



STATIC SAFE PACKAGING CATALOGUE



Poppi says,
"Your Product, Our Bag,
Perfectly Packed!"

SECO INDUSTRIES - INNOVATION IN E.S.D. PACKAGING

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Established in 1982

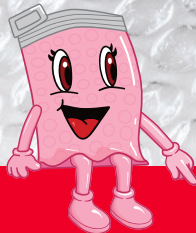
For over 40 years, SECO Industries has been a leading manufacturer of custom flexible packaging solutions specializing in slide zipper pouches, stand-up pouches, static protective packaging, cushion pouches, foil barrier roll stock, and medical & pharmaceutical packaging. Whether protecting delicate electronics, securing cosmetic or medical items, or delivering high-barrier packaging for sensitive goods, SECO Industries has the material and expertise to meet every need.

Since 1982, companies have turned to SECO for its expertise, innovation, quality, and quick turnaround time to meet their packaging needs. Furthering its commitment to providing quality packaging and to complement its range of offerings.

Quality and innovation have been the defining characteristics of SECO Industries since its inception. Our customers continually challenge us with new packaging needs and applications. In turn we challenge ourselves to continually research and develop new materials and combination of materials to meet those needs. Many of our customers' needs can be met with our stock products that have become the standard in many industries. However, it is our innovation and inventory that sets SECO Industries apart. Our reputation for design, customization, and manufacturing to submitted specifications is renowned and growing.



We proudly make all our products in the U.S.A.



CUSHION POUCHES

Designed and developed to provide the most comprehensive shock and vibration protection for sensitive electronic components, and other sensitive items. A diverse selection of protection, including slider zip close cushion pouches, which allows you to select what best fits your application.

We offer one-layer to multi-layered pouches. You can find our Standard/Stock sizes on page 22. Reach out by phone or by email for a comprehensive quote today!



Our pouches are made with the highest quality materials and made in the USA. Our quick turnaround times, quality products and service are hard to beat!



GOOD

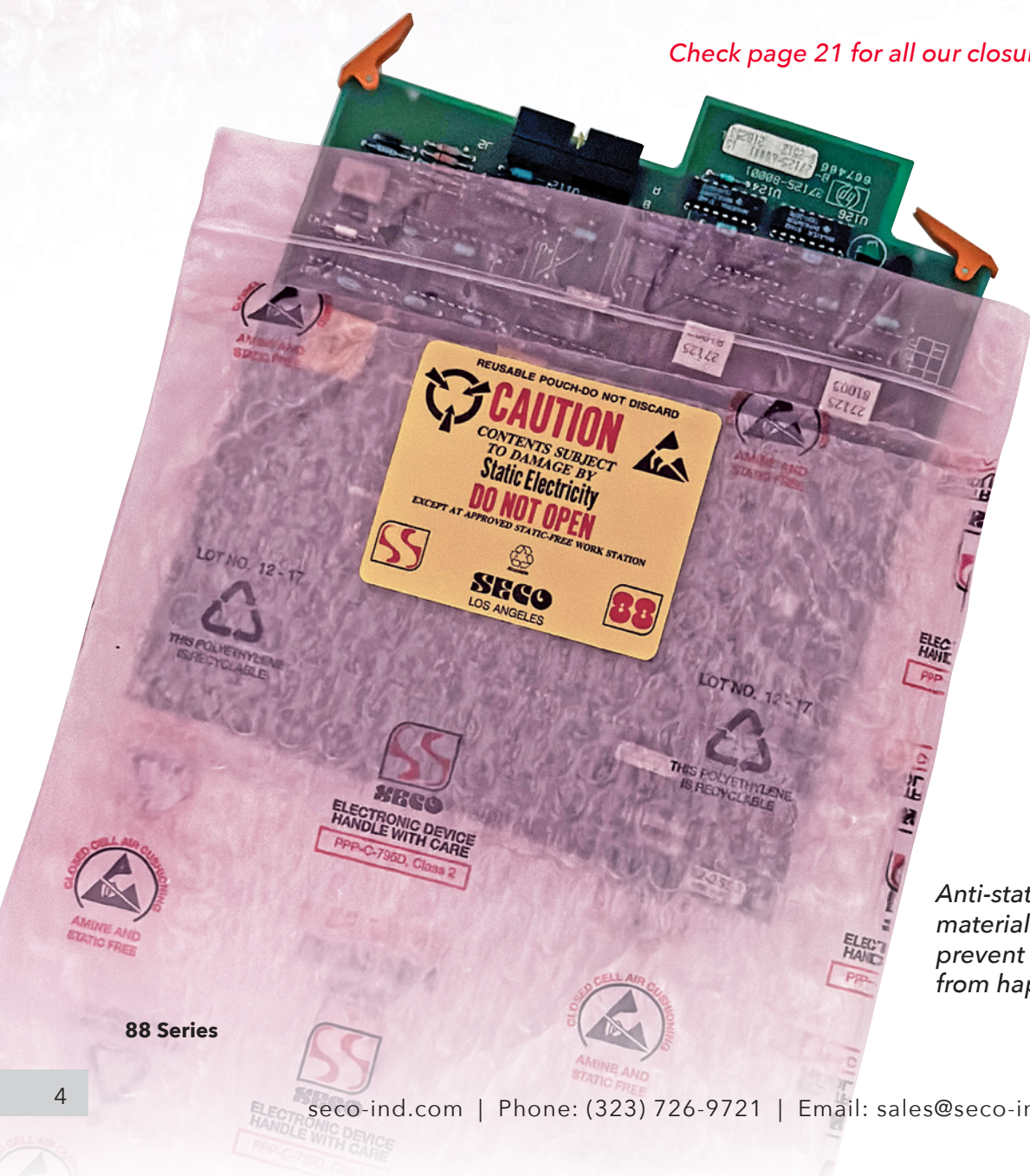
PINK ANTI-STATIC CUSHION POUCH

Multi-layered, Anti-Static cushion pouch: Pink Anti-Static Poly, Safecell Anti-Static bubble; available with double track red line Anti-Static press to close zipper or pull slide zipper.

When to use:

- Moving ESD-sensitive parts within a static-controlled environment.
- To prevent static generation, making them safe to use around sensitive electronics.
- Suitable for parts that are shock & vibration sensitive.

Check page 21 for all our closure options



Anti-static materials help prevent problems from happening.



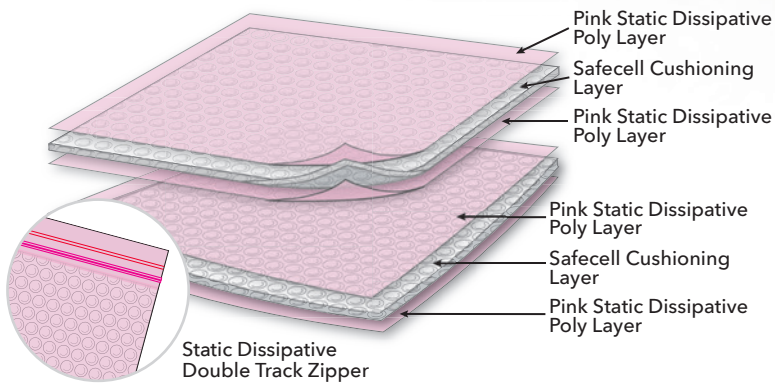
88 Series

PINK ANTI-STATIC

Pink Anti-Static Polyethylene 3-Layer Cushion Pouch with Double Track Zipper

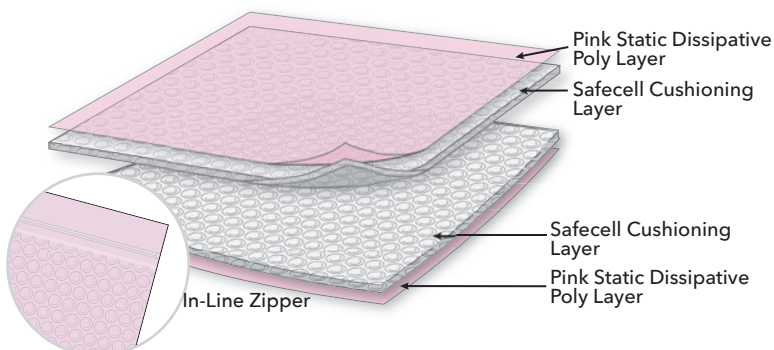
SECO Pack 88-3 is a heavy-duty, three-layered Static Dissipative Cushion Pouch with an easy press to close Zipper to keep product secure. This is a stronger and easier press to close zipper. Constructed with two layers of poly and our extra strong Safecell Cushioning between these two layers.

Stock Sizes	4 x 6	8 x 10	12 x 15
	6 x 8	10 x 12	



An alternative to our 88-3 bag is the two layer option, **SECO Pack 88-2** which includes an in-line zipper, and one layer of poly and one layer of our Safecell Cushioning.

Stock Sizes	4 x 6	8 x 10	12 x 15
	6 x 8	10 x 12	



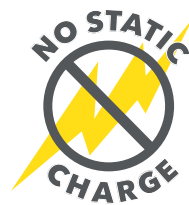
BETTER

STATIC SHIELDING CUSHION

Multi Layered Static Shielding Cushion Pouch provides faraday protection with E.S.D. Safecell cushioning to absorb shock and vibration.

When to use

- Perfect for packaging, storing, or shipping electronic components to prevent ESD Damage.
- For handling high-stakes components, that require full static protection.
- Great for transferring items that are sensitive to electrostatic discharge.



Check page 21
for all our closure
options



Static Shielding protects
components from static
charges both inside and
outside of the bag

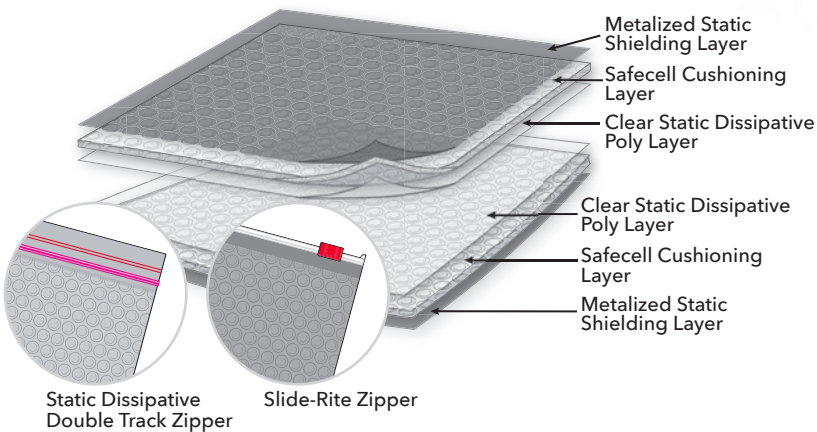
77 Series

STATIC SHIELD

Static Shielding 3-Layer Cushion Pouch with Double Track Zipper

SECO Pack 77-3 is a heavy-duty, three-layered metalized static shielding cushion pouch with double-track zipper to keep item secure. This is a stronger and easier press to close zipper. The outer layer is Metalized Static Shielding, middle layer our exclusive Safecell Cushioning with an inner layer of clear Static Dissipative Poly.

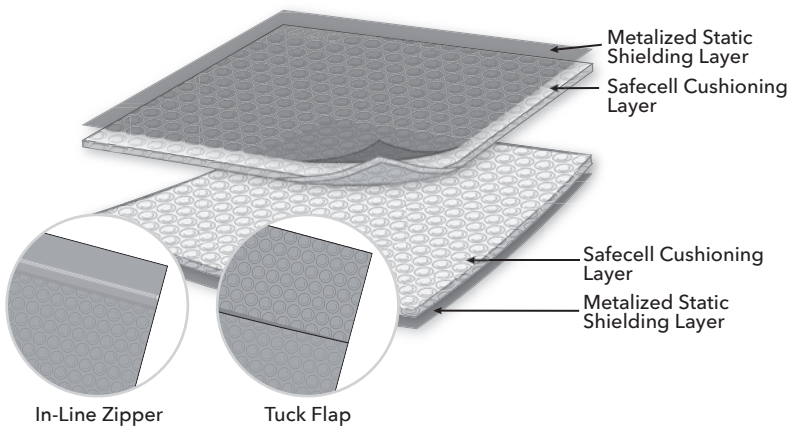
Stock Sizes: 4 x 6; 6 x 8; 8 x 10; 10 x 12; 12 x 15



An alternative option is the **SECO Pack 77-2** which includes an in-line zipper, a Metalized layer and one layer of our Safecell Cushioning.

**velcro closure and tuck flap available*

Stock Sizes: 4 x 6; 6 x 8; 8 x 10; 10 x 12; 12 x 15



BEST

BLACK CONDUCTIVE

Originally created to transport Dynamite, Black Conductive is a carbon-based film Cushion Pouch. It provides a Faraday Cage Effect, Static Dissipative E.S.D. cushioning, available with a double track Anti-Static press to close zipper and flap closure. SECO's ultimate Conductive Pouch.

When to use

- The components inside are semi-sensitive electronic parts, requiring **maximum ESD Protection**.
- Environments where personnel are grounded to avoid potential differences that could cause ESD, along with being effective with Electrostatic Protected Areas (EPAs).
- The surface of these bags helps prevent charges that could discharge onto sensitive electronic parts, ensures no external static fields damage the items inside the bag.

Check page 21 for all our closure options

66 Series

99 Series



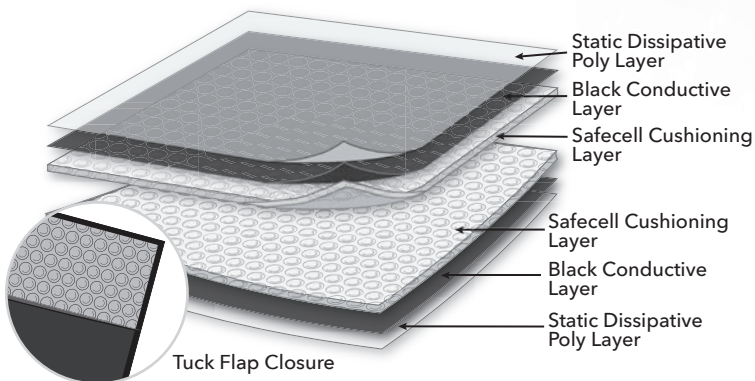
Conductive Materials solve the problem once static exists

BLACK CONDUCTIVE

Black Conductive 3-Layer Cushion Pouch with Fold-Over Flap

SECO Pack 66-3 is a three-layer pouch constructed with Static Dissipative Poly, Black Conductive and our exclusive Safecell Cushioning. The conductive layer offers protection similar to metalized static shielding, with the additional benefit of extreme flexibility, along with our Safecell Cushioning which absorbs shock and vibration.

Custom sizes available. Also available in pink anti-static 3/16" bubble. A four-layer is also available as a custom.

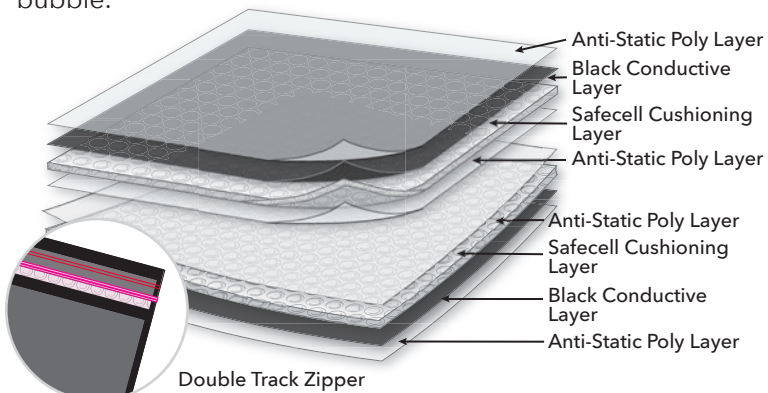


Black Conductive 4-Layer Cushion Pouch with Double Track Zipper

SECO Pack 99-4 is a heavy-duty, four layered Black Conductive Cushion Pouch with a double-track zipper to keep product secure. This offers a stronger and easier press to close zipper. All the benefits of the SECO Pack 66-3, with a double track zipper to lock up your product.

Stock Sizes: 4 x 6; 6 x 8; 8 x 10; 10 x 12; 12 x 15

Custom sizes available. Also available in pink anti-static 3/16" bubble.



WORKSTATION POUCH



User Friendly, Static Control Packaging

- Visually Inspected without necessity of handling components
- A Transporter with maximum E.S.D. protection that is user friendly and safe
- A safe handling and shipping pack that can be used in bulk, or individually with a carton for additional protection
- Easy removal of components from this protective package without components becoming caught on the material and damaged
- Functions as portable workstation



WORKSTATION POUCH

Environmentally Responsible E.S.D. Packaging

The SECO Workstation Pouch is a highly reuseable form of E.S.D. protection for PCB's, sensitive components and assemblies. This multi-faceted package offers storage and shipping protection from shock & vibration, as well as E.S.D. protection; it also allows for hands-off inspection. After shipping, the unit opens flat to serve as a workstation for field service personnel, after which they can then take the old components and return them, utilizing the original package. The pack can be returned to SECO to be recertified for reuse; when the pack is deemed nonreusable, its materials will be separated and processed for recycling into other products.

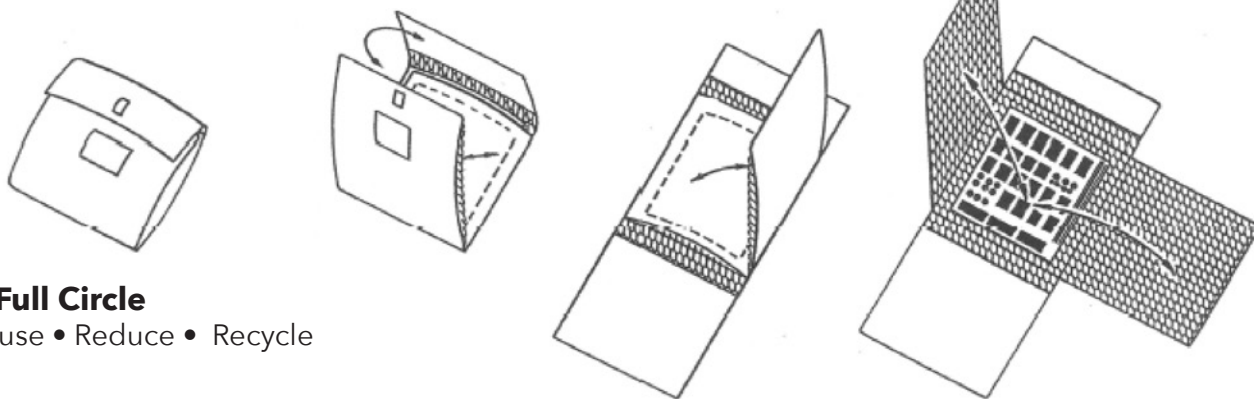
A User Friendly, Full Circle E.S.D. Packaging System

It's Friendly

- Fold-over flaps allow access without handling of components for inspection
- Opens to function as workstation for field service applications, then serves as a return shipper
- Polycarbonate compatible
- Velcro Closure to secure the package
- Made of metallized static shielding film and static dissipative amine free cellular cushion material

It's Safe

- E.S.D. protection that exceeds most industrial and military specifications for electrical and cushion packaging, Mil-81705C, PPP-C-1842, ASO-80132-12261



It's Full Circle

- Reuse • Reduce • Recycle

E.S.D. TRANSPORTERS

Custom Item Only

Fast Pack II Static Safe | Double Cushion | Transporter



Two Piece Slide Pack Transporter

- For safe transporting of individual circuit boards
- Withstands many round-trip shipments
- Four layers of Safecell cushion material, a criss-cross design fold over
- 200 lb. test board with a 200 lb. outer sleeve



Designed to reduce physical and electrostatic damage when transporting P.C. boards

CUSTOM DESIGN PACKS

SECO Industries leads the packaging industry in design and development of ESD protective packaging for sensitive electronic components. Many of designs that today are the backbone of ESD packaging have been conceived or evolved from SECO ongoing research and development programs. Unparalleled manufacturing capabilities combined with an experienced design team offers the unique ability to custom design packaging systems that ensure the protection our customers require.

SECO stocks one of the most diverse selections of packaging material available, including barrier, shielding and coextruded films, along with a wide variety of cushioning material.

SECO can offer you, our customer, the quality, service and innovation you deserve.

- Static Shielding
- Static dissipative
- Conductive
- Barrier materials
- Moisture / vapor barrier
- Cellular cushioning
- Foams
- Conductive corrugated
- Class 100 clean room
- In house test lab

SECO is continuing seeking out new technology and materials, conducting ongoing research and developed in order to provide our customers with the assurance that their products will be fully protected.



ANTI-STATIC/STATIC DISSIPATIVE



Secovac 132

Pink Anti-Static/Static Dissipative Bags film is the most economical form of ESD protection. Pink or clear amine free, mono layer extruded transparent polyethylene will meet MIL-B81705, Type II electricals. To be used in both open top and zip close bags, square bottom covers, or as a good general protective covering.

Clear amine free is a more stable film over the pink poly and can be used with polycarbonates. However, as with all mono layer anti-static films, humidity changes may affect performance.

Open Top Stock Sizes

3 x 5	6 x 8	10 x 12	15 x 18
4 x 6	8 x 10	12 x 15	

Zip Close Stock Sizes

3 x 5	6 x 8	10 x 12	15 x 18
4 x 6	8 x 10	12 x 15	

Slide Rite Closure

*Custom option upon request

Square Bottom Covers

*Custom sizes upon request



Secovac 142

Secovac 132 This pink mono layered extruded transparent film is static safe, which eliminates the hazard of static damage to electronic components.

Secovac 142 is amine-free mono extruded formulation which is polycarbonate compatible, humidity independent, non-octanoic, and is both non-corrosive and non-contaminating. Bags are hot stamped with blue ESD warning symbol.

STATIC SHIELDING BAGS

Static Shielding 2102 is a Transparent Metalized Static Shielding that creates a faraday cage effect with E.M.I. and R.F.I. protection and provides a static-safe environment for sensitive electronic devices. Durability of these metalized bags is enhanced by sandwiching the metal layer between polyester and polyethylene. Bags are hot stamped with a yellow ESD warning symbol and date coded for QC traceability.

Tested to meet and/or exceed the electrical and physical requirements of MIL-PRF-81705 Type III and EIA 541.

Open Top Stock Sizes

3 x 5
4 x 6
6 x 8
8 x 10
10 x 12
12 x 15
18 x 18

Zip Close Stock Sizes

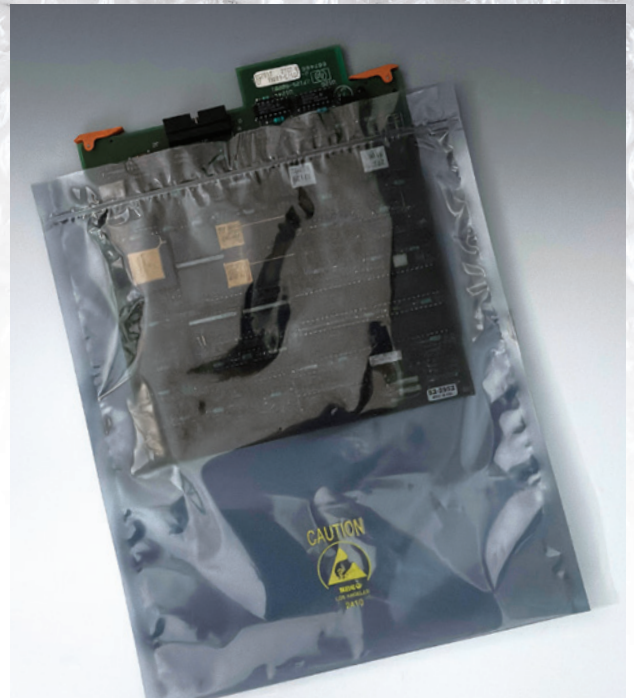
3 x 5
4 x 6
6 x 8
8 x 10
10 x 12
12 x 15
18 x 18

Slide Rite Closure

*Custom option
upon request

Square Bottom Covers

*Custom sizes
upon request



BLACK CONDUCTIVE BAGS

Black 303 is a volume conductive material, made from a single layer of carbon loaded polyethylene, creating a Faraday Cage effect with minimal E.M.I. and R.F.I. protection. It is also used for packing and powder explosives.

Surface resistivity of 10^3 to 10^5 ohms/sq and a volume resistivity of less than 5000 ohms/cm.

Meets military specification requirements of NFPS-56-A, MIL-P-82647 and MIL-P-82646.

Open Top Stock Sizes

3 x 5
4 x 6
6 x 8
8 x 10
10 x 12
12 x 15
18 x 18

Zip Close Stock Sizes

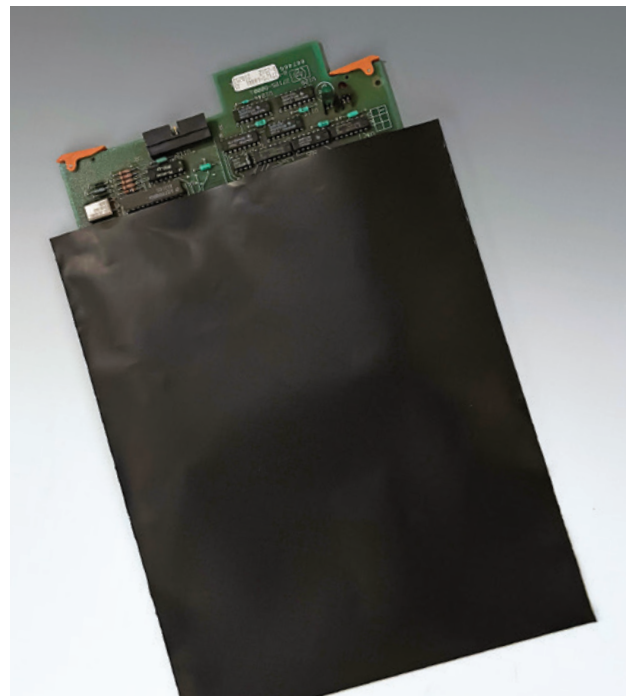
3 x 5
*Custom
option

Slide Rite Closure

*Custom option
upon request

Square Bottom Covers

*Custom sizes
upon request



CUSHION MONO LAYER

Anti-Static single layer cushion pouches. Most cost-effective form of cushioning protection combined with static control. Offers both cellular and bubble construction available as tuck in flap with optional tape.

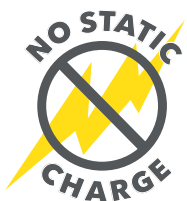
Anti-Static Cushion Mono Layer with Tuck-In Flap

SECO Pack 42 is a single Layer Cushion Pouch provides faraday protection with E.S.D. The Safecell cushioning provides Outstanding Shock and Vibration protection. This pouch is a budget friendly option that offers basic cushion protection. Thickness 5 mil, 3/16" cell height, 5/8" cell diameter. Identification providing ESD markings and lot numbers. Meets PPP-C-795C Class 2, MILPRF-81705D- TYPE II.

Check page 21 for all our closure options

When to use

- Basic protection from E.S.D.
- This type of cushion bag doesn't generate static charge.
- Suitable for parts that are static-sensitive, ex, circuit boards, or anything electro sensitive.



42 Series

ROLL STOCK



Static Safe Safecell Roll Stock

SECO offers the option to purchase Roll Stock as well. Our static dissipative safe-cell is a heavy-duty closed cell bubble material. The bubble is a 3/16" height with a 3 Web. This makes Safe-Cell Cushioning ideal for applications requiring a strong 3/16" bubble.

The additive used in Safe-Cell is amine free and homogenously blended in the cell and film extrusion processed. It meets or exceeds requirements of Federal Spec. PPP-C-795D CL-2 and (Electrical Properties) Mil-PRF-81705D Type II. Also, Safe-cell is the only standard cushioning material that is lot numbered for traceability.

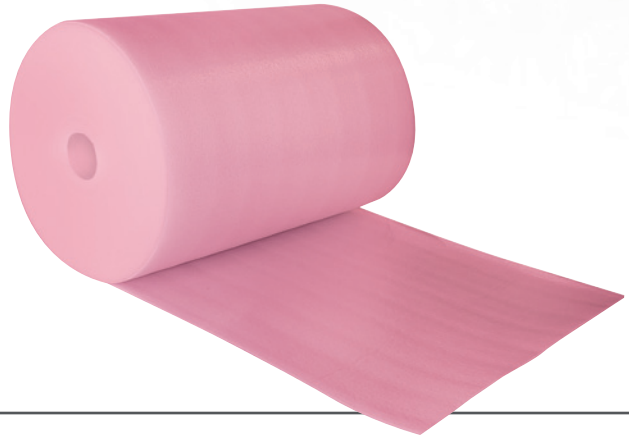
Bundle Size: 48"x750' **Note:** P/N R762-48

Additional Notes: Bubble Sheets cut to any size. Rolls cut to size 12" or 24". Custom Size Rolls upon request.

Pink Anti-Static Foam

Pink Anti-Static Foam is another roll stock we offer at SECO. They are 48" Rolls at 1/8" thickness.

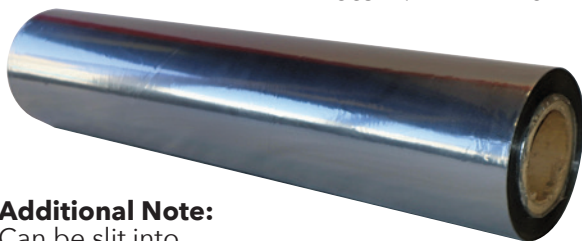
Bundle Size
48"x1/8"x450'
Note:
P/N R704-48



Static Shielding Film

Transparent Metalized Static Shielding that creates a faraday cage effect with E.M.I. and R.F.I. protection and provides a static-safe environment for sensitive electronic devices. Tested to meet and/or exceed the electrical and physical requirements of MILPRF- 81705 Type III and EIA 541.

Bundle Size: 48"x1640'
Note: P/N R222-48



Additional Note:
Can be slit into
12" and 24" width roll

Black Conductive Film

A volume conductive material, made from a single layer of carbon loaded polyethylene, creating a Faraday Cage effect with minimal E.M.I. and R.F.I. protection. It is also used for packing and powder explosives. Surface resistivity of 10^3 to 10^5 ohms/sq and a volume resistivity of less than 5000 ohms/cm. Meets military specification requirements of NFPS-56-A, MIL-P-82647 and MIL-P-82646.

Bundle Size: 48"x1625'
Note: P/N R303-48



Additional Note:
Can be slit into
12" and 24" width roll

SLIDE-RITE ZIP CLOSURE



Slide-Rite Zipper



Clear Polyethylene Slide- Rite Cushion Pouch

SECO Pack SR80-1 is a single-layer cushion pouch with a **slide-rite zipper**. It protects delicate items from shock and abrasion damage. The slider closure offers easy opening and closure. This type of bag is suitable for non anti-static items.

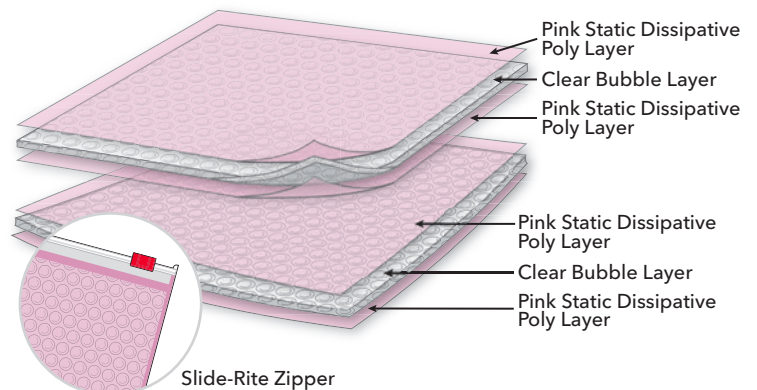
Multi-Use Polyethylene Slide-Rite Cushion Pouch

SECO Pack SR80-3 is a heavy-duty, three-layered cushion pouch with a **slide-rite zipper**. It protects heavy or fragile items from shock and abrasion damage. The slider closure offers easy opening and closure. Constructed with two layers of clear .004 MIL polyethylene and clear 3/16" bubble sandwiched between these layers.

- SECO also offers this pouch in colors green and orange for a personal touch.
- 2-layer slide-rite offered as a custom option

Multiple Uses

- Storing Cosmetic Items
- Encasing items such as camera lenses, digital cameras, and chargers
- Organizing loose items
- Great for travel
- Ideal for shipping fragile or delicate items



CLEAR BUBBLE

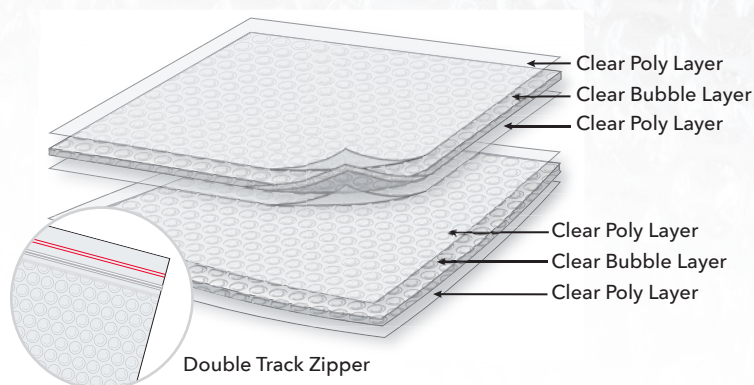
Clear Polyethylene 3- Layer Cushion Pouch with Double Track Zipper

SECO Pack 80-3 is a heavy-duty, three-layered cushion pouch with double-track zipper to keep items enclosed while it protects heavy or fragile items from shock and abrasion damage. Constructed with two layers of clear .004 MIL polyethylene and clear 3/16" bubble sandwiched between these layers.

When to use

- Ideal for shipping any delicate or fragile items, since the cushion can help absorb shock and prevent movement during transit.
- Can be used to fill gaps and stabilize items, thus providing a cushioning effect to prevent physical damage.

Multi-Layered polyethylene pouch that has **no ESD properties**, but protects heavy or fragile items from shock and abrasion damage. Locks out dirt and secures items inside the pouch, available with a press to close zipper or with a slide zipper.



When static control is not needed, SECO offers a full line of Clear Poly Packaging.

Check page 21 for all our closure options

80 Series

PROTECTIVE COVERS AND LINERS

Sized to meet your needs Square Bottom / Form Fitted

These covers are five panel static-safe, protective cover that can be sized to the object it is covering. Utilizing a wide range protective materials, they provide a secure fit that offers a variety of cost saving function.

Protects from

- Dust and moisture
- Security-maintains the integrity of the load
- Abrasion & mishandling
- Fire sprinkler damage
- Shock & Vibration

Available in a Variety of Materials

- Clear poly 4mil through 6mil
- Static dissipative and conductive
- Barrier materials
- Bubble cushioning
- Class 100 clean room

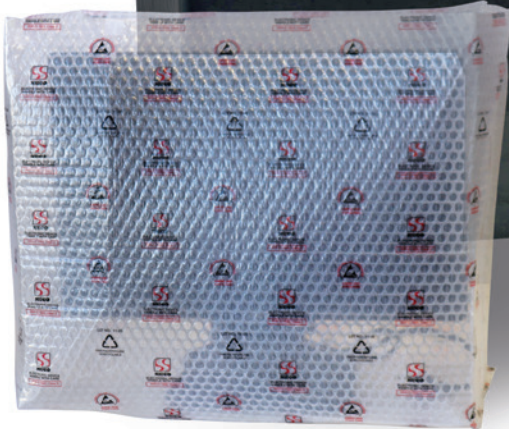
Black Conductive Square Bottom Cover



Safecell Square Bottom Cover



Safecell Square Bottom Liner



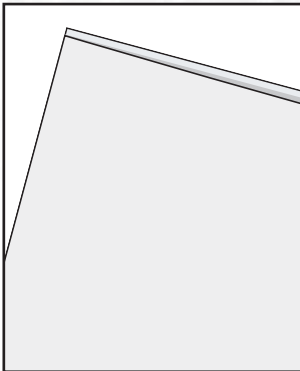
Static Shield Bottom Cover



Pink Anti-Static Bottom Liner

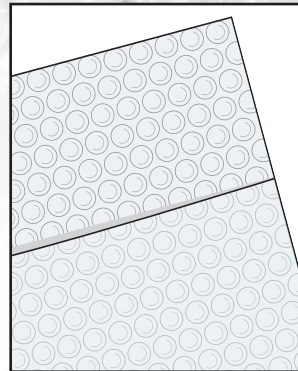


CLOSURE OPTIONS



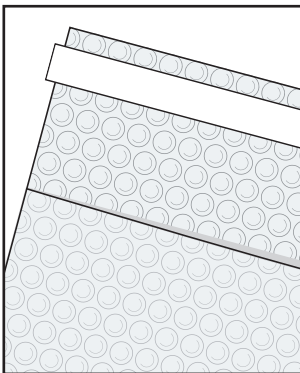
Open top

An opening that has no closure but allows for items to be stored.



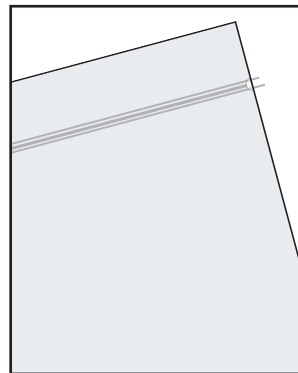
Tuck Flap

One side of the material is longer than the other allowing for a tuck type of closer and can be taped shut to keep items secure.



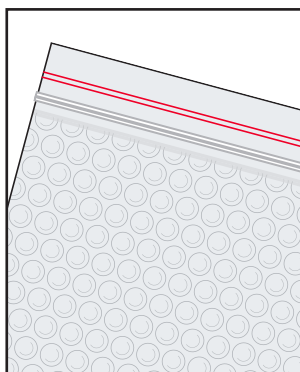
Lip & Tape

This closure can be used for a tuck flap bag, with an adhesive to allow for it to stick shut.



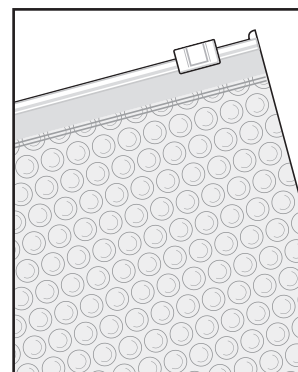
In Line Zipper

A clear press to close zipper that offers security and functionality. This type of zipper is used to construct 2 layer bags. *Used on 77-2, 88-2, & 80-2 bags



Double Track

A heavy duty press to close zipper that offers functionality. This type of zipper is used to construct 3 layer bags. *Used on 77-3, 88-3, 80-3, & 99-4 bags



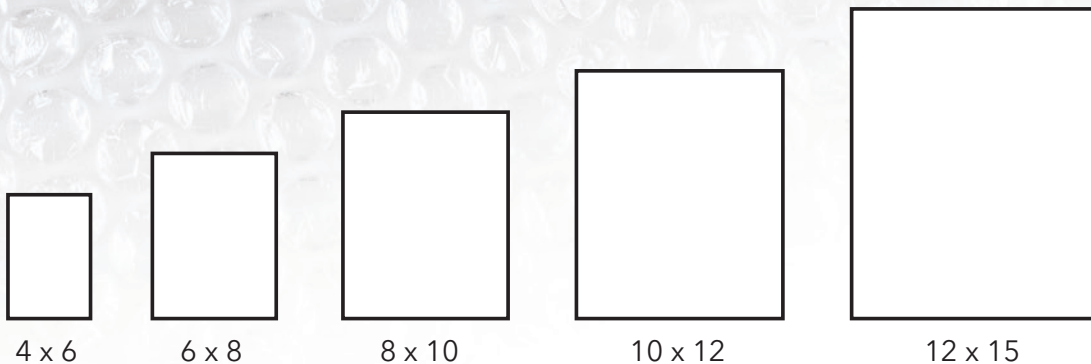
Slider Zipper

Our advanced closure system that offers easy opening and closure even in a gloved environment. *Used on our SR80 bags

POUCH SIZES AND FILMS

Cushion Pouch Stock Sizes Available

80-3, 88-3, 77-3, & 99-4 - Packed 100/Ctn



MOQ: Please call for MOQ

Known for Customization, SECO can make any size or combination of films and closures upon request.

Films Available



If you've been searching for Quality, Service and Innovation in E.S.D. Packaging, call



SECO INDUSTRIES

6858 E ACCO ST.

LOS ANGELES, CA 90040

1 (323) 726-9721

www.seco-ind.com

sales@seco-ind.com

**Call in today with your Application, Quantity,
and Size in mind for a quote!**

PRODUCT DESCRIPTION

Pink Anti-Static Poly - The most economical form of E.S.D. protection. Pink Mono Layer Extruded Transparent Polyethylene Film that is static dissipative. Humidity changes may cause a chemical reaction of the material and effect contents, not polycarbonate compatible. No E.M.I. or R.F.I. protection. Meets MIL-B-81705 Type II Electricals.

Black Conductive - Volume Conductive Bag is made from a Single Layer of Carbon-loaded Polyethylene. Creates a faraday cage effect with minimal E.M.I. and R.F.I. protection. Also use for packaging of chemical and powder explosives. Meets MIL-P-82646 (OS) and MIL-P-82647 (OS).

Static Shielding - Transparent static shielding bags. A Multi-Layer Lamination with a metallic layer for faraday cage protection. Inner layer provides static dissipative protection. Probably the best overall E.S.D. protection available in bag form. Meets many requirements set forth in E.I.A. 541 and 81705 Type III.

Zip Close - A Low-Profile zipper that is integrated into the bag construction. Interlocking surfaces ensure a static shielding cage and is ideal for reusability.

TERMINOLOGY

Anti-Static - A form of Protection against the discharge of static electricity.

Attenuation - The reduction of RF signal intensity by absorption or reflection.

Coextruded - Multi films extruded simultaneously into one sheet, not laminated or glued. This process enables E.S.D. inner films to keep their properties permanent with no migration to the surface.

Conductor - A substance or body that allows a current of electrons to pass continuously along it or through it when a sufficient voltage is applied.

Corrosion - Physical reaction between two materials, one of which generally a metal, producing a surface change.

EMI - Abbreviation for electromagnetic interference. Sources are sparks, lightning, radar, radio and TV transmission. EMI can cause undesirable voltage signals.

Inherently Dissipative Polymer - When static dissipation is achieved with polymer molecules, not additives. When you change the basic structure of the film through chemistry.

E.M.P. - Abbreviation for electromagnetic pulse. A high energy magnetic pulse.

E.S.D. - Abbreviation for electrostatic discharge. The sudden transfer (discharge) of an electron charge from one object to another.

Faraday Cage - An electrically continuous enclosure which provides electrostatic shielding.

Polycarbonate Compatible - Material that will not craze (crack) polycarbonate (plastic) parts and cases. Parts kept in anti-static bags are subject to damages by stress cracking as a result of a chemical reaction with the anti-static film.

Static Dissipative - Material with surface resistivity between 1.0×10^5 to 1.0×10^{12} OHMS/Sq. Material that dissipates a charge of 5,000 volts to zero volts in less than 2 seconds.

RFI - Abbreviation for radio frequency interference. The spark from static discharge is a source of RFI. Can interfere with the operation of electrical or electronic equipment.

Triboelectric Charge - An electrical charge generated by frictional movement or separation of two surfaces.



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