

# **ALUM-A-STAND BLEACHERS**

## **STANDARD INSTALLATION INSTRUCTIONS**

### **TO OUR CUSTOMERS**

You have purchased the most unique portable bleacher system on the market. It is the highest quality, the best appearing, and the strongest bleacher system and the Alum-A-Stand will assemble faster and at less cost than any other bleacher system with comparable features. No other bleacher system will give you all of this:

- Becomes more rigid and safe by means of a positive connection with each connection of a footboard, a seat, a crossbrace, and aisle and a handrail.
- Allows repair of damaged understructure parts without welding.
- Comes with a standard 5/3 year warranty.
- Has the strength of the Alum-A-Stand's 3" tube and channel construction.
- Has two internal legs on the seats (3 ¼") and footboards that are 2 ½" in height which is the most important factor that gives the plank its strength.

While other bleacher manufacturers are constantly looking for ways to cut costs from their production, the Dant Clayton Corporation has constantly searched for ways to improve the Alum-A-Stand to comply with code requirements, make the Alum-A-Stand safer and easier to install, and make the Alum-A-Stand a quality product of which you can be proud.

### **TO THE INSTALLER**

The Alum-A-Stand is a unique product and requires some different techniques and tools than any other bleacher system. Please familiarize yourself with these instructions in their entirety before beginning your installation. We have combined drawings, pictures and the written word on each step in an attempt to make your installation go as smoothly as possible.

## **TOOLS REQUIRED THAT MAY BE UNIQUE TO THE ALUM-A-STAND**

- 32 oz. rubber mallets for attaching footboards
- C-clamp type vise grips to remove a footboard
- 3" hole saw

## **OTHER TOOLS REQUIRED**

- Generator if no electric is on site
- Band cutters to break bundles
- Knife for removing packaging
- Tape measures
- Drill with 3/16", 3/8" bits
- Screw driving drill with 5/16" hex drive attachment
- Pop rivet tool for 3/16" rivets
- Ratchets with 1/2" and 3/8" sockets
- 3/8" and 11/16" open end wrenches
- Drift pins for hole alignment
- Circular saw with carbide tipped blade
- Reciprocating saw with metal cutting blade
- Concrete hammer drill with 3/8" and 1/2" bits
- Sledge hammer
- Fencing pliers
- Come-a-long
- Hammer
- Bolt cutters
- Fence Stretcher

## **IMPORTANT PITFALLS TO AVOID**

Your installation efficiency will increase by heeding the following:

- Don't tighten anything until you are ready to attach the chain link fabric.
- Attach cross bracing before footboards.
- Install riser and 2' x 5' filler boards for aisles and/or closed deck before seats.
- Install the 2' x 5' filler board over the tall stair handrail posts before attaching the stair handrails. If stairs are positioned at front of stand instead of at the end(s) of walkway, the 2' x 5' filler board will have four 3" diameter holes and will slide over the front handrail posts on bleacher before front handrail is installed.
- Seats for the end sections which have a 3" diameter hole in one end must be attached at the rows where a handrail post will be located (refer to drawings).
- The bottom side handrails and the side rail post connector channels must be positioned before the side handrail posts are attached.
- Install the side and rear rails at the rear corners in sequence from bottom to top (bottom side rail first, bottom rear rail second, etc. Refer to drawings and hole patterns on posts.)
- After all attachments have been made, tighten the handrail posts and handrails before attaching chain link fabric.

## STEP 1:

### Unloading the Truck and Staging the Material

In most cases, your material will arrive on a flatbed trailer. Larger Alum-A-Stand bleachers may require the use of a forklift. You will need a minimum of 4 workers; 2 on the ground and 2 on the truck. Position the truck as close as possible to the installation site. When practical, scatter the frames approximately 6' on center of the installation site. Stack the footboards in front of the installation site conveniently accessible as these will be installed first. Arrange other materials on ground in order of use.

Some boards are dimensionally similar. Special attention must be given to kerf patterns. Front Walk Way (FWW) Boards are kerfed every 3'-0".

## STEP 2:

### Crossbrace Attachment

Distribute pre-assembled frames throughout the length of the site for the stand spacing them 6' OC. Attach all crossbraces at locations shown on section drawing and on framing plan drawing. Refer to crossbrace connection detail and crossbrace length chart on section drawing and on packing list. Use 3/8" x 3 1/2" bolts (3/8" x 4" bolts may be furnished when connecting 2 or more braces at the same location). The 2 channels that form the "X" for each set of crossbracing will be positioned on opposite sides of the tubes.



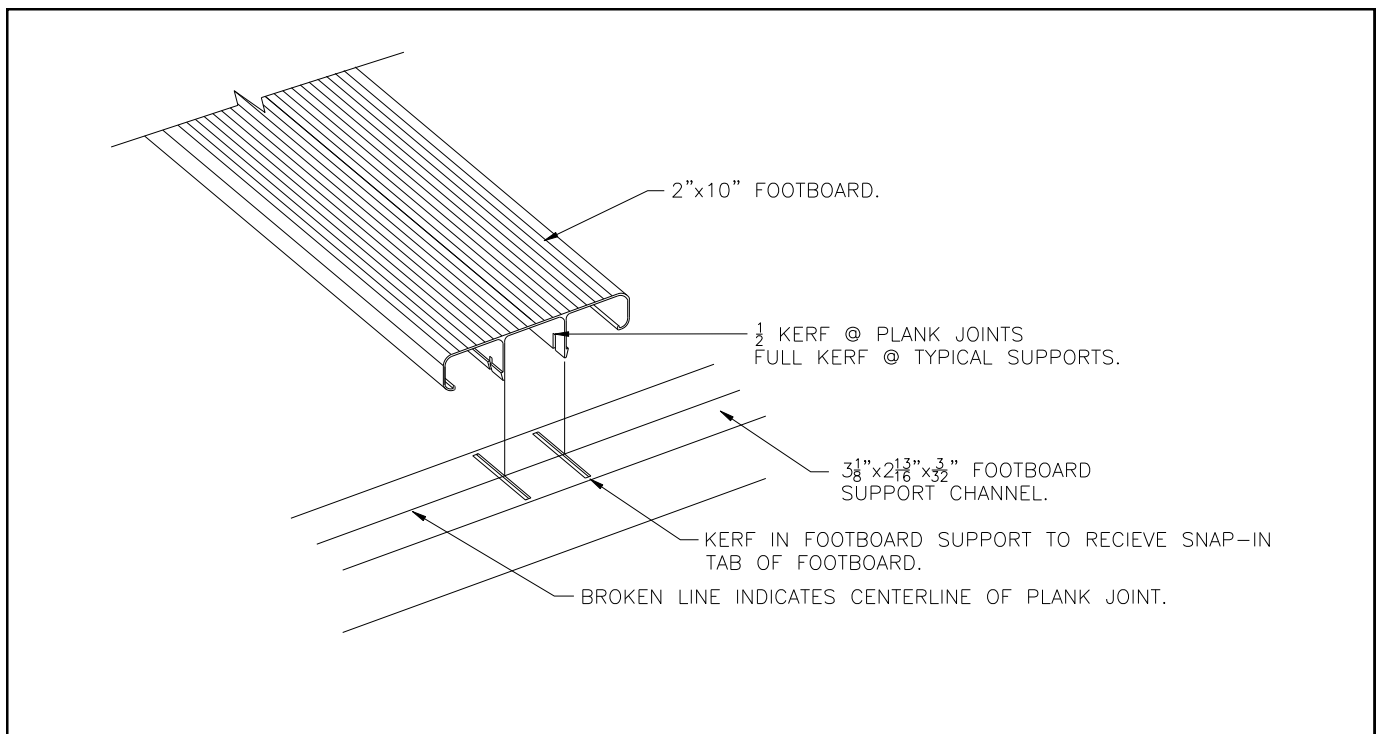
**IMPORTANT: DO NOT TIGHTEN ANY BOLTS WITH A WRENCH UNTIL YOU HAVE COMPLETED FOOTBOARD AND SEAT-BOARD INSTALLATION.**

### STEP 3:

#### Footboard Attachment

Referencing frame layout plan, organize and space frames as shown throughout the length of the stand. Begin installing footboards according to the plank layout drawing. Begin at front walkway or row 1 working from one end to the other, but never from both ends simultaneous. Pay attention that if your stand has a front walkway to locate the footboards that are kerfed typically every 3'-0" as those boards will require stiffener channels. To attach the footboards to the footboard support channel, align the slots in the channel with the notches in the legs of the plank in a vertical position. While applying downward pressure on the plank and using a rubber mallet, drive the plank straight down so the lower points of the legs lock the plank into the channel. Once the front walkway is attached to the frames attach the stiffener channels to the underside of the front walkway footboards to provide stiffness to the decking. Continue to work your way up the bleacher in this manner until all footboards are attached to the frames. If you have more than one frame front to back, swing up the connector link channel on the next frame and bolt to the frame in front with a 3/8" x 3 1/2" bolt. Once all footboards are attached to the stand apply end caps with rubber mallet to the ends of each footboard.

NOTE: If your stand is elevated, entrance stairs should be assembled to assist in getting materials onto stand.

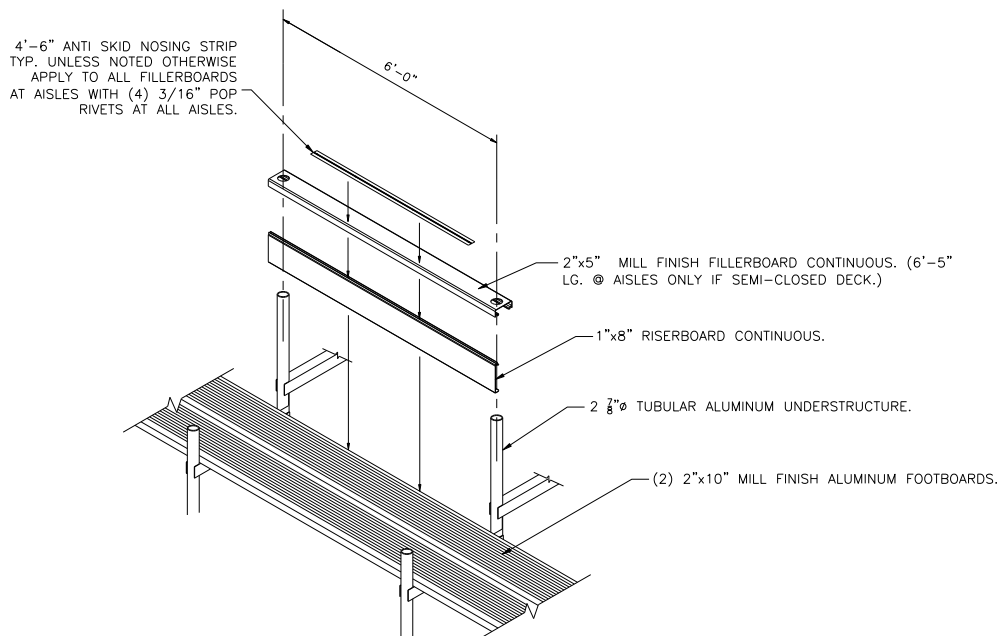


## STEP 4:

### Aisle Filler Board and/or Closed Deck Installation

Install the closed deck or aisle filler materials consisting of a riserboard and a 2" x 5" filler board which interlock in a tongue and groove connection. Refer to plank layout drawing. The riser plate fits behind the double 2" x 10" footboards and the filler board slides over the seat support tubes to interlock with the riserboard.

NOTE: If your stand is semi-closed, the riser board will run the length of the stand and the filler board will interlock with the riser at the aisles and handicap area only. Attach the riser to the seat support tubes with self-tapping tek screws.

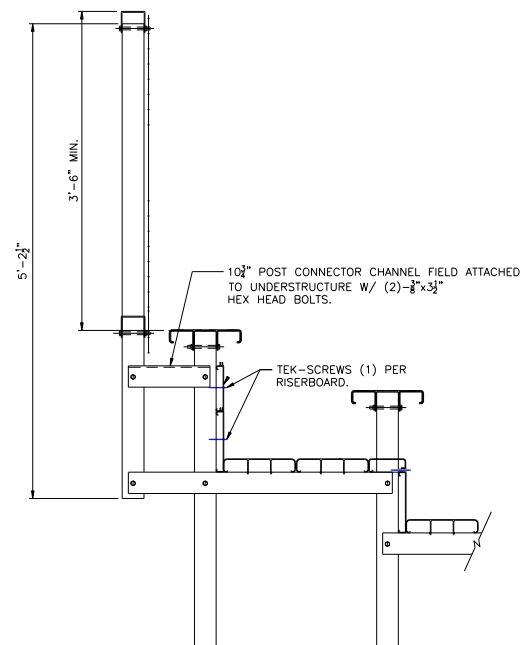


## STEP 5:

### Rear Handrail Post Installation

Install rear handrail support posts using two 3/8" x 3 1/2" bolts. The rear posts will have 2 holes in the bottom, 14" apart in most cases.

NOTE: This step may be done while the rear frames are laying on the ground.

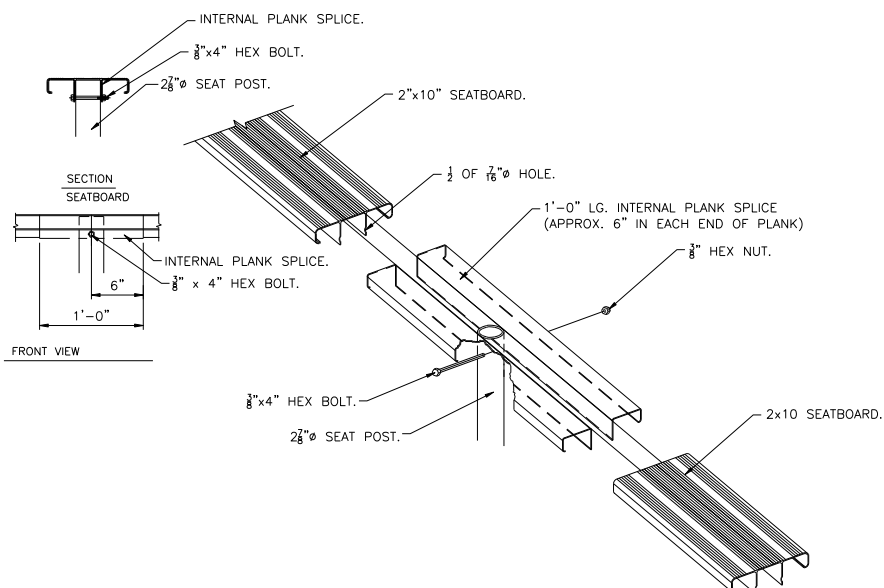


## STEP 6:

### Seat Attachment

Install the seatboards referring to the seatboard layout drawing. Use  $\frac{3}{8}$ " x  $3\frac{1}{2}$ " bolts. If your stand requires seat splices, install seatboard on one side of the splice as described above. Then, insert the splices into the end of that seatboard and bolt the splices through the seat support post. Slide the seatboard on the other side of the splice into the splices and bolt. Ensure bolt is tightened after assembling splice. Install protective plastic seatboard leg covers per installation drawing.

NOTE: The end sections of seats will have 3" diameter holes punched in the top at one end for the locations on the end where handrail support posts will be installed. Refer to the end elevation drawing for the locations of the end handrail support post.



## STEP 7:

### Cast Endcap Installation

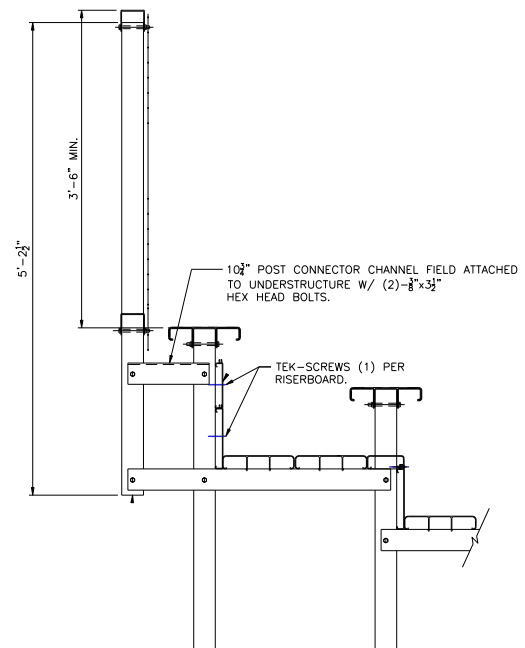
Install all cast aluminum endcaps for the footboards, filler boards, seatboards and riser boards. Ensure  $\frac{3}{16}$ " pop rivets attach riser endcaps. Pre-drill through risers into riser endcap flanges shown on right.



## STEP 8:

### Bottom Side Guardrail and Side Guardrail Post Connections

Lay the lower side guardrail in place above footboards and below seatboards. Insert side post connector channel and bolt to seat support tube below seat. (See End Elevation drawing). Slide side guardrail posts down through 3" hole in end of seats through the side post connector channel and the lower side guardrail. Bolt post into place with 3/8" x 3 1/2" bolts.



## STEP 9:

### Stair Installation

Prior to assembly re-verify that all needed material is on site. Stage the parts at the install location. Stand up the LH and RH stair stringer assemblies and bolt on the x-braces and the lower backer angle beneath the bottom stair tread. Clip stair treads so that the riser keyway is clear of the tread angle. CLIP SECURELY and leave off the bottom tread. Begin installation of the riser by centering and rolling the riser so the ends are the same distance from the stringer. Install Tek screws 3" from each end and one in the center (3) total.

Once the above work has been completed (minus the bottom step), position and square up the stairs to the bleacher (shim if necessary) and then anchor the stair. Finish the bottom by setting the stair tread and clipping down and then installing the bottom riser. At this point the cover plates for the top and front of the stair **MUST BE INSTALLED** per the installation drawings to cover the sharp corners to prevent injury. Install the joint cover if necessary and apply anti-skid nosing with the required number of pop rivets. Then install the grab rails and anchor to the concrete.

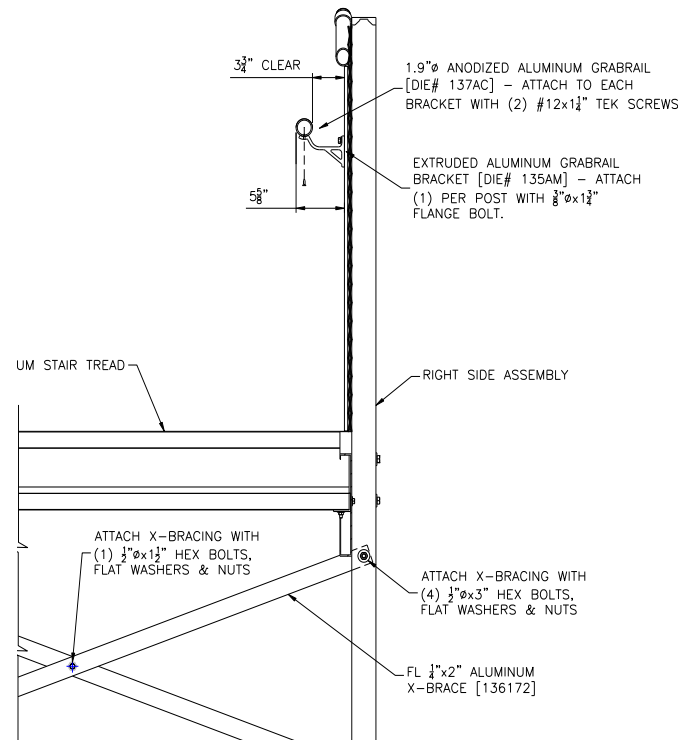




## STEP 10:

### Stair Attachment (Elevated Only!)

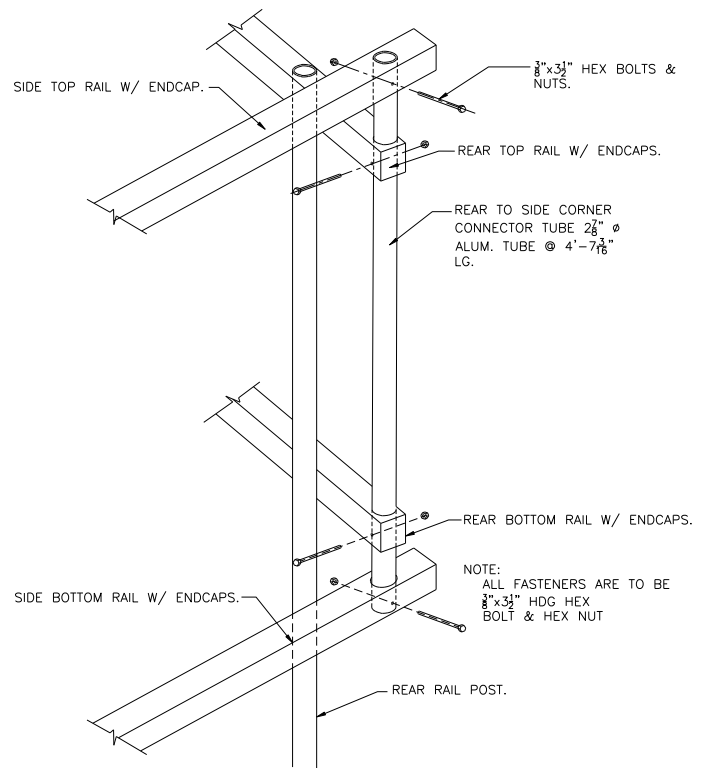
If you enter the stand from the front, attach stairs to front of stand by sliding 2" x 5" plank over the top of the stair posts and the front handrail posts adjacent to the stairs. Slide the 2" x 5" plank over the top of the tall stair posts before attaching the handrail.



## STEP 11:

### Corner Connector Tubes

Install front and rear corner connector tubes. Connectors will stabilize the rails that cantilever past the frames to the corners.

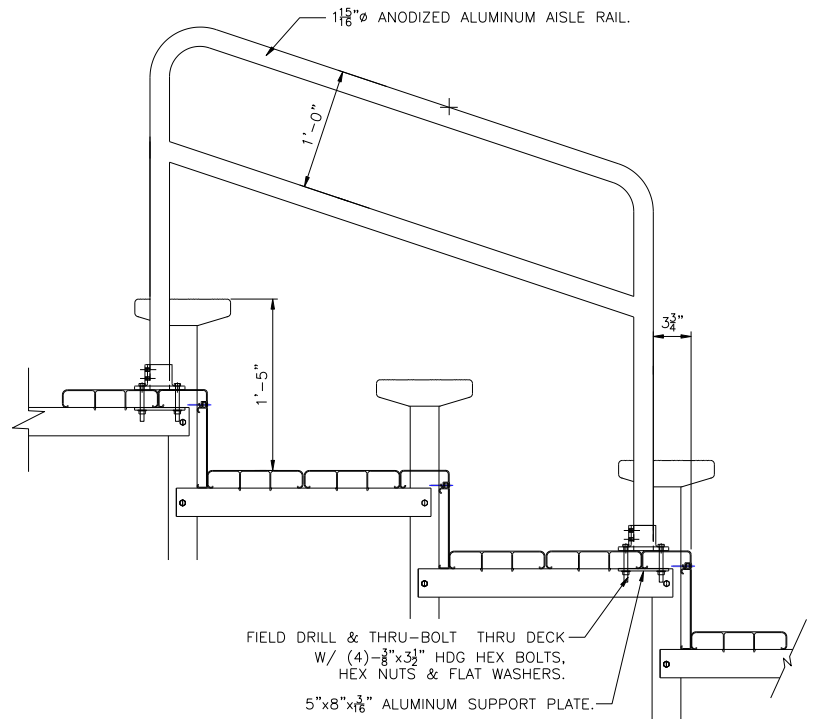




## STEP 12:

### Aisle Handrails

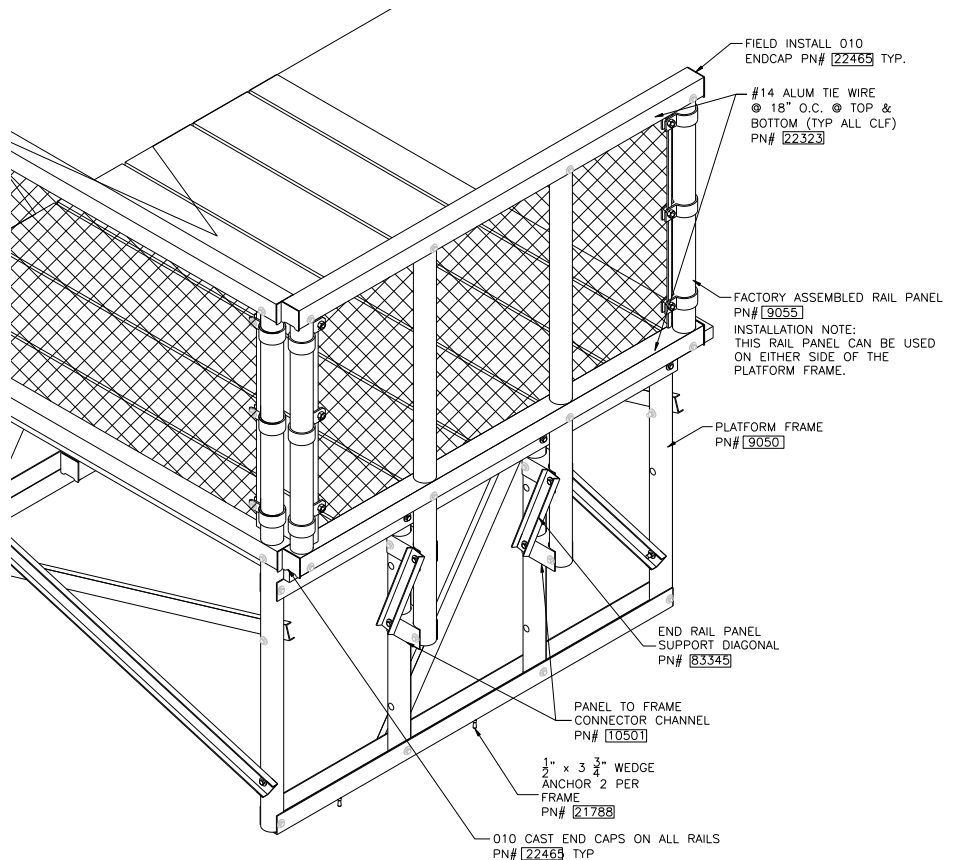
Position aisle handrails in center of aisles at row locations shown on drawings. The floor mount flange is to be centered over the joint where the 2" x 5" plank and the front footboard meet. Mark holes and drill 3/8" holes through the footboards. Attach aisle rails using 3/8" x 3 1/2" bolts and a backer plate on the underside of the footboards, per installation drawings.



## STEP 13:

### Walkway End Rail Panels

On stands that have the walkway closed off, you will have a pre-assembled guardrail panel with guardrail posts that extend below the walkway level. Attach this panel using 3" channels with half-moon cut-outs in the ends to the end frame under the walkway. Attach 042 diagonal brace in two places.



## STEP 14:

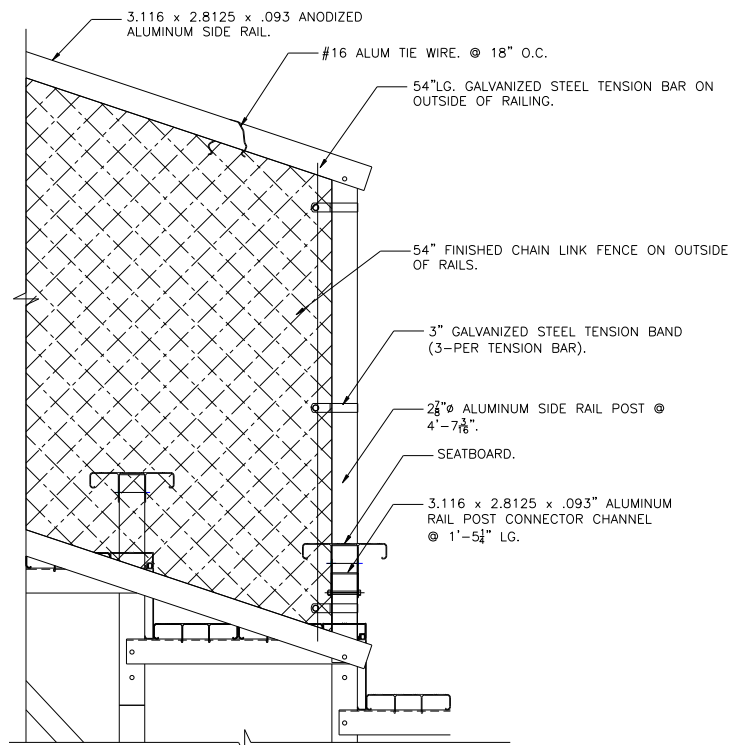
### Tighten all Bolts

After tightening, double check for bolts that may have been missed. A commonly overlooked connection is the frame connector channel bolt that is used to attach the frames together front to back.

## STEP 15:

### Install Chain Link Fabric

Slide the tension bar into the end of the chain link fabric and attach the bar and fabric to the corner post with 3 tension bands and 5/16" x 1 1/2" carriage bolts and nuts. Using a come-a-long for long stretches of fence, pull the chain link tight and attach the chain link to the handrails (top and bottom) using the aluminum tie wires and fencing pliers. Attach the other end of the chain link to the terminating post, again using 3 tension bands and the carriage bolts. Typically, the side chain link will be 54" and the rear chain link will be 42". The ends of the side chain link will have to be cut at an angle. Slide the tension bar through on the path of least resistance, cut the excess triangular material behind the tension bar with bolt cutters and wrap the ends that have been cut around the tension bars with fencing pliers.



SAFETY NOTE: All cut chain link fabric must be bent to avoid exposed cut edges.

## STEP 16:

### Anchor the Stand to Concrete

Anchor stand to concrete with expansion anchors provided. Drill through the holes in the base channel with a concrete hammer drill using a bit the same size as the anchors provided. Put the washer and nut on the anchor bolt past the taper on the top of the bolt. Drive the bolt into the hole in the concrete and tighten. Dant Clayton Corp. does not advise placing Alum-A-Stand bleachers on asphalt, gravel or ground.

You have purchased a premium quality product and it is our intent to provide a premium quality service. Should you encounter problems or have questions, please call Dant Clayton Corporation at **1-800-626-2177**.



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