

**NATURAL RESOURCES CONSERVATION SERVICE
CONSTRUCTION SPECIFICATION**

**WOVEN WIRE FENCE (WWF)
(Feet)**

CODE 382

I. MATERIALS

All materials shall be new, free of defects and meet the following specifications.

A. Wire

For standard, low-carbon wire, use woven wire material with a minimum top and bottom edge wire gauge of 11 and minimum intermediate wire and vertical stay gauge of 14.5. The maximum distance between stays should be 12-inches. If using high-tensile material, the minimum gauge of all wires should be 12.5, with the same maximum stay spacing.

B. Line Posts

1. Steel

- Only new "T" or "U" posts, constructed of high carbon steel, and weighing a minimum of 1.25 lbs/foot exclusive of anchor plate.
- Minimum 6-feet long, studded, notched, or punched for wire attachment.

2. Wood

- 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.
- Minimum 6-feet long, and 3-inch diameter.

C. Corner, Brace, and Gate Posts

1. Wood

- 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 3".
- Landscape timbers cannot be used for posts or brace members.

2. Steel

- Minimum 3-inch 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.
- Horizontal brace pipe can be 2-inch diameter high carbon steel that weighs at least 3.6 lbs/foot and is galvanized or coated with a rust-resistant metal paint.

D. Fasteners

1. For wood posts, use staples that are at least 9 gauge, class 3 galvanized. Minimum length for softwoods is 1 1/2-inch and for hardwoods is 1-inch.
2. Use manufactured clips or minimum 14-gauge wire for steel line posts.

II. CONSTRUCTION

(See Florida Fence Drawings)

A. Corners, Braces, Ends, and Gates

1. Posts

- Set posts for all fence assemblies at least 42-inches deep, in holes with a diameter at least 2.5X the post diameter. The top of posts should be at least 2-inches above the top wire.
- Backfill wooden posts by thoroughly tamping soil around the post after every 4 inches of depth.
- Set steel pipe in concrete that extends 1-inch below the bottom of the pipe and slightly above the soil surface.

2. Braces (See Specification Table 6 and FL Fence Drawing or Photos)

- H-braces are required for all corner, pull, end, and gate assemblies.
- Set the center line of all horizontal brace members 6 – 9-inches below the top of the post.
- Anchor horizontal brace members to brace posts with a minimum 3/8" galvanized pin or spike driven through the post that penetrates the horizontal member at least 4 inches.
- H-braces must have a tension member consisting of 2 complete loops of 9-gauge smooth single strand wire, 12-gauge double strand wire, or 12.5-gauge high-tensile wire. One end of the loop is attached to the anchor (corner, end, or gate) post 4-inches above the soil surface, and the other end is attached to the brace post at the same height as the top of the horizontal brace member. Twist the loops to provide rigidity to the brace assembly, or use in-line strainers on high-tensile wire.
- Tighten tension member with a tensioner made of permanent material such as rebar, pipe or pressure treated wood.

3. Corner and in-line pull assemblies (See Specification Table 6)

- Use a corner post assembly for any angle in an otherwise straight fence line.
- Use an H-brace assembly with two crossed tension members at intervals not to exceed 660-feet and a double H-brace >600-feet in straight line fence sections. Use braces at shorter distances in uneven terrain.

B. Line Posts

1. Steel

- The maximum distance between steel line posts is 16-feet without the use of stays, or 30-feet with stays between posts.

- Drive posts at least 24-inches into the ground. The top of the post must be at least 1-inch above the top wire.

2. Wood

- The maximum distance between steel line posts is 16-feet without the use of stays, 22-feet with one stay or 30-feet with two stays between posts.
- Drive or bury wood posts at least 24-inches into the ground. The top of the post must be at least 2-inches above the top wire. If post holes are dug, backfill by tamping the soil around the post at every 4-inch depth.

C. Fence Height, Top Wire, and Fastening

1. Wire Spacing (See Specification Tables 4)

- Place at least one strand of barbed, or one strand of high-tensile smooth (energized or non-energized) wire 4- to 10-inches above the top of the woven wire. The 10-inch spacing will reduce the risk of deer becoming entangled in the fence.
- Be sure the top wire meets the requirements in either the Barbed Wire, or High-Tensile Wire Construction Specification.
- Minimum fence height to the top wire is 38-inches.
- For hogs, an additional strand of barbed wire should be run along the bottom of the woven wire.

2. Fastening

- On the perimeter, attach wires to the side of the post closest to the livestock, except on corners.
- Avoid driving staples in-line with the wood grain. When using slash cut staples, place the staple parallel to the grain then rotate in the direction away from the cut face.
- Pull tension on wire and firmly attach to corner, end, gate, or pull posts.
- Wires may be attached to steel posts by use of manufacturer's clips or by two turns of 14 gauge galvanized smooth wire.

- Wire should be able to move freely between the fastener and the line posts.