

PRACTICE CERTIFICATION CHECKLIST
USDA, Natural Resources Conservation Service
Wisconsin

Fence (382) Woven Wire Fence

Program Participant Information

Name (print): _____

Contract Number: _____ Contract Item #(s): _____

Tract Number: _____ County: _____ Location: T. _____ R. _____ S. _____

Livestock Type _____

Contractor Information (If installed by someone other than participant)

Name (print): _____

- Woven Wire Fence shall be constructed from (select all that apply):
- **Standard Woven Wire** fence meeting ASTM A 116 or equivalent. Top and bottom strands shall be 10 gauge or heavier, intermediate and stay wires shall be a minimum 14.5 gauge. Stay wires shall be a maximum of 12 inches apart. Fence wire shall meet ASTM A 641 or equivalent. Single or multiple strands of Barbed or High Tensile smooth wire shall be placed at 2 to 6 inch intervals above the woven wire.
 - **High Tensile Woven Wire** fence (fixed knot or hinge joint) meeting ASTM A 116 or equivalent. Top and bottom strands shall be 12.5 gauge or heavier, intermediate and stay wires shall be 14.5 gauge or heavier. Stay wires shall be a maximum of 12 inches apart for non-electric and 24 inches when wire is electrified. Single or multiple strands of Smooth High Tensile Wire or High Tensile Barbed Wire shall be placed above the woven wire at 2 to 6 inch intervals. Electrified Woven Wire fence shall be placed 7 inches above the ground and a barbed wire strand placed near the ground line.
 - **Specialty High Tensile Woven Wire** shall be 49 to 96 inches high and meet the quality criteria outlined above. A single strand of smooth high tensile wire or high tensile barbed wire shall be placed 2 to 6 inches above the top of the woven wire.
 - **Fence Type** as constructed meets the Fence Selection Criteria, Table 1 of the 382 Fence conservation practice standard based on the livestock types present on the site.

- A separate checklist shall be attached to certify the quality and installation of each of the following additional components utilized in the fence installation: Standard Barbed Wire, High Tensile Barbed Wire and/or High Tensile Smooth Wire.

- Documentation of Class 3 Galvanization (ASTM A 641 or equivalent) on all wire.

- Wire Fasteners (select type and circle specific type of fastener used)
- Minimum 9 gauge Class 3 galvanized steel staples with barbs, 1 inch hardwood posts/1.75 inch softwood post
 - Manufacturer supplied clips or minimum 14 Gauge wire
 - OTHER (must be pre-approved by fence designer)

- Wood Post and Brace Members (Select all that apply)

- Red/white cedar, tamarack, osage orange, black locust (circle the type of wood used) with ALL bark removed.
- Treated Wood (provide manufacturer certification of treatment).
- Minimum ½ of post diameter is heartwood.
- Specialty High Tensile Woven Wire Fence minimum line post diameter 5 inches.
- Wooden posts for All other Woven Wire Fence line post minimum diameter 4 inches.
- Wooden corner, end pull and gate assembly posts minimum 5 inch diameter.
- Specialty Woven Wire Fence post length as specified in design.
- Wooden posts for ALL other Woven Wire Fences shall be a minimum of 7 feet long.

Steel Post

- Documentation of conformance with ASTM A702, Steel Fence Posts and Assemblies, Hot Wrought from the supplier OR verification of all of the following:
- Standard T cross-section with minimum dimensions of 1³/₈" x 1³/₈" x 1¹/₈" with an anchor plate at the base and studded for wire retention.
- Minimum weight of 1.25 lbs./foot of length.
- Minimum length of 5 feet for steel line posts.
- Corrosion Protection: paint, enameled/baked, galvanized (circle protection type)

Plastic/Composite Posts

- Minimum 1 inch diameter
- UV protected for the life of the fence

Fiberglass Posts

- Fiberglass reinforced round posts minimum 2 inch diameter
- Fiberglass reinforced round posts guaranteed by manufacturer durable for the life of the fence.

OTHER materials used with per-approval by fence designer (attach documentation)

COMMENTS:

Post Spacing and Installation

- 16 feet maximum Standard and Specialty High Tensile Woven Wire Fence.
- 25 foot maximum High Tensile Woven Wire Fence.
- Corner posts set or driven minimum 3 feet (or additional bracing required).
- Bend post spacing equal to or less than minimum's in Table 4 of Specification 10.

Brace Installation

- Corner posts shall be installed to a minimum depth of 4 feet below ground.
- Floating or Single H Brace (circle type used) placed on all corners and ends.
- Standard Woven Wire Fence Pull assembly with H Brace at a maximum of 660 feet (Number Installed_____).
- Size and type of brace member and installation per specification.
- Single H Brace (minimum 3 foot post depth) installed.
- Double H Brace installed locations where minimum post depth restricted to less than 3 feet.
- Corner post or bend assembly wherever horizontal/vertical alignment varies by more than 15 degrees.

Line Post Installation (Select ALL that apply)

- Wood, fiberglass and plastic/composite posts set a minimum of 24 inches below ground.
- Steel posts set a minimum of 18 inches below ground.

- Backfill around non-driven posts well compacted
- Where post placement depth is restricted document the number and location additional anchors or deadmen installed against the direction of pull on the fence.

Wire Fastening (Select ALL that apply)

- Wooden Post: Top wire minimum 2 inches below post top.
- Staples driven into wood posts diagonal to wood grain and in the direction of fence pull.
- Steel, fiberglass, composite/plastic post: Top wire minimum 1 inch below post top.
- Wires attached to steel, fiberglass or plastic/composite posts using manufactured clips or 2 turns of 14 gauge galvanized wire.
- All wires attached to all posts.
- Wires attached to wood posts by staples, wires and clips will allow the free movement of the wire.

High Tensile Wire Installation

- Tension on high tensile wire fence will be a minimum of 200 -250 psi.
- In-line stretcher placed on each wire.
- Minimum of 1 tension spring per pull of wire to gauge tension.
- Wire stapled to wood posts to allow free movement.

Wire splicing:

- Splices will be by means of a crimp, knot or suitable splice sleeves applied with a tool designed for this purpose. Splice shall have no less than 8 wraps at each end.

Electric Fence Energizers (as applicable)

- Lightning protection applied to all electric fences using the fence energizer manufacturer's recommendations.
- Install the fence energizer according to the manufactures recommendations.
- High power/low impedance system, minimum 5000volt peak output, 300 mAmps intensity, 0.003 second pulse length at a rate of 35-65 pulses per minute.
- Minimum 1 joule/mile of fence energizer power rating.
- Minimum voltage: sheep/goats 4000v, cattle 3000v, hogs/horses 2000v.
- Battery operated units: 3 week capacity battery pack, solar recharger required for units of greater than 4 joules capacity.
- Energized adequately grounded based on manufacturer or 3 feet of ground rod per joule of power rating. Additional ground requirements if provided by the fence design shall be met and inspected.
- Lightning protection: follow energized manufacturer recommendations. Combined grounding systems for fence and energizer must meet capacity requirements of the energizer and the lighting arrestor.
- A surge protector shall be installed between the energizer and the power source.
- Fence wire insulators on posts made of "conductive" material shall have a current leakage rating of 10,000v and made of porcelain or UV resistant polyethylene.

Fence Lightning Protection – non-electrified high tensile wire fence: non-electrified fences with wood posts shall be grounded at least every 1320 feet of fence. Minimum ½ inch diameter, 4 foot long galvanized ground rods shall be utilized and attached to ALL line wires of the fence utilizing 12.5 gauge or heavier lead out wire.

Map attached to checklist documenting the "As Built" location of the fence by type (include a separate checklist for each fence type) including location of all corner/ end posts, gate assemblies and pull post assemblies.

Fence is constructed of “new” materials, is properly aligned to meet the intent of the practice and does not have any gaps that would jeopardize the functionality of the practice.

I certify that the Fence (382) has been implemented in accordance with the 382 practice standard, WI NRCS Specification 10, was installed according to the practice design and meets the documentation requirements of this checklist.

Client Certification of Practice Completion

Date

Practice Approval Rational:

Approved By Certified Conservation Planner or TSP

Date