



TERRAGRID 90

Geogrids

TerraGrid geogrids are made up of woven high tenacity polyester and coated with a polyvinyl chloride (PVC) coating. TerraGrid geogrids non-biodegradable and resistant to most soil chemicals, acids, and alkalis with a pH range of 3 to 12. TerraGrid 90 is manufactured to meet or exceed the following machine direction roll value requirements.

		English		Metric	
		<u>lbs/ft</u>		<u>kN/m</u>	
Tensile Properties					
Ultimate Strength	ASTM D 6637	T_{ult}	8,500	124.5	
Ultimate Strain at Failure	ASTM D 6637	ϵ_{ult}	15.0%	15.0%	
Creep Reduced Strength	ASTM D 5262	T_I	4,774	69.9	
Design Strength Properties					
Creep Reduction Factor	NCMA '97	RF_{CR}	1.55	1.55	
Aging / Durability Reduction Factor	NCMA '97	RF_D	1.10	1.10	
Installation Damage Reduction Factor	NCMA '97				
Soil Type 1	100mm Max, 30mm D_{50} , $PI < 6$	RF_{ID}	1.50	1.50	
Soil Type 2	20mm Max, 0.7mm D_{50} , $PI < 6$	RF_{ID}	1.05	1.05	
Soil Type 3	20mm Max, 0.1-0.5mm D_{50} , $PI < 20$	RF_{ID}	1.05	1.05	
Long Term Design Strength					
	NCMA '97		<u>lbs/ft</u>	<u>kN/m</u>	
$T_{ult} / (RF_{ID} \text{ for Soil Type 1 } \times RF_D \times RF_{CR})$		LTDS	3,323	47.2	
$T_{ult} / (RF_{ID} \text{ for Soil Type 2 } \times RF_D \times RF_{CR})$		LTDS	4,747	69.5	
$T_{ult} / (RF_{ID} \text{ for Soil Type 3 } \times RF_D \times RF_{CR})$		LTDS	4,747	69.5	
Design Interaction Properties					
Coefficient of Interaction		GRI – GG5			
Soil Type 1	100mm Max, 30mm D_{50} , $PI < 6$	C_I	0.75	0.75	
Soil Type 2	20mm Max, 0.7mm D_{50} , $PI < 6$	C_I	0.85	0.85	
Soil Type 3	20mm Max, 0.1-0.5mm D_{50} , $PI < 20$	C_I	0.80	0.80	
Coefficient of Direct Sliding		ASTM D-5321			
Soil Type 1	100mm Max, 30mm D_{50} , $PI < 6$	C_{ds}	0.65	0.65	
Soil Type 2	20mm Max, 0.7mm D_{50} , $PI < 6$	C_{ds}	0.90	0.90	
Soil Type 3	20mm Max, 0.1-0.5mm D_{50} , $PI < 20$	C_{ds}	0.85	0.85	
Physical Properties					
Aperture			.79in X .98 in	21mm x 25mm	
Roll Size			12 ft X 150 ft	3.66 m X 45.7m	

7/01/08 NCMA

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