



TERRAGRID 110

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 110 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}	10,250	149.6
Ultimate Strain at Failure	ASTM D 6637	ϵ_{ult}	17.0%	17.0%
Creep Reduced Strength	ASTM D 5262	T_I	6,500	94.9
Design Strength Properties				
Creep Reduction Factor	NCMA '97	RF_{CR}	1.57	1.57
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}	1.40	1.40
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	4,089	59.7
$T_{ult} / (RF_{ID} \text{ for Soil Type 2 } \times RF_D \times RF_{CR})$		LTDS	5,653	82.5
$T_{ult} / (RF_{ID} \text{ for Soil Type 3 } \times RF_D \times RF_{CR})$		LTDS	5,653	82.5
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

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