



Water Management - Post-Construction

# **SWPPP Cut Sheet:**

# Filtrexx® Rip Rap Grouting

Runoff Control & Vegetation Technology

#### **PURPOSE & DESCRIPTION**

Filtrexx® Rip rap grouting is a seeded organic media used to **establish permanent vegetation within the interstitial void spaces of rap rap** armoring systems. Rip rap grouting can be used to:

- Vegetate rip rap and similar hard armoring systems to mimic soft armoring systems;
- Increase wildlife habitat, restore ecosystems, and increase landscape aesthetics;
- Increase sediment and soluble pollutant removal efficiency of rip rap systems;
- Reduce runoff volume and pollutant loading of runoff flowing through rip rap systems;
- Increase stability and erosion control capability of rip rap system;
- Absorb water from ground water seeps and subsurface flows on a limited basis.

### **APPLICATION**

Filtrexx® Rip rap grouting is surface applied to rip rap void areas at a depth of 2 in (50mm) or 270 yd³/ac (513 m³/ha). Rip rap grouting is used where reduction of storm water runoff, removal of sediment and soluble pollutants from runoff, or permanent vegetation is desired to improve water quality, enhance landscape aesthetics, or mimic natural ecosystems. Rip rap grouting is only applied after land disturbing activities have ceased and rip rap has been correctly installed.

### **INSTALLATION**

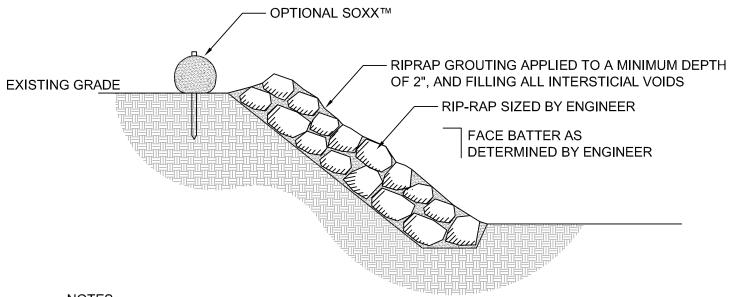
- Rip rap grouting used for rip rap fill and vegetation establishment shall meet Filtrexx<sup>®</sup> Rip rap grouting Specifications and use Filtrexx<sup>®</sup> GrowingMedia<sup>™</sup>.
- 2. Contractor is required to be a Filtrexx® Certified™ Installer as determined by Filtrexx® International, LLC (440-926-2607 or visit website at www.filtrexx.com). Certification shall be considered current if appropriate identification is shown during time of bid or at time of application (current list can be found at www.filtrexx.com). Look for the Filtrexx® Certified™ Installer Seal.
- **3.** Rip rap grouting will be placed at locations indicated on plans as directed by the Engineer.
- **2.** Rip rap shall be installed and stabilized prior to application of Rip rap grouting.
- **4.** Rip rap grouting shall be applied to 100% of the void spacing between rip rap aggregate/stone and where permanent vegetation is required.
- **5.** Additionally, Rip rap grouting may be applied over surfaces of rip rap/stone; however, application may not be as stable.
- 6. Rip rap grouting shall be applied at a minimum depth of 2 in (50mm) or at a rate of 270 cubic yards/ac (513 cubic m/ha). Additional Rip rap grouting may be applied to sufficiently fill all void/interstitial spaces within

- rip rap armoring system.
- 7. Seed shall be thoroughly mixed with the GrowingMedia™ prior to application or surface applied to GrowingMedia™ at time of application. Seeding is only required for surface layer if Rip rap grouting is used to fill deep void/interstitial areas.
- **8.** Rip rap grouting shall not be installed in areas of severe concentrated runoff flow, including channels and ditches.
- Runoff diversion may be temporarily installed above/upslope from Rip rap grouting applications while vegetation is undergoing establishment.

#### **INSPECTION & MAINTENANCE**

Routine inspection should be conducted within 24 hrs of a runoff event or as designated by the regulating authority. If rilling occurs, GrowingMedia™ has washed, or vegetation does not establish, the area of application should be reapplied with Rip rap grouting. If failure continues, the use of runoff diversion devices may be considered until permanent vegetation is established. If diversion devices are used, runoff should be directed to areas that have been stabilized, infiltration zones, or containment systems. Permanent vegetation practices should always be inspected for noxious or invasive weeds.

- The Contractor shall maintain the Compost Grouting<sup>™</sup> in a functional condition and it shall be routinely inspected until vegetation is established.
- 2. Rip rap grouting shall be maintained until a minimum uniform 70% cover of the applied area has been vegetated or as required by the jurisdictional agency.
- **3.** Rip rap grouting may require regular irrigation during hot and dry weather, or arid and semi-arid climates to ensure permanent vegetation establishment.
- 4. Where a Rip rap grouting fails, rilling occurs, or vegetation does not establish the Contractor will repair or provide an approved and functioning alternative.
- 5. If Rip rap grouting is damaged by storm water runoff, installation of temporary runoff diversion devices above the Rip rap grouting may be required.
- **6.** No additional fertilizer or lime is required for vegetation establishment and maintenance.



## NOTES:

- 1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
- 2. RIPRAP TO BE SIZED BY ENGINEER.
- 3. ALL RIPRAP GROUTING TO BE SEEDED PER LANDSCAPE ARCHITECT'S SPECIFICATIONS.
- 4. RIPRAP GROUTING SHALL FILL ALL VOIDS BETWEEN RIPRAP.

# FILTREXX® RIPRAP GROUTING

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