2020

Furniture Packaging Guidelines

Crate&Barrel CB2 HUDSON | GRACE

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Addendum

- Replaced *Packaging Reduction Goals* with General *Packaging Requirements*.
- Replaced *Alternative Sustainable Materials* section with *Preferred Interior Packaging Materials*
- Updated Transit Testing protocols
- Removed requirement for materials worksheet to be completed. Replaced with requirement for vendor to submit detailed packaging specification
- Updated unacceptable packaging list. Removed EPS and strapping from the list of unacceptable packaging materials
- Replaced Silica Gel Pack section with Desiccant Packs
- Added sections *Acceptable Shipping Container Styles* and *Packaging for Storage at Crate and Barrel*
- Added section *Wood Crating*
- Added section *Storage and Handling Labels*
- Updated overall layout

General Packaging Requirements

We take steps to protect the product through improved packaging materials and designs, with the expectation that our vendors comply with these standards.

- ➢ Vendors shall use sustainable, recycled or easily recyclable packaging materials that meet or exceed all performance and quality standards.
- ➢ EPS / Styrofoam can be used, but should not exceed 12% of the total carton cube.
- ➢ The total amount of packaging material used should not exceed 35% of the total carton cube.
- ➢ Reused packaging materials are not acceptable.
- ➢ All products must pass any applicable transit tests.
- ➢ Banding is not preferred, but may be used if necessary. Metal banding is not accepted.
- ➢ Packaging materials must protect the product and not result in an increase in damages.

Unacceptable Packaging Materials

- ➢ Polyurethane Cushioning (Foam-in-Place)
- ➢ Staples (used as a carton closure method)
  - o Staples are unacceptable as they can cause injury to our customers and employees.
- ➢ Loose fill (i.e. packing peanuts, cornstarch, expandOS®)







Preferred Interior Packaging Materials

Listed below are preferred interior packaging options that will maintain product integrity and meet Crate and Barrel's sustainable packaging goals:

- **Honeycomb -** Honeycomb is a paper based protective material offering a strong, lightweight alternative to standard corrugated packaging. Honeycomb is a great option for corner and edge protection.




- **Multiwall Corrugated** - Multiwall corrugated is a protective packaging design composed to layers of corrugated board. Multi-wall corrugated can be produced in variety of styles such as flat, angled channel, u-channel, and pyramid. This material should not be used as an interior cushioning material if the product-package exceeds 60lbs.





- **Mushroom Based Packaging** - Mushroom packaging uses roots of a fungi to act as system of branched fibers. This type of packaging is a developing trend, generally used as a replacement for standard EPS packaging. Mushroom packaging is both biodegradable and compostable.




- **Closed Cell Foam Cushioning** - These types of foams include many used in packaging today including, but not limited to, Polyethylene (PE), Polypropylene (PP), and Polystyrene (EPS). These types of foams are less sustainable, but are sometimes recommended on highly fragile products. Use of these materials should not exceed 12% of the total carton cube.





Transit Testing

In order to reduce damages during transportation, distribution, handling, and storage, we require certain products pass a transit test protocol using standards outlined by the International Safe Transit Association (ISTA).

These laboratory tests focus on four basic types of hazards that occur in distribution:

- Shock
- Vibration
- Compression
- Atmospheric

Test protocols are based on the size and weight of the carton and the type of delivery method being used. Large furniture pieces that exceed 150 lbs shall be placed onto wood pallets that are sized to the footprint of the Master Carton, secured with plastic strapping, as shown below. Stone, travertine, and marble dining table tops should be packed and transit tested within a wooden crate. Only an ISTA Certified Laboratory can perform these tests for the Company. The Packaging team will provide specific testing requirements.





Send any transit test inquires to packaging-group@crateandbarrel.com.

Packaged-products that fall within the below parameters should be transit tested. If you are unsure, please reach out to the Packaging team at packaging-group@crateandbarrel.com.

- Product is packed as a single, and does NOT fit into one of the below box sizes:
    - 24" x 20" x 15"
    - 27" x 20" x 7 7/8"

OR

- Weight of a packaged-product exceeds 30 lbs.

At the Crate and Barrel, we allow for "group testing." This is where, to help control costs, only one or two products of a collection can be tested, provided all are produced with the same materials and processes, and are produced in the same factory. Group testing is applicable for new versions of previously transit tested products such as a sideboard in a new finish. The product should be a similar size and weight as what was previously tested. The packaging system shall also be the same as what was previously tested, including its design, the material specifications, etc. The exception to this will be if there are any packaging improvements or revisions that were requested due to damages; in this case, the most recent packaging system shall be used for testing. For beds, we will use the queen size as the Master SKU if other sizes are added and you will refer to the queen test report in the Group Test Form (GTF). Travertine, marble, concrete, and stone table tops shall be group tested with the largest size as the Master SKU. For transit Group Testing requests, contact packaging-group@crateandbarrel.com.

Items need to be tested **prior** to shipment. Please ensure there is adequate time between transit testing and the ship date to ensure there are no delays. **Failing to perform any required transit test will result in chargebacks per piece.** If the inner carton qualifies for transit testing, it will need to be transit tested instead of the master carton. Some products may require both the Inner and Master Carton to be transit tested. Please contact the Packaging team to confirm. Note that only one color of the same product/same size needs to be tested - in these cases please fill out a GTF, per above.

Exceptions to the above parameters:

- Textiles such as rugs, bedding, et cetera do NOT require transit testing.
- Chairs that are packed in quantities greater than one DO need to be transit tested.

We review damage reporting to maintain customer satisfaction. Products with high damage rates will be re-evaluated for packaging system design and material recommendations and improvements. Packaging revisions may require transit retesting to confirm changes.

Bureau Veritas (BV) and Intertek are our primary independent testing labs for both packaging and quality assurance. We have negotiated price discounts for tests performed at both labs for our vendors. Information regarding the locations, the test request form, and other Crate and Barrel program details can be found at www.bureauveritas.com and www.intertek.com. In addition to BV and Intertek, we will accept test reports from other labs; you must confirm with the Packaging team before proceeding with testing.

The packaging team will need to calculate the package girth in order to select the proper protocol. To do this we need to know Master Carton (or inner carton) dimensions and weight.

Measuring the Packaged-Product

The Combined Length and Girth (CLG) of ground packages can be measured using the following formula:

Length + 2x Width + 2x Height

Step 1. Determining Length

➢ Measure the longest side of the package, rounding to the nearest inch. This is your length.

Step 2. Determining Girth (2x Width + 2x Height)

➢ Measure the width of the package, rounding to the nearest inch. Multiply this number by 2.

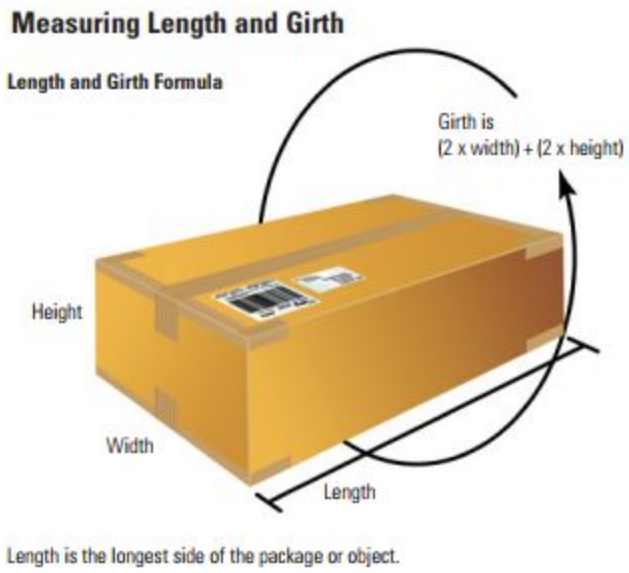
➢ Measure the height of the package, rounding to the nearest inch. Multiply this number by 2.

➢ Add these two numbers together. This is your girth.

Step 3. Add the length and the girth together. This is your package measurement.

Step 4. Weigh the package to obtain its actual weight.

Measuring Combined Length and Girth



Example: carton size is 26” x 25” x 24”

The calculation is ((25 + 24) x 2) + 26 = 124 (this carton can ship Small Parcel).

Packages that qualify for Parcel based on size but exceed 100 Lbs must ship Basic Freight. When sending items for transit testing, please insure that the sample is over-boxed; indicate on the outer

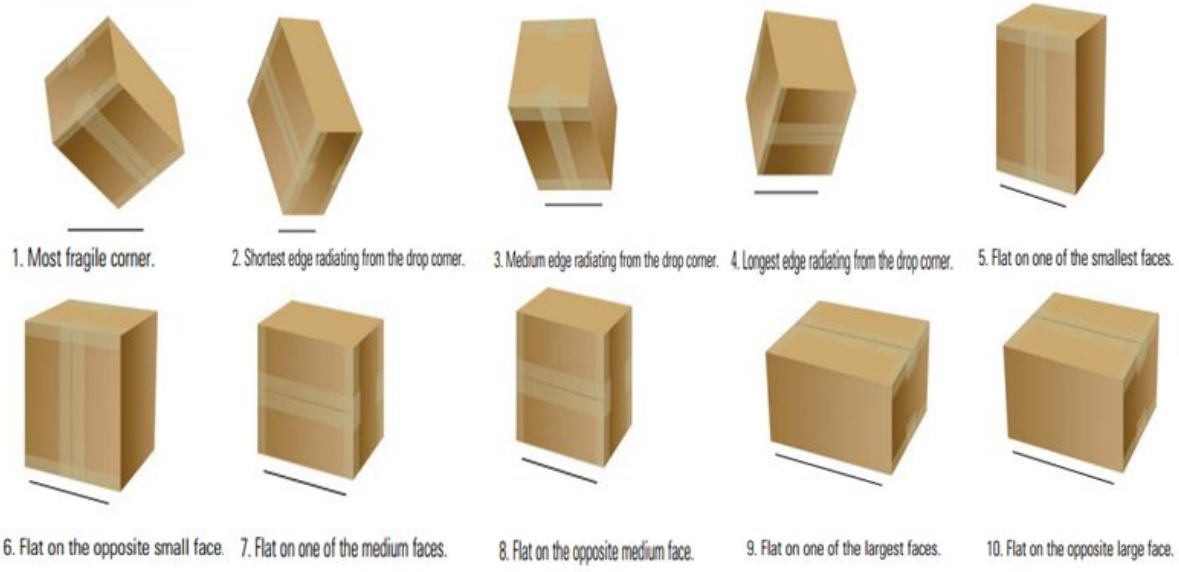
carton that the test carton is inside and mark the carton to be tested as “Test Carton” or “Test this Carton”. In addition, please attach the test request form on the outside of the carton.

Our transit-testing requirement is a vendor pay program for Company product. Products are required to be tested by third party testing labs in order to assure compliance with the specified product performance and packaging requirements. The approved test labs will release a copy of the test results to Crate and Barrel. If an item fails testing, the test lab will identify the reason for failure; an item that fails testing must be re-tested until a passing result is received. To ensure testing does not delay shipment, please ensure adequate time between testing and PO ship date.

Before sending product to testing lab, please ensure the product packaging is in compliance with these guidelines. In addition, in-house drop testing may be completed prior to full third party lab testing. While in-house drop testing does not necessarily confirm the packaging is sufficient, it does provide confidence in the design prior to a full transit test.

These are standards that you should follow when performing the drop test:

Package Weight	Drop Height	Drops per Sequence
Equal to or less than 75 lbs.	30"	10
Greater than 75 lbs. but equal to or less than 100 lbs.	24"	10
Greater than 100 lbs. but equal to or less than 150 lbs.	18"	10



For product greater than 150lbs, please reach out to the packaging team for guidance on in-house testing.

New testing protocols have been developed for the Fall 2019 season. Crate and Barrel reserves the right to use a protocol not listed below if necessary to properly test an item.

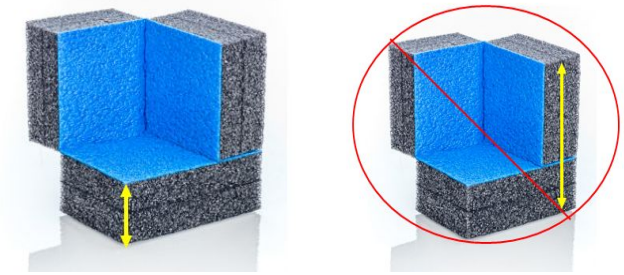
Protocol	Description
ISTA 3A	General simulation tests for individual packaged products shipped through parcel delivery system (150 lbs or less, combined length and girth of 165" or less). • BV protocol 09070.01-US-CN
ISTA 3B	General simulation tests for packaged products shipped through a motor carrier delivery system, where different types of packaged products, often from different shippers and intended for different ultimate destinations, are mixed in the same load (200 lbs or less, combined length and girth greater than 165"). • BV protocol 09070.04-US-CN
ISTA 3E	General simulation test for unitized loads of similar retail or institutional packaged-products shipped from a manufacturing location or distribution center (Greater than 200 lbs, combined length and girth greater than 165" **including pallet**). • BV protocol 09052.01-US-CN

Packaging Specifications

For new products, Packaging will ask for step-by-step photos of the final packaging system (including material specifications and packaging components). Packaging specifications also define master pack quantities for a specific product. These specifications have replaced the materials worksheets that were previously required in conjunction with transit testing.

Packaging System Specification Requirements

- Primary, secondary, and tertiary
  - Primary: Packaging that directly touches the Product
  - Secondary: Case or Inner Carton
  - Tertiary: Master Carton, Shipping Container, etc
- Packaging materials used (i.e. expanded polyethylene)
- Dimensions of packaging materials
- Master pack quantities (i.e. master pack qty: 1)
- Packaging steps – Step-by-step images of the packaging (please see example below)



Above: When providing material dimensions, please ensure dimensions correctly reference the area that is providing cushioning.

The following photo sequence illustrates how you can format packaging step specifications. Please note that when specifying materials, we require detailed descriptions of the packaging used. Please do not use generic terms such as “foam sheet” or “black foam” when describing the material.

Step 1 **Step 2** **Step 3**



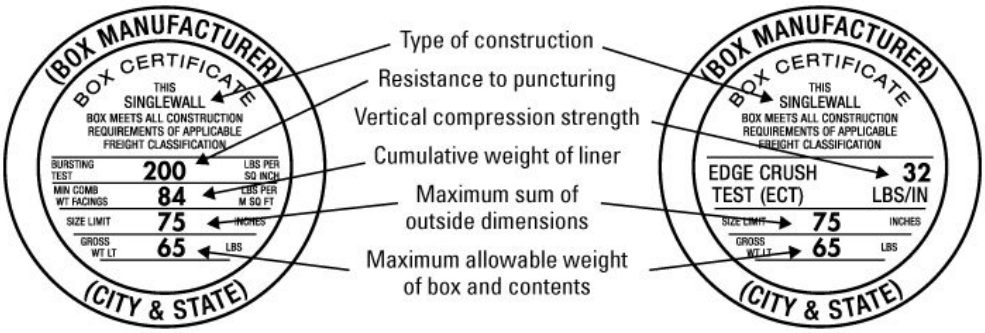
Master Container Specifications

Carton Guidelines

Cartons being sent to the Company may have both a master and inner cartons. The inner carton can be considered the carton immediately surrounding the product as well as a graphics display type of carton, intended for store shelves. The master carton is the larger carton containing inner cartons. Both the inner and master cartons must adhere to the requirements listed in this document, including carton strength, void space limits, and flute direction. Inner and master cartons will follow the below guidelines. Each product is slightly different so adjustments to packaging may be required. Corrugated used in the construction of cartons should consist of Kraft material, as the production cost and environmental impact are less than when using bleached material.

Master Shipping Carton

The master shipping carton must provide sufficient strength to protect and contain the product and should be properly sized, allowing for no movement due to excess headspace or void space between the product and packaging components. Excess space leads to damage and increased material and transportation costs. To prevent this, minimize excess space to not exceed ¼" within the package; this allows for ease of packing and unpacking the product. The table below will help to outline the specifications required in designing an adequate master carton. Note that the recycled content of a carton should not exceed 30%. All master cartons must have a **Box Manufacturer Certification (BMC)** stamp providing the ECT or Burst strength of the carton. Below is an example of a BMC stamp:



Carton Strength

Inner cartons shall be made from 32-50 point chipboard based on the product weight or corrugated. The carton strength must be adequate for the weight and the stacking strength required to support the full weight of the pallet of boxes (if carton is on bottom layer). The following box strength requirements are based on packaging industry standards as well as our own experience. The Company will accept either Burst Strength (lbs/in^2, #) or Edge Crush (lbs/in) as a form of measuring acceptable carton strength.

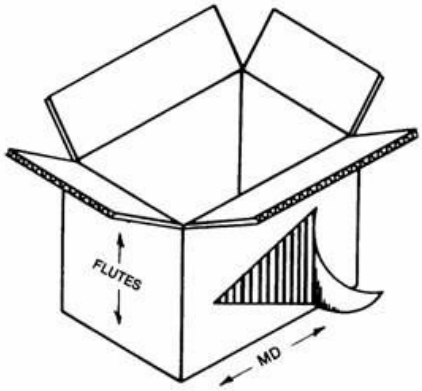
Weight of Product (lbs / kg)	Burst Test (lbs per in^2 / kg per cm^2)	Edge Crush Test (ECT) (lbs per in / kg per cm)	Corrugated, Combined Board
0 to 30 lbs 0 to 13.6 kg	200 lbs per in^2 14.1 kg per cm^2	32 lbs per in 5.7 kg per cm	Double-wall
30+ lbs 13.6+ kg	275 lbs per in^2 19.3 kg per cm^2	44 lbs per in 7.8 kg per cm	Double-wall

Commonly Used Carton Styles



The Regular Slotted Container (RSC), Full Overlap Container (FOL), Full Telescope Design (FTD), and Double Cover (DC) carton styles are preferred as they typically provide the most effective protection for our products. These, along with many other styles, are widely available through packaging suppliers. The minimum board for ALL Master Cartons is double wall. Double wall board has three sheets of linerboard and two mediums in between.

Flute Direction



Flutes keep the linerboard sheets of corrugated board separated and provide the rigidity against bending. When pressure is applied to the side of the board, the space between the flutes acts as a cushion to protect the container's contents. Flutes also provide some protection against sudden temperature changes by acting as an insulator. To prevent damages due to compression, containers oriented in their shipping direction should have flutes in the vertical direction. To prevent damages that may occur due to compression, when carton is positioned in the shipping direction the flute must be in vertical direction. Flat pack shaped cartons and FTD style cartons shall not be failed for flute direction discrepancies during Transit Testing, as flute direction can be misinterpreted for these cartons. On the next page is an illustration of properly positioned carton flutes.

Preferred flute sizes: B flute and C flute



Acceptable Shipping Container Style

Selecting the correct shipping container style is an important factor to consider during the packaging design process. Changes in design can have a direct affect on the ability to ship efficiently and effectively. The following section contains box styles accepted by Crate and Barrel. Requests to use box styles other than the ones listed in this section **MUST** to be approved by the Crate and Barrel packaging team. Requests should be emailed to packaging-group@crateandbarrel.com.

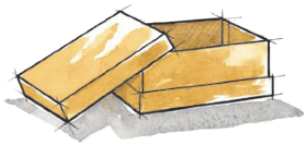
*RSC Regular Slotted Container (RSC)***:** All flaps have the same length, and the two outer flaps (normally the lengthwise flaps) are one-half the containers width, so that they meet at the center of the box when folded.



Full Overlap Slotted Container (FOL): All flaps have the same length. When closed, the outer flaps come within one inch of complete overlap. FOL cartons are preferred for products packaged in flat packs because of its better resistance to protection.



Double Cover Container (DC): A tube forms the body. The pieces are shipped flat to the user, who opens the tube and sets up the covers. This style is frequently used for tall or heavy products that would be difficult to lower into a box. The double layer of corrugated around the top and bottom perimeter adds additional cushioning. The item is placed on the bottom cover, and the tube is lowered over the product.



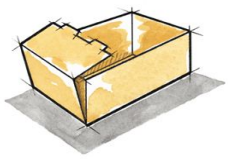
Full Telescope Box (FTD): This consists of a separate top and bottom that fit over each other. This will provide a double layer of double wall corrugated around the entire perimeter of the container.



Overlap Slotted Container (OSC): All flaps have the same length. The outer flaps overlap by a minimum of one inch.



Roll End Tray: Formed from a single piece of combined board.



This design offers several layers of corrugated on the ends.

Product/Carton Fit

Products within the carton should be secured so no movement is possible. The maximum amount of void space in any direction should not exceed ¼". Void space should be considered the space between the edge of the product and the interior wall of the carton.

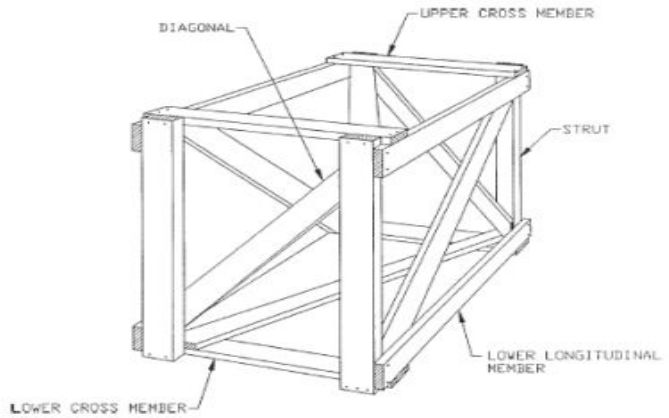
Failure to eliminate void space in cartons will result in chargebacks being issued, as void space can cause stacking instability and lead to damages within our warehouses and distribution center, as well as during transit.





Wooden Crate Specifications

Wooden crates shall be sized to fit the outside dimensions of the corrugated Master Carton on all stone, marble, or travertine dining table tops exceeding 100 lbs or 60 inches in the longest dimension or the diameter for round tables. Use solid, IPPC-certified wood in the construction of any wood crate components. Wood shall be IPPC certified and stamped accordingly. Wood joints shall be half-lap or mitered butt; do NOT use the basic butt-style joints as this method provides weak corners and edges. Fasteners shall be #8 or #10 Phillips-head wood screws, with the screw length depending on the size and/or weight of the product. Do not use staples or nails of any kind.



Left: Crate designs should make use of diagonal members to increase the structures rigidity. Please use screws as fasteners. This will allow our associates to easily remove the crate when needed without damaging the products.

Acceptable Closure Methods

The carton closure used should be adequate to secure the contents and prevent shipment shortages or damages. Please use the guidelines below to select the closure method for your package.

Gross Weight	Tape Width
0 - 30 lbs (0 - 13.6 kg)	2 inches (5.08 cm)
Greater than 30 lbs (13.6 kg)	3 inches (7.62 cm)

- **Tape -** Pressure sensitive adhesive tape is preferred, but we will also accept the use of paper reinforced tape. Please utilize the taping methods below.



- *"H" Method* - Use this method on RSC containers. The "H" taping method is required for any products with a gross weight exceeding 30 pounds and for all furniture items.



- *DSC Method* - Use this method on DSC containers. Tape should first be sealed along the openings at the top and bottom (around the box top and bottom). Additional tape should be applied vertically for reinforcement.



- *FTD Method* - Use this method on FTD style containers. Tape should be sealed horizontally along the opening. Additional tape should be applied vertically over the horizontal tape for reinforcement.



- *FOL Method* - Use this method on FOL style containers. Tape should be applied horizontally along the flaps and reinforced with vertically-applied tape if necessary.

Desiccant Packs

Desiccant packs must be used in all packages to prevent damage to the product and packaging. Desiccant packs help prevent any possible rusting on metal products, as well as mold and mildew on textiles, wood and paper products, and packaging. This is of particular concern if products are produced, packaged, or loaded into containers during high humidity seasons. Crate and Kids requires desiccant packs in packaging for all categories ***with the exception of baby and kids bedding, throw pillows, and curtain panels.*** If you are uncertain about this requirement, please contact the merchandising team you are working with. If unsure on desiccant pack usage, contact packaging-group@crateandbarrel.com.



The amount of desiccant required in a package can differ depending on a number of factors, including – but not limited to – product characteristics, container volume, and environmental conditions. As a general rule of thumb, please use the following guideline when adding desiccant packs: **1 gram per 130 cubic inches.**





Pictured above, moisture can cause mold on corrugated packaging *and* the actual product.

Hardware

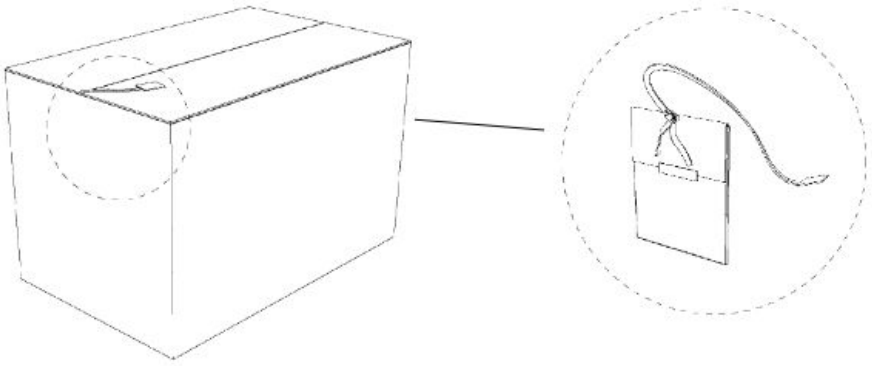
When packaging an item that contains hardware, please ensure that the hardware packet is clearly labeled and easy to identify, as it may be inadvertently disposed of or misplaced by the customer when unpacking the carton. The Company has found that by using the packaging method listed below, the likelihood of missing hardware is reduced:

- A product's hardware should be packaged in a blister pack or red envelope/sleeve based on direction provided by the merchandising team.
- Assembly Instructions should be packaged in a red envelope/sleeve.
- Attach the blister pack and envelope/sleeve to a red ribbon/string.
- Secure the blister pack and red envelope/sleeve inside the carton in a way that will not damage the merchandise while in-transit and that is easy to identify when the carton is opened.
- Feed the other end of the string/ribbon through the top flap of the carton and secure to the top or side of the carton.
- Label the end of the ribbon/string "Hardware Enclosed."

Hardware Packaging Illustration

Placement of "Hardware Enclosed" label

Entire hardware package with label



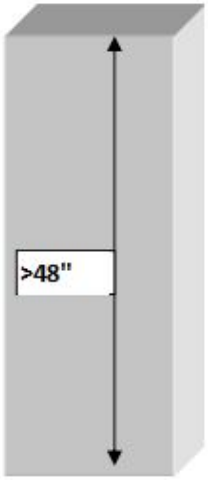




Packaging for Storage at Crate and Barrel

The following considerations should be taken into account as products will be warehoused in any of our four main distribution centers. Packaged-products where the longest dimension exceeds 48” may be stored standing up. Examples are large case good items, such as sideboards and media centers.

Tall, narrow items will likely be stored in this orientation:



Internal packaging must protect all corners, edges, and faces of the Master Carton along with any internal product components that are fragile, regardless of storage or shipping orientation, so that the packaged products can move safely through our distribution network. Products that are face-wrapped or packed in wooden crates will be stored at the discretion of Supply Chain.

Storage and Handling Labels

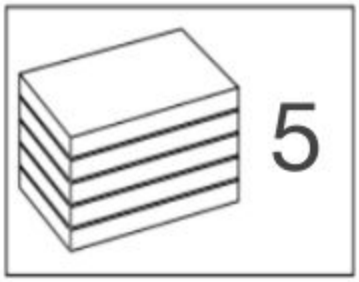
For all furniture pieces, an arrow indicating storage orientation alongside the words “This end up” will be required. This arrow will indicate the orientation in which the piece should be shipped and stored. This arrow can be pre-printed, labeled, or stenciled onto the master carton. This should be the only instance of an arrow on the outside of the packaging. In addition to orientation arrows, please indicate any other specific handling requirements, such as “Handle with Care”, “Fragile”, or “Do not Stack.”

Storage Stack Height Labels

Another visual we are now requiring on the packaging is the maximum stack height of the product as products arriving to our DCs may be stacked during staging and storage. Without knowing the maximum stack height that the product can withstand, our associates could over stack product, causing damage to the unit at the bottom of the stack.


DO NOT STACK
HANDLE WITH CARE
FRAGILE




5


BULKY OR HEAVY
CHARGE LOURDE
WARNING
ATTENTION



Upholstery

Upholstery packaging is unique in that it is the only product department that is not required to fully cartonize the product, although this is still a preferred option. Upholstery packaging is still held to the same performance requirements of all other Crate and Barrel /CB2 product packaging. Please follow the guidelines below as a minimum requirement for upholstery packaging.

Exterior Packaging

- Carton Style: Double wall corrugated tray and/or corrugated RSC, DSC style container
- For items that are less than 30 lbs (13kg) the corrugated tray and/or shipping container needs to be a minimum of 200 lbs./in^2 (32 ECT)
- For items that exceed 30 lbs (13kg) the corrugated tray and/or shipping container needs to be a minimum of 275 lbs./ in^2 (44 ECT)
- Protective film: Product needs to be fully covered to protect product from tears, snags, dust/dirt, moisture, etc. We suggest using multi-layered (loose layers) film to provide proper film properties. (i.e. HDPE, PP, LDPE or LLDPE)
- Outer Film: Product should be fully encapsulated in Polyethylene film (≥3.5 mil) and film should be properly shrunk (via shrink tunnel or other heat shrinking equipment) to tightly hold inner bag and corrugated tray to the product.

Interior Packaging

- Legs: If product has attached legs, legs must be suspended off of the master carton/tray a **minimum of 2".** Legs should also utilize cushioning such as, foam caps to cushion the product from impacts during handling.



Left: Foam cushioning used to cap the end of the leg.





Above – Sofas can be packed using the tray and shrink method or placed into a master carton. Ensure the method used follows the guidelines for exterior and interior packaging for Upholstery. When using the tray and shrink method, please ensure that the tray used extends over both arms of the sofa, rather than under one arm and across the entire back.

Chairs





Above - Chairs can be packed using the tray and shrink method or placed into a master carton. Ensure the method used follows the guidelines for exterior and interior packaging for Upholstery.

Ottomans




Left – Interior packaging should adhere to the interior packaging guidelines listed in the Interior Packaging section. This example utilizes PE foam corner and edge protection and a suspension box to suspend the legs from the master carton

Cushions

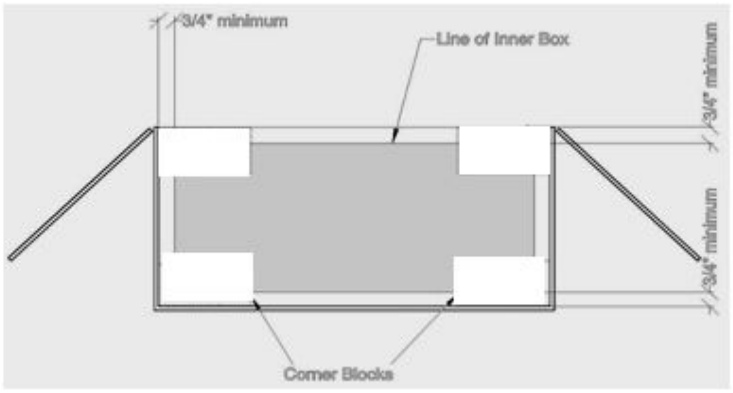
Cushions must be packed in a corrugated box that adheres to Crate and Barrel's master carton specifications.

Case Goods

Case goods need to be packed adequately as to protect the product from damage throughout the entire trip from the manufacturing facility to the customer's home. Please follow the guidelines below when packaging case goods.

- *Surface Protection:* To prevent abrasion and scuffing, wrap the product and/or components in protective, non-abrasive material such as, poly-foam or fabric bags.

- *Corners:* All corners of the product must be protected using approved cushioning materials. Cushioning must be sufficient for the size and weight of the product. Please follow the general guidelines for cushion thickness on the next page, unless cushioning material selected was lab tested and performance can be proven. (NOTE: If handle or other ornamental piece extends beyond profile of the frame this is considered the outermost finished surface).





- *Edges:* All edges of the product must be protected using approved protective materials. It is recommended that 75% of the length of the edges be covered with protective material. Please refer to the cushion thickness chart on the following page for thickness requirements.

- *Assembled Legs:* Assembled legs should not bear the weight of the load during distribution and storage. Legs need to be suspended and protected from direct contact with the bottom of the master carton. The corrugated box or partition used to suspend the legs must be strong enough to support the product. We suggest suspending the legs 2" off of the master carton; please see section 'Suspension Packs' below. In addition, each leg should be covered using foam or corrugated caps. Please make sure these caps are appropriately sized for the legs.

- *Glass:* Glass surfaces (i.e. glass window on doors) must be covered using protective foam or corrugated sheeting to protect damages.

- *Moveable components:* Loose items, such as shelves must be firmly secured in place or boxed separately within the master container or stretch wrapped to the frame. Please note that product movement in all axes needs to be taken into account.

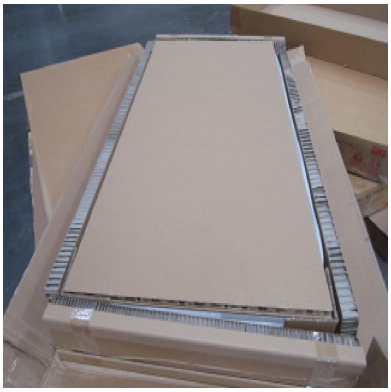
- *Drawers/doors:* Drawers and doors need to be secured in place.

- *Hardware:* Please refer to the "Hardware" section of this document for information on how to properly pack and label all hardware components.
- *Internal bracing:* If product that is packed does not have a great amount of rigidity, container should be braced for additional support.

Packaged Product Weight	Cushion Thickness
0 - 60 lbs (0 - 27.2 kg)	¾"
61 - 100 lbs (27.7 - 45.4 kg)	1"
101 - 200 lbs (45.8 - 90.7 kg)	1 ¼"
Greater than 200 lbs (90.7 kg)	1 ½"

Tables

Dining Tables - Knock Down (KD)
Dining tables that are shipped knocked down should be packaged according to the specifics of the product.

Round Tables	Non-Marble	Marble Tops
		

The three most common styles are shown above. Please see specifics below.

- *Round Tables:* Round tables must be suspended from the carton walls by use of triangle shaped cushions or cushions that contour to the shape of the table. Cushioning must be the same height as the table top so that there is no opportunity for the table to slip above or below the cushioning.
- *Non-Marble Tables:* Non-marble tables need to have corner and edge protection that is sufficient for the weight of the piece. Please refer to the cushioning table in the Interior Packaging section of this document. In addition the top and bottom surfaces of the table should be protected with approved protective materials.
- *Marble Tables:* Marble tops are fragile and require special packaging to ensure they arrive without damage. Marble tops should be packed similar to non-marble tops; however, because these types of tops cannot withstand deflection the packaging needs to provide some rigidity. We suggest crating marble tops (especially large tops). See wood crating section (pg. 17) for further details.

Tables that have unassembled components must be packed so that these pieces are all secured within the master carton. Each piece should be wrapped in non-abrasive material to prevent damage.

Assembled Tables

- *Table Frame Assembled*: Assembled table frames should be fully covered using corrugated face wrapping. Corners need to be protected using one of the preferred materials outlined in the Preferred Interior Packaging Materials section. Corner protection must be properly secured so that it cannot become dislodged during transit.
- *Assembled Tables:* Tables (dinning, accent, outdoor, etc.) that come fully assembled need to follow the packaging guidelines for case goods (pg. 24-25)





Chairs

When shipping chairs to Crate and Barrel you may stack multiple chairs within a master carton to maximize cube efficiency**.** Assembled chairs can be packed in master carton quantities of two. Unassembled chairs should be packed in quantities of two unless it negatively affects container utilization, in which a master pack of four will be accepted. Due to height, barstools are typically packed in quantities of one.

Stacking Chairs

- Stack chairs seat to seat
- If the height of the seat back (measured from the seat cushion) is greater than the height of the leg please use a suspension box between the seats. The suspension box will lift the top of the inverted chair so that it is protected from the master carton. The stacked chairs need to form a rectangular shape – with the legs on the first chair even to the back of the second chair (that way the load is evenly distributed). Recommended construction of the suspension box: corrugated carton, corrugated board/pads, molded pulp, Green Cell cushioning, Hexacomb® or honeycomb (please note the packaging reduction goals).
- *Top Rail of the Chair:* Use cushioning material such as corrugated U-board, honeycomb or Hexacomb® to protect the chair back.
- *Top Edges/Rail of Chair & Arms:* Use cushioning material such as multi- wall corrugated board, PE foam blocks, bubble (if the item is not too heavy) or similar material.
- *Arms (if present):*
  - Chairs with arms typically are not to be double stacked.
  - Arms should be protected using one of the approved packaging materials listed throughout this document.
- *Chair Seats:* Chairs constructed of velour type fabric (velvet, micro fiber, etc.) are prone to fabric damage from compression. We recommend using a fabric bag or PE film (>3 mil) to prevent damage. It is not advisable to cover with bubble wrap as the pattern may transfer to the fabric under compression.

Component Packaging for Unassembled Chairs

Unassembled chairs are typically packed in quantities of two or four units. Within our distribution centers, individual chair components are picked out of the master carton and need to be easily identified and removed to fulfill orders. Hardware and additional components should be in a packet labeled “Hardware Enclosed,” attached to a red string or ribbon feeding out of the carton.







Packaging for Assembled Chairs

Although assembled chairs may be packed in quantities of one or more, a Master Carton quantity of two is typical. Spacer cartons should be used and sized to ensure the seats of the chairs do not damage each other and to prevent both chairs within the Master Carton from shifting during transit and handling. There should be cushioning around the legs to prevent further shifting and surface damage to the legs.

Chair packaging







Suspension Packs

For packaged-products with attached legs, please use a double wall, 44 ECT (275# Mullen Burst Strength) spacer carton to elevate the bottom of the legs away from the inner walls of the Master Carton.





Mattresses

- ➢ Poly bag (Double bagged)
- ➢ Heat sealed closure
- ➢ At least 6 mil thickness
- ➢ Corrugated “Boot” (Shown in picture, on bottom of mattress). A poly boot is also acceptable.
- ➢ Contain desiccant packs to prevent moisture



Rugs

In order to protect rugs during distribution and shipment to our customers, the following rug packaging guidelines should be followed:

- ➢ Rugs shall be rolled in a compact and tight manner to enable us to reduce delivery expense when shipping to our customers.
- ➢ Roll rugs so the smallest dimension is the length. For example, when rolling a 2’ x 3’ rug, roll the rug so the length is 2’.
- ➢ All non-cotton rugs be rolled to avoid permanent creasing.
- ➢ Soft, cotton rugs may be folded, including sizes smaller than 4’ x 6’.
- ➢ Pack doormats, including jute and sisal, into corrugated cartons as these typically do not roll easily.
- ➢ Utilize two 6 mil thick poly tubing for area rugs. The diameter of the poly tubing should be sized to fit tightly around the rolled rug. The ends of the poly tubing should be sealed with pressure sensitive tape and secured flush to the ends of the rug roll.
- ➢ We cannot accept rugs that have tassels; knots or handles of poly tubing that extend beyond the end of the rug roll.
- ➢ Within a unit pack, each rug must be individually folded or rolled. Do not roll multiple quantities of rugs within the same roll. This creates distribution difficulties.
- ➢ Bundle rugs of the same SKU and stretch wrap ends. Merchandising will assign the appropriate bundle quantities.
- ➢ SKU labels should be placed on both ends of the roll so it can be viewed from either end when stacked on a pallet (see illustration below).
- ➢ Please utilize Desiccant packs in all unit packs to absorb any excess moisture and prevent mold and odors in transit.

Rug Packaging Illustration

