

High Tensile Electric Fence

--- Construction Specification ---

The high tensile electric fence is well suited for the restraint and management of most species and classes of livestock. When constructed in accordance with the specifications, high tensile fence provides quality fencing with a life of at least ten years and typically more than twenty years. In addition, to its relatively long service the high tensile electric fence has advantages in its ease of construction, relative expense, and the relative low cost and feasibility of repairs. A power source is an essential requirement for an electric fence. Note that while a high tensile electric fence is compatible with the restraint of most species/classes of livestock, the effectiveness of the specific design is dependent of the size of the animal to be restrained. This jobsheet is for cattle, if

desired for other animals contact the local NRCS Office.



Specifications:

<u>Component</u>	<u>Specification</u>
Wire	<ul style="list-style-type: none"> • Wire will be 12 ½ guage high tensile steel with Class III galvanized or 12 ½ guage aluminum. • Outside (perimeter) fences shall be constructed of at least three wires with the top wire not less that 40"; the bottom wire 14" form the ground and the other equidistant between the top and bottom. Interior electric cross fences shall have at least two wires. For 3-strand fences the top and bottom wires will have a positive charge. For 2-strand fences both wires shall have a positive charge. The top wire at approximately 40 " and the bottom approximately 18 " from the ground. • Wire shall be joined using a figure 8 knot, crimping sleeve or other commercially approved connectors. See Figure 20. (in bold red)
Line Posts	<ul style="list-style-type: none"> • Posts shall be standard metal "T" or "U" posts; preservative treated wooden posts at least 3" in diameter; or untreated posts of red cedar heartwood, longleaf pine heartwood, or white oak (at least 3" in diameter) • Wooden posts will not be spaced more than 100 feet apart and will be 36" in the ground (48" in sandy soils). If posts are spaced this far apart a dropper of fiberglass, plastic, or insul timber will be placed between the posts. • T-post or fiberglass for the typical 3-Wire Hot/Ground system shall be 60 inches long and shall be at least 18 inches in the ground. • Wires will not be attached directly to trees unless the trees are aligned along the fence line and attachment to the trees is the most feasible option. If wires are attached to trees, a buffer at least 2" thick, such as a treated 2" x 2" board, will be attached to the tree and the wires attached to the treated timber. • Unless the posts are of a material that is sufficiently insulated, approved insulators will be used to attach the wire to posts.
Brace Units	<ul style="list-style-type: none"> • Line brace units shall not be more than 1320 feet apart and will also be located at major changes in slope and/or changes in direction. • At points where the change in direction is approximately 90 degrees, corner brace units will be installed. • Brace units shall be of the "double H" design unless permission is granted for other designs. • Anchor posts shall be 6" or > in diameter and braces 4" or greater and shall be 36 "in the ground. • See Figures 3, 6, and 7(in bold red) • See Figure 6 of the standard for the proper installation of brace wire. No. 9 gauge wire should be used.
Energizers	<ul style="list-style-type: none"> • Approved by Underwriter Laboratories or a similar group. • High Impact weather resistant cases unless the power unit is maintained inside a building. • Be 110 volt, 220 volt or 12 volt battery powered capable of operating three weeks with out recharging. Appropriate solar powered systems are acceptable as well.

All substitutions in materials or modifications in design from those given under “specifications” must be approved by NRCS prior to beginning construction.

Approved Modifications: _____

Prepared By: _____ **Date:** _____

Landowner: _____ **Date:** _____
Signature