

Silt Fence Installation Guidelines

Specifications for installing the silt fence should be in conformance with the following.

Materials

1. Synthetic filter fabric shall be a pervious sheet of propylene, nylon, polyester or ethylene yarn and shall be certified by the manufacturer or supplier as conforming to the following requirements: synthetic filter fabric shall contain ultraviolet ray inhibitors and stabilizers to provide a minimum of 6 months of expected usable construction life.
2. Burlap shall be 10 ounces per square yard fabric.
3. Posts for silt fences shall be either 4 in (10 cm) diameter wood or 1.33 lbs / ft (2 kg/m) steel with a minimum length of 5 ft (1.5 m). Steel posts shall have projections for fastening wire to them.
4. Stakes for filter barriers shall be 1 x 2 in (2.5 x 5 cm) wood or equivalent metal with a minimum length of 3 ft (0.9 m).
5. Wire fence reinforcement for silt fences using standard strength filter cloth shall be a minimum of 3 ft (0.9 m) in height, a minimum of 14 gauge and shall have a maximum mesh spacing of 6 in (15 cm).

Filter Barrier

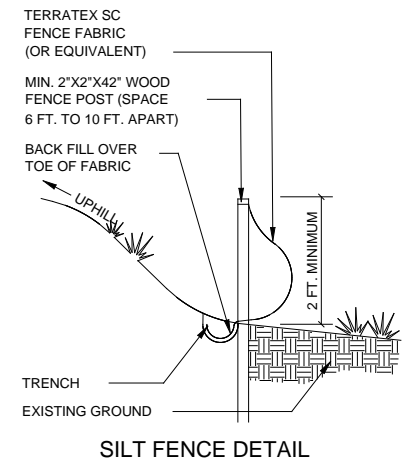
1. This sediment barrier may be constructed using burlap or standard strength synthetic filter fabric. It is designed for low or moderate flows.
2. The height of a filter barrier shall be a minimum of 15 in (381 mm) and shall not exceed 18 in (457 mm).
3. Burlap or standard strength synthetic filter fabric shall be purchased in a continuous roll and cut to the length of the barrier to avoid the use of joints.
4. The stakes shall be spaced a maximum of 3 feet (0.9 m) apart at the barrier location and driven securely into the ground - a minimum of 8 in (203 mm).
5. A trench shall be excavated approximately 4 in (102 mm) wide and 4 in (102 mm) deep along the line of stakes and upslope from the barrier.

6. The filter material shall be stapled to the wooden stakes, and 8 in (203 mm) of the fabric shall be extended into the trench. Heavy duty wire staples at least 1/2 in (13 mm) long shall be used. Filter material shall not be stapled to existing trees.
7. The trench shall be backfilled and the soil compacted over the filter material.
8. If a filter barrier is to be constructed across a ditch line or swale, the barrier shall be of sufficient length to eliminate end flow, and the plan configuration shall resemble an arc or horseshoe with the ends oriented upslope.
9. Filter barriers shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized.

Silt Fence

1. This sediment barrier utilizes standard strength or extra strength synthetic filter fabrics. It is designed for situations in which only sheet or overland flows are expected.
2. The height of a silt fence shall not exceed 3 ft (0.9 m); (higher fences may impound volumes of water sufficient to cause failure of the structure).
3. The filter fabric shall be purchased in a continuous roll cut to the length of the barrier to avoid the use of joints. When joints are necessary, filter cloth shall be spliced together only at a support post, with a minimum 6 in (152 mm) overlap, and securely sealed.
4. Posts shall be spaced a maximum of 10 ft (3 m) apart at the barrier location and driven securely into the ground (minimum of 12 in (305 mm). When extra strength fabric is used without the wire support fence, post spacing shall not exceed 6 ft (1.85 m).
5. A trench shall be excavated approximately 4 in (102 mm) wide and 8 in (203 mm) deep along the line of posts and upslope from the barrier.
6. When standard strength filter fabric is used, a wire mesh support fence shall be fastened securely to the upslope side of the posts using heavy duty wire staples at least 1 in (25 mm) long, tie wires or hog rings. The wire shall extend into the trench a minimum of 2 in (51 mm) and shall not extend more than 3 ft (0.9 m) above the original ground surface.

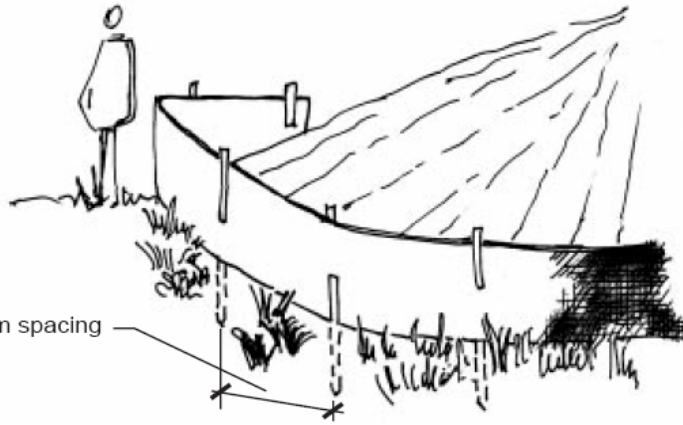
7. The standard strength filter fabric shall be stapled or wired to the fence, and 8 in (203 mm) of the fabric shall be extended into the trench. The fabric shall not extend more than 3 ft (0.9 m) above the original ground surface.
8. When extra strength filter fabric and closer post spacing are used, the wire mesh support fence may be eliminated. In such cases the filter fabric is stapled or wired directly to the posts.
9. The trench shall be backfilled and the soil compacted over the filter fabric.
10. Silt fences shall be removed when they have served their useful purpose, but not before the upslope area has been permanently stabilized. Install parallel to the contour of the land and with no more than 0.25 acre (0.1 hectare) drainage area per 100 ft (30 m) of fence. Extend ends upslope enough to allow water to pond behind the fence. Fence posts buried a minimum of 15 in (381 mm). Excavate a trench 4 in (102 mm) wide and 8 in (203 mm) deep. Install fence with stakes on the down slope side. Bury 12 in (305 mm) of fabric in the trench, extending the bottom 4 in (102 mm) toward the upslope side. Backfill trench with soil material, and compact. Join silt fence sections by overlapping sections and nailing with lath to the nearest post. Inspect twice a week and after each storm event, repairing as needed and removing sediment deposits when they reach one-half the fence height.



Silt Fence Installation Guidelines

Additional Drawings:

Standard Silt Fence Perspective View



10 ft (3.0 m) maximum spacing between post

36 in (0.9 m) minimum fence post length

Geotextile class F filter cloth

Flow

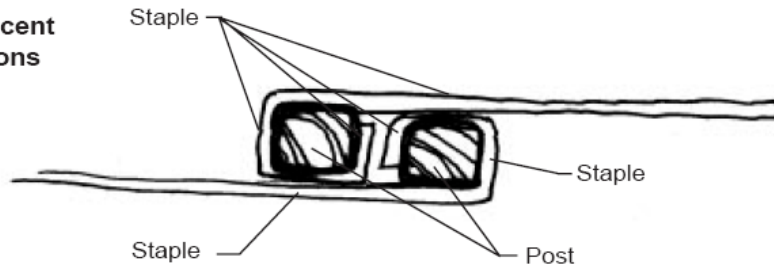
Fence post \geq 20 in (508 mm) above ground

Standard Silt Fence Section View

Embed post and filter cloth a minimum of 8 in (203 mm) vertically into the ground

Fence post driven \geq 16 in (406 mm) into ground

Joining Two Adjacent Silt Fence Sections Plan View



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Monday - Friday
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