

Structural Geogrid - 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:
Specs 985 Physical Requirements (Test Results)					
Property Test Method		MARV/Design Value	Structural App. Type		Test Method
UV Stability (Min. Retained Strength @ 500 hrs.)			R-3		ASTM D4355
Aperture Size MD x XD (in x in)			R-1,2,3,4,5		-
Tensile Strength (lbs/ft)	Machine Direction	2% Strain		R-1,3	ASTM D6637
		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: GG4(a) & GG4(b)	
	Sewn				
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		