



HOW TO USE RETENTION & SUSPENSION PACKAGING

A guide for selecting the right option for your products



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KORRVU® RETENTION & SUSPENSION PACKAGING

INTRODUCTION

With so many protective packaging options available, it can be overwhelming to decide which choice is right for your business and product.

In this guide, you'll find information about retention and suspension packaging. This solution is often sought after for its ability to protect products from damage, its unique and unparalleled product presentation, and its sustainability profile.

Whether you're just learning about retention and suspension packaging or reevaluating its role in your packaging strategy, it's worth a closer look.

01 WHAT IS RETENTION & SUSPENSION PACKAGING?

Retention and suspension packaging includes two different approaches to pack products with non-slip film.

RETENTION PACKAGING

With retention packaging, a product is held in place between corrugate and non-slip film. When tension flaps are folded, the corrugate stretches the non-slip film across the product, securing it in place to protect it from damage during transit. Retention packaging can be used for blocking and bracing and light cushioning.

RETENTION PACKAGING COMES IN 2 DIFFERENT FORMATS:

1 RETENTION BOXES

Retention boxes are an all-in-one solution, where the retention film and corrugate are integrated into a single box. It can include a tamper-evident closure.

2 RETENTION INSERTS

Retention inserts are a two-piece solution. The product is held in place with the insert, then placed into a separate box.



SUSPENSION PACKAGING

Suspension packaging holds a product in place between two layers of non-slip film, which are then placed into a box.

The film acts like a spring, to cushion products from damage and absorb shock and vibration during packing and shipping. The orientation of the film layers can be top and bottom or side caps, depending on the size and shape of the product.



BENEFITS OF RETENTION & SUSPENSION PACKAGING

The three biggest reasons companies use retention and suspension packaging are product protection, sustainability, and presentation.

Retention and suspension packaging comes in a variety of films and configurations to deliver the ideal product protection without the need for void fill or other cushioning. Products including sensitive electronics, fragile cosmetics, and delicate medical devices have all been shipped using this packaging, with performance testing to prove the pack’s protection capabilities.

From a sustainability perspective, retention and suspension packaging is often kerbside recyclable, even with the film attached. This makes it easier for consumers to dispose of the packaging at home without extra materials like void fill and cushioning.

Retention and suspension packaging also has an unparalleled product presentation, thanks to the clear film that secures the products in place. It gives a premium, memorable unboxing experience for consumers, especially for luxury and tech products like perfumes, cosmetics, smartphones, and tablets. Some companies also offer custom printing and engraving for custom-branded boxes.

Resuability, space savings, and flexibility are three more reasons companies choose retention and suspension packaging.



1 REUSABILITY

When a shipping cycle includes returns, or components are assembled across multiple facilities, suspension packaging can be an attractive choice because it’s reusable. The product can be removed from between the films then replaced in the original packaging, supporting sustainability by reducing overall material use and packaging waste.

2 SPACE SAVINGS

Retention and suspension packaging ships and store flat, saving valuable storage space. It also eliminates the need for void fill and cushioning materials that can take up room.

3 FLEXIBILITY

Because the film forms around the product to secure it, one size of retention and suspension packaging can typically accommodate a range of product sizes and shapes, helping streamline packaging inventory. Custom designs can also help you reach this goal.

02 HOW TO CHOOSE BETWEEN RETENTION & SUSPENSION PACKAGING

How a company chooses between retention and suspension packaging is based on its goals and the products it ships. Often seen as a premium packaging option, it's well-suited to higher-value products.

The chart below shows some general guidelines that can help you decide which is a better fit. Specific capabilities will depend on the manufacturer, pack design, and product.



	RETENTION	SUSPENSION
WEIGHT LIMITS	Up to 7 kg*	Up to 45 kg*
SINGLE OR MULTIPLE PRODUCT SHIPMENTS	Single or multiple	Single
ONE-PIECE SOLUTION	Yes	No
REUSABILITY	Yes†	Yes†
PRODUCT TYPES	Best suited for fragile but durable products that are compact and need protection from damage	Best suited for fragile or sensitive products that need a higher level of protection from damage
EXAMPLE PRODUCTS	Smartphones, tablets, perfumes, books, cosmetics	Boilers, headlights, camera lenses, medical devices, coffee machines, flatscreen televisions

*Dependent on product shape, size, and fragility. †Dependent on film properties and packing processes.

CUSTOM DESIGNS IN RETENTION & SUSPENSION PACKAGING

One of the reasons retention and suspension packaging offers nearly endless packaging options is its ability to be customised based on your unique packaging challenge and goals.

The best recommendation should come from your packaging supplier, who can discuss your packaging challenges and goals, walk you through your options, and figure out if a standard or custom solution is right for your products.

SOME BENEFITS OF CHOOSING CUSTOM RETENTION AND SUSPENSION DESIGNS INCLUDE:



BENEFIT 1
Selecting among various film options to support product and business needs



BENEFIT 3
Printing and engraving to enhance branding options and presentation



BENEFIT 2
Accommodating a range of products with a single size package, to reduce material inventory



BENEFIT 4
Ensuring specific performance through package testing

03 HOW TO PACK PRODUCTS WITH RETENTION PACKAGING

Whether you’re using retention inserts or retention boxes, products are secured between a strong, non-slip film and a piece of corrugate.

THESE 5 STEPS WILL HELP YOU PACK AND SHIP PRODUCTS WITH RETENTION PACKAGING INSERTS.¹

STEP 1



Centre product under film.

STEP 2



Fold tension flaps underneath.*

STEP 3



Fold sides up and hold together.

STEP 4



Insert into box.

STEP 5



Close flaps.

PACKAGING TIP

*Some insert styles use film straps that wrap around the product. For these inserts, you may need to break away and fold up tension flaps, then hook tension flaps over tabs, before folding underneath.



RETENTION PACKAGING IN ACTION

Automotive technology supplier KSE designed a new electric vehicle (EV) charger for homes. The company needed a packaging solution that would impress customers when they opened the box and protect the technology inside. Plus, it had to be sustainable.

SEE’s Korrvu® retention packaging fit all KSE’s needs. The clear, non-slip film displays the product immediately when a customer opens the box, and it holds the charger in place to protect it from damage. The kerbside-recyclable insert and box supports KSE’s sustainability efforts and are rightsized to the charger to reduce the use of packaging materials.

¹ This is general guidance and may change depending on the type of retention packaging insert you use and the product that’s being packed.

THESE 7 STEPS WILL HELP YOU PACK AND SHIP PRODUCTS WITH RETENTION BOXES.²

STEP 1



Centre product under film.

STEP 2



Fold bottom panel and flip over.

STEP 3



Fold up the frame's two side panels.

STEP 4



Fold up the side panels and fold in the back tabs.

STEP 5



Holding minor flaps, fold up back panel.

STEP 6

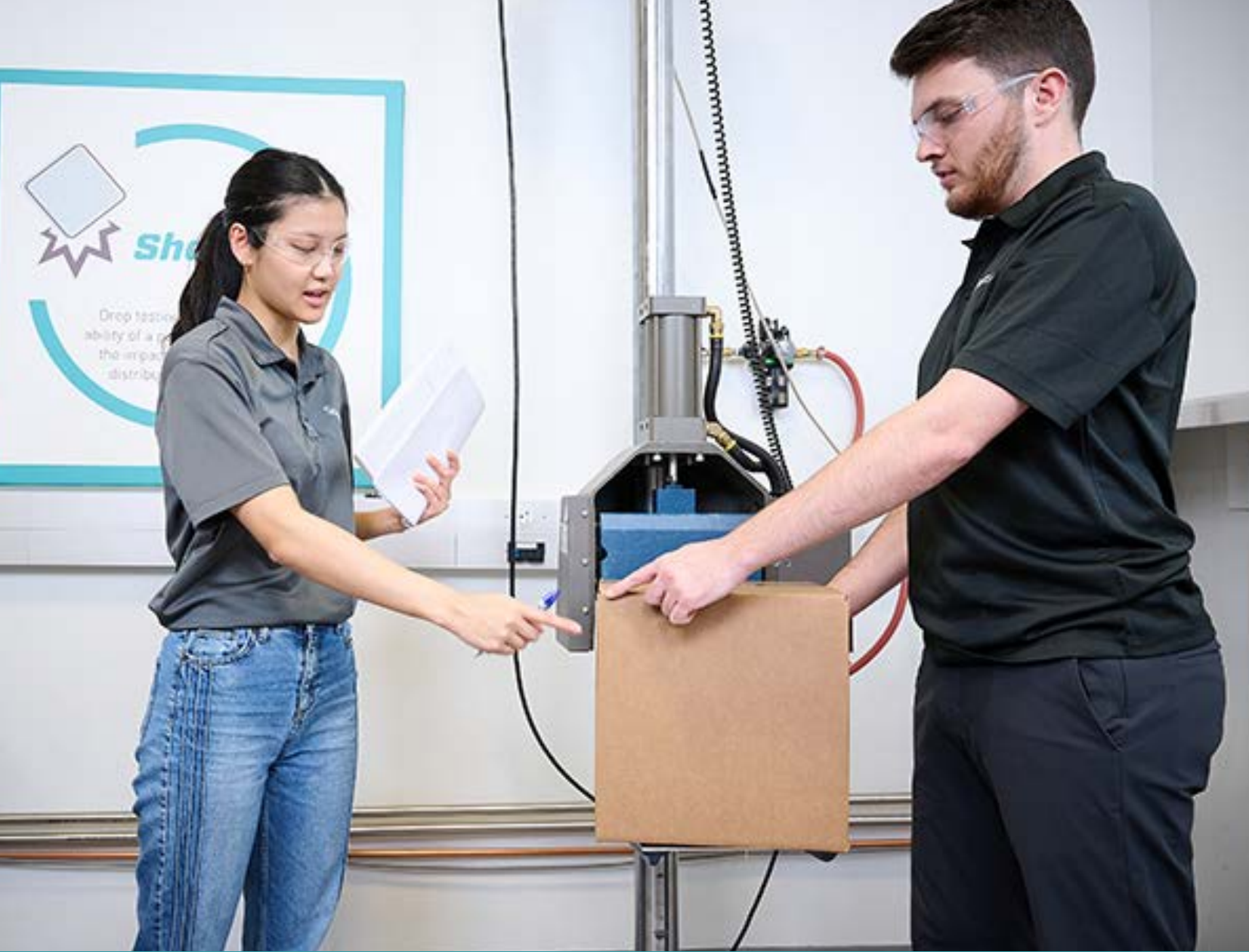


Fold small tabs toward middle.

STEP 7



Tuck closure panel into slot.



PACKAGING TIP

We often hear questions about whether retention and suspension packaging can deliver on product protection or really hold a product in place. Package performance testing can help answer these questions, validate packaging designs, and ensure product integrity throughout the shipping process.

SEE has 18 ISTA-certified testing facilities around the world that perform a range of ISTA, Amazon, UPS, and FedEx testing methods on a variety of packaging options, including retention and suspension.

Interested in more information? [See our full range of services.](#)

² This is general guidance and may change depending on the type of retention packaging box you use and the product that's being packed.

04 HOW TO PACK PRODUCTS WITH SUSPENSION PACKAGING

With suspension packaging, a product is suspended between two pieces of film. These pieces are then placed in a box for shipping.

THESE 6 STEPS WILL HELP YOU PACK AND SHIP PRODUCTS WITH SUSPENSION PACKAGING.³



Fold sides and tabs with the film side down.



Fold outer panels over inside flaps.



Place first frame film side up.



Place product centred on film.



Place second frame on top, film side down.



Press down frame and close flaps.



SUSPENSION PACKAGING IN ACTION

A boiler company in Europe was struggling with damage rates on one of its products. The large and heavy equipment included a sensitive temperature sensor inside, which was being damaged during shipment.

After switching to SEE's Korrvu® suspension packaging, the customer's damage rates decreased. The kerbside-recyclable packaging made it easier for customers to recycle, too.

³ This is general guidance and may change depending on the type of suspension packaging you use and the product that's being packed.

05 KORRVU® RETENTION & SUSPENSION PACKAGING

For more than 30 years, SEE has evolved its Korrvu® packaging to meet the demands of the market.

KORRVU® RETENTION AND SUSPENSION PACKAGING DELIVERS VALUE TO CUSTOMERS ACROSS 3 KEY AREAS:

1 PRODUCT PROTECTION

Korrvu® uses a strong, low-slip film to hold products in place. Retention packaging prevents products from shifting during shipping, and suspension secures products against shock and vibration. Films can have specialised properties. For example, anti-corrosive films can be used for machined parts, bearings, and common rail injectors, while antistatic films help protect electronics like boards, processors, and devices.

2 SUSTAINABILITY

This retention and suspension packaging is kerbside recyclable with the film attached, and its cardboard is made from 50% recycled content. It ships flat to optimise cube space. Plus, you're able to rightsize Korrvu® to your product, helping reduce dimensional weight and avoid using void fill.

3 PRESENTATION

With clear film to secure products, Korrvu® enhances the unboxing experience for customers. Custom design options help reinforce your brand, too, with printing and laser engraving to personalize packages.



With the recent introduction of digital die cutting and production capabilities for Korrvu®, we’re expanding what’s possible in retention and suspension packaging.

Rather than rely on time-consuming traditional die cutting, new digital die cutting capabilities help turn around designs more quickly. In many cases, time to production is reduced from months to days.

MAKING THE SHIFT TO DIGITAL ALSO GIVES CUSTOMERS:

MORE DESIGN FLEXIBILITY

Without the need to cut traditional dies, it’s easier to edit and customise designs for various products and seasons and different locations. It’s also possible to create more complex cuts thanks to laser engraving, for unique product presentation.

ON-DEMAND PRODUCTION AND ORDERING

Both high-volume and short-run orders are available on demand, so you don’t have to hold excess inventory.

ENHANCED SUSTAINABILITY

Laser engraving can remove or reduce the use of ink on packaging. Digital finishing streamlines the supply chain, helping reduce the carbon footprint.



CUSTOM KORRVU® DESIGNS

Korrvu® retention and suspension packaging is nearly endlessly customisable, and the experts at SEE’s Packaging Application Centres help customers design the pack that’s right for them.

AREAS OUR TEAM CAN HELP WITH INCLUDE:

- Selecting between retention or suspension packaging
- Choosing the right film, from antistatic or anti-corrosive to more elastic for reuse
- Reducing material use and pack size
- Designing for reusability
- Testing performance against industry standards
- Creating custom designs to enhance your brand and the customer experience
- Discussing ways to reduce packaging inventory with designs that fit a range of products

INTERESTED IN LEARNING MORE ABOUT KORRVU®?

Talk to your sales representative or email us today.
info-pack@sealedair.com

