

High Performance Statproof® and Statguard® ESD Floors in Three Easy Steps

Statproof® and Statguard® Floor Finish are used to dissipate static charges as well as prevent tribocharging (static charge generation) while providing a clear, high gloss finish that resists wear. It is UL listed for slip resistance.

Statproof® and Statguard® Floor Finish have a very easy application process:



The Tools

High-tech ESD Floor Finish uses standard janitorial tools and procedures. All you need is a clean dedicated rayon or cotton blend mop, a dedicated bucket, and pail of Statproof® or Statguard® Floor Finish.



The Application

Start with a clean floor. One gallon covers 2,000 to 2,500 square feet. We recommend applying two to three coats. For known high traffic applications three coats are recommended for extended life. Allow as little as 45 minutes between each coat for proper drying.



The Measurable Results

It is recommended to test the surface resistance periodically to ensure that insulative contaminants such as dirt and grime are not building up on the surface. See below for ESD Systems.com testers that meet the requirements of ESD-S7.1.

Confirming Your Results



SURFACE RESISTANCE TEST KIT

- 41290 Test Kit, NIST, 120 Volt
- 41291 Tester Only, NIST, 120 Volt
- 41292 Resistivity Attachment
- 41275 Replacement Electrode, 5lb, each
- 41293 Replacement Leads for Electrodes, each

Everything needed for testing, audits, and meeting EOS/ESD S4.1 standards.

Tech Brief PS-2111



MINIMEG TESTER

- 41256 Pocket Megohmmeter, NIST
- 41258 Replacement Electrode Kit

Perfect for fast spot checking of dissipative and conductive surfaces.

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High Performance Floor Care Tips That Save You Money

STRIPPING

1. Follow recommended dilution; stronger isn't always better. The stripper solution must contain some water to be effective.
2. Allow stripper solution to penetrate the finish for several minutes before scrubbing. For heavy build-up, you may have to apply more stripper to the floor as the stripper solution becomes saturated with old loosened finish.
3. To check if the floor is ready for scrubbing, scrape the finish film with the center section of a floor pad. (Be sure you're wearing rubber gloves.) If you easily scrape the bare floor, it is ready to scrub. If the pad scrapes only a slippery layer of finish, then you need more time or more stripper solution.

FINISHING

4. Always use laundered rayon-blend mopheads for finishing. Soiled or new cotton mops can turn the finish brown. Before use, soak mops in water and wring out tightly, so they absorb less finish and are easier to clean.
5. Coat traffic lanes more than other areas. On the first application, stay at least 12 to 14 inches away from baseboards and corners. Gradually work closer to the edges with each subsequent coat. To prevent edge buildup, apply one coat to non-traffic edges for every three coats applied in traffic lanes.
6. Apply finish in uniform, medium to full coats. Thin coats may dry faster, but often lack strength and contribute to powdering.
7. To test finish adhesion, apply one coat to a small area and let dry 40-50 minutes. Apply masking or cellophane tape to the finish and pull up quickly. If the finish comes off with the tape, you have poor adhesion. This is especially important to do when stripping the factory finish from new tile.

CLEANING/ MAINTENANCE

8. Frequent dust mopping and immediate clean-up of spills are critical to great looking floors. Use only clean dust mops. For a treated dust mop use only Statproof® finishes diluted 1:3 with water. Other treatments may insulate floor.
9. Follow dilution instructions carefully to conserve cleaner and protect finish. Cleaners should be strong enough to remove soil without damaging your finish. The cleaner solution is too strong if your finish looks hazy and dull after cleaning.
10. Always use clean scrubbing pads or brushes on auto scrubbers and rotary machines, and clean cotton mops for hand mopping.
11. Deep scrub floors before recoating to prevent floor finish build-up and delay stripping. Mix a cleaning solution suitable for heavy soil; apply with a mop or auto scrubber. Scrub the floor using an automatic or rotary machine equipped with black stripping pads, then pick up solution and rinse. Surface should be clean and free of scratches, heel marks, and any cleaner residue. Recoat with finish.

BUFFING/ BURNISHING

12. Always clean the floor before any buffing operation. Even light accumulations of soil quickly become embedded into the floor finish when burnished.
13. With softer finishes (especially with UHS), fresh coats may show swirl marks and scratches when buffed. Use a softer, less aggressive buffing pad for several days until the finish has fully cured.
14. A dedicated pad is recommended to eliminate any contamination of insulative finishes. Change and clean buffing pads frequently. As they pick up floor finish, dirt and other materials, they become less effective and create excess drag on the buffing machine.



Turn an Ordinary Floor into a High Performance ESD Safe Floor

ESD (electrostatic discharge) is an increasingly challenging problem for manufacturers of products containing electronics. Static electricity is generated in many ways. People, carts, and chairs generate static electricity as they walk or are rolled around. A simple touch from an operator in a non-static controlled environment can transfer thousands of volts of static electricity. For a person to feel the static discharge, it has to be over 3,000 volts, and modern miniature electronic components can be damaged by static discharges of 30 volts and less.

In high tech manufacturing facilities, there will be increasing demand for floor finish which is static dissipative. ESD Systems.com's Statproof® and Statguard® Finish can turn almost any existing floor into ESD safe flooring.

ESD Systems.com provides expert ESD control information, superior products, and technical support to serve this important niche market. Using standard maintenance procedures, Statproof® and Statguard® floor finish will create a quality ESD floor without sacrificing floor appearance.

YOU CAN RELY ON ESD SYSTEMS.COM AS YOUR ESD EXPERTS:

- ✓ ESD Systems.com has over twenty years of ESD experience
- ✓ Statproof® and Statguard® products are made in America at our Canton, MA facility
- ✓ Statproof® and Statguard® products are inventoried at Marlboro, MA.
- ✓ Extensive technical support available

We produce all our floor care products at our Canton, MA facility

ESD Systems.com has tested some of the most popular floor finishes. Evaluate the test results shown below and you will see that Statproof® and Statguard® are clearly the high-performance, low cost leaders.

Brand	Statproof®* Statguard®*	Brand A*	Brand B*	Brand X*
Resistance in Ohms				
RTT (RH @ 10%)	2.45 x 10 ⁸	5.4 x 10 ¹²	2.45 x 10 ¹⁰	9.7 x 10 ¹¹
RTT (RH @ 50%)	3.04 x 10 ⁷	3.0 x 10 ¹⁰	5.18 x 10 ⁷	3.5 x 10 ¹⁰
RTT (RH @ 75%)	2.64 x 10 ⁷	1.1 x 10 ⁷	1.04 x 10 ⁷	1.1 x 10 ⁹
Slip Resistance				
RH @ 10%	0.530	0.382	0.646	0.480
RH @ 50%	0.562	0.452	0.482	0.510
RH @ 75%	0.540	0.579	0.377	0.518
Pass = > 5.0	PASS	FAIL	FAIL	FAIL
Cost per Gallon	\$42	\$48	\$56	\$28
Applications/Year	6	6	6	12
Dry Time per Coat	45 min.	240 min.	45 min.	45 min.
Total Material	\$1260	\$900	\$1350	\$1680
Total Labor	\$900	\$1350	\$1150	\$1800
Total Annual Cost	\$2160	\$2790	\$2830	\$3480

*Actual test results available upon request.



The Statproof® and Statguard® High Performance System That Works for You

Choose Your Maintenance Program			
	Mop, Scrub, & Recoat	Weekly Spray Buff	Ultra High Speed Weekly Burnish
RECOMMENDED ESD PRODUCTS	Statguard®-LH Finish and Cleaner	Statproof® & Statguard® Finish and Spray Buff	Statproof® Finish and Burnishing Restorer
SUGGESTED LOCATION	Manufacturing, Labs, Stock Areas	Manufacturing, Hospitals, Assembly	Walkways, Hospitals, High Traffic, Clean Rooms
LABOR USAGE	Low	High	Moderate
PRODUCT USAGE	High	Moderate	Highest
TOTAL COST	Low	Moderate	Highest
APPEARANCE	Very Good	Excellent	Excellent
ELECTRICAL PROPERTIES	Excellent	Very Good	Very Good
MAJOR BENEFITS	Minimal Care	Shine	High Shine
FINISH SOLIDS	18%	18%	18%
POLYMER HARDNESS	Highest	High	High
FINISH DURABILITY	Highest	High	Highest
METAL CROSS LINKER	Zinc	No Zinc / Zinc	No Zinc
THALATE FREE	Yes	Yes	Yes
CLEAN ROOM USE	Very good	Very Good	Very Good
GLOSS	Highest	High	Highest
DRY TIME PER COAT	45-60 minutes	45-60 minutes	45-60 minutes
UL SLIP RESISTANCE	Safe Floor	Safe Floor	Safe Floor
ELECTRICAL PROPERTIES*	10 ⁷ to 10 ⁹ Ohms @ 30% to 65% RH	10 ⁷ to 10 ⁹ Ohms @ 30% to 65% RH	10 ⁷ to 10 ⁹ Ohms @ 30% to 65% RH
CHARGE DECAY	5000 volts to Zero in 0.05 seconds	5000 volts to Zero in 0.05 seconds	5000 volts to Zero in 0.05 seconds
LOW CHARGING PER ESD STM 97.2	<100 Volts	<100 Volts	<100 Volts

GREAT FOR CLEAN ROOM APPLICATIONS CONTAMINANT COMPATIBILITY

Contaminant	Dried Film	Liquid (Outgassing)
Sodium	Zero	Zero
Fluoride	Zero	Zero
Chloride	Zero	Zero
Bromide	Zero	Zero
Iodide	Zero	Zero

- Dried film testing was completed to simulate particulating.**
- Liquid analysis completed using GLC (gas-liquid chromatography)**
- ** Analysis conducted at Armstrong Corporate Research Center, Lancaster, PA.

QUICK DRYING TIME 3 times faster than some competitive brands.

It is recommended that Statproof® and Statguard® be allowed to dry at room temperature in excess of 70°F for 45 minutes or until dry. At high relative humidity levels, a longer drying time may be necessary. Wait 6 hours before any light traffic, 12 hours before regular traffic, 48 hours before any wet maintenance, and 72 hours before buffing, heavy equipment, and floor truck traffic.

***Note:** ANSI/ESD S20.20 provides two options for ESD Flooring-Footwear System when used as primary grounding method to ground personnel. Either charge less than 100 volts per ESD-STM97.2 or less than 3.5 x 10⁷ ohm resistance measured in combination with a person per ESD STM97.1. Statproof® and Statguard® do both!

The Statproof® and Statguard® High Performance Floor Care System



STATGUARD® FLOOR FINISH

- 26200** Floor Finish, 2.5 Gallon Bag-in-Box
- 26201** Floor Finish, 5 Gallon Bag-in-Box
- 26004** LH Floor Finish, 5 Gallon Bag-in-Box

Statguard® is a durable, static control floor coating with a high gloss finish.

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STATPROOF® FLOOR FINISH

- 26000** Floor Finish, 1 Gallon Bottle
- 26002** Floor Finish, 2.5 Gallon Bag-in-Box
- 26004** Floor Finish, 5 Gallon Pail
- 26006** Floor Finish, 5 Gallon Bag-in-Box
- 26008** Floor Finish, 55 Gallon Drum

Statproof®'s initial gloss is the highest no-zinc finish on the market, and its response to spray buffing is unmatched.

Tech Brief PS-2026



STATPROOF® FLOOR NEUTRALIZER

- 26052** Floor Neutralizer, 1 gallon concentrate
- 26050** Floor Neutralizer, 2.5 gallon Bag-in-Box

Statproof® Neutralizer prepares the floor prior to the application of new floor finish.

Tech Brief PS-2028



STATPROOF® SPRAY BUFF

- 26028** Spray Buff, 1 Quart Bottle

Spray Buff is used to repair, spot clean and restore Statproof® finished floors.

Tech Brief PS-2031



STATPROOF® BURNISHING RESTORER

- 26032** 1 Gallon Bottle
- 26036** 2.5 Gallon Bag-in-Box

Burnishing Restorer snaps back electricals and finish.

Tech Brief PS-2032



STATPROOF® & STATGUARD®

Choosing the right solutions for your ESD floor care system

Other Statproof® and Statproof® High Performance Products



REZTORE™ ESD HAND LOTION

- 16009** 8 oz. Bottle
- 16011** 1 gal. Refill
- 16012** 1 qt. Bottle

This moisturizing hand lotion can be used to reduce skin electrical resistance and enhance the reliability of ESD control wrist straps.

Tech Brief PS-2110



STATPROOF® FLOOR CLEANER

- 26022** Cleaner, 5 Gallon Pail
- 26026** Cleaner, 5 Gallon Bag-in-Box
- 26024** Cleaner, 2.5 Gallon Bag-in-Box

Dissipative cleaners leave floors clean and free of insulative film with no rinsing.

Tech Brief PS-2029



STATPROOF® FLOOR STRIPPER

- 26042** Stripper, 5 Gallon Pail
- 26046** Stripper, 5 Gallon Bag-in-Box
- 26044** Stripper, 2.5 Gallon Bag-in-Box

Strips floors with low ph formula, reducing rinse time and cutting labor costs by 20%.

Tech Brief PS-2027



AISLE MARKING TAPE

- 16070** Tape, 3" x 54'
- 16071** Tape, 3" x 108'
- 16072** Tape, 3" x 216'
- 16080** Tape, 3" x 108', Four Languages

Aisle Marking Tape is ideal for area designation in ESD sensitive areas. It is constructed of scuff-resistant vinyl plastic with a backing of quick-stick adhesive.

Drawing TD-16070



STATPROOF® CARPET PROTECTOR

- 26060** Carpet Protector, 1 quart
- 26061** Carpet Protector, 1 gallon concentrate

Statproof® Carpet Protector controls the generation and build-up of static charges on carpeting and fabric chairs.

Tech Brief PS-2082



STATPROOF® CONDUCTIVE FLOOR PAINT

- 26120** 5 Gallon Pail, Grey
- 26110** 1 Gallon Pail, Grey
- 26125** 5 Gallon Pail, Light Grey

A great conductive base for concrete floors and other hard surfaces.

Techn Brief PS-2015

Need More Details About Our Floor Care Products?

See our web site:
www.esdsystems.com

E-mail us:
service@esdsystems.com

Customer Service:
(508) 485-7390



TRASH CAN LINERS

- 16410** 24" x 24" (10 Gallon)
- 16420** 22" x 16" x 58" (55 Gallon)

Heavy duty static dissipative trash can liners reduce static generation to less than 250 volts.

Drawing 16410