAT-REZ ESD NANO 275 is a two-component, high-performance aliphatic polyurethane floor coating, utilizing NANO WISE<sup>®</sup> Technology, and designed to impart electrostatic conductive qualities to floor surfaces in conjunction with ESD compliant footwear. The system is designed to provide static control properties for personnel, ESD compliant wheeled equipment, and chairs, which limits the ability of personnel to build up electrostatic charges on their person by providing effective equipotential grounding. This coating features excellent light reflection, abrasion and scratch resistance, ease of cleaning, and excellent resistance to a broad range of chemicals. Surface resistance is not affected by relative humidity.

APF STAT-REZ ESD NANO 275 is formulated utilizing the most advanced single-wall graphene nanotube technology available to conform to ANSI S20.20 - 2021 Product Qualification and Performance Verification requirements. Meets most DOD and Military standards.

## USES

- Electronics Manufacturing and Assembly
- Military/ Aerospace/ Aircraft Hangars
- Hazardous Industries (dust or explosion hazards)
- Clean Rooms
- Pharmaceutical

## ADVANTAGES

- Highly reflective, easily cleaned surface
- NANO WISE Technology provides exceptional ESD performance
- Resistant to common industrial and aviation chemicals
- More durable than ESD tile or sheet goods
- Low Maintenance
- Greatly improved shelf-life and transport stability

## COLORS

Adobe	Buff	Light Gray	Slate
Concrete Gray	Sterling	Blue	Black
Medium Gray			

## TECHNICAL DATA

Taber Abrasion 1000 g load/1000 cycles/CS17	<45 mg loss
Mixing Ratio by Volume	Mix Full Kits Only
Volume Solids	45.6%
VOC	<50 g/l
Cure Times (77°F/25°C)	
Working Time	~30 Minutes
Dry To Touch	~20 Hours
Recoat	~24-36 Hours
Light Traffic	~48 Hours
Full Cure	7 Days

### Electrical Properties

Electrical resistance per ANSI S7.1<sup>1</sup> <1.0 x 10<sup>7</sup> ohms

Body Voltage Generation ANSI 97.2<sup>1</sup> <25 Volts

Meets ANSI S20.20 – 2021 Product Qualification & Compliance Verification<sup>2</sup>

<sup>1</sup>With compliant footwear or shoe grounders, properly worn and in good working condition

Higher temperature and lower humidity will shorten cure time.

Lower temperatures and higher humidity will increase cure time.

If 24 hour recoat window exceeded, substrate recoat preparation required.

## PACKAGING

Supplied in complete 1.5 gallon (5.7L) & 3.0 gallon (11.35L) total by volume kits, consisting of A & B components. Use only as complete mixed unit, do not break down units.

## COVERAGE

Coverage Rate: 250-400 sqft/gallon (4-6 mils WFT)

## CONCRETE MOISTURE

Test for concrete moisture in accordance with ASTM F2170 – 19. If moisture is indicated to be in excess of 85%, apply APF VaporSolve<sup>®</sup> system in accordance with the published technical data sheet. Consult APF Technical Service for further information.

## GROUNDING

Prior to beginning application, confirm that the grounding points have been placed in accordance with the project specifications.

## 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.

## PRIMING (Non-Conductive):

Prepared concrete must be primed before application of APF STAT-REZ ESD NANO 275. Prime prepared concrete with APF EPOXY 400. Substrate surface must be completely sealed and cured before application of subsequent coats. Apply APF EPOXY 400 in accordance with the product data sheet.

Existing ESD surfaces should have an isolation layer of APF EPOXY 400 applied prior to application of APF STAT-REZ ESD NANO 275.

## PRIMING (Conductive):

APF STAT-REZ ESD NANO 275 will create a static-dissipative surface without the use of a conductive ground plane. Prime prepared concrete with APF Epoxy 400 in accordance with the product data sheet. Surface resistance\*  $\sim 1.0 \times 10^7$  ohms point-to-point may be achieved without a conductive ground plane. Application of APF STAT-REZ ESD NANO 175 Conductive Primer will produce a floor surface with resistance values of  $< 1.0 \times 10^6$  ohms, typically  $\sim 1.0 \times 10^5$  ohms.

\* Per ANSI S7.1, when installed in accordance with the published technical data.

Refer to APF STAT-REZ ESD NANO 175 Conductive Primer product data sheet for complete application instructions.

## MIXING

Thoroughly pre-mix part A before adding the part B. Combine components and mix for 2-3 minutes using slow speed drill, scraping the bottom and sides of the mixing container. It is important to NOT whip air into the material while mixing. Material cannot be properly mixed by hand. Apply material immediately after complete mixing.

## APPLICATION

APF Stat-Rez ESD NANO 275 must be applied in two (2) coats at a rate of 250-400 sqft/gallon (4-6 mils WFT). Observe recoat time limitation prior to the application of the 2nd coat. Apply second coat within 24-36 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.

Apply using a quality solvent resistant 3/8-inch nap roller cover. Apply at uniform thickness to ensure consistent appearance. Finish rolling with 1/4-inch polyester loop type roller cover (Wooster R223, or equal) to remove all roller marks. Do not exceed recommended application thickness.

## CLEANING

APF STAT-REZ ESD NANO 275 conductive and static-dissipative flooring systems require specific cleaning procedures to ensure that the flooring surface maintains the highest level of conductivity.

Sweep as necessary and dust mop with a quality micro-fiber type mop head. Frequent dust mopping will extend the life of the floor and permit the lowest resistance between flooring and ESD footwear, wheels, and casters.

Use only cleaning agents that leave no residue after rinsing. Mechanical scrubbers may be used with pads no more aggressive than 3M brand White Super Polish Pad 4100, or equal.

Never use ESD surface treatments, wax, acrylic finishes, polishes, or other film creating products. A properly cleaned Stat-Rez 275 floor should never require additional ESD treatments. Beware of processes that may impart a non-conductive residue on the floor such as adhesives and paint.

## LIMITATIONS

- Exterior applications will exhibit chalking, discoloration and fading
- Electrical performance (surface resistance, resistance to ground, body-voltage generation) is a function of surface cleanliness, and the condition of ESD shoe grounders and footwear.
- Before applying, measure and ensure that the ambient temperature is at least 5°F above the dew point.
- Do not thin this product. Addition of thinners will void Manufacturer's warranty.
- 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 }

\*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.

APF Stat-Rez\_ESD\_Nano\_275\_PDS\_11.10.25

## 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.