

Part I: Store Display Pallets

Mini pallet base dimensions are critical to ensure the proper handling of product through our entire retail system and therefore they must be strictly adhered to. The top dimensions do have some flexibility as indicated on the attached chart. However, the height of the display (including the pallet and header card) cannot exceed 48".

The attached chart indicates the proper product facing by type of display and store location. To maximize your product exposure and sales be careful to select the proper orientation. When preparing mini pallets for DC shipments, multiple mini pallets must be placed on a standard 40 x 48 pallet with the long end facing the rear of the truck. This will expedite the unloading of the product. If the product is shipping directly to the store, the mini pallet should be floor loaded.

It is the responsibility of the vendor to ensure that the packaged product is adequately unitized and secured to the standard wood mini-pallet through the utilization of stretch wrap, plastic strapping, etc. so the product and mini-pallet are one unit.

The display pallet must be capable of withstanding the normal rigors of transportation especially those rigors encountered by stacking, transportation via LTL and full truckload trailers, and handling by material handling equipment.

Cartons must conform to the bursting and weight constraints of the National Motor Freight Classification (NMFC). Lowe's has the right to refuse any substandard packaging.

Stretch wrap all product to the base (wing) of the pallet with sufficient stretch wrap to prevent the product from shifting in transit. Stretch wrap must be of top quality in stretch, memory, and retention. Four way straps can be used over the freight through the pallet to provide additional stability.

Product must be restrained from shifting in transit through the use of support pillows/air bags and/or dunnage.

Product over-hang on the mini-pallet is NOT acceptable.

Mini-pallets should be clearly marked "MINI-PALLET - DO NOT BREAK DOWN"

Any questions on signage, unitization/packaging, etc. can be directed to the Lowe's Logistics Specialist who must approve all mini-pallet products before it can be sent into our distribution network.

Detail pallet specifications will be placed on the Internet.

Pallet deviations requiring an alternate pallet style or dimension due to product size limitations or for product protection must be reviewed and approved by the Promotional Display Specialist.

Pallet Specifications

Display Type	Store Location	Pallet Type	Pallet Dimensions	Product Facing (On Pallet)	Product Height (Including Pallet)
Type 1 Under-Rack Storage	In-Line Aisle	Mini Pallet	Length: • Min. = 14.00" • Max. = 24.00" Width: • Min. = 20.00" • Max. = 24.00"	Front of Product	Minimum = 24.00" Maximum = 48.00"
Type 2 Side Stack Storage	In-Line or Main Aisle	Mini Pallet	Length: • Min. = 14.00" • Max. = 24.00" Width: • Min. = 20.00" • Max. = 24.00"	Side of Product	Minimum = 36.00" Maximum = 48.00"
Type 3 Middle Aisle Stack-outs	Main Drive Aisle	Full Size Pallet *2 or 4-way Entry	Length = 48.00" Width = 42.00"	Side of Product	Minimum = 36.00" Maximum = 48.00"

Note: Pallets requiring an alternative style or dimension due to product size limitations or for product protection must be reviewed and approved by the Promotional Display at Lowe's Companies, Inc.

Type 1 & 2: Under Rack & Side Stack Storage

Purpose: To develop a Standard Mini-Pallet design for use at all Distribution Center and Store Locations throughout Lowe's Companies, Inc. The construction of the pallet must be accessible for all forklift equipment to facilitate handling throughout the entire distribution process.

• Pallet Dimensions (L x W):	Length = 14.00 – 24.00 inches. Width = 20.00 – 24.00 inches.
• Pallet Style:	Double-Wing, Double Faced Non-Reversible.
• Entry:	2-way entry.
• Lumber Specifications:	Grade III hardwood, clean sawn.
• Fastener Requirements	1.625 inch screw shank nails.
Pallet Top • Top Deck Boards (4/pallet):	A. 0.50 (min.) x 3.75 x 20.00 – 24.00 inches. Space between boards: 3 inches (max.) and equally spaced.
Pallet Base • Runners (2/pallet):	B. 1.25 x 3.50 x 14.00 – 24.00 inches.
• Bottom Deck Boards (2/pallet):	C. 0.50 (min.) x 3.75 x 20.00 – 24.00 inches.

Notice:

Pallets requiring an alternative style or dimension due to product size limitations or for product protection, must be reviewed and approved by the Promotional Display Specialist at Lowe's Companies, Inc.

Important:

The construction and dimensions of the Pallet Base (B & C) are extremely critical in order to handle the pallet with all the various equipment used by Distribution Center and Store Locations and must not be deviated (* = critical dimension). The Pallet Top (A) dimensions must fall within the accepted tolerances identified above.

Type 3: Middle Aisle Stack Outs

Purpose: To develop a standard 2 or 4-way pallet design for in-store floor displays at all Store Locations throughout Lowe's Companies, Inc. The construction of the pallet must be accessible for all forklift equipment to facilitate handling throughout the entire distribution process.

• Pallet Dimensions (L x W):	Length = 42.00 inch (min.) x 48.00 inch (max.). Width = 42.00 inch (min.) x 48.00 inch (max.).
• Pallet Style:	Double Faced Non-Reversible.
• Entry:	4-way entry.
• Lumber Specifications:	Grade III and/or IV hardwood, clean sawn.
• Fastener Requirements	2.00 inch screw shank nails.
• Top Deck Boards (7/pallet):	Outer Boards (2) = 0.625 (min.) x 5.75 x 42.00-48.00 inches. Inner Boards (5) = 0.625 (min.) x 3.75 x 42.00-48.00 inches. Space between boards: 3 inches (max.)
• Bottom Deck Boards (5/pallet):	Outer Boards (4) = 0.625 (min.) x 3.75 x 42.00-48.00 inches. Inner Boards (1) = 0.625 (min.) x 5.75 x 42.00-48.00 inches.
• Runners (3/pallet):	1.50 x 3.50 x 42.00-48.00 inches.

Notice: Pallets requiring an alternative style or dimension due to product size limitations or for product protection, must be reviewed and approved by the Promotional display Specialist at Lowe's Companies, Inc.

Important: If the weight of the pallet load exceeds the capabilities of the above specification, it is the responsibility of the vendor to determine if additional runners or deck-boards are required to safely support the palletized load.

Part II: Regional Distribution Center Pallets

Pallet Specifications:

Purpose: To develop a standard 2 or 4-way (GMA) pallet specification to be used at Lowe's Regional Distribution Center locations. The construction of the pallet must be accessible for all forklift equipment to facilitate handling throughout the entire distribution process.

• Pallet Dimensions (L x W):	Length = 48.00 inches. Width = 40.00 inches.
• Pallet Style:	Double Faced Non-Reversible.
• Entry:	2 or 4-way entry.
• Lumber Specifications:	Grade III and/or IV hardwood, clean sawn.
• Fastener Requirements	2.00 inch screw shank nails.
• Top Deck Boards (7/pallet):	Outer Boards (2) = 0.625 x 5.75 x 40.00 inches. Inner Boards (5) = 0.625 x 3.75 x 40.00 inches. Space between boards: 3 inches (max.)
• Bottom Deck Boards (5/pallet):	Outer Boards (2, chamfered) = 0.625 x 5.75 x 40.00 inches. Inner Boards (3) = 0.625 x 3.75 x 40.00 inches.
• Runners (3/pallet):	1.50 x 3.50 x 48.00 inches.

Notice: Pallets requiring an alternative style or dimension due to product size limitations or for product protection, must be reviewed and approved by the Promotional display Specialist or Merchandising Organization at Lowe's Companies, Inc.

Important: If the weight of the pallet load exceeds the capabilities of the above specification, it is the responsibility of the vendor to determine if additional runners or deck-boards are required to safely support the palletized load.

Slip Sheet Specifications:

General:

- Lowe's Regional Distribution Center's minimum standard slip sheet is 43" width by 51" length having two adjacent tabs of 3" each. The slip sheet is made of high density polyethylene 100% recycled raw material base with a minimum tensile strength of 2,100 psi and tear test of 14 pounds.
- Slip sheets size is set to conform to Lowe's Distribution Center rack system
- Slip sheets for loads exceeding 48" in length must be coordinated with Lowe's Supply Chain Analyst
- Vendor must consult with a slip sheet manufacturer to certify that slip sheets meet or exceed Lowe's standards.

Slip Sheet Specifications (minimum):

Materials: - High density, polyethylene (HDPE) 100% recycled raw material base with a minimum tensile strength of 2,100 psi and tear test of 14 pounds

Size: - 43" X 51" counting 3" side and end tabs (40" X 48" footprint)

Gauge / Thickness: -

- Loads less than 1,800 lb. 20 mil
- Loads 1,800 lb. to 2,400 lb. 25 mil
- Loads 2,400 lb. or greater 30 mil

Pull Tabs: - Two, three inch (3") adjacent side and end pull tabs

Corners: - Split, 90 degree, or diagonal corners engineered to meet product specific requirements.

Friction Properties - Load side of sheet - non skid laminate with a coefficient of friction (COF) equal to or greater than .49 to minimize product movement. Bottom side of sheet - matte finish to facilitate load movement

Optional Features - To customize slip sheets to specific unit load and unique operational procedures, the following are permitted:

- Locking tray, pre-punched stretch wrapped starter hole, and pattern designs (e.g. dimple or waffle)
- Four, three inch tabs consisting of 2 fold tabs for shrink wrapping around loads and 2 tabs for load handling
- Equivalent gauges to tensile strengths for loads less than 1,800 lbs. as an exception and with certification (Example: 16 mil with a tensile strength of 3,200 lbs.)

Stretch Wrap Specification

Scope: To develop minimum stretch wrap requirements for landscaping block, patio pavers and other concrete block items stored in the Outside Lawn and Garden area at Lowe's Companies, Inc.

Objective: To identify a UV resistant stretch wrap material to be implemented by Lowe's Block Suppliers, to enhance the performance capabilities from the exposure of extreme weather conditions in the Outside Lawn and Garden area.

• Film Type:	Blown
• Film Color:	Clear
• Minimum Gauge:	80 g.
• Minimum UVI Concentration:	5%.

Important:

- Product must not overhang on the pallet.
- The palletized load must be sufficiently stretch wrapped to prevent load-shift during shipping and safely contain the product at the store level.
- **Note:** To further prevent load shift, the stretch wrap must be adequately secured around the bottom edges of the shipping pallet.

Part III: Packaging & Unitizing

All packaging must be designed and manufactured to comply with all applicable standards as set forth by the National Motor Freight Classification to withstand the normal rigors of the transportation and physical distribution processes. (see packaging and unitizing specifications)

A master carton is a shippable corrugated carton that contains one or more identical selling units. The selling units contained within a master carton may be individual pieces referred to as 'eaches' or a number of smaller multi-piece containers called 'innerpacks'. All master cartons must protect inner packs and individual selling units which will be displayed on Lowe's sales floor.

Master Carton Requirements

- Master cartons will contain only like items. Mixed items are not allowed.
- Master cartons and inner packs must be labeled with an I 2 of 5 bar code, vendor model number, and unit count if the carton quantity is greater than one (MC > 1). If the master carton is equal to one (MC =1), there must be a UPC bar code and vendor model number.
- Any changes to ship units must be approved by the Lowe's Supply Chain Analysts.
- The master carton must meet a minimum single wall corrugated carton specification of adequate construction for conveyance and floor loading.
- The carton must contain a seal of certification listing its bursting and weight constraints as set forth by the National Motor Freight Classification.
- All items will be completely cartoned to insure product protection with no product exposure or protrusion that would injure personnel or damage the RDC's conveyance system or material handling equipment.
- Master cartons with boxed inner packs will be engineered with no loose packing material unless specifically required for product protection.
- All cartons will be sufficiently sealed to eliminate potential of accidental opening.

Palletization Requirements

- Lowe's requires that all items be packed onto the same pallet together.
- Lowe's will order items in master carton, tier layer or pallet quantities.
- The vendor is required to pack the items together on the pallet by the quantity amount ordered.

Trailer Loading Requirements

- Co-locate like items within trailers.
- Products must be restrained from shifting through use of support pillows / air bags, load locks and / or dunnage. Vendors are responsible for providing load locks (load bars), air bags, dunnage or support pillows if needed to secure their loads, prior to sealing the trailer.
- Restrict the weight of individual stacks of items in a trailer to 2,800 lb. and to a height convenient for off loading stacks through the rear door without breaking stacks down.

Pallet Tier Requirements

- Coordinate Purchase Orders (PO) of less than pallet quantities to insure POs are placed for tier level quantities.
- Use slip sheets or cardboard separators only between tiers of unlike items.

Pallets and Slip Sheets

- Unitize like items on a single pallet / slip sheet. (Restrict slip sheets to full truck loads.)

- Palletize all loads only on 40" x 48" , 2 or 4 way entry, hardwood pallets or on 43" x 51" slip sheets. (See the Lowe's Pallet and Slip Sheet specifications)
- Products should not extend beyond the edges of the pallet / slip sheet for maximum protection
- Limit the height of the product itself (not counting the pallet) to not more than 55"

Stretch Wrap

- Stretch wrap all individual pallet / slip sheet loads to the base of the pallet / slip sheet with sufficient stretch wrap to prevent the product from shifting in transit.
- Stretch wrap must be of top quality in stretch, memory and retention.
- To reduce the risk of product damage and personal injury, stretch wrap with UV (ultra violet) inhibitor's is required for securing landscaping block, patio pavers and other concrete block items on pallets stored in the Outside Lawn and Garden area.

Carton Access Hole Requirements

- Access holes should be located on opposing carton panels on all oversized master cartons meeting the following criteria:
- Access Holes Only - If the outside carton dimensions are greater than 24" x 18" x 18" (L x W x H) and weighs equal to or greater than 30 lbs.
- Access Holes and Plastic Banding (straps) - If the outside carton dimensions are greater than 48" x 24" x 30" (L x W x H) and weighs equal to or greater than 55 lbs.

Desiccants (silica gel or clay) Requirements

- To reduce moisture damage, the following product categories require a small desiccant bag (silica gel or clay only) be placed inside each individual product carton:
- Electrical/Electronic Products such as (but not exclusive to) light fixtures, ceiling fans, TV's, VCR's, Trim-a-Tree, etc.
- Fabric Materials such as (but not exclusive to) leather materials, gloves, umbrellas, etc.
- Metal Products such as (but not exclusive to) nails, fasteners, garden tools, etc.
- For other exposed moisture sensitive products such as wheel barrels, etc. a large (80-unit) desiccant bag should be contained with the product in a plastic bag or barrier inside the import container.
- Note - Desiccant bags scattered loosely inside the overseas shipping container is NOT permitted

Abrasion Resistance of Printed Packaging Materials (Sutherland Rub Test)

- Objective: To ensure resistance to abrasion or scuffing during shipping.
- Applies to: corrugated boxes, folding cartons, labels, inserts and other packaging materials having applied graphics on a flat surface
- The printed materials identified above must pass the Sutherland Rub Test as specified under ASTM D5264-98, using a 4-lb weight and subjected to 100 strokes (a stroke is one back-and-forth cycle).
- Note – The use of Cellophane or other plastic shrink-wrap around individual product cartons is NOT permitted.

Part IV: Labeling Requirements

Placard Specifications For Labeling Pallets of Lumber and Lawn and Garden Bagged Goods:

All pallets of bagged goods in the lawn and garden department and of lumber must be labeled with an identifying placard giving the item description, Lowe's item number, piece count and 12of5 bar code. The preferred placard should be approximately 8 and 1/2 inches high by 11 inches wide and visible on at least two opposing sides of the pallet, located as high as possible on the pallet to ensure visibility. The label must be weather-proof (placed under the last layer of shrink wrap), scannable and withstand the ride from the vendor's facility to our store. The following are the minimum requirements for the lettering on the placard:

- Verbiage "Lowe's Item #" should be a minimum of 1/2 inch high
- Actual item number itself should be a minimum of 1 and 5/8 inches high (2 inches preferred) and bolded
- Item description should be a minimum of 1 inch high and bolded
- 12of5 bar code must be a minimum of 3/4 inch high by 3 inches wide
- 12of5 bar code numbers below the bar code should be a minimum of 1/4 inch high
- Quantity associated with the bar code should be a minimum of 1/2 inch high