

#### CONDUCTIVE BLACK TUBING AND BAGS

- · Tough, puncture resistant, often re-used
- Made of linear polyethylene with carbon added, 0.07mm thick
- Rs: 10E3 to 5 x 10E5 ohms, independent of humidity
- · Heat sealable, recyclable
- **Click HERE** to see how to determine the correct size bag for your application
- Made in Britain

Part No. 203530 203535 203540 203555 203575 203580 203600 203605 203620 203645 203675	Internal Dimensions (W x L)  100mm x 100mm (4" x 4"), Bag  100mm x 150mm (4" x 6"), Bag  100mm x 305mm (4" x 12"), Bag  125mm x 200mm (5" x 8"), Bag  150mm x 200mm (6" x 8"), Bag  150mm x 255mm (6" x 10"), Bag  200mm x 255mm (8" x 10"), Bag  200mm x 305mm (8" x 12"), Bag  255mm x 305mm (10" x 12"), Bag  305mm x 405mm (12" x 16"), Bag  405mm x 455mm (16" x 18"), Bag	Unit 100 100 100 100 100 100 100 100 100
<u>203700</u>	455mm x 610mm (18" x 24"), Bag	100
203510 203560 203590 203630	75mm (3"), Conductive Tubing 150mm (6"), Conductive Tubing 200mm (8"), Conductive Tubing 305mm (12"), Conductive Tubing	500m 500m 500m 500m



203600

#### *Protektive PAK* dissipative CORRUGATED SMALL COMPONENT SHIPPER

- · Efficient means of shipping or storing small ESD sensitive items
- Static dissipative surface of 10E6- 10E8 ohms
- Made in America

Part No. Description

Small Component Shipper, 87mm x 54mm x 25mm

Download Technical Drawing 37000.E

# 37003



#### **PROTEKTIVE PAK** DISSIPATIVE CORRUGATED CIRCUIT BOARD SHIPPER

· Economical, efficient method of storing static sensitive electronic devices

Constructed from a unique buried conductive layer of impregnated corrugated fiberboard with a static dissipative surface

Made from 100% recycled material and is 100% recyclable

Made in America

Part No. 37051 37081 37053 37055 37057 37085 37061 37065 37071	Description Box with Foam, 102mm x 102mm x 54 mm Box with Foam, 157mm x 152mm x 38 mm Box with Foam, 178mm x 127mm x 38 mm Box with Foam, 178mm x 127mm x 64 mm Box with Foam, 229mm x 191mm x 64 mm Box with Foam, 229mm x 229mm x 38 mm Box with Foam, 267mm x 216mm x 64 mm Box with Foam, 318mm x 267mm x 64 mm Box with Foam, 378mm x 168mm x 51 mm Box with Foam, 394mm x 318mm x 64 mm
37073 37087 37079	Box with Foam, 406mm x 311mm x 89 mm Box with Foam, 406mm x 381mm x 76 mm Box with Foam, 521mm x 394mm x 64 mm
<u>37050</u>	Box Only, 102mm x 102mm x 54 mm

Download Technical Drawing 37050.E



**Superior protection** with impregnated corrugated material

> See our products being Made in America on our web site: **Desco.com/Factory**







#### ANTISTATIC PINK BAGS

- For use with non-ESD sensitive items destined for use in an EPA
- **Economical**
- Made of polyethylene, 0.070mm thick
- Rs: 10E10 to 10E11 ohms, T1000: < 2 sec at 50% rH, 22°C
- **Click HERE** to see how to determine the correct size bag for your application
- Made in Britain

Internal Dimensions (W x L) Part No. 100mm x 150mm (4" x 6") <u>204020</u> 150mm x 255mm (6" x 10") 150mm x 200mm (6" x 8") 204040 <u>204035</u> 200mm x 255mm (8" x 10") <u>204055</u> 255mm x 305mm (10" x 12") 204070 255mm x 355mm (10" x 14") **204075** 204095 305mm x 405mm (12" x 16") 305mm x 455mm (12" x 18") <u>204100</u> 610mm x 915mm (24" x 36") <u>204155</u> 75mm x 125mm (3" x 5") with write-on panels, with zipper **203000** 100mm x 150mm  $(4" \times 6")$  with write-on panels, with zipper <u>203005</u> 125mm x 200mm (5" x 8") with write-on panels, with zipper 150mm x 200mm (6" x 8") with write-on panels, with zipper 203010 **203015** 150mm x 255mm (6" x 10") with write-on panels, with zipper 203020 200mm x 255mm (8" x 10") with write-on panels, with zipper **203025** 255mm x 355mm (10" x 14") with write-on panels, with zipper 203030

100mm x 150mm (4" x 6"), with zipper **203040** 125mm x 200mm (5" x 8"), with zipper <u>203045</u> 150mm x 255mm (6" x 10"), with zipper 203055 255mm x 355mm (10" x 14"), with zipper <u>203065</u>

Download Technical Drawings 204020 and 203000



#### ANTISTATIC PINK BUBBLE BAGS

- Suitable for use in an EPA
- Provide mechanical protection
- Made of pink-tinted, amine-free, antistatic polyethylene
- Rs: 10E10 to 10E12 ohm, T1000: < 2 sec at 50% rH
- **Click HERE** to see how to determine the correct size bag for your application
- Made in Britain

Part No. Internal Dimensions (W x L) 90mm x 110mm, no flap **202505** 130mm x 185mm <u>202515</u> 180mm x 235mm <u> 202520</u> 280mm x 360mm 202530

Download Technical Drawing 202505



204055



E-mail: Service@Vermason.co.uk • Web: Vermason.co.uk



#### STATSHIELD® MOISTURE BARRIER SHIELDING BAGS

- · Provide ESD and moisture protection
- Film thickness: 90 micron (3.6mil)
- Bag is opaque, printed and designated as ESD moisture barrier bag
- Used to pack SMD reels or trays and IC tubes
- · Use with humidity indicator cards and dessicant
- Rs: <10E11 ohms at 15% rH</li>
- <u>Click HERE</u> to see how to determine the correct size bag for your application
- · Made in America

Part No. Internal Dimensions (W x L) 125mm x 200mm (5" x 8") 150mm x 255mm (6" x 10") 204549 204550 200mm x 255mm (8" x 10") 204551 255mm x 305mm (10" x 12") **204552** 255mm x 610mm (10" x 24") 204575 204580 255mm x 660mm (10" x 26") 255mm x 760mm (10" x 30") 204581 305mm x 405mm (12" x 16") 204585 380mm x 455mm (15" x 18") 204586 400mm x 455mm (16" x 18") 204595 455mm x 455mm (18" x 18") **204605** 455mm x 610mm (18" x 24") 204610

Download Technical Drawing 204580

Storage problems?

Check out our shelf liner on Page 20



#### **HUMIDITY INDICATOR CARDS**

- · Low-cost method of verifying the effectiveness of moisture barrier packaging
- · Indicates the relative humidity level at which the contents have been stored
- · Colour changes quickly and clearly from pink to blues as rH levels are exceeded
- · Made in Britain

Part No. Description

204502 6 spot, 40mm x 120mm, can of 200

Download Technical Drawing 204502

#### **DESICCANT**

- Sold in packs of 600
- For use in conjunction with moisture barrier bags whenever moisture control is a critical factor in the packaging of electronic products
- At 50% rH and 25°C it will absorb 27% water by weight
- · Packed in woven, non-leaching HDPE sachets
- Meets Mil D-3464E, DIN 55473A and B and Afnor 00321 requirements
- · Made in Britain

Part No. Description

204514 Desiccant, 1/2 Unit (10g), Pack Of 600 204516 Desiccant, 1 Unit (25g), Pack Of 300

Download Technical Drawing 204515





204502

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### STATSHIELD® TRANSPARENT METAL-OUT ESD SHIELDING BAGS

 Aluminum metal outer layer of laminated film metal-out required by many end-users; meets requirements of MIL-PRF-81705D, Type III

Shielding protects ESD sensitive items

Integral antistatic, low tribocharging properties bags will

not electrostatically charge during movement

- Resistance of outer surface: <10E8 ohms</li>
- <u>Click HERE</u> to see how to determine the correct size bag for your application
- · Made in America

Part No. Internal Dimensions (W x L) 75mm x 125mm (3" x 5") <u>202100</u> 100mm x 150mm (4" x 6") 202105 100mm x 760mm (4" x 30") 202110 125mm x 200mm (5" x 8") <u>202115</u> 150mm x 255mm (6" x 10") 202120 150mm x 760mm (6" x 30") <u>202125</u> 200mm x 255mm (8" x 10") 200mm x 305mm (8" x 12") 202130 202135 255mm x 305mm (10" x 12") 202140 <u>202145</u> 255mm x 355mm (10" x 14") 255mm x 610mm (10" x 24") 202150 202155 280mm x 380mm (11" x 15") 305mm x 405mm (12" x 16") <u>202160</u> 305mm x 455mm (12" x 18") 202165 380mm x 455mm (15" x 18") **202170** 455mm x 455mm (18" x 18") 455mm x 610mm (18" x 24") 202175 202180

<u>202200</u> 75mm x 125mm (3" x 5"), with zipper 100mm x 150mm (4" x 6"), with zipper 202205 125mm x 200mm (5" x 8"), with zipper 202215 150mm x 255mm (6" x 10"), with zipper 150mm x 760mm (6" x 30"), with zipper 200mm x 255mm (8" x 10"), with zipper 202220 202225 202230 200mm x 305mm (8" x 12"), with zipper 202235 255mm x 305mm (10" x 12"), with zipper 255mm x 355mm (10" x 14"), with zipper 255mm x 610mm (10" x 24"), with zipper 202240 202245 202250 280mm x 380mm (11" x 15"), with zipper 202255 305mm x 405mm (12" x 16"), with zipper <u>202260</u> 305mm x 455mm (12" x 18"), with zipper 380mm x 455mm (15" x 18"), with zipper 455mm x 455mm (18" x 18"), with zipper 202265 202270

202275 455mm x 455mm (18" x 18"), with zipper 455mm x 610mm (18" x 24"), with zipper

Download Technical Drawings 202100 and 202220

#### **BUBBLE SHIELDING BAGS**

· Combines "Faraday Cage" and mechanical protection

 Shields about twice as well as normal shielding bag of equivalent size

- Rs inside and out: 10E10 to 5 x 10E11 ohms
- <u>Click HERE</u> to see how to determine the correct size bag for your application
- Made in Britain

Part No. W x L + FLAP

200510 100mm x 150mm + 25mm (4" x 6" + 1")

200515 150mm x 255mm + 25mm (6" x 10" + 1")

200520 200mm x 255mm + 25mm (8" x 10" + 1")

200530 255mm x 305mm + 50mm 10" x 12" + 2")

200535 305mm x 405mm + 50mm (12" x 16" + 2")

200540 355mm x 455mm + 50mm (14" x 18" + 2")

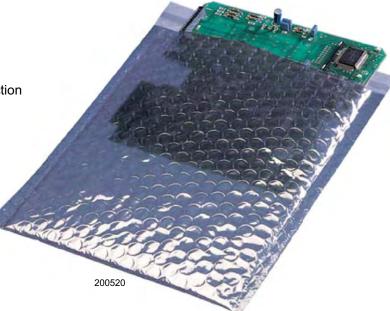
200545 455mm x 455mm + 50mm (18" x 18" + 2")

Thermal Transfer does not flake or peel off!



**Low Charging Zipper!** 

**Custom Sizes and Printing Available!** 



Download Technical Drawing 200510



See our products being Made in Britain on our web site: Click Here



### STATSHIELD® TRANSPARENT METAL-IN STANDARD ESD SHIELDING BAGS

• ESD shielding limits energy penetration from ESD and eledctrostatic charges

Rs: 10E9 to 5 x 10E11 ohms inside and out

· Protects ESD sensitive items

· Good see-through clarity

Sold 100 per pack

 <u>Click HERE</u> to see how to determine the correct size bag for your application

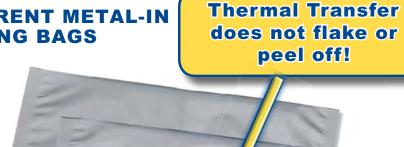
Made in America

Part No. Internal Dimensions (W x L) 75mm x 125mm (3" x 5") 201015 100mm x 150mm (4" x 6") 201025 100mm x 760mm (4" x 30") 201040 125mm x 200mm (5" x 8") 201050 150mm x 200mm (6" x 8") 201065 150mm x 255mm (6" x 10") <u>201070</u> 150mm x 760mm (6" x 30") 201071 200mm x 255mm (8" x 10") 201105 200mm x 305mm (8" x 12") 201110 200mm x 405mm (8" x 16") 201115 255mm x 305mm (10" x 12") **201120** 255mm x 355mm (10" x 14") 201130 255mm x 610mm (10" x 24") 201135 280mm x 380mm (11" x 15") 201100 305mm x 355mm (12" x 14") 201140 305mm x 405mm (12" x 16") 201145 305mm x 455mm (12" x 18") 201150 355mm x 455mm (14" x 18") 201160 201161 380mm x 455mm (15" x 18") 405mm x 455mm (16" x 18") 201165 405mm x 610mm (16" x 24") 201175 455mm x 455mm (18" x 18") 201180 455mm x 610mm (18" x 24") 201190 610mm x 760mm (24" x 30") 201210 75mm x 125mm (3" x 5"), with zipper 201500 100mm x 150mm (4" x 6"), with zipper 201510

100mm x 735mm (4" x 29"), with zipper <u>201511</u> 125mm x 200mm (5" x 8"), with zipper 150mm x 200mm (6" x 8"), with zipper 201515 201520 150mm x 255mm (6" x 10"), with zipper 201525 150mm x 735mm (6" x 29"), with zipper **201526** 200mm x 255mm (8" x 10"), with zipper **201530** 200mm x 305mm (8" x 12"), with zipper 201535 255mm x 305mm (10" x 12"), with zipper **201540** 255mm x 610mm (10" x 24"), with zipper 201545 255mm x 355mm (10" x 14"), with zipper 201546 280mm x 380mm (11" x 15"), with zipper 305mm x 405mm (12" x 16"), with zipper 201547 201550 305mm x 455mm (12" x 18"), with zipper **201551** 355mm x 455mm (14" x 18"), with zipper 201552 380mm x 455mm (15" x 18"), with zipper 201553 455mm x 455mm (18" x 18"), with zipper 201555 455mm x 610mm (18" x 24"), with zipper 201556

Download Technical Drawings 201000 and 201500

505mm x 505mm (20" x 20"), with zipper



**Low Charging Zipper!** 

201105

**Custom Sizes and Printing Available!** 

For Self-Adhesive
Labels CLICK HERE





201560





### **ESD BAG SELECTION CHART**

Physical Properties	Statshield≗ Standard Metal In Bags	Statshield® Standard Metal Out Bags	Statshield≗ ESD-Moisture Barrier Bags	Bubble Shielding Bags	Antistatic Pink Bags	Antistatic Pink Bubble Bags	Conductive Black Bags
Resistance of polyester outer layer	10E11 ohms	10E8 ohms	10E12 ohms	10E9 to 5 x 10E11 ohms	1010 to 1011 ohms	10E10 to 10E12 ohm	10E5 ohms
Resistance of aluminium layer	10E2 ohms	10E2 ohms	10E2 ohms	10E10 to 10E12 ohms	-	-	-
Resistance of polyethylene	10E11 ohms	10E12 ohms	10E12 ohms	-	10E11 ohms	10E11 ohms	10E11 ohms
Aluminium metal layer location	Between polyester & polyethylene	Outer layer coated with abrasive resistant coating	Dual metal layers between plastic layers	Between polyester & polyethylene	-	-	-
Faraday Cage ESD shielding	Yes	Yes	Yes	Yes	No	No	No
Energy penetration (nanojoules)	<25	<20	<50				
Thickness (nominal)	3.0 mil	3.0 mil	3.6 mil	5mm (height of bubbles)	2.7 mil	5mm (height of bubbles)	2.8 mil
Puncture resistance	>10#	>10#	>20#	>25lbs			
Moisture barrier MVTR	<0.40 grams	<0.40 grams	<0.02 grams	<0.2 grams	>0.8gr/m2 24 hr at 50% rH & 20°C		>0.8gr/m2 24 hr at 50% rH & 20°C
Application	Transport or store ESDS outside protected area	Substitute for Metal In where end user requires	Stands up to many automatic vacuum packaging operations	Transport or store ESD sensitive items that require mechanical protection outside an EPA	Economical bags for use with non-ESD sensitive items destined for use in an EPA	Economical bags for use with non-ESD sensitive items that require mechanical protection destined for use in an EPA	Ideal for storage of ESD sensitive items within an ESD controlled storage area
Durability	Good	Less Durable	Superior	Good	Less Durable	Good	Good
Available with Zipper	Yes	Yes	No	No	Yes	No	No
Part Numbers	<u>201015</u> - <u>201560</u>	<u>202100</u> - <u>202280</u>	<u>204549</u> - <u>204610</u>	<u>200510</u> - <u>200545</u>	<u>203000</u> - <u>204155</u>	<u>202505</u> - <u>202530</u>	<u>203530</u> - <u>203700</u>

#### **Vermason ESD Bags - Designed for Europe**

We refuse to put your products at risk. We use only the highest quality materials in our full line of static shielding bags. Vermason 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.

#### ESD Bags meet EN 61340 5-1 requirement:

- "low charging packaging exhibiting properties which minimize any charge generation" (paragraph 3.18.1)
- "electrostatic discharge shielding barrier or enclosure that limits the
  passage of current and attenuates the energy resulting from an electrostatic
  discharge such that the maximum energy from 1 000 V human body
  model discharge is less than or equal to 50 nJ." (paragraph 3.18.2)
- Identified with ESD packaging symbol, manufacturer, and batch identification number (paragraph 4.1.2)



See our products being Made in Britain on our web site: Click Here

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