







G-2004



General Information

We are Penco . . .

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, PA.

Penco became a subsidiary of Vesper Corporation in 1979 and continued to grow. In 1994 the company added a manufacturing plant in Salt Lake City, Utah. In 2001, the East coast manufacturing facilities were moved from Oaks to a 400,000 square foot manufacturing facility in Hamilton, North Carolina, allowing significant room for expansion. The corporate headquarters remains in Pennsylvania.

The need for storage products is universal, and Penco's markets span the spectrum of industrial, service, governmental and institutional organizations. Shelving and pallet rack products are popular with warehousing and manufacturing applications, ranging from a few units to multi-level installations. Lockers are widely used in educational facilities, fitness centers, health care, commercial and industrial locations. Other products such as storage cabinets, work benches and shop furniture are used wherever material gets shipped, received or stored.

Penco's products are available through a nationwide network of distributors, serviced by a team of District Sales Managers. Penco's mission is to provide customers with value in the form of the finest storage products available. Penco customers know they can "put the load on Penco" with confidence.

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Clipper® Industrial Shelving Penco



Clipper® Shelving Features Hi-Performance® **Box Beam Shelves**

Penco Clipper Hi-Performance shelves are produced on a state-of-the-art production line that begins with a flat steel blank and ends with a completed shelf. The result is a shelf with an exceptional strength to weight ratio.

- A. Front and rear flanges of each shelf utilize Box Beam construction for extra strength - no additional reinforcing necessary.
- B. Sides are double flanged and accept additional reinforcements if required.
- C. Flanges are welded to the underside of shelf on 3' centers.
- D. Corners are lapped and
- E. Shelves are available in three main capacity ranges: Medium, Heavy Duty and Extra Heavy Duty.

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

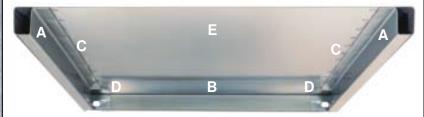
Clipper Shelving offers a wide variety of sizes and capacities. This gives you the flexibility to provide top quality storage for a simple back room area, or a sophisticated multi-level or high-rise application.

The following pages detail the units, components and accessories for designing a shelving system that meets your individual needs. You can't buy finer industrial grade shelving than Penco Clipper.





Automatic shelf welding on Hi-Performance shelf production line.



Cross Section of a Hi-Performance shelf.



Clipper Clip allows shelf adjustment on 1" vertical centers.



Four Clipper Compression Clips included with each shelf. Shelf is held tight against post.

FENCO Clipper® Shelving Versatility

Versatile Clipper Shelving can be accessorized for any job.



SHELVING

Basic Clipper Ordering Data Penco



Growth Dimension Considerations

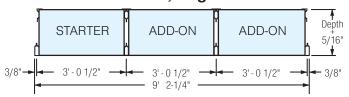
Several factors contribute to dimensional growth of a continuous row of shelving beyond specified dimensions. To determine the overall dimension of a continuous row of shelving employing box posts, refer to detail drawings and table below.

Choice of Post Arrangements

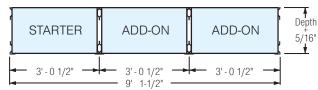
Penco standard shelving units employ box posts at front and offset angle posts at rear for each section. Other post assembly plans may be employed using offset angle posts at front and rear, when ordered as individual component parts. The illustrations below show typical growth for 36" wide units using two types of post arrangements.

Growth Showing Penco High Performance® Shelves

Box Posts Front, Angle Posts Rear



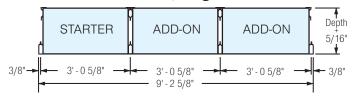
Angle Posts Front & Rear



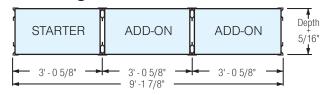
All dimensions are theoretical subject to manufacturing tolerances.

Growth Showing Clipper Conventional Flange Shelves

Box Posts Front, Angle Posts Rear



Angle Posts Front & Rear





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.

To order standard shelving units 87" high:

- 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.



Clipper Open & Closed Shelving in a retail storage lock-up area.



Open Clipper Units

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 3 for ordering instructions.

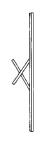
The standard stock color for Clipper shelving is 028 Gray. Refer to the inside back cover for complete color information. Many other configurations can be designed from the component parts and accessories on the following pages.





Basic Unit

- box post angle posts
- set side sway braces
- set back sway braces shelves hardware



End Kit

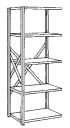
box post sway





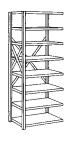
OPEN TYPE SHELVING

Box Post at Front Offset Angle Posts at Rear











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

^{**} For Evenly Distributed Load

Closed Clipper Units



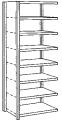
Closed type shelving units are covered on three sides with steel panels to provide stability, protection and to promote cleanliness of stored items. Optional locking doors may be added for greater security.

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 3 for ordering instructions.

Standard stock color is 028 Gray; refer to the inside back cover for complete color information. Many other configurations can be designed from the component parts and accessories on the following pages.





Basic Unit

- 1 box post2 angle posts1 side panel
- 1 back panel shelves hardware



End Kit

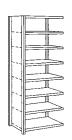
box postside panel hardware













CLOSED TYPE SHELVING

Box Post at Front Offset Angle Posts at Rear

Order Closed Bases Separately

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

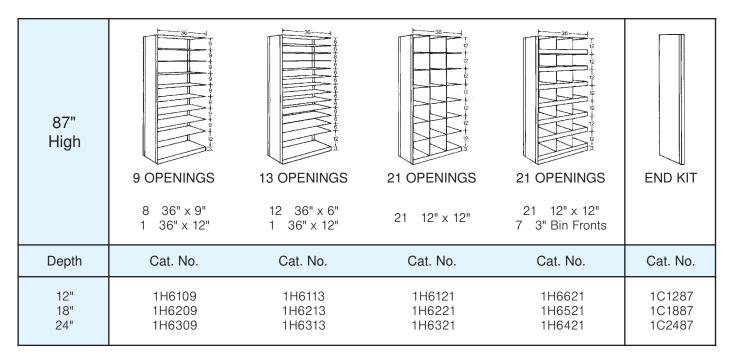
PENCO

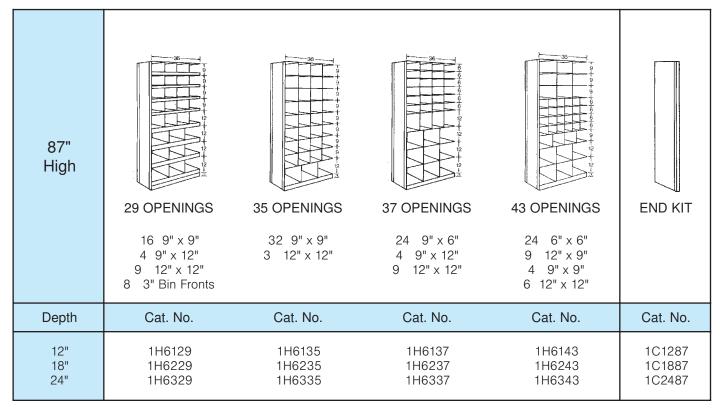
36" Wide Clipper Bin Units

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. Most units are available for quick shipment in 028 Gray. See inside back cover for other colors.

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

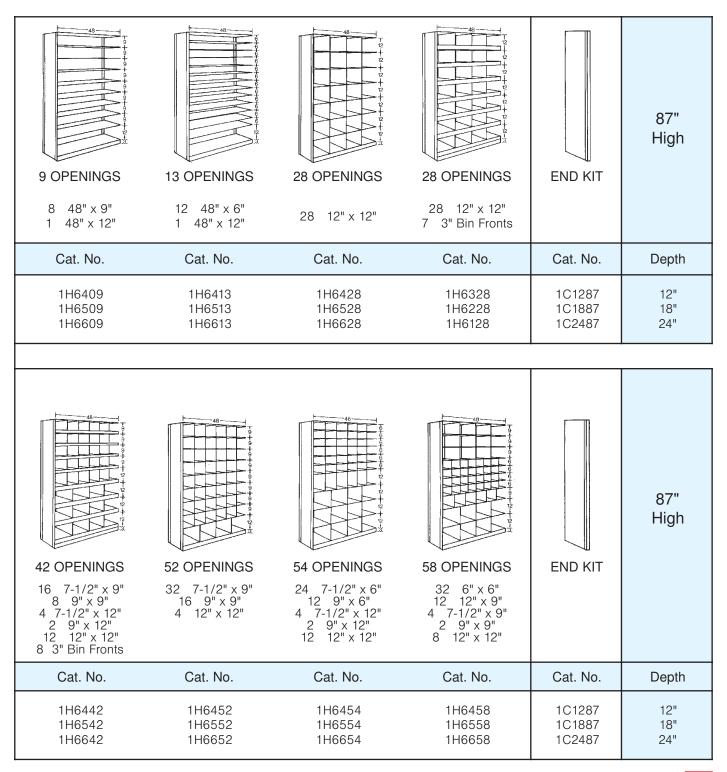




48" Wide Clipper Bin Units Penco



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





Ledge & Counter Units

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 the 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 stockroom 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.

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.



Open Unit with End Kit

Closed Unit

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

Size	Unit	End Kit
$W \times D \times H$	Cat. No.	Cat. No.
36" x 24" x 39"	1H122C	19125E
42" x 24" x 39"	1H123C	19125E
48" x 24" x 39"	1H124C	19125E

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 Type Ledge Unit

Size	Unit	End Kit
$W \times D \times H$	Cat. No.	Cat. No.
36" x 12/24" x 48/39"	1H432L	19433E

Closed Type Ledge Unit

36" x 12/24" x 48/39" 1H434L 19435E

Counter Tops Only

Size	
WxD	Cat. No.
36" x 24"	13670H
42" x 24"	13680H
48" x 24"	13690H

Counter Fronts Only

Cat. No.
13870H
13880H
13890H

Special Purpose Units



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.

Shown in Light Putty (723) enamel. Available in other standard Clipper Shelving Colors.

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 row.

Shown in Light Putty (723) enamel. Available in other standard Clipper Shelving colors.

NOTE: Utilizes 18 ga. Standard Flange Shelves only.

	End Kit			
Size W x D x H	No. of Shelves	No. of Dividers	Catalog Number	Catalog Number
36" 24" 87"	4	15	1H6700	1C2487

	End Kit			
Size W x D x H	No. of Shelves	No. of Dividers	Catalog Number	Catalog Number
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-rays. 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.

Shown in Light Putty (723) enamel. Available in other standard Clipper Shelving colors.

Refer to opening sizes in chart below.

	End Kit					
Size W x D x H	No. of Shelves	No. of Dividers	Catalog Number	Catalog Number		
36" 18" 87"	6	25	1H6705	1C1887		
Divider Quantities	15 - 18"D x 16"H - Cat. No. 15860H - Clear Opening 14-13/16" H 10 - 18"D x 18"H - Cat. No. 15870H - Clear Opening 16-13/16" H					

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.

Shown in Light Putty (723) enamel. Available in other standard Clipper Shelving colors.

	End Kit			
Size W x D x H	No. of Shelves	No. of Dividers	Catalog Number	Catalog Number
48" 36" 87"	18	56	1H6659	1C3687

Clipper Shelving Components

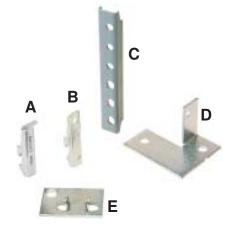


Box Post

Offset Angle Post



Closed Upright Assembly



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.

	14 Ga.	16 Ga.	
Height	Cat. No.	Cat. No.	
39"	1B4039	_	
48"	1B4048	_	
75"	1B4075	_	
87"	1B4087	1B6087	
99"	1B4099	_	
123"	1B4123	_	
147"	1B4147C	_	

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.

	14 Ga.	16 Ga.		14 Ga.	16 Ga.
eight	Cat. No.	Cat. No.	Height	Cat. No.	Cat. No.
39"	1B4039	_	39"	1A4039	_
18"	1B4048	_	48"	1A4048	_
'5"	1B4075	_	75"	1A4075	_
37"	1B4087	1B6087	87"	1A4087	1A6087
9"	1B4099	_	99"	1A4099	_
23"	1B4123	_	123"	1A4123	_
47"	1B4147C	_	147"	1A4147C	_

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

Closed Upright Assemblies

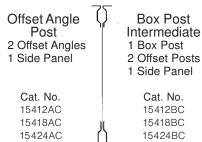
Steel Panels used to close the sides of 87" high shelving units. Panels are securely welded to posts for rigidity, helping to reduce installation time and costs.

		Box Post 1 Box Post 1 Angle Post 1 Side Panel	7	Offse F 2 Offs 1 Side
Deep 12" 18" 24"	High 87" 87" 87"	Cat. No. 15412CC 15418CC 15424CC	}	Ca 154 154

A & B. Clipper Clips - One piece 14 gauge rugged compression clip inserts into either box or offset angle posts to hold shelf securely while allowing easy removal if changes are needed.

A — Cat. No. 10002Z - For Hi-Performance Shelves B — Cat. No. 100001Z - For Standard Flange Shelves

C. Post Splice – Used to join Box or Angle posts for high rise or mezzanine applications. One per post. Catalog No. 10030H



D. Floor Anchor Clip - Heavy gauge device punched for fastening posts to floor. Includes hardware to fasten to post. Catalog No. 10006Z

E. Foot Plate - Used to distribute unit load and protect the floor. For box and angle post. Catalog No. 10007Z

Shim, 11 Gauge - (not shown) For optional placement beneath Floor Anchor Clip. Catalog No. 10011C

Clipper Shelving Components Fenco

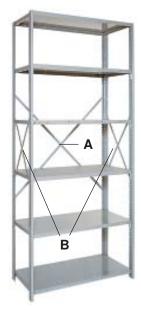
Open Construction

Sway Braces

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 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 eliminate front to back sway. They fasten to the flanges of the front and rear posts.



Back Sway Braces (A)

Unit Width (inches)	Overall Length (inches)	Cat. No.
24	45	12045A
30	50	12050A
36	50-3/4	12036H
42	57-1/8	12042H
48	65-1/2	12048H

Side Sway Braces (B)

Unit Depth (inches)	Overall Length (inches)	Cat. No.
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

Corner Angle Braces

For applications requiring clear entry to shelves front and rear, Corner Angle Braces may be used. Contact your Penco representative for pass-thru applications. Not recommended for two level shelving. Hardware included.

E. For box posts used in common with two standard flange shelves. Used at front and rear of unit.

Catalog No. 10044H

F. For angle post only. Use at front and rear of unit.

Catalog No. 10043H



Back and Side Panels

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

Back panels fasten 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 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.

Back Panels (C)

	Shelf Width (inches)					
Height (inches)	24 Cat. No.	30 Cat. No.	36 Cat. No.	42 Cat. No.	48 Cat. No.	
39			12500H	12600H	12700H	
	-	-				
51	-	-	12510H	12610H	12710H	
75	-	-	12530H	12630H	12730H	
87	12340H	12440H	12540H	12640H	12740H	
99	-	-	12550H	12650H	12750H	

Side Panels (D)

		Shelf Depth (inches)						
Height (inches)	9 Cat. No.	12 Cat. No.	15 Cat. No.	18 Cat. No.	24 Cat. No.	30 Cat. No.	36 Cat. No.	
39	-	11400H	-	11600H	11700H	11800H	11900H	
48	-	11409H	-	11609H	-	-	-	
51	-	11410H	-	11610H	11710H	-	-	
75	-	11430H	-	11630H	11730H	-	11930H	
87	11340H	11440H	11540H	11640H	11740H	11840H	11940H	
99	-	11450H	-	11650H	11750H	11850H	11950H	



Hi-Performance® Shelves

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.

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

For additional strength, flanges of the box beams 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 the face and surface to accept shelving accessories such as dividers, label holders and bin fronts.

Clipper Hi-Performance Shelf Capacities









	Medium Duty Class 0 Medium Duty High Strength Steel		Heavy Duty Class 1 Heavy Duty High Strength Steel		Extra Heavy Duty Class 2 Extra Heavy Duty High Strength Steel		Extra Heavy Duty With Reinforcing - See Note (1)
WxD	Cat. No.	Capacity	Cat. No.	Capacity	Cat. No.	Capacity	Capacity
36" x 12"	1H223612C	500	1H203612C	800	1H183612C	1100	-
36" x 15"	1H223615C	500	1H203615C	800	1H183615C	1100	-
36" x 18"	1H223618C	500	1H203618C	850	1H183618C	1200	2000
36" x 24"	1H223624C	500	1H203624C	800	1H183624C	1250	2000
36" x 30"	-	-	1H203630C	500	1H183630C	900	2000
36" x 36"	-	-	1H203636C	500	1H183636C	900	2000
42" x 12"	-	-	1H204212C	600	1H184212C	1100	-
42" x 15"	-	-	1H204215C	600	1H184215C	1100	-
42" x 18"	-	-	1H204218C	600	1H184218C	1050	1600
42" x 24"	-	-	1H204224C	600	1H184224C	900	1600
42" x 30"	-	-	1H204230C	625	1H184230C	1000	1600
42" x 32"	-	-	1H204232C	525	1H184232C	950	1600
42" x 36"	-	-	1H204236C	475	1H184236C	900	1600
48" x 12"	1H224812C	350	1H204812C	500	1H184812C	750	-
48" x 15"	-	-	1H204815C	500	1H184815C	850	-
48" x 18"	1H224818C	375	1H204818C	500	1H184818C	900	1200
48" x 24"	1H224824C	400	1H204824C	500	1H184824C	900	1200
48" x 30"	-	-	1H204830C	500	1H184830C	750	1200
48" x 36"	-	-	1H204836C	500	1H184836C	750	1200

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.

Note: (1): Class 3 capacities are based upon the use of Extra Heavy Duty Shelves with (A) Side Shelf Supports and

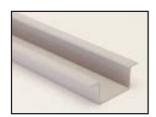
(B) Center Support for additional capacity. Must use nuts and bolts for shelves, not clips.











A. Class 3 Side Shelf Support (pairs): Used to support Center Support in Class 3 applications.

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.

Vidth	Cat. No.
36"	H13736C
42"	H13742C
48"	H13748C

Conventional Flange Shelves Penco

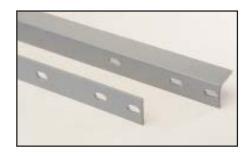
Clipper Conventional Flange Shelves are fabricated from 18 gauge cold rolled steel. All sides of the shelf are double flanged for added strength. The corners are lapped and welded for positive reinforcement. Shelves secure to posts with Penco's unique compression Clipper clip, or can be bolted. Shelves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

Clipper Conventional Flange Shelf Capacities - 18 Gauge



	700					
	С	lass 0		Class 1-B	Class 2-B	Class 2-A
	No a	ormal Loads additional orcement.		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.	For Medium Loads. Same as Class 1-B with the addition of a reinforcing bar in the rear flange.	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.
Shelf Size W x D	Class 0 Cat. No.	Deflection At Center Front Edge	Capacity		Capacity	Capacity
24" x 12" 24" x 18" 24" x 24"	12810C 12830C 12840C	.200" .200" .200"	990 1110 1140		1270 1430 1090	1580 1430 1090
30" x 12" 30" x 18" 30" x 24"	12910C 12930C 12940C	.250" .250" .250"	760 820 920		980 1060 1030	1230 1320 1030
36" x 9" 36" x 12" 36" x 15" 36" x 18" 36" x 24" 36" x 30" 36" x 36"	13000C 13010C 13020C 13030C 13040C 13050C 13060C	.300" .300" .300" .300" .300" .300"	620 620 620 660 700 790 740	Class 1, shelves do not have appreciably more load carrying capabilities over Class 0, but should be used where impact or concentrated loads occur along the front edge.	790 810 820 850 920 860 740	980 1010 1020 1050 1090 860 740
42" x 12" 42" x 15" 42" x 18" 42" x 24" 42" x 30" 42" x 36"	13110C 13120C 13130C 13140C 13150C 13160C	.350" .350" .350" .350" .350"	520 520 550 580 620 680		690 690 710 740 800 740	850 860 880 930 800 740
48" x 12" 48" x 18" 48" x 24" 48" x 30" 48" x 36"	13210C 13230C 13240C 13250C 13260C	.400" .400" .400" .400"	450 470 480 510 550		590 600 640 670 720	740 770 790 830 720

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.



A - Reinforcing Bar: Rolled steel bars insert in the shelf channel for reinforcement. Hardware is included.

Wide	Deep	High	Cat. No.
30"	1/8"	1-3/32"	16660H
36"	1/8"	1-3/32"	16670H
42"	1/8"	1-3/32"	16680H
48"	1/8"	1-3/32"	16690H

B - Reinforcing Angle: 1/8" thick rolled steel angles added to the shelf flanges for developing class 2A shelves. Hardware is included.

Wide	Deep	High	Cat. No
36"	1"	1"	16520H
42"	1"	1"	16530H
48"	1"	1"	16540H



Clipper Shelving Accessories



A - Bin Front: A formed steel panel partially enclosing the front opening of a shelf to keep bulk items within a bin.

Wide	High	Cat. No.
36"	1"	14210H
36"	2"	14220H
36"	3"	14230C
42"	3"	14330C
18"	3"	1//300

1" & 2" Bin Fronts attach to the front of the shelf with bolts & nuts. Hardware included.

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

Deep	High	Cat. No.
12"	4"	1H4124C
12"	6"	1H4126C
18"	4"	1H4184C
18"	6"	1H4186C
24"	4"	1H4244C
24"	6"	1H4246C

C - Partial Dividers: Partially subdivides shelf to separate stored items. Hardware included.

Deep	High	Cat. No.
12"	2"	16395H
12"	4"	16410H
18"	2"	16397H
18"	4"	16430H
24"	4"	16440H

D - Full Height Dividers: Used to divide a shelf opening into smaller units. Divider has a beaded front edge for strength and safety. Hardware included. Note: for Class 3 shelving applications, contact your representative regarding special notching of dividers.

notoning	or arriagis.		
Deep	High	Cat. No.	
12"	6"	15600H	
12"	9"	15620H	
12"	12"	15640H	
12"	14"	15650H	
12"	18"	15670H	
15"	6"	15700H	
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	
36"	18"	16170H	

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

Width	Cat. No.
24"	13900H
30"	13910H
36"	13920H
42"	13930H
48"	13940H

Front Base Strip



Closes the space between the floor and bottom shelf. Hardware included.

Wide	High	Cat. No.
24"	3"	14500H
30"	3"	14510H
36"	3"	14520H
42"	3"	14530H
48"	3"	14540H

Swinging Doors



3 Point latching with locking handle and 2 keys.

NOTE: Not for use with Modular Drawers.

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.

	Door Frame	Unit	Pair
Wid	th Height	Height	Cat. No.
(F	or Below Ledge	or Counter	Height)
36	" 36"	39"	19600H
	(For Above	Ledge Uni	t)
36	" 48"	48"	19610H
	(For Standard	Shelving U	nits)
36	73"	75"	19630H
36	" 85"	87"	19640H
48	" 36"	39"	19646H
48	" 85"	87"	19650H

Sliding Doors



Flanged on all 4 sides and reinforced. Doors slide on quiet, smooth-running nylon rollers and guides. Designed for use with two 36" wide units side by side. Complete with grooved key cylinder lock and 2 keys. Hardware included. Not for use with Modular Drawers.

	Door Frame	Unit	Pair
Width	Height	Height	Cat. No.
72"	36"	39"	1H907236
72"	84"	87"	1H907284

Clipper Shelving Accessories Fenco

Finished End Panel

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.

Deep	High	Cat. No.
12"	87"	18241H
18"	87"	18440H
24"	87"	18540H

Must be used with Box Post at front, Angle Posts at rear.

This strong compact open topped box measures 4-5/8" high and is ideal for storing small parts where shelves are spaced on 6" centers. It features a full width drawer pull, built-in drawer stop and recessed label holder. Box guides are provided for each row of boxes. Finished in 028 Gray only. Order 2 Shelf Box Guides for each shelf of boxes. Cat No. 10038H

Shelf Boxes

Cal. No. 1003011.		
Box Size	Boxes Per	r
w x d	Cat. No.	36" Shelf
5-5/8" x 11"	38030	6
8-7/16" x 11	38035	4
11-1/4" x 11"	38040	3
5-5/8" x 17"	38180	6
8-7/16" x 17"	38185	4
11-1/4" x 17"	38190	3
5-5/8" x 23"	38255	6
8-7/16" x 23"	38260	4
11-1/4" x 23"	38265	3

Shelf Box Dividers

Dividers have built-in label holders and drop into slots in the box sides. Adjustment on 1" centers allow you to compartmentalize each box. Galvanized finish.

Size	
wxh	Cat. No.
5-5/8" x 4-1/2"	38306
8-7/8" x 4-1/2"	38307
11-1/4" x 4-1/2"	38308



Closed Clipper Shelving with sliding dividers used for storage of medical records.







Automotive parts warehouse with two level shelving and full height dividers

Multi-Level Support Brackets

For attachment of cross aisle decking supports. Bolts to shelving posts.

A - For Box Post Cat. No. 10063H

B - For Offset Angle Post Cat. No. 10062H



Coat Rod Bracket

A metal channel "V" groved to accept a 1-1/16" O. D. pipe for hanging clothes or other material. Attaches to front and rear posts. Two required per coat rod.

Wide	High	Cat. No.
18"	1-3/4"	14705H
24"	1-3/4"	14706H

Coat Rod - 3/4" Galv. Pipe 1-1/16" O. D. 9405C 9406C





Clipper® 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 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 "O": 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: Medium Duty, Heavy Duty and Extra Heavy Duty are manufactured from cold rolled steel in three material thicknesses that provide up to three 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. Medium Duty and Heavy Duty shelf tabs for lapping and welding have formed ribs to maintain the same snug fit in the shelf clip as the extra heavy duty shelf. 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 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 ENDS: 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 botted

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.

SHELF BOXES: To be 20 gauge steel with a rigid curled handle at the front of the box, punched with an integral card holder on front and rear. Box shall be 4-5/8" high to fit between shelves on 6" centers and shall be slotted to accept dividers on 1" centers.

SHELF BOX DIVIDERS: To be 20 gauge steel. Punched with an integral card holder.

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.

SLIDING DOORS: Set of doors is 72" wide and cover two 36" wide units. Each door shall be 22 gauge with two or more 18 gauge reinforcing pans, recessed handle and nylon glides and rollers. Each set has16 gauge channels welded at the top and bottom, and 20 gauge channels on the ends. Doors shall be contained in top, bottom and vertical channels. Right hand door has a provision for a cylinder lock.

FOOT PLATES: Shall be 13 gauge zinc plated steel and be used to protect floors.

FINISH: All painted parts shall be selected from a minimum of five standard colors. Materials shall be cleaned and phosphatized in a multi-stage process, dried in a 400° oven and electrostatically spray painted with a high grade enamel and baked on at 360°.

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

Heavy Duty Modular Drawers Penco

PERCO PRODUCTS INC.

PENDO PRODUCTS INC.

PENCO PRODUCTS INC.

ELWPER HEAVY DAITY MOCKEAR DRAWERS

• For 36" Wide Clipper Shelving Units

Available for 18" & 24" depths

The Cubic Advantage

- · 400 lb. capacity per drawer
- Improve inventory control
- · Increased versatility
- Reduce stockroom labor
- · Reduce inventory damage
- · Improved security
- · Economy through accessibility
- · Efficient space utilization

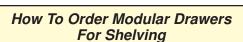
With Clipper® Heavy Duty Modular Drawers in shelving you can effectively utilize your storage space above as well as below your drawers. By consolidating your bulk storage needs in the same floor space taken up by a conventional drawer cabinet unit, you can increase your storage capabilities up to 40% or more! Penco Modular Drawers can be installed at any level, and can be moved if your needs change. If you need drawers, your present Clipper shelving installation can be retrofitted right now without the capital expense of new shelving or cabinets.

Best of all, Penco Modular Drawers are truly modular. All heights and adjustments are on 1" centers, drawers can be interchanged and switched (2-3" drawers replace a 6" drawer etc.). The wide variety of sizes and drawer subdivision possibilities make this system versatile enough to fill practically any need.

Can be used in units with either Hi-Performance or Standard Flange Shelves.

Heavy Duty Modular Drawers

Provide secure high density storage of small parts. Heavy duty 100% full suspension allows full view of contents. Available in a variety of sizes with a wide range of accessories. Can be added to existing shelving installations.

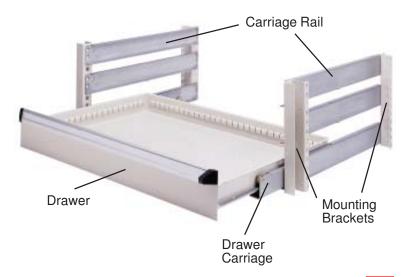


CLUPPER MEDIT OUT IN

- A. The easiest way to order Clipper Heavy Duty Modular Drawers is by selecting the Drawer Kit that matches your needs, and then add the appropriate Drawer Interior Subdivision.
- B. If you need to order from parts and accessories:
 1. Select the size of mounting brackets.
 2. Order drawer front sizes that add up to the bracket size.
 3. Order one shelf closure strip per mounting bracket kit.
 4. Order partitions & dividers, plus any accessories sized to fit your application.
- C. Color: Drawers, brackets and carriage are finished in Putty 3. Partitions are Gray.

NOTE: We strongly recommend that shelving be floor anchored, wall anchored, or cross aisle top tied. For Floor Anchoring Clip order Catalog Number 10006Z.

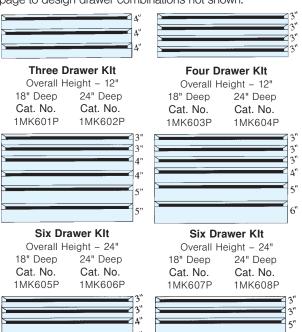
NOT FOR USE WITH SHELVING DOORS.



FENCO Heavy Duty Modular Drawers

Modular Drawer Kits

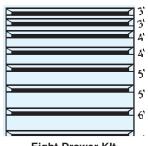
All Clipper Modular Drawer Kits come complete with mounting brackets, drawer, carriage, rails, hardware and shelf closure strips necessary to install easily into new or existing Clipper shelving. All are available for 18" and 24" deep shelving. Drawer combinations shown are representative of the most popular configurations. See the Components page to design drawer combinations not shown.



Seven Drawer KIt

Overall Height – 36" 18" Deep 24" Deep Cat. No. Cat. No. 1MK609P 1MK610P

NOTE: All overall height dimensions do not include the shelves placed at the top and bottom of the drawers.



Eight Drawer Klt

Overall Height – 36"
18" Deep 24" Deep
Cat. No. Cat. No.
1MK613P 1MK614P

Seven Drawer KIt

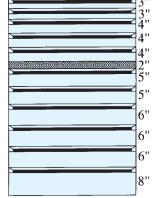
5"

6"

6"

8"

Overall Height – 56"
18" Deep 24" Deep
Cat. No. Cat. No.
1MK611P 1MK612P



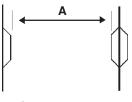
Eleven Drawer KIt

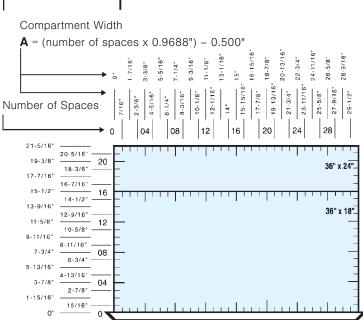
Overall Height – 56"
18" Deep 24" Deep
Cat. No. Cat. No.
1MK615P 1MK616P

Interior Subdivisions

Calculating Compartment Dimensions

The slots in all sides of each drawer are on nominal 1" centers (.97"). Partitions, which are inserted from front to rear, have the same slot pattern as the sides. The diagram below enables you to figure the exact compartment sizes of interior subdivisions.



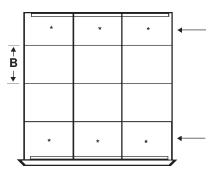


 \mathbf{B} = (number of spaces x 0.9688") *

Number of Spaces

Depth of Compartments

* Subtract 1/4" each for compartments at the front and rear.

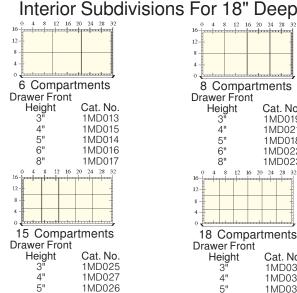


Heavy Duty Modular Drawers Penco

Organized storage of small parts is achieved by dividing the drawer body into smaller compartments. Illustrated are the most common configurations. To customize your own drawer compartments, order partitions and dividers

separately. Compartment dimensions are clear opening sizes. Catalog numbers are provided for convenient ordering of partitions and dividers only. Order drawers separately. Partitions and dividers are not factory installed.

Interior Subdivisions For 24" Deep Shelving 4 Compartments 6 Compartments 8 Compartments 9 Compartments 10 Compartments Drawer Front Drawer Front Drawer Front Drawer Front Drawer Front Height Height Height Cat. No. Height Cat. No. Cat. No. Height Cat. No. Cat. No. 1MD069 1MD103 1MD075 1MD111 1MD043 4" 1MD105 4" 1MD108 1MD071 1MD077 1MD045 5" 5" 5" 1MD070 5" 1MD104 1MD076 5" 1MD127 1MD044 6" 6" 1MD106 6' 6" 1MD109 6" 1MD072 1MD078 1MD046 8" 1MD073 8" 1MD107 8" 1MD079 8" 1MD110 8" 1MD047 12 16 20 24 28 32 20 24 28 32 20 24 28 32 16 20 24 28 32 20 24 28 32 12 12 24 Compartments 12 Compartments 15 Compartments 16 Compartments 20 Compartments Drawer Front Drawer Front Drawer Front **Drawer Front Drawer Front** Height Height Cat No. Height Cat. No. Height Cat. No. Height Cat. No. Cat. No. 1MD055 1MD092 1MD081 1MD049 1MD087 1MD094 4" 1MD083 4" 1MD051 41 1MD089 1MD057 5" 5" 5" 1MD082 1MD050 5' 1MD088 1MD056 1MD128 6" 6" 6" 1MD095 6' 1MD090 6" 1MD084 1MD052 1MD058 8' 1MD085 8" 1MD053 8' 1MD091 8" 1MD059 12 16 20 24 28 32 20 24 28 32 20 24 28 32 12 12 25 Compartments 32 Compartments 40 Compartments 48 Compartments 30 Compartments Drawer Front Drawer Front **Drawer Front** Drawer Front Drawer Front Heiaht Cat. No. Height Cat. No Height Cat. No. Height Cat. No. Height Cat. No. 1MD061 3 1MD066 1MD096 1MD099 1MD093 4" 1MD097 4" 1MD063 4١ 4" 1MD101 1MD067 5' 1MD062 5" 1MD129 51 1MD130 5" 1MD131 6' 6" 1MD064 6" 1MD068 1MD098 6" 1MD102

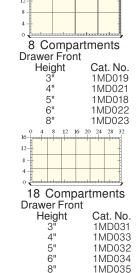


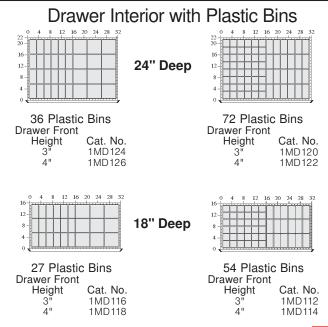
6"

1MD028

1MD029

1MD065







Components & Accessories

Modular Drawers



All drawers are furnished complete with a heavy duty roller bearing carriage, carriage rails, extruded aluminum pull with built-in label holder, label, clear acetate label cover and hardware. Capacity is 400 pounds, evenly distributed.

18" Deep Shelving

Interior Dimensions: 30" w. x 15" d.

24" Deep Shelving

Drawer Drawer Usable 18"

Interior Dimensions: 30" w. x 21" d.

Front Height*	,		Deep Cat. No.	Deep Cat. No.
3"	1-1/2"	2"	1MD301P	1MD307P
4"	2-1/2"	3"	1MD302P	1MD308P
5"	3-1/2"	4"	1MD303P	1MD309P
6"	4-1/2"	5"	1MD304P	1MD310P
8"	6-1/2"	7"	1MD305P	1MD311P

^{*} Actual height 1/16" less.

Mounting Bracket Kit



Includes four brackets and hardware for fastening to shelving posts.

24"

Height	Cat. No.
12" 18"	1MK112P 1MK118P
24"	1MK124P
36"	1MK136P

Shelf Closure Strip



A finish trim strip which fastens to the shelf and closes the gap above the top drawer.

Size	Cat. No.
2"	1M137H

Partitions



Runs from front to rear to separate drawer left to right. Accepts dividers in pre-punched slots.

	Drawer	
Shelving	Front	
Depth	Height	Cat. No.
18"	3"	1M336H
18"	4"	1M339H
18"	5"	1M338H
18"	6"	1M342H
18"	8"	1M345H
24"	3"	1M337H
24"	4"	1M340H
24"	5"	1M341H
24"	6"	1M343H
24"	8"	1M347H

Dividers

Drawer

Zinc plated dividers insert into slots for easy adjustment.



rawer	NO. Of	
Front Height	Slots Wide	Cat. No.
3"	4	1M0331
3"	5	1M0331
3"	6 7	1M0333
3"		1M0334
3" 3"	8	1M0335
3" 3"	10 11	1M0337 1M0338
4" 4"	4 5	1M0347 1M0348
4 4"	6	1M0346
4"	7	1M0350
4"	8	1M0351
4"	10	1M0353
4"	11	1M0354
5"	4	1M0339
5"	5	1M0340
5" 5"	6 7	1M0341 1M0342
5" 5" 5"	8	1M0342
5"	10	1M0344
5"	11	1M0345
6"	4	1M0356
6"	5	1M0357
6"	6 7	1M0358
6" 6"	/ 8	1M0359 1M0376
6"	10	1M0378
6"	11	1M0379
8"	4	1M0381
8"	5	1M0382
8"	6	1M0383
8"	7	1M0384
8" 8"	8 10	1M0385 1M0386
8"	11	1M0388
~		

Plastic Bins



Sturdy gray molded plastic bin for small parts has built-in label holder.

Drawer Front Height	D.	Cat. No.		
3"	2-1/2"	2-1/2"	1-1/2"	1M0001
3"	2-1/2"	5"	1-1/2"	1M0002
3"	5"	5"	1-1/2"	1M0003
4"	2-1/2"	2-1/2"	2-1/2"	1M0004
4"	2-1/2"	5"	2-1/2"	1M0005
4"	5"	5"	2-1/2"	1M0006

Label Holder

Attaches to divider. Accepts 2-1/4" wide x 3/4" label.



Cat. No. 1M0009

Drawer Locking Mechanism

Contains two keyed alike built-in cylinder locks and prevents drawers form being opened. Supplied with two keys.*

Mounting Bracket Height	Cat. No.
12" 18" 24"	1MK412 1MK418 1MK424
36"	1MK436



*NOTE: If more than one set of brackets is used in a single shelving unit, contact your Penco representative for applicable locking mechanism.

Clipper Applications





Archives records storage.



Multi-level shelving with open deck above second level.



Automobile parts distribution center.



Upper level of retail mail order central warehouse.



Industrial parts warehouse makes good use of shelving with bins.



Two level automotive parts storage.



High density record storage.



40' high shelving ready for loading.



Wide Span Shelving



Wide Span Shelving Units

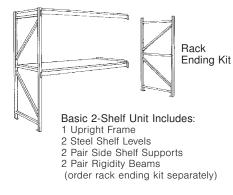




Wide Span Units are easy to order. Shown below are common sizes of units with 2 and 3 steel shelves, plus units for 3 levels of *plywood* shelves. Order as many Basic Units as you need for your row of shelving, then order one Rack Ending Kit to end each row or single unit (plywood must be purchased separately).

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 below illustrates this concept for your convenience.

Two Shelf Units with Steel Shelves



	30"Deep		36" Deep		48" Deep		
Wide Inches	High Inches	Basic Unit Cat. No.	Rack Ending Kit Cat. No.	Basic Unit Cat. No.	Rack Ending Kit Cat. No.	Basic Unit Cat. No.	Rack Ending Kit Cat. No.
60" 72" 84" 96"	72"	20351 20353 20355 20357	20002C	20359 20361 20363 20365	20003C	20375 20377 20379 20381	20005C
60" 72" 84" 96"	96"	20383 20385 20387 20389	20018C	20391 20393 20395 20397	20019C	20407 20409 20411 20413	20021C



				•			
60" 72" 84" 96"	120"	20415 20417 20419 20421	20034C	20423 20425 20427 20429	20035C	20439 20441 20443 20445	20037C
60" 72" 84" 96"	144"	20447 20449 20451 20453	20050C	20455 20457 20459 20461	20051C	20471 20473 20475 20477	20053C

Rack Ending Kit

Three Shelf Units with Steel Shelves

Three Shelf Units with Steel Shelves

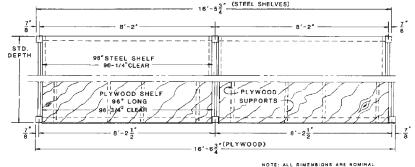
72-1/2" 96-1/2"	120"	-	ı	ı	-	20512 20514	20037C
72-1/2" 96-1/2"	144"	-	-	-	-	20535 20537	20053C

Basic 3-Level Unit for Plywood Includes:

- 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. (Plywood not inlcuded. Order rack ending kit separately)

Wide Span Growth Chart

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 chart shows typical growth for two 96" steel shelf units and 96-1/2" plywood beam units.



Wide Span 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. Other 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 10,000 pounds with a 1.92 safety factor where vertical beam spacing does not exceed 60".

Rigidity Beams (A)

Rigidity beams provide lateral stability for the shelving; 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 normally not necessary to place rigidity beams beneath each steel shelf. 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 (see Beam Braces on next page).

	Capacity (lbs.)**	Cat. No.
Width	(per pair)	(per pair)
48"	2500	20315
60"	2140	20316
72"	1780	20317
84"	1580	20318
96"	1340	20319

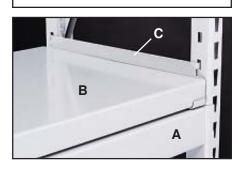
	UPRIGHT FRAMES by Depth								
Upright Height	18" Cat. No.	24" Cat. No.	30" Cat. No.	36" Cat. No.	42" Cat. No.	48" Cat. No.	50" * Cat. No.		
72" 84" 96" 120" 144" 168" 192"	20000C 20008C 20016C 20032C 20048C	20001C 20009C 20017C 20033C 20049C 20065C 24001C	20002C 20010C 20018C 20034C 20050C 20066C 24002C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

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. Can be disengaged with a mallet.

U. S. Patent No. 4,928,834



Side Shelf Supports (C)

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.



	Capacity (lbs.)	Cat. No.
Depth	(per pair)	(per pair)
24"	3600	22024
30"	2900	22030
36"	2400	22036
42"	2100	22042
48"	1800	22048

Wire Deck

Call your representative for sizes and availability.

Steel Shelves (B)

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 by Shelf Width Capacities Below (Cap.) in Pounds, Evenly Distributed									
Shelf	48" 60" 72" 84" 96"						'			
Depth	Cat. No.	Сар.	Cat. No.	Сар.	Cat. No.	Сар.	Cat. No.	Сар.	Cat. No.	Сар.
18" 24" 30" 36" 42" 48"	22418C 22424C 22430C 22436 22442 22448	1200 1500 2300 2400 2000 1800	22518C 22524C 22530C 22536 22542 22548	1200 1200 1800 2400 2000 1800	22618C 22624C 22630C 22636 22642 22648	1000 1000 1500 2000 2000 1800	22718C 22724C 22730C 22736 22742 22748	800 800 1200 1600 1600 1600	22818C 22824C 22830C 22836 22842 22848	600 600 900 1200 1200 1200

- * 50" deep frame is for use with H. D. Plywood Beam. Allows use of standard 48" plywood deck without cutting for depth dimension.
- ** 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" & 72" long.

 1 Beam Brace: 84" & 96" length, 2 Beam Braces.

Wide Span Components



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.

	Capacity (lbs.)*	Cat. No.
Width	(per pair)	(per pair)
48-1/2"	" 2500 <i>´</i>	¨20337 ´
60-1/2"	2120	20338
72-1/2"	1700	20339
84-1/2"	1500	20340
96-1/2"	1350	20335

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.

Capacity (lbs.) [^]	Cat. No.
(per pair)	(per pair)
2500	210480
2500	210720
2500	210960
	(per pair) 2500 2500

Rigid Wall Brackets

Used to fasten to wall for sturdy single row applications.



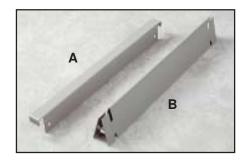
Includes hardware to fasten to frame.

Cat. No.
5AR404
5AR406
5AR408
5AR410

^{*} Capacity in pounds for evenly distributed load.

Standard Plywood Support Angles (A)

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.



Beam Brace/Heavy Duty Plywood Support (B)

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 are used as Plywood supports. Use a minimum of two supports per pair of beams. Use more if required by your load condition — see capacities below.

	(A)	(B)	(B)
	Štď.	Beam Brace/	Capacity
	Support	H.D. Support	Éach
Depth	Cat. No.	Cat. No.	Lbs.
24"	20341C	202040C	1200
30"	20330C	202050C	1100
36"	20342C	202060C	900
42"	20332C	202070C	700
48"	20336C	202080C	500
50"	_	2P0050C	500

Rigid Row Spacers

Used to space and join back-toback units. Adds rigidity to double



row applications. Includes hardware.

Depth	Cat. No.
6"	5AR506
8"	5AR508
10"	5AR510
12"	5AR512

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

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.

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 decking material must be trimmed for the heavy duty beams.



Standard Plywood Beams used with plywood decking.



RivetRite® Shelf Framing



RivetRite® Introduction



Why RivetRite® Shelving?

We call RivetRite the Universal Shelf Framing System because so many storage requirements can be met by only a few simple components.

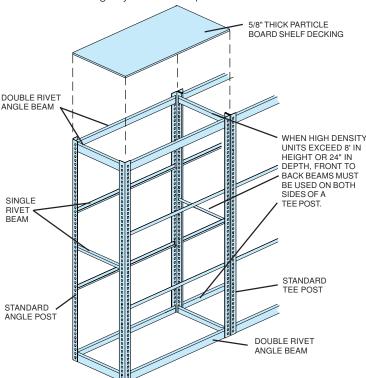
RivetRite is engineered to provide safe, economical storage of virtually any type of hand loaded material. Structural integrity is ensured by a rigid boltless connection between beams and posts.

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
- Finished in attractive 723 Light Putty color baked on for permanence
- A variety of beams to accommodate a wide range of loads — you buy the capacity you need

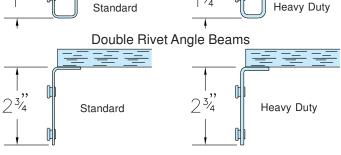
Single Rivet High Density Unit

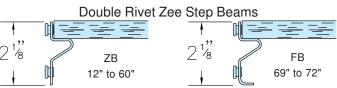
Single Rivet high density shelving uses single rivet beams on intermediate levels, and double rivet beams at the top and bottom for rigidity. For units up to 48" wide.



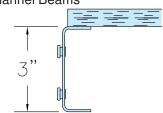
Beam Profiles

Single Rivet Beams



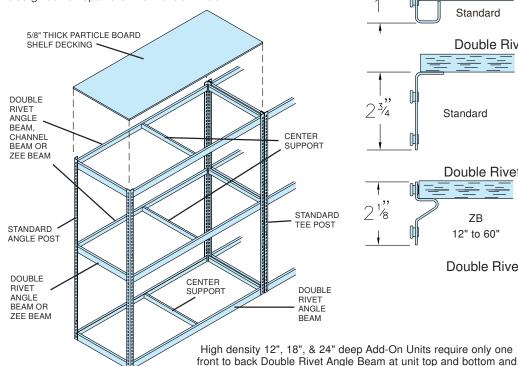


Double Rivet Channel Beams



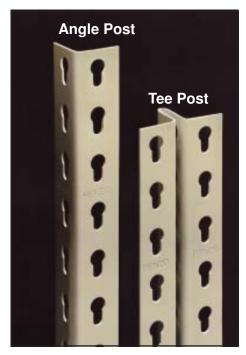
Double Rivet Bulky Storage Unit

Below is an illustration of a typical Double Rivet unit — designed for spans of 48" to 96" wide.



one Single Rivet Shelf Beam for front to back at unit center.

RivetRite® Components



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

Single Rivet Shelf Beam (Heavy Duty)

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

Double Rivet Angle Beam (Standard Duty)

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

Double Rivet Angle Beam (Heavy Duty)

Provides stability and increased load capacity in the longer lengths.

Double Rivet Channel Beam

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.

Center Support

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

Double Rivet Zee Step Beams

Reduced profile increases vertical clearance by 1-1/4" between shelf levels when used in place of Double Rivet Angle Beams. Protects decking edges.

When used as the bottom shelf on Single Rivet Units clear space between the bottom and first shelf is increased by 1-1/4".

Decking Support for Zee Step Beam

Used with Zee Step Beams for front to back decking support.

Double Rivet Bulky Storage Penco





Four shelf starter unit, 72" w x 30" d x 84" h (Order decking separately)

Three standard beam types are incorporated into the design of RivetRite Bulky Shelving units. The beam configuration supplied is determined by your specific load requirements. Do not use Channel Beams at the bottom level.







Standard Beam

Heavy Duty Beam

Channel Beam

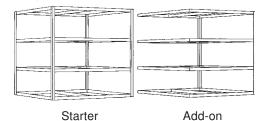
Units shown with Center Support Channels have one per level on 60" and 72" wide units and two for 96" wide units. Additional channels can be installed if required. Supports are easily attached with bolts and wing nuts.



Cut-away illustrates the Center Support Channel.

- 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

Example: One starter and two add-ons.

STARTER	ADD-ON	ADD-ON
---------	--------	--------

Particle Board is not included with the unit. Order separately from the chart below.

5/8" Particle **Board Decking**



Penco 1-M-1 interior grade particle board is available pre-cut to fit, or from your local building materials supplier. Other types and thicknesses of deck may be desired based on load or use. See note regarding particle board capacities under "RivetRite Components."

Size	Cat. No
48" x 18"	94625
48" x 24"	94626
48" x 30"	94627
48" x 36"	94628
48" x 48"	94629
60" x 18"	94635
60" x 24"	94636
60" x 30"	94637
60" x 36"	94638
60" x 48"	94639
72" x 18"	94655
72" x 24"	94656
72" x 30"	94657
72" x 36"	94658
72" x 48"	94659
96" x 18"	94665
96" x 24"	94666
96" x 30"	94667
96" x 36"	94668
96" x 48"	94669



Double Rivet Bulky Storage



Channel Beam

Units with Channel Beams are furnished with Heavy Duty Double Rivet Angle Beams (left to right) at the bottom level.

Double Rivet Bulky Storage Units - With 4 Shelves - 7' High

			Without Ce	Without Center Support			With Center Support		
Unit Width	Beam Type	Shelf Depth	Shelf Capacity*	Starter Cat. No.	Add-On Cat. No.	Shelf Capacity*	Starter Cat. No.	Add-On Cat. No.	
48" Wide Units		18" 24" 30" 36" 48"	750 750 750 750 750	46001H 46002H 46003H 46004H 46005H	46006H 46007H 46008H 46009H 46010H	1400 1400 1310 1220 1125	46W01H 46W02H 46W03H 46W04H 46W05H	46W06H 46W07H 46W08H 46W09H 46W10H	
60" Wide	a a	18" 24" 30" 36" 48"	600 600 600 600 600	46011H 46012H 46013H 46014H 46015H	46016H 46017H 46018H 46019H 46020H	1200 1200 1200 1200 1200	46W11H 46W12H 46W13H 46W14H 46W15H	46W16H 46W17H 46W18H 46W19H 46W20H	
Units		18" 24" 30" 36" 48"		- - - -	-	2240 (1) 2240 (1) 2240 (1) 2240 (1) 2240 (1)	46W01C 46W02C 46W03C 46W04C 46W05C	46W06C 46W07C 46W08C 46W09C 46W10C	
72" Wide Units	01	18" 24" 30" 36" 48"	500 500 500 500 500	46021H 46022H 46023H 46024H 46025H	46026H 46027H 46028H 46029H 46030H	1000 1000 1000 1000 1000	46W21H 46W22H 46W23H 46W24H 46W25H	46W26H 46W27H 46W28H 46W29H 46W30H	
		18" 24" 30" 36" 48"	-	- - - -	-	1850 1850 1850 1850 1850	46W11C 46W12C 46W13C 46W14C 46W15C	46W16C 46W17C 46W18C 46W19C 46W20C	
96" Wide		18" 24" 30" 36" 48"	- - - -	- - - -	-	620 620 620 620 620	46W31H 46W32H 46W33H 46W34H 46W35H	46W36H 46W37H 46W38H 46W39H 46W40H	
Units		18" 24" 30" 36" 48"	-	- - - -	-	1400 1400 1400 1400 1400	46W21C 46W22C 46W23C 46W24C 46W25C	46W26C 46W27C 46W28C 46W29C 46W30C	
	Double F	Rivet Bull	ky Storag	ge Units -	With 5 Sh	nelves - 1	10' High		
72" Wide	in in	30" 36" 48"	500 500 500	46041H 46042H 46043H	46044H 46045H 46046H	1000 1000 1000	46W41H 46W42H 46W43H	46W44H 46W45H 46W46H	
Units	in I	30" 36" 48"	- - -	- - -	- - -	1850 (2) 1850 (2) 1850 (2)	46W31C 46W32C 46W33C	46W34C 46W35C 46W36C	
96" Wide Units	14	30" 36" 48"	- - -	- - -	- - -	620 620 620	46W47H 46W48H 46W49H	46W50H 46W51H 46W52H	
)]	30" 36" 48"	- - -	- - -	- - -	1400 1400 1400	46W37C 46W38C 46W39C	46W40C 46W41C 46W42C	

^{*} Capacity shown are for the steel support beams, not the shelf deck material.

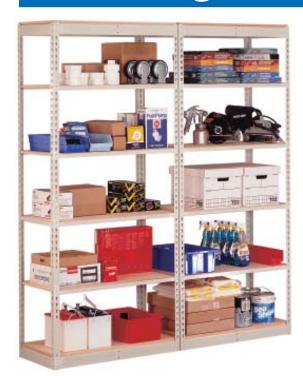
Capacities are in pounds for evenly distributed loads.

All unit catalog numbers include metal framing only. Shelf deck mateial must be ordered separately.

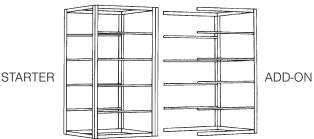
(1) — Max. Average Shelf Load 2000# per shelf. (2) — Max. Shelf Load 1490# per shelf.

Single Rivet Units





- 6 Shelf Starter and Add-on Unit with decking (Order decking separately)



· High Density Shelf Beams provide maximum space between shelf

- 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

Penco Single Rivet beam High Density shelving is designed to provide for maximum vertical clearance between shelves. Access to stored item 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.

Example: One starter and two add-ons.

STARTER ADD-ON ADD-ON

Particle Board is not included with unit. Order separately from the chart or from your local building materials supplier.

	Single Rivet Units						5/8	8" Partio	cle Board Decking
Unit Width	Shelf Depth	Shelf Capacity*	5 Shelf Units Cat. No.	6 Shelf Units Cat. No.	7 Shelf Units Cat. No.	8 Shelf Units Cat. No.	Shelf Depth	Cat. No.	
36" Starter Units	12" 18" 24" 36"	350 350 350 350	461315 461325 461335 461345	461316 461326 461336 461346	461317 461327 461337 461347	461318 461328 461338 461348	12" 18" 24" 36"	94603 94605 94606 94608	
36" Add-On Units	12" 18" 24" 36"	350 350 350 350	462355 462365 462375 462385	462356 462366 462376 462386	462357 462367 462377 462387	462358 462368 462378 462388	12" 18" 24" 36"	94603 94605 94606 94608	Penco 1-M-1 interior grade particle board is available
48" Starter Units	12" 18" 24" 36"	250 250 250 250	461415 461425 461435 461445	461416 461426 461436 461446	461417 461427 461437 461447	461418 461428 461438 461448	12" 18" 24" 36"	94623 94625 94626 94628	pre-cut to fit, or from your local building materials supplier. Other types and thicknesses of deck may be de-
48" Add-On Units	12" 18" 24" 36"	250 250 250 250	462455 462465 462475 462485	462456 462466 462476 462486	462457 462467 462477 462487	462458 462468 462478 462488	12" 18" 24" 36"	94623 94625 94626 94628	sired based on load or use. See note regarding particle board capacities under "RivetRite Components."

^{*} Capacity shown are for the steel support beams, not the shelf deck material. For higher support beam capacity see "RiveRite Components". Capacities are in pounds for evenly distributed loads.



Record Storage Shelving



80 Box Unit With Decking Cat. No. 46604A (Order decking separately) BOXES NOT INCLUDED 80 Box Unit With Steel Box Supports Cat. No. 46708A

Based on 27" vertical center spacing between shelf levels.

Record Storage Units - For use with decking

Width	Unit Size Depth	Height	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
69	15	168	7	70	46609A	46621A
69	30	168	7	140	46610A	46622A
69	15	192	8	80	46611A	46623A
69	30	192		160	46612A	46624A

Record Storage Units - With Box Supports

42	15	60	3	18	46701A	46709A
42	30	60	3	36	46702A	46710A
69	15	60	3	30	46703A	46711A
69	30	60	3	60	46704A	46712A
42	15	84	4	24	46705A	46713A
42	30	84	4	48	46706A	46714A
69	15	84	4	40	46707A	46715A
69	30	84	4	80	46708A	46716A

- Assembles without special tools
- Records can be retrieved from both sides
- · Units can be added as needed
- Two shelf types available; particleboard and steel box supports

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

Two types of units are available; one that utilizes particle board decking to support the boxes, and an all steel unit with specially designed box supports. (Particle board must be ordered separately — see table below).

Fire insurance premium savings may be realized by using units with steel box supports. Check with your insurance carrier.

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. 42" wide units hold 3 boxes across; 69" wide units hold 5 boxes across.

5/8" Particle Board Decking



grade particle board is available pre-cut to fit or from your local building materials supplier.

Penco 1-M-1 interior

Width Depth Cat. No. 42" 15" 94614 42" 30" 94617

Width	Depth	Cat. No.
69"	15"	94644
69"	30"	94647

Record Storage Box Supports



Box Supports allow air to circulate around the entire box, helping to reduce moisture and musty smells. They align with holes pre-punched in the special double rivet beams and are secured with nylon button fasteners.

Automotive Parts Storage





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.

	Single Row					
Width	Depth	Height	No. Levels	*Tire Capacity	Starter Cat. No.	Add-On Cat. No.
60" 60" 60" 60"	21" 21" 21" 21"	84" 120" 144" 192"	3 4 5 6	24 32 40 48	46351T 46352T 46353T 46354T**	46451T 46452T 46453T 46454T**
	Double Row					
60" 60" 60" 60"	42" 42" 42" 42"	84" 120" 144" 192"	3 4 5 6	48 64 80 96	46355T 46356T 46357T 46358T**	46455T 46456T 46457T 46458T**

- Based on average passenger tire.
- Supplied with Heavy Duty Posts.



Single Row

Starter





Single Row Add-on



Double Row Starter

Double Row Add-on



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.

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

Inventory Cart

The Penco Inventory Cart transports supplies, orders, merchandise, tools or files from point to point with ease. The cart is easy to assemble and additional shelves can be quickly added. Shelves can be adjusted to fit a wide variety of load sizes, providing greater flexibility than traditional carts. The Penco Cart delivers the goods by reducing the cost of material handling.



			Deck Material Options		
W	D	Н	Particle Board	Melamine	No Decking
48" Inventory Cart with Three Shelves Overall Height 54" with base and wheels					
36	24	48	35076P	35080P	35095P
48	24	48	35077P	35081P	35096P
60	24	48	35078P	35082P	35097P
			ventory Cart with bare		5
36	24	60	35074P	35083P	35092P
48	24	60	35073P	35084P	35093P
60	24	60	35075P	35085P	35094P
Note that all 60" wide carts use Double Rivet Beams on Intermediate levels					

Additional Shelves					
Shelf Kit (Consists of 4 Beams and Deck Material) Kits for 36" and 48" Wide Carts use Single Rivet Beams					
W	D	Н	Particle Board	Melamine	Sold Per
36	24		35086P	35089P	Shelf Kit
48	24		35087P	35090P	Shelf Kit
Kit for 60" Wide Carts uses Double Rivet Beams					
60	24		35088P	35091P	Shelf Kit



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. Addon units utilize common Tee Posts between units.

Particle Board must be ordered separately for each level.

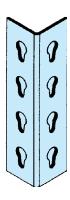
48" x 36" Cat. No. 094628 96" x 36" Cat. No. 094668

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



RivetRite® Components

Angle Posts



	Standard	Heavy Duty
Size	Cat. No.	Cat. No.
36"	46AS03C	_
48"	46AS04C	_
60"	46AS05C	_
72"	46AS06C	_
84"	46AS07C	_
96"	46AS08C	46AH08C
108"	46AS09C	46AH09C
120"	46AS10C	46AH10C
144"	46AS12C	46AH12C
168"	_	46AH14C
192"	_	46AH16C
216"	_	46AH18C

Punched for shelf adjustment on 1-1/2" centers.

Standard Posts — 1-1/2" x 1-1/2" Heavy Duty Posts — 1-7/8" x 1-7/8"

Tee Posts



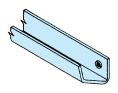
Standard Cat. No.	Heavy Duty
Cat No.	0 1 11
Out. 140.	Cat. No.
46TS03C	_
46TS04C	_
46TS05C	_
46TS06C	_
46TS07C	46TH07C
46TS08C	46TH08C
46TS09C	46TH09C
46TS10C	46TH10C
46TS12C	46TH12C
_	46TH14C
_	46TH16C
_	46TH18C
	46TS03C 46TS04C 46TS05C 46TS06C 46TS07C 46TS08C 46TS09C 46TS10C

Punched for shelf adjustment on 1-1/2" centers.

Standard Posts — 3" x 1-1/2"

Heavy Duty Posts -3-3/4" x 1-7/8"

Single Rivet Shelf Beams

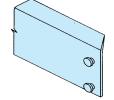


	Standard	Heavy Duty
Size	Cat. No.	Cat. No.
12"	46SS12C	_
15"	46SS15C	_
18"	46SS18C	_
24"	46SS24C	_
30"	46SS30C	_
36"	46SS36C	46HS36C*
42"	46SS42C	46HS42C
48"	46SS48C	46HS48C*

For use as left to right and front to back shelf support.

*Heavy Duty 36" support beam capacity is 600 lb. per pair. Heavy Duty 48" support beam capacity is 500 lb. per pair.

Double Rivet Angle Beams

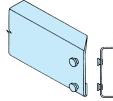


2-3/4" x 1" - For left to
right and front to back
shelf support.

	Standard		Heavy Duty
Size	Cat. No.	Size	Cat. No.
12"	46SB12C	48"	46HB48C
15"	46SB15C	60"	46HB60C
18"	46SB18C	69"	6AB69C**
24"	46SB24C	69"	46HB69C
30"	46SB30C	72"	46HB72C
32"	46SB32C	84"	46HB84C
36"	46SB36C	96"	46HB96C
42"	46AB42C**		
42"	46SB42C		

^{**} Punched for Box Supports

Double Rivet Channel Beams

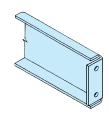


3" x 1" - For left to right shelf support. Provides for higher capacity than Heavy	Size 60" 69" 72"	Cat. No. 46CB60C 46CB69C 46CB72C
Duty Double Rivet	, _	
Angle Beams.	84" 96"	46CB84C 46CB96C

NOTE: Do not use Double Rivet Channel Beams at the lowest position, use only Double Rivet Beams.

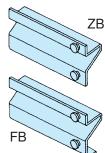
Channel Beams have a top and bottom flange. The top flange has two holes for attaching decking.

Center Support with hardware



2-3/4" - Bolts to	Size	Cat. No.
double rivet or	12"	46CS12
channel beams add support to decking and stabilize beams. Supplied with bolts	15"	46CS15
	18"	46CS18
	24"	46CS24
	30"	46CS30
	32"	46CS32
and wing nuts for	36"	46CS36
fast assembly.	42"	46CS42
	48"	46CS48

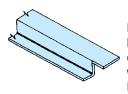
Double Rivet Zee Step Beams



Size	Cat. No.	Size	Cat. No.
12"	46ZB12C	36"	46ZB36C
15"	46ZB15C	42"	46ZB42C
18"	46ZB18C	48"	46ZB48C
24"	46ZB24C	60"	46ZB60C
30"	46ZB30C	69"	46FB69C
32"	46ZB32C	72"	46FB72C

2-1/8" High — For left to right and front to back shelf support.

Decking Support for Zee Step Beams

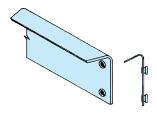


1-1/8" — 11 Gauge. Provides front to back support of decking when used	Size	Cat. No.
	24"	46ZS240
	30"	46ZS300
	32"	46ZS320
	36"	46ZS360
with Zee Step	42"	46ZS420
Beams.	48"	46ZS480

RivetRite® Components



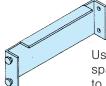
Tire Rack Beams



Size Cat. No. 48" 46TB48C 60" 46TB60C

2-3/4" High - For left to right shelf support of tires. 30° degree angle on supporting edae.

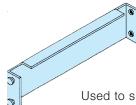
Wall Tie



Cat. No. 9-1/4" 46WT09C

Used to secure units to wall and provide space between wall and unit. (Hardware to attach to wall not included).

Double Row and Top Ties



Cat. No. Size 9-1/4" 46RT09C 15-1/4" 46RT15C 18-1/4" 46RT18C 36-1/4" 46RT36C

Cat. No.

46FP0H

Cat. No.

46PS0H

Used to space back-to-back units and to top-tie rows across aisles for added stability.

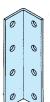
Foot Plate — with hardware



For use in anchoring angle and tee posts to the floor.

(Hardware to anchor to the floor not included).

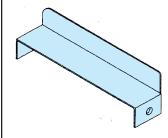
Post Splice — with hardware



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.

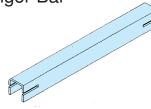
Record Storage Box Support - with hardware



Size 15" 46BS15 30" 46BS30

Used in place of particle board to support boxes and maintain neat organized storage. Supplied with nylon button fasteners.

Hanger Bar



Size Cat. No. 36" 46BH36C 42" 46BH42C 48" 46BH48C 60" 46BH60C

1-1/4" x 1-1/4" - For hanging items between double rivet beams. One or more may be used per level.

Beam Cleat

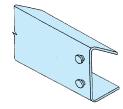




Size Cat. No. 46BC00C Left 46BC01C Right

An economical way to add on units. Not recommended for heavy loads.

Down Aisle Grating Supports



Cat. No. Size 46DA36C 36" 46DA48C 46DA60C 69" 46DA69C 72" 46DA72C

3-1/2" — Attaches to unit front between rows to provide support for grating on two level shelving installations.

Tie Plate



Used to join Angle Post units side by side to insure proper row alignment.

Cat. No. 46TP00C

RivetRite® Components

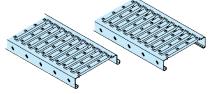
Deck-Over Grating Supports



3-1/2" — Provides secure support for grating when decking over entire installation.

Grating Planks

For use with Down Aisle Grating Supports. Non-Interlocking Size Cat. No. 30" 8GL030C 36" 8GL036C



Penco Channel-Lock grating provides for

Interlocking 30" 8AL030C 36" 8AL036C sure-footed movement on aisles and upper 42" 8AL042C 8AL048C

8GL042C

8GL048C

42"

48"

level storage areas. Interlocking grating has male and female flanges that interlock with adjacent planks providing a continuous locked surface. Non-locking grating planks butt against one another. Grating is secured to Down Aisle supports with self tapping screws.

- Catalog Number 08822

(For ease of assembly we recommend using Male Grating with Down-Aisle Grating Supports)

Grating Fillers — 3" Wide Galvanized



Size	Cat. No.
30"	8FK030C
36"	8FK036C
42"	8FK042C
48"	8FK048C

Particle Board Decking



Particle Board supplied by Penco is classified as 1-M-1 interior grade. If you are cutting your own board use nomial size & cut to +0" -1/8".

Size	Cat. No.	Size	Cat. No
36" x 12"	94603	60" x 18"	94635
36" x 15"	94604	60" x 24"	94636
36" x 18"	94605	60" x 30"	94637
36" x 24"	94606	60" x 36"	94638
36" x 30"	94607	60" x 48"	94639
36" x 36"	94608		
		69" x 15"	94644
42" x 12"	94613	69" x 30"	94647
42" x 15"	94614		
42" x 18"	94615	72" x 18"	94655
42" x 24"	94616	72" x 24"	94656
42" x 30"	94617	72" x 30"	94657
42" x 36"	94618	72" x 36"	94658
		72" x 48"	94659
48" x 12"	94623		
48" x 18"	94625	96" x 18"	94665
48" x 24"	94626	96" x 24"	94666
48" x 30"	94627	96" x 30"	94667
48" x 36"	94628	96" x 36"	94668
48" x 48"	94629	96" x 48"	94669

Note: Check 5/8" Particle Board capacity for the unit you require. Shelf deck capacity may not carry the rating of the steel framing. All dimensions are in inches unless other wise stated.

Wire Decking

Won't trap dirt - makes overhead sprinklers more effective. Easy installation. Prices and availability are supplied by Penco upon request.



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. (Particle Board decking available from Penco is unfinished and natural in color).
- 4. Stock color for all steel parts is 723 Light Putty. Other colors are available. Contact your Penco representative for availability and pricing.
- 5. All starter units are furnished with four Angle Posts. Add-on units have two intermediate Tee Posts. When assembling units always put the Angle Posts at the extreme ends of the shelving row. Note that shelving growth will always occur; see growth chart.
- 6. 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 insure structural integrity.



RivetRite® Two-Level Storage Penco

The structural integrity of RivetRite lends itself to the construction of two-level storage facilities for applications where maximum utilization of overhead space is required. Expanding in an upward direction instead of outward keeps your personnel in closer proximity to each other and stored material, for more efficient operation.

Using standard components for support, economical units may be constructed with an open "deck-over" upper level, or additional shelving. In either case, savings are realized because:

- You virtually double the amount of storage space in a given floor area
- You utilize existing heat and air conditioning within the building

Construction is as uncomplicated as standard single level shelving:

- Beams and grating supports lock into strong one-piece posts without hardware.
- Penco Channel-Lock Safety Grating installs easily for a rigid walking surface.

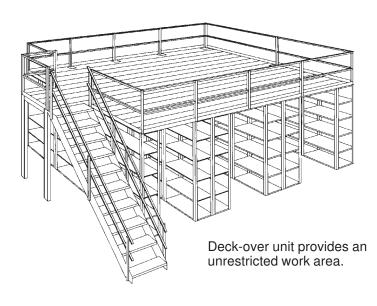
The utility of a RivetRite two-level installation has unlimited possibilities:

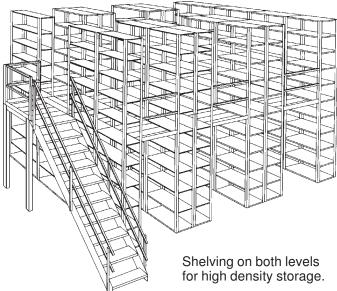
- Shelf heights are adjustable on 1-1/2" centers
- Shelves can be accessed from all four sides

RivetRite two level shelving systems are designed to meet your specifications. Contact your representative for assistance in reviewing your two-level shelving requirements.





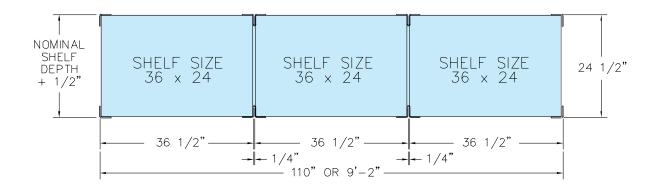




RivetRite® Growth Chart

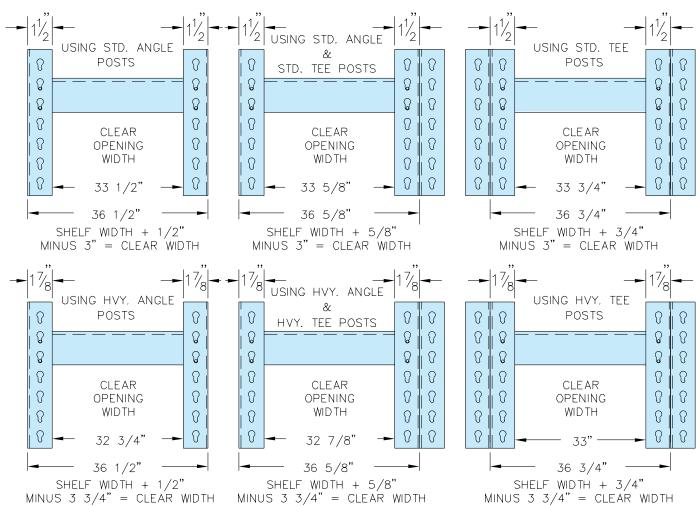
UNIT GROWTH CHART

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.



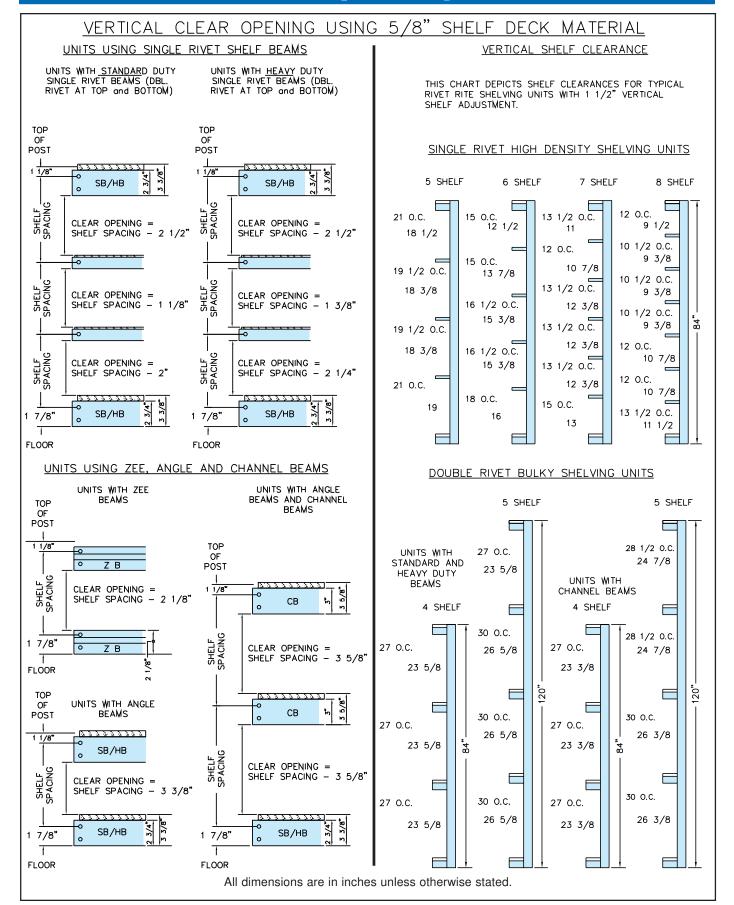
UNIT CLEAR WIDTH

EXAMPLES BELOW ARE BASED ON 36" WIDE SHELF

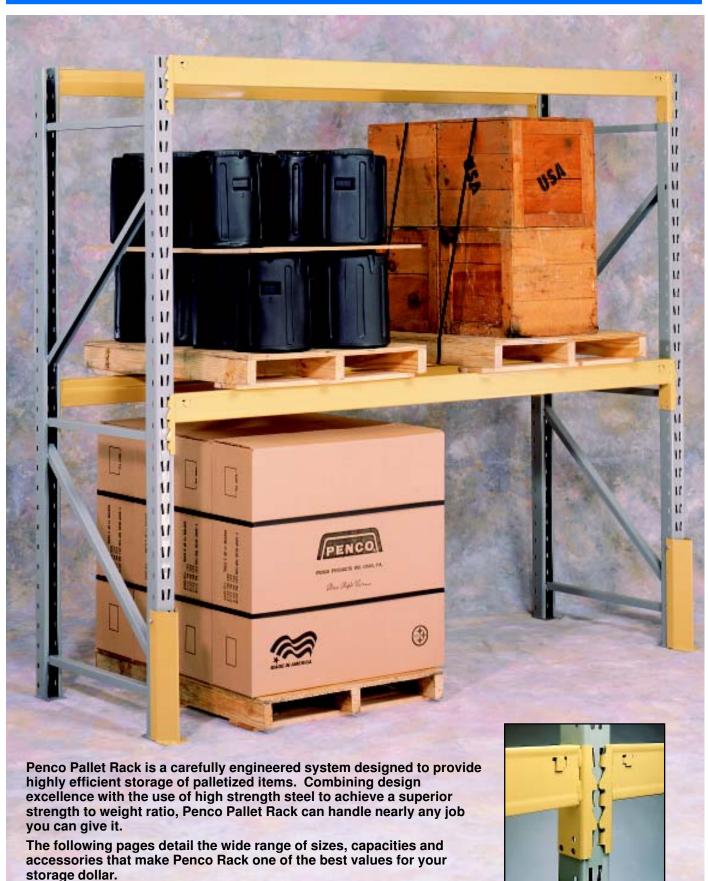


All dimensions are in inches unless otherwise stated.

RivetRite® Clear Opening Chart Fenco



Pallet Rack



Pallet Rack



Design Features

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.

A. Step Down Design

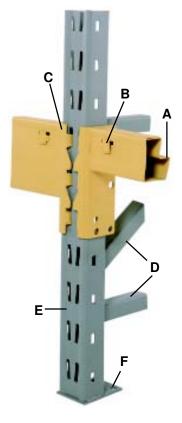
All beams have a step for the purpose of accepting accessories. Two step sizes are available: 7/8" and 1-5/8" high.

B. 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.

C. 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.





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

E. Upright Column

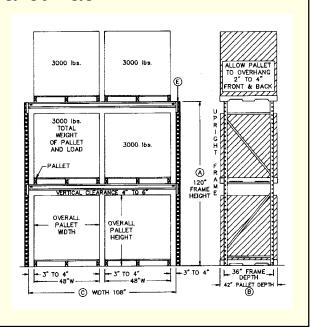
A continuous post roll formed into an "M" design for added strength. Slanted slots on the column allow for beam placement on 3" vertical centers. Slots on column sides accept the safety beam locking key. The design allows for beams to be placed flush with the top, or as close as 9" from the floor.

F. 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.

How to Select Pallet Rack

- **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 Upright Frames

How To Select Upright Frame Type

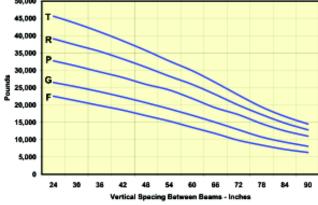
- 1. Determine the maximum vertical opening dimension between pairs of beams or between the lowest beam level and the floor.
- 2. Calculate the total load imposed on the upright frame.
- 3. Using the chart below, find the maximum vertical spacing between beams along the bottom scale, and then draw a 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.



We recommend that all upright frames be securely anchored to the floor for safety.

NOTE: Consult the Penco Engineering Department regarding any pallet rack to be installed in areas with high seismic activity.

Upright Frame Capacities- Pounds



The chart 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.

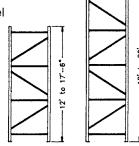
Frame Types	Post Size W x D	Post Gauge
F	3" x 1-3/4"	14
G	3" x 2-1/4"	14
Р	3" x 3"	14
R	3" x 3"	13
Т	3" x 3"	12

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 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. Standard finish for upright frames is 028 Gray.

Panel Construction: Four standard types of panel construction are illustrated.



7 to 1. to 1

Most Po	opular Pallet Rac	k Frame Sizes
Frame Size D x H	Type F 3" x 1-3/4" 14 Gauge Cat. No.	Type G 3" x 2-1/4" 14 Gauge Cat. No.
36" x 72"	5FE072C	-
42" x 72"	5FH072C	-
36" x 96"	5FE096C	-
42" x 96"	5FH096C	-
48" x 96"	5FL096C	-
36" x 120"	5FE120C	-
42" x 120"	5FH120C	5GH120C
48" x 120"	5FL120C	-
36" x 144"	5FE144C	5GE144C
42" x 144"	5FH144C	5GH144C
42" x 192"	-	5GH192C

For a complete list of Pallet Rack Upright Frame Catalog Numbers, see the Pallet Rack section of the Illustrated Price

Pallet Rack & Accessories



Upright Frames - Available Sizes									
FRAME HEIGHT		- FRAME DEPTHS -							
HEIGH	30"	36"	42"	48"	54"	60"			
48"	~	~	~	~	~	~			
54"	~	~	~	~	~	~			
60"	~	~	~	~	~	~			
66"	~	~	~	~	~	~			
72"	~	~	~	~	~	~			
78"	~	~	~	~	~	~			
84"	~	~	~	~	~	~			
90"	~	~	~	~	~	~			
96"	~	~	~	~	~	~			
102"	~	~	~	~	~	~			
108"	~	~	~	~	~	~			
114"	~	~	~	~	~	~			
120"	~	~	~	~	~	~			
126"	~	~	~	~	~	~			
132"	~	~	~	~	~	~			
138"	~	~	~	~	~	~			
144"	~	~	~	~	~	~			
150"	~	~	~	~	~	~			
156"	~	~	~	~	~	~			
162"	~	~	~	~	~	~			
168"	~	~	~	~	~	~			
174"	~	~	~	~	~	~			
180"	~	~	~	~	~	~			
186"	~	~	~	~	~	~			
192"	~	~	~	~	~	~			
198"	~	~	~	~	~	~			
204"	~	~	~	~	~	~			
210"	~	~	~	~	~	~			
216"	~	~	~	~	~	~			
222"	~	~	~	~	~	×			
228"	~	~	~	~	~	×			
234"	~	~	~	~	~	×			
240"	~	~	~	~	~	×			

✓ Available X Not available

To add height to an Upright Frame, a splice can be added. For more information on splicing frames see the Pallet Rack Accessories section.

Upright	Frame	e Cata	log Nu	ımberi	ng Sy	stem
Position	1	2	3		4	
Catalog Number	5	F	E	0	9	6

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).

Rigid Row Spacer

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



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

Rigid Wall Bracket

Structurally connects racks to wall for additional stability. Frame hardware included.

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



Frame Protector

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

Height	Cat. No
18"	5AF018



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 Type	Cat. No
F, G, P	5AU008
R. T	5AU018



Reel Holder

Accessorizes rack for reel storage. Max. axle 2-1/2" dia.

Cat. No. 5AH000



Left Side Shown



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 acces-

sory 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 Safety Yellow for high visibility.

Beam Selection Chart**

	3-3/4"	7/8" B GA.	<u> </u>	1-5/8" D GA.	<u> </u>	1-5/8" H 4 GA.		J 1-5/8" J 4 GA.		N 1-5/8' N 14 GA.	5-3/8"	S 1-5/8" S 4 GA.	6"	X X 4 GA.	6"	1-5/8" Y 2 GA.
Clear Span*	Cap.**	Cat.No.	Cap.**	Cat.No.	Cap.**	Cat.No.	Cap.**	Cat.No.	Cap.**	Cat.No.	Сар.**	Cat.No.	Cap.**	Cat.No.	Cap.**	Cat.No.
(Inches)	(Lbs./Pr.)	(Pair)	(Lbs./Pr.)	(Pair)	(Lbs./Pr.)	(Pair)	(Lbs./Pr.)	(Pair)	(Lbs./Pr.)	(Pair)	(Lbs./Pr.)	(Pair)	(Lbs./Pr.)	(Pair)	(Lbs./Pr.)	(Pair)
48	8,920	5BB048	8,380	5BD048	9,430	5BH048	10,670	5BJ048	12,170	5BN048	-	-	-	-	-	-
54	7,920	5BB054	7,445	5BD054	8,370	5BH054	9,480	5BJ054	10,810	5BN054	-	-	-	-	-	-
60	7,120	5BB060	6,695	5BD060	7,530	5BH060	8,520	5BJ060	9,730	5BN060	-	-	-	-	-	-
66	6,470	5BB066	6,080	5BD066	6,840	5BH066	7,740	5BJ066	8,830	5BN066	-	-	-	-	-	-
72	5,920	5BB072	5,570	5BD072	6,260	5BH072	7,090	5BJ072	8,090	5BN072	9,560	5BS072	-	-	-	-
78	5,460	5BB078	5,135	5BD078	5,770	5BH078	6,540	5BJ078	7,460	5BN078	-	-	10,220	5BX078	-	-
84	5,070	5BB084	4,760	5BD084	5,360	5BH084	6,060	5BJ084	6,920	5BN084	-	-	9,480	5BX084	12,650	5BY084
90	4,720	5BB090	4,430	5BD090	4,990	5BH090	5,650	5BJ090	6,450	5BN090	7,630	5BS090	8,840	5BX090	11,800	5BY090
96	4,420	5BB096	3,990	5BD096	4,670	5BH096	5,290	5BJ096	6,040	5BN096	7,190	5BS096	8,280	5BX096	11,050	5BY096
102	4,160	5BB102	3,530	5BD102	4,390	5BH102	4,980	5BJ102	5,680	5BN102	6,720	5BS102	7,790	5BX102	10,390	5BY102
108	3,920	5BB108	3,150	5BD108	3,990	5BH108	4,690	5BJ108	5,340	5BN108	6,340	5BS108	7,350	5BX108	9,800	5BY108
114	3,540	5BB114	2,830	5BD114	-	-	4,440	5BJ114	-	-	-	-	6,950	5BX114	9,280	5BY114
120	3,190	5BB120	2,550	5BD120	3,230	5BH120	4,130	5BJ120	4,810	5BN120	5,690	5BS120	6,600	5BX120	8,800	5BY120
126	2,900	5BB126	2,310	5BD126	-	-	-	-	4,570	5BN126	5,410	5BS126	6,270	5BX126	8,370	5BY126
132	2,840	5BB132	-	-	-	-	-	-	4,410	5BN132	5,160	5BS132	5,980	5BX132	7,980	5BY132
138	2,410	5BB138	-	-	-	-	-	-	4,030	5BN138	-	-	5,710	5BX138	7,620	5BY138
144	2,220	5BB144	-	-	2,240	5BH144	-	-	-	-	4,740	5BS144	5,500	5BX144	7,340	5BY144

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.
- ** Capacity of beam pairs 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.
- * Clear span is measured from inside frame to inside frame.

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

Pallet Rack & Accessories Penco

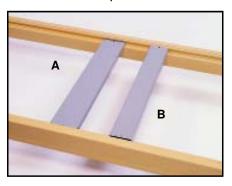


The Penco Beam End Connector

Beam ends are manufactured from heavy gauge steel, featuring a sturdy reinforced three prong connection for even load distribution. The prongs fit easily into the slanted slots of any Penco rack upright, then lock down for a tight fit, as the oversized 3" x 8-1/2" flat surface hugs the post increasing lateral stability. Once the beam locking key is engaged, the beam end is prevented from accidental disengagement. Beams can be easily removed and adjusted by manually disengaging the locking key.



Cross Bars 7/8" Step Beams



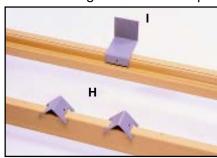
A. 1/2" Plywood Support - Supports sheets of 1/2" Plywood.

Frame Depth	Cat. No.
30"	5AP230C
36"	5AP236C
42"	5AP242C
48"	5AP248C

B. General Duty Cross Bar - For supporting loads smaller than unit depth.

Frame Depth	Cat. No.
30"	5AX530C
36"	5AX536C
42"	5AX542C
48"	5AX548C
54"	5AX554C
60"	5AX560C

Drum Wedge and Pallet Stop



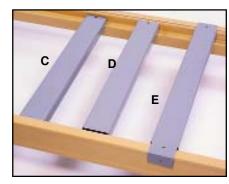
H. Drum Wedge - Two loose triangular stops for drum storage. Install on front beam only.

Cat. No. (Pair) 5AW000

I. Pallet Stop – Attaches to rear beam with Tek screw Cat. No. 08822 included. For 1-5/8" step beam only.

Cat. No. (Pair) 5AT00H

Cross Bars 1-5/8" Step Beams



C. 3/4" Plywood Support - Supports 3/4" sheets of Plywood.

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.

Frame Depth	Cat. No.
30"	5AX630C
36"	5AX636C
42"	5AX642C
48"	5AX648C
54"	5AX654C
60"	5AX660C

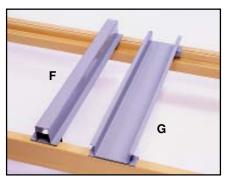
E. Heavy Duty Flanged Cross Bar -Supports heavier loads smaller than unit depth on 1-5/8" step beams.

Frame Depth Cat. No. 30" 5AX730C 36" 5AX736C 42" 5AX742C 48" 5AX748C 54" 5AX754C

5AX760C

60"

Fork Clearance Bar and Heavy Duty Skid Channel



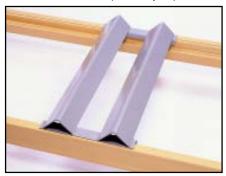
F. Fork Clearance Bar - Provides proper fork clearance for unpalletized stock, 2" wide by 2-3/4" high.

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.

Frame Depth	Cat. No.
30"	5AS230C
36"	5AS236C
42"	5AS242C
48"	5AS248C

Coil Bed (full depth)



For proper placement and storage of cylindrical items.

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



Pallet Rack













Mezzanine / Handrail



Shelving Mezzanines

Penco shelving has the structural integrity to allow for custom design of multi-level installations in a myriad of configurations. Our Clipper, Erectomatic®, RivetRite and Wide Span shelving systems along with our Pallet Rack integrate smoothly with mezzanine storage situations. Your Penco representative will discuss these options with you to determine which shelving product will work the best with your application.



Free-Standing Custom Mezzanines

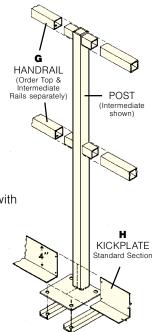
Free-standing custom mezzanine can be designed to fit specific shape, size, height or load requirements. Custom mezzanines can be designed with longer spans while retaining a load rating of up to 150 pounds per square foot. When designing a custom mezzanine structural steel components are used. A variety of deck options are available such as Penco Channel Lock Safety Grating, bar grating, 1-1/2" B-Deck with plywood and diamond plate and many others. For applications requiring a custom mezzanine contact your Penco Sale Representive with your requirements.



Handrail, Kickplate & Accessories

Penco square tube handrail is designed for shelving decks or other types of storage decks which use Penco Channel-Lock Safety Grating.

Designed for post installation on nominal 6' centers. Base plates are welded to posts. All required fastening hardware including channels for support beneath the grating is included with the posts. Standard finish is 710 Yellow baked enamel.



Avaliable with 2 or 3 rails







Description	Cat. No
Posts - 42" High for 2 Han	drails
A. Left Hand End Post	85204A
D. Diskaller J. C. J. D. J.	050040

A. B. Right Hand End Post 85204B C. Intermediate Post 85204C D. Outside Corner Post 85204D E. Inside Corner Post 85204E



1011 High for O Hondralle

POSIS – 42" HIGH IOF 3	nanarans
A. Left Hand End Post	85205A
B. Right Hand End Po	st 85205E
C. Intermediate Post	85205C
D. Outside Corner Pos	t 85205D
E. Inside Corner Post	85205E



852066C G. Handrail (Order Top and Intermediate Rails Separately) Nominal 6' Section

H. Kickplate - 4" High Standard Nominal 6' 850072C For End of 36" Aisle 85036H For End of 48" Aisle 85048H





HANDRAIL **BRACKET**

Channel-Lock Safety Grating

For Mezzanines, Multi-Level Shelving, Catwalks and Platforms



Safe

Penco Safety Grating's standard slip-resistant surface contains hundreds of shoe-gripping nibs formed into the ribs to provide a safe, comfortable walking surface. The open design keeps small debris from accumulating, and allows passage of air and light.

Strong

The efficient Channel-Lock design achieves a very high strength-to-weight ratio with double flanges on each rib, and multiple flanges on each side channel for lateral strength. Since each piece is nested in adjacent planks, they actually strengthen one another. Each one-piece rigid plank is manufactured by a continuous roll-forming process capable of producing custom lengths up to 24 feet long.

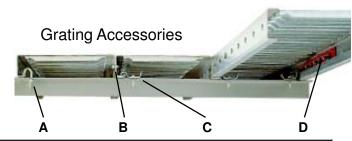
Economical

Easy installation of Penco grating pays off in labor savings. Each plank is light enough for one person to carry. Cutting can be easily done with a hacksaw or power saw. All fastening can be done with standard tools – no welding is required, no special material handling equipment is required.

The Advantages

Penco grating is an extremely cost-efficient way to provide an elevated walking surface. Its hot dipped galvanized corrosion-resistant coating insures long, safe life for interior or exterior applications.

Penco Channel-Lock Safety Grating is the ideal companion for multilevel installations made from Penco Clipper® or RivetRite® Shelving, or Penco Pallet Rack.



	Name	Description	Size	Cat. No.
Α.	J-Bolt (w/nut)	Bag of 50 - Fastens grating to support structure.	5/16" Dia.	82200
B.	Bolts/Nuts	Bag of 50 - hex head bolts & nuts (use 4 per plank)	5/16" x 5/8"	82201
C.	Hold Down Clip	Fastens grating to support. Includes self-tapping screw.	-	8HC00H
D.	Splice	Holds grating together at outside edge of deck.	12"	8SP012

The grating shown below are the most popular sizes. All are 2" high x 8-7/8" wide, 16 gauge. Other gauges and sizes are available for large applications.

Туре	Application	Length	Cat. No.	
MALE/FEMALE 8-7/8"	Interlocks on both sides. Used for most applications	72" 108" 144"	8AL072C 8AL108C 8AL144	
MALE/MALE 8-7/8"	Interlocks on one side only. For flush fit at edge of deck.	72" 108" 144"	8GL072C 8GL108C 8GL144	
FILLER	To fill 3" wide gaps.	72" 108" 144"	8FK072C 8FK108C 8FK144	

Shorter lengths available, see RivetRite® section of this catalog.

Grating Capacity Table

16 Gauge x 2" High Unsupported Span in Feet

Measurement	3'	4'	5'	6'	7'	8'	Point Load *		Weight Per
Uniform Load (U1)	668	374	238	164	119	-		Lin. Ft. (Lbs.)	Sq.Ft. (Lbs.)
Deflection (D1)	0.11	0.19	0.29	0.42	0.57	-		(LDS.)	(LDS.)
Uniform Load PSF (U2)	668	374	203	116	71	46			
Deflection at Above Load (D2)	0.11	0.19	0.25	0.3	0.35	0.4	110	3.11	4.15

- U1 = Uniform load in pounds per square foot for 9" wide plank (safe stress limit, no restriction on deflection).
- D1 = Deflection in inches at load U1.
- U2 = Uniform load in pounds per square foot for 9" wide plank (deflection restricted to length/240).
- D2 = Deflection in inches at load U2.

Foint Load = Maximum load in pounds for truck wheels each up to two inches wide x 8 inches diameter (for other types of concentrated loads, contact local representative).

To convert square feet to 9" wide linear feet: Multiply square feet x 1.35. To convert 9" wide linear feet to square feet: Multiply linear feet x .74.

For capacities of other than 2" high, 16 ga. grating, consult factory.

Shop Furniture







Open Work Benches

Open Work Benches

This is the classic work station. A rugged platform for work of all types. Standard units include a top, legs and stringer. Each model can be ordered with your choice from 4 types of top materials. The bench can be accessorized with drawers, electrical outlet strips, back & end stops, risers and a lower shelf (see subsequent pages for bench tops & accessories).

Open work bench units are available with either fixed or adjustable height legs. Both leg types are punched for tops, stringers, shelves and floor anchoring.

Fixed height legs are designed for overall surface height of approximately 30" or 34". Adjustable height legs offer work surfaces from approximately 30" to 36" high, adjustable on 1" centers, plus knockouts for standard electrical outlets.

Colors: Shop Furniture standard color is 028 Gray, but is also available at no extra charge on production schedules in 073 Champagne, 012 Tawny Tan, 715 Lake Blue and 723 Light Putty.



Benches shown above are Catalog Numbers 34426 with Adjustable Legs and Tuff Top™, and 34420 with Fixed Legs and Steel Top.









Open Work Benches

•

Fixed Leg Unit



Adjustable Height Unit

Shelf for Open					
Work Benches					
48 x 12	31110H				
60 x 12	31115H				
72 x 12	31120H				

		SIZE & I G HEIG		STE	EL TOP		ASTIC* IATE TOP		TOP™ BOARD)		INATED VOOD TOP
	W	D	H*	Fixed	Adjustable Height	Fixed	Adjustable Height	Fixed	Adjustable Height	Fixed	Adjustable Height
		(inches)		Height	30" to 36"						
	48	24	30	34300	_	_	_	34302	_	34303	_
	48	24	34	34310	_	_	_	34312	_	34313	_
	48	28	30	34320	34324	_		34322	34326	34323	34327
	48	28	34	34330	34324	_		34332	34320	34333	34327
Includes: Top,	60	28	30	34420	34424	34428	34429	34422	34423 34426	34423	34427
Legs, and Stringer	60	28	34	34430	34424	34434	34429	34432	34420	34433	34427
	60	34	30	34460	04404	34468	34476	34462	0.4400	34463	34467
	60	34	34	34470	34464	34474	34476	34472	34466	34473	34407
	72	28	30	34520	34524	34528	34529	34522	34526	34523	34527
	72	28	34	34530	34324	34534	34329	34532	34320	34533	34327
	72	34	30	34560	34564	34568	34576	34562	34566	34563	34567
	72	34	34	34570	34304	34569	34376	34572	34300	34573	34307

 $^{^{\}star}$ Deduct 1/8" from height shown for Plastic Laminate Top.

Bench Legs and Stringers (Penco bench legs can be used as common legs between benches).



Fixed Height (A) – All welded, exceptionally strong. Flared foot distributes load evenly. No hardware included.

Depth	Height	Cat. No.
24"	28-1/4"	31075
24"	32-1/4"	31077
28"	28-1/4"	31080
28"	32-1/4"	31082
34"	28-1/4"	31090
34"	32-1/4"	31092

Adjustable Height (B) – Welded leg assembly which allows installation of top at height from approximately 30" to 36" in 1" increments. Has knockouts for the installation of standard electrical outlets.

Depth	Height	Cat. No.
28"	30"-36"	31093H
34"	30"-36"	31097H



Stringer - Required for lateral stability; also serves as a backstop for lower shelf. Hardware included.

Bench Width 48"

Cat. No. 31135H

Bench Width 60"

Cat. No. 31136H

Bench Width 72"

Cat. No. 31137H

Modular Work Benches



Modular Work Benches

Penco Modular Work Benches offer the stability of a rock solid work surface, with the addition of secure storage below for tools, gauges, instruments or other essentials.

A great feature of these benches is the total flexibility with which they can be configured. You choose among stacked drawers or cabinets for support.

Each is available with your choice from one of four types of tops, which can be joined in long rows using common supports to make more leg room, or set up individually as shown here. The welded cabinet has a center shelf, built-in lock with 2 keys, and is reversible for left or right-hand door operation. It sits on an enclosed base.

Drawers glide quietly on nylon rollers and contain a sliding tray for small parts. Each comes with a hasp for padlock attachment. Optional built-in key locks are also available for the drawers.

Colors: Shop Furniture standard color is 028 Gray, but is also available at no extra charge on production schedules in 073 Champagne, 012 Tawny Tan, 715 Lake Blue and 723 Light Putty.



Bench above is Cat. No. 32099 — 60" x 28" x 34" with Plastic Laminate top, one optional built-in drawer key lock, and one optional padlock.















Modular Work Benches

4 Drawers 1 Cabinet 2 Bases	60 60 72 72	28 28 28 28	30 34 30 34	32090 32095 32110 32115	32094 32099 32114 32119	32093 32098 32113 32118	32092 32097 32112 32117
8 Drawers 2 Bases	60 60 72 72	28 28 28 28	30 34 30 34	32050 32055 32070 32075	32054 32059 32074 32079	32053 32058 32073 32078	32052 32057 32072 32077
2 Cabinets 2 Bases	60 60 72 72	28 28 28 28	30 34 30 34	32010 32015 32030 32035	32014 32019 32034 32039	32013 32018 32033 32038	32012 32017 32032 32037

^{*} Deduct 1/8" from height shown for Plastic Laminate Top.

Cabinet Pedestal and Base

Cabinet Pedestal (D)

A welded 15-3/4"W x 20"D x 27"H cabinet with one adjustable shelf. Locking handle with 2 keys. Cabinet may be inverted for left or right hand door opening. May be used in common between tops. For fastening to steel top, order mounting channels.

Cat. No. 32505

Cabinet Base (G) - 15-3/4"W x 20"D Supports either Cabinet Pedestals or four (4) Case and Drawer units when used in modular work benches. Welded construction, closed on 4 sides.

Height	For Bench Ht.	Cat. No.
1-1/4"	30"	32170
5-1/4"	34"	32171

Case and Drawers

Case and Drawer (E) – 20" Deep (Long) x 6-3/4" high. For hanging beneath tops or stacking to support a modular work bench. Includes a sliding tray. Drawer moves on nylon rollers and can be locked with

built-in locks or padlocks (ordered separately). Hardware for stacking included. For fastening to steel work bench top, order mounting channels.

> Drawer Width Cat. No. 30960 15-3/4" 21-3/4" 30962



Drawer Mounting Channels For Steel Top (F) Order 2 per drawer, for fastening to steel work bench top.

Bench Top	
Depth	Cat. No.
24"	31140
28"	31141
34"	31143

Built-In Drawer Lock Includes 2 keys.

Description Cat. No.

Keyed Differently 09389 Keyed Alike 09390

PENCO

Bench Tops & Accessories

Steel Top — Heavy gauge steel with no holes on work surface. Withstands hard shop use for years. Will not crack, splinter, gouge or absorb oil. Two end channels provided with each top. Top is 1-3/4" thick.



Width	Depth	Cat. No.
48"	24"	31145H
48"	28"	31151H
60"	28"	31152H
60"	34"	31161H
72"	28"	31153H
72"	34"	31162H

Plastic Laminate — Top surface and edges are covered in attractive "White Leather" plastic laminate, securely bonded to a high-density particle board core. A moisture resistant backer sheet is bonded to the underside to deter warping. Top is 1-5/8" thick.



Width	Depth	Cat. No.
60"	28"	9366H
60"	34"	9368H
72"	28"	9367H
72"	34"	9369H

Tuff Top™ — An extremely hard resin board surface bonded to a composition core with hardboard rails. Radiused top front edge for comfort. Resists penetration by many industrial fluids, and can be refinished. 1-3/4" thick.



Width	Depth	Cat. No.
48"	24"	9355H
48"	28"	9358H
60"	28"	9359H
60"	34"	9362H
72"	28"	9360H
72"	34"	9363H

Laminated Maple Hardwood — Thoroughly seasoned, kiln dried northern hardwood maple provides an extremely durable, attractive and long lasting top surface. 1-3/4" thick.



Width	Depth	Cat. No.
48"	24"	9341H
48"	28"	9344H
60"	28"	9345H
60"	34"	9348H
72"	28"	9346H
72"	34"	9349H

Work Bench Accessories

All Penco work benches can be ordered by their various component parts, as well as complete units shown on the previous pages. You can customize benches to fit your application with the parts shown below – tops are shown on the next page. Standard finish for all steel parts is 028 Gray baked enamel.

Width

Back and End Stops – A 3" high barrier with rounded front corners. Hardware included for installation on steel top. Hardware for mounting to plastic laminate, wood or composition tops requires Mounting Kit No. 31223.

Width	Depth	Cat. No.
48"	24"	30971
48"	28"	30976
60"	28"	30977
60"	34"	30987
72"	28"	30978
72"	34"	30988

Stringer – Required for lateral stability; also serves as a backstop for lower shelf. Hardware included.

For Bench Width	Cat. No.
48"	31135H
60"	31136H
72"	31137H

Shelf – Full width 11-3/16" deep shelf fastens to legs for convenient storage. Hardware included.

Width	Cat. No.
48"	31110H
60"	31115H
72"	31120H

Riser – Provides a 12" high x 10" deep shelf above the work surface. Hardware for mounting to plastic laminate, wood or composition tops requires Mounting Kit Cat. No. 31223.

Cat. No.

	48" 60" 72"		30965 30966 30967	
	-			4
F			4	
K		Sho adjus	own with table legs	s.



optional drawer lock

Electrical Outlet Strip – A convenient way to route power to the work area. Finished in Ivory only. Outlets are 15A, 125V on 12" centers. For grounded 3-prong plugs (mounting hardware not included).

Size	Outlets	Cat. No.
60"	5	9371
72"	6	9372

Case and Drawer (E) – 20" Deep (Long) x 6-3/4" high. For hanging beneath tops or stacking to support a modular work bench. Includes a sliding tray. Drawer moves on nylon rollers and can be locked with built-in locks or padlocks (ordered separately). Hardware for stacking included. For fastening to steel work bench top, order mounting channels.

Drawer Width	Cat. No.
15-3/4"	30960
21-3/4"	30962

Drawer Mounting Channels For Steel Top (F) Order 2 per drawer.

Cat. No
31140
31141
31143

Built-In Drawer Lock Includes 2 keys.

Description	Cat. No.
Keyed Differently	09389
Keyed Alike	09390

Service Carts and Stools



BATA PROCESSION

Shop Desk

The Penco Shop Desk is ergonomically designed for people in an active work environment. The angled desktop creates a comfortable surface for handwriting and data entry. The riser compartments allow work materials to be organized within easy reach.

Desktop is a spacious 34" x 30" and made with welded steel



construction. The height of the desk can be set to 41" or 43-1/2". The Easy Slide Drawer is 19" \times 19" \times 5" and has welded construction. Drawer has a lock and 2 keys. Riser is a welded assembly that is bolted to the sides and back of the desktop and adds 7" to the height of the desk.

W	D	Н	Cat. No.
34"	30"	41" or 43-1/2"	35100-028

Stools

Penco all-purpose stools are designed to fit almost every job requirement. They are available in two height ranges, and can be outfitted with an adjustable backrest.

Both sizes (18" to 26" & 24" to 32") offer 8" height adjustment on 1"



centers with easy lock-screw adjustment on the telescoping lower legs. All stools have swiveled plated steel glides which distribute weight evenly. The legs are constructed with heavy gauge steel tubing. They are welded to the underside of the one piece seat, and to the ring brace for strength. For added comfort, optional gray leatherette slip-on cushions are available for covering the backrest and the seat.

Gray enamel only. Sold in full carton quantity (see below).

Type	Height	Qty.	Cat. No.
Short Stool	18"-26"	2	9317
Tall Stool	24"-32"	2	9316
Backrest	-	2	9336
Seat Cushion	-	-	9315
Backrest Cushion	-	-	9314

Service Carts

Heavy duty 32" high steel service cart for the efficient movement of materials, tools, mail or stocks through a plant or office. Two sizes are available: 16"W x 30"D x 32"H and 24"W x 36"W x 32"H.

The steel trays are 3" deep with smooth formed edges.
The top tray can be turned upside down for a flush surface. The

handle can be secured at either end. Two rigid and two swivel 5" casters are standard.

As an option, a center tray may be added. For secure storage, Penco Case and Drawer Units can be ordered with carts, to hang beneath the trays, per the table at right. The 36" deep units can accept 15-3/4" wide drawers mounted side by side as well as vertically.

All Service Carts are 32" High

			Included With	
		Depth		Cat. No.
	16"	30"	(Basic Two Tray	33000
	24"	36"	Cart shown above)	33001
	24"	36"	1 Dwr 15-3/4"W	33014
	24"	36"	1 Dwr 21-3/4"W	33018
20	24"	36"	2 Dwr 15-3/4"W	33015
	24"	36"	2 Dwr 21-3/4"W	33019
	24"	36"	2 Dwr 15-3/4"W 1 Extra Tray	33016
	24"	36"	2 Dwr 21-3/4 W 1 Extra Tray	33020
	24"	36"	3 Dwr 15-3/4"W	33017
(9)	24"	36"	3 Dwr 21-3/4 W	33017
	Extra Trays	30	3 DWI 21-3/4 W	33021
	16"	30"		33010H
75	24"	36"		33011H





E-Z Bilt™ Storage Cabinets



With Recessed Handle

- 3 Popular Sizes Contemporary Design & Finish
- Available K.D. or Assembled Adjustable Shelves

Penco's E-Z Bilt Storage Cabinet is an ideal solution to storage needs in offices, plants, schools and institutions. Its contemporary design and attractive baked enamel finish is compatible with any office decor. Design features include a recessed handle with built-in lock & 2 keys; 3 hinges per door; three point latching; and 2" shelf adjustment. Doors open a full 180 degrees. Available for quick shipment in 3 models, 3 sizes and 2 colors, 723 Light Putty and 028 Gray.





Recessed Handle

Storage Cabinet

Includes: 4 Full Width Shelves Shown with 1 extra full width self.

Size w x d x h	K.D. Cat. No.	Assembled Cat. No.
36" 18" 78"	76218	76218A
36" 21" 78"	76221	76221A
36" 24" 78"	76224	76224A

Wardrobe Cabinet

Includes: 1 Full Shelf, 1 Coat Rod, 2 Coat Hooks

Size w x d x h	K.D. Cat. No.	Assembled Cat. No.
36" 18" 78"	76318	76318A
36" 21" 78"	76321	76321A
36" 24" 78"	76324	76324A

Combination Cabinet

Includes: 1 Shelf, 4 Half Shelves that adjust on 6" centers, 1 Coat Rod, 2 Coat Hooks

Size w x d x h	K.D. Cat. No.	Assembled Cat. No.
36" 18" 78"	76418	76418A
36" 21" 78"	76421	76421A
36" 24" 78"	76424	76424A

E-Z Bilt Storage Cabinets With Locking "L" Handle



age cabinet provides spacious secure

storage for almost anything. Ideal for of-

fice, institutional or manufacturing facili-

Four reinforced shelves, each supported

at six points, adjust on 2" vertical centers

and will support an evenly distributed load of up to 400 lbs. per shelf.

42" High⇒



These 42" high counter height storage cabinets feature a smooth heavy gauge top and are available 36" wide by 18" or 24" deep, and 48" wide by 24" deep.

Two interior shelves adjust on 2" vertical increments. Three point locking "L" handle with two keys provided.

42" H. "L" Handle Storage Cabinets

Size	3
wxdxh	Cat. No.
36" 18" 42"	75018
36" 24" 42"	75024
48" 24" 42"	75124



"L" Handle

Doors swing 180 degrees for full access to contents, and have three point latching plus locking "L" handle with two keys.

Stocked in 723 Light Putty and 028 Gray baked enamel finishes.

"L" Handle cabinets ship KD for easy assembly.

Extra Shelves

For all E-Z Bilt Cabinets

Shelf Size	
wxd	Cat. No.
36" 18"	7665710
36" 21"	7665720
36" 24"	7665730
48" 24"	7665680

Size w x d x

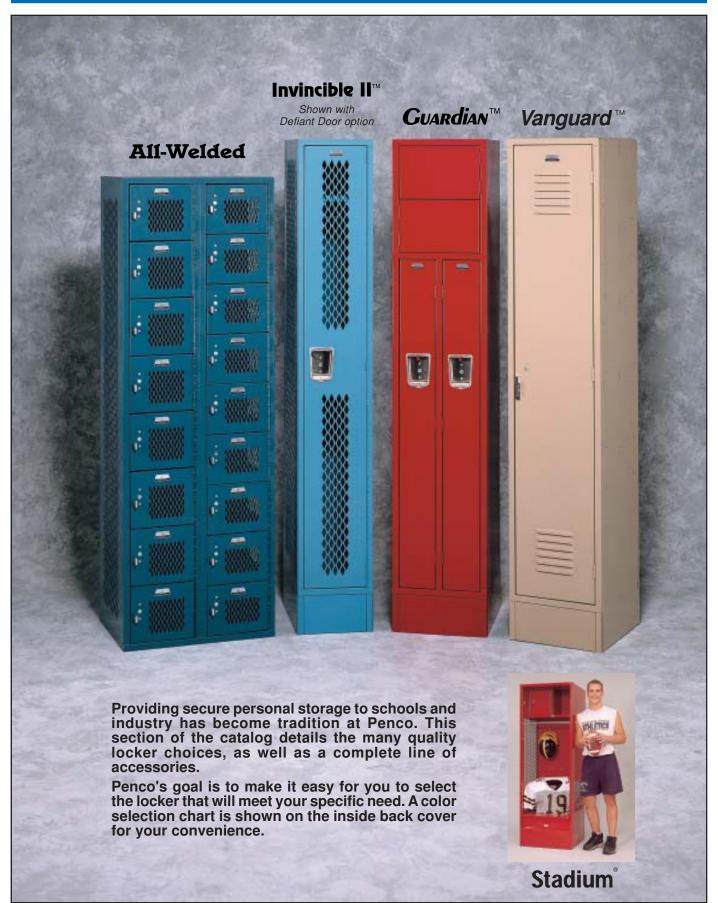
w x d x h Cat. No. 48" 24" 78" 76715

78" H. "L" Handle Storage Cabinet

ties.

Steel Lockers







Locker Contents

In this Section

Dimensions are in inches unless otherwise stated. Opening sizes are nominal.

Legs 6" legs are standard on K. D. lockers. Lockers may be ordered without legs. On All-Welded lockers, no legs is the standard. You may order legs or channel bases as an option.

Overall heights shown for all lockers are for flat top lockers and do not include legs.

Single Row lockers are shown for all K.D. models, but double row construction (common back) is also available up to 18" in depth.

Catalog Numbers shown for lockers are per <u>frame</u>. Wall Mounted, 7, 8 & 16 Person lockers are ordered by entire <u>units</u>.

Minimum Quantities and/or Setup Charges apply to some lockers sizes. Contact your Penco representative for pricing.

Organization: The locker line has been simplified into two basic areas: **Knocked Down** (K.D.) and **All-Welded.** Within each of these two groups there is much from which to choose.

Knocked Down means that the lockers are normally shipped unassembled (factory assembly is available at extra cost). The K. D. locker series is available in three basic types:

Vanguard Lockers with the patented cast pull-out handles on multipoint latch lockers, traditional louvers on all standard lockers, and widest assortment of models. Guardian lockers offer recessed handles on a solid door. The Invincible II line is ideally suited for athletic use with its standard diamond-shaped perforations providing superb ventilation.

More Information on Our Web Site

- Complete library of Penco catalogs
- List of upcoming trade shows
- Assembly instructions
- Lead times
- Product specifications
 Please visit our web site
 www.pencoproducts.com

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All-Welded Construction

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Colors Inside Back Cover

Penco Products, Inc. reserves the right to vary specifications consistent with our policy of continuous product improvement.

Lockers from A to Z



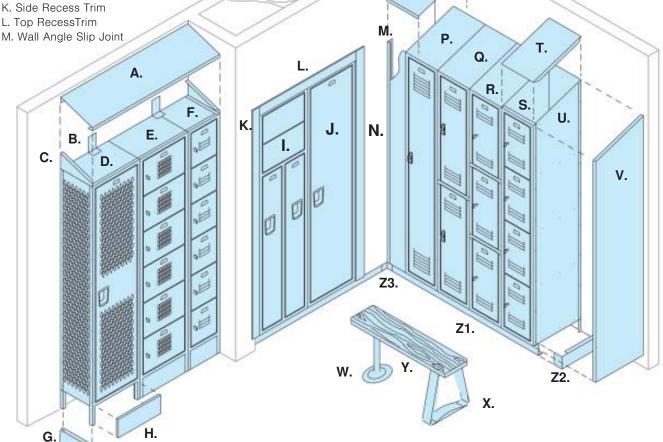
The illustration below shows several locker groups with frequently ordered accessories.

- A. Slope Hood
- B. Rear Support for Hood
- C. Slope End for Hood L.H. (Left Hand)
- D. Single Tier Invincible
- E. 6 Tier Box Locker w/Visual Doors
- F. 6 Tier Box Locker w/Std. Louvers
- G. End Base, 6" High
- H. Front Base, 6" High
- I. Two Person Guardian
- L. Top Recess Trim
- J. Single Tier Guardian
- L. Top RecessTrim
- M. Wall Angle Slip Joint

- N. Vertical Filler
- O. Filler, Slope Top
- P. Single Tier Vanguard
- Q. Double Tier Vanguard
- R. Three Tier Vanguard
- S. Four Tier Vanguard T. Slope Top, Unit Construction

0.

- U. Slope Top Division (Side)
- V. Finished End Panel
- W. Heavy Duty Bench Pedestal
- X. Stainless Steel Bench Pedestal
- Y. Hardwood Bench
- Z1. Zee Base, 4" high
- Z2. Zee End Base/Splice
- Z3. Zee Corner Splice





Two Person lockers with special mail slots in the upper doors for airline employees.



Vanguard lockers with visual perforations, finished end panels and sloped hoods.



Single Tier Vanguard and special 36" high 3 Tier Box Lockers with Slope Tops are used in this high school gymnasium locker room.

Locker Finishes

21 Colors with Three Types of Paint Finishes



Standard Finish

Penco's standard paint finish is perfect for most locker applications. The paint surface has been proven to be tough and durable.

To achieve a strong paint bond between the paint and the locker, each body part receives pre-paint conditioning. During this process, a hot spray wash cleans cold rolled steel. Then a coating of a special phosphate film is applied creating a surface that resists corrosion and improves paint bonding.

Once the steel has been conditioned, a premium quality custom blended enamel is applied by one of the industry's most efficient electrostatic paint systems. The final step occurs in a continuous curing oven that assures superior paint adhesion, a high degree of paint permanence and an attractive surface.

The standard finish is available at no extra charge. All Penco locker doors, frames and body parts are painted the same color, as standard.



Locker Finishes





PowderCoat plus

- Outperforms galvanized in salt spray & impact tests
- · Friendly to the environment
- · Looks great and costs less



Penco has developed PowderCoatplus, a cost-effective way of improving the durability and rust resistance of steel lockers. The PowderCoatplus system starts before the paint goes on, with superior cleaning and pretreatment of the steel. Then a 2 mil thick coating of powder coat enamel is applied and baked onto the steel surface.

The old way of improving rust resistance on steel surfaces was to cover the steel with zinc prior to painting. However, paint does not adhere to zinc as well as it does to bare steel. During the paint preparation process, zinc can leach from the steel surface and become a wastewater contaminant. During the paint baking cycle, a process known as "outgassing" from the zinc occurs, creating small fissures in the paint surfaces allowing moisture to penetrate. The result is a locker that is still vulnerable to moisture penetration, which will lead to rust.

Penco's PowderCoat*plus* is a better way to preserve the appearance of lockers. Powder coat systems have the advantage of producing an exceptionally impervious layer of

paint in virtually any desired thickness without runs or drips. It adheres to edges better, and looks great.

The first step in the process is a thorough pre-treatment to remove lubricating oils from the steel surface, required to assure a lasting bond of the paint to the steel. Penco's steel preparation systems are electronically monitored with the latest technology to consistently obtain optimum adhesion. The next step is to apply powder coat paint in an atmospherically controlled chamber. This process is far more environmentally sound than wet systems since there are virtually no liquid solvents to create fumes that go into the atmosphere.

Powder coat paint on cold rolled steel is more rust resistant than painted electro-galvanized (EG) steel, has the added benefit of being environmentally sound, and costs less. Tests have shown that PowderCoatplus dramatically outperforms liquid painted EG steel in salt spray tests and impact tests, the most widely accepted tests of paint durability.

New Finish

-Off[™]Anti-Graffiti Paint

- Graffiti is easily and completely removed
- Protective paint seals lockers
- Resists corrosive elements

Penco's X-Off Anti-Graffiti Paint provides a surface coating that allows the easy removal of graffiti and resists corrosion. This specially formulated paint has a tight molecular structure that seals the locker surface preventing graffiti and corrosive agents from penetrating the finish.

When this tough powder coat paint finish is used, acrylic, oil, latex paints along with permanent marker and paint pens are easily and completely removed with a

special cleaning agent. All graffiti is completely removed without changes in appearance such as ghosting, staining or shadowing.

The cleaning agent is available in a spray bottle. It allows graffiti to be removed without the use of hot water or high-pressure wash equipment. X-Off Anti-Graffiti Paint is capable of withstanding a minimum of 120 cleaning cycles over the same area without measurable coating deterioration.

Graffiti Removal Process





Spray cleaning agent on area with graffiti. Agitate area with brush. Wipe off graffiti residue with rag.





Afterwards, spray area with water to deactivate cleaning agent. Then use towel or rag to wipe off excessive water from locker. Repeat if needed.



Construction Variations

Ventilation



Louvers - for ventilation through the door. Pattern varies with door size. Full louvers are available.



Visual Perforations - patterns of 5/8" x 1-1/8" rectangular slots which provide high visibility and air flow.



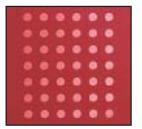
Diamond Shaped Perforations - popular in applications which require maximum ventilation



Mini Louvers - provide a high degree of ventilation while keeping contents out of view.



Door Flange Ventilation Smooth attractive finish with ventilation achieved through slots in the top and bottom



Round Hole
Perforations - Provided
as an option to increase
ventilation on body parts.

Handle Types



Vanguard - This patented die-cast handle is standard on all Single & Double Tier, 2-Person and Duplex Vanguard lockers.



Door Pull - All box lockers come standard with this friction catch door pull handle with padlock hasp.



Classic III Stainless Steel Recessed Handle - All new seamless deep drawn design is attractive as well as strong.

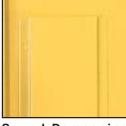


Spring Loaded Positive Latch - This latch is available as an option on heavy duty box lockers. (shown with optional padlock strike).

Door Options



Automatic Multi-point Latching - Allows the door to be closed without unlocking. Standard on all doors except box lockers and Single Point Latch door.



Sound-Dampening Panel - Welded to the inside of the door to reduce noise. Louvers are not available when sound-dampening panel is installed.

14 Gauge Steel Doors

25% thicker than 16 Gauge

14 Gauge - For use on lockers requiring additional strength. Standard on Invincible II and All-Welded lockers, and Single Point Latch doors.





Defiant™ Single Point Latch - Setting a new standard in locker design, Penco offers a complete line of Single Point Latch lockers. No moving parts, deep drawn stainless steel pocket and box formed door design (Patent Pending). *Not ADA compliant*.

Features and Options



	Vanguard	Guardian	Invincible II	Stadium	All-Welded
Description	K.D. 16 & 186a. Doors (see specs.) 24 Ga. Bodies Vanguard Handle on Multipoint latch doors	K.D. Recessed Handles 16 & 18 Ga. Solid Doors- see specs. (14 ga. with Guardian 'Plus' option) 24 Ga. Body Parts Defiant Option Available	K.D. Recessed Handle,1-3 Tier Diamond perf. doors, sides 14 Ga. Doors 16 Ga. Sides, Tops, Shelves 18 Ga Backs Defiant Option Available	Open Front K.D. or Welded Construction Ga. Sides, Bottom & Top Ga. Back Optional Security Box Optional Footlocker	Factory Welded Assembl Recessed Handle,1-3 Tie Diamond perf. doors, side 14 Ga. Doors 16 Ga. Sides, Tops, Shelv 18 Ga. Backs Defiant Option Availabl
Legs and Bases					
6" Legs	S	S	S	N/A	N/A
4" Legs	N/A	N/A	N/A	N/A	Α
Front Base	Α	Α	Α	N/A	N/A
End Base	Α	Α	Α	N/A	N/A
Zee Bases	Α	Α	Α	N/A	N/A
Channel Base, Integral	N/A	N/A	N/A	W	Α
Handles			•		
Vanguard Handle	S	N/A	N/A	N/A	N/A
Recessed Handle for Multi-Point Latch	A	S	S	N/A	S
Defiant Single Point Latch (Recessed)	N/A	A*	А	N/A	Α
Friction Catch Door Pull (Box Lockers)	S	N/A	s	A	S
Spring Loaded Box Locker Latch	N/A	N/A	A	N/A	Α
Padlock Strike Plate	A	N/A	A	s	Α
Doors and Ventilation					
Standard Louvers	S	A*	A	N/A	Α
Full Louvers	A	A*	l A	N/A	Α
Mini Louvers	l A	A*	l A	Foot Locker	Α
No Louvers - No Perforations in the Door	A	S	A	N/A	A
Door Ventilation Slots Top & Bottom Flange	A	S	A	N/A	A
Diamond-Shaped Door Perforations	N/A	A*	S	N/A	S
Visual Perforations in Door (5/8"w x 1- 1/8"h)	A	N/A	N/A	N/A	N/A
Fire Extinguisher Door	Α	Α	Α	N/A	Α
Waste Bin Door	Α	Α	Α	N/A	Α
Sound-Dampening Panel (Louvers N/A)	Α	Α	N/A	N/A	N/A
Heavy 14 Gauge Door	N/A	Α	S	N/A	S
Double Rivet Hinges	S	S	S	N/A	N/A
Continuous Hinge	N/A	A**	A**	N/A	S
Miscellaneous					
Non-Standard Gauges	A	Α	N/A	N/A	N/A
Center Partitions	A	A	A	N/A	A
Extra Shelves	A	A	A	N/A	A
Heavy Gauge Bottom (16 Ga.)	A	A	S	S	S
Stainless Steel Bottom	A	A	N/A	N/A	N/A
Galvanized Bottom Shelf	A	A	A	N/A	A
Round Perforations in the Sides	A	A	N/A	N/A	N/A
Diamond Shaped Perforations in the Sides	N/A	N/A	S	S	S
Individual Sloping Tops	A	A	N/A	N/A	N/A
Continuous Slope Tops	Ä	Ä	A	A	A
Slope Top Kits	Ä	Ä	N/A	N/A	N/A
Factory Assembly	Ä	Ä	A	A	S
Recessed Trim	A	Ä	A	A	A
Finished End Panel	A	Ä	A	N/A	A
Heavy Gauge End Panel (16 ga.)	A	Ä	S	S S	S
Handicap Lockers	A	Â	A	N/A	A
iandicap Euchers		^		IN//A	

Vanguard™ Lockers



Penco has been manufacturing lockers for decades

that last for decades, and the Vanguard line is the embodiment of what it takes to withstand the daily use and abuse typically given to a locker.

The baked enamel finish is available in 21 standard colors, with body parts finished same color as the doors.



To reduce noise, the latch channels have unique nylon

glides and the latch hooks have noise-reducing rubber bumpers.



The welded door frames have mortise and tenon

construction and are spot welded for lifetime rigidity. Every door has a continuous door strike. All hinges are full loop, 5-knuckle design.

Single Tier — 60" and 72" high single tier lockers have a shelf for storage of books and small articles. Lockers 18" deep or more come with a coat rod in addition to coat hooks.

Double Tier — Accommodates twice as many people as single tier lockers in the same floor space.

Three Tier — Part numbers for the Vanguard Handle and Classic III Recessed Pocket are on this page while the three tier Box Locker with the Door Pull are on the facing page.

NOTE: 1, 2, 3, 4, 5 & 6 tier, 2 Person, Duplex, Dual and Box Over are ordered by the FRAME. 7, 8, 16 Person and Wall Mounted are ordered by the entire unit. Overall height does not include legs.





Double Tier

Three Tier



Single Tier

Double Tier

Three Tier

Vanguard Standard with Die-Cast Handle



The patented die-cast Vanguard handle pulls out with a simple motion for opening. You close the door with one

motion of the hand, since the springloaded latch clips will secure the door even while the door is locked.

Vanguard with Classic III Recessed Handle



Our one piece deep drawn Classic III stainless steel recessed handle eliminates protrusions from the

locker front and accepts a built in lock or padlock. Door closes with lock attached. Handle is ADA compliant.

			Singl	e Tier	ier Double Tier					Three Tier					
w	D	Vang Har			essed ndle	Vang	uard Ha	ındle	Rece	essed Ha	andle	Vanguard Handle		Recessed Handle	
		60"	72"	60"	72"	60"	72"	84"	60"	72"	84"	60"	72"	60"	72"
9	12	6101V	6151V	6101R	6151R	6201V	6221V		6201R	6221R				6401R	6413R
9	15	6103V	6153V	6103R	6153R	6203V	6223V		6203R	6223R				6403R	6415R
9	18	6105V	6155V	6105R	6155R	6205V	6225V		6205R	6225R				6405R	6417R
12	12	6111V	6161V	6111R	6161R	6211V	6231V	6251V	6211R	6231R	6251R	6407V	6419V	6407R	6419R
12	15	6113V	6163V	6113R	6163R	6213V	6233V	6253V	6213R	6233R	6253R	6409V	6421V	6409R	6421R
12	18	6115V	6165V	6115R	6165R	6215V	6235V	6255V	6215R	6235R	6255R	6411V	6423V	6411R	6423R
12	21	6117V	6167V	6117R	6167R	6217V	6218V		6217R	6218R				6449R	6499R
12	24	6118V	6168V	6118R	6168R		6220V			6220R					
15	12	6119V	6169V	6119R	6169R	6227V	6239V		6227R	6239R					6472R
15	15	6121V	6171V	6121R	6171R	6229V	6241V	6261V	6229R	6241R	6261R				6494R
15	18	6123V	6173V	6123R	6173R	6237V	6243V	6263V	6237R	6243R	6263R				6496R
15	21	6125V	6175V	6125R	6175R	6257V	6245V		6257R	6245R					
15	24	6126V	6177V	6126R	6177R	6258V	6246V			6246R					
18	15	6134V	6180V	6134R	6180R		6259V			6259R					
18	18	6131V	6181V	6131R	6181R		6247V			6247R					
18	21	6133V	6183V	6133R	6183R		6249V			6249R					
18	24	6135V	6185V	6135R	6185R		6250V			6250R					
24	18	6149V	6196V	6149R	6196R										
24	21	6158V	6198V	6158R	6198R										
24	24	6160V	6199V	6160R	6199R		6274V			6274R					

Vanguard[™] Lockers







Duplex



3 Tier



4 Tier



5 Tier



6 Tier

2 Person Lockers

A space saving model that has ample room for two people while occupying about the same space as a single tier locker. Full width book compartment doors. Coat rods are included in lockers 18" deep or more.



Hidden door release for 2 Person lockers.

Duplex Lockers

An economical way to provide full length locker convenience in a small amount of floor space. Two private lockers are combined in one frame. Door openings are 6" wide and each locker contains a 7-1/2" wide shelf located 18" from the top.

Multiple Tier Box Lockers

Also known as "box lockers" for their compact dimensions, Penco multiple tier lockers allow numerous users in the smallest amount of floor space. Box locker doors have a functional friction catch latch that permits the use of built-in locks or padlocks.

They are ideal for storage of athletic gear or employee personal storage. Can be locked with padlocks or built-in locks.









Two Person and Dual are available with Standard -Vanguard Die-Cast Handle and Classic II Recessed Pocket→



			2 Pe	rson			Du	olex	
w	D	Vanguard Handle		Handle Recessed Handle V			d Handle	Recessed Handle	
		60"	72"	60"	72"	60"	72"	60"	72"
15	12	6510V	6500V	6510R	6500R				
15	15	6506V	6501V	6506R	6501R	6519V	6531V	6519R	6531R
15	18	6437V	6503V	6437R	6503R	6521V	6533V	6521R	6533R
15	21		6505V		6505R		6535V		6535R
18	15		6509V		6509R				
18	18		6515V		6515R				
18	21		6525V		6525R				

	Vanguard Box Lockers										
w	D	3 Tier		4 Tier		5	6 Tier				
•••		20"	24"	15"	18"	12"	14-2/5"	12"			
9	12	6301V	6313V								
9	15	6303V	6315V								
9	18	6305V	6317V								
12	12	6307V	6319V	6325V	6331V	6343V	6353V	6365V			
12	15	6309V	6321V	6327V	6337V	6345V	6355V	6367V			
12	18	6311V	6323V	6329V	6339V	6347V	6357V	6369V			
12	21	6349V	6399V	6393V	6395V		6435V	6371V			
15	12		6372V								
15	15		6394V	6333V	6431V	6351V	6359V	6373V			
15	18		6396V		6433V	6397V	6361V	6375V			
15	21							6377V			
18	18							6379V			
18	21							6378V			

Additional sizes are available for most locker types. Consult your Penco representative.

PENCO

Vanguard™ Specialty Lockers



Dual









8 Person

Dual — A dual locker is merely a single tier locker with a vertical partition separating the bottom into two compartments. It is ideally suited for situations where street clothes and work clothes are to be kept apart. It is generally used with lockers 15" or 18" wide and 18" or 21" deep. Guardian and Invincible II lockers can also be

Box Over Lockers — Provides for independent lockable storage above the main single tier locker. This is a 72" door frame with a 60" high standard Vanguard Door.

supplied as dual lockers.

Width	Depth	Height	Cat. No.
12	12	72	6439V
12	15	72	6441V
12	18	72	6443V
18	18	72	6445V
18	21	72	6447V

Wall Mounted Locker With Coat Rod



A practical storage unit where space is at a premium. Four private compartments with a hanging area for 16 coats. When wall mounted, the floor below is kept clear for easy cleaning (wall anchors are not included). Can also be set on counters or cabinets (without coat rod).

Width Depth Body Height Cat. No.

45 18 13-5/8 68242

The Executive — The Executive is a custom-outfitted 24" wide locker which offers such optional personal amenities as multiple storage shelves, lockable inner storage compartment, and combination comb & brush tray with towel bar. Shown with double door construction.

It is especially appropriate for golf clubs. Other accessories available include golf ball tray, acrylic mirror and name card holder.

For ordering information contact your Penco representative.

16 Person Locker



Accommodates 16 users in only 69" of floor space. Includes a 45" wide coat rod. Ideal for employee lockers. Accepts built-in locks or padlocks.

Width	Depth	Height	Cat. No.
69	18	72	6579V

7 and 8 Person Lockers —

These efficient lockers are ideal for multiple user situations such as school gymnasium locker rooms. The box compartments (18" w x 12" h) are for permanent storage of athletic gear. When a user is present, the large locker (18" w x 60" h) is used for street clothes.

7 Person

Width	Depth	Height	Cat. No.
36	18	72	6573V
36	21	72	6575V
8 Persor	1		
54	18	72	6577V

Single Tier Half Height

Locker — Available in 30-1/2",

36-1/2" and 48-1/2" heights.

Width Depth
12 x 12
12 x 15
12 x 18

48-1/2" high lockers have a shelf for storage of books and small articles.



One High Box Locker — This individual one high box locker provides



storage for personal items and features standard box locker construction with internal friction catch. Actual overall height is 13-5/8".

Vanguard™ Specifications



MATERIALS:

SHEET STEEL: All parts made from prime grade mild cold rolled sheet steel free from surface imperfection, and capable of taking a high grade enamel finish.

HINGES: .074" thick, 2" high, double spun, full loop, tight pin, five-knuckle hinges, projection welded to door frame and securely fastened to the door with 2 steel rivets. Doors over 42" high shall have three hinges, all other doors shall have two hinges.

FINISHING: Chemically pretreat metal with a six stage cleaning phosphatizing and metal preparation process. Finish coat shall be hot airless electrostatically applied enamel baked on at 350 to 400 degrees. Select colors from manufacturer's minimum standard 21 colors. All lockers shall be painted inside and outside with the same color.

EQUIPMENT: Coat hooks and coat rods are zinc plated. Truss fin head bolts and hex nuts are zinc plated.

FABRICATION GENERAL:

CONSTRUCTION: Built on the unit principle - each locker shall have an individual door and frame, individual top, bottom, back and shelves with common intermediate uprights separating compartments. Lockers shall be fabricated square, rigid and without warp. Doors shall be flat and free of distortion.

DOOR FRAME: All door frame members to be not less than 16 gauge formed to a channel shape. Vertical members to have an additional flange to provide a continuous door strike. Intermembering parts to be mortised and tenoned and electrically welded together in a rigid assembly capable of resisting strains.

Cross frame members of 16 gauge channel shapes including intermediate cross frame on double and triple tier lockers shall be securely welded to vertical framing members to ensure rigidity.

BODY: Bolt spacing in locker body construction not to exceed 9" o.c. All locker body components shall be made of cold rolled steel specially formed for added strength and rigidity and to ensure tight joints at fastening points. Tops & bottoms shall be 24 gauge with three sides formed 90° and the front offset formed to be flush with the horizontal frame member. Shelves shall be 24 gauge with four sides formed to 90°, the front edge shall have a second bend. Backs & sides shall be 24 gauge.

DOORS: Doors 30" or higher shall be formed from one piece 16 gauge cold rolled sheet steel. Doors less than 12" wide shall be minimum of 18 gauge. Formations shall consist of a full channel shape on the lock side of adequate depth to fully conceal the lock bar, channel formation on the hinge side, and right angle formations across the top and bottom. Doors over 15" wide x 60" & 72" high shall have a 3" wide 20 gauge full height reinforcing pan welded to the inside face of the door on 6" centers.

Doors for box lockers 3, 4, 5, and 6 tier high shall have channel formations on lock and hinge side and have right angle flanges on the top and bottom. Doors less than 15" wide shall be 18 gauge, 15" wide or wider shall be 16 gauge. Box locker door for 3, 4, 5, and 6 openings high shall be pre-punched for padlock latch and friction catch and built-in combination and key locks.

DOOR HANDLE 1 & 2 TIER, 2 PERSON & DUPLEX: Handle to consist of zinc alloy die-cast case and handle. 40,000 PSI maximum tensile strength, chrome plated. Handle to be pulled out to move up latch bar and open door in one motion. Padlock eye for use with 9/32" diameter padlock shackle to be an integral part of handle and to be so located that extension of handle forms a padlock strike. Attachment to latch bar shall be tamper-proof and concealed inside the door. The case shall be kick proof type, shielding the movable part and provide a padlock strike to prevent scratching and marring the door. A lock hole cover plate shall be provided for use with padlocks.

DOOR LATCHING 1 & 2 TIER, 2 PERSON & DUPLEX: Doors to have latch clip engaging the door frame at three points on doors over 42" high and two points on all other doors. Locking device to be positive, automatic type, whereby locker door may be locked when open, then closed without unlocking. One rubber silencer shall be firmly secured in the frame at each heavy gauge latch hook. Latch clips shall be glass filled nylon for long life and low friction and shall hold doors shut by engaging the latch hooks. The latch channel assembly shall be quieted by the use of unique nylon glides to reduce noise.

DOOR HANDLE & LATCHING 3 TO 6 TIER BOX LOCKERS: Doors shall be punched for use with padlocks or built-in locks. Doors for use with padlocks shall be equipped with an 18 gauge combination door pull, staple and lock hole cover plate with integral friction catch.

VENTILATION: Lockers with doors 72" to 36" high shall have two sets of louvers, one set near the top of the door and another set near the bottom of the door. Lockers with doors 30" or less in height, shall have a minimum of one set of louvers.

NUMBER PLATES: Each locker to be supplied with a polished aluminum number plate, 2-1/4" wide x 1" high, with black numerals not less than 3/8" high. Number plates shall be attached to the face of the door with two aluminum rivets.

INTERIOR EQUIPMENT: Single-tier lockers 48-1/2" or higher shall have a hat shelf located approximately 9" below the top of locker; if less than 18" deep, locker shall have three single-prong hooks and one double-prong ceiling hook. Single tier lockers 18" or more in depth shall have a coat rod instead of a ceiling hook. 30" & 36" high lockers shall have three single-prong wall hooks and one double-prong ceiling hook. Hooks to be attached with two bolts per hook. 20" & 24" high lockers to have three wall hooks for 12" wide, and four wall hooks for 15" wide and wider.

LOCKER ACCESSORIES: See locker Accessory Specifications.

OPTIONS:

BODY: Locker shall be assembled using rivets.

RECESSED HANDLE 1, 2 & 3 TIER LATCHING: Delete the standard handle and provide handle recessed in the door with finger lift control. 20 gauge drawn pocket shall be brushed stainless steel securely fastened to the door with two tabs plus a positive tamper resistant decorative fastener. The pocket shall be of sufficient depth to prevent a combination padlock, built-in combination lock or key lock from protruding beyond the face of the door. A lock hole cover plate shall be provided for use with padlocks.

The lifting piece shall be 14 gauge formed steel, attached to the latching channel with one concealed retaining lug and one rivet assuring a positive two point connection. Handle finger lift shall have a padlock eye for use with a 9/32" diameter padlock shackle. It shall have a sound deadening molded comfortable finger lift. Note: adding a recessed handle changes the lower louver pattern.

HUSH TONE SOUND-DAMPENING PANELS: Panels are designed to reduce sound levels when doors are slammed. They are 22 gauge and are die formed and have a full perimeter flange spot welded flush to the inside door surface. Louvers are not used when sound-dampening panels are provided.

SIDE AND BACK VENTILATION: Sides and/or backs shall be perforated with 1/2" diameter holes in patterns of 42 holes per group.

DOOR VENTILATION: Visual perforations shall consist of 5/8" wide x 1-1/8" high rectangular perforations in the door in standard manufacturer's patterns. Doors with visual perforations shall not have louvers.

Mini louvers shall be 5/8" wide x 1/4" high and be placed in doors in manufacturer's standard pattern. Doors with mini louvers shall not have standard louvers.

ADA COMPLIANT LOCKERS: Handicap lockers shall have recessed handles and shall be single tier or the lower opening of a double tier locker. Locker bottom shall be a minimum of 9" off the floor, or an extra shelf placed 9" off the floor. Single tier lockers shall have a shelf 48" off the floor. Doors assigned for handicapped use shall have an appropriate symbol sign.

EXECUTION:

INSTALLATION: Install metal lockers at location shown in accordance with manufacturers instructions for plumb, level, and flush installation.

ANCHOR LOCKERS to the floor and wall 48" on center or less as recommended by the manufacturer.

INSTALL SLOPING HOODS AND METAL FILLERS using concealed fasteners. Provide flush hairline joints against adjacent surfaces.

INSTALL BENCHES by fastening bench tops to pedestals and securely anchoring to the floor using appropriate anchors for the floor material.

ADJUST & CLEAN: Adjust doors and latches to operate without binding. Verify that latches are operating satisfactorily.

TOUCH UP marred finishes with factory supplied paint.

Penco Products, Inc. reserves the right to vary specifications consistent with our policy of continuous product improvement.



Guardian™ Lockers



Standard Guardian lockers build upon the design features of the Vanguard series with

several enhancements and options that give it a distinctive look.

Our one piece deep drawn Classic III stainless steel recessed handle is part

of every Guardian. It eliminates protrusions from the locker front and accepts a built in locker padlock.

The 16 gauge door front has a solid exterior, aiding quiet operation. In addition to rubber bumpers on all latch hooks, the latch channel is silenced by unique nylon guides. Ventilation is achieved by slots in the top and bottom flanges of the door.



Medallion Option

This upgrade has a sound damping panel welded to the door reducing noise levels when doors are slammed.



Guardian Plus Option

This upgrade increases the thickness of the door to 14 gauge. The Guardian Plus locker is ideally suited for corridors and situations where the locker is likely to encounter harsher than normal usage.

Defiant Single Point Latch Option

This locking option has no moving parts and allows the door to be locked at single point. See the 14 gauge Defiant Single Point Latch option on page 69.

If desired, louvers may be added to the door on all Guardian locker options except Medallion.

NOTE: 1, 2 & 3 Tier, 2 Person and
Duplex lockers are ordered by the FRAME.
Overall heights are do not include legs.
* Standard Guardian & "Medallion option" doors less than 12" wide are 18 gauge.







Double Tier

Single Tier									
Size (Inches)				Guardian Door*		n" Option* . Door	"Guardian Plus" Option w/14 ga. Door		
	W	D	60" 72" Opening Ht. Opening Ht. Cat. No. Cat. No.		60" Opening Ht. Cat. No.	72" Opening Ht. Cat. No.	60" Opening Ht. Cat. No.	72" Opening Ht. Cat. No.	
	9 9	12 15 18	6101G 6103G 6105G	6151G 6153G 6155G	6101M 6103M 6105M	6151M 6153M 6155M	6C101 6C103 6C105	6C151 6C153 6C155	
	12 12 12 12 12	12 15 18 21 24	6111G 6113G 6115G 6117G	6161G 6163G 6165G 6167G 6168G	6111M 6113M 6115M 6117M	6161M 6163M 6165M 6167M 6168M	6C111 6C113 6C115 6C117	6C161 6C163 6C165 6C167	
	15 15 15 15	12 15 18 21	6119G 6121G 6123G 6125G	6169G 6171G 6173G 6175G	6119M 6121M 6123M 6125M	6169M 6171M 6173M 6175M	6C119 6C121 6C123 6C125	6C169 6C171 6C173 6C175	
	18 18 18	18 21 24	6131G 6133G	6181G 6183G 6185G	- - -	6181M 6183M 6185M	6C131 6C133	6C181 6C183	

Double Tier

W	D	30" Opening Ht. (60" overall ht.) Cat. No.	36" Opening Ht. (72" overall ht.) Cat. No.	30" Opening Ht. (60" overall ht.) Cat. No.	36" Opening Ht. (72" overall ht.) Cat. No.	30" Opening Ht. (60" overall ht.) Cat. No.	36" Opening Ht. (72" overall ht.) Cat. No.
12	12	6211G	6231G	6211M	6231M	6C211	6C231
12	15	6213G	6233G	6213M	6233M	6C213	6C233
12	18	6215G	6235G	6215M	6235M	6C215	6C235
12	21	6217G	6218G	6217M	6218M	6C217	6C237
12	24	-	6220G	-	6220M	-	-
15	12	6227G	6239G	_	6239M	6C271	6C239
15	15	6229G	6241G		6241M	6C273	6C241
15	18	6237G	6243G	_	6243M	6C275	6C243
15	21	6257G	6245G	_	6245M	6C277	6C245
15	24	0237 G	6246G	_	6246M	00277	00240
'	l		32100		0_ 10W		
18	18	-	6247G	-	-	-	6C247
18	21	-	6249G	-	-	-	6C249

Guardian™ Lockers











Three Tier

2 Person

Duplex

Guardian Lockers with contrasting door frames.

			Th	2 Pe	Duplex				
Size (Inches)		Standard Guardian 16 ga. Door*		"Medallion" Option 16 ga. Door*	"Guardian Plus" Option		Standard "Medallion" Guardian* Option*		Standard Guardian*
W	D	20" Opening Ht. (60" overall ht.) Cat. No.	24" Opening Ht. (72" overall ht.) Cat. No.	24" Opening Ht. (72" overall ht.) Cat. No.	20" Opening Ht. (60" overall ht.) Cat. No.	24" Opening Ht. (72" overall ht.) Cat. No.	52" Opening Ht. (72" overall ht.) Cat. No.	52" Opening Ht. (72" overall ht.) Cat. No.	72" Opening Ht. Cat. No.
12 12 12 12	12 15 18 21	6407G 6409G 6411G 6449G	6419G 6421G 6423G 6499G	6419M 6421M 6423M 6499M	6C407 6C409 6C411 6C413	6C419 6C421 6C423 6C425	- - - -	- - - -	- - - -
15 15 15 15	12 15 18 21	- 6451G 6453G 6455G	6425G 6427G 6429G 6437G	- - - -	- - - -	6C427 6C429 6C431 6C433	- 6501G 6503G -	- 6501M 6503M -	- 6531G 6533G

Additional sizes are available for most locker types. Consult your Penco representative.





Guardian™ Specifications

MATERIALS:

SHEET STEEL: All parts made from prime grade mild cold rolled sheet steel free from surface imperfection, and capable of taking a high grade enamel finish.

HINGES: .074" thick, 2" high, double spun, full loop, tight pin, five-knuckle hinges, projection welded to door frame and securely fastened to the door with 2 steel rivets. Doors over 42" high shall have three hinges, all other doors shall have two hinges.

FINISHING: Chemically pretreat metal with a six stage cleaning phosphatizing and metal preparation process. Finish coat shall be hot airless electrostatically applied enamel baked on at 350 to 400 degrees. Select colors from manufacturer's minimum standard 21 colors. All lockers shall be painted inside and outside with the same color.

EQUIPMENT: Coat hooks and coat rods are zinc plated. Truss fin head bolts and hex nuts are zinc plated.

FABRICATION GENERAL:

CONSTRUCTION: Built on the unit principle - each locker shall have an individual door and frame, individual top, bottom, back and shelves with common intermediate uprights separating compartments. Lockers shall be fabricated square, rigid and without warp. Doors shall be flat and free of distortion.

DOOR FRAME: All door frame members to be not less than 16 gauge formed to a channel shape. Vertical members to have an additional flange to provide a continuous door strike. Intermembering parts to be mortised and tenoned and electrically welded together in a rigid assembly capable of resisting strains.

Cross frame members of 16 gauge channel shapes including intermediate cross frame on double and triple tier lockers shall be securely welded to vertical framing members to ensure rigidity.

BODY: Bolt spacing in locker body construction not to exceed 9" o.c. All locker body components shall be made of cold rolled steel specially formed for added strength and rigidity and to ensure tight joints at fastening points. Tops & bottoms shall be 24 gauge with three sides formed 90° and the front offset formed to be flush with the horizontal frame member. Shelves shall be 24 gauge with four sides formed to 90°, the front edge shall have a second bend. Backs & sides shall be 24 gauge.

DOORS: Doors 20" or higher shall be formed from one piece 16 gauge cold rolled sheet steel. Formations shall consist of a full channel shape on the lock side of adequate depth to fully conceal the lock bar, channel formation on the hinge side, and right angle formations across the top and bottom. Doors over 15" wide \times 60" or 72" high shall have a 3" wide 20 gauge full height reinforcing pan welded to the inside face of the door on 6" centers. Doors less than 12" wide shall be minimum of 18 gauge.

DOOR HANDLE & LATCHING: Handles shall be recessed in the door and be finger lift control. The 20 gauge drawn pocket shall be brushed stainless steel securely fastened to the door with two tabs plus a positive tamper resistant decorative fastener. The pocket shall be of sufficient depth to prevent a combination padlock, built-in combination lock or key lock from protruding beyond the face of the door. A lock hole cover plate shall be provided for use with padlocks.

The lifting piece shall be 14 gauge formed steel, attached to the latching channel with one concealed retaining lug and one rivet assuring a positive two point connection. Handle finger lift shall have a padlock eye for use with a 9/32" diameter padlock shackle. It shall have a sound deadening molded comfortable finger lift.

Doors to have latch clip engaging the door frame at three points on 60" & 72" high and two points on 20" through 36" high doors. Locking device to be positive, automatic type, whereby locker door may be locked when open, then closed without unlocking. One rubber silencer shall be firmly secured in the frame at each heavy gauge latch hook. Latch clips shall be glass filled nylon for long life and low friction and shall hold doors shut by engaging the latch hooks. The latch channel assembly shall be quieted by the use of unique nylon glides to reduce noise.

VENTILATION: Shall be facilitated by air flow slots located in the top & bottom flange of the door. The door front shall be flush with no exposed louvers.

NUMBER PLATES: Each locker to be supplied with a polished aluminum number plate, 2-1/4" wide x 1" high, with black numerals not less than 3/8" high. Number plates shall be attached to the face of the door with two aluminum rivets.

INTERIOR EQUIPMENT: Single tier lockers 48-1/2" or higher shall have a hat shelf located approximately 9" below the top of locker; if less than 18" deep, locker shall have three single-prong hooks and one double-prong ceiling hook. Single Tier lockers 18" deep or more shall have a coat rod instead of a ceiling hook. 30" & 36" high lockers shall have three single-prong wall hooks and one double-prong ceiling hook. Hooks to be steel, ball tip zinc plated, attached with two bolts per hook. 20" & 24" high lockers to have three wall hooks for 12" wide and four wall hooks for 15" and wider.

LOCKER ACCESSORIES: Lockers shall be furnished with the accessories selected from the Accessory Specifications.



OPTIONS:

BODY: Lockers shall be assembled using rivets.

DOORS: Guardian Plus doors shall be 14 gauge steel. Doors 24" wide \times 60" or 72" high shall have one door per opening and four hinges per door.

HUSH TONE SOUND-DAMPENING PANELS: Medallion Option has heavy duty panels that reduce sound levels when doors are slammed. They are 22 gauge and are die formed and have a full perimeter flange spot welded flush to the inside door surface. Louvers are not used when sound-dampening panels are provided.

DOOR VENTILATION: Mini louvers shall be 5/8" wide x 1/4" high and be placed in doors in manufacturer's standard pattern.

ADA LOCKERS: Handicap lockers shall have recessed handles and shall be single tier or the lower opening of a double tier locker. Locker bottom shall be a minimum of 9" off the floor, or an extra shelf placed 9" off the floor. Single tier lockers shall have a shelf 48" off the floor. Doors assigned for handicapped use shall have an appropriate symbol sign.

EXECUTION:

INSTALLATION: Install metal lockers at location shown in accordance with manufacturer's instructions for plumb, level, and flush installation.

ANCHOR LOCKERS to the floor and wall 48" on center or less as recommended by the manufacturer.

INSTALL SLOPING HOODS AND METAL FILLERS using concealed fasteners. Provide flush hairline joints against adjacent surfaces.

INSTALL BENCHES by fastening bench tops to pedestals and securely anchoring to the floor using appropriate anchors for the floor material.

ADJUST & CLEAN: Adjust doors and latches to operate without binding. Verify that latches are operating satisfactorily.

TOUCH UP marred finishes with factory supplied paint.

Penco Products, Inc. reserves the right to vary specifications consistent with our policy of continuous product improvement.

Guardian™ Defiant (SPL)



GUARDIAN DEFIANT SINGLE POINT LATCH SPECIFICATIONS

When specifying <u>Guardian Lockers with Defiant Single Point Latch doors</u>, <u>substitute</u> the following specifications for "Doors" and "Door Handle & Latching, 1, 2 & 3 Tier" to the Guardian specification on the previous page.



DOORS: Doors 20" or higher shall be formed from one piece 14 gauge steel. Formations shall be box formed stiffeners on the hinge side and latch side. Both formations shall have a 1/2" flange spot welded to the inside face of the door. Top and bottom flanges shall have one 90 degree bend. For long life, the door shall be manufactured from one integral piece. Door shall be manufactured to allow maximum ventilation and stiffness. Each locker door to be supplied with a polished aluminum number plate. Number plates shall be attached to top of door with two aluminum rivets.

HINGE: 16 gauge continuous hinge riveted to the frame and the door for the full length of the door.

DOOR HANDLE & LATCHING 1, 2 & 3 TIER: Handles shall be recessed in the door. The formed pocket shall be brushed stainless

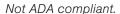
steel securely fastened to the door with two lugs plus a positive tamper resistant fastener. The pocket shall be of sufficient depth to prevent a combination padlock, built-in combination lock or key lock from protruding beyond the face of the door. A lock hole cover plate shall be provided for use with padlocks. All pockets shall be 20 gauge drawn steel for superior strength. Door pull shall be formed in the pocket. Pocket and pull shall be integral. Doors shall have a catch to retain unlocked doors in the closed position. Locking shall be accomplished by an 11 gauge lug welded to the locker frame. The lug shall include a surface for the bolt of a built-in combination or key lock to engage. A padlock staple shall protrude through the 20 gauge pocket. The lug shall include an anti-pry flange and notch to deter prying open when locked. Rubber door silencers shall be firmly attached to the locker frame.

The Single Point Alternative

The Defiant Single Point Latch (SPL) option for Guardian lockers is for those desiring a heavy gauge door offering improved security with the low maintenance inherent in a door with no moving parts.

The door is roll formed from heavy 14 gauge steel. Strengthening box-beams are formed as integral parts of each side of the door (patent 5,802,801). The return flanges of the box beams are spot welded to the back of the door for extra strength.

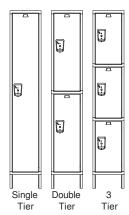
Each door has a patented deep drawn stainless steel pocket handle with an integral door pull. The doors can be locked either with a built-in lock, or with a conventional padlock, using the padlock staple protruding through the recessed handle.



The result is an extremely rigid recessed handle door

that is elegant in appearance, simple in design, and long on endurance.

NOTE: Order Guardian Single Point Latch lockers by the **FRAME**. Overall heights do **not** include legs.









Single Point Latch (SPL) Recessed Handle

Single Point Latch Padlock Staple

Size (Inches)			Single Tier		Doub	le Tier	3 Tier	
	W	D	60" Opening Ht. Cat. No.	72" Opening Ht. Cat. No.	30" Opening Ht. (60" overall ht.) Cat. No.	36" Opening Ht. (72" overall ht.) Cat. No.	20" Opening Ht. (60" overall ht.) Cat. No.	24" Opening Ht. (72" overall ht.) Cat. No.
	12 12 12 12 12	12 15 18 21 24	6E111 6E113 6E115 6E117	6E161 6E163 6E165 6E167 6E168	6E211 6E213 6E215 6E217	6E231 6E233 6E235 6E218 6E220	6E407 6E409 6E411 6E449	6E419 6E421 6E423 6E499
	15 15 15 15	12 15 18 21	6E119 6E121 6E123 6E125	6E169 6E171 6E173 6E175	6E227 6E229 6E237 6E257	6E239 6E241 6E243 6E245	- 6E451 6E453 6E455	6E425 6E427 6E429 6E479
	18 18 18 18	15 18 21 24	6E149 6E131 6E133 6E135	6E187 6E181 6E183 6E185	6E279 6E281 6E283 6E285	6E259 6E247 6E249 6E250	- - - -	- - -



Invincible II[™] Lockers







Single Tier

Double Tier

3 Tier



Penco's Invincible II athletic lockers are more attractive and durable than ever! Ideal for applica-

tions that require a high degree of ventilation and strength, or where visual inspection of locker contents is desired.

Doors are made from heavy 14 gauge steel. Sides, tops, bottoms and shelves are 16 gauge steel. Backs are 18 gauge. Doors and sides are perforated with a diamond-shaped pattern allowing maximum air circulation while maintaining security.

Invincible II lockers come in a variety of styles: single tier, double tier, 3 tier all have as standard the Classic III stainless steel recessed handle and multipoint latching with quiet latch channels.

Standard 4, 5, 6, 8 and 9 tier box locker doors have a padlock hasp and a



Latch guards welded to the door frame prevent tampering.



An optional spring loaded positive latch is available for four tier through nine tier lockers. (Shown with optional stainless steel padlock strike.)

friction catch, and will accept built-in locks. Available at extra cost is a spring-loaded catch.

Both double tier and 3 tier lockers have horizontal frame members welded between the doors for added strength and security. 24" wide lockers have full width doors. If slope tops are required, use hoods. All lockers ac-



Classic III Stainless Steel Recessed Handle is standard on

14 gauge diamond perforated doors allow maximum air flow while providing security.



Single, Double, and 3 Tier lockers.



cept built-in locks or padlocks and have rubber bumpers on the latch hooks to reduce noise.

NOTE: Each catalog number represents one **FRAME**. Overall height does **not** include legs. See How To Order Invincible II lockers on the next page. Be sure to order a Group End for <u>every</u> group of lockers.

	ize hes)	Single Tier		Doub	e Tier	3 T	ier		
W	D	36-1/2" Opening Ht.	48-1/2" Opening Ht.	60" Opening Ht.	72" Opening Ht.	30" Opening Ht. (60" overall ht.)	36" Opening Ht. (72" overall ht.)	20" Opening Ht. (60" overall ht.)	24" Opening Ht. (72" overall ht.)
9 9	12 15 18			6A101 6A103 6A105	6A107 6A109 6A111	- - -	- - -	- - -	- - -
12 12 12 12	12 15 18 21	6A011 6A013 6A015	6A017 6A019 6A021	6A129 6A131 6A135 6A133	6A157 6A159 6A161 6A163	6A213 6A215 6A217 -	6A245 6A247 6A249 6A251	6A287 6A289 6A291	6A281 6A283 6A285
15 15 15 15	15 18 21 24	- - -	- - -	6A143 6A145 6A147	6A169 6A171 6A173 6A172	6A225 6A239 6A241 -	6A257 6A259 6A261 6A253	6A293 6A295 6A297 -	6A301 6A303 6A305 -
18 18 18 18	15 18 21 24			6A149 6A151 6A153 6A155	6A175 6A177 6A179 6A181	6A223 6A227 6A229 6A231	6A263 6A265 6A267 6A269	- - -	- - -
24 24 24 24	15 18 21 24	- - -	- - -	- 6A117 6A119 6A121	6A182 6A123 6A125 6A127	- 6A233 6A235 6A237	- 6A271 6A273 6A275	- - -	- - -

Invincible II[™] Lockers



HOW TO ORDER INVINCIBLE II:

- 1. Basic units: Locate the desired type and size of locker from the tables shown. (Note that only Single Row lockers are shown. Double Row [back-to-back] configurations are available and are provided with a common back and angles to connect the second row of sides to the common back-consult your Penco representative). Order the desired number of FRAMES of the Basic Units required. (6" high legs are standard; if no legs are required, specify when ordering). Note that a single frame of a Basic Unit has only one side, and is not complete until bolted to another locker or until a Group End has been added.
- 2. Group Ends: Lockers can be built in small complete groups, and then placed into long rows. To end a group or row of lockers, order either a perforated or solid 16 gauge Group End in the appropriate size (for solid group ends on lockers with common perforated sides, be sure to order a solid end for each row end). Note that groups of lockers can be built in long rows if built in place, however groups are difficult to move if they exceed 3-wide. Consult your installer.



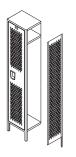
3. Slope Top:

For slope top lockers, accessorize with Slope Hood components. Closed Bases and other accessories are available. Refer to the Accessories section.

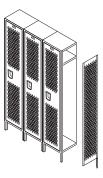
	Size (inches) 4 Tier		5	Tier	6 Tier	8 Tier	9 Tier	
W	D	15" Opening Ht. (60" overall ht.)	18" Opening Ht. (72" overall ht.)	, ,	14-2/5" Opening Ht. (72" overall ht.)	12" Opening Ht. (72" overall ht.)	9" Opening Ht. (72" overall ht.)	8" Opening Ht. (72" overall ht.)
12 12 12 12	12 15 18 21	6A307 6A309 6A311	6A319 6A321 6A323	6A351 6A353 6A355 -	6A363 6A365 6A367 -	6A375 6A377 6A379 6A381	6A393 6A395 6A397 -	6A407 6A409 6A411 -
15 15 15	15 18 21	6A313 6A315 -	6A331 6A335 -	6A357 6A359 6A361	6A369 6A371 6A373	6A383 6A385 6A389	6A401 6A403 6A405	6A413 6A415 6A417
18 18	18 21	-	-	6A419 6A421	6A445 6A447	6A423 6A425	- -	- -

Ordering Group Ends for Invincible II Lockers

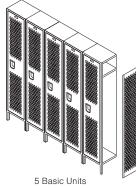
You must order a Group End to finish each group of Invincible II lockers, regardless of length of each group or row. Specify Perforated or Solid.



1 Basic Unit 1 Group End



3 Basic Units 1 Group End



1 Group End

	Size iches)	Perforated Single		Solid Gro Single	
D	Н	1, 2, 3, 4, 5 & 6 Tier	8 & 1, 2, 3, 4, 9 Tier 5 & 6 Tier		8 & 9 Tier
12 15 18	36-1/2 36-1/2 36-1/2	603600V 603602V 603704V	-	603601S 603603S 603605S	
12 15 18	48-1/2 48-1/2 48-1/2	603606V 603608V 603700V	- - -	603607S 603609S 603701S	- - -
12 15 18 21 24	60 60 60 60 60	602100V 602102V 602104V 602106V 602108V	- - - -	602101S 602103S 602105S 602107S 602109S	- - - -
12 15 18 21 24	72 72 72 72 72 72	602110V 602112V 602114V 602116V 602118V	602120V 602122V 602124V 602126V	602111S 602113S 602115S 602117S 602119S	602121S 602123S 602125S 602127S



Invincible II™ Specifications

MATERIALS:

SHEET STEEL: All parts made from prime grade mild cold rolled sheet steel free from surface imperfection, and capable of taking a high grade enamel finish.

HINGES: .074" thick, 2" high, double spun, full loop, tight pin, five-knuckle hinges, projection welded to door frame and securely fastened to the door with 2 steel rivets. Doors over 42" high shall have three hinges, all other doors shall have two hinges except the 24" wide x 60" or 72" doors which shall have four hinges.

FINISHING: Chemically pretreat metal with a six stage cleaning phosphatizing and metal preparation process. Finish coat shall be hot airless electrostatically applied enamel baked on at 350 to 400 degrees. Select colors from manufacturer's minimum standard 21 colors. All lockers shall be painted inside and outside with the same color.

EQUIPMENT: Coat hooks and coat rods are zinc plated. Truss fin head bolts and hex nuts are zinc plated.

FABRICATION GENERAL:

CONSTRUCTION: Built on the unit principle - each locker shall have an individual door and frame, individual top, bottom, back and shelves with common intermediate uprights separating compartments. Lockers shall be fabricated square, rigid and without warp. Doors shall be flat and free of distortion.

DOOR FRAME: All door frame members to be not less than 16 gauge formed to a channel shape. Vertical members to have an additional flange to provide a continuous door strike. Intermembering parts to be mortised and tenoned and electrically welded together in a rigid assembly capable of resisting strains.

Cross frame members of 16 gauge channel shapes including intermediate cross frame on double and triple tier lockers shall be securely welded to vertical framing members to ensure rigidity.

BODY: Bolt spacing in locker body construction not to exceed 9" o.c. All locker body components shall be made of cold rolled steel specially formed for added strength and rigidity and to ensure tight joints at fastening points. Tops & bottoms shall have three sides formed 90° and the front offset formed to be flush with the horizontal frame member. Shelves shall have sides formed to 90°, the front edge shall have a second bend. Backs shall be 18 gauge; all other body parts shall be 16 gauge.

DOORS: Doors 20" or higher shall be formed from one piece 14 gauge cold rolled sheet steel. Formations shall consist of a full channel shape on the lock side of adequate depth to fully conceal the lock bar, channel formation on the hinge side, and right angle formations across the top and bottom. Doors over 15" wide and over 30" high shall have a 3" wide full height 20 gauge reinforcing pan welded to the inside face of the door on 6" centers.

Doors for box lockers 4, 5, 6, 8 & 9 tiers high shall be 14 gauge steel and have channel formations on lock side and hinge side and have right angle flanges on the top and bottom.

DOOR HANDLE & LATCHING 1, 2 & 3 TIER: Handles shall be recessed in the door and be finger lift control. The 20 gauge drawn pocket shall be brushed stainless steel securely fastened to the door with two tabs plus a positive tamper resistant decorative fastener. The pocket shall be of sufficient depth to prevent a combination padlock, built-in combination lock or key lock from protruding beyond the face of the door. A lock hole cover plate shall be provided for use with padlocks.

The lifting piece shall be 14 gauge formed steel, attached to the latching channel with one concealed retaining lug and one rivet assuring a positive two point connection. Handle finger lift shall have a padlock eye for use with a 9/32" diameter padlock shackle. It shall have a sound deadening molded comfortable finger lift.

Doors to have latch clip engaging the door frame at three points on 60" & 72" high and two points on 20" through 36" high doors. Locking device to be positive, automatic type, whereby locker door may be locked when open, then closed without unlocking. One rubber silencer shall be firmly secured in the frame at each heavy gauge latch hook. Latch clips shall be glass filled nylon for long life and low friction and shall hold doors shut by engaging the latch hooks. Latch hooks on diamond-perforated lockers shall have tamper guards. The latch channel assembly shall be quieted by the use of unique nylon glides to reduce noise.

DOOR HANDLE & LATCHING 4 TO 9 TIER BOX LOCKERS: Doors shall be punched for use with padlocks or built-in locks. Doors for use with padlocks shall be equipped with an 18 gauge combination door pull, staple and lock hole cover plate with integral friction catch.

VENTILATION: All locker sides and doors 20" or higher shall be perforated with diamond-shaped openings 3/4" wide x 1-1/2" high in a quantity and pattern to insure maximum ventilation and maintain structural strength. All other doors shall have small diamond-shaped perforations 7/16" wide x 15/16" high.

NUMBER PLATES: Each locker to be supplied with a polished aluminum number plate, 2-1/4" wide x 1" high, with black numerals not less than 3/8" high. Number plates shall be attached to the face of the door with two aluminum rivets.

INTERIOR EQUIPMENT: Single-tier lockers 48-1/2" or higher shall have a hat shelf located approximately 9" below the top of locker; if less than 18" deep, locker shall have three single-prong hooks and one double-prong ceiling hook. Single Tier lockers 18" deep or more shall have a coat rod instead of a ceiling hook. 30" & 36" high lockers shall have three single-prong wall hooks and one double-prong ceiling hook. Hooks to be steel, ball tip zinc plated, attached with two bolts per hook. 20" & 24" high lockers to have three wall hooks.

LOCKER ACCESSORIES: Lockers shall be furnished with the accessories selected from the Accessory Specifications.

OPTIONS:

BODY: Lockers shall be assembled using rivets.

DOORS: Box locker doors 4 to 9 tier, as an alternative option each door shall be furnished with a stainless steel padlock strike.

DOOR HANDLE & LATCHING 4 TO 9 TIER BOX LOCKERS: As an alternate option, each door shall be provided with a finger operated 11 gauge slam latch with an electrogalvanized trigger, and a spring contained in a 14 gauge case welded to the door. The spring latch engages a 13 gauge hasp welded to the frame. Rubber bumpers shall be securely installed in the frame.

DOOR VENTILATION: Standard louvers or mini louvers (5/8" wide x 1/4" high) may be substituted for diamond perforations in doors. All louvers and perforations shall be placed in doors according to manufacturer's standard pattern.

ADA COMPLIANT LOCKERS: Handicap lockers shall have recessed handles and shall be single tier or the lower opening of a double tier locker. Locker bottom shall be a minimum of 9" off the floor, or an extra shelf placed 9" off the floor. Single tier lockers shall have a shelf 48" off the floor. Doors assigned for handicapped use shall have an appropriate symbol sign.

EXECUTION:

INSTALLATION: Install metal lockers at location shown in accordance with manufacturers instructions for plumb, level, and flush installation.

ANCHOR LOCKERS to the floor and wall 48" on center or less as recommended by the manufacturer.

INSTALL SLOPING HOODS AND METAL FILLERS using concealed fasteners. Provide flush hairline joints against adjacent surfaces.

INSTALL BENCHES by fastening bench tops to pedestals and securely anchoring to the floor using appropriate anchors for the floor material.

ADJUST & CLEAN: Adjust doors and latches to operate without binding. Verify that latches are operating satisfactorily.

TOUCH UP marred finishes with factory supplied paint.

Penco Products, Inc. reserves the right to vary specifications consistent with our policy of continuous product improvement.

Invincible II™ Defiant (SPL)



INVINCIBLE II DEFIANT SINGLE POINT LATCH SPECIFICATIONS

When specifying Invincible II Lockers with Defiant Single Point Latch (SPL) doors, substitute the following specifications for "Doors," "Hinges" and "Door Handle & Latching, 1, 2 & 3 Tier" to the Invincible II specification on the previous page. Delete "Door Handle & Latching 4 to 9 tier Box Lockers."



DOORS: Doors 20" or higher shall formed from one piece 14 gauge steel. Formations shall be box formed stiffeners onthe hinae

side and latch sides. Both formations shall have a 1/2" flange spot welded to the inside face of the door. Top and bottom flanges shall have one 90 degree bend. For long life, the door shall be manufactured from one integral piece. Door shall be manufactured to allow maximum ventilation and stiffness utilizing two box formed

stiffeners.

HINGES: 16 gauge continuous hinges (full length of the door) are welded to the frame and riveted to the door.

DOOR HANDLE & LATCHING 1, 2 & 3 TIER: Handles shall be recessed in the door. The formed pocket shall be brushed stainless steel securely fastened to the door with two lugs plus a positive tamper resistant fastener. The pocket shall

be of sufficient depth to prevent a combination padlock, built-in combination lock or key lock from protruding beyond the face of the door. A lock hole cover plate shall be provided for use with padlocks. All pockets shall be 20 gauge drawn steel for superior strength. Door pull shall be formed in the pocket. Pocket and pull shall be integral. Doors shall have a catch to retain unlocked doors in the closed position. Locking shall be accomplished by an 11 gauge lug welded to the locker frame. The lug shall include a surface for the bolt of a built-in combination or key lock to engage and a padlock staple that protrudes through the 20 gauge pocket. The lug shall include an anti pry flange and notch to deter prying open when locked. Rubber door silencers shall be firmly attached to the locker frame.

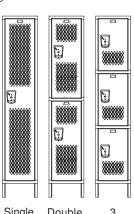
The Single Point Alternative

The Defiant Single Point Latch option for Invincible II lockers offers improved security and the low maintenance inherent in a door with no moving parts. It is available with diamond shaped perforations or as a solid door.

The door is roll formed from heavy 14 gauge steel. Strengthening box-beams are formed as integral parts of each side of the door (patent 5,802,801). The return flanges of the box beams are spot welded to the back of the door for extra strength.

Each door has a patented deep drawn stainless steel pocket handle with an integral door pull. The doors can be locked either with a built-in lock, or with a conventional padlock, using the padlock staple protruding through the recessed handle. Not ADA compliant.

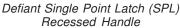
The result is an extremely rigid recessed handle door that is elegant in appearance, simple in design, and long on endurance.













Single Point Padlock Staple



	ze hes)	Single	Single Tier Double Tier 3 Tier			ier	
W	D	60" Opening Ht. Cat. No.	72" Opening Ht. Cat. No.	30" Opening Ht. (60" overalll ht.) Cat. No.	36" Opening Ht. (72" overall ht.) Cat. No.	20" Opening Ht. (60" overall ht.) Cat. No.	24" Opening Ht. (72" overall ht.) Cat. No.
12	12	6P129	6P157	6P213	6P245	6P287	6P281
12	15	6P131	6P159	6P215	6P247	6P289	6P283
12	18	6P135	6P161	6P217	6P249	6P291	6P285
15	15	6P143	6P169	6P225	6P257	6P293	6P301
15	18	6P145	6P171	6P239	6P259	6P295	6P303
15	21	6P147	6P173	6P241	6P261	6P297	6P305
18 18 18 18	15 18 21 24	6P149 6P151 6P153 6P155	6P175 6P177 6P179 6P181	6P223 6P227 6P229 6P231	6P263 6P265 6P267 6P269	- - -	- - -
24	18	6P123	-	6P233	6P271	-	-
24	21	6P125	-	6P235	6P273	-	-
24	24	6P127	-	6P237	6P275	-	-

Order Group Ends for Invincible II Single Point Latch lockers from page 71.



Stadium Locker











ALL-WELDED

All-Welded with 4" base



Shelf and Security Box

Shelf and Footlocker

Shelf, Security Box and footlocker



The Right Locker for Players and Their Equipment



Penco's new Stadium lockers are ideally suited for athletic team rooms, fire fighter's equipment or any other application where easy access to uniforms and/or equipment is required.

They are available in different configurations: the minimum configuration has a

full width shelf, 2 coat hooks and a coat rod. You can add a lockable security box, a lockable foot locker that doubles as a bench, or both. The open front and visually perforated sides create full ventilation while allocating a specific storage space to each individual.

Fully accessorized, Stadium lockers are outfitted with a security box fastened to a full width shelf, and a footlocker

with a hinged, reinforced seat at the base. Both compartments are lockable to secure valuable items. The front of the footlocker is recessed for an external padlock, and a stainless steel strike plate protects the finish. The footlocker design saves floor space by eliminating the clutter of open locker doors and the need for separate locker room benches.

Stadium lockers are available in All-Welded construction or K.D. (knocked down, or unassembled). They are available in 24" or 33" widths and 18", 21" or 24" depths. K.D. lockers are 72" high; All-Welded models have an integral 4" base, bringing the total height to 76". Color selection is from any one of Penco's 21 baked enamel decorator colors.

Size	e (incl	(inches) K.D. Stadium Lockers with Perforated Sides					Size (inches)			Welded Stadium Lockers with Perforated Sides			
W	D	Н	With Shelf	With Shelf & Security Box	With Shelf & Footlocker	With Shelf, Footlocker & Security Box	W	D	Н	With Shelf	With Shelf & Security Box	With Shelf & Footlocker	With Shelf, Footlocker & Security Box
24	18	72	6KFD10	6KFD11	6KFD12	6KFD13	24	18	76	6WFD10	6WFD11	6WFD12	6WFD13
24	21	72	6KFD20	6KFD21	6KFD22	6KFD23	24	21	76	6WFD20	6WFD21	6WFD22	6WFD23
24	24	72	6KFD30	6KFD31	6KFD32	6KFD33	24	24	76	6WFD30	6WFD31	6WFD32	6WFD33
33	18	72	6KFD40	6KFD41	6KFD42	6KFD43	33	18	76	6WFD40	6WFD41	6WFD42	6WFD43
33	21	72	6KFD50	6KFD51	6KFD52	6KFD53	33	21	76	6WFD50	6WFD51	6WFD52	6WFD53
33	24	72	6KFD60	6KFD61	6KFD62	6KFD63	33	24	76	6WFD60	6WFD61	6WFD62	6WFD63

Stadium Locker

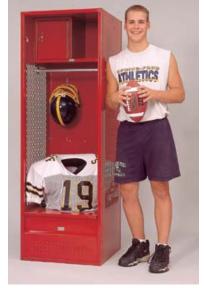


MATERIALS:

SHEET STEEL: All parts made from prime grade mild cold rolled sheet steel free from surface imperfection, and capable of taking a high grade enamel finish.

FINISHING: Chemically pretreated metal with a six stage cleaning phosphatizing and metal preparation process. Finish coat shall be hot airless electrostatically applied enamel baked on at 350 to 400 degrees. Select colors from manufacturer's minimum standard 21 colors. All lockers shall be painted inside and outside with the same color.

EQUIPMENT: Coat hooks and coat rods are zinc plated. Truss fin head bolts and hex nuts are zinc coated.



Ideal for Athletic Team Rooms along with Fire and Police Stations

FABRICATION GENERAL:



All-Welded

CONSTRUCTION: Fabricate lockers square, rigid and without warp. Metal faces shall be flat and free of distortion. Lockers shall be preassembled by welded construction, all welds shall be free of burrs.

BODY: All locker body components shall be made of cold rolled steel specially formed for added strength and rigidity and to ensure tight joints at fastening points. Tops & bottoms shall be 16 gauge notched and formed. Bottoms have two reinforcement channels for added strength. Sides shall be 16 gauge and backs 18 gauge.



K.D. (Knocked Down)

CONSTRUCTION: Lockers shall be fabricated square, rigid and without warp.

BODY: Bolt spacing in locker body construction not to exceed 9" o.c. All locker body components shall be made of cold rolled steel specially formed for added strength and rigidity and to ensure tight joints at fastening points. Tops & bottoms shall be 16 gauge with three sides formed 90 degrees and the front offset formed to be flush with the horizontal frame member. Bottoms have two reinforcement channels for added strength. Shelves shall be 16 gauge with four sides formed to 90 degrees, the front edge shall have a second bend. Sides shall be 16 gauge and backs 18 gauge.





All-Welded & K.D.

LOCKER FRAME: Locker frame members to be not less than 16 gauge formed to a channel shape. Intermembering parts to be mortised and tenoned and electrically welded together in a rigid assembly capable of resisting strains.

VENTILATION: For maximum ventilation locker has an open front. Side panels are to be diamond perforated unless specified.

NUMBER PLATES: Each locker to be supplied with a polished aluminum number plate, 2-1/4" wide x 1" high, with black numerals not less than 3/8" high. Number plates to be attached to center of shelf with two aluminum rivets.

INTERIOR EQUIPMENT: Each locker is provided with: a set of rod holders and one coat rod, two single prong hooks (to be bolted to the back panel).

SHELF: 16 gauge with four sides formed to 90 degrees, the front edge shall have a second bend.

OPTIONS:

SECURITY BOX: 14 gauge lockable door with a 16 gauge side panel. The door is attached to a welded frame with a continuous hinge. The hinge is mounted to door with aluminum rivets. The door is locked with a single point latch by a padlock or built in lock. A lock hole cover plate shall be provided for use with padlocks. Security box door frame members to be not less than 16 gauge formed to a channel shape. Vertical members to have an additional flange to provide a continuous door strike. Intermembering parts to be mortised and tenoned and electrically welded together in a rigid assembly capable of resisting strains.

FOOTLOCKER: Front footlocker panel includes single point latch with padlock strike plate and mini louvers. Footlocker top has a continuous hinge. Opening and closing is quieted by rubber bumpers mounted to the contact points. Seat is strengthened with two reinforcement channels welded to bottom of seat. Two side seat supports are fastened to side panels and inserted in a support tab on the front locker panel for added strength.



K.D. BODY: Locker shall be assembled using rivets.

EXECUTION:

INSTALLATION: Install metal lockers at location shown in accordance with manufacturers instructions for plumb, level, and flush installation.

ANCHOR LOCKERS to the floor and wall 48" on center or less as recommended by the manufacturer.



Locking Security Box



Footlocker Doubles as Seat and Storage Locker

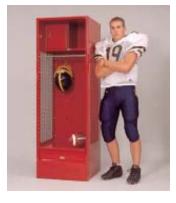


Reinforced Base

ADJUST & CLEAN: Adjust doors and latches to operate without binding. Verify that latches are operating satisfactorily.

TOUCH UP marred finishes with factory supplied paint.

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







All-Welded Lockers



Now you can choose!

Penco's All-Welded Lockers give you a choice between our traditional K.D. locker lines, and our new All-Welded setup lockers.

All-Welded lockers offer superior resistance to hard use and abuse. All body parts are welded into a single rigid unit to resist damage for the life of the product. The door frame and locker side are

16 gauge. The backs, tops and bottoms of each group of lockers are made from one piece of steel that spans multiple lockers. The doors are made from 14 gauge steel and include a continuous hinge. Sides, tops, bottoms and shelves are 16 gauge steel. Backs are 18 gauge.

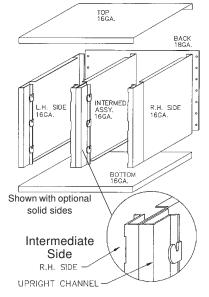
Since All-Welded lockers are shipped pre-assembled, the time and expense of on-site installation is greatly reduced. This is a great help where labor is either extremely expensive, or hard to find. Groupings will be determined by Penco based upon the floor plan layout drawings submitted with the order (not to exceed 54").

All-Welded lockers are available as standard in ventilated models with diamond-shaped perforations in the doors and sides for maximum visibility and ventilation, or with solid door and side construction, with or without door louvers. The perforated models are ideal for heavy duty athletic use, where ventilation is important to aid the drying of athletic gear.

All-Welded lockers come in a variety of styles. Single tier, double tier and triple tier all have stainless steel recessed handles and multi point latching with quiet latch channels. Four, five, six, eight and nine tier box locker doors have a padlock hasp and a friction catch. All will accept built-in locks and padlocks, and all have rubber bumpers on the latch hooks to reduce noise. An available option on box lockers is a spring-loaded positive catch.

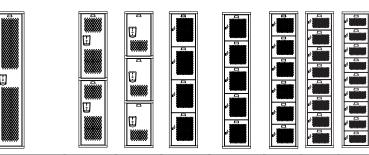
Double and triple tier lockers have welded horizontal frame intermediate cross members between the doors for added strength and security. 24" wide doors are one piece, full width.

Standard fillers are used when required. Sloped top construction is available as an accessory by ordering slope hoods, which are field installed. Standard construction is flat top without legs. Lockers can be ordered with 4" high legs or 4" high Channel Bases, as options.









(inches)		1 Tie	er		2 1	ier	3 T	ier	4 1	ier	5	Tier	6 Tier	8 Tier	9 Tier
WxD	36-1/2"	48-1/2"	60"	72"	30"	36"	20"	24"	15"	18"	12"	14.4"	12"	9"	8"
9 12	-	-	✓	✓	-	-	-	-	-	-	-	-	-	-	-
9 15	-	-	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	\ \ \ \ \	-	-	-	-	-	-	-	-	-	-	-
9 18		-	√	✓		-	Ŀ	-	<u> </u>	-		-	_	_	-
12 12	/	V	√	√	√	√	V	\	V	√	√	✓	√	√	✓
12 15	🗸	✓	✓	\	√	\ \ \ \	V	\	V	\	/	\ \ \ \	V	√	√
12 18	 	√	✓ ✓	√	V		√ ./	√	·/	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	·/	\ \ \	✓	· /	~
12 21 12 24	-	_	V ✓		V ✓	v √	∨	∨	√	V ✓	√	v	∨ ✓	√	_
	_		√	✓	√	√		√		√		1	_	_	
15 12 15 15	-	-	∨	__	\ \ \	<u>`</u>	\ \	\	\ \	\ \ \	\ _	\ \ \	∨ ✓	\ _	V
15 18]	_	·	· /	· ✓	· /	· ✓	· /	· ✓	· ✓	· ✓	· /	· /	· /	· ✓
15 21	_	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
15 24	-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	-
18 18	-	-	✓	✓	✓	✓	√	✓	-	-	-	-	-	-	-
18 21	-	-	✓	✓	✓	✓	✓	✓	-	-	-	-	-	-	-
18 24	-	-	√	✓	✓	✓	✓	√	-	-	-	-	-	-	-
24 18	-	-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-
24 21	-	-	✓	✓	✓	✓	-	-	-	-	-	-	-	-	-
24 24			✓	✓	\checkmark	✓	-	-	-	-	-	-	-	-	-

All-Welded Lockers





Single Tier and Double Tier with Solid Door and Sides



3 Tier and 4 Tier with Standard Diamond Perforation



5 Tier and 6 Tier with Standard Diamond Perforation



8 Tier and 9 Tier with Standard Diamond Perforation

Base Options



No Legs or Base – The standard for welded lockers (not engineered for use with Z Base).



4" Legs – Permanently welded to the bottom of the locker for installations where there is no permanent base installed. Can be anchored to floor.



Channel Base – A permanent integral 4" high channel steel base system to enclose front, sides and rear.

How to Order All-Welded Lockers

(Maximum Group Width Is 54")

- 1. Make careful measurements of the area where the lockers are to be installed (remember that you <u>cannot</u> detach a locker frame from a welded group to make it fit).
- 2. Make a floor plan drawing showing the lockers in place.
- 3. Determine the desired type and size of lockers (1 tier, 2 tier, etc.). If there are mixed types (i.e; 2 tier and 6 tier, alternating), code the layout drawing to show the location of each type.
- 4. Complete the *Penco Welded Locker Information Sheet* for each type or size of welded lockers that you have on the job.
- 5. Determine the total desired number of frames of each type and size of locker that are required on the job, and include the totals on your order.
- **6.** After receipt of an order for All-Welded lockers with the appropriate floor plan and Information Sheet, Penco will detail from your drawings for grouping purposes. Groupings shall be determined by Penco and noted on drawings.

NOTE: Welded lockers have no legs or Channel Base unless they are ordered as an option.

<u>Welded Locker Growth</u> When you install an All-Welded Locker group next to another All-Welded Locker group the overall width increases by 1/16" per group. *Example: A locker group of 45" installed next to a locker group of 45" results in a total overall width of the two locker groups of 90-2/16".*



All-Welded Specifications

MATERIALS:

SHEET STEEL: All parts made from prime grade mild cold rolled sheet steel free from surface imperfection, and capable of taking a high grade enamel finish.

FINISHING: Chemically pretreat metal with a six stage cleaning phosphatizing and metal preparation process. Finish coat shall be hot airless electrostatically applied enamel baked on at 350 to 400 degrees. Select colors from manufacturer's minimum standard 21 colors. All lockers shall be painted inside and outside with the same color.

FABRICATION GENERAL:

CONSTRUCTION: Fabricate lockers square, rigid and without warp. Metal faces shall be flat and free of distortion. Lockers shall be preassembled of welded construction, all welds shall be free of burrs. Grouping shall be the most practical that conforms to the job requirement. No bolts, nuts or rivets shall be allowed in the assembly of main locker groups. Each locker group shall be securely welded into a one piece structure.

SIDE AND DOOR FRAME: Shall be manufactured from 16 gauge steel. The front edge of the frame shall be formed to a channel shape with a continuous door strike. Two and three tier lockers shall have intermediate 16 gauge channel shaped horizontal frame members attached to the side frames with mortise and tenon construction, and securely welded. Intermediate frames shall consist of two 16 gauge frame channels securely welded together.

TOPS: Shall be 16 gauge notched and formed. Each group of lockers shall have one continuous flat top.

BOTTOMS: Shall be 16 gauge notched and formed. Each group of lockers shall have one continuous bottom suitable for anchoring to wood or concrete bases.

SHELVES: Shall be 16 gauge, flanged on four sides with an additional return flange on the front edge to increase strength.

BACKS: Shall be solid 18 gauge cold rolled steel. One piece steel backs for groups to 48" wide. Groups over 48" wide shall have two piece backs.

DOORS: Doors 20" or higher shall be formed from one piece 14 gauge cold rolled sheet steel. Formations shall consist of a full channel shape on the lock side of adequate depth to fully conceal the lock bar, channel formation on the hinge side, and right angle formations across the top and bottom. Doors over 15" wide and over 30" high shall have a 3" wide 20 gauge full height reinforcing pan welded to the inside face of the door on 6" centers.

Doors for box lockers 4, 5, 6, 8 & 9 tiers high shall be 14 gauge steel and have channel formations on lock side and hinge side and have right angle flanges on the top and bottom.

DOOR HANDLE & LATCHING 1, 2 & 3 TIER: Handles shall be recessed in the door and be finger lift control. The 20 gauge drawn pocket shall be brushed stainless steel securely fastened to the door with two tabs plus a positive tamper resistant decorative fastener. The pocket shall be of sufficient depth to prevent a combination padlock, built-in combination lock or key lock from protruding beyond the face of the door. A lock hole cover plate shall be provided for use with padlocks.

The lifting piece shall be 14 gauge formed steel, attached to the latching channel with one concealed retaining lug and one rivet assuring a positive two point connection. Handle finger lift shall have a padlock eye for use with a 9/32" diameter padlock shackle. It shall have a sound deadening molded comfortable finger lift.

Doors to have latch clip engaging the door frame at three points on 60" & 72" high and two points on 20" through 36" high doors. Locking device to be positive, automatic type, whereby locker door may be locked when open, then closed without unlocking. One rubber silencer shall be firmly secured in the frame at each heavy gauge latch hook. Latch clips shall be glass filled nylon for long life and low friction and shall hold doors shut by engaging the latch hooks. Latch hooks on diamond-perforated lockers shall have tamper guards. The latch channel assembly shall be quieted by the use of unique nylon glides to reduce noise.

DOOR HANDLE & LATCHING 4 TO 9 TIER BOX LOCKERS: Doors shall be punched for use with padlocks or built-in locks. Doors for use with padlocks shall be equipped with an 18 gauge combination door pull,

staple and lock hole cover plate with integral friction catch.

VENTILATION: All sides and doors 20" or higher shall be perforated with diamond-shaped openings 3/4" wide x 1-1/2" high in a quantity and pattern to insure maximum ventilation and maintain structural strength. All other doors shall have small diamond-shaped perforations 7/16" wide x 15/16" high.

NUMBER PLATES: Each locker to be supplied with a polished aluminum number plate, 2-1/4" wide x 1" high, with black numerals not less than 3/8" high. Number plates shall be attached to the face of the door with two aluminum rivets.

HINGES: 16 gauge continuous type hinge riveted to the frame and the door for the full height of the door.

INTERIOR EQUIPMENT: Single tier lockers 48-1/2" or higher shall have one hat shelf located approximately 9" down from the top of the locker.

Lockers 20" or more in height and up to 15" wide to be supplied with one double prong ceiling hook and two single prong wall hooks, over 15" wide to be supplied with a double prong ceiling hook and four single prong wall books

All coat hooks shall be forged steel with ball ends, zinc plated.

LOCKER ACCESSORIES: Lockers shall be furnished with the accessories selected from the list below:

- Continuous metal base: If required base shall be 4" high 16 gauge, integral with locker bottom.
- Legs: If required, each group of lockers shall be furnished with four 14 gauge legs each 4" high and welded to the locker bottom.
- For additional accessories see Accessory Specifications.

OPTIONS:

DOORS: Box locker doors 4 to 9 tier, as an alternative option each door shall be furnished with a stainless steel padlock strike.

DOOR HANDLE & LATCHING 4 TO 9 TIER BOX LOCKERS: As an alternate option, each door shall be provided with a finger operated 11 gauge slam latch with an electrogalvanized trigger, and a spring contained in a 14 gauge case welded to the door. The spring latch engages a 13 gauge hasp welded to the frame. Rubber bumpers shall be securely installed in the frame.

VENTILATION: If specified, all perforations may be deleted. If deleted, louvers may be added to the doors.

DOOR VENTILATION: Delete diamond perforations in the doors and substitute with standard louvers, or mini louvers may be substituted and shall be 5/8" wide x 1/4" high. Louvers shall be placed in doors in manufacturer's standard pattern.

ADA LOCKERS: Handicap lockers shall have recessed handles and shall be single tier or the lower opening of a double tier locker. Locker bottom shall be a minimum of 9" off the floor, or an extra shelf placed 9" off the floor. Single tier lockers shall have a shelf 48" off the floor. Doors assigned for handicapped use shall have an appropriate symbol sign.

EXECUTION:

INSTALLATION: Install metal lockers at location shown in accordance with manufacturers instructions for plumb, level, and flush installation.

ANCHOR LOCKERS to the floor and wall 48" on center or less as recommended by the manufacturer.

INSTALL SLOPING HOODS AND METAL FILLERS using concealed fasteners. Provide flush hairline joints against adjacent surfaces.

INSTALL BENCHES by fastening bench tops to pedestals and securely anchoring to the floor using appropriate anchors for the floor material.

ADJUST & CLEAN: Adjust doors and latches to operate without binding. Verify that latches are operating satisfactorily.

TOUCH UP marred finishes with factory supplied paint.

Penco Products, Inc. reserves the right to vary specifications consistent with our policy of continuous product improvement.

A11-Welded Defiant™ (SPL)



ALL-WELDED DEFIANT SINGLE POINT LATCH SPECIFICATIONS

When specifying <u>All-Welded Lockers with Defiant Single Point Latch (SPL) doors</u>, <u>substitute</u> the following specifications for "Doors", "Door Handle & Latching, 1, 2 & 3 Tier", "Ventilation" and "Hinges" to the

All-Welded specification on the following page. *Delete* "Door Handle & Latching 4 to 9 Tier Box Lockers."

DOORS: Doors 20" or higher shall be formed from one piece 14 gauge steel. Formations shall be box formed stiffeners on the hinge and latch sides. Both formations shall have a 1/2" flange spot welded to the inside face of the door. Top and bottom flanges shall have one 90 degree bend. For long life,

the door shall be manufactured from one integral piece. Door shall be manufactured to allow maximum ventilation and stiffness utilizing two box formed stiffeners.

HINGES: 16 gauge continuous type hinge riveted to the frame and the door for the full height of the door.

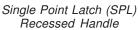
DOOR HANDLE & LATCHING 1, 2 & 3 TIER: Handles shall be recessed in the door. The formed pocket shall be brushed stainless steel securely fastened to the door with two lugs plus a positive tamper resistant fastener. The pocket shall be of sufficient depth to prevent a combination padlock, built-in combination lock or key lock from protruding beyond the face of the door. A lock hole cover plate shall be provided for use with padlocks. All pockets shall be 20 gauge drawn

steel for superior strength. Door pull shall be formed in the pocket. Pocket and pull shall be integral. Doors shall have a catch to retain unlocked doors in the closed position. Locking shall be accomplished by an 11 gauge lug welded to the locker frame. The lug shall include a surface for the bolt of a built-in combination or key lock to engage and a padlock staple that protrudes through the 20 gauge pocket. The lug shall include an anti pry flange and notch to deter prying open when locked. Rubber door silencers shall be firmly attached to the locker frame.

VENTILATION: All side frames and doors 20" or higher shall be perforated with diamond-shaped openings 3/4" wide x 1-1/2" high in a quantity and pattern to insure maximum ventilation and maintain structural strength.









Single Point Latch Padlock Staple

The Single Point Alternative

The Defiant Single Point Latch (SPL) option for All-Welded lockers is for those desiring extra strength and the low maintenance inherent in a door with no moving parts. It is available with diamond shaped perforations, louvers or as a solid door.

The door is roll formed from heavy 14 gauge steel. Strengthening boxbeams are formed as integral parts of each side of the door (patent 5,802,801). The return flanges of the box beams are spot welded to the back of the door.

Each door has a patented deep drawn stainless steel handle with an integral door pull. The doors can be locked either with a built-in lock, or with a conventional padlock, using the padlock staple protruding through the recessed handle. Not ADA compliant.

The result is an extremely rigid recessed handle door with a minimum number of parts that is elegant in appearance, simple in design, and long on endurance.

WxD



1-Tier	2-Tier	3-Tier

(inches)	1-Tier	2-11er	3-Tier	
12 12 12 15 12 18	60" & 72" High	30" & 36" High	20" & 24" High	
15 15 15 18 15 21	60" & 72" High	30" & 36" High	20" & 24" High	
18 15 18 18 18 21 18 24	60" & 72" High	30" & 36" High	24" High	
24 18 24 21 24 24	60" & 72" High	30" & 36" High	-	



Slope Top Construction

Slope tops are often used instead of flat tops to prevent the accumulation of dust and debris, and to discourage the use of locker tops as storage areas. There are three different types of slope top construction: Unit Slope Tops, Slope Hoods, and Slope Top Kits. Each is explained below.

Unit Slope Tops

Unit Slope Tops cover the width of one locker frame only. Lockers with Unit Slope Tops have sides with mitered top ends with a rise equal to 1/3 of the locker depth, plus longer backs that meet the rear edge of the slope top. Unit slope tops are used in place of the standard flat tops. Order the appropriate locker plus the proper slope top size. (Not for use on Invincible II or All-

Welded lockers).

		Cat. No.	
W	D	Η	Cat. No.
999	12 15 18	1 1 1	60332C 60334C 60336C
12 12 12 12	12 15 18 21	1 1 1 1	60338C 60340C 60342C 60344C
15 15 15 15	12 15 18 21	1 1 1	603450C 60346C 60348C 60350C
18 18 18	18 21 24	-	60352C 60354C 60356C
24 24 24	18 21 24	- - -	60364C 60366C 60368C

Unit Slope Tops

Size (Inches)

Slope Top Kits

Designed to convert stock flat top lockers into slope top lockers in groups of 3 wide. Each Kit contains 3 tops, 3 backs and 4 ends. Also available for quick shipment in 028 Gray. (Not for use on Invincible II or All Welded lockers.)

5	Slope Top Kits								
Size	e (Incl	nes)	Cat Na						
W	W D H		Cat. No.						
12	12	4	60230H						
12	15	5	60232H						
12	18	6	60234H						
15	15	5	60238H						
15	18	6	60240H						
18	18	6	60244H						



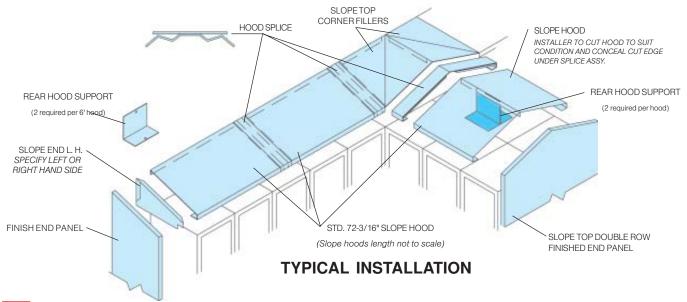
Continuous Slope Hoods

Continuous slope hoods fit on top of flat top lockers. They can be used on new lockers, or on a retrofit basis. All hoods are furnished in 72" lengths and must be cut to length during installation. Intermediate splices, ends and rear supports (2 per hood) complete the installation, and must be ordered separately.



	Slope Hoods									
	Size	e (Incl	Cat Na							
	W	D	Н	Cat. No.						
1	72	12	5	66144H						
	72	15	6	66147H						
	72	18	7	66150H						
	72	21	8	66153H						
	72	24	9	66156H						

Size (Inches)		Slope LH	Ends RH	Hood Splice	Rear Support
D	Н	Cat.	No.	Cat. No.	Cat. No.
12	5	66158H	66159H	66168C	66173C
15	6	66160H	66161H	66169C	66174C
18	7	66162H	66163H	66170C	66175C
21	8	66164H	66165H	66171C	66176C
24	9	66166H	66167H	66172C	66177C



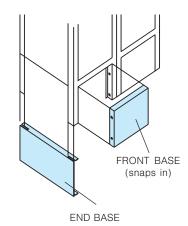


Individual Closed Bases



Closed Bases								
Size	e (Incl	Cat. No.						
W	D	Н	Cat. No.					
	Fro	nt E	Bases					
9 12 15 18 24		66666	60216C 60217C 60218C 60219C 60220C					
	End Bases Single Row							
1 1 1 1 1	12 15 18 21 24	666666	60204C 60205C 60206C 60207C 60208C					
End Bases Double Row								
-	24 30 36	6 6 6	60209C 60210C 60211C					

Front and end bases are designed to fit between standard Penco 6" legs. They present a clean flush appearance and prevent the accumulation of dust and dirt under the lockers. (Not for use on All-Welded lockers.)



(slips over legs during locker assembly)

Fillers

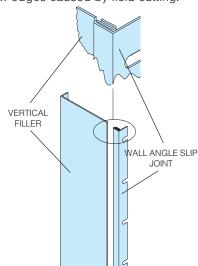
Penco provides standard fillers to adapt lockers to a wide range of field conditions and provide a professional, finished appearance.

They can be used to cover columns, pipes or other obstacles in a row of lockers, or fill the gap between the lockers and a wall.

A. Vertical Fillers

These come in three widths and are designed to be used in conjunction with Wall Angle Slip Joints for a solid fit and smooth finish. The slip joint conceals any raw edges caused by field cutting.

A. Vertical Fillers							
Size	(Incl	hes)	Cat. No.				
W	D	Η	Cal. NO.				
Fillers, Vertical Angle							
5 5		60 72	66112C 66115C				
999		60 72 78	66114C 66117C 66127C				
12 12 12	1 1 1	60 72 78	66113C 661141C 66116C				
Wa	all Ar	ngle S	Slip Joints				
1 1		60 72 78	66118C 66119C 66121C				



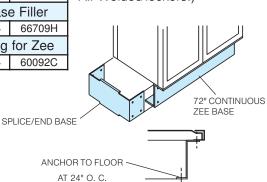
Zee Bases

Zee Base							
Size	Size (Inches) Cat. No.						
W	D	Н	Cat. No.				
Front Zee Base							
72	-	4	66700H				
S	plice Sir	e/En igle	d Base Row				
-	12 15 18 21 24	4 4 4 4	66701H 66702H 66703H 66704H 66705H				
S	plice Do	e/En uble	d Base Row				
1 1 1	30 24 36	4 4 4	66707H 66706H 66708H				
-	Zee	Bas	e Filler				
-	-	4	66709H				
R	ear	Leg	for Zee				
-	-	4	60092C				

Zee bases raise lockers without legs 4" off the floor when there is no concrete or wood base. They provide a toe space in the front and a concealed flange for floor anchoring at the rear. A special 4" high rear leg can be ordered to simplify installation.

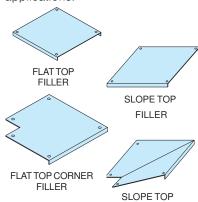
Zee Bases are available only in 72" lengths, and may need to be cut to fit at the time of installation. Splices/End Bases are used at ends of rows, and where the front sections join. (Not for use on

All-Welded lockers.)



B. Top Fillers

Top Fillers cover gaps between tops of lockers. They overlap the locker tops and can be field cut to allow for pipes, etc. There are separate designs for flat top vs. slope top, and in-line vs. corner applications.



CORNER FILLER

	_	_					
B. Top Fillers							
Size	(Inch	ies)	Cat. No.				
W	D	Η	Cat. No.				
	Fla	at T	op Fillers				
15 15 15	12 15 18	1 1 1	661321C 661322C 661323C				
	Slo	pe [·]	Top Fillers				
15 15 15	12 15 18	1 1 1	661371C 661372C 661373C				
Fl	at To	р (Corner Fillers				
12 15 18	12 15 18	1 1 1	66138C 66139C 66140C				
Slo	pe 7	ор	Corner Fillers				
12 15 18	12 15 18	-	66100C 66101C 66102C				



Extra Steel Locker Shelves

Extra locker shelves can be added to K.D. lockers to meet special user requirements. Most lockers have extra holes already punched into backs and

side panels for mounting. In some cases shelf mounting holes may need to be drilled. Please consult your Penco sales representive for shelf mounting requirements.



Single Tier Invincible II Locker with additional shoe shelf

Tuff-Stuff® Plastic Locker Bottom & Shelf Insert

Penco lockers can now be equipped with solid plastic Tuff-Stuff bottoms. Tuff-Stuff parts are rust-proof, impervious to chlorine, salt water and cleaners. It features a patented Drip-Lip® edge to contain moisture from wet shoes and clothing. The parts can also be ordered with new lockers. They are colored to match 028 Gray and 012 Tawny Tan.

Original								
WxD	W x D W x D							
12" x 12"	12" x 15"	12" x 18"						
Renew								
WxD	WxD	WxD						
12" x 12"	15" x 12"	18" x 12"						
12" x 15"	15" x 15"	18" x 18"						
12" x 18"	15" x 18"	18" x 18"						

The components come in two styles: the "Original" is designed to replace the steel locker top or bottom. It is not shipped with hardware. The "Renew" version is designed to fit on top of an existing locker shelf or bottom. This version is supplied with four self-tapping zinc coated fasteners and require no special tools.





Inserted on top of Shelf

Recess Trim

Recess Trim - 3" Recess trim bridges the gap between lockers and wall and/or soffits when the lockers are recessed into a wall.

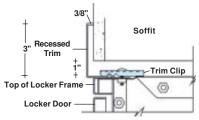


Single Tier

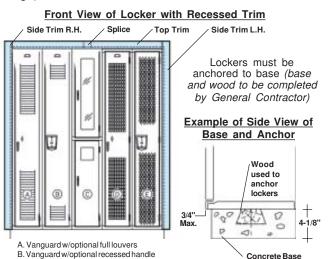
Vanguard Locker

with 5 shelves

Side View of Top Recessed Trim

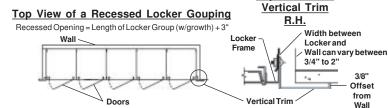


Soffit to be constructed by general contractor. Face of soffit must be flush with face of locker. There should be 1" between top of locker and bottom of soffit. The recessed trim extends 3/8" from face of soffit.



Recess Trim							
Size	(Inch	Cat. No.					
W	D	Н	Cal. NO.				
	Sid	e Trin	ı, LH				
3	1 1	63 60465C 75 60469C					
	Side Trim, RH						
3 3	1 1	63 75	60466C 60470C				
	T	op Tr	im				
74	-	3	60456H				
		Splice	е				
2	-	3	66105C				
Out	side	Corn	er Splice				
2	2	3	66108C				

Top View of 3"



K.D. Locker Growth

When you install a locker frame next to another locker frame the width of the lockers increases 1/16". Example: a grouping of 7 lockers that are 12" wide $(7 \times 12$ "= 84" locker grouping length without increase.

7 x 1/16" = 7/16" increase in length of locker grouping. Total overall length of locker grouping 84" + 7/16" = 84-7/16"). See page 21 for All Welded Locker Growth.

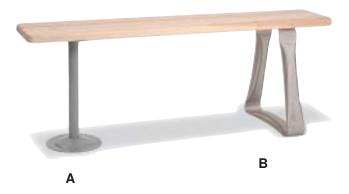
C. Fire extinguisher/waste bin door D. Vanguard w/optional visual perforations

E. Invincible II



Locker Room Benches and Pedestals

A natural accessory for any locker room. Benches add permanent comfort and order to the floor plan arrangement.



Bench Tops

Exceptionally strong. Made from selected hardwood and finished with clear lacquer.

9-1/2" deep x 1-1/4" thick. (Order Pedestals separately.)

Bench Pedestals

Penco offers a choice in bench pedestal styles, as shown below. Order two pedestals for benches 96" long or less; order

three pedestals for benches over 96" long.

		•
	Size (Inches)	Cat. No.
	W	Cal. No.
	36 48 60 72 84	9611 9600 9601 9602 9603
r	96 108 120 132 144	9604 9605 9606 9607 9608

Bench Tops

A. Heavy Duty Bench Pedestal—16-1/4" High

Pedestal consists of a heavy duty steel tube welded to top and bottom flanges. Hardware for fastening to the bench only is included. Pedestal must be anchored to the floor. Order two or more per bench (see above). Available for quick shipment in 028 Gray; available in all 21 colors. Cat. No. 60822H

B. Stainless Steel Free Standing Pedestal-16-1/4" High

This pedestal has a 14" wide base which allows for moveable free standing use. Holes in the bottom are provided for optional floor anchoring. Hardware supplied for fastening to the bench top.

Cat. No. 60827H



Mirror

Made of acrylic plastic that will not break in normal usage. Mirror has an adhesive backing for easy installation. Size is 6" wide x 8" high.

Cat. No. 96370

Locks

All Penco lockers are designed to accept built-in key or combination locks, padlocks and, in certain circumstances, coin or card locks. Locks are always ordered separately.

Built-in Key Locks

Available in flat key or grooved key models. Can be obtained in many different key combinations or keyed alike if required. Dead bolt construction. Reversible for LH & RH applications.



Built-in Combination Locks

Available with five combination changes for security year to year. Master key controlled. Stainless steel escutcheon plate. Use dead bolt models for all but box lockers, which use spring bolt. Available in LH & RH models for 2 Person and Duplex lock-



Combination Padlock

Available with and without master-keying. 3 number dialing. Rust resistant. Fits box lockers, Vanguard Handles, recessed handles and basket racks.



Coin/Card Operated

This lock is ideal for public or private applications that require security with the assurance that kevs will be returned, or as a revenue producer. Fits most Penco lockers. Available in 4 types: coin return, coin collect. token operation and card activated which is popular in the health club industry. Not available for Defiant lockers.



Digilock®

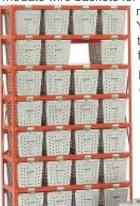
ADA compliant lock that opens by touching a Button Key to the lock. When opened, an LED light flashes and audio indicator sounds. Lock uses programming key to set user access and a master key for administrative or management use.





Basket Racks

An economical shelving rack specially designed to accommodate wire baskets for storage of athletic apparel, swim-



ming trunks, etc. Ideal for schools, YMCA's, clubs and other organizations with swimming pools and gym facilities.

Penco basket racks' open type construction with 13 ga. posts and 20 ga. shelves permits free circulation of air and easy visual inspection. Stability is achieved through the use of 12 ga. cross braces. 3" high 20 ga. dividers between

baskets and at ends of rows make basket contents inaccessible from adjacent openings.

Backs of shelves are turned

down to form a backstop to prevent baskets from being removed from the rear. Aluminum number plates with 3/8" high black letters and 14 ga. padlock hasp are furnished for each opening and fasten to the front edge of the shelf. Units

may be bolted together to form a double faced rack. Racks are 40" wide x 13-3/16" deep. Units can be equipped with casters. Order baskets separately.

Baskets

Three styles of baskets are available. All are supplied with number plate corresponding to a shelf position and are nominally 13" deep x 8" high.

- A. Perforated plate front and rear with wire on sides and bottom.
- B. Same a above, except with "Pilfer Guard", an extra plate that covers the top front of the basket.
- C. All plated wire construction.

No. of	Basket Racks							
Baskets High	Siz	Cat. No.						
	W	W D H						
For 9" wide Baskets 4 Baskets Wide								
7 8	40 40	13 13	70 79	65910 65930				
	For 12" wide Baskets 3 Baskets Wide							
7 8	40 40	13 13	70 79	65800 65830				
	Ва	skets	3					
A	Perfo	rated	Front					
	9 12	13 13	8 8	9646 09641				
В.	With F	Pilfer	Guard	I				
	9 12	13 13	8 8	9642 9643				
	C. A	dl Wii	re					
	9 12	13 13	8	9621 9620				

Food Industry Lockers

For ease of cleaning beneath lockers. Leg extensions increase the 6" height to 16". Order as piece



parts or in a kit specially designed for 18" deep lockers. Kits Include supports for a hardwood bench (order bench separately). Lockers must have standard 6" legs. (Not to be used with All-Welded lockers.)

Food Industry Locker Conversion							
Size	(Incl	nes)	Cat. No.				
W	D	Н	out. No.				
Kits (for 18" depth)							
1 Wide 16 64001							
3 W	3 Wide 16		64003				
	I	Rea	r Leg				
-	16		65540H				
	Ber	nch :	Support				
-	18	-	65541H				
End Front Leg							
-	-	16	65542H				
Inte	erme	ediat	e Front Leg				
-	-	16	65543H				



ADA Locker Guidelines

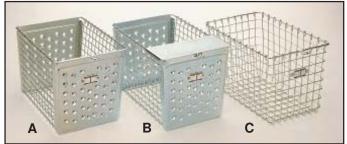
The Americans with Disabilities Act has several requirements for lockers. Penco lockers that comply with ADA requirements are:

Single tier 60" or 72" high with recessed handle and 3 point latch with the shelf placed no higher than 48" from the floor (we recommend FIELD DRILLING for required shelf location).

Double tier 36" with recessed handle and 2 point latch. Assign lower tier only to disabled.

If the person needs to use the locker bottom, it must be 9" off the floor or a shelf must be installed a minimum of 9" off the floor. (We recommend field drilling for required shelf location).

Other Requirements: The owner or architect may require a handicap access sign to be placed on the door (handicap decal part # 8690). In addition, the architect should show the location of the handicap lockers on the drawings and provide the necessary clear open space in front of the selected lockers.



Accessory Specifications





CLOSED BASES: Provide 18 gauge closed metal front and end bases on knocked down lockers having legs. Front bases shall be installed between legs without overlap or exposed fasteners. Provide end bases on exposed ends. Bases shall be finished to match lockers.

LOCKS: (Specify lock brand if desired, location and locker type if appropriate.) All locks shall have bolt types appropriate to the mode of locker operations.

Built-In Flat Key Locks: All lockers shall be equipped with built-in flat key type locks. All locks shall be master keyed to the same series. Provide two (2) keys for each lock and two (2) master keys for the system.

Built-In Grooved Key Locks (Pin Tumbler): All lockers shall be equipped with built-in grooved key type locks. All locks shall be master keyed to the same series. Provide two (2) keys for each lock and two (2) master keys for the system.

Built-in Combination Locks: All lockers shall be equipped with built-in combination locks. Locks shall have three-number combination dialing and be capable of at least five different combination changes. Master key, combination change key, if required, and combination control charts shall be provided to the owner.

Padlocks-Combination Type: Master keyed combination type padlocks shall be provided for all locker doors. Locks shall have three-number combination dialing. Master key shall be provided to the owner.

Coin Operated Locks: (Certain locker types and sizes will not accept coin locks; verify with locker manufacturer).

Coin operated locks shall be provided for all lockers.

Locks shall be (select one):

Coin return/deposit type; Coin collect/pay type; Card Lock.

Coin fee shall be (select one):

Token; One (1) Quarter; Two (2) Quarters; Card Lock.

Locks are to be installed on lockers using security-type machine screws.

VISUAL PERFORATION 16 Ga. & 18 Ga.: Locker doors shall be provided with 5/8" x 1-1/8" rectangular visual perforations.

ROUND PERFORATION: 24 gauge (Backs, Sides, Tops, Bottoms or Shelves) are to be punched with 1/2" diameter perforations grouped in 42 hole patterns. (For sides and backs, specify full perforations for maximum number of holes in the part, or standard perforations consisting or one group top and bottom in single-tier; one group each compartment in double-tier or box lockers).

FIRE EXTINGUISHER DOOR: Lockers designated on drawings to contain fire extinguisher shall be double tier type with upper door to have a glazed opening. Locks are to be omitted on fire extinguisher doors.

WASTE BIN DOORS: Lockers designated on drawings to contain waste bins shall be provided with a door cut-out with a top hinged internal flap door over the cut-out. Locks are to be omitted on waste bin doors.

CENTER PARTITIONS: Lockers shall have 24 gauge, full depth, vertical partitions between bottom and shelf.

RECESS TRIM: Vertical and/or horizontal recessed trim shall be provided where shown. Trim shall be formed from 18 gauge sheet steel and have a 3" face dimension. Trim shall be furnished in standard lengths as long as practical and attached to lockers with concealed clips. Finish caps and splices shall be provided as required. Trim shall be finished to match lockers.

ZEE BASES: Knocked down lockers shall be furnished with 4" high, 14 gauge zee base flanged outward at top for support of lockers and inward at bottom for anchoring to the floor.

FRONT FILLER: Fillers for spaces between lockers or between lockers and a wall shall be fabricated from 20 gauge sheet steel and formed

in an angle shape. Slip joint angles shall be 20 gauge sheet steel formed in an angle shape with a double bend on one leg to form a pocket which provides adjustable mating with the angle filler. Attachment shall be by means of concealed fasteners. Fillers shall be finished to match lockers.

EXPOSED LOCKER SIDES: Shall be furnished in 16 gauge without any extra holes.

FINISHED END PANELS: Finished end panels shall be installed on all exposed ends of lockers. They shall be formed from minimum 16 gauge sheet steel to match locker depth and height, and shall have a 1" edge dimension. All panels shall be installed with concealed fasteners. Panels shall be finished to match lockers.

CONTINUOUS SLOPE HOOD: Lockers shall be provided with continuous slope hoods formed from 18 gauge sheet steel with a slope that has a rise equal to 1/3 of the locker depth (18-1/2°), plus a 1" vertical rise at the front. Tops shall be provided in lengths as long as practical. Provide slip joints without visible fasteners at splice locations. Necessary end closures shall be provided. Tops shall be finished to match lockers.

UNIT SLOPE TOPS VANGUARD AND GUARDIAN LOCKERS: Lockers shall be provided with 24 gauge individual sloping tops. Tops shall be formed to a slope which rises 1/3 of the locker depth. Tops shall be finished to match lockers.

BENCHES: Locker benches shall be laminated selected hardwood, 1-1/4" full finished thickness. All corners are to be rounded and sanded. Surfaces shall be finished with two coats of clear lacquer. Bench tops are to be 9-1/2" wide and furnished in lengths of 3' through 12' (even foot increments).

HEAVY DUTY BENCH PEDESTAL: Pedestals shall consist of steel tubing with 10 gauge steel flanges welded to each end. The overall height of pedestal shall be 16-1/4". Pedestals are to be finished to match the lockers.

STAINLESS STEEL FREE STANDING BENCH PEDESTAL:

Shall be 2" diameter brushed 16 ga. stainless steel formed into a trapezoid. Bottom shall be 14" wide with two 5/16" diameter holes. Pedestal shall be 16-1/4" high for an overall bench height of 17-1/2". Top flange shall have four 5/16" diameter holes for fastening to the bench. Bench can be moveable or may be anchored.

WIRE BASKET RACKS: Shelving: Shelving units shall consist of 1" x 1" x 13 gauge angle posts punched for bolting shelves. Sway braces of 12 gauge steel shall be provided for the back and sides of the unit. Shelves shall be 20 gauge formed with downturned flanges at the back to act as a backstops.

Dividers: Dividers shall be 20 gauge, 3" in height with an attaching flange formed at right angles. Dividers are bolted to shelves.

Padlock Attachment: A padlock staple attachment shall be provided at the front edge of each shelf located to match the locking loop formed in the basket rim.

Casters (option): Mobility casters shall be 3" diameter, swivel-type bolted to each corner post.

Number Plates: Numbering shall consist of Penco standard aluminum number plates pop riveted to shelf face at each basket opening, and on the front of the basket.

Baskets: Baskets shall be (select size) 12" x 13" x 8" or 9" x 13" x 8" of (select type) all wire or wire mesh or perforated steel front type.

Pilfer Guards (option): Provide a sheet steel pilfer guard designed for field attachment to the top of the basket to cover the first 3" of depth.

Finish: Finish on baskets and pilfer guards consists of electroplating with bright zinc chromate. Basket rack posts, shelves and braces to be finished in color selected from manufacturer's standard colors.

Penco Products, Inc. reserves the right to vary specifications consistent with our policy of continuous product improvement.



Locker Overview



Vanguard[™] Lockers

Knocked Down Construction Standard Louvers Accepts Padlocks and Built-in Locks 6" Legs

1 and 2 Tier Vanguard Lockers Standard Die-cast Handle Multi-Point Latch

1, 2 and 3 Tier Vanguard Lockers Recessed Handle Option Multi-Point Latch

3-6, 8 and 9 Tier Box Lockers Friction Catch Handles

2 Person & Duplex Vanguard Lockers Standard Die-cast Handle Optional Recessed Handle Multi-Point Latch Latch Channel

Specialty Vanguard Lockers Dual, Executive Box Over Wall Mounted w/Coat Rod 7 & 8 Person 16 Person One High Box

Leg and Base Options No Legs Front Base, End Base Zee Base











Guardian[™] Lockers

Knocked Down Construction Solid Doors Recessed Handle 6" Legs

Standard Guardian Multi-Point Latch Accepts Padlocks and Built-in Locks

Guardian Plus Option Heavy Gauge Door (Standard Guardian Only)

Medallion Door Option Sound Damping Panel Welded to Door

Guardian Defiant Single Point Latch (no moving parts) Heavy Gauge Door Continuous Hinge Accepts Padlocks

Door Ventilation Options Louvers Mini Louvers **Diamond Perforations** (Plus Option Only)

Leg and Base Options No Legs Front Base, End Base Zee Base













Invincible II™ Lockers

Knocked Down Construction Heavy Gauge Door, Sides and Backs Diamond Perforations 6" Legs

1, 2 and 3 Tier Invincible II Lockers Multi-Point Latch Recessed Handle Accepts Padlocks and Built-in Locks

4-6, 8 and 9 Tier Invincible II Box Lockers Friction Catch Handles Accepts Padlocks and Built-in Locks

1, 2 and 3 Tier Invincible II Defiant Lockers Single Point Latch (no moving parts) Recessed Handle Continuous Hinge Accepts Padlocks

Door Ventilation Options Solid Louvers Full Louvers Mini Louvers

Leg and Base Options No Legs Front Base, End Base Zee Base









All-Welded Lockers

Factory Welded Assembly Heavy Gauge Door, Sides and Backs Diamond Perforations No Legs

1, 2 and 3 Tier All-Welded Lockers Multi-Point Latch Recessed Handle Continuous Hinge Accepts Padlocks and Built-in Locks

4-6, 8 and 9 Tier All-Welded Box Lockers Friction Catch Handles Accepts Padlocks and Built-in Locks

1, 2 and 3 Tier All-Welded Defiant Lockers Single Point Latch (no moving parts) Recessed Handle Continuous Hinge Accepts Padlocks

Door Ventilation Options Solid Louvers Full Louvers Mini Louvers

Leg and Base Options No Legs 4" legs 4" Channel Base

Lock Applications Penco



Recommended Lock Applications									
Locker Type Lock Type	Single Tier w/Latch Channel	Double Tier w/Latch Channel	16 Person & Multiple Tier w/o Latch Channel	Slam Latch	2 Person & Duplex	Defiant Single Point Latch	Remarks		
Master Locks									
1502 Padlock	ок	ок	ок	ок	ок	ок	Not Key Controlled		
1525 Padlock	ок	ок	ок	ок	ОК	ОК	Key Controlled		
1630 RH Combination Built-In	ок	ок	NO	NO	OK RH Door	NO	Key Controlled, Auto Locking		
1631 LH Combination Built-In	NO	NO	NO	NO	OK LH Door	NO	Key Controlled, Auto Locking		
1654 RH Spring Combination Built-In	NO	NO	ок	NO	NO	For Defiant Lockers we recommend a Padlock	Optional: for improved security on 16 Person & Multi-tier, remove the padlock staple and hole in door. Key Controlled, Auto Locking		
1670 Dead Bolt Combination Built-In	NO	NO	ок	ок	NO	NO	Key Controlled, Manual Locking		
1714 Flat Key Spring Bolt	NO	NO	ОК	NO	NO	Not Recom.	For improved security on 16 Person & Multi-tier, remove the padlock staple and hole in door. Key Controlled, Auto Locking		
1710 Groove Key Dead Bolt	ок	ок	ок	ок	ок	ок	Key Controlled Manual Locking		
			Zep	hyr Lo	cks				
1954 Padlock	ок	ок	ок	ок	ок	ок	Key Controlled		
1825 RH Combination Built-In	ок	ок	NO	NO	OK RH Door	NO	Similar to Master Lock 1630		
1824 LH Combination Built-In	NO	NO	NO	NO	OK LH Door	NO	Similar to Master Lock1631		
1823 RH Spring Combination Built-In	NO	NO	ок	NO	NO	For Defiant Locker we recommend a Padlock	Optional: for improved security on 16 Person & Multi-tier, remove the padlock staple and hole in door. Similar to Master 1654		
1827 Dead Bolt Combination Built-In	NO	NO	ок	ок	NO	NO	Similar to Master 1670		
	•		Other T	ypes o	Locks				
American 400, 400K & 401K Padlock	ок	ок	ок	ок	ок	ок			
Sentinel Coin Return	ок	ок	ок	NO	NO	NO	Cannot be used with recessed handle.		
Safe-O-Mat S6 Coin Lock w/Cash Box	ОК	ОК	ок	NO	NO	NO	If locker has recessed handles and latch channels, recessed handle adapter must be ordered. Minimun locker width 12"		
Flat Key Dead Bolt 09617	ок	ок	ок	ок	ок	ОК			
Lock Type	Single Tier w/Latch Channel	Double Tier w/Latch Channel	16 Person & Multiple Tier w/o Latch Channel	Slam Latch	2 Person & Duplex	Defiant Single Point Latch	Remarks		
All Padlocks must have a 9/32" Diameter Shackle with 7/8" from case to shackle for proper fit.									



Locker Applications



Vanguard[™] Lockers

High School Locker Room (shown with optional recessed handle)



Vanguard[™] Lockers

Golf Club Locker Room (shown with optional contrasting door frames)



Guardian[™] Lockers

Beach and Tennis Club Locker Room



All-Welded Lockers

High School Team Room (with diamond perforations)



Invincible II™ Lockers

High School Team Room (with zee base)



All-Welded Lockers

Employee Locker Room (shown with optional solid doors)



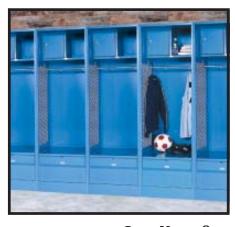
All-Welded Lockers

Athletic Complex Locker Room (with concrete base and Slope Tops)



Guardian™ Lockers

High School Corridor Lockers (with concrete base and Slope Tops)



All-Welded Stadium®

College Team Room (with security box and footlocker)

A Superior Paint Process

To achieve the strongest bond between the paint and the metal surface, all Penco painted products receive the most advanced metal treatment in the industry. This six stage pre-paint conditioning process is monitored by computer controlled sensors which provide real time feedback to the operators, and assure that all processes are completed to specifications.

During the process, a hot spray wash removes contaminants from the steel. A heated coating of phosphate film is applied creating a surface that resists corrosion and improves paint bonding.

Once the steel has been conditioned and dried, a premium custom blended enamel is applied by one of the industry's most efficient electrostatic paint systems. Products are then cured in a continuous curing oven, resulting in a beautiful painted finish with superior performance characteristics.

KEY TO TABLE

- **STD.** = No extra charge. Many models are Quick Ship and ship in 72 hours.
- **A** = No extra charge, available on production run.
- **C** = Consult with sales representative for availability and pricing (Special Price Inquiry)
- **E** = Extra charge applies per color surcharge schedule
- N/A = Not applicable

SPECIAL NOTES

- (1) Clipper and Erectomatic shelf boxes and their dividers are available in 028 Gray only. Clipper Modular Drawers are available in Putty 3 finish or 028 Gray.
- (2) Wide Span is painted 028 Gray unless otherwise specified.
- (3) Locker doors, frames and body parts are painted the same color. Two-tone finishes are available at additional cost. Contact your Penco representative for details.

Color Availability By Product Line.

Lockers are available in all 21 colors.

See chart below for color restrictions on other Penco Products.



	. 84.						500,000	
Use other side for accurate color representation	Clipper & Erectomatic Shelving (1)	RivetRite Shelving	Wide Span Shelving (2)	Pallet Rack	Shop Furniture	Cabinets	Lockers (3)	Quick Color Lockers
021 Gray Ash	С	С	O	С	С	O	А	N/A
028 Gray	STD.	С	STD.	С	STD.	STD.	STD.	STD.
073 Champagne	С	С	С	С	А	А	А	STD.
723 Light Putty	А	STD.	E	E	А	STD.	А	N/A
012 Tawny Tan	А	С	E	С	А	Α	А	N/A
701 Spray Green	С	С	А	С	С	С	А	N/A
952 Turquoise Teal	С	С	С	С	С	С	А	N/A
924 Peacock	С	С	С	С	С	С	А	N/A
812 Hunter Green	С	С	С	С	С	С	А	N/A
715 Lake Blue	А	С	E	E	А	С	А	N/A
826 Slate Blue	С	С	С	С	С	С	А	N/A
806 Marine Blue	E	С	С	С	С	С	А	STD.
822 Regal Blue	С	С	С	С	С	С	А	N/A
783 Iris	С	С	С	С	С	С	А	N/A
710 Sagebrush Yellow	С	С	С	С	С	С	А	N/A
720 Mandarin Orange	С	С	С	С	С	С	А	N/A
722 Patriot Red	С	С	С	С	С	С	А	N/A
767 Cardinal Red	С	С	С	С	С	С	А	N/A
736 Burgundy	С	С	С	С	С	С	А	STD.
848 January White	С	С	С	С	С	С	А	N/A
949 Jet Black	С	С	С	С	С	А	А	N/A

Exposure to high humidity, chlorine salts, abrasive cleaners, germicidal cleaners and acids can damage the finish and will void the guarantee.





Authorized Penco Distributor

STORAGE AND WORK AREA PLANNING SPECIALISTS









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