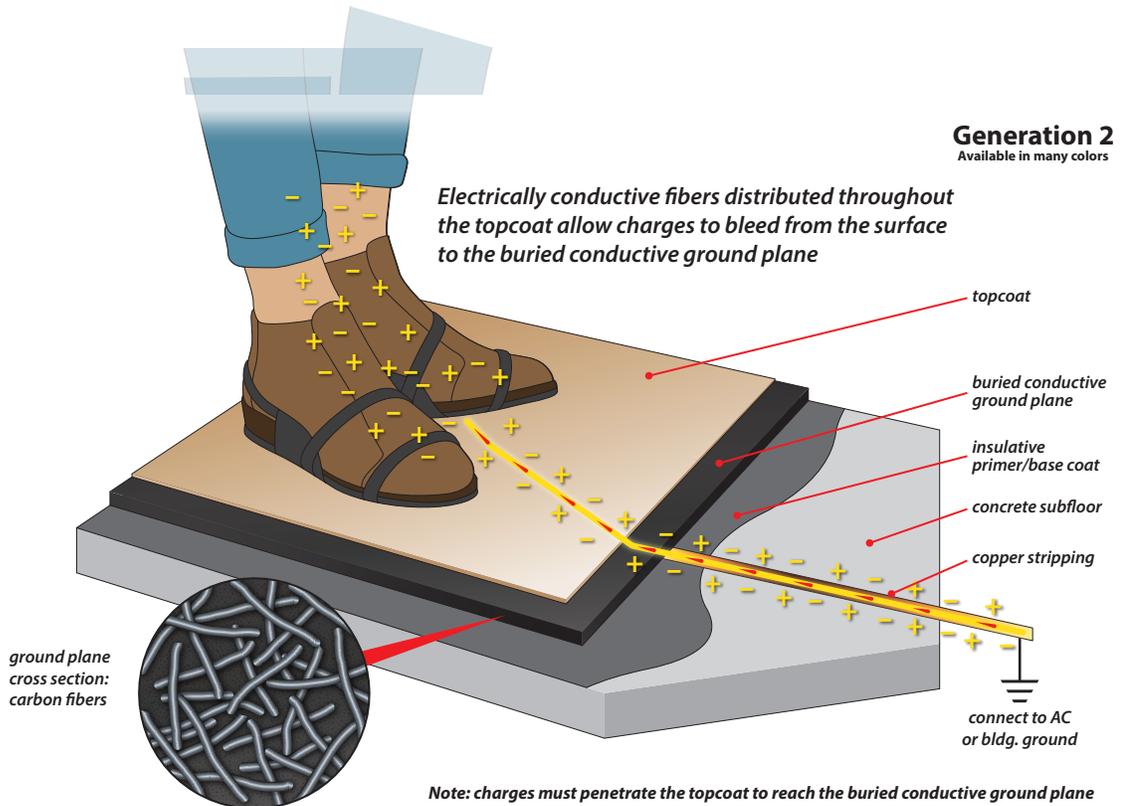
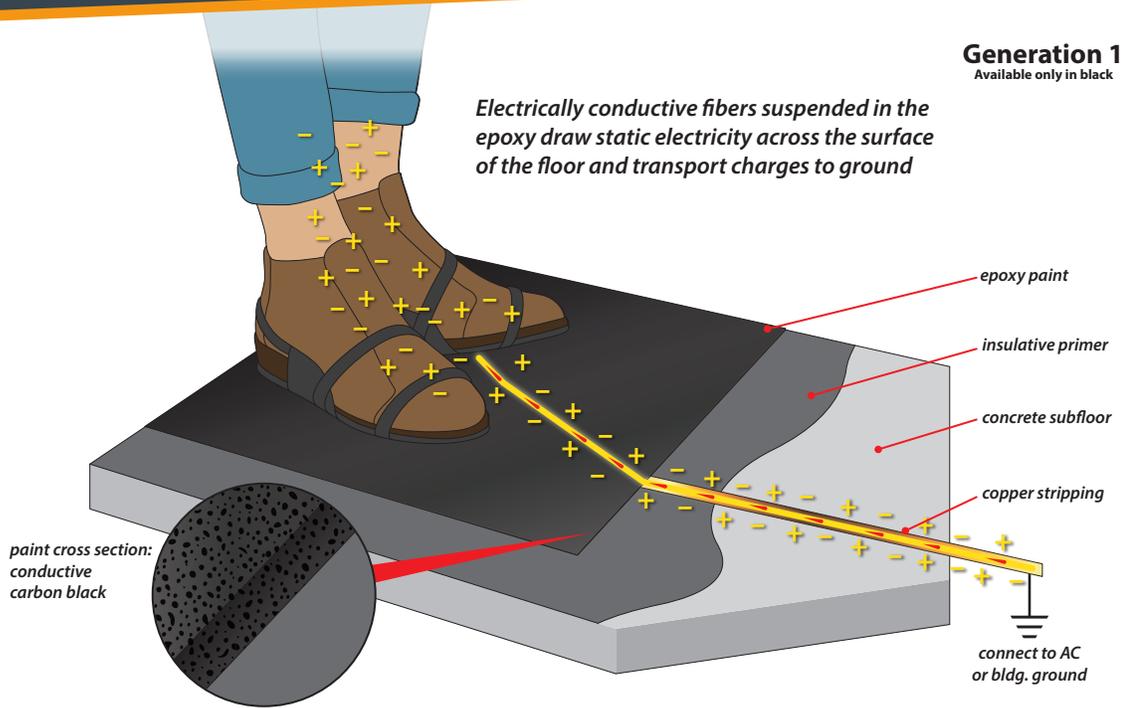


ESD COATING	Carbon Black	Multi-layer Epoxy w/Conductive Groundplane	ESD Urethane	Epoxy Acrylate
	Generation 1	Generation 2	Generation 3	Generation 3
Electrical Specification/ANSI S20.20				
Always meets ANSI/ESD S20.20	Yes	No ¹	Yes	Yes
Available in dissipative (>1.0 10E6)	No	Yes	Yes	Yes
Available in conductive (<1.0 10E6)	Yes	No	Yes	Yes
Measures below 100V w/heel straps per STM 97.2	Yes	No	Yes	Yes
Measures below 100V w/ESD shoes	Yes	Yes	Yes	Yes
Material				
Requires carbon black ground plane	No	Yes	No	No
Available in light colors	No	Yes	Yes	No
Scratch resistant	No	No	Yes	No
Installation				
Can be applied over sub- or old floors in one coat	Yes	No	Yes	Yes
Can be repaired with a single coat	Yes	No	Yes	Yes
Gloss finish without use of sealer or wax	No	Yes	Yes	No

In qualification testing, multi-layer epoxies that rely on a groundplane fail 97.2 walking body tests with heel straps.

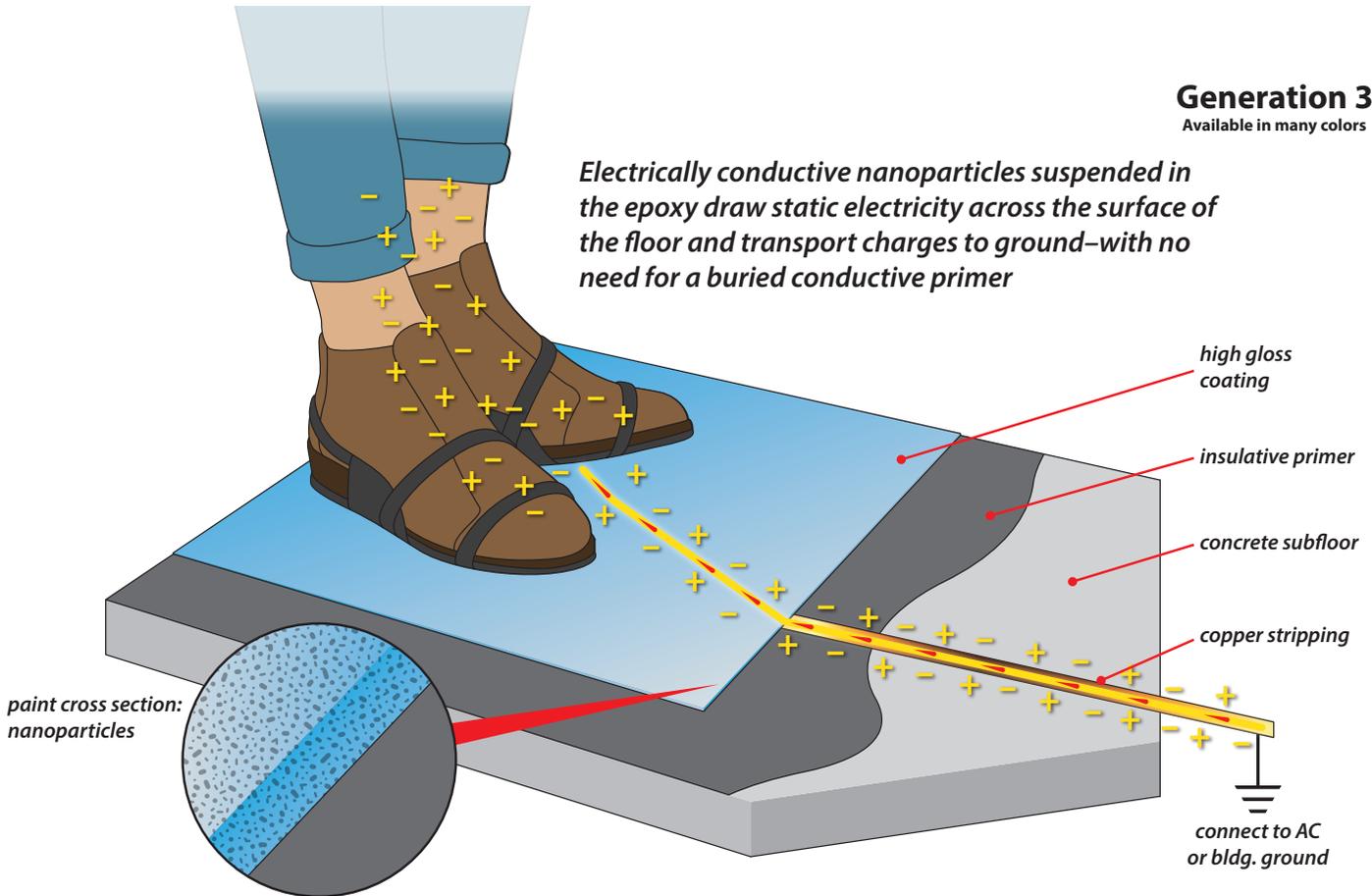
Generation Comparison



Generation 3

Available in many colors

Electrically conductive nanoparticles suspended in the epoxy draw static electricity across the surface of the floor and transport charges to ground—with no need for a buried conductive primer



Nano technologies produce fully conductive colorized topcoats (colored and clear). This translates into a floor that requires a standard concrete primer and conductive topcoat.

Information in the table below is based on tests performed by an independent lab and show body voltage generation for different types of ESD flooring materials. Tests showed that surface conductivity greatly impacts the performance of ESD epoxy coatings.

MATERIAL	Regular Footwear	ESD Heel Straps	Conductive Shoes
	Generation 1	Generation 2	Generation 3
Conductive vinyl interlocking floor Tile A PU surface coating	>4000 volts	827 volts peak	62 volts peak
Conductive vinyl interlocking floor Tile B with no PU coating	>2500 volts	33 volts peak	15 volts peak
Conductive vinyl tile (12" x 12" 3 mm thickness)	>3500 volt	10 volts peak	12 volts peak
Static-dissipative carpet tile squares 500 mm x 500 mm)	< 400 volts	<25 volts	< 25 V peak
Conductive rubber tile (24" x 24" 2 mm thickness)	< 400 volts	<10 volts	< 10 V peak
Static-dissipative epoxy, Generation 2 Buried conductive layer	> 3000 volts	350 volts peak	18 volts peak
Conductive epoxy coating, Generation 2 Buried conductive layer	> 3500 volts	329 volts peak	35 volt peak
Conductive epoxy coating, Generation 3 No buried layer, surface fully conductive	> 3500 volts	23 volts peak	>25V peak

Please note: Flooring should always be evaluated based on charge generation testing performed on flooring in combination with footwear. ANSI/ESD S20.20 specifies maximum charge generation of 100V.

Tests performed by Fowler Associates, Inc.