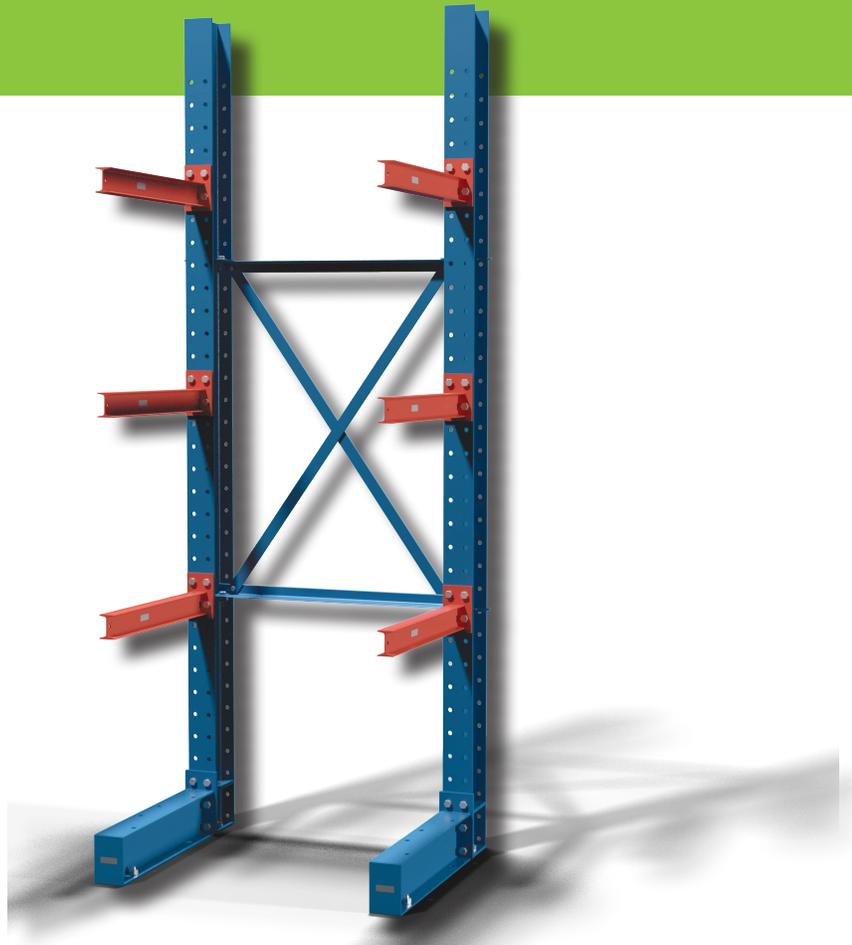




# CANTILEVER RACK SYSTEM

INFORMATIONAL BROCHURE



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NOT ALL RACKS ARE THE SAME - STEEL KING IS BUILT TO LAST!



# CANTILEVER RACK SYSTEM



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.*



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# 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

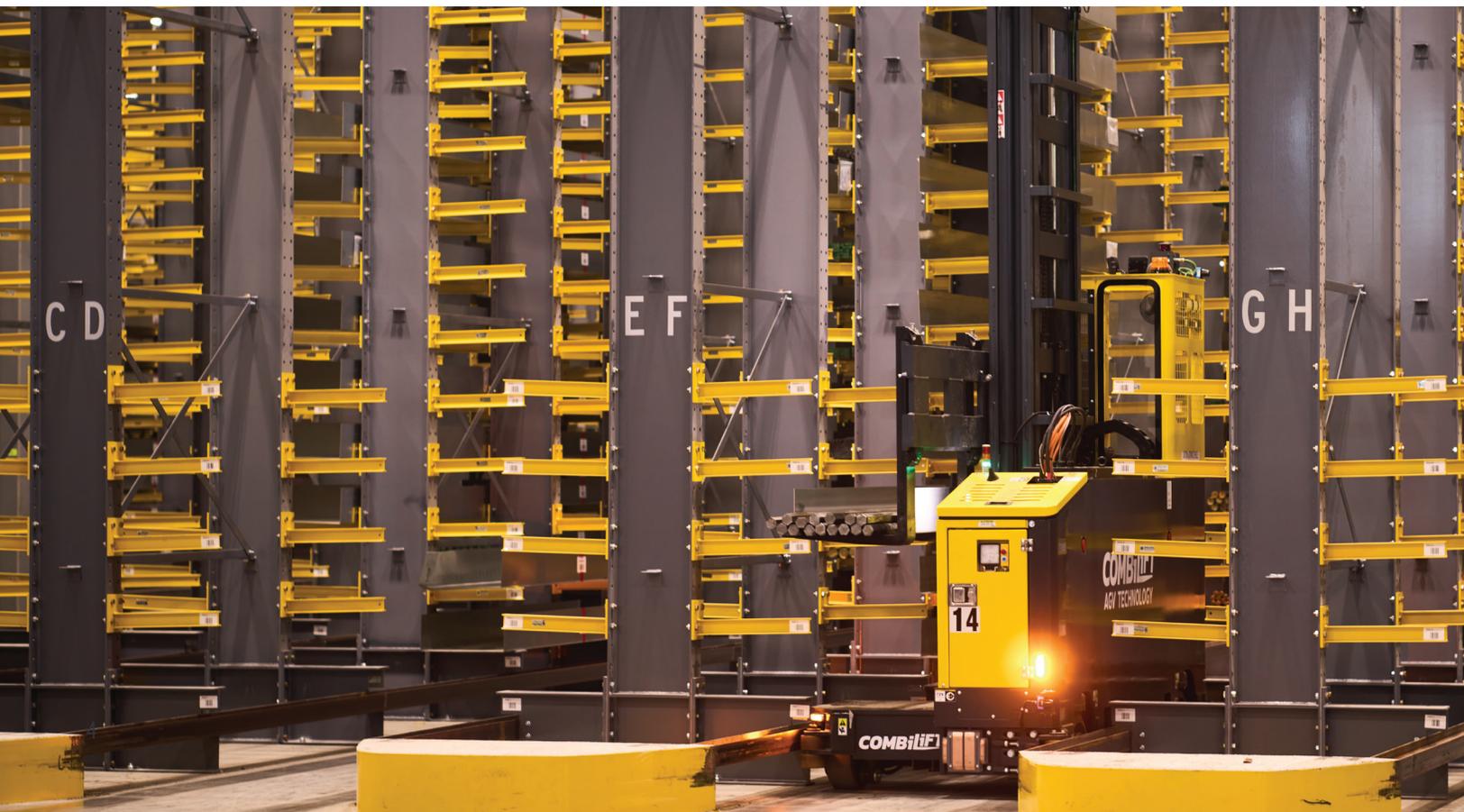
Any load or storage slot is immediately accessible.

## 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.

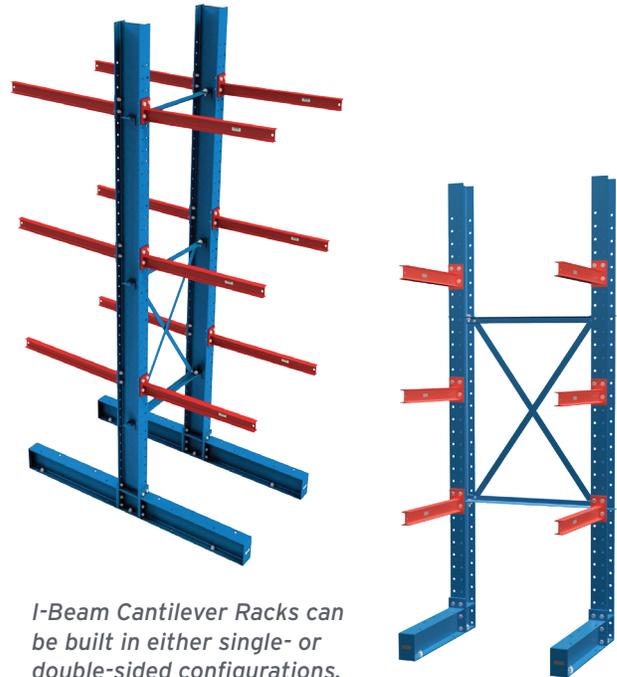


# I-Beam Cantilever Racks

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



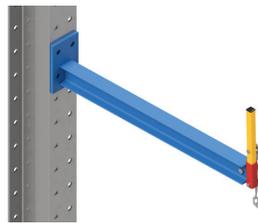
*I-Beam Cantilever Racks can be built in either single- or double-sided configurations.*

## Options and accessories for cantilever racks

**Saddles:**  
Attaches to arms. Used for decking supports.



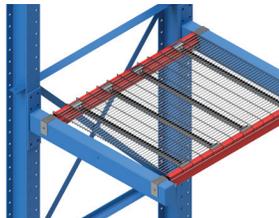
**Removable Pipe End Stops:**  
Attaches to arms or base. Includes pipe, bracket and plastic cap.



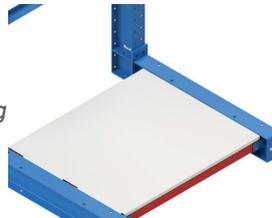
**Welded Lips:**  
Welds to arms or base. Many heights available.



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



**Drop-On Base Pans:**  
Attaches to arms for storage of odd lengths of bar, rounds, etc.



**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.

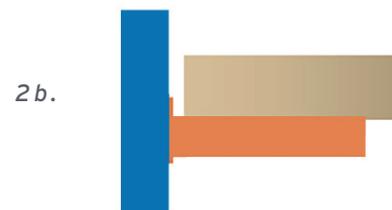
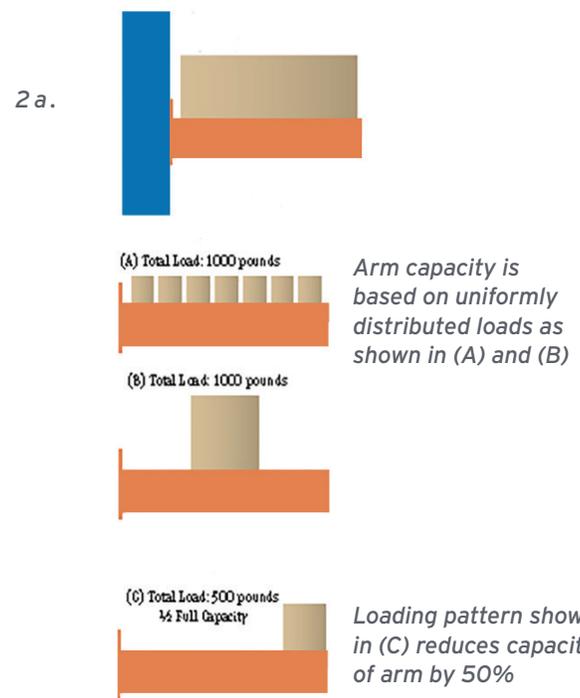
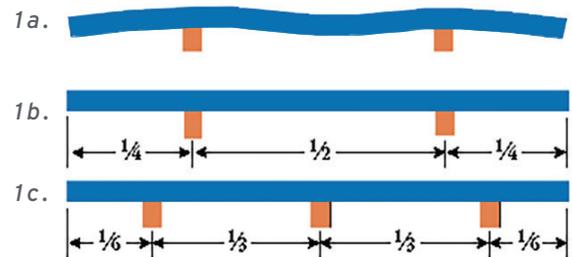
If three supports are still not enough, add supports as necessary until deflection is eliminated.

**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.

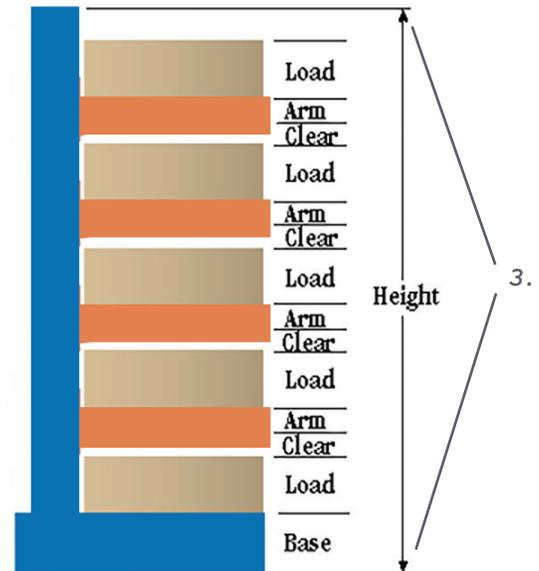
Start with based height:

- + 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 divided by the number of arms per level = arm capacity. (Assuming each arm supports an equal amount of the load.)

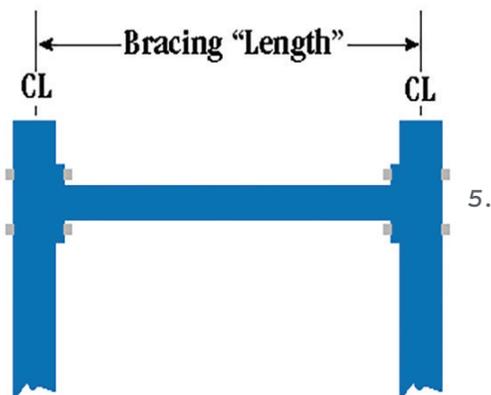
**Uprights:** Number of arms per side x load per arm.

**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).





## Rack and Systems

The ultimate in design and execution, customized for your space and requirements. Built tough, forklift-friendly, and ready to store any inventory.

- > Pallet Racks
- > Cantilever Racks
- > Drive-In / Drive-Through Racks
- > Flow Rack / Pushback Racks
- > Pick Module Racks
- > Specialty Racks
- > Portable Racks
- > Custom Shipping Racks
- > Support Structures / Work Platforms

## Safety Products

Steel King's safety products extend the life of your facility and have been setting industry standards in safety, protecting your people, product, and plant.

- > Guard Rails
- > Safety Gates
- > Pallet Load Stops and Supports
- > Lift-Out Rails
- > Rub Rails

*If you have any further questions, contact your local Steel King Representative for customer assistance or contact Steel King Industries directly at (800) 826-0203.*

Scan to learn about our complete solutions and why our products are BUILT TO LAST.



SCAN ME

## Containers

Steel King manufactures a full line of industrial storage containers for heavy-duty stackable storage, scrap handling, line assembly dispensary, parts distribution, and other uses. We offer essential, industry-standard designs as well as fully-custom containers suited to your storage requirements.

- > Transportable Containers
- > Bulk Containers
- > Collapsible Containers
- > Work in Progress (WIP) Containers
- > Steel Pallets



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