Envirolok®
Vegetated Environmental Solutions

ENVIROLOK UNIT BAG FILL MATERIAL SPECIFICATION

A. Bag fill material should be selected with the desired vegetation and specific application in mind. Criteria for bag fill soils should be specified by the Designer, suggestions include:
   1. Walls, slopes and above High Waterline Applications
      a) Freely draining native soils and granular materials clean of all debris, roots, branches, stones in excess of 2" (50 mm) diameter and other deleterious materials. Remove soil contaminated with calcium chloride, toxic materials and petroleum products.
      b) Properties should include (by volume)
         a. Approximate Top Soil Content: 15% -20% (for an engineered structure)
            i. Topsoil shall be a sandy-loam to clay loam based soil. It shall be of uniform composition, screened and free of stones greater than 2” (50 mm), lumps, plants, and their roots, debris and other extraneous matter over one inch in diameter.
            ii. Soil should be tested prior to screening and stock piling to ensure it is free from containments that would inhibit plant growth or harm water quality.
         b. Approximate Sand Content: 75-85%
            i. Granular Content: smaller than 50 mm larger than 2 mm 60 - 70%
            ii. Granular Content larger than 0.05 mm smaller than 2mm 10 -15%
         c. Approximate Compost (Organic) Content: Use and percentage shall be approved by Project Engineer or Landscape Architect. Percentage content shall not exceed 7-12%.
         d. Clay and Silts 0 - 5%
         e. Percolations shall be such that no standing water is visible 60 minutes after at least 10 minutes of moderate to heavy rain or irrigation.
         f. Top Soil materials should be a locally available or from commercially provided sources.
         g. Mix all Top Soil materials evenly throughout the bag fill material.
         h. Do not deliver or store soils in frozen, wet, or muddy conditions.
         i. Protect soils and mixes from absorbing excess water and from erosion at all times.
         j. Do not store materials unprotected from large rainfall events.
         k. Fill per bag is approximately 1.25 cu ft. (.0354 m^3)
         l. Other criteria may be required in Project Specific Engineered Drawings. Refer to Contract Documents.

   2. Below Waterline Applications
      i. Clean Granular material; 3/4 in (20mm) gravel minimum particle size 2mm. Pre-seeding bags is suggested for structures built below normal water levels if vegetation is desired.
      ii. Clay soils shall not be used for bag fill.

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