

# **RIVET SPAN®**



















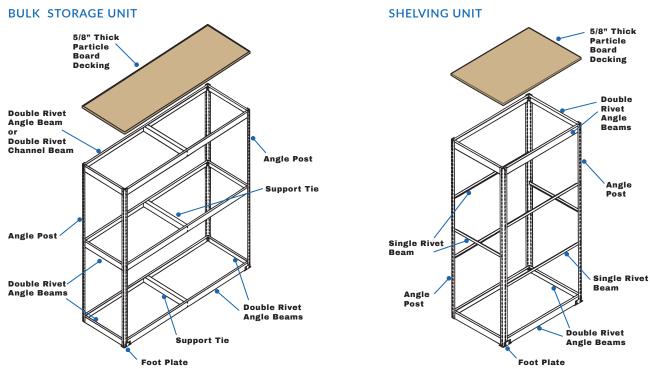
### Why Rivet-Span®?



**Rivet-Span is an economical and versatile** hand-load storage product that is incredibly easy to assemble, yet strong. It starts with a simple, economical design. A unit consists of posts, horizontal beams and wood decking. A variety of beams are available to accommodate a wide range of loads, providing spans and depths wider and greater than conventional shelving. Beams have high strength shoulder rivets that engage double keyhole post slots to form a strong and rigid unit. All components are universal (no lefts or rights, fronts or backs). Without the hassle of nuts, bolts, clips or cross braces, Rivet-Span installation is quick and easy.

ECONOMICAL	STRONG	SIMPLE ASSEMBLY	FLEXIBLE
<ul> <li>Low initial investment reduces shelving costs</li> <li>Quick labor saving installation reduces set-up costs</li> <li>Sizes to eliminate costly decking material cutting charges</li> </ul>	<ul> <li>Steel frame construction extends shelving life</li> <li>Rigid boltless connec- tion between posts and beams</li> <li>Secure double key hole and shoulder rivet connections</li> </ul>	<ul> <li>All pieces universal <ul> <li>No lefts or rights</li> <li>No fronts or backs</li> <li>No tops or bottoms</li> </ul> </li> <li>Requires no cross or sway braces</li> </ul>	<ul> <li>Allows access from any or all four sides</li> <li>Variety of beams to accommodate a wide range of loads</li> <li>Spans up to 8' to optimize storage</li> </ul>

### **Primary Components**



### **Rivet-Span® Types**

**Bulk Storage Units** are 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** can 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** are limited only by the imagination of the individual. The most obvious use is archival records storage. However, specialty units are perfect for many hard-to-store items and can include the following:

- Counter high units
- Tire racks
- Workbenches
- Packing or receiving tables
- Garment hang rod units

Beam	Profiles		
	Double Rivet Low Profile Beam Heavy duty shelving		Double Rivet Z Beam 12" to 60"
	Single Rivet Beam . Standard duty shelving		Heavy duty shelving
	Double Rivet Angle Beam Standard duty	, ,	Double Rivet Z Beam 69" and 72" Standard duty bulk storage
	bulk storage Double Rivet Channel Beam	- 7	<b>Tire Beam</b> Tires and Wheels Standard duty
	Heavy duty bulk storage		

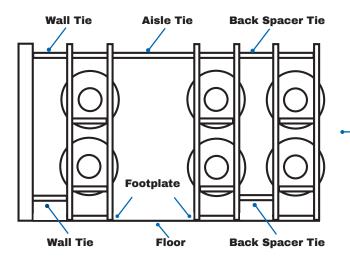
		TIRE RACK	S				
	Starter Unit Catalog No	Adder Unit Catalog No	Unit Width	Unit Depth	Unit Height	Beam Levels	
		B60SETB37	A60SETB37	60"	12"	7'	3
	B60SETB40	A60SETB40	60"	12"	10'	4	
		B60SETB52	A60SETB52	60"	12"	12'	5
		B60DETB37	A60DETB37	60"	42"	7'	3
Single Entry	Double Entry	B60DETB40	A60DETB40	60"	42"	10'	4
		B60DETB52	A60DETB52	60"	42"	12'	5



The Rivet-Span Tire rack has a specially designed angled tire beam to "nest" the tires and wheels.



Automotive dealerships use hanging racks for items such as; floor mats, mufflers, shrouds, etc...



Accessories in use with tire racks (END VIEW)



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### **ANGLE POST**

Standard duty upright post. Supplied with starter units. Use on freestanding units and row ends of units or runs of units. 1.57" x 1.57"; 14 gauge. Punched on 1-1/2" centers

Catalog No.	Size	Catalog No.	Size
10061-000	6'0"	10061-003	9'0"
10061-001	7'0"	10061-004	10'0"
10061-002	8'0"	10061-006	12'0"

### 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 heavy-duty angle, or T posts.

4" x 2"; 14 gauge.

Catalog No. 10103-000

### **HEAVY-DUTY ANGLE POST**

Designed for maximum load capacity and stability.  $1-7/8" \times 1-7/8"$ ; 14 gauge. Punched on 1-1/2" centers.

Catalog No.	Size	Catalog No.	Size
10060-000	6'0"	10060-006	12'0"
10060-001	7'0"	10060-008	14'0"
10060-002	8'0"	10060-009	15'0"
10060-003	9'0"	10060-010	16'0"
10060-004	10'0"		



### **TIE PLATE - ANGLE POST**

Connects posts of adjacent angle post units to insure structural stability and alignment. 4" x 2.66"; 14 gauge.

Catalog No. RSS-0070-000

### T POST

Common post between adjoining units to create economical starter and adder units. Supplied with adder units. Use as shared intermediate post between units on runs of units and also on row end of back-to-back units.  $3.34" \times 1.57"$ ; 14 gauge. Punched on 1-1/2" centers.

Catalog No.	Size	Catalog No.	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 SLICER - ANGLE POST**

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

Catalog No. 10065-000

### Z TIE

Used with Z Beam to support decking material.

Catalog No.	Size	Catalog No.	Size
10110-003	24"	10110-005	36"
10110-004	30"	10110-006	42"
10110-012	32"	10110-007	48"



### **POST SLICER - T POST**

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

Catalog No. 10145-000



### **TIE PLATE - ANGLE POST**

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

Catalog No.	Size	Catalog No.	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"



### 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 No.	Size	Catalog No.	Size
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 No.	Size	Catalog No.	Size
10077-005	36"	10077-008	60"
10077-007	48"		

### AISLE TIE

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 No.	Size	Catalog No.	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 No. 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.

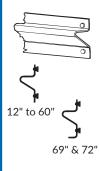
Catalog No. Size 10075-000 9"



### DOUBLE RIVET LOW PROFILE BEAM

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

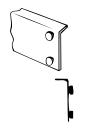
Catalog No.	Size	Catalog No.	Size
16330-091	36"	16331-011	48"
16331-001	42"		



### **DOUBLE RIVET Z BEAM**

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

Catalog No. Size Catalog No. Size 10142-000 12" 10142-005 36" 10142-001 15" 10142-006 42" 10142-002 18" 10142-007 48" 10142-003 24" 10142-008 60" 69" 10142-004 30" 10144-009 10142-012 32" 10144-010 72"



\* Punched to accept

**Record Storage** 

Support Angle.

### **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 No.	Size	Catalog No.	Size
10068-000	12"	10068-007	48"
10068-001	15"	10068-008	60"
10068-002	18"	10068-009	69"
10068-003	24"	10097-009*	69"
10068-004	30"	10068-010	72"
10068-012	32"	10068-013	84"
10068-005	36"	10068-011	96"
10068-006	42"		

DOUBLE RIVET CHANNEL BEAM Higher capacity left-to-right support for bulk

<sup>\*</sup> Punched to accept **Record Storage** Support Angle.

Catalog No.	Size
10070-007	48"
10070-008	60"
10070-009	69"
10098-009*	69"

at floor level, use angle beams with support tie					
Size	Catalog No.	Size			
48"	10070-010	72"			
60"	10070-013	84"			
69"	10070-011	96"			
69"					
	Size 48" 60" 69"	Size         Catalog No.           48"         10070-010           60"         10070-013           69"         10070-011			

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.	



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### RECORD STORAGE SUPPORT ANGLE

1-17/32" high; 14 gauge.

Catalog No.Size10099-00015"10099-00130"



**NEW DESIGN** now features a full 5/8" radius that is ideally suited for standard clothing hangers. One or more may be used per level. Support at each end by either double rivet angle or channel beams. Fabricated from 14 gauge Galvanized material.

Catalog No. Size 10104-012-00036" 10104-013-00048" Catalog No. Size 10104-014-00060"

### 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 No.
 Size

 10113-000
 Right

 10113-001
 Left



### RIVET SPAN SOLID DECKING GALVANNEAL

Galvanneal decking is a solid decking option. 18 gauge.

Catalog No.	Size	Catalog No.	Size
R1-SDG4812	48" x 12"	R1-SDG7212	72" x 12"
R1-SDG4818	48" x 18"	R1-SDG7218	72" x 18"
R1-SDG4824	48" x 24"	R1-SDG7224	72" x 24"
R1-SDG4830	48" x 30"	R1-SDG7230	72" x 30"
R1-SDG4836	48" x 36"	R1-SDG7236	72" x 36"
R1-SDG4842	48" x 42"	R1-SDG7242	72" x 42"
R1-SDG4848	48" x 48"	R1-SDG7248	72" x 48"
R1-SDG6012	60" x 12"	R1-SDG9612	96" x 12"
R1-SDG6018	60" x 18"	R1-SDG9618	96" x 18"
R1-SDG6024	60" x 24"	R1-SDG9624	96" x 24"
R1-SDG6030	60" x 30"	R1-SDG9630	96" x 30"
R1-SDG6036	60" x 36"	R1-SDG9636	96" x 36"
R1-SDG6042	60" x 42"	R1-SDG9642	96" x 42"
R1-SDG6048	60" x 48"	R1-SDG9648	96" x 48

## For Wire Decking Pricing, please contact your Regional Manager





### AISLE/FULL 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 No.	Size	Catalog No.	Size
10111-005	36"	10111-008	60"
10111-006	42"	10111-009	69"
10111-007	48"	10111-010	72"



### PARTICLE BOARD DECKING

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

Catalog No.	Size	Catalog No.	Size	Catalog No.	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"	10095-035	69" x 48"
10095-002	36" x 18"	10095-014	48" x 30"	10095-025	72" x 18"
10095-003	36" x 24"	10095-015	48" x 36"	10095-026	72" x 24"
10095-004	36" x 30"	10095-016	48" x 48"	10095-027	72" x 30"
10095-005	42" x 12"	10095-017	60" x 18"	10095-028	72" x 36"
10095-006	42" x 15"	10095-018	60" x 24"	10095-029	72" x 48"
10095-007	42" x 18"	10095-019	60" x 30"	10095-041	84" x 36"
10095-008	42" x 24"	10095-020	60" x 36"	10095-030	96" x 18"
10095-009	42" x 30"	10095-021	60" x 48"	10095-031	96" x 24"
10095-010	48" x 12"	10095-022	69" x 15"	10095-032	96" x 30"
10095-011	48" x 15"	10095-023	69" x 24"	10095-033	96" x 36"
				10095-034	96" x 48"

Particle board decking, 5/8" (.625) thick, is available pre-cut from Borroughs. It can also be obtained from your local building material supplier. 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.

When supplying your own decking material, cut the decking to the nominal unit size +0" -1/8" (.125). If single rivet beams or double rivet low profile beams are being used in the left-to-right position, cut the decking material 3/16" (.188) under the nominal unit depth for easier assembly. Similarly, if either of these types of beams are being used in the front-to-back position to support the decking, also cut the decking material 3/16" (.188) under the nominal unit width.

## INTERMIX BEAM FAMILIES ON THE SAME BEAM LEVEL

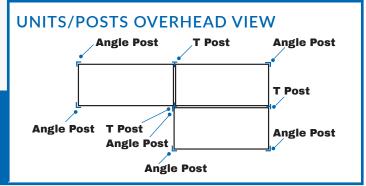
These beam families can be intermixed without decking problems:

- Single Rivet Beams
- Double Rivet Low Profile Beams

The above groupings cannot be intermixed and support decking.

- Double Rivet Angle Beams
- Double Rivet Channel Beams

These beam families can be intermixed without decking problems:



### **Specification Data**

Rivet-Span® shelving units are made up of posts, side-to-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 two side-to-side and two 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> SRB intermediate level front-to-back, located approximately in the middle of the unit.
  - 9'-10' high must have <u>two</u> SRB intermediate levels front-to-back, located to divide the height into 3 equal parts.
  - 11'-16' high must have <u>three</u> intermediate levels; a full perimeter of Double Rivet Beams (DRB) in the middle plus intermediate levels of front-to-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 SRB's front-to-back at every intermediate level; units 11'-16' must have SRB's front-to-back at every intermediate level PLUS a full perimeter level of Double Rivet Beams (DRB) located approximately in the middle of the unit.
- Double Rivet Angle Beams (DRAB) and Double Rivet Channel Beams (DRCH) must have front-to-back beams at each beam level to provide decking support and ensure stability. When using DRCH from side-to-side, DRAB must be used from front-to-back.
- 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 posts with additional tie plates spaced no more than 48" apart. Tie plates are not used on units with T Posts.

### **BEAM CAPACITIES**

### Maximum Uniformly Distributed Loads/Pounds Per Beam Pair

Beam Length	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

One support tie except 96" which has two support ties.

• 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.

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

### 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"

### CALCULATED POST CAPACITIES Pounds Allowable Load Per Post

Maximum	Beam		Heavy-Duty
Spacing 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, which avails are the

whichever is greater.

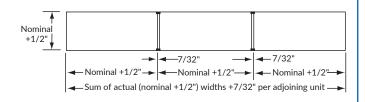
Capacities are for vertical loads where seismic forces are not a factor.

### HEIGHTS

Nominal unit height = 6', 7', 8', 10', 12', 14', 15' or 16' Actual unit height = nominal height  $\pm 1/32$ "

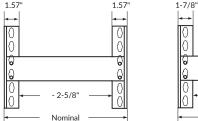
### LENGTH OF RUN

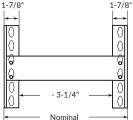
Actual length of run = sum of actual unit widths +7/32" per adjoining unit



### 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"

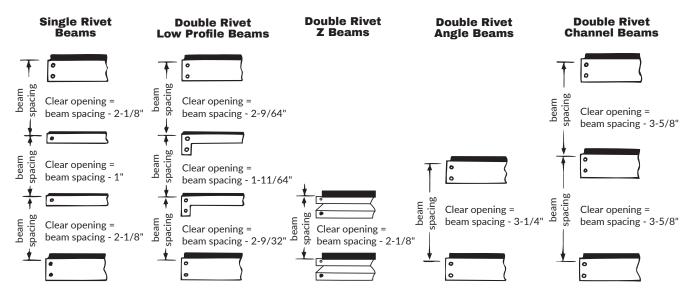




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### VERTICAL ADJUSTMENT AND CLEAR OPENINGS

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



Vertical clearance calculated using 5/8" thick decking material

### **Borroughs Standard Powder Coat Colors**

Borroughs powder coat finishes are high quality, durable and inert. Borroughs offers 7 standard colors. We also offer custom color matching, using Borroughs computerized technology. The colors depicted on this publication have been reproduced using a printing process and are only provided as a guide. The actual painted product may vary. All colors are not available on all products.

Please contact your Borroughs Dealer for details.





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