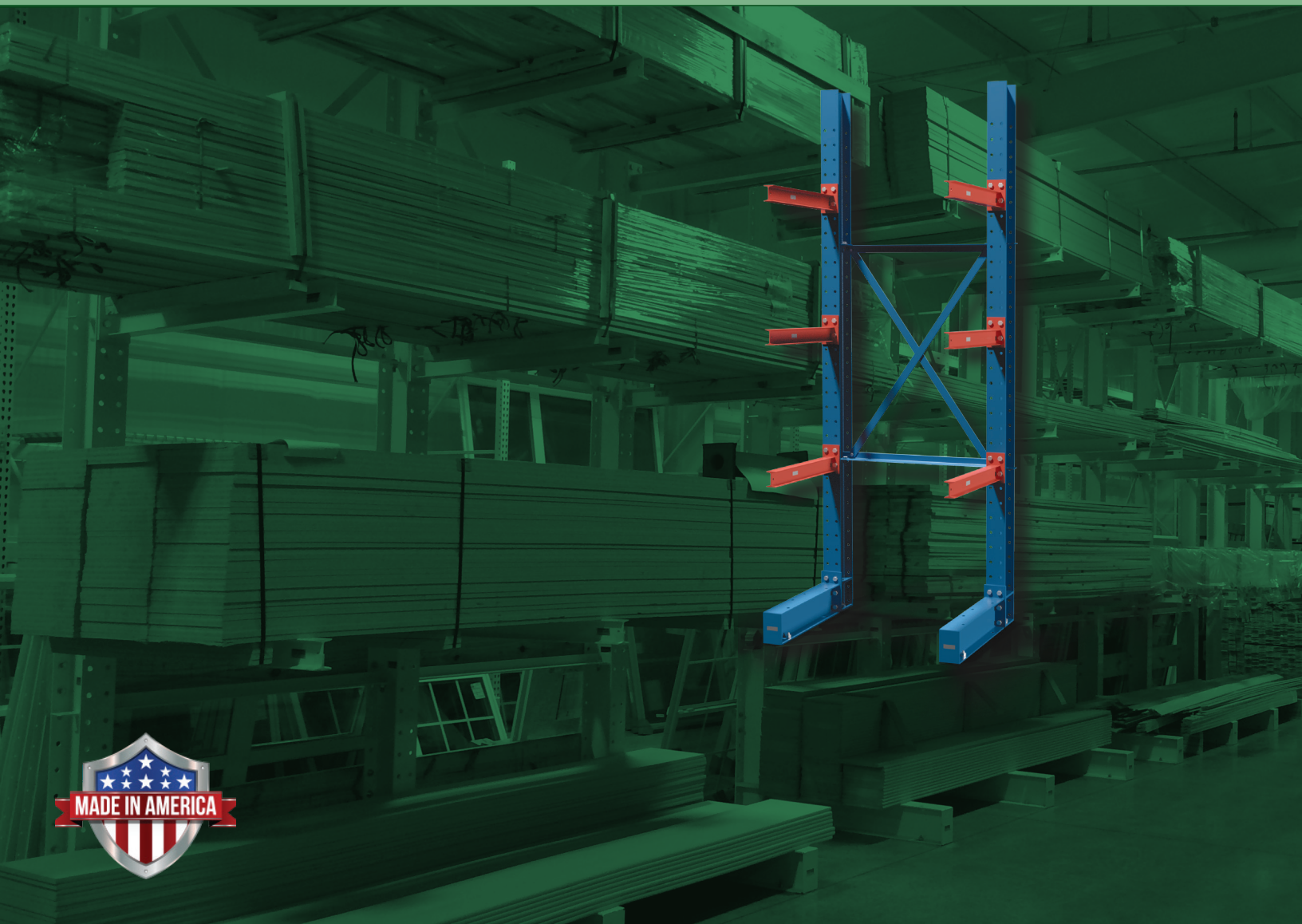




Cantilever Rack System



Steel King

*Strength. Innovation.
Integrity.*

Steel King leads the way in rack technology with innovation and experience with more than 40 years in the materials handling industry.

Our superior designs give you a rugged, long lasting, truly economical rack. Steel King offers innovative, expert solutions to complex storage problems.



Arms are available in a variety of sizes and styles to accommodate your rack load.



Maximize capacity and density with Cantilever Rack

Efficient, organized storage of long or oddly-sized materials. Choose any style for simple installation, low maintenance, and rugged operation.

Easier to use: With no front column in the way, cantilever racks are faster to load and unload, lowering handling time and costs.

More compact: The lack of a front column saves horizontal space normally lost to rack structure and allows for easy access.

More selective: Any load or storage slot is immediately accessible.

More economical: Both reduced handling times and increased space utilization make cantilever racks more cost-efficient.

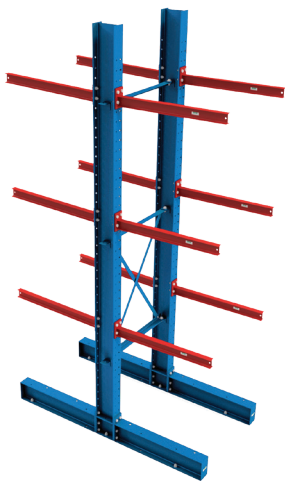
Additionally, cantilever racks become more economical to incorporate than pallet rack when load length increases.

More adaptable: Cantilever racks can store nearly any type of load. They are especially useful for storing long, bulky, or oddly-shaped items.

I-Beam cantilever racks

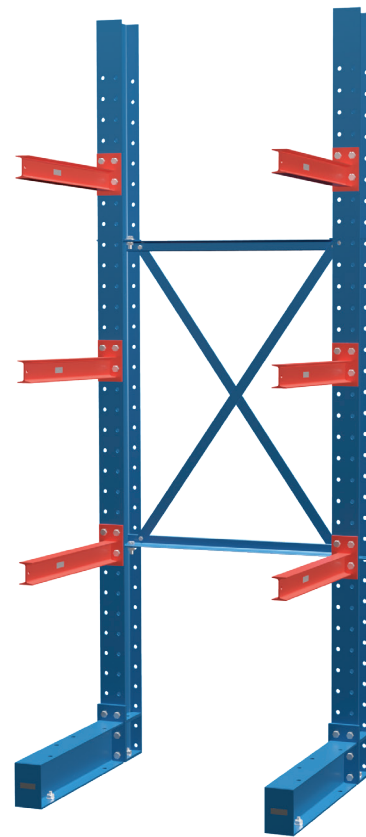
Maximize storage and improve accessibility

Cantilever racks in the I-Beam configuration allow accessibility from both sides, allowing for faster load and unload times. This design saves horizontal space normally lost to rack structure and reduces fork truck damage.



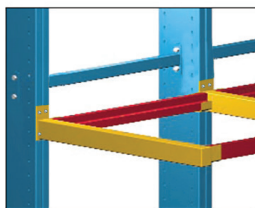
- Arm lengths up to 8'
- Freestanding heights up to 30'
- Arms adjust vertically in 4" increments
- Constructed of structural steel with a 50,000 psi minimum yield
- Heavy arm connector plate
- Bolted base-to-column connection

I-Beam Cantilever Racks can be built in either single- or double-sided configurations.

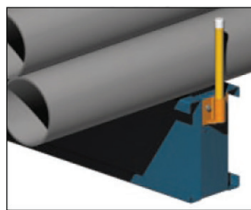


Options and accessories for cantilever racks

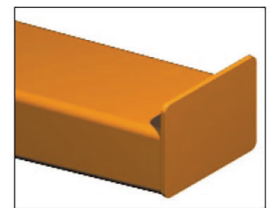
Saddles:
Attaches to arms.
Used for decking supports.



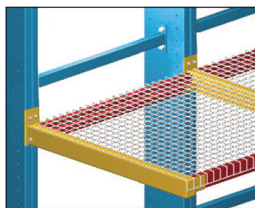
Removable pipe end stops:
Attaches to arms or base. Includes Pipe, bracket and plastic cap.



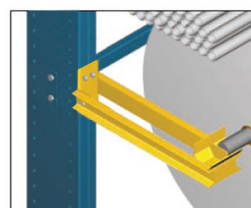
Welded lips:
Welds to arms or base. Many heights available.



Wire deck:
Attaches to arms for storage of odd lengths of bar, rounds, etc.



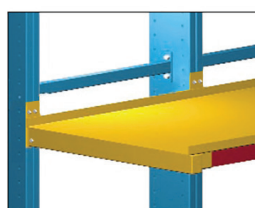
Core/axle saddles:
Attaches to arms for accepting core I axle of rolls.



Bolted end lips:
Arms punched to accept optional removable end lips.



Drop-on pans:
Attaches to arms for storage of odd lengths of bar, rounds, etc.



How to design your cantilever rack systems

1. Determine the number and spacing of support arms.

1a. Use enough arms under a load to prevent deflection of the load. Deflection causes undesirable side pressure on the arms.

Using wood blocks on the floor under the load, test your load for deflection on a two-support system.

1b. If you do not detect any deflection, you may use two support arms. The arm capacity required will be half the load weight, and the upright centerline will be 1/2 of the load length.

1c. If you notice deflection with two supports, try three supports. If this system works, arm capacity will be 1/3 of the load weight, and the upright centerlines will be 1/3 of load length.

If three supports are still not enough, add supports as necessary until deflection is eliminated.

Note: Product should overhang the end of the rack by 1/2 of the upright centerline distance.

Loading without overhang is incorrect.

2. Determine arm length. Arm length is generally equal to load depth.

Arm length shown in 2a is correct; 2b can also be used if rack is designed as such.

3. Determine upright height.

Start with base height:

+ number of storage levels x load height

+ handling clearance [4" to 6"] x number of levels

+ number of arm levels x arm thickness = upright height.

Note: Contact Steel King for current arm and base dimensions.

Note: Check limitations at your plant such as ceiling clearance or fork lift height.

Note: Top arm level must be below the top of the column.

4. Determine capacities required.

Arms: Load weight ÷ number of arms per level = arm capacity.
(Assuming each arm supports an equal amount of the load)

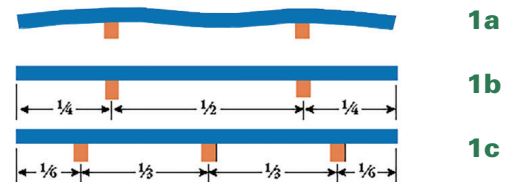
Uprights: Number of arms per side x load per arm.

Note: Load on base is not included in capacity.

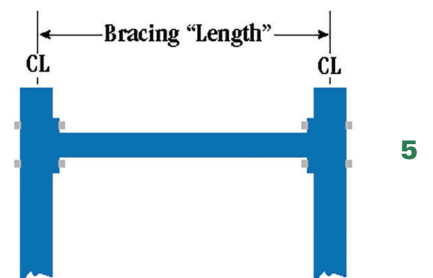
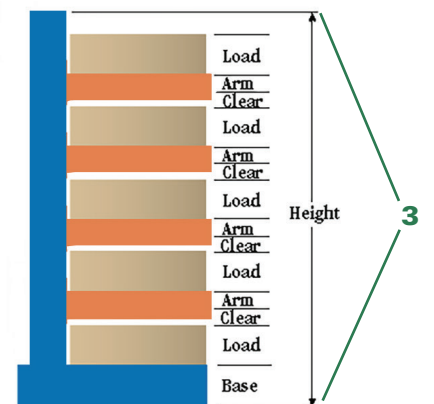
5. "Bracing lengths" refer to the horizontal centerline distance from column to column, as in the diagram.

Based on the number of arms calculated in Step 1, determine the bracing length required.

Bracing can be sold in individual pieces (or, through our Quick Ship program, sold in bracing kits.)



Loading pattern shown in (C) reduces capacity of arm by 50%



Why Choose Steel King?

Industry Leadership – With our state-of-the-art facilities and active participation in the associations that develop the national specifications for quality and safety, we lead the way with our uncompromising dedication to engineering and manufacturing excellence.

Expertise and Versatility – Our in-house engineering and drafting staff has decades of experience designing thousands of rack systems, which means we can custom engineer a solution for any storage challenge and ensure efficient space utilization.

Quality and Safety – Steel King is committed to providing customers with the highest quality and safest products possible. Our structural engineers design our products to strictly conform to industry design codes to ensure product and worker safety. Steel King facilities and processes are tested and fabricator licenses are approved for the City of Los Angeles and the City of Phoenix.

Durability – Made with the highest quality materials available, Steel King products are built to last. We design them to better resist the daily rigors of your environment, which means they last longer, require less maintenance and provide greater safety.

Single Source Responsibility – Our wide breadth of product offerings allows us single-source responsibility that ensures both cost and quality control.

Welder Certification – Our welders are trained and qualified to American Welding Society (AWS) D1.1 and D1.3 standards. We also have an in-house Certified Welding Inspector (CWI).

**We are a “one-stop shop”
for all your storage needs.**



STEEL KING®

BUILT TO DELIVER

715-341-3120 | 800-826-0203 | www.steelking.com



Dynamic Storage



Pallet Rack



Rack Storage Systems

Steel King has been delivering customized storage solutions since 1970, designing and manufacturing pallet racking systems and related material handling products that improve operational efficiency in manufacturing, warehousing and distribution facilities.

When it comes to offering the highest quality, safest and most diverse product offerings, **Steel King is built to deliver.**