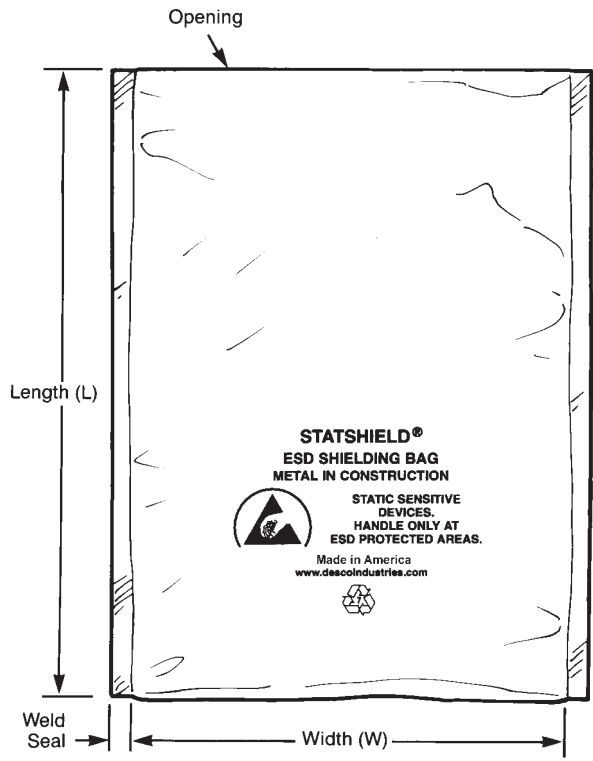


# STATSHIELD® M/I SERIES



Side Weld Seals 3/8 in.

See reverse side for available sizes.

**ANSI/ESD S541 Section 6.2 Outside an EPA**  
 "Transportation of sensitive products outside of an EPA shall require packaging that provides:  
 1. Low charge generation  
 2. Dissipative or conductive materials for intimate contact  
 3. A structure that provides electrostatic discharge shielding."



### Specifications:

#### Electrical Properties

Surface Resistance:  
 Outer Surface  
 Aluminum Layer  
 Inner Surface  
 Static Shielding  
 Charge Generation

#### Typical Values

<10E11 ohms  
 <10E2 ohms  
 <10E11 ohms  
 <25 nJ  
 Teflon: 0.09 nC/sq. in.  
 Quartz: 0.01 nC/sq. in.  
 <30V

#### Test Procedures/Method

ANSI/ESD STM11.11  
 ANSI/ESD STM11.11  
 ANSI/ESD STM11.11  
 ANSI/ESD STM11.31  
 Modified Incline Plane  
 Modified Incline Plane  
 MIL-PRF-81705D, EIA 541

#### Physical Properties

Bag Thickness:  
 Polyester Layer  
 Aluminum Layer  
 Polyethylene Layer  
 Total Thickness  
 Light Transmission (%)  
 Burst Strength (psi)  
 Heat Seal (lbs/in)  
 Seam Strength  
 Tear Strength (lbs)  
 Puncture Resistance (lbs)  
 MVTR (gms / 100 in<sup>2</sup> / 24 hrs, 100°F)  
 OTR (cc / 100 in<sup>2</sup> / 24 hrs)  
 Abrasion Resistance  
 Outgassing  
 Non-corrosive

0.5 Mils Static Dissipative PET film  
 10-25 Angstroms  
 2.5 Mils Static Dissipative PE film  
 2.8 to 3.0 Mils  
 >40% (Tobias)  
 >50  
 >10  
 Pass  
 >25  
 >10  
 <0.40  
 <6.1  
 >100 cycles  
 Pass  
 Pass

ASTM D-2103  
 ASTM D-2103  
 ASTM D-1003  
 FTMS 101K, Method 2065.1  
 375°F, 1/2 sec 60 psi  
 MIL-PRF-81705D  
 ASTM D-1004  
 ASTM D-2065  
 FTMS 101C/2065  
 ASTM D-1434  
 Sutherland Abr. (.0000 Steel Wool)  
 ASTM E595  
 MIL-STD-3010, M3005

#### Chemical Properties

Corrosion  
 Polycarbonate Capability,  
 No Amines or N-Octanoic Acid

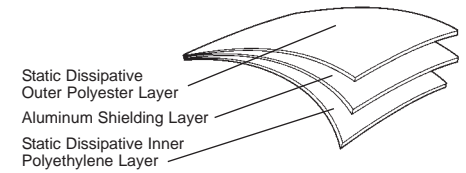
No effect on aluminum, copper, silver, Sn-Pb coated foil, stainless steel, low carbon steel  
 Yes  
 Not present



#### 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 IN CONSTRUCTION



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**  
 13405

**DATE:**  
 February  
 2007

### METAL IN BAG SIZES

Item #	Size (WxL)	Item #	Size (WxL)	Item #	Size (WxL)	Item #	Size (WxL)
13405	3" x 5"	13446	6" x 16"	13475	10" x 14"	13510	14" x 18"
13415	4" x 6"	13447	6" x 18"	13476	10" x 16"	13515	15" x 18"
13416	4" x 8"	13450	6" x 30"	13485	10" x 24"	13520	18" x 18"
13420	4" x 24"	13457	7" x 15"	13488	10" x 26"	13524	18" x 24"
13425	4" x 30"	13460	8" x 10"	13490	10" x 30"	13528	20" x 24"
13430	5" x 8"	13465	8" x 12"	13495	11" x 15"	13530	24" x 24"
13440	6" x 8"	13466	8" x 16"	13500	12" x 16"	13531	24" x 30"
13443	6" x 12"	13468	8" x 24"	13505	12" x 18"		
13445	6" x 10"	13470	10" x 12"	13506	12" x 24"		
Packaged 100 per package							

### 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 triboelectrification. 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-STM11.11 Surface Resistivity Standard, ANSI/ESD-STM11.12 Volume Resistance Measurements of Static Dissipative Planar Materials, and Shielding Materials ANSI/ESD STM11.31.

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).

"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.

#### 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).