STONHARD®

EST. 1922

Ten Questions You Should Ask About Static Control Flooring

Before you consider which ESD flooring system is right for you, consider this:

We will replace over 1 million square feet of our competitors' floors this year.

1. **Static control begins with the floor.**
   A static control floor is security for people and equipment not protected by workstation products. Think of static control flooring as protection or insurance for the total environment. A sound static control program is a combination of several overlapping measures designed to maximize ESD protection. This "total system approach" is aimed at effectively controlling static from all possible sources. You might think that wrist-straps and grounded bench tops provide adequate protection; this is not the case. Supervisors, non-workstation personnel, hand carts and pallet trucks move in and out of ESD safe areas without proper grounding. In fact, there is only one common grounding element in a static control program - the floor. This approach also provides backups. If a wrist strap or table top fails, or an operator is careless, the presence of static control flooring will prevent the "system" from failing.

2. **Does the supplier manufacture and formulate their own products?**
   Static control flooring systems must meet stringent specifications for both material consistency and performance characteristics. Stonhard formulates and manufactures all of its own products to ensure the highest quality material available on the market. Stonhard's manufacturing facilities are registered to the international quality standard ISO 9001. This disciplined approach gives us an advantage in both technology and quality that no one can match. Do not let someone try to tell you that one epoxy system is just like another. We work with hundreds of resin and curing agent combinations optimized to deliver unique finished properties.

3. **Does the installation process affect the overall performance of the floor?**
   The preparation of your substrate and the installation of your floor are perhaps the most crucial steps to the success of your new flooring system. The quality and attention to detail shown on installations can greatly affect the floor's ultimate physical strength, durability and aesthetic characteristics. Stonhard's turnkey installation approach and specialized installation teams are unique to the industry. With over 350 direct local project engineers and 175 specially trained installation teams, Stonhard can quickly respond to any job anywhere. In addition, many other ESD flooring systems' performance can be dramatically affected by on-site mixing, installation procedures and thickness variations. Unlike these other systems, the electrostatic properties of Stonlux ESD are built into the material and are not affected by installation variations. Only Stonhard can provide an ESD flooring solution with cutting edge technology coupled with world class installation.

4. **What is electrical resistance of the finished system?**
   Electrical resistance indicates electrical continuity across a surface or from surface to ground. Resistance measurements reflect the dissipation characteristics and the relative electrical safety of the material. Stonhard's ESD control flooring systems are available in both conductive and static dissipative ranges to meet your specific requirements. Our Stonlux ESD systems meet or exceed all existing domestic and international electrical resistance standards for flooring. Stonhard's static control systems quickly and efficiently dissipate electrical charges and Stonlux ESD's charge dissipating characteristics are not affected by relative humidity, traffic, wear or other environmental factors.

5. **How do I know which system is best for my needs: Static Dissipative or Conductive?**
   The Conductive range is defined as a resistance less than 1×10^6 ohms and the Static Dissipative range is defined as 1×10^6 to 1×10^9 ohms in the ESD industry. Common standards require both the electrical resistance to be below 1×10^9 ohms and have a body volt generation less than 100 Volts when tested with ESD footwear. Stonhard's ESD flooring solutions meet or exceed these testing standards and your local territory managers will help you determine the type of system and product that will keep your facility operating effectively and safely.

6. Besides electrical resistance, is there any other way to characterize the electrostatic performance of an ESD flooring system?

Yes. While electrical resistance is the most important and universally accepted method to characterize ESD flooring performance, it only tells part of the story. Body Voltage Generation and Decay are performance characteristics which determine the maximum amount of body voltage which can be generated on a floor and the time needed to dissipate that charge during both a walking cycle and standing still. These characteristics must always be evaluated with the actual footwear worn in the environment. These measurements are used to determine the ESD sensitivity classification of a given floor/footwear combination. Stonhard's ESD control systems meet the Class 0 sensitivity specification for use in the most sensitive electronics applications. Stonlux ESD will maintain body voltage generation values below a maximum of 100 volts when used in conjunction with any approved ESD footwear, which include heel grounders, conductive and static dissipative shoes. Beware of flooring systems which present very low values that can only be achieved using a specific type of footwear. These systems will limit your freedom to modify existing production area dress protocol while providing little substantive benefit.

7. How safe are the products?

Year after year, electronic chip densities are increasing and with them the need for cleaner production capabilities. Clean manufacturing environments require flooring systems which can be applied in clean rooms down to Class 100 specifications. These environments dictate that a material be seamless to avoid contaminant collection at the seams and joints and resistant to particulate shedding and abrasion under normal traffic conditions. Additionally, the material must not exhibit outgassing, as found with rubber/vinyl flooring and solvent based coatings. Stonhard's Stonlux ESD meets all of these requirements while providing state-of-the-art ESD protection.

8. Will what I buy be what I get?

Sounds like a simple enough question, but the answer may surprise you. ESD flooring systems typically range from 50 to 125 mils in thickness. Do not assume that these systems' thickness represent usable ESD thickness. Many ESD flooring suppliers offer an insulative flooring base with a 6-10 mil conductive coating on top. This type of system will provide adequate physical strength, however, normal use can quickly wear the top coating and eliminate the floor's ESD properties. Stonhard's Stonlux ESD flooring system provides a nominal 80 to 120 mils of usable ESD thickness; that's right, the entire thickness of the floor provides ESD protection. Even excessive wear under extreme traffic conditions will not affect the electrostatic properties of the floor. This provides an ESD safe environment for the life of the flooring system.

9. How much maintenance is required with this system?

Stonhard's Stonlux ESD flooring system has the lowest long-term maintenance requirements of any ESD flooring system on the market. The only maintenance required is a daily dust mopping to remove abrasives from the floor and a monthly power wash with soap and water to remove any tire marks or built up dirt. Unlike vinyl tile or conductive coatings, there is never a need for topical finishes or recoating of the floor to maintain its aesthetic or electrostatic properties. Before being dazzled by the low cost of a thin film coating or wax, put a pencil to paper and see for yourself the cost of maintaining these systems over a three year period. After three years these costs will continue while your Stonlux floor will have paid for itself; it is a simple matter of dollars and cents.

10. What about service after the sale?

At the completion of every Stonlux ESD installation, the electrostatic properties of the floor are tested and certified by a qualified Stonhard representative in the presence of a customer's representative. These results are then approved in writing by the customer. Stonhard will not leave the site until you are completely satisfied with the condition of your new floor. While the electrostatic properties of the floor will not change with time, it is possible to arrange periodic audits of the system with your local project engineer. At Stonhard, you'll never hear the lines, "it's the manufacturer's problem" or "it's the installer's fault." We formulate, manufacture and install our products and we take full responsibility.

Once you've asked these questions, we think you might have just one question left...

Is there really any other choice when buying flooring ESD?

Wherever you have floors, we have solutions.

- Airports
- Automotive
- Aerospace
- Chemical
- Distribution
- Education
- Electronics
- Food & Beverage
- Government
- Healthcare
- Hospitality
- Manufacturing
- Office Buildings
- Parking Garages
- Pharmaceutical/Biotech
- Retail & Commercial Spaces
- Stadiums
& Entertainment Venues
- Technology
- Utilities
- Water/Waste Water

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