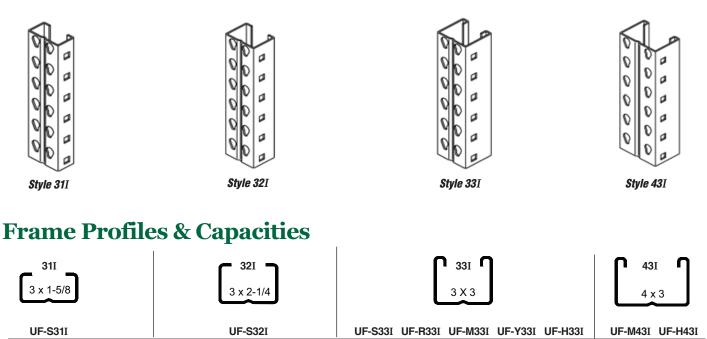




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# **UPRIGHT FRAME CAPACITIES**



### UPRIGHT FRAME CAPACITY TABLES are no longer published. See the statement below.

• Due to the system-based design approach of the current RMI Specification, the use of static load capacities are no longer appropriate. Load ratings can only be provided through a system analysis which accounts for configuration of the system, static loading, seismic parameters, stability requirements and the interaction characteristics of the various system components.

If your system was provided to you by Ridg-U-Rak, please contact your regional sales manager for the appropriate capacity rating.

If you purchased a Ridg-U-Rak system from a source other than Ridg-U-Rak, it is recommended that you work with an experienced rack design engineer to obtain the appropriate capacity rating.

## **Beam Capacities**

Beam	Beam Lengths										
Profile	48"	60"	72"	84"	92"	96"	102"	108"	120"	144"	156"
250 S	5,700	4,530	3,130	2,300	1,910	1,750	1,550	1,380	1,120	770	660
300 S	7,500	5,980	4,820	3,530	2,940	2,690	2,380	2,120	1,720	1,190	1,010
355 S	9,760	7,770	6,460	5,330	4,440	4,070	3,600	3,210	2,590	1,790	1,520
410 L	10,810	8,620	7,150	6,110	5,570	5,200	4,600	4,100	3,310	2,290	1,940
410 S	12,000	9,780	8,120	6,930	6,320	5,830	5,160	4,600	3,710	2,570	2,180
465 S	12,000	11,970	9,940	8,490	7,740	7,410	6,960	6,320	5,110	3,530	3,000
500 S	12,000	12,000	11,170	9,540	8,700	8,330	7,830	7,380	6,140	4,250	3,610
550 S	18,000	18,000	18,000	11,150	10,160	9,720	9,140	8,620	7,740	5,420	4,610
600 S	18,000	18,000	18,000	12,850	11,710	11,210	10,540	9,940	8,920	6,790	5,770
650 S	18,000	18,000	18,000	14,660	13,360	12,790	12,020	11,340	10,180	8,360	7,110
650 R	18,000	18,000	18,000	18,000	15,160	14,520	13,640	12,870	11,550	9,370	7,970

• Capacities are based on uniformly distributed loads per pair of beams.

• Capacities listed are for non-seismic conditions. For seismic conditions consult with Ridg-U-Rak sales or engineering.

• Capacities listed are for a 2-pallet wide condition.

• All beams over 114" in length should utilize at least (1) flanged, tek-screwed or lock-in cross bar located at mid length.

• Maximum shelf load for Teardrop Beams using 6" connectors with 2-pins is 12,000# per pair.

• Maximum shelf load for Teardrop Beams using 8" connectors with 3-pins is 18,000# per pair.



### **New RMI Frame Capacity Guidelines**

Understanding Frame Capacity Tables & The RMI Specification (ANSI MH16.1-2021)

The RMI specification criteria for selective rack structures has changed how frames are designed. The use of traditional frame capacity tables are no longer valid.

The capacity of frames are dependent on a variety of factors. Here are some points that may help better understand the factors that influence frame capacity.

- The beam-to-column connections used are very important
- The ratio of average to maximum loads is very important
- Column Base Plates
- Anchors used
- Number of Storage Levels
- Beam Level spacing
- Beam Sizes
- Column Profile and its section properties
- Seismic design criteria for geographic location
- Height-to-depth ratio of the frame
- System Importance Factor based on the environment of storage (Retail or Industrial)

Hence, the use of traditional frame tables are no longer valid, and they should only be used as a "starting point".

Existing frame systems designed to older specifications are "grandfathered" and do not need to be recalculated to the current specification requirements, unless the rack is reconfigured or relocated. In those cases, however, the use of average-to-maximum load ratios and stronger beam connections (particularly in lower beam levels of the system) can many times help to achieve the desired load ratings of existing frames. An experienced rack engineer, familiar with the current RMI design criteria, can assist in determining what changes are needed to achieve the desired load rations.



#### **RMI R-Mark Certifications**

RIDG-U-RAK has been awarded R-Mark Manufacturer, Systems and Installation certifications. RMI, the Rack Manufacturer's Institute, updated its requirements adding critical design and manufacture responsibilities.

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RIDG-U-RAK is a founding and executive level member of the RMI, Rack Manufacturer's Institute.