*INCLUDE SECTION 714 FOR PROJECTS WITH WORK THAT REQUIRES GEOSYNTHETIC MATERIAL AND BASED ON CLAUSE INSTRUCTIONS*

$$714.00A

Section 714. — GEOSYNTHETIC MATERIAL

Revised 08 November 2024

*INCLUDE THE FOLLOWING SPEC INSTRUCTION LINE AND SUBSECTION TITLE TEXT (CLAUSE ##714.01A) FOR PROJECTS REQUIRING GEOTEXTILE FILTERS AND VERIFY WITH GEOTECH AND HYDRAULICS WHICH ONE OF THE THREE CLAUSES ##714.01B, ##714.01C, OR ##714.01D IS APPROPRIATE FOR THE PROJECT (USE ONLY ONE OF THE CLAUSES ##714.01B, ##714.01C, OR ##714.01D)*

##714.01A

714.01(c). Delete the Subsection and substitute the following:

**(c) Geotextile filter.** Provide geotextile filter for the following installations:

*INCLUDE THE FOLLOWING FOR PROJECTS REQUIRING GEOTEXTILE FILTERS WITH <15 PERCENT OF IN SITU SOIL PASSING THE NO. 200 SIEVE* *(IF CLAUSE ##714.01B IS USED, DO NOT INCLUDE CLAUSES ##714.01C OR ##714.01D)*

##714.01B

**(1) Riprap, special rock embankment, rock buttress, and other high survivability applications.** Conform to AASHTO M 288 Table 1, Class 1 (either <50 percent elongation or ≥50 percent elongation) and the following:

*(a)* Minimum permittivity, ASTM D4491 0.7 sec-1

(*b)* Maximum apparent opening size, ASTM D4751 0.43 mm maximum average

roll value

*(c)* Minimum ultraviolet stability, ASTM D4355 50 percent strength retained

after 500 hours of exposure

**(2) Underdrains and other subsurface drainage applications.** Conform to AASHTO M 288 Table 1, Class 2 (either <50 percent elongation or ≥50 percent elongation) and the following:

*(a)* Minimum permittivity, ASTM D4491 0.5 sec-1

*(b)* Maximum apparent opening size, ASTM D4751 0.43 mm maximum average

roll value

*(c)* Minimum ultraviolet stability, ASTM D4355 50 percent strength retained

after 500 hours of exposure

*INCLUDE THE FOLLOWING FOR PROJECTS REQUIRING GEOTEXTILE FILTERS WITH 15 TO 50 PERCENT OF IN SITU SOIL PASSING THE NO. 200 SIEVE (IF CLAUSE ##714.01C IS USED, DO NOT INCLUDE CLAUSES ##714.01B OR ##714.01D)*

##714.01C

**(1) Riprap, special rock embankment, rock buttress, and other high survivability applications.** Conform to AASHTO M 288 Table 1, Class 1 (either <50 percent elongation or ≥50 percent elongation) and the following:

*(a)* Minimum permittivity, ASTM D4491 0.2 sec-1

(*b)* Maximum apparent opening size, ASTM D4751 0.25 mm maximum average

roll value

*(c)* Minimum ultraviolet stability, ASTM D4355 50 percent strength retained

after 500 hours of exposure

**(2) Underdrains and other subsurface drainage applications.** Conform to AASHTO M 288 Table 1, Class 2 (either <50 percent elongation or ≥50 percent elongation) and the following:

*(a)* Minimum permittivity, ASTM D4491 0.2 sec-1

*(b)* Maximum apparent opening size, ASTM D4751 0.25 mm maximum average

roll value

*(c)* Minimum ultraviolet stability, ASTM D4355 50 percent strength retained

after 500 hours of exposure

*INCLUDE THE FOLLOWING FOR PROJECTS REQUIRING GEOTEXTILE FILTERS WITH >50 PERCENT OF IN SITU SOIL PASSING THE NO. 200 SIEVE (IF CLAUSE ##714.01D IS USED, DO NOT INCLUDE CLAUSES ##714.01B OR ##714.01C)*

##714.01D

**(1) Riprap, special rock embankment, rock buttress, and other high survivability applications.** Conform to AASHTO M 288 Table 1, Class 1 (either <50 percent elongation or ≥50 percent elongation) and the following:

*(a)* Minimum permittivity, ASTM D4491 0.1 sec-1

(*b)* Maximum apparent opening size, ASTM D4751 0.22 mm maximum average

roll value

*(c)* Minimum ultraviolet stability, ASTM D4355 50 percent strength retained

after 500 hours of exposure

**(2) Underdrains and other subsurface drainage applications.** Conform to AASHTO M 288 Table 1, Class 2 (either <50 percent elongation or ≥50 percent elongation) and the following:

*(a)* Minimum permittivity, ASTM D4491 0.1 sec-1

*(b)* Maximum apparent opening size, ASTM D4751 0.22 mm maximum average

roll value

*(c)* Minimum ultraviolet stability, ASTM D4355 50 percent strength retained

after 500 hours of exposure

*INCLUDE THE FOLLOWING FOR SUBGRADE STABILIZATION GEOTEXTILE WHEN VERY SOFT/WEAK SUBGRADES REQUIRE A PRODUCT WITH HIGHER REINFORCEMENT STRENGTH THAN A TYPICAL SOIL STABILIZATION GEOTEXTILE -VERIFY WITH GEOTECH IF THE CLAUSE IS APPROPRIATE TO USE*

##714.01E

714.01. Add the following:

**(e) Subgrade stabilization geotextile.** Conform to AASHTO M 288, Table 12, Class 4A.