



GeoGrid Product Data

FaceGrid™

HP Polyester GeoGrid Styles

Materials	Symbol	Test Method	MG100		HP200		HP300		HP500		HP600		
			kN/m	lbf/ft	kN/m	lbf/ft	kN/m	lbf/ft	kN/m	lbf/ft	kN/m	lbf/ft	
Polymer	—	—	PET/PET		PET/PET		PET/PET		PET/PET		PET/PET		
Coating	—	—	PVC		PVC		PVC		PVC		PVC		
Tensile Properties			kN/m		kN/m		kN/m		kN/m		kN/m		
MD-Ultimate Strength ¹	T _{ULT}	ASTM D 6637	21.6	1480	50.2	3437	70.3	4815	117.1	8025	128.6	8809	
MD-Creep Limited Strength	T _L	ASTM D 5262	13.5	925	32.4	2217	45.3	3106	75.6	5177	82.9	5683	
CMD-Ultimate Strength ¹	T _{ULT}	ASTM D 6637	21.4	1465	29.2	2000	29.2	2000	29.2	2000	29.2	2000	
Reduction Factors													
Creep Reduction Factor	RF _{CR}	ASTM D 5262	1.60	1.60	1.55	1.55	1.55	1.55	1.55	1.55	1.55	1.55	
Durability Reduction Factor (3 < pH < 9)	RF _D	ASTM D 2455	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	
Installation Damage Reduction Factor	RF _{ID}	ASTM D 5818											
Soil Type 1 (Sand, Silt & Clay, D50<6mm)			1.2	1.2	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	
Soil Type 2 (0.75" minus angular aggregate, D50<6mm)			1.30	1.30	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	
Soil Type 3 (1.5" minus angular aggregate, D50<20mm)			1.40	1.40	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	
Design Strength Properties			kN/m		kN/m		kN/m		kN/m		kN/m		
Long Term Design Strength ²	LTDS	—											
T _{ULT} / RF for Soil Type 1			10.2	701	28.0	1920	39.3	2690	65.4	4483	71.8	4921	
T _{ULT} / RF for Soil Type 2			9.4	647	26.7	1833	37.5	2567	62.4	4279	68.5	4697	
T _{ULT} / RF for Soil Type 3			8.8	601	23.5	1613	33.0	2259	55.0	3765	60.3	4133	
Design Interaction Properties													
Coefficient of Interaction	C _i	ASTM D 6706											
Soil Type 1			0.6 - 0.7		0.7 - 0.8		0.7 - 0.8		0.7 - 0.8		0.7 - 0.8		
Soil Type 2			0.7 - 0.8		0.8 - 0.9		0.8 - 0.9		0.8 - 0.9		0.8 - 0.9		
Soil Type 3			0.9 - 1.1		0.9 - 1.0		0.9 - 1.0		0.9 - 1.0		0.9 - 1.0		
Coefficient of Direct Sliding	C _{ds}	ASTM D 5321											
Soil Type 1			0.7		0.7		0.7		0.7		0.7		
Soil Type 2			0.8		0.8		0.8		0.8		0.8		
Soil Type 3			0.9		0.9		0.9		0.9		0.9		
Scale Correction Factor	α		—		—		—		—		—		
Physical Properties	Units		Test Method		SI	US	SI	US	SI	US	SI	US	
	SI	US											
MD-Aperture Size	mm	in	Measured	2.54	0.10	21.59	0.85	21.59	0.85	20.32	0.80	20.32	0.80
CMD-Aperture Size	mm	in	Measured	2.54	0.10	20.83	0.82	20.32	0.80	19.05	0.75	18.29	0.72
Packaging													
Roll Width	m	ft	Measured	2.9	9.5	2.5	8.2	2.5	8.2	2.5	8.2	2.0	6.56
Roll Length	m	ft	Measured	72.2	237	67.0	220.0	67.0	220.0	67.0	220.0	83.8	275.0
Area Per Roll	m ²	yd ²	Measured	209.2	250.2	167.5	200.3	167.5	200.3	167.5	200.3	167.5	200.3
Weight Per Roll	kgs	lbs	Measured	57.5	127	56.0	122.0	61.0	134.0	61.0	189.0	100.0	221.0

¹ The values reported are calculated as the mean value minus two standard deviations. Statistically, the values yield a 97.7% degree of confidence that any sample of fabric tested will exceed the value reported.

² Long Term Design Strength is LTDS or TAL = T_{ULT} / (RF_{CR} x RF_{ID} x RD).