

SPECIAL PROVISION

SPECIFICATION 909 – PRE-FABRICATED DRAINAGE COMPOSITE

909-1 DESCRIPTION

909-1.01 Scope

- a. This work shall consist in furnishing and installing prefabricated vertical drainage composites behind completed retaining walls and abutments in order to collect and drain groundwater and avoid hydrostatic pressure build-up. These drains shall be installed following the Manufacturer’s recommendations and at the locations and to the limits shown on plans or established by the Engineer.
- b. This item shall also include any materials or incidentals required for the proper completion of the item.
- c. A complete set of installation procedures shall be submitted for approval. The approved procedure shall be strictly followed during construction.

909-2.01 MATERIALS

909-2.01 General

- a. The prefabricated drainage composites shall consist in a 3 dimensional high density polyethylene or PVC drainage core with a securely bonded geotextile filter fabric cover. These composites shall be provided in rolls or panels and shall be non-biodegradable, have UV stabilizers and have a compressive strength capable of withstanding twice the anticipated earth pressures. Compressive strength shall be determined in accordance to ASTM D-1621. Hydraulic flow rates shall be determined in accordance with ASTM D-4716.

909-2.02 Acceptance of Materials

- a. The Contractor shall submit copies of independent laboratory test results and a Certificate of Compliance certifying the product complies with specifications and is suitable for use under the conditions depicted in plans.

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909-3 CONSTRUCTION REQUIREMENTS

909-3.01 General

- a. Installation of the pre fabricated drainage composite shall be as per the Manufacturer’s recommendations. Filter fabric shall be completely wrapped around the perforated collector pipes. Splicing shall be as per the Manufacturer’s recommendations and shall be protected from exposure to sunlight.
- b. During transportation and storage the material shall be maintained in its original package and shall be protected from exposure to sunlight.
- c. Backfill shall be carefully compacted in the vicinity of the drains and shall consist in the use of lightweight equipment on reduced lifts. Compaction operations shall be coordinated with the Manufacturer to avoid overloading the material.

909-4 METHOD OF MEASUREMENT

909-4.01 Pre-fabricated drainage composite shall be measured by the square meter of surface area installed and accepted by the Engineer. The unit of measurement shall include furnishing and drainage composite on completed retaining walls and abutments and connecting to drainage outlet pipes.

909-5 BASIS OF PAYMENT

909-5.01 Payment will be made under:

<u>Pay Item</u>	<u>Pay Unit</u>
Pre-Fabricated Drainage Composite.....	Square Meter