

**NOTES:**

This information is to be used only as a guide.  
 Products on this list can change without notice.

FHA QPL website: <http://www.wfl.fhwa.dot.gov/design/specs/fp96.htm>

**FEDERAL HIGHWAY ADMINISTRATION FP-96**  
 Also '96 Forest Service and Dept. of Agriculture\*\*

**TABLE 714-1 (612-1 FOR USDA)**  
**Physical Requirements for Subsurface Drainage Geotextile**

Property	Test Method ASTM	Units	Specifications (1)					
			Type I-A	Type I-B	Type I-C	Type I-D	Type I-E	Type I-F
Grab Strength	D4632	lbs	248/158	248/158	248/158	180/112	180/112	180/112
Sewn Seam	D4632	lbs	223/142	223/142	223/142	162/102	162/102	162/102
Tear Strength (3)	D4533	lbs	90/57	90/57	90/57	68/40	68/40	68/40
Puncture Strength	D4833	lbs	90/57	90/57	90/57	68/40	68/40	68/40
Burst Strength	D3786	psi	399/196	399/196	399/196	305/138	305/138	305/138
Permittivity	D4491	s-1	0.5	0.2	0.1	0.5	0.2	0.1
AOS	D4751	mm	0.45 (2)	0.25 (2)	0.22 (2)	0.45 (2)	0.25 (2)	0.22 (2)
		US Sieve	40	60	70	40	60	70
UV Stability	D4355	%	50% @ 500 hrs					
CSI Fabric			160N	160N	160N	140N	140N	140N
			FW 404	FW 700	FW 700	FW 404	FW 700	FW 700
					3601	3401	3401	3401

(1) The first values in a column apply to geotextile that break at <50 % elongation. The second values in a column apply to geotextile that break at >50 % elongation

(2) Maximum average roll value.

(3) The minimum average roll tear strength for woven monofilament geotextile is 56 lbs.

**TABLE 714-2**  
**Physical Requirements for Separation Geotextile**

Property	Test Method ASTM	Units	Specifications (1)		
			Type II-A	Type II-B	Type II-C
Grab Strength	D4632	lbs	315/203	248/178	180/113
Sewn Seam	D4632	lbs	284/183	223/142	162/102
Tear Strength (3)	D4533	lbs	113/79	90/57	68/41
Puncture Strength	D4833	lbs	113/79	90/57	68/41
Burst Strength	D3786	psi	508/247	392/189	305/138
Permittivity	D4491	s-1	0.02	0.02	0.02
AOS	D4751	mm	0.60 (2)	0.60 (2)	0.60 (2)
		US Sieve	30	30	30
UV Stability	D4355	%	50% @ 500 hrs		
CSI Fabric			600X	600X	500X
			180N	160N	140N
				3601	3401

(1) The first values in a column apply to geotextile that break at <50 % elongation. The second values in a column apply to geotextile that break at >50 % elongation

(2) Maximum average roll value.

(3) The minimum average roll tear strength for woven monofilament geotextile is 56 lbs.

\*\* Only I-A through III-B apply to USDA

**TABLE 714-3**  
**Physical Requirement for Stabilization Geotextile**

Property	Test Method ASTM	Units	Specifications (1)	
			Type III-A	Type III-B
Grab Strength	D4632	lbs	315/203	248/178
Sewn Seam	D4632	lbs	284/183	223/142
Tear Strength (3)	D4533	lbs	113/79	90/57
Puncture Strength	D4833	lbs	113/79	90/57
Burst Strength	D3786	psi	508/247	392/189
Permittivity	D4491	s-1	0.05	0.05
AOS	D4751	mm	0.43 (2)	0.43 (2)
		US Sieve	40	40
UV Stability	D4355	%	50% @ 500 hrs	
CSI Fabric			600X	600X
			180N	160N
				3601

(1) The first values in a column apply to geotextile that break at <50 % elongation.

The second values in a column apply to geotextile that break at >50 % elongation

(2) Maximum average roll value.

(3) The minimum average roll tear strength for woven monofilament geotextile is 56 lbs.

**TABLE 714-4**  
**Physical Requirements for Permanent Erosion Control Geotextile**

Property	Test Method ASTM	Units	Specifications (1)					
			Type IV-A	Type IV-B	Type IV-C	Type IV-D	Type IV-E	Type IV-F
Grab Strength	D4632	lbs	315/203	315/203	315/203	248/178	248/178	248/178
Sewn Seam	D4632	lbs	284/183	284/183	284/183	223/142	223/142	223/142
Tear Strength (3)	D4533	lbs	113/79	113/79	113/79	90/57	90/57	90/57
Puncture Strength	D4833	lbs	113/79	113/79	113/79	90/57	90/57	90/57
Burst Strength	D3786	psi	508/247	508/247	508/247	392/189	392/189	392/189
Permittivity	D4491	s-1	0.7	0.2	0.1	0.7	0.2	0.1
AOS	D4751	mm	0.43 (2)	0.25 (2)	0.22 (2)	0.43 (2)	0.25 (2)	0.22 (2)
		US Sieve	40	60	70	40	60	70
UV Stability	D4355	%	50% @ 500 hrs					
			180N	180N	180N	160N	160N	160N
			FW 404	N/A	N/A	FW 404	FW 700	FW 700
								3601

(1) The first values in a column apply to geotextile that break at <50 % elongation. The second values in a column apply to geotextile that break at >50 % elongation

(2) Maximum average roll value.

(3) The minimum average roll tear strength for woven monofilament geotextile is 56 lbs.

**TABLE 714-5  
Physical Requirements for Temporary Silt Fence**

Property	Test Method ASTM	Units	Specification (1)		
			Type V-A	Type V-B(2)	Type V-C(3)
Grab Strength Machine Direction Cross Direction	D4632	lbs			
			90	122	122
			90	100	100
Permittivity	D4491	s-1	0.05	0.05	0.05
AOS	D4751	mm	0.60 (1)	0.60 (1)	0.60 (1)
		US Sieve	30	30	30
UV Stability	D4355	%	70% @ 500 hrs		
Post Spacing		ft	3.95	3.95	3.95
CSI Fabric			AGES 600B	150N	AGES 600B

(1) Maximum average roll value

(2) Elongation at break >50% elongation (ASTM D4632)

(3) Elongation at break <50% elongation (ASTM D4632)

**TABLE 714-6  
Physical Requirements for Paving Fabric**

Property	Test Method ASTM	Units	Specs (1)
			Type VI
Grab Strength	D4632	lbs	113
Ultimate Elongation	D4632	lbs	50%
Asphalt Retention	Texas Dot Item 3099	g/yd <sup>2</sup>	0.2
Melting Point	D276	°F	302
CSI Fabric			MP 500

\*\* Only I-A through III-B apply to USDA