



**INSTALLATION INSTRUCTIONS
FOR
4' FENCE**

- Using Wooden Posts -

Questions??

Call

1-800-447-6444 (Ext 7520)

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IMPORTANT: A good brace is the backbone to a fence that will last. Braces must be installed in the fence line, no matter how long the section is. The braces should be no more than 1320 ft. apart if the fence is stretched to the middle. If stretched to the end do not exceed 2 rolls (660 ft) of fence before a brace is installed.

RECOMMENDED MATERIALS:

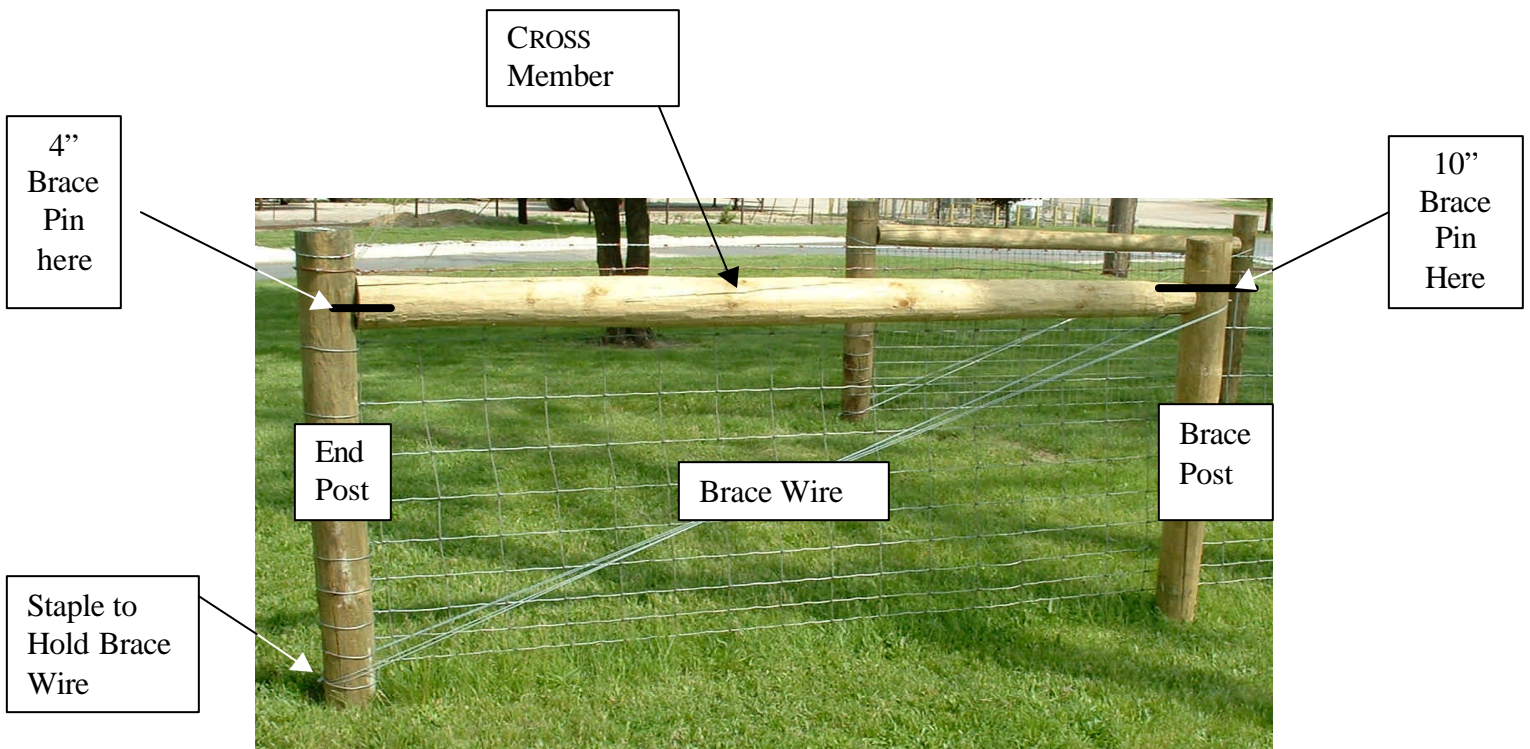
Brace Posts and End Posts (the last 2 posts of the fence) should be 6 inch diameter by 8 ft treated pine.

Line Posts should be 4” to 6” diameter depending on the fencing plan. If the fence is to be all wood posts, 4” posts should be sufficient. If using Tee Posts (8 ft high x 1.33 lbs. per foot) use no more than 5 tees to 1 wood post and use 5-6” diameter wood posts. The posts should be 8 ft long.

Horizontal Cross Members must be *at least* twice the height of the fence (8 ft) by 5” diameter. (2.5 times the fence height (i.e.10ft) is preferred.) They should be placed between the 2nd and 3rd line wire from the top and attached using ½” dia. galvanized brace pins.

Brace Wire should be attached with 1.75” Class 1 or 3 staples from the top of the 2nd post to the base of the brace post. Two wraps of 9 gauge low tensile Class 3 wire or 2-3 wraps of 12.5 gauge high tensile Class 3 wire should be used. Maintain tension with a ratchet type in-line wire strainer.

Anatomy of A Typical Brace



INSTALLATION:

1. **Installing End Posts:** Drive or auger & tamp both End Posts (or corner posts) for the run you are fencing. Posts should be set with 4'6" above ground and 3'6" below ground. Wet or sandy soils may require 5-6 ft. in ground.
2. **Establishing The Fence Grade:** Tie one end of a guide wire (12 ½ ga Hi Tensile wire works well) about 2" off the ground to one end post and stretch it to the other end post. Tighten it with a come-along or chain grab. It will now indicate your fence line. For best appearance adjust the height of the guide wire to roughly follow the terrain but aim to keep it 1-2" off the ground.
3. **Marking Posts:** Determine how high on the post you want the top line wire to be positioned (usually 4" from the top). Add this measurement (4") to the 48" height of the fence and mark all posts at 52 inches from the big end. (This mark will be aligned with the guide wire so the post height can be set without repeatedly looking for a tape measure.)
4. **Locating the Brace Post:** Lay the **Cross Member post** against the base of the **End Post** (along the guide wire.) Install the **Brace Post** at the end of the cross member.
5. **Installing the Cross Member:** The cross member should be installed between the 2nd and 3rd line wire of the fence.
6. A) In the inside of the End Post drill a ½" by 2" deep hole at this location. For the Brace Post, drill a ½" hole all the way through the post.
B) Using a hammer drive a 4" Brace Pin 2" into the center of the cross member. Also, start to drive a 10" brace pin into the hole through the Brace Post. (Note: Drive the pin from the side opposite the End Post. Stop driving before the pin exits the post.)

7. Obtain sufficient help to do the next step. Insert the 2" pin protruding from the cross member into the hole in the End Post. Next, lift the other end to align with the 10" pin. Drive the 10" pin into the Brace Post, leaving 1" exposed for the installation of the Brace Wire. *Caution: Do not walk under the cross member until it is secured by the brace wire.*



8. **Installing the Brace Wire:** Drive a staple about 1" into the End Post, near ground level on the side opposite the cross member. This will be used to hold the Brace Wire in place.



9. Guide the Brace Wire under the staple in the **End Post**, diagonally across and over the 10" pin in the **Brace Post**, back down under the staple and over the 10" pin again. This will provide a double wrap for the Brace Wire. Repeat if a triple wrap is needed.

The brace wire needs to be tensioned to keep the brace intact. This can be done using a come-a-long and wire crimps or

using an in-line ratchet type wire strainer. Install the ratchet on the opposite side of the brace that the wire fabric will be on. Tighten the Brace Wire until the Brace Post moves approximately ¼" away from the soil.

10. **Installing Line Posts:** Set line posts at 10'– 15' spacing unless you are using Hi-Tensile fence. Hi tensile can be 15-30 ft spacings depending on the knot. Post spacings will be determined by terrain, bends in the fence and animal pressure. Closer spacing may be used if a combination of Tee & Wood posts are used *Remember that the number of Tee posts to wood posts should not exceed a 5 to 1 ratio.* Tee Post weight should not be less than 1.33 lbs. per foot.

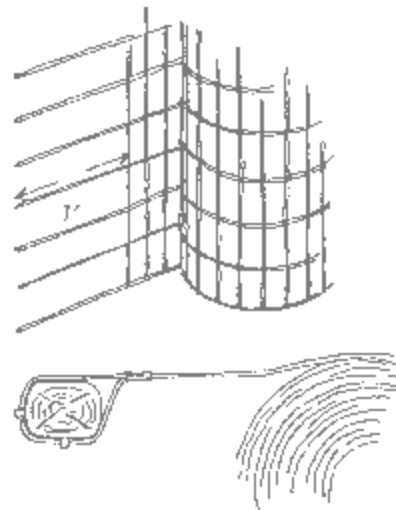
Use 10-20' post spacing as a guideline. In rough terrain closer post spacing will be required. A wood post should be placed on top of all hills and in the bottom of all dips.

11. Attaching Fence

Because of the weight of the rolls, installing horse fence is not a one-person job. Don't try to erect the fence alone. Fence should be attached on the inside of the posts with the smooth side towards the horses. Unroll fence and position it alongside the fence line. Attach fence wires to post using the following steps:

1. Cut vertical wires 1' from the starting end and wrap horizontal wire around the end post (see fig.1).
2. Staple each line wire diagonally into the outside and inside of the post, making sure that the bottom line wire is no more than 2" above ground.
3. Use fence sleeves or wrap the horizontal wires three or four times around the corresponding wires on the fence line to secure. Crimp with large pliers or crimping tool (see fig. 4 on Page 6).
4. Cut off any protruding ends.

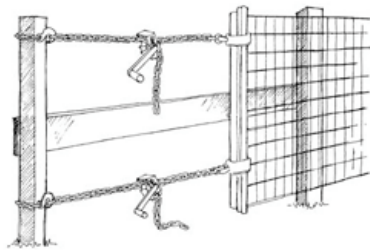
Figure 1. Wrap 1' of horizontal wires around end posts.



12. Stretching fence

Decide if you will stretch the fence from the End Post or Center Stretch

A. Stretching from the End Post Use a tractor-adaptable stretcher or hand stretcher to straighten fence between posts. If using a hand stretcher, erect a wood dummy post 4' or 5' past the pull post and secure with a heavy brace. Attach stretcher bar to fence and stretcher chains to dummy post. (Note: For 8 ft fence 3 chain grabs should be used.) Stretch fence slowly between the pull post and dummy post, keeping stay wires as vertical as possible. Pull the top and bottom of the fence at an equal rate. During stretching, make sure the fence does not catch on posts or kink. Apply tension until the tension crimps in the line wires are 50% of the height they were with no tension. Firmly drive 2 staples into the End Post across each line wire. Carefully cut 1 line wire, wrap it around the post and tie it off. Repeat with every 2nd line wire of the fence. Release tension from the stretcher bar and tie off the rest of the line wires.

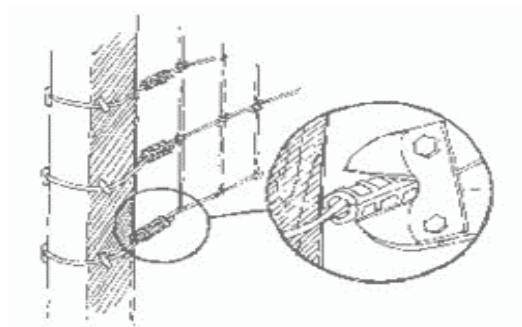


B. Center Stretching: When center stretching 8ft tall fence use 2 stretcher bars and 3 chain grabs to properly secure the fence. Make sure stretcher bars are parallel to the vertical fence stays. Add tension uniformly on all chain grabs to prevent distorting the fence. As tension is applied the fence will stand up. Apply tension until the tension crimps in the line wires are 50% of the height they were with no tension. Overlap the 2 sections and cut off excess fence. Splice the 2 sections together using appropriate crimping techniques. (Done well, the splice will not be recognizable in the finished fence.) After splicing, carefully release tension on the fence.

13. **Crimping and Stapling** Before stapling or crimping check that the stay wires are as vertical as possible and the bottom wire is within two inches of the ground.

A) Splice wire ends together with a lap-type sleeve by cutting all loose vertical wires and inserting horizontal wires into sleeve. Press sleeve tightly to wire with crimping tool.

Fig 4 Crimping Sleeves



B) Staple fence line wires to the center of the line posts in a zig zag fashion to avoid post splitting in the future. **IMPORTANT: STAPLES IN LINE POSTS SHOULD BE INSTALLED LOOSELY TO ALLOW THE LINE WIRE TO MOVE BACK AND FORTH WHEN LOADS ARE APPLIED TO THE FENCE.**

January 29, 2004