

ArtReach Pull-Out Modular Art Rack Installation Guide



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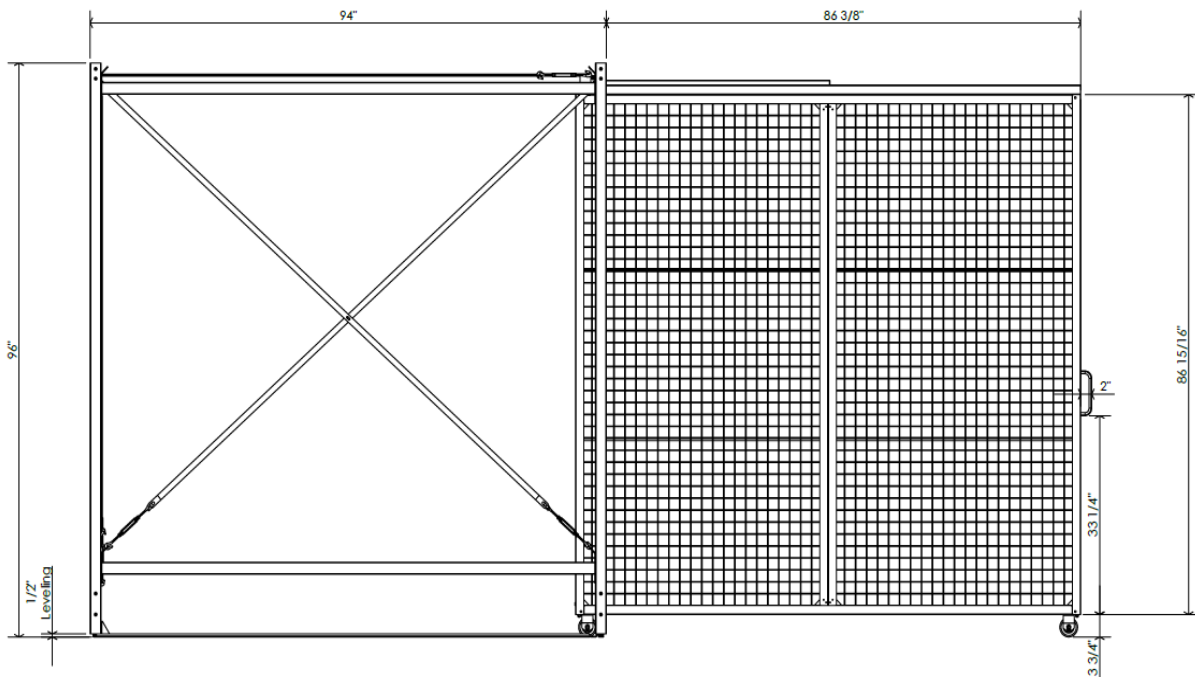
Floor Flatness Requirement

- 1) Maximum allowable floor variation across the full system footprint is 1/4".
- 2) The system footprint includes all areas where the screens extend.
- 3) Maximum allowable variation over any 2 ft span is 3/16".
- 4) Recommended floor flatness is Ff25 or higher, with no more than a single 1/4" deviation over a 10 ft span.
- 5) The pull-out art rack must be installed on solid surfaces capable of supporting the required system loads.

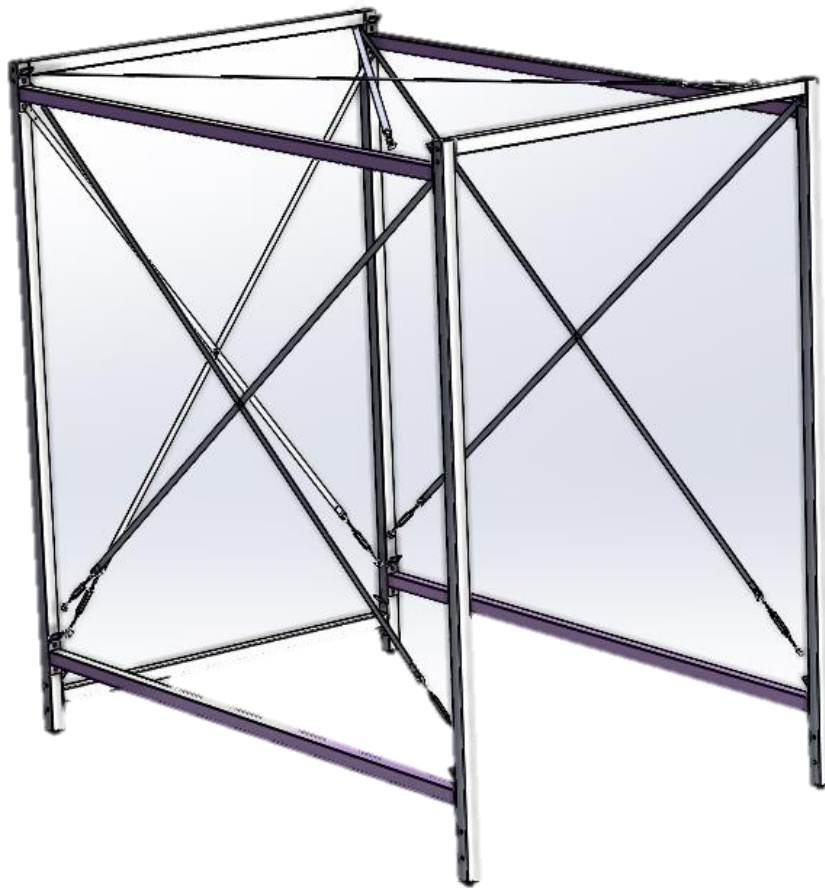


Layout

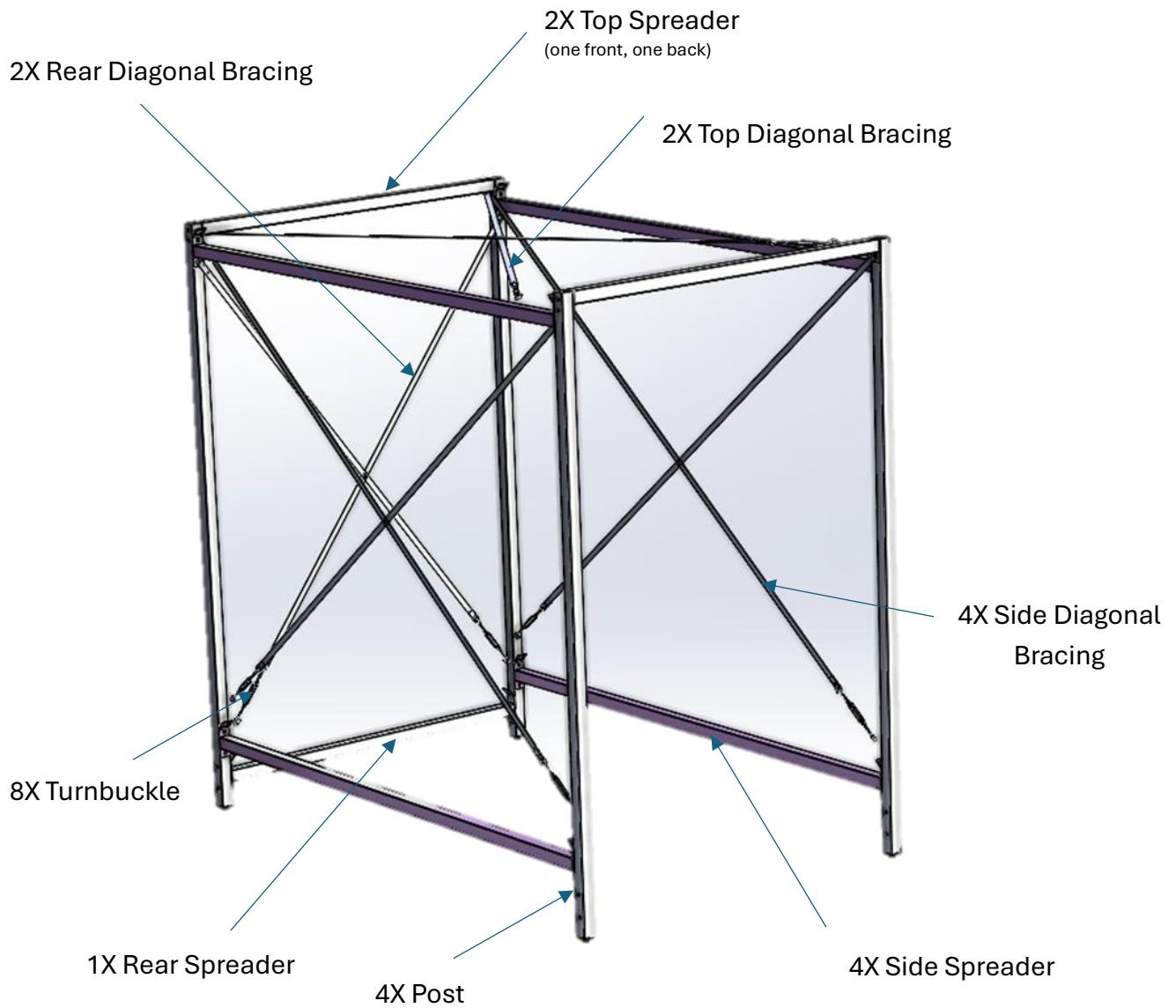
- 1) Ensure the floor surface and levelness meet the installation requirements.
- 2) Review the system footprint, including the full screen extension area.
- 3) Carefully review the dimensions shown in the pull-out art rack drawing. Make sure there is enough height clearance. If you have not received the drawing, contact your dealer.
- 4) Refer to your product drawing to confirm there are no obstructions when the screens are fully extended. In this example, for a 94" deep system, the screen extends 86-3/8" plus an additional 2" for the handle. Ensure there is sufficient clearance for the user to stand in front of the system and comfortably extend the screen.
- 5) Use proper layout and measurement methods to ensure the structure is square during assembly.
- 6) It is strongly recommended to assemble the product at its final installation location.
- 7) A minimum of two people is recommended for assembly of the structure.



Structural Frame



Structural Frame Main Components

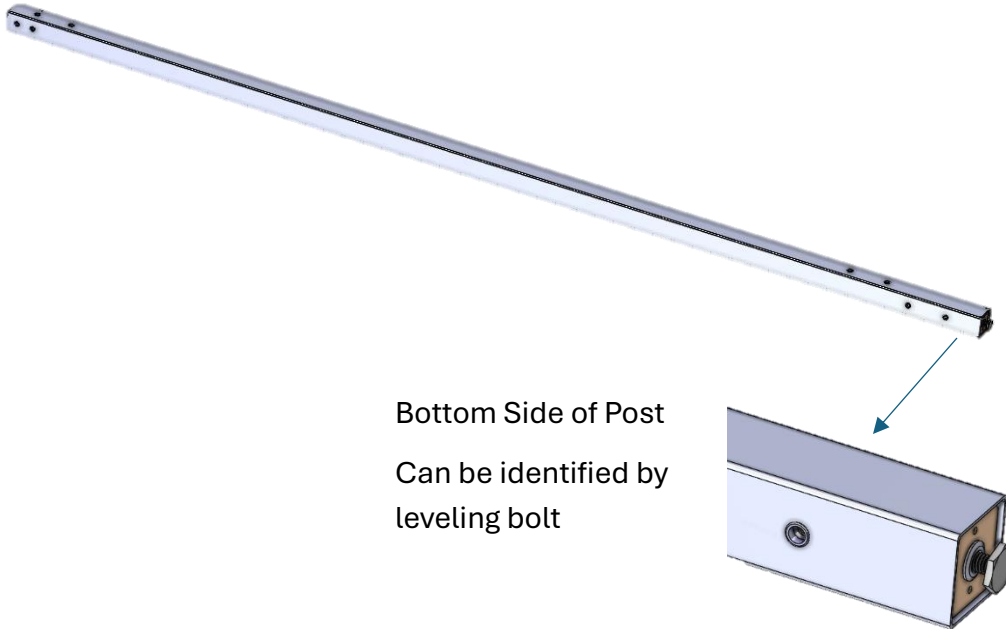


Starter Frame		
	Description	Quantity
1	Post (vertical)	4
2	Top Spreader (Horizontal Side to Side)	2
3	Rear Spreader (Horizontal Side to Side)	1
4	Side Spreader (Horizontal Front to Back)	4
5	Top Diagonal Bracing	2
6	Rear Diagonal Bracing	2
7	Side Diagonal Bracing	4
8	Turnbuckle, hook to hook	8
9	Levelling Bole_ 3/8"-16 X1-1/2"	4
10	Bolt_Hexhead_ 1/4"-20 X 3/4"	30
11	Lock Washer-1/4" ID	30
12	Bolt_Pan Head_ 1/4"-20X 1/2"	4
13	Nut-hex, flange locking_ 1/4"-20	4

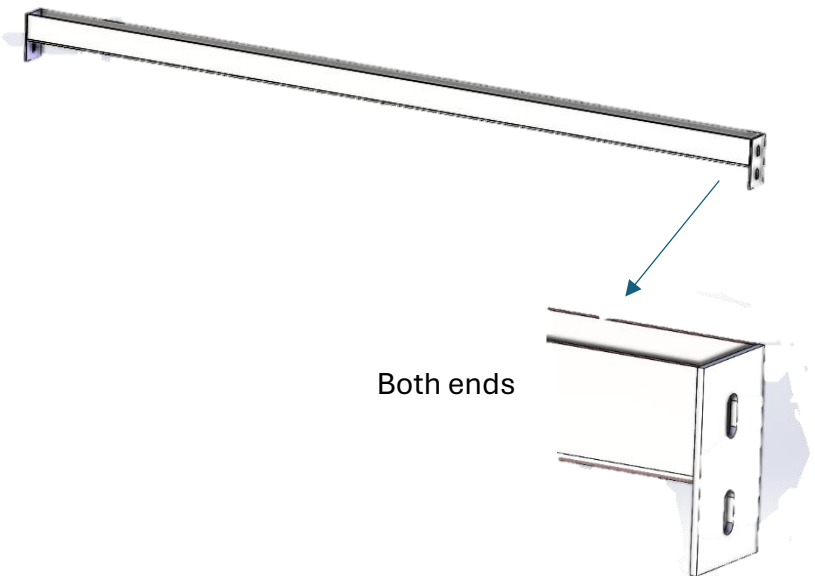
Adder Frame		
	Description	Quantity
1	Post (vertical)	2
2	Top Spreader (Horizontal Side to Side)	2
3	Rear Spreader (Horizontal Side to Side)	1
4	Side Spreader (Horizontal Front to Back)	2
5	Top Diagonal Bracing	2
6	Rear Diagonal Bracing	2
7	Side Diagonal Bracing	2
8	Turnbuckle, hook to hook	6
9	Levelling Bole_ 3/8"-16 X1-1/2"	2
10	Bolt_Hexhead_ 1/4"-20 X 3/4"	22
11	Lock Washer-1/4" ID	22
12	Bolt_Pan Head_ 1/4"-20X 1/2"	3
13	Nut-hex, flange locking_ 1/4"-20	3



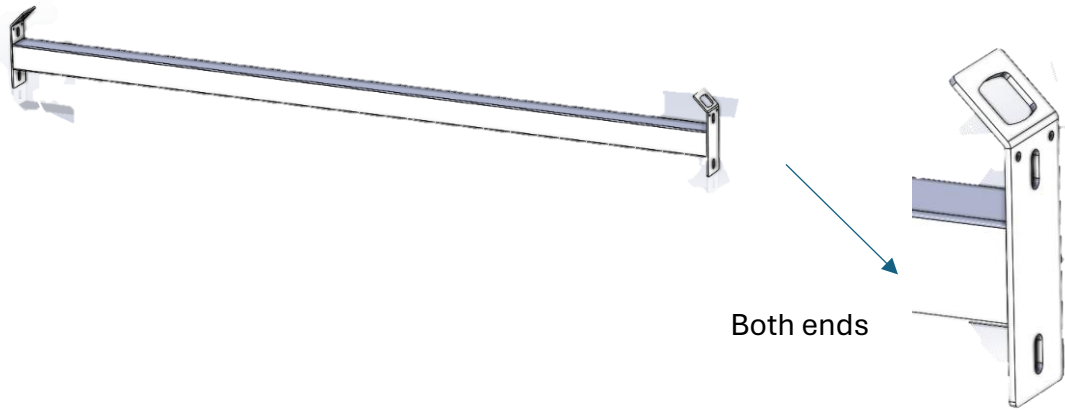
1- Post (Vertical), 2”X2” Structural Tube



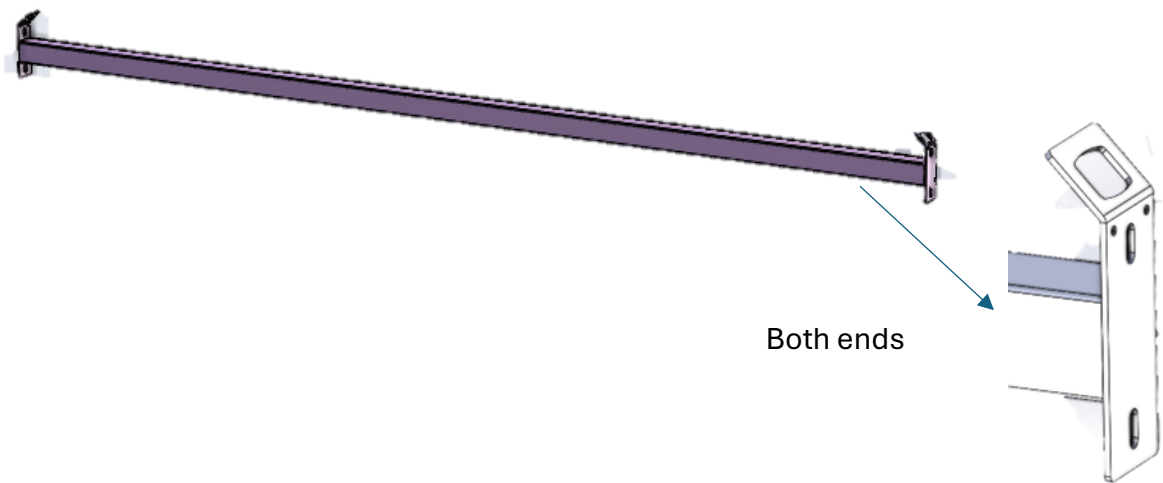
2-Top Spreader (Horizontal Side to Side), U Channel



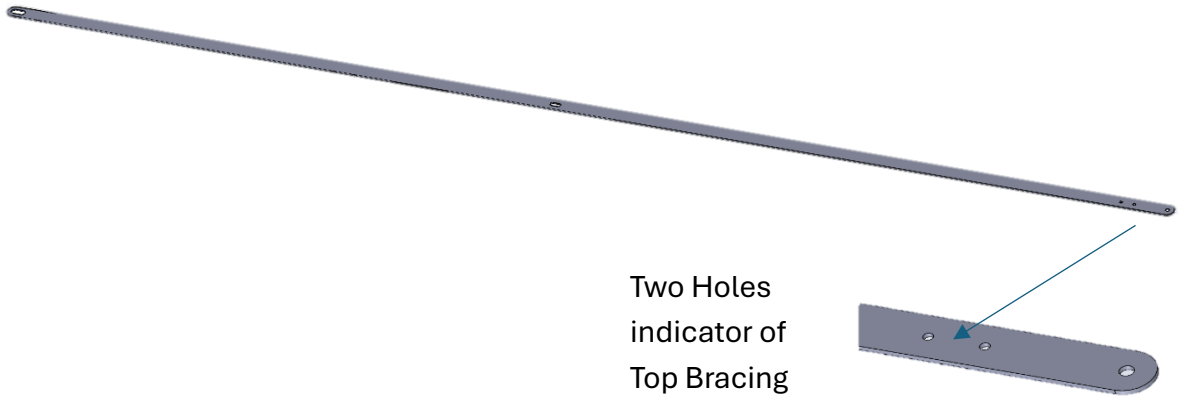
3-Rear Spreader (Horizontal Side to Side), 2"X2" Structural Tube



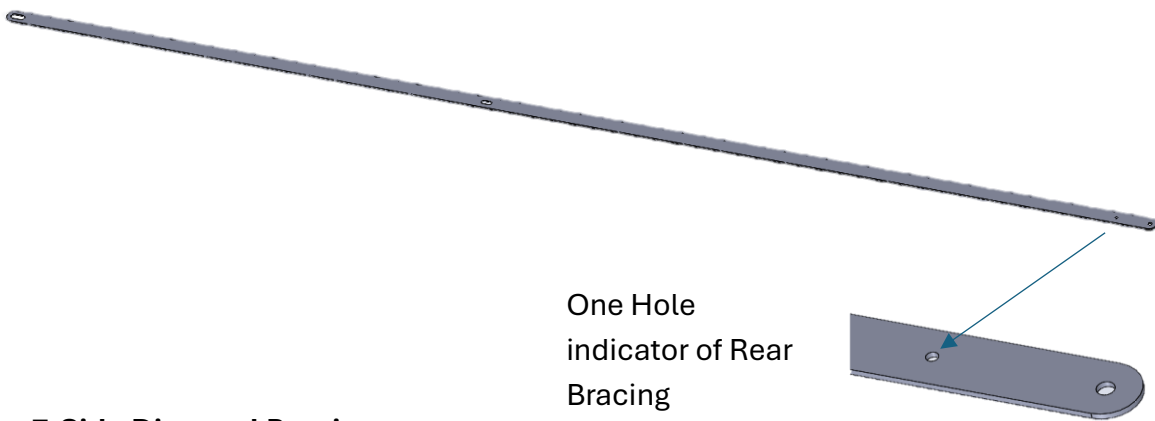
4-Side Spreader (Horizontal Side to Side), 2"X2" Structural Tube



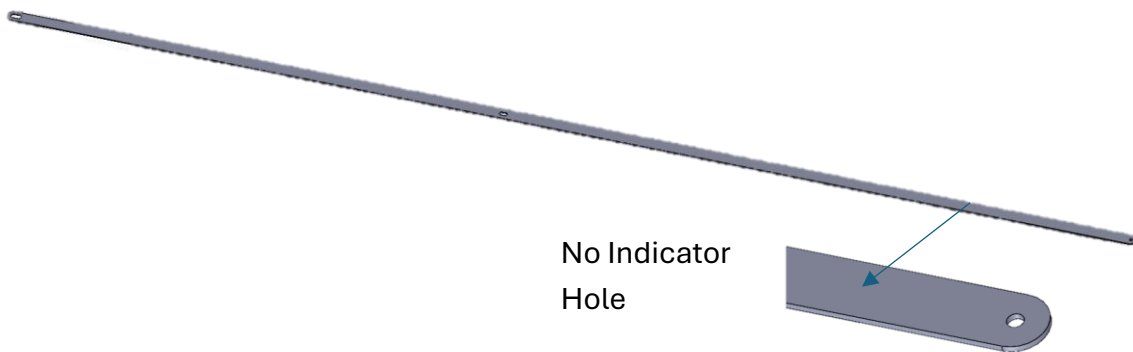
5-Top Diagonal Bracing



6-Rear Diagonal Bracing



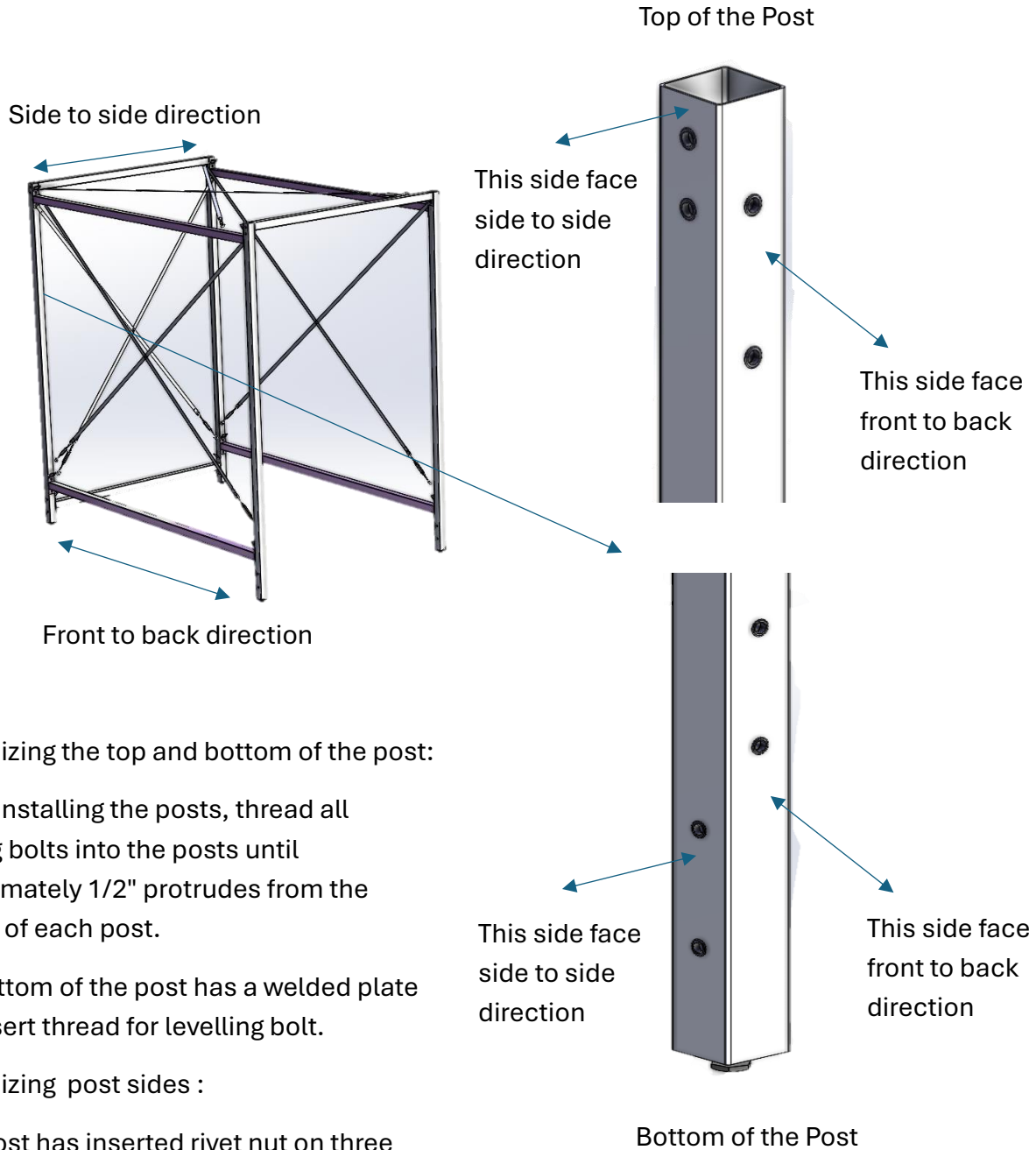
7-Side Diagonal Bracing



		
8-Turnbuckle, hook to hook -5/16"	9-Levelling Bole_ 3/8"-16X1-1/2"	10-Bolt_Hexhead_1/4"-20 X3/4"
		
11-Lock Washer-1/4" ID	13-Bolt_Pan Head_1/4"-20X 1/2"	14- Nut-hex, Keps (K) locking_1/4"-20



Understanding of the post:



Recognizing the top and bottom of the post:

Before installing the posts, thread all leveling bolts into the posts until approximately 1/2" protrudes from the bottom of each post.

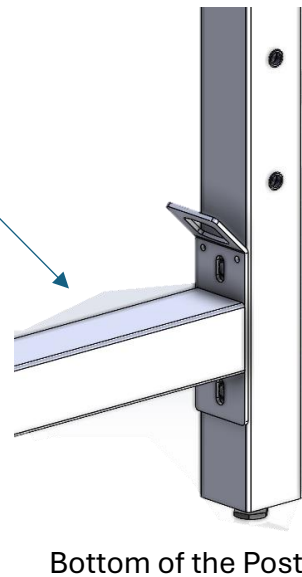
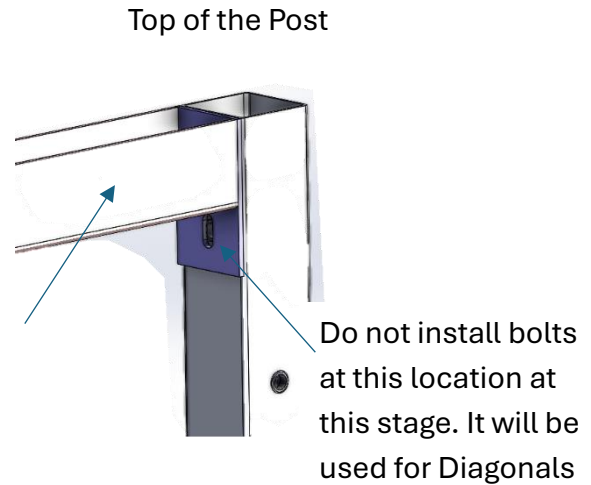
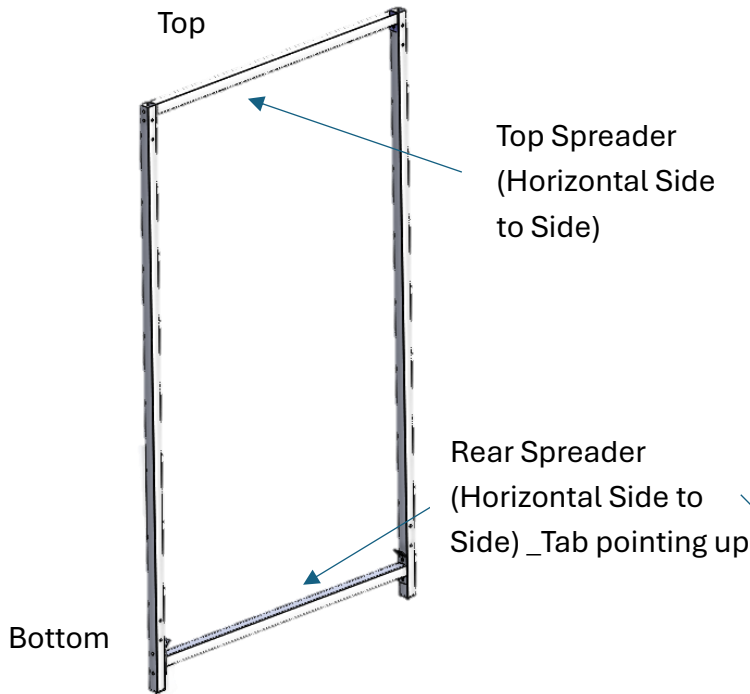
The bottom of the post has a welded plate with insert thread for levelling bolt.

Recognizing post sides :

Each post has inserted rivet nut on three side and one side has no insert. Use the this illustration to recognize each side of the post and face them to the correct direction



Starting the assembly from back side of frame:



Lay out two vertical posts, and the Top Spreader and Rear Spreader.

Note that Top Spreader will bolt into the top and Rear Spreader will be bolt on bottom set of inserts in the posts.

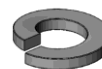
Use measuring tape to confirm the length of the Rear Spreader. you should measure width (side to side) of the system minus 4 inches. As an example, if the width is 62" you should measure 58".

The Rear Spreader should have the tab pointing up.

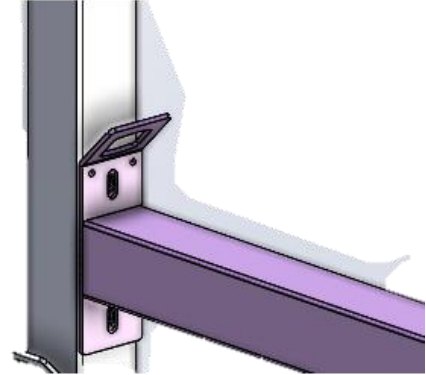
Using Bolt_Hexhead_1/4"-20 x 3/4", hand-thread the bolts into the inserts on the posts and tighten them by hand to connect the members together.

Use both bolts for the Rear Spreader and only the top bolt for the Top Spreader.

Do not fully tighten any hardware at this stage.



Assembly of the frame sides:



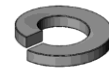
Side Spreader
(Horizontal Side to
Side) _Tab pointing up

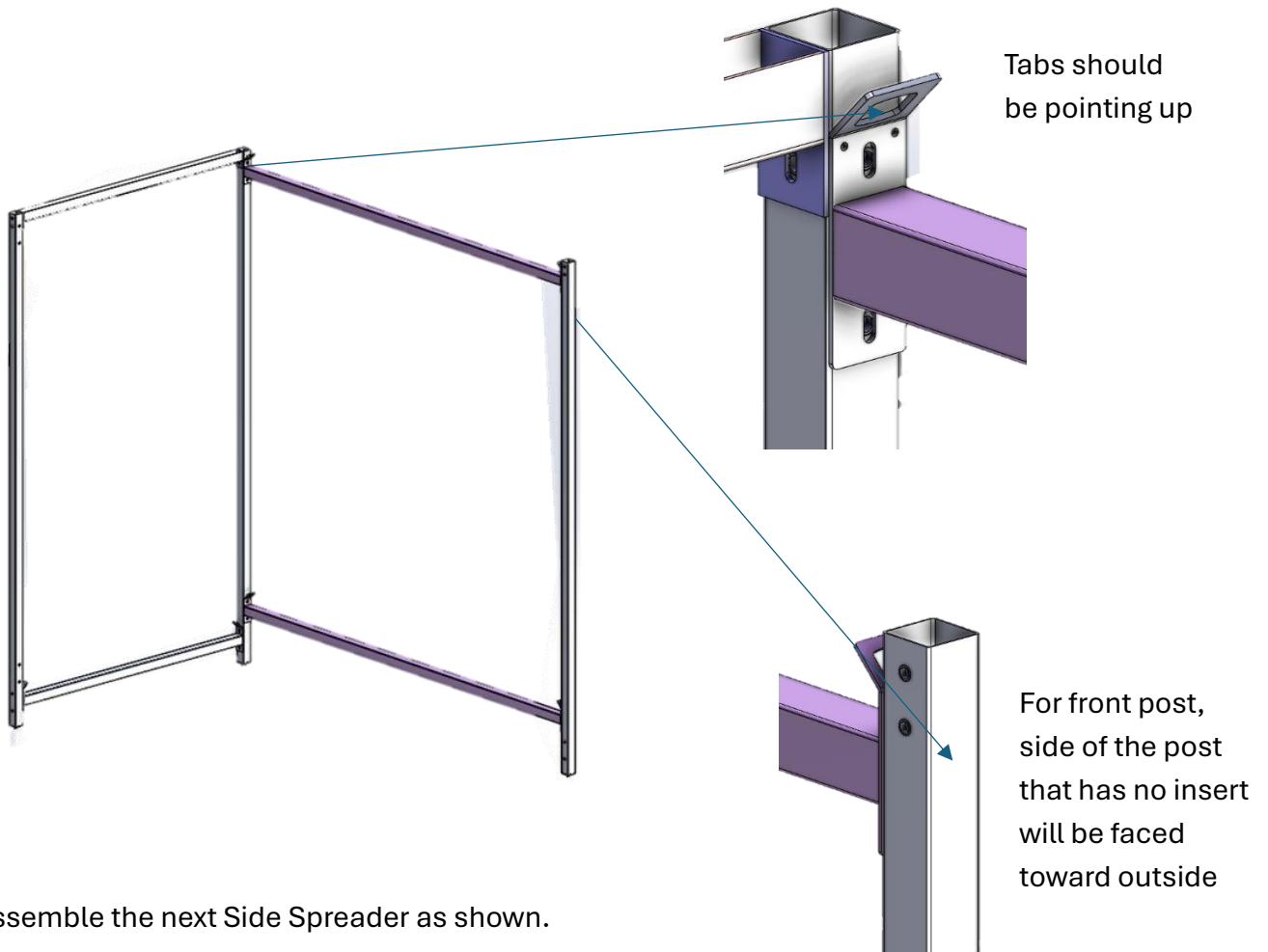
Stand the back of frame and bolt on the Side Spreader as shown in the illustration.

Use measuring tape to confirm the length of the Side Spreader . you should measure depth (front to back) of the system minus 4 inches. As an example, if the depth is 96” you should measure 92”.

Tabs should be pointing up.

Hand tighten at this time.





Assemble the next Side Spreader as shown.

Tabs should be pointing up.

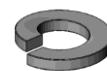
Finger tightens at this time.

Do not install bolts at lower spot at this stage. This will be used for assembly of Diagonals later.

Continue with assembling a post in front location. Make sure the side of the post that has no insert will be face toward outside.

Repeat the same steps to assemble the other side of frame.

After assembling both sides of the frame, assemble the Top Spreader on front side of the frame.



Bolt upper end of the Top Diagonal Bracing, Back Diagonal Bracing and Side Diagonal Bracing.

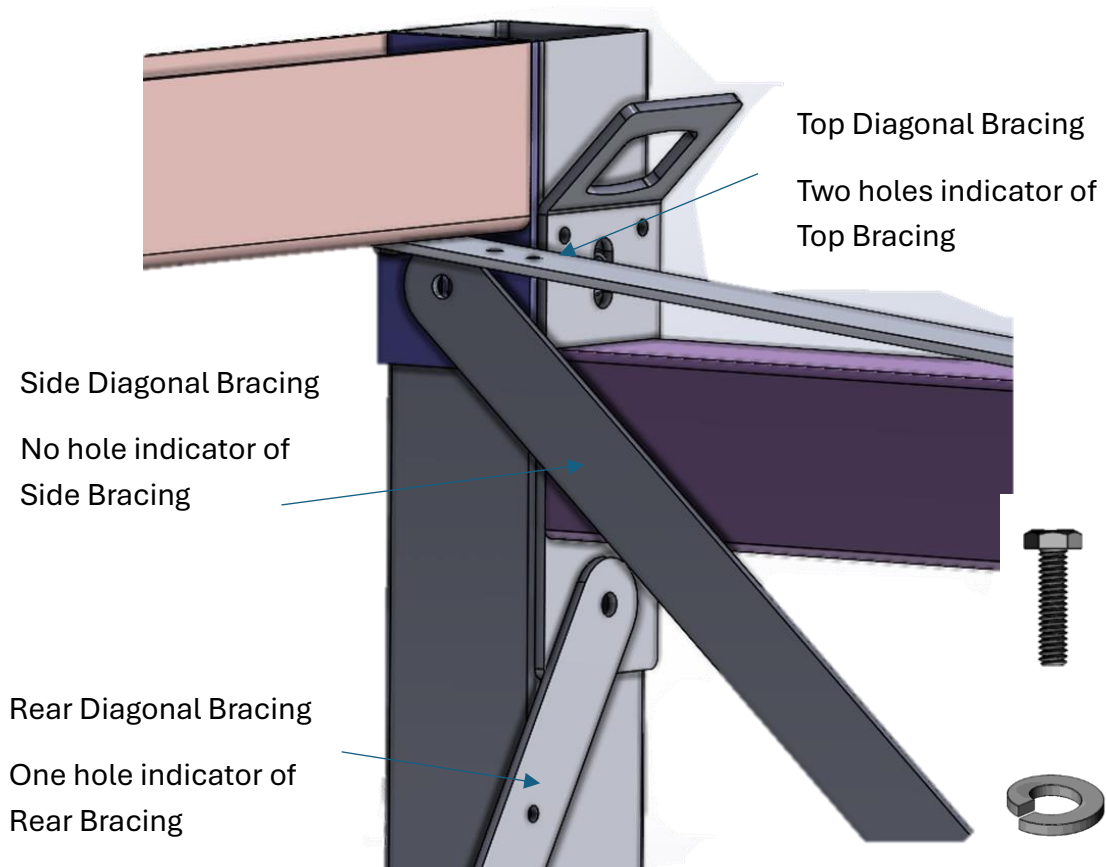
The end with the round hole will be bolted. The end with the obround hole will hook to the turnbuckle.

Do not tighten at this time.

Use the indicator holes to identify diagonals. Two Holes indicates Top Bracing, one hole indicates Rear Bracing and not hole is indicator of side bracing.



Back side of frame





Two holes indicator of Top Bracing

At rear of frame, bolt the Top Diagonal Bracing to both far-end inserts located at the bottom of the Top Spreader.



Hook the Top Diagonal Bracing to the front tab of the Side Spreader using the turnbuckle.



Use turnbuckles to attach the diagonal braces to the Rear Spreader and Side Spreaders that are located on bottom side of the frame.

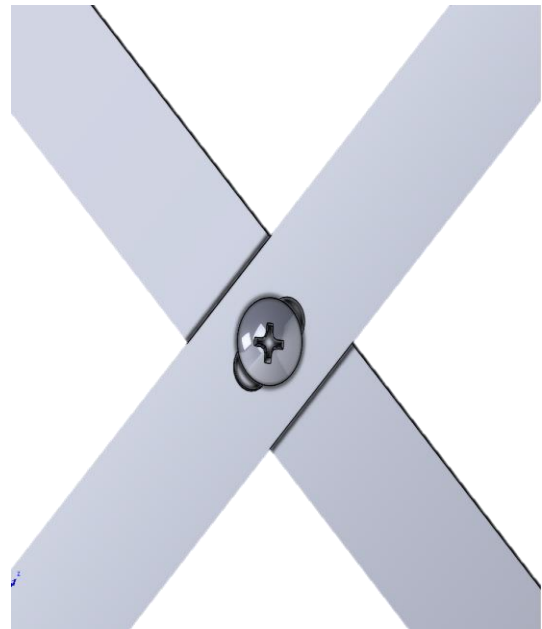


Bolt mid holes of diagonal braces.

Do not tighten at this time.

Use provided Pan Head_1/4"-20X 1/2" bolt and Nut.

Tighten all hardware except cross braces mid bolts at this time.



Verify the structure:

1. Ensure the structure is properly level. Adjust the leveling bolts as required.
2. Check that all sides are square by measuring the diagonals. If necessary, adjust the turnbuckles until the frame is square.
3. Check that all vertical posts are plumb. Adjust the turnbuckles as needed to achieve proper alignment.
4. Verify that the front posts are spaced correctly.

Once all adjustments are complete, tighten the cross brace hardware.



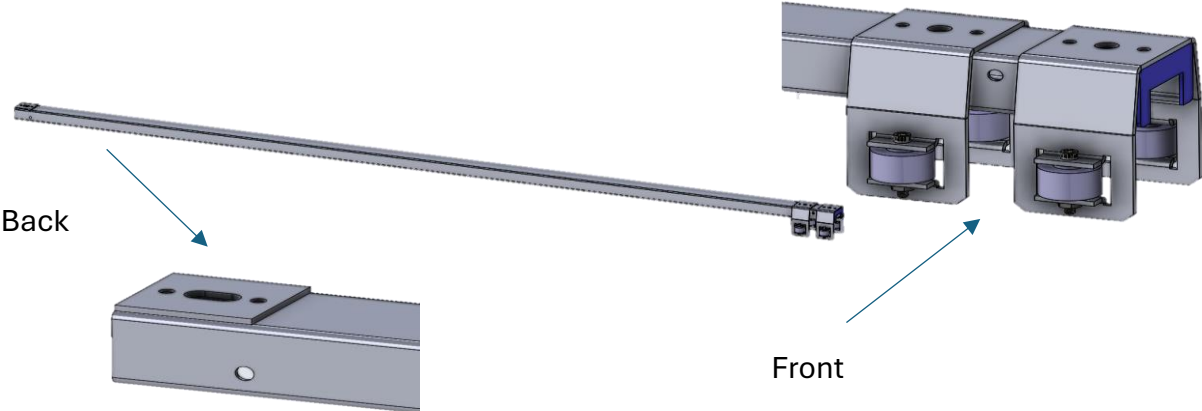
Overhead Slide and Floor Track



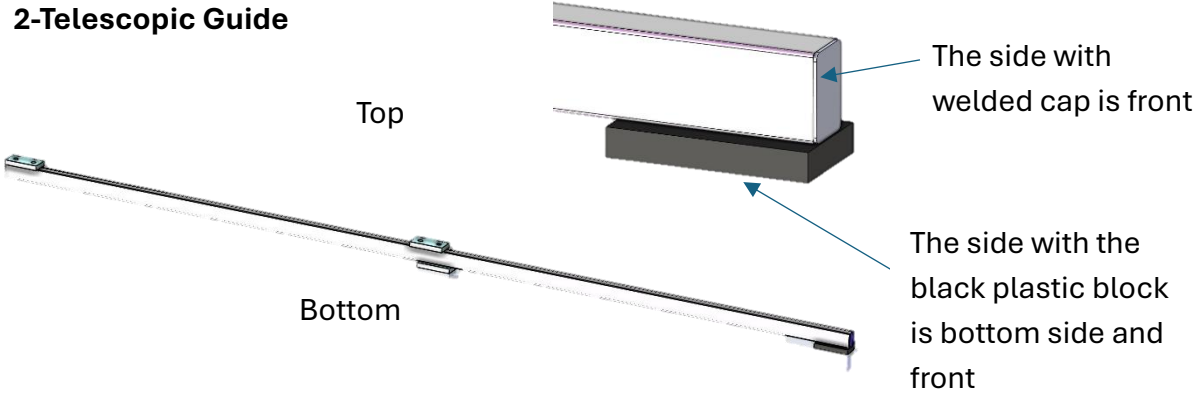
Overhead Slide and Floor track		
	Description	Quantity per screen
1	Sliding channel_Top Assembly	1
2	Telescopic Guide	1
3	Floor Track	1
4	Bolt_Hexhead_1/4"-20 X3/4"	2
5	Lock Washer-1/4" ID	2
6	Nut-hex, flange locking_1/4"-20	1
7	Bolt_Hexhead_1/4"-20 X2-1/4"	1



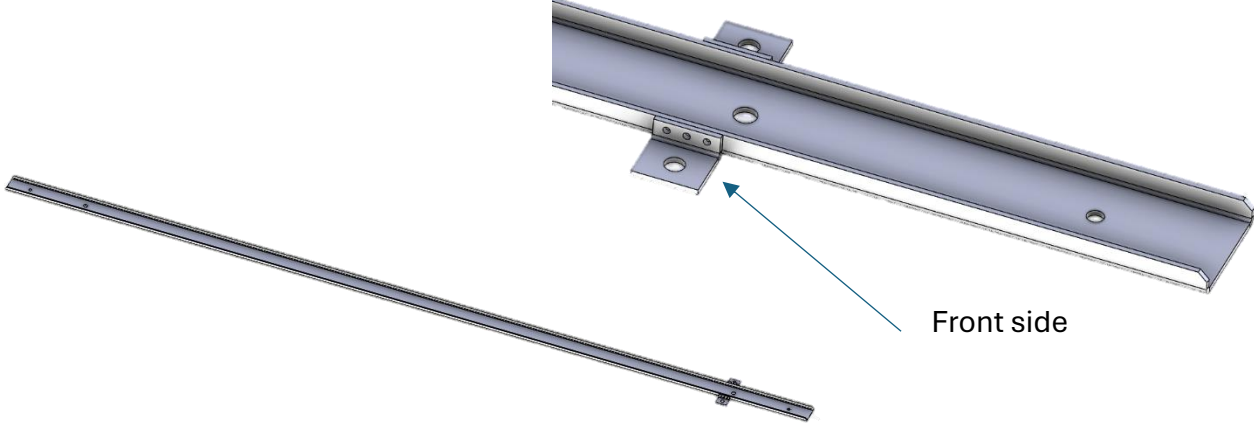
1-Sliding channel_Top Assembly



2-Telescopic Guide



3-Floor Track



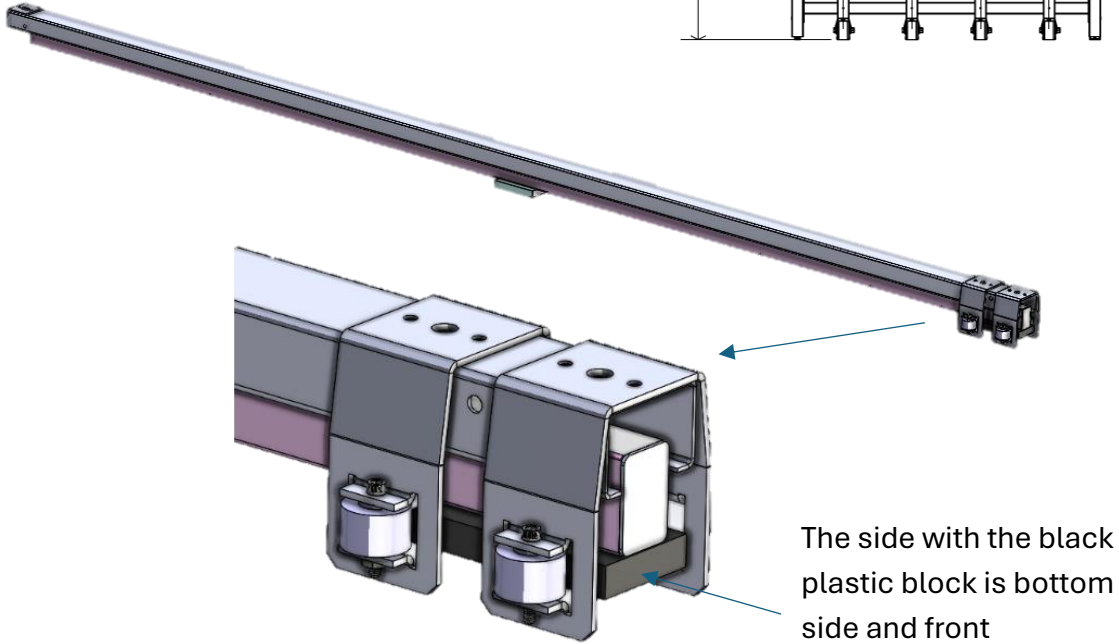
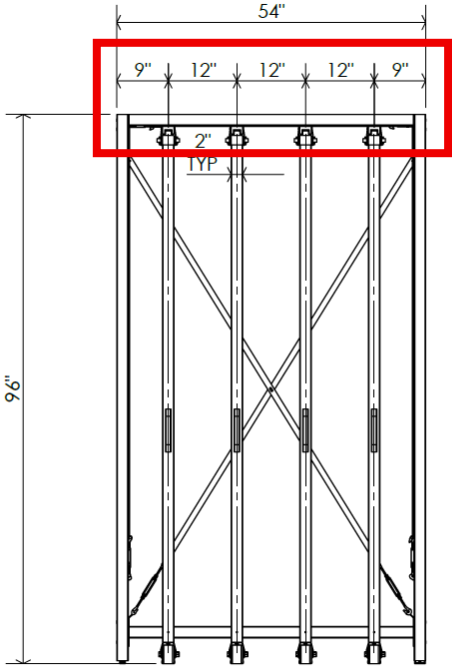
		
4-Bolt_Hexhead_1/4"-20 X3/4"	5-Lock Washer-1/4" ID	6- Nut-hex, Keps (K) locking_1/4"-20
		
7-Bolt_Hexhead_1/4"-20 X2-1/4"		



Refer to the product drawings for proper screen spacing.

In this example the screens are 12” on center with 9” to the left and right of the first and last screens.

The Top Stretcher comes with the pre punched holes with the thread inserted at the correct spacing. If the center distance on the Top Stretcher does not match with drawing contact your dealer.



Determine the front and back sides of the Sliding Channel_Top Assembly and the Telescopic Guide. Before installing the Sliding Channel_Top Assembly, insert the Telescopic Guide into the assembly from the back side, as there may not be enough clearance at the rear of the system to perform this step after installation.

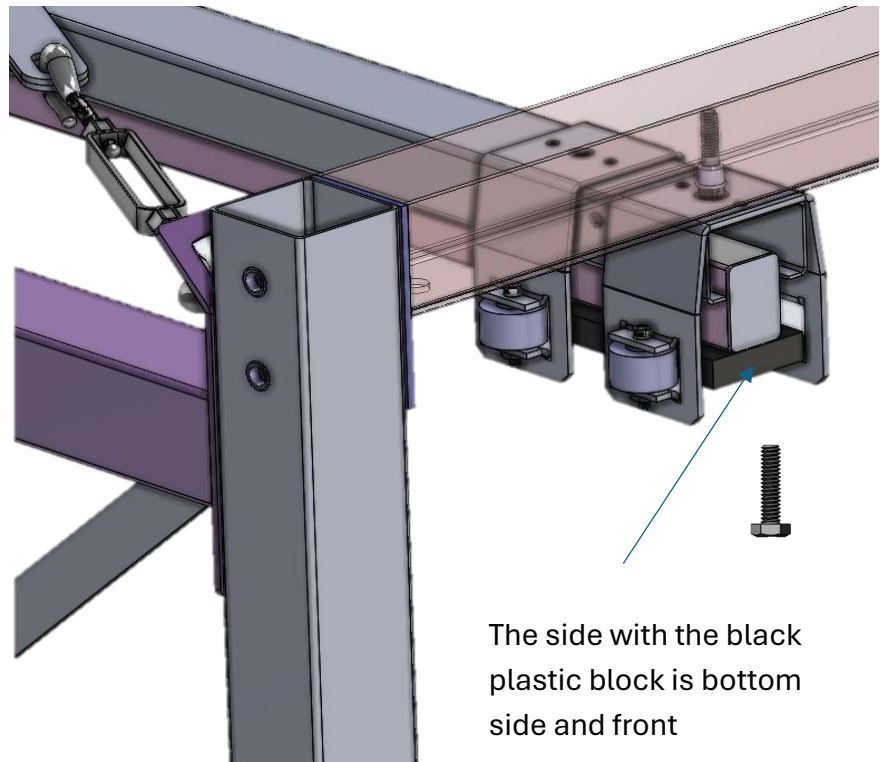


To install the Sliding Channel_Top Assembly to the frame, position it against the underside of the Top Spreader and secure it using the provided Bolt_Hexhead_1/4"-20 x 3/4" fasteners.

Fasten the front side first, then secure the back side.

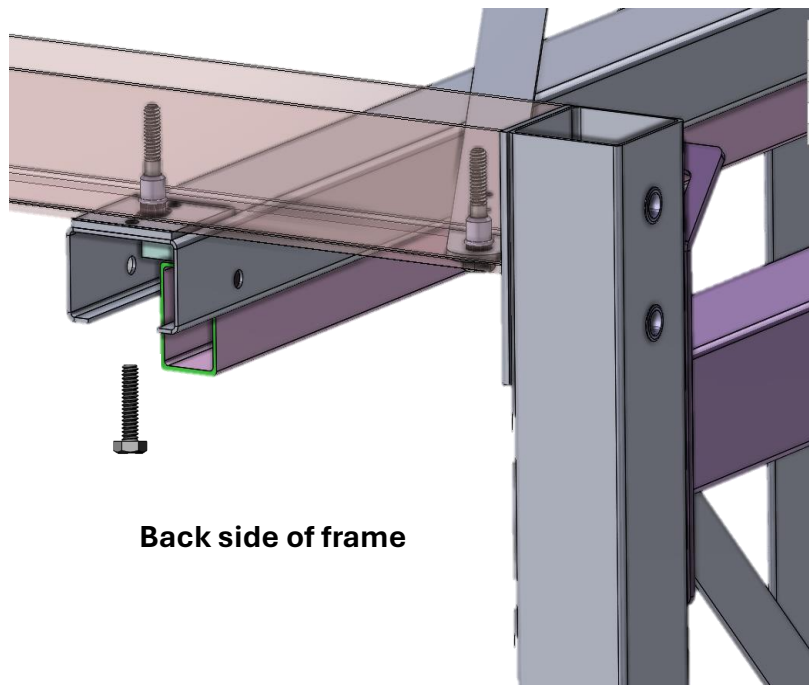


Front side of frame



The side with the black plastic block is bottom side and front

Use the same type of bolt to secure and tighten the back side of the Sliding Channel_Top Assembly.



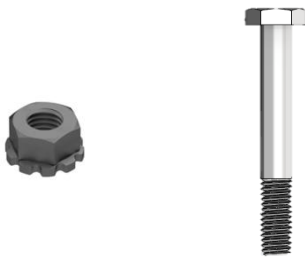
Back side of frame



On the back side of Sliding Channel_Top Assembly, locate the hole position as shown in the picture and install the Bolt_Hexhead_1/4"-20 × 2-1/4" together with the Nut-Hex, Keps (K) Locking_1/4"-20 at this location. Tighten the nut only enough to prevent it from loosening.

Do not overtighten, as excessive force may deform the hollow channel and negatively affect the smooth operation of the screen movement.

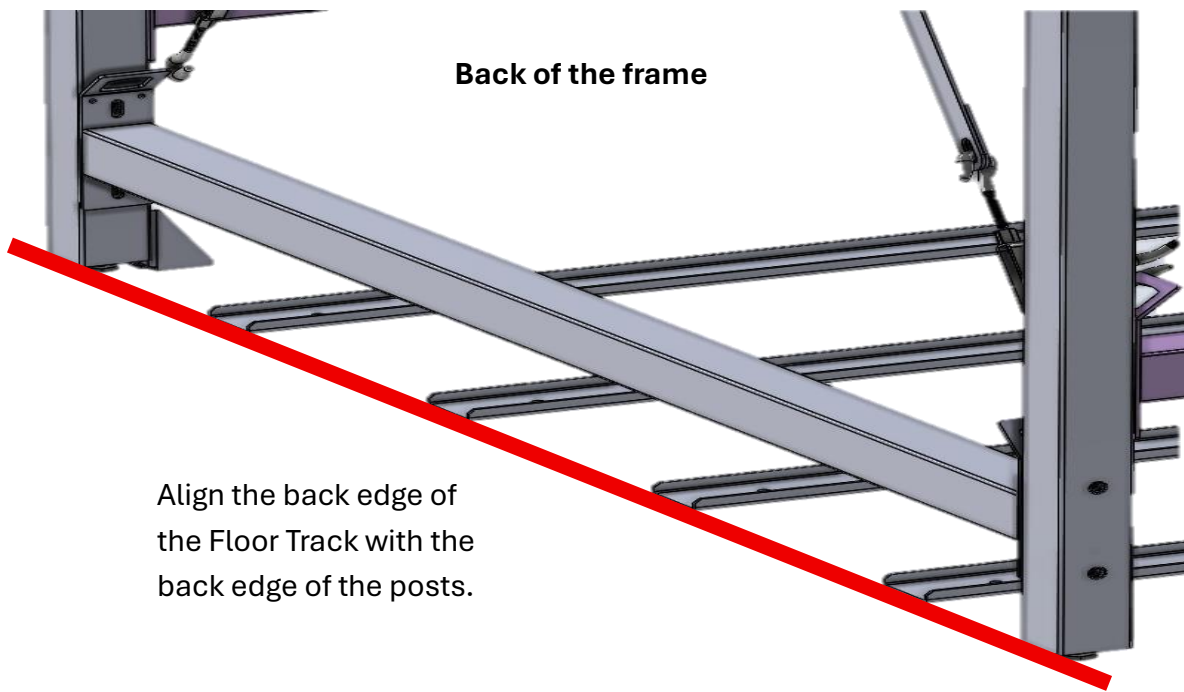
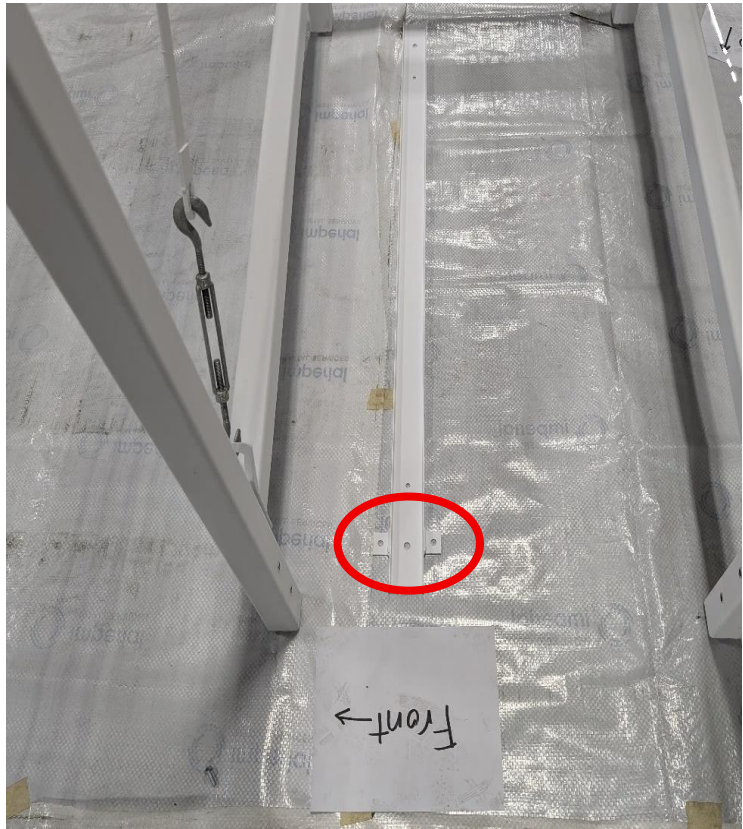
Back side of the frame



When laying out the Floor Tracks, ensure the center-to-center spacing between the tracks matches the screen spacing.

The Floor Track width is 2-1/4". Therefore, the distance from the side of one track to the side of the adjacent track should equal the screen center spacing minus 2-1/4". For example, if the screen center spacing is 12", the distance between adjacent track sides should be 9-3/4".

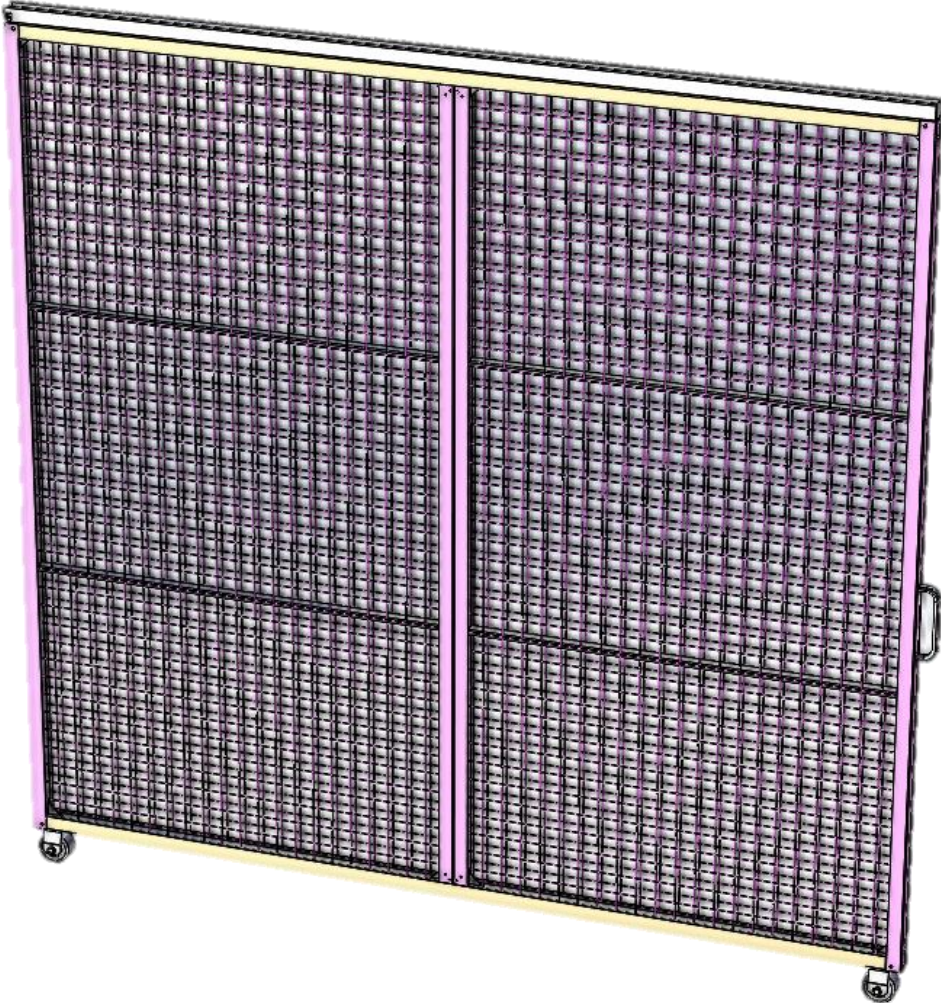
Position the side of the Floor Track with the two tabs toward the front of the frame.



Align the back edge of the Floor Track with the back edge of the posts.



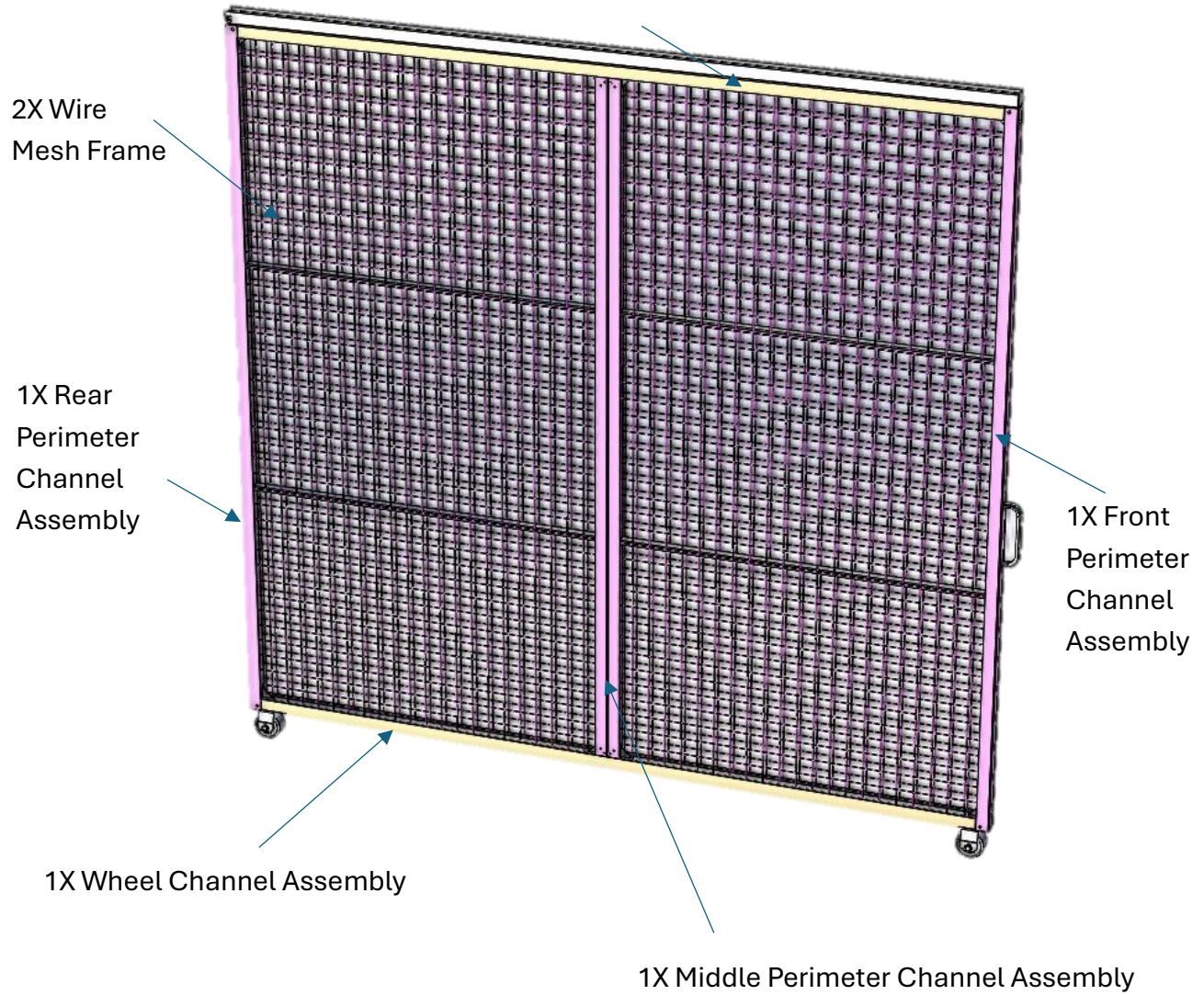
Screen Assembly



Screen Assembly Main Components

1X Sliding Channel_Bottom Assembly

(The Top Sliding Channel was assembled to the frame in the previous steps)

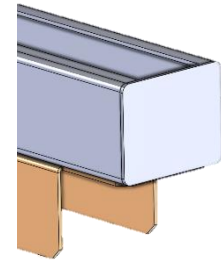
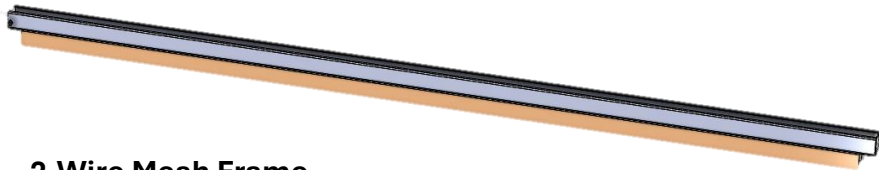


Screen Assembly with two Wire Mesh Frame		
	Description	Quantity per screen
1	Sliding channel_Bottom Assembly (Horizontal)	1
2	Wire Mesh Frame	2
3	Front Perimeter Channel Assembly (Vertical)	1
4	Rear Perimeter Channel Assembly (Vertical)	1
5	Middle Perimeter Channel Assembly (Vertical)	1
6	Wheel Chanel Assembly (Horizontal)	1
7	Bolt_Hexhead_1/4"-20 X2-1/4"	1
8	Nut-hex, flange locking_1/4"-20	1
9	Nut-hex, flange locking_5/16"-18	4
10	Flanged Hex Head Drilling Screws_# 10, 3/4" Long	4

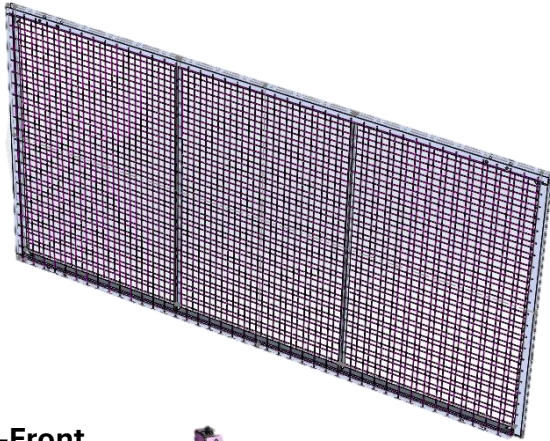
Screen Assembly with one Wire Mesh Frame (Only for 48" deep systems and less)		
	Description	Quantity per screen
1	Sliding channel_Bottom Assembly (Horizontal)	1
2	Wire Mesh Frame	1
3	Front Perimeter Channel Assembly (Vertical)	1
4	Rear Perimeter Channel Assembly (Vertical)	1
5	Wheel Chanel Assembly (Horizontal)	1
6	Bolt_Hexhead_1/4"-20 X2-1/4"	1
7	Nut-hex, flange locking_1/4"-20	1
8	Nut-hex, flange locking_5/16"-18	4



1-Sliding channel_Bottom Assembly (Horizontal)



2-Wire Mesh Frame



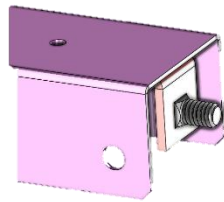
Front

**3-Front
Perimeter
Channel
Assembly
(Vertical)**



Top

Both ends have
welded 5/16"-18 bolt



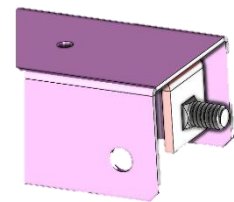
Bottom

**4-Rear Perimeter
Channel
Assembly**



Top

Both ends have
welded 5/16"-18 bolt

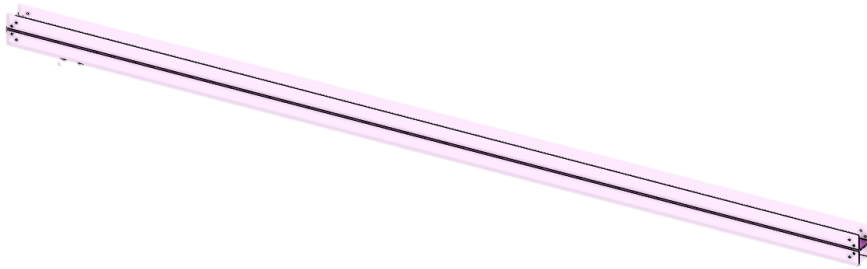


Bottom

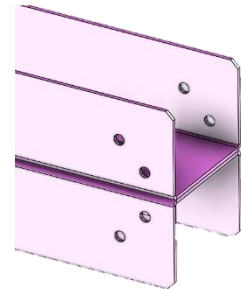
(has rubber
bumper)



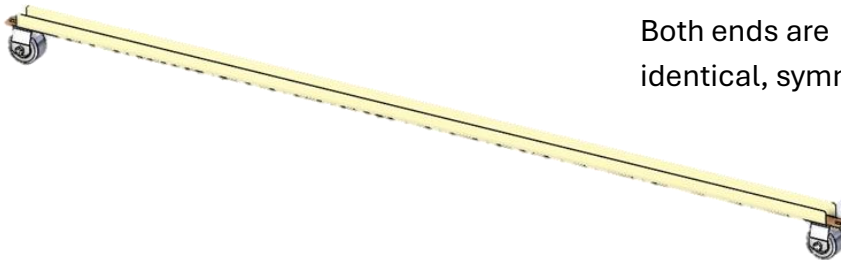
5-Middle Perimeter Channel Assembly (Vertical)



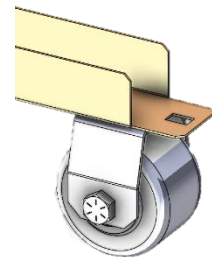
Both ends are identical, symmetric







6-Wheel Chanel Assembly



Both ends are identical, symmetric



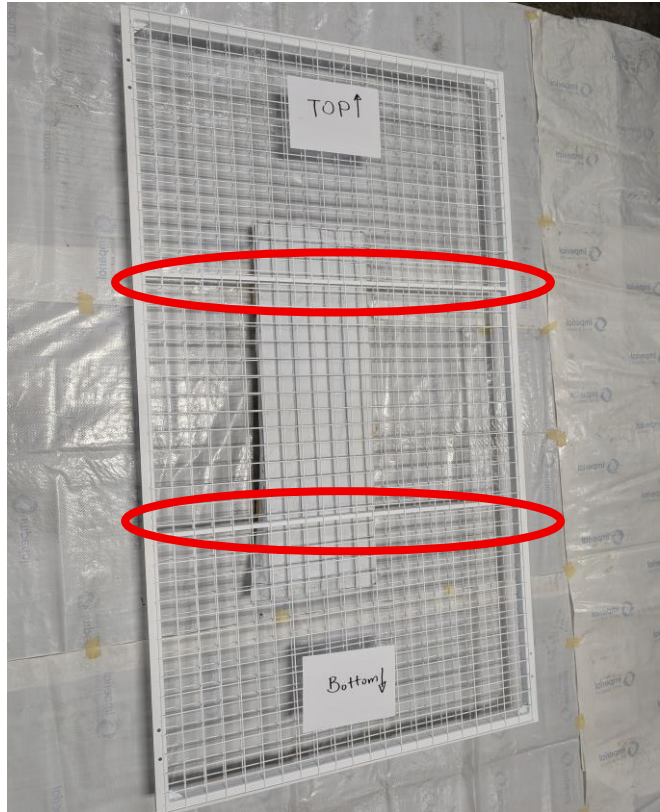
			
<p>7-Bolt_Hexhead_1/4"-20 X2-1/4"</p>	<p>8-Nut-hex, flange locking_1/4"-20</p>	<p>9-Nut-hex, flange locking_5/16"-18</p>	<p>10-Flanged Hex Head Drilling Screws_# 10, 3/4" Long</p>



Identify the top and bottom of the Wire Mesh Frame.

Place the Wire Mesh Frame on a piece of wood to elevated for ease of assembly

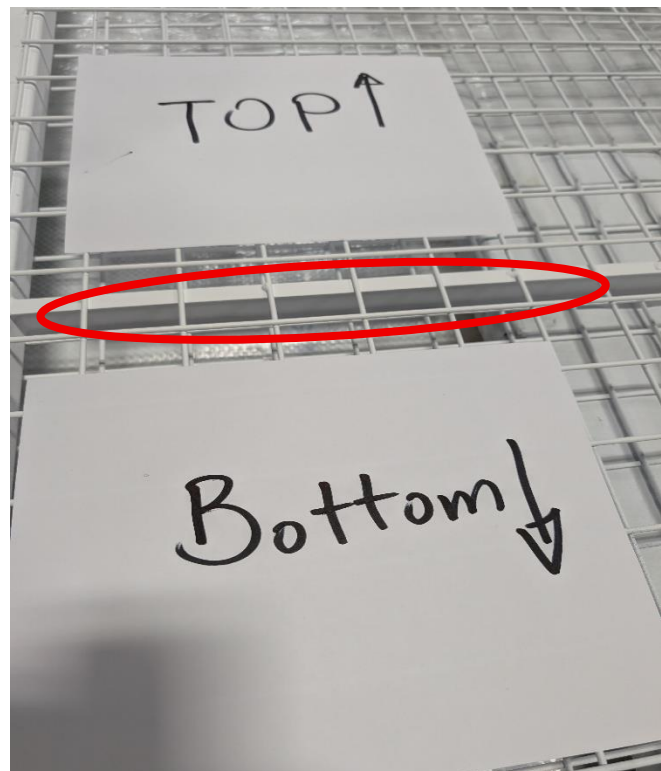
. Ensure correct orientation by verifying the direction of the two reinforcement U-channels, as shown in the reference image.



The open side of the U-channel faces toward the bottom side of the Wire Mesh Frame



Bottom



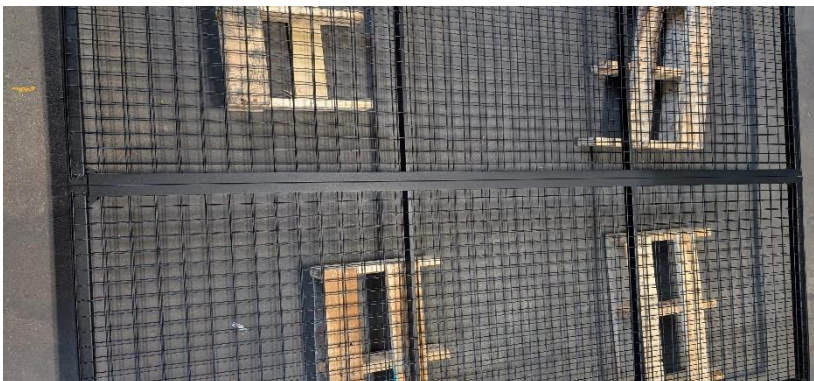
Repeat the same steps for the next Wire Mesh Frame and position it close to the first one. Ensure that the top and bottom sides of both Wire Mesh Frames are oriented in the same direction.



Slide in the Front Perimeter Channel Assembly (Vertical) into the first Wire Mesh Frame. Ensure that the top and bottom sides of Perimeter Channel Assembly and Wire Mesh Frames are oriented in the same direction. You should measure 33-1/4" to the bottom of the handle as shown here



Slide in the Middle Perimeter Channel Assembly in between the two Wire Mesh Frame. If the system is 48" deep or less, skip this step, as the screen has only one Wire Mesh Frame.

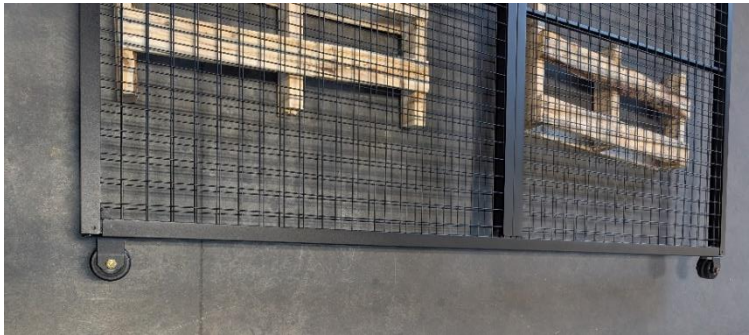


Slide in the Rear Perimeter Channel Assembly into the second Wire Mesh Frame. Ensure that the top and bottom sides of Perimeter Channel Assembly and Wire Mesh Frames are oriented in the same direction.



The bottom side of Rear Perimeter Channel Assembly has small rubber bumper inserted in.

Now insert the Wheel Channel Assembly (Horizontal) into the bottom side of the Wire Mesh Frame, ensuring the welded bolts pass through the openings at both ends of the Wheel Channel Assembly.

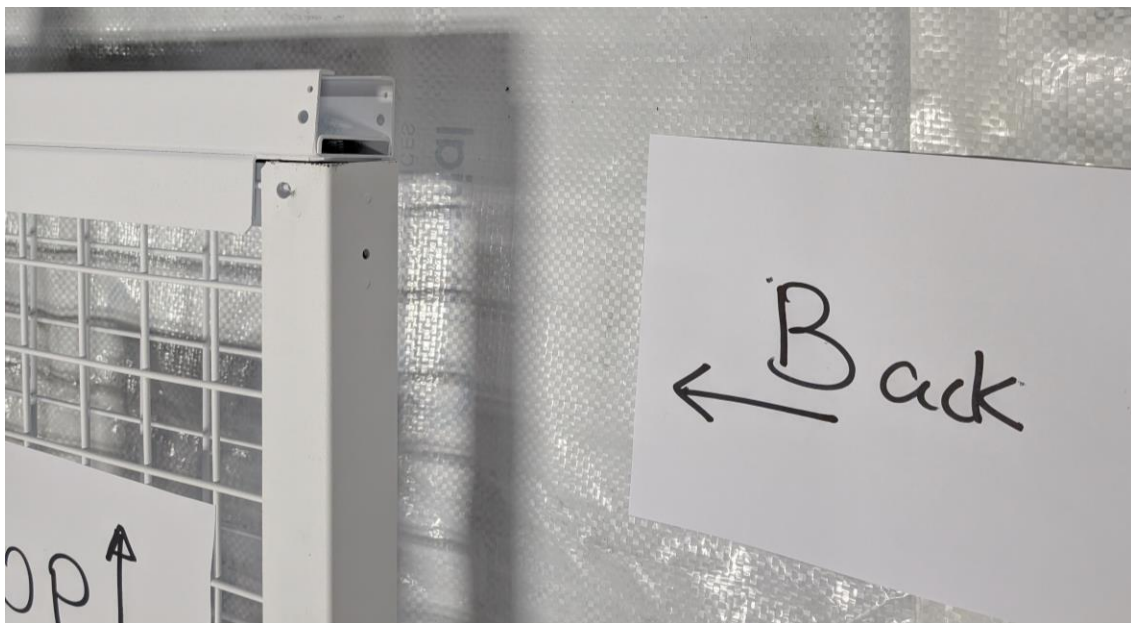


Use provided Nut-hex, flange locking_5/16"-18.

Hand tighten them at both ends



Insert the Sliding Channel_Bottom Assembly (Horizontal) to the top side of the Wire Mesh Frames. Ensure that the front and back sides of Sliding Channel_Bottom Assembly and Wire Mesh Frames are oriented in the same direction.



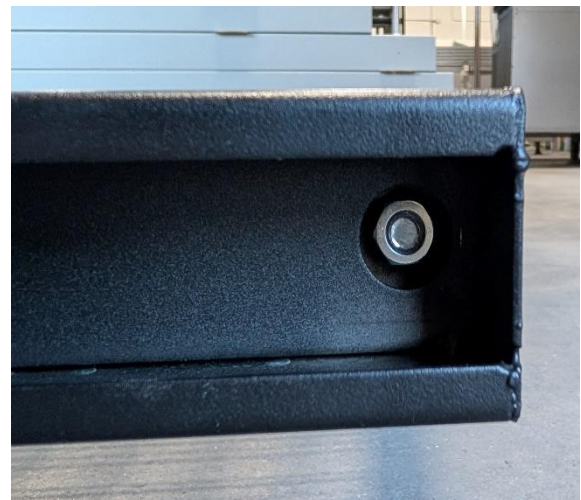
As with the Wheel Channel Assembly, ensure the welded bolts pass through the openings at both ends of the Sliding Channel_Bottom Assembly.



Use a 1/2" socket (Deep access socket) with a 1/4" drive ratchet to install and tighten the two 5/16"-18 hex flange locking nuts on both ends.

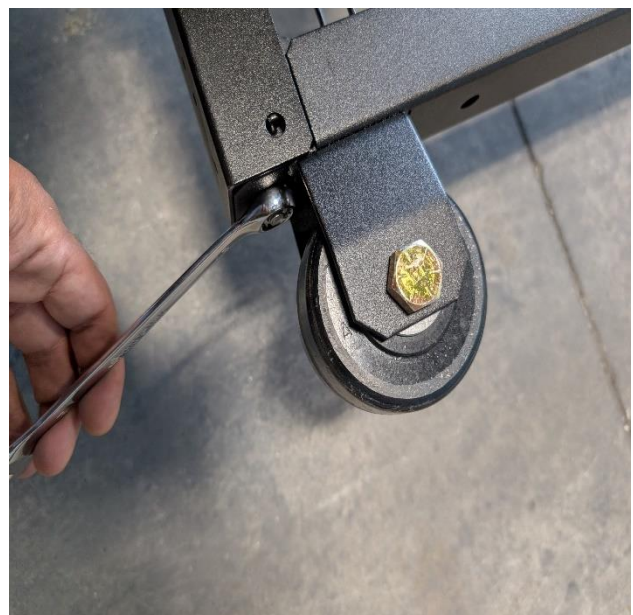


Do not overtighten, as this may damage the welded joints between the bolts and brackets.

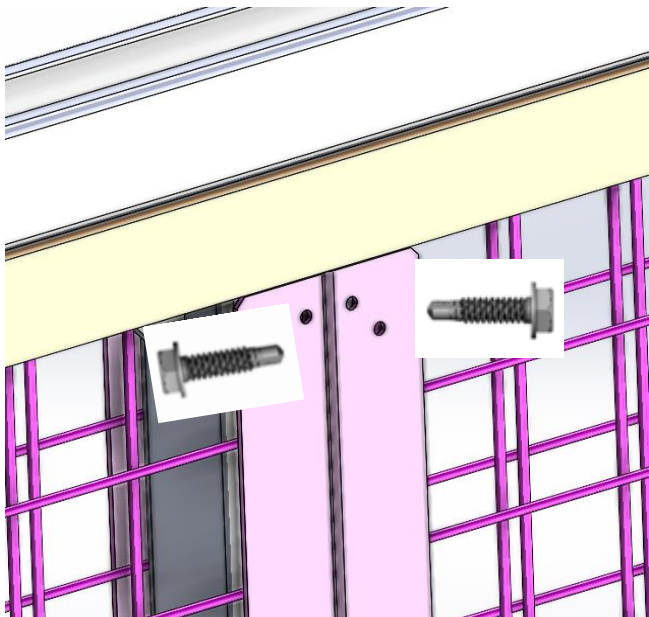


Use 1/2" wrench to tighten the two 5/16"-18 hex flange locking nuts on both ends of Wheel Chanel Assembly.

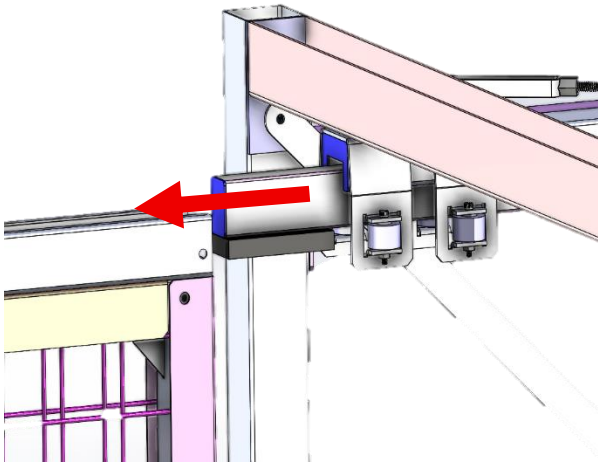
Do not overtighten, as this may damage the welded joints between the bolts and brackets.



Use self-drilling screws to attach the top and bottom of the Middle Perimeter Channel Assembly to both Wire Mesh Frames.



Stand the screen in upright position in front of the frame and align it with one of the Sliding Channel_Top Assemblies.



From the back side, insert and guide the black plastic Telescopic Guide block into the Sliding Channel_Bottom Assembly.

Fully retract the Screen Assembly inside.



On the back side of Sliding Channel_Bottom Assembly, locate the hole position as shown in the picture and install the Bolt_Hexhead_1/4"-20 × 2-1/4" together with the Nut-Hex, Keps (K) Locking_1/4"-20 at this location. Tighten the nut only enough to prevent it from loosening.

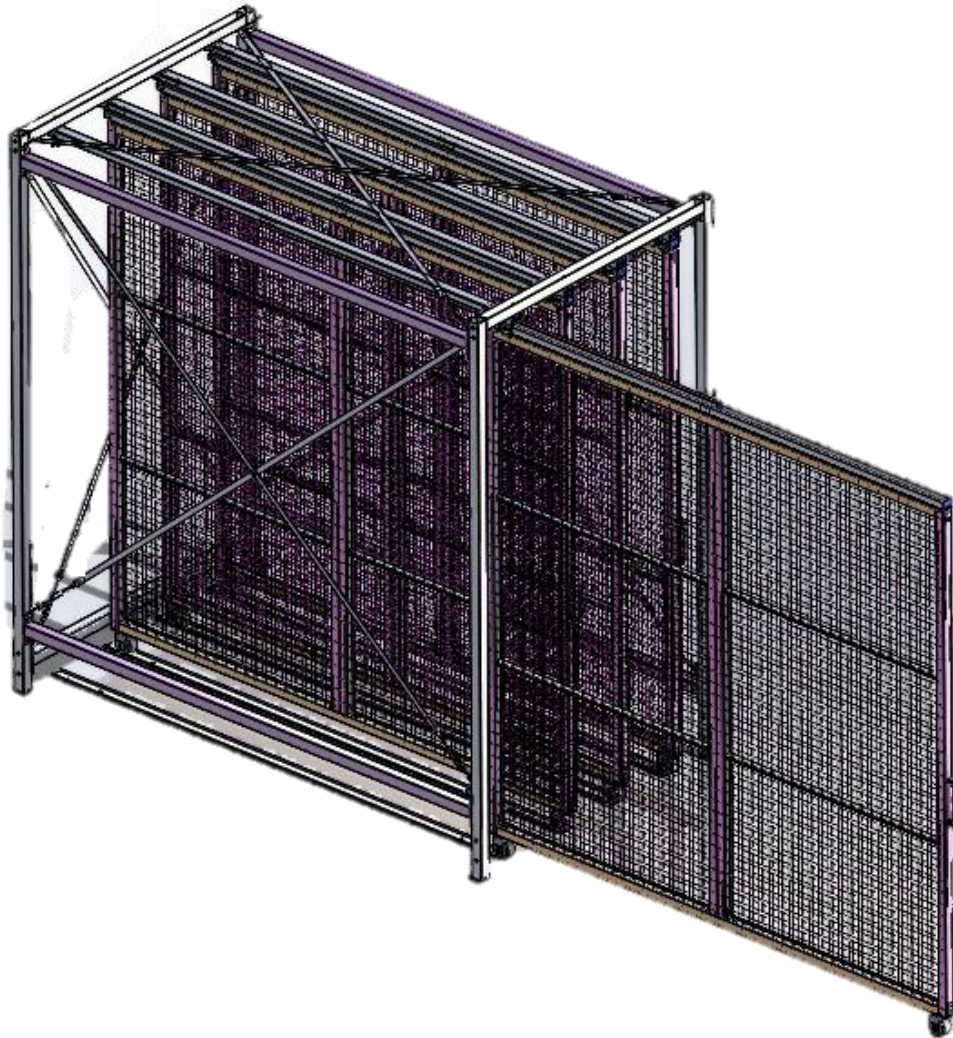
Do not overtighten, as excessive force may deform the hollow channel and negatively affect the smooth operation of the screen movement.



Continue the steps above for the rest of the screens



Finishing Steps



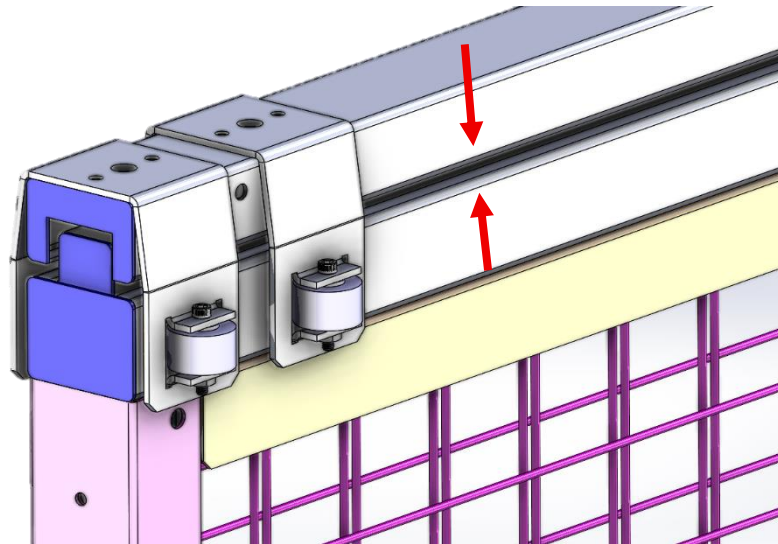
Finishing Steps		
	Description	Quantity
1	Anchoring Bracket	Min2/Frame
2	Flanged Hex Head Drilling Screws_# 10, 3/4" Long	Min2/Frame
3	Screw for concrete-1/4"	3/Screen
4	Bumper Assembly	1/Screen



		
<p>1-Anchoring Bracket</p>	<p>2-Flanged Hex Head Drilling Screws_# 10, 3/4" Long</p>	<p>3-Screw for concrete-1/4"</p>
		
<p>4-Bumper Assembly</p>		



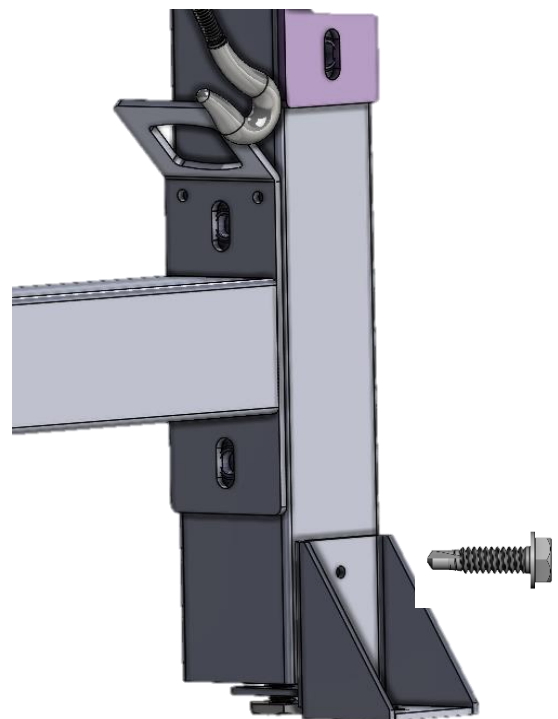
The screen should slide in and out smoothly. If movement is not smooth, check the spacing between the Sliding Channel_Top Assembly and Sliding Channel_Bottom Assembly; it should be approximately 1/4". If not, adjust the leveling bolts to raise or lower the frame as needed.



After checking all the screens for the smooth movement, use the Anchoring Bracket to anchor the frame to the floor in at least two opposite locations.

Use self-drilling screw to attach the Anchoring Bracket to the post.

Floor anchoring requirements should be determined by site conditions, local code or other requirements.



Double-check the Floor Track layout to ensure it is set to the correct center-to-center spacing.

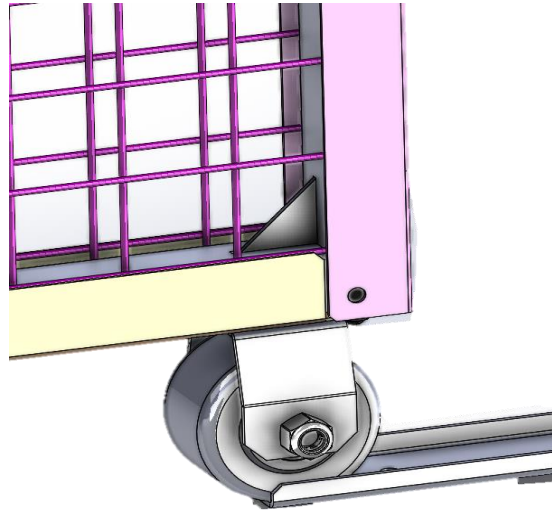
Align the back edge of the Floor Track with the back edge of the posts.

Ensure the front edge of the Floor Track ends just before the front wheel of the screen.

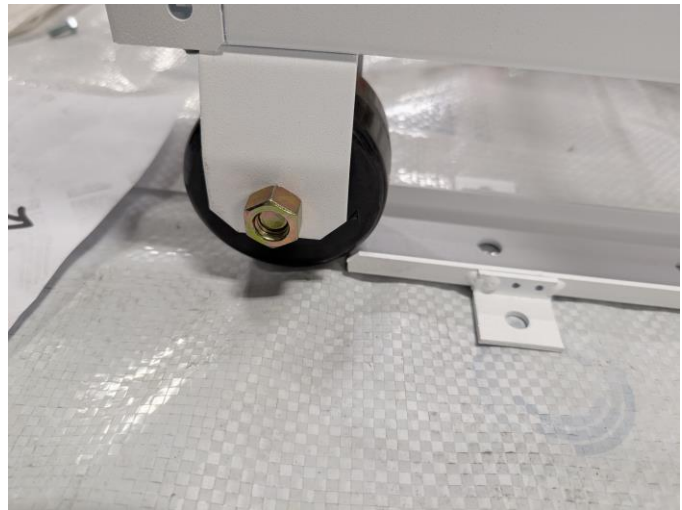
Note: When the screen is fully extended, the rear wheel should remain inside the Floor Track.

Note: When the screen is fully retracted, the front wheel must stay clear of the track and must not ride onto it.

After confirming the spacing, use 1/4" concrete screws to secure the Floor Tracks to the floor.



Note: When the screen is fully extended, the rear wheel should remain inside the Floor Track.



Note: When the screen is fully retracted, the front wheel must stay clear of the track and must not ride onto it.



Insert the bumper assembly into the Channel_Top Assembly as shown in the picture and hand-tighten it.

Fully retract the Screen Assembly, then adjust the bumper position as needed and tighten it securely.

The hex nut supplied with the assembly has a 5/16"-18 thread.

