



A  
P  
R  
I  
L  
  
2  
0  
2  
5

# MATERIAL HANDLING

PENCO'S MATERIAL HANDLING CATALOG



FEATURING:

**CLIPPER**  
SHELVING

**RivetRite**

**Erectomatic**

Wide Span

Pallet Rack

PENCO PRODUCTS, INC. | ☎ 800.248.1555 | 🌐 WWW.PENCOPRODUCTS.COM



## ABOUT PENCO

The need for storage products is universal and Penco has a broad selection of solutions to fill that need. In doing so, Penco has become one of America's largest and most trusted suppliers of storage and work-area products. With state-of-the-art US manufacturing facilities and QuickShip Distribution Centers strategically located throughout the United States and Canada, Penco is positioned to best serve your needs.

Market sectors served by Penco include educational, healthcare, and government facilities, as well as offices, manufacturing companies, distribution warehouses, retail outlets, sports arenas and community parks.

Shelving and pallet rack products are popular with warehousing and manufacturing applications, ranging from a few units to multi-level and high rise applications.

Lockers are widely used in educational facilities, fitness centers, healthcare, military, emergency response, commercial and industrial locations.



All products manufactured by Penco Products are GREENGUARD Gold Certified through UL Environment's GREENGUARD Certification

Program. This certification signifies that Penco's products are in compliance with the stringent chemical emissions guidelines set by UL Environment.

Accredited courses are available to design professionals and fulfill credit requirements for AIA, GBCI, IDCEC. Contact a Penco Sales Manager for more information.

## PENCO'S HISTORY

In 1869, a man named L. Lewis Sagendorph fulfilled his ambition to begin his own company that would produce the finest metal products in America. He called his fledgling business the Penn Metal Corporation of Pennsylvania, and began by making steel culvert pipe on Oregon Avenue in South Philadelphia.



Over the years, Penn Metal's product lines broadened to include lockers, shelving and even aircraft landing mats. A reputation for quality fabrication spread, and the company's influence became nationwide. In the 1950's, the name was shortened to Penco Products and the plant and offices were expanded to a modern facility in Oaks, Pennsylvania, near Valley Forge.

In 2001, the manufacturing facility was moved from Oaks to a 475,000 square foot manufacturing facility in Hamilton, North Carolina, allowing significant room for expansion. In 2013, the corporate headquarters was moved from Skippack, Pennsylvania to Greenville, North Carolina.



Headquarters in Greenville, NC

## CUSTOMER SERVICE

[pencoproducts.com](http://pencoproducts.com) | 800.562.1000

Penco's Customer Service staff is a customer friendly, knowledgeable team that is dedicated to excellence in service delivery and communication. The team is based at Penco's Greenville, NC headquarters.

Our goal is to provide professional, courteous, timely and accurate service to every customer in a fair, consistent and accessible manner. Penco's distributor partners and customers are our number one priority and focus.

## LEEDS Environmental Information

- Based upon the most recent information from our source mills, the recycled content of our steel lockers can range from 25% to over 50%. Because the percentage of recycled content may vary from project to project based on a number of variables, please contact our offices for detailed information on your specific requirement.
- Powder coating drastically reduces waste through high efficiency application & recovery methods.
- Penco's powder coat paint contains no solvents and as a result releases no Volatile Organic Compounds (VOC's) normally associated with wet paint processes.
- Our packaging contains at least 20% post-consumer recycled content.
- Approximately 34% of the U.S. population lives within a 500 mile radius of our manufacturing facility, requiring less fuel to ship our products to many destinations.





# TABLE OF CONTENTS



## ABOUT PENCO

Penco's History .....	2
Customer Service .....	2
LEED's Environmental Information .....	2
QuickShip Locker Program .....	3

## SHELVING

### Clipper Shelving

Introduction .....	4
Units .....	5
Components.....	11
Hi-Performance Shelves .....	13
Conventional Flange Shelves.....	14
Accessories.....	15
QuickShip Clipper Shelving.....	17
Specifications.....	18

### Wide Span Shelving

Introduction .....	19
Units .....	20
Components.....	21
Specifications.....	25

### RivetRite Shelving

Introduction .....	26
Units .....	27
Components.....	31
Technical Information .....	33
QuickShip RivetRite Shelving.....	35
Capacities.....	37
Specifications.....	38

### Erectomatic

Introduction .....	39
Units .....	42
Components.....	47
Accessories.....	50
Hi-Performance Shelves .....	52
Multi-Level Shelving .....	53
Specifications.....	54

## PALLET RACK

Introduction .....	55
Upright Frames & Accessories .....	57
Pallet Rack Beams & Accessories.....	11
Pallet Rack Specifications.....	61
Pallet Rack Plus Specifications.....	62

## ADDITIONAL INFORMATION

Color Information.....	63
Environmental Information.....	64
Corporate Information.....	65

## QUICKSHIP Locker Program

Penco Products leads the industry with its comprehensive QuickShip program. Penco's QuickShip Distribution Centers have been strategically located throughout North America to best serve customer needs with prompt delivery of products from the shortest distance possible. Penco's QuickShip program saves time, delivery cost and energy, thus reducing the impact on our environment.

Visit [pencoproducts.com/penco-programs/quickship](http://pencoproducts.com/penco-programs/quickship) for a listing of which products are available at each warehouse location shown.

QuickShip Clipper Shelving.....	17
QuickShip RivetRite Shelving.....	35

## QUICKSHIP LOCATIONS



- Fort Wayne, IN
- Memphis, TN
- New Castle, DE
- Paramount, CA
- Passaic, NJ
- West Jordan, UT

## Introduction

### Clipper Hi-Performance Shelving Systems

At the heart of the Clipper Shelving System is the ingenious Penco Clipper Clip. It is easily installed, holds the shelf firmly in place, can be repositioned at any time, and actually helps make the shelving more rigid.

Clipper Shelving features Hi-Performance® Box Beam Shelves, which offer an exceptional strength to weight ratio. Clipper Shelving offers a wide variety of sizes and capacities too. This gives you the flexibility to provide top quality storage for a simple back room area up to a sophisticated multi-level or high-rise application.

### How to Order Clipper Units

Virtually all shelving storage needs may be satisfied by ordering standard shelving units as illustrated on the following pages. These units are shipped KD with all required components, shelf clips, hardware and assembly instructions.

### Choice of Post Arrangements

Penco standard shelving units employ box posts at front and offset angle posts at rear for each section. Other post assembly plans may be employed using offset angle posts at front and rear, when ordered as individual component parts.

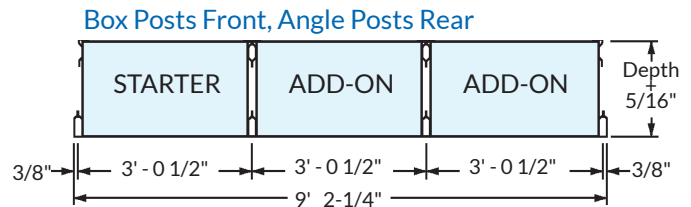
### Growth Dimension Considerations

To determine the overall dimension of a continuous row of shelving employing box and angle posts, refer to detail drawings on this page.

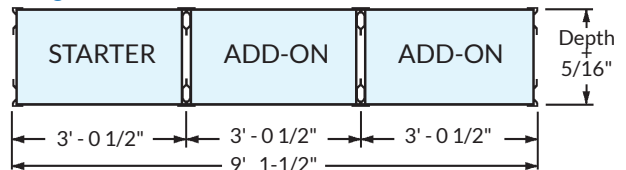
#### To order standard 87" high units:

1. Determine the shelving type desired (open, closed or ledge)
2. Determine shelf width and depth.
3. Order by catalog number as many basic units as required to form a continuous row of shelving.
4. Order by catalog number one ending kit to end each row.
5. Select the appropriate accessories for your application.

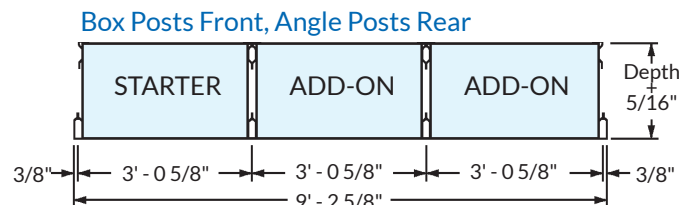
Growth with Penco Hi-Performance® Shelves



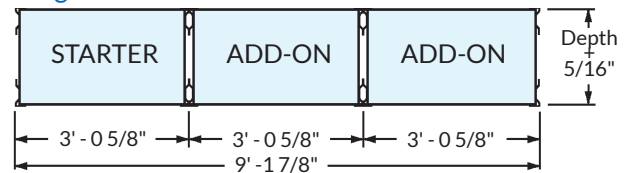
#### Angle Posts Front & Rear



Growth with Clipper Conventional Flange Shelves



#### Angle Posts Front & Rear



All dimensions are theoretical subject to manufacturing tolerances.

**Clipper Growth Chart**  
(With box posts at front, angle posts at rear)

No. of Units In a Row	36" Wide Sections	42" Wide Sections	48" Wide Sections
1	3' 1-3/8"	3' 7-3/8"	4' 1-3/8"
2	6' 2"	7' 2"	8' 2"
3	9' 2-5/8"	10' 8-5/8"	12' 2-5/8"
4	12' 3-1/4"	14' 3-1/4"	16' 3-1/4"
5	15' 3-7/8"	17' 9-7/8"	20' 3-7/8"
6	18' 4-1/2"	21' 4-1/2"	24' 4-1/2"
7	21' 5-1/8"	24' 11-1/8"	28' 5-1/8"
8	24' 5-3/4"	28' 5-3/4"	32' 5-3/4"
9	27' 6-3/8"	32' 0-3/8"	36' 6-3/8"
10	30' 7"	35' 7"	40' 7"
11	33' 7-5/8"	39' 1-5/8"	44' 7-5/8"
12	36' 8-1/4"	42' 8-1/4"	48' 8-1/4"
13	39' 8-7/8"	46' 2-7/8"	52' 8-7/8"
14	42' 9-1/2"	49' 9-1/2"	56' 9-1/2"
15	45' 10-1/8"	53' 4-1/8"	60' 10-1/8"
16	48' 10-3/4"	56' 10-3/4"	64' 10-3/4"
17	51' 11-3/8"	60' 5-3/8"	68' 11-3/8"
18	55' 0"	64' 0"	73' 0"
19	58' 0-5/8"	67' 6-5/8"	77' 0-5/8"
20	61' 1-1/4"	71' 1-1/4"	81' 1-1/4"



## Open Shelving Units

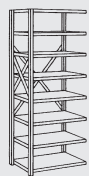
### Open Type Shelving

Open type shelving is the basic and most economical shelving design for general purpose use. Backs and sides are open, except that sections are stabilized by sway braces.

For convenient ordering, 36 different open configurations of Basic Units are shown below with their respective End Kits. The completed units below utilize Heavy Duty Hi-Performance® Shelves with box posts at front and offset angle posts at rear. Label holders are not included. Refer to page 4 for ordering instructions.

Many other configurations can be designed from the component parts and accessories on the following pages.

#### Basic Unit



- 1 Box Post
- 2 Angle Posts
- 1 Set Side Braces
- 1 Set Back Sway Braces
- Shelves
- Hardware

#### End Kit



- 1 Box Post
- 1 Set Side Braces
- Hardware



**CLIPPER®**  
SHELVING

### Clipper Open Units

Unit Width	Unit Depth	Unit Height	Capacity Per Shelf**	5 Shelf Basic Cat. No.	6 Shelf Basic Cat. No.	7 Shelf Basic Cat. No.	8 Shelf Basic Cat. No.	End Kit Cat. No.
36" Wide Units	12"	87"	800 lb	1H7015	1H7016	1H7017	1H7018	101287
	18"	87"	850 lb	1H7025	1H7026	1H7027	1H7028	101887
	24"	87"	800 lb	1H7035	1H7036	1H7037	1H7038	102487
42" Wide Units	12"	87"	600 lb	1H7045	1H7046	1H7047	1H7048	101287
	18"	87"	600 lb	1H7055	1H7056	1H7057	1H7058	101887
	24"	87"	600 lb	1H7065	1H7066	1H7067	1H7068	102487
48" Wide Units	12"	87"	500 lb	1H7075	1H7076	1H7077	1H7078	101287
	18"	87"	500 lb	1H7085	1H7086	1H7087	1H7088	101887
	24"	87"	530 lb	1H7095	1H7096	1H7097	1H7098	102487

\*\* For Evenly Distributed Load

## Closed Shelving Units



### Closed Type Shelving

Closed type shelving units are covered on three sides with steel panels to provide stability, protection and to promote cleanliness of stored items. Optional locking doors may be added for greater security.

The 36 configurations shown below with their respective End Kits employ Heavy Duty Hi-Performance® shelves with box posts at the front and offset angle posts at the rear. **Label holders and closed front bases are not included and must be ordered separately.**

Refer to page 4 for ordering instructions. Many other configurations can be designed from the component parts and accessories on the following pages.

#### Basic Unit



- 1 Box Post
- 2 Angle Posts
- 1 Side Panel
- 1 Back Panel
- Shelves
- Hardware

#### End Kit



- 1 Box Post
- 1 Side Panel
- Hardware

### Clipper Closed Units

Unit Width	Unit Depth	Unit Height	Capacity Per Shelf**	5 Shelf Basic Cat. No.	6 Shelf Basic Cat. No.	7 Shelf Basic Cat. No.	8 Shelf Basic Cat. No.	End Kit Cat. No.
36" Wide Units	12"	87"	800 lb	1H8015	1H8016	1H8017	1H8018	1C1287
	18"	87"	850 lb	1H8025	1H8026	1H8027	1H8028	1C1887
	24"	87"	800 lb	1H8035	1H8036	1H8037	1H8038	1C2487
42" Wide Units	12"	87"	600 lb	1H8045	1H8046	1H8047	1H8048	1C1287
	18"	87"	600 lb	1H8055	1H8056	1H8057	1H8058	1C1887
	24"	87"	600 lb	1H8065	1H8066	1H8067	1H8068	1C2487
48" Wide Units	12"	87"	500 lb	1H8075	1H8076	1H8077	1H8078	1C1287
	18"	87"	500 lb	1H8085	1H8086	1H8087	1H8088	1C1887
	24"	87"	530 lb	1H8095	1H8096	1H8097	1H8098	1C2487

Front Bases must be ordered separately.



## 36" Wide Bin Units

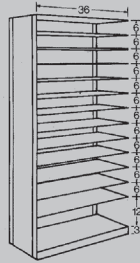
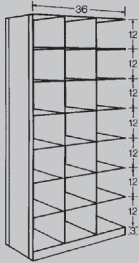
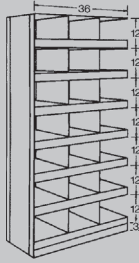

Clipper Shelving Bin Units are closed units with Heavy Duty Hi-Performance shelves, in various quantities, plus dividers and bin fronts as required. Offset angle posts are used at the rear of each unit, and box posts at the front. Order one End Kit to finish a unit or row of units. **Front bases are included. Label holders must be ordered separately.** This and the following page catalog 36" & 48" wide units, but many other configurations are possible by ordering component parts.

**NOTE:** Bin widths are nominal. They are measured from the hole centers on the shelves, not the vertical bead of the dividers.

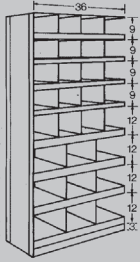
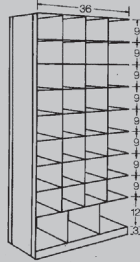
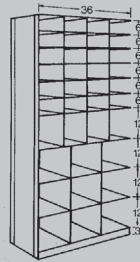
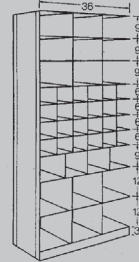
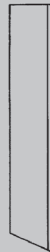
**CLIPPER**  
SHELVING

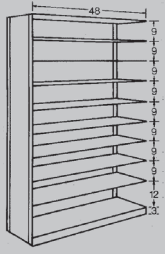
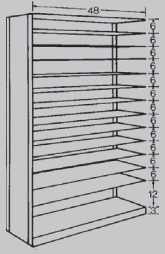
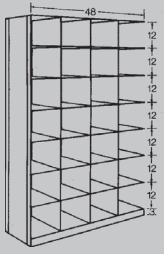
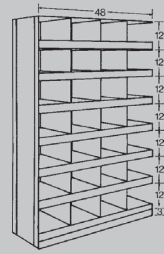



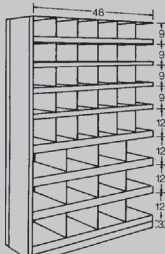
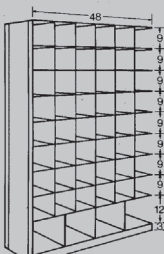
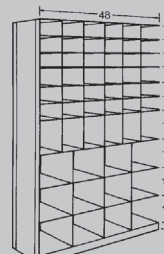
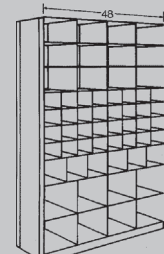

### 36" Wide Clipper Bin Units

Unit Depth	Unit Height	9 Openings 8 @ 36" x 9" 1 @ 36" x 12"	13 Openings 12 @ 36" x 6" 1 @ 36" x 12"	21 Openings 21 @ 12" x 12"	21 Openings 21 @ 12" x 12" 7 - 3" Bin Fronts	End Kit
		 9 Openings Cat. No.	 13 Openings Cat. No.	 21 Openings Cat. No.	 21 Openings 3" Bin Fronts Cat. No.	 End Kit Cat. No.
12"	87"	1H6109	1H6113	1H6121	1H6621	1C1287
18"	87"	1H6209	1H6213	1H6221	1H6521	1C1887
24"	87"	1H6309	1H6313	1H6321	1H6421	1C2487

### 36" Wide Clipper Bin Units

Unit Depth	Unit Height	29 Openings 16 @ 9" x 9" 4 @ 9" x 12" 9 @ 12" x 12" 8 - 3" Bin Fronts	35 Openings 32 @ 9" x 9" 3 @ 12" x 12"	37 Openings 24 @ 9" x 6" 4 @ 9" x 12" 9 @ 12" x 12"	43 Openings 24 @ 6" x 6" 9 @ 12" x 9" 4 @ 9" x 9" 6 @ 12" x 12"	End Kit
		 29 Openings Cat. No.	 35 Openings Cat. No.	 37 Openings Cat. No.	 43 Openings 3" Bin Fronts Cat. No.	 End Kit Cat. No.
12"	87"	1H6129	1H6135	1H6137	1H6143	1C1287
18"	87"	1H6229	1H6235	1H6237	1H6243	1C1887
24"	87"	1H6329	1H6335	1H6337	1H6343	1C2487

48" Wide Clipper Bin Units						
		9 Openings 8 @ 48" x 9" 1 @ 48" x 12"	13 Openings 12 @ 48" x 6" 1 @ 48" x 12"	28 Openings 28 @ 12" x 12"	28 Openings 28 @ 12" x 12" 7 - 3" Bin Fronts	End Kit
						
Unit Depth	Unit Height	9 Openings Cat. No.	13 Openings Cat. No.	28 Openings Cat. No.	28 Openings 3" Bin Fronts Cat. No.	End Kit Cat. No.
12"	87"	1H6409	1H6413	1H6428	1H6328	1C1287
18"	87"	1H6509	1H6513	1H6528	1H6228	1C1887
24"	87"	1H6609	1H6613	1H6628	1H6128	1C2487

48" Wide Clipper Bin Units						
		42 Openings 16 @ 7-1/2" x 9" 8 @ 9" x 9" 4 @ 7-1/2" x 12" 2 @ 9" x 12" 12 @ 12" x 12" 8 - 3" Bin Fronts	52 Openings 32 @ 7-1/2" x 9" 16 @ 9" x 9" 4 @ 12" x 12"	54 Openings 24 @ 7-1/2" x 6" 12 @ 9" x 6" 4 @ 7-1/2" x 12" 2 @ 9" x 12" 12 @ 12" x 12"	58 Openings 32 @ 6" x 6" 12 @ 12" x 9" 4 @ 7-1/2" x 9" 2 @ 9" x 9" 2 @ 9" x 12" 8 @ 12" x 12"	End Kit
						
Unit Depth	Unit Height	42 Openings 3" Bin Fronts Cat. No.	52 Openings Cat. No.	54 Openings Cat. No.	58 Openings Cat. No.	End Kit Cat. No.
12"	87"	1H6442	1H6452	1H6454	1H6458	1C1287
18"	87"	1H6542	1H6552	1H6554	1H6558	1C1887
24"	87"	1H6642	1H6652	1H6654	1H6658	1C2487





### Ledge Units

Ledge type shelving is recommended where greater depth of the lower compartment is desired, and a convenient working height surface ledge is required. Seven Heavy Duty Hi-Performance® shelves are included plus a heavy gauge ledge top with a reinforcing pan welded to the bottom for extra strength. This provides a total of seven openings.

The units are available in open or closed construction and may be equipped with standard shelving accessories, including locking doors at the top and bottom. Units are 36" wide, 12" deep at the top, and 24" deep at the bottom. Overall height is 87"; the ledge top is 39" high.

The End Kit includes 2 ledge top finishing strips to provide a finished appearance at the sides of the ledge top. Order one End Kit to finish each single unit, or row of units.

### Counter Units

Penco steel counters present an extremely clean, classic appearance for over the counter or stock-room use. A smooth, extra heavy gauge reinforced counter top provides an excellent work surface. Three standard Heavy Duty Hi-Performance® Clipper shelves, adjustable on 1" centers, are used below. Units have box posts at all four corners and closed front bases.

The top is designed to butt against adjacent tops when more than one unit is used in a row for a continuous flush surface. One End Kit is required for each single unit, or to end a row of units. Two counter top finishing strips are included with each End Kit, to extend the top beyond the end and provide a finished appearance.

Counter Tops and Fronts may be purchased as separate components. Note that they may be used only when box posts are used at front and rear of unit.



Open Unit  
with End Kit



Closed Unit  
with End Kit

Front Bases are included with Closed Ledge Units.

Ledge Units				
Unit Width	Unit Depth	Unit Height	Unit Cat. No.	End Kit Cat. No.
Open Type Units				
36"	12" (Top) 24" (Bottom)	48" (Top) 39" (Bottom)	1H432L	19433E
Closed Type Units				
36"	12" (Top) 24" (Bottom)	48" (Top) 39" (Bottom)	1H434L	19435E



Front and rear views of 2 1H122C Basic Units plus 1 19125E End Kit

Counter Units				
Unit Width	Unit Depth	Unit Height	Unit Cat. No.	End Kit Cat. No.
Complete Units				
36"	24"	39"	1H122C	19125E
42"	24"	39"	1H123C	19125E
48"	24"	39"	1H124C	19125E
Counter Tops Only				
36"	24"	-	13670H	-
42"	24"	-	13680H	-
48"	24"	-	13690H	-
Counter Fronts Only				
36"	-	39"	13870H	-
42"	-	39"	13880H	-
48"	-	39"	13890H	-

# Clipper® Shelving

## Artwork Shelving

This efficient unit serves the need for storing, organizing and protecting artwork. It is a basic piece of storage equipment wherever artwork is maintained. The unit has 18 openings, each with a 26-3/4" clear vertical opening. The unit includes closed back, sides and base, four Hi-Performance® shelves and 15 dividers. Dividers adjust easily on 1-1/2" centers. Can be accessorized with lockable doors. Order End Kit to finish each unit or row.



Artwork Shelving						
Unit Width	Unit Depth	Unit Height	No. of Shelves	No. of Dividers	Unit Cat. No.	End Kit Cat. No.
36"	24"	87"	4	15	1H6700	1C2487

## Special Purpose Units

## Open Shelf Filing Record Storage

A space-saving efficient unit designed for filing a variety of records in a safe, organized, easily accessible system. Special tabbed dividers insert into the shelf and special back bracket for divider stability. They adjust easily on alternate 1" and 2" centers. The unit features closed sides and base. A special bracket at each shelf level is pierced to accept one tab of the divider. Order End Kit to finish a unit or a row.



Open Shelf Filing Record Storage						
Unit Width	Unit Depth	Unit Height	No. of Shelves	No. of Dividers	Unit Cat. No.	End Kit Cat. No.
36"	12"	87"	8	35	176709	1C1287

## X-Ray Shelving

An efficient, practical storage unit with a broad application throughout the healthcare industry for the protective storage of X-ray. The unit features Heavy Duty Hi-Performance shelves, closed back, sides, and base. 25 dividers are furnished in two sizes which adjust easily on 1-1/2" centers. The dividers attach to the shelf with strong plastic buttons. Order End Kit to finish each unit or row.



Refer to opening sizes in chart below.

X-Ray Shelving						
Unit Width	Unit Depth	Unit Height	No. of Shelves	No. of Dividers	Unit Cat. No.	End Kit Cat. No.
36"	18"	87"	6	25	1H6705	1C1887
Divider Quantities						
Unit Depth	Divider Height	No. of Dividers	Clear Opening Height			
18"	16"	15	14-13/16"			
18"	18"	10	16-13/16"			

## Plan Shelving

Designed with the engineer, draftsman or architect in mind, this unit allows plans and drawings to be stored either rolled or flat. This unit provides 64 openings 6" x 36" x 6" for rolled storage and 9 openings 48" x 36" x 4" for flat storage. Unit includes Heavy Duty Hi-Performance shelves, closed back, sides and base. Can be accessorized with lockable doors. Order End Kit to finish each row.



Plan Shelving						
Unit Width	Unit Depth	Unit Height	No. of Shelves	No. of Dividers	Unit Cat. No.	End Kit Cat. No.
48"	36"	87"	18	56	1H6659	1C3687



## Shelving Components

### Box Posts

A high strength roll formed tubular box section usually used at unit fronts; permits full access to shelf width. Designed to be used in common between units, or at row ends. Permits vertical shelf adjustment on 1" centers using clips or nuts & bolts. Internal flange is punched on 3" centers to accept side sway bracing or closed side panels.

### Offset Angle Posts

A roll formed high strength post which permits 1" vertical shelf adjustment using clips or nuts & bolts. Can be used at rear of units, or at front and rear. Offset recess adds rigidity and allows for independent shelf clip adjustment. Ends of flanges are punched on 3" centers to accept sway braces or closed panels.

### Closed Upright Assemblies

Steel End or Intermediate Panels are used to close the sides of 87" tall shelving units and are securely welded to posts for rigidity.

### Small Components

**A & B. Clipper Clips** - One piece 14 gauge compression clip for box and offset angle posts to hold shelf securely. A. For Hi-Performance Shelves; B. For Standard Flange Shelves.

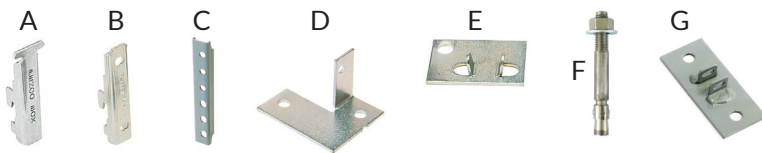
**C. Post Splice** - Used to join Box or Angle posts for high-rise or multi-level shelving applications.

**D. Floor Anchor Clip (Foot Plate)** Punched for fastening posts to floor. Bolts to post.

**E. Floor Protector** - To distribute unit load and protect floor. For box and angle posts. Not for use on high-rise or multi-level shelving.

**F. Anchors** - For securing shelving posts to a concrete floor when Floor Anchor Clips are used. Use the longer anchor #9281 in seismic zones higher than 2A.

**G. Heavy Duty Foot Plate** - For box, single or double angle posts in high seismic areas.



### Small Components

Letter	Unit Description	Cat. No.
A	Clipper Clip (Hi-Performance)	10002Z
B	Clipper Clip (Standard Flange)	100001Z
C	Post Splice	10030H
D	Floor Anchor Clip, 3-1/2" x 2-7/8"	10006Z
-	Shim for "D", 3-1/2" x 2-7/8", 11 Gauge	10011
E	Floor Protector, 1-3/4" x 2-5/8"	10007Z
F	Anchor, 3/8" x 2-1/4"	9280
	Anchor, 3/8" x 3-3/4"	9281
G	Foot Plate, Heavy Duty, 5-1/2" x 2-3/8", 7 Ga.	1ACX322H
-	Shim, Hvy. Duty for "G", 5-1/2" x 2-3/8", 7 Ga.	1ACX330



### Box Posts

Unit Height	14 Gauge Cat. No.	16 Gauge Cat. No.
39"	1B4039C	-
48"	1B4048C	-
75"	1B4075C	-
87"	1B4087C	1B6087C
99"	1B4099C	-
123"	1B4123C	-
147"	1B4147C	-



### Offset Angle Posts

Unit Height	14 Gauge Cat. No.	16 Gauge Cat. No.
39"	1A4039C	-
48"	1A4048C	-
75"	1A4075C	-
87"	1A4087C	1A6087C
99"	1A4099C	-
123"	1A4123C	-
147"	1A4147C	-

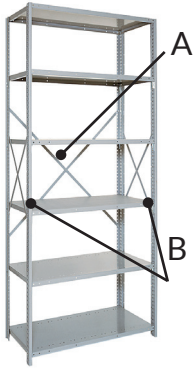
### 14 Gauge Clipper Post Capacities (Pounds)

Unbraced Length (Max. Space Between Shelves)	Box Post Capacity	Single Angle Capacity	Double Angle Capacity (Bolted on 12" Centers)
9"	6740 lb	3760 lb	8270 lb
12"	6450 lb	3490 lb	7670 lb
15"	6070 lb	3130 lb	6880 lb
18"	5630 lb	2700 lb	5940 lb
21"	5090 lb	2180 lb	4790 lb
24"	4480 lb	1680 lb	4460 lb

### Closed Upright Assemblies

Unit Depth	Unit Height	Cat. No.
Box Post		
Box Post, 1 Angle Post, 1 Side Panel		
12"	87"	15412CC
18"	87"	15418CC
24"	87"	15424CC
Offset Angle Post		
2 Offset Angles, 1 Side Panel		
12"	87"	15412AC
18"	87"	15418AC
24"	87"	15424AC
Box Post Intermediate		
Box Post, 2 Offset Posts, 1 Side Panel		
12"	87"	15412BC
18"	87"	15418BC
24"	87"	15424BC

# Clipper® Shelving



## For Open Construction Sway Braces (A & B)

Sway braces provide stability for Open Type shelving. They are furnished in sets of two braces to fasten to one back or side of a unit. Hardware included.

Back sway braces (A.) eliminate lateral sway. They fasten to the flanges of offset angle posts used at the rear of units. Braces also bolt to each other at the center hole to ease installation.

Side sway braces (B.) eliminate front to back sway. They fasten to the flanges of the front and rear posts.

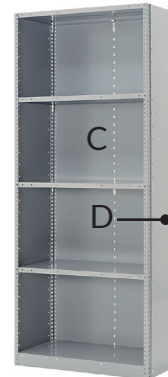


## Shelving Components

Sway Braces					
Letter Code	Description	Unit Width	Unit Depth	Overall Piece Length	Cat. No.
A	Back Sway Braces	24"	-	45"	12045A
		30"	-	50"	12050A
		36"	-	50-3/4"	12036H
		42"	-	57-1/8"	12042H
		48"	-	65-1/2"	12048H
B	Side Sway Braces	-	9"	11"	12011S
		-	12"	15"	12015S
		-	15"	19"	12019S
		-	18"	26"	12026S
		-	24"	34"	12034S
		-	30"	45"	12045S
		-	32"	46-1/4"	12046S
		-	36"	49"	12049S

## Back and Side Panels

Letter Code	Description	Shelf Width	Shelf Depth	39" Height	48" Height	51" Height	75" Height	87" Height	99" Height
C	Back Panels	24"	-	-	-	-	-	12340H	-
		30"	-	-	-	-	-	12440H	-
		36"	-	12500H	-	12510H	12530H	12540H	12550H
		42"	-	12600H	-	12610H	12630H	12640H	12650H
		48"	-	12700H	-	12710H	12730H	12740H	12750H
D	Side Panels	-	9"	-	-	-	-	11340H	-
		-	12"	11400H	11409H	11410H	11430H	11440H	11450H
		-	15"	-	-	-	-	11540H	-
		-	18"	11600H	11609H	11610H	11630H	11640H	11650H
		-	24"	11700H	-	11710H	11730H	11740H	11750H
		-	30"	11800H	-	-	-	11840H	11850H
		-	36"	11900H	-	-	11930H	11940H	11950H



## Back and Side Panels (C & D)

Panels to enclose the backs and sides of Closed Type Shelving provide unit stability while giving greater protection to the shelving contents.

Back panels (C.) bolt to the flanges of offset angle posts at the rear of units. The center of the back is held tight against a shelf with a "back panel clip" furnished with each back. Common backs may be used when units are placed back-to-back, provided that units are

securely bolted together.

Backs 36" wide are furnished in one piece through 87" high. Over 87" high, they are split horizontally (2 pieces). 42" & 48" wide backs are furnished in one piece through 51" high; above 51" they are split horizontally (2 pieces). Hardware included.

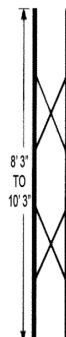
Side panels (D.) fasten to the flanges in the front and rear posts. Furnished in one piece through 87" high. As an alternate to side panels, you may order Closed Upright Assemblies (shown on the previous page) which combine posts and side panels in one welded unit.

## Sway Braces

Open shelving units, 87" high or shorter, must have at least one set of side sway braces per side and one set of back braces. Both side and back braces may be common with adjacent units. For multiple level, deck-over or high-rise shelving structures, the lowest set of braces should be within

4 1/2" of the floor. For posts over 87" high up to 123", order two sets of side and rear braces for each unit. Posts taller than 123" may require additional bracing.

For brace location requirements in regions where there is seismic activity, contact a local consultant or the Penco Product Management and Systems Engineering Department.





Clipper Hi-Performance® Shelves maximize load handling capacity through a design which shapes the front and rear flanges into rigid tubular

box beams. The box shape provides two vertical surfaces in each box-flange that inherently give it a high strength-to-weight ratio. Additional reinforcing bars or angles are not used with Hi-Performance shelves. Reinforcing options for Class 3 shelves are shown at right.

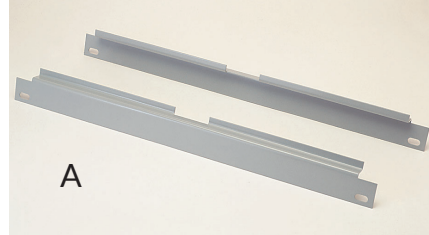
The shelves are efficiently manufactured from high strength cold rolled steel on a modern automated roll forming mill.

For additional strength, front and rear flanges are welded to the underside of the shelf on 3" centers. Shelf corners are lapped and welded.

Shelves are available in a wide variety of sizes shown below in the capacity chart. All shelves are punched on 1.5" centers to accept shelving accessories such as dividers, label holders and bin fronts.

### A. Class 3 Side Shelf Support (pairs)

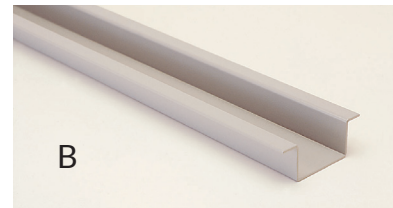
Used to support Center Support in Class 3 applications.



Class 3 Side Shelf Support	
Unit Depth	Cat. No.
18"	1H830H
24"	1H840H
30"	1H850H
36"	1H860H

### B. Class 3 Center Support

Runs left to right beneath the mid-point of the shelf for conversion to Class 3. Supported by side shelf supports.



Class 3 Center Support	
Unit Width	Cat. No.
36"	H13736C
42"	H13742C
48"	H13748C

## Clipper Hi-Performance® Shelf Capacities

Class 1 Heavy Duty High Strength Steel				Class 2 Extra Heavy Duty High Strength Steel		Class 3 Extra Heavy Duty With Reinforcing*
Unit Width	Unit Depth	Cat. No.	Capacity	Cat. No.	Capacity	Capacity
36"	12"	1H203612C	800 lb	1H183612C	1100 lb	-
	15"	1H203615C	800 lb	1H183615C	1100 lb	-
	18"	1H203618C	850 lb	1H183618C	1200 lb	2000 lb
	24"	1H203624C	800 lb	1H183624C	1250 lb	2000 lb
	30"	1H203630C	500 lb	1H183630C	900 lb	2000 lb
	36"	1H203636C	500 lb	1H183636C	900 lb	2000 lb
42"	12"	1H204212C	600 lb	1H184212C	1100 lb	-
	15"	1H204215C	600 lb	1H184215C	1100 lb	-
	18"	1H204218C	600 lb	1H184218C	1050 lb	1600 lb
	24"	1H204224C	600 lb	1H184224C	900 lb	1600 lb
	30"	1H204230C	625 lb	1H184230C	1000 lb	1600 lb
	32"	1H204232C	525 lb	1H184232C	950 lb	1600 lb
	36"	1H204236C	475 lb	1H184236C	900 lb	1600 lb
48"	12"	1H204812C	500 lb	1H184812C	750 lb	-
	15"	1H204815C	500 lb	1H184815C	850 lb	-
	18"	1H204818C	500 lb	1H184818C	900 lb	1200 lb
	24"	1H204824C	500 lb	1H184824C	900 lb	1200 lb
	30"	1H204830C	500 lb	1H184830C	750 lb	1200 lb
	36"	1H204836C	500 lb	1H184836C	750 lb	1200 lb

\* Class 3 Capacities are based upon the use of Extra Heavy Duty Shelves with (A) Side Shelf Supports and (B) Center Support for additional capacity. Must use nuts and bolts for shelves, not clips. All shelves are supplied with Clipper Clips. All shelf load capacities are in pounds for evenly distributed loads, and include a safety factor of 1.65.



# Clipper® Shelving

## Conventional Flange Shelves



Clipper Conventional Flange Shelves are fabricated from 18 gauge cold rolled steel. All sides of the shelf are double flanged for added strength. The corners are lapped and welded for positive reinforcement. Shelves secure to posts with Penco's unique compression Clipper clip, or can be bolted. Shelves are punched for divider placement on alternating 1" and 2" centers. Reinforcing options are shown at right.

All shelves are supplied with Clipper Clips. Nuts and bolts may be substituted upon request. All capacities are for safe static loads distributed uniformly over the entire shelf surface as determined by test. Refer all "Pass Thru" or other unusual conditions to Penco Engineering for their evaluation.

Class 0 - For Normal Loads. No additional reinforcement.

Class 1-B - For Normal Loads requiring impact resistance. A standard Class 0 Shelf with the addition of a 1" x 1/8" reinforcing bar in the front flange.

Class 2-B - For Medium Loads. Same as Class 1-B with the addition of a reinforcing bar in the rear flange.

Class 2-A - For Medium to Heavy Loads. A standard Class 0 shelf with the addition of field installed 1" x 1" x 1/8" reinforcing angles in front and rear flanges.

### A. Reinforcing Bar

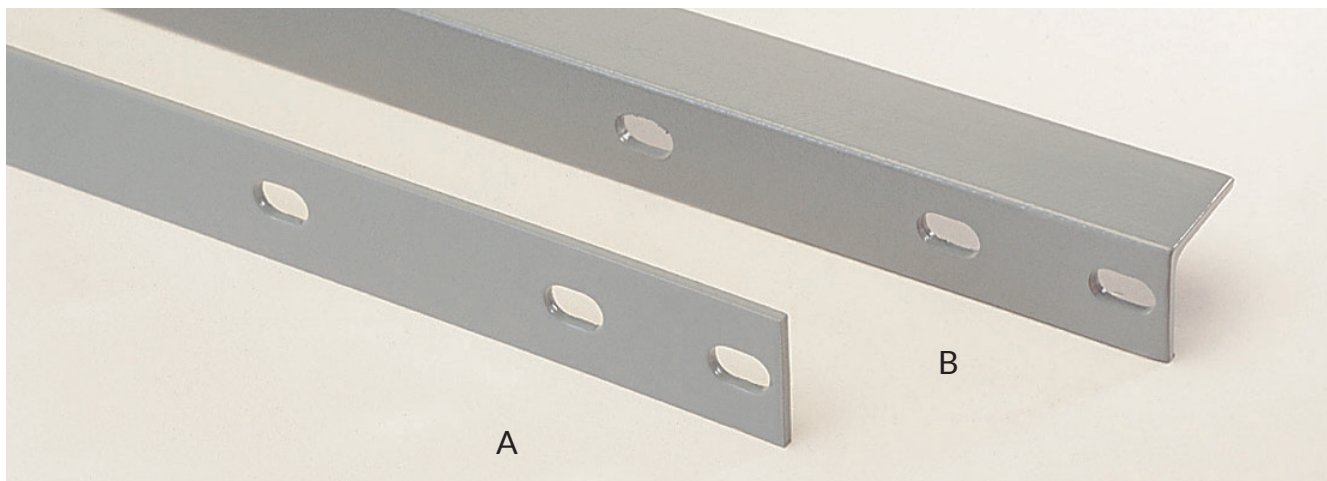
Rolled steel bars insert in the shelf channel for reinforcement. Hardware is included. Not for use with Hi-Performance Shelves.

A - Reinforcing Bar			
Width	Depth	Height	Cat. No.
24"	1/8"	1-3/32"	16650H
30"	1/8"	1-3/32"	16660H

### B. Reinforcing Angle

1/8" thick rolled steel angles added to the shelf flanges for developing class 2A shelves. Hardware is included. Not for use with Hi-Performance shelves.

B - Reinforcing Angle			
Width	Depth	Height	Cat. No.
24"	1"	1"	16500H
30"	1"	1"	16510H



## Clipper Conventional Flange Shelf Capacities - 18 Gauge

			Class 0		Class 1-B	Class 2-B	Class 2-A
Unit Width	Unit Depth	Deflection @ Center Ft Edge	Cat. No.	Capacity	Capacity	Capacity	Capacity
24"	12"	.200"	12810C	990 lb	NOTE: Class 1 shelves do not have any more load carrying capabilities over Class 0, but should be used where impact or concentrated loads occur along the front edge.	1270 lb	1580 lb
	18"	.200"	12830C	1110 lb		1430 lb	1430 lb
	24"	.200"	12840C	1140 lb		1090 lb	1090 lb
30"	12"	.250"	12910C	760 lb		980 lb	1230 lb
	18"	.250"	12930C	820 lb		1060 lb	1320 lb
	24"	.250"	12940C	920 lb		1030 lb	1030 lb

## Shelving Accessories



### Finished End Panels

Formed sheet steel panels used to finish the end of a shelving row. Panels attach to posts to cover holes and hardware. Presents an attractive and finished appearance. Must be used with Box Post at front, Angle Posts at rear.

Finished End Panels		
Unit Depth	Unit Height	Cat. No.
12"	87"	18241H
18"	87"	18440H
24"	87"	18540H



### Front Base Strips

Closes the space between the floor and bottom shelf. Hardware included. The 4" high base is for use with the heavy duty foot plate.

Front Base Strip		
Unit Width	Unit Height	Cat. No.
24"	3"	14500H
30"	3"	14510H
36"	3"	14520H
36"	4"	14525H
42"	3"	14530H
48"	3"	14540H



### Swinging Doors

3 Point latching with locking handle and 2 keys. Doors are pre-hung at the factory on a welded frame for easy assembly and good fit. Can be used on standard ledge or counter units up to 87" high. Order doors separately from units. Door can be attached to box posts or angle posts. Base strips should be ordered to close the opening between the door frame and the floor.

NOTE: Not for use with Modular Drawers.

Swinging Doors			
Unit Width	Door Frame Height	Unit Height	Pair Cat. No.
For Below Ledge or Counter Height			
36"	36"	39"	19600H
For Above Ledge Unit			
36"	48"	48"	19610H
For Standard Shelving Units			
36"	73"	75"	19630H
36"	85"	87"	19640H
48"	36"	39"	19646H
48"	85"	87"	19650H

### A. - Bin Front

A formed steel panel partially enclosing the front opening of a shelf to keep bulk items within a bin. 1" & 2" Bin Fronts attach to the front of the shelf with bolts & nuts. 3" high Bin Front attaches to posts with metal clips. Hardware included.

### B. - Sliding Divider

Formed to fit around front and rear flanges on the shelf. Position anywhere on surface. No hardware needed. For Hi-Performance Shelves.

### C. - Partial Dividers

Partially subdivides shelf to separate stored items. Fastens to the shelf with plastic buttons (included).

### D. - Full Height Dividers

Used to divide a shelf opening into smaller units. Divider has a beaded front edge for strength and safety. Fastens to the shelf with plastic buttons (included). NOTE: For Class 3 shelving applications, contact your representative regarding special notching of dividers.

### E. - Label Holders

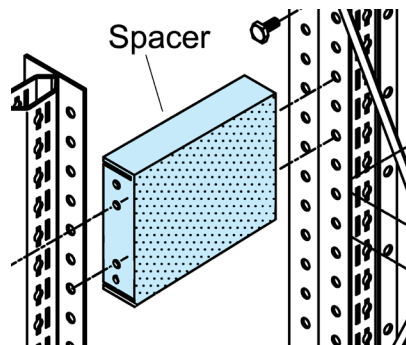
A formed steel strip that accepts 7/8" labels. Fastens to the shelf with plastic buttons (included).

### F. - Flue Spacer

A component that can provide a 6" open area between rows of back-to-back shelving to facilitate installation of fire suppression equipment (hardware included).

A. - C. Accessories					
Letter Code	Unit Desc.	Unit Width	Unit Depth	Unit Height	Cat. No.
A	Bin Front	36"	-	1"	14210H
		36"	-	2"	14220H
		36"	-	3"	14230C
		42"	-	3"	14330C
		48"	-	3"	14430C
B	Sliding Divider	-	12"	4"	1H4124C
		-	12"	6"	1H4126C
		-	18"	4"	1H4184C
		-	18"	6"	1H4186C
		-	24"	4"	1H4244C
		-	24"	6"	1H4246C
C	Partial Dividers	-	12"	2"	16395H
		-	12"	4"	16410H
		-	18"	2"	16397H
		-	18"	4"	16430H
		-	24"	4"	16440H
		-	24"	4"	16440H

D. - F. Accessories					
Letter Code	Unit Desc.	Unit Width	Unit Depth	Unit Height	Cat. No.
D	Full Height Dividers	-	12"	6"	15600H
		-	12"	9"	15620H
		-	12"	12"	15640H
		-	12"	14"	15650H
		-	12"	18"	15670H
		-	15"	6"	15700H
		-	15"	9"	15720H
		-	15"	12"	15740H
		-	18"	6"	15800H
		-	18"	9"	15820H
		-	18"	10"	15830H
		-	18"	12"	15840H
		-	18"	16"	15860H
		-	18"	18"	15870H
		-	18"	24"	15890H
		-	24"	6"	15900H
		-	24"	9"	15920H
		-	24"	12"	15940H
		-	24"	18"	15970H
		-	24"	24"	15990H
E	Label Holders	24"	-	-	13900H
		30"	-	-	13910H
		36"	-	-	13920H
		42"	-	-	13930H
		48"	-	-	13940H
F	Flue Spacer	-	6"	4"	1ACX522H





Touch Up Spray Paint - 12 oz.

Must be ordered with lockers, shelving, or RivetRite products.

028 Gray

97028Z

## Basic Clipper Shelving OPEN QuickShip Units - 87" High



Unit Width	Shelf Depth	5 Shelf Cat. No.	6 Shelf Cat. No.	7 Shelf Cat. No.	8 Shelf Cat. No.
36"	12"	1H7015028	1H7016028	1H7017028	1H7018028
	18"	1H7025028	1H7026028	1H7027028	1H7028028
	24"	1H7035028	1H7036028	1H7037028	1H7038028
48"	12"	1H7075028	1H7076028	1H7077028	1H7078028
	18"	1H7085028	1H7086028	1H7087028	1H7088028
	24"	1H7095028	1H7096028	1H7097028	1H7098028

Pictured at left: a 5-shelf Open Basic Unit. It requires an Open End Kit for completion (see below).

## Basic Clipper Shelving CLOSED QuickShip Units - 87" High



Unit Width	Shelf Depth	5 Shelf Cat. No.	6 Shelf Cat. No.	7 Shelf Cat. No.	8 Shelf Cat. No.
36"	12"	1H8015028	1H8016028	1H8017028	1H8018028
	18"	1H8025028	1H8026028	1H8027028	1H8028028
	24"	1H8035028	1H8036028	1H8037028	1H8038028
48"	12"	1H8075028	1H8076028	1H8077028	1H8078028
	18"	1H8085028	1H8086028	1H8087028	1H8088028
	24"	1H8095028	1H8096028	1H8097028	1H8098028

Pictured at left: a 5-shelf Closed Basic Unit. It requires a Closed End Kit for completion (see below).

## Clipper QuickShip Components

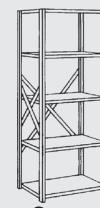
	Description	W	D	H	Cat. No.
	Box Post	-	-	87"	1B4087028
	Offset Angle Post	-	-	87"	1A4087028
	Floor Anchor Clip	3-1/2"	2-7/8"	-	10006Z
	Concrete Floor Anchor	3/8"	-	2-1/4"	9280
	Back Sway Braces	36"	-	-	12036H028
		48"	-	-	12048H028
	Side Sway Braces	-	12"	-	12015S028
		-	18"	-	12026S028
		-	24"	-	12034S028
	Back Panels	36"	-	87"	12540H028
		48"	-	87"	12740H028
	Side Panels	-	12"	87"	11440H028
		-	18"	87"	11640H028
		-	24"	87"	11740H028
	Front Base Strips	36"	-	3"	14520H028
		48"	-	3"	14540H028

## Clipper Shelving QuickShip End Kits - 87" High

Unit Depth	For OPEN Units Cat. No.	For CLOSED Units Cat. No.
12"	101287028	1C1287028
18"	101887028	1C1887028
24"	102487028	1C2487028

## Clipper® QuickShip Adjustable Shelving

- High Quality Industrial Grade
- Open and Closed Configurations
- 87" high units with Box & Angle Posts
- Shelves adjust on 1" vertical centers
- Heavy duty box beam shelves - 4 sizes
- Attractive 028 Gray powder coat finish
- Accessories - Front Bases, Anchors and Floor Anchor Clips

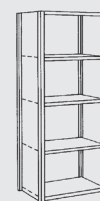


Open Basic Unit

Use an OPEN Clipper Basic Unit to start a single unit or a row of shelving. Add additional Clipper Basic Units to add to the row. To end a row or single unit, finish the unit with an OPEN End Kit.



Open End Kit



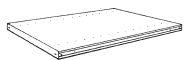
Closed Basic Unit

Use a CLOSED Clipper Basic Unit to start a single unit or a row of closed shelving. Add additional Closed Clipper Basic Units to add to the row. To end a row or single unit, finish the unit with a CLOSED End Kit.



Closed End Kit

## Heavy Duty Shelves & Capacities (Each Shelf comes with 4 Clipper Clips)



Size	Cat. No.	Capacity
36" W x 12" D	1H203612028	800 lbs.*
36" W x 18" D	1H203618028	850 lbs.*
36" W x 24" D	1H203624028	800 lbs.*
48" W x 12" D	1H204812028	500 lbs.*
48" W x 18" D	1H204818028	500 lbs.*
48" W x 24" D	1H204824028	500 lbs.*

\* Evenly Distributed Loads for Clipper Hi-Performance Heavy Duty Class 1 Shelves.

**General:** All shelving shall comply with SMA and ANSI MH 28.1-1982 and in addition shall have the following characteristics:

**Posts:** All posts shall be punched for clip or nut and bolt construction. Shelves and accessories are to be vertically adjustable on 1" centers. Side sway braces or side panels to be attached to the side flange of the post. Bolts, nuts, and sway braces or panels shall not obstruct the full adjustability of the shelves.

**Box Post:** Box post to be roll formed and have overall dimensions of 3/4" wide x 2-7/16" deep. Box post to be flush within 1/4" of the face of the shelves when assembled.

**Offset Angle:** Offset angle post shall be roll formed and have overall dimensions of 1-1/8" wide x 2-1/2" deep. The rear flange shall be punched to accept sway braces or backs, the side flange shall be punched to accept side sway braces or side panels.

**Side Panels:** Shall be 24 gauge steel. Each side shall be punched with holes for bolting to posts.

**Backs:** Shall be 24 gauge steel with holes on each side for bolting to angle posts and in the middle for using a back panel clip.

**Sway Braces:** To be 12 gauge x 3/4" steel punched at each end for bolting to posts and at the center for strength and ease of assembly.

**Clipper Shelf Clip:** One piece 14 gauge rugged compression type to insert into either box or offset angle posts to form a positive four point connection. Clips shall have two claw-like hooks to seat firmly into post slots and two tabs at bottom to seat into post holes for a tight friction connection. All clips for all posts and shelves to be the same. Design shall offer a pre-clipping feature to simplify erection. Finish: zinc plated. All shelves are to have four independently adjustable clips.

**Shelves: Conventional Flange, Class "0":** Shall be 18 gauge steel with a 1-3/16" vertical face on all four sides, front and rear faces to have 17/32" return flange 90° with the edges coined upward to prevent snagging. Sides to have a 5/8" return flange 90°. All four shelf corners shall be closed by lapping and spot welding together to provide a firm, rigid shelf. Shelf shall be universally punched for use with all available accessories and for clip or bolted assembly. Shelves are available in 24", 30", 36", 42" and 48" widths and 9", 12", 15", 18", 24", 30" and 36" depths. Shelves can be reinforced by adding 1-3/32" x 11 ga. bars or 1" x 1" x 1/8" angles to front and back flanges.

**Shelves: Clipper Hi-Performance® Box Formed:** Heavy Duty and Extra Heavy Duty are manufactured from cold rolled steel in two material thicknesses that provide up to two different shelf capacities per size. Shelves have 1-1/4" face on all four sides. Front and rear faces have four 90° bends providing a 3/4" x 1-1/4" high tubular shape with an 11/16" wide flange seated against the underside of the shelf. The flange is spot welded to the underside of the shelf on 3" centers. Sides have a 5/8" return flange 90°. All four corners are closed by lapping and spot welding together. Overall, the shelf depth and width is 1/4" less than nominal. The shelf is punched for divider adjustment on 1-1/2" centers and for attachment of label holders, bin fronts and base fronts. Hi-Performance shelves are available in 30", 36", 42", & 48" widths and 12", 15", 18", 24", 30" & 36" depths.

Extra Heavy Duty Reinforced (Class 3) Hi-Performance Shelves provide maximum capacity using Extra Heavy Duty shelves that are reinforced using 13 gauge side shelf supports bolted to the Clipper posts and 14

gauge 1-5/32" high hat shaped center supports held in place by a notch and flange in the side shelf support.

**Ledge Tops:** To be 14 gauge steel. Face of ledge to be 1-1/8" and have a center reinforcing pan. Ledge top to project 1-1/8" beyond the face of the post and to have two 14 gauge angles welded to underside for strength and bolting to post. Must be used with box posts below ledge.

**Ledge Top Finishing Strips:** To be manufactured from 14 gauge steel and furnished to give ledge top a finished appearance.

**Counter Tops:** To be 14 gauge steel. Face of counter top to be 1-1/8" and project 1-1/8" beyond face of post with a welded center reinforcing pan. Units to be furnished with box post front and rear for finished appearance. 14 gauge counter top ends can be furnished at the ends of all rows for a finished appearance.

**Counter Front:** To be 18 gauge steel attached with no exposed fasteners.

**Base Strip:** Shall be 18 gauge steel attached to face of shelf with bolts and nuts to close space between the bottom of the shelf and the floor.

**Label Holder:** Shall be 24 gauge steel with necessary holes for attaching to shelves with plastic push-in fasteners.

**Shelf Dividers:** 6" high through 20" high shall be 24 gauge, 24" high and over shall be 20 gauge. All divider front flanges shall have a 5/16" diameter bead. Top, bottom and rear flanges are 7/8". Dividers less than 24" high shall be attached with plastic push-in fasteners, 24" and higher are bolted.

**Partial Dividers:** Shall be 18 gauge steel with a 7/8" flange at the bottom. Attached with push-in Plastic Button fasteners.

**Sliding Divider:** To be 20 gauge steel manufactured to give infinite lateral adjustability. Divider portion shall be sloped 45° at front, 1/2" radius at front corner.

**Bin Fronts:** To be 18 gauge steel. One and two inch high bin fronts shall be bolted to the face of the shelf. Three inch high bin fronts to be attached to the post by use of 16 gauge zinc plated channel clips.

**Swinging Doors:** Consist of a 16 gauge steel frame and 20 gauge doors, reinforced to prevent warping. Doors are riveted to three 5-knuckle hinges and have a three-point latching device with chrome plated key lock handle. Doors to be preassembled in the frame at factory.

**Foot Plates:** Shall be 13 gauge zinc plated steel and be used to protect floors.

**Finish:** Finish to be selected from manufacturer's standard colors. Surface to be pretreated with a multiple stage cleaning and metal preparation process. Finish coat of high grade pure polyester powder coat is applied and properly cured to paint manufacturer specifications to achieve optimum performance.

---

Clipper® and Hi-Performance® are registered trademarks of Penco Products, Inc. Penco reserves the right to vary specifications consistent with a policy of continuous product improvement.

# Wide Span



## Introduction

### For HIGH, WIDE or BULKY Hand-Loaded Items

Penco Wide Span is the standard of the industry for shelving designed to contain wide, bulky loads. It bridges the storage gap between conventional shelving and pallet rack. The range of applications can be from a single unit (right) to a sophisticated multi-level picking system (bottom).

Penco Wide Span is easily the quickest shelving product to assemble. There are a minimum number of parts that snap or fit into place quickly and easily. No bracing to add and no hardware required. Not to be loaded with fork trucks.



Multi-level Wide Span Pick Module



Optional wire deck shelves



Museum storage



Auto part center storage

## How To Order Wide Span Units

Wide Span Units are easy to order. Shown on the next page are common sizes of units for 3 levels of plywood shelves.

Many other sizes are available by ordering from the component parts on the following pages. Allow for the width of each upright post in planning your layout. The Wide Span Growth Chart on the next page illustrates this concept for your convenience.

To order Wide Span Shelving Units:

1. Order as many Basic Units as you need for your row of shelving.
2. Order one Rack Ending Kit to end each row or single unit (plywood must be purchased separately).

## Growth Dimension Considerations

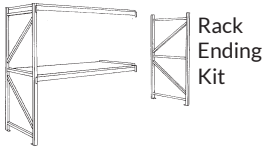
When planning a row of Wide Span Shelving, allow for the 1-3/4" width of each upright post and 1/4" additional per bay for the thickness of the beam ends. The Wide Span Growth Chart on the following page shows typical growth for two 96" steel shelf units and 96-1/2" plywood beam units.

For safety purposes, we recommend that Wide Span Uprights be floor or wall anchored.



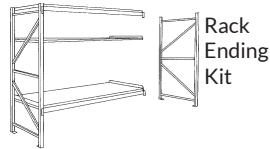
# Wide Span

## Wide Span Units



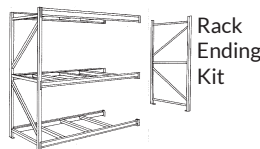
### Basic 2-Shelf Unit

- 1 Upright Frame
- 2 Steel Shelf Levels
- 2 Pair Side Shelf Supports
- 2 Pair Rigidity Beams



### Basic 3-Shelf Unit

- 1 Upright Frame
- 3 Steel Shelf Levels
- 3 Pair Side Shelf Supports
- 2 Pair Rigidity Beams



### Basic 3-Level Unit for Plywood \*

- 1 Upright Frame
- 3 Pair Standard Plywood Beams
- 3 Plywood Support Angles per pair of 72-1/2" Beams
- 4 Plywood Support Angles per pair of 96-1/2" Beams

ORDER RACK END KITS SEPARATELY. SEE BELOW.

\* NOTE: Plywood not included.

## Wide Span Shelving Units

Unit Height	Beam Width	30" Deep		36" Deep		48" Deep	
		Basic Unit Cat. No.	Rack End Kit Cat. No.	Basic Unit Cat. No.	Rack End Kit Cat. No.	Basic Unit Cat. No.	Rack End Kit Cat. No.
Two Shelf Units with Steel Shelves							
72"	60"	20351	20002C	20359	20003C	20375	20005C
	72"	20353	20002C	20361	20003C	20377	20005C
	84"	20355	20002C	20363	20003C	20379	20005C
	96"	20357	20002C	20365	20003C	20381	20005C
96"	60"	20383	20018C	20391	20019C	20407	20021C
	72"	20385	20018C	20393	20019C	20409	20021C
	84"	20387	20018C	20395	20019C	20411	20021C
	96"	20389	20018C	20397	20019C	20413	20021C
Three Shelf Units with Steel Shelves							
120"	60"	20415	20034C	20423	20035C	20439	20037C
	72"	20417	20034C	20425	20035C	20441	20037C
	84"	20419	20034C	20427	20035C	20443	20037C
	96"	20421	20034C	20429	20035C	20445	20037C
144"	60"	20447	20050C	20455	20051C	20471	20053C
	72"	20449	20050C	20457	20051C	20473	20053C
	84"	20451	20050C	20459	20051C	20475	20053C
	96"	20453	20050C	20461	20051C	20477	20053C
Three Level Units for Plywood Shelves							
120"	72-1/2"	-	-	-	-	20512	20037C
	96-1/2"	-	-	-	-	20514	20037C
144"	72-1/2"	-	-	-	-	20535	20053C
	96-1/2"	-	-	-	-	20537	20053C

## Plywood used in lieu of Steel Shelves

Special beams and supports are used when plywood, pressed wood, particle board, oriented strand board or other composition type panels are used in place of steel shelves (these deck materials must be purchased separately).



All Wide Span Beams have a patented Beam Lock that secures the beam end to the upright post to retard accidental beam dislodging. An embossed nib on the beam end engages a slot on the side on the upright

post, which holds the beam end tight against the post (U. S. Patent No. 4,928,834). Can be disengaged with a mallet.

Two beam types are available: Standard Plywood Beams, and Heavy Duty Plywood Beams. Each is manufactured an extra 1/2" long to facilitate placement of full foot lengths of decking. Each uses a different type of front to back support for the decking material. Neither can be used in the same unit or bay with standard rigidity beams, because the lengths are different.

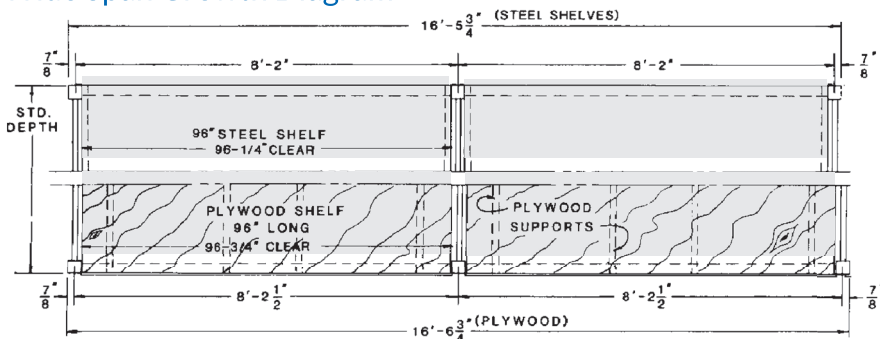
## Standard Plywood Beams

Standard Size panels may be used without trimming. This is accomplished by the step design which allows decking depths which match the upright depth. Capacities vary by beam length. Plywood Support Angles must be ordered separately. [A full 48" x 96" deck will fit on a pair of 96-1/2" beams when 48" deep upright frames are used.]

## Heavy Duty Plywood Beams

These beams can support a greater load than Standard Plywood Beams, and have a flush front facing the aisle. Requires the use of Beam Brace/Heavy Duty Plywood Supports which are ordered separately. [A full 48" x 96" deck will fit on a pair of 96-1/2" beams when 50" deep upright frames are used.]

## Wide Span Growth Diagram



## Shelving Components

### Side Shelf Supports

Heavy gauge steel angles which support steel shelves. Each support engages the upright frame at four points. One or more tangs stamped into the surface engages the reinforcing pan on the shelf bottom to prevent accidental dislodging of the shelf. One pair is required for each steel shelf.



Side Shelf Supports		
Unit Depth	Capacity Per Pair	Cat. No. Per Pair
18"	3600 lb	22018
24"	3600 lb	22024
30"	2900 lb	22030
36"	2400 lb	22036
42"	2100 lb	22042
48"	1800 lb	22048

### Rigid Wall Spacers

Assures that uniform spacing between upright and building wall is maintained. Includes hardware to fasten to frame.



Rigid Wall Spacers	
Unit Depth	Cat. No.
4"	5AR404
6"	5AR406
8"	5AR408
10"	5AR410

### Rigid Row Spacers

Used to space and join back-to-back units. Adds rigidity to double row applications. Includes hardware.



Rigid Row Spacers	
Unit Depth	Cat. No.
6"	5AR506
8"	5AR508
10"	5AR510
12"	5AR512

### Standard Plywood Beams

Designed to support 1/2" thick deck material flush with top of beam flange when used with the appropriate number of Plywood Support Angles which insert into slots in beam step. Overall height is 3-1/2". Beam step is 1-1/2" deep by 5/8" high. A 48" deep deck will fit between beams without trimming when a 48" deep upright frame is used.



Standard Plywood Beams		
Beam Width	Capacity Per Pair***	Cat. No. Per Pair
48-1/2"	2500 lb	20337
60-1/2"	2120 lb	20338
72-1/2"	1700 lb	20339
84-1/2"	1500 lb	20340
96-1/2"	1350 lb	20335

\*\*\*Capacity in pounds for evenly distributed loads.

# Wide Span

## Shelving Components

### Heavy Duty Plywood Beams

A heavy duty beam designed for greater capacity when used with deck material. Deck material sits on beam step and is supported by the appropriate number of Beam Brace/Heavy Duty Plywood Supports (order separately). Deck must be trimmed to 2" less depth than the depth of the upright frame.

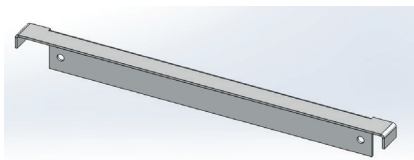
Heavy Duty Plywood Beams can be used in the same unit or bay with Standard Plywood Beams. However, the decking material must be trimmed 2" for the heavy duty beams. Capacity in pounds for evenly distributed loads.



Heavy Duty Plywood Beams		
Beam Width	Capacity Per Pair	Cat. No. Per Pair
48-1/2"	2500 lb	210480
72-1/2"	2500 lb	210720
96-1/2"	2500 lb	210960

### Standard Plywood Support Angles

Standard Plywood Support Angles fit into the slots in the beam step of Standard Plywood Beams. Order separately from beams. Order 2 per pair of 48-1/2" & 60-1/2" beams; 3 for 72-1/2" & 84-1/2" beams; 4 for 96-1/2" beams.



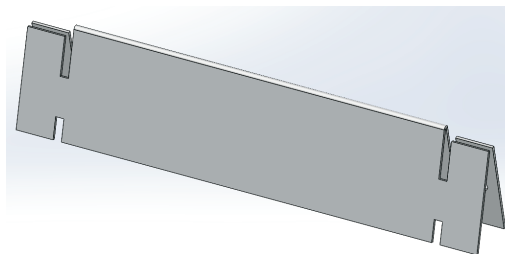
Standard Plywood Support Angles	
Depth	Cat. No.
18"	20349C
24"	20341C
30"	20330C
36"	20342C
42"	20332C
48"	20336C

### Beam Brace / H.D. Plywood Support

This item fits easily into the inside of the beam opening and has two functions.

When Rigidity Beams are used as load bearing members, the Beam Braces are used to keep the beams from twisting.

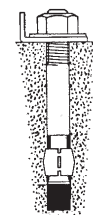
When used with Heavy Duty Plywood Beams they become Plywood supports. Use a minimum of two supports per pair of beams. Use more if required by your load condition - see capacities in the table.



Beam Brace / H.D. Support		
Depth	Capacity	Cat. No.
24"	1200 lb	202040C
30"	1100 lb	202050C
36"	900 lb	202060C
42"	700 lb	202070C
48"	500 lb	202080C
50"	500 lb	2P0050C

### Concrete Floor Anchor

Use the longer anchor #9281 in seismic zones above 2A.



Concrete Floor Anchor			
Unit Width	Unit Depth	Unit Height	Basic Unit Cat. No.
3/8"	-	2-1/4"	9280
3/8"	-	3-3/4"	9281



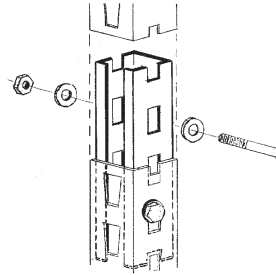
# Wide Span



## Shelving Components

### Upright Frame Splice

Note that TWO splices must be ordered per frame. Top upright frame **MUST** be ordered without footplate. Hardware included.

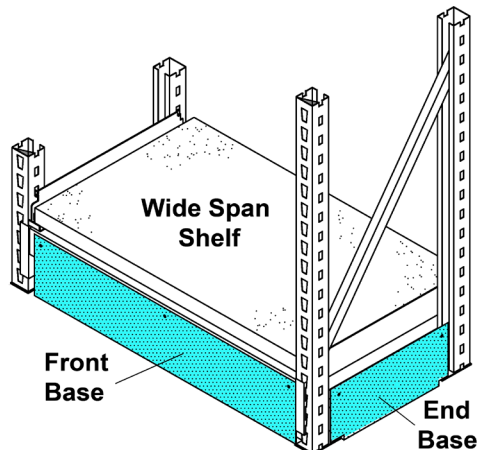


### Wide Span Upright Frame Accessories

Unit Width	Unit Depth	Unit Height	Cat. No.
Upright Frame Splice			
-	-	8"	20099H
Shim, unpainted			
2-1/2"	3-1/2"	-	20100C

### Wide Span Base Closures

These base closures will close the space beneath a unit between the bottom Rigidity or Heavy Duty Plywood Beam at their lowest position, and the floor, or at the end of the unit between the lowest horizontal brace and the floor. They are supplied with tek screws for fastening.



### Wide Span End Bases

Depth	Height	Cat. No.
18"	7-3/4"	
24"	7-3/4"	
30"	7-3/4"	
36"	7-3/4"	
42"	7-3/4"	
48"	7-3/4"	
50"	7-3/4"	

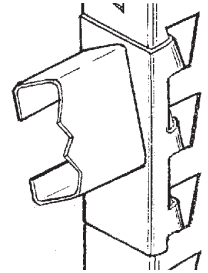
### Wide Span Front Bases

Width	Height	Cat. No.
48"	6"	202200H
60"	6"	202201H
72"	6"	202202H
84"	6"	202203H
96"	6"	202204H

### Tire Rack Beams

Beam is slanted to cradle tires. It is designed to be installed on aisle side of unit.

Penco can supply special beams for installation on the aisle side that are slanted to accept passenger tires, while standard Rigidity Beams are used at the rear. Contact your Penco representative for more information on Tire Rack Units.



### Tire Rack Beams (Each)

Unit Width	Cat. No.
48"	20619C
60"	20620C
72"	20621C

### Tire Rack Upright Frames

Unit Depth	Unit Height	Cat. No.
Single Entry Units (with Footplates)		
18"	96"	20016C
18"	126"	20260C
18"	156"	20056C
18"	192"	24040C
Double Entry Units		
38"	96"	20262C
38"	126"	20263C
38"	156"	20264C
38"	192"	20265C

### Tire Rack Units

Unit Width	Unit Depth	Unit Height	Cat. No.
Basic Units, Single Entry			
60"	18"	96"	20651
60"	18"	126"	20653
60"	18"	156"	20655
60"	18"	192"	20657
Basic Units, Double Entry			
60"	38"	96"	20659
60"	38"	126"	20661
60"	38"	156"	20663
60"	38"	192"	20665

# Wide Span

## Shelving Components

### Upright Frames



Penco Wide Span Upright Frames are made from heavy gauge steel, MIG welded into one rigid assembly containing posts, diagonal and horizontal braces and foot plates for anchoring. There is no assembly required. Other sizes are available. See page 11 for anchors.

Posts are punched on the face to provide positive independent beam placement on 2" vertical centers. The posts are marked on 12" centers to facilitate placement of shelf levels. A slot on each side of the post accepts a nib on the end of each beam, to lock it in place.

Frames have a capacity of 7,500 pounds with a 1.92 safety factor where vertical beam spacing does not exceed 60". Footplates are punched for anchoring: see "Anchors" in the post section of Clipper shelving on page 11.

Upright Frames							
Unit Height	18" Deep Cat. No.	24" Deep Cat. No.	30" Deep Cat. No.	36" Deep Cat. No.	42" Deep Cat. No.	48" Deep Cat. No.	50" Deep Cat. No.*
72"	20000C	20001C	20002C	20003C	20004C	20005C	2P072C
84"	20008C	20009C	20010C	20011C	20012C	20013C	2P084C
96"	20016C	20017C	20018C	20019C	20020C	20021C	2P096C
120"	20032C	20033C	20034C	20035C	20036C	20037C	2P020C
144"	20048C	20049C	20050C	20051C	20052C	20053C	2P044C
168"	-	20065C	20066C	20067C	20068C	20069C	2P068C
192"	-	24001C	24002C	24003C	24004C	24005C	2P092C

\* 50" deep frame is for use with H.D. Plywood Beam. Allows use of standard 48" plywood deck without cutting for depth dimension.

### Rigidity Beams



Rigidity beams provide lateral stability when steel shelves are used. A minimum of 2 pairs of beams is required per unit. They are constructed of 3" high steel channels with return flanges, with a beam end connector welded to each end.

It is not necessary to place rigidity beams beneath each steel shelf. Rigidity Beams do not carry a load unless used to support wire decking. If used with wire decking, then use the Beam Brace/Heavy Duty Plywood Supports (shown on the page 22).

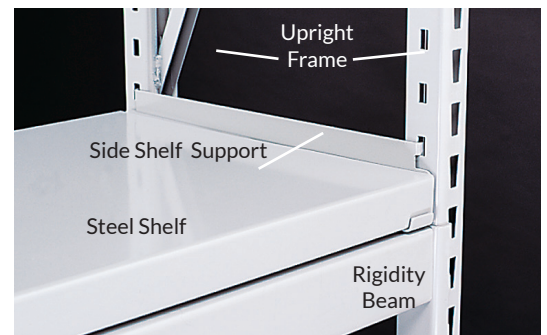
Rigidity Beams		
Unit Width	Capacity Per Pair**	Cat. No. Per Pair
48"	2500 lb	20315
60"	2140 lb	20316
72"	1780 lb	20317
84"	1580 lb	20318
96"	1340 lb	20319

\*\*Capacity per pair in pounds for evenly distributed load when used as load bearing members using Beam Braces/H.D. Plywood Supports as follows: 60" x 72" length, 1 Beam Brace; 84" x 96" length, 2 Beam Braces.

### Steel Shelves

Penco Steel Wide Span Shelves are the ultimate in providing a smooth, safe surface for storing a wide variety of items. They are 1-3/4" high and feature double flanges at front and rear edges with a full width reinforcing pan welded to the center of the bottom.

Each shelf requires a pair of Side Shelf Supports, which must be ordered separately. For 36", 42" and 48" depths, the appropriate number of 18" and 24" deep shelves are provided, and are installed together on the Side Shelf Supports to achieve the stated depth.



Steel Shelves										
Unit Depth	48" Wide		60" Wide		72" Wide		84" Wide		96" Wide	
	Cat. No.	Capacity *	Cat. No.	Capacity *	Cat. No.	Capacity *	Cat. No.	Capacity *	Cat. No.	Capacity *
18"	22418C	1200 lb	22518C	1200 lb	22618C	1000 lb	22718C	800 lb	22818C	600 lb
24"	22424C	1500 lb	22524C	1200 lb	22624C	1000 lb	22724C	800 lb	22824C	600 lb
30"	22430C	2300 lb	22530C	1800 lb	22630C	1500 lb	22730C	1200 lb	22830C	900 lb
36"	22436C	2400 lb	22536C	2400 lb	22636CC	2000 lb	22736C	1600 lb	22836C	1200 lb
42"	22442C	2000 lb	22542C	2000 lb	22642C	2000 lb	22742C	1600 lb	22842C	1200 lb
48"	22448C	1800 lb	22548C	1800 lb	22648C	1800 lb	22748C	1600 lb	22848C	1200 lb

\* NOTE: Shelf capacities in pounds, evenly distributed.

### COMPONENTS

**Upright Frames:** Penco Wide Span Upright Frames are made from heavy gauge steel, MIG welded into one rigid assembly containing posts, diagonal and horizontal braces and foot plates. There is no assembly required. Many sizes are available. Posts are punched on the face to provide positive independent beam placement on 2" vertical centers. The posts are marked on 12" centers to facilitate placement of shelf levels. A slot on each side of the post accepts a nib on the end of each beam, to lock it in place. Frames have a capacity of 7,500 pounds with a 1.92 safety factor where vertical beam spacing does not exceed 60".

**Rigidity Beams:** Rigidity beams provide lateral stability for the shelving; a minimum of two pairs of beams is required per unit. They are constructed of 3" high steel channels with return flanges and a beam end connector welded to each end. Beams are supplied in even foot lengths from 4' through 8'. Clearance between upright frames is 1/4" more than stated beam size. If the beams are being used as load bearing members, then Beam Braces are required. All Wide Span Beams have a patented Beam Lock that secures the beam end to the upright post to retard accidental beam dislodging. An embossed nib on the beam end engages a slot on the side on the upright post, which holds the beam end tight against the post (U. S. Patent No. 4,928,834). Can be disengaged with a mallet. It is normally not necessary to place rigidity beams beneath each steel shelf.

**Steel Shelves:** Penco Steel Wide Span Shelves are the ultimate in providing a smooth, safe surface for storing a wide variety of items. They are 1-3/4" high and feature double flanges at front and rear edges with a full width reinforcing pan welded to the center of the bottom. Each shelf requires a pair of Side Shelf Supports, which must be ordered separately. For 36", 42" and 48" depths, the appropriate number of 18" and 24" deep shelves are provided, and are installed together on the Side Shelf Supports to achieve the stated depth.

**Side Shelf Supports:** Heavy gauge steel angles which support steel shelves. Each support engages the upright frame at four points. One or more tangs stamped into the surface engages the reinforcing pan on the shelf bottom to prevent accidental dislodging of the shelf. One pair is required for each steel shelf.

**Rigid Wall Brackets:** Used to fasten upright frames to the wall for sturdy single row applications. Includes hardware to fasten to frame.

**Rigid Row Spacers:** Used to space and join back-to-back shelving units. Adds rigidity to double row applications. Includes hardware.

**PLYWOOD USED IN LIEU OF STEEL SHELVES:** Special beams and supports are used when plywood, pressed wood, particle board, oriented strand board or other composition type panels are used in place of steel shelves (these deck materials must be purchased separately). Two beam types are available: Standard Plywood Beams, and Heavy Duty Plywood Beams. Each is manufactured an extra 1/2" long to facilitate placement of full foot lengths of decking. Each uses a different type of front to back support for the decking material. Neither can be used in the same unit or bay with standard rigidity beams, because the lengths are different.

**Standard Plywood Beams:** Designed to support 1/2" thick deck material flush with top of beam flange when used with the appropriate number of Plywood Support Angles (ordered separately) which insert into slots in beam step. Overall height is 3-1/2". Beam step is 1-1/2" deep by 5/8" high. A 48" deep deck will fit between beams without trimming when a 48" deep upright frame is used.

**Heavy Duty Plywood Beams:** These beams can support a greater load than Standard Plywood Beams, and have a flush front facing the aisle. Requires the use of Beam Brace/Heavy Duty Plywood Supports which are ordered separately. A full 48" x 96" deck will fit on a pair of 96-1/2" beams when 50" deep upright frames are used. Heavy Duty Plywood Beams can be used in the same unit or bay with Standard Plywood Beams, however the depth of the decking material must be trimmed for the heavy duty beams (i.e. deck must be trimmed to 2" less depth than the depth of the upright frame.)

**Standard Plywood Support Angles:** Standard Plywood Support Angles fit into the slots in the beam step of Standard Plywood Beams. Order separately from beams. Order two per pair of 48-1/2" & 60-1/2" beams; three for 72-1/2" & 84-1/2" beams; four for 96-1/2" beams.

**Beam Brace/Heavy Duty Plywood Support:** This item fits easily into the inside of the beam opening and has two functions: A) When Rigidity Beams are used as load bearing members, the Beam Braces are used to keep the beams from twisting; B) When used with Heavy Duty Plywood Beams they are used as Plywood supports. Use a minimum of two supports per pair of beams. Use more if required by your load condition.

---

PENCO RESERVES THE RIGHT TO VARY SPECIFICATIONS CONSISTENT WITH A POLICY OF CONTINUOUS PRODUCT IMPROVEMENT.



### RivetRite Universal Shelf Framing System

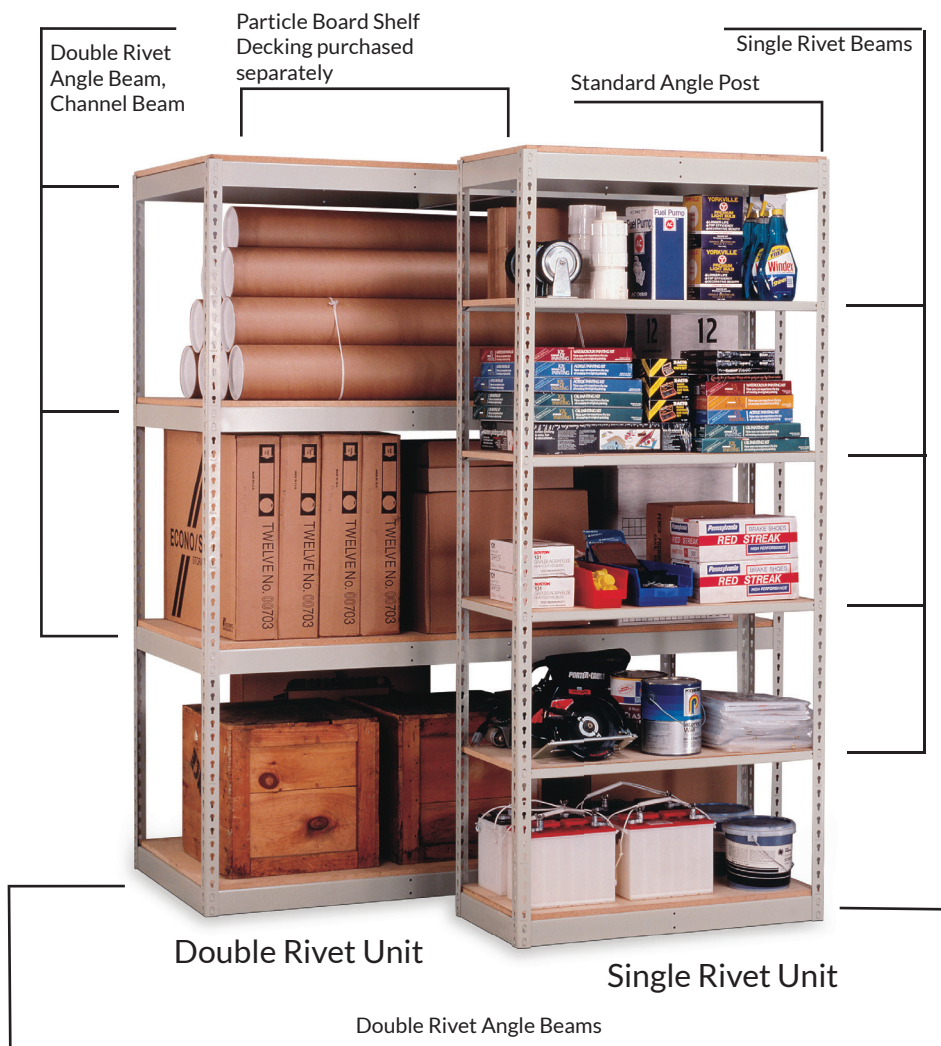
We call RivetRite the Universal Shelf Framing System because so many storage requirements can be met with only a few simple components. RivetRite is engineered to provide safe, economical storage of virtually any type of hand-loaded material. Structural integrity is ensured by a rigid boltless connection between beams and posts.

RivetRite offers the following to help solve your storage problems:

- Economical — your shelving dollar goes a long way
- Easy assembly without special tools - all you need is a rubber mallet to assemble most units
- Access to contents from all four sides - no braces to get in the way
- Shelves adjustable on 1-1/2" centers- allows you to custom design unit to fit your load size
- A variety of beams to accomodate a wide range of loads - you buy the capacity you need
- Finished in durable powder coat enamel - baked on for permanence. Available in 028 Gray or 723 Light Putty
- Order by pre-configured UNITS or by individual components

### Components

RivetRite shelving is comprised of 4 types of posts for the vertical members and various horizontal support members. In this way it is possible to order by components to tailor the shelving to the items to be stored.



(Double Rivet Beams are ALWAYS used for the full perimeter at the TOP and BOTTOM of ALL

Units)

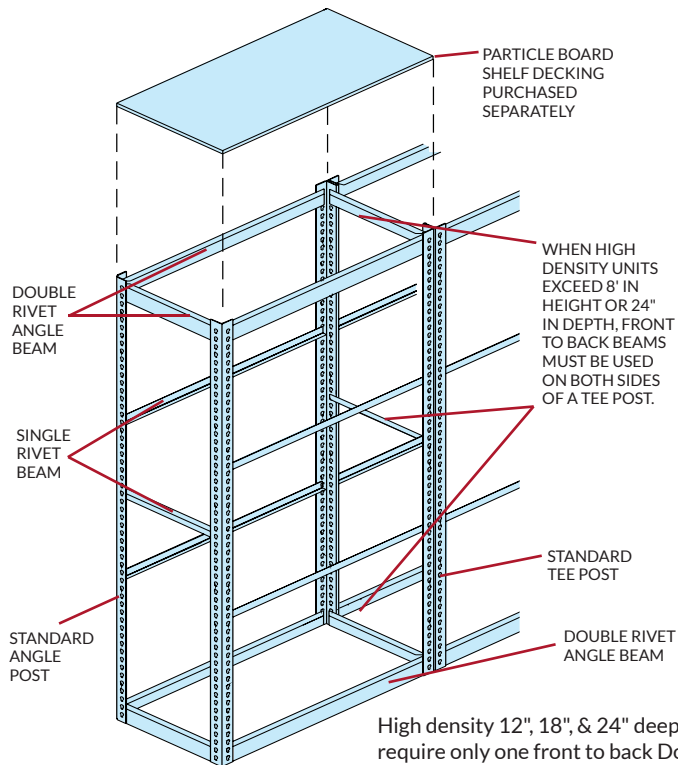
# RivetRite® Shelving



## Building Your RivetRite® Units

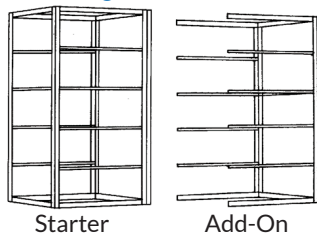
### Single Rivet High Density Units

Single Rivet high density shelving uses single rivet beams on intermediate levels, and double rivet beams at the top and bottom for rigidity. For units up to 48" wide.



High density 12", 18", & 24" deep Add-On Units require only one front to back Double Rivet Angle Beam at unit top and bottom and one Single Rivet Shelf Beam for front to back at unit center.

#### Single Rivet Units

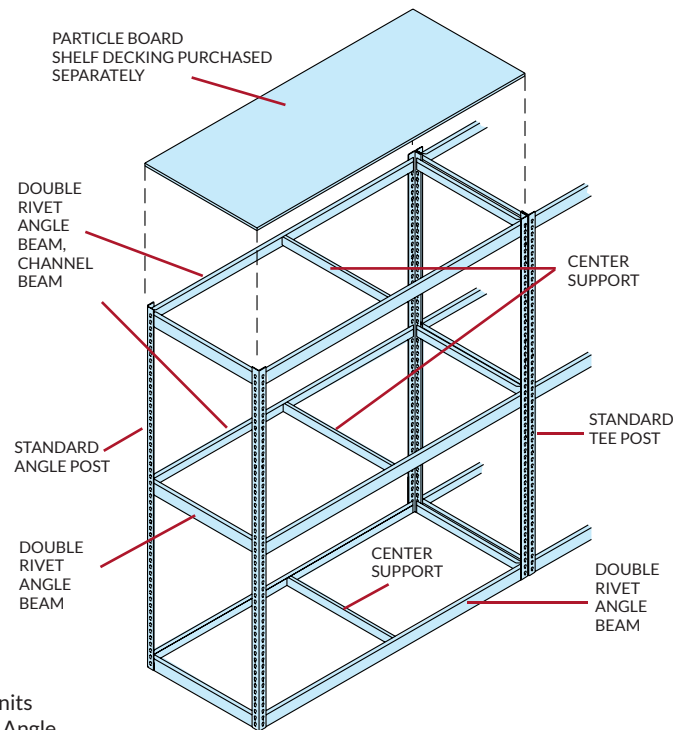


### Starters and Adders

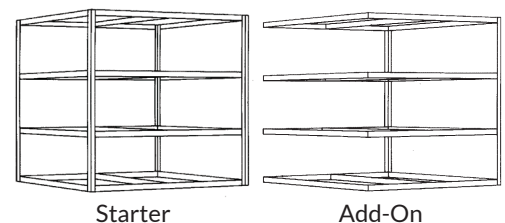


### Double Rivet Bulky Storage Units

Double Rivet bulky storage units use double rivet for strength and rigidity. For units up to 96" wide.



#### Double Rivet Units



Starter and Add-On units are combined to form economical rows of shelving. Each Add-On unit includes a pair of tee posts which are used in common between units. This reduces assembly time and the number of parts required. Begin each row with two angle posts from the starter unit and join the desired number of add-on units to complete the row. Finish the last unit with a pair of angle posts from the starter unit. All dimensions in the tables are in inches and are subject to change without notice.

### Steps for Selecting Your RivetRite® Units

1. Review the catalog and decide what type of unit will meet your requirement.
2. Determine the shelf size desired and select the capacity needed. Note the capacity shown is for the steel structure only.
3. Next determine the type of shelf deck material and calculate the quantity. Note that none of the unit catalog numbers include decking. Decking must be purchased separately.
4. All starter units are furnished with four Angle Posts. Add-on units have two intermediate Tee Posts. When assembling units, always

5. put the Angle Posts at the extreme ends of the shelving row. Note that shelving growth will always occur; see Growth Chart on pg. 33.
5. When ordering piece parts from the Component Parts pages of the catalog, contact your Penco representative for guidance on piece part capacities and product application to ensure structural integrity.





# RivetRite® Shelving

## Single Rivet Units: Up to 48" Wide

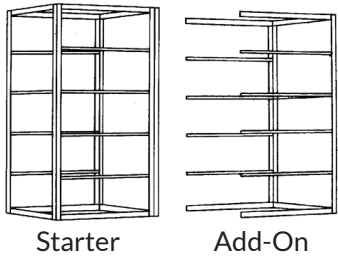
### Single Rivet High Density Units

Single Rivet High Density shelving uses single rivet beams on intermediate levels, and double rivet beams on all four sides at the top and bottom for rigidity. For units up to 48" wide.

Starter and add-on units are combined to form economical rows of shelving. Each add-on unit includes a pair of tee posts which are used in common between units. This reduces assembly time and the number of parts required. Begin each row with two angle posts from the starter unit and join the desired number of add-on units to complete the row. Finish the last unit with a pair of angle posts from the starter unit.

All intermediate shelves on units that exceed 24" deep utilize single rivet beams for front to back shelf deck support.

Units 12", 18" and 24" deep include one pair of single rivet beams for intermediate use front to back.



- High Density Single Rivet Shelf Beams provide maximum space between shelf levels
- Common tee posts between starter and add-on unit
- Shelf levels adjust on 1-1/2" centers
- Fast easy assembly
- No special tools needed
- Optional heavy duty single rivet shelf beams available for added capacity



Single Rivet High Density Units (84" High)						
Unit Width	Shelf Depth	Shelf Capacity*	5 Shelf Cat. No.	6 Shelf Cat. No.	7 Shelf Cat. No.	8 Shelf Cat. No.
36" Starter Units	12"	350	461315	461316	461317	461318
	18"	350	461325	461326	461327	461328
	24"	350	461335	461336	461337	461338
	36"	350	461345	461346	461347	461348
36" Add-On Units	12"	350	462355	462356	462357	462358
	18"	350	462365	462366	462367	462368
	24"	350	462375	462376	462377	462378
	36"	350	462385	462386	462387	462388
48" Starter Units	12"	250	461415	461416	461417	461418
	18"	250	461425	461426	461427	461428
	24"	250	461435	461436	461437	461438
	36"	250	461445	461446	461447	461448
48" Add-On Units	12"	250	462455	462456	462457	462458
	18"	250	462465	462466	462467	462468
	24"	250	462475	462476	462477	462478
	36"	250	462485	462486	462487	462488

\* Capacities shown are for the steel support beams, not the shelf deck material. For higher support beam capacity, see "RivetRite Components".

Capacities are in pounds for evenly distributed loads. All unit catalog numbers include metal framing only. Shelf deck material must be ordered separately.



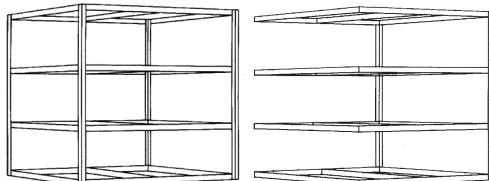
# RivetRite® Shelving

## Double Rivet Units: Up to 96" Wide



### Double Rivet Units

Double Rivet Units use the same posts and top and bottom perimeter beams as single rivet units, however all intermediate beams are of double rivet construction. Units are either 84" or 120" high. Some units have center supports for higher capacity and some units have channel beams in place of angle beams for heavier loads.



Starter

Add-On



### Double Rivet Bulky Storage Units (With 4 Shelves - 84" High)

Unit Width	Beam Type	Shelf Depth	WITHOUT Center Support			WITH Center Support		
			Shelf Capacity*	Starter Cat. No.	Add-On Cat. No.	Shelf Capacity*	Starter Cat. No.	Add-On Cat. No.
48" Wide Units	Heavy Duty Angle	18"	750	46001H	46006H	1400	46W01H	46W06H
		24"	750	46002H	46007H	1400	46W02H	46W07H
		30"	750	46003H	46008H	1310	46W03H	46W08H
		36"	750	46004H	46009H	1220	46W04H	46W09H
		48"	750	46005H	46010H	1125	46W05H	46W10H
60" Wide Units	Heavy Duty Angle	18"	600	46011H	46016H	1200	46W11H	46W16H
		24"	600	46012H	46017H	1200	46W12H	46W17H
		30"	600	46013H	46018H	1200	46W13H	46W18H
		36"	600	46014H	46019H	1200	46W14H	46W19H
		48"	600	46015H	46020H	1200	46W15H	46W20H
	Channel	18"	-	-	-	2240 (1)	46W01C	46W06C
		24"	-	-	-	2240 (1)	46W02C	46W07C
		30"	-	-	-	2240 (1)	46W03C	46W08C
		36"	-	-	-	2240 (1)	46W04C	46W09C
		48"	-	-	-	2240 (1)	46W05C	46W10C
72" Wide Units	Heavy Duty Angle	18"	500	46021H	46026H	1000	46W21H	46W26H
		24"	500	46022H	46027H	1000	46W22H	46W27H
		30"	500	46023H	46028H	1000	46W23H	46W28H
		36"	500	46024H	46029H	1000	46W24H	46W29H
		48"	500	46025H	46030H	1000	46W25H	46W30H
	Channel	18"	-	-	-	1850	46W11C	46W16C
		24"	-	-	-	1850	46W12C	46W17C
		30"	-	-	-	1850	46W13C	46W18C
		36"	-	-	-	1850	46W14C	46W19C
		48"	-	-	-	1850	46W15C	46W20C
96" Wide Units	Heavy Duty Angle	18"	-	-	-	620	46W31H	46W36H
		24"	-	-	-	620	46W32H	46W37H
		30"	-	-	-	620	46W33H	46W38H
		36"	-	-	-	620	46W34H	46W39H
		48"	-	-	-	620	46W35H	46W40H
	Channel	18"	-	-	-	1400	46W21C	46W26C
		24"	-	-	-	1400	46W22C	46W27C
		30"	-	-	-	1400	46W23C	46W28C
		36"	-	-	-	1400	46W24C	46W29C
		48"	-	-	-	1400	46W25C	46W30C

### Double Rivet Bulky Storage Units (With 5 Shelves - 120" High)

Unit Width	Beam Type	Shelf Depth	WITHOUT Center Support			WITH Center Support		
			Shelf Capacity*	Starter Cat. No.	Add-On Cat. No.	Shelf Capacity*	Starter Cat. No.	Add-On Cat. No.
72" Wide Units	Heavy Duty Angle	30"	500	46041H	46044H	1000	46W41H	46W44H
		36"	500	46042H	46045H	1000	46W42H	46W45H
		48"	500	46043H	46046H	1000	46W43H	46W46H
	Channel	30"	-	-	-	1850 (2)	46W31C	46W34C
		36"	-	-	-	1850 (2)	46W32C	46W35C
		48"	-	-	-	1850 (2)	46W33C	46W36C
96" Wide Units	Heavy Duty Angle	30"	-	-	-	620	46W47H	46W50H
		36"	-	-	-	620	46W48H	46W51H
		48"	-	-	-	620	46W49H	46W52H
	Channel	30"	-	-	-	1400	46W37C	46W40C
		36"	-	-	-	1400	46W38C	46W41C
		48"	-	-	-	1400	46W39C	46W42C

\*Capacities shown are for the steel support beams, not the shelf deck material. For higher support beam capacity, see "RivetRite Components". Capacities are in pounds for evenly distributed loads. All unit catalog numbers include metal framing only. Shelf deck material must be ordered separately. All Double Rivet Bulky Storage Units with Channel Beams are furnished with Heavy Duty Double Rivet Angle Beams (left to right) at the bottom level. (1) - Max. Average Shelf Load 2000# per shelf. (2) - Max. Shelf Load 1490# per shelf.

# RivetRite® Shelving

## Record Storage Shelving



80 Box Unit with Decking  
Cat. No. 46604A  
(Order decking separately)

(Boxes are not Included)

### Keep Your Records Organized!

- Assembles without special tools
- Records can be retrieved from both sides
- Units can be added as needed
- 42" wide units hold 3 boxes across
- 69" wide units hold 5 boxes across
- Various unit heights are available

### Record Storage Units

RivetRite Record Storage Units aid in records management by providing an organized solution for high density archive storage applications.

Add-on units utilize a common Tee Post between units to save time during assembly.

### Record Storage Units

For Use With Decking (order deck material separately)

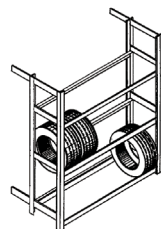
Unit Width	Unit	Unit	No. of Shelves	No. of Boxes*	Starter Cat. No.	Add-On Cat. No.
42"	15"	84"	4	24	46601A	46613A
42"	30"	84"	4	48	46602A	46614A
69"	15"	84"	4	40	46603A	46615A
69"	30"	84"	4	80	46604A	46616A
42"	15"	108"	5	30	46605A	46617A
42"	30"	108"	5	60	46606A	46618A
69"	15"	108"	5	50	46607A	46619A
69"	30"	108"	5	100	46608A	46620A

## Inventory Systems

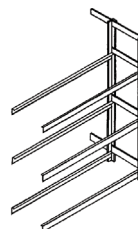


### Tire Storage Rack

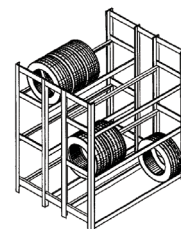
Penco RivetRite® Tire Racks provide for the neat organized storage of standard automobile or light truck tires. Specially designed beams with a 30° flange on the top securely cradle the tires. Available in Single-Row, (12" deep units with 9" Wall Ties) and Double-Row, (two 12" deep units separated by 18" Double Row Spacers). Unit depth shown includes wall ties/row spacers. Deeper units are available to accommodate larger SUV tires.



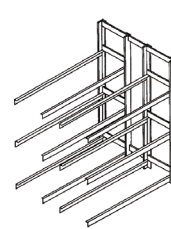
Single Row Starter



Single Row Add-On



Double Row Starter



Double Row Add-On

### Passenger Tire Storage Rack

#### Single Row

Unit Width	Unit Depth	Unit Height	No. of Levels	Tire Capacity*	Starter Cat. No.	Add-On Cat. No.
60"	21"	84"	3	24	46351C	46451C
60"	21"	120"	4	32	46352C	46452C

#### Double Row

Unit Width	Unit Depth	Unit Height	No. of Levels	Tire Capacity*	Starter Cat. No.	Add-On Cat. No.
60"	42"	84"	3	48	46355C	46455C
60"	42"	120"	4	64	46356C	46456C

NOTE: Tire rack capacities are based on average passenger tire sizes.

\*\* Supplied with Heavy Duty Posts.

### Tire Rack Upright Frames

Unit Width	Unit Depth	Unit Height	Basic Unit	Cat.
Single Row Starter Units				
60"	24"	84"	46361TP	
60"	24"	120"	46362TP	
Single Row Add-On Units				
60"	24"	84"	46461TP	
60"	24"	120"	46462TP	
Double Row Starter Units				
60"	48"	84"	46655TP	
60"	48"	120"	46656TP	
Double Row Add-On Units				
60"	48"	84"	46665TP	
60"	48"	120"	46456TP	

## Components



### Muffler Storage Unit

Provides sturdy storage for mufflers or other inventory items. All double rivet beam construction. Available in 48" and 96" widths in both starter and add-on configurations.

Muffler Storage Units

Unit Width	Unit Depth	Unit Height	Starter Cat. No.	Add-On Cat. No.
48"	36"	84"	46801M	46803M
96"	36"	84"	46802M	46804M



### Hanging Tailpipe Rack

Designed specifically for the storage of automotive and light truck tailpipes. Assembles in minutes without special tools. Stored items are visible and easily accessible. Hanging hooks are not provided by Penco.

Hanging Tailpipe Rack

Clear Span	Unit Depth	Unit Height	Cat. No.
48"	18"	120"	46901P
96"	18"	120"	46902P

## Components

### Posts

#### Angle Posts

##### Standard Duty Angle:

1-1/2" x 1-1/2". Used as upright post for standard RivetRite units. All Angle Posts allow for beam adjustments on 1-1/2" centers.

##### Heavy Duty Angle:

1-7/8" x 1-7/8". When greater capacity and stability are essential, the heavy duty angle post is the proper choice. Ideally suited for two level shelving, storage deck and high rise shelving applications.



### Tee Posts Standard Duty Tee:

3" x 1-1/2". Included with standard duty add-on units to function as a common post between the starter unit and adjoining units. All Tee Posts allow for beam adjustment on 1-1/2" centers.

### Heavy Duty Tee:

3-3/4" x 1-7/8". Used in the same way as the standard tee, when increased load capacities are required.

RivetRite® Posts

Item Desc.	Size	Standard Cat. No.	Hvy Duty Cat. No.
Angle Posts	36"	46AS03C	-
	48"	46AS04C	-
	60"	46AS05C	-
	72"	46AS06C	-
	84"	46AS07C	-
	96"	46AS08C	46AH08C
	108"	46AS09C	-
	120"	46AS10C	46AH10C
Tee Posts	36"	46TS03C	-
	48"	46TS04C	-
	60"	46TS05C	-
	72"	46TS06C	-
	84"	46TS07C	-
	96"	46TS08C	46TH08C
	108"	46TS09C	-
	120"	46TS10C	46TH10C

## Beams

### Single Rivet Shelf Beams Standard Duty Single Rivet "SS":

Primarily used as an intermediate shelf support when maximum vertical space between levels is needed. Furnished as standard on High Density Shelving units.

### Heavy Duty Single Rivet "HS":

Manufactured to provide greater capacity with very little loss of usable vertical space between shelves.

### Double Rivet Angle Beams Standard Duty "SB":

Used to establish unit stability and to provide shelf support on all four sides.



# RivetRite® Shelving

## Components

### Heavy Duty "HB":

Provides stability and increased load capacity in the longer lengths.

RivetRite® Beams			
Item Desc.	Size	Standard Cat. No.	Hvy Duty Cat. No.
Single Rivet Shelf Beams	12"	46SS12C	-
	15"	46SS15C	-
	18"	46SS18C	-
	24"	46SS24C	-
	30"	46SS30C	-
	36"	46SS36C	-
"SS" & "HS"	42"	46SS42C	-
	48"	46SS48C	46HS48C**
Double Rivet Angle Beams	12"	46SB12C	-
	15"	46SB15C	-
	18"	46SB18C	-
	24"	46SB24C	-
	30"	46SB30C	-
	36"	46SB36C	-
	42"	46SB42C	-
	48"	-	46HB48C
	60"	-	46HB60C
	69"	-	46HB69C
	72"	-	46HB72C
	84"	-	46HB84C
	96"	-	46HB96C

\* Heavy Duty 36" support beam capacity is 600 lb. per pair.

\*\* Heavy Duty 48" support beam capacity is 500 lb. per pair.

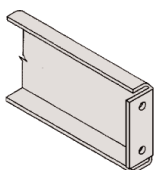
### Double Rivet Channel Beams "CB":

3" x 1". Channel is designed to provide maximum left to right stability and higher capacity than standard or heavy duty beams. Cannot be used at floor level. The top flange has holes for fastening decking.

### Tire Rack Beams "TB":

2-3/4" high - For left to right shelf support of tires. 30 degree angle on supporting edge of tire rack beam.

Beams, Continued		
Item Desc.	Size	Standard Cat. No.
Double Rivet Channel Beams "CB"	60"	46CB60C
	72"	46CB72C
	84"	46CB84C
	96"	46CB96C
Tire Rack Beams "TB"	48"	46TB48C
	60"	46TB60C



### Center Support:

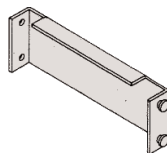
Used with double rivet beams to provide front-to-rear support for shelf deck and provides added stability to beams. Hardware included.



### Post Splice:

1-3/8" x 1-3/8". Used to extend posts. Order one per angle post. Order two per tee post. Note: installs on the outside of the post.

Beams, Center Supports & Splice		
Item Desc.	Size	Standard Cat. No.
Center Support with Hardware	12"	46CS12
	15"	46CS15
	18"	46CS18
	24"	46CS24
	30"	46CS30
	36"	46CS36
	42"	46CS42
	48"	46CS48
Post Splice	1-3/8" x 1-3/8"	46PS0H

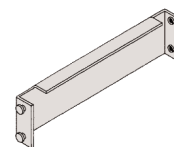


### Wall Tie:

Used to secure units to wall and provide space between wall and attached units. Hardware is not included.

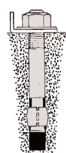
### Double Row and Top Ties:

Designed to space back-to-back units and to top-tie rows across aisles for additional stability.



### Concrete Anchors:

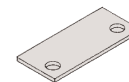
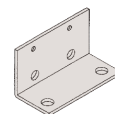
Used to secure posts to the floor (foot plates are used). Available in 2 lengths; the 2-1/4" length is sufficient for most usage, but areas with a high seismic rating may require the 3-3/4" length #9281.



### Foot Plate & Shim:

Foot Plate includes hardware, for anchoring angle and tee posts to the floor. NOTE: Foot plate cannot be used if there is a double rivet channel beam at the lowest point. Hardware to attach to post anchor is ordered separately.

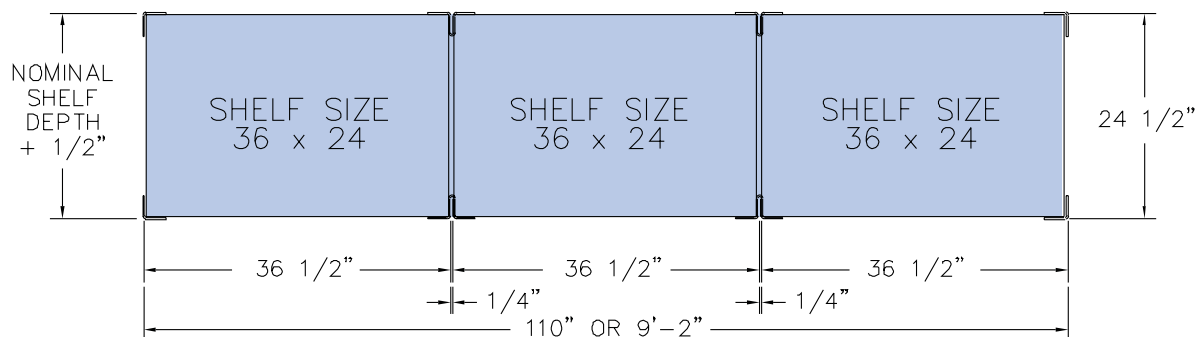
Shim (14 ga.) is for placement beneath footplate if floor is uneven.



Ties and Anchors		
Description	Size	Std. Cat. No.
Wall Tie	9-1/4"	46WT09C
Double Row and Top Ties	18-1/4"	46RT18C
Concrete Anchors	3/8" x 2-1/4"	9280
	3/8" x 3-3/4"	9281
Foot Plate	-	46FPOH
Shim (plated)	3-1/2" x 2"	46FPS00Z

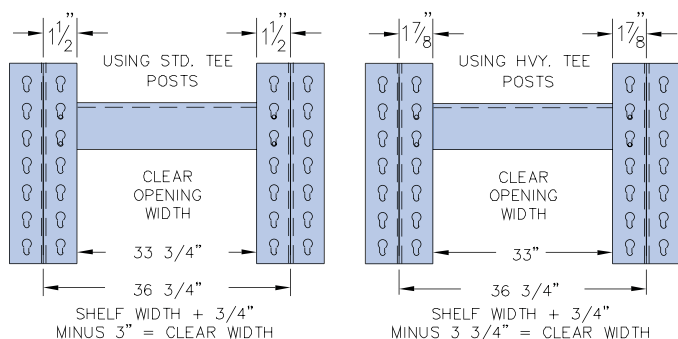
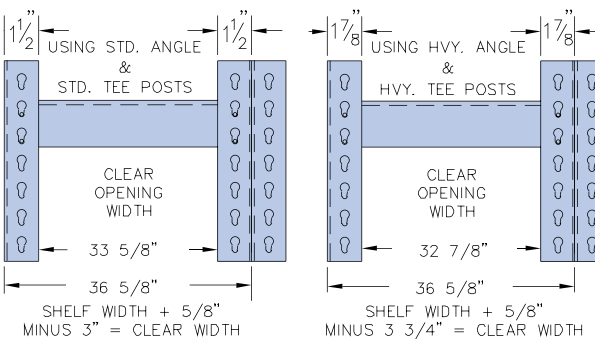
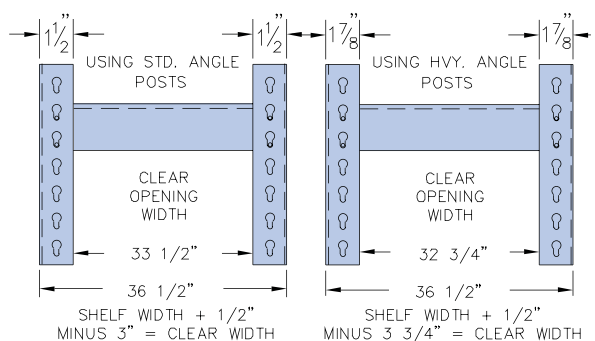
### Unit Growth Chart

WHEN DESIGNING A SHELVING LAYOUT, UNIT GROWTH MUST BE CONSIDERED. TO DETERMINE THE OVERALL DIMENSION OF A CONTINUOUS ROW OF SHELVING EMPLOYING TEE POSTS OR ANGLE POST WITH TIE PLATES.



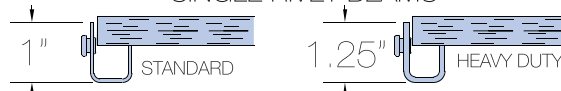
### Unit Clear Width

EXAMPLES BELOW ARE BASED ON 36" WIDE SHELF

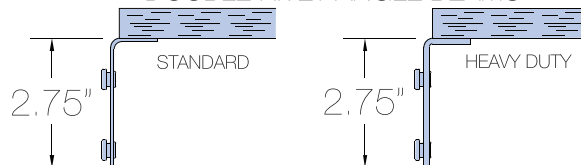


### Beam Profiles

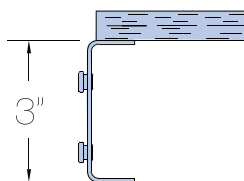
#### SINGLE RIVET BEAMS



#### DOUBLE RIVET ANGLE BEAMS



#### DOUBLE RIVET CHANNEL



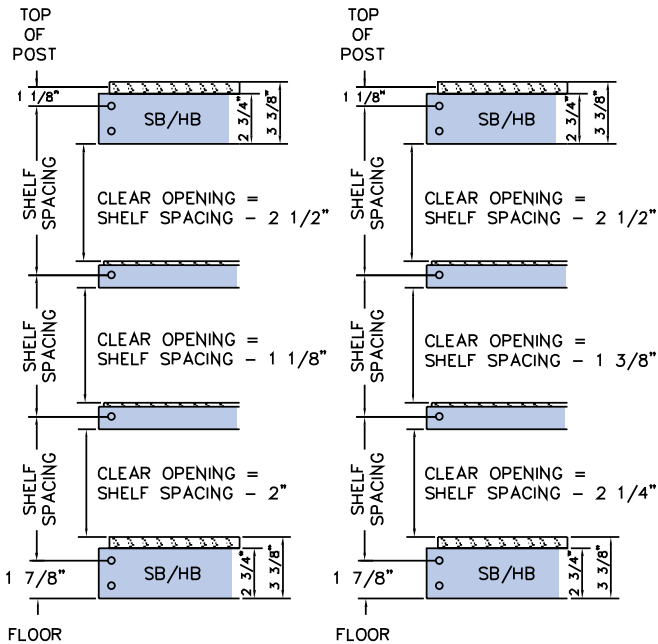
**RivetRite®**

### Vertical Clear Opening Using 5/8" Shelf Deck Material

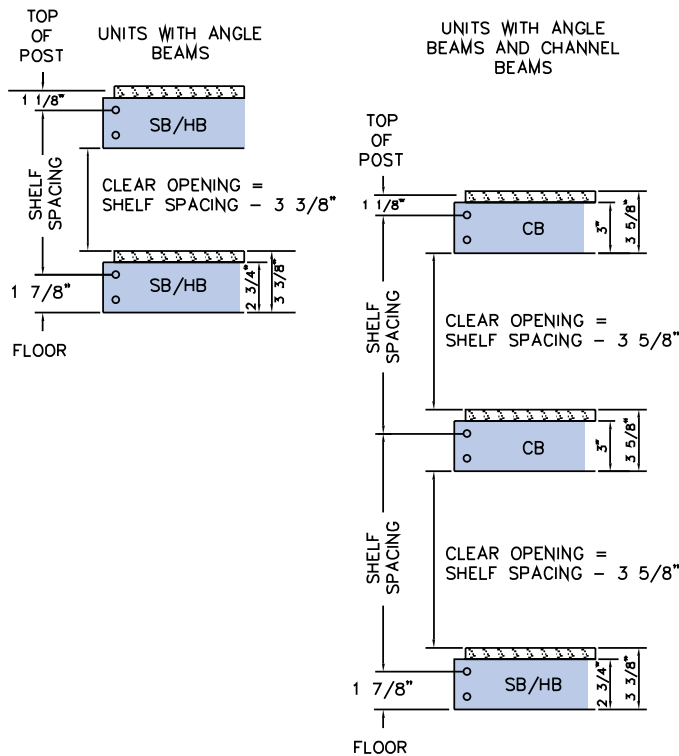
#### UNITS USING SINGLE RIVET SHELF BEAMS

UNITS WITH STANDARD DUTY  
SINGLE RIVET BEAMS (DBL.  
RIVET AT TOP and BOTTOM)

UNITS WITH HEAVY DUTY  
SINGLE RIVET BEAMS (DBL.  
RIVET AT TOP and BOTTOM)



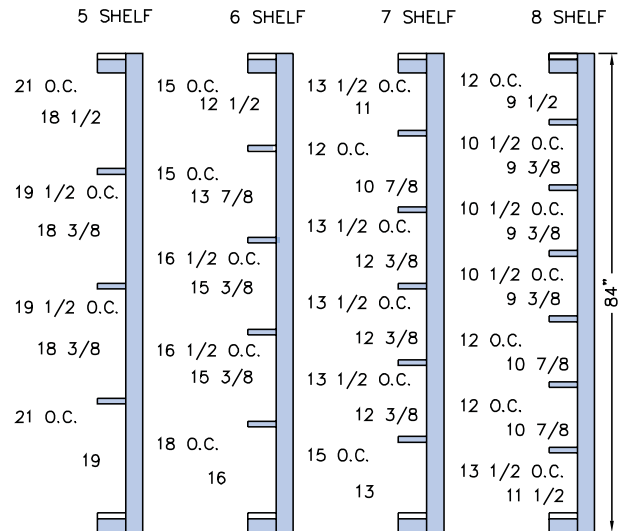
#### UNITS USING ANGLE AND CHANNEL BEAMS



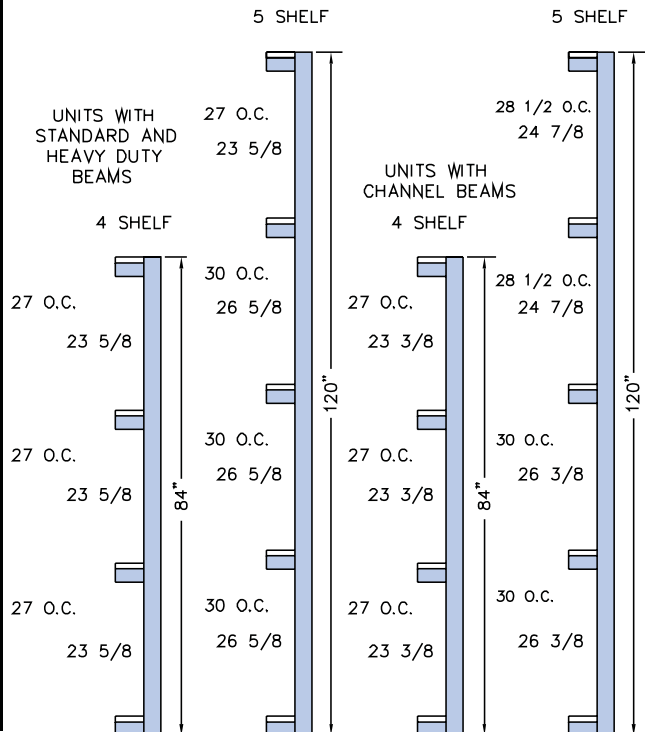
#### VERTICAL SHELF CLEARANCE

THIS CHART DEPICTS SHELF CLEARANCES FOR TYPICAL RIVET RITE SHELVING UNITS WITH 1 1/2" VERTICAL SHELF ADJUSTMENT.

#### SINGLE RIVET HIGH DENSITY SHELVING UNITS



#### DOUBLE RIVET BULKY SHELVING UNITS





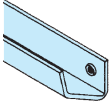
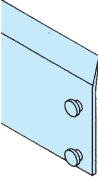
## QuickShip Components



### RivetRite® QuickShip Shelving Components




If you prefer to order RivetRite by its individual component, you can obtain many of the most popular sizes and accessories through the QuickShip program. By mixing beam sizes, you can create some sizes that are not available as pre-configured units on the previous page.

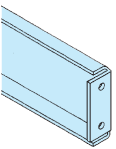
For detailed descriptions of components, see pages 31-32. All RivetRite QuickShip items are finished in 723 Light Putty powder coat paint. See beam capacities on page 37.

Shelf deck material is not available in the QuickShip program. It must be obtained outside the QuickShip program or purchased locally. Partial board not available through Penco. For cutting your own board, use the nominal shelf deck size and cut +0", -1/8".

RivetRite® Beams			
Item	Size	Cat. No.	
	12"	46SS12P	
	18"	46SS18P	
	24"	46SS24P	
	30"	46SS30P	
	36"	46SS36P	
	42"	46SS42P	
	48"	46SS48P	
	48"	46HS48P*	
	12"	46SB12P	
	15"	46SB15P	
	18"	46SB18P	
	24"	46SB24P	
	30"	46SB30P	
	36"	46SB36P	
	42"	46SB42P	
	48"	46HB48P*	
	72"	46HB72P*	
	96"	46HB96P*	

RivetRite® Posts			
	Item	Size	Cat. No.
	Angle Posts	72"	46AS06P
		84"	46AS07P
		96"	46AS08P
	Tee Posts	72"	46TS06P
		84"	46TS07P
		96"	46TS08P

Miscellaneous Accessories			
	Item	Size	Cat. No.
	Tie Plate	-	46TP00P
	Foot Plate	-	46FP0H
	Concrete Anchor	3/8" x 2-1/4"	9280

Center Supports			
	Item	Size	Cat. No.
		12"	46CS12P
		15"	46CS15P
		18"	46CS18P
		24"	46CS24P
		30"	46CS30P
		36"	46CS36P
		48"	46CS48P



### RivetRite® QuickShip Shelving Units

- Quick Shipment in attractive 723 Light Putty powder coat finish
- Economical
- Choice of beam types
- Accessibility on all four sides
- Beams adjust on 1-1/2" vertical centers
- Boltless construction for easy assembly
- Starter & Adder configurations with Angle & Tee Posts
- Accessories available: Anchors, Foot Plates, Tie Plates



NOTE: Shelf Deck material is NOT included with the units. You must obtain shelf deck material separately.

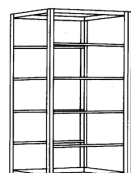
### Single Rivet High Density Units (With Double Rivet Beams at Top/Bottom - 84" High)

Unit Width	Shelf Depth	5 Shelf Cat. No.	6 Shelf Cat. No.	7 Shelf Cat. No.	8 Shelf Cat. No.
36" Starter Units	12"	461315P	461316P	461317P	461318P
	18"	461325P	461326P	461327P	461328P
	24"	461335P	461336P	461337P	461338P
	36"	461345P	461346P	461347P	461348P
36" Add-On Units	12"	462355P	462356P	462357P	462358P
	18"	462365P	462366P	462367P	462368P
	24"	462375P	462376P	462377P	462378P
	36"	462385P	462386P	462387P	462388P
48" Starter Units	12"	461415P	461416P	461417P	461418P
	18"	461425P	461426P	461427P	461428P
	24"	461435P	461436P	461437P	461438P
	36"	461445P	461446P	461447P	461448P
48" Add-On Units	12"	462455P	462456P	462457P	462458P
	18"	462465P	462466P	462467P	462468P
	24"	462475P	462476P	462477P	462478P
	36"	462485P	462486P	462487P	462488P

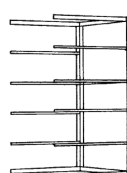
### Touch Up Spray Paint - 12 oz.

Must be ordered with lockers, shelving, or RivetRite products.

723 Light Putty  
97723Z



Starter



Add-On

### Double Rivet Bulky Storage Units (With 4 Shelves - 84" High)

Unit Width	Shelf Depth	WITHOUT Center Support		WITH Center Support	
		Starter Cat. No.	Add-On Cat. No.	Starter Cat. No.	Add-On Cat. No.
48" Wide Units	18"	46001HP	46006HP	46W01HP	46W06HP
	24"	46002HP	46007HP	46W02HP	46W07HP
	30"	46003HP	46008HP	46W03HP	46W08HP
	36"	46004HP	46009HP	46W04HP	46W09HP
	48"	46005HP	46010HP	46W05HP	46W10HP
60" Wide Units	18"	46011HP	46016HP	46W11HP	46W16HP
	24"	46012HP	46017HP	46W12HP	46W17HP
	30"	46013HP	46018HP	46W13HP	46W18HP
	36"	46014HP	46019HP	46W14HP	46W19HP
	48"	46015HP	46020HP	46W15HP	46W20HP
72" Wide Units	18"	46021HP	46026HP	46W21HP	46W26HP
	24"	46022HP	46027HP	46W22HP	46W27HP
	30"	46023HP	46028HP	46W23HP	46W28HP
	36"	46024HP	46029HP	46W24HP	46W29HP
	48"	46025HP	46030HP	46W25HP	46W30HP
96" Wide Units	18"	-	-	46W31HP	46W36HP
	24"	-	-	46W32HP	46W37HP
	30"	-	-	46W33HP	46W38HP
	36"	-	-	46W34HP	46W39HP
	48"	-	-	46W35HP	46W40HP

### Double Rivet Bulky Storage Units (With 5 Shelves - 120" High)

Unit Width	Shelf Depth	WITHOUT Center Support		WITH Center Support	
		Starter Cat. No.	Add-On Cat. No.	Starter Cat. No.	Add-On Cat. No.
72" Wide Units	30"	46041HP	46044HP	46W41HP	46W44HP
	36"	46042HP	46045HP	46W42HP	46W45HP
	48"	46043HP	46046HP	46W43HP	46W46HP
96" Wide Units	30"	-	-	46W47HP	46W50HP
	36"	-	-	46W48HP	46W51HP
	48"	-	-	46W49HP	46W52HP

### Archive Shelving Units (For Use with Decking - 84" High)

Unit Width	Shelf Depth	5 Shelf Cat. No.
42" Starter Units	15"	46601AP
	30"	46602AP
42" Add-On Units	15"	46613AP
	30"	46614AP
69" Starter Units	15"	46603AP
	30"	46604AP
69" Add-On Units	15"	46615AP
	30"	46616AP

## Capacities

RivetRite Post Capacity Chart		
Recommended safe loads (per post) for use only where seismic forces are not a factor.		
Beam Spacing (inches)	Standard Angle Post Capacity (lbs.)	Heavy Duty Angle Post Capacity (lbs.)
12	1530	1735
18	1520	1720
24	1510	1695
30	1490	1680
36	1350	1660
42	990	1560
48	755	1195
Beam Spacing (inches)	Standard Tee Post Capacity (lbs.)	Heavy Duty Tee Post Capacity (lbs.)
12	4725	5045
18	4510	4965
24	4210	4850
30	3825	4705
36	3350	4525
42	2795	4315
48	2180	4075
For beam spacing over 48", please contact Penco.		
Post capacities are based on the maximum vertical distance between left to right beams or front to back beams, whichever is greater. In single rivet beam units, the vertical distance between front to back beams will usually govern.		
Tie plates must be spaced no more than 48 inches apart to insure structural stability when joining angle posts together.		
The above capacities are NOT intended for use when designing multi-level systems or for specific requirements where seismic forces are a factor. For specific multi-level or seismic requirements, contact your Penco District Manager.		

RivetRite Beam Capacities Recommended Safe Use Allowable Uniformly Distributed Hand Loaded Static Beam Loads		
Length (in.)	Cap./Pair (lbs.)	Deflection (in.)
Single Rivet Shelf Beams		
Standard Beams		
36	350	0.25
42	300	0.30
Heavy Duty Beams		
48	500	0.34
Double Rivet Angle Beams		
Standard Beams		
Without Center Supports (***)		
36	1000	***
42	780	***
Heavy Duty Beams		
Without Center Supports (***)		
48	750	***
60	600	***
69	525	***
72	500	***
With Center Supports (*)		
48	1400	0.16
60	1200	0.25
69	1050	0.33
72	1000	0.36
84	840	0.49
96	620	0.53
Double Rivet Channel Beams		
With Center Supports (*)		
60	2240	0.23
72	1850	0.33
84	1600	0.45
96	1400	0.59
(*) One (1) support per pair of beams except 96' which have two (2) Supports		
(***) Beam rotation is less than 5 degrees		





**Components:** Choose from a wide selection of component sizes and capacities to fit the storage requirements.

**Angle Post:** 1-1/2" x 1-1/2" (Standard Duty): Used as upright post for standard RivetRite units.

**Angle Post:** 1-7/8" x 1-7/8" (Heavy Duty): When maximum capacity and stability are essential, the heavy duty angle post is the proper choice. Ideally suited for two level shelving, storage deck and high rise shelving applications.

**Tee Post:** 3" x 1-1/2" (Standard Duty): Included with standard duty add-on units to function as a common post between starter and adjoining units.

**Tee Post:** 3-3/4" x 1-7/8" (Heavy Duty): Used in the same way as the standard tee, when increased load capacities are required.

**Single Rivet Shelf Beam (Standard Duty):** Primarily used as an intermediate shelf support when maximum vertical space between levels is needed. Furnished as standard on High Density Shelving units.

**Single Rivet Shelf Beam (Heavy Duty):** Manufactured to provide maximum capacity with very little loss of usable vertical space between shelves.

**Double Rivet Shelf Beam (Standard Duty):** Used to establish unit stability and to provide shelf support on all four sides.

**Double Rivet Shelf Beam (Heavy Duty):** Provides stability and increased load capacity in the longer lengths.

**Double Rivet Channel Beam:** Designed to provide maximum left to right stability and higher capacity than standard or heavy duty beams. Cannot be used at floor level.

**Center Support:** Used with double rivet beams to provide front-to-rear support for shelf deck and provides added stability to beams.

**TYPES OF UNITS:** RivetRite Units come in two basic types: Single Rivet Units and Double Rivet Units. These utilize different combinations of beam types. In addition, units for special purposes include Records Storage Units and Automotive Parts Storage Units.

**Double Rivet Bulky Storage Units:** 48" to 96" wide beams Access to stored items from all sides Choice of beam capacity to meet your storage requirement Easy assembly without special tools Units available in 84" and 120" heights. Penco RivetRite bulky shelving is designed to provide an economical solution for the storage of retail, wholesale or industrial goods. Installation can be done without special tools in a minimum amount of time. All steel parts are finished in attractive 723 Light Putty baked enamel. Starter and add-on units are combined to form economical rows of shelving. Each add-on unit includes a pair of tee posts which are used in common between units. This reduces assembly time and the number of parts required. Begin each row with two angle posts from the starter unit and join the desired number of add-on units to complete the row. Finish the last unit with a pair of angle posts from the starter unit.

**Single Rivet High Density Units:** Single Rivet high density shelving uses single rivet beams on intermediate levels, and double rivet beams at the top and bottom for rigidity. For units up to 48" wide. High Density Shelf Beams provide maximum space between shelf levels. Common tee posts between starter and add-on unit Shelf levels adjust on 1-1/2" centers. Fast easy assembly. Optional heavy duty single rivet shelf beams available for added capacity. Penco Single Rivet beam High Density shelving is designed to provide maximum vertical clearance between shelves. Access to stored items from all sides is possible because side and back cross braces are not necessary for stability. Add-on units assemble quickly without special tools by using a common tee post between units. Finished in 723 Light Putty baked enamel. Starter and add-on units are combined to form economical rows of shelving. Each add-on unit includes a pair of tee posts which are used in common between units. This reduces assembly time and the number of parts required. Begin each row with two angle posts from the starter unit and join the desired number of add-on units to complete the row. Finish the last unit with a pair of angle posts from

the starter unit. All intermediate shelves on units that exceed 24" deep utilize single rivet beams for front to back shelf deck support. Units 12", 18" and 24" deep include one pair of single rivet beams for intermediate use front to back.

**Record Storage Units:** RivetRite Record Storage Units aid in records management by providing an organized solution to high density archive storage. (Particle board must be ordered separately). Add-on units utilize a common Tee Post between units to save time during assembly. All unit box capacities are based on a standard archive box size of approximately 12-1/2" wide x 16-1/2" deep x 10-1/2" high.

### AUTOMOTIVE PARTS STORAGE UNITS

**Tire Storage Rack:** Penco RivetRite Tire Racks provide for the neat organized storage of standard automobile or light truck tires. Specially designed beams with a 30 degree flange on the top securely cradle the tires. Available in Single-Row, (12" deep units with 9" Wall Ties) and Double-Row, (two 12" deep units separated by 18" Double Row Spacers). Unit depth shown includes wall ties/row spacers.

**Muffler Storage:** Uniform storage of various size mufflers is achieved through the use of RivetRite Muffler Storage Units. As with all RivetRite units, ease of assembly and access from all sides is standard. Add-on units utilize common Tee Posts between units. Particle Board must be ordered separately for each level.

**Hanging Tailpipe Rack:** Designed specifically for the storage of automotive and light truck tailpipes. Assembles in minutes without special tools. Stored items are visible and easily accessible.

---

RivetRite® is a registered trademarks of Penco Products, Inc.  
PENCO RESERVES THE RIGHT TO VARY SPECIFICATIONS CONSISTENT WITH A POLICY OF CONTINUOUS PRODUCT IMPROVEMENT.

## Shelving Highlights / Contents

The Erectomatic Hi-Performance Shelving System is designed for greater strength, durability and versatility. Start with a single-tiered system today and expand into high density, multi-level or high rise systems tomorrow. At the heart of the system is the hi-performance welded box-beam flange shelf designed to be:

- Stronger - capacities from 400 lbs to 2,000 lbs!
- Simpler - no need for shelf reinforcing channels...even for extra heavy duty capacity shelving. That means fewer parts, less expense.
- Versatile - can be used with your choice of four posts types.

Along with the box-beam shelf, the Erectomatic Hi-Performance Shelving System features Beaded Posts, Angle Posts, Welded T-Posts, Heavy Duty H-Posts and a one-piece shelf clip with a complete line of accessories that can be added as your storage requirements change.

Together, these high quality shelving components provide safe, organized storage that is designed to allow for easy modifications and future expansion to meet your changing needs.



### Erectomatic Beaded Posts

Beaded front and welded together at rear flange for strength. Flush to permit straight-in/straight-out shelf installation or shelf changing. Enables full use of the shelf width for storage. No dead space behind post. Provides easy independent vertical shelf adjustment on 1-1/2" centers. For use in the front of the unit only. See page 47 for more information.

### Erectomatic Offset Angle & T-Posts

Used at the rear of the unit these posts are punched on 1-1/2" centers to allow quick, independent shelf adjustment. T-Posts consist of two angle posts welded together. They are used as common posts between units for faster assembly and fewer parts.

See page 47 for more information.



### Erectomatic Heavy Duty H-Posts

All the advantages of the Flush Beaded Posts plus more than two times the load-carrying capacity. These heavy duty posts are common to front or rear and can support high rise or high density storage systems using standard Erectomatic components throughout. See page 48 for more information.



### Erectomatic One Piece Shelf Clip

A non-intrusive one piece compression clip, designed to secure the shelf to any Erectomatic post without intruding into the area to be devoted to storage. Four clips are provided with each shelf. See page 51 for more information.



### Erectomatic Hi-Performance® Shelves



Manufactured from high strength steel, front and rear flanges are formed into a tubular box shape and welded to the underside of the shelf on 3" centers for superior strength. Shelf corners are lapped and welded and sides are double flanged. A special design feature keeps clips snug against the shelf regardless of shelf class. Available in four load capacity classes. Sizes up to 48" wide and 36" deep. Shelves are punched to accept accessories

such as dividers, label holders, bin fronts and base strips. For use with all Erectomatic posts. Can be independently installed or re-positioned using four one-piece compression clips. See page 52 for more information.

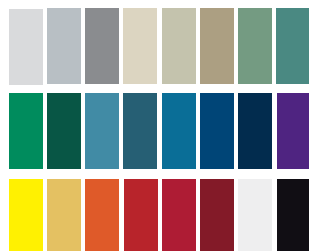


Chart of 24  
Designer Colors  
See Page 63

# Erectomatic Shelving

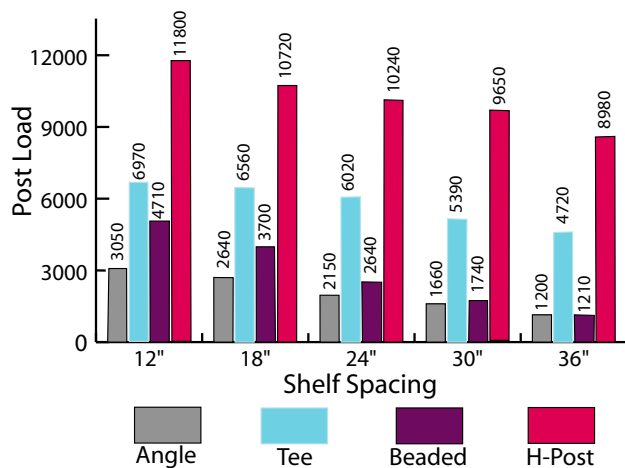
## Introduction

### Post Load Capacity Information

Post calculations should always be based on applied loads, shelf spacing and the allowable load for any post. To determine the actual load for any post, use the following procedure.

- Add the shelves in each unit multiplied by the load for each shelf. Do not include the bottom shelf which is 3" above the floor in your count.
- Divide the result by 2 to achieve loading to intermediate posts, and by 4 to achieve loading totals for posts located at aisle ends.
- The resulting numbers will be the load superimposed on each post.
- Check the superimposed load with the allowable load shown in the chart below.

If your shelving installation is in an area where seismic activity may occur, please contact Penco Products for design assistance.

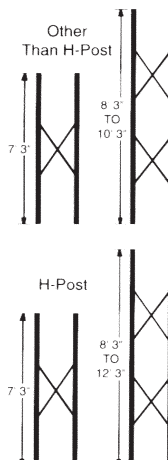


All post capacities shown are based on the latest AISI Design Manual for cold-formed members.

### Sway Braces

Open shelving units, 87" high or less, must have at least one set of side sway braces per side and one set of back braces. Both side and back braces may be common with adjacent units. For multiple level, deck-over or high-rise shelving structures, the lowest set of braces should be within 6" of the floor. For posts over 87" high up to 123", order two sets of side and rear braces for each unit. Posts taller than 123" may require additional bracing.

For brace location requirements in regions where there is seismic activity, contact Penco Products for assistance.

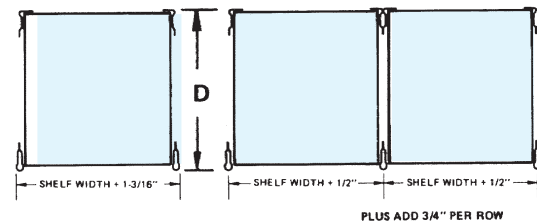


### Unit Growth

#### Beaded Post Shelving

For "D" — Single Face add 3/16" to nominal shelf depth.

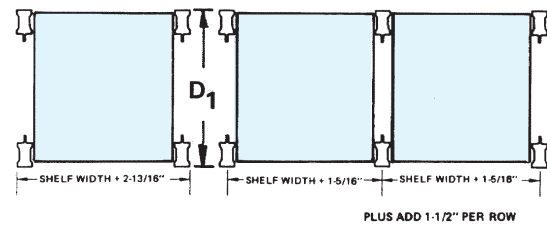
For "D" — Double Face add 3/8" to nominal shelf depth.



#### H-Post Shelving

For "D1" — Single Face add 5/16" to nominal shelf depth.

For "D1" — Double Face add 13/16" to nominal shelf depth for closed models, and 29/32" for open models.



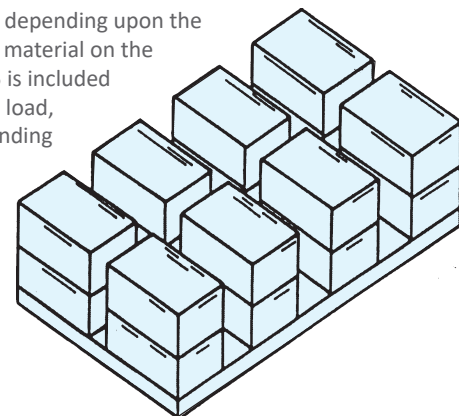
NOTE:

Widths of Erectomatic posts should be added to the nominal shelf width in any floor plan to determine the overall shelving width. Check "D" and "D1" dimensions depth.

## The Most Reliable Shelf Test Method in the Industry

Test methods simulate actual applications to the highest degree possible. Evenly distributed static loads of boxed hardware are spaced to prevent "bridging" (product stacked together forms a mass like a stone archway resulting in a false safe load) to determine the maximum safe load for each size and type of shelf.

In actual usage, there is a risk that the recommended safe load may be exceeded, depending upon the type, size and placement of material on the shelf. A safety factor of 1.65 is included for your protection. Impact load, and point loads, such as standing on the shelf (unsafe) are not included in test



Shelf Test Method



## Versatile Shelving With Accessories

**Sliding Divider**  
Formed to fit around front and rear flanges of the shelf. May be positioned anywhere along shelf surface.

**Partial Divider**  
Divides shelf surface into sections.

**Bin Front**  
To retain small bulk parts on shelf.

**Full Height Dividers**  
Used to subdivide the shelf opening into smaller units. Punched top and bottom for attachment to shelves.

**Welded End Panel**  
One-piece welded assembly of steel sheet and posts used to enclose shelving sides or as a partition between sections placed side by side.

**Back Panel**  
Completely closes the back of shelving units and provides lateral stability.

**Hi-Performance® Shelf**  
Available in 23 sizes and 3 classes of load carrying capacity.

**Beaded Post**  
Used as a common front post or row end. Allows independent 1-1/2" vertical adjustability and access to the full shelf width.

**Offset Angle Post**  
Roll formed for strength and punched on 1-1/2" centers for shelf adjustment. Can be used at front or back of unit.

**Side Braces**  
Eliminates front to back sway on open type shelving.

**Back Braces**  
Attaches to rear posts of open type shelving to ensure lateral stability.

**Base Strip**  
Designed to close the space between the bottom shelf and floor to promote good housekeeping.

**CLOSED**  
Shelving Unit

**OPEN**  
Shelving Unit

Versatile Erectomatic® Shelving  
can be accessorized for any job.



# Erectomatic Shelving

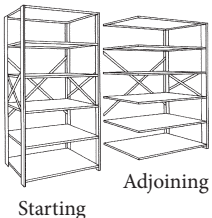
## Open Shelving Units



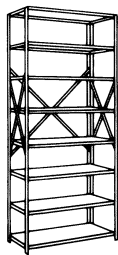
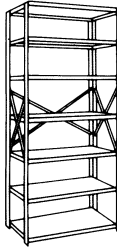
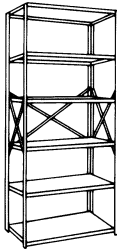
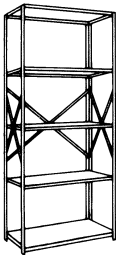
All Units Are 87" High  
and have Heavy Duty  
Hi-Performance® Shelves

Open shelving is the most basic method of storing packaged or bulky items. Units feature Beaded Posts at the front of the unit and Offset Angle or T-Posts at the rear and are stabilized by side and back sway bracing. All starting units are complete and free standing. Open starting units utilize beaded front posts with offset angle posts at the rear. Adjoining open shelving units consist of shelves, 1 beaded post, 1 T-post, 1 set of side sway braces and 1 set of back sway braces.

When installing a row of shelving with starting and adjoining units, a rear angle post from the starting unit is replaced with the T-Post supplied with the adjoining unit, and is used in common between the units. The angle post from the starting unit is used at the end of the row.



Back-to-back shelving utilizes common back braces.



Many other sizes are available.

			5 Shelves	6 Shelves	7 Shelves	8 Shelves
Width	Depth	Height	Starting	Starting	Starting	Starting
36" Wide Units	12"	87"	H51012	H51112	H51212	H51312
	18"	87"	H51018	H51118	H51218	H51318
	24"	87"	H51024	H51124	H51224	H51324
	30"	87"	H51030	H51130	H51230	H51330
	36"	87"	H51036	H51136	H51236	H51336
42" Wide Units	12"	87"	H57512	H57712	H57912	-
	18"	87"	H57518	H57718	H57918	-
	24"	87"	H57524	H57724	H57924	-
	30"	87"	H57530	H57730	H57930	-
	36"	87"	H57536	H57736	H57936	-
48" Wide Units	12"	87"	H56912	H57112	H57312	-
	18"	87"	H56918	H57118	H57318	-
	24"	87"	H56924	H57124	H57324	-
	30"	87"	H56930	H57130	H57330	-
	36"	87"	H56936	H57136	H57336	-
Width	Depth	Height	Adjoining	Adjoining	Adjoining	Adjoining
36" Wide Units	12"	87"	H51012A	H51112A	H51212A	H51312A
	18"	87"	H51018A	H51118A	H51218A	H51318A
	24"	87"	H51024A	H51124A	H51224A	H51324A
	30"	87"	H51030A	H51130A	H51230A	H51330A
	36"	87"	H51036A	H51136A	H51236A	H51336A
42" Wide Units	12"	87"	H57512A	H57712A	H57912A	-
	18"	87"	H57518A	H57718A	H57918A	-
	24"	87"	H57524A	H57724A	H57924A	-
	30"	87"	H57530A	H57730A	H57930A	-
	36"	87"	H57536A	H57736A	H57936A	-
48" Wide Units	12"	87"	H56912A	H57112A	H57312A	-
	18"	87"	H56918A	H57118A	H57318A	-
	24"	87"	H56924A	H57124A	H57324A	-
	30"	87"	H56930A	H57130A	H57330A	-
	36"	87"	H56936A	H57136A	H57336A	-

## Closed Shelving Units

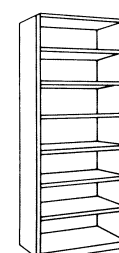
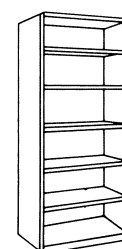
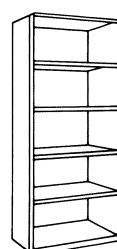
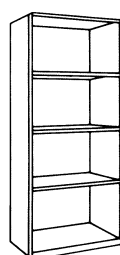
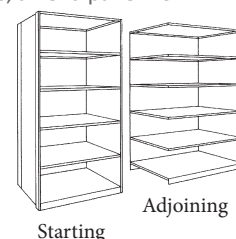


All Units Are 87" High  
and have Heavy Duty  
Hi-Performance® Shelves

End panels, T-panels and back panels provide stability and protection for stored items. Front base strips are included. Locking doors may be added for greater security. All starting units are complete and free standing. Closed starting units use welded end panels. Closed adjoining units consist of shelves, 1 T-Panel, 1 base strip and a back panel.

When installing a row of shelving with starting and adjoining units, an end panel from the starting unit is replaced with the T-Panel supplied with the adjoining unit, and is used in common between the units. The angle post or end panel from the starting unit is used at the end of the row.

Back-to-back shelving utilizes common back panels.



Many other sizes are available.

5 Shelves

6 Shelves

7 Shelves

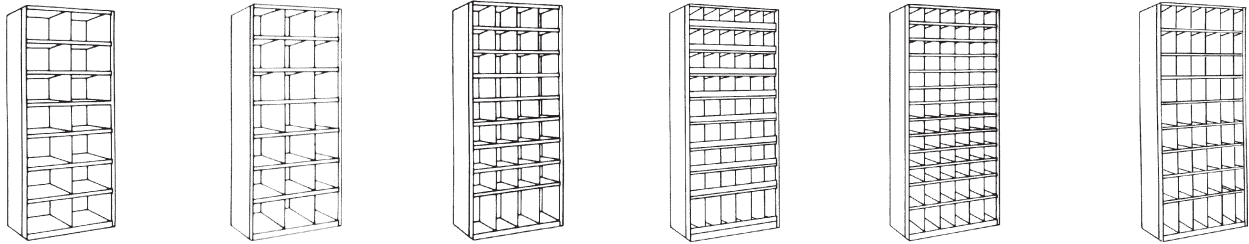
8 Shelves

Width	Depth	Height	Starting	Starting	Starting	Starting
36" Wide Units	12"	87"	H52012	H52112	H52212	H52312
	18"	87"	H52018	H52118	H52218	H52318
	24"	87"	H52024	H52124	H52224	H52324
	30"	87"	H52030	H52130	H52230	H52330
	36"	87"	H52036	H52136	H52236	H52336
42" Wide Units	12"	87"	H57612	H57812	H58012	-
	18"	87"	H57618	H57818	H58018	-
	24"	87"	H57624	H57824	H58024	-
	30"	87"	H57630	H57830	H58030	-
48" Wide Units	12"	87"	H57012	H57212	H57412	-
	18"	87"	H57018	H57218	H57418	-
	24"	87"	H57024	H57224	H57424	-
	30"	87"	H57030	H57230	H57430	-
	36"	87"	H57036	H57236	H57436	-
Width	Depth	Height	Adjoining	Adjoining	Adjoining	Adjoining
36" Wide Units	12"	87"	H52012A	H52112A	H52212A	H52312A
	18"	87"	H52018A	H52118A	H52218A	H52318A
	24"	87"	H52024A	H52124A	H52224A	H52324A
	30"	87"	H52030A	H52130A	H52230A	H52330A
	36"	87"	H52036A	H52136A	H52236A	H52336A
42" Wide Units	12"	87"	H57612A	H57812A	H58012A	-
	18"	87"	H57618A	H57818A	H58018A	-
	24"	87"	H57624A	H57824A	H58024A	-
	30"	87"	H57630A	H57830A	H58030A	-
48" Wide Units	12"	87"	H57012A	H57212A	H57412A	-
	18"	87"	H57018A	H57218A	H57418A	-
	24"	87"	H57024A	H57224A	H57424A	-
	30"	87"	H57030A	H57230A	H57430A	-
	36"	87"	H57036A	H57236A	H57436A	-

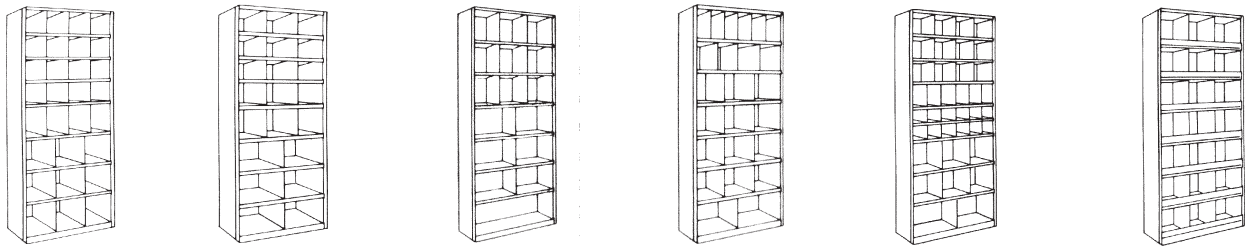
# Erectomatic Shelving

## 36" Wide Bin Units

Erectomatic Bin Units are for storage of smaller parts and packaged goods. Easy access to materials stored. Save time in locating and picking stock. Models are 36" wide, 87" high in depths shown, and use Heavy Duty Hi-Performance® Shelves. Enclosed back and sides. Base Strips included. Bin openings are width x height. Many other sizes are available.



	Openings	Size	Openings	Size	Openings	Size	Openings	Size	Openings	Size	Openings	Size
Shelf Depth	14	18" x 12"	21	12" x 12"	32 4	9" x 9" 9" x 12"	48 6	6" x 9" 6" x 12"	66 12	6" x 6" 6" x 9"	48 6	6" x 9" 6" x 12"
											All with 3" High Bin Fronts	
	Starting		Starting		Starting		Starting		Starting		Starting	
	12"	H52512		H52612		H52712		H52812		H52912		H53012
18"	H52518		H52618		H52718		H52818		H52918		H53018	
24"	H52524		H52624		H52724		H52824		H52924		H53024	
Shelf Depth	Adjoining		Adjoining		Adjoining		Adjoining		Adjoining		Adjoining	
12"	H52512A		H52612A		H52712A		H52812A		H52912A		H53012A	
18"	H52518A		H52618A		H52718A		H52818A		H52918A		H53018A	
24"	H52524A		H52624A		H52724A		H52824A		H52924A		H53024A	



	Openings	Size	Openings	Size	Openings	Size	Openings	Size	Openings	Size	Openings	Size
Shelf Depth	16	9" x 9"	12	12" x 9"	9	12" x 12"	6	6" x 12"	12	9" x 9"	21	12" x 12"
	4	9"x12"	3	12"x12"	6	18" x 12"	4	9" x 12"	6	6" x 9"		
	9	12"x12"	6	18"x12"	1	36" x 12"	12	12" x 12"	12	6" x 6"		
							2	18" x 12"	6	12" x 12"		
									2	18" x 12"	With 3" High Bin Fronts	
	Starting		Starting		Starting		Starting		Starting		Starting	
12"	H53112		H53212		H53312		H53412		H53512		H53612	
18"	H53118		H53218		H53318		H53418		H53518		H53618	
24"	H53124		H53224		H53324		H53424		H53524		H53624	
Shelf Depth	Adjoining		Adjoining		Adjoining		Adjoining		Adjoining		Adjoining	
12"	H53112A		H53212A		H53312A		H53412A		H53512A		H53612A	
18"	H53118A		H53218A		H53318A		H53418A		H53518A		H53618A	
24"	H53124A		H53224A		H53324A		H53424A		H53524A		H53624A	

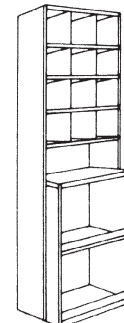
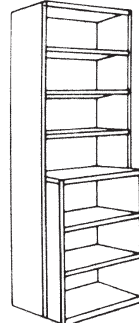
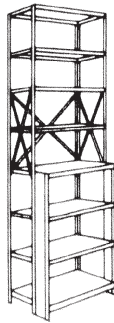


# Erectomatic Shelving



## Ledge Units

**Erectomatic Ledge Units** combine storage space with a work surface. Models are 36" wide and 87" high, and use Heavy Duty Shelves, in the depths shown. Closed units include front base strips. Accessorize to fit your requirement with dividers, label holders, doors, etc., selected from the component parts pages of this catalog.

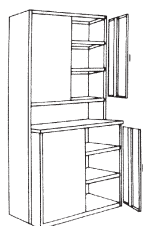


		Description	Description	Openings	Size
		4 adjustable shelves above ledge, 3 below	4 adjustable shelves above ledge, 3 below	12 1	12" x 9" 36" x 12"
Shelf Depth Above	Shelf Depth Below	Starting	Starting	2 adj. shelves with 3" high bin fronts below ledge	
		H5491218 H5491224 H5491824	H5501218 H5501224 H5501824	H5511218 H5511224 H5511824	
		Adjoining	Adjoining	Adjoining	
Shelf Depth	Shelf Depth	H5491218A H5491224A H5491824A	H5501218A H5501224A H5501824A	H5511218A H5511224A H5511824A	

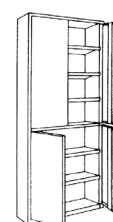
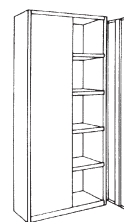
# Erectomatic Shelving

## Counter Units & Cabinet Models

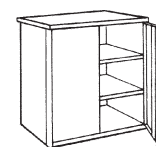
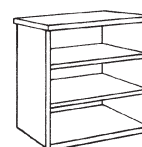
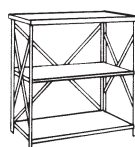
**Erectomatic Cabinet Models** are completely enclosed with swinging doors. Doors are equipped with locks to provide security. Swinging doors have a 3-point latching, chrome finished handles, and built-in lock. Models are 87" high, in the widths and shelf depths shown with Heavy Duty Shelves. Base Strips included.



		Description
		36" Wide
		2 adjustable shelves above ledge 2 adjustable shelves below ledge 2 sets swinging doors
Shelf Depth Above	Shelf Depth Below	Starting
12"	18"	H5641218
12"	24"	H5641224
18"	24"	H5641824
Shelf Depth	Shelf Depth	Adjoining
12"	18"	H5641218A
12"	24"	H5641224A
18"	24"	H5641824A



		Description	Description
		36" Wide	36" Wide
		4 adjustable shelves 2 swinging doors	5 adjustable shelves 2 sets of swinging doors
Shelf Depth		Starting	Starting
12"		H55912	H56312
18"		H55918	H56318
24"		H55924	H56324
		Adjoining	Adjoining
12"		H55912A	H56312A
18"		H55918A	H56318A
24"		H55924A	H56324A



All **Erectomatic Counter Units** are 36" wide and 39" high. They provide neat compact storage with a smooth work surface. Shelves are Heavy Duty. Base Strip included with closed models. Counter models accept standard shelving accessories. See component pages of this catalog.

		Description	Description	Description
		2 adjustable shelves	2 adjustable shelves	2 adjustable shelves 2 swinging doors
Shelf Depth		Starting	Starting	Starting
18"		H55418	H55518	H55818
24"		H55424	H55524	H55824
Shelf Depth		Adjoining	Adjoining	Adjoining
18"		H55418A	H55518A	H55818A
24"		H55424A	H55524A	H55824A

# Erectomatic Shelving

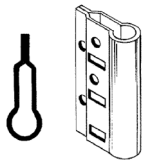


## Shelving Components

Erectomatic Shelving Components can be ordered in any combination for all kinds of custom applications. Be certain to order shelves and posts of sufficient capacity to hold the maximum expected load (refer to the capacity information on pages 40 and 52).

Posts and panels are available in custom heights (minimum quantity may apply). Contact your representative with your requirements.

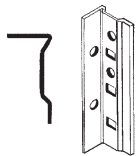
Dimensions (inches)	Width	Depth	Height	Cat. No.
---------------------	-------	-------	--------	----------



### Beaded Front Post

Used at front of shelving, in single units or in common with adjoining unit. Permits full access to shelf width. Allows independent adjustment of shelves on 1-1/2" centers.

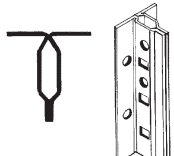
-	-	39	H0023C
-	-	75	H0026C
-	-	87	H0027C
-	-	99	H0028C
-	-	123	H00210C



### Offset Angle Post

Angles for rear of single or end units. Slotted on 1-1/2" centers to permit easy shelf adjustment.

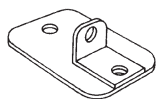
-	-	39	H0043C
-	-	75	H0046C
-	-	87	H0047C
-	-	99	H0048C
-	-	123	H00410C



### T-Post

Constructed by spotwelding two offset angle posts together. Use at rear of shelving when adjoining units are added to form a continuous row.

-	-	39	H0063C
-	-	75	H0066C
-	-	87	H0067C
-	-	99	H0068C
-	-	123	H00610C



### Foot Plate, Erectomatic Post (zinc plated)

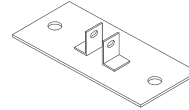
1/8" thick with mounting bracket for bolting to post. Has 7/16" diameter hole for floor anchor bolts. Includes hardware to fasten to post. If shims are required, use shim No. H026 (page 48).

2-1/4	3-1/2	-	H050H
-------	-------	---	-------

Dimensions (inches)	Width	Depth	Height	Cat. No.
---------------------	-------	-------	--------	----------

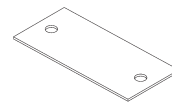
### Heavy Duty Footplate

for Beaded, Angle and Tee Posts - 7 ga.



Includes two mounting brackets and intended for use in high seismic areas or in conditions where post loading is intended to be spread over a larger area, such as on a mezzanine/work platform elevated deck. Footplate is drilled to accept 3/8" floor anchors, and can be used with 9281 3/8"x 3-3/4" wedge anchors to meet IBC 2003/2006 building code requirements in high seismic areas.

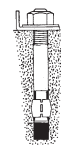
2-3/8	5-1/2	-	1ACX326H
-------	-------	---	----------



### Heavy Duty Shim - 7 Ga.

Fits under 1ACX326H footplate for leveling as needed.

2-3/8	5-1/2	-	1ACX330
-------	-------	---	---------



### Concrete Floor Anchor

Use the longer anchor # 9281 in seismic zones higher than 2A.

3/8	-	2-1/4	9280
3/8	-	3-3/4	9281



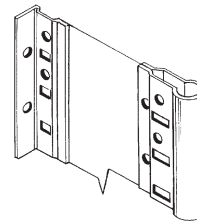
### Splice Channels for Beaded, Angle and T-Post

Used when splicing posts. Splice and aisle supports use common hardware. Replaces Part No. H009H

-	-	-	HXAS071H
---	---	---	----------

### End Panel (welded 1 piece)

Welded one-piece construction for easy assembly. Consists of beaded front post, offset angle post and one-piece side panel welded together on 6" centers. For left or right ends of single units or row ends.



-	12	39	H0921203C
-	12	75	H0921206C
-	12	87	H0921207C
-	12	99	H0921208C
-	12	123	H0921210C
-	15	87	H0921507C
-	18	39	H0921803C
-	18	75	H0921806C
-	18	87	H0921807C
-	18	99	H0921808C
-	18	123	H0921810C
-	24	39	H0922403C
-	24	75	H0922406C
-	24	87	H0922407C
-	24	99	H0922408C
-	24	123	H0922410C
-	30	87	H0923007C
-	36	87	H0923607C



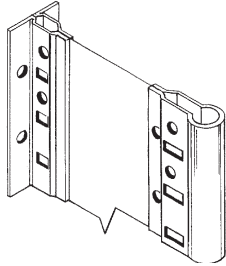
# Erectomatic Shelving

## Shelving Components

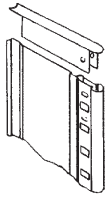
Dimensions (inches)      Width    Depth    Height    Cat. No.

### T-Panel

Welded construction for easy assembly. Consisting of beaded front post, T-post and one-piece side panel welded on 6" centers. For use between units when adjoining models are added to form a continuous shelving row.



-	12	39	H0941203C
-	12	75	H0941206C
-	12	87	H0941207C
-	12	99	H0941208C
-	12	123	H0941210C
-	15	87	H0941507C
-	18	39	H0941803C
-	18	75	H0941806C
-	18	87	H0941807C
-	18	99	H0941808C
-	18	123	H0941810C
-	24	39	H0942403C
-	24	75	H0942406C
-	24	87	H0942407C
-	24	99	H0942408C
-	24	123	H0942410C
-	30	87	H0943007C
-	36	87	H0943607C



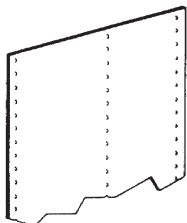
### Ledge Panel

For converting open or closed type shelving models to ledge models. All-welded construction. Combines beaded front post and preformed panel into a one-piece unit. Ledge panel cover is included.

-	6	39	H0120306H
-	12	39	H0120312H
-	18	39	H0120318H

### Back Panel

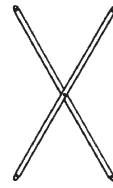
Punched on 1" centers at vertical edges and center for mounting to back of posts and shelves. 36" wide backs are furnished in 1 piece through 87" high; above 87" they are split horizontally. 42" & 48" wide backs are furnished in 1 piece through 51" high; above 51" they are split horizontally. Includes back clip and hardware.



36	-	39	12500H
36	-	51	12510H
36	-	75	12530H
36	-	87	12540H
36	-	99	12550H
42	-	39	12600H
42	-	51	12610H
42	-	87	12640H
42	-	99	12650H
48	-	39	12700H
48	-	51	12710H
48	-	87	12740H
48	-	99	12750H

Dimensions (inches)      Width    Depth    Height    Cat. No.

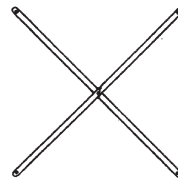
### Side Sway Braces, For Beaded Post Unit (Pair)



One pair forms a set which bolts to the front and rear posts for stability. Can be used in common between adjoining units. NOT for use with H-Posts.

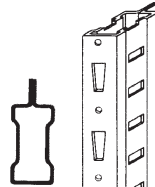
-	12	-	12015S
-	15	-	12019S
-	18	-	12026S
-	24	-	12034S
-	30	-	12045S
-	36	-	12049S

### Back Sway Braces, For Back,T, & H-Post, (Pair)



Each pair forms a set which bolts to posts at rear of unit for stability. Can be used in common with back to back units.

36	-	-	12036H
42	-	-	12042H
48	-	-	12048H



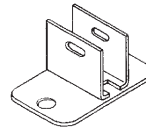
### H-Post

Very strong tubular design. 1-1/2" wide x 2-15/16" deep in heights shown. Used in front and rear post positions. Sides slotted on 1-1/2" centers for shelf clip adjustment. Has more load carrying capacity than beaded or angle posts.

-	-	87	H0037C
-	-	99	H0038C
-	-	123	H00310C
-	-	147	H00312C

### Foot Plate,

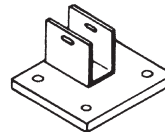
#### H-Post, Light/Medium Duty



Mounting bracket welded to top for bolting inside H-Posts. Base plate has 7/16" diameter hole for floor anchor bolts.

3-1/2	2-1/4	-	H025H
-------	-------	---	-------

### Foot Plate, H-Post, Heavy Duty



Mounting bracket is welded to top for bolting inside H-Post. Base plate is 3/8" thick and has four 7/16" diameter holes for receiving the embosses in shim plate (No. H016) and for floor anchor bolt.

4	3-1/2	-	H015H
---	-------	---	-------

### Shim Plate, For Foot Plate, Light/Medium Duty



Fits under foot plate (Cat. No. H025H or H050H) for leveling. Has (1) 7/16" diameter hole which aligns with hole in foot plate to permit anchoring to floor.

3-1/2	2-1/4	-	H026
-------	-------	---	------

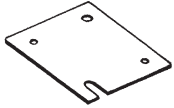
# Erectomatic Shelving

## Shelving Components

Dimensions (inches)      Width      Depth      Height      Cat. No.

### Shim Plate, Heavy Duty

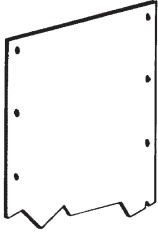
Fits under foot plate (Cat. No. H015H) for leveling. Has (2) 7/16" diameter holes which align with footplate holes to permit anchoring to floor.



Width	Depth	Height	Cat. No.
4	3-1/2	-	H016

### Side Panel, H-Post

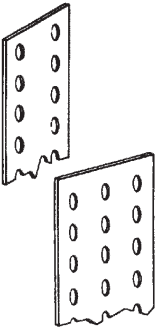
Provides closed side panels sections where desired. Punched on 6" centers for mounting to front and rear H-Posts. Attach 1/4 x 20 pan head screws (included).



Width	Depth	Height	Cat. No.
-	18	39	H0911803H
-	18	87	H0911807H
-	24	39	H0912403H
-	24	87	H0912407H
-	36	39	H0913603H
-	36	87	H0913607H

### Connector Strip, For H-Post Back

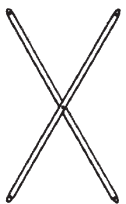
For connecting Back Panels or braces to rear H-Posts; punched on 1" centers. 2-1/16" wide pieces are for back posts at row ends. 3-1/8" wide pieces are for adjoining intermediate back posts, and are punched at outside vertical edges & center. Hardware included.



Width	Depth	Height	Cat. No.
2-1/16	-	39	H1143H
2-1/16	-	51	H1144H
2-1/16	-	87	H1147H
3-1/8	-	39	H1153H
3-1/8	-	51	H1154H
3-1/8	-	87	H1157H

### Side Sway Braces, H-Post (Pair)

Each pair forms a set for connecting front and rear H-Posts for stability. Can be used in common with adjoining unit (for H-Posts ONLY).



Width	Depth	Height	Cat. No.
-	12	-	H34112H
-	15	-	H34115H
-	18	-	H34118H
-	24	-	H34124H
-	30	-	H34130H
-	36	-	H34136H

### Splice, H-Post

For use in multi-level and high rise shelving. Fits inside two connecting H-Posts. Punched for bolting. Maintains post strength at the splice without interfering with clips or other accessories. Hardware included.

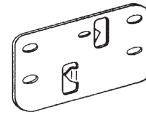


Width	Depth	Height	Cat. No.
-	-	9-3/4	H010H

Dimensions (inches)      Width      Depth      Height      Cat. No.

### Combination Clip, H-Post (zinc plated)

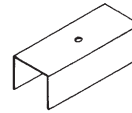
Mounts to rear H-Posts to provide anchor point for back sway braces. Also used to connect H-Posts and common back panels or common back sway braces together in back to back models. Hardware included. Not for use in high seismic areas.



Width	Depth	Height	Cat. No.
-	-	-	H027H

### Support Brace for Bottom Shelf (For Class 3 Only)

Used only on Class 3 bottom shelves to support center support hat section. Positioned in center of shelf; rests on floor. Includes hardware.

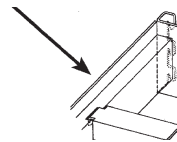


Width	Depth	Height	Cat. No.
5-1/8	2-1/16	1-3/4	H131H

### H-Post Beams

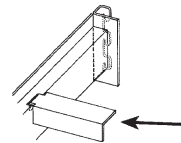
Beams with H-Post end connectors for use with plywood decking. Support Angle(s) are required (see below).

Width	Depth	Height	Cat. No.
36-1/2	-	-	900036
42-1/2	-	-	900042
48-1/2	-	-	900048
72-1/2	-	-	900072
84-1/2	-	-	900084
96-1/2	-	-	900096



### Plywood Support Angles (For H-Post Beams)

Use 1 for 36" & 42" 2 for 48", 3 for 72" & 84", 4 for 96" Beams.



Width	Depth	Height	Cat. No.
-	18	-	20349C
-	24	-	20341C
-	30	-	20330C
-	36	-	20342C
-	42	-	20332C
-	48	-	20336C

### Standard H-Post Beam Capacities (With Support Angles)

Width	Capacity
36-1/2	2500/Pr.
42-1/2	2500/Pr.
48-1/2	2500/Pr.
72-1/2	1760/Pr.
84-1/2	1500/Pr.
96-1/2	1350/Pr.

All Capacities are based on uniformly distributed loads in pounds.

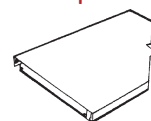
### Counter Top

Heavy duty steel working surface with cornice at front and rear. Use End Caps for finishing cornice on ends. Hardware included.

Width	Depth	Height	Cat. No.
36	18	-	H1953618H
36	24	-	H1953624H

### End Caps for Counter Top, (Pair)

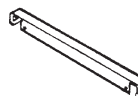
Provides a finished cornice on extreme ends of counter top applications. Sold in pairs; hardware included.



Width	Depth	Height	Cat. No.
-	18	-	H20118H
-	24	-	H20124H

### Base Strip

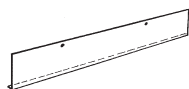
Shaped to fasten directly to the bottom shelf



## Accessories

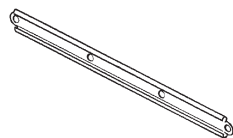
Dimensions (inches)      Width    Depth    Height    Cat. No.

### Base Strip



Shaped to fasten directly to the bottom shelf front to close the gap beneath it and the floor. Normally used with closed shelving. Includes hardware. Note: 4-1/2" high model is for use with H-Posts attached to footplates and in x-ray storage units.

36	-	3	14520H
36	-	4	1450H
36	-	4-1/2	H23336H
42	-	3	14530H
42	-	4	14560H
48	-	3	14540H
48	-	4	14570H



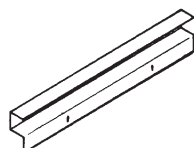
### Label Holder

Punched for attaching to front flange of shelves. Accepts 7/8" high labels. Attaches with plastic button fasteners (included).

36	-	-	13920H
42	-	-	13930H
48	-	-	13940H

### Bin Front

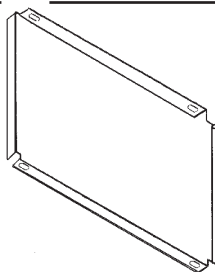
Offset type double formed at top and triple flanged at bottom to telescope over shelf flange. Hardware included.



36	-	1	14210H
36	-	2	14220H
36	-	3	14240H
42	-	3	14340H
48	-	3	14440H

Dimensions (inches)      Width    Depth    Height    Cat. No.

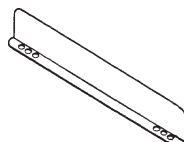
### Full Divider



Front edge beaded; top, bottom and rear edges are flanged. Attaches with plastic button fasteners (included). For Class 3 shelving applications, contact your representative regarding special notching. Note: 16-1/2" high model is for x-ray unit.

-	12	6	15600H
-	12	9	15620H
-	12	12	15640H
-	12	18	15670H
-	15	6	15700H
-	15	12	15740H
-	18	6	15800H
-	18	9	15820H
-	18	12	15840H
-	18	16-1/2	15865H
-	18	18	15870H
-	18	24	15890H
-	24	6	15900H
-	24	9	15920H
-	24	12	15940H
-	24	18	15970H
-	24	21	1DVX082H
-	24	24	15990H
-	36	18	16170H

### Partial Divider



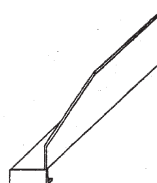
Partitions shelves from front to rear. Flanged and punched for shelf attachment. Has rounded top corners for safety. Attaches with plastic button fasteners (included).

-	12	2	16395H
-	12	4	16410H
-	18	2	16397H
-	18	4	16430H
-	24	4	16440H

### Sliding Divider, For Box Formed Shelf

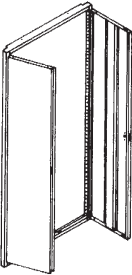
Formed to fit around front and over rear edges of shelf. Can be positioned horizontally anywhere along shelf surface. No hardware required.

-	12	4	1H4124C
-	12	6	1H4126C
-	18	4	1H4184C
-	18	6	1H4186C
-	24	4	1H4244C
-	24	6	1H4246C





## Accessories & Miscellaneous Hardware

Dimensions (inches)	Width	Depth	Height	Cat. No.
 <b>Swinging Doors, With Lock &amp; 2 Keys</b> Pre-hung at the factory on a welded frame for easy assembly. Includes 3-point latch system with locking handle and 2 keys. Can be used on standard ledge or counter units up to 87" high. Six Universal Clips required for attaching doors to shelving posts. Order separately.				
36	-	36		H3003636
36	-	48		H3003648
36	-	85		H3003684
48	-	36		H3004836
48	-	85		H3004884

## Touchup Paint

### Spray Paint, 12 Oz. Can

012 Tawny Tan	97012	722 Patriot Red	97722
021 Gray Ash	97021	723 Light Putty	97723
028 Gray	97028	736 Burgundy	97736
052 Reflex Blue	97052	767 Cardinal Red	97767
054 Canvas	97054	806 Marine Blue	97806
055 Shamrock	97055	812 Hunter Green	97812
056 Sunburst	97056	822 Regal Blue	97822
058 Nordic Purple	97058	826 Slate Blue	97826
073 Champagne	97073	848 January White	97848
701 Spray Green	97701	949 Jet Black	97949
710 Sage Brush Yellow	97710	952 Turquoise Teal	97952
715 Lake Blue	97715		
720 Mandarin Orange	97720		

Dimensions (inches)	Width	Depth	Height	Cat. No.
---------------------	-------	-------	--------	----------

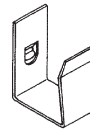
## Miscellaneous Replacement Parts & Hardware



### Shelf Clip, For Erectomatic Posts

One piece compression clip that is shipped in sets of 4 with each shelf ordered. Order by single pieces for replacement use only.

-	-	-	H133Z
---	---	---	-------



### Clip, Back Panel (Plated)

Formed to fit the bottom flange of shelf and tabbed to insert in holes in center of back panel. Holds back panel to shelf and prevents panel from bowing. Normally shipped with backs; order here for replacement use only.

-	-	-	H120C
---	---	---	-------



### Universal Clip, To Mount Doors

Six clips required to mount swinging doors. Twelve clips required for sliding doors. Not included with doors. Order separately.

-	-	-	H315H
---	---	---	-------



### Plastic Button

For attaching various shelving accessories such as dividers and label holders. Normally included with shipment; order here for replacement only.

-	-	-	8401
---	---	---	------

### Pan Head Screws

(sold in quantity of 100)

1/4-20 x 1/2	-	-	8412H
1/4-20 x 3/4	-	-	8410H
1/4-20 x 1/4	-	-	8409H
1/4-20 x 1/2 (Grade 5)	-	-	8412G5H

### 1/4-20 Hex Nut

(sold in quantity of 100)

-	-	-	8473H
Grade 5	-	-	8473G5H

### Square Washer

(sold in quantity of 100)

-	-	-	8408H
---	---	---	-------

# Erectomatic Shelving

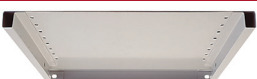

## Hi-Performance® Shelves

Erectomatic® Hi-Performance® Shelves maximize load handling capacity through a design which shapes the front and rear flanges into rigid tubular box beams. The box shape provides two vertical surfaces in each box-flange that inherently give it a high strength-to-weight ratio. Additional reinforcing bars or angles are not used with Hi-Performance shelves.

The shelves are efficiently manufactured from high strength cold rolled steel on a modern automated roll forming mill.

For additional strength, front and rear flanges are welded to the underside of the shelf on 3" centers. Shelf corners are lapped and welded.

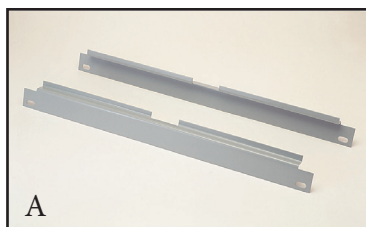
Shelves are available in a wide variety of sizes shown below in the capacity chart. All shelves are punched on 1.5" centers to accept shelving accessories such as dividers, label holders and bin fronts.

Erectomatic® Hi-Performance® Shelves and Capacities						
		 Class 1 Heavy Duty High Strength Steel		 Class 2 Extra Heavy Duty High Strength Steel		 Class 3 Extra Heavy Duty With Reinforcing*
Unit Width	Unit Depth	Cat. No.	Capacity	Cat. No.	Capacity	Capacity
30"	12"	H1203012C	-	-	-	-
	15"	H1203015C	-	-	-	-
	18"	H1203018C	-	-	-	-
	24"	H1203024C	-	-	-	-
36"	12"	H1203612C	800 lb	H1183612C	1100 lb	-
	15"	H1203615C	800 lb	H1183615C	1100 lb	-
	18"	H1203618C	850 lb	H1183618C	1200 lb	2000 lb
	24"	H1203624C	800 lb	H1183624C	1250 lb	2000 lb
	30"	H1203630C	500 lb	H1183630C	900 lb	2000 lb
	36"	H1203636C	500 lb	H1183636C	900 lb	2000 lb
42"	12"	H1204212C	600 lb	H1184212C	1100 lb	-
	15"	H1204215C	600 lb	H1184215C	1100 lb	-
	18"	H1204218C	600 lb	H1184218C	1050 lb	1600 lb
	24"	H1204224C	600 lb	H1184224C	900 lb	1600 lb
	30"	H1204230C	625 lb	H1184230C	1000 lb	1600 lb
	32"	H1204232C	525 lb	H1184232C	950 lb	1600 lb
	36"	H1204236C	475 lb	H1184236C	900 lb	1600 lb
48"	12"	H1204812C	500 lb	H1184812C	750 lb	-
	15"	H1204815C	500 lb	H1184815C	850 lb	-
	18"	H1204818C	500 lb	H1184818C	900 lb	1200 lb
	24"	H1204824C	500 lb	H1184824C	900 lb	1200 lb
	30"	H1204830C	500 lb	H1184830C	750 lb	1200 lb
	36"	H1204836C	500 lb	H1184836C	750 lb	1200 lb

\* Class 3 Capacities are based upon the use of Extra Heavy Duty Shelves with (A) Side Shelf Supports and (B) Center Support for additional capacity. Must use nuts and bolts for shelves, not clips. All shelves are supplied with Erectomatic Clips. All shelf load capacities are in pounds for evenly distributed loads, and include a safety factor of 1.65.

### A. Class 3 Side Shelf Support (pairs)

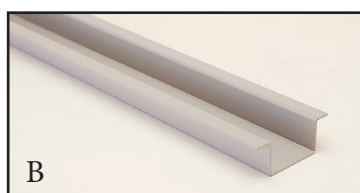
Used to support Center Support in Class 3 applications.



Class 3 Side Shelf Support	
Unit Depth	Cat. No.
18"	1H830H
24"	1H840H
30"	1H850H
36"	1H860H

### B. Class 3 Center Support

Runs left to right beneath the mid-point of the shelf for conversion to Class 3. Supported by side shelf supports.



Class 3 Center Support	
Unit Width	Cat. No.
36"	H13736C
42"	H13742C
48"	H13748C



# Erectomatic Shelving



## Multi-Level Shelving



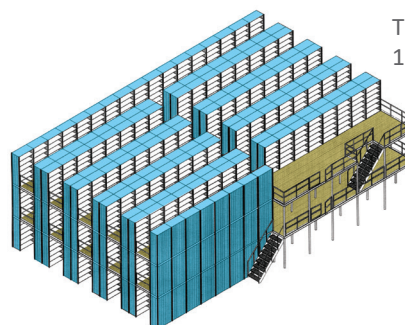
### Penco Erectomatic Shelving Systems

Using standard components, Penco Erectomatic Shelving can be designed and configured to overcome a number of storage problems. By going UP and not OUT, tall shelving systems take advantage of factory space by capturing overhead area that is lighted, heated and paid for, while allowing valuable floor space to be used for more profitable activities.

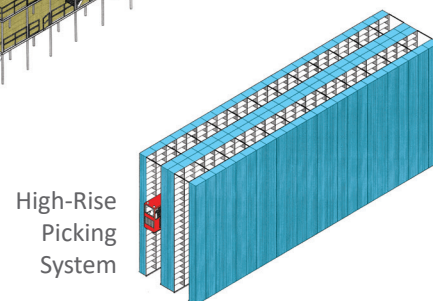
With Erectomatic Flush Beaded Front Posts, or H-Posts for extreme loading and seismic applications, shelving systems can be built vertically. We can also supply pre-engineered components, elevated walkways, stair structures and handrails designed to meet local, state or federal codes. In Hi-Rise applications where free-path man-aboard order picking equipment is used, guide rail and cross-aisle top-ties are used to keep the structure sound.

Shelving systems can be designed as “closed” installations with solid backs and welded side panels, or as “open” style structures that are held together with side and rear sway bracing. For “pass through” order picking, H-Post with beams and a variety of decking choices are available.

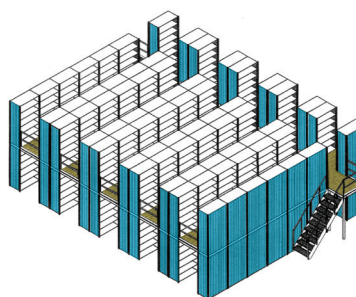
All Penco Erectomatic High Performance Storage Systems are available with drawings that have been reviewed and approved by a structural engineer licensed in the state where the installation will take place.



Three-Level Structure -  
153 Units per Level

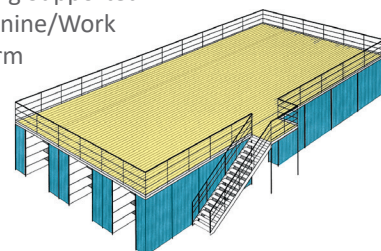


High-Rise  
Picking  
System



Two-Level Structure- 70  
Units per Level

Shelving Supported  
Mezzanine/Work  
Platform



## Shelving Specifications

**General:** All shelving shall comply with SMA and ANSI MH 28.1-1982 and in addition shall have the following characteristics:

**POSTS** - All posts shall be 14 gauge with 3/8" x 7/8" slots punched on 1-1/2" vertical centers for shelf adjustment using non-intrusive compression clips. Sway braces shall be attached to the post with nuts and bolts that shall not interfere with shelf adjustment.

**BEADED POST** - Shall be 14 gauge 11/16" wide x 2-9/16" deep overall. Units to have front beaded posts. Beaded posts used on open units shall have legs spot welded together on 6" centers for added strength. Legs shall be punched on 3" centers for the attachment of side sway braces.

**ANGLE POSTS** - Shall be 14 gauge side leg 2-5/16" wide, rear leg is 1-3/16". Post to be offset angle shape. Starter units shall have rear angle posts. Flanges shall be punched on 3" centers for the attachment of side and back sway braces.

**TEE POSTS** - Shall be two angle posts spot welded together on 6" centers. Adder units shall have rear T posts.

**END PANELS** - Closed starter units shall have end panels. Each end panel shall consist of one beaded post, one angle post and one 24 gauge side sheet spot welded on 6" centers.

**INTERMEDIATE PANELS** - Shall be the same as end panels except they shall have 2 angle posts and shall be furnished on closed adder units.

**BACKS** - Shall be 24 gauge with holes on 1" centers for bolting to angle or tee posts.

**SWAY BRACES** - Shall be 12 gauge x 3/4" wide ends punched for bolting to posts. Also punched in the middle for bolting to each other for strength and ease of installation.

**SHELF CLIP** - One piece 13 gauge compression type independently adjustable. Each clip shall bear on the edges of two post notches and provide a minimum of 1-1/2" of bearing. Zinc plated. Provide four independently adjustable clips per shelf.

**SHELVES** - Shelf shall have a 1-1/4" face on all four sides. Front and rear flanges shall have a 3/4" wide box formation with return flanges spot welded to the shelf bottom on 3" centers. Sides shall have a 5/8" 90° return flange. Corner shall be lapped and spot welded. Heavy duty shelves shall have ribs in the tabs to keep shelf clips snug. Shelves shall be punched for dividers on 1-1/2" centers.

Shelves shall be furnished in heavy duty or extra heavy duty to meet the specified capacity.

**SHELF REINFORCING** - Shall consist of 13 gauge side shelf supports tabbed to fit into clip slots and 14 gauge center shelf supports. Center support shall be held in place by engaging the side shelf supports. Shelf reinforcing shall be furnished when specified shelf capacity exceeds the rated capacity of the extra heavy duty shelf.

**SHELF DIVIDERS** - Shall be 24 gauge through 20" high; over 20" high dividers shall be 20 gauge. Fronts of dividers shall have a 5/16" diameter bead. Top, bottom and rear flanges shall be 7/8". Dividers shall be held in place with plastic buttons.

**ANGLE DIVIDERS** - Shall be 18 gauge and held in place with plastic buttons.

**SLIDING DIVIDERS** - Shall be 20 gauge. Divider portion shall be sloped at 45° at the front with a 1/2" radius at the front corner.

**BASE FRONT** - Shall be 18 gauge and attached to the shelf by bolting.

**BIN FRONTS** - Shall be 18 gauge and attached to the shelf by bolting. Bin fronts shall be 1", 2" or 3" high.

**FOOTPLATES** - Standard duty foot plate for Beaded, Angle and Tee Post foot plates shall be 2 1/4" x 3 1/2" x 12 ga. with a bracket welded on top. Plate has a 7/16" diameter hole for anchoring and an embossment for shim alignment.

Heavy duty foot plate for Beaded, Angle and Tee Post Footplates are 5 1/2" x 2 3/8" x 7 ga. with two brackets on top. Plate has two 7/16" diameter holes for anchoring.

**COUNTER TOPS** - Shall be 14 gauge with a 2" high face and 13 gauge counter

end finishing caps attached with concealed nut and bolts.

**SHIMS** - Shims for use with standard duty foot plates shall be 2 1/4" x 3 1/2" and 16 ga., with 7/16" diameter hole and embossment same as for footplate.

Heavy duty foot plate shims for use with heavy duty foot plate and are 5 1/2" x 2-3/8" x 7 ga. Shim has two 7/16" holes that correspond with holes in the Heavy Duty Foot plate for anchoring.

**SWINGING DOORS** - Door and frame assembly complete with 3 point locking, chrome plated turn handle with built in lock with two keys. Doors are 20 gauge with reinforcing pans. Frames 16 gauge. Each pair of doors cover one shelving unit.

**POST SPLICE CHANNEL** - Shall be 16 gauge and formed into a channel shape. Center of channel shall be punched with three holes for assembling to upper and lower post. Used whenever posts are to be spliced to achieve added height.

**H-POST** - 14 gauge pickled and oiled steel. Post is 1-1/2" O.A. wide x 2-1/4" deep plus a rear flange of 11/16". Rear flange is punched with 5/16" diameter holes on one leg and 13/64" diameter holes on the opposite leg. Holes are on 3" centers for attaching sway braces or side panels.

**H-POST SIDE PANELS** - 24 gauge. Both vertical sides are punched with 9/32" x 9/16" slots on 3" centers.

**H-POST SPLICE** - 16 gauge with six 11/32" diameter holes. Part consists of two pieces each formed into a special channel shape and spot welded together. Assembly forms a splice with overall dimensions of 1-5/16" wide x 2-1/32" deep x 9 3/4" high.

**H-POST FOOT PLATE** - Heavy Duty foot plate consists of a 3-1/2" x 4" plate with four 7/16" diameter holes and a 12 gauge 2" wide channel 1 1/8" web with 1-3/4" legs. Channel web has a 5/8" diameter hole, each leg has a 9/32" x 7/16" slot. Channel is plug welded to the plate through the 5/8" diameter hole.

Light/medium duty foot plates are the same as above except the plate is 2-1/4" x 3-1/2" with one 7/16" diameter hole and one 3/8" diameter embossment.

**H-POST SIDE SWAY BRACES** - 12 gauge x 3/4" hot rolled pickled & oiled steel. Braces are punched at each end and in the middle with 3/16" diameter holes. Use 1/4 x 1/2" truss head bolts and hex nuts.

**SHIM PLATE HEAVY DUTY** - 4" x 3-1/2" x 16 gauge with two 7/16" diameter holes, one 27/32" long x 7/16" wide slot and one 3/8" diameter.

**SHIM PLATE LIGHT/MEDIUM DUTY** - 2-1/4" x 3-1/2" x 16 gauge with one 7/16" diameter hole and one 3/8" diameter embossment.

**CONNECTOR STRIPS** - Connector strips fasten to H-posts with Tek screws then the back panel is fastened to the connector strip. Starter unit connector strips are 14 gauge, 2-1/16" wide with two rows of 5/16" diameter holes on 1" centers. Adder unit connectors are 14 gauge, 3-1/8" wide with three rows of 5/16" diameter holes on 1" centers.

---

Erectomatic® and Hi-Performance® are registered trademarks of Penco Products, Inc.

**PENCO RESERVES THE RIGHT TO VARY SPECIFICATIONS CONSISTENT WITH A POLICY OF CONTINUOUS PRODUCT IMPROVEMENT.**



# Pallet Rack



## Introduction

### Penco Pallet Rack

Penco Pallet Rack is a carefully engineered system designed to provide highly efficient storage of palletized items. Combining design and excellence with the use of high strength steel to achieve a superior strength to weight ratio, Penco Pallet Rack can handle nearly any storage job you can give it.

The basic components of Penco Pallet Rack are Upright Frames and Beams. Each is manufactured to exacting tolerances to provide many years of dependable service at their rated loads.

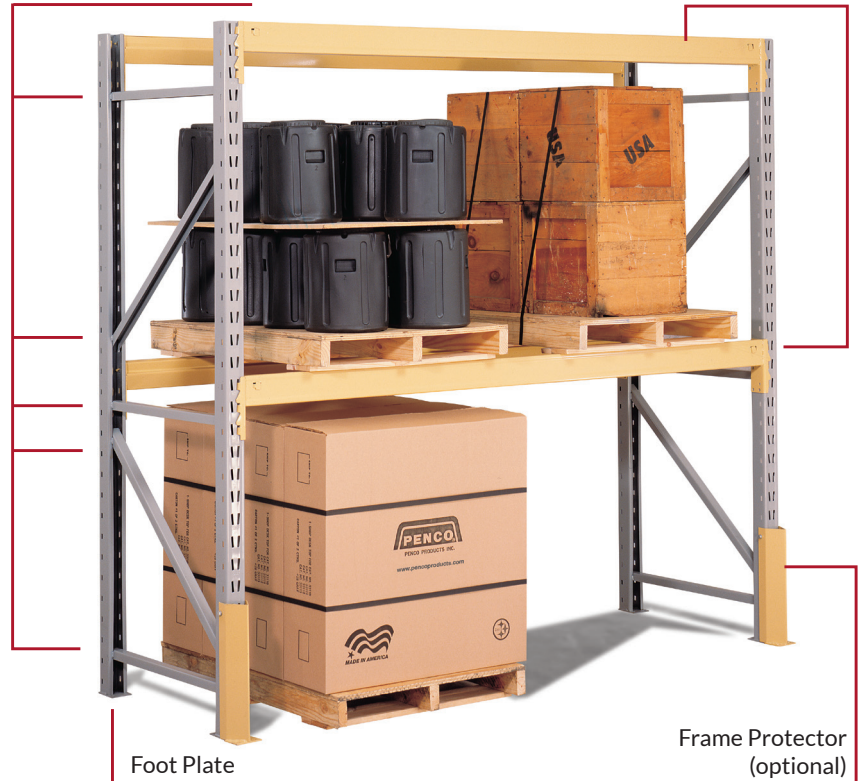
The following pages detail the wide range of sizes, capacities and accessories that make Penco Rack one of the best values for your storage dollar.



Available in  
24 Colors  
See Page 63

Welded Upright Frame

Beams



Foot Plate

Frame Protector  
(optional)

## Design Features

### Heavy Duty Beam End Connector

Beam ends are made from extra heavy gauge steel. They feature a three prong connection which assures positive beam to post alignment along the 8-1/2" length of the connector, and uniform load distribution. The greater the load, the tighter the connection. Tabs extend along the face of the beam to provide extra protection to the prongs during transit and installation.

### Upright Column

A continuous post roll formed in 5 different shapes and 3 different metal thicknesses to handle a variety of loads. Slanted slots on the column allow for beam placement on 3" vertical centers. Slots on column sides accept the safety beam locking key. The design allows for beams to be placed flush with the top, or as close as 9" from the floor.

### Beam Locking Key for Safety

A unique recessed safety key made from heavy gauge steel engages a slot in the side of the post. It resists an upward force from material handling equipment up to 1000 pounds. It is an integral part of the beam assembly, can be engaged easily without tools, and is clearly visible for checking.

### Step Down Design

All beams have a step for the purpose of accepting accessories. Two step sizes are available: 7/8" and 1-5/8" high.

### Welded Upright Frame Bracing

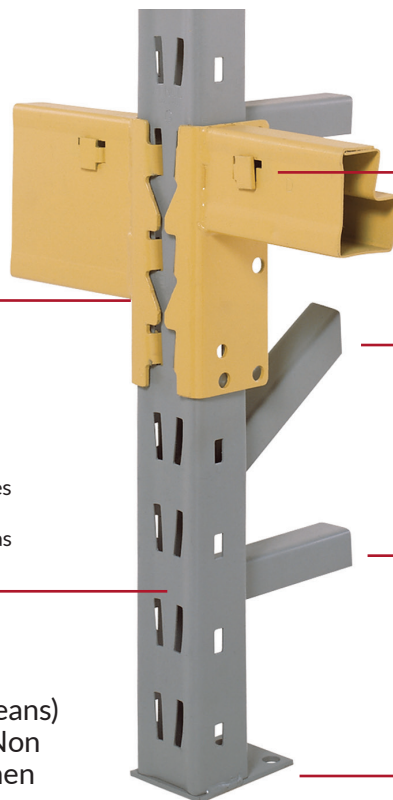
Upright frame columns are securely MIG welded together with channel type braces for maximum rigidity.

### Foot Plate

A heavy gauge foot plate is securely welded to each post to provide load distribution over 13.7 square inches, and two holes allow for floor anchoring from either side of the frame.

### PLEASE NOTE:

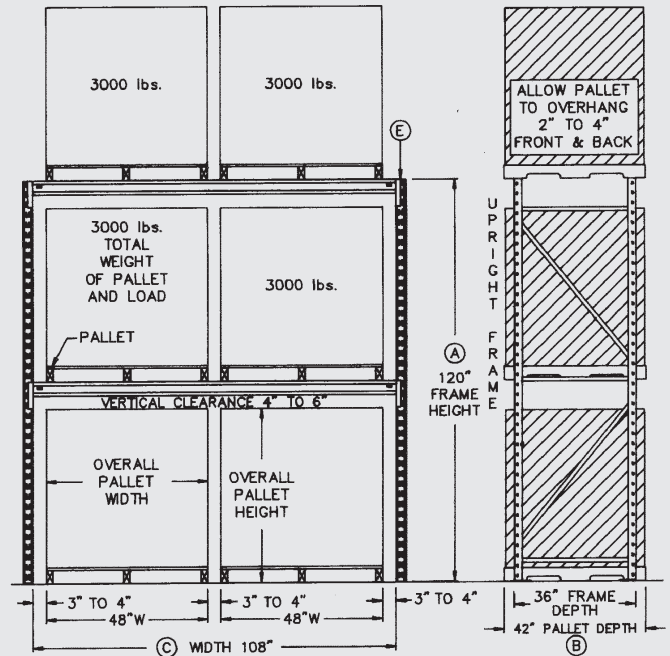
Ideally the top shelf level (load bearing beams) are 24"-48" from the top of the upright. Non load bearing beams should be utilized when top shelf level is more than 48".



## Design Considerations

## Determining Pallet Rack Needs

- A. **Height:** Measure the vertical dimensions of the pallet, pallet load and beam. Add an extra 4" to 6" clearance between bottom of beam above and top of load on pallet. Top beam should be at least 6" lower than the maximum lifting height of your forklift.
- B. **Depth:** Measure the depth of the pallet. Pallet should overhang the frame by 3" front and back. (Example: for a 48" deep pallet use a 42" deep frame).
- C. **Width:** Measure the width of the load and pallet, and use the greater of the two. Add 3" to 4" between loads, and between loads and upright frames to determine correct beam length. Select beams with a capacity equal to or greater than the total load of each level. (See "How to Order Beams" on the Pallet Rack Beam page).
- D. **Frame Capacity:** Add the total weight of all loads for each bay, excluding the pallets on the floor (a bay is the space between two upright frames).
- E. **Frame:** A common frame should be used between each bay.



## Pallet Rack Plus - An option for severe conditions or high seismic activity

Penco Pallet Rack Plus is engineered for use in areas where high seismic activity or other severe conditions exist. Load capacities are the same as the standard pallet rack shown in this catalog, however the frames and beams are more resistant to horizontal and vertical forces that could damage standard rack and its load. To learn the seismic rating where your pallet rack will be in use, contact your Penco representative.

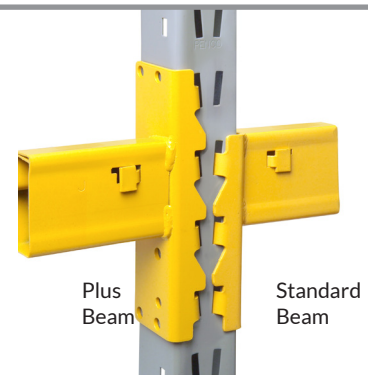
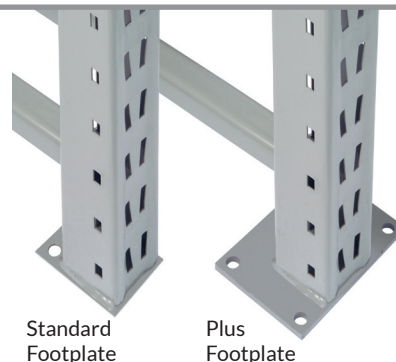
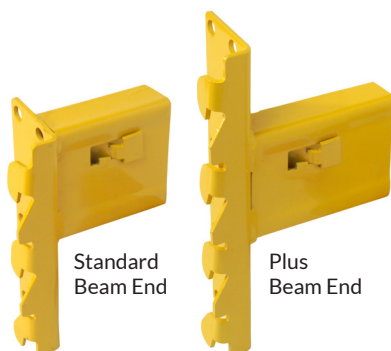
### Plus Beam End Connectors:

The Plus beams have 4 connectors instead of 3 for a stronger connection between

the beam and the upright post to resist conditions with higher lateral forces. The beam is welded 3" down from the top of the connector so loading is evenly distributed across all four connector prongs. The beam locking key is the same as used on standard beams.

### Plus Upright Frames with Large Footplates:

Each Plus upright frame has two 5" x 7" x 3/8" thick footplates with four 9/16" diameter anchoring holes. The extra holes provide the installer with more choices for floor anchoring.



# Pallet Rack



## Upright Frames

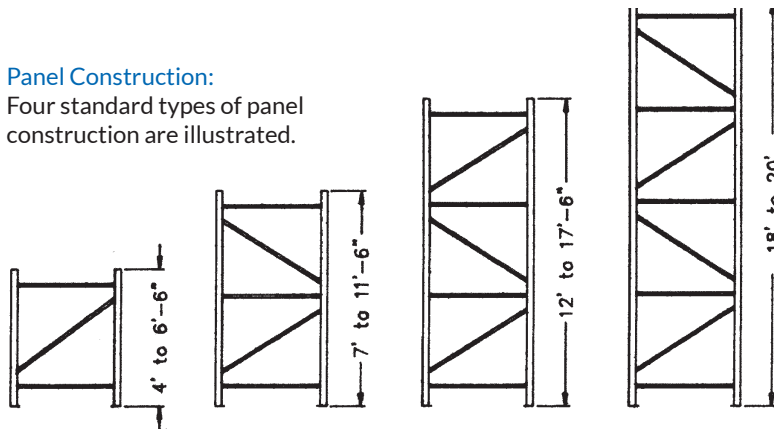
Penco Pallet Rack Upright Frames are available in five load capacities. A letter code stamped into the face of the post indicates the frame type. Depths of 30", 36", 42", 48", 54" and 60" are standard, but other depths and double-posted and cantilever frames are available. Standard heights range from 48" to 240" in 6" increments, but greater heights can be achieved when splices are used.

Beam heights adjust on 3" vertical centers, and are independent on each side of the frame. Beams of any type can be placed along the full height of the post; there are no dead spots on the post, even across a splice. Various load rated frames can be combined in a row of rack for maximum economy.

Penco Pallet Rack Upright Frames are furnished completely fabricated, welded into rigid units.

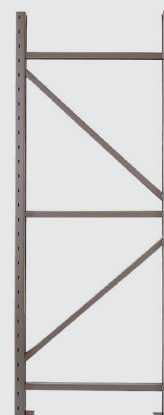
### Panel Construction:

Four standard types of panel construction are illustrated.



### How To Select Upright Frame Type

1. Determine the maximum vertical opening dimension between pairs of beams or between the lowest beam level and the floor.
2. Calculate the total load imposed on the upright frame.
3. Using the charts below, find the maximum vertical spacing between beams along the bottom scale, and then draw a vertical line to intersect the lines representing the capacities of the five types of upright frames. Select the frame that has a capacity that equals or exceeds the total load imposed upon it by all beam levels.



### Upright Frame Types

Frame Types	Post Width	Post Depth	Post Gauge
F	3"	1-3/4"	14
G	3"	2-1/4"	14
P	3"	3"	14
R	3"	3"	13
T	3"	3"	12

### Upright Frame Capacity

Frame Type	Beam Spacing											
	24"	30"	36"	42"	48"	54"	60"	66"	72"	78"	84"	90"
F	22,555	21,213	19,853	18,528	16,929	15,381	13,543	11,773	9,824	8,439	7,216	6,336
G	26,512	25,236	23,839	22,311	20,663	18,904	17,025	15,015	12,864	10,774	9,306	8,110
P	32,751	31,227	29,555	27,932	25,965	24,342	21,871	19,203	17,212	14,630	12,540	11,026
R	39,108	37,264	35,464	33,266	30,891	28,339	25,934	23,043	19,959	17,245	14,796	12,834
T	45,629	43,478	41,102	38,503	35,715	32,703	29,897	26,489	22,875	19,432	16,713	14,527

The table above indicates capacities for various vertical beam spacings for the different Penco upright frame types. Load data shown is for preliminary consideration only. Each installation must be individually evaluated for actual conditions and the use of each element in relation to the entire system with all aspects of the structural function.





# Pallet Rack

## Rigid Row Spacer

Structurally connects and spaces two rows of rack back-to-back. Bolted type. Hardware included.



Rigid Row Spacer	
Space	Cat. No.
6"	5AR506
8"	5AR508
10"	5AR510
12"	5AR512
18"	5AR518
24"	5AR524
30"	5AR530
36"	5AR536
42"	5AR542
48"	5AR548
54"	5AR554
60"	5AR560

## Rigid Wall Spacer

Assures that uniform spacing between pallet rack and building wall is maintained. Frame hardware included.



Rigid Wall Spacer	
Space	Cat. No.
4"	5AR404
6"	5AR406
8"	5AR408
10"	5AR410
12"	5AR412
18"	5AR418

## Reel Holder

Accessorizes rack for reel storage. Max. axle 2-1/2" dia. Cat. No. 5AH000



## Concrete Floor Anchor

To anchor pallet rack upright frames to a concrete floor. 1/2" diameter x 3-3/4". High seismic areas may require other floor anchors. Check with local permitting agency for assistance, if required. Cat. No. 9580



## Frame Protector

Anchors to floor at front of post. Provides protection against damage from material handling vehicles. NOT for use on Pallet Rack PLUS upright frames. Includes hardware to fasten to post only. 18" high. Cat. No. 5AF018



## Frame Deflector

Fastens to post only, usually 1-1/2" above the footplate. Includes hardware to bolt to post. 18" High. Cat. No. 5AF021PC

## Frame Splice

For adding to height of existing frame. Can be supplied welded in top of new frame if specified on order. (Top frame must be ordered without foot plate.) With hardware.



Frame Splice	
Frame Type	Cat. No.
F, G, P	5AU008P
R, T	5AU018P

## Upright Frame Accessories

Upright Frames - Available Sizes						
Frame Height	Frame Depths					
	30"	36"	42"	48"	54"	60"
48"	I	I	I	I	I	I
54"	I	I	I	I	I	I
60"	I	I	I	I	I	I
66"	I	I	I	I	I	I
72"	I	I	I	I	I	I
78"	I	I	I	I	I	I
84"	I	I	I	I	I	I
90"	I	I	I	I	I	I
96"	I	I	I	I	I	I
102"	I	I	I	I	I	I
108"	I	I	I	I	I	I
114"	I	I	I	I	I	I
120"	I	I	I	I	I	I
126"	I	I	I	I	I	I
132"	I	I	I	I	I	I
138"	I	I	I	I	I	I
144"	I	I	I	I	I	I
150"	I	I	I	I	I	I
156"	I	I	I	I	I	I
162"	I	I	I	I	I	I
168"	I	I	I	I	I	I
174"	I	I	I	I	I	I
180"	I	I	I	I	I	I
186"	I	I	I	I	I	I
192"	I	I	I	I	I	I
198"	I	I	I	I	I	I
204"	I	I	I	I	I	I
210"	I	I	I	I	I	I
216"	I	I	I	I	I	I
222"	I	I	I	I	I	q
228"	I	I	I	I	I	q
234"	I	I	I	I	I	q
240"	I	I	I	I	I	q

I = Available q = Not Available

To add height to an Upright Frame, a splice can be added. For more information on splicing frames see the Frame Splice to the left.

Upright Frame Catalog # System							
Position	1	2	3	4			5
Cat. No.	5	F	E	0	9	6	C

DESCRIPTION OF PART NO. SEQUENCE:

1. Always a 5 2. Capacity code for frame (See Pallet Rack Frame Capacities Table). 3. Depth code for frame (B = 30", E = 36", H = 42", L = 48", P = 54", S = 60") 4. Height of upright frame in inches (for example, 096 = 96 inches). 5. Always ends in "C"



## Pallet Rack Beams

### One Piece Beam Design

Penco has engineered its roll-formed one piece beams to achieve the highest possible strength-to-weight ratios in the most frequently desired load ratings through the use of efficient design and high strength steel.

Beams are offered in eight basic styles with different vertical profiles and steel gauges. Beam step heights of 7/8" and 1-5/8" are available for a wide variety of accessory use. Both the overlapping seam and the beam end connector are securely MIG welded for strength.

The face of the beam has an M-design recessed configuration for added strength, protecting the locking key, and to accept pressure sensitive labeling. Each beam is stamped with an identifying letter referring to the load bearing capacity. Beams are shown in 710 Yellow.

### How to Order Beams

**1. Select the Required Clear Span (distance between posts).** Allow for a minimum of 3" between pallet and post, and a minimum of 4" between adjacent pallets. Allow additional separation if load overhangs the pallet. For sizes not shown, contact your Penco representative.

**2. Determine the Required Capacity.** Add up the maximum load to be placed on one pair of beams. Remember that capacities are based on evenly distributed loading, not point loading.

### Beam Selection

Clear Span*	Capacity Per Pair**	Cat. No. Per Pair	Capacity Per Pair**	Cat. No. Per Pair	Capacity Per Pair**	Cat. No. Per Pair	Capacity Per Pair**	Cat. No. Per Pair	Capacity Per Pair**	Cat. No. Per Pair	Capacity Per Pair**	Cat. No. Per Pair	Capacity Per Pair**	Cat. No. Per Pair	Capacity Per Pair**	Cat. No. Per Pair
48"	8920 lb	5BB048	8380 lb	5BD048	9340 lb	5BH048	10670 lb	5BJ048	12170 lb	5BN048	-	-	-	-	-	-
54"	7920 lb	5BB054	7445 lb	5BD054	8370 lb	5BH054	9480 lb	5BJ054	10810 lb	5BN054	-	-	-	-	-	-
60"	7120 lb	5BB060	6695 lb	5BD060	7530 lb	5BH060	8520 lb	5BJ060	9730 lb	5BN060	-	-	-	-	-	-
66"	6470 lb	5BB066	6080 lb	5BD066	6840 lb	5BH066	7740 lb	5BJ066	8830 lb	5BN066	-	-	-	-	-	-
72"	5920 lb	5BB072	5570 lb	5BD072	6260 lb	5BH072	7090 lb	5BJ072	8090 lb	5BN072	9560 lb	5BS072	-	-	-	-
78"	5460 lb	5BB078	5135 lb	5BD078	5770 lb	5BH078	6540 lb	5BJ078	7460 lb	5BN078	-	-	10220 lb	5BX078	-	-
84"	5070 lb	5BB084	4760 lb	5BD084	5360 lb	5BH084	6060 lb	5BJ084	6920 lb	5BN084	-	-	9480 lb	5BX084	12650 lb	5BY084
90"	4720 lb	5BB090	4430 lb	5BD090	4990 lb	5BH090	5650 lb	5BJ090	6450 lb	5BN090	7630 lb	5BS090	8840 lb	5BX090	11800 lb	5BY090
96"	4420 lb	5BB096	3990 lb	5BD096	4670 lb	5BH096	5290 lb	5BJ096	6040 lb	5BN096	7190 lb	5BS096	8280 lb	5BX096	11050 lb	5BY096
102"	4160 lb	5BB102	3530 lb	5BD102	4390 lb	5BH102	4980 lb	5BJ102	5680 lb	5BN102	6720 lb	5BS102	7790 lb	5BX102	10390 lb	5BY102
108"	3920 lb	5BB108	3150 lb	5BD108	3990 lb	5BH108	4690 lb	5BJ108	5340 lb	5BN108	6340 lb	5BS108	7350 lb	5BX108	9800 lb	5BY108
114"	3540 lb	5BB114	2830 lb	5BD114	-	-	4440 lb	5BJ114	-	-	-	-	6950 lb	5BX114	9280 lb	5BY114
120"	3190 lb	5BB120	2550 lb	5BD120	3230 lb	5BH120	4130 lb	5BJ120	4810 lb	5BN120	5690 lb	5BS120	6600 lb	5BX120	8800 lb	5BY120
126"	2900 lb	5BB126	2310 lb	5BD126	-	-	-	-	4570 lb	5BN126	5410 lb	5BS126	6270 lb	5BX126	8370 lb	5BY126
132"	2840 lb	5BB132	-	-	-	-	-	-	4410 lb	5BN132	5160 lb	5BS132	5980 lb	5BX132	7980 lb	5BY132
138"	2410 lb	5BB138	-	-	-	-	-	-	4030 lb	5BN138	-	-	5710 lb	5BX138	7620 lb	5BX138
144"	2220 lb	5BB144	-	-	2240 lb	5BH144	-	-	-	-	4740 lb	5BS144	5500 lb	5BX144	7340 lb	5BY144

NOTE: Beam Capacity is reduced if loading is on the step only, unless beams are stabilized by some form of front to back tie.

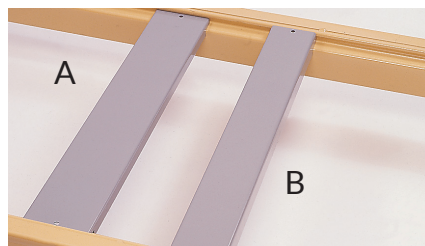
\* Clear span is measured from inside frame to inside frame.

\*\* Capacity of beam pairs in pounds is calculated in compliance with RMI Specifications and AISI Standard. Calculations assume uniform load distribution. Beams of 138" and 144" span require a minimum of two (2) Heavy Duty Cross Bars.

# Pallet Rack

## Beam Accessories

### Cross Bars 7/8" Step Beams



#### A. - 1/2" Plywood Support

Supports sheets of 1/2" Plywood.

A - 1/2" Plywood Support	
Frame Depth	Cat. No.
30"	5AP230C
36"	5AP236C
42"	5AP242C
48"	5AP248C

#### B. - General Duty Cross Bar

For supporting loads smaller than unit depth.

B - General Duty Cross Bar	
Frame Depth	Cat. No.
30"	5AX530C
36"	5AX536C
42"	5AX542C
48"	5AX548C
54"	5AX554C
60"	5AX560C

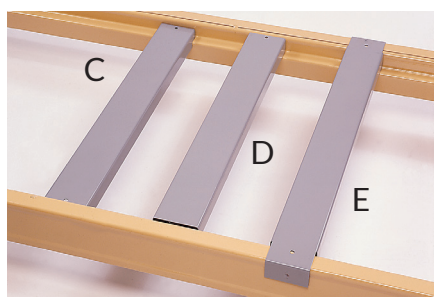


#### Coil Bed

Full depth. For proper placement and storage of cylindrical items.

Coil Bed	
Frame Depth	Cat. No.
30"	5AC030C
36"	5AC036C
42"	5AC042C
48"	5AC048C

### Cross Bars 1-5/8" Step Beams



#### C. - 3/4" Plywood Support

Supports sheets of 3/4" Plywood.

C - 3/4" Plywood Support	
Frame Depth	Cat. No.
30"	5AP330
36"	5AP336
42"	5AP342
48"	5AP348
54"	5AP354
60"	5AP360

#### D. - General Duty Cross Bar

Supports loads smaller than unit depth on 1-5/8" step beams. Not for plywood.

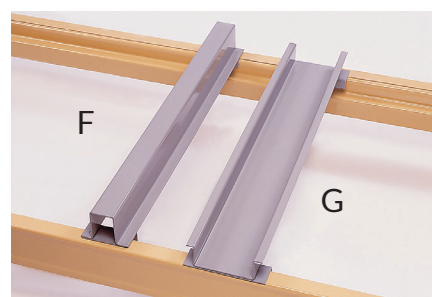
D - General Duty Cross Bar	
Frame Depth	Cat. No.
30"	5AX630C
36"	5AX636C
42"	5AX642C
48"	5AX648C
54"	5AX654C
60"	5AX660C

#### E. - Heavy Duty Flanged Cross Bar

Supports heavier loads smaller than unit depth on 1-5/8" step beams.

E - HD Flanged Cross Bar	
Frame Depth	Cat. No.
30"	5AX730C
36"	5AX736C
42"	5AX742C
48"	5AX748C
54"	5AX754C
60"	5AX760C

### Fork Clearance Bar and Heavy Duty Skid Channel



#### F. - Fork Clearance Bar

Provides proper fork clearance for unpalletized stock, 2" wide by 2-3/4" high.

F - Fork Clearance Bar	
Frame Depth	Cat. No.
30"	5AF330C
36"	5AF336C
42"	5AF342C
48"	5AF348C
54"	5AF354C
60"	5AF360C

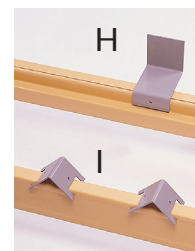
#### G. - Heavy Duty Skid Channel Assembly

Provides a channeled base for skid runners, 4" wide by 2" high.

G - HD Skid Channel Assembly	
Frame Depth	Cat. No.
30"	5AS230C
36"	5AS236C
42"	5AS242C
48"	5AS248C

#### H. - Pallet Stop

Attaches to rear beam with Tek screw. Cat. No. 08822 included. For 1-5/8" step beam only. In Pairs. Cat. No. 5AT00H



#### I. - Drum Wedge

Two loose triangular stops for drum storage. Install on front beam only. In Pairs. Cat. No. 5AW000

## Pallet Rack Specifications

**PALLET RACK:** The basic components of Standard Penco Pallet Rack are Upright Frames and Beams. Each is manufactured to exacting tolerances to provide many years of dependable service at their rated loads.

**Step Down Design:** All beams have a step for the purpose of accepting accessories. Two step sizes are available: 7/8" and 1-5/8" high.

**Beam Locking Key For Safety:** A unique recessed safety key made from heavy gauge steel engages a slot in the side of the post. As soon as beams are installed, the locking keys should be slid into place. They will resist an upward force from material handling equipment up to 1000 pounds. It is an integral part of the beam assembly, can be engaged easily without tools, and is clearly visible for checking.

**Heavy Duty Beam End Connector:** Beam ends are made from extra heavy gauge steel. They feature a three prong connection which assures positive beam to post alignment along the 8-1/2" length of the connector, and uniform load distribution. Tabs extend along the face of the beam to provide extra protection to the prongs during transit and installation.

**Heavy Duty Beam End Connector (Pallet Rack Plus):** Pallet Rack Plus beams are intended for use in severe conditions or high seismic areas and have four pronged end frame connectors. The beams are centered along the 11 1/2" long connector so all prongs share equally in the live beam load. Any Penco pallet rack beam can be equipped with four-pronged connectors.

**Welded Upright Frame Bracing:** Upright frame columns are securely MIG welded together with channel type braces for maximum rigidity.

**Upright Column:** A continuous post roll formed into an "M" design for added strength. Slanted slots on the column allow for beam placement on 3" vertical centers. The greater the unit load the tighter the beam-upright connection becomes. Slots on column sides accept the safety beam locking key. The design allows for standard beams to be placed flush with the top, or as close as 9" from the floor.

**Upright Column (Pallet Rack Plus):** A continuous post roll formed into an "M" design for added strength. Slanted slots on the column allow for beam placement on 3" vertical centers. The greater the unit load the tighter the beam-upright connection becomes. All Plus pallet rack beams are attached 3" down from the top of the heavy duty connector and cannot be installed flush with the top of the uprights. Plus beams can be placed within 9" above the floor.

**Foot Plate:** A heavy gauge foot plate is securely welded to each post to provide load distribution over 13.7 square inches, and two 9/16" holes allow for floor anchoring on either side of the frame. Standard duty foot-plates are 7 ga. thick.

**Foot Plate (Pallet Rack Plus):** All pallet rack Plus upright frames have foot-plates that are 35 square inches and 3/8" thick. Four 9/16" holes are present at the corners for anchoring.

**Pallet Rack Frames:** Penco Pallet Rack Upright Frames are available in five different load carrying ranges. A letter code stamped into the face of the post indicates the frame type. Depths of 30", 36", 42", 48", 54" and 60" are standard, but other depths are available. Standard heights range from 48" to 240" in 6" increments, but greater heights can be achieved when splices are used. Double posted and cantilever leg custom upright configurations are available upon request. Beam heights adjust on 3" vertical centers, and are independent on each side of the frame. Various load rated frames can be combined in a row of rack for maximum economy. Beams cannot be placed at locations where a splice is positioned. Penco Pallet Rack Upright

Frames are furnished completely fabricated, welded into rigid units. Standard finish for upright frames is 028 Gray baked enamel. Other standard Penco colors are available upon request.

We recommend that all upright frames be securely anchored to the floor for safety. Seismic conditions and local codes may require anchors other than the Penco 1/2"-13 x 3 3/4" wedge anchor be used. We suggest you check with local code officials about anchoring as many jurisdictions have approved different anchors.

**Pallet Rack Beams:** Penco has engineered its roll-formed one piece beam to achieve the highest possible strength-to-weight ratios in the most frequently desired load ratings through the use of efficient design and high strength steel. Beams are offered in eight basic styles with different vertical profiles and steel gauges. Beam step heights of 7/8" and 1-5/8" are available for a wide variety of accessory use. Both the overlapping seam and the beam end connector are securely MIG welded for strength. The face of the beam has an M-design recessed configuration for added strength, protecting the locking key, and to accept pressure sensitive labeling. Each beam is stamped with an identifying letter referring to the load bearing capacity. Beams are finished in 710 Sagebrush Yellow baked enamel for high visibility. Safety Yellow and any other standard Penco colors are available upon request.

### PALLET RACK ACCESSORIES

**Plywood Supports:** For supporting plywood or other wood decking. Styles are available for 1/2" deck on 7/8" step beams and 3/4" deck on 1-5/8" step beams.

**General Duty Cross Bars:** For supporting loads smaller than unit depth.

**Heavy Duty Flanged Cross Bar:** Supports heavier loads smaller than unit depth on 1-5/8" step beams.

**Fork Clearance Bar:** Provides proper fork clearance for unpalleted stock, 2" wide by 2-3/4" high.

**Heavy Duty Skid Channel Assembly:** Provides a channeled base for skid runners, 4" wide by 2" high.

**Frame Splice:** For adding to height of existing frame. Can be supplied welded in top of new frame if specified on order. (Top frame must be ordered without foot plate.) Hardware provided.

**Frame Protector:** Anchors to floor at front of post. Provides protection against damage from material handling equipment.

**Frame Deflector:** Fastens to front of upright post on 3" increments.

**Rigid Wall Bracket:** Structurally connects racks to wall for additional stability. Frame hardware included.

**Rigid Row Spacer:** Structurally connects and spaces two rows of rack back-to-back to satisfy NFPA requirements. Bolted into place. Hardware included.

**Reel Holder:** Accessorizes rack for elevated reel storage. Capacity is 1,000 lbs./pair and they can hold axels up to 2 1/2" diameter. Hardware included.

**Decking:** Decking for Pallet Rack is available in a number of formats that include wire, steel and wood.

---

PENCO RESERVES THE RIGHT TO VARY SPECIFICATIONS CONSISTENT WITH A POLICY OF CONTINUOUS PRODUCT IMPROVEMENT.

# Pallet Rack

## Pallet Rack Plus Specifications

**PALLET RACK PLUS:** The basic components of Penco Pallet Rack Plus are Upright Frames and Beams. Each is manufactured to exacting tolerances to provide many years of dependable service at their rated loads. Other components and accessories are available

**Step Down Design:** All beams have a step for the purpose of accepting accessories. Two step sizes are available: 7/8" and 1-5/8" high.

**Beam Locking Key for Safety:** A unique recessed safety key installed into each beam connector that is made from heavy gauge steel engages a slot in the side of the post. As soon as beams are installed, the locking key should be slid into place. They will resist an upward force from material handling equipment up to 1000 pounds. It is an integral part of the beam assembly, can be engaged easily without tools, and is clearly visible for checking.

**Heavy Duty Beam End Connector:** Pallet Rack Plus beams are intended for use in severe conditions or high seismic areas and have four pronged end frame connectors. The beams are centered along the 11 1/2" long connector so all prongs share equally in the live beam load. Any Penco pallet rack beam can be equipped with four-pronged connectors.

**Welded Upright Frame Bracing:** Upright frame columns are securely MIG welded together with channel type braces for maximum rigidity.

**Upright Column:** A continuous post roll formed into an "M" design for added strength. Slanted slots on the column allow for beam placement on 3" vertical centers. The greater the unit load the tighter the beam-upright connection becomes. All Plus pallet rack beams are attached 3" down from the top of the heavy duty connector and cannot be installed flush with the top of the uprights. Plus beams can be placed within 9" above the floor.

**Foot Plate:** All pallet rack Plus upright frames have footplates that are 35 square inches and 3/8" thick. Four 9/16" holes are present at the corners for anchoring.

**PALLET RACK FRAMES:** Penco Pallet Rack Plus Upright Frames are available in five different load carrying ranges. A letter code stamped into the face of the post indicates the frame type. Depths of 30", 36", 42", 48", 54" and 60" are standard, but other depths are available. Standard heights range from 48" to 240" in 6" increments, but greater heights can be achieved when upright frames are spliced together. Double posted and Cantilever leg custom upright configurations are available upon request. Beam heights adjust on 3" vertical centers, and are independent on each side of the frame. Various load rated frames can be combined in a row of rack for maximum economy. Beams cannot be placed at locations where a splice is positioned. Penco Pallet Rack Upright Frames are furnished completely fabricated, welded into rigid units. Standard finish for upright frames is 028 Gray baked powdercoat enamel. Other standard Penco colors are available upon request. We recommend that all upright frames be securely anchored to the floor. Seismic conditions and local codes may require anchors other than the Penco 1/2"-13 x 3 3/4" wedge anchor be used. We suggest you check with local code officials about anchoring as many jurisdictions have approved different anchors.

**PALLET RACK BEAMS:** Penco has engineered its roll-formed one piece beam to achieve the highest possible strength-to-weight ratios in the most frequently desired load ratings through the use of efficient design and high strength steel. Beams are offered in eight basic styles with different vertical profiles and steel gauges. Beam step heights of 7/8" and 1-5/8" are available for a wide variety of accessory use. Both the overlapping seam and the beam end connector are securely MIG welded for strength. The face of the beam has an M-design recessed configuration for added strength, protecting the locking key, and to accept pressure sensitive labeling. Each beam is stamped with an identifying letter referring to the load bearing capacity. Beams are finished in 710 Sagebrush Yellow baked enamel for high visibility. Safety Yellow and any other standard Penco colors are available upon request.

### PALLET RACK ACCESSORIES

**Plywood Supports:** For supporting plywood or other wood decking. Styles are available for 1/2" deck on 7/8" step beams and 3/4" deck on 1-5/8" step beams.

**General Duty Cross Bars:** For supporting loads smaller than unit depth.

**Heavy Duty Flanged Cross Bars:** Supports heavier loads smaller than upright end frame depth. Only available for use with 1-5/8" step beams.

**Fork Clearance Bar:** Provides proper fork clearance for loads not on pallets. Fork clearance bars are 2" wide by 2-3/4" high.

**Heavy Duty Skid Channel Assembly:** Provides a channeled base for skid runners, 4" wide by 2" high.

**Frame Splice:** For adding to height of existing frame. Can be supplied welded in top of new frame if specified on order. (Top frame must be ordered without foot plate.) With hardware. Can be used with standard or Plus uprights. Length of splice allows for two bolt locations on each side of the splice joint. Hardware for attachment is included. Top frames must be ordered without footplates.

**Frame Protector:** Anchors to floor at front of post. Provides protection against damage from material handling vehicles.

**Frame Deflector:** Fastens to front upright post on 3" increments.

**Rigid Wall Bracket:** Structurally connects racks to wall for additional stability. Frame hardware included.

**Rigid Row Spacer:** Structurally connects and spaces two rows of rack back-to-back to satisfy NFPA requirements. Bolted type. Hardware included.

**Reel Holder:** Accessorizes pallet rack for elevated reel storage. Capacity is 1,000 lbs/pair and they can hold axles up to 2 1/2" diameter. Hardware is included.

**Decking:** Decking for pallet rack is available in a number of formats that include wire, steel and wood.



## 24 Brilliant Colors



NOTE: Colors shown are as close to actual finishes as the printing process allows. Do not make your final color selection based on the color shade shown on this page. Penco Color Charts are available for a more accurate color match. Exposure to high humidity, chlorine salts, abrasive cleaners, germicidal cleaners and acids can damage the finish and will void the guarantee. For outdoor applications or other harsh environmental conditions, contact your Penco representative.

### Standard Colors

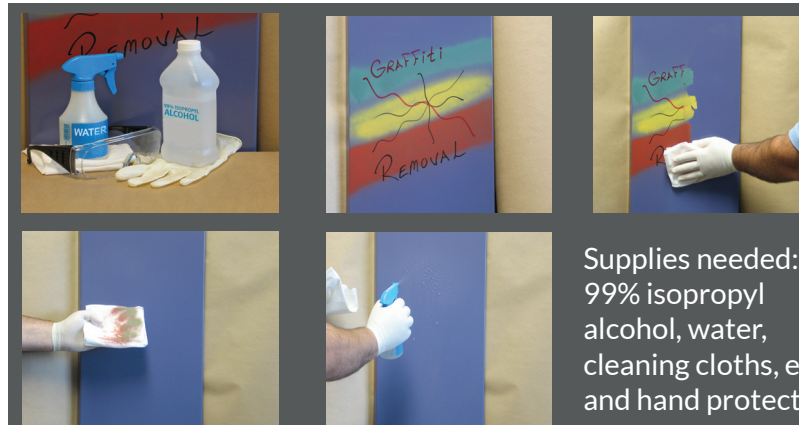
To assure rust resistance and paint adhesion, all Penco steel products receive a state of the art pre-paint conditioning that includes a thorough cleansing by a hot spray washing process, then a specially formulated coating is applied creating a surface that resists corrosion and improves paint adhesion. All lockers are available in the 24 colors shown above.

### Standard Powder Coat Finish

Penco's standard 1 mil thick paint finish is perfect for most applications. The paint surface is tough and durable and offers a beautiful drip-free surface, excellent edge coverage and environmentally friendly application.

### Antimicrobial Paint

Antimicrobial Paint finishes offer an added level of protection against virus and disease-causing micro-organisms while increasing resistance to stain and odor-causing bacteria, yielding an easier-to-clean product with extended durability and aesthetic appeal.



### X-Off™ Anti-Graffiti Paint

Penco's optional X-Off Anti-Graffiti Paint for lockers provides a surface coating that allows easy removal of graffiti with alcohol and water. This specially formulated paint has a tight molecular structure that completely seals the locker surface, preventing graffiti and corrosive agents from penetrating the finish.

Supplies needed:  
99% isopropyl alcohol, water,  
cleaning cloths, eye  
and hand protection.

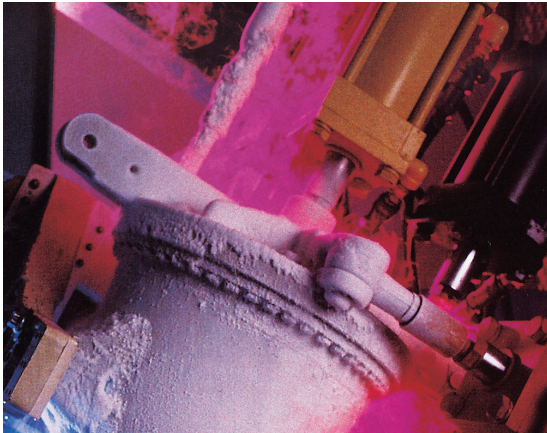


## GREENGUARD

All products manufactured by Penco Products are GREENGUARD Gold Certified through UL Environment's GREENGUARD Certification Program. This certification signifies that Penco's products are now in compliance with the stringent chemical emissions guidelines set by UL Environment. Accredited courses are available to design professionals and fulfill credit requirements for AIA, GBCI, IDCEC. Contact a Penco Sales Manager for more information.

## ENVIRONMENTAL INFORMATION

- Based upon the most recent information from our source mills, the recycled content of our steel lockers can range from 25% to over 50%. Because the percentage of recycled content may vary from project to project based on a number of variables, please contact our offices for detailed information on your specific requirement.
- Powder coating drastically reduces waste through high efficiency application & recovery methods.
- Penco's powder coat paint contains no solvents and as a result releases no Volatile Organic Compounds (VOC's) normally associated with wet paint processes.
- Our packaging contains at least 20% post-consumer recycled content.
- Approximately 34% of the U.S. population lives within a 500 mile radius of our manufacturing facility, requiring less fuel to ship our products to many destinations.



The parent company of Penco Products and its affiliates is Industrial Manufacturing Company (IMC). IMC and its international arm, IMCI, are a proud family of companies that produce a wide variety of innovative products for industry.

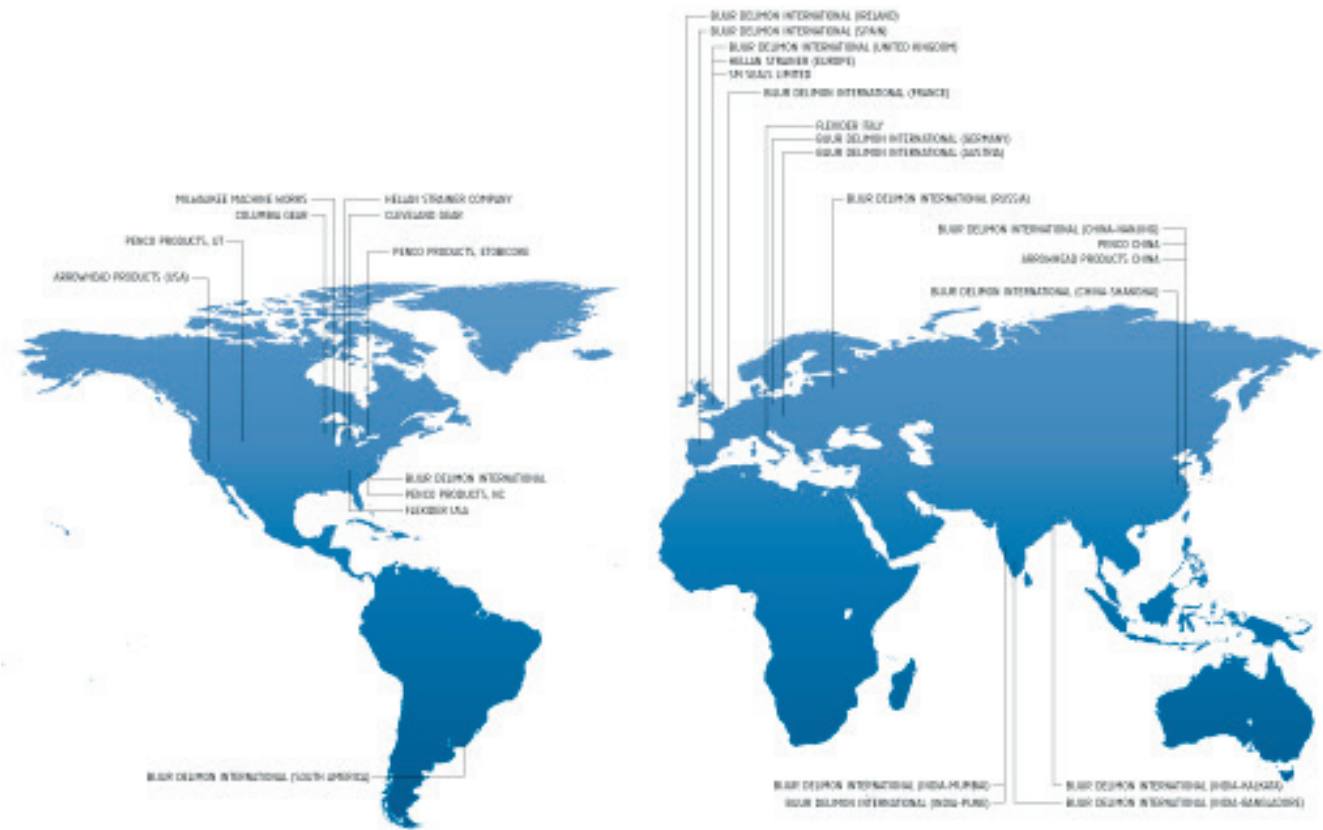
With more than 3,500 direct employees and over 34 worldwide manufacturing, sales and distribution facilities, we provide tier-one products and services to some of the most demanding industries imaginable.

This vast diversity of global resources and networking infrastructure allows us to utilize the strengths of each company, learn from each other and create a technological advantage within each industry. Common to every associate in our family

of companies, is the profound respect for and the integrity of established industrial principles and practical openness to applications of new technology. With individual company histories spanning decades, and in two cases, more than a century, the IMC and IMCI companies are time-tested leaders in their national and global markets.



[www.mfgco.com](http://www.mfgco.com)







**PENCO PRODUCTS, INC.**

1820 STONEHENGE DRIVE, GREENVILLE, NC 27858

📞 800.248.1555 🌐 [WWW.PENCOPRODUCTS.COM](http://WWW.PENCOPRODUCTS.COM)

© Copyright 2024 Penco Products, Inc.  
MATERIAL HANDLING CATALOG \_APRIL 2025