



General Packaging Guidelines

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At FedEx, we know proper packaging can help ensure that your shipments arrive safely. So we offer general packaging guidelines — from measuring and weighing your package, to packing methods, sealing and labeling instructions, and guidelines for restricted shipments.

Shipment Size and Weight Restrictions

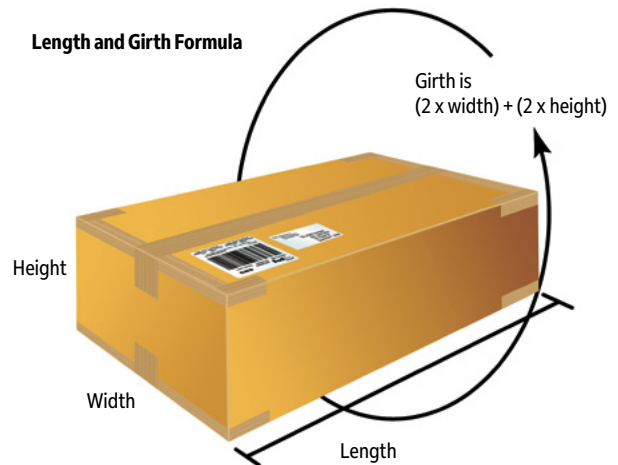
- With FedEx Express® U.S. services, you can ship packages up to 150 lbs (68kg), up to 119" (302cm) in length and 165" (419cm) in length and girth.
- With FedEx Express international services, you can ship packages up to 150 lbs (68kg), up to 108" (274cm) in length and 130" (330cm) in length and girth.
- With FedEx Express® Freight Services, you can ship individual skids of 150 lbs. (68kg) or more. Skids exceeding 2,200 lbs. (998kg) in weight or exceeding 70" (178cm) in height, 119" (302cm) in length, or 80" (203cm) in width require prior approval. FedEx Freight® shipments may be palletized or non-palletized, weigh up to 20,000 lbs. (9072kg), and measure up to 21 feet in length.
- With FedEx Ground® and FedEx Home Delivery® Services, you can ship packages up to 150 lbs (68kg), up to 108" (274cm) in length, and 165" (419cm) in length plus girth.

Place yellow and black safety heavyweight labels over the diagonal corners of the package if it weighs more than 75 lbs (34kg). To get the labels, contact your FedEx Express courier or FedEx account executive, or go to a FedEx Office® Print and Ship Center or FedEx Ship Center®.

Measuring Length and Girth

The length and girth formula is simple. Here's what you do:

- Measure the length, height, and width of the package.
- Length and girth equals length plus twice the width and twice the height.



Length is the longest side of the package or object.

Calculating Dimensional Weight

Dimensional weight applies when the package is relatively light compared with its volume. If the dimensional weight exceeds the actual weight, charges based on the dimensional weight will be assessed. To calculate it:

- Multiply length by width by height in inches.
- Divide by 139 for U.S., Puerto Rico, and international shipments.
- Compare the dimensional weight and actual weight. Your chargeable weight is the greater of the actual weight or the dimensional weight.

General Packaging Guidelines

- Use FedEx Express packaging for FedEx Express package shipments only; any other use is prohibited.
- You may use your own packaging if boxes are sturdy and undamaged with all flaps intact.
- Chipboard boxes, such as gift or shoe boxes, must be packed into a corrugated fiberboard outer box.
- Use double-wall boxes for heavier items.

- Ensure your package is fully encased in an outer shipping container or packaging. The outer container should be made out of corrugated fiberboard materials. Other rigid containers such as plastic cases, wooden crates, and metal totes can be used, but are subject to additional handling surcharges.
- For FedEx Express shipments, go to [fedex.com/packaging](https://www.fedex.com/packaging) to order complimentary packaging.
- Place small packages inside a larger outer corrugated fiberboard box. For express shipments smaller than 7" x 4" x 2" (18cm x 10cm x 5cm), use a FedEx Express packaging option, or you can purchase other packaging at a FedEx Office location.
- Double-box fragile items with 3" (8cm) of cushioning in and around the smaller box.
- Wrap items individually with cushioning material and center them in boxes away from other items and away from the sides, corners, top, and bottom of the box.
- Position bottles that contain liquids upright. Use an inner seal and perforated breakaway cap. The inner packaging must be able to contain leaks.
- Place items that might be damaged by normal handling, such as soiling, marking, or application of adhesive labels, in a protective outer box.
- For odd- or irregular-shaped items, at a minimum you should wrap and tape all sharp edges or protrusions.
- Enclose an extra label, business card, or letterhead with the shipper's address and phone number and the recipient's address and phone number inside the package before sealing it.
- Remove all old address labels from reused boxes before shipping, and make sure there are no holes, tears, or corner dents in the outer box.
- Rolled goods should be placed inside a FedEx tube, triangular tube, corrugated fiberboard box, or crating method. An additional handling surcharge can apply if you use the crating method.

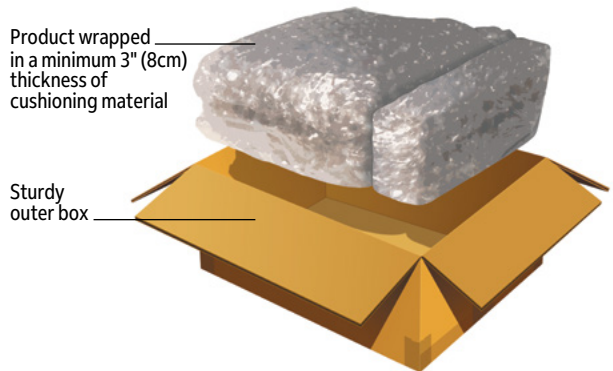
General Packing Methods

Follow these general guidelines for the two most popular packing methods, plus recommendations for odd- or irregular-shaped shipments.

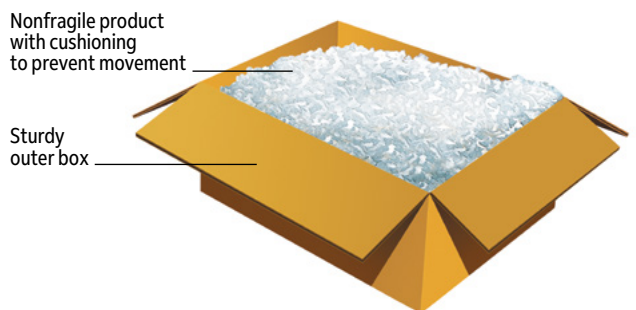
Single-Box Packing Method

- Ship nonfragile products like soft goods inside a sturdy outer box.
- Use fillers like crumpled newspaper, loosefill peanuts, or air-cellular cushioning material such as Bubble Wrap® to fill void spaces and prevent movement of goods *inside* the box during shipping.
- Place goods that might be affected by dirt, water, or wet conditions inside a plastic bag.
- Consolidate small parts or spillable granular products in a strong sealed container, such as a burlap or sift-proof plastic bag, then package in a sturdy outer box.
- Use the H taping method for sealing your package.

Single-Box With Wrapped Item



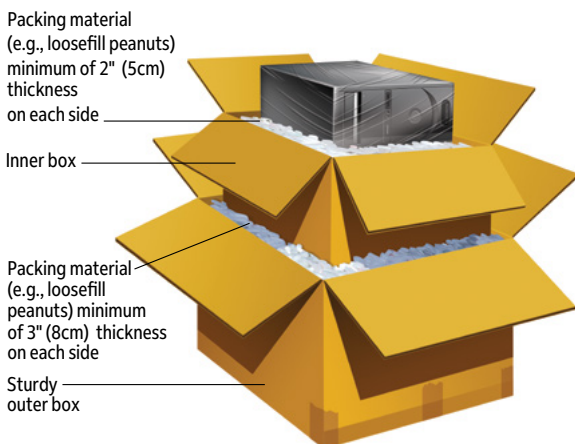
Single-Box Filled With Loosefill Peanuts



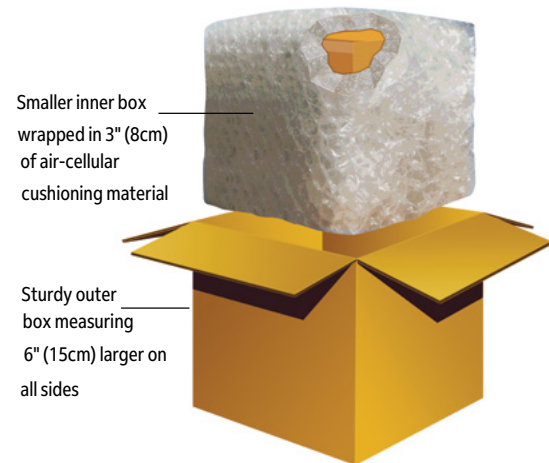
Box-in-Box Packing Method

- Wrap product(s) individually with at least 2" (5cm) thick-ness of air-cellular cushioning or foam material to fit snugly inside a corrugated fiberboard box.
- Restrict product movement *inside* the box using filler like crumpled newspaper, loosefill peanuts, or other cushioning material.
- Close and tape the inner box using the H taping method. This will help prevent accidental opening.
- Use a second box that is at least 6" (15cm) longer, wider, and deeper than the inner box.
- Choose the wrap or fill method to cushion the inner box inside the larger sturdy outer corrugated fiberboard box.
- Ship fragile products individually, wrapping them in a minimum 3" (8cm) thickness of air-cellular cushioning material.
- Wrap the inner box with 3" (8cm) thickness of air-cellular cushioning material or use at least 3" (8cm) of loosefill peanuts or other cushioning material to fill the spaces between the inner box and outer box on the top, bottom, and all sides.
- Fill any void spaces with more cushioning material.
- Use the H taping method for sealing your package.

Box-in-Box With Loosefill Peanuts



Box-in-Box With Air-Cellular Cushioning



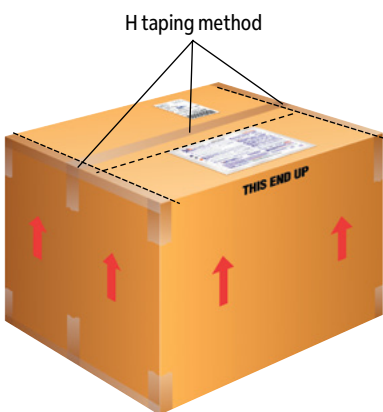
Multiple piece shipments

Explore your options for shipping multiple packages in one shipment. These tips will help when you want all your packages to arrive at the same time and place.

- Use the overbox method. Place all your packages into one large corrugated fiberboard box.
- Make sure your large corrugated fiberboard box meets our size and weight restrictions.
- Ship it with FedEx Freight. If your packages combined weight totals over 150 lb (68kg) give Freight a try. For more information on FedEx Freight visit fedex.com/en-us/shipping/freight.html.

Sealing Your Package

- Use pressure-sensitive plastic tape, water-activated paper tape (minimum 60-lb. (27kg) grade), or water-activated reinforced tape that is at least 2" (5cm) wide.
- Apply tape evenly across flaps and seams to both the top and bottom of the outer box. Use the H taping method.
- Do not use cellophane tape, duct tape, masking tape, string, or rope to seal packages. In addition, do not wrap the outer box in shrink wrap, stretch wrap, or Bubble Wrap.



- Shrink wrap is allowed for wrapping expanded polystyrene (EPS) foam coolers when approved by the FedEx Packaging Lab. To inquire about approval, email packagingservices@fedex.com. Shrink wrap should not be used around corrugated fiberboard boxes, corrugated plastic boxes, or other transit cases made of plastic, metal, or wood. Stretch wrap and Bubble Wrap are both prohibited from use on the exterior of small parcel packages.
- The package should not be bound with metal, plastic, or cloth banding. It should however be properly sealed using the H taping method.

Addressing and Labeling Your Package

- Place delivery information inside and outside the package. Include an address for your recipient and yourself.
- Do not list a P.O. box address for U.S. recipients. FedEx Express can ship to a P.O. box in certain international locations, including Puerto Rico, but you must provide a valid telephone, fax, or telex number.
- Remove or cross out any old address labels on the outer box.
- Shipping labels and packing slips should be applied facing the same direction on the same side of the package.
- Avoid wrapping labels around the corner or directly on the edge or seam of the package.
- Place shipping labels on the package's largest surface. While we cannot ensure compliance with markings such as "Up" arrows or "This End Up," properly placing the shipping label increases your chance for the preferred orientation.
- To avoid scanning issues, do not apply tape, wrappings, or other coverings over the shipping label. The coverings make the barcode unreadable.
- Use tie-on tags on transit cases (including tradeshow display cases), golf bags, skis, and luggage.

Use applicable routing label, airbill, or address label



Packaging Specialty Shipments

Some shipments require detailed instructions for proper packaging to ensure intact delivery to your destination. For more information, check out our guides on how to pack specialty and unique items such as bikes, breakables, computers, and more. You can find these detailed guides at the bottom of our [**How to Pack page**](#). Guidelines for packaging specialty items contain specific packing, sealing, labeling, and testing instructions. The following page has recommendations for items that don't require such specific guidelines.

General Guidelines for Unique Items

- **Artwork.** Apply masking tape in a criss-cross pattern on the glass surface to prevent glass from splintering. FedEx Office has a selection of framed-art boxes for purchase. Or let the pros do the packing for you.
- **Photos and Posterboard.** Tape flat items onto a rigid material like plywood, plastic, or layers of corrugated fiberboard padding; as an alternative, place printed material between two corrugated pads and tape both pads together at all seams.
- **Undeveloped Film.** Prominently mark packages containing undeveloped film. Special labels are available. Ask your FedEx courier or call 1.800.GoFedEx 1.800.463.3339 (say “order shipping supplies”).
- **Stringed Musical Instruments.** Loosen the tension on the strings to remove the stress on the neck of the instrument. Place the instrument in a strong box with cushioning materials to prevent damage. FedEx Office has a guitar box for purchase that fits most guitars in hard or soft cases with adequate cushioning.
- **Printed Matter.** Bundle printed material together to prevent shifting. Cushion sufficiently before packing into a double-walled corrugated outer box. FedEx Office has a heavy-materials box for purchase that is double-walled and suitable for printed matter.
- **Rolled Goods.** Tightly wrap rolled goods using several layers of heavy-duty plastic film and wrap with plastic packing tape. Once wrapped, place the rolled good into a FedEx tube or corrugated fiberboard box. FedEx office has a variety of telescoping boxes for purchase that can be used for shipping rugs, rolls of fabric, and other rolled goods. FedEx cannot assume liability for damage due to inadequate protection.

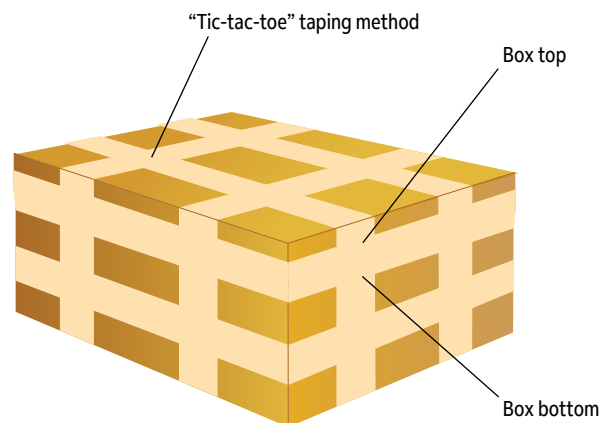


Banker Box, Storage Box, Archive Box, Document Box, Copy Paper Box

These boxes are designed for palletized transport and storage, not individual transport. However, such boxes can be shipped successfully with proper reinforcement and within certain parameters. FedEx will accept such shipments, but the following criteria are strongly recommended:

- The total weight of the shipment should not exceed 30 lbs (14kg).
- Use only new, undamaged boxes for shipping. Used boxes are more likely to result in loss of or damage to the contents.
- Secure the box with 2"- to 3"- (5cm to 8cm) wide plastic pressure-sensitive shipping tape around the length, width, and perimeter of the box in two places. Upon completion the tape should resemble a “tic-tac-toe” pattern on all sides of the box.
- If the box is not completely full of product, fill all void areas with packing material, e.g., Bubble Wrap, crumpled kraft paper (not newspaper), or loosefill peanuts.
- For identity purposes, apply a shipping label to both the lid and the side of the base for two-piece box shipments.

If the above recommendations are not satisfied and the shipment cannot be brought to compliance, place the material in a new corrugated fiberboard box or use a box-in-a-box of proper size and strength for the weight of product being shipped.



General Guidelines for Polybags

Polybags or soft mailers are non-rigid/flexible packaging that can be made from plastic, paper, fabric, etc. Common examples include polyethylene (PE) or polypropylene (PP) bags, paper bags, cloth bags, plastic or paper bubble mailers, and single faced corrugated mailers. Polybags are commonly used to pack malleable items like paper, documents, clothes, and other non-fragile items. Below are some best practices and things to avoid when it comes to using polybags for your shipments.



Best practices

- Use polybags with a minimum thickness of 3 mil
- Sizes under 18" x 13" x 5" (48cm x 33cm x 13cm) are recommended and larger items should use a corrugated box
- Use of additives to improve puncture or tear resistance is encouraged
- Bubble mailers or paper padded mailers provide limited cushioning for non-fragile goods

Things to avoid

- 100% recycled or fully compostable polybags
- Using a polybag to ship an item that weighs over 5lbs (2.3 kg)
- Shipping glass, liquids, electronics, or other fragile items
- Fragile items that require cushioning

Have questions about your polybag? Submit a polybag sample with your product to our Packaging Lab for complimentary testing.

Dangerous Goods Shipments via FedEx Express

Dangerous goods must be tendered to FedEx Express according to both current International Air Transport Association (IATA) regulations for air transport and the FedEx Express Terms and Conditions.

If you have other questions, call the FedEx Dangerous Goods/Hazardous Materials hotline at 1.800.GoFedEx 1.800.463.3339; press "81" or say "dangerous goods," then press "4" for the next available dangerous goods agent.

To find updated dangerous goods guidelines, information on packaging guidelines, and other information, go to **fedex.com/dangerousgoods**.

You can also register at **fedex.com/us/services/options/dangerousgoods/seminars.html** for IATA and International Civil Aviation Organization (ICAO) training that meets government-mandated training under 49 Code of Federal Regulations (49CFR) 172.700. To speak with a dangerous goods shipping professional, call 1.800.GoFedEx 1.800.463.3339; press "81" or say "dangerous goods," then press "4" for the next available dangerous goods agent.

Hazardous Materials Shipments via FedEx Ground

If you haven't shipped hazardous materials via FedEx Ground before, contact your FedEx account executive first. We need to confirm that you've met government training requirements and can generate the documentation your shipment needs.

To find updated hazardous materials guidelines, information on packaging guidelines, and other information, go to **fedex.com/hazardousmaterials**. To register for online training that meets Department of Transportation (DOT) certification requirements, go to www.shipsafeshipsmart.com or call 1.800.762.3744, ext. 6753. To speak with a hazardous materials shipping professional, call 1.800.GoFedEx 1.800.463.3339; press "81" or say "dangerous goods," then press "4" for the next available dangerous goods agent.

Bubble Wrap is a registered trademark of Sealed Air Corporation.

NOTICE: This packaging brochure is provided to FedEx customers to help reduce loss or damage due to improper packaging. It is NOT intended to be a comprehensive guide for packaging items we accept for transit. We make no warranties, expressed or implied, regarding this information. Proper packaging is the sole responsibility of the shipper. If items are not fully encased in an outside shipping container, an additional handling surcharge may apply. For more information and additional guidelines, go to the packaging tips page at fedex.com/packaging, email packagingservices@fedex.com, or contact FedEx Packaging Lab at 1.800.633.7019. Refer to the current FedEx Service Guide for terms, conditions, and limitations applicable to FedEx® delivery services. 2087127R-Rev. 9/23