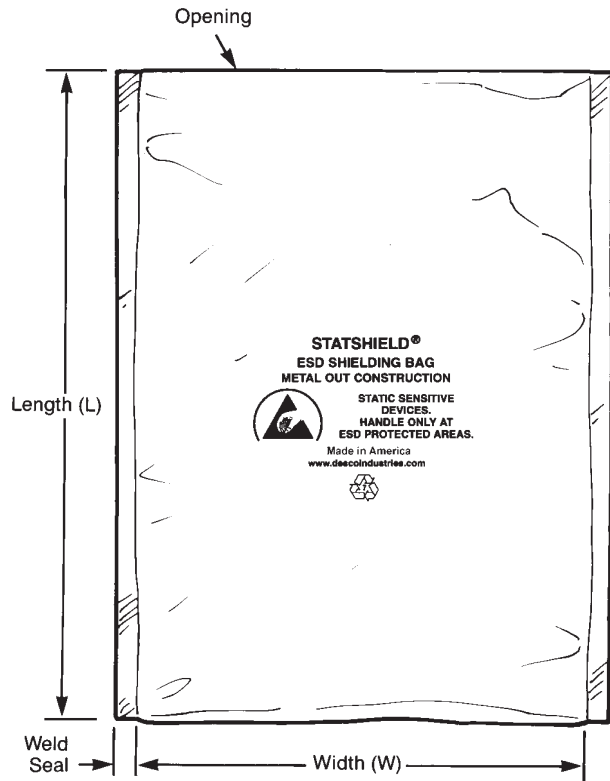


# STATSHIELD® M/O SERIES



Side Weld Seals 3/8 in.

See reverse side for available sizes.

**A fundamental ESD control principle (see ANSI/ESD S20.20 Foreword):**  
ESD susceptible items should be transported and stored outside an Electrostatic protected Area enclosed in low charging, static shielding protective packaging.



### Specifications:

#### Electrical Properties

Surface Resistance:	
Outer Surface	<10E8 ohms
Aluminum Layer	<10E2 ohms
Inner Surface	<10E11 ohms
Static Shielding	<20 nJ
Charge Generation (nC/in <sup>2</sup> )	Teflon: -0.03 Quartz: +0.10
Capacitance Probe (to dissipate 1 KV)	<30V

#### Typical Values

#### Test Procedures/Method

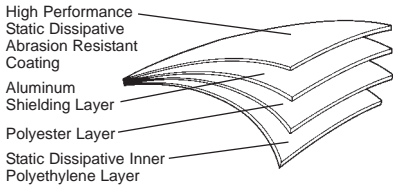
ANSI/ESD S11.11
ANSI/ESD S11.11
ANSI/ESD S11.11
ANSI/ESD S11.31
Modified Incline Plane
Modified Incline Plane
MIL-PRF-81705D, EIA 541

#### Physical Properties:

Bag Thickness:		
Polyester Layer	0.5 Mils Static Dissipative PET film	ASTM D-2103
Aluminum Layer	10-25 Angstroms	
Polyethylene Layer	2.5 Mils Static Dissipative PE film	ASTM D-2103
Total Thickness	3.0 to 3.1 Mils	ASTM D-2103
Light Transmission (%)	40% (Tobias)	ASTM D-1003
Seam Strength	Pass	MIL-PRF-81705D
Tear Strength (lbs)	>25	ASTM D-1004
Puncture Resistance (lbs)	>10	ASTM D-2065
MVTR (gms / 100 in <sup>2</sup> / 24 hrs, 100°F)	0.40	ASTM F-1249
Burst Strength (psi)	>50 psi	FTMS 101C, 2065.1
Heat Seal	>10 lbs/in.	375°F, 1/2 sec 60 psi
Abrasion Resistance	>30 cycles	Sutherland Abr. (.0000 Steel Wool)
Outgassing	Pass	ASTM E595
Non-corrosive	Pass	MIL-STD-3010, M3005

#### Chemical Properties

Corrosion	No effect on aluminum, copper, silver, Sn-Pb coated foil, stainless steel, low carbon steel
Polycarbonate Capability,	Yes
No Amines N-Octanoic Acid	Not present



#### Mixed Unsortable Plastic Scrap

Mixed unsortable plastic scrap shall contain assorted plastics of multiple grades that are co-extruded, bonded or laminated together which are unsortable into individual grades.

**Desco's bags are recyclable**

*The bag's material meets the performance specification requirements of Mil-PRF-81705D, Type III. Bag is free of amines, N-octanoic acid, and heavy metals.*

Statshield®, Statfree®, and Faraday® are Registered Trademarks of Desco Industries Inc.

### STATSHIELD® BAG, SHIELDING, METAL OUT CONSTRUCTION

# DESCO

DESCO WEST: 3651 WALNUT AVE., CHINO, CA 91710 WEB SITE: Desco.com  
PHONE (909) 627-8178 FAX (909) 627-7449

DESCO EAST: 90 HUDSON RD, CANTON, MA 02021-1407  
PHONE (781) 821-8370 FAX (781) 575-0172

**DRAWING NUMBER**  
13010

**DATE:**  
12/06

Item No.	Size (in.) W x L	Item No.	Size (in.) W x L
13010	3 x 5	13080	10 x 14
13020	4 x 6	13090	10 x 24
13035	5 x 8	13110	12 x 16
13050	6 x 10	13115	12 x 18
13065	8 x 10	13125	15 x 18
13070	8 x 12	13130	18 x 18
13075	10 x 12	13135	18 x 24
Packaged 100 per package			

“The Organization shall define ESD protective packaging for all ESD susceptible item material movement within Protected Areas, between job sites and field service operations.” See ANSI/ESD S20.20 section 6.2.4.1. Packaging Requirements.

“ESD susceptible items shall be packaged in ESD protective packaging while not in a Protected Area.” See ANSI/ESD S20.20 section 6.2.3.1.

Statshield® bags are packaged 100 per package in an oversized shielding bag rather than a cardboard box. Therefore, our bags are not exposed to water vapors that will degrade the metallized shielding layer. Our bags have an additional layer of barrier protection because of our packaging.

### Desco ESD Bags Are Generally Reusable

For best results, bag inventory should be continually replenished. It is recommended that standard packs of bags should be stored in its original packaging in a climate controlled environment where the temperature ranges from 45 degrees F to 70 degrees F and relative humidity is 50%. Bags should not be stored in ultraviolet sunlight, moisture, or heat because the aluminum shielding layer could oxidize if exposed to these conditions.

We have no reports of degradation of ESD control properties of bags sealed in original standard pack packaging. Desco's Limited Warranty expressly warrants that for a period of one (1) year from the date of purchase, Desco products will be free of defects in material (parts) and workmanship (labor).

Before using and after one year from purchase date, users shall determine the suitability of the Statshield ESD Bags for their intended use. Users assume all risk and liability whatsoever in connection therewith. Mishandling or improper storage may render an ESD Bag unusable to perform its function. ESD Bags that are ripped, torn, or scratched should be discarded.

From ANSI/ESD S20.20 section 6.2.4.2. Packaging Guidance: "The objective of ESD protective packaging is to prevent a direct electrostatic discharge to the ESDS 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 triboelectricity. They may also lose static shielding properties by crumpling, puncturing and folding."

Some end users reuse a Statshield® Transparent Metal In ESD Shielding Bag up to six times and then discard.

Ideally, the user should test, auditing some percentage of the re-used ESD Bags using test procedures outlined in ANSI/ESD-S11.11 Surface Resistivity Standard, ANSI/ESD-S11.12 Volume Resistance Measurements of Static Dissipative Planar Materials, and Shielding Materials ANIS/ESD S11.31.

Desco's only obligation shall be to replace such quantity of the product proved to be defective. See full Limited Warranty information at [www.desco.com/Warranty.aspx](http://www.desco.com/Warranty.aspx).

#### RoHS Compliance Statement

None of the following materials are intentionally added in manufacturing this product: lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls (PBB) or polybrominated diphenyl ethers (PBDE) as outlined in the Directive 2002/95/EC Article 4.1. See Desco Industries Inc. letter online at [Desco.com](http://Desco.com).