Import Container Loading Guidelines for Transload and Regional Distribution Center Shipments

Effective date: 6/1/2010
Revised: 4/11/16

Purpose:
To provide guidelines to Import vendors for loading multiple items (SKUs) in Import containers while maximizing cube, weight, and load stability. Proper loading techniques will also help avoid damage to cartons.

This document applies to Import shipments that originate at an overseas location and travel via ocean freight directly to a Lowe's Distribution facility.

User Group Who Should Follow These Guidelines:
Any employees involved in the loading of outbound Import containers at factories or warehouses.

Import Container Loading Guidelines

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

<table>
<thead>
<tr>
<th>Actions</th>
<th>Do This:</th>
</tr>
</thead>
</table>
| **Step 1: Check container to make sure it is safe to load product** | ![Warning Icon] 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 |

| Step 2: Build Foundation of Cartons on Floor of Container | ![Warning Icon] Important! Follow the Cornerstone Loading Guidelines  
   a. **CORRECT METHOD:** 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:  
      - 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. **INCORRECT METHOD:** Follow the Arrows Up icons when loading  
      - 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 |

*Figure 1: INCORRECT METHOD - Cartons are loaded on their side and upside down*
### Step 3: Build Carton “Shelves” (Layers of Product)

**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.

**INCORRECT METHOD:**

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

**INCORRECT METHOD:**

- Stacking in vertical columns will cause products 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

<table>
<thead>
<tr>
<th>Container Size</th>
<th>Cube Utilization (%)</th>
<th>Max Cube Per Container</th>
<th>Max Weight per Container</th>
</tr>
</thead>
<tbody>
<tr>
<td>20'</td>
<td>100%</td>
<td>1,170</td>
<td>38,000</td>
</tr>
<tr>
<td>20HW</td>
<td>100%</td>
<td>1,170</td>
<td>52,000</td>
</tr>
<tr>
<td>40'</td>
<td>100%</td>
<td>2,391</td>
<td>44,000</td>
</tr>
<tr>
<td>40' High Cube</td>
<td>100%</td>
<td>2,700</td>
<td>44,000</td>
</tr>
<tr>
<td>45'</td>
<td>100%</td>
<td>3,055</td>
<td>41,500</td>
</tr>
</tbody>
</table>

**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.
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 PALLETTIZED CONTAINER (Nails, Tile, etc):**

  ![Correct Method Diagram]

- **INCORRECT METHOD FOR HEAVY WEIGHT PALLETTIZED CONTAINER (Nails, Tile, etc):**

  ![Incorrect Method Diagram]

**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.**

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

- 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.

**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:

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