

PRODUCT DESCRIPTION

APF STAT-REZ[®] NANO 275 is a two-component, high-performance aliphatic polyester urethane floor coating, utilizing **NANOWISE 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 NANO 275 is formulated utilizing the most advanced single-wall graphene nanotube technology available to conform to ANSI S20.20 Product Qualification and Performance Verification requirements. Meets most DOD and Military standards.

USES

Typical Uses

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

ADVANTAGES

- Highly reflective, easily cleaned surface
- **NANOWISE TECHNOLOGY** provides exceptional ESD performance
- Resistant to common industrial and aviation chemicals
- More durable than ESD tile or sheet goods, no joints to fail
- Low Maintenance, no topical ESD treatments required
- Greatly improved shelf-life and transport stability

COLORS

Adobe	Buff	Light Gray	Slate
Concrete Gray	Sterling	Blue	Black

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	42 g/l
Cure Times (77°F/25°C)	
Light Traffic	18 Hours
Full Cure	7 Days
Electrical Properties	
Electrical resistance per ANSI S7.1 ¹	<1.0 x 10 ⁷ ohms
Body Voltage Generation ANSI 97.2 ¹	<25 Volts
Meets ANSI S20.20 – 2014 Product Qualification & Compliance Verification ²	

¹With compliant footwear or shoe grounders, properly worn and in good working condition

PACKAGING

Supplied in complete 1.5 gallon (5.7 L), 3.0 gallon (11.35 L) & 15 gallon (56.8 L) total volume kits, components A + B. Use only as complete mixed unit, do not break down units.

SURFACE PREPARATION

Concrete must be cured 30 days and be clean, dry, and structurally sound. Surface must be shot blasted or diamond ground to achieve a minimum ICRI profile of CSP-3. Consult ICRI Technical Guidelines Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays, and Concrete Repair for complete information. If the surface is diamond ground, use 20-30 grit diamonds and vacuum the floor to completely remove any concrete dust. Excessive dust in the pores of the concrete will compromise adhesion. Previously coated surfaces must be mechanically cleaned and abraded prior to application to achieve a clean, gloss-free and open texture. Existing ESD surfaces should be primed with an isolation layer of APF Epoxy 400.

CONCRETE MOISTURE

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

PRIMING

Prepared concrete must be primed before application of **APF STAT-REZ 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 NANO 275**.

MIXING

Condition all materials to ambient temperature before starting. Premix A component completely to consolidate any settled product. Scrape sides and bottom of container to ensure that all constituents are completely blended. Add B Component to the A component container and mix with slow speed mixer for a minimum of three [3] minutes and until completely blended. Apply product to floor immediately after mixing.

APPLICATION

APF STAT-REZ NANO 275 must be applied in two [2] coats, approximately 4 - 6 mils each coat (266 – 400 sq. feet per mixed gallon.) Single coat applications will not cover adequately and will not provide conforming resistance values. Observe re-coat time limitation. Apply second coat within 48 hours. If recoat time is exceeded, thoroughly abrade to first coat to remove any gloss before application of second coat.

APPLICATION

Apply with 1/4- or 3/8-inch quality solvent-resistant 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.

SHELF LIFE

12 months from date of manufacture, in original unopened container. Store away from heat sources between 50°F and 85°F (10°C – 30°C). Do not allow to freeze.

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

LIMITATIONS

- Exterior applications will exhibit chalking, discoloration and fading
- **APF STAT-REZ** systems applied direct to concrete are not intrinsically spark-proof (struck by metal) and require a spark-proof substrate. Consult APF Technical Service for specification spark-proof systems.
- Applications direct to APF STAT-REZ 175 NANO conductive primer are not recommended, see **APF Stat-Rez System Sheet for Stat-Rez Hybrid System**.
- 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.
- Prior to application, measure and confirm that ambient temperature and humidity conditions are at least 5°F over 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.

CONDUCTIVE PRIMER

APF STAT-REZ NANO 275 will create a static-dissipative surface without the use of a conductive ground plane. Surface resistance* $\sim 1.0 \times 10^7$ ohms point-to-point may be achieved without a conductive ground plane.

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

GROUNDING

APF STAT-REZ NANO 275 conductive and static-dissipative flooring systems are naturally self-grounding and for most applications, no additional grounding is needed. Casual contact of the coating system with grounded structural elements in most cases is adequate. For critical processes and hazardous applications such as very low body voltage generation requirements, and flammable liquids, powders, gases, & explosives, positive ground points are required.

Positive grounding may be achieved by several methods. Copper foil tape (3M 3313, or similar) may be used. Invisible grounding points are possible under vinyl or formed cove base. Positive grounding points may be created using masonry fasteners. See APF construction detail.

GROUNDING, Cont.

All ground points should be tested for electrical continuity to the buildings structural or electrical utility ground system. Surface-to-Ground (rtg) readings are typically approximately one megohm lower than surface-to-surface (rtt) values.

CLEANING

APF STAT-REZ 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.

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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.