

# 308 Bleacher Systems

**BILJAX**  
Haulotte  
GROUP

Bench / Tip-Up

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## ASSEMBLY INSTRUCTIONS



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P/N: LL-204-90

### Assembly Instructions Include:

Rev: 0

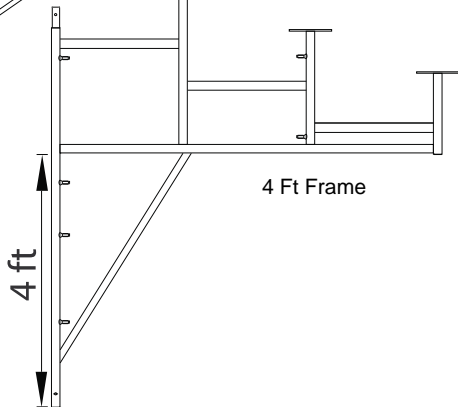
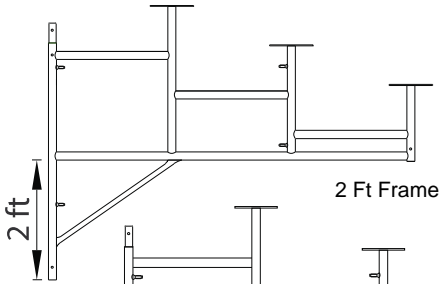
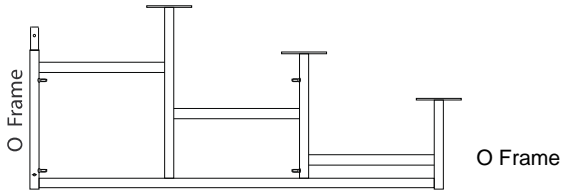
- Step 1:** Site Preparation
- Step 2:** Frame Assembly
- Step 3:** Bracing
- Step 4:** Walkboards Installation
- Step 5:** Isle way / Handrails
- Step 6:** Seat Installation

- Step 7:** Guardrails
- Step 8:** Panel Installation
- Step 9:** Non-Elevated Patterns  
Elevated Patterns
- Step 10:** Stair System
- Step 11/12:** Tip-Up Seating

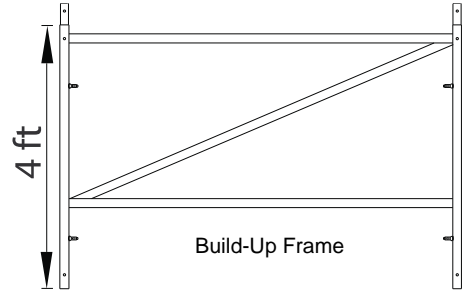
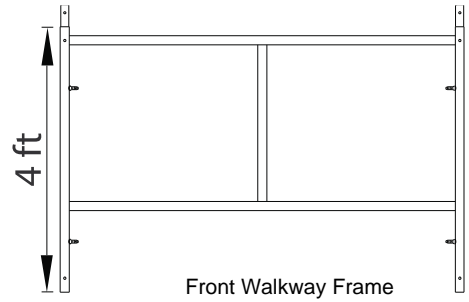


# Bleacher Components

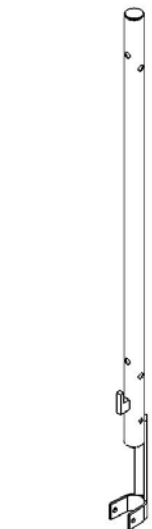
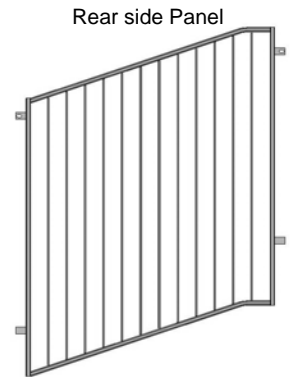
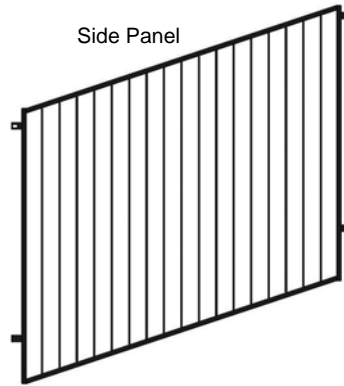
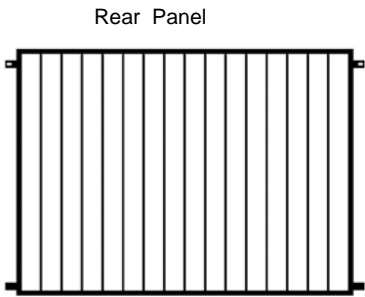
## Seating frame sizes



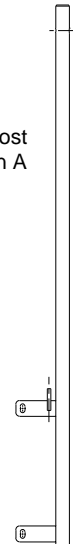
## Build Up Frames



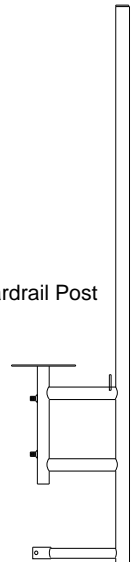
## Panels



Side Guardrail Post Option A



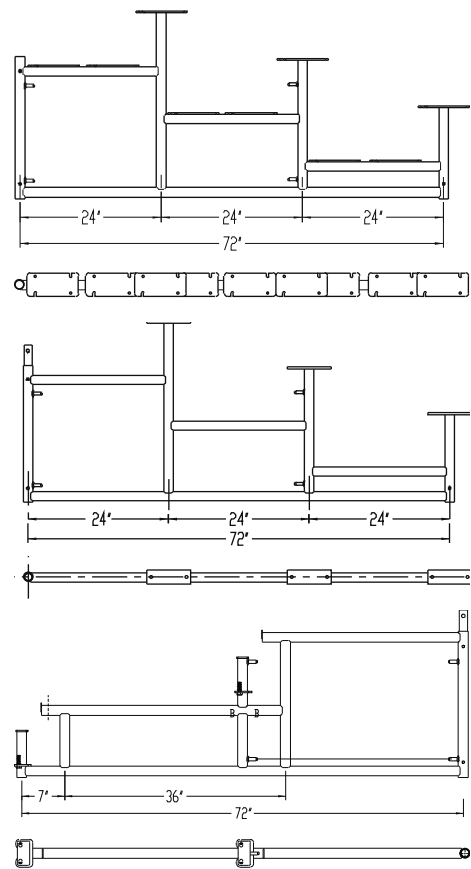
Rear Guardrail Post



## Guardrail Posts

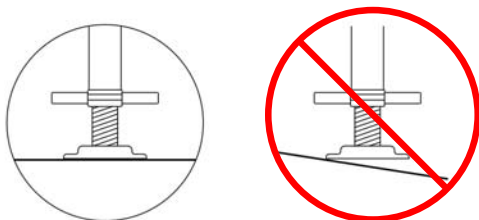
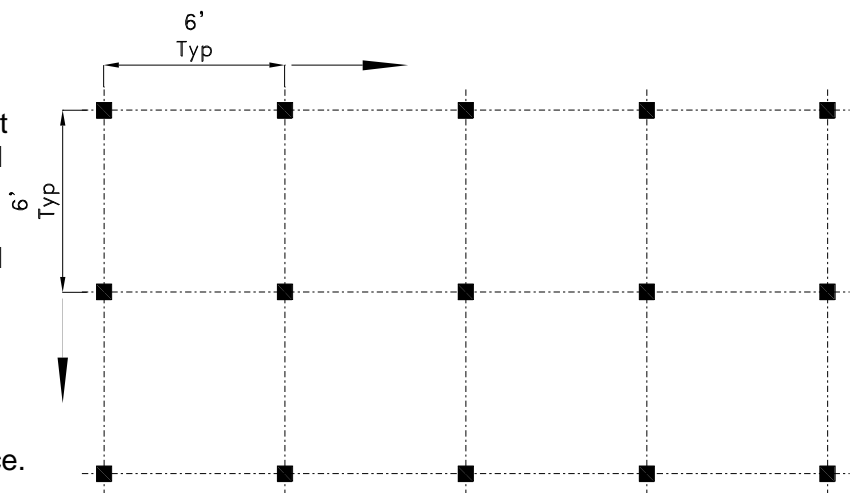
**NOTE: The 308 Bleacher has three frame options:**

- 1. **Permanent setup** – (Building codes IBC state that all structures that stay in place longer than 180 days are to be considered permanent.) IBC-3103.1
  
- 2. **Rental Bleachers** – Structures that are easily assembled and quickly disassembled.
  
- 3. **Rental 308 Tip up seat / Combination**



**Step 1 Site Preparation**

- A. Determine the exact location where the bleacher will be erected.
  
- B. Preplanning of the bleacher installation is very important. The bleacher footprint will require footers set on a 6ft x 6ft grid pattern (as shown)
  
- C. For installation, the footers are required to distribute the weight (4500lbs. per leg) of the structure. This will prevent the legs from sinking and ease the leveling
  
- D. All footers should provide a level surface.



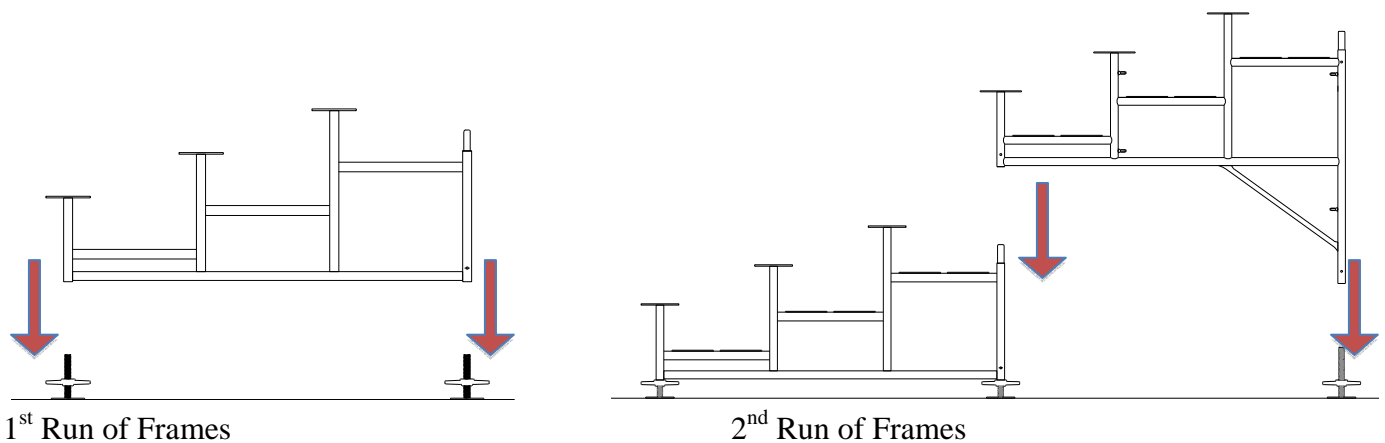
**NOTE: It is recommended for permanent installations to use a level concrete surface as footers.**

## Step 2 Frame Assembly

1. The front row of frames will require the installation of two jacks per frame (one in each leg). After the completion of the front row of frames including full bracing (see step 3 for bracing details) the next row of frames can be assembled.
2. The next row of frames in the setup will then connect to the back of the first row of frames by sliding onto the first row of frame's insert.
3. The buildup frame requirements can be determined by the number of rows, and if it is non-elevated or an elevated system. The appropriate pattern can be found on the reference page listed for a visual aide, page (8 & 9).

**NOTE:**  
For quick reference images

1. Non-elevated - pg. 8
2. Elevated - pg. 9
3. Tip-Up - pg. 11



**NOTE:** If using an elevated system, start with the front walkway framing before seat framing.

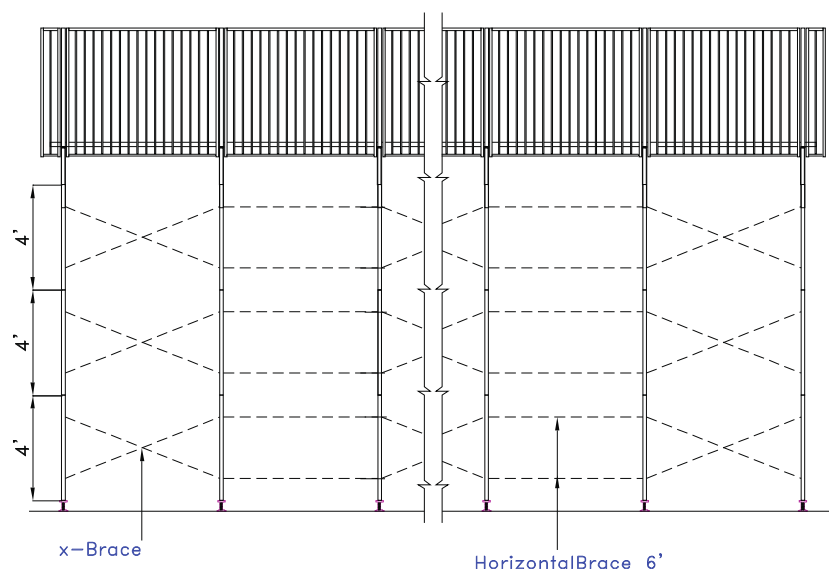
## Step 3 Bracing

Install X-brace or Horizontal brace on all frames as shown in the diagram to the right.

All Bracing must continue with the same bracing pattern of a cross brace and then a horizontal brace in the next section, starting and stopping with a cross brace for each end.

**NOTES:**

- There may be two consecutive bays with x-brace at the end of the bleacher.
- "0" Frame and 2ft Build up frame require 16" x 6ft x- brace. All the rest of the frames use 27 3/4" x 6ft x- brace.

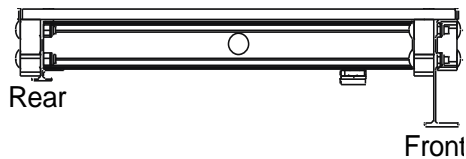


## Step 4 Installation of Walkboards

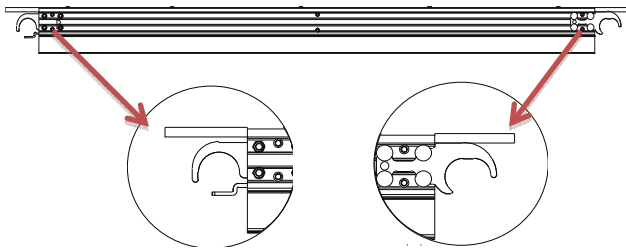
The installation of the whole system will be completed one level at a time with walkboards installed with each level as it is constructed.

### A. Walkboards

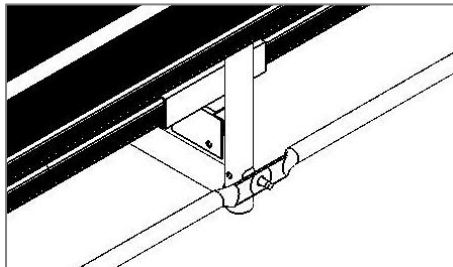
1. Drops down for each placement with the locking hook side lowered down first and then dropping down the other side. The front can be determined from the different size edges. The front has a larger edge face than the rear.



2. Last Board is different to install than the previous walkboards. Each end has an overlap on the last section

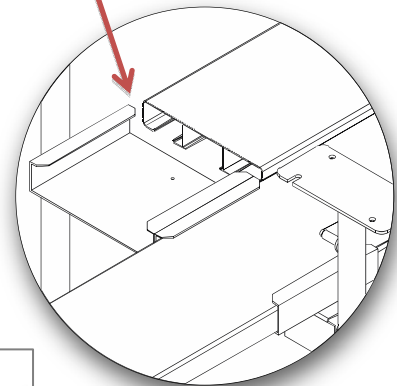
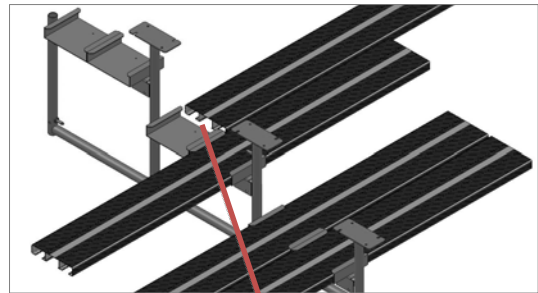


**NOTE:** If the bleacher foot boards are aluminum or wood planks then you need to attach horizontal bracing to the stud under the seat.



### B. Aluminum

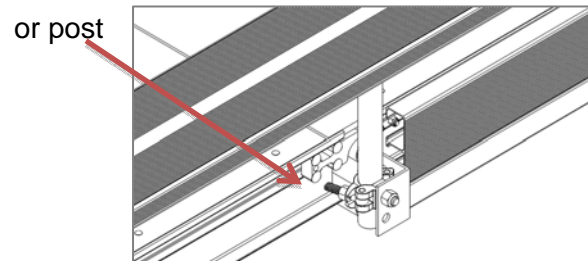
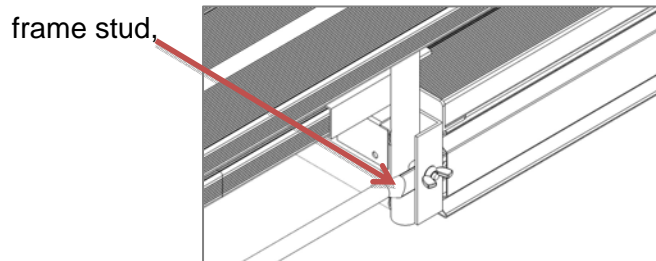
1. The brackets will sit on top of the frame tube and the aluminum planks just slide inside the bracket side by side.



## Step 5 Isle way/ Handrails – (Based on Code)

308 Bleachers have different handrails available depending on the frame system in use.

1. After the walkways are complete for each level, the isle way can be bolted onto the front



2. Handrails are installed after the isle way is installed.
3. All isle ways must be installed before the installation of the seats.

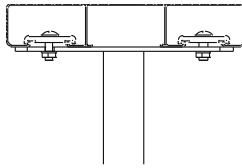
**NOTE:** Each setup will need to follow the local or state building code applicable for that location for all spacing details and installation requirements.

## Step 6 Seat Installation – Aluminum

The installation of seating will be after all levels with walkways are completed following the directions for the specific style of seating applied.

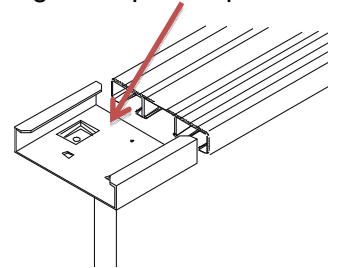
### A. Aluminum permanent installation

1. Lay aluminum plank on seat plates of framing.
2. Slide hold-down clips to plate and into holes and secure tightly with bolt and nut.
3. Two hold-down clips are needed per plate, except where a splice occurs. At a splice, use four clips.

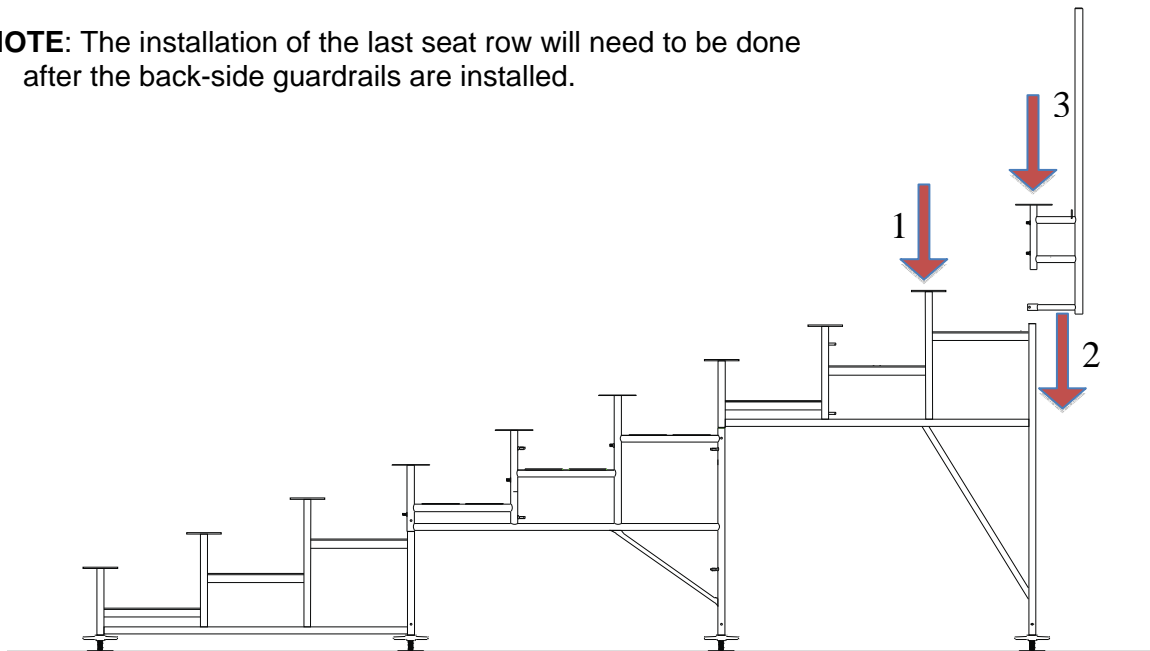


### B. Aluminum rental installation

1. Connect the quick clip to the frame seat plate.
2. Starting from one end of the bleacher slide seat board through the quick clip.



**NOTE:** The installation of the last seat row will need to be done after the back-side guardrails are installed.



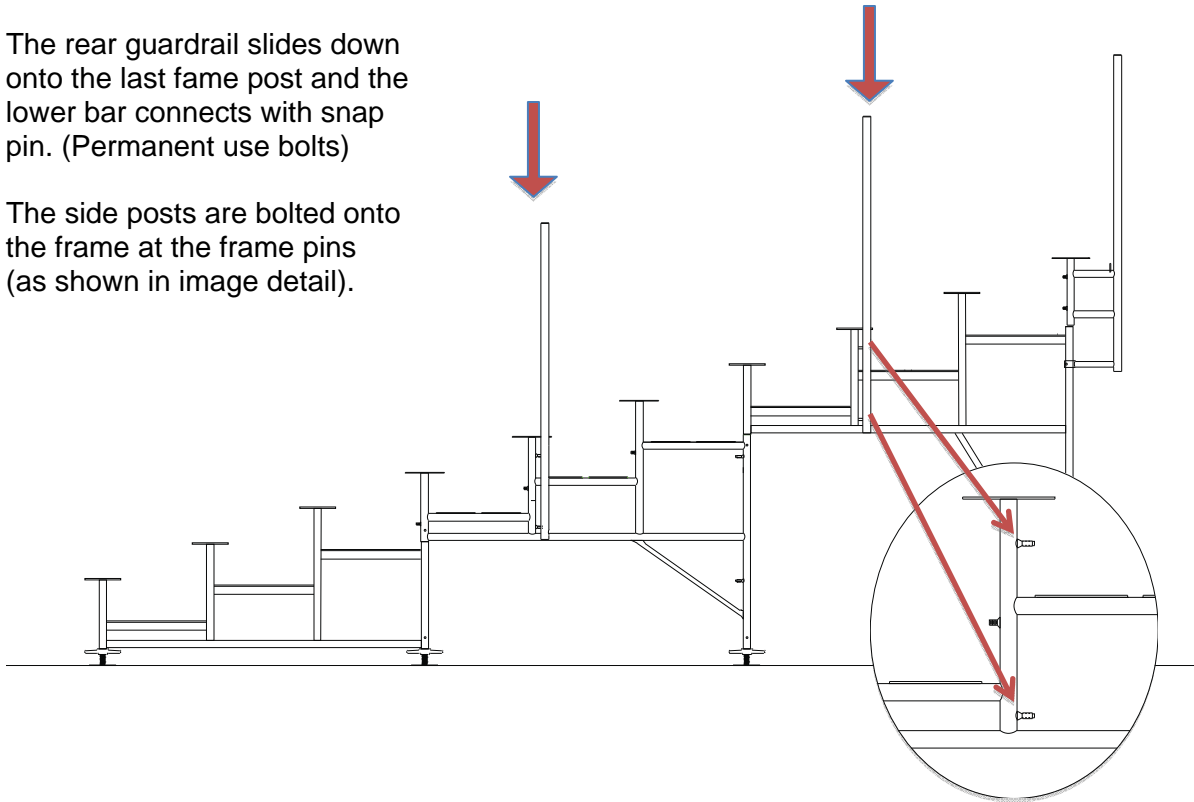
**NOTE:** If wood seats are used, then follow the Aluminum permanent installation and using carriage bolt and nuts in place of hold down clip.

## Step 7 Installation of Guardrail Posts

308 Bleachers have different Guardrails depending on the frame system of choice due to size differences.

The guardrails are installed on the outer edge of the bleacher system along the back upper level and along the sides using the correct posts for the style of framing installed for correct spacing.

1. The rear guardrail slides down onto the last frame post and the lower bar connects with snap pin. (Permanent use bolts)
2. The side posts are bolted onto the frame at the frame pins (as shown in image detail).

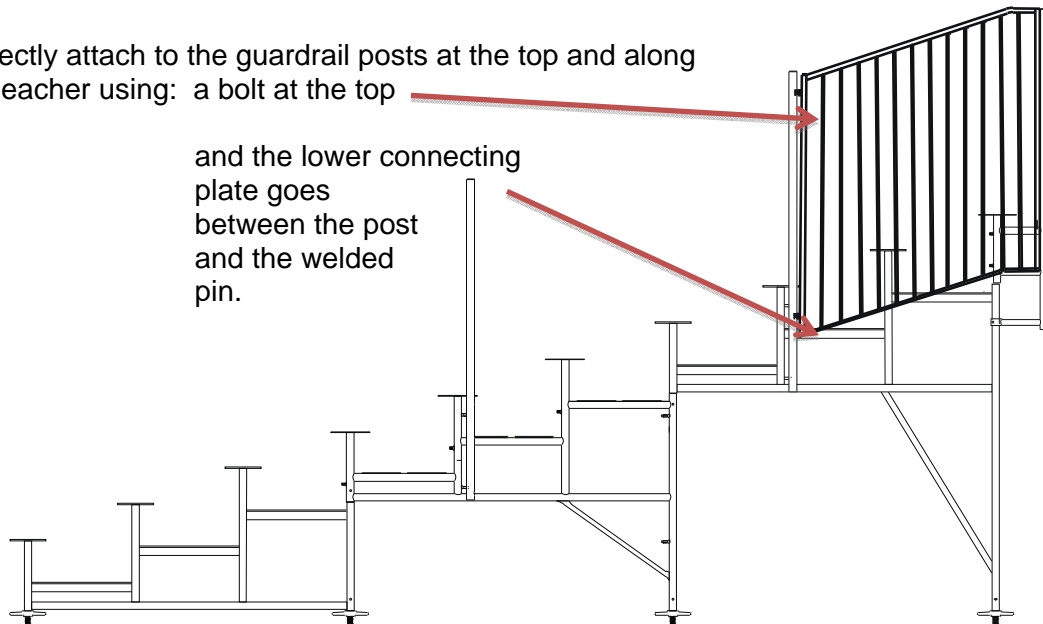


## Step 8 Panel Installation

**2 Options:** 308 Bleachers have different panel attachment measurements depending on the frame system used.

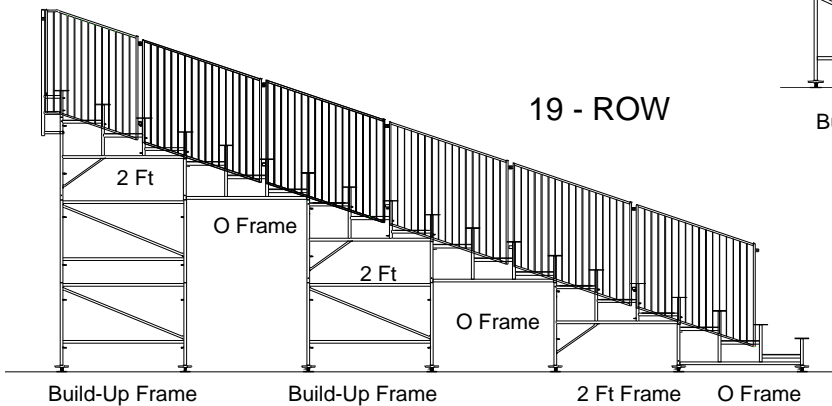
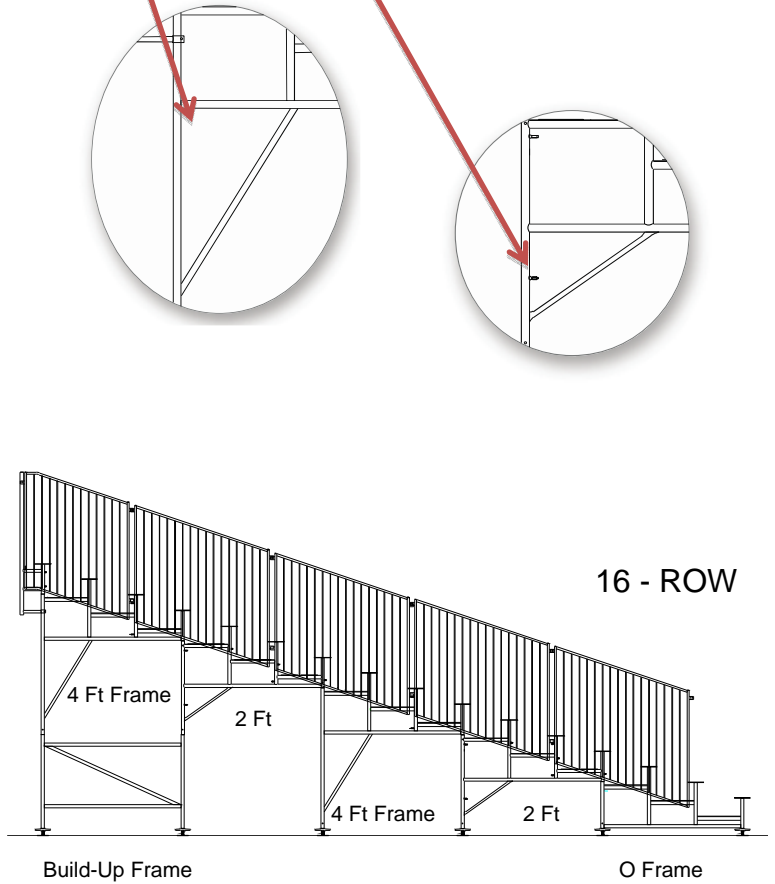
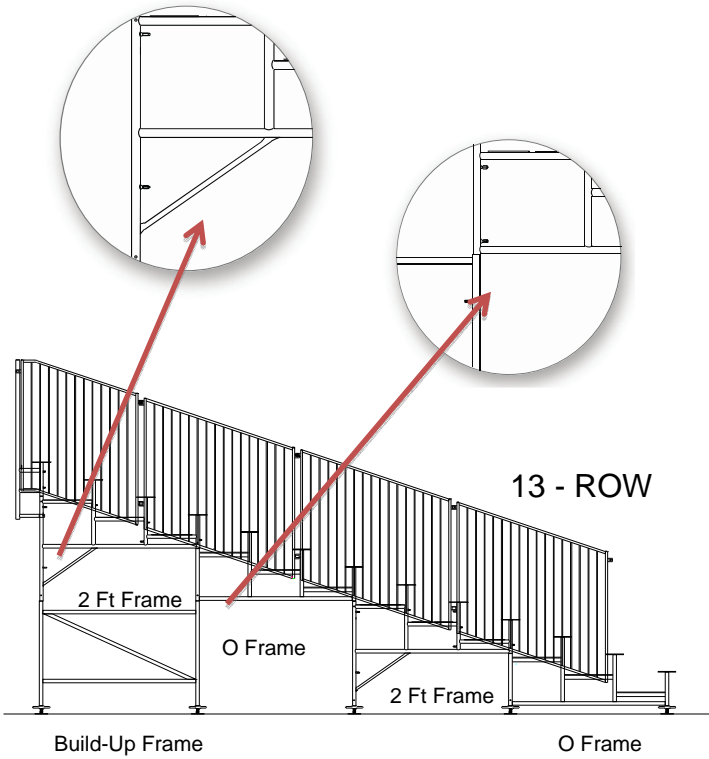
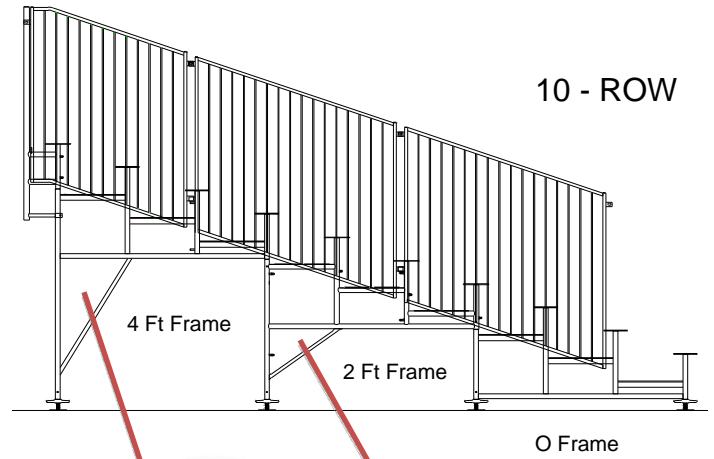
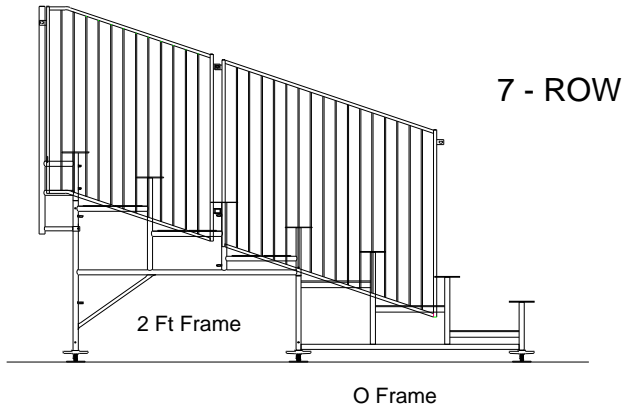
The panels will directly attach to the guardrail posts at the top and along each side of the bleacher using: a bolt at the top

and the lower connecting plate goes between the post and the welded pin.



## Step 9 Frame Patterns – Non-Elevated Bleacher

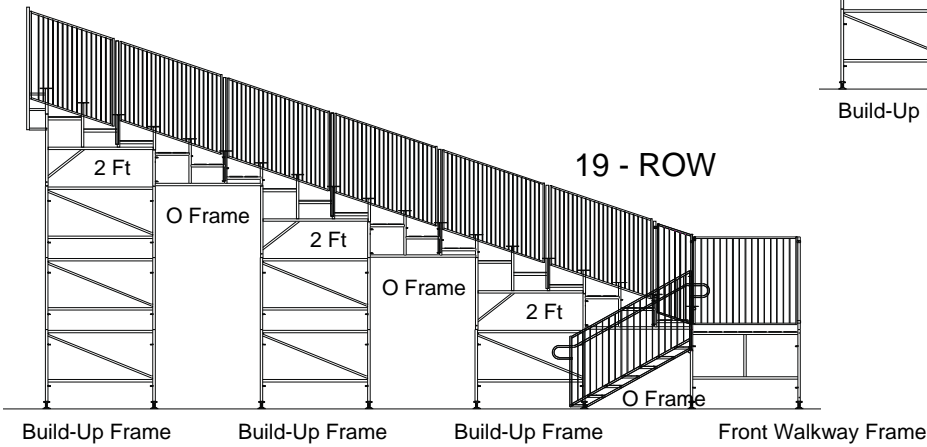
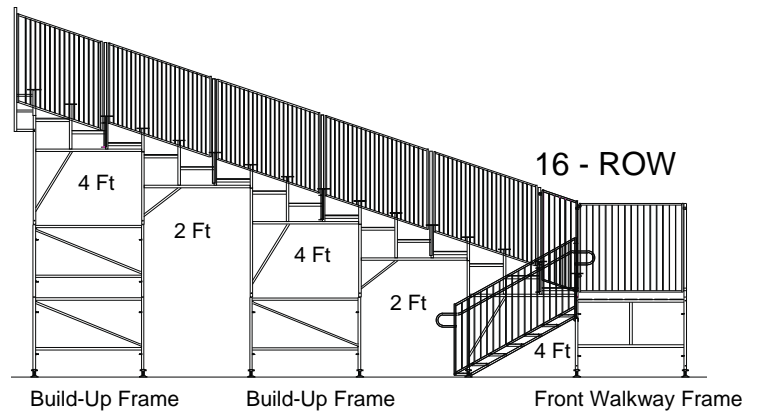
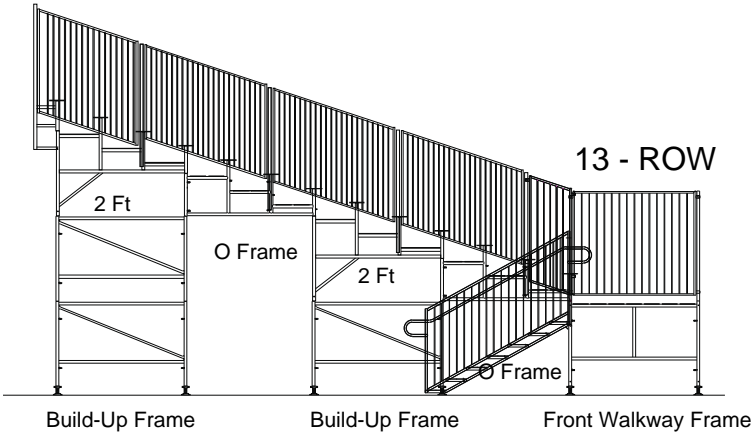
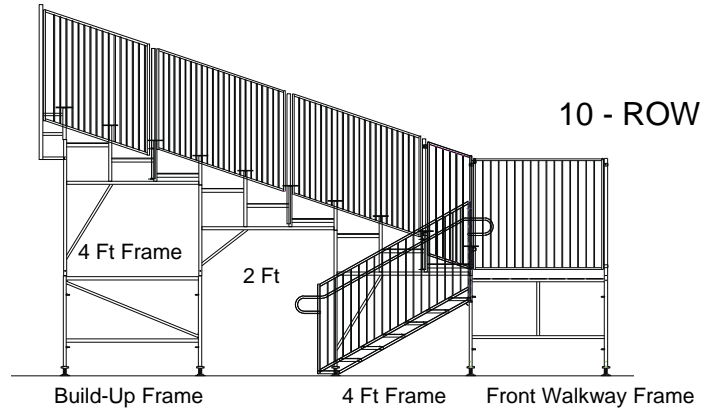
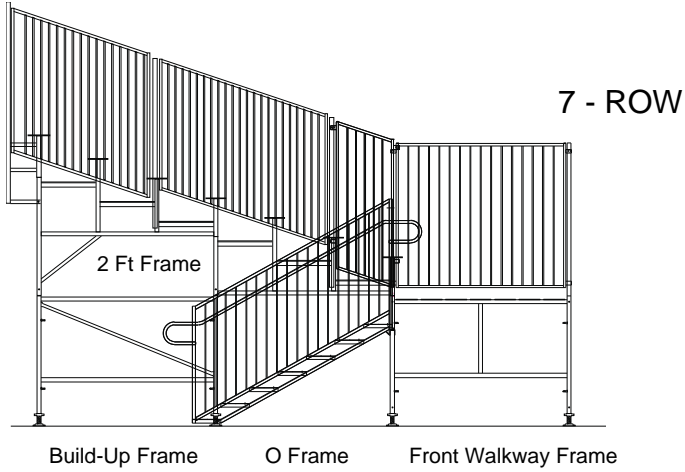
Each system follows a frame pattern.





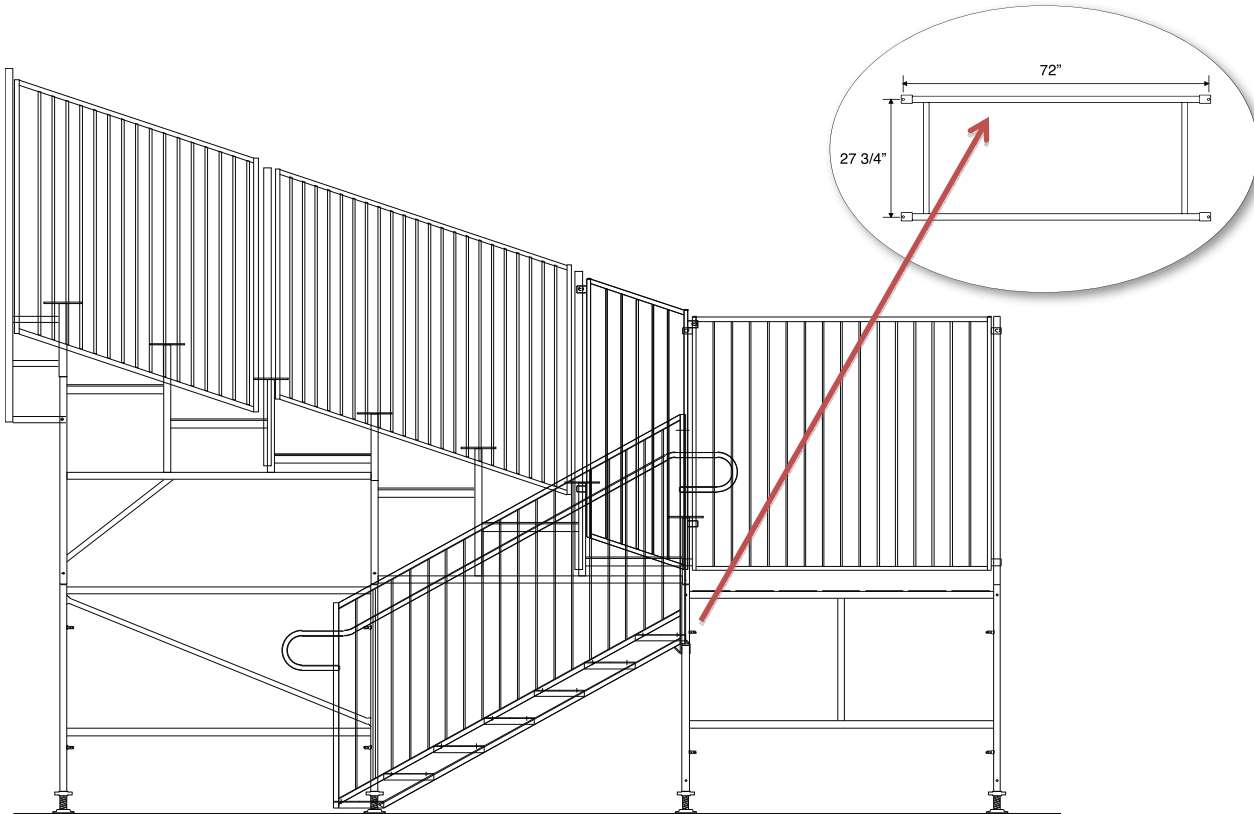
# Frame Pattern – Elevated Walkway

Each system follows a frame pattern.



## Step 10 Elevated Walkway – Stair System

1. System mounts to walkway with stair support bracket panel.
2. Mounts to brace studs on the front walkway frame.
3. The stair saddles attached to support bracket panel and secure with provided nut and bolt.

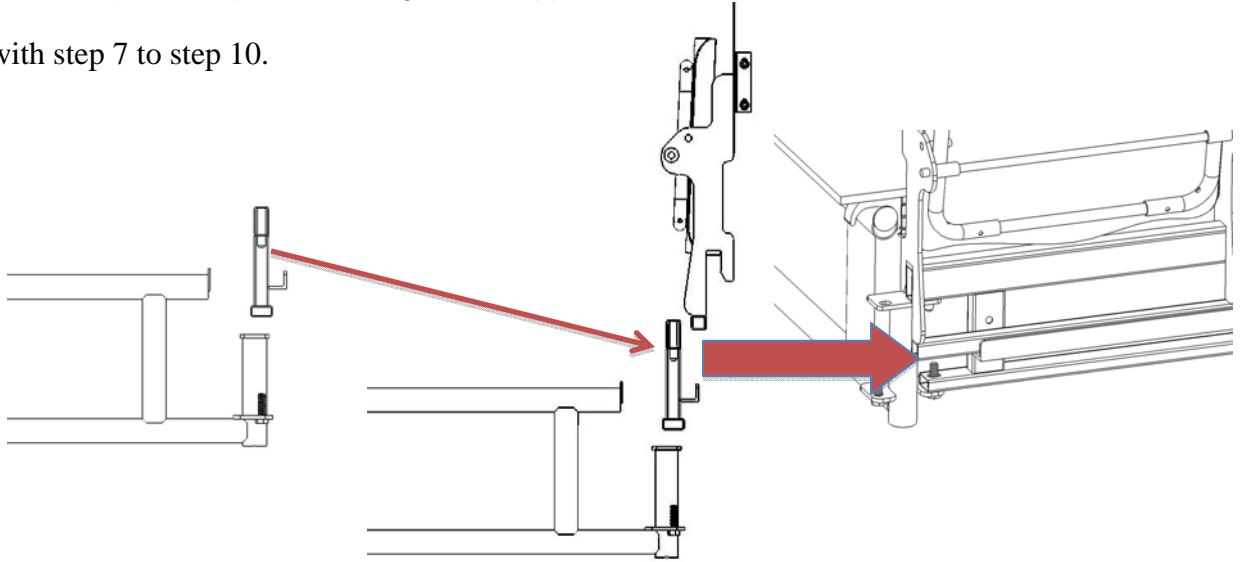


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## Step 11 Tip-Up – System

308 Tip Up set up follow the following steps:

1. Step 1 to Step 4, Site Preparation through walkboards installation.
2. (In place of 5 and 6) use Step 12 of bolting in the support frame between the seat frames.
3. Continue with step 7 to step 10.



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## Step 12 Tip-Up Seating

After all walkways and Guardrails are complete, 308 Tip Up seat components are placed on top of the support frame.

