

INSTALLATION GUIDE

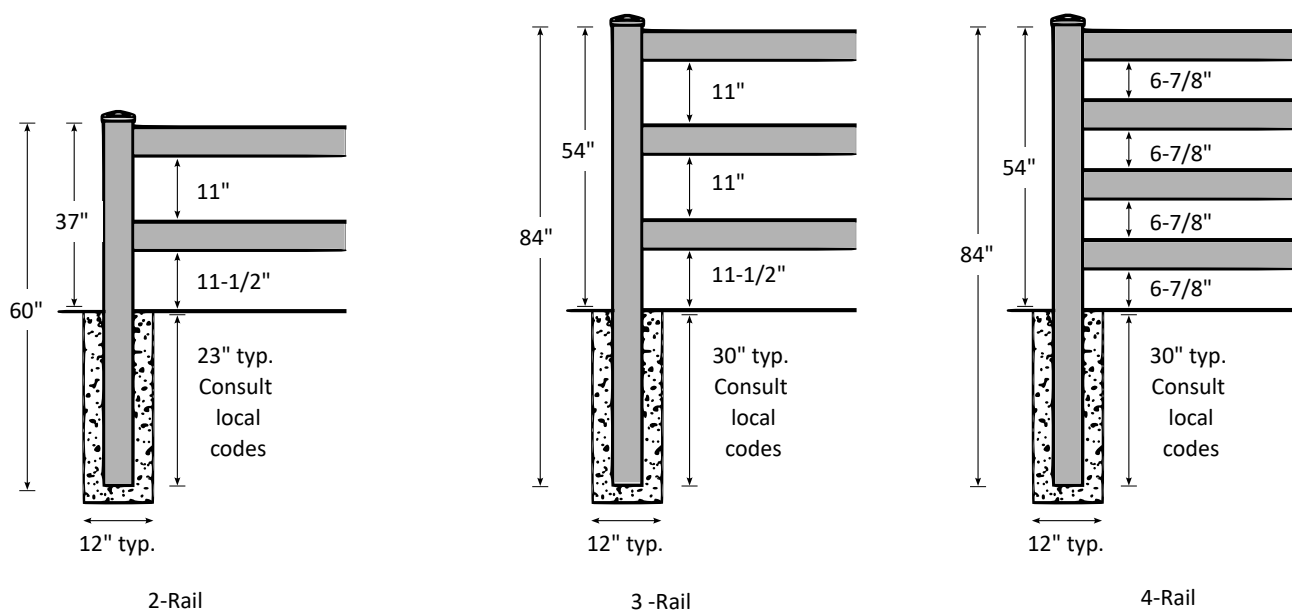
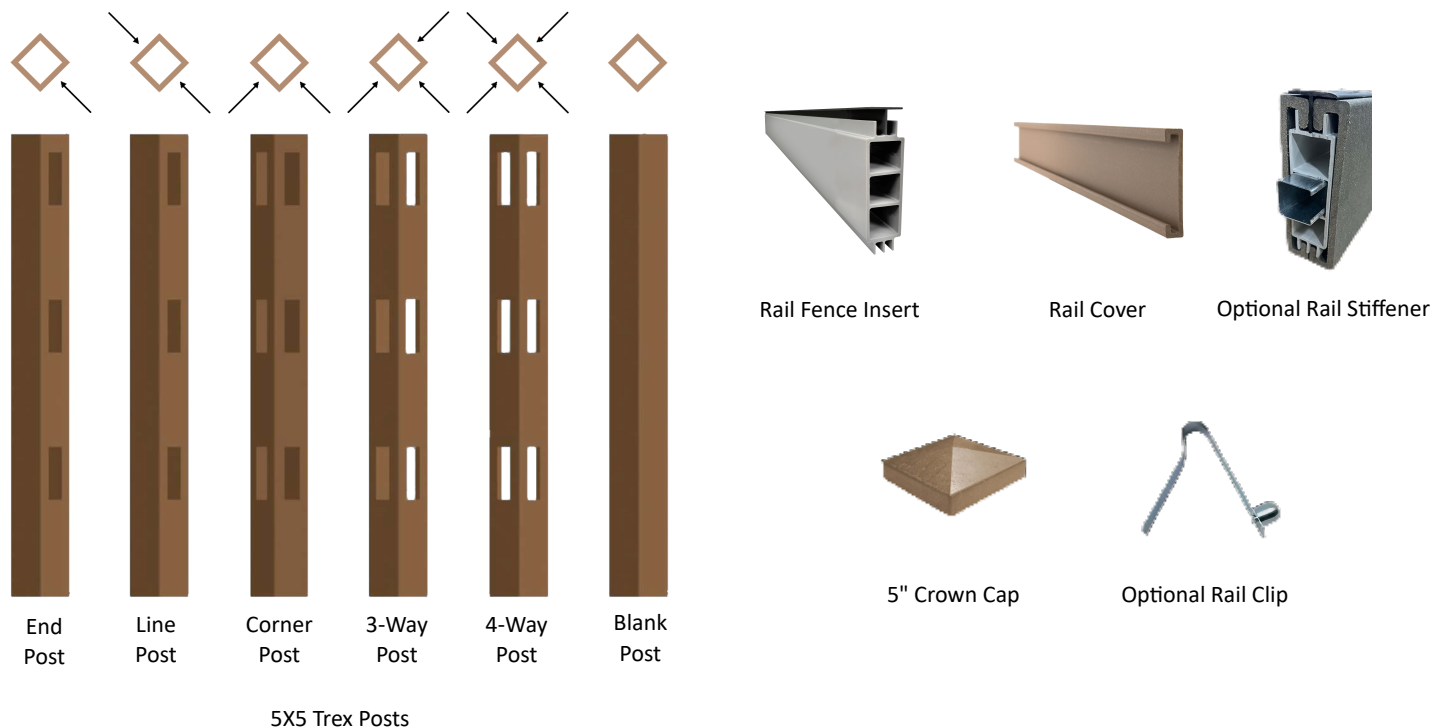
Trex[®] w/ Shenandoah[™] RAIL FENCE SYSTEM



For current installation instructions, download guide:

TrexFencing[FDS.com](https://www.trex.com/fencing-fds)

Rail Fence Parts List



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 encroachment on neighbors.
2. Mark location of posts. Spray paint a line perpendicular to the string every 91-1/4" on center. 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 92-1/4" from center of post to center of next post or rails will be too short. Laying out posts 92-1/4" on center may leave a remainder at the end of a line. Set all sections per line at 92-1/4" on center and split the remainder for the last two sections. Alternatively, for a uniform look, fence lines may be divided into even sections, each less than 92-1/4" on center. Ex.: If fence line is 35 ft. long, space posts 84" on center ($35' \times 12" = 420" / 5 \text{ sec} = 84"$). See Fig 1A.

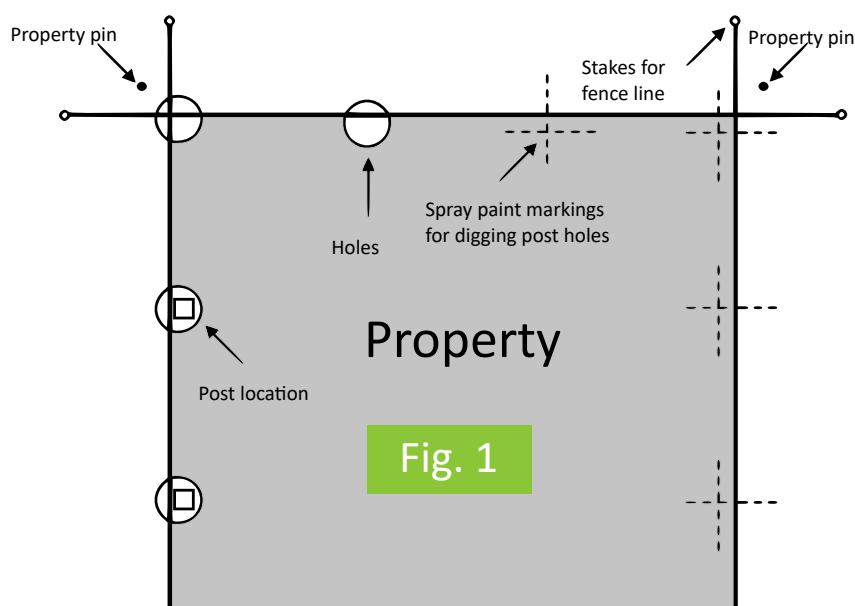
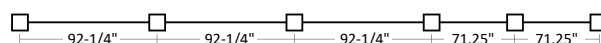
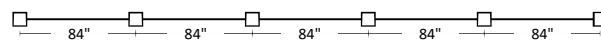


Fig. 1A

Example: Fence line is 35'



Option 1. Set most sections to 92-1/4" and split the difference over the last two sections.



Option 2. Divide the length of the entire line set all sections evenly.

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 for 3 and 4-rail fences or 23" for 2-rail fence (depending on local codes). Holes should be dug so they allow equal amounts of concrete on all sides of posts (see Fig. 1B).

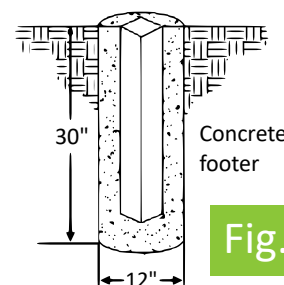


Fig. 1B

Set Posts

1. Begin by setting the end and corner posts. Plumb and level each post to the string line using a post level or 4' level. Make sure the posts are next to but not pushing the string line. String a line from the top of each end post and set the remaining posts to this height. Fill the hole with concrete and brace if necessary until concrete is cured. Allow concrete to dry 24-48 hours (depending on the temperature) before building (see Fig.3).

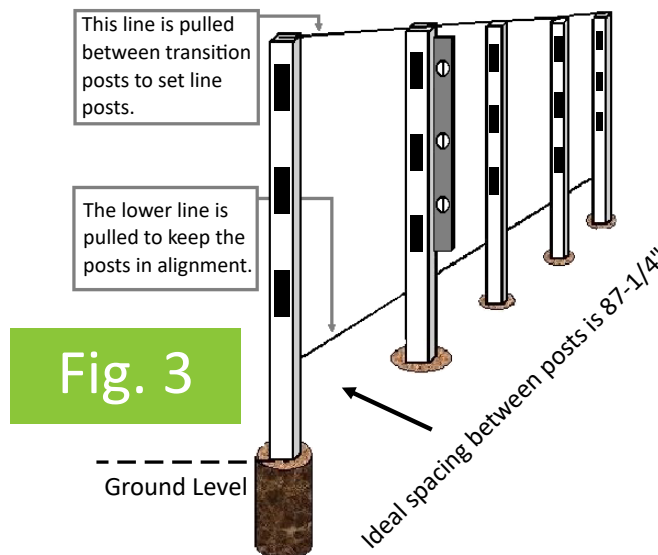


Fig. 3

Note: If the fence is installed on a significant slope, the holes will need to be elongated using a jigsaw. Begin by setting all end, corner and transition (where grade changes) posts first. Posts should be 54" high for 3-4 rail fence, and 37" for 2-rail fence high. String a line from the top of these posts, then set the remainder of the posts to the height of the string (see Fig. 4). Dirt-set transition posts first, if needed, then reset w/ concrete when completed.

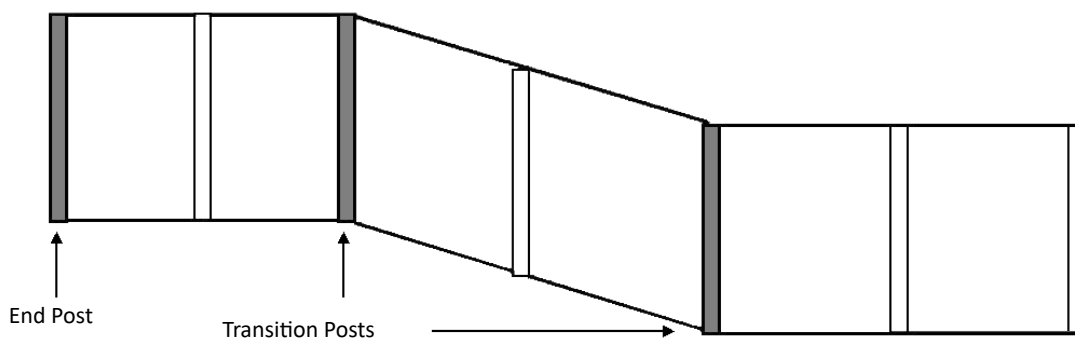


Fig. 4

Assemble and Cut Ranch Rail

1. Assemble the rails by sliding two Trex rail covers over each side of the rail fence insert (see Fig. 5).

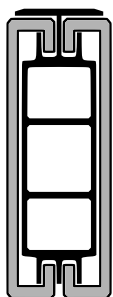


Fig. 5

Optional Rail Stiffener

If a stiffer rail is needed, cut and insert a steel rail stiffener in the middle cell of the rail fence insert as shown (see Fig. 6).

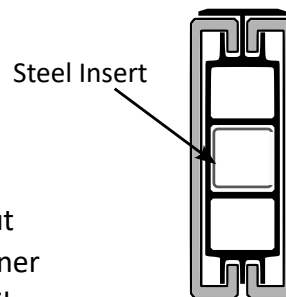


Fig. 6

Note: The rail stiffener is not necessary for the overall performance of the fence. However, it will increase rigidity and strength, and will help prevent the rail from bowing while it is exposed to the heat by the sun.

2. Mark each assembled rail for length by pushing them against one post of each section and then mark the outside of the opposite post. Cut each rail $\frac{1}{4}$ " shorter than the mark to allow for expansion (see Fig. 7).

Note: When marking and cutting the rails for a corner post, mark the first side as noted above. The rails for the remaining side will be cut so that the rails butt into the first set of rails and run a $\frac{1}{4}$ " short of the middle of the next post (see Fig. 8).

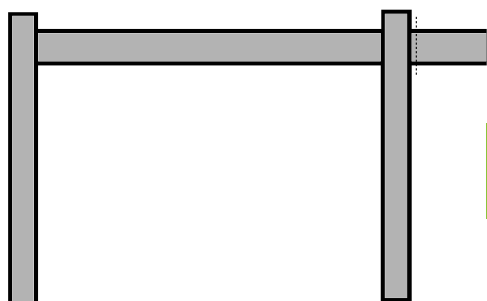


Fig. 7

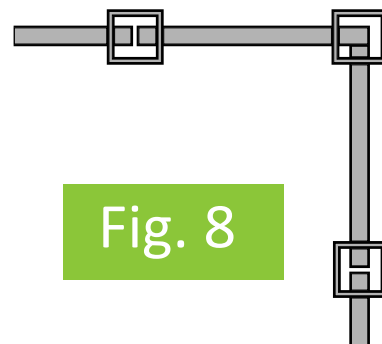
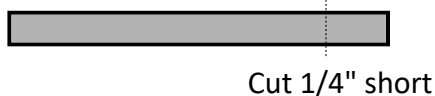
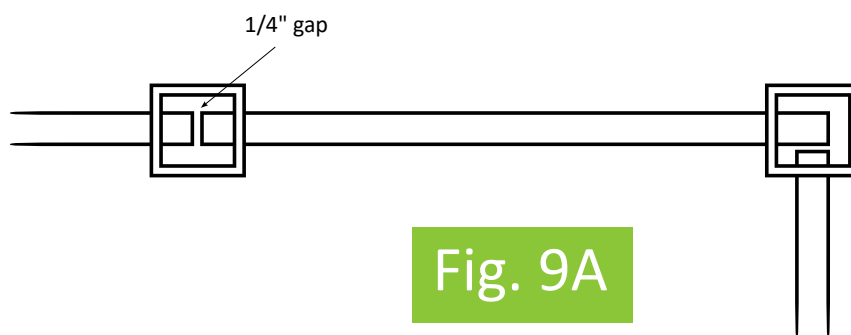
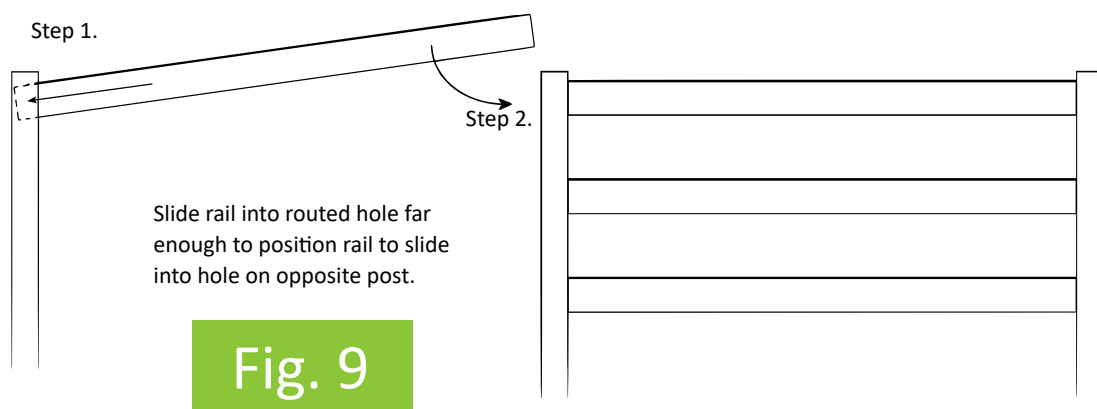


Fig. 8

Install Rails

1. Slide the assembled rail into each post beginning from the end and working in one direction (the black strip should be facing up). Slide the rail into the opposite post first and slide back into the other post with the rails already inserted (see Fig. 9). Leave a $\frac{1}{4}$ " gap between rails for expansion (see Fig. 9A).



Securing Rails (Optional)

If installed correctly, only the rails in the end posts will need to be secured on both ends.

Option 1: Secure Rails using clips (see Fig. 10)

Drill a 9/16" hole on the end of each rail. Drill the first hole in the middle of the top cell on one side 3/4" from the end. Drill the second hole in the middle of the top cell on the opposite side and opposite end, 3/4" from the end as noted below. Slide a snap button clip into each hole by compressing the clip and sliding the leg into the cell until the button pops out of the 9/16" hole. When installing the rail, depress the button when sliding it into the hole of the post.

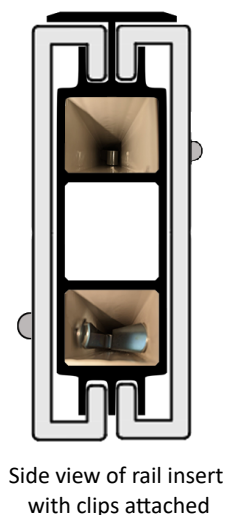
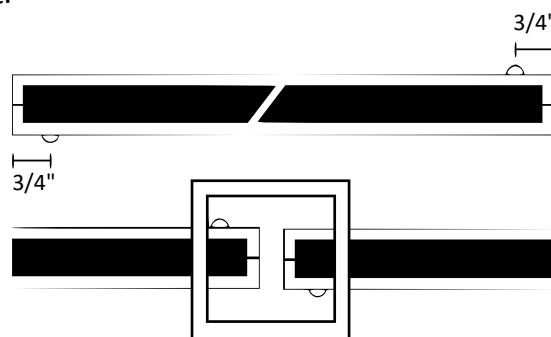


Fig. 10



Option 2: Secure rails using screws (see Fig. 11)

Using #6 x 1" screws or similar, place a screw in top of each top rail on each side. The screw should be placed in the center of the same Trex rail cover on each end. Place the screw approximately 1/8" away from the inside of the post to allow for expansion. For the lower rails, place the screw in the bottom of one of the Trex rail covers of each assembled rail on each end. Place the screw approximately 1/8" away from the outside of the post to allow for expansion.

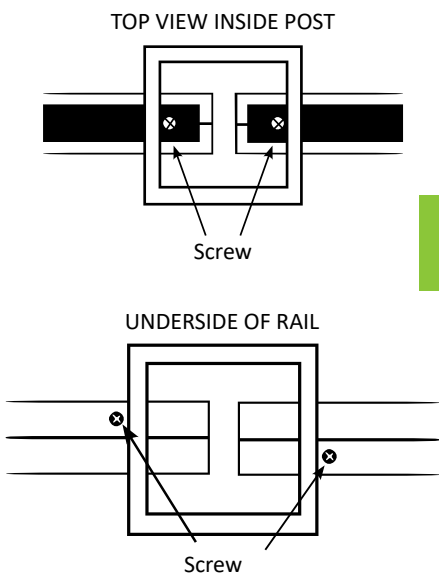
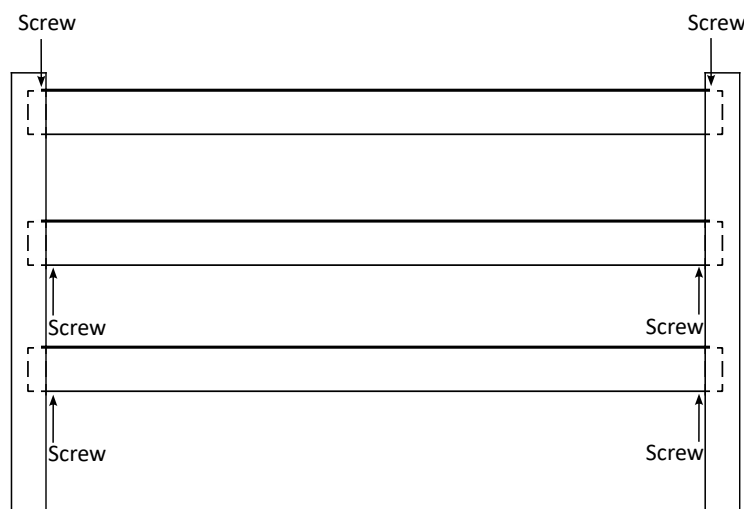


Fig. 11

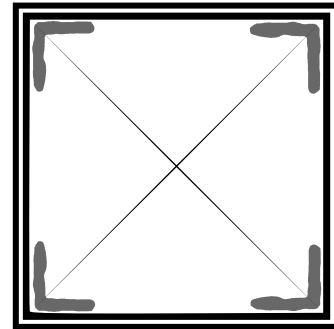


Attach Post Caps

1. Attach post caps using E 6000 adhesive (see Fig. 12), available from most hardware stores or online.



Fig. 12



Apply glue to interior of cap in pattern as shown (corners of cap)

Place caps on posts and press down firmly to ensure contact with glue.

