



Standard Carton Flow Rack

Assembly Instructions

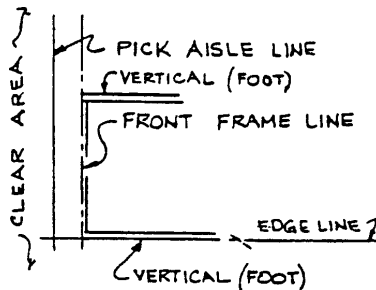
Unloading

Quik-Pik flow rack sections are shipped in component pieces; the vertical frames and shelf frames are placed vertically in the truck. Rolla-trak, guide, sway braces and hardware are palletized. While the boxed loads can generally be handled with pallet-handling equipment, **the shelves and vertical frames must be unloaded by hand.** Do not remove the protective corner covers until the units have been taken to the installation area.

Vertical Frame/Sway Brace Assembly

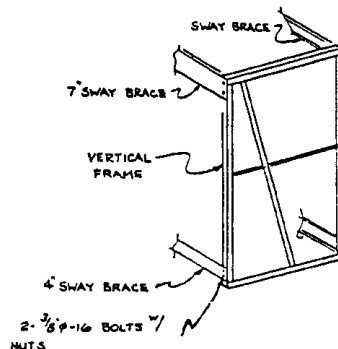
The installation area should be free and clear of all material. The floor should be level and smooth and capable of carrying the load to be placed upon it with complete safety. All **Quik-Pik** parts should be unpacked and stacked neatly, adjacent to the installation area.

Snap a chalk line on the floor representing one edge of the "clear" pick aisle; this is the "front line". Another line should be set at one edge of the flow rack run, perpendicular to the front line; this is the "edge line".



Place one vertical frame flat on the floor, approximately 12" away from the front-line, and with the bottom edge of the frame on the edge-line. Vertical frames have numbered T-slots. Confirm that these numbers are in the "up" position.

Attach the 7" and 4" sway braces to one side of this frame, at the top and bottom, front and rear, according to the configuration required for the model being installed (see chart below).



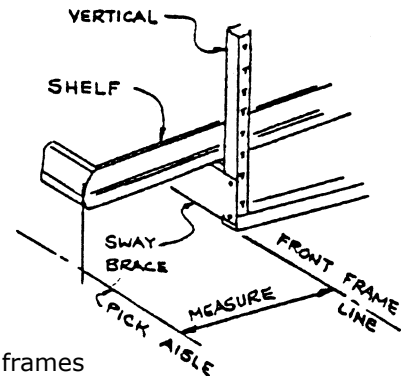
Position a second vertical frame and bolt the sway braces in place, **finger-tight**, using two 3/8" x 3/4" bolts and flanged nuts at each end of each sway brace. These bolts will be tightened later. The **Quik-Pik** shelves are mounted to the vertical

frames with the T-slot hanger brackets. These brackets have a "top" position (marked with a "T") and a bottom position. When the brackets are installed in the same holes, but inverted, an adjustment increment of 3/4" is obtained. Two hanger brackets should be installed at the rear, one on each side, in the first available T-slots above the rear sway brace.

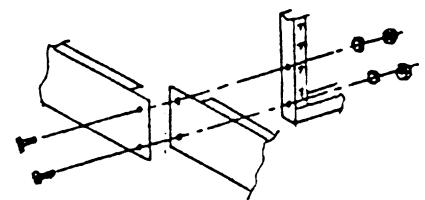


Install one bottom shelf in the section, support with two hanger brackets at the rear and either use hanger brackets or rest directly on the lower sway brace at the front. The shelf should be positioned with the brackets engaging the side rail notches closest to the pick-aisle line.

This section should then be carefully positioned with the edge of the lower shelf located on the pick-aisle line, and the outer vertical frame located on the edge-line. By measuring the set-back of the vertical frame from the pick-aisle line, a new chalk line can be snapped, which will locate the front edge of any other vertical frames in the run, called the "front-frame line".



A second set of sway braces should then be attached to the intermediate vertical frame, with the sway braces overlapping and sharing bolts. Plumb and tighten the first set of bolts on the outer vertical frame. Position and bolt on the next vertical frame in the run, repeating the above procedure until all vertical frames and sway braces are in place and aligned on the front-frame line.



Shelf Installation

The balance of the shelf frames are installed in the sections with the number of shelf frames, pitch and vertical spacing as specified by the customer.

Standard-capacity shelves in this model range require four (4) hanger brackets per shelf; for heavy capacity or models greater than 120", consult factory.

The starting pitch should be set at 5 to 7 degrees, or 1" elevation change per each 12" between hanger

Sway Brace Configuration Chart

Model	Top Front	Top Rear	Bottom Front	Bottom Rear	Top Center
60	7"	4"	4"	4"	—
90	7"	4"	4"	7"	—
120	7"	4"	4"	7"	4"

for units over 120", consult factory

brackets. For example, a Model 90 has approximately 66" between hanger brackets, and a starting pitch of $66/12 = 5.5"$ at the posts.

Actual flow tests should be conducted to determine the correct pitch required. These tests must be made with the test shelf fully loaded with medium-to-heavy loads. All shelves will deflect under load and affect flow; as a result, if pitch is determined using empty shelves, products will not flow properly when shelves are loaded.

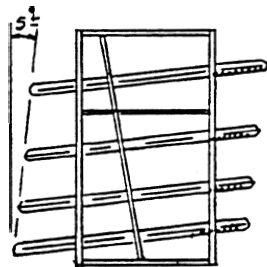
Flow Test Procedure

Install track and guide (next section) in one shelf, set the runways to fit a typical assortment of products with medium weight, and fully load the shelf.

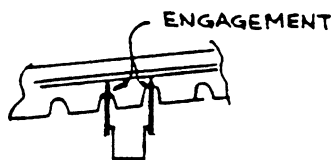
Remove the front package from each runway, and confirm that the entire lane moves forward smoothly. Replace the packages removed and reposition the rear of the shelf in successive $3/4"$ height increments until all products just barely start to flow smoothly. Raise the rear shelf one more $3/4"$ increment for Model 90 or shorter, and two increments for models larger than 90. This should be the final pitch setting. When possible, allow this test shelf to set fully loaded for 24 hours, and retest the start-up flow characteristics. All packages will "settle" over the roller bed, and some low-grade corrugated materials may require additional pitch after prolonged storage.

After determining pitch, locate and install the remainder of the shelves in the sections using the vertical spacing provided by the customer. A rule of thumb for vertical spacing from top of shelf to top of shelf: minimum = product height + $4-1/2"$.

If a layback configuration is desired, step back successively higher shelves via the multiple notches in the side rail. These notches are in $1-3/8"$ increments. Layback configuration of 5-10 degrees can be achieved by this method.



At final installation, all shelves should have a notch over each tab of the rear hanger brackets (two total per side) to prevent forward movement of shelves.



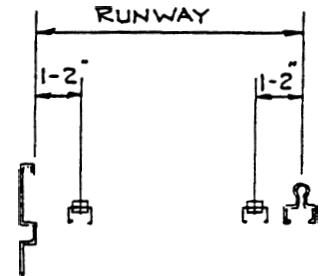
Installing Rolla-Trak and Guide Rail

Quik-Pik rolla-trak and guide are held in position by the horizontal teeth of the front and rear rails. These are spaced at $1/2"$ intervals and provide this same $1/2"$ of horizontal adjustability when setting the flow lanes. The rails are also stamped with a "hash-mark" at every tooth. It is recommended that after setting the first track or guide, the teeth are counted at front and rear to

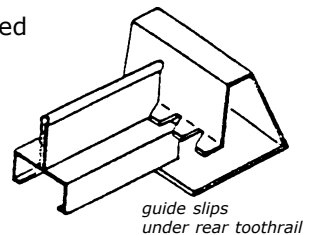
ensure that the track and guide are parallel. No guide rail is required at the outer edges since the shelf side rail serves this purpose.

The following guidelines will help ensure proper lane sizing and product flow:

- Runway width should be a minimum of the box width + 1", rounded to the next largest $1/2"$ multiple. For boxes over 18" wide and/or weighing more than 30#, an additional 1" lane width is recommended.
- Tracks should be located within 1 - 2" of the guide rails and side rails. **All tracks and guides must be installed parallel to ensure good flow.**
- Boxes over 18" wide and/or weighing more than 30# may benefit from additional tracks supporting their centers. Or...1 additional piece of track per 15# of box weight over 30#...or...1 additional piece of track per 8" of box width over 18". In addition, very soft-bottom boxes will benefit from additional tracks.



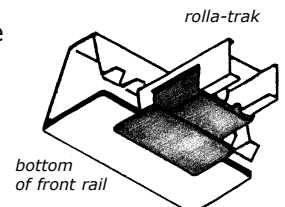
The **Quik-Pik** system is designed to rigidly lock the guide rail at the rear of the shelf, by allowing its shoulder to slip **under** the teeth, while the actual (upper) guide surface passes between teeth. At the front of the shelf the guide rests with the shoulder **on top** of the teeth. Guide rail on some heavy duty shelves, two-piece shelves and/or shelves over 120" long require a plastic clip at the front.



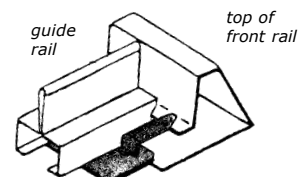
Installing Optional Plastic Clips

An optional plastic locking clip is provided for some installations. This is a dual purpose clip that snaps to the bottom of the track and guide, and can be easily slipped in and out of locking position.

With Rolla-trak: The clip is to be installed with its tongue toward the toothed rail. The tongue then slides under the bottom edge of the toothed rail, until it stops.



With guide rail: The clip is to be installed with its tongue away from the tooth rail, on the one end (only) of the guide rail which sits on top of the teeth. The clip then slides between the teeth and the bottom support ledge of the rail.



For assistance call 1-800-888-5707