



Import Container Loading Guidelines for Transload and Regional Distribution Center Shipments

Effective date: 6/1/2010







Revised: 4/11/16

Purpose:	<p>To provide guidelines to Import vendors for loading multiple items (SKUs) in Import containers while <u>maximizing cube, weight, and load stability</u>. Proper loading techniques will also help avoid damage to cartons.</p> <p>This document applies to Import shipments that originate at an overseas location and travel via ocean freight directly to a Lowe's Distribution facility.</p>
User Group Who Should Follow These Guidelines:	<p>Any employees involved in the loading of outbound Import containers at factories or warehouses.</p>

Import Container Loading Guidelines

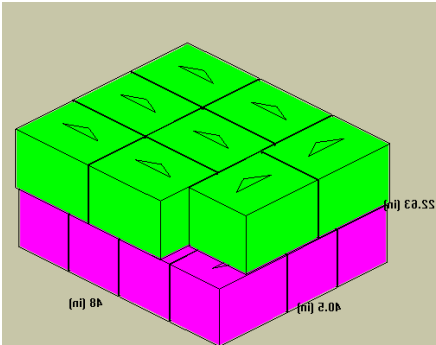
	Guideline
1	Do not stack heavy cartons on top of fragile items
2	Do not stack heavy products on top of light products
3	Load products with arrows up and carton flaps up (see Page 2 Section f for additional details)
4	Load containers to maximize cube efficiency. Adjust larger items in the load as necessary.
5	Group cartons of the same item together in the same location within the container
6	Place light or fragile cartons on top of heavy cartons
7	Use cornerstone loading techniques for <u>small, unpalletized items (Master Carton less than 7.0 cu. ft) that cannot be squeeze clamped</u> - Read sections on next pages
8	Do not stack product higher than the stack height printed on the carton.
9	Load long-length items(> 4 ft length) along a side wall of the container when possible

Beginning the Loading Process

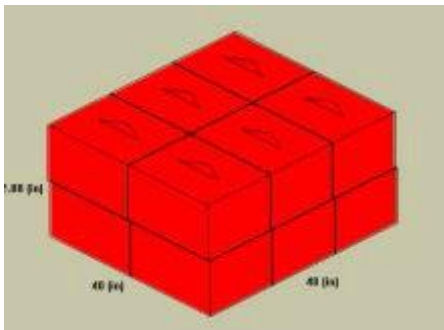
Actions	Do This:
<p>Step 1: Check container to make sure it is safe to load product</p>	<p></p> <ol style="list-style-type: none"> a. Visually inspect the container. b. Check for holes, water damage, mold, or any other condition that could damage Lowe's product. c. If you observe damage, notify your Factory/Warehouse Supervisor d. Factory/Warehouse Supervisor should contact Lowe's Import Logistics Specialist immediately and determine whether to continue loading. e. If container is safe to load, then remove any trash/debris from inside the container
<p>Step 2: Build Foundation of Cartons on Floor of Container</p> <p> CORRECT METHOD:</p>  <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p>This is the cornerstone carton. Use this carton as the foundation to stack other items above.</p> </div> <p> INCORRECT METHOD</p>  <p>Figure 1: INCORRECT METHOD - Cartons are loaded on their side and upside down</p>	<p> Important! Follow the Cornerstone Loading Guidelines</p> <ol style="list-style-type: none"> a. For Small Unpalletized Cartons (Master Carton less than 7.0 cu. ft) that cannot be squeeze clamped, build a foundation of cartons on the floor of the container making sure that: <ul style="list-style-type: none"> • Products are of similar height • Product is heavy and not fragile • Product is placed in a straight line from the first cornerstone carton toward the other side of the container. • Remember to use proper lifting techniques to avoid injury! b. Build a foundation layer of cartons above cornerstone cartons c. Begin stacking smaller cartons on top of the foundation. d. Keep the smaller cartons aligned with the front edge of the cornerstone carton e. Lock cartons in place by placing a “wedge” carton to fit tightly in the corner between the container wall and the layer of product. f. Follow the Arrows Up icons when loading <ul style="list-style-type: none"> • Do not load cartons upside down • Load cartons with flaps up. • Product can only be loaded on side if the box is designed to withstand vertical compression in that direction. If loading on side, make sure that arrows icons are present and pointing up.

Step 3: Build Carton "Shelves" (Layers of Product)

⚙️ CORRECT METHOD:



❌ INCORRECT METHOD



⚙️ Correct Method:

- For Small Unpalletized Cartons (Master Carton less than 7.0 cu. ft) that cannot be squeeze clamped Use the "bricklaying" technique to continue to build shelves (layers) of product.
- Load cartons to form a "T" shape as if you are building a brick wall.
- By alternating the direction of the boxes you distribute the weight and increase load stability.



CAUTION: Avoid stacking small cartons in vertical columns! This creates an unstable load

❌ INCORRECT METHOD:

- Stacking in vertical columns will cause product to be more likely to shift in transit
- This can create a dangerous situation for unloading container.

Step 4: Build Carton Walls High and Pack Cartons Tight

⚙️ CORRECT METHOD:



- Build walls from front to back until the wall is at shoulder height
- Use smaller cartons to fill the empty spaces above shoulder height
- Build wall from the back to front up to the ceiling of the container
- Secure the wedge carton at the top of the container to maximize cube utilization.
- Leave a small gap (approximately 5 cm) along the top and sides of container
 - This will allow cartons to be unloaded at US RDC by hand or using mechanical equipment.
 - This will avoid tearing, scuffing, and damage to cartons during receiving.
- Repeat process until container is full or at maximum weight.

Step 5: Check the weight and cube of the trailer



IMPORTANT! Be aware of the weight and cube volume of the container so it is not overloaded or underutilized

- Alert your Lowe's Inventory Planner if Purchase Orders are overweight/ over cube.
- Alert your Lowe's Inventory Planner if you notice that containers are underutilized.

Container Size	Cube Utilization (%)	Max Cube Per Container	Max Weight per Container
20'	100%	1,170	38,000
20HW	100%	1,170	52,000
40'	100%	2,391	44,000
40' High Cube	100%	2,700	44,000
45'	100%	3,055	41,500

Step 6: Brace and secure the load before closing the container

⚙️ CORRECT METHOD FOR FLOOR LOADED CONTAINER:

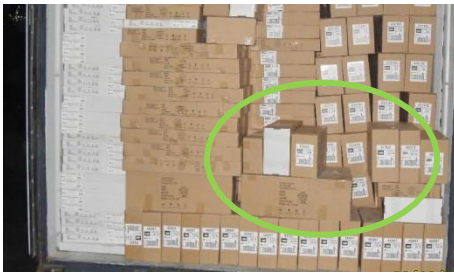


Figure 2: CORRECT METHOD - Cartons have been properly down stacked at the tail of container to improve stability. This will prevent load from shifting

❌ INCORRECT METHOD FOR FLOOR LOADED CONTAINER



Figure 3: INCORRECT METHOD - Cartons were column stacked and not secured. Load shifted in transit.



IMPORTANT! – Load must be secure so that product will not be damaged in transit

- a. If floor loading, make sure the last cartons loaded on the container have been secured and down stacked to avoid damage.

Step 6: Brace and secure the load before closing the container

⚙️ CORRECT METHOD FOR HEAVY WEIGHT PALLETIZED CONTAINER (Nails, Tile, etc):

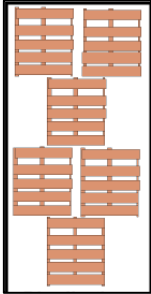


Figure 4 - Alternating the placement of pallets helps distribute the weight evenly and improves stability

❌ INCORRECT METHOD FOR HEAVY WEIGHT PALLETIZED CONTAINER (Nails, Tile, etc):

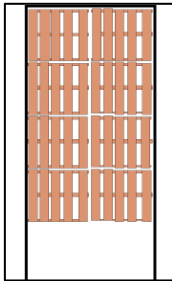


Figure 5 – Loading pallets of Heavy Weight items on one end of container will overload the axle and container will not be stable in transit

! IMPORTANT! – Special notes for heavy weight containers of crated/palletized products:

- a. For heavyweight palletized/crated items (e.g. Tile, Vanities, etc) that do not completely fill the container, ensure that pallets/crates are loaded in an alternating pattern to keep from shifting in the container.

Result

- ⚙️ *Following these steps will reduce damage to cartons and improve load stability.*
- ⚙️ *Container will be safe for Lowe's employees to unload when it reaches the distribution center.*

Compliance Policy:

Import vendors are expected to follow these guidelines. Unsafe or unstable loads that result from a failure to use proper loading methods will be the liability of the vendor and may result in the following actions:

- Product may be refused **or**
- Transload or Regional Distribution Center may charge vendor for additional labor required to unload the container and restack product.

Revisions:

Date	Author	Change Description & Location
1/24/2014	Jon Meurs	Updated Logistics Specialist to Inventory planner throughout the document
1/24/2014	Jon Meurs	Updated long length requirement from 6 feet to 4 feet long
8/20/2014	Steve Coyne	Updated Max cube for all container sizes as requested by SCOM (Shak El-Akkad)
2/16/2016	Sarah Voorhees	Updated Max cube for all container sizes as requested by IM&GS
4/11/2016	Sarah Voorhees	Updated Max weight for 45' container sizes as requested by IM&GS