

**NATURAL RESOURCES CONSERVATION SERVICE
CONSTRUCTION SPECIFICATION**

**WOODEN BOARD FENCE (WBF)
(Feet)**

CODE 382

I. MATERIALS

A. Type of Board

The horizontal boards need to be a minimum of 1" x 5" and 12' long. Lumber needs to be treated with creosote or comparable preservative that meets the American Wood Protection Association (AWPA) U1-08/UC3 standard (see Table 1). If painting is desired do not use creosote treated wood, use lumber treated with an anti-fungal agent or a waterborne preservative such as acid copper chromate.

B. Line Posts

1. Wood

All wooden posts need to be treated according to use category UC4A of the AWPA, U1-08 (see Table 1).

At least half the diameter of red cedar shall be heartwood. Quality of treated wood shall provide sufficient strength and last for the expected life of the fence.

C. Corner, Brace, and Gate Posts

1. Wood

- Acceptable species include black locust, red cedar, and Osage orange. All bark must be removed. At least one-half the diameter of red cedar posts must be heartwood.
- All other wood posts must be treated with a minimum of 0.4 lbs/ft³ of chromate copper arsenate (CCA-Type A, B or C), or equivalent.
- Corner, brace, and gate posts must be at least 8' X 5^{1/2}".
- Horizontal brace members must be at least 6^{1/2}' X 4".
- Landscape timbers cannot be used for posts.
- Minimum 3" diameter high-carbon steel pipe weighing at least 7 lbs/foot, is galvanized or coated with a rust-resistant metal paint. Pipe ends must have a water-tight cap.

D. Fasteners

For wood boards, use two, 16d galvanized or equivalent treated nails or screws.

Do not use aluminum wires or staples with wood treated with the ACQ preservative.

Use only galvanized metals.

II. CONSTRUCTION

(See Florida Fence Drawings)

A. Board Spacing

The top of the top board shall be at least 48" above ground level and 2" below the top of posts on wood posts. Install a minimum of 3 horizontal boards or rails. Space the boards 12" to 14" apart on center.

Place horizontal boards on the side of posts receiving livestock pressure. If boards are on the side away from livestock, install one or more barbed or electric wires at nose height of the animal being controlled.

If boards are long enough, stagger rail joints so they do not hit the same on every post. For example for a three plank fence, posts would alternately have two or one joint. For a four plank fence, every post would have two joints.

Install a vertical face board to cover joints on every post and two on corners.

B. Post Spacing, Length, and Depth

Space posts 6 to 8' apart to accommodate selected rail length. Rail length may range between 12 and 16'.

Wood posts shall be installed to a minimum length of 6 feet and set or driven to a minimum depth of 24". When posts are set, thoroughly tamp earthfill placed back around posts. Wooden line posts shall have a 3" top commercial size.

C. Corner, End, and Gate

Brace assemblies are required at all gates on the hinge side of the gate. Six-inch (6") diameter posts are required at ends, corners, and angles up to 15⁰ degrees in the fence line.

D. Brace

Bracing is not required for board fence except where gates occur or if wire is run in addition to boards. If wire is run in addition to board, follow applicable standard for wire.

The brace member needs to be the equivalent of a 4" top diameter post or standard weight galvanized steel pipe of 2" diameter installed at least 3' above ground or between the top two wires, whichever is higher. Place brace at least 8" below the top of post. The brace member shall be at least 6' long or 2.5 times the height of the top wire (i.e., 42" x 2.5 = 105" or 8.75').

The brace wire needs to be number 9 gauge smooth wire or 12-1/2-gauge high tensile strength smooth wire.

Twist sticks or inline strainers will be used to tighten brace wire.

E. Fasteners

Attach each rail or horizontal board with two, 16d galvanized or equivalent treated nails or screws. On each post install a face board with one nail in each horizontal plank. So for a 3 rail fence, two nails or screws would be in each horizontal rail and six nails or screws would be in the face board for a total of 18 nails or screws per post.