Sediment traps shall be at least 1 ft (30cm) higher in elevation than the mid-section. The mid-section shall be the lowest point of the trap.

12. Sediment traps shall be constructed so the horizontal base width is at least equivalent to the effective height (1H:1V).

13. Sediment traps sized and specified by fascia design area shall be installed so that the height is measured vertically not across the plane of the sediment trap face.

14. Additional runoff-sediment storage area can be created by over excavating the area immediately upslope of the sediment trap.

15. Soxx that are sleeved to create longer lengths shall not be placed in areas of concentrated flow, at the base of channels/ditches, or at the low point with the sediment trap system.

16. Soxx that are sleeved to create longer lengths shall be overlapped by a minimum of 4 ft (120 cm) and shall be staked where material over laps using 2 stakes 2 ft (60 cm) apart.

17. Stakes shall be installed through the middle of the Soxx using 2 in (50mm) by 2 in (50mm) by 3 ft (1m) wooden hardwood stakes on 10 ft (3 m) centers; 5 ft (1.5 m) on center staking may be used to increase stability. Stakes shall be placed in a pyramid configuration perpendicular to Soxx where stakes cross at the apex of the sediment trap. Stakes shall be joined and secured with wire wrapping at apex using 16 gauge or multi-strand 20 gauge wire allowing 12 in (30cm) of stake above the Soxx. All base layers shall be staked on 5 ft (1.5 m) centers. All base layers shall be staked on 5 ft (1.5 m) centers; placed opposite the pyramid staking; where staking is present every 2.5 ft (0.75 m). Half inch (12.5 mm) rebar may also be used when ground is frozen or extremely compacted.

18. Staking depth for all soil types shall be minimum 12 in (300mm) into native soil.

19. Soxx to receive additional layers shall be slightly compacted and leveled.

20. Loose FilterMedia shall be backfilled along the upslope side of the sediment trap, along seams, and within void spaces; thereby filling the seam between the soil surface and the sediment trap, improving sediment containment, and reducing undercutting potential.

21. If the sediment trap is to be left as a permanent filter or part of the natural landscape, it may be seeded at time of installation for establishment of permanent vegetation. The Engineer will specify seed requirements.

22. Sediment traps are not to be used in perennial, ephemeral, or intermittent streams.

See design drawing schematic for correct sediment trap installation (Figure 9.1).

**INSPECTION & MAINTENANCE**

Routine inspection should be conducted within 24 hrs of a runoff event or as designated by the regulating authority. Sediment traps should be regularly inspected to make sure they maintain their shape and are producing adequate hydraulic flow-through. If ponding becomes excessive, additional sediment traps may be required to reduce effective drainage area or sediment removal may be necessary. Sediment traps shall be inspected until area above has been permanently stabilized and construction activity has ceased.

1. The Contractor shall maintain the sediment trap in a functional condition at all times and it shall be routinely inspected.

2. If the sediment trap has been damaged, it shall be repaired, or replaced if beyond repair.

3. The Contractor shall remove sediment at the base of the upslope
side of the sediment trap when accumulation has reached 1/2 of the effective height of the sediment trap, or as directed by the Engineer. Alternatively, a new Soxx can be placed on top of the original structure creating more sediment storage capacity without soil disturbance.

4. Sediment traps shall be maintained until disturbed area above the device has been permanently stabilized and construction activity has ceased.

5. The FilterMedia will be dispersed on site once disturbed area has been permanently stabilized, construction activity has ceased, or as determined by the Engineer.

6. For long-term sediment and pollution control applications, sediment traps can be seeded at the time of installation to create a vegetative filtering system for prolonged and increased filtration of sediment and soluble pollutants (contained vegetative filter strip). The appropriate seed mix shall be determined by the Engineer.

ADDITIONAL INFORMATION

For other references on this topic, including additional research reports and trade magazine and press coverage, visit the Filtrexx website at filtrexx.com

Filtrexx International, Technical Support
877-542-7699 | www.filtrexx.com | info@filtrexx.com
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Figure 9.1. Engineer Design Drawing for Sediment Trap.

1. Filtrexx® Sediment Trap must be installed by Filtrexx Certified Installer.
2. Filtrexx® Sediment Trap must comply with all Filtrexx Standard Specifications.
3. Filtrexx® Sediment Trap must use Filtrexx FilterMedia™.
4. Filtrexx® Sediment Trap barrier face sizing shall use Q/0.98cfm(per sq ft of area face) = A (Q=6L/sec/lq.m)
5. Filtrexx® Sediment Trap barrier face shall be measured as A=L*D.
6. Filtrexx® Sediment Trap shall be constructed so that the minimum base width is equivalent to the height (H+1V).
7. Sediment accumulation shall not exceed 1/4 the height of the barrier.
8. Filtrexx® Sediment Trap shall be inspected and maintained after storm events.
9. Soxx™ shall be of larger diameter at the base of the Sediment Trap and decrease in diameter for successive layers.
10. Ends of the Sediment Trap shall be a minimum 1 ft (30 cm) higher in elevation than the mid-section, which shall be at the lowest elevation.
11. Bottom layer of Soxx™ shall be staked with 2x2x36" wooden stakes. Successive layers shall be staked with 1/2" rebar at a 45 degree angle.

MAX WATER LEVEL

2x2x36" WOODEN STAKE, 10" O.C.
1/4" REBAR, 45° ANGLE, 10" O.C.

SECTION

FILTREXX® SEDIMENT TRAP
Figure 9.2. Engineer Design Detail for Staking Sediment Traps.

**FILTREXX® SEDIMENT TRAP STAKING DETAIL**

NTS

12" ABOVE SOXX™

(2) 2"x2"x48" HARDWOOD STAKES, WRAPPED TOGETHER WITH 16 GUAGE WIRE, 10' O.C.

2"x2"x36" HARDWOOD STAKE, 10' O.C., STARTING 5' FROM ANGLED STAKES