

Bolted Cantilever Assembly Instructions

DO NOT USE unless trained and authorized



Training is required before racking is loaded or unloaded, using powered mobile equipment.



Damaged racking must be reported immediately to a supervisor or manager.



Do not overload racking. Weight restrictions must be observed.



Do not climb on racking.

Step 1: Before starting to install

Check carefully for any damaged components as materials are received. Report any deficiencies and or damage to the carrier immediately upon receipt of materials. Check to ensure all hardware is included with the shipment.

Cantilever should only be installed on a suitably reinforced, level concrete base. Design and load carrying capacity vary greatly in concrete floors. Contact your building architect, local engineer, or Arpac if you are unsure of the suitability of your floor.

An installation drawing may be available from Arpac as a reference regarding product layout and arm elevations.

Step 2:

It is highly recommended that a professional cantilever installation crew be responsible for the erection of the cantilever system. Personnel installing cantilever should be competent in reading and following the instructions on the installation drawing.

Improper assembly of this product could result in injury or death.

Product warranty coverage will be voided if the material is not installed as per the installation drawing and or the installation instructions as outlined in these assembly instructions.

Step 3:

Ensure that the area the cantilever system is to be located is clear of all obstructions. Note the position of any building columns, heaters, lights, sprinkler pipes that may interfere with the cantilever system.

If an installation drawing is provided, note the correct distance off the wall to start the first row of cantilever. Use chalk lines to establish both down aisle and cross aisle start points. Make sure your lines are at 90 degrees to each other.

Check to ensure that the cantilever system does not block any exits required by applicable fire codes. Remember to allow for product overhang by starting the first column no less than half the distance of your column spacing from a wall or other obstacle.

Step 4:

Lay down two columns with the holes facing up. Bolt on bases as shown in (Ref. #A) using hardware specified. Bolt on arms as shown in (Ref. #B) making sure to use correct spacing as per the installation drawing. Make sure arms slope upwards when the cantilever is standing.

Next, bolt cross panel (Ref. #C) between two columns. Refer to job specific installation drawing to determine what configuration is required. Safely lift assembly to the upright position. If you are assembling a double-sided column, you can now bolt the base and arms on the opposite side.

Dependent on the height of the cantilever system a scissor lift should be used to install the upper arm levels and brace panels to satisfy your local OH&S regulations. At no time should anyone climb or walk on any components of the cantilever system.

Step 5:

Once the first pair of columns is in position, anchor the columns to the concrete following the directions in [Step 6](#) and [Step 6a](#).

Continue making pairs of columns as per [Step 4](#) and standing them up with allowances to fit the brace panels in between each bay.

Slide the columns into position and attach the brace panels at the correct height between the bays of cantilever.

Once the first row of cantilever is in position, ensure that the system is squared and aligned correctly. You can now begin to anchor as per the instructions in [Step 6](#) and [Step 6a](#).

Step 6:

It is recommended to anchor all upright columns to the floor and mandatory for upright columns that are higher than eight feet tall.

Always make sure columns are plumb, level and square before starting to anchor. If not plumb, level and square, shimming will be required. Use appropriate sized shims to properly transfer the weight to the concrete floor.

Anchor the first column to the square lines you created on the concrete floor. Make sure the columns and bases are evenly spaced to allow for the next brace panel to be bolted in.

Step 6a:

Use only anchors shown on the installation drawing and never mix manufacturer anchors and bits. The use of different drill bits can result in a pullout failure of the anchor. Refer to the anchor manufacture's recommended torque and embedment requirements to ensure proper anchor performance.

Locate columns at least six anchor diameters from saw cuts, joints or edges of the concrete floor slab. If an anchor hole falls too close to a cut or joint in the slab, adhesive anchors may be necessary.

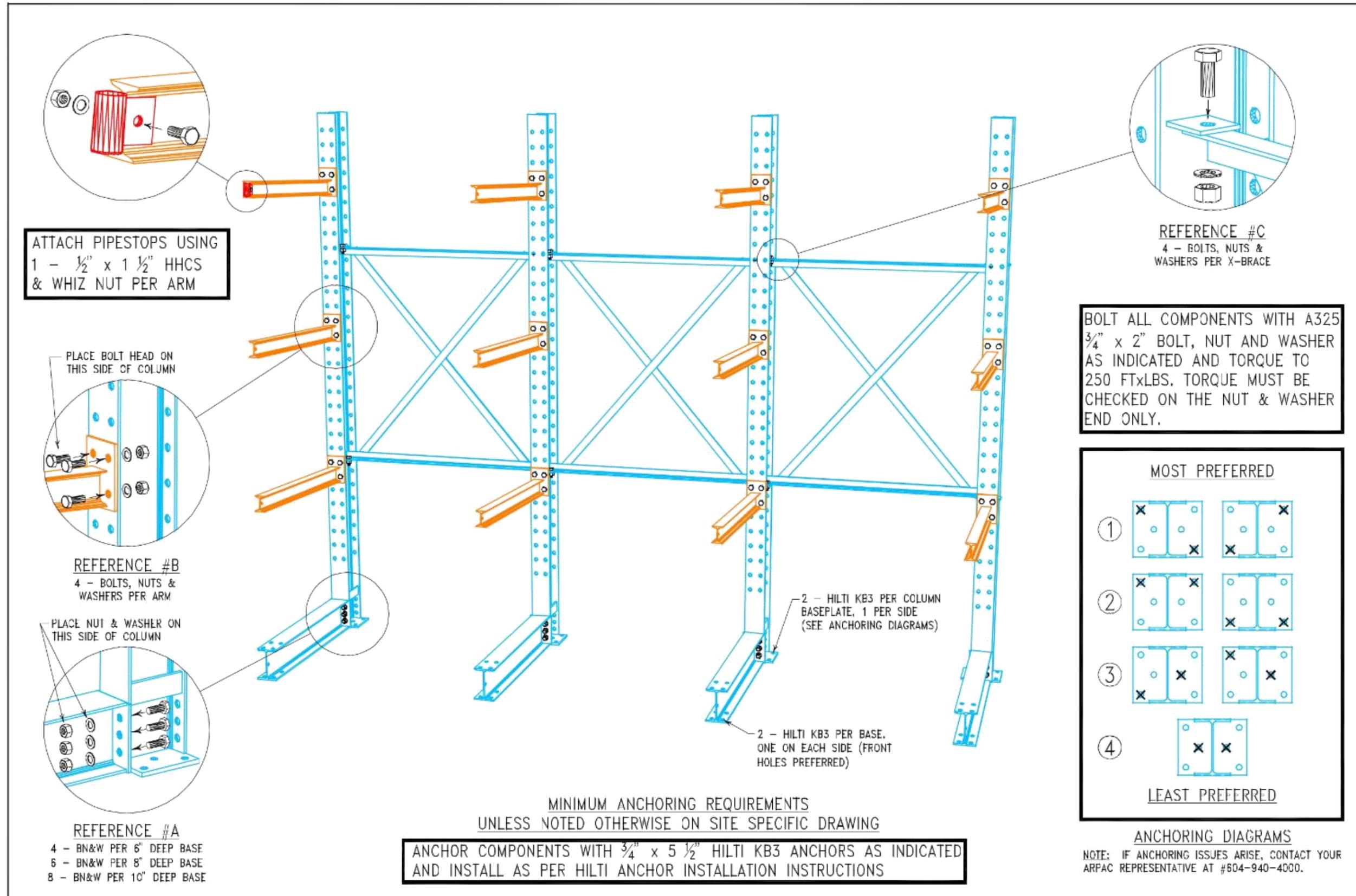
Contact your Arpac sales representative if this occurs.

Step 7:

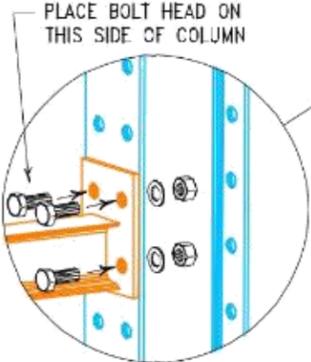
Under no circumstances should you cut, weld or modify in any way, any components of your Arpac cantilever system. Doing so may decrease the load carrying capabilities of the component which could jeopardize the integrity of the entire cantilever system.

Any modifications of any components, unless authorized in writing by Arpac's engineers, will void any warranty coverage and guarantees available.

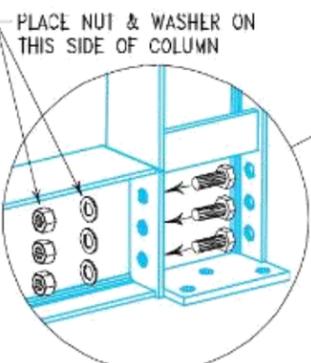
Contact your ARPAC sales representative at 604-940-4000 should you have any questions regarding installation of this product.



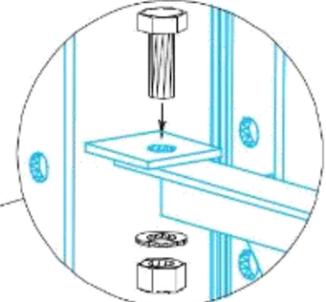
**ATTACH PIPESTOPS USING
1 - 1/2" x 1 1/2" HHCS
& WHIZ NUT PER ARM**



**REFERENCE #B
4 - BOLTS, NUTS & WASHERS PER ARM**

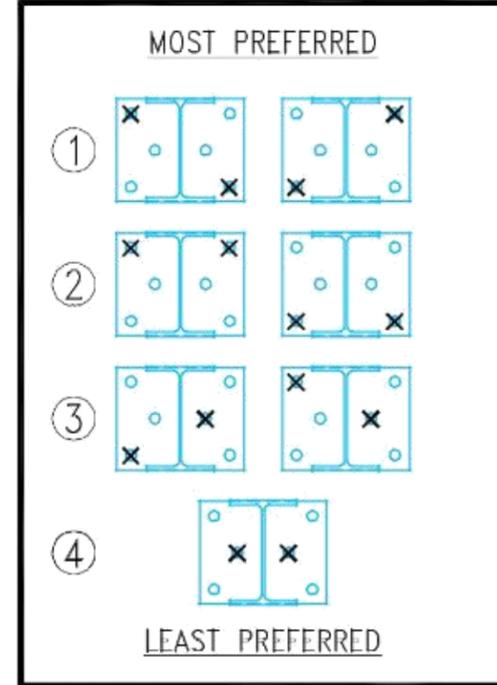


**REFERENCE #A
4 - BN&W PER 6" DEEP BASE
6 - BN&W PER 8" DEEP BASE
8 - BN&W PER 10" DEEP BASE**



**REFERENCE #C
4 - BOLTS, NUTS & WASHERS PER X-BRACE**

BOLT ALL COMPONENTS WITH A325 3/4" x 2" BOLT, NUT AND WASHER AS INDICATED AND TORQUE TO 250 FTxLBS. TORQUE MUST BE CHECKED ON THE NUT & WASHER END ONLY.



ANCHORING DIAGRAMS
NOTE: IF ANCHORING ISSUES ARISE, CONTACT YOUR ARPAC REPRESENTATIVE AT #604-940-4000.

**MINIMUM ANCHORING REQUIREMENTS
UNLESS NOTED OTHERWISE ON SITE SPECIFIC DRAWING**
**ANCHOR COMPONENTS WITH 3/4" x 5 1/2" HILTI KB3 ANCHORS AS INDICATED
AND INSTALL AS PER HILTI ANCHOR INSTALLATION INSTRUCTIONS**

2 - HILTI KB3 PER COLUMN BASEPLATE, 1 PER SIDE (SEE ANCHORING DIAGRAMS)

2 - HILTI KB3 PER BASE, ONE ON EACH SIDE (FRONT HOLES PREFERRED)