

Large Silt Fence Installation

Materials:

3 ft x 30 ft piece of silt fence fabric
11, 4 ft x 2 inch wooden survey stakes (Control ONLY)
7, 4 ft x 2 inch wooden survey stakes (Non-control ONLY)
4, 3 ft T-Posts (Non-control ONLY)
Flat-nosed shovel (blade width 6-7 inches)
Measuring tape
Staples (5/8" length)
Staple gun
Roofing paper (asphalt/tar paper)
2.5 inch metal plumbing pipe cap
20 gauge wire
Wire cutters
25 ft string/rope (knotted at one ft in on either end)
2 metal tent stakes
3 lb mallet
Numbered identification tags
Plastic tarp
Gloves
GPS
Large Silt Fence datasheet

Silt Fence Field Location:

1. For transects 2, 8, 10, go to the "35" meter end of the transect and pace 5m in the upslope direction, perpendicular to the transect. Find the most prominent water flow paths in the area.
2. Orient perpendicular to the slope, catching the most prominent water flow paths in the area.
3. Use 25ft long string/rope and tent stakes to mark upslope edge of trench.

Silt Fence Installation:

1. Dig a trench (~0.5 ft X ~23 ft), ~0.5 ft deep, placing soil on plastic tarp located on downslope side of trench. Ensure that trench is oriented perpendicular to downslope, perpendicular to transect.
2. Cut upslope edge of trench so edge is clean.
3. Lay down silt fence fabric so that the bottom and upslope sides of the trenches are covered.
4. Refill trench, ensuring that fabric is taught and flush against upslope edge of trench; tramp/compact soil. The top of the trench should follow the ground surface as closely as possible.

Non-Control Specific:

5. Measuring 1 ft downslope from the upslope edge of the trench, install alternating metal 3 ft T-posts and 4 ft wooden survey stakes at 3 ft intervals along the length of the trench. Make sure to install one wooden post at each downslope corner, as well as one ~3 inches removed from each upslope corner. Wooden stakes should be pounded in using metal plumbing pipe cap to prevent splitting. Pound down at least 6 inches. Metal posts should be pounded until "T" is underground and hook directly above it is either at ground surface level or slightly below. All of the posts should be oriented with their broad faces inwards towards the trench; metal posts should have the hooks facing outward.
6. Starting with the post in the middle, pull fabric back up tightly against post, making sure it is flat against the ground.
7. If wooden: staple fabric once at bottom of post to hold fabric tight. Lay 2 in X 12 in piece of tar paper over fabric, pulling fabric tightly up side of post. Staple tar paper, fabric to post, inserting staples at a slight angle to prevent tearing of fabric.
8. If metal: use 10 cm piece of 20 gauge wire to secure fabric to metal post at ground level by treading wire through fabric at a slight angle (~45-60 degrees) around post and wrapping around hooks at back of post. Repeat this process so fabric is secured at middle and top.
9. Move to next post, pulling fabric flat against ground and tight against the post. Attach in appropriate method.
10. Once the fabric has been secured against the poles on the downslope face of the trench, the corners can be constructed by folding the fabric along the natural crease created by the previous stapling method, then pulling the fabric forward and wrapping it around the inwards face of the post, creating a clean edge/corner. The fabric can be bundled and stapled to the backside of the upslope post.
11. Using silicon, seal the corners, seam, places where wire has been threaded through fabric, and any place where fabric may have been torn during construction.
12. Attach ID tag to backside of metal post using wire.
13. Mark silt fence on GPS; GPS ID should match metal tag. Record on data sheet.
14. Get final measurement of length of silt fence. Record.

Control Specific:

15. Use wooden stakes only. Other methods remain the same.

Ordering Information:

Large Silt Fence Fabric: 36 -inch, stakes not attached

Nilex Corporation

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Fabric cost: \$0.15/linear ft. Stakes: \$0.82/stake.