



# Customer Packaging Guidelines

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This document is applicable to  
FedEx and TNT shipments.





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**NOTICE:** These Packaging Guidelines are provided to FedEx and TNT customers in Europe to help reduce loss or damage due to improper packaging. This document is not intended to be a comprehensive guide for packaging shipments that FedEx and TNT will accept for transit. FedEx and TNT make no warranties, expressed or implied, regarding this information. Proper packaging is the sole responsibility of the sender. If items or pieces are not fully encased in an outside shipping container, box, or packaging, an Additional Handling Surcharge may apply. Refer to the current Service Guide for terms, conditions, and limitations applicable to FedEx and TNT delivery services.

# Customer Packaging Guidelines

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 labelling instructions, and guidelines for restricted shipments.

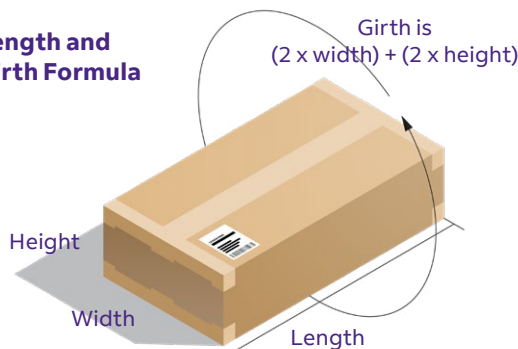
## Shipment Size and Weight Restrictions

- With FedEx Express international services, you can ship packages up to 68kg, up to 274cm in length and 330cm in length and girth.
- With FedEx Express® Freight Services, you can ship individual skids of 68kg or more. Skids exceeding 998kg in weight or exceeding 178cm in height, 302cm in length, or 203cm in width require prior approval.
- For TNT shipments, please visit [tnt.com](https://www.tnt.com) for size and weight restrictions.

Place yellow and black safety heavyweight labels (marked 'Heavy') over the diagonal corners of the package if it weighs more than 34kg.



### Length and Girth Formula



### 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 combined is equal to length plus twice the width and twice the height.

## Calculating Dimensional (DIM) 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 centimeters.
- Divide by 5,000 for international shipments. For FedEx® Regional Economy and FedEx® Regional Economy Freight, DIM divisor is 4,000. FedEx Regional Economy and FedEx Regional Economy Freight are our intra-Europe economy services and are available to selected customers only. For further information, please contact your local Sales Representative.
- Compare the dimensional weight and actual weight. Your chargeable weight is the greater of the actual weight or the dimensional weight.

Dimensional weight does not apply to shipments in FedEx packaging, however, in case FedEx® Pak in Europe exceeds 0.0154m³, dimensional weight may apply. FedEx® Box packaging is subject to a minimum weight charge.

The maximum dimensions of packages are defined by the features of service. Please refer to the Service Guide available on [fedex.com](https://www.fedex.com) for the maximum dimensions.

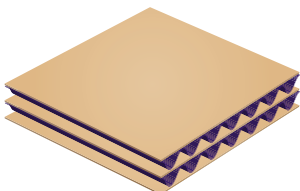
Any FedEx package exceeding these standard measurements is automatically considered as FedEx International Priority® Freight, FedEx International Economy® Freight or FedEx® Regional Economy Freight, and billed accordingly.





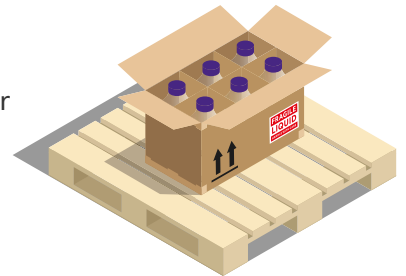
## General Packaging Guidelines

- Use FedEx Express packaging for FedEx Express and TNT package shipments only; any other use is prohibited.
- Use only new, undamaged boxes for shipping. Used boxes are more likely to result in loss of or damage to the contents.
- 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 shipping container or packaging should be made of corrugated fiberboard materials, is cuboidal in shape, and is flat on each side. While other rigid containers or packaging such as plastic cases, wooden crates, and metal totes may still be used, these packaging types will be subject to applicable Additional Handling Surcharges.
- Place small packages inside a larger outer corrugated fiberboard box. For express shipments smaller than 18cm x 10cm x 5cm, use a FedEx Express packaging option.
- Double-box fragile items with 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.



For FedEx Express shipments, go to [fedex.com/en-ie/shipping/packaging/supplies.html](https://fedex.com/en-ie/shipping/packaging/supplies.html) to order complimentary packaging.



## Packing Methods

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

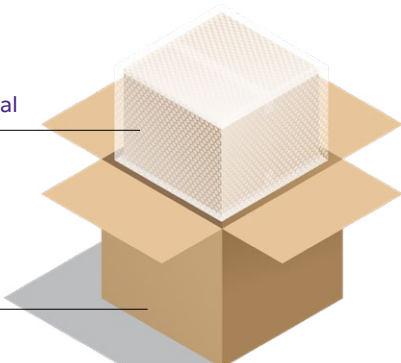
### Box-in-Box Packing Method

- Wrap product(s) individually with at least 5cm thickness 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 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 8cm thickness of air-cellular cushioning material.
- Wrap the inner box with 8cm thickness of air-cellular cushioning material or use at least 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 Air-Cellular Cushioning

Smaller inner box wrapped in (8cm) of air-cellular cushioning material

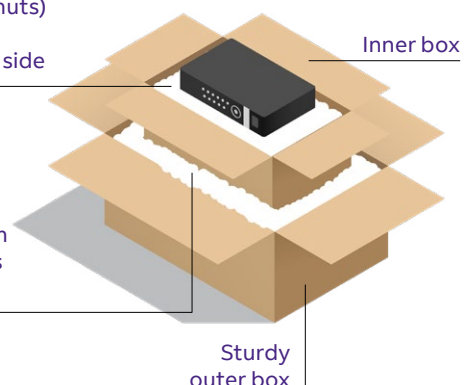
Sturdy outer box measuring (15cm) larger on all sides



#### Box-in-Box with Loosefill Peanuts

Packing material (e.g., loosefill peanuts) minimum of (5cm) thickness on each side

Packing material (e.g., loosefill peanuts) minimum of (8cm) thickness on each side



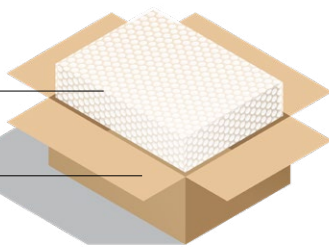
## Single-Box Packing Method

- Ship non-fragile 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

Product wrapped in a minimum (8cm) thickness of cushioning material

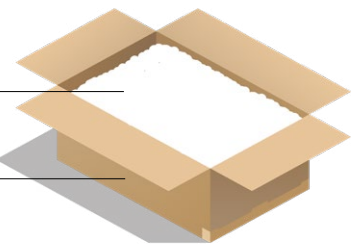
Sturdy outer box



### Single-Box Filled with Loosefill Peanuts

Nonfragile product with cushioning to prevent movement

Sturdy outer box



## Multiple piece shipments

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

We encourage that, if possible, you place multiple items or pieces in a single box. If this is not possible, then ensure that each item has a tracking ID and a shipping label.

- Use the overbox method of packaging. This means placing all your items or pieces into one large, corrugated fiberboard box.
- Make sure your large, corrugated fiberboard box meets our size and weight restrictions.

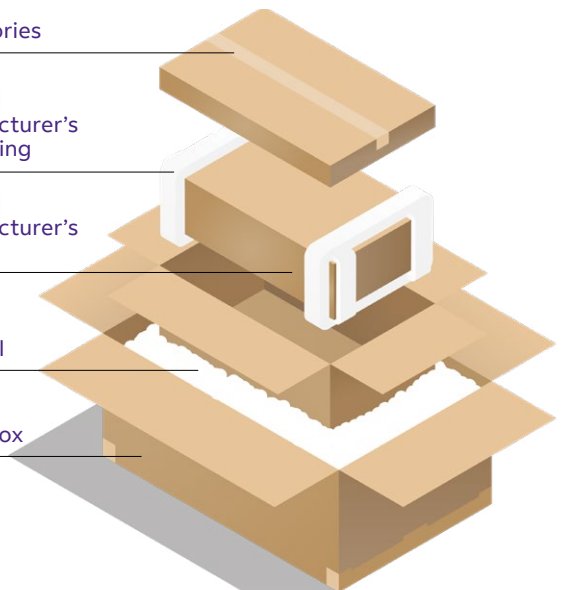
Accessories

Original manufacturer's cushioning

Original manufacturer's box

Packing material

Outer box



(Sample overbox method when shipping with original manufacturer's packaging.)



### Ship it with FedEx Freight.

If your packages' combined weight totals over 68kg, please use Freight. For more information on FedEx Freight visit [fedex.com/en-ie/shipping/freight-services.html](https://fedex.com/en-ie/shipping/freight-services.html)





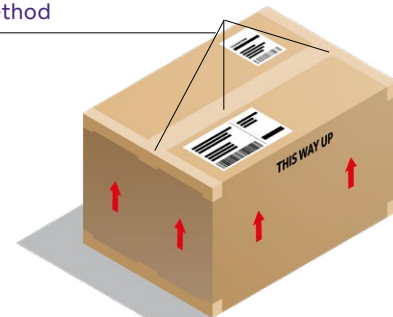
## Sealing Your Package

- Use pressure-sensitive plastic tape, water-activated paper tape (minimum 27kg grade), or water-activated reinforced tape that is at least 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](mailto: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.

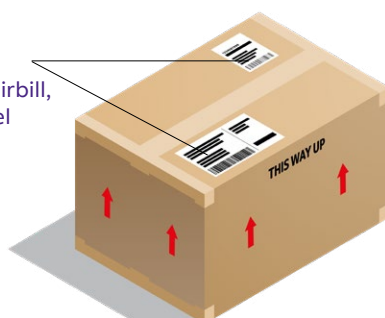
H taping method



## Addressing and Labelling Your Package

- Place delivery information inside and outside the package. Include an address for your recipient and yourself.
- 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. 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 crisscross pattern on the glass surface to prevent glass from splintering.
- **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.
- **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.
- **Printed Matter.** Bundle printed material together to prevent shifting. Cushion sufficiently before packing into a double-walled corrugated outer box.
- **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 cannot assume liability for damage due to inadequate protection.
- **Tires and Wheels.** Cushion the bottom of the box with 8cm of bubble packaging. Place the tire inside the box. Cushion the sides and top of the box with 8cm of bubble packaging or other cushioning material. Tape the box and apply shipping label on top of the box.
- **Wine.** Two-piece molded polystyrene inner packaging shipped with flute double-wall corrugated outer container or packaging. All closure flaps must be sealed securely, top and bottom, with pressure-sensitive tape.





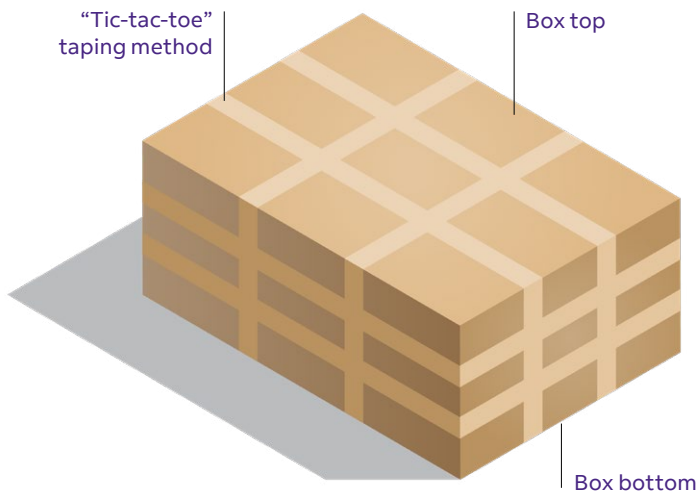
# Packaging Specialty Shipments

## 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 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 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.





## Packaging Pallets and Freight Shipments

Shipments that qualify as freight must be packaged accordingly.

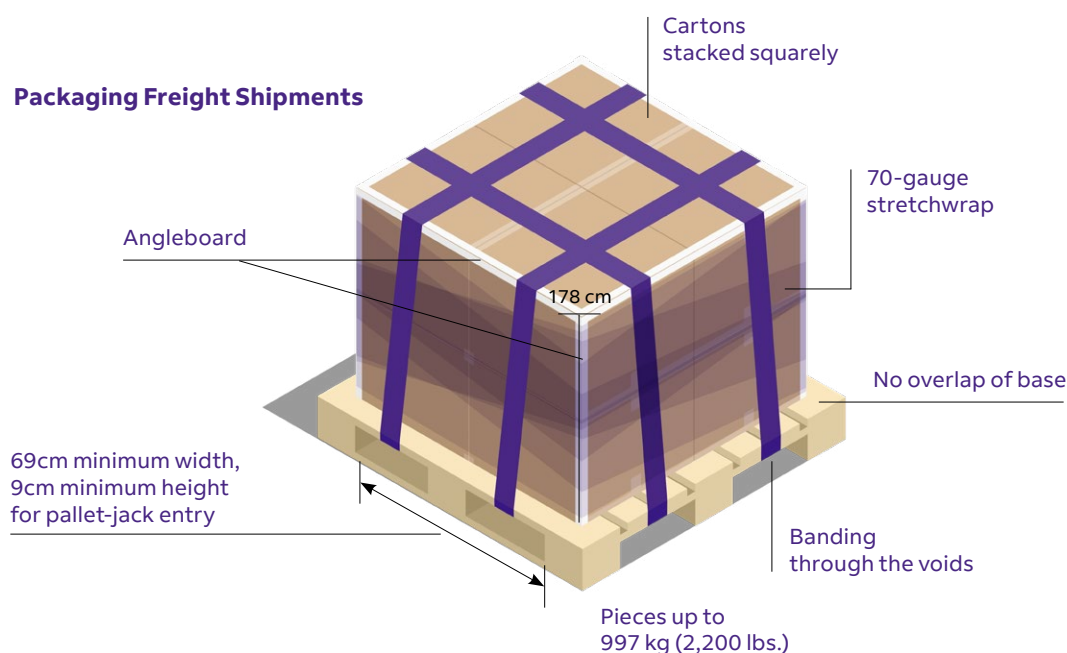
You must package your freight shipments to allow for stacking of other freight shipments on top of your shipment. Make sure your freight shipments are banded and stretch-wrapped to the pallet, with the bands running in both directions. (Pallet loads secured with only stretch wrap are not acceptable.)

Avoid corrugated or fiberboard pallets. You must secure all freight shipments weighing 68 kg or more on a forkliftable base, compatible with pallet-jack usage. The minimum specifications for a typical base for forklift or pallet-jack configuration are illustrated below.

To lessen the possibility of damage or delay to your cargo, make sure that all single-piece cargo greater than 68 kg is banded on all sides with heavy-duty metal or break-resistant plastic banding.

If your cargo is a single piece contained within a hardened container (plywood, metal) and is greater than 68 kg, it does not require banding if exterior locks or clamps are used. (Glue, nails, or screws are not sufficient.)

### Packaging Freight Shipments



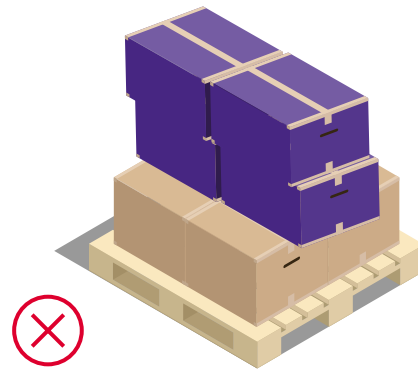
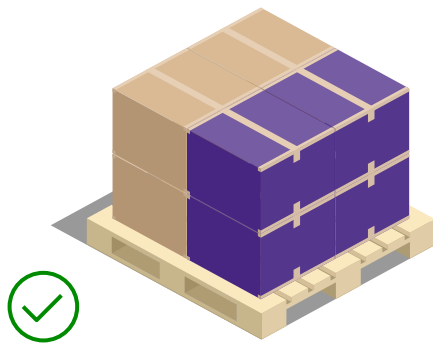


## Constructing a pallet

Check all pallets before use for any signs of wear and tear.

**The proper construction of a pallet is crucial as this will have a significant impact on the integrity of the shipment:**

- The correct method to ensure stability and strength is to stack boxes in columns. This involves placing boxes directly on top of each other to form a 'cube' shape, making sure the load has a flat surface at the top. Please check that the boxes fit correctly on the pallet and **do not overhang the edge of the pallet**.
- Boxes should only be stacked overlapping each other, known as the 'bricklayer' method if the individual cartons and their contents form a rigid unit.
- Please note when palletising boxes, if a box is only partially filled it can easily become crushed under the weight of other parcels on the pallet. Therefore, any empty space in a box should be filled with suitable cushioning materials i.e. foam, corrugated cardboard etc.
- **Avoid building 'pyramid' shape pallets** as the lack of a level surface weakens the overall packaging and may expose the contents to damage from other shipments.

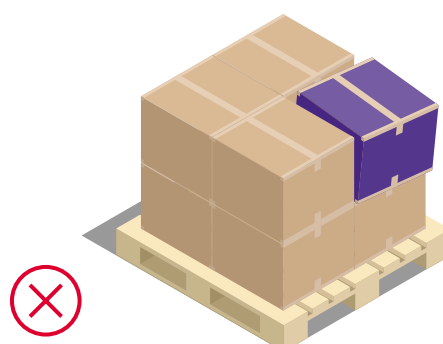


## Strapping

Usually any damage caused to palletised boxes during transit is due to the shipment not being correctly stacked, bundled or secured.

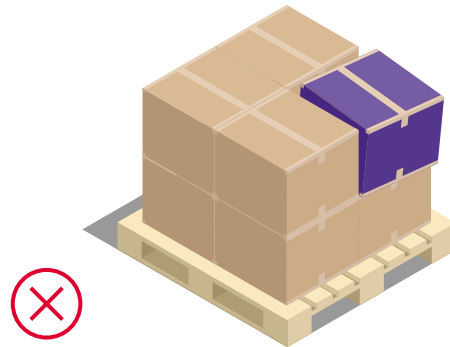
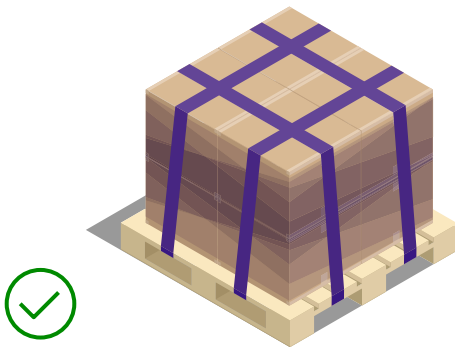
**We only accept shipments following guidelines for protecting, shrink wrapping and banding:**

- Top and bottom load protector pads help to reduce damage to the top and bottom of the shipment. Corner or edge boards which should run the full length of the pallet help to stabilise the load and protect the box edges at each corner of the pallet.
- Strapping with two straps from both sides, four in total, is generally used to secure the bundled load to the pallet. Strapping and/or wrapping can be applied around several decking rows for additional stability. There are various forms of strapping including steel, polypropylene, nylon or polyester. Heavy duty strapping such as steel is preferred for heavy loads as it does not stretch.



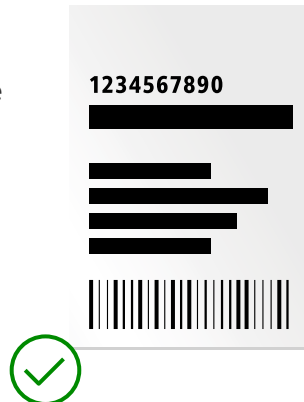
## Shrink-wrapping

- Shrink-wrapping is critical for bundling the load and securing the items to the pallet. It is a packaging technique which involves wrapping thin, stretchable plastic film, tightly around the load.
- The shrink-wrap should be tucked between the pallet and the bottom row of boxes or tied to the bottom of the pallet. The wrap should be spiralled around the boxes in an upward direction making sure the film overlaps. At the top of the load, stretch the film diagonally over the corners and then spiral back down to the bottom leaving a slight overlap at the pallet base. As a minimum, there should be three layers of shrink wrap.
- An alternative to shrink-wrapping is to use secondary outer packaging as this will provide added protection. The outer packaging will need to be fastened by either gluing or stapling the base of the package to the pallet to make it secure. The boxes should then be evenly distributed inside the outer packaging making sure the contents are tightly packed to avoid movement. The top of the packaging should be levelled and then the lid secured.



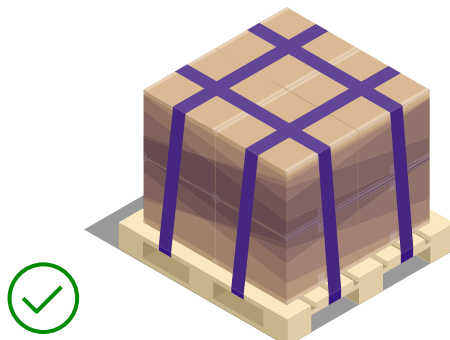
## Labelling of shipment

- Make sure the routing labels are placed on the side of the pallet load and clearly visible to enable the barcode to be scanned.
- Use orientation labels to help us with the identification of the type of shipment and required handling practices such as 'This Way Up'; 'Fragile'; 'Handle with Care'.



## Pallets

- The use of pallets is an ideal approach to protect your shipment from damage. The design and materials used in constructing a pallet must take into account the weight of the items to be carried in the container.
- Transit pallets should be shrink wrapped and strapped.







## 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 of Carriage.

### Section II Lithium Battery: Packaging Guidelines

To comply with Section II IATA shipping requirements, shipments containing lithium batteries and cells must comply with specific packaging guidelines.

- Ensure that lithium batteries are individually packaged in fully enclosed inner packaging such as a plastic blister wrap or pasteboard to provide protection for each battery.
- Shield and protect lithium batteries to prevent short circuits or contact with conductive materials within the packaging that could cause short circuits.
- Ensure that packaging is proven (i.e., tested) to meet the requirements of each test in the UN Manual of Tests and Criteria, Part III, Sub-Section 38.3.
- Make sure that lithium batteries are completely enclosed (such as in equipment or surrounded by plastic with void space filled to prevent movement), except when the proper shipping names end with “contained in equipment.”

- Place contents in a sturdy outer container.
- Provide correct labelling and documentation

Certain fully regulated Section IA and Section I Packing Instructions require UN specification packaging that meets Packing Group II performance standards. Refer to the specific IATA Packing Instruction for complete packaging requirements.

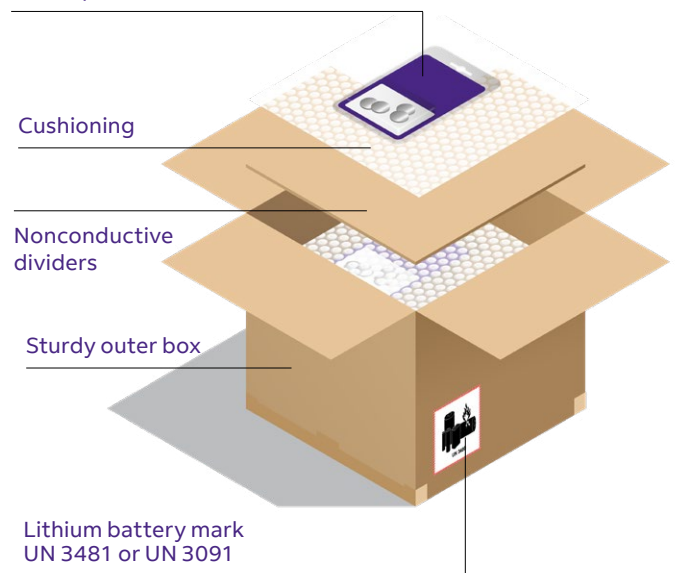
Lithium metal battery in blister pack

Cushioning

Nonconductive dividers

Sturdy outer box

Lithium battery mark UN 3481 or UN 3091



**Note:** Please reach out to your Account Executive for applicability of Dangerous Goods services. As we continue with our integration, **some Dangerous Goods shipments by Road will only be available through TNT Economy services.** TNT Economy shipments of UN 3090 or UN 3480 offered in compliance with ADR Special Provision 188 will be acceptable for carriage if there is no air connection anywhere in the routing of the shipment.



To find updated dangerous goods guidelines, information on packaging guidelines, and other information, go to [fedex.com/en-ie/shipping/dangerous-goods.html](https://fedex.com/en-ie/shipping/dangerous-goods.html)