Design Criteria

ANNE ARUNDEL SOIL CONSERVATION DISTRICT 2015

REINFORCED SILT FENCE

Reinforced Silt Fence Design Constraints

1. The use of Reinforced Silt Fence must conform to the design constraints listed above.
2. The area downgrade of the Reinforced Silt Fence must be undisturbed ground.
3. Reinforced Silt Fence should be placed along the contour.
4. Reinforced Silt Fence should be used with caution in areas where rocky soils may prevent trenching.
5. Extend both ends of reinforced silt fence a minimum of five (5) horizontal feet up-slope and 45° degrees to main fence alignment to prevent runoff from going around the edges.

Maximum Silt Fence Length

- Unlimited
- 250 feet
- 750 feet
- 1,000 feet

Average Slope Steepness

- Flatter than 50:1 (<2%)
- 5:1 (>20%)
- 10:1 to 5:1 (10-20%)
- 50:1 to 10:1 (2-10%)

Maximum Slope Length

- 300 feet*
- 40 feet
- 100 feet
- 125 feet

*Maximum slope length is unlimited on Hydrologic Soil Group (HSG) "A" soils

Construction Specifications

1. Metal fence post shall be a minimum of 48" long driven 16" minimum into the ground no more than 8 feet apart. Post shall be standard T or U section weighing not less than 1.00 pound per linear foot. Reinforcement shall be 14 gauge welded wire fencing with 2 in. x 4 in. mesh openings.
2. Geotextile shall be fastened securely to each fence post with wire ties or zip ties at top and midsection. Where ends of geotextile fabric come together, they shall be overlapping, folded and wire tied or zip tied to post to prevent sediment bypass.
3. Use a woven geotextile, as specified in section H-1 materials, and fasten to the up-slope side of the fence posts with wire or zip ties at top and midsection. The Manufacture's certification that the fabric meets the requirements in section H-1 must be made available to the inspection/enforcement authority.
4. Extend both ends of reinforced silt fence a minimum of five (5) horizontal feet up-slope at 45° degrees to the main fence alignment to prevent runoff from going around the ends.
5. Remove accumulated sediment and debris when bulges develop in the reinforced silt fence fabric or when sediment reaches 25% of the fence height. Replace geotextile if torn. If undermining occurs, reinstall fence.

Filter cloth

- Flow
- Fence post section
- Minimum 20" above ground

Undisturbed Ground

- Filter fabric
- Ties
- CROSS SECTION JOINING TWO ADJACENT FABRIC SECTIONS
- TOP VIEW
- 8' Maximum center to center
- ELEVATION ANNE ARUNDEL SOIL CONSERVATION DISTRICT 2015

STANDARD SYMBOL

REINFORCED SILT FENCE

- geotextile above ground
- 8" Minimum depth of welded wire fencing and geotextile below ground backfill and compact both sides of fabric
- 14 gauge welded wire fencing with 2 in. x 4 in. mesh openings
- Embeded welded fencing and geotextile fabric a minimum of 8 in. vertically into the ground backfill & compact both sides
- Fence post driven a minimum of 16 in. into the ground
- MIn. 2 ft. fabric overlap fasten to fencing with wire or zip tie @ 6 in. O.C.

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