

6.1.7 Compost Vegetated Cover - Temporary Seeding

PURPOSE & DESCRIPTION

Filtrex[®] Compost Vegetated Cover (CVC)/Temporary Seeding is a **temporary vegetation and erosion control** practice used on hill slopes to stabilize disturbed soils on and around construction activities. CVC is generally used for rapid vegetation establishment on disturbed or erodible soils, and are not to be used as an erosion control blanket. CVC consists of a ½ in to ¾ in (12-20mm) deep layer of Filtrex[®] GrowingMedia™ or 70 to 100 cubic yards/acre (135-193 cubic m/ha) mixed with a specified seed mix and applied to hill slopes with pneumatic blower trucks or similar equipment.

APPLICATION

CVC is generally used for temporary vegetation for erosion control on disturbed, bare, or highly erodible soils during land disturbing and construction activities. Stabilization using temporary vegetation is generally required for (Fifield, 2001):

- disturbed soils that will undergo future disturbance,
- cut and fill slopes under construction,
- soil storage areas and stockpiles,
- permanent vegetation establishment that requires a nurse crop,
- stabilization of temporary runoff diversion devices, dikes, and sediment containment systems,
- curbside buffers on residential construction lots prior to vertical construction.

Permanent stabilization practices, such as erosion control blankets, anchoring and sod are not typically used for these applications; however, they may be used selectively with temporary vegetation practices. CVC is best utilized on bare soils in excavated or fill areas immediately after temporary or final grading is finished. It should be noted that CVC provides little erosion control until vegetation is established, this should be considered in the planning and design process. Slopes greater than 4:1 should be vertically tracked to aid in catching and stabilizing CVC application prior to germination. Slopes greater than 3:1 should apply a tackifier with the CVC to increase stability. Slopes greater than 2:1 should utilize erosion control blankets or turf reinforcement mats. Other erosion control practices should be utilized if soil erosion control/slope stabilization is required prior to vegetation establishment.

Although most specification and design manuals include fertilizer recommendations or requirements for vegetation, mineral nutrients from fertilizers may not be preferable where vegetation sustainability and water quality are a concern. CVC provides organic nutrients which are slow release, provides plant micronutrients, and is less likely to be transported in storm runoff to receiving waters – which can lead to pollution and eutrophication of waterways. In site sensitive areas where nutrient runoff is a concern, CVC may release up to 1/10 of the nutrient load compared to conventional hydroseeding and hydromulching.

CVC should not be used in areas where concentrated flow exists or where runoff velocities will damage or undermine vegetation. For most grasses a maximum velocity of 4 CFS (0.11 CFS) or a maximum hydraulic shear stress of 2 lbs/ft² (10 kg/m²) is recommended. In regions or seasons prone to high velocity wind conditions (such as arid regions, mountainous regions, and regions with distinct hurricane seasons) it is recommended that LockDown™ Netting is installed on top of the CVC to prevent wind erosion and movement of the CVC.

INSTALLATION

1. CVC used for temporary vegetation establishment and erosion control shall meet Filtrex CVC and Filtrex GrowingMedia Specifications.
2. Call Filtrex at 877-542-7699 or visit www.filtrex.com for a current list of installers and distributors of Filtrex products.
3. CVC will be placed at locations indicated on plans as directed by the Engineer.
4. CVC shall be installed on and around unprotected and erodible soils for temporary vegetation and erosion control.
5. CVC shall be applied to 100% of the area where temporary vegetation is required.
6. CVC shall be applied at a depth of ½ to ¾ in (12-20mm) or 70 to 100 cubic yards/ac (135-293 cubic m/ha).
7. Seed shall be thoroughly mixed with the GrowingMedia™ prior to application or surface applied with GrowingMedia™ at time of application.
8. CVC shall not be installed in areas of concentrated runoff flow.
9. CVC installed on slopes: greater than 4:1 shall be vertically tracked; greater than 3:1 shall use tackifiers or slope stabilizers; greater than 2:1 shall use erosion control blankets or turf reinforcement mats.

INSPECTION & MAINTENANCE

Routine inspection should be conducted within 24 hours of a runoff event or as designated by the regulating authority. If rilling occurs or vegetation does not establish, the area of application should be reapplied with CVC. If failure continues, the use of runoff diversion devices, compost erosion control blankets, rolled erosion control blankets, or soil stabilizers should be considered. CVC should be inspected until permanent vegetation or other erosion control practices are installed. Temporary vegetation practices should also be inspected for noxious or invasive weeds.

1. The Contractor shall maintain the temporary seeding in a functional condition at all times and it shall be routinely inspected.
2. CVC shall be maintained until a minimum of 70% uniform cover of the applied area has been vegetated or as required by the jurisdictional agency.
3. CVC may need to be irrigated in hot and dry weather seasons, or arid and semi-arid climates to ensure vegetation establishment.
4. CVC shall be maintained until permanent vegetation is established or erosion control practices are installed.
5. Where CVC fails, rilling occurs, or vegetation does not establish the Contractor will repair or provide an approved and functioning alternative.
6. If CVC is damaged by stormwater runoff, runoff diversion devices installed above the CVC may be required.
7. Once vegetation is established, final seeding and/or permanent vegetation may not be required.
8. No additional fertilizer or lime is required for vegetation establishment and maintenance.
9. No disposal is required for this product/practice.

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
Call for complete list of international installers and distributors.

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Figure 7.1. Engineering Design Drawing for Temporary Seeding

