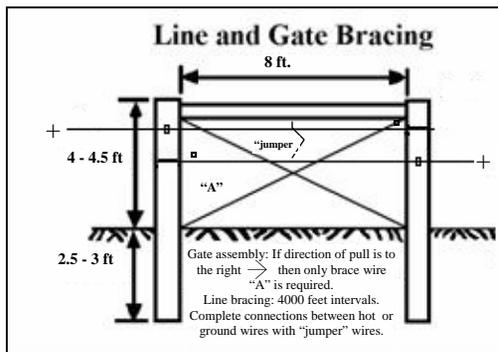


# Power Fence

- Wire will be smooth, 12.5 gauge, high-tensile strength (170,000 psi). Type III galvanized or better. Barbed wire will not be used on power fences.
- Single-wire permanent power fence should have the wire located 26 to 32 inches above the ground level.
- Two-wire power fence will have the top wire (hot) at least 26 inches above ground level and the bottom wire (ground or hot) not more than 8 to 12 inches below the top wire.
- The three-wire power fence will have the top wire (hot) at least 26 inches above ground. The middle (ground or hot) and bottom wire (hot) will be spaced 8 to 12 inches apart.
- An in-line strainer device will be installed on each wire to maintain correct tension. Wire tension will be sufficient to maintain proper wire spacing between posts.
- For one and two-wire power fence, line post spacing shall not exceed 100 feet. Stays are **NOT** recommended.
- For three-wire power fence, post spacing shall not exceed 75 feet without stays, or 100 feet with stays. Stays will be made from a non-metallic material.
- Brace assemblies will be spaced at intervals no greater than 4,000 feet.
- Brace timbers will measure minimum of 4 inch by 4 inch by 8 feet, 4 inch diameter by 8 feet or 2 inch by 8 feet galvanized steel pipe.
- Diagonal braces may be substituted for H-style braces. See ND Construction Job Sheet 24 for details.
- Brace wire will be galvanized, double strand 12.5 gauge or single strand 9 gauge smooth wire, twisted to properly tighten.
- Corner, gate and in-line brace posts will be a minimum of 5 inch by 7 feet wood.
- Line posts: Wood posts will have a top diameter of 2 inches or larger. Steel posts will weigh a minimum of one pound per foot and have an anchor plate attached. Fiberglass posts will be a minimum of 7/8 inch by 7/8 inch or 7/8 inch diameter round. Posts will be set to a minimum depth of 16 inches, except in sand where 24 inches may be required.
- Porcelain, ceramic, or high quality UV-stabilized polypropylene insulators will be used on wood and steel posts.
- Fence and energizer will be grounded as per energizer manufacturer's recommendations.
- Chargers will have a minimum output of one joule and be high-power, low-impedance type with a pulse duration of 0.0003 of a second or less.



**Construction details — Any deviation from the shown design requires prior NRCS approval**

