



# Structural Cantilever Systems



**RIDG-U-RAK®**



# Cantilever Storage Racks

Structural steel cantilever storage systems are multi-level, high density storage racks designed to handle many different types and sizes of products with freedom from column obstruction. Cantilever storage racks offer more flexibility for placing and removing products. Cantilever offers the best solution when unobstructed access is required for longer dimensional products, such as carpet, lumber, bar/plate stock and pipe. Cantilever racks can also be decked for use with odd-sized bundles, crates or bulk items like furniture.

- Strong and durable structural steel construction
- No aisle-side column – unrestricted access to your product
- Arms are vertically adjustable on 4" centers to accommodate various load heights
- Efficient use of vertical space
- Easily store materials of varying dimensions
- Columns punched on both sides for single or double sided storage
- Decking options are available
- Available in painted or galvanized finish
- All connections are bolted
- A variety of component sizes and capacities are available to accommodate different loads
- Accessories include product retaining poles, protective end caps and sign holders



Optimize use of available Cube Space with Cantilever Storage Racks







Double Sided  
Cantilever

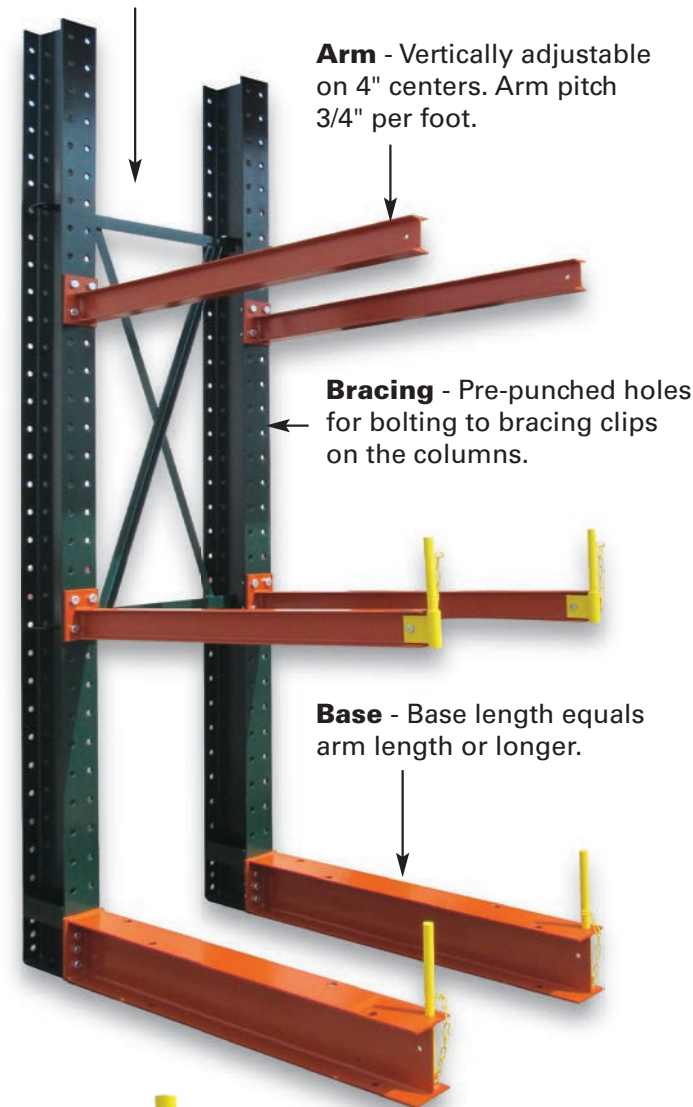


Single Sided  
Cantilever

# Cantilever Components

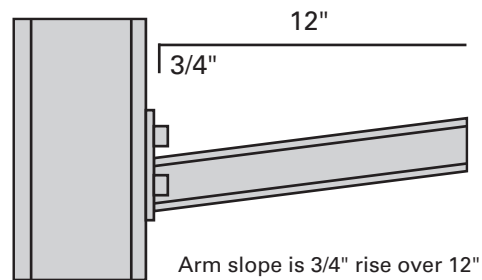
Cantilever racks have load carrying arms projecting from a single column bolted at one end only. Cantilever racks have no aisle-side columns, therefore, optimizing space utilization and allowing immediate access to your inventory.

**Column** - Wide flange (WF) sections with punched holes in both flanges. Columns can be used in both single and double sided applications.



## Arms

- Arm vertical spacing is dependent on the load size and lift clearance required
- Arm lengths are dependent on the depth of the product stored
- Various sizes are available depending on required capacity



Arm Capacity Ratings									
Arm Type	Arm Height	Arm Capacity (LBS)*							
		24"	30"	36"	42"	48"	52"	54"	60"
CAS-03	3"	3,200	2,500	2,100	1,800	1,550	1,425	1,300	1,050
CAS-04	4"	5,225	4,200	3,500	3,000	2,625	2,425	2,350	2,100
CAS-05	5"	6,600	5,300	4,400	3,750	3,300	3,050	2,925	2,650

\*Arm capacities in this table are based on uniformly distributed load. Capacities can vary depending on the column choice. Listed capacities are for non-seismic conditions. For other special conditions such as seismic or wind loadings, consult with Ridg-U-Rak engineering.

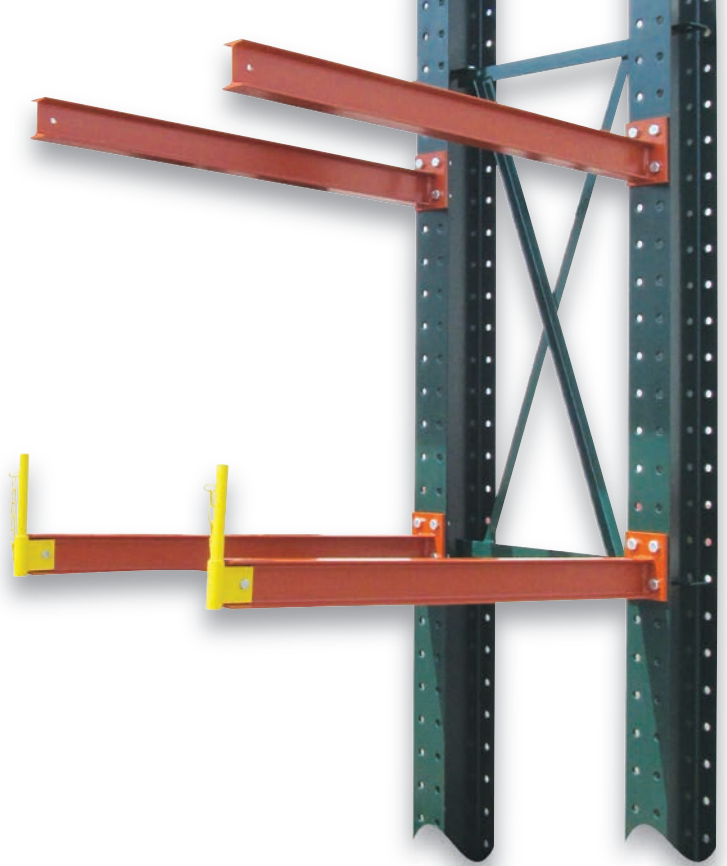


**Accessories** - Optional soft plastic protective caps, retaining poles or sign holders are available.



# Columns & Bases

- Column must have a minimum of 6" clear above top arm
- All cantilever columns have holes punched on 4" vertical centers
- Cantilever column horizontal hole center-to-center spacing is 2-3/4"
- Base section size is always the same as the column section size
- All bolt and anchor holes are 13/16" diameter
- All cantilever must be anchored to concrete in accordance with configuration drawings
- Column height is dependent on desired storage needs and the lifting height capability of the equipment used
- Column spacing is determined based on product weight, size and rigidity



## Column Capacity

Single-Sided Capacity*										
Column Part**	Nominal Col. Depth (in.)	Max Hgt to Top Arm (ft.)	Arm Length (in.)							
			24"	30"	36"	42"	48"	52"	54"	60"
CTS-08x18	8"	18'	19,500	17,500	15,800	14,400	13,300	12,600	12,300	11,300
CTS-10x26	10"	24'	30,300	27,500	25,200	23,200	21,600	20,600	20,100	18,900
CTS-12x30	12"	24'	42,400	38,500	35,300	32,600	30,200	28,900	28,200	26,500

\* Column capacities shown are for single-sided application. The load on the base is not included in capacity ratings. Capacity for a double-sided configuration would be double the values in table.

\*\* The capacities shown in this table are for static load conditions only. For other special conditions such as seismic or wind loadings, consult with Ridg-U-Rak engineering.



Base Length must equal arm length or longer.



# Column Bracing

Lateral stability and spacing of the columns is accomplished with Vertical x-Brace Panels and Horizontal Brace members.

## Vertical Bracing Requirements (VBR)

Vertical x-Brace Panels, as shown in figure below, are required in each end bay of any row, and in alternate interior bays. Factory welded attached bracing clips will properly position the bracing on the column.

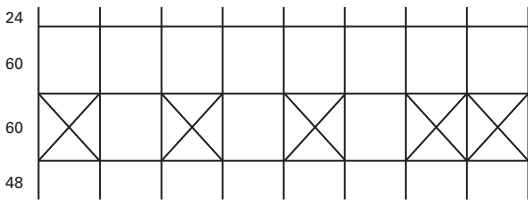
See Bracing Pattern Chart for various column heights. To ascertain bracing required for in-between sizes select next larger size.



## Horizontal Bracing Requirements (HBR)

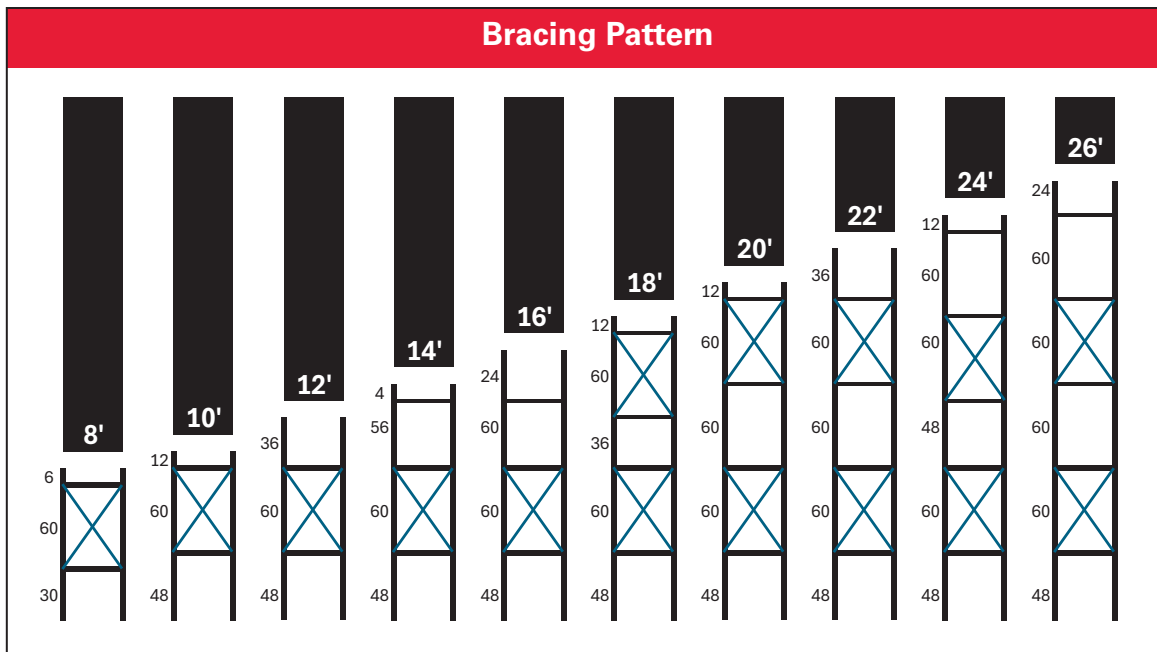
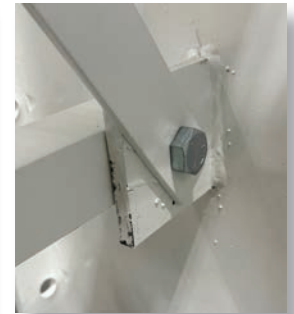
Horizontal single-angle bracing is configured as shown below or is indicated in Bracing Pattern figure.



**Bracing** - Pre-punched holes for bolting to bracing clips on the columns.



 = VBR (X-brace assembly)  
 = HBR (single-angle)



Upright heights showing position of required bracing in inches. To ascertain bracing required for in between sizes, select next larger size.



# Engineering Design

RIDG-U-RAK's Structural Steel Cantilever Systems are designed in accordance with current model codes and the ANSI MH16.3 standard, Design, Testing and Utilization of Industrial Steel Cantilevered Storage Racks published by the Rack Manufacturers Institute. All of our cantilever components meet ASTM A992 specifications for high strength steel with a minimum yield strength at 50,000 psi.



Unrestricted access to your longer dimensional product w/o obstruction from aisle side columns, like that of pallet rack





# Storage Rack Systems & Certifications

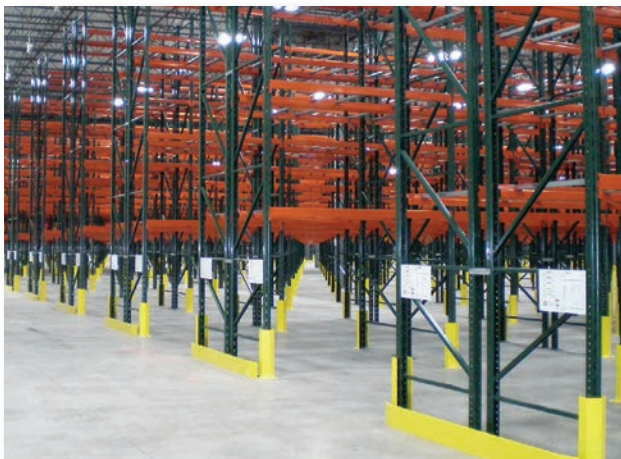


## 100% Selective Pallet Racks

- Original Slotted
- Tear Drop
- Structural

## High Density Storage

- Drive-In/DriveThru
- Push-Back
- Gravity Flow
- Very Narrow Aisle
- Pick Modules



## Weld Certifications

The weld quality of storage rack components directly affects the durability and structural integrity of the system. Ridg-U-Rak welders maintain certifications to AWS D1.1 and D1.3. Ridg-U-Rak is also CWB (Canada) certified to CSA Welding Standard W47.1.



## Certified Fabrication

Through an audit and approval process of our quality system, Ridg-U-Rak is a licensed and certified manufacturer in a number of municipalities around the United States including:

- Clark County (Nevada)
- Los Angeles
- Phoenix

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*RIDG-U-RAK is a founding member in good standing of RMI. The Storage Rack covered by this manual is in full compliance with the latest design specification approved by the members of the RACK MANUFACTURERS INSTITUTE. We believe that it is important to you that your supplier be committed to the principles of continuous improvement in both product design/application, and in the highest professional and ethical standards of performance as embodied in the mission and work conducted within RMI.*



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120 South Lake Street • North East, PA 16428

TF: 866-479-7225 • P: 814-725-8751 • F: 814-725-5659

[www.ridgurak.com](http://www.ridgurak.com)

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