Static Charge Generated While Walking
Flooring and Footwear Comparison

Selecting the best flooring solution isn’t as simple as checking off Level 1, Level 2, or Level 3. Fortunately, there is evidence-based design that can help you match flooring with your unique environment.

Overall, it is essential to understand the relationship between the various forms of static-control flooring and the types of footwear people will wear while working in your space. Many combinations of footwear and ESD flooring actually generate significant static charges even though you would expect just the opposite. For example, conductive and static dissipative vinyl and epoxy provide no static-control benefits with ordinary shoes. Different types of ESD footwear also perform differently across brands of the same type of flooring. Because of this, you could unknowingly risk damage to equipment, product returns, facility downtime, communication errors, and liability.

The chart below outlines the performance of ordinary footwear, ESD shoes, and ESD heel straps on the five main forms of ESD flooring. Here you can see the differences in static charge generation with the same forms of flooring from multiple manufacturers.

Before making a final decision on a flooring supplier, check to see if its flooring has been tested by an independent lab for performance with many types of ESD footwear and standard footwear and ask to see the full report.

For more information on static charge generation, please visit our Knowledge Center. For help selecting a flooring product for your environment, please see our Flooring Selector Chart.
Body Voltage Generated with Different Footwear
Comparison Between Flooring Types

- ESD Shoes
- ESD Heel Strap
- Regular Footwear

**Static Generated While Walking (Volts)**

- Interlocking Floor A: >200
- Interlocking Floor B: >3500
- ShadowFX Carpet Tile: >3500
- Eclipse Rubber: >3500
- Vinyl Tile A: >3500
- Ameriworx Vinyl Tile: >3500
- Epoxy Coating A: >3500
- Epoxy Coating B: >3500

**FEEL SHOCK**

- Staticworx

**REAL WORLD**

- 911 Dispatch Area
- Data Center
- Flight Command Center
- Networked Office
- Hospital/Imaging
- Control Room
- Lab
- Government Office
- Server Room

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Body Voltage Generated with ESD Footwear
Comparison Between Flooring Types

Static Generated While Walking (Volts)

ESD Heel Strap  ESD Shoes

Interlocking Floor A  Interlocking Floor B
ShadowFX Carpet Tile  Eclipse Rubber
Vinyl Tile A  Ameriworx Vinyl Tile  Epoxy Coating A  Epoxy Coating B

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