Rivet-Span®

Rivet-Span starts with a simple, economical design. A unit consists of posts, horizontal beams and wood decking. Using sturdy rack-like beam-to-post connections, beams have high strength shoulder rivets that engage double keyhole post slots. The assembled heavy-duty, 14 gauge steel frame forms an extremely strong and rigid storage unit.

A variety of beams adds versatility. Rivet-Span has six types and 15 sizes, in spans and depths wider and greater than conventional shelving, to accommodate a wide range of loads and optimize your storage.

All components are universal – no lefts or rights, no fronts or backs. Units are universal and can be accessed from any or all four sides.

Without the hassle of nuts, bolts, clips or cross braces, installation is quick and easy. Most units can be assembled in minutes using only a rubber mallet.

This results in a storage product that is incredibly economical, versatile and easy to assemble...And, Borroughs' finish process means your Rivet-Span will continue to look great, even after years of heavy use.



Economical

Low initial investment reduces shelving costs.

Quick labor saving installation reduces set-up costs.

Sizes to eliminate costly decking material cutting charges.

Strong

Steel frame construction extends shelving life.

Rigid boltless connection between posts and beams.

Secure double key hole and shoulder rivet connections.

Flexible

Allows access from any or all four sides.

Variety of beams to accommodate a wide range of loads.

Spans up to 8' to optimize storage.

Simple Assembly

All pieces universal

- No lefts or rights
- No fronts or backs
- No tops or bottoms

Requires no cross or sway braces.



Bulk Storage Units

Rivet-Span is ideally suited to virtually any type of hand-loaded material. It is designed for greater cube capacity than shelving and lower price than rack. Rivet-Span can be used to make bulk storage racks for storing a broad range of hand-loaded heavy materials, bulky parts or hard-to-store items.

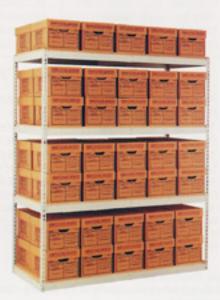
- Designed for spans of 48" to 96" wide.
- Choice of beam capacity to meet your storage requirements.
- Uses double rivet angle, channel or Z beams.
- Beam levels adjust on 1-1/2" centers.
- T Post adder units further reduce material investment and installation time.



Shelf Units

Rivet-Span can also be used as quick, low-cost steel wood shelving. Single rivet and double rivet low profile beams provide maximum space between shelf levels. Plus, Rivet-Span is ideal for double entry shelving units. It can be accessed from all four sides because no cross braces or face braces are required for stability.

- Designed for units up to 48" wide.
- Uses single rivet or double rivet low profile beams on intermediate levels.
- Uses full "perimeter" double rivet angle beams at the top and bottom levels for rigidity.
- Shelf levels adjust on 1-1/2" centers.
- T Posts provide additional savings on runs of shelving.



Specialty Units

Special uses of Rivet-Span are limited only by the imagination of the individual. Some of the obvious uses are as archival records storage units or tire racks or three foot high units and rows as work benchs and packing or receiving tables. Additionally, retail establishments can use Rivet-Span for back room garment hang rod units. Rivet-Span is perfect for many hard-to-store items.

Rivet-Span®

Bulk Storage Units

Simple, economical storage that is strong for today's wide variety of handloaded bulky, heavy, or hard-to-store items. Rivet-Span offers a complete range of sizes with spans and depths wider and greater than conventional shelving.



48" Wide



4 Beam Levels 7'0" High

Starter Unit	Adder Unit	Unit Depth	Capacity Per Beam Level***	Beam Type	Extra Beam Level
B4818DR47	A4818DR47	18"	730 lbs.	Angle	BL4818DR
B4824DR47	A4824DR47	24"	730 lbs.	Angle	BL4824DR
B4830DR47	A4830DR47	30"	730 lbs.	Angle	BL4830DR
B4836DR47	A4836DR47	36"	730 lbs.	Angle	BL4836DR
B4848DR47	A4848DR47	48"	730 lbs.	Angle	BL4848DR
B6018DR47	A6018DR47	18"	680 lbs.	Angle	BL6018DR BL6018DH

60" Wide



B6018DR47	A6018DR47	18"	680 lbs.	Angle	BL6018DR
B6018DH47	A6018DH47		1300 lbs.	"Angle	BL6018DH*
B6018CH47	A6018CH47		*2250 lbs.	*Channel**	BL6018CH*
B6024DR47	A6024DR47	24"	680 lbs.	Angle	BL6024DR
B6024DH47	A6024DH47		*1300 lbs.	*Angle	BL6024DH*
B6024CH47	A6024CH47		*2250 lbs.	*Channel**	BL6024CH*
B6030DR47	A6030DR47	30"	680 lbs.	Angle	BL6030DR
B6030DH47	A6030DH47		*1300 lbs.	*Angle	BL6030DH*
B6030CH47	A6030CH47		*2250 lbs.	*Channel**	BL6030CH*
B6036DR47	A6036DR47	36"	680 lbs.	Angle	BL6036DR
B6036DH47	A6036DH47		*1300 lbs.	*Angle	BL6036DH*
B6036CH47	A6036CH47		*2250 lbs.	*Channel**	BL6036CH*
B6048DR47	A6038DR47	48"	680 lbs.	Angle	BL6048DR
B6048DH47	A6038DH47		*1300 lbs.	*Angle	BL6048DH*
B6048CH47	A6048CH47		*2250 lbs.	*Channel**	BL6048CH*

72" Wide



A7218DR47	18"			BL7218DR
A7218DH47		*1050 lbs.		BL7218DH*
A7218CH47		*1700 lbs.	"Channel"	BL7218CH*
A7224DR47	24"	450 lbs.	Angle	BL7224DR
A7224DH47		*1050 lbs.	*Angle	BL7224DH*
A7224CH47		*1700 lbs.	*Channel**	BL7224CH*
	30"	450 lbs.	Angle	BL7230DR
		*1050 lbs.	*Angle	BL7230DH*
		*1700 lbs.	*Channel**	BL7230CH*
	36°	450 lbs.	Angle	BL7236DR
		*1050 lbs.	*Angle	BL7236DH*
		*1700 lbs.	*Channel**	BL7236CH*
	48"	450 lbs.	Angle	BL7248DR
		*1050 lbs.	*Angle	BL7248DH*
A7248CH47		*1700 lbs.	*Channel**	BL7248CH*
	A7218CH47 A7224DR47 A7224CH47 A7224CH47 A7230DR47 A7230DH47 A7230CH47 A7236DR47 A7236DH47 A7236CH47 A7248DR47 A7248DH47	A7218DH47 A7218CH47 A7224DR47 A7224DH47 A7224CH47 A7230DR47 A7230DH47 A7230CH47 A7236DR47 A7236DH47 A7236DH47 A7236CH47 A7236CH47 A7248DR47 A7248DH47	A7218DH47 *1050 lbs. A7218CH47 *1700 lbs. A7224DR47 24" 450 lbs. A7224DH47 *1050 lbs. A7224CH47 *1050 lbs. A7230DR47 30" 450 lbs. A7230DH47 *1050 lbs. A7230CH47 *1050 lbs. A7236DR47 36" 450 lbs. A7236DH47 *1050 lbs. A7236CH47 *1050 lbs. A7236CH47 *1050 lbs. A7248DR47 48" 450 lbs. A7248DH47 *1050 lbs. A7248DH47 *1050 lbs. A7248DH47 *1050 lbs.	A7218DH47 *1050 lbs. *Angle *1700 lbs. *Channel** A7224DR47 24" 450 lbs. Angle *1700 lbs. *Angle *1700 lbs. Angle *1700 lbs. Angle *1700 lbs. *Channel** A7224CH47 *1700 lbs. *Channel** A7230DR47 30" 450 lbs. Angle *1700 lbs. *Angle *1700 lbs. Angle *1700 lbs. *Angle *1700 lbs. *Channel** A7230CH47 *1700 lbs. *Channel** A7236DR47 36" 450 lbs. Angle *1700 lbs. *Angle *1700 lbs. *Angle *1700 lbs. *Channel** A7236CH47 *1700 lbs. *Channel** A7248DR47 48" 450 lbs. Angle *1700 lbs. *Angle *1700 lbs.

96" Wide



B9618DH47	A9618DH47	18"	*650 lbs.	*Angle	BL9618DH*
B9618CH47	A9618CH47		*1300 lbs.	*Channel**	BL9618CH*
B9624DH47	A9624DH47	24"	*650 lbs.	*Angle	BL9624DH*
B9624CH47	A9624CH47		*1300 lbs.	*Channel**	BL9624CH*
B9630DH47	A9630DH47	30"	*650 lbs.	*Angle	BL9630DH*
B9630CH47	A9630CH47	77.7	*1300 lbs.	*Channel**	BL9630CH*
B9636DH47	A9636DH47	36"	*650 lbs.	*Angle	BL9636DH*
B9636CH47	A9636CH47		*1300 lbs.	*Channel**	BL9636CH*
B9648DH47	A9648DH47	48"	*650 lbs.	*Angle	BL9648DH*
B9648CH47	A9648CH47		*1300 lbs.	*Channel**	BL9648CH*

Starter unit has (4) angle posts; Adder unit has (2) T posts.

^{*}Includes (1) support tie, except 96" which has (2) support ties.

^{***}Units with channel beams have angle beams with support ties located directly at the floor level.

***Capacities are for steel beams only with evenly distributed loads and do not reflect the capacity of the decking material. All units include metal frame only. Decking material must be ordered separately.



Rivet-Span® Shelf Units

Quick low-cost shelving with low profile steel supports. Rivet-Span's single rivet and double rivet low profile beams provide optimum vertical shelf openings without the hassle of nuts, bolts, clips or cross braces.

Single Rivet Shelf Units*

7'0" High	6 Beam Levels	Starter Unit	Adder Unit	Unit Depth	Capacity Per Beam Level***	Extra Shelf Level
76" 1854-		B3612SR67	A3612SR67	12"	350 lbs	BL3612SR
36" Wide		B3618SR67	A3618SR67	18"	350 lbs.	BL3618SR
	FEF	B3624SR67	A3624SR67	24"	350 lbs.	BL3624SR
		B3636SR67	A36365R67	36"	350 lbs.	BL3636SR
42" Wide	TIES .	B4212SR67	A4212SR67	12"	260 lbs.	BL4212SR
42 Wide	HH	B4218SR67	A4218SR57	18"	260 lbs.	BL4218SR
FIEF	FIEF	B4224SR67	A4224SR67	24"	260 lbs.	BL4224SR
		B4236SR67	A42365R67	36"	260 lbs.	BL4236SR
48" Wide	rie	B4812SR67	A48125R67	12"	240 lbs.	BL4812SR
46 Wide	HH	B4818SR67	A4818SR67	18"	240 lbs.	BL4818SR
		B4824SR67	A4824SR67	24"	240 lbs.	BL4824SR
		B4836SR67	A4836SR67	36"	240 lbs.	BL4836SR

Double Rivet Low Profile Shelf Units*

		ii Oilito				
7'0" High	7 Beam Levels	Starter Unit Catalog #	Adder Unit Catalog #	Unit Depth	Capacity Per Beam Level***	Extra Shelf Levels
36" Wide	APRIL 1	B3612LP77	A3612LP77	12"	450 lbs.	BL3612LP
36 Wide		B3618LP77	A3618LP77	18"	450 lbs.	BL3618LP
		B3624LP77	A3624LP77	24"	450 lbs.	BL3624LP
	13	B3636LP77	A3636LP77	36"	450 lbs.	BL3636LP
42" Wide	FFFF	B4212LP77	A4212LP77	12"	430 lbs.	BL4212LP
42 Wide		B4218LP77	A4218LP77	18"	430 lbs.	BL4218LP
	REP	B4224LP77	A4224LP77	24"	430 lbs.	BL4224LP
		B4236LP77	A4236LP77	36"	430 lbs.	BL4236LP
48" Wide		B4812LP77	A4812LP77	12*	400 lbs.	BL4812LP
40 Wide		B4818LP77	A4818SR67	18"	400 lbs.	BL4818LP
	H	B4824LP77	A4824LP77	24"	400 lbs.	BL4824LP
		B4836LP77	A4836LP77	36"	400 lbs.	BL4836LP

Starter Unit has (4) angle posts; Adder Unit has (2) T posts.

*All units include double rivet angle beams, left-to-right and front-to-back, at the top and bottom beam levels.

""Extra shelf levels 24" deep or less include left-toright beams only. Extra shelf levels 30" or deeper also include front-toback single rivet beams.

^{***}Capacities are for steel beams only with evenly distributed loads and do not reflect the capacity of the decking material.

All units include metal framing only. Decking material must be ordered separately.

Shelf units 24" deep or less include only (2) intermediate front-to-back single rivet beams. Units 30" or deeper include front-to-back single rivet beams at every intermediate beam level.

Rivet-Span®

Components and Accessories

Angle Post



Standard duty upright post. 1.57" x 1.57", 14 gauge, punched on 1-1/2" centers.

Catalog #	Size	Catalog #	Size
10061-000	6'0"	10061-003	9'0"
10061-000	7'0"	10061-004	10'0"
10061-002	8'0"	10061-006	12'0"

Heavy-Duty Angle Post



Designed for maximum load capacity and stability. 1-7/8" x 1-7/8", 14 gauge, punched on 1-1/2" centers.

30-006	12'0"
60-008	14'0"
	15'0"
	16'0"
	60-008 60-009 60-010

Tie Plate - Angle Post



Connects posts of adjacent angle post units to insure structural stability and alignment. 14 gauge.

Catalog # 10066-000

Post Splicer - Angle Post



Used to extend the height of angle posts or heavy-duty angle posts. 13 gauge.

Catalog # 10065-000

T Post



Common post between adjoining units to create economical starter and adder units. 3.34" x 1.57", 14 gauge, punched on 1-1/2" centers.

Catalog #	Size	Catalog #	Size
10132-000	6'0"	10132-003	9'0"
10132-001	7'0"	10132-004	10'0"
10132-002	8'0"	10132-006	12'0"

Post Splicer - T Post



Used to extend the height of T Posts. 14 gauge.

Catalog # 10145-000

Foot Plate



Used for weight distribution and securing posts to the floor. Designed for single (row end) and double (intermediate) posts. Use with either standard or heavyduty angle, or T posts. 4" x 2", 14 gauge. Catalog #

10060-000

Single Rivet Beam



Left-to-right and front-to-back support for shelf decking. 1" high, 14 gauge.

Catalog #	Size Size	Catalog #	Size
10063-000	12"	10063-004	30"
10063-001	15"	10063-005	36"
10063-002	18"	10063-006	42"
10063-003	24"	10063-007	48"

Double Rivet Low Profile Beam



Heavier duty left-to-right support shelf decking. 1-1/4" high, 14 gauge.

decking, 1-	1/4 11181	1, 14 Booke.	
Catalog #	Size	Catalog #	Size
16330-091	36"	16331-011	48"
16331-001	42"	1577566	

Double Rivet Z Beam





Reduced profile left-to-right and front-toback support recesses decking to provide additional vertical storage space and protect decking edges. 2-1/4" high, 14

Size	Catalog #	Size
12"	10142-005	36"
	10142-006	42"
	10142-007	48"
		60"
	10144-009	69"
	10144-010	72"
		12" 10142-005 15" 10142-006 18" 10142-007 24" 10142-008 30" 10144-009

Z Tie



Used with Z Beam to support decking material.

Catalog # Size		Catalog #	Size
10110-003	24"	10110-005	36"
10110-003	30"	10110-006	42"
10110-012	32"	10110-007	48"

Double Rivet Angle Beam



Standard left-to-right and front-to-back support for bulk storage decking and top and bottom level shelf decking. 2-5/8" x 7/8", 14 gauge.

Catalog #	Size	Catalog # Siz	
10068-000 12"		10068-007	48"
10068-001	15"	10068-008	60"
10068-002	18"	10068-009	69"
10068-002	24"	10097-009*	69"
10068-003	30"	10068-010	72"
10068-012	32"	10068-013	84"
10068-005	36"	10068-011	96"
10068-005	42"	*Punched to acc	

Double Rivet Channel Beam



Higher capacity left-to-right support for bulk storage decking. 3" x 7/8", 14 gauge. Channel beams cannot be located directly at floor level due to their longer face. For a beam level directly at floor level, use angle beams with support ties.

ngle beam: atalog #	Size	Catalog #	Size
0070-007	48"	10070-010	72"
0070-007	60"	10070-013	84"
0070-009	69"	10070-011	96"
0098-009*	69"		

*Punched to accept Record Storage Support Angle.

Components and Accessories

Support Tie



Adds support to decking material and increases capacity of double rivet angle and channel beams by limiting rotation. 2-1/2" high, 14 gauge.

Catalog # Size		Catalog # Si		
10072-000	12"	10072-004	30"	
10072-001	15"	10072-012	32"	
10072-002	18"	10072-005	36"	
10072-003	24"	10072-006	42"	
		10072-007	48"	

Tire Beam



Left-to-right support for tires and wheels. 2-23/32" high, 14 gauge.

Catalog #	Size	Catalog #	Size
10077-005	36"	10077-008	60"
10077-007	48"		

Aisle Tie



Top ties units together across aisles to maintain a constant aisle and stabilize units exceeding a height-to-depth ratio of 4. Not designed to support upper level walkways. 2-1/2" high, 14 gauge.

Catalog #	Size	Catalog #	Size	
10073-000	30"	10073-002	42"	
10073-001	36"	10073-003	48"	

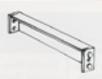
Back Spacer Tie



Spaces back-to-back shelving units where space is required between units such as tire storage. 2-1/2" high, 14 gauge.

Catalog #	Size
10079-000	18"

Wall Tie



Ties rack to wall for stability where space is required between unit and wall such as wheel storage. 2-1/2" high, 14 gauge.

Catalog # Size 10075-000 9"

Record Storage Support Angle



Catalog #	Size
10099-000	15"
10099-001	30"

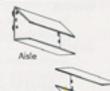
Hang Rod



Used for hanging items within a unit.
One or more may be used per level.
Accepts standard clothing hangers.
Support at each end by either double rivet angle or channel beams. 1-1/4" x 1-1/4". 14 gauge.

Catalog #	Size	Catalog #	Class	
Catalog #	2176	Catalog #	Size	
10104-005	36"	10104-008	60"	
10104-007	48"	100000000000000000000000000000000000000		

Mat Decking Support



Supports steel decking in catwalk systems in aisle position. Turned over, supports decking for deck over or full mat multi-level systems. 3-1/2" high, 12 gauge.

Catalog #	Size	Catalog #	Size
10111-005	36"	10111-008	60"
10111-006	42"	10111-009	69"
10111-007	48"	10111-010	72"

Slotted Angle Cleat



Used where slotted angle pieces must be joined to Rivet-Span, such as top tie or special grating supports. Use one left and right, facing each other, when creating cross aisle supports. 14 gauge.

Catalog #	Size
10113-000	Right
10113-001	Left

Particle Board Decking



Optional bulk storage and shelf decking material. 5/8" thick.

Catalog #	Size	Catalog #	Size	Catalog #	Size
10095-000	36" x 12"	10095-012	48" x 18"	10095-024	69" x 30"
10095-001	36" x 15"	10095-013	48" x 24"	10095-025	72" x 18"
10095-002	36" x 18"	10095-014	48" x 30"	10095-026	72" x 24"
10095-003	36" x 24"	10095-015	48" x 36"	10095-027	72" x 30"
10095-004	36" x 30"	10095-016	48" x 38"	10095-028	72" x 36"
10095-005	42" x 12"	10095-017	60" x 18"	10095-029	72" x 48"
10095-006	42" x 15"	10095-018	60" x 24"	10095-030	96" x 18"
10095-007	42" x 18"	10095-019	60" x 30"	10095-031	96" x 24"
10095-008	42" x 24"	10095-020	60" x 36"	10095-032	96" x 30"
10095-009	42" x 30"	10095-021	60" x 48"	10095-033	96" x 36"
10095-010	48" x 12"	10095-022	69" x 15"	10095-034	96" x 48"
10095-011	48" x 15"	10095-023	69" x 24"		

Particle board decking, 5/8" (.625) thick, is available pre-cut from Borroughs. Or it can be obtained direct from your local Borroughs Distributor. Other types and thicknesses of decking material, such as plywood, structure wood, oriented strand board or wire decking may be desired based upon load or use. These also can be obtained locally.



Specification Data

Rivet shelving units are made up of posts, sideto-side beams, and front-to-back beams. There are certain minimum requirements for beam use to ensure structural stability and safety. For example: all units must have a full "perimeter" of double rivet beams, meaning (2) side-to-side and (2) front-to-back, at both top and bottom of unit for stability. There are other requirements, see below.

Preconfigured Units - Include all required beams. Installation instructions (included with shipment) show how to position beams correctly.

Non-preconfigured Units - Follow these guidelines when specifying individual components:

- All units require a full perimeter of double rivet beams at top and bottom of unit.
- Single Rivet Beam (SRB) and Double Rivet Low Profile Beam (DRLPB) units 24" deep or less:
 - do not require SRB's front-to-back at each intermediate level in the unit.
 - 6'-8' high must have <u>one</u> intermediate level front-to-back SRB's located approximately in the middle of the unit.
 - 9'-10' high must have two intermediate levels front-to-back SRB's located to divide the height into 3 equal parts.
 - 11'-16' high must have three intermediate levels; a full perimeter of DRB's in the middle plus intermediate levels of frontto-back SRB's in the upper and lower halves of unit.
- Single Rivet Beam (SRB) and Double Rivet Low Profile Beam (DRLPB) units 30" deep or greater:
 - All units must have single rivet beams frontto-back at every intermediate beam level and units 11'-16' must have SRB's frontto-back at every intermediate level AND have a full perimeter level of Double Rivet Beams (DRB) located approximately in the middle of the unit.
- Double Rivet Angle Beams (DRAB), Double Rivet Channel Beams (DRCB) and Double Rivet Z Beams (DRZB) must have front-to-back and left-to-right beams at each beam level to provide decking support and ensure stability
- Tie Plates are not used on units with T Posts. Tie Plates are recommended to tie adjacent angle post units together and to ensure structural stability. Tie plates should be used at the top and bottom of adjacent angle posts with additional tie plates spaced no more than 48" apart.

Calculated Post Capacities Pounds Allowable Load Per Post

Maximum		
Beam Spacing		Heavy-Duty
In Inches	Angle Post	Angle Post
48"	1,170	1,750
42"	1,315	1,960
36"	1,460	2,180
30"	1,605	2,390
24"	1,750	2,610
18"	1,896	2,830
12"	2,040	3,050

- Maximum beam spacing is determined as the distance between left-to-right beams or front-to-back beams, whichever is greater.
- Capacities are for vertical loads only where seismic forces are not a factor.

Basic Data

Widths

Nominal unit width = 24", 30", 32", 36", 42", 48", 60", 69", 72", 84" or 96" Actual single unit width = nominal width +1/2"

Depths

Nominal unit depth = 12", 15", 18", 24", 30", 32", 36", 42" or 48"

Actual single unit depth = nominal depth +1/2"

Actual back-to-back units depth = combined actual single unit depths +7/32"

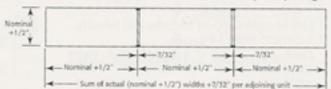
Heights

Nominal unit height = 6',7',8',10',12',14', 15' or 16'

Actual unit height = nominal height ± 1/32"

Length of Run

Actual length of run = sum of actual unit widths +7/32" per adjoining unit



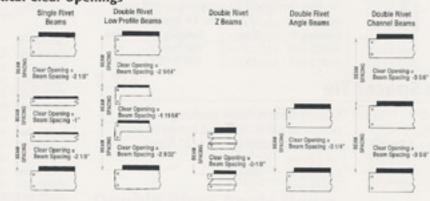
Horizontal Clear Openings

Actual clear opening between angle posts = nominal width - 2-5/8" Actual clear opening between heavy-duty angle posts = nominal width - 3-1/4"

Vertical Adjustment

All beams are adjustable on 1-1/2" centers

Vertical Clear Openings



Vertical clearance calculated using 5/8° thick decking material.

Beam Capacities

Maximum Uniformly Distributed Loads Pounds Per Beam Pair **

	Single Rivet Beam	Double Rivet Low Profile Beam	Double Rivet Z Beam	Double Rivet Z Beam w/Z Tie*	Double Rivet Angle Beam	Double Rivet Angle Beam w/Support Tie*	Double Rivet Channel Beam w/Support Tie*	
36"	350	450	1,400	-	1,400	-	-	
42"	260	430	1,350		1,000			
48"	240	400	1,300	1,600	730	1,700		
60°	-	-	800	950	680	1,300	2,250	
69°	-	-	600	900	460	1,100	1,900	
72"			600	900	450	1,050	1,700	
96"	-	-		-	240	650	1,300	

*(1) support tie except 96' which has (2).

**The longest pair of beams at a given level determines the capacity for the entire level. Capacities are for steel beams only and do not reflect the capacity of the decking material.

Important

Wall, floor or top tie anchoring is recommended for units when the height to depth ratio exceeds 4.

Example: A 7' high x 18" deep unit has a height to depth ratio of 4.67 and should be attached to a firm restraint, such as a floor, wall or tied overhead across the aisle to an opposite upright assembly.