

WorkSafe™

Multi-Level Shelving Components



About Penco Products

Penco Products has set the standard for quality and design in material handling products, systems and equipment. During that time we have earned a reputation for well-built products, excellent engineering and attentive customer service.

All Penco's products are designed and constructed from structural steel components for optimum strength, rigidity and safety. Our engineers can provide solutions that meet the unique challenges of your facility. We carefully consider all of your specifications so that your Penco product is installed smoothly.



Our Facility

Penco Products designs and manufactures the highest quality products in a 375,000 square foot manufacturing facility, located in Hamilton, North Carolina.

Today, Penco Products employs a full time team members including a department of designers with support of professional structural engineers.

Penco Products strives to provide excellent service, products and on-time performance. For the most advanced products and services available, turn to Penco Products.

Customer Service

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

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



Contents



Stairs and Stair Towers.....	4
Landings.....	5
Handrail and Gates.....	6
Decking.....	7
Color Chart.....	8
Penco® Shelving Systems.....	9



GREENGUARD

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



Environmental Information

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



Stairs and Stair Towers

Stairs and Stair Towers

Penco offers a wide range of pre-designed stairs based on the height of existing decks. Penco also specializes in designing and fabricating custom stairs, landings and gates. Industrial stairs and stair towers are available with either open-riser or closed-riser designs, in welded or bolted construction, with stair treads offered in either open grate or diamond plate material.

Stair towers are used to access multi-level structures. Unlike individual stairs that are incorporated with rack and shelving systems, often stairs are required to be independent of the system, Penco stair towers are a self-supported structures that have multiple levels to exit onto the rack modules.

Stairs are constructed of heavy duty MC10 x 8.4# structural channel. Stringers are painted in Penco 005 Gray and handrails are painted in Penco 007 Safety Yellow. Deck heights over 12 ft. require an additional intermediate landing.



IBC Code Stairs

Deck Height	Treads	Weight (lbs.)	Horizontal Run	Catalog Number
up to 2'4"	3	304.08	2'-10½"	WIBC-36-28H
up to 2'11"	4	390.43	3'-9½"	WIBC-36-35H
up to 3'6"	5	459.46	4'-8½"	WIBC-36-42H
up to 4'1"	6	528.42	5'-7½"	WIBC-36-49H
up to 4'8"	7	597.39	6'-6½"	WIBC-36-56H
up to 5'3"	8	683.81	7'-5½"	WIBC-36-63H
up to 5'10"	9	752.76	8'-4½"	WIBC-36-70H
up to 6'5"	10	821.73	9'-3½"	WIBC-36-77H
up to 7'	11	908.05	10'-2½"	WIBC-36-84H
up to 7'7"	12	977.02	11'-1½"	WIBC-36-91H
up to 8'2"	13	1046.07	12'-½"	WIBC-36-98H
up to 8'9"	14	1115.02	12'-11½"	WIBC-36-105H
up to 9'4"	15	1201.36	13'-10½"	WIBC-36-112H
up to 9'11"	16	1270.32	14'-9½"	WIBC-36-119H
up to 10'6"	17	1339.36	15'-8½"	WIBC-36-126H
up to 11'1"	18	1408.33	16'-7½"	WIBC-36-133H
up to 11'8"	19	1494.66	17'-6½"	WIBC-36-140H
up to 12'	20	1552.92	18'-5½"	WIBC-36-144H

Note: Tread is 11" deep with 7" rise, 36" wide, closed treads with closed risers. Includes internal stair handrails.

OSHA Code Stairs

Deck Height	Treads	Weight (lbs.)	Horizontal Run	Model Number
up to 2'3"	2	152.16	1'-8"	WOSHA-36-27H
up to 3'	3	219.12	2'-6¾"	WOSHA-36-36H
up to 3'9"	4	297.10	3'-4½"	WOSHA-36-45H
up to 4'6"	5	337.42	4'-2½"	WOSHA-36-54H
up to 5'3"	6	387.86	5'	WOSHA-36-63H
up to 6'	7	438.31	5'-9½"	WOSHA-36-72H
up to 6'9"	8	506.07	6'-7½"	WOSHA-36-81H
up to 7'6"	9	556.60	7'-5½"	WOSHA-36-90H
up to 8'3"	10	607.05	8'-3"	WOSHA-36-99H
up to 9'	11	674.81	9'-1"	WOSHA-36-108H
up to 9'9"	12	725.35	9'-10½"	WOSHA-36-117H
up to 10'6"	13	775.79	10'-8¼"	WOSHA-36-126H
up to 11'3"	14	826.31	11'-6"	WOSHA-36-135H
up to 12'	15	894.71	12'-3¾"	WOSHA-36-144H

Note: Tread is 9¾" deep with 9" rise, 36" wide, open treads with open risers. Includes internal stair handrails.

Landings

Landings			
Size	Description	Weight (lbs.)	Model Number
3' x 3'	intermediate landing (straight run)	537.37	WL-INT-3636H
3'6" x 3'6"	intermediate landing (L-shaped run)	590.16	WL-L-4242H
3'6" x 3'6"	top landing	563.91	WL-TOP-4242H
4' x 4'	top landing	628.56	WL-TOP-4848H
3'6" x 7'	intermediate landing (U-shaped run)	1064.95	WL-U-4284H

Landings

Landings are required for deck heights over 12 ft. Penco landings are 4-column supported using 2½" square tubular uprights and ¼" x 6" top framing. Landings are powder coated in Penco 005 Gray. Handrails and kick-plate are painted Penco 007 Safety Yellow.



Handrail and Gates

Handrail





Standard handrail is fabricated from 1½" x 14 gauge square steel tube and can be fabricated to meet any project specifications. The standard color is safety yellow but handrails are available in any of Schmidt's 24 standard colors. Handrails are sold per lineal foot price and can be cut to size in the field. Handrail is also available in 1¼" schedule 40 pipe.





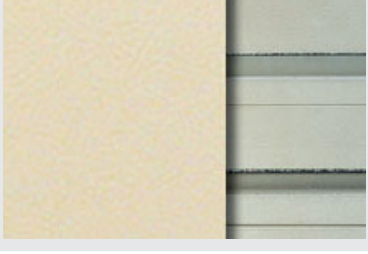
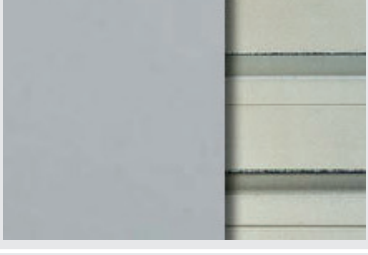


Handrail

Description	Weight (lbs.)	Catalog Number
deck mounted corner post kit	21.14	WDMPC-HC007
deck mounted post kit	21.33	WDMP-HC007
6' section of 2-rail handrail with kick plate	35.44	W2RAIL-HC007
6' section of 3-rail handrail with kick plate	57.87	W3RAIL-HC007
1½" x 1½" black plastic cap	0.13	W78640
2" x 2" black plastic cap	0.25	W78630
2½" x 2½" black plastic cap	0.38	W78620

Gates

Gate Type/ Catalog Number	Weight (lbs.)	Description	
Swing WG-SWING-HC007	75.25	This dual swing gate features spring hinges, allowing a full clearance of 5'9" with both gates open. Gates are securely latched with two rugged cane bolts fastened through the mezzanine/work platform deck. Custom gates available. Swing gates are used when personnel are available to open the gate. Impact gates have a molded rubber bumper allowing fork lift drivers to open the gate without any assistance.	
Impact WG-IMPACT-HC007	128.10		
Corral WG-CORRAL-HC007	265.24	Standard corral gates allow a deck opening of 6' and are fabricated from square steel tube. They are designed to pivot and provide an integral railing at the mezzanine's edge to prevent accidental falls. Corral gates allow for quick and safe loading of large pallet loads. Once loaded, the gate is pivoted back to open the mezzanine/work platform deck for forklift access to the pallet from below.	
Sliding (manual or electric) WG-SLIDE-HC007	208.49	Sliding gates span a total length of 10' when closed and allow a clear opening of 5'8". Requires no pallet drop guard, the gate rolls on the top of the deck. A 16' minimum footprint is required. Sliding gates for mezzanines/work platforms are available in both electric and manual options. Forklift operators can open the motorized gate by remote control, reducing labor and time.	
Pivot WG-PIVOT-HC007	138.91	The gate pivots 90° from a single point on the floor, leaving a deck opening of 5'8". Double doors may be ordered, permitting a deck opening of 11'. Available with left-hand or right-hand opening and attaches to any standard handrail. Minimum overhead clearance required is 7'.	

Decking Material

Decking Material	Description	Typical Application	
Plywood on B-Deck	A durable, economical choice. 20-gauge galvanized B-deck is used as the standard, helping SpaceLoft mezzanines/work platforms maintain a like-new appearance for years. B-deck is typically covered with one or two layers of plywood.	Suitable for in-plant offices, enclosures, storage, and a variety of other uses.	
Concrete over B-Deck	Concrete is poured-in-place over B-deck.	Often specified in sites which require all fireproof materials, but can be applied in any facility which needs the durability and permanence that only concrete can offer.	
Engineered Materials	Various brands of wear-resistant deck material are recommended in applications requiring a variety of thicknesses, colors and surfaces are available.	Recommended in applications requiring a solid floor which may be subject to heavy traffic loads from wheeled carts, dollies or lifts.	
ResinDek® on B-Deck	Supports foot traffic and live/dead loads from 1,250 lbs to 8,000 lbs. Resists stains and scratches. Superior cleanability. Panel joints are designed to handle rated loads when installed as recommended.	Appropriate for almost any application on mezzanines/work platforms or conveyor support systems.	
Diamond Plate Decking	Provides outstanding wear resistance, with embossed pattern to reduce slippage. The strength of the steel helps to distribute concentrated loads. Steel deck is also available without a diamond pattern.	This is the material of choice for heavy loads and to resist damage in pallet loading drop areas.	
Open Bar Grating	By far the strongest and most versatile type of open deck available. It allows maximum transfer of heat, sound, and ventilation between levels.	Often specified in sites which require all fireproof materials or ventilation requirements.	

Color Chart

24 Designer Colors

Standard Colors

The standard color for Penco Products is 007 Safety Yellow and 005 Gray. Both colors are formulated for moderate protection for outdoor use.



**007
Safety
Yellow**



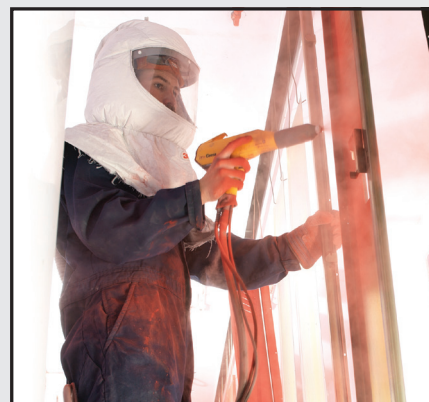
**005
Gray**

To assure rust resistance and paint adhesion, all Penco steel products receive a state of the

art pre-paint conditioning that includes a thorough cleansing by a hot spray washing process, then a specially formulated coating is applied creating a surface that resists corrosion and improves paint adhesion. In addition to the standard Safety Yellow 007 and Gray 005 colors, virtually all steel products are available in the 24 colors shown below.

Penco's standard 1 mil thick paint finish is perfect for most applications. The paint surface is tough and durable and offers a

beautiful drip-free surface, excellent edge coverage and environmentally friendly application.



054 Canvas	021 Gray Ash	028 Gray	073 Champagne	723 Light Putty	012 Tawny Tan	701 Spray Green	952 Turquoise Teal
055 Shamrock	812 Hunter Green	715 Lake Blue	826 Slate Blue	806 Marine Blue	052 Reflex Blue	822 Regal Blue	058 Nordic Purple
056 Sunburst	710 Sagebrush Yellow	720 Mandarin Orange	722 Patriot Red	767 Cardinal Red	736 Burgundy	848 January White	949 Jet Black

NOTE: Colors shown are as close to actual finishes as the printing process allows. Do not make your final color selection on the color shade shown on this page. Schmidt Color Charts are available for a more accurate color match. Exposure to high humidity, chlorine salts, abrasive cleaners, germicidal cleaners and acids can damage the finish and will void the guarantee.

PENCO® Shelving Systems



Shelving Interface with Penco Products

Stairs and handrail are natural complements to shelving also manufactured by Penco Products, Inc. Penco's Clipper® and Erectomatic® Shelving lines are each completely configurable for multi-level and high-rise applications and can be integrated seamlessly with Penco's WorkSafe Products by our engineering department.

Both Clipper and Erectomatic shelving lines share the same shelf. Penco Hi-Performance® shelves are made with a box-beam construction that produces a high strength-to-weight ratio. Carrying capacities vary depending on whether a medium duty, heavy duty or extra heavy duty shelf is used. Many sizes are available.

Each shelving line uses its own custom posts and clips, making shelf positioning very easy. Clipper posts allow shelf adjustment on 1" vertical centers and Erectomatic posts allow adjustment on 1-1/2" centers. Both use a flush front design for posts in the face of the unit that permits full access to the width of each shelf.

For extra heavy loads, the Erectomatic line offers a heavy duty "H" post that is 1-1/2" wide and nearly 3" deep that carries more load than standard posts and can be used to reach greater heights. H-Posts with beams and a variety of decking choices are also available for "pass through" order picking.

Shelving systems can be designed as "closed" installations with solid backs and welded side panels, or as "open" style structures that are held together with side and rear sway bracing. In Hi-Rise applications where free-path man-aboard order picking equipment is used, guide rail and cross-aisle top-ties are used to keep the structure sound.

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

Each engineered shelving system is custom designed to account for all the specific conditions such as building columns and door locations. Careful consideration is given to insure that they are designed to comply with structural requirements for the seismic zone where the project will be installed.





www.pencoproducts.com

Every customer's first choice to transform space into safe, secure and effective storage.



Lockers



Multi-Level & High Rise Shelving



Wide Span Shelving



RivetRite® Shelving



Garment Lockers • Hygiene Products



Pallet Racks

Textile Rental Industry Products



This catalog was printed on paper made in the USA.



© Copyright 2016 Penco Products, Inc.
Penco-WorkSafe-electronic_Oct2016 .indd/pdf

PENCO PRODUCTS, INC. • 1820 Stonehenge Drive, Greenville, NC 27858
800-562-1000 • fax: 800-248-1555 • general@pencoproducts.com