

**NATURAL RESOURCES CONSERVATION SERVICE  
CONSTRUCTION SPECIFICATION**

**FENCE**

**(Feet)**

**CODE 382**

**FLEXIBLE RAIL FENCE (FRF)**

1. Flexible Rail.

- a. Each rail shall be a minimum of 4.25 inches wide with a 12.5 gauge high tensile wire molded in the top, center, and bottom of the rail. The minimum tensile strength of each wire shall be 180,000 psi. and a breaking strength of 1,350 lbs.
- b. Top of top rail shall be at least 48 inches from the ground. The top edge of the lowest rail shall be no greater than 16 inches above the ground line.
- c. Three rails are a minimum. Four rails are required for animals less than 48 inches high at the shoulders.
- d. Fasteners – Manufactured brackets are to be used to hold the rails to post. The brackets will be secured to the wood post with 1.75 inch stainless steel wood screws.
- e. The maximum rail spacing shall be 16 inches center to center.

Splicing and anchoring of ends of rails and tension shall be per manufacturer recommendations.

2. Post.

a. Wood.

Untreated posts will be black locust. All treated wooden posts and brace members shall be treated with a minimum of 0.40 lbs.cubic foot of chromated copper arsenate (CCA), type A, B, or C or ammoniated copper quat (ACQ) preservative by a method to ensure that complete penetration of the sapwood is obtained or has a 20-year warranty. **(NOTE: Do Not Cut or Notch Treated Post)**

Quality of treated wood shall provide sufficient strength and last for the expected life of the fence.

Pressure treatment shall conform to NRCS Material Specification 585.3.

b. Plastic.

Plastic line posts shall be at least 5 inches in diameter, able to accept and hold screws, and be durable for the life of the fence.

3. Corner, End, and Gate Brace Assemblies.

All posts shall be wooden with a minimum top diameter of 5-6 inches.

One of the following assemblies shall be used:

- a. 1(1) H-brace assembly posts shall be set or driven 3 feet below the ground line using a 8 foot post.
- b. (2) Deep soils and sandy soils shall have post driven 4 feet or deeper below the ground line, to secured the H-Brace with a minimum 9 foot post.

If posts are not driven, the backfill around the post shall be thoroughly compacted.

In areas where soil depth restricts the embedment depth, additional anchors or deadman applied against the direction of pull shall be used.

**Bracing assemblies are required at all corners, gates, and ends.  
(Post should be 5 feet above ground. NOTE: Do Not Cut or Notch Treated Post.)**

The horizontal cross member shall be a 4-5 inch in diameter and a minimum of 8 feet in length installed with 10" and 4" galvanized pins (H-Brace Standard) placed 2 feet from top of post or 3 feet from top of the ground to the galvanized pins.

The horizontal cross member shall be a 4-5 inch in diameter and 8 feet in length. A tension wire composed of a double loop of 12.5 gauge high tensile smooth wire with a inline striner or 2 complete loops of number 9 gauge smooth wire with a twist stick or a n inline striner shall be used. One end of the tension wire shall be at the height of the horizontal cross brace member galvanized pin and the other end of the tension wire shall be 1-2 inches above the ground line on the other post. Do not staple the tension wire. Used a staple assembly.

A corner assembly or a bend assembly shall be used when the horizontal alignment changes more than 15 degrees and a pull assembly when the vertical alignment changes more than 15 degrees. A bend assembly will be used only when it will not affect the integrity of the fence. Post spacing for a bend assembly can be determined by placing 3 stakes, each spaced 14 feet apart along the fence line. A string is then stretched between the first and third stake. A measurement is then taken from the second stake and the string. The spacing of the posts is determined as follows:

0 to 4 inches	14 feet
5 to 7 inches	12 feet
8 to 10 inches	10 feet
11 to 15 inches	8 feet
16 or more inches	6 feet

These bend assembly posts will be wood, 5-6 inches in diameter, 8 feet long, and set or driven 36 inches, with a 6-inch lean from vertical to the outside of the curve.

#### 4. Line Post.

Wooden and plastic line posts shall be set or driven 30 inches below ground line and shall be at least 4-5 inches in diameter. Post spacing for line posts shall be a maximum of 12 feet. If posts are not driven, the backfill around the post shall be thoroughly compacted. In areas where soil depth restricts the embedment depth, additional anchors or deadmen applied against the direction of pull shall be used. Line post shall be a minimum length of 8 feet.

#### 5. Pull Assembly.

Pull post assemblies are not required.