

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

**FENCE
(Feet)**

CODE 382



DEFINITION

A constructed barrier to animals or people.

PURPOSE

This practice is applied as part of a conservation management system to facilitate one or more of the following objectives:

- Improve the distribution and timing of livestock grazing.
- Reduce erosion and water quality degradation by controlling livestock access to streams, springs, wetlands, and ponds.
- Facilitate handling, movement, watering, and feeding of livestock.
- Protect newly planted areas from disturbance until plant establishment.
- Protect sensitive environmental areas from animal or human traffic.
- Protect people, livestock, or wildlife from hazardous areas.

CONDITIONS WHERE PRACTICE APPLIES

This practice applies to areas where livestock and/or wildlife control is needed or where access by people is to be regulated. Fences are not needed where natural barriers will serve the purpose.

CRITERIA

General Criteria Applicable to All Purposes

Comply with all local, state, and federal laws in fence location and construction.

The fence design and location shall consider; topography, soil properties, livestock management and safety, livestock trailing, wildlife movement, location and adequacy of water facilities, development of potential grazing systems, human access and safety, landscape aesthetics, erosion problems, moisture conditions, flooding potential, stream crossings, and durability of materials.

Design and construct fences to control access by the animals or people of concern, to facilitate management requirements, or meet the intended management objectives and life of the practice.

Use new, high-quality, durable materials installed to meet the management objectives and topographic challenges of the site.

Design and install fences in accordance with this standard and the specific fence Construction Specification.

Additional Criteria to Improve Grazing Management

Improve resource by locating fences and size paddocks to:

- improve the management and integrity of natural and farm resources,
- optimize livestock access to water,
- meet livestock forage needs,
- and maintain or improve pasture condition through proper grazing management.

Fencing is part of a resource management plan. See the Prescribed Grazing Practice Standard (Code 528) for determining appropriate grazing management strategies.

CONSIDERATIONS

Consider maintenance issues when installing fences and avoid irregular terrain such as gullies and water crossings if possible. Fences should not be constructed in flood prone areas except when necessary.

A double-brace assembly may be necessary in poorly drained or sandy soils, or on highly irregular terrain.

Consider soil erosion potential when planning and constructing a fence on steep slopes.

Consider wildlife movement when locating fences. In whitetail deer range, the top two wires should be at least 10-inches apart to minimize the chance of deer becoming entangled.

Where applicable, cleared right-of-ways may be established that would facilitate fence construction and maintenance. Apply necessary erosion control measures to any cleared areas.

Consider livestock handling, watering, shade, and feeding when locating fences.

Determine paddock size needed before cross-fencing is installed.

Consider location and type of livestock water when planning fence placement.

Construct cross fences using the shortest possible distance.

PLANS AND SPECIFICATIONS

Develop detailed plans for each site that are consistent with this standard and the Construction Specification for the particular fence type. At a minimum, plans should include (1) a map showing field identification and the location of fence, gates, and water facilities; (2) the fence type; and (3) fence length and how it was determined.

The following Construction Specifications are considered part of this standard:

- barbed wire
- high-tensile smooth wire fence
- electric fence
- woven wire
- wooden board

DOCUMENTATION AND VARIATIONS

The completed work will be checked and documented to verify that the practice is complete according to NRCS standards and specifications. Supporting data for documentation will include those features of this practice that can be measured and observed such as: length of fence installed, type of fence and materials installed, and signature of the performance checker

Variations from the above materials and installation specifications may be approved by the responsible District Conservationist or someone with appropriate conservation planning authority, provided it is determined that such variation would result in an installation that would equal or exceed a fence installed according to this specification.

Record the variations approved along with an explanation of the reasons why approved variations will result in an installation that will meet or exceed one installed in accordance with the specifications.

OPERATION AND MAINTENANCE

Maintenance in accordance with the requirements of this standard is necessary throughout the functional life of the fence.

Regular inspection of fences shall be part of an on-going management program. Fence inspection after storms is required. Maintenance and repairs will be performed as needed to ensure the fence meets its intended purpose.

For electrified fence, use a voltage tester to ensure adequate charge along the entire fence span. Keep heavy vegetation away from electric fences to avoid loss of charge.

REFERENCES

Groenier, James "Scott;" Lebow, Stan. 2006. Preservative-treated wood and alternative products in the Forest Service. Tech. Rep.

0677–2809–MTDC. Missoula, MT: U.S. Department of Agriculture, Forest Service, Missoula Technology and Development Center. 44 p. (http://www.fpl.fs.fed.us/documnts/pdf2006/fpl_2006_groenier001.pdf)

United States Department of Agriculture, Forest Service, Fences, Feb. 1999. ASTM Standard 116

United States Department of Agriculture, Natural Resources Conservation Service. 2005. Electric fencing for serious graziers. Columbia, Mo.

United States Department of Agriculture, Natural Resources Conservation Service. 2003. National Range and Pasture Handbook. Washington, DC.