

Evaluation Table

PEP ID:	XXXXXX
Manufacturer:	Name of Manufacturer
Product Name:	Name of Product

1014 Soil Reinforcement and Geosynthetics
 1014-6 Geocomposite Wall Drain System
 ADOT Standard Specification: 1014-1, 1014-6, & 1014-9
 ADOT Stored Specification: 1014GEOSYN
 Responsible Section: Materials Group

Material Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
NTPEP Datamine	1014-1 1014GEOSYN	Geosynthetic materials, excluding biaxial geogrid, must be on the DataMine list for geotextiles and geosynthetics on the AASHTO Product Evaluation & Audit Solutions (formerly NTPEP) website.		
Composition	1014-1	Fibers, yarns, and filaments used in the manufacture of geotextile fabric, and the threads used in joining by sewing, shall consist of long-chain synthetic polymers, composed at least 95 percent, by weight, of polyolefins or polyesters.		
Packaging	1014-1	Geosynthetic materials shall be furnished in protective covers capable of protecting the materials from harmful environmental conditions such as ultraviolet rays, abrasion, extreme heat, and water.		
General	1014-1	Geotextile fabric shall be resistant to chemical attack, rot, and mildew, and shall have no tears or defects which will adversely alter its physical properties.		

Material Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Geocomposite Wall Drain System: General	1014-6	The geocomposite wall drain system shall be of composite construction, consisting of a supporting structure of drainage core material and a geotextile filter fabric permanently bonded to the core material on one side only.		
Geocomposite Wall Drain System: General	1014-6	The geocomposite shall be resistant to commonly encountered chemicals and hydrocarbons, and resistant to ultraviolet exposure.		
Geocomposite Wall Drain Core	1014-6.01	The geocomposite wall drain core material shall consist of a preformed, stable, polymer plastic material with a cusped, nipped, or geonet structure.		
Geocomposite Wall Drain Core	1014-6.01	The drainage core shall provide support for and shall be bonded to the geotextile filter fabric at intervals not exceeding 1-1/8 inches in any direction.		
Geocomposite Wall Drain Core	1014-6.01	The core shall have at least 14 square inches per square foot of flat area in contact with the geotextile fabric to support the fabric.		
Core Material: Thickness with Fabric, Inches, min	1014-6.01 ASTM D1777	0.23		
Core Material: Compressive Strength, psf, min	1014-6.01 ASTM D1621	6,000		
Core Material: Transmissivity; Gradient = 1.0, Normal Stress = 5,000 psf, gpm/ft	1014-6.01 ASTM D4716	4.0		
Geocomposite Wall Drain Fabric	1014-6.02	The geocomposite wall drain fabric shall be laminated onto or adhere to the side of the drainage core which will face the backfill.		

Material Property	Specification/ Test Method	Requirement	Results	Pass/ Fail
Geocomposite Wall Drain Fabric	1014-6.02	A minimum 3-inch wide flap of fabric shall extend beyond both longitudinal edges of the geocomposite core. The fabric shall cover the full length of the core.		
Drainage Fabric: Elongation, % MARV min	1014-6.02 1014-9 ASTM D4632	≥50%		
Drainage Fabric: Grab Strength: lbs., MARV min	1014-9 ASTM D4632	157		
Drainage Fabric: Tear Strength: lbs., MARV min	1014-9 ASTM D4533	56		
Drainage Fabric: Puncture Strength: lbs., MARV min	1014-9 ASTM D6241	309		
Drainage Fabric: Ultraviolet Stability (retained strength) MARV min	1014-9 ASTM D4355	≥50% after 500 hours exposure		
Drainage Fabric: Permittivity, sec ⁻¹ MARV min	1014-9 ASTM D4491	0.5		
Drainage Fabric: Apparent Opening Size / US Standard sieve size, MARV max	1014-9 ASTM D4751	No. 70		