

Structural Geotextile - FDOT APL Data Form

Company and Contact Information										
App. Date:		Company Name:			Company Type:					
Contact:			E-mail:		Phone:					
Product Information										
Product Name:					Prod. Structure:					
Structural Type(s) Request: ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4 ☐ R-5					Material:		Axial Type:			
Product Physical Requirements (Test Results)										
Property Test Method				MARV/Design Value		Structural App. Type		Test Method		
Permittivity (sec ⁻¹)						R-1,2,3,4,5		ASTM D4491		
UV Stability (Min. Retained Strength @ 500 hrs.)						R-3		ASTM D4355		
Puncture Strength (lbs)						R-5		ASTM D6241		
Grab Strength (lbs)		Machine Direction						ASTM D4632		
		Cross Direction								
Tear Strength (lbs)		Machine Direction						ASTM D4533		
		Cross Direction								
Apparent Opening Size (A.O.S) mm						R-1,2,3,4,5		ASTM D4751		
Tensile Strength (lbs/ft)	Machine Direction	2% Strain				R-1,3		ASTM D4595		
		5% Strain				R-2,3,4,5				
		10% Strain				R-1,2,3,4,5				
		Ultimate (T _{ult})								
		Strain @ T _{ult}								
	Cross Direction	2% Strain				R-1,3				
		5% Strain				R-2,3,4,5				
		10% Strain				R-1,2,3,4,5				
		Ultimate (T _{ult})								
		Strain @ T _{ult}								
Coefficient of Direct Sliding, C _{ds} (dim.)						R-1,2		ASTM D5321		
Coefficient of Interaction, C _i (dim.)						R-3		ASTM D6706		
Scale Correction Factor, α (dim.)						R-3				
Creep Resistance -T _{creep} (lbs/ft)		Machine Direction				R-2,3		ASTM D5262		
		Cross Direction								
Creep Reduction Factor (T _{ult} /T _{creep})								--		
Installation Damage (RF _{ID})		Sand				R-2,3,4		AASHTO R69		
		Limestone								
Durability (RF _D)		Chemical								
		Biological								
Joint Strength (RF _j)		Mechanical				R-2,3		GRI: GT7		
		Sewn						ASTM D4884		
Limitations/Notes				Structural Application						
				Type	Description					
				R-1	Geosynthetic Reinforced Soil (GRS-IBS)					
				R-2	Reinforcement of foundations over soft soils (FDM Ch.263)					
				R-3	Reinforced Soil Slopes (FDM, Ch.263)					
				R-4	Reinforced Embankment (SFH, App. E)					
				R-5	Construction Expedient					