INSTALLATION GUIDE

Trex® Solitudes™

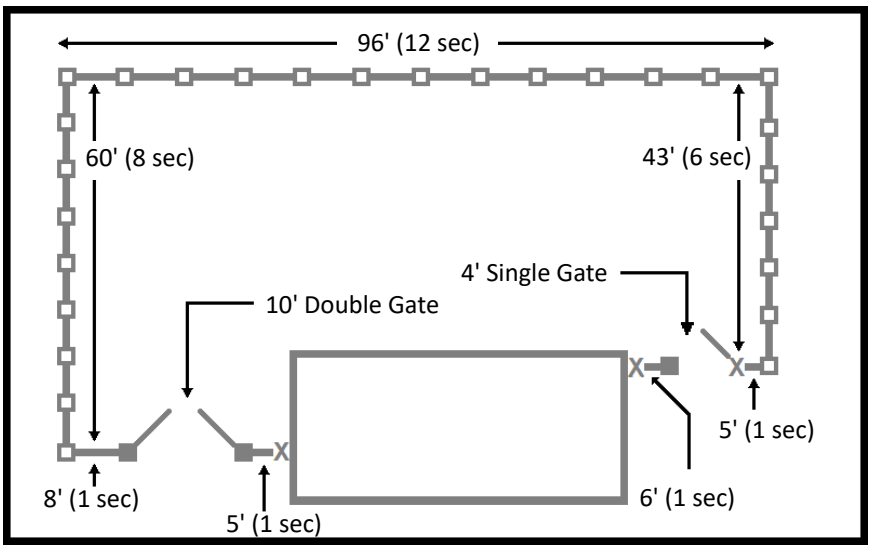
COMPOSITE FENCING SYSTEM

For current installation instructions, download guide:

TrexFencingFDS.com

Plan Your Fence

Sample Fence Sketch and Measurements



- line post
- starting post
- x terminal post

>> Figure the number of sections for each line by dividing the length of each line in inches, then that amount by 96. Round up any remainder. For example:

45 ft = 540 in / 96 = 5.63 (round up to 6 sections)

Calculate Materials

The materials calculations on this form are intended for rough estimation based on 6' tall x 8' wide sections. Fill in yellow boxes and verify all counts.

# of Sections (Divide each line by 96" and round up; add total # of sections):		# of Terminal Posts	
Items Needed (6' H x 8' W Section)		**Multiplier**	**Total Materials For Sections**
Material	**Quantity**		
Top Rail	*1*	*x (# of sections)*	
Aluminum Top Rail Insert	*1*	*x (# of sections)*	
Bottom Rails (14 as pickets / 2 as bottom rail covers)	*16*	*x (# of sections)*	
Aluminum Bottom Rail	*1*	*x (# of sections)*	
9' Post	*1*	*x (# of sections) + # of terminal posts*	
Post Cap	*1*	*x (# of posts)*	
Vertical Rails (4 pk)	*1*	*x (# of packs)*	
80 lbs Bags of Concrete	*2*	*x (# of posts)*	
Trex Brackets/Fasteners (4 pk)	*1*	*x (# of sections)*	
# of Single Gate(s)		# of Single Gate Hardware Package(s)	
# of Double Gate(s)		# of Double Gate Hardware Package(s)	
Steel Post Stiffener(s)	*based on # of hinge posts*		
Solitudes Screw Packs	*1*	*x (# of sections)*	

* For standard single gates (46 1/4" opening) : (1) small Trex gate panel, (1) steel post insert, and (1) Trex single gate hardware kit.
* For standard double gates (130 3/4" opening) : (2) large Trex gate panels, (2) steel gate post inserts, and (1) Trex double gate hardware kit.

Tools Needed

- ☐ Stakes
- ☐ String Line
- ☐ Marking Paint
- ☐ Hammer
- ☐ Tape Measure
- ☐ Shovel
- ☐ Post Hole Digger
- ☐ Digging Bar
- ☐ Circular Saw
- ☐ Drill
- ☐ Pencil
- ☐ Wheelbarrow
- ☐ 4' Level
- ☐ 12" Miter Saw
- ☐ Speed Square
- ☐ Finish Nail gun (optional)

Before you begin

- ☐ Confirm location of underground utilities with local providers before you dig.
- ☐ Check local zoning laws and HOA rules which may regulate the height and placement of your fence.
- ☐ Apply for local permits as directed by local codes.
- ☐ Wear proper safety protection for eyes and ears.
- ☐ For a step-by-step installation video, visit:

TrexFencingFDS.com/videos

NOTES:

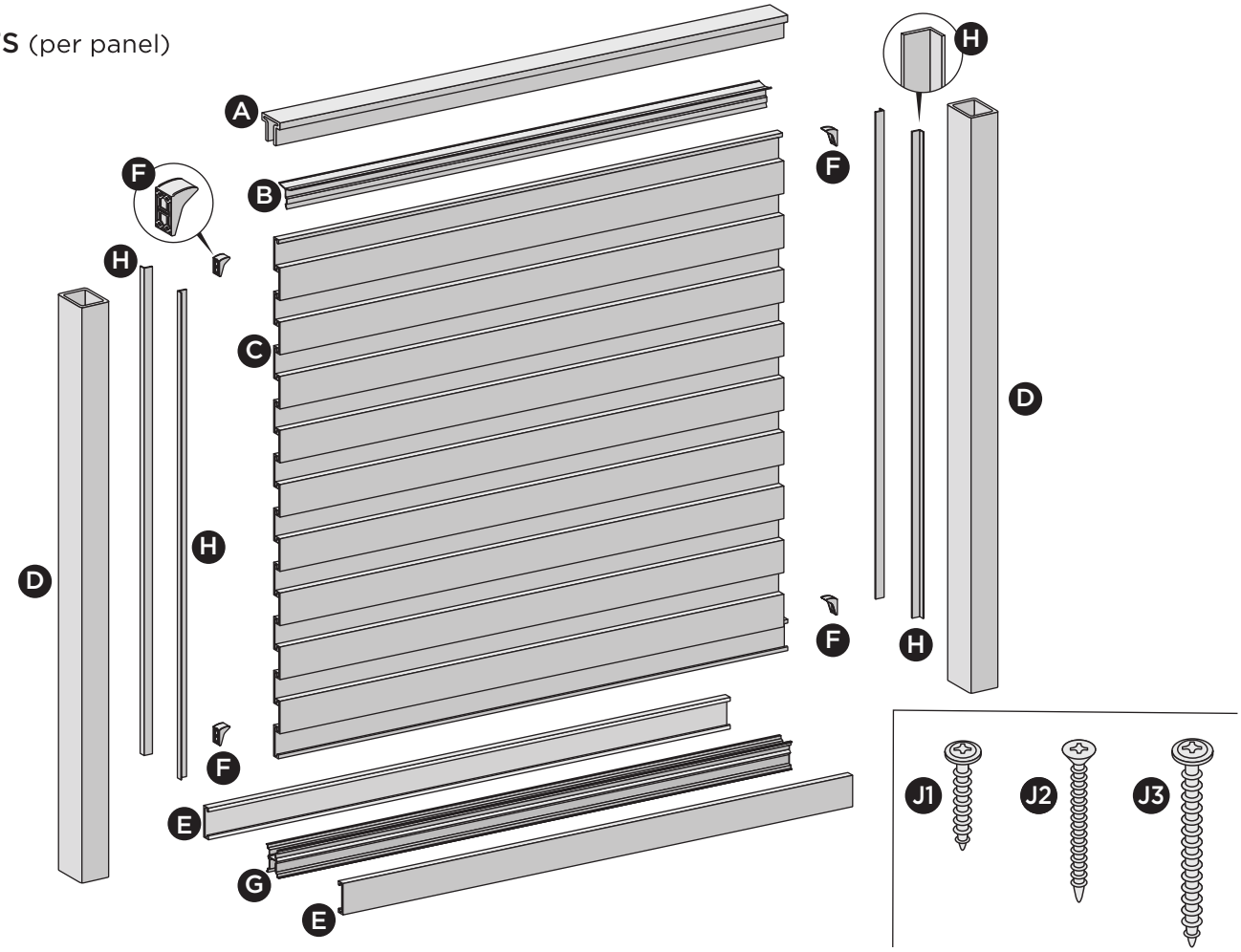
» Trex Solitudes Fencing is designed to be installed with posts at 8' ON CENTER.

» Please refer to local building code requirements prior to digging holes to ensure local guidelines are followed.

Below instructions are guidelines for general requirements.

» ALL INSTRUCTIONS WITHIN THIS DOCUMENT ARE FOR A POST EMBEDMENT OF 30".

PARTS (per panel)

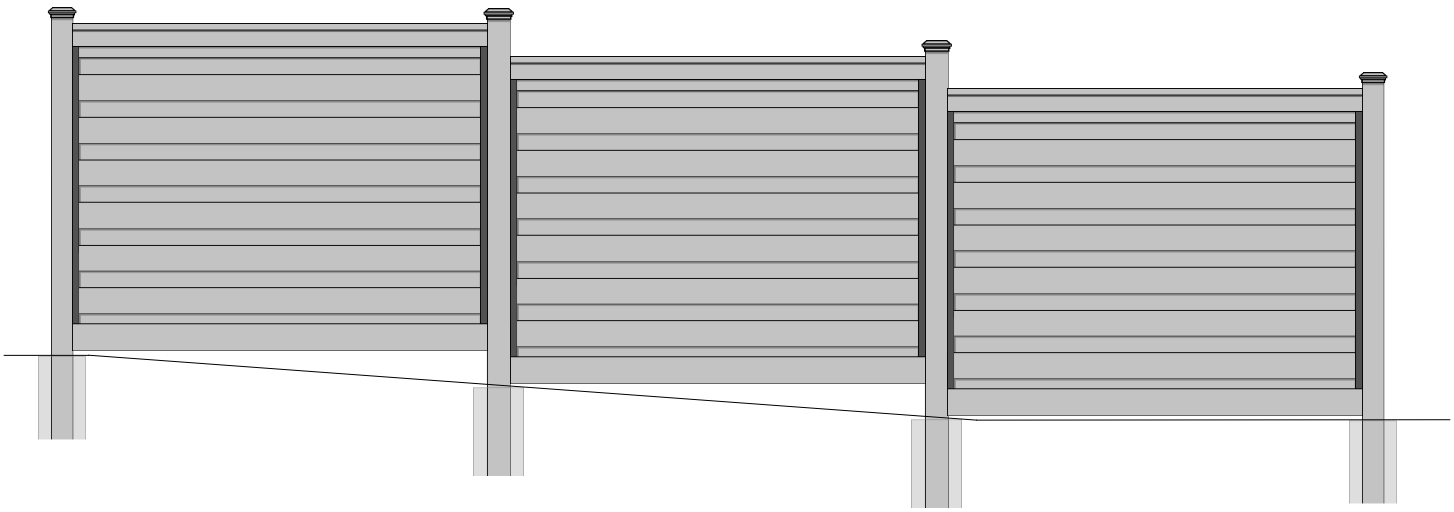


ITEM	DESCRIPTION	QUANTITY
A	Top Rail	1
B	Aluminum Top Rail Insert	1
C	Picket/Bottom Rail Cover	6' height = 14 8' height = 17
D	5" x 5" Post	2
E	Bottom Rail Cover	2

ITEM	DESCRIPTION	QUANTITY
F	Rail Bracket	4
G	Aluminum Bottom Rail	1
H	L-Channel	4
J1	#8 x 1" Pan Head Screw	6' height = 20 8' height = 24
J2	#8 x 1-5/8" Flat Head Screw	28
J3	#10 x 2" Self-Drilling Pan Head Screw	2

Step 1: Understanding the Install Method

Solitudes is designed to be built on level ground. If Solitudes is built on a slope it will be necessary to step the panels as shown below. This may leave gaps under the fence and may also require longer posts to accommodate the steps.



Step 2: Stake and String

1. Stake and string fence lines. Drive stakes approximately 2 ft. beyond property pins so stakes will not be disturbed when digging holes, and set line approximately 4-5 inches inside of property lines to ensure no enchroachment on neighbors.
2. Mark location of posts. Spray paint a line perpindicular to the string every 96" on center. Ideal spacing *between* posts is 91". Spray additional lines (making a cross) 2" in from the string to mark the center of the hole (see Fig. 1).

Note: Post layout should not exceed 96" from center of post to center of next post or rails will be too short. Laying out posts 96" on center may leave a remainder at the end of a line. Set all sections per line at 96" on center and split the remainder for the last two sections (see Fig. 1A). Alternatively, for a uniform look, fence lines may be divided into even sections, each less than 96" on center. Ex.: If fence line is 68 ft. long, space posts 90.7" on center (68' x 12" = 816" / 9 sec = 90.7").

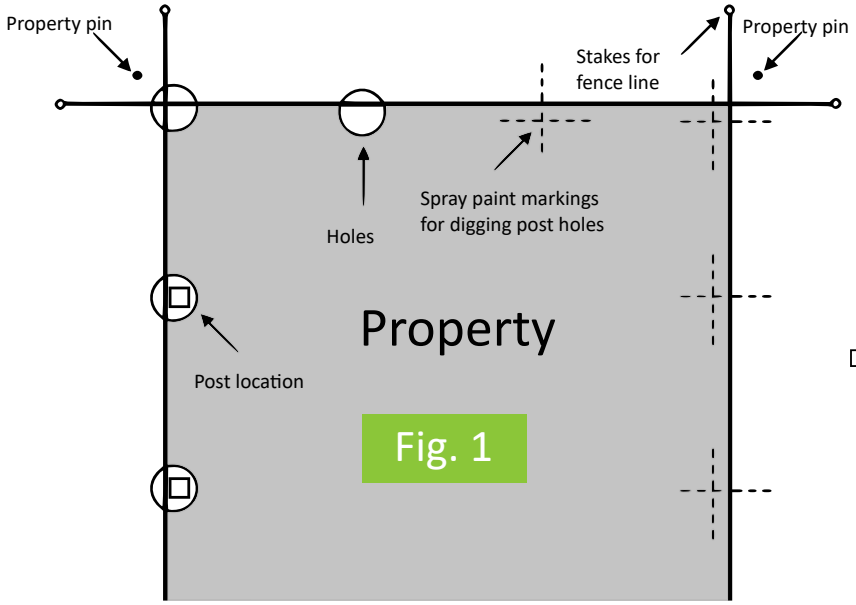
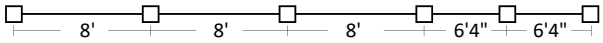


Fig. 1



Example

Fig. 1A

Step 3: Dig Holes

1. Dig holes for the posts making sure not to disturb the stakes for the string. The string may be removed and replaced after holes are dug. The holes should be approximately 12” in diameter and 30” deep (depending on local codes). Holes should be dug so they allow equal amounts of concrete on all sides of posts (see Fig. 1B).

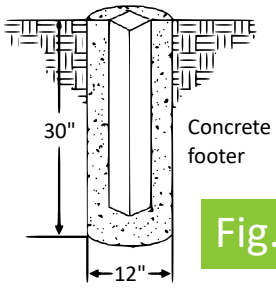


Fig. 1B

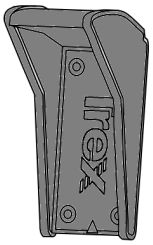
Step 3A: Attach Fence Brackets

1. Using 1-5/8” fence screws, attach the fence brackets in the center of the posts as follows:

   Attach the top bracket 5-3/4" down from the top of the post. Attach the bottom bracket 73-5/8" down from the top of the post (see Fig. 2).

2. End posts will only have two brackes on one side of the post. Line posts will have brackets on two sides of the post (on opposite sides).

   Note: If the fence is stepping down a slope, attach the brackets to the uphill side of the post only.



Fence Bracket

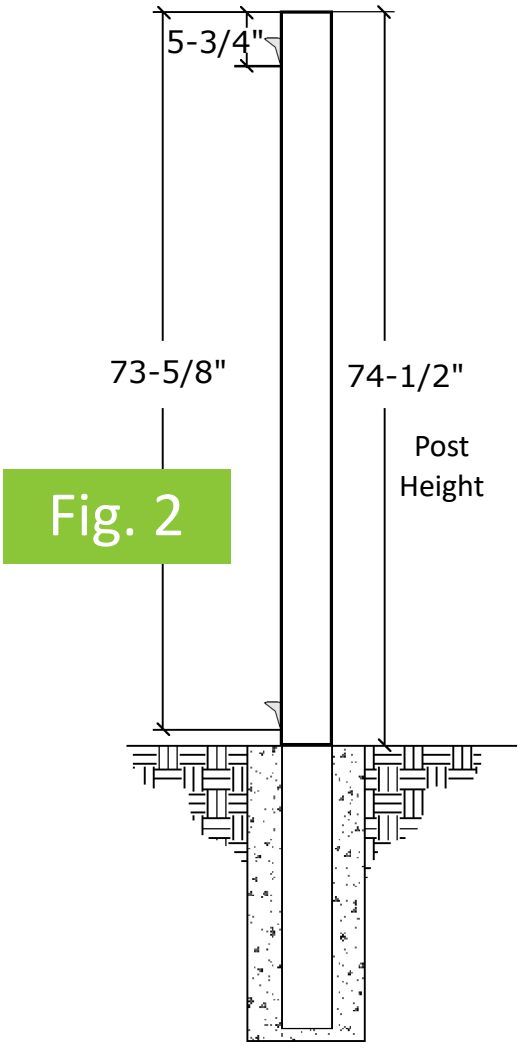


Fig. 2

Step 3B: Set Posts on Level Ground

If posts will be set on sloping or uneven ground, or will be stepping, skip to Step 4.

1. Set the first post in the hole. Plumb and level the post to the string line (ensure the post is 74-1/2" high for 6' tall fencing) and fill the hole around the post with concrete mix (see Fig 3.).

2. Place a post in the next hole. Use a level and a 2x4 on top of the posts and raise or lower the post until it is level with the previous post (see Fig. 3A). Plumb and level the post to the string line and fill the hole around the post with concrete mix.

3. Continue this process until all posts are set.

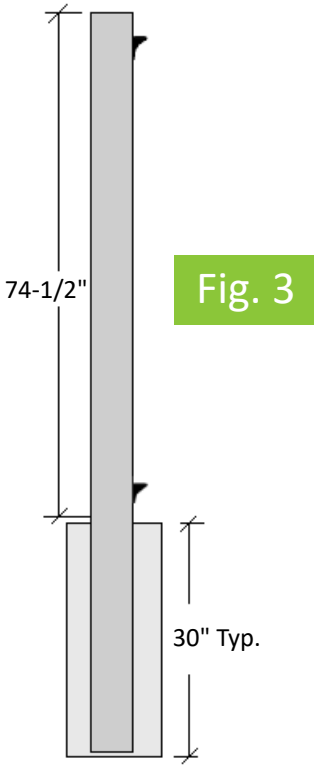


Fig. 3

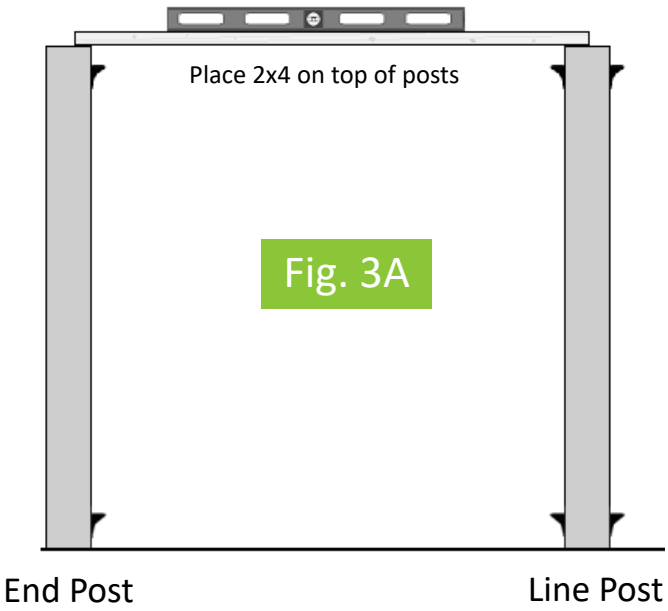


Fig. 3A

Step 4: Set Posts on a Slope

1. Set the uphill post first. This post should be set at 74-1/2” tall with the bracket facing to the next post down hill. Plumb and level the post to the string line. Fill the hole around the post with concrete mix (see Fig. 4).

2. Place a post in the next hole. Use a level and a 2x4 on top of the brackets and raise or lower the brackets until it is level with the previous post (see Fig. 5). Plumb and level the post to the string line and fill the hole around the post with concrete mix.

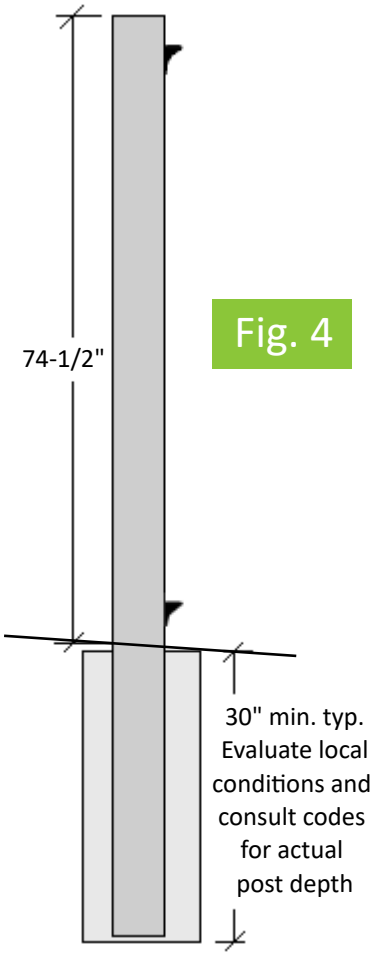


Fig. 4

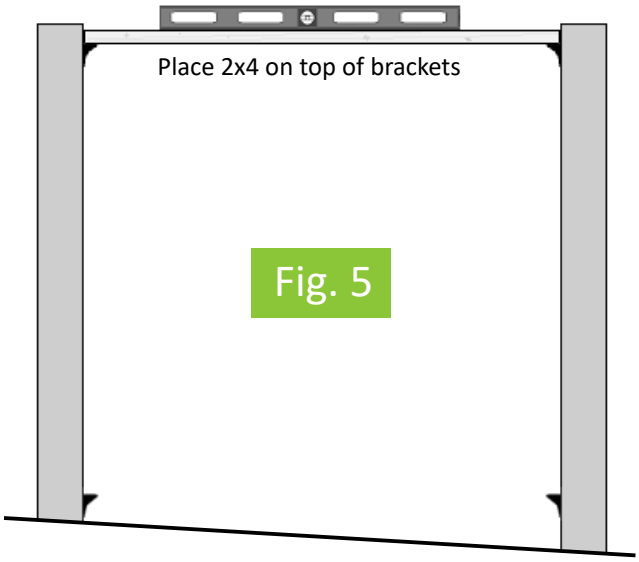


Fig. 5

3. Attach brackets to the downhill side of the post. To determine the location of the brackets, measure from top of the post on the uphill side of the post: (A) subtract this from the height of the first post; (B) add this measurement to 5-3/4” (the measurement of the first top rail bracket) and this will be the placement of the downhill top rail bracket. Then, add this measurement to 73-5/8" (the measurement of the first bottom rail bracket). This will be the placement of the downhill bracket. (see Fig. 6).

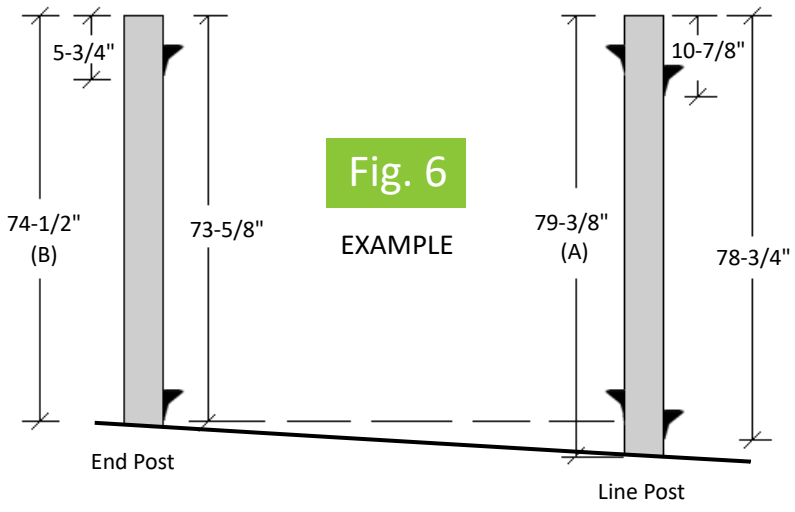


Fig. 6

EXAMPLE

Note: End posts will only have two brackets (which face the fence section). Line posts will have brackets attached on two sides (see Fig. 6).

Example:

Post height (A) = 79-3/8"
Post height (B) = -74-1/2"
5-1/8"*

Upper bracket measurement 5-3/4" +5-1/8"

Top Bracket placement of downhill side 10-7/8"

Bottom bracket placement on downhill side 73-5/8" +5-1/8" 78-3/4"

*Add to bracket height of first post

4. After the brackets have been attached to the downhill side of this post, place a post in the next hole with the brackets facing the previously set post. Repeat the process in Steps 2-3 until all of the posts on the slope are set.

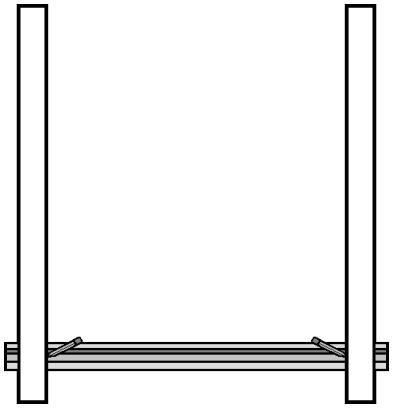
Step 5: Cut Top and Bottom Rails

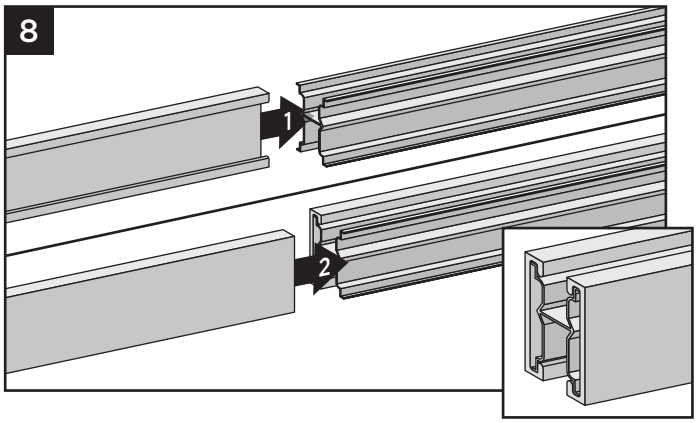
1. Mark the aluminum bottom rail, bottom rail covers for length by holding them next to the post (see Fig. 7).

2. Using a nonferrous metal cutting blade, cut the aluminum top rail insert 5" shorter than the distance between the posts and cut the aluminum bottom rail 1/2" shorter than the distance between posts.

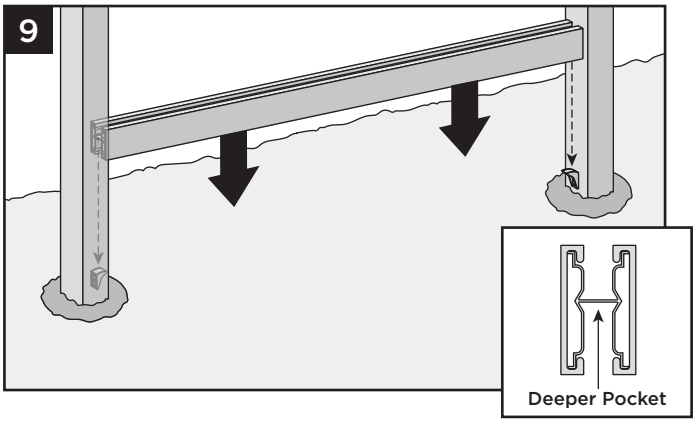
3. Cut top and bottom rail covers with a miter saw.

Fig. 7



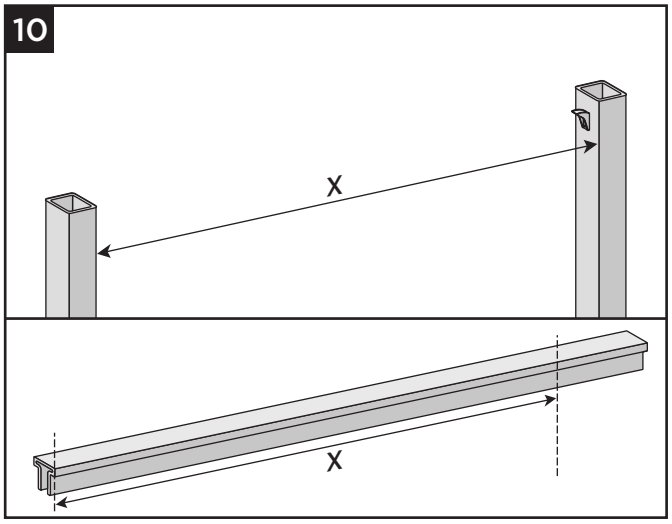


8. Slide the bottom rail covers onto the bottom rail.

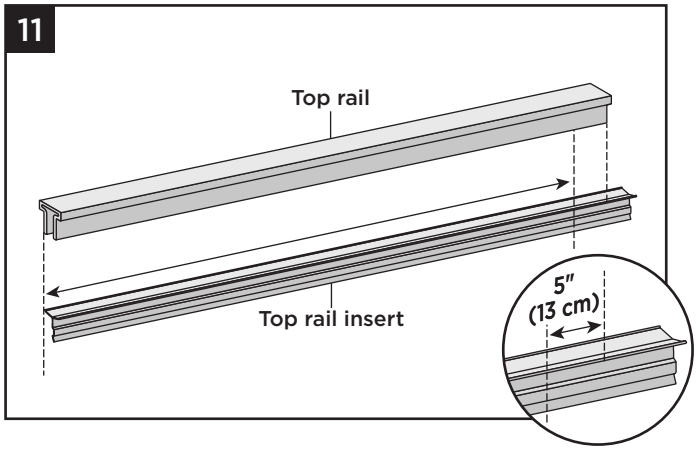


9. Set the assembled rail onto the bottom brackets with the deeper pocket of the rail facing down.

Measuring, Cutting, and Installing Top Rail

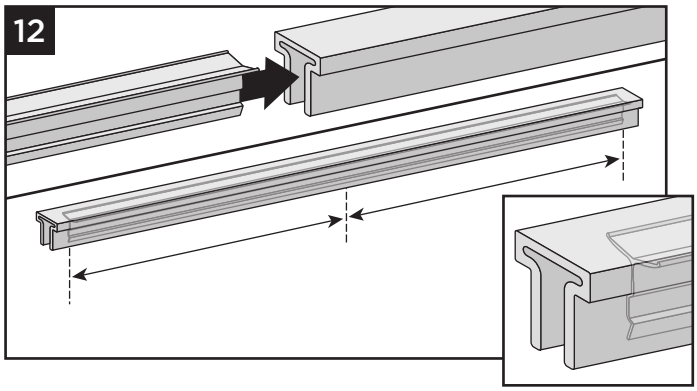


10. Measure the distance between the posts, and cut the top rail to length using a 12′ miter saw.



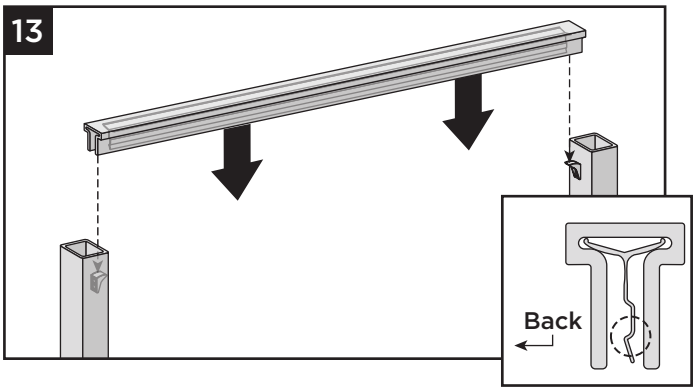
11. Cut the aluminum top rail insert 5″ shorter than the top rail.

NOTE: The aluminum insert should not have to be cut if posts are spaced at 8′ OC.



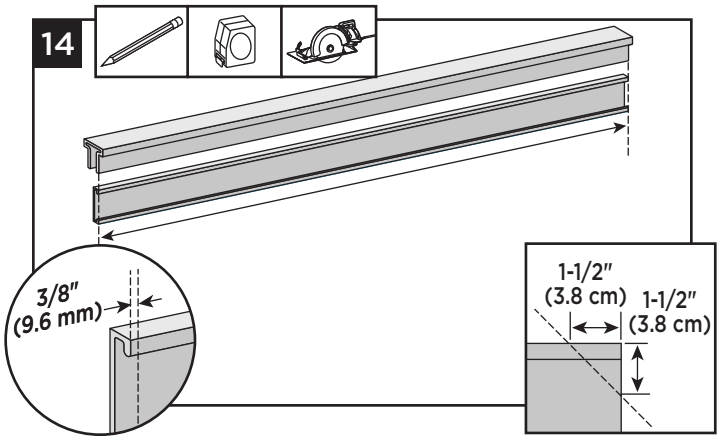
12. Slide the aluminum insert into the top rail, centering the insert along the length of the rail.

NOTE: Use rubber mallet to gently tap aluminum insert into top rail.

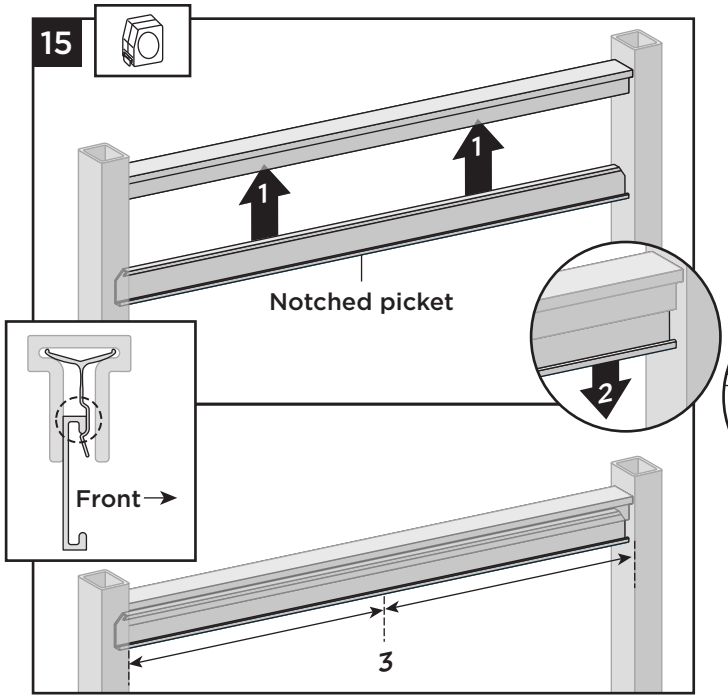


13. Set the top rail onto the top brackets such that the hook feature on the aluminum insert is pointing toward the **BACK** of the fence assembly.

Measuring, Cutting, and Installing Pickets

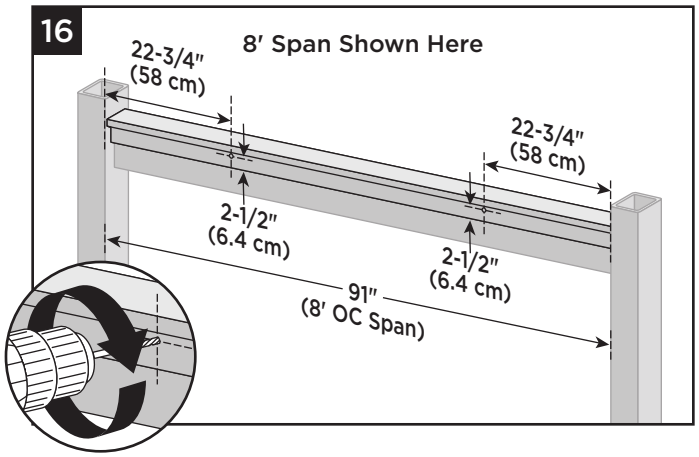


14. Cut the first picket 3/8" shorter than the top rail. In addition, notch both ends of the first picket at 1-1/2" x 1-1/2" x 45°.

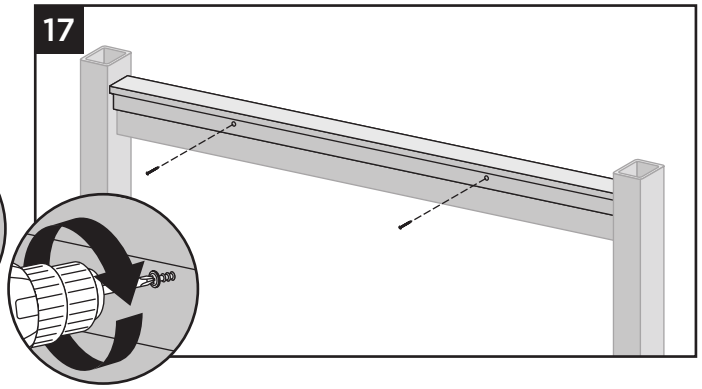


15. Install the first picket (with the notched side up) into the top rail with the open side of the picket facing the FRONT of the fence assembly. Push the picket up (tapping gently with a rubber mallet if needed) so it fully engages with the snap feature on the aluminum insert. Once fully engaged, pull down on the picket so it seats properly in the top rail. Ensure the picket is centered between the posts.

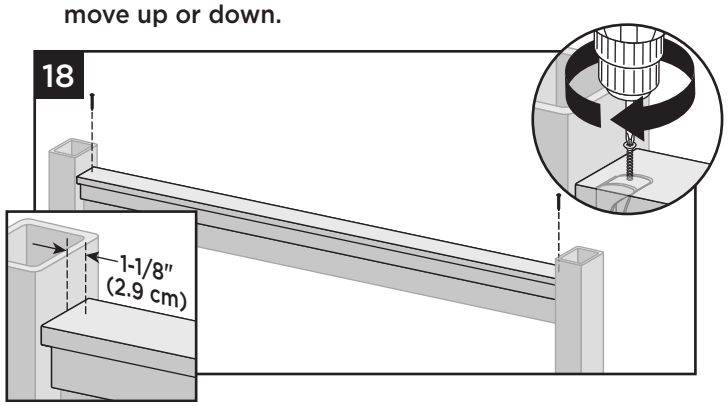
TIP: Using two people here is helpful as the top rail will need to be held in place while the frst picket in installed into the top rail.



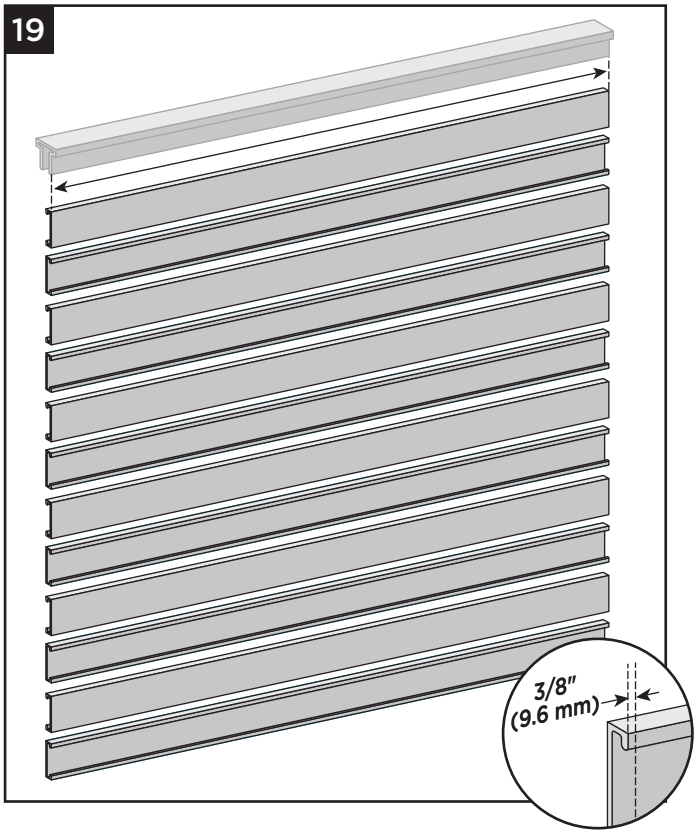
16. On the BACK of the fence assembly, predrill thru the aluminum insert using a 1/8" drill bit at the quarter points of the top rail approximately 2-1/2" from the bottom edge of the rail. Adjust quarterpoint measurements accordingly for smaller post spans.



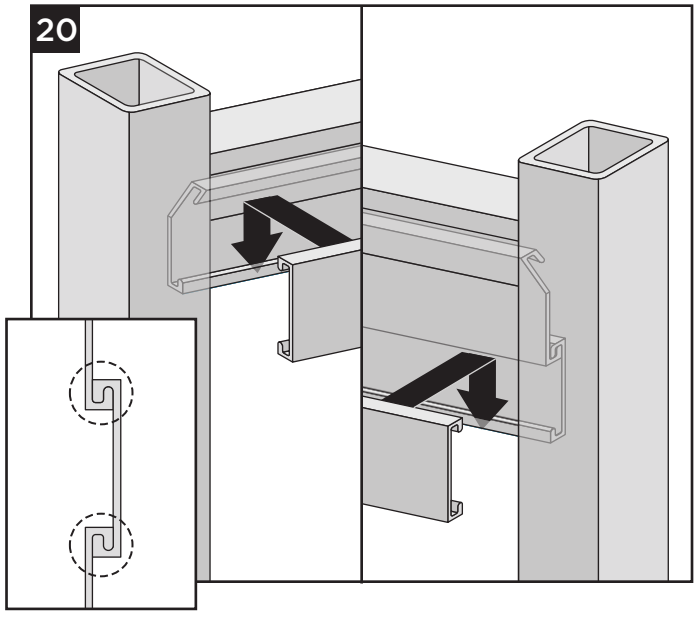
17. Install (1) #10 x 2" self-drilling pan head screw into each predrilled hole. Tighten the screws until the picket is clamped in the top rail such that it cannot move up or down.



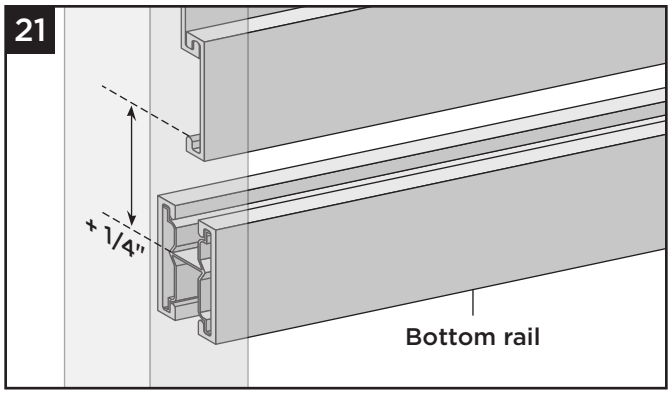
18. Measure approximately 1-1/8" out from each post and attach the top rail to the top brackets using (1) #8 x 1-5/8" flat head screw per bracket.



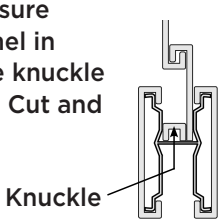
19. Cut the remaining pickets 3/8" shorter than the top rail.



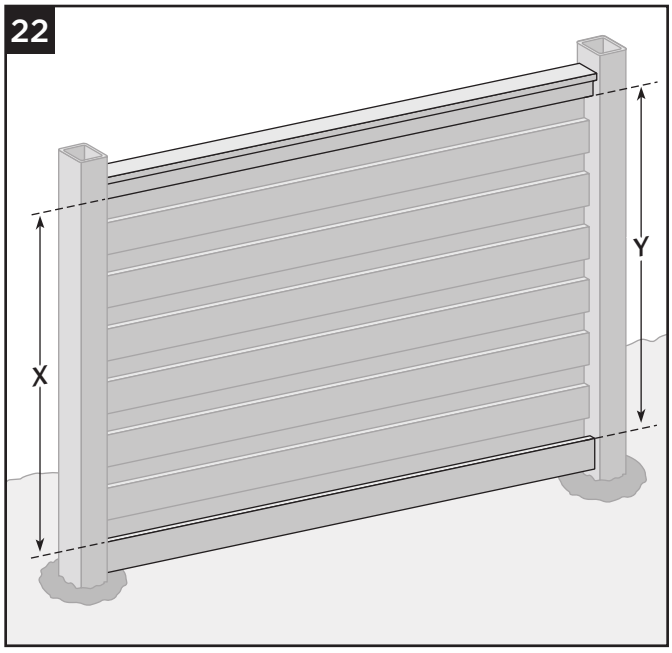
20. Install the remaining pickets by hanging each picket from the above picket. Ensure the pickets are centered between the posts as they are hung.



21. It may be necessary to rip-cut the last picket so it seats properly in the bottom rail. To determine the width of the ripped picket, measure from the bottom of the H-channel in the bottom rail to the top of the knuckle on the last picket, and add 1/4". Cut and fill gap with remaining knuckle.

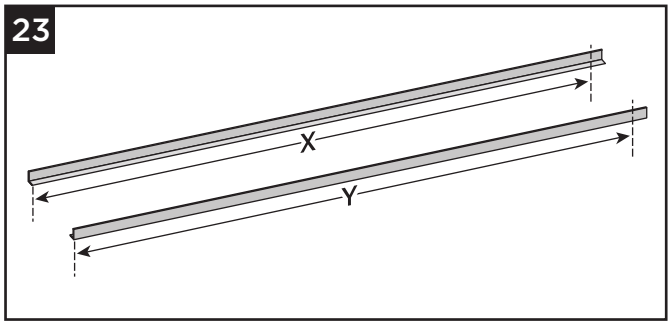


Measuring, Cutting, and Installing L-Channels on Both Sides of Fence

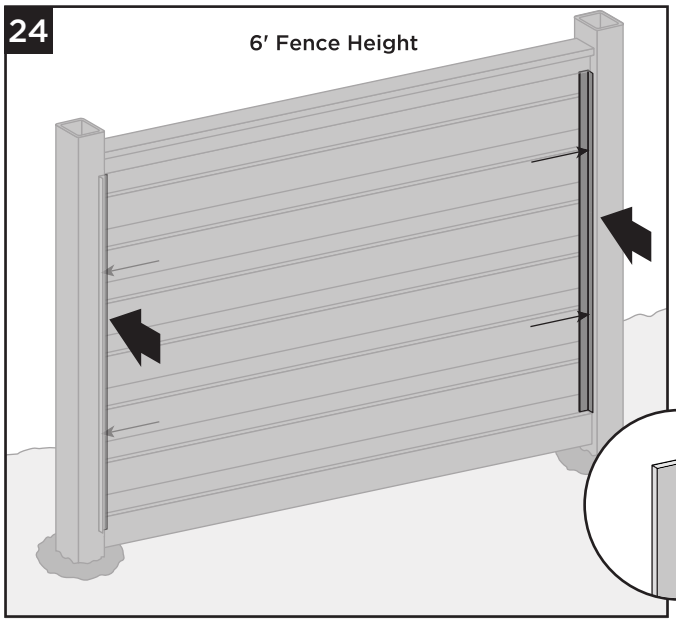


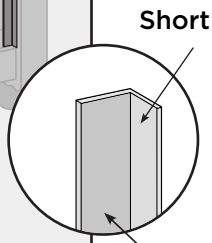
22. Measure the distance between the top and bottom rails on both sides of the fence assembly.

TIP: Due to possible variances, measure the distance between the top and bottom rails at each end (Left / Right) of the fence assembly.



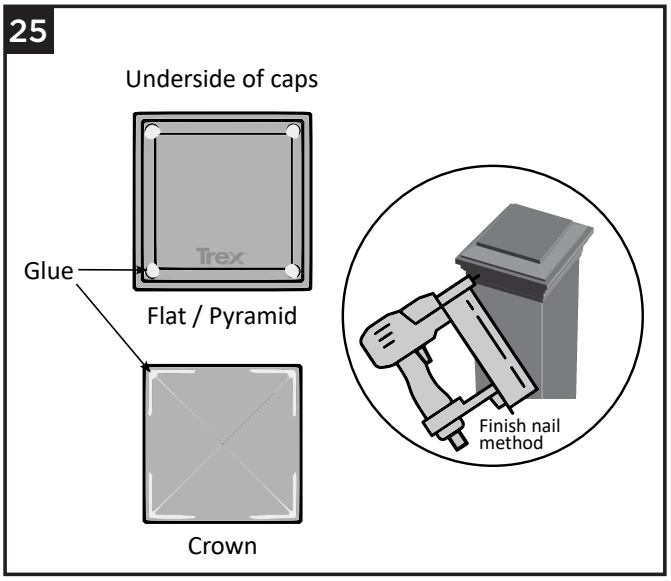
23. Cut (4) aluminum L-channels individually to the lengths in the previous step.





24. Cut vertical rail for length. Drill a 3/16″ hole in center of vertical rail's short leg, 6″ from the cut end. Touch up the cut end using a zinc rich primer and add a matching top coat (consult local paint vendors for options).

Push wide leg of rail tightly against pickets on both sides and attach short leg of L-channel to posts by placing screws in each hole.



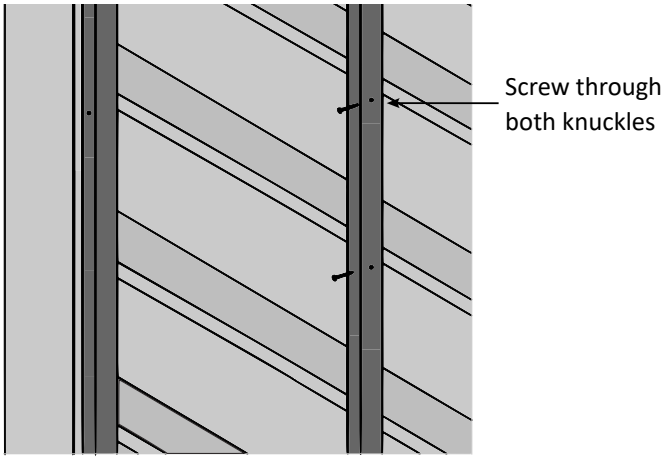
25. Place post caps onto posts and secure using E6000 glue or finish nails.

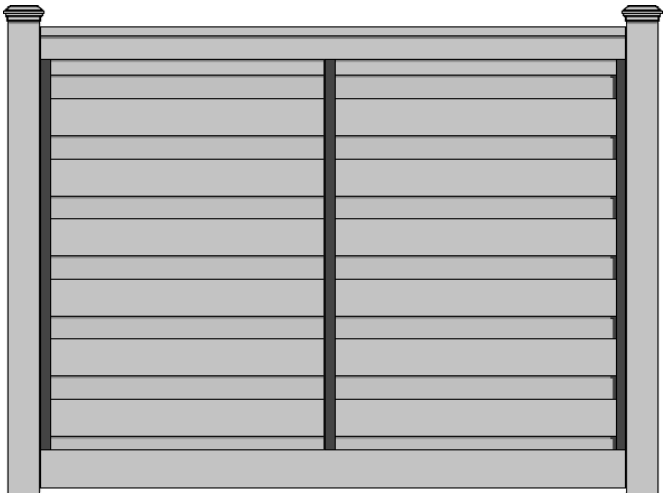
Optional: Install Vertical Mid Rail

NOTE: If installing Solitudes in a high heat or high humidity area, use an additional vertical rail in the center of the fence panel to reduce the risk of warping boards.

1. Mark the center of the section of each fence panel.
2. Mark and drill holes for screw placement. Hold the vertical mid rail in position with the wider leg of the L-channel against the fence and mark the location of each hole needed to attach the mid rail. The hole should be marked on the top side of each picket so the screw will connect to the knuckle of both interlocking pickets. Additional holes should be marked at each end of the rail to attach the mid rail to the top and bottom horizontal rails. See Fig 26.
3. Using a 3/16” drill bit, drill a hole in the vertical mid rail at each mark.
4. Hold the mid rail to the center of each fence panel, making sure it is flush with the bottom of the top rail and place a screw into the top hole to attach the rail to the top picket. Level the vertical rail and attach another screw into the bottom picket. Place screws into the remaining holes and attach the rail to the remaining pickets.

Fig. 26





Back side of fence