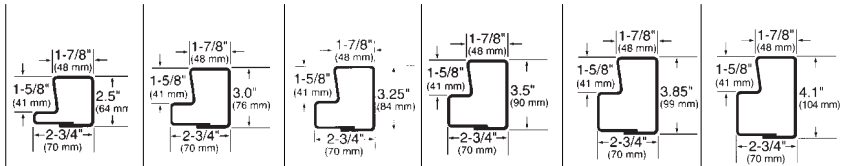


SELECTIVE RACK 5000 SERIES BEAM CAPACITY TABLES

Rated capacities (per pair of beams with uniformly distributed loads)

This table presents data for uniformly distributed loads. Beams 120" or longer should be tied together with at least one front to back bar.

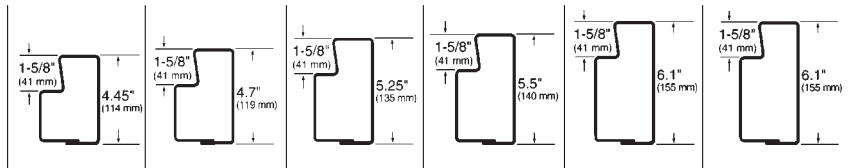
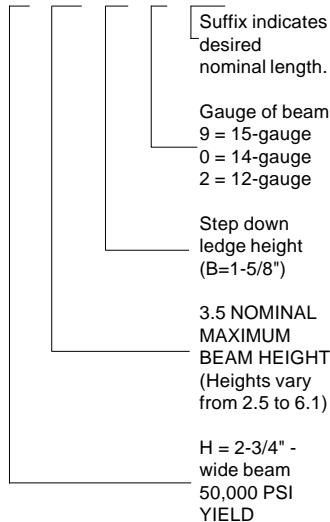
Catalog Designations
See example below. The first character designates the beam width. The next two designate the beam height in inches and tenths of an inch. Then follows the step-down ledge height and thickness code. The suffix indicates the beam length.



Beam	Nom. Length "L"	Max Allow Defl.	H25B9 2 Prong Hook		H30B9 3 Prong Hook		H33B9 3 Prong Hook		H35B0 3 Prong Hook		H39B0 3 Prong Hook		H41B0 3 Prong Hook	
			Safe Load	Act. Defl.	Safe Load	Act. Defl.	Safe Load	Act. Defl.	Safe Load	Act. Defl.	Safe Load	Act. Defl.* (IN)	Safe Load	Act. Defl.
48"	.27	5,000	.13	6,700	.12	7,500	.11	9,200	.10	10,200	.09	11,600	.09	
54"	.30	4,500	.17	5,900	.14	6,700	.14	8,200	.13	9,100	.12	10,300	.11	
60"	.33	4,000	.20	5,300	.18	6,000	.17	7,400	.16	8,200	.14	9,300	.14	
66"	.37	3,700	.25	4,800	.21	5,500	.20	6,700	.19	7,400	.17	8,400	.16	
74"	.41	3,300	.31	4,300	.27	4,900	.25	6,000	.24	6,600	.21	7,500	.20	
82"	.46	2,900	.38	3,900	.33	4,400	.31	5,400	.29	6,000	.26	6,800	.25	
90"	.50	2,700	.46	3,500	.39	4,000	.37	4,900	.34	5,400	.31	6,200	.30	
92"	.51	2,600	.48	3,400	.42	3,900	.38	4,800	.36	5,300	.33	6,000	.31	
96"	.53	2,500	.52	3,300	.44	3,700	.41	4,600	.39	5,100	.36	5,800	.34	
102"	.57	2,200	.55	3,100	.50	3,500	.47	4,300	.44	4,800	.40	5,400	.38	
106"	.59	2,100	.59	3,000	.54	3,400	.51	4,100	.47	4,600	.43	5,200	.41	
108"	.60	2,000	.59	2,900	.56	3,300	.52	4,000	.49	4,500	.45	5,100	.43	
114"	.63	1,800	.63	2,800	.63	3,100	.58	3,800	.54	4,300	.50	4,900	.48	
120"	.67	1,600	.65	2,500	.66	3,000	.65	3,700	.61	4,100	.56	4,600	.53	
126"	.70	1,400	.66	2,300	.70	2,800	.70	3,500	.67	3,900	.62	4,400	.58	
132"	.73	1,300	.70	2,100	.73	2,500	.72	3,300	.72	3,700	.67	4,200	.64	
138"	.77	1,200	.74	1,900	.76	2,300	.76	3,000	.75	3,500	.73	4,000	.69	
144"	.80	1,100	.78	1,700	.77	2,100	.78	2,800	.80	3,400	.80	3,800	.75	
156"	.87	900	.80	1,500	.86	1,800	.85	2,400	.87	2,900	.87	3,400	.85	
162"	.90	800	.90	1,400	.90	1,700	.90	2,200	.89	2,700	.90	3,200	.90	
180"	1.0	700	.96	1,100	.97	1,300	.95	1,800	1.00	2,100	.96	2,600	1.00	

EXAMPLE

H 35 B 0 96



Beam	Nom. Length "L"	Max Allow Defl.	H45B0 4 Prong Hook		H47B0 4 Prong Hook		H53B0 4 Prong Hook		H55B0 4 Prong Hook		H61B0 4 Prong Hook		H61B2 4 Prong Hook	
			Safe Load	Act. Defl.	Safe Load	Act. Defl.	Safe Load	Act. Defl.	Safe Load	Act. Defl.	Safe Load	Act. Defl.* (IN)	Safe Load	Act. Defl.
48"	.27	12,800	.08	14,500	.80									
54"	.30	11,300	.10	12,900	.10	14,700	.09							
60"	.33	10,200	.13	11,600	.12	13,200	.11							
66"	.37	9,300	.15	10,500	.14	12,000	.13							
74"	.41	8,300	.19	9,400	.18	10,700	.16	12,800	.23					
82"	.46	7,400	.23	8,500	.22	9,600	.20	11,600	.28					
90"	.50	6,800	.28	7,700	.26	8,800	.24	10,500	.34	12,200	.31			
92"	.51	6,600	.29	7,500	.27	8,600	.25	10,300	.36	11,900	.32			
96"	.53	6,400	.31	7,200	.30	8,200	.27	9,900	.39	11,400	.25			
102"	.57	6,000	.35	6,800	.34	7,700	.30	9,300	.44	10,800	.40			
106"	.59	5,800	.38	6,500	.36	7,400	.32	9,000	.47	10,400	.43			
108"	.60	5,600	.39	6,400	.37	7,300	.34	8,800	.49	10,200	.44			
114"	.63	5,300	.44	6,100	.42	6,900	.37	8,300	.55	9,600	.49			
120"	.67	5,100	.49	5,800	.47	6,600	.42	7,900	.60	9,200	.55	12,900	.57	
126"	.70	4,800	.53	5,500	.51	6,300	.46	7,600	.67	8,700	.60	12,400	.63	
132"	.73	4,600	.58	5,200	.55	6,000	.50	7,200	.73	8,300	.66	11,800	.69	
138"	.77	4,400	.64	5,000	.61	5,700	.55	6,700	.77	8,000	.72	11,300	.75	
144"	.80	4,200	.69	4,800	.66	5,500	.60	6,100	.80	7,700	.78	10,600	.80	
156"	.87	3,900	.82	4,400	.77	5,000	.69	5,200	.87	6,700	.87	9,100	.87	
162"	.90	3,700	.87	4,300	.84	4,900	.76	4,900	.90	6,200	.90	8,400	.90	
180"	1.0	3,100	1.00	3,700	1.00	4,400	.93	4,900	1.00	5,100	1.00	6,800	1.00	

NOTE: Tabulated loads are safe uniform loads applied over the entire length of two beams. Capacities are based on a 1.67 factor of safety against yield of the extreme top fiber.

*Maximum deflection permitted by the Rack Manufacturers institute Code is L/180.

SELECTIVE RACK ORDERING INFORMATION

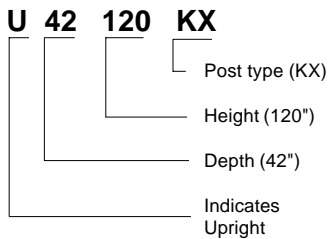
CHART A

SERIES 5000 UPRIGHTS

Refer first to rack application recommendations.

- Determine total frame capacity required.
- Determine maximum height required from floor to first beam or maximum beam spacing. Use highest figure if different.
- Refer to bottom of chart A at right. Reading left to right, locate
 - height from floor to first beam or maximum beam spacing. Use highest figure if different. Move vertically up chart to
 - weight capacity for your requirement. Moving to the right, locate the first post capacity curve that intersects your required weight capacity. Follow curve down and across to determine appropriate post. Now you are ready to determine product number - such as example below:

EXAMPLE



All Paltier uprights are made of 50,000 psi yield high-strength steel.

- Select Height And Depth.

NOTE: Paltier recommends that pallets overhang beams by 3" the minimum overhang is 2". If the overhang is less than 2", front-to-back bars are required to prevent misplaced pallets from falling through.

Capacities are based on a safety factor of 1.92.

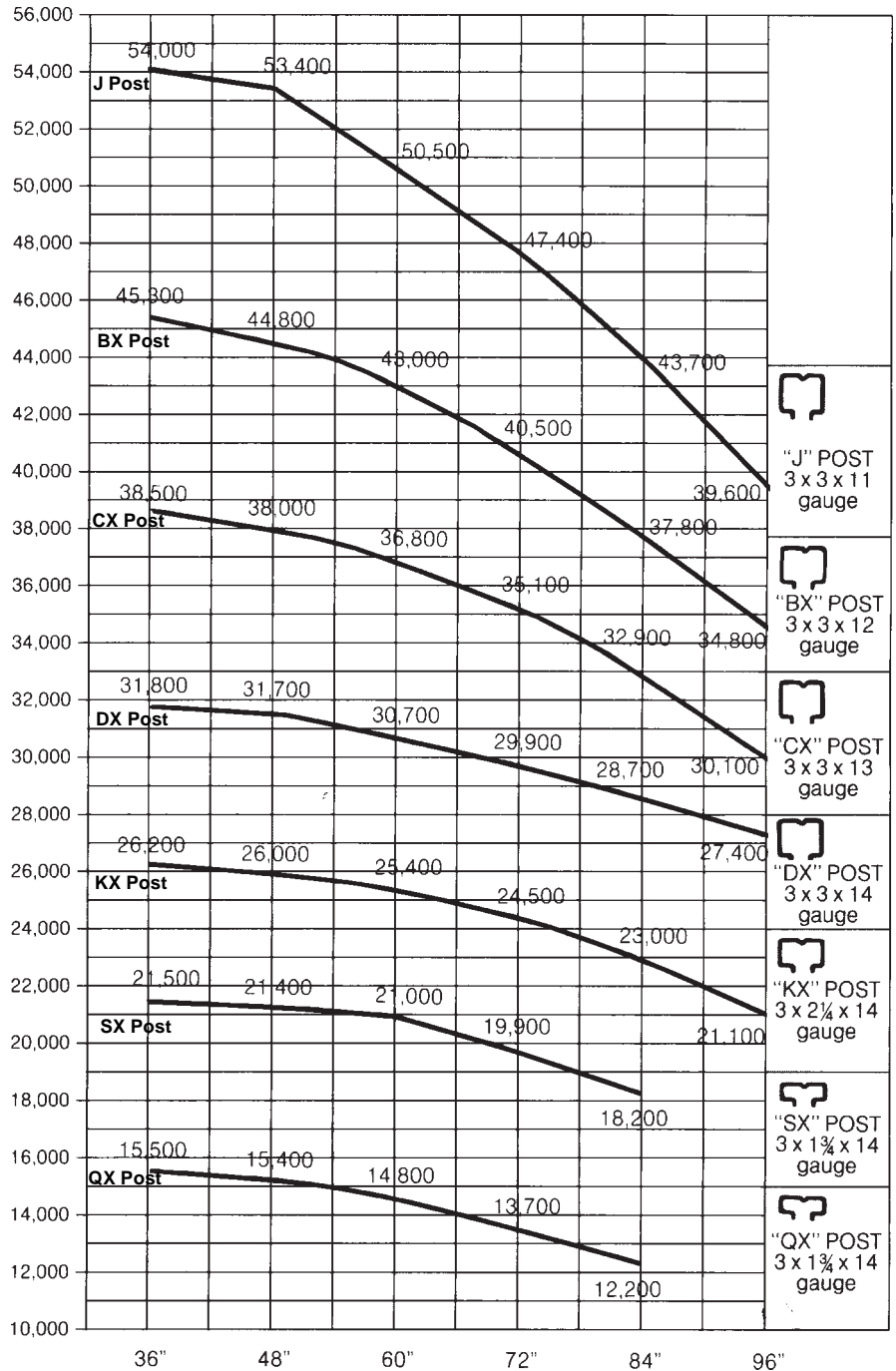


CHART B

Post Type	Max. Hgt.	Capacities					
		36"	48"	60"	72"	84"	96"
"QX"	14'	15,500	15,400	14,800	13,700	12,200	N/A
"SX"	20'	21,500	21,400	21,000	19,900	18,200	N/A
"KX"	25'	26,200	26,000	25,400	24,500	23,000	21,100
"DX"	30'	31,800	31,700	30,700	29,900	28,700	27,400
"CX"	30'	38,500	38,000	36,800	35,100	32,900	30,100
"BX"	30'	45,300	44,800	43,000	40,500	37,800	34,800
"J"	30'	54,000	53,400	50,500	47,400	43,700	39,600

HEIGHT TO FIRST BEAM OR MAXIMUM BEAM SPACING (inches).

SELECTIVE RACK APPLICATIONS

General Recommendations

To get the longer life that can be expected from Paltier selective rack, design of load(s) should be accurately determined and ratings of rack components not exceeded. If warehouse operations cause exceptional rack abuse, however, additional conservatism in selection of components is recommended. Post protectors (especially at aisle intersections), extra "beefing-up" or aisle guidance may be advisable. If aisles are too narrow for a high-speed, high-inventory turnover operation, for example, exceptional abuse can be anticipated.

GIVEN: Loads as shown.

SELECT: Proper frames and beams.

BEAMS: Load--6,000 lb/pair. See beam chart.

For 108" beam length, select H47BO beam with 6,400-lb rated capacity.

Catalog Number is H47BO-108.

UPRIGHT FRAME:

Load = $6 \times 3,000 \text{ lb} = 18,000 \text{ lb}$

Height to first beam (or maximum beam spacing--whichever is higher) = 59". Upright height = 192".

For 192" upright height, select "SX" post and 21,000-lb rated capacity.

Catalog Number is U34192SX.

Pallet Rack Selection

FRAME DEPTH: Paltier recommends that pallets over-hang beams by 3". The minimum overhang should be 2". If the overhang is less than 2", front-to-back bars are required to prevent misplaced pallets from falling through.

STORAGE HEIGHT: For lower storage levels, at least 4" clearance should be provided between the top of loads and the bottom of beams above; 6" or more should be provided at higher storage levels. A minimum of 18" clearance is required between the top of top loads and ceiling sprinklers.

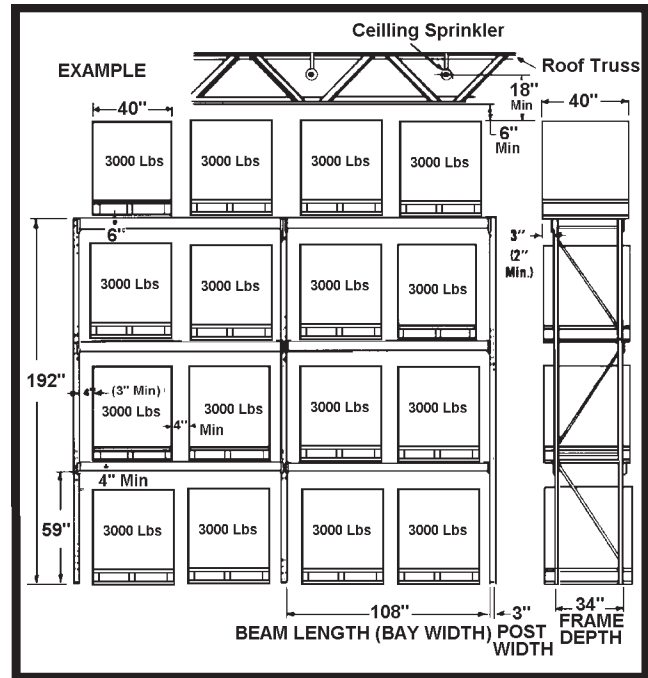
FRAME SELECTION: See example, above.

BEAM LENGTH: The length should be adequate to ensure easy placement and removal of pallets. There should be no less than 3", preferably 4", between pallets and posts. At least 4" clearance should be allowed between pallets. If straddle-type lift trucks are used, additional clearance between pallets and posts may be required. To keep long beams from spreading, beams over 120" in length should be tied together with at least one front-to-back bar in the center.

BEAM SELECTION: See example, above.

BACK-TO-BACK CLEARANCE: Clearance between rows of racks should consider rear pallet overhang, possible building columns and at least 6" clearance when intermediate sprinklers are to be installed in racks.

HEIGHT-TO-DEPTH RATIO: If the ratio of the rack height to the top of the uppermost load to the frame depth exceeds 6 to 1, additional stabilizing is required.



IN DOUBLE-ROW RACKS: This is easily accomplished by use of two back-to-back ties, one installed near the bottom and one near the top of the rack. Tying together the two rows greatly increases the rack's effective depth, thereby increasing the allowable height.

SINGLE-ROW RACKS: These can most easily be stabilized by anchoring to a wall or to the floor, using heavy-duty foot plates and anchor bolts that are reliably rated. Alternatively, single-row racks can be tied overhead across the aisle to an opposite rack or, with caution, tied with wire rope to roof trusses.

INSTALLATION: Racks must be installed reasonably level and plumb. Ratings are based on their being installed plumb within at least 1" of 10' in height. When they are not plumb, additional stresses are induced that reduce capacity. Paltier shim plates nest into footplates so plumbness can easily be achieved

whether racks are anchored to the floor or not. Drive-in/Drive-through must always be anchored.

Personal Safety Considerations

UNSTABLE LOADS- If loads are not stable, a retaining device--wire mesh, retaining bars or sheet steel, as

examples--should be placed at the rear or the side of any rack adjacent to a walkway or aisle. Unstable loads should never be stored in over-aisle locations.

OVER-AISLE STORAGE--This substantially improves utilization of available warehouse space. Only stable loads should be stored in these locations, however. Further, to prevent the possibility of a misplaced load falling into an aisle, front-to-back bars are recommended for added safety. Solid decking of some type is recommended over aisles.

DRIVER TRAINING AND SUPERVISION--Good rack design is not a substitute for driver training and reasonable operating practices. No rack can withstand the full impact of a lift truck traveling at high speed.