

**KANSAS DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION TO THE
STANDARD SPECIFICATIONS, 2015 EDITION**

Delete SECTION 1712 and replace with the following:

SECTION 1712

PREFABRICATED VERTICAL DRAIN

1712.1 DESCRIPTION

This specification covers the requirements for prefabricated vertical drains.

1712.2 REQUIREMENTS

Provide a prefabricated polypropylene channeled core wrapped in a non-woven polypropylene continuous filament geotextile complying with the typical values in TABLES 1712-1 and 1712-2.

TABLE 1712-1: PREFABRICATED VERTICAL DRAIN FABRIC, TYPICAL VALUES		
Property	Requirement	Test Method
Grab Tensile Strength	130 lbs	ASTM D4632
Grab Elongation at Failure	> 50%	ASTM D4632
Trapezoidal Tear	60 lbs	ASTM D4533
Permittivity	0.5 sec ⁻¹	ASTM D4491
Apparent Opening Size (AOS)	≤ 0.3 mm	ASTM D4751

TABLE 1712-2: PREFABRICATED VERTICAL DRAIN COMPOSITE, TYPICAL VALUES		
Discharge	Capacity Requirement	Test Method
1.5 gpm	1.50 psi	ASTM D4716

1712.3 TEST METHODS

Test in accordance with the requirements stated in **subsection 1712.2**.

1712.4 PREQUALIFICATION

- a. All material provided under this specification must be prequalified through the Engineer of Tests.
- b. Manufacturers interested in prequalifying material under this specification must provide, to the Engineer of Tests, 4 samples consisting of at least 15 linear feet each of the assembled prefabricated vertical drain, installation instructions for the material, certification that the properties of the type of material submitted meet the requirements of this specification, and any other information requested by the Engineer of Tests.
- c. KDOT reserves the right to submit one or all samples requested in **subsection 1712.4b** to an independent lab for testing. These test results along with those submitted by the manufacturer will be evaluated for compliance with this specification, and the manufacturer will be notified of the results. When KDOT submits multiple samples for testing, test results for all samples must independently comply with the requirements of this specification.
- d. Materials satisfying all applicable requirements described above will be placed on the requalified list maintained by the Bureau of Construction and Materials. Products will remain on the prequalified list provided field performance of the product continues to be satisfactory.

1712.5 BASIS OF ACCEPTANCE

a. Prequalification as specified in **subsection 1712.4.**

b. Receipt and approval of a Type C certification as specified in Division 2600 for each shipment. A shipment consists of all material arriving at the job site at substantially the same time but in no instance greater than 1 month. Each month will constitute a new time period requirement a new Type C certification even if the site has been supplied continuously from the previous week. The construction engineer shall take one 15 linear foot sample per shipment and ship it to the KDOT Materials and Research Center Soils Lab for storage until the Chief Geotechnical Engineer approves of disposal following successful completion of the project.

c. Visual inspection of the material at the job site for quality of workmanship and damage incurred during shipping or job site storage.

04-22-2024 BSGS (BJP)
FEB-2025 Letting