

# **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

### 21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL

FILE LOC. Q:\Inventor Files\

5/27/2014 SHT. NO. 1 OF 16

# Introduction/Liability Disclaimers

Thank you for your purchase of the Fixed Aluminum Bleachers. This guide will provide information on the proper assembly and installation methods of your bleachers.

Please note that a Bill of Materials is being included with this guide. Please check that all of the parts called out on the Bill of Materials are present prior to beginning assembly. Please do not substitute for factory parts. Please contact the PSS or Gared Sports customer service department and allow them to determine if substitute parts are acceptable.

It is recommended that an individual who has been properly trained perform assembly and set up of the bleachers. No one under the age of 18 should attempt assembly or set up of the unit, unless properly supervised.

To prevent normal wear and tear from shortening the life of the unit, preventative maintenance inspections and repairs should be performed at least once per year. If the units are subject to high or unusual usage, inspections should be scheduled to occur more frequently. If items are found to be nonconforming, replacements can be ordered from PSS or Gared Sports or one of our authorized dealers. When contacting PSS or Gared Sports, please have information regarding the dealer/installer who sold the unit, the name of the project, and any applicable warranty information.

800-325-2682 -- Gared Customers 800-848-8034 -- PSS Customers

## **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL

FILE LOC. Q:\Inventor Files\

SHT. NO. 5/27/2014 2 OF 16

	MATERIAL LIST						
ITEM	QTY	PART NUMBER	DESCRIPTION	LENGTH			
1	14	198011026-21	PLANK, FOOT 10" MILL FINISH X 21'	252.00 in			
2	1 1	198011026-21AN	PLANK, SEAT 10" ANNODIZED X 21'	252.00 in			
3	14	198011026-9AN	PLANK, SEAT 10" ANNODIZED X 8.25'	99.00 in			
4	9	198011027-21	PLANK, RISER 6" MILL FINISH X 21'	252.00 in			
5	7	198011032	PLANK, AISLE STEP 5.5" MILL FINISH	57.00 in			
6	2	1166-17-00	TUBE,RND,1.660 OD X 0.065 WALL GALV	120.00 in			
7	2	1166-17-00	TUBE,RND,1.66 OD X 0.065 WALL GALV	129.00 in			
8	2	1166-17-00	TUBE,RND,1.66 OD X 0.065 WALL GALV	144.00 in			
9	2	1166-17-00	TUBE,RND,1.660 OD X 0.065 WALL GALV	252.00 in			
10	2	1166-17-00	TUBE,RND,1.660 OD X 0.065 WALL GALV	38.75 in			
11	2	1166-17-00	TUBE,RND,1.660 OD X 0.065 WALL GALV	44.00 in			
12	26	101051052	U-BOLT, 5/16-18 X 1.75 X 2.688 GALV	1 1100 111			
13	60	108011049	ALUM WIRE TIE 9 GA X 8.5" LONG				
14	4	498011020	REAR GUARD WELDMENT				
15	4	498011025	BAR, SIDE REAR TENSION (46 IN)				
16	2	498011026	BAR, SIDE FRONT TENSION (40 IN)				
17	4	498011029	FRAME WELDMENT 5 ROW				
18	8	498011030	BRACE ANGLE - 75.44 LONG				
19	12	498011031	BRACE ANGLE - 78.62" LONG				
20	58	498011033	END CAP, BLEACHER SEAT				
21	18	498011034	END CAP, BLEACHER RISER				
22	317	498011035	MOUNTING CLIP				
23	8	498011076	PLASTIC CAP, 1.62 TUBE				
24	2	498011092	BRACE ANGLE - 74.00" LONG				
25	4	498011095	FRAME WELDMENT 8 ROW ADDER				
26	3	498011111	SIDE RAIL WELDMENT, LH				
27	3	498011112	SIDE RAIL WELDMENT, RH				
28	32	498011125	BLEACHER RISER MOUNTING ANGLE				
29	21	498011133	BLEACHER STEP MOUNTING ANGLE				
30	8	498011139	#3 ELBOW, 1-5/8" O.D. TUBING				
31	1	498011140	HAND RAIL WELDMENT 3 STEP				
32	1	498011142	HAND RAIL WELDMENT 2 STEP				
33	12	498011148	PLATE, SIDE RAIL CLAMP				
34	8	498011149	ANGLE, HAND RAIL CLAMP				
35	14	498011183	END CAP SHORT				
36	2	498011327	CHAIN LINK 8 ROW SIDE GUARD				
37	18	651653934	HEAVY TENSION BAND, 1-5/8"				
38	180	6044-11-00	1/8" POP RIVET				
39	33.250 ft	921041001	ABRASIVE ANTISLIP TAPE 2" WIDE				
40	317	501-5-18-16G	BOLT, CARRIAGE 5/16-18 UNC X 1 GALV				
41	18	501-6-16-24G	BOLT, CARRIAGE 3/8-16 UNC X 1.5 GALV				
42	34	502-5-18-16G	HEX BOLT, 5/16-18 UNC X 1 GALV				
43	70	502-6-16-16G	HEX BOLT, 3/8-16 UNC X 1 GALV				
44	32	502-6-16-40G	HEX BOLT, 3/8-16 UNC X 2.5 GALV				
45	403	548-5-18G	HEX NUT, SERRATED FLANGE 5/16-18 GALV				
46	120	548-6-16G	HEX NUT, SERRATED FLANGE 3/8-16 GALV				
47	8	561-6G	FLAT WASHER 3/8 GALV				
48	21.500 ft	FENCE	42" GALVANIZED CHAIN-LINK FENCE				

# **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

### 21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL

FILE LOC. Q:\Inventor Files\

5/27/2014

SHT. NO. PART NO. 3 OF 16

1. Pre-assemble the frame sections by bolting together the 5 row frame and 8 row adder frame. Use the 3/8" x 1" hex bolts and 3/8" whixlock nuts. Three (3) are required at each frame connection. Make sure all six bolts and nuts are securely tightened. Repeat the process for all four (4) frame sections.

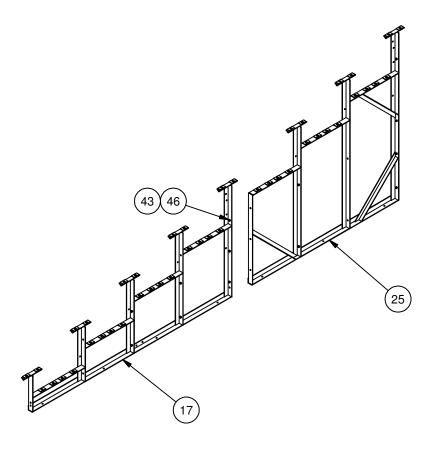


Figure 1

2. Pre-assemble the braces by laying them out in pairs. Place the angles in each pair back to back and connect with a 3/8" x 1" hex bolt and 3/8" Whizlock nut as shown in Figure 2. When assembling the 10 row bleachers, there are two lengths of braces required. Make sure equal length braces are paired in this step.

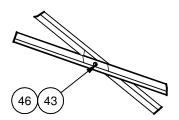




Figure 2

### **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

21' ALUMI	NUM BLEACHER 8 ROW WITH AISLE
	AND HAND RAIL

FILE LOC. Q:\Inventor Files\

5/27/2014 4 OF 16

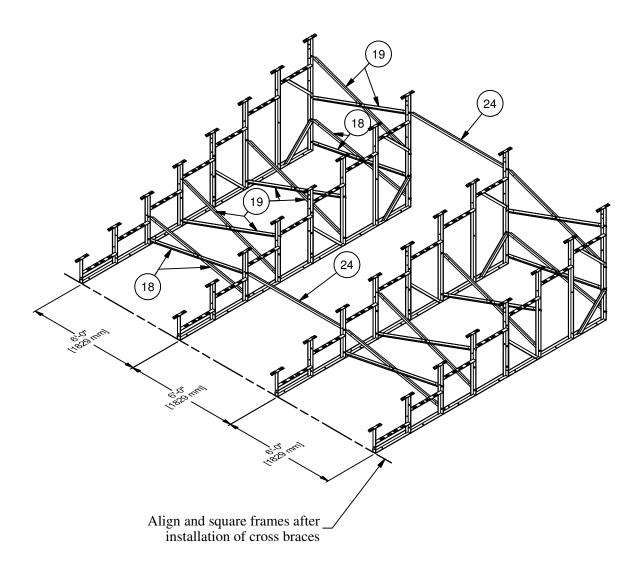


Figure 3

3. Lay out the Frame weldments approximately 6' apart. Refer to figure 3 for proper frame spacing. Install the brace sub-assemblies from step 2 using the 3/8" x 1" hex bolts and 3/8" whizlock nuts as shown in Figure 4. Cross braces are connected to the frames at verticals 3,4,6, and 8. Refer to figure 3 for item number and page 2 for brace angle length. NOTE: Cross braces are located in the end bays. Straight spacer braces are located in the center bay at row 3 and row 8 only. After all braces are installed, square the frame and make sure the front of the frame is in line.

### **Installation and Assembly Instructions**





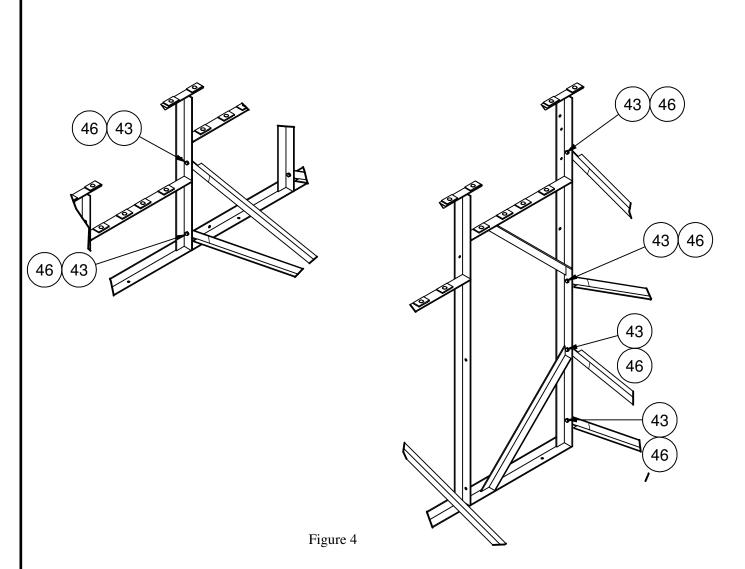
Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

2	1' ALUMINUM	<b>BLEACHER</b>	8 ROW	WITH AISLE
		AND HAND	RAIL	
FILE LOC.	Q:\Inventor Files\			

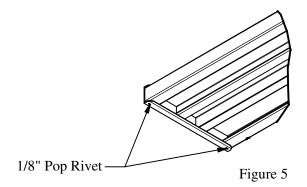
Q:\Inventor Files\

5/27/2014 <sub>5 OF 16</sub>

GSNB0821WA ai



4. Install the end caps on each end of the seat planks, foot planks, and riser planks. Slide the end cap onto the plank with the holes on the underside of the plank. Using the holes in the end cap for a guide, drill a 1/8" hole and install the pop rivets to retain the end caps. See Figure 5.



## **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL					
FILE LOC. Q:\Inventor Files\					
DATE	SHT. NO.	PART NO.	REV		
5/27/2014	6 OF 16	GSNB0821WA ai			

5. Install the foot planks using the mounting clips, 5/16" carriage bolts, and 5/16" Whizlock. These mounting clips, bolts, and nuts are required at every frame position. Pre-install the mounting clips on the frame using the 5/16" x 1" carriage bolt and 5/16" whizlock nut. Only start the nuts a few threads to allow for the clips to be lifted and rotated into the channel of the bleacher plank.

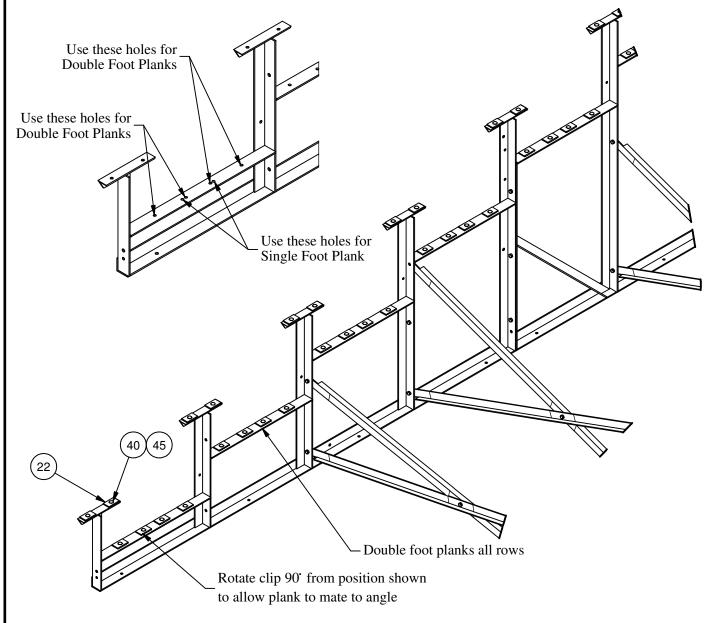


Figure 6

Note: Double foot planks are used on all foot rows. All rows must use double foot planks and riser planks.

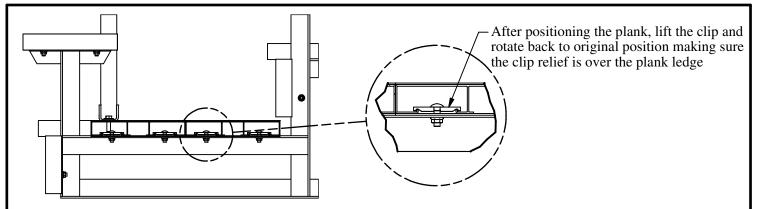
Install all foot planks before installing riser planks. Install the riser planks then install the seat planks.

### **Installation and Assembly Instructions**



Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL					
FILE LOC. Q:\Inventor Files\					
DATE SHT. NO. PART NO. RI					
5/27/2014	7 OF 16	GSNB0821WA ai			



Plank Clip Illustration

6. Before tightening the foot plank bolts, align all the planks and make sure the planks are centered on the assembled frame. See Figure 7 for reference dimensions.

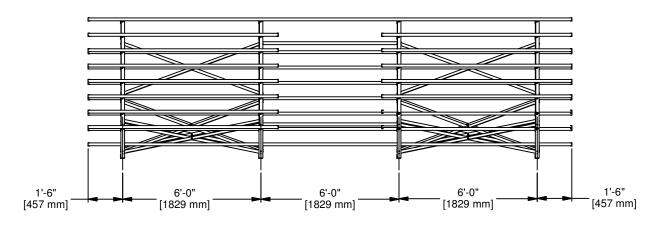
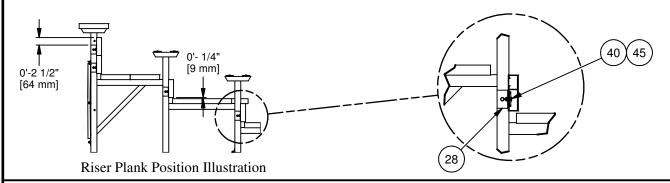


Figure 7

- 7. Install the riser planks on the 2nd through 8th row seat vertical angles. First install the riser mounting angle onto the upright using the 5/16" x 1" hex bolt and 5/16" whizlock nut. Note: Two (2) angles are used on the top row verticals. Once all the mounting angles have been installed at all frame positions, loosely install the mounting clip with the 5/16" x 1" carriage bolt and 5/16" whizlock nut. See figure 8. Angle clips are not required on the first row. Connect the first row riser to the first row upright with mounting clips, 5/16" carriage bolts and 5/16" nuts only.
- 8. Install the riser planks onto the verticals using the same method as the foot planks. Rotate the clip to fit into the slot of the riser planks, then push it up and rotate it back to make sure the clip indent fits onto the riser plank ribs. Align the ends of the riser flush with the foot planks, and tighten all bolts.



### **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

# 21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL

FILE LOC. Q:\Inventor Files\

DATE SHT.

5/27/2014 8 OF 16 GSNB0821WA ai

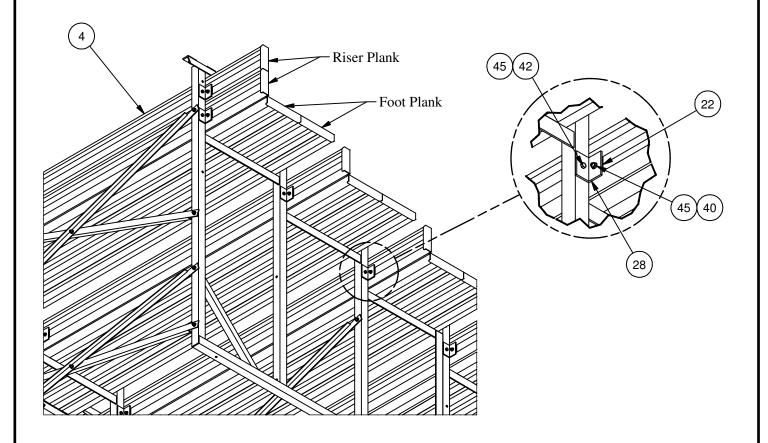


Figure 8

- 9. Install the seat planks using the mounting clips, 5/16" x 1" carriage bolts, and 5/16" whizlock as shown in figure 6. Note: these mounting clips, bolts, and nuts are required at every frame position.
- 10. Before tightening the seat plank bolts, align all the planks and make sure the planks are centered on the assembled frame. See Figure 5 for reference dimensions.
- 11. Check all bolted connections and insure all bolts are securely tightened.

The bleacher portion of the assembly is now complete except for the hand rails and aisle step planks.

The following instructions will guide you in the installation and attachment of the guard rail, fencing, hand rails and aisle step planks.

### **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

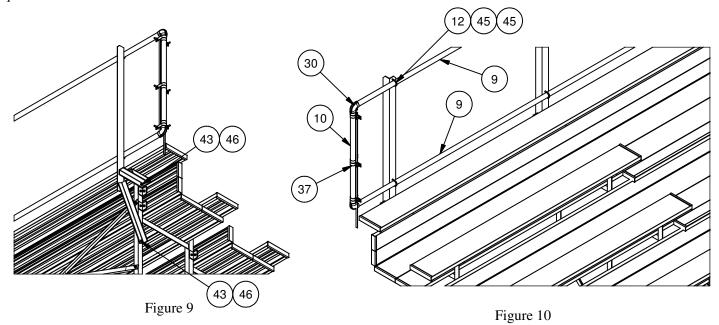
2	21' A	LU	MII	NU	M BLEACHER 8 ROW WITH AISLE
					AND HAND RAIL
ILFLOC					

Q:\Inventor Files\

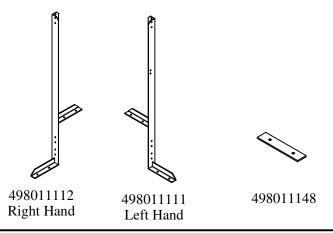
5/27/2014 9 OF 16

GSNB0821WA ai

12. Install the rear guard weldment on each frame using the 3/8" x 1" hex bolts and 3/8" whizlock nuts. One weldment is required at each frame location.



- 13. Attach the 21' long guard rail pipes onto the weldments using the 5/16" U-Bolts and 5/16" whizlock nuts. One pipe will be attached to the top hole locations on the weldment and one pipe will be attached to the bottom hole locations on the weldment. Before tightening the U-Bolts, make sure the ends of the pipes are flush with the ends of the bleacher seats. Tighten all U-Bolts.
- 14. Attach the 38.75" long tube to the pipes installed in the last step using the #3 elbows. Slide 6 heavy tension bands onto the pipe before adding the elbows. Alternate the position of the tension band so that 3 will have the flat side out on the side fence and the other three will have the flat side toward the back on the rear fence. Add an elbow to each end of the pipe and insert the elbows onto the long pipes and tighten all the set screws.
- 15. Before installing the side guard rails, lay out the parts to make sure the right hand weldments and left hand weldments are ready to be installed on the correct end of the bleacher. For the purposes of this installation, the right hand side is the right hand end of the bleacher as you are sitting on the seat. The parts required for installing the side guard upright are shown below.



### **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

	21' A	LUI	ΙIΜ	UΝ	IM BLEACHER 8 ROW WITH AISLE
					AND HAND RAIL
FILETO					

FILE LOC. Q:\Inventor Files\

5/27/2014 <sub>10 OF 16</sub>

GSNB0821WA ai

16. Install the side rail weldments onto the ends of the bleacher. Locate one vertical on the top row 6th row, and on the 4th row. Position the verticals as shown in figure 9. Using the holes in the angles, drill the four 3/8" holes through the seat plank (2 holes) and the foot planks (2 holes).

Attach the verticals using the 3/8" x 2.5" hex bolts and 3/8" whizlock nuts. Make sure the clamp plate is placed on the underside of the plank before installing the nuts. Tighten all bolts and nuts securely.

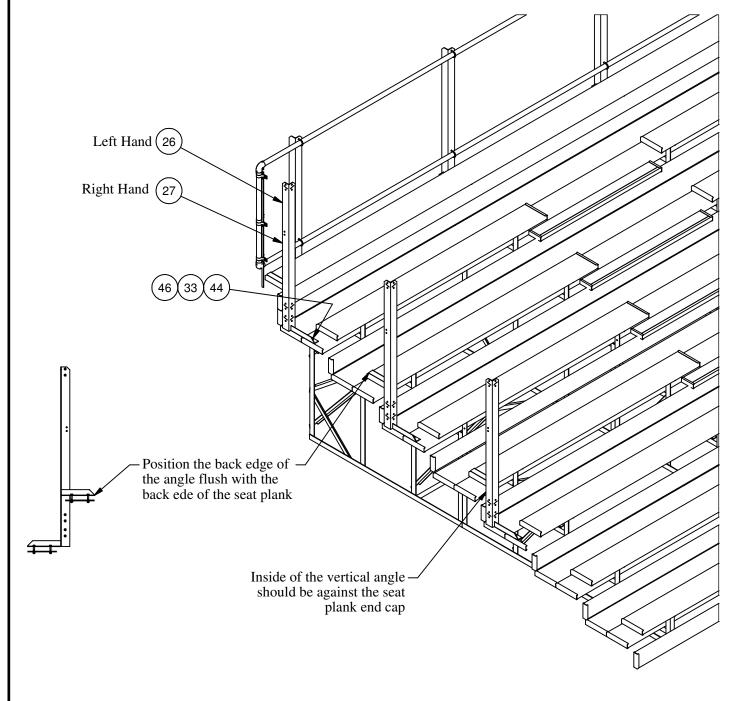


Figure 11

### **Installation and Assembly Instructions**

5/27/2014





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL								
FILE LOC.	FILE LOC. Q:\Inventor Files\							
DATE SHT. NO. PART NO. REV								

11 OF 16

#### 17. Install the side guard rail pipes on each end of the bleacher.

Install the 144.0" long pipe on the top set of holes in the vertical using the 5/16" U-Bolt and 5/16" whizlock nuts. The upper end of the pipe should be about 1" from the rear guard rail pipe. Tighten the U-Bolt nuts and install the plastic cap in the top end of the pipe.

Install the 129.0" long pipe on the center (top bottom) set of holes in the vertical using the 5/16" U-Bolt and 5/16" whizlock nuts. Do not tighten nuts.

Attach the 44.0" long tube to the pipes installed in the last step using the #3 elbows. Slide 3 heavy tension bands onto the pipe before adding the elbows. Insert an elbow on each end of the pipe and then insert the elbows onto the longer pipes and tighten all set screws. Now tighten the U-Bolt nuts on the lower pipe installed earlier.

Install the 120.0" long pipe on the bottom set of holes in the vertical using the 5/16" U-Bolt and 5/16" whizlock nuts. The lower end of the pipe should be flush with the elbow installed on the adjacent pipe. Tighten all U-Bolt nuts.

Install the plastic caps on all open ends of the installed pipes.

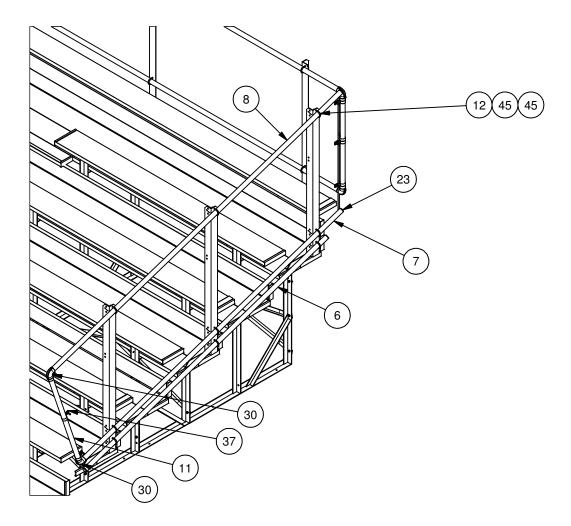


Figure 12

### **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

21' ALUMINUM BLEACHER 8 ROW WITH AISLE	
AND HAND RAIL	
FILE LOC	٠

SHT. NO.

FILE LOC. Q:\Inventor Files\

5/27/2014 <sub>12 OF 16</sub>

GSNB0821WA ai

18. Install the side chain link sections using the heavy tension bands and the 46" long tension bars. The tension bars are pre-installed in the chain link fence at the factory. Start with the bias end of the chain link fence at the rear of the side and attach the tension bar using (3) of the tension bands on the rear vertical. Attach the tension bar to the front vertical pipe using (3) tension bands. It may be necessary to cut the fence before attaching the tension bar to the front vertical. Tie the chain link to the top and bottom horizontal pipes using the aluminum wire ties approximately 18" ap Align fabric so top diamond is approximately centered on

Figure 13

19. Install the 42" wide chain link to the rear of the bleacher. Using the 40" long tension bars. The tension bars are pre-installed on the chain link fabric at the factory. Start at one end and attach the tension bar to the vertical end pipe using (3) tension bands. Pull the fencing along the back of the bleacher and tie the chain link to the top and bottom horizontal pipes using the aluminum wire ties approximately 18" apart. At the opposite end, it may be necessary to cut the length of the fence. Attach the end of the cut fence to the opposite end pipe by attaching to the pipe using (3) tension bands.

### **Installation and Assembly Instructions**



top rail pipe



Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

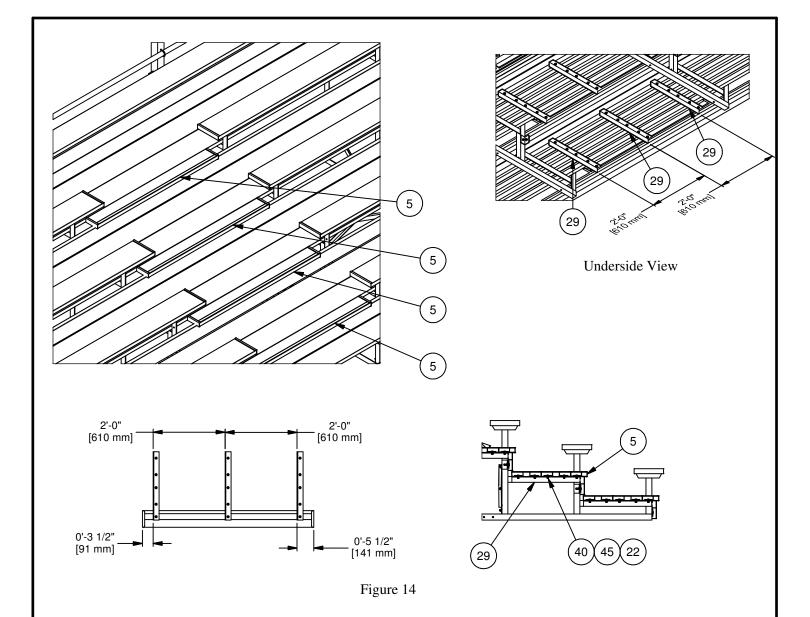
21' ALUMINUM BLEACHER 8 ROW WITH AISLE
AND HAND RAIL
II E LOC

SHT. NO.

FILE LOC. Q:\Inventor Files\

5/27/2014 <sub>13 OF 16</sub>

GSNB0821WA ai



- 20. Attach three (3) bleacher step mounting angles (Item 31) to the riser step plank making sure the center angle bolt holes are in the center of the plank. Refer to Figure 14 for reference dimensions. The angles are attached with a mounting clip and a 5/16" x 1" carriage bolt and 5/16" whizlock nut. Do not fully tighten the nuts at this time. Slide the three mounting angles through the gap between the riser plank and the foot plank. Center the step plank on the aisle opening between seat planks. From the underside of the bleacher, atach each of the step mounting angles to the bottom of the foot planks using mounting clips, 5/16" x 1" carriage bolts, and 5/16" whizlock nuts. Four (4) are required per each mounting angle. Make sure the step plank is fully seated against the foot plank, centered on the aisle opening, and the mounting angles are pushed against the riser plank. Tighten all the nuts securely. Repeat the process for each aisle row.
- 21. Install the hand rails in the center of the aisle. The hand rails will be located at foot rows 2 and 3, 5 and 6, and 8 and nine. See figure 15 for reference.

### **Installation and Assembly Instructions**

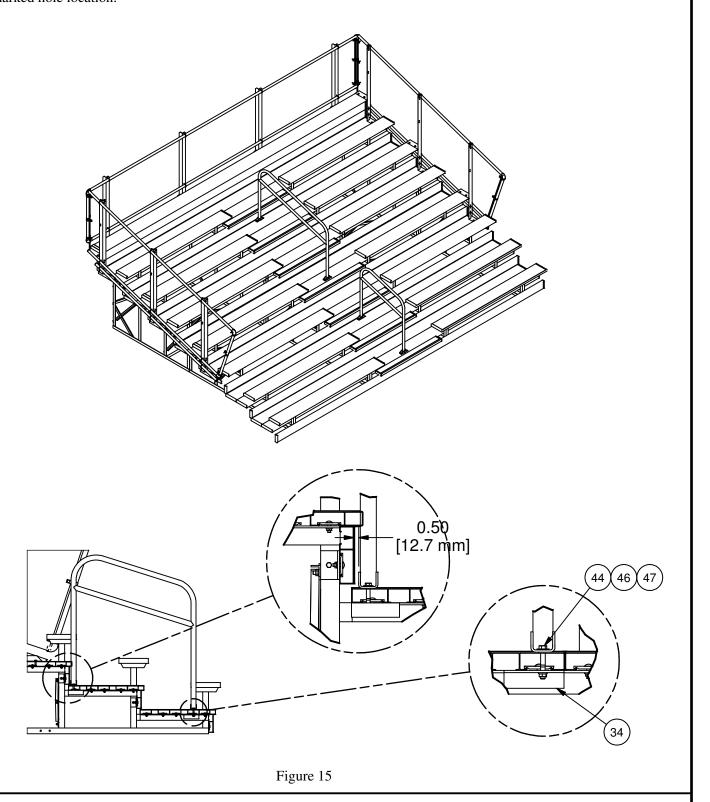




Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL						
FILE LOC. Q:\Inventor Files\						
DATE	SHT. NO.	PART NO.	RE			
5/27/2014	14 OF 16	GSNB0821WA ai				

22. Position the upper leg of the hand rail 1/2" in front of the riser plank. Mark the holes in the mounting flange on the foot plank. Also mark the holes in the lower leg mounting flange on that foot plank. Drill a 7/16" hole through the foot plank at each marked hole location.



## **Installation and Assembly Instructions**





Gared Holdings, LLC 9200 E. 146th St. Noblesville, IN 46060

### 21' ALUMINUM BLEACHER 8 ROW WITH AISLE AND HAND RAIL

FILE LOC. Q:\Inventor Files\

5/27/2014 <sub>15 OF 16</sub>

23. Install the hand rails using a 3/8" hole location. On the underside of the plank and insert the 3/8" bolt before in	foot plank, position the	angle, hand rail cla	" whizlock nut at each amp (Item 34) across the	mounting flange he space on the foot
24. Recheck all bolted connections to complete.	make sure all bolts and	nuts are tightened	securely. The bleacher	r assembly is now
25. Make sure the bleacher is position	ned correctly and anchor	red in accordance w	vith local conditions.	
Ir	nstallation and Ass	embly Instructi	ions	
			JM BLEACHER 8 ROV	V WITH AISLE
	Gared Holdings, LLC 9200 E. 146th St.	FILE LOC. Q:\Inventor Files\	AND HAND RAIL	
PERFORMANCE SPORTS SYSTEMS  GARED	Noblesville, IN 46060	DATE 5/27/2014	SHT. NO. PART NO. GSNB08	21WA ai