

## Storage Rack

### Pallet Rack

Expand your useable storage space while maximizing all available space within your building – both horizontally and vertically.

Lyon's teardrop design features a roll form welded upright and is totally interchangeable with all major teardrop-style products on the market today.

Tough, Durable, Smooth Finish features our baked-on powder epoxy finish which gives an appliance-like finish that is impact and corrosion resistant.

Available in stock:

Gray – Upright Frames/Accessories  
 Safety Orange – Beams



**Note: For "Big Foot" – Heavy-Duty Pallet Rack Components, see page 77.**



### Step 1

#### Select Upright Frames (see page 74)

Add the following figures:

- Height of pallet loads (including pallet)
- + Height of shelf beam
- + 4" Min. vertical clearance for each pallet load

**Sum of above dimensions = rack height**

For uppermost load level, location of shelf beam should be 6" less than fork truck's maximum lift height. Top of beams need to be at even increments.

### Step 2

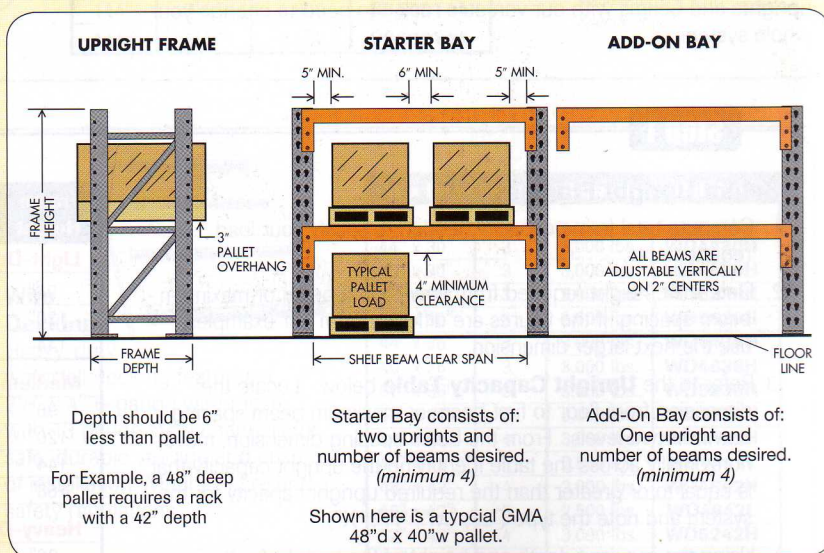
#### Select Beams (see page 75)

Shelf length equals the distance between uprights. It is determined by adding the widths of pallet loads plus a 5" side clearance between upright and pallet and 6" between pallet loads.

Shelf beam capacities are based on a pair of beams supporting an evenly distributed load.

Beams over 120" in length should be tied together with the appropriate front-to-back support (see page 76) to maintain proper spacing at each storage level.

### HOW TO ORDER PALLET RACKS



Depth should be 6" less than pallet.  
 For Example, a 48" deep pallet requires a rack with a 42" depth

Starter Bay consists of: two uprights and number of beams desired. (minimum 4)

Shown here is a typical GMA 48"d x 40"w pallet.

Add-On Bay consists of: One upright and number of beams desired. (minimum 4)

### Step 3

#### Select Decking (see page 75)

Select Decking based on style needed:

- Solid Panel Decking
- Wire Decking

### Step 4

#### Select Accessories (see page 76)



# Storage Rack

IN STOCK

ALL ITEMS ON THIS PAGE ARE FOR IMMEDIATE SHIPMENT

## Pallet Rack - Upright Frames

### Upright Ordering Information

- Choose light, medium, heavy-duty or extra heavy-duty stock uprights to suit your storage requirements:
  - » Light-duty upright posts are 3"w x 1½"d
  - » Medium posts are 3"w x 2½"d
  - » Heavy-duty upright posts are 3"w x 2½"d
  - » Extra heavy-duty upright posts are 3"w x 3"d
- Two frames are required per bay, and any number may be joined together in continuous row applications
- Available in Dove Gray

Uprights conform to standards set by 1997 Rack Manufacturers' Institute LRFD Specifications.



**Unique Design** - Roll formed upright provides greater strength-to-weight ratio. Minimum-sized slots mean more steel per upright. Uprights structures are 100% mig-welded with precision K-brace and heavy-duty cross channel reinforcement for increased strength, rigidity and resistance to abuse.

**Easy Adjustment** - Tapered keyhole slots on 2" centers, provide quick, easy vertical adjustment of beams. There are no "dead spots" or obstructions in upright posts to impede movement of beam along the entire height.

**Interchangeable** - Lyon pallet rack fits with other traditional teardrop designs. That means you can upgrade damaged, weak, or worn out uprights and beams with our versatile rack. No need to change your whole system.



## Step 1

### Select Upright Frames

1. Compute total frame capacity needed to satisfy your load requirements.
2. Determine height required from floor to first beam or maximum beam spacing. If the figures are different from our examples, use the next larger dimension.
3. Refer to the **Upright Capacity Table** below. Locate the dimension from floor to first beam or maximum beam spacing between two levels. From the beam spacing dimension, move horizontally across the table identifying the upright capacity that is equal to or greater than the required upright capacity for the system and note the type ("L", "M", "H", "X").
4. Using the required depth and height of the upright for the corresponding type identified in step 3, select the appropriate upright catalog number from the table.

Upright Capacity Table

Largest Beam Span	"L" Upright Capacity	"M" Upright Capacity	"H" Upright Capacity	"X" Upright Capacity
36"	18,100 lbs.	29,800 lbs.	32,100 lbs.	38,600 lbs.
48"	15,900 lbs.	24,000 lbs.	25,900 lbs.	31,100 lbs.
60"	12,300 lbs.	18,300 lbs.	19,800 lbs.	23,700 lbs.
72"	9,800 lbs.	14,800 lbs.	16,000 lbs.	19,300 lbs.
84"	7,700 lbs.	11,700 lbs.	12,600 lbs.	15,400 lbs.
96"	6,100 lbs.	9,400 lbs.	10,200 lbs.	12,400 lbs.

Frame Height	30" deep Cat. No.	36" deep Cat. No.	42" deep Cat. No.	48" deep Cat. No.
<b>Light-Duty Upright Frames ("L" Post)</b>				
96"	N/A	F1436096	F1442096	F1448096
120"	N/A	N/A	F1442120	F1448120
144"	N/A	F1436144	N/A	N/A
<b>Medium-Duty Upright Frames ("M" Post)</b>				
96"	F2030096	F2036096	F2042096	F2048096
120"	N/A	F2036120	F2042120	F2048120
144"	N/A	F2036144	F2042144	F2048144
168"	N/A	N/A	F2042168	N/A
<b>Heavy-Duty Upright Frames ("H" Post)</b>				
96"	F2430096	F2436096	F2442096	F2448096
120"	N/A	F2436120	F2442120	F2448120
144"	N/A	F2436144	F2442144	F2448144
168"	N/A	F2436168	F2442168	F2448168
192"	N/A	F2436192	F2442192	F2448192
<b>Extra Heavy-Duty Upright Frames ("X" Post)</b>				
144"	N/A	N/A	F3042144	N/A
168"	N/A	N/A	F3042168	N/A

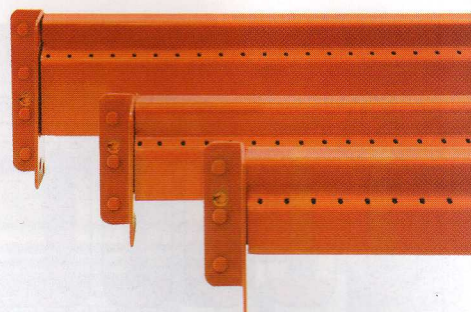


## Storage Rack

## Pallet Rack - Beams

## Beam Ordering Information

- Roll-formed beams feature an integrated  $1\frac{5}{8}$ " step for decking and are totally enclosed for clean applications
- Heavy-duty rivet-type connectors engage upright wedge slots for increased holding power
- Beams are easy to assemble, disassemble, and relocate
- Available in Safety Orange



**Three-Point Safety Catch** — Each beam has 3 rugged studs (4 on heavy-duty) that engage the tapered keyhole slots in the

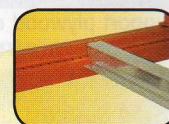
upright with a compression fit. Integral safety lock automatically locks into place when beam is properly seated.

## Step 2

## Select Beams

1. Determine load weights per pair of beams.  
(Two 2,500-lb. pallet loads = 5,000 lb. beam capacity).
2. Determine length of beam required based on load width and minimum clearances.  
(Minimum clearance between pallets and pallet and upright is 4", or for two 48" pallets, a total of 12". Use 108" beam).
3. Refer to desired beam length and move across table to rated capacities.  
(For 108" beam and 5,000 lb. load, select beam S4264108).

Clear Span	Height of Beams	Cap. (lbs.) per pair	Cat. No.
96"	3 $\frac{1}{2}$ "	3,650	<b>S3600096</b>
96"	4 $\frac{1}{8}$ "	5,280	<b>S4124096</b>
96"	5 $\frac{1}{8}$ "	7,596	<b>S5124096</b>
108"	3 $\frac{1}{2}$ "	2,940	<b>S3600108</b>
108"	4 $\frac{1}{8}$ "	4,230	<b>S4124108</b>
108"	4 $\frac{5}{8}$ "	5,520	<b>S4624108</b>
108"	5 $\frac{1}{8}$ "	6,788	<b>S5124108</b>
108"	6"	11,206	<b>S5900108</b>
120"	5 $\frac{1}{8}$ "	5,887	<b>S5124120</b>
120"	6 $\frac{1}{2}$ "	10,152	<b>S6500120</b>
144"	5 $\frac{1}{2}$ "	4,890	<b>S5500144</b>
144"	6 $\frac{1}{2}$ "	8,482	<b>S6500144</b>

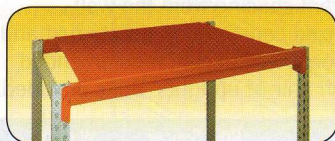


Beams 120" long and greater should be tied together with at least one front-to-back support except when solid decking panels are used.

Beams conform to the standards set by 1997 Rack Manufacturers' Institute LRFD Specifications.

## Step 3

## Select Decking

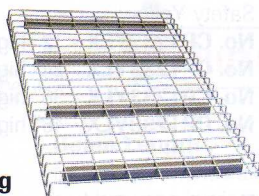


## Solid Decking Panels

Heavy, 14-gauge panels feature three  $1\frac{1}{2}$ " x  $1\frac{1}{2}$ " 14-gauge square tube reinforcing channels welded on the underside for maximum strength and durability. Panels drop into place to provide a solid deck surface.

W x D	Capacity	Cat. No.
<b>Solid Decking Panels</b>		
48" x 30"	7,740 lbs.	<b>SSD3047</b>
60" x 30"	6,000 lbs.	<b>SSD3059</b>
48" x 36"	5,640 lbs.	<b>SSD3647</b>
60" x 36"	4,890 lbs.	<b>SSD3659</b>
48" x 42"	10,320 lbs.	<b>SSD4247</b>
60" x 42"	8,000 lbs.	<b>SSD4259</b>
48" x 48"	7,520 lbs.	<b>SSD4847</b>
60" x 48"	6,520 lbs.	<b>SSD4859</b>

Nominal width; actual is 2" less.



## Wire Decking

Heavy-duty waterfall decking features a  $2\frac{1}{2}$ " x 4" 6-gauge wire mesh with 13 gauge steel channels for safe, durable storage and ease of installation. Meets all fire and safety regulations.

Wire decking sizes necessary to fit Lyon pallet rack

Beam Width	Wire Decking Sizes
90"	(2) 44"W
96"	(2) 46"W
102"	(1) 46"W and (1) 52"W
108"	(2) 52"W
120"	(2) 58"W
144"	(3) 46"W

W x D	# Channels	Capacity	Cat. No.
<b>Wire Decking</b>			
44" x 30"	3	3,000 lbs.	<b>WD4430H</b>
46" x 30"	3	3,000 lbs.	<b>WD4630H</b>
52" x 30"	3	3,000 lbs.	<b>WD5230H</b>
58" x 30"	3	3,000 lbs.	<b>WD5830H</b>
44" x 36"	3	3,000 lbs.	<b>WD4436H</b>
46" x 36"	3	3,000 lbs.	<b>WD4636H</b>
52" x 36"	3	3,000 lbs.	<b>WD5236H</b>
58" x 36"	3	3,000 lbs.	<b>WD5836H</b>
44" x 42"	4	3,000 lbs.	<b>WD4442H</b>
44" x 42"	3	2,500 lbs.	<b>WD4442L</b>
46" x 42"	4	3,000 lbs.	<b>WD4642H</b>
46" x 42"	3	2,500 lbs.	<b>WD4642L</b>
52" x 42"	4	3,000 lbs.	<b>WD5242H</b>
52" x 42"	3	2,500 lbs.	<b>WD5242L</b>
58" x 42"	4	3,000 lbs.	<b>WD5842H</b>
58" x 42"	3	2,500 lbs.	<b>WD5842L</b>
44" x 48"	4	2,800 lbs.	<b>WD4448H</b>
44" x 48"	3	2,250 lbs.	<b>WD4448L</b>
46" x 48"	4	2,800 lbs.	<b>WD4648H</b>
46" x 48"	3	2,250 lbs.	<b>WD4648L</b>
52" x 48"	4	2,800 lbs.	<b>WD5248H</b>
52" x 48"	3	2,250 lbs.	<b>WD5248L</b>
58" x 48"	4	2,800 lbs.	<b>WD5848H</b>
58" x 48"	3	2,250 lbs.	<b>WD5848L</b>



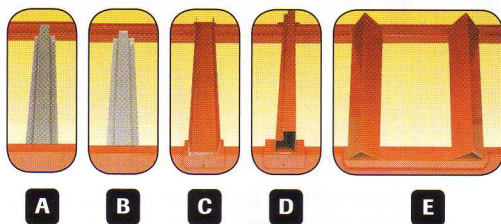
# Storage Rack

## Pallet Rack Accessories



### Step 4

### Select Accessories



#### (A) Front-to-Back Support

Reduces the likelihood of inaccurately placed pallets falling through.

#### (B) Plywood Support Channel

To support plywood or other decking material, or as front-to-back member between beams.

#### (C) Skid Support

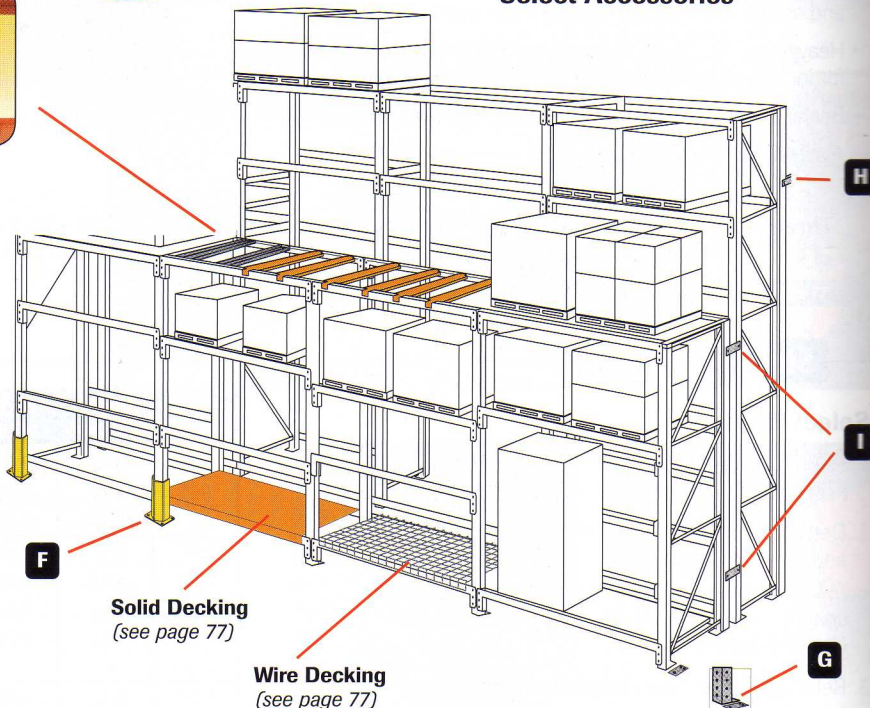
Provides secure, easily adjustable base for skid runners.

#### (D) Fork Entry Bar

Solid base and proper fork clearance for non-palletized loads

#### (E) Drum Cradle

For safe storage of cylindrical items. Welded unit fits securely on beams.



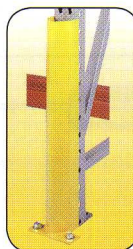
**Solid Decking**  
(see page 77)

**Wire Decking**  
(see page 77)

#### (F) Impact Support

Provides extra protection against abuse. Bolt on to floor only. Finish is Safety Yellow.

**No. CP1233YLX** - 12" high  
**No. CP1233YLX** - 24" high  
**No. CP1233YLX** - 36" high  
**No. CP1233YLX** - 48" high



#### Upright Anchor

Optional wedge-type anchor can be used to secure column posts. 1/2" dia. x 3 3/4" long.

**No. 25163**



#### (G) Shim Plate

Nests under footplate. Unpainted.

**No. SHM053**



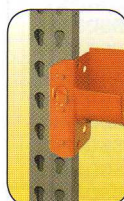
#### (H), (I) Row Spacers & Wall Ties

Row spacer provide a stabilizing connection for back-to-back rows of racks; wall ties provide stability and consistent spacing from the wall. Galvanized construction resists rust and corrosion. Two spacers recommended for each pair of uprights. Bolts included.

Dimension	Row Spacer Cat. No.	Wall Tie Cat. No.
<b>Row-and-Wall Support</b>		
4" Long	RRF04	RWTS04
6" Long	RRF06	RWTS06
8" Long	RRF08	RWTS08
10" Long	RRF10	RWTS10
12" Long	RRF12	RWTS12
18" Long	RRF18	RWTS18

Dimension	Capacity	Cat. No.
<b>Front-to-Back Support</b>		
30" Deep	2,958 lbs.	TSB130
36" Deep	2,806 lbs.	TSB136
42" Deep	2,711 lbs.	TSB142
48" Deep	2,645 lbs.	TSB148
<b>Plywood Support Channel</b>		
30" Deep	1,714 lbs.	SST030
36" Deep	1,626 lbs.	SST036
42" Deep	1,570 lbs.	SST042
48" Deep	1,532 lbs.	SST048
<b>Skid Support</b>		
30" Deep	2,700 lbs.	CSCH3003
36" Deep	2,550 lbs.	CSCH3603
42" Deep	2,550 lbs.	CSCH4203
48" Deep	2,225 lbs.	CSCH4803
<b>Fork Entry Bar</b>		
30" Deep	4,922 lbs.	FES030
36" Deep	3,525 lbs.	FES036
42" Deep	3,365 lbs.	FES042
48" Deep	2,900 lbs.	FES048
<b>Drum Cradle</b>		
30" Deep	2,583 lbs.	DDB30
36" Deep	2,436 lbs.	DDB36

**NOTE:** Load-carrying capacities for individual accessories listed are based on evenly distributed loads and are limited by the support capacity of the beams and/or upright assemblies. When skid supports, fork-entry bars and/or front-to-back supports are used to support the load, the weight is not evenly distributed to the beam and, therefore, beam capacities are reduced significantly.



#### Reel Support Bracket

Converts standard rack to reel or coil rack. Axle not furnished. Accommodates axle pipe or rod up to 1 1/4" O.D.

**No. RH0175L** - Left Hand  
**No. RH0175R** - Right Hand



## Heavy-Duty Pallet Rack - "Big Foot"



**Embedment Anchors**

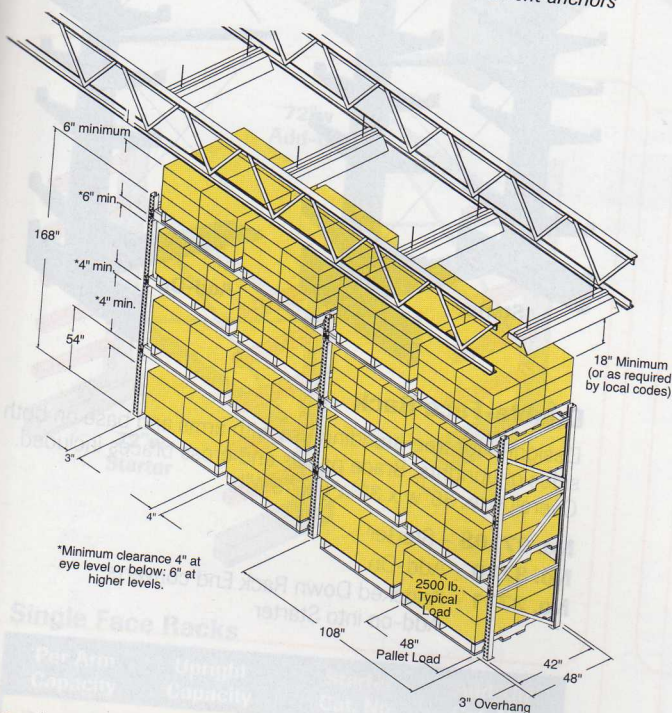
Bigfoot® Rack from Lyon gets its name from the oversized 8" x 5" x 3/8" thick all-welded footplate which anchors our 12-gauge steel, 55,000 psi upright posts. The 3" x 3" uprights are slotted to allow easy beam adjustment on 2" centers. All bracing is box tubing, which produces a structurally superior member.

All of our 15-gauge steel, 55,000 psi beams feature a four-stud connector which

utilizes a spring loaded, tamper-resistant, integral locking mechanism. Beams also offer you a choice of two lengths in capacities of up to 6,300 lbs. per level. The step beam ledge is slotted at 1" intervals to accept drop-in front-to-back supports.

Bigfoot components are finished in tough powder coat – Dove Gray on uprights and Safety Orange on beams.

*Note: Uprights accept two 1/2" dia. x 4 1/2" long embedment anchors per base plate.*



## Heavy Duty Pallet Rack Components

Dimensions				
Width	Depth	Height	Capacity	Cat. No.
Uprights				
--	36"	120"	17,295 lbs.	D4026120
--	36"	144"	17,295 lbs.	D4036144
--	36"	192"	17,295 lbs.	D4036192
--	42"	120"	17,295 lbs.	D4042120
--	42"	144"	17,295 lbs.	D4042144
--	42"	192"	17,295 lbs.	D4042192
Beams				
96"	--	--	5,000 lbs.	SOS41240964
108"	--	--	6,300 lbs.	SOS51241084
Anchor				
--	Dia. 1/2"	Length 4-1/2"	17,295 lbs.	25165

## 1 PALLET RACK SAFETY RECOMMENDATIONS

### Beam Length

Lyon recommends a clearance of 4" between palletized loads – and between loads and uprights. Minimum clearance between loads and upright posts should not be less than 3". Beams over 120" in length should be tied together with the appropriate front-to-back support to maintain proper spacing at each storage level.

### Back-to-back Clearance

Clearance should be sufficient to accommodate minimum pallet overhang and tolerances – where pallet placement may vary. Additional clearances may be required to accommodate building structures or intermediate sprinkler systems (according to local codes).

### Installation and Anchoring

To insure minimum stability standards, racks should be level, plumb and properly anchored.

### Seismic Zones

Since requirements vary so widely, we advise you to contact Lyon for assistance on rack projects in high risk seismic zones. Please call 800-323-0096.

Determine actual load requirements as accurately as possible and adhere to rated capacities shown in tables on the proceeding pages. Additional precautions should be taken in applications where extraordinary rack abuse is anticipated. For example, when narrow aisles are used for high speed or high inventory turnover operations, Lyon recommends additional rack reinforcement. Impact supports and aisle guidance devices may be advisable – especially at aisle intersections and other vulnerable locations.