



ESD Systems.com Statshield® ESD Bags are designed to fulfill the ANSI/ESD S20.20 ESD control principle requiring the transportation of ESD susceptible items outside an ESD protected area to be enclosed in low tribocharging and static discharge shielding materials. Statfree® Ultra Clear ESD Barrier Bags are low tribocharging and static dissipative for use inside an ESD protected area.

Why Choose ESD Systems.com Static Control Bags?

We refuse to put your products at risk. We use only the highest quality materials in our full line of static shielding bags. ESD Systems.com bags are made in America at our Canton, MA facility on specially designed bag machines. Great care is given to produce the finest quality bags. It's in the details.

The objective of ESD protective packaging is to prevent a direct electrostatic discharge to the ESD Systems.com item contained within and allow for dissipation of charge from the exterior surface. In addition, the packaging should minimize charging of the ESDS item in response to an external electrostatic field and triboelectrification. If the user does not know the sensitivity of the items being used, static shielding packaging should be used. See ANSI/ESD S20.20 paragraph 6.2.4.2. Packaging Guidance.



ESD BAG SELECTION CHART

	Statshield® Premium Metal In Green Bag	Statshield® Standard Metal In Bag	Statshield® Standard Metal Out Bag	Statfree® Ultra Clear Bag	Protektive Shield™ ESD Shielding Moisture Barrier Bags	Pink Poly Bags
Surface Resistance: Interior/exterior per ANSI/ESD S11.11	<10E10 ohms	<10E11 ohms	<10E11 ohms <10E9 ohms	<10E11 ohms	<10E11 ohms	<10E11 ohms
Energy test- Average per ANSI/ESD F11.31	≤ 15nJ	< 25nJ	< 25nJ	N/A	< 10nJ	N/A
Electrostatic Decay per FTMS 101C/4046	< 2 sec	< 2 sec	< 2 sec	< 5 sec	< 3 sec	<1 sec
Static Shielding MIL -PRF-81705D, EIA-541	< 10 volts	< 30 volts	< 30 volts	N/A	< 20 volts	N/A
Type of bag according to Mil-PRF-81705D	III	III	III	II	I	II
Application	RoHS & ESD sensitive items, multiple use bag	ESD sensitive items, multiple use bag	ESD sensitive items	Non-ESD sensitive items	Dry packing of moisture sensitive devices	Non-ESD sensitive items
Thickness (nominal) ASTM D374	3 mil	3 mil	3 mil	3.5 mil	4.0 to 4.2 mil	2.0 to 6.0 mil
Puncture - Average per FTMS 101C/4046	>12 lbs	>12 lbs	>12 lbs	>19 lbs	>27 lbs	
Moisture Barrier MVTR per ASTM F1249-90	N/A	N/A	N/A	0.15 (gms / 100 in 2 / 24 hrs, 100°F	0.0003 (gms / 100 in 2 / 24 hrs, 100°F	N/A
Non-corrosive per FTMS 101C/4046	Pass	Pass	Pass	Pass	Pass	Pass
Outgassing ASTM E595	Pass	Pass	Pass	Pass	Pass	N/A
HEAT SEALING CONDITIONS: (Temperature) (Time - Dwell) (Pressure)	250-375°F 0.56 -3.5 sec 40-80psi	250-375°F 0.56 -3.5 sec 40-80psi	250-375°F 0.56 -3.5 sec 40-80psi	250-375°F 0.56 -3.5 sec 40-80psi	350-475°F 0.56 -3.5 sec 40-80psi	275-300°F 5 -10 sec

Richmond brand bags are provided to those wanting Richmond brand ESD bags. Shielding is required for ESD packaging of ESD sensitive items outside the ESD protected area per ANSI/ESD S541 Packaging standard.