

# *Structural Packaging Specifications*



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## Introduction

Our mission at Costco is to continually provide members with quality goods and services at the lowest possible prices. To achieve this, we focus on opportunities to lower not just the initial cost, but also the costs associated with handling and damage. By utilizing Costco's Structural Packaging Specifications, you will help to keep our prices low by ensuring that your products arrive to our members safely, efficiently and without damage.

Costco manages a multifaceted supply network. Section 1 – *Costco's Supply Chain Handling* briefly explains the handling processes for the following distribution channels:

- Inline – Depot to Warehouse
- Online – Ecommerce
  - Big and bulky:\* Direct Distribution Center (DDC) to Market Delivery Operation (MDO) to final-mile delivery
  - Small pack: Depot to Member
  - Drop ship: Supplier to Member

It's important to understand these channels to engineer packaging that will maintain its structural integrity throughout Costco's entire supply chain. For example, Section 2 – *Package Engineering and Performance Requirements* notes that goods may be stacked up to 25'/7.6 m and stored for up to one year.

**As a supplier of merchandise, you are responsible for the structural quality and integrity of your packaging throughout the supply chain. A packaging engineer with specialization in both unit load and Costco's sales floor should be utilized to design packaging that meets our requirements. Costco does not give structural approval of packaging.**

Packaging must be display-ready, with minimal to no handling required. Costco's goal is to drive out costs by eliminating extra packaging, handling and corrugate waste whenever possible. However, this cannot be achieved in a manner that increases damage. When trays are required to transport and protect the product from damage, it is a requirement of doing business with Costco that the trays are useful in every way, including functional boxes for members to carry out their purchases.

Costco's Structural Packaging Specifications may not be able to encompass each and every circumstance. Section 7 – *Display Pallet Guidelines and Addendums* are included to cover additional or modified requirements for specific categories and departments. If you have concerns that your packaging cannot meet our specifications, contact your Costco buyer to discuss. In limited cases, exceptions or extensions may be granted.

On an ongoing basis, Costco will be conducting random performance compliance audits to confirm that packaging meets our specifications. If packaging is non-compliant, the item may be at risk of deletion, or subject to a 2% chargeback to reimburse Costco's operational and handling costs as a result of non-compliant packaging. No new items will be brought into the system unless they are compliant with Costco's packaging requirements.

Please join us in supporting Costco's objectives to keep end-to-end costs low and bring greater value to our members. We appreciate your participation and support.

\*See Glossary for definition.

## Sustainability Initiatives

Packaging is a complex aspect of our business that has many components, including concerns about plastic waste in landfills and the oceans, the need for more uniform waste-collection programs, the need for better recycling infrastructure, and the inconsistency of laws and regulations.

Costco's goal is to reduce our packaging waste by improving our efficiencies, with the added benefit of reducing expenses. We also strive to provide sustainable packaging without compromising food safety, product quality or sales while ensuring our packaging: (1) complies with laws and regulations; (2) reduces materials; and (3) communicates effectively with our members.

### Paper

Packaging materials should use responsibly sourced paper fibers, such as recycled content and/or certified paperboard. Costco has a strong preference for Forest Stewardship Council (FSC) certification, but also accepts Sustainable Forestry Initiative (SFI) and Programme for the Endorsement of Forest Certification (PEFC).

### Plastic

All packaging component materials should be widely recyclable, certified compostable or biodegradable by members in the areas where the product will be sold. Packaging should also optimize recycled content.

Expanded polystyrene is not allowed except in limited circumstances as noted in Section 2.1 – *Minimum Package Engineering Requirements*.

## Chemicals in Packaging

Per- and polyfluoroalkyl Substances (PFAS) have been used for numerous purposes, including heat resistance, water repellency and oil/stain resistance in the packaging industry for many years.

Recent studies have shown PFAS to have a number of concerning characteristics.

Several U.S. states have passed regulations limiting PFAS.

Costco is working toward eliminating PFAS in all of our products and packaging moving forward.

For other chemical restrictions in packaging, Costco follows the AFIRM Packaging RSL: <https://afirm-group.com/packaging-restricted-substance-list/>



## Section 1 – Costco’s Supply Chain Handling

### 1.1 Merchandise Handling Equipment

Merchandise is handled at Costco’s receiving facilities and Warehouses using many different types of equipment. Anticipate that your items will be handled by one or more of the illustrated examples.



**Standard Forklift**



**Pallet Jack**



**Quad Forklift**



**4-Way Layer Clamp**



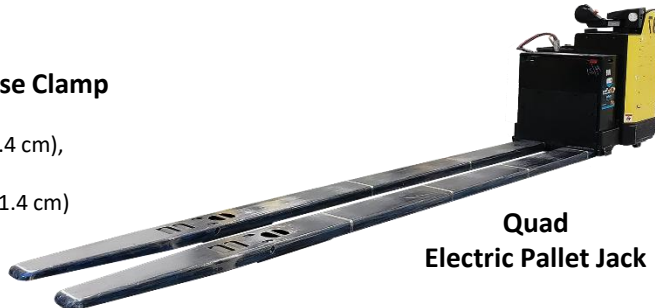
**Appliance Clamp**

Clamp dims:  
29" L x 48" H  
(73.7 cm x 121.9 cm)



**Standard Merchandise Clamp**

Clamp dims:  
36" L x 36" H (91.4 cm x 91.4 cm),  
and  
48" L x 36" H (121.9 cm x 91.4 cm)



**Quad Electric Pallet Jack**

## Section 1 – Costco’s Supply Chain Handling

### 1.2 Inline: Depot to Warehouse

Costco’s Depots are managed and most efficiently operated as cross-dock facilities. We strive not to hold or store inventory at our Depots.

#### Receiving

Palletized product will be offloaded using a forklift or electric pallet jack (EPJ).

Floor-loaded product will be offloaded and palletized using a mechanical clamp truck. **The clamp truck panels will press against the sides of the goods that are parallel to the long sides of the container.** Slip sheets are not to be used under floor-loaded product; they interfere with the unloading process.

#### Warehouse Distribution

Product is shipped to Warehouse locations on the same day. Full pallet distribution is cross-docked immediately.

Product distributed to our Warehouse locations in less than full pallet quantities requires mechanical clamping to sort layers of product. Layers may be clamped multiple times during this process. We utilize both two-way and four-way clamp trucks, so clamp panels may press against the 40"/101.6 cm sides, the 48"/121.9 cm sides or all four sides. (Fig. A & B)

Clamped layers are set onto separate pallets. Multiple items are stacked together for outbound shipment. (Fig. C)

Confirm distribution plans with your Costco buyer to determine whether your packaging needs to be designed to support clamping for layer distribution.



Fig. A

#### 2-way Clamping

Clamp truck panels press against two sides of load.



Fig. B

#### 4-way Clamping

Clamp truck panels press against all sides of load.



Fig. C

#### Outbound Mixed Pallet

## Section 1 – Costco's Supply Chain Handling

### 1.3 Warehouse Handling

Our Warehouses are the physical locations where our members come to shop. We merchandise inventory on 48"x 40"/121.9 cm x 101.6 cm pallets.

Pallet loads of product are moved into place by forklifts or pallet jacks. Anticipate that pallet loads will be multistacked during receiving, and in cooler or freezer storage.

Additional product for daily replenishment is stored in the steel shelves above the pallet run.

As product shops down, pallets are refreshed, and empty trays are removed and reused on the Front End for members to carry out their purchases after checkout.





## Section 1 – Costco’s Supply Chain Handling

### 1.4 Ecommerce for Big and Bulky Items: Direct Distribution Center and Market Delivery Operation

Receiving and distribution for online orders of big and bulky items occurs through Costco Logistics, our nationwide network of middle-mile Direct Distribution Center (DDC) and Market Delivery Operation (MDO) facilities.

Most merchandise is received floor loaded and moved without pallets throughout the DDC and MDO channels using mechanical clamp trucks. Limited product lines received on previously approved, purpose-built pallets will be moved using forklifts, electric pallet jacks and/or mechanical clamp trucks.

#### DDC

Big and bulky items are delivered to our DDC locations.

Product that arrives floor loaded will be offloaded using a mechanical clamp truck. **The clamp truck panels will press against the sides of the goods that are parallel to the long sides of the container.** Slip sheets are not to be used under floor-loaded product; they interfere with the unloading process.

Goods will be stacked upon themselves and may be stored for up to one year to support online orders.

Carton Height	Will be Stacked
30"/ 76 cm or taller	at least 15'/ 4.6 m up to 25'/ 7.6 m
less than 30"/ 76 cm	up to 15'/ 4.6 m

Handling graphics (pictograms) are required on all items distributed through our big and bulky delivery network.

Cartons  $\geq$  30"/ 76 cm



25'

Cartons < 30"/ 76 cm



15'

DDC Storage

## Section 1 – Costco’s Supply Chain Handling

### 1.4 Continued

#### MDO

Once an online order is placed for a big and bulky item, it ships from the DDC to the MDO.

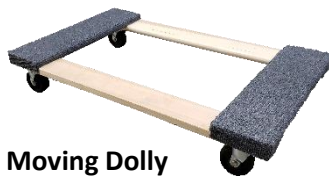
Once received, the MDO stages product for our final-mile carriers to load into their delivery trucks. Some items may be unboxed and assembled prior to staging.

Delivery may also include:

- Hand truck
- Moving dolly
- Moving straps



**Hand Truck**



**Moving Dolly**



**Moving Straps**

## Section 1 – Costco’s Supply Chain Handling

### 1.5 Ecommerce for Small-Pack Items: Depot to Member

Some Costco Depot facilities receive, process and ship small-pack Ecommerce items to fulfill orders purchased through Costco.com.

#### Receiving

Palletized product will be offloaded using a forklift or electric pallet jack (EPJ).

Floor-loaded product will be offloaded and palletized using a mechanical clamp truck. The clamp truck panels will press against the sides of the goods that are parallel to the long sides of the container. Slip sheets are not to be used under floor-loaded product; they interfere with the unloading process.

#### Storage

Palletized goods may be stored at the Depot for up to one year to support online orders and may be stacked up to 25'/7.6 m.

#### Delivery

Once an online order is placed, items are processed for delivery and floor-loaded onto a 53'/16.15 m trailer to be transported to a small-package delivery service for final-mile delivery.



Ecommerce Small-Pack Storage

## ***Section 1 – Costco’s Supply Chain Handling***

### **1.6 Ecommerce Drop Ship: Supplier to Member**

Based upon what’s been negotiated between Costco and the supplier, some Ecommerce items are shipped from the supplier directly to the member.

Drop-ship items must be designed to arrive safely to our member without damage.

It is the supplier’s responsibility to determine how this is accomplished, whether the item ships in its original package or in an overpack.

## Section 2 – Package Engineering and Performance Requirements

### 2.1 Minimum Package Engineering Requirements

Packaging must be engineered to withstand the following standards, under load weight, without failing:

- Item-appropriate International Safe Transit Association (ISTA) pre-shipment tests, freight carrier rules and government regulations that are mandatory within their respective jurisdiction ([www.ista.org](http://www.ista.org))
- Long-haul transit dynamic load factors (over 500 miles/804 km) without damage
- Repeated forklift, pallet jack and up to 2,300 psi/159 BAR mechanical clamping, without damage
- 80% to 90% high-humidity environmental conditions
- A minimum of four weeks' storage time
- Packaging for cooler/freezer products must be able to withstand refrigerated temperatures in a moist environment
- Moisture Resistant Adhesive (MRA) is required for all corrugated packaging that is exposed to a moist, refrigerated environment, and recommended for non-refrigerated environments
- Expanded polystyrene is not allowed. Packaging component materials should be widely recyclable or certified compostable by members in the areas where the product will be sold. *Exception:* If an alternative material cannot sufficiently protect the product and polystyrene is required, it must have a minimum foam specification of 20 kg, and be clean, high quality and high impact that does not break apart or pill.

#### **Additional Package Engineering Requirements for Ecommerce Big and Bulky and Small-Pack Product**

- Stacking up to 25'/7.6 m high, and vertically stable independent of any external structural support (*refer to Sections 1.4 and 1.5 for details*)
- Up to 2,300 psi/159 BAR mechanical clamping 15 or more times, without damage
- Up to one year storage time (after being received by Costco)
- Stack lean may be no greater than 3% of the total stack height

Confirm distribution plans with your Costco buyer to determine whether the packaging for your item needs to support additional Ecommerce requirements.

Conventional testing typically cannot predict failures within our robust supply chain. Engage the expertise of a packaging engineer versed in designing for our environment to ensure your packaging meets Costco's supply chain requirements.



## Section 2 – Package Engineering and Performance Requirements

### 2.2 Minimum Dynamic Stacking Strength Requirements

Each pallet load under 750 lbs./340 kg (including pallet) must be capable of withstanding 1,500 lbs./680 kg of weight on the bottom product layer without damage.

Each pallet load weighing 750 lbs./340 kg (including pallet) or more must be capable of withstanding 2,500 lbs./1134 kg of weight on the bottom product layer without damage.

Pallet loads must maintain stacking strength and stability during end-aisle (end cap) or focus-area sales floor merchandising no less than 6'/1.8 m tall, regardless of unit load height inbound to Costco.

To determine overall packaging performance requirements, include environmental factors in Section 2.1.



## Section 2 – Package Engineering and Performance Requirements

### 2.3 Essential Packaging Functions

It is expected that the packaging performs several functions during transportation, storage, display and use, including:

- Containment of the product to ensure integrity and safety
- Protection of the product from physical damage
  - Some examples include:
    - Orienting goods inside cartons to support stacking on top of largest outer box surface, or top surface for goods with directional stacking requirements (e.g., TVs)
    - Designing cartons with vertical corrugation (fluting) per the stacking orientation
    - Using supportive packaging inside of outer carton (dividers, inserts, etc.) that supports the stacking orientation
- Convenience of use and ease of handling
- Compliance to legal and regulatory requirements

### 2.4 Performance Testing is Strongly Recommended

The purpose of testing products is to ensure that packaging quality is sufficient to withstand the rigors of transit, delivery and storage within the Costco network and to our members.

- Performance testing will reduce damage, rework and returns, and will improve the member experience
- Professional associations and regulatory bodies, such as International Safe Transit Association (ISTA) may offer pre-shipment test procedures, which provide a means to determine the probability of the safe arrival of a packaged product at destination

While ISTA ship testing helps to predict whether the packaging or packaging material is optimal for shipment through the supply chain, it does not guarantee damage-free shipments.

Ultimately, it remains the supplier's responsibility to ensure that their product is properly packaged so it arrives to the member in good condition.

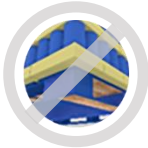
## Section 3 – Pallet Load Requirements

### 3.1 Unit Load and Pallet Load Configuration

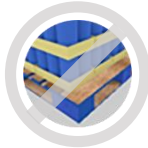
Unit load footprint must not exceed 48"x 40"/121.9 cm x 101.6 cm, and cannot be smaller than 45"x 37"/111.8 cm x 94 cm. Overhang is prohibited.

Recommended footprint is 47"x 39"/119.4 cm x 99.1 cm.

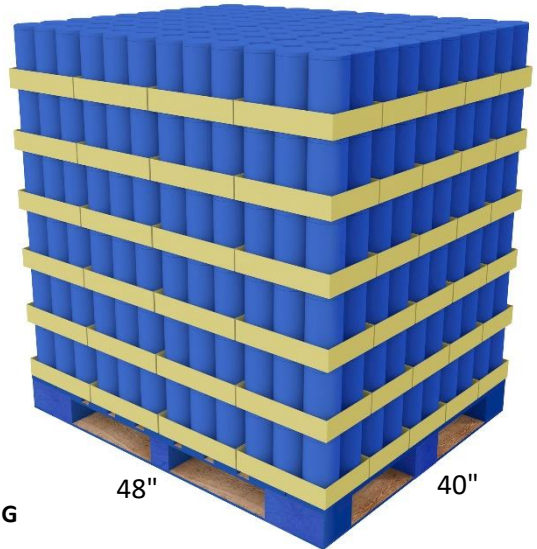
Exceptions are made only for oversized goods.



**NO OVERHANG**



**DO NOT EXCEED 3" UNDERHANG  
IN EITHER DIRECTION**



Unit load must maximize pallet area without gaps between sell units or master cartons. (Fig. A)

Chimney stacking is prohibited. (Fig. B)

False bottoms that ship with empty space below goods are prohibited unless requested by Costco. (Fig. C)

Use layer pads or grip sheets for stability of small footprint sell units.

Primary packaging and display trays or master cartons must be designed to fit properly on pallets.

We encourage reverse engineering to ensure a proper fit.



**Fig. A**



**Fig. B**



**Fig. C**

## Section 3 – Pallet Load Requirements

### 3.2 Pallet Layout Guidelines

The 48"/121.9 cm pallet dimension is the main shopping side.

Design the pallet layout to support the following merchandising requirements:

- A. Dry items merchandised on pallets
  - a. A pallet oriented on three or all four sides is preferred as it provides the greatest flexibility for end cap merchandising (Fig. A)
  - b. At a minimum, orient goods to face one 48"/121.9 cm side and at least one 40"/101.6 cm side for inline and end cap merchandising flexibility
- B. Cooler/freezer items merchandised on pallets
  - Orient goods to face one 48"/121.9 cm pallet side
- C. Items not merchandised on pallets (deli, books, etc.)
  - Goods may be palletized facing any direction

Column stack to optimize stacking strength.

Oversized goods and goods with multiple boxes per sell unit should be palletized with the largest box/portion of the box in the center of the pallet and the heaviest box/portion of the box on the bottom.

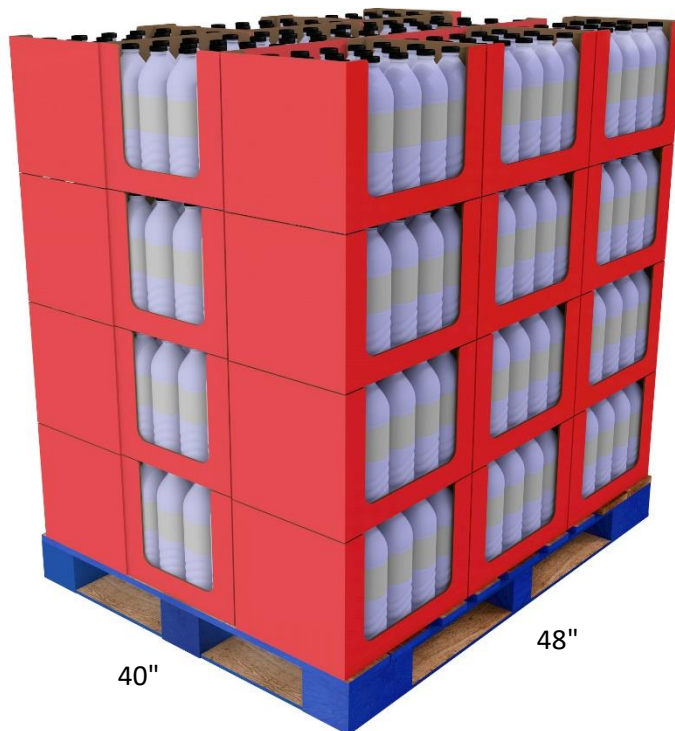


Fig. A

## Section 4 – Unitized Pallet Requirements

### 4.1 Unitized Requirements for Goods Shipped in Fully Enclosed Corrugated Containers

Unit load weight must not exceed 2,500 lbs./1134 kg.

Packaging and unit load height must support double stacking in transit whenever our Warehouse receives full unit load quantities and for Ecommerce. (If double stacking exceeds shippable weight limits, total pallet load height may be up to 58"/147 cm, including pallet height.)

If the Costco buyer has indicated distribution to Warehouses will be done in layers, unit load height is limited only by the loadable height of inbound shipping equipment.

Contain the unit load, and secure it to the pallet with stretch film or strapping. Stretch film must be uncolored, minimum of 0.79 gauge, and wrapped three times or the performance equivalent.

No metal strapping, no metal buckles, no stretchable tape and no netting.

*CAUTION: Anticipate shipping and handling dynamics to ensure unit loads will still be properly contained and secured to the pallet at delivery.*

### 4.2 Unitized Requirements for Goods Shipped in Display-Ready Packaging

Must adhere to all conditions of Section 4.1.

Use non-skid coated paper sheets to stabilize and “tie” layers together. When possible, avoid using corrugated sheets between layers. Do not use layer caps.

Use a layer pad or cap atop unit loads to protect goods in open-top display trays.

Use paper/fiber corner posts only if necessary. Plastic corner posts are prohibited.

Vertically unstable goods with multiple units per unit load (tall rugs, mirrors, brooms, etc.) must use supports to prevent partially full pallet loads from tipping over on our sales floor.

*Stretch film or strapping must not damage display trays or consumer packaging.*



## Section 4 – Unitized Pallet Requirements

### 4.3 Unitized Requirements for Bags Exceeding 10 lbs./4.5 kg

Unit load weight must not exceed 2,500 lbs./1134 kg.

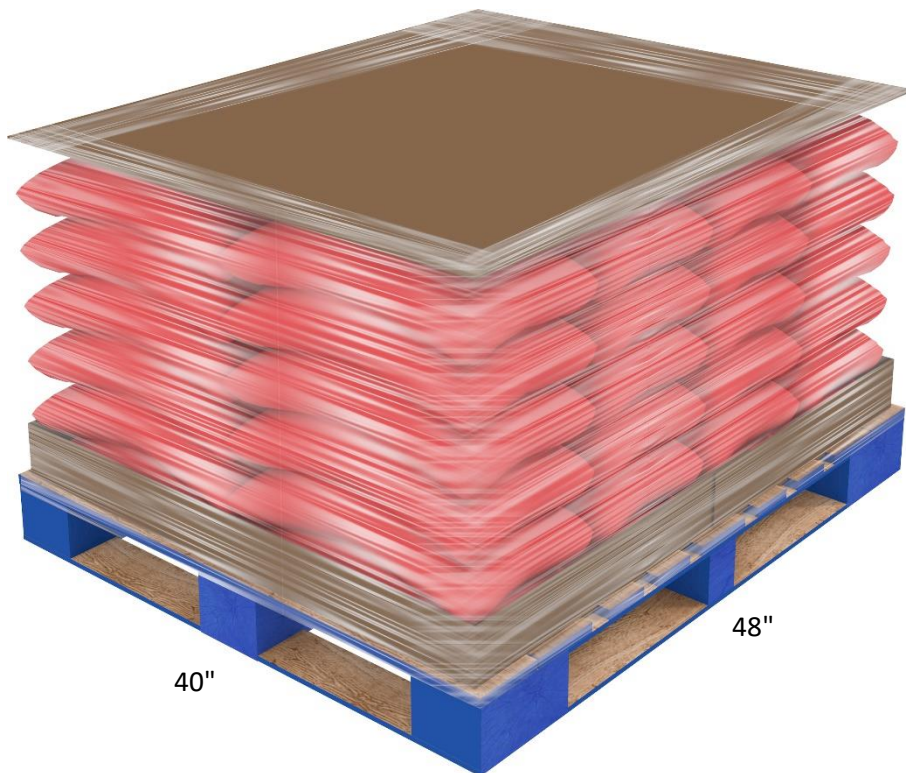
Pallet load height must not exceed 50"/127 cm (including pallet).

Layer sheet or tray required between bottom layer and pallet, and atop unit load.

Unit load contained and secured to pallet in one of these ways:

- A. 1.2 mil one-side-cling, puncture-resistant, uncolored stretch film. At least three layers of film around the top third and bottom third of the pallet load. Unit load must be secured to the pallet.
- B. Corrugated shroud fully enclosing unit load. Stretch film top to bottom and secure to the pallet.
- C. Pallet-sized tray, minimum height of 12"/30 cm. Stretch film top to bottom and secure to the pallet.

*CAUTION: Anticipate settling will occur during shipping and handling; ensure unit loads will still be properly contained and secured to the pallet at delivery.*



## Section 5 – Package Design

### 5.1 Sell Unit Packaging

Rigid sell units that provide stacking strength are ideal to enhance product visibility, facilitate easy shopping and minimize overall packaging.

Gusseted and squared bags (self-standing bags) are optimal for best display and use of space. When possible, flexible films should be made from mono-materials that are widely recyclable.

Product packaging can ship without the use of a secondary display tray if it is:

- Self-supporting
- Able to be unitized into a stable pallet load and designed to ship without damage
- 7.5" x 7.5" x 7.5"/19 cm x 19 cm x 19 cm or greater in size
- Designed to withstand mechanical clamping if distributed in layer quantities  
*Refer to Section 2*
- Able to support product weight without buckling, independent of the structural support of corner boards or other ancillary shipping components

Bottle closures must have adequate stacking strength if self-supporting.

Reverse-engineering is encouraged to facilitate a successful pallet load footprint.

**Stable Pallet Load,  
No Secondary Tray**



## Section 5 – Package Design

### 5.2 Sell Unit Packaging – Blister

Costco prefers paper card and trapped paper card packaging.

Written approval from the buyer is required to use card-and-blister (trapped blister), or stretch card (stretch pack) packaging.

Blister box (box-and-blister), blister card (face seal, skin board or mock clamshell), or clamshells (two-piece blister packs) are not allowed.

All packaging component materials should be widely recyclable, certified compostable or biodegradable by members in the areas where the product will be sold.

Costco must approve packaging for look and feel prior to retail placement. This approval is for aesthetics only and not structural integrity.

Plastic must be thick enough to hold product(s) securely and have great clarity.

Not acceptable:

- Rigid PVC
- Plastic with cracking and/or sharp edges
- Clamshells/two-piece blister pack
- Blister box/box-and-blister
- Blister card/face seal

Exceptions to these requirements are produce clamshells or unit-dispensing blister cards (pharmacy and chewing gum).

Acceptable  
Packaging Types



Paper Card



Trapped Paper Card



Trapped Blister



Stretch Pack



Voucher

Not Acceptable  
Packaging Types



Box-and-Blister



Face Seal



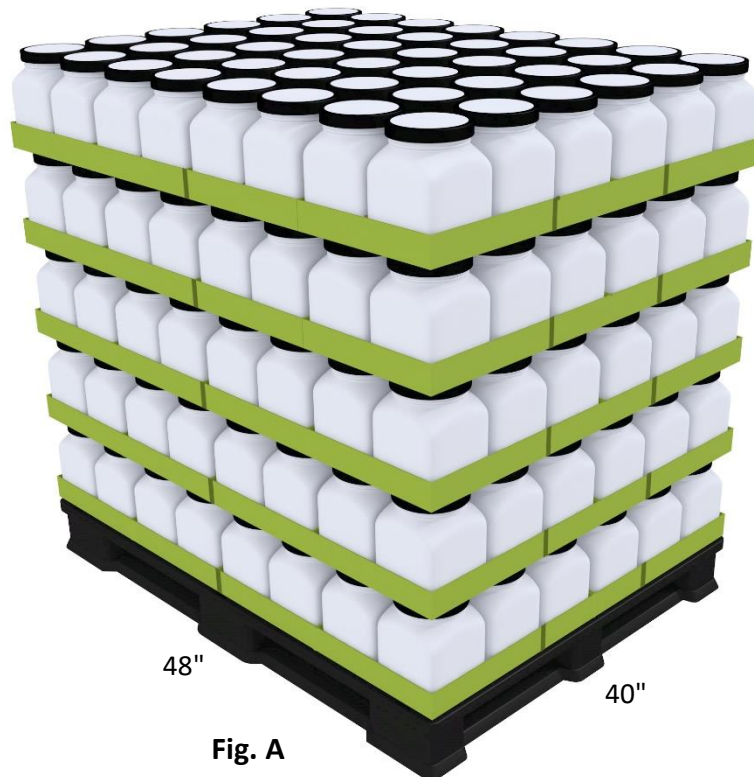
2-Pc. Blister Pk.

### 5.3 Sell Unit and Display Tray Integration

Display tray and sell unit packaging should be designed to work together for product protection and merchandising.

Display tray design considerations:

- If the product packaging (the sell unit) does not provide any structural support, design the tray to carry all load weight (pouches, bags, soft goods, etc.)
- If the product packaging is partially stable, but not strong enough to support all load weight, design tray to work with the sell unit, so together they provide the proper strength
- If the product packaging supports the load weight and is smaller than 7.5" x 7.5" x 7.5"/19 cm x 19 cm x 19 cm, include a low wall tray for containment (Fig. A)
- If the product packaging is 7.5" x 7.5" x 7.5"/19 cm x 19 cm x 19 cm or larger, refer to Section 5.1



## Section 5 – Package Design

### 5.4 Display Trays – Style and Function

For items merchandised on a pallet or shelf, ship products in a display tray only if necessary for unit load stability or to protect the product from damage.

Must ship display-ready, without box cutters or labor required to stock product. (Fig. A)

Display trays should support the product inside without product blocking dividers. (Fig. B)

Tear front panels (Fig. C), plastic strapping, tear tape, telescoping lids and tray covers are not allowed.

*Exceptions:*

- A. Telescoping lid or display tray cover may be used if products are distributed in layer quantities.
- B. Products distributed in individual case quantities may be shipped in a display tray with a telescoping lid taped to the bottom on two opposing sides.

Product containment inside tray must support Costco distribution method. Confirm distribution plans with your buyer to determine whether distribution will occur by pallet, layer or individual cases.

Maximum weight cannot exceed 40 lbs./18 kg per tray. Recommended case weight should not exceed 25 lbs./11 kg.

Display tray presentation is as important as sell unit presentation at point of sale. Consider interaction of tray and sell unit packaging for best presentation.

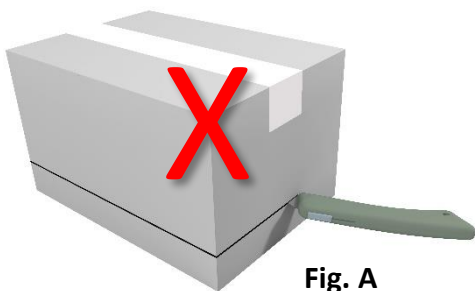


Fig. A

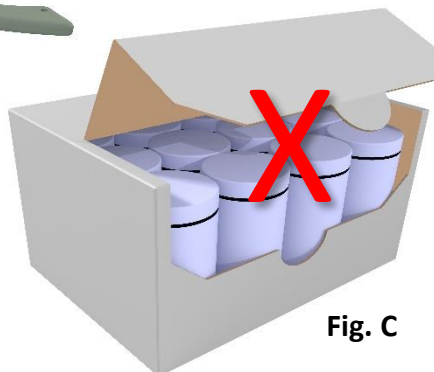


Fig. C

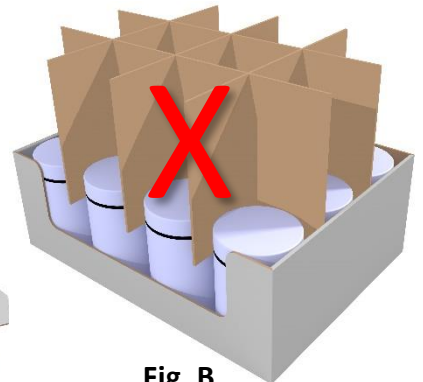


Fig. B



## Section 5 – Package Design

### 5.5 Display Trays – Design Specifications

Incorporate a design feature that prevents the tray above from nesting into the tray below.

Stacking tabs to interlock layers, which hinder the process of inventory replenishment, are allowed only for produce items.

Trays must have a minimum of 3"/8 cm front panel height unless one of the following is true:

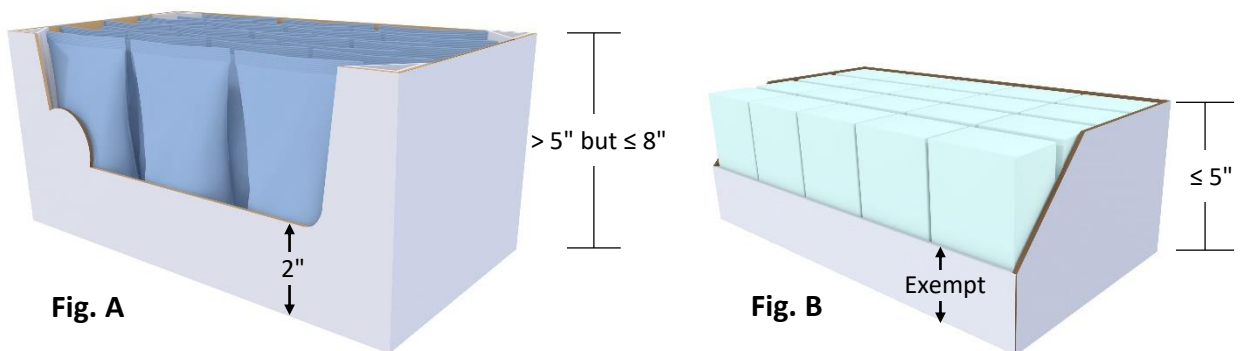
- For product that is single stacked with a height greater than 5"/12 cm but less than or equal to 8"/20 cm, the minimum front tray height may be reduced to 2"/5 cm, as long as the remaining three sides are a minimum of 4"/10 cm (Fig. A)
- For product that is single stacked with a height less than or equal to 5"/12 cm, the tray is exempt from the minimum front height requirements (Fig. B)

Product bearing 100% of load weight may be contained using a low tray, provided it meets the minimum front panel height requirements.

When there are multiple sell units per tray, size trays to five per layer minimum to support Front End reuse.

Use of large 48" x 40"/121.9 cm x 101.6 cm pallet trays are allowed only:

- When there are 24 or fewer sell units on a layer
- If Costco deems goods to be very high volume, e.g., chips, salty snacks



## Section 6 – Master Case Requirements

### 6.1 Fully Enclosed Master Cases

Certain categories, such as apparel, books and service departments (Meat, Bakery, Food Court and Service Deli) that are not merchandised on a pallet or shelf, may be shipped with multiple sell units in an enclosed master case.

Maximum weight should not exceed 50 lbs./23 kg when master case is of the size to be hand lifted. If the master case does exceed 50 lbs./23 kg, then it must be marked with a Heavy Weight/Multiple-Person Lift pictogram.

Wax-impregnated boxes are allowed only on fully enclosed master cases. Wax-coated cases that prohibit recycling are not allowed.



### Regarding Section 7 and Addendums

The following pages include special circumstances for display pallets, and Addendums for additional or modified requirements for specific departments or categories.

The information provided in the following pages may include corrugate weights and case-build specifications. The noted requirements are considered to be the *minimum* to build for structural integrity.

Suppliers are responsible for the structural quality and integrity of packaging throughout Costco's supply chain. We recommend you engage the expertise of a packaging engineer versed in designing for our environment to ensure you meet Costco's supply chain requirements.

## Section 7 – Display Pallet Guidelines for Special Circumstances

### 7.1 Master Display Requirements With Pop-in Tray Supports (E.g., mops, brooms, pruners, shovels)

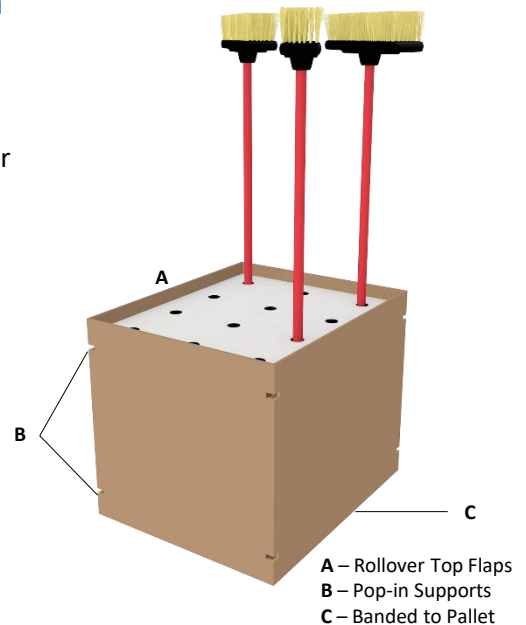
Regular Slotted Container (RSC) bottom with 2.25"/5.7 cm rollover top flaps and pop-in tray supports in all four corners. 44 ECT/275 lb. Mullen test board, C flute minimum requirement.

Double wall recommended for pruners and shovels.

Two corner-cut trays with die-cut holes at top and bottom to ensure vertical pole stability.

Each master displayer must be banded to its pallet so the displayer cannot tip off the pallet in transit or on our sales floor.

A corrugated shroud may be necessary for stability and protection of the goods in transit and during handling.



### 7.2 Bulk Bin Requirements (E.g., pet beds or throws, and pillows)

44 ECT/275 lb. Mullen test board, C flute minimum requirement.

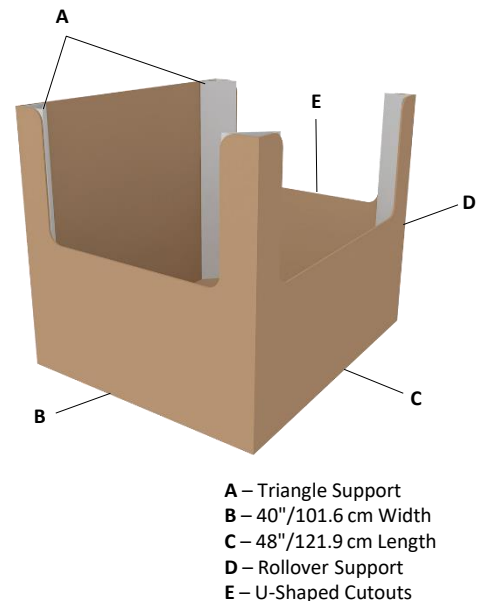
Double wall recommended.

Bulk bins must have U-shaped openings on the front 48"/121.9 cm side and two 40"/101.6 cm sides. Tear panels are restricted. U-shaped openings must not exceed 50% of the front panel height. Cutouts must have full depth rollovers for enhanced panel strength.

Inner triangular corner supports fastened or adhered to inside four corners required.

Corrugate shroud and a deep-skirt pallet cap are required to completely enclose unit load.

Corner posts and two belly bands are recommended.



## Section 7 – Display Pallet Guidelines for Special Circumstances

### 7.3 Wood Pallet Side-Load Crate Requirements

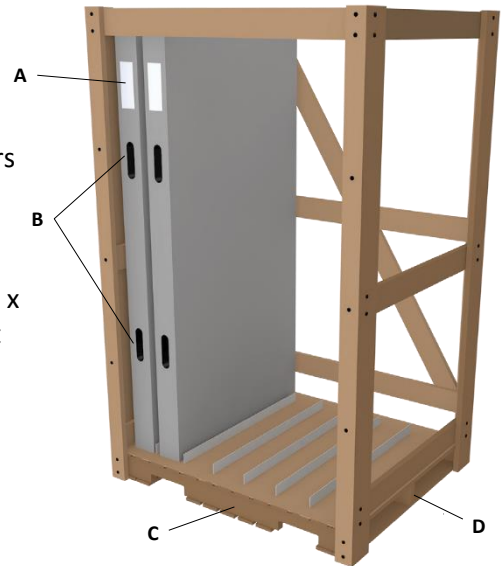
(E.g.: large mirrors and framed art)

Products must be shipped in a wood crate with dividers or plastic runners at top and bottom to separate and secure products into place.

Wood crate must be attached to a 48" x 40"/121.9 cm x 101.6 cm wood pallet that meets Costco's wood pallet requirements. (Refer to *Pallet Specifications reference pages*.)

A header label is required to show assortment. Each item must be identified with a photo sticker or illustration on the spine.

A plastic strap handle or reinforced hand cutout must be added to each item for accessibility to slide product in and out of pallet crate.



A – Photo on Spine    C – Front Length 48"/121.9 cm  
B – Hand Cutouts    D – Side Width 40"/101.6 cm

### 7.4 Metal Frame Rack Requirements (E.g.: rugs)

Racks should be manufactured using a welded or bolted metal frame designed to prevent lateral movement of the unit load. Diagonal rigidity should be incorporated into the design.

Racks should be designed with channels or product supports at top to separate and secure the products into place, and to prevent product from creating a leaning, top-heavy unit load.

Racks must be attached to a 48" x 40"/121.9 cm x 101.6 cm wood pallet that meets Costco's wood pallet requirements (refer to *Pallet Specifications reference pages*), using a minimum of four 3/16" x 3" lag screws/bolts fastened over the corner or side blocks with a minimum fastener penetration of 1.5"/3.8 cm into wooden block.





## Section 7 – Display Pallet Guidelines for Special Circumstances

### 7.5 False-Bottom Display

Allowed only if directed by your Costco buyer.

Allowed only for over-the-counter (OTC) Pharmacy items.

Corrugated skirt not to exceed 26"/66 cm high (not including base pallet).

Skirt to be pre-built prior to shipment and must adequately support product above during shipping and merchandising.

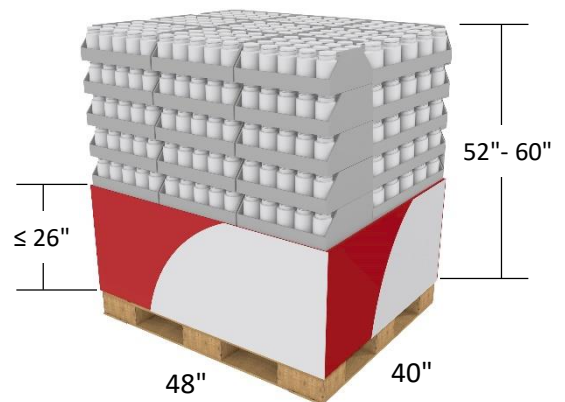
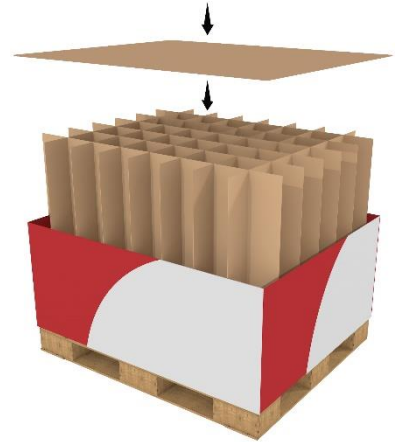
Display height must be a minimum of 52"/132 cm, and a maximum of 60"/152 cm (not including base pallet).

Fillers between trays of product are acceptable to achieve overall display/presentation.

Must be shoppable on three sides (one 48"/121.9 cm and two 40"/101.6 cm) unless written approval is obtained from the buyer.

Do not wrap or cover individual trays.

Pallets must be placarded as "False-Bottom Display, Do Not Double Stack".



## Section 7 – Display Pallet Guidelines for Special Circumstances

### 7.6 Butterfly Skirt Display

Allowed only if directed by your Costco buyer.

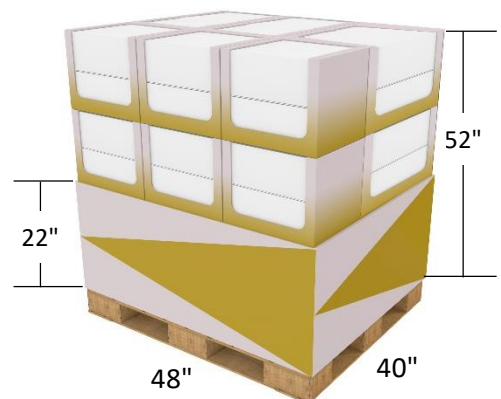
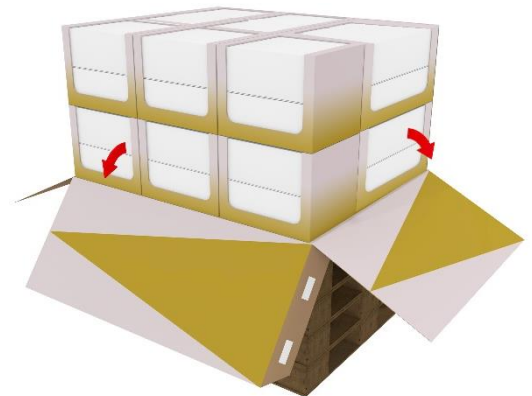
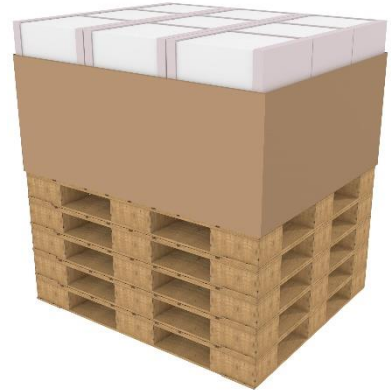
Corrugated skirt height = 22"/55 cm.

Straight base (no cutouts).

Display height to be 52"/132 cm (not including base pallet).

Fillers between trays of product are acceptable to achieve overall display/presentation.

Must be shoppable on three sides (one 48"/121.9 cm and two 40"/101.6 cm) unless written approval is obtained from the buyer.



## Addendum A – Consumables

### Supplemental Requirements

### Date Coding on Trays

Date coding is required for Department 12 Candy, on a minimum of two sides and the front of each display tray.

The format must read: Best Before mm/dd/yy (e.g., 12/16/23)

Font size must be a minimum height of 0.375"/0.95 cm.

### Best Before:

**12/16/23** ← 0.375"/0.95 cm tall

↑                    ↑                    ↑  
Month                    Day                    Year



Although only required for Department 12 Candy, visible date coding on trays is welcome on the display packaging for other consumables as well.

## Addendum B – Department 16 Liquor

5

### Modified and/or Supplemented Requirements to Section 5 Package Design

#### 5.1 Sell Unit Packaging

##### **Supplemented:**

All beer packaging must have functional carry handles or side-access holes.

Sections 5.3 and 5.4 not applicable to Department 16 Liquor.

#### 5.5 Display Trays – Design Specifications

##### **Modified for wine and spirits:**

Trays must measure a minimum height of 50% of the total bottle height, not to exceed a maximum height of 65%.

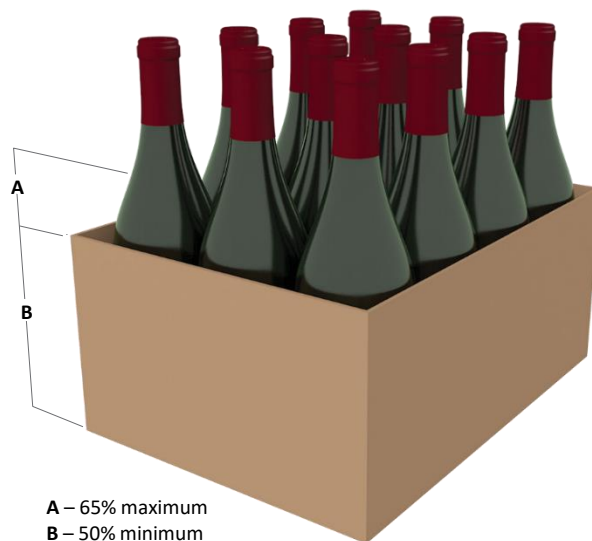
Tray pack dividers/inserts must be removable – no glue.

Dividers should not extend above the top edge of the tray pack. Written approval from the buyer must be obtained if dividers extend to the top of the bottle.

Corrugated tray pack specifications:

- Half Slotted Container (HSC)
- 32 ECT/200 lb. Mullen test board
- B or C flute minimum

All packaging and labeling must comply with Bureau of Alcohol, Tobacco, Firearms and Explosives ([www.atf.gov](http://www.atf.gov)) laws and regulations.



### 4

*Modified and/or Supplemented Requirements to Section 4*

#### Unitized Pallet Requirements

##### 4.1 Unitized Requirements for Goods Shipped in Fully Enclosed Corrugated Containers

**Modified:**

Pallet load height may be up to 94"/239 cm, including pallet, when pallet loads are distributed in layer quantities.

**Supplemented:**

Pallet loads are mechanically clamped for layer distribution.

##### 4.2 Unitized Requirements for Goods Shipped in Display-Ready Packaging

**Modified:**

Exposed front of display packaging may be turned toward center of pallet to protect from damage in shipping.



### 5

*Supplemented Requirements to Section 5*

#### Package Design

##### 5.4 Display Trays – Style and Function

**Supplemented:**

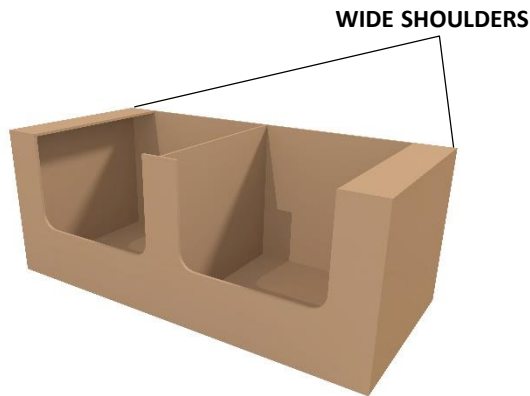
Raw, cut, exposed corrugated edges with single-wall construction do not perform well in a cooler/freezer environment. Rolled-over edges, double-wall construction and wide stacking surfaces are recommended.



### 5.6 *Supplemented Requirements to Section 5* Display-Ready Guidelines for Bagged-Style Primary Packaging

Display-ready trays must be able to support 100% of the load-bearing weight of multiple trays stacked up to 52"/132 cm high (without using telescoping lids or layer sheet/caps).

Wide stacking surfaces are required to eliminate nesting problems. Narrow side panel construction with a center divider has proven not to be sufficient for stacking purposes.



### 6.2 *Supplemented Requirements to Section 6* Display-Ready Guidelines for Carton-Style Primary Packaging

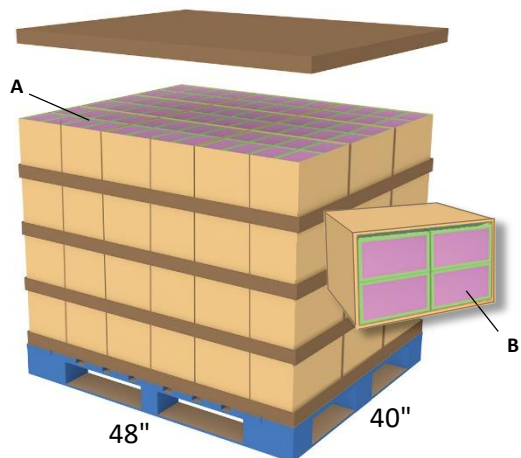
Pack product in an open-top Half Slotted Container (HSC) in a horizontal presentation.

HSC must have a minimum rating of 40 ECT/250 lb. Mullen test board. Corrugate direction must be in vertical orientation for shipping.

Add 4"/10 cm deep pallet caps between product layers and atop each pallet load.

Carton-style product will be displayed vertically with front display panel in a vertical presentation.

Allow 0.25"/0.64 cm finger space at top of HSC presentation for product accessibility. U-shaped cutouts are not allowed.



A – Product packs in a horizontal presentation  
B – Product displays in a vertical presentation with product facing out

## Addendum D – Department 65 Produce

4

*Modified or Supplemented Requirements to Section 4*

### Unitized Pallet Requirements

#### 4.1 Unitized Requirements for Goods Shipped in Fully Enclosed Corrugated Containers

**Modified:**

Pallet load height may be up to 94"/239 cm, including pallet, when pallet loads are distributed in layer quantities.

Stretch film is not required unless specified by the buyer.

**Supplemented:**

Cartons should be oriented on the pallet to sustain mechanical clamping against the 48"/121.9 cm sides of the pallet for layer distribution.

#### 4.2 Unitized Requirements for Goods Shipped in Display-Ready Packaging

**Modified:**

Corner posts may be used if needed. Each pallet load must have a minimum of three straps to secure the product on the pallet. Straps must be placed over the top of the corner posts to prevent damage to the display packaging.

Exposed front of display packaging may be turned toward center of pallet to protect from damage in shipping.

5

*Supplemented Requirements to Section 5*

### Package Design

#### 5.4 Display Trays – Style and Function

**Supplemented:**

Stacking tabs may not exceed 0.75"/1.9 cm in height. Corrugate direction must be in a vertical orientation on a minimum of two sides. A minimum of two-ply tabs are required, unless written approval is obtained from the buyer.

Must comply fully with industry-accepted Common Footprint Guidelines.

7.2

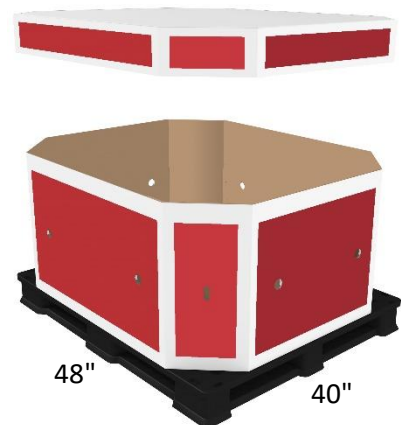
*Supplemented Requirements to Section 7*

### Bulk Bin (Minimum) Requirements

**Supplemented:**

Triple-wall corrugated fiberboard minimum requirement.

4"/10 cm deep octagonal lid with a minimum of 32 ECT/200 lb. Mullen test board, C flute is required on top of pallet load.



TERM	DEFINITION
Big and bulky	Items that meet at least one of the following criteria: <ul style="list-style-type: none"> <li>• Packages exceeding 150 lbs./68 kg</li> <li>• Packages where the combined dimensions of length and girth exceed 165"/419 cm</li> <li>• Packages exceeding 108"/274 cm in length</li> </ul>
Clamp truck	A small vehicle, similar to a <i>forklift</i> , with power-operated attachments at the front that compress loads on either two or four sides for moving and stacking.
Costco Logistics	A nationwide network of middle-distribution centers ( <i>DDCs</i> ) and final-mile delivery facilities ( <i>MDOs</i> ).
Direct Distribution Center (DDC)	Costco facility that receives full truck and container loads of goods from our <i>suppliers</i> , stores product until ordered online and then ships mixed truckloads of merchandise to <i>MDO</i> for final-mile delivery.
Depot	Costco facility that receives full truck and container loads of goods from our <i>suppliers</i> , then ships mixed truckloads of merchandise to Costco <i>Warehouses</i> .
Electric pallet jack (EPJ)	A motorized tool for lifting and moving up to 10 <i>pallets</i> at the same time.
End cap	Item display located at the end of an aisle to promote new items or impulse sales.
Floor load	Goods delivered to Costco receiving facilities that are not on a <i>pallet</i> .
Forklift	A small vehicle with power-operated prongs at the front that can be slid into pallet to be raised for moving, stacking and racking.
Handling graphics	A set of symbols to be used for the marking of packages or containers to indicate special handling and storage requirements. Also referred to as <i>Pictograms</i> .
Master carton	The outer box that contains merchandise at its largest quantity other than a <i>pallet</i> .
Member	A valued person who pays to shop at our club.
Market Delivery Operation (MDO)	Costco facility that stages product for final-mile delivery to Costco <i>members</i> .
Pallet	A platform on which goods are received, displayed and stored, that can be lifted and moved using a <i>forklift</i> or <i>electric pallet jack</i> .
Pallet load	Goods on a <i>pallet</i> , including the pallet.
Per- and polyfluoroalkyl Substances (PFAS)	A group of chemicals used to make fluoropolymer coatings and products that resist heat, oil, stains, grease and water. Fluoropolymer coatings have been used in a variety of products and packaging.
Pictograms	A set of symbols to be used for the marking of packages or containers to indicate special handling and storage requirements. Also referred to as <i>Handling graphics</i> .
Sell unit	The unit in which an item is sold and inventoried at Costco, such as an each, three-pack, a case, etc.
Slip sheet	A packing method used in shipping merchandise in which cardboard sheets are used in lieu of wood <i>pallets</i> to stack merchandise – or – cardboard that acts as a pallet.
Small-pack	Items that do not meet the <i>big and bulky</i> criteria.
Stretch film	Plastic film that is stretched around a <i>pallet</i> to keep the merchandise from shifting.
Supplier	The manufacturer, vendor, broker, merchant or resource from whom products are purchased.
Unit load	Goods on a <i>pallet</i> , not including the pallet.
Warehouse	Physical location where Costco <i>members</i> shop.

## Contacts/References

### For:

Additional information regarding Costco's Structural Packaging Specifications

Handling graphics/pictograms and vector files

Costco's Global Sustainable Packaging Guidelines, or information regarding sustainable packaging options

Contract packing for paper card and card-and-blister packaging

Questions regarding hazardous materials packaging or labeling

Questions related to pallets/pallet requirements

Load study requests, reviews or questions

Barcode labeling requirements

Questions regarding Country of Origin marking

### Contact/Link:

[packaging@costco.com](mailto:packaging@costco.com)

[www.costco.com/packaging-handling-graphics.html](http://www.costco.com/packaging-handling-graphics.html)

[globalpackaging@costco.com](mailto:globalpackaging@costco.com)

[cwip@costco.com](mailto:cwip@costco.com)

[hazmat@costco.com](mailto:hazmat@costco.com)

[pallets@costco.com](mailto:pallets@costco.com)

[NLC@costco.com](mailto:NLC@costco.com)

[barcodeguidelines@costco.com](mailto:barcodeguidelines@costco.com)

[customscompliance@costco.com](mailto:customscompliance@costco.com)



*Attachment(s) included on the following pages.*






# Pallets

Costco is committed to replacing wooden pallets throughout our network with lighter, cleaner, longer-lasting plastic pallets. Approved plastic pallets are currently available through iGPS and PECO; see below for contact information. All suppliers are encouraged to transition Costco shipments onto plastic pallets. Email [pallets@costco.com](mailto:pallets@costco.com) for more details.

## 1 iGPS, PECO, or CHEP USA Block Pallets Are Required Throughout North America

- 1.1 Over-land shipments must arrive palletized. This includes many imports – see section 3.
- 1.2 This applies to all deliveries and locations – including Business Centers, Ecommerce, production, and packaging sites.
- 1.3 Only when iGPS, PECO, and CHEP cannot be used may Costco approve alternate pallets – see section 2.
- 1.4 We do not accept GMA/grade A stringers, CHEP stringers, CHEP Euro, or corrugated/paperboard pallets.

	DOMESTIC	BORDER CROSSING		IMPORT	EXPORT
<b>APPROVED BRANDS</b>  <a href="mailto:costcosupplier@chep.com">costcosupplier@chep.com</a>  <b>PECO</b> PALLET <a href="mailto:sales@pecopallet.com">sales@pecopallet.com</a>  <b>iGPS</b> <a href="mailto:info@igps.net">info@igps.net</a>	<b>WITHIN:</b> <b>CANADA, USA, or MEXICO</b> <small>heat-treatment is not required</small>	<b>CANADA-USA</b> Either direction <small>see section 3.3</small>	<b>MEXICO-USA</b> Either direction <small>see section 3.4</small>	<b>TO:</b> <b>NORTH AMERICA</b> <small>see section 3.4</small>	<b>FROM:</b> <b>NORTH AMERICA</b> <small>see section 3.5</small>
	<b>CHEP BLOCK</b>	<b>CHEP BLOCK</b>	<b>CHEP-HT</b>	<b>CHEP-HT</b>	<b>TO:</b> Europe, Oceania, & China <b>CHEP-HT</b>
	<b>PECO</b>	<b>PECO</b>	<b>PECO-HT</b>	<b>Purpose-Built HT</b> <small>see section 2</small>	<b>TO:</b> Japan, Korea, & Taiwan <b>Purpose-Built HT</b>
	<b>iGPS</b>	<b>iGPS</b>	<b>iGPS</b>	<b>Purpose-Built HT pallets only from Walk Global network</b> USA 888-583-2479	
	<b>Purpose-Built</b> <small>see section 2</small>	<b>Purpose-Built</b> <small>see section 2</small>	<b>Purpose-Built HT</b> <small>see section 2</small>	<a href="mailto:packaging@walkglobal.com">packaging@walkglobal.com</a>	<a href="mailto:export@walkglobal.com">export@walkglobal.com</a>

### For safety and efficiency, our pallet standards are quite high, structurally and aesthetically.

Goods remain on their delivery pallets throughout Costco to optimize overall cost, product condition, and efficiency.

Overstock is stored on delivery pallets, in open-span (no deck) pallet racking above selling stock.

At Costco warehouses (selling locations), goods are displayed on the delivery pallets.

**We encourage our suppliers to use the lightest-weight, most durable pallets in the marketplace.**

## 2 Purpose-Built Pallets

- 2.1 This applies to any pallet not from iGPS, PECO, or CHEP, and all platforms or “feet” for equipment handling.
- 2.2 For safety, pallets must conform to our detailed technical specifications.
- 2.3 Approval is required in advance.
  - a. Reasons Purpose-Built pallets may be approved:
    - Oversized goods
    - iGPS, PECO, or CHEP cannot supply pallets from an overseas location
    - Pallet is included in the sale to our members
    - Bolts or screws secure fixtures or goods to pallets

To minimize cost, we require iGPS, PECO, or CHEP whenever possible. This includes Heat-Treated (HT) pallets.
  - b. **Purpose-Built pallet approvals are specific by item and destination country.**
    - Each Costco item number requires its own approval.
    - The same item shipping to Costco in multiple countries requires pallet approval for each destination country.
  - c. Approvals are valid for one season or rotation, only for pallets from the source(s) of the document(s) we approved.

**CAUTION:** Seek new approval each season, to add items or destination countries, or to use a different pallet provider.

2.4 We do not participate in pallet exchange. We do not return pallets to suppliers/shippers.

2.5 For more information, or to submit information for item pallet approval, email [pallets@costco.com](mailto:pallets@costco.com).

## Pallets (cont.)

### 3 Imports and Exports

- 3.1 Most countries require wood pallets to be ISPM 15 compliant for border entry.** Costco requires ISPM 15 Heat-Treatment (HT). ISPM 15/HT marks must be on both long pallet sides and fully legible.
- 3.2 Shipments between Canada and USA** (in either direction)
- ISPM 15 Heat-Treatment is not required at Canada/USA border entry in either direction.
  - iGPS, PECO, or CHEP USA pallets are required (see section 2 regarding Purpose-Built pallets).
- 3.3 Goods destined to cross the Mexico-USA border** (in either direction)
- iGPS, PECO-HT, or CHEP USA-HT are required (see section 2 regarding Purpose-Built pallets).
    - Includes deliveries to USA Costco sites (Katy, TX or Mira Loma, CA) but destined to Mexico
- 3.4 Overseas imports to North America**
- Non-Costco Facility Unloads Containers:
    - Goods must be delivered to Costco already palletized. Three alternatives:
      - CHEP USA-HT pallets may be available overseas.
      - Once goods are in North America, move to iGPS, PECO, or CHEP USA pallets prior to delivery to Costco.
      - Costco may pre-approve Purpose-Built pallets see section 2
  - Costco Unloads Containers:
    - We unload many containers without pallets. Contact our buying team to explore this option.
    - To ship on pallets, there are two alternatives:
      - CHEP HT may be available overseas. Only CHEP USA-HT or CHEP UK-HT pallets are accepted.
      - Costco may pre-approve Purpose-Built HT pallets built overseas see section 2
        - Caution: When containerized, pallet moisture content cannot exceed 19%.
- 3.5 Overseas exports from North America**
- CHEP USA-HT pallets to Europe (UK, Spain, France, Iceland, Sweden), Oceania (Australia, New Zealand), and China
  - Purpose-Built HT pallets to Japan, Korea, and Taiwan Contact Walk Global [Export@WalkGlobal.com](mailto:Export@WalkGlobal.com).
  - This applies to all overseas Costco destinations, regardless of where goods are containerized or destined.
    - Caution: When containerized, pallet moisture content cannot exceed 19%.



Sample of heat treated stamp

### 4 Inspection, Non-Compliance, Pallet Rejection

- 4.1 Pallet quality is visually assessed at delivery.**
- For safety, we must consider pallets to meet these criteria:
    - ✓ Sound & Serviceable In Our Facilities
    - ✓ Properly Support Their Load
    - ✓ Dry & Uncontaminated
    - ✓ Will Continue To Meet These Standards While The Goods Remain On The Pallet
  - While we generally observe the inspection criteria of the brands in section 1, all pallets are subject to visual assessment.
  - Visual assessment applies at each delivery, regardless of prior approval or acceptance of the same or similar pallets.
- 4.2 We reject:**
- Pallets failing our visual quality assessment
  - Pallets intended for export but lacking Heat-Treatment (HT) see section 3
  - Purpose-Built pallets without prior approval or that appear non-conforming to the approved specification see section 2
  - Pallets that appear to be iGPS, PECO, or CHEP with unauthorized modifications or repairs
- 4.3 Goods on rejected pallets are refused delivery, or at our discretion, we may transfer goods to acceptable pallets.**
- 4.4 Suppliers are responsible for pallet rejection, including:**
- Delivery refusal, regardless of who arranges or pays for transportation (see our Standard Terms)
  - Border entry denial due to ISPM 15/HT non-compliance, regardless of importer-of-record see section 3
  - Corrective actions. Examples: Arrangements and costs for a third party to transfer goods to approved pallets, transportation costs, detention/demurrage, fumigation, import containers returned to origin (such as consumables that cannot be fumigated for border entry), and remediation charges from Costco