



PATIO FURNITURE GENERAL PACKAGING SPECIFICATION

*****Excludes dining tables, side tables, umbrellas and umbrella bases.**

Purpose: To develop optimum packaging elements for patio furniture shipped to Lowe's Companies, Inc.

SECTION I – TRANSIT TESTING REQUIREMENTS

The following testing procedures must be passed:

Vibration and Drop Tests:

- ISTA procedure 1A for packages less than 150 Pounds.
- ISTA procedure 1B for packages equal to or greater than 150 pounds.

Horizontal Compression Tests:

- Packaged product must withstand 2000 pounds of pressure across the package surface when fully engaged in the clamp fixture in both front to back and side to side orientation without damage.
- Packaged product must withstand 1500 pounds of pressure across the package surface when engaged half way in the clamp fixture in both front to back and side to side orientation without damage.
- Clamp testing must be performed utilizing a hydraulic fixture if available.

Vertical Compression Tests:

- Product must be capable of being stacked a minimum of 16 feet (192 inches) and a maximum of 20 feet. The compression requirement is determined in the following manner:

Example is a carton with a depth of 36" and a weight of 50 pounds.

1. Determine maximum number of boxes above bottom carton:
(Gross stack height/box depth) – 1

192"/36 = 6 – 1 = 5 number of cartons above bottom carton

2. Determine load on bottom box:
Number of cartons above bottom carton (weight)

5(50) = 250

3. Environmental Factor of 3(load) = Compression Requirement

250 (3) = 750 Compression for 1 Hour

SECTION II – REQUIRED PACKAGING COMPONENTS

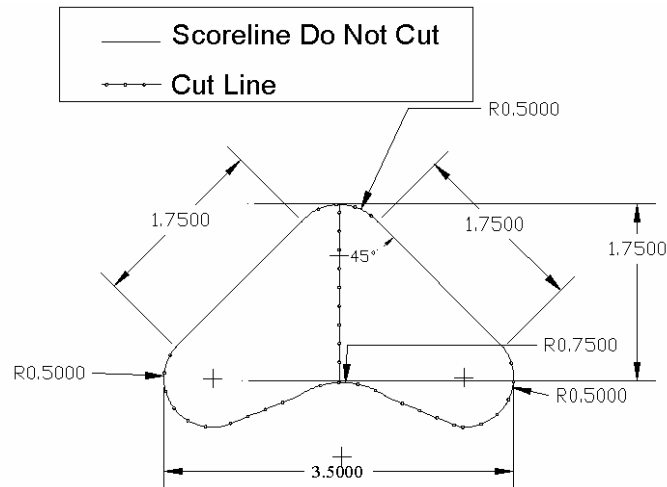
Internal Packaging Components:

- Finished exposed surfaces (painted, coated or polished) must be protected from corrugate or EPS abrasion by an adequate protective barrier such as poly foam, plastic sheeting, etc.
- Rigid angle board must be incorporated inside the shipping carton in the four vertical corners to provide protection against squeeze truck handling and ensure adequate stacking attributes.
- All components must be adequately secured and protected to prevent movement of product inside master carton i.e. no metal to metal contact.

Access Holes (when applicable if used):

- Access holes must comply with the Lowe's Access Hole Specification and be located in appropriate areas to facilitate handling of the product at RDC and Store level. Hand access must not be hindered by grill components or internal packaging. Access holes should be utilized based on carton size and handling issues.

SEE BELOW FOR ACCESS HOLE SPECIFICATION



Plastic Strapping:

- Minimum width = 1/2". Strapping should be either white or semi-transparent
- If metal clips are utilized to secure the strapping, they must be free of sharp points or edges.

Sealing Tape:

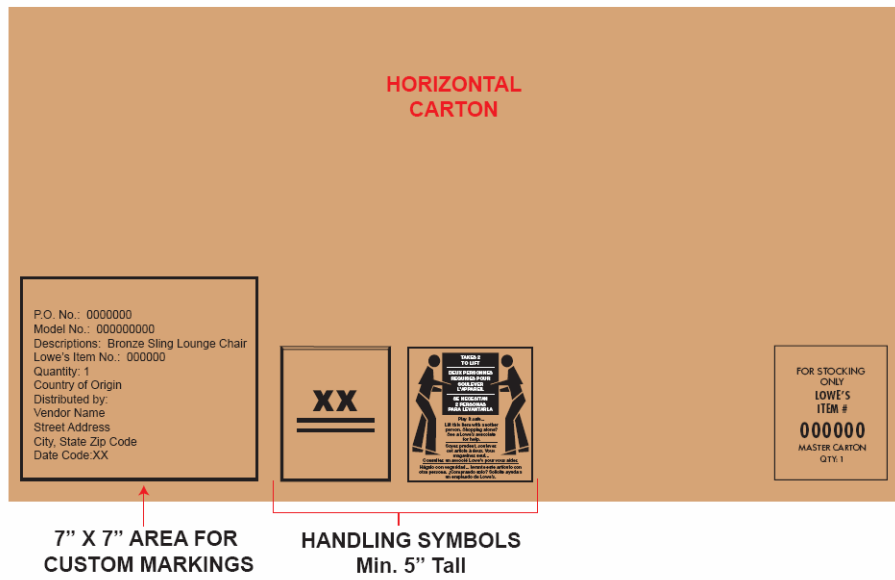
- Minimum of 2-1/2" wide with biaxial oriented polypropylene backing and pressure sensitive hot melt rubber resin adhesive.
- The tape must be resistant to aging and tolerate wide climate variations. Smooth and wrinkle-free application is required and the tape must extend at least 3" on the side panels of both the carton top and bottom.

Patio Furniture Packaging Specification

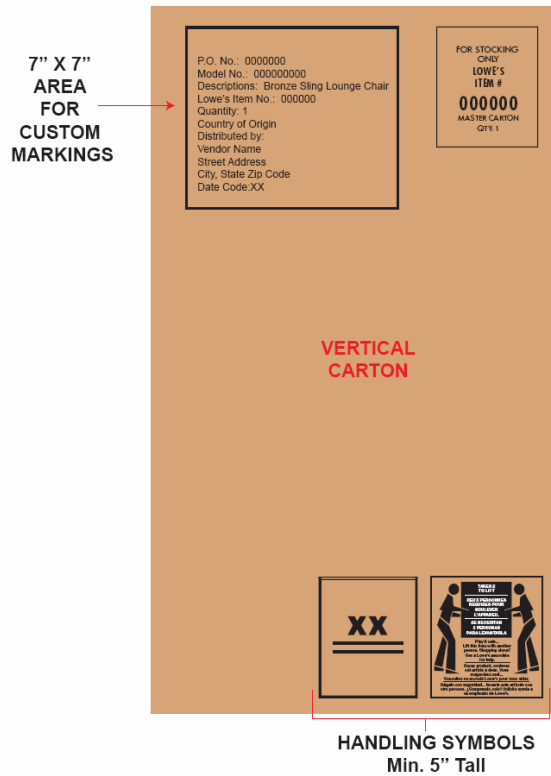
Package Markings:

Stack Height: Insert correct stacking height in place of XX. **Stacking height should represent a minimum of 16 feet and a maximum of 20 feet storage height.**

DRAWING FOR ILLUSTRATION PURPOSES ONLY AND IS NOT TO SCALE



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CORRUGATE RECOMMENDATIONS

4 Pack Chairs, 4 Pack Bar Stools and Dining Tables 40" and Larger

Corrugated Carton:

- Double-Wall A/B Flute with **Full Overlap Top and Bottom**
- Burst Strength = 350# (lbs. per square inch)
- Edge Crush = 51# (lbs. per inch width)
- Weight of Outer Liner = 42# (lbs. per 1000 square feet)
- Weight of Middle Liner = 42# (lbs. per 1000 square feet)
- Weight of Inner Liner = 42# (lbs. per 1000 square feet)

2 Pack Swivel Rockers, 2 Pack Bar Stools and Dining Tables 32-38"

Corrugated Carton:

- Double-Wall A/B Flute with **Full Overlap Top and Bottom**
- Burst Strength = 275# (lbs. per square inch)
- Edge Crush = 48# (lbs. per inch width)
- Weight of Outer Liner = 36# (lbs. per 1000 square feet)
- Weight of Middle Liner = 36# (lbs. per 1000 square feet)
- Weight of Inner Liner = 36# (lbs. per 1000 square feet)

Umbrella, Umbrella Base and Bistro or Side Table

Corrugated Carton:

- Double-Wall A/B Flute with **Full Overlap Top and Bottom**
- Burst Strength = 200# (lbs. per square inch)
- Edge Crush = 42# (lbs. per inch width)
- Weight of Outer Liner = 30# (lbs. per 1000 square feet)
- Weight of Middle Liner = 30# (lbs. per 1000 square feet)
- Weight of Inner Liner = 30# (lbs. per 1000 square feet)