



Wide Span Shelving



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

Penco Wide Span is easily the quickest shelving product to assemble. There are a minimum number of parts that snap or fit into place quickly and easily. No bracing to add and no hardware required. Penco wide span is furnished in # 028 gray baked-on enamel finish.

Not recommended for fork truck loading.



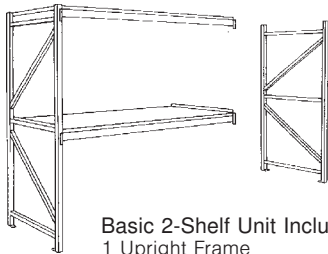
Wide Span Shelving Units



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.

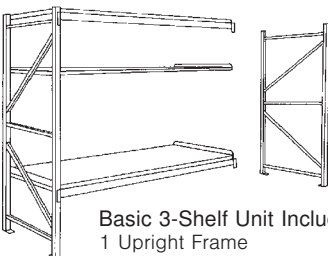
Two Shelf Units with Steel Shelves



Basic 2-Shelf Unit Includes:
 1 Upright Frame
 2 Steel Shelf Levels
 2 Pair Side Shelf Supports
 2 Pair Rigidity Beams
 (order rack ending kit separately)

Rack Ending Kit

		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



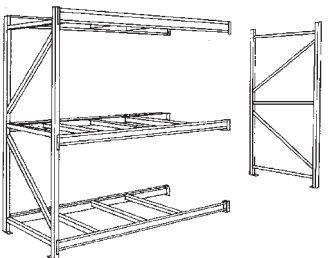
Basic 3-Shelf Unit Includes:
 1 Upright Frame
 3 Steel Shelf Levels
 3 Pair Side Shelf Supports
 2 Pair Rigidity Beams
 (order rack ending kit separately)

Rack Ending Kit

Three Shelf Units with Steel Shelves

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

Three Shelf Units with Steel Shelves



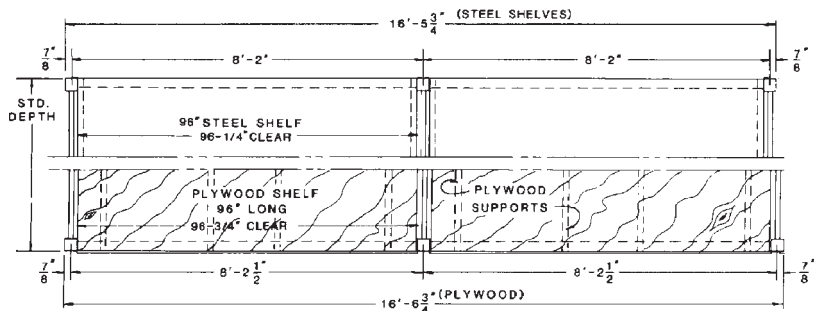
Basic 3-Level Unit for Plywood Includes:
 1 Upright Frame
 3 Pair Standard Plywood Beams
 3 Plywood Support Angles per pair of 72-1/2" Beams.
 4 Plywood Support Angles per pair of 96-1/2" Beams.
 (Plywood not included. Order rack ending kit separately)

Rack Ending Kit

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

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.



NOTE: ALL DIMENSIONS ARE NOMINAL

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



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).

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

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

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.



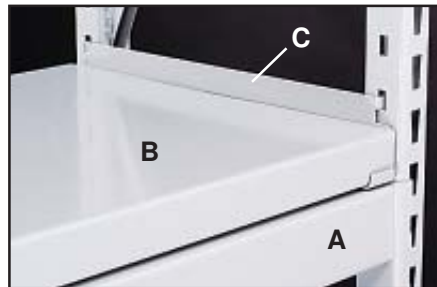
U. S. Patent No. 4,928,834

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.



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

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.

Width	Capacity (lbs.)* (per pair)	Cat. No. (per pair)
48-1/2"	2500	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.

Width	Capacity (lbs.)* (per pair)	Cat. No. (per pair)
48-1/2"	2500	210480
72-1/2"	2500	210720
96-1/2"	2500	210960

Rigid Wall Brackets

Used to fasten to wall for sturdy single row applications.

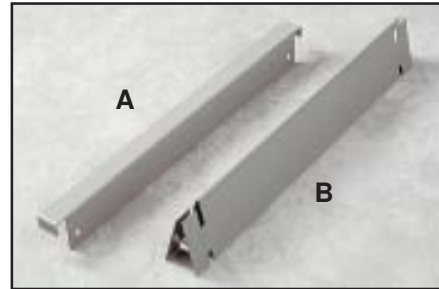


Includes hardware to fasten to frame.

Depth	Cat. No.
4"	5AR404
6"	5AR406
8"	5AR408
10"	5AR410

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) Std. Support	(B) Beam Brace/ H.D. Support	(B) Capacity Each
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-to-back 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.

* Capacity in pounds for evenly distributed load.