

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

FENCE

(Ac.)

CODE 382

DEFINITION

A constructed barrier to animals or people.

Fences shall be positioned to facilitate management requirements. Ingress/egress features such as gates and cattle guards shall be planned.

PURPOSE

This practice facilitates the accomplishment of conservation objectives by providing a means to control movement of animals and people, including vehicles.

Height, size, spacing and type of materials used will provide the desired control, life expectancy, and management of animals and people of concern. Fences shall be designed in accordance with NRCS Code 382 Fence Specification Guide and Appendices. All fences shall be appropriately braced in accordance with the Guide.

CONDITIONS WHERE PRACTICE APPLIES

This practice may be applied on any area where management of animal or human movement is needed.

For fences to be installed for safety in conjunction with other conservation practices (such as Waste Storage Facility), a woven wire fence design will be provided by NRCS. If determined suitable, other fence types may be designed specifically for the site and purpose by a qualified technician or engineer.

CRITERIA

General Criteria Applicable to All Purposes

Fencing materials, type and design of fence installed shall be of appropriate quality and durability to meet the practice lifespan. Materials will be new. The type and design of fence installed will meet the management objectives and site challenges.

Barbed wire shall not be electrified nor insulated for electrification.

Exterior fences must be permanent. Based on intended use, interior fences may be permanent or temporary. 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.

Manufacturers' guidelines shall be adhered to during installation and shall meet the minimum construction specifications for each type of fence to ensure proper component assembly.

Plastic insulators used on electric fence shall be of high quality and have UV protection.

CONSIDERATIONS

The fence design and location should consider:

- Livestock management and safety
- Durability of materials
- Development of a grazing system
- Topography, soil properties, landscape aesthetics, erosion problems, moisture conditions, flooding potential, stream crossings
- Livestock trailing
- Location and adequacy of water facilities
- Human access and safety
- Wildlife class and movement
- Vehicle traffic for passage and for pasture and fence maintenance.
- Adequate room between roadways and fence to allow for plowing and piling of snow without harm to fence.
- Appropriate fence in areas where livestock may be crowded or panicked. For animal safety reasons, electric fence may not be suitable in these areas.

Where applicable, cleared rights-of-way may be established which would facilitate fence construction and maintenance. It is recommended to maintain a cleared area on the outside of the fence large enough to accommodate mowing equipment for fenceline maintenance.

Avoid clearing of vegetation during the nesting season for migratory birds.

Fence height may be increased where snow pack depth will allow livestock to escape.

Fences across gullies, canyons or streams may require special bracing, designs or approaches.

Fence design and location should consider ease of access for construction, repair and maintenance.

Fence construction requiring the removal of existing unusable fence should provide for the proper disposal of scrap materials to prevent harm to animals, people and equipment.

Consider safety issues.

Protection of shade trees from livestock in pasture settings.

Consider resources at the site such as soil characteristics, i.e. shallow to bedrock, wetness, etc., topographic features such as slope, erosion, drainage ways, etc., climatic conditions that may affect the fence, i.e. snow drifts, seasonal flooding, etc.

If electrified fences must pass under overhead high voltage power lines, cross the power lines as close to perpendicular as possible. The maximum height of the top wire shall be 6 feet.

Before beginning fence installation, call 1-888-DIG-SAFE to ensure safety from buried and overhead utilities.

PLANS AND SPECIFICATIONS

Plans and specifications are to be prepared for all fence types, installations and specific sites. Requirements for applying the practice to achieve all of its intended purposes shall be described.

Specifications will include:

- Conservation Plan Map with fence layout
- Purpose for fence
- Type and length of fence
- Details for fence materials, attachment to posts, post materials, and specifications for post length, diameter, spacing, and depth
- Bracing details for ends, corners, gates and long runs

- Other info as needed to ensure proper installation and function of fence
- Operation and Maintenance instructions

OPERATION AND MAINTENANCE

Regular inspection of fences should be part of an ongoing maintenance program. Inspection of fences after storms and other disturbance events is necessary to insure the continued proper function of the fence.

Maintenance and repairs will be performed in a timely manner as needed, including tree/limb removal. Loose and lost staples and broken tie wires should be replaced during the fence inspections. Remove and properly discard all broken fencing material and hardware.

All necessary precautions should be taken to ensure the safety of construction and maintenance crews. Eye and hand protection should be worn during construction and maintenance.

At least once annually, remove brush and heavy grass and weeds growing near or on the fence line to reduce physical pressure on the fence, maintain visibility for fence maintenance, and in the case of electrified fence, prevent voltage loss. For electric fence, this task should be done several times throughout the growing season.

High Tensile fences can be loosened in the fall and re-tightened in the spring to prevent excess pressure from shrinkage and snow loads. Tension in the fencing should be checked and the fence repaired when the sag in the wire is excessive.

Do not burn weeds and grasses under and around fences as fire destroys the galvanized coating and accelerates rusting.

Gates should be kept closed and latched to prevent swinging and sagging.

Electric Fences – Check the voltage regularly. If voltage is insufficient, determine the cause and correct it. During dry weather, ground rods may need water applied to the soil around them. Weeds and plants in contact with the fence will also reduce voltage.

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.