

# Silt Fences

**Definition:** A temporary barrier with a life expectancy of six months or less, installed below small disturbed areas or at the toe of a slope.

**Purpose:** The purpose of a silt fence is to intercept and detain sediment from small unprotected areas.

**Conditions Where Practice Applies:** A silt fence may be used where:

1. There is no concentration of water in a channel or other drainage way above the barrier.
2. Erosion will occur in the form of sheet and rill erosion.
3. Protection of a property line or limits of grading is required.
4. The length of slope of the contributing drainage area above the fence is less than 200 feet. The slope should be 25 percent or less. If slope is greater than 25 percent, fences should be located on 100-foot spacing.

## Design Criteria

All silt fences shall be placed as close to the contour as possible.

A detail of the silt fence shall be shown on the plan, and contain the following minimum requirements:

1. The type, size, and spacing of fence posts.

2. The size of woven wire support fence.
3. The type of filter cloth used.
4. The method of anchoring the filter cloth.

## Materials

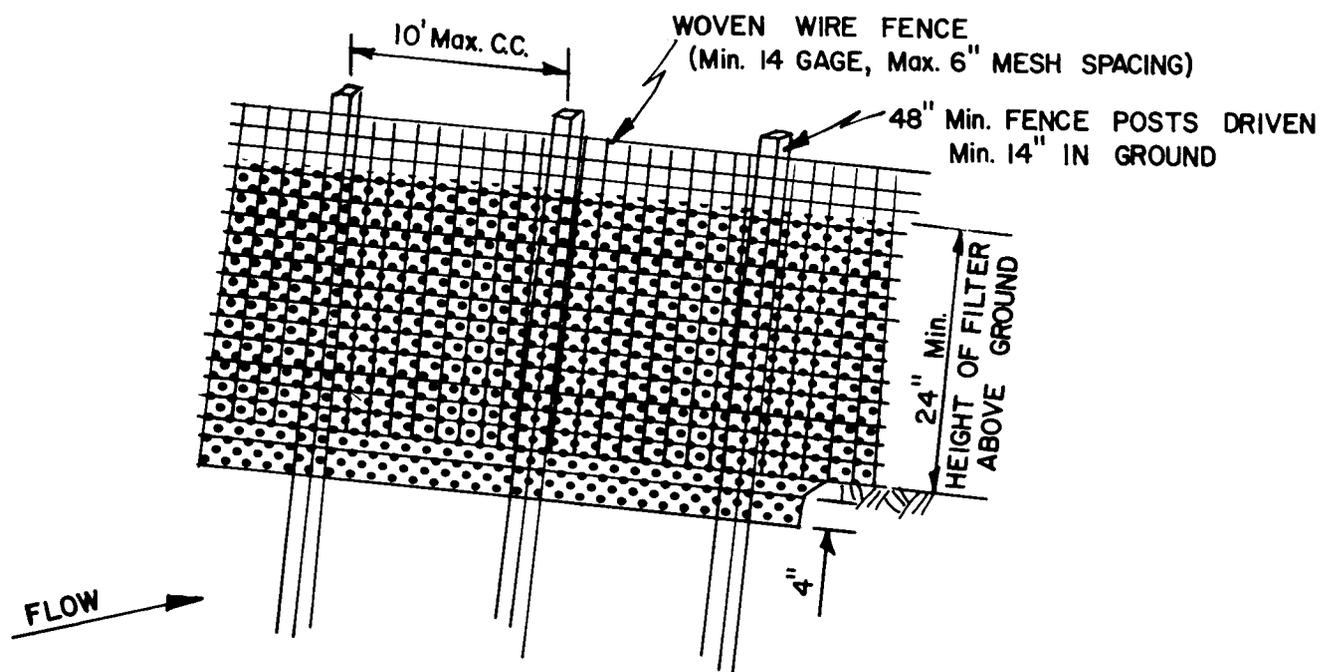
1. **Silt Fence Cloth:** Filter fabric shall be a pervious sheet of woven geotextile fabric consisting of long chain polymeric filaments or yarns such as polypropylene, polyethylene, polyester, polyamide, or polyvinylidene-chloride. The fabric shall be fixed so that the filaments or yarns retain their relative positions to each other. The fabric shall be resistant to commonly encountered chemicals, mildew, rot, insects, and rodents.
2. **Fence Posts:** The length shall be minimum of 48 inches long. Wood posts will be of sound quality hardwood with a minimum diameter of 2 inches, or as approved. Steel posts will be standard T or U section weighing not less than 1.33 pounds per linear foot.
3. **Wire Fence:** Woven wire fencing shall be a minimum 14 1/2 gage with maximum 6-inch mesh openings, or as approved.

**Prefabricated Silt Fence:** Prefabricated silt fence with posts attached is available. This fence is installed in a manner similar to that described above. While this type of fence is cheaper and easier to install, it requires more maintenance in order to perform satisfactorily.

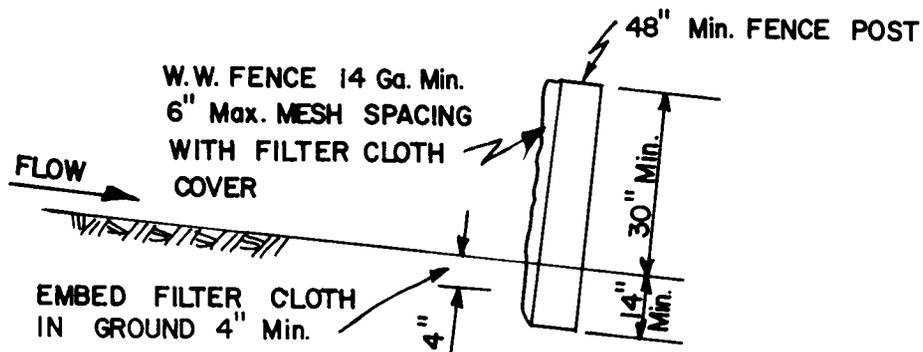
## Specifications

1. The fence posts shall be spaced a maximum distance of 10 feet center-to-center.
2. Woven wire fence shall be fastened securely to the upstream side of the fence posts by staples or wire ties.
3. Staple or fasten securely the filter cloth to the upstream side of the woven wire. Allow sufficient filter cloth for anchor at the bottom.
4. The filter cloth shall be embedded in the soil a minimum of 4 inches, and have compact soil to hold it in place.
5. The inspection shall be frequent and the filter cloth shall be replaced promptly as needed if it is torn. Sediment should also be removed to insure capacity.

Figure 2 — Silt Fence Detail



PERSPECTIVE VIEW



SECTION

Figure 3

## BUILDING A SILT FENCE A STEP BY STEP PROCEDURE

