

Fence—High Tensile Woven Wire

Conservation Practice Jobsheet

MA-382



General Criteria

Fencing materials, type and design of fence installed shall be of a high quality and durability. The lifespan of this practice is 20 years. The fence design and installation should have the life expectancy appropriate for management objectives and shall follow all federal, state and local laws and regulations.

Height, size, spacing and type of materials used will provide the desired control, life expectancy, and management of animals and people of concern.

Manufacturer's guidelines shall be adhered to during installation of each type of fence to ensure proper component assembly. All fence construction shall comply with federal, state and local fencing codes.

Specifications

All materials shall meet/exceed the following:

Wire:

- 12.5 ga. high tensile steel for all wires;
- Sheep and goats: 12.5 ga. top/bottom wire; 14 ga. high tensile steel for horiz/vert stays;
- Class 3 galvanization;
- Fixed knots;

- 3" max vertical stays for horses, goats, sheep w/horns, and poultry;
- 6" max vertical stays for cattle, bulls, llamas, alpacas, sheep, and hogs;
- 8" max horizontal stays.

Hardware and Fasteners:

- Class III or zinc galvanization for brace pins, strainers, joiners/splices and tension springs;
- Gripping-style joiners are permitted;
- Brace pins: $\frac{3}{8}$ " x 5" and $\frac{3}{8}$ " x 10";
- Staples: 9 gauge, $1\frac{3}{4}$ " for soft wood, 1" for soft wood, barbed for pressure treated.

Wood:

- Red or white cedar, black locust or pressure treated. Do not use red pine if posts are mechanically driven.

Wood Line Posts:

- Diameter: 4";
- Length: 7' (4' fence); 8' (5' fence); or 11' (8' fence);
- Depth: 4' below the ground line.

Steel "T" Line Posts:

- Dimensions: $1\frac{3}{8}$ " x $1\frac{3}{8}$ " x $1\frac{1}{8}$ ";
- Weight: at least 1.25 lbs per ft. of length;
- Coating: hot dip galvanized with at least 2 oz. per sq. ft. of zinc coating;
- Length: 6' (4' fence); 7' (5' fence); or 10' (8' fence);
- Depth: 2' below the ground line.

Line Post Spacing:

- 20' max between posts;
- Ratio of steel line posts to wooden line posts shall not exceed 2 to 1.

Wood Corner, Gate, and Brace Posts:

- Diameter: 5";
- Length: 8' (4' fence); 9' (5' fence); or 12' (8' fence);

- Depth: 4' below the ground line.

Cross Members:

- Diameter: 4";
- Length at $\frac{3}{4}$ brace post height: 8' (4' fence); 10' (5' fence); or 16' (8' fence);
- Length above $\frac{3}{4}$ brace post height: 10' (4' fence); 12' (5' fence); or 20' (8' fence).

Bracing Requirements:

- At all corners, ends and gates;
- When runs exceed 1,320';
- When slope is > 20-30°;
- When horizontal alignment is > 20-30°.

Wire Spacing and Fastening:

- Attach wire at least 2" below top of wooden posts, and 1" below top of steel posts;
- Staple at least every other wire to wood;
- At least one additional wire above the top of the woven wire for all fences except 8' deer fence.

Top wire:

- 2 twisted strands of 15.5 gauge high tensile wire with class 3 galvanizing (or better) with 4 point barbs on 5 inch centers (2-3 in. above woven wire); or
- 12.5 ga. electrified high tensile steel or aluminum alloy (4-6 in. above woven wire).

Gates:

- Install prefabricated gates according to manufacturer's instructions.

Other Considerations

Fences across gullies or streams require special braces and design.

Any permanent fencing for grazing livestock should allow flexibility to facilitate implementation of the grazing plan and permit land management activities such as nutrient application, pest control, forage harvest, and other appropriate practices.

Wire should generally be attached on the

sides of posts that will receive the greatest pressure from animals. Wire will be placed on the outside of posts on curves.

Locate fences to facilitate maintenance. Where applicable, clear right of ways should be established and maintained to facilitate fence construction and maintenance. When possible, install fences across slopes to improve grazing distribution, rainfall infiltration, and reduce soil erosion.

Barbed wired shall never be electrified or used with electrified fences.

Consider making accommodations for the passage of wildlife, particularly where known travel ways for species of concern exist.

Operation and Maintenance Plan

This practice will require you to perform periodic operation and maintenance to maintain satisfactory performance. The following are some requirements to help you develop a good operation and maintenance program.

1. The fence should be inspected frequently to see that it is not cut, broken or pushed down and the posts and braces are in place and intact.
2. Weeds, grass and sprouts along and under the fence should be clipped yearly.
3. Gates should be kept closed and latched to prevent swinging and sagging.
4. Signs posted on the fence should be inspected to determine if they are still visible and legible. Damaged and illegible signs should be replaced with new signs.
5. Do not burn weeds and grasses under and around fences as this destroys the galvanized coating and accelerates rusting.
6. Loose or lost staples or broken tie wires should be replaced during inspections.

