



TERRAGRID 20

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 20 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}	1,940	28.4
Ultimate Strain at Failure	ASTM D 6637	ϵ_{ult}	14.4%	14.0%
Creep Reduced Strength	ASTM D 5262	T_I	1,269	18.6
Design Strength Properties				
Creep Reduction Factor	NCMA 97	RF_{CR}	1.54	1.54
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}	1.73	1.73
Soil Type 2	20mm Max, 0.7mm D_{50} , $PI < 6$	RF_{ID}	1.10	1.10
Soil Type 3	20mm Max, 0.1-0.5mm D_{50} , $PI < 20$	RF_{ID}	1.10	1.10
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	662	9.7
$T_{ult} / (RF_{ID} \text{ for Soil Type 2 } \times RF_D \times RF_{CR})$		LTDS	1,041	15.2
$T_{ult} / (RF_{ID} \text{ for Soil Type 3 } \times RF_D \times RF_{CR})$		LTDS	1,041	15.2
Design Interaction Properties				
Coefficient of Interaction		GRI-GG5 '91		
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	0.80	0.80
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}	0.70	0.70
Soil Type 2	20mm Max, 0.7mm D_{50} , $PI < 6$	C_{ds}	0.80	0.80
Soil Type 3	20mm Max, 0.1-0.5mm D_{50} , $PI < 20$	C_{ds}	0.80	0.80
Physical Properties				
Aperture			.98in X .79in	25mm x 20mm
Roll Size			12 ft X 150 ft	3.66 m X 45.7m

7/01/08 NCMA

815 Buxton Street Winston Salem, NC 27101
 888 - 239 - 4539 • Fax: 336 - 747 - 1652
 www.hanesgeo.com info@hanesgeo.com