

ITEM 613.0105 11 M – SOIL MIX FOR PLANTERS

DESCRIPTION

The work shall consist of furnishing, mixing and placing of Soil Mix for Planters in conformance with the Contract Documents or as designated by the Engineer/Landscape Architect.

SUBMITTALS

Submit duplicate samples and manufacturer’s guaranteed analysis of the following items and obtain written approval thereof before beginning fabrication or delivery of material to the project site.

- a. Geotextile separation
- b. Soil mix
- c. Soil Amendments & Fertilizers
- d. Hydrogel

MATERIALS

- 1. The pH of the material shall be between 6.0 and 7.4.
- 2. The organic content shall be not less than 5% or more than 20%. The organic materials used to amend or manufacture topsoil shall conform to the requirements of 713-15.

3. Composition

- A. Crushed Stone - Shall be granite or sandstone as per item 623.12 M. No limestone shall be used.

<u>Sieve Size</u>	<u>Percent Passing by Weight</u>
13 mm	50
20 mm	0

- B. Geotextile Separation – Shall be Mirafi 140N or approved equal

- C. Soil Mix- Shall meet the following:

- 20% by weight shall be sand.
- 40% by weight shall be Horticultural Pumice.
- 25% by weight shall be §713-01 Topsoil
- 10% by weight shall be Organic Soil Amendments
- 4% by weight shall be Fertilizer
- 1% Hydrogel

- D. The following organic Soil Amendments/fertilizer are to be used per cubic meter:

- 0.9 kg Urea form (36-0-0)
- 0.9 kg Single Superphosphate (0-22-0)
- 0.22 kg Potassium Nitrate
- 0.45 kg Iron Sulfate (32%)
- 0.45 kg Dolomite 65

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0.45 kg Dolomite 10

If the soil is deficient in any nutrient, supplementary organic amendments and fertilizer shall be added to meet these requirements.

- E. Hydrogel/Wetting Agent - Shall be a potassium propenoate-propenamide copolymer hydrogel such as:
 - 1. Gelscape, Amereq Corporation, 50 North Harrison, Congers, NY 10920
 - 2. Soilmoist, JRM Chemical Inc., 13600 Broadway Avenue, Cleveland, OH 44125
 - 3. Supersorb, Aquatrols Corporation, 5 North Olney Avenue, Cherry Hill, NJ 08003

- F. Water - Shall comply with §712-01.

CONSTRUCTION DETAILS

- 1. Planter & Weep Holes: Verify the location and inspect the condition of all planters and planter drainage holes.

Inspect, flush out the drainage holes and remove all debris prior to proceeding. Notify the landscape architect prior to commencing if condition of planter or drainage elements is unsatisfactory
- 2. Crushed Stone: Place the stone in the locations and to the depths shown in the details. Flush with water before proceeding.
- 3. Geotextile Separation: The geotextile separation shall extend on planter wall surfaces, on the drain pipes, and secured with adhesive as recommended by the manufacturer and approved by the Landscape Architect. The geotextile separation shall be cleaned of foreign materials.
- 4. Soil Mix, hydrogel, organic material, water and any fertilizer or limestone necessary to meet the requirements of this specification shall be mixed prior to placement. Mixing shall uniformly blend the specified components in the approximate ratio.
 - a) The dry hydrogel shall be mixed with a sufficient amount of water to form a slurry. The slurry shall be allowed to set for at least one hour with periodic agitation/mixing to assure hydration of the hydrogel.
 - b) The hydrogel slurry shall be added to the crushed stone during mixing before the soil is added. Mixing shall continue for a sufficient time, but not less than ten (10) minutes to assure the crushed stone is completely coated with the hydrogel slurry.

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- c) The soil shall be added to the slurry mixture in a manner that assures the resulting mix is free of clods. The mixing shall be controlled to assure over mixing does not cause the material to become pelletized.
 - d) The resulting Soil Mix shall be protected from drying prior to placement.
5. The Soil Mix and plant material shall be watered thoroughly

METHOD OF MEASUREMENT

Soil Mix For Planters will be measured as the number of cubic meters placed, measured in place.

BASIS OF PAYMENT

The unit price bid per cubic meter shall include the cost of all labor, materials and equipment, including crushed stone, geotextile separation, soil mix, amendments, fertilizers, hydrogel, water, transportation, testing, mixing, and all incidental necessary and required to complete the work in accordance with the plans and specifications and as directed by the Engineer.

DISAPPROVED BY EIT 12-001