

Bulk Storage Rack Assembly Instructions

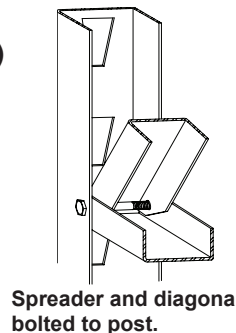
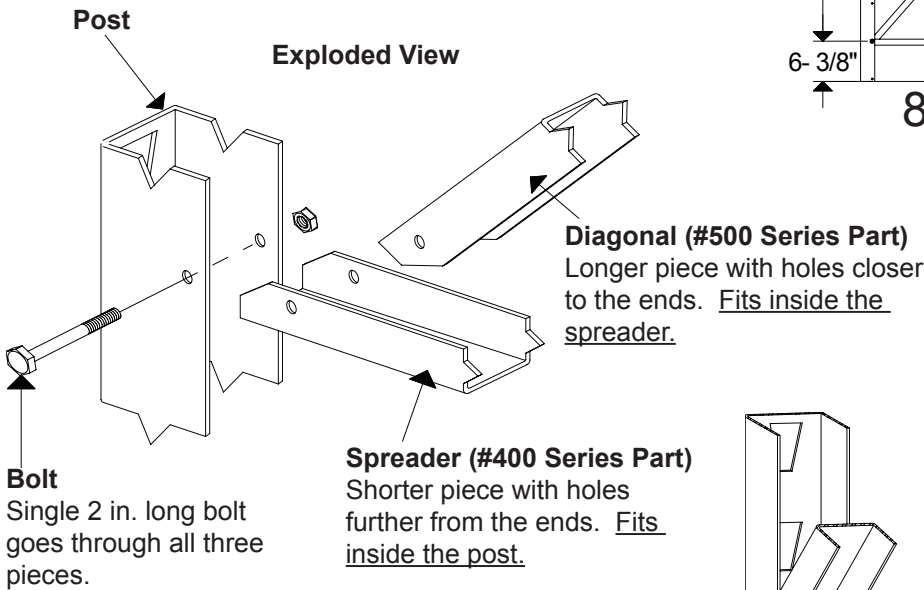
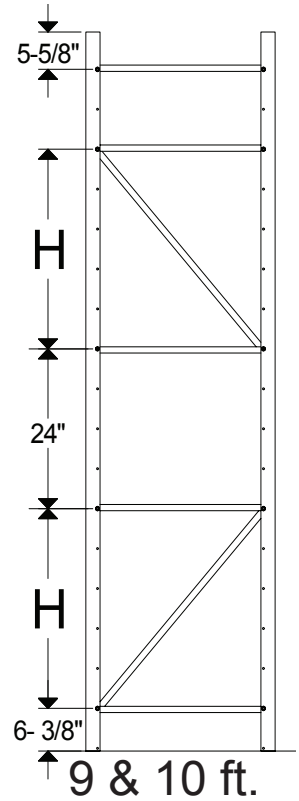
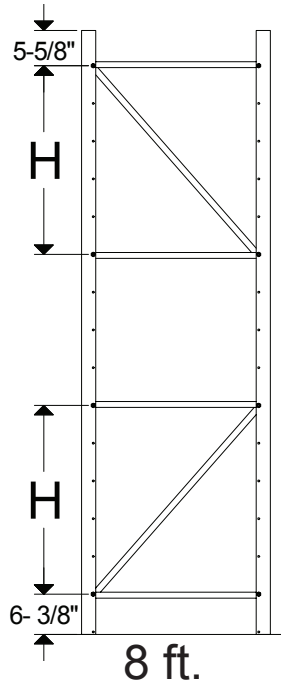
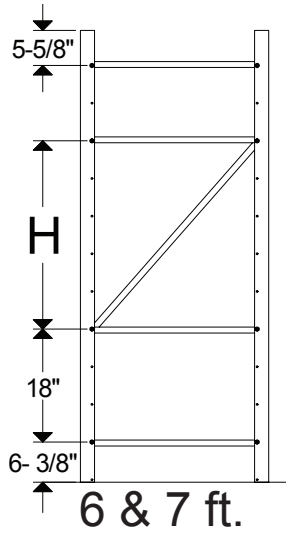
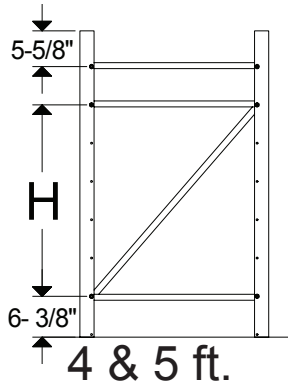
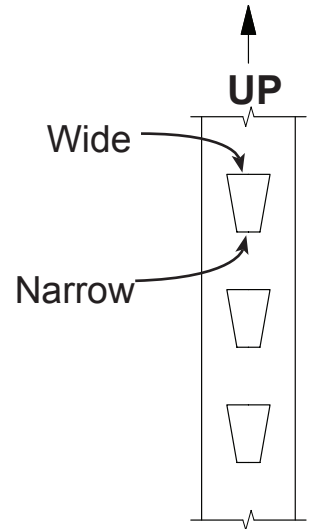
Upright Frame Assembly

Determine which end of the post goes up. The keystone slots on the front face of the post are wider at the top than at the bottom (see diagram to the right).

Locate the correct end frame height in the pictures below to determine the proper spacing of the spreaders and diagonals on the post. For frames taller than 10 ft. see page 2. The dimension 'H' in the diagrams below are 30 inches except for end frames that are 24" deep or less in which case the dimension 'H' is 24".

Upright frames over 10' tall must first have the vertical posts spliced together. See page 2 for splicing details and spacing of spreaders and diagonals.

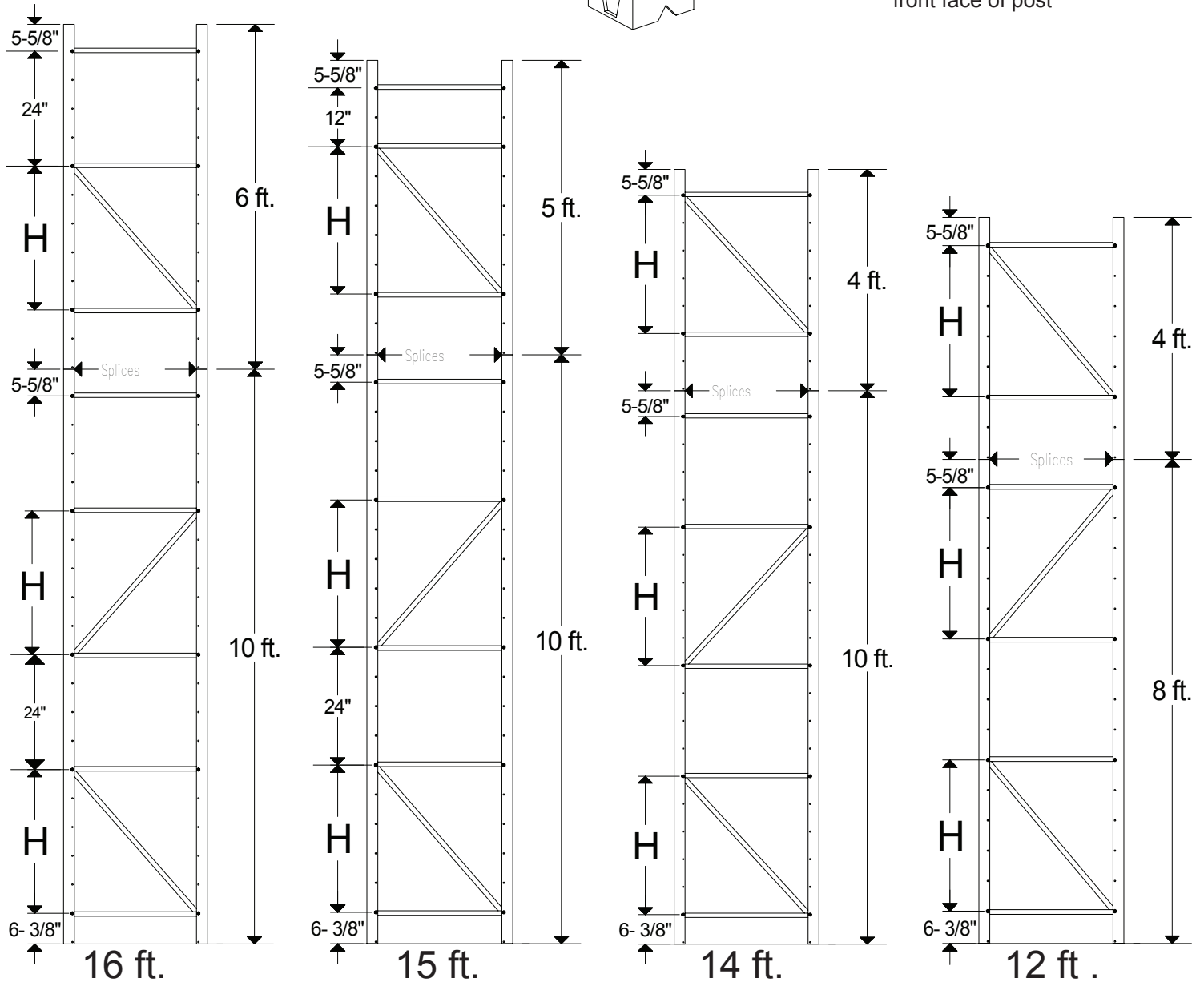
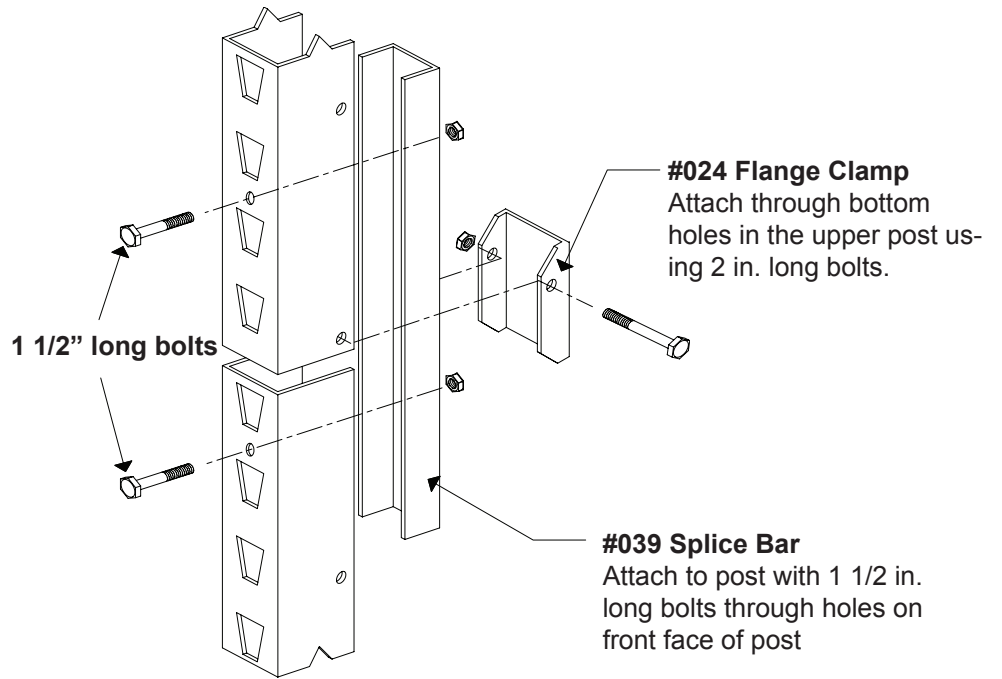
The upright frames bolt together using 1/4" x 2" long bolts and nuts. For easiest assembly lay the posts on saw horses. First put in the bolt that holds both the spreader and diagonal to the post and then put in the bolt that holds just the spreader to the post. If the optional footplates are being used bolt them to the bottom of the upright frame using a 1/4" x 2" long bolt and nut.



Frame Depth	PART IDENTIFICATION			
	Spreader		Diagonal	
	Part #	Length	Part #	Length
18"	418	16-1/8"	518	28-3/4"
24"	424	22-1/8"	524	32-5/16"
30"	430	28-1/8"	530	40-3/4"
36"	436	34-1/8"	536	44-15/16"
42"	442	40-1/8"	542	49-1/2"
48"	448	46-1/8"	548	54-3/8"
50"	450	47-15/16"	550	55-7/8"
54"	454	52-1/8"	554	59-7/16"
60"	460	58-1/8"	560	64-11/16"

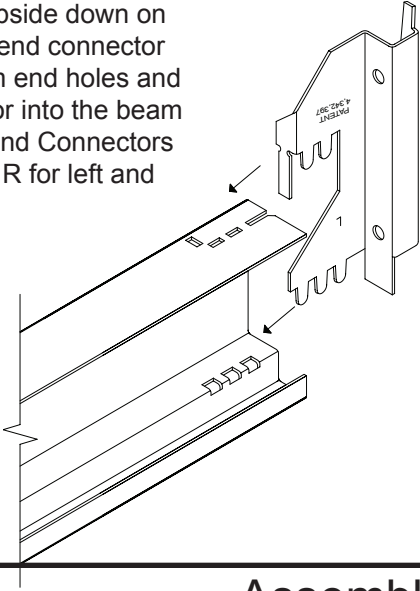
Splicing Posts over 10 ft. high

First bolt the #039 splice bar to the post using two 1-1/2" long bolts and then bolt the #024 flange clamp to the top post section using one 2" long bolt. See diagram to the right. The longer post must be used on the bottom and the shorter post on the top (as shown in the upright frame diagrams at the bottom of this page).

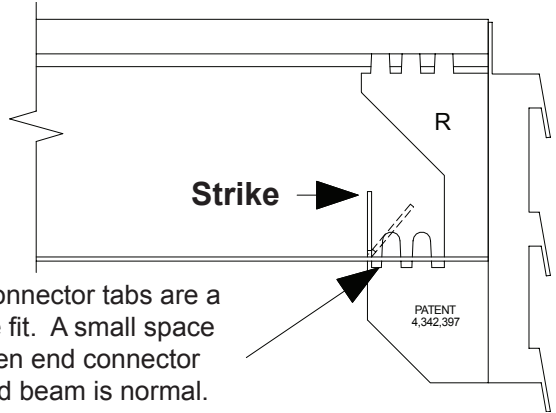


Beam Assembly

Place the beam upside down on the floor. Set the end connector tabs into the beam end holes and drive the connector into the beam with a hammer. End Connectors are marked L and R for left and right.

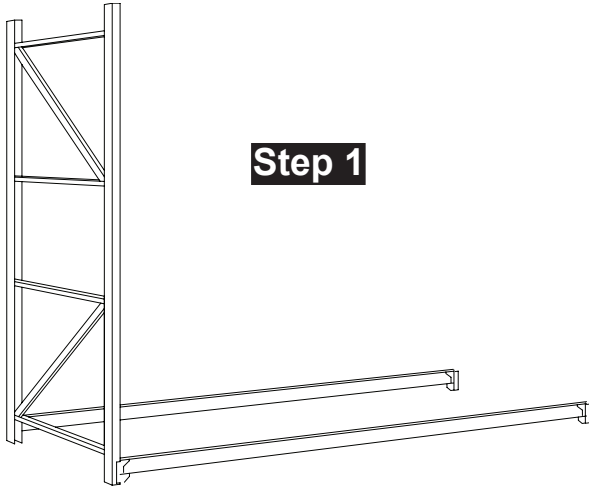


Strike safety tabs over to about 45 degrees to lock end connector permanently to the beam.



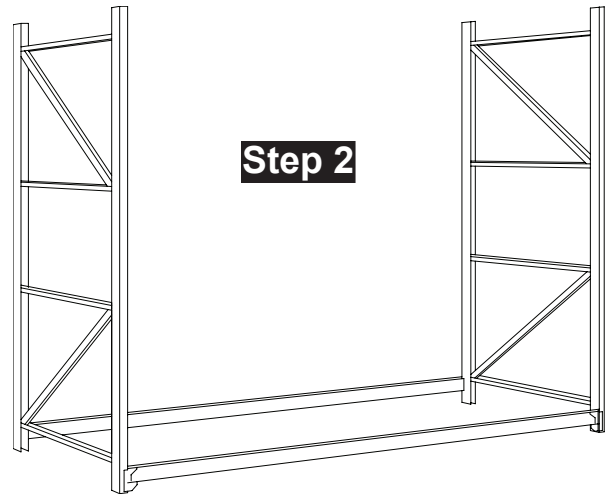
End connector tabs are a wedge fit. A small space between end connector tab and beam is normal.

Assembling Decks to Frames



Step 1

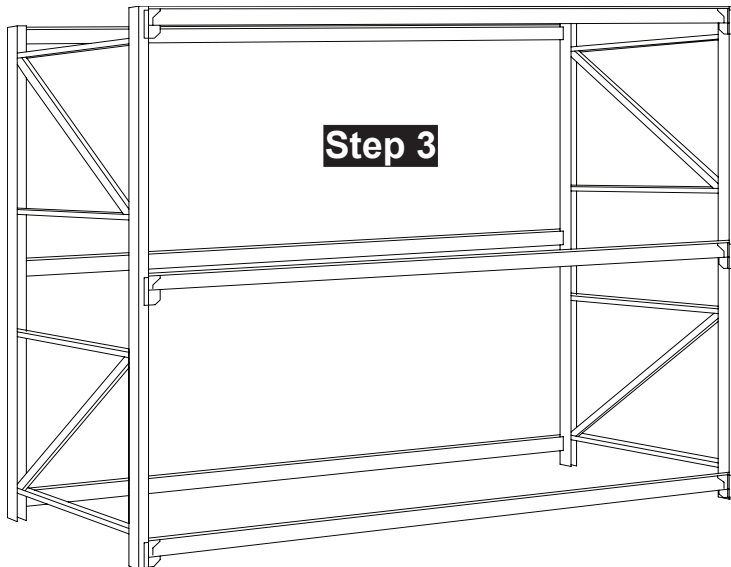
Stand first upright frame in position and hook beam into lowest position on the post.



Step 2

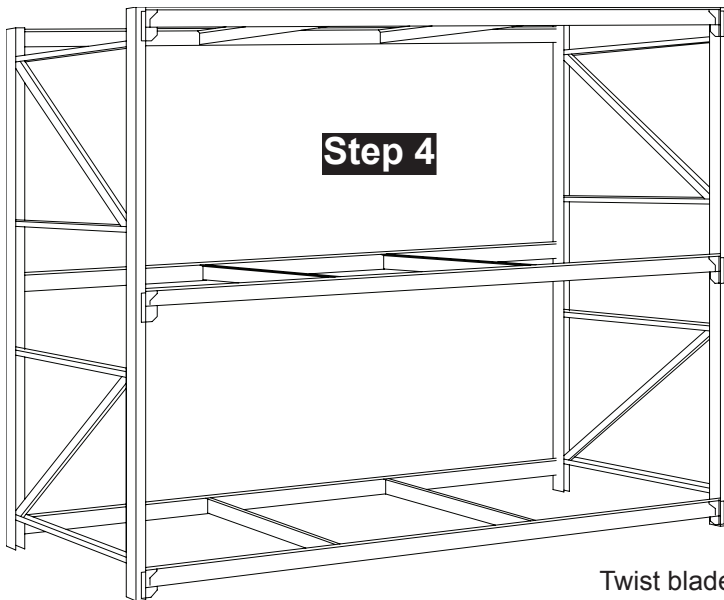
Stand second upright frame in position and hook beam into it.

Beam ends do NOT need to be forced to bottom of post holes!



Step 3

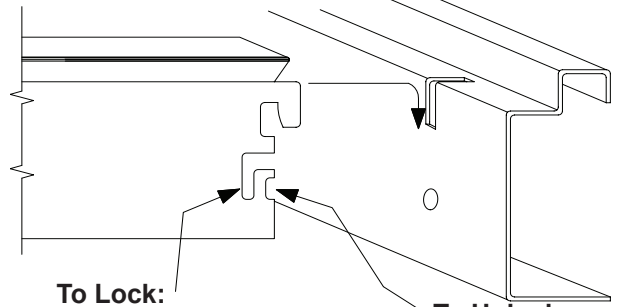
Install beams on both faces of section. Top beams need not be at the top of the posts. Make sure both ends of beams are at the same level by referencing the holes on the side of posts.



Install and lock deck supports into beams in the slots indicated in the illustration below. Four supports are used when using MDF decking or two supports for steel or wire decking.

Locking Deck Support to Beam

Deck supports **MUST** be locked to beam!



To Lock:

To Unlock:

Twist blade of screwdriver in this slot to bend the tab to catch the top of the hole in the beam.

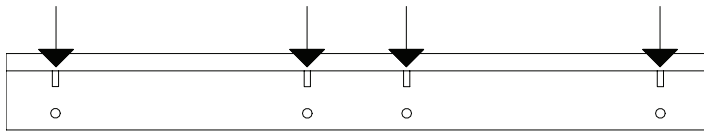
To unlock to adjust beams up or down twist blade of a screwdriver in this slot to clear pointer from hole in the beam.

Location of Deck Supports along Beam

MDF Decking

(4 supports except 3' beams use 2 supports)

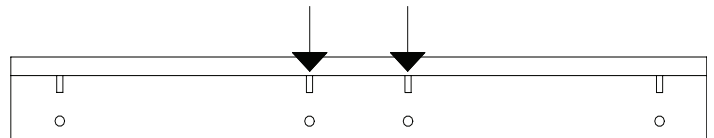
Install deck supports in two center slots and two outer most slots.



Steel or Wire Decking

(2 Supports)

Install deck supports in two center slots only.

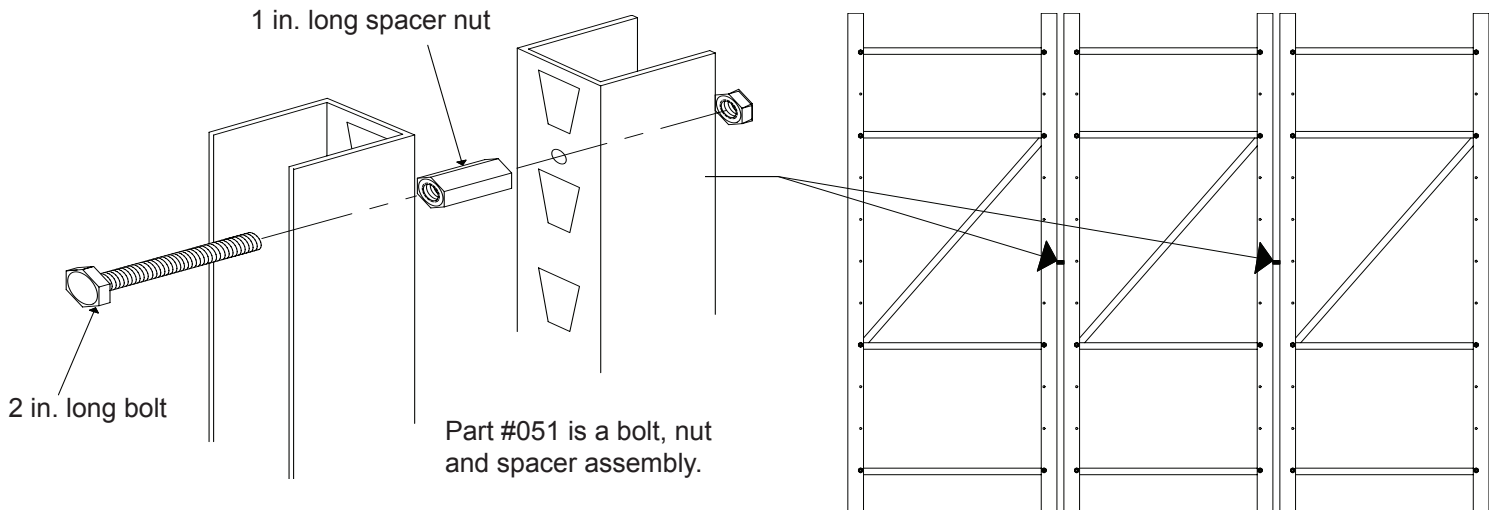


Step 5 If multiple sections are used in a row, hook beams to the bottom of second upright frame and proceed with steps 2 through 4. Only one end frame is needed between sections.

Step 6 Use a carpenter's level to check that the posts are plumb and beams level. If not shim under posts to make them so. This is necessary for a safe installation. **Posts not being plumb or beams not level can significantly reduce load carrying capability.**

Multiple Depth Racks

Upright frames can be connected face to face to make any overall rack depth desired. Long nut spacer keeps one inch clear between posts for beam readjustment. Install spacer after installing beams but before installing decking.



1 in. long spacer nut

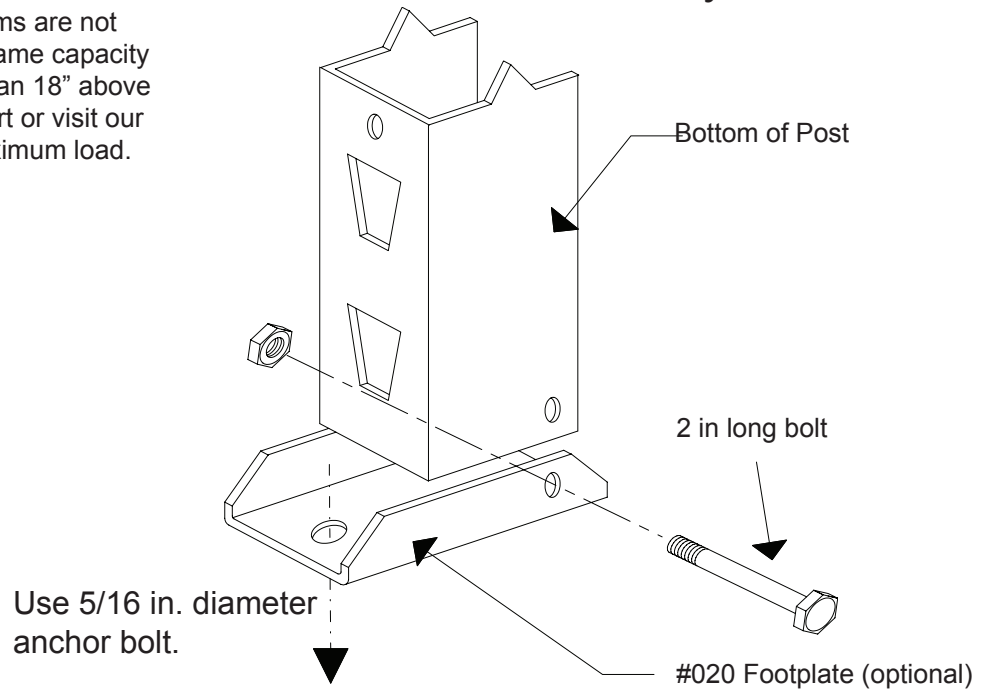
2 in. long bolt

Part #051 is a bolt, nut and spacer assembly.

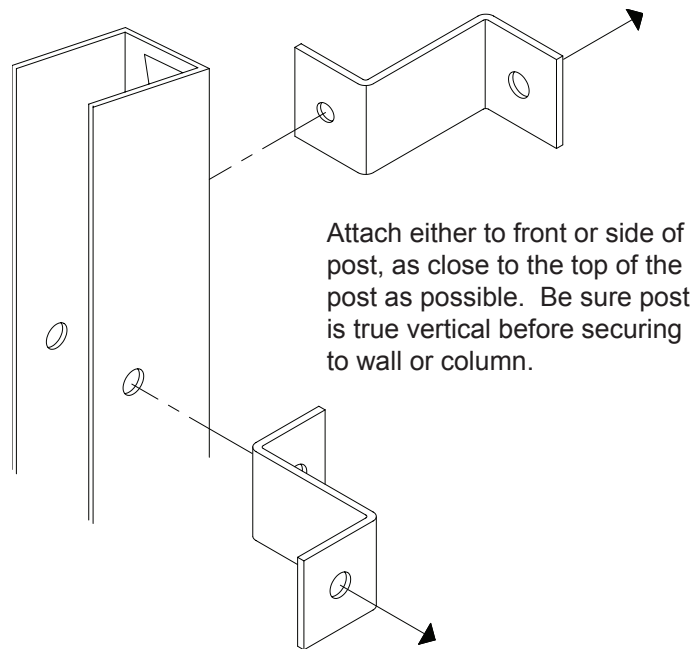
IMPORTANT

Floor anchoring is required whenever beams are not installed at the bottom of posts. Upright frame capacity is reduced if bottom shelf level is higher than 18" above floor. See upright frame load capacity chart or visit our web site at www.scotlandrack.com for maximum load.

Foot Plate Assembly



Wall Anchoring



Installation: It is the end user's responsibility to provide adequate flooring support for the system and its application. Upright frame assembly anchoring will be required when the top loaded shelf is over eight feet high and the height to depth ratio of the shelving unit exceeds four (4). When the upright frame assembly ratio is exceeded, back-to-back sections should be firmly tied together at a minimum of two places (near the top and the bottom), and single row sections should be attached to some firm restraint such as the floor, wall, or tied overhead across the aisle to an opposite upright frame assembly. "Depth" relates to the overall depth (front to back) of the upright frame assembly and "height" refers to the height from the floor to the highest of the upright frame assembly or top of the load on the section, both in the same units of measure.

Where attachment to the building structure is required for stability, these forces must be checked on the structure to assure its capacity of resisting these additional forces. Also, it is possible that certain local codes do not allow attachment to a building structure, and therefore other means for stabilization must be determined.

Shelving must be installed with a maximum tolerance from the vertical of one-half inch in ten feet or more of height unless tighter tolerances are specified.