

# ACEGrid®

## High Performance, Woven Uniaxial, Durable Coated, PET Reinforcement Geogrid



### ACEGrid® Grades - additional grades to 1,000kN/m UTS are available

Mechanical Properties	Test Method	Units	GG40	GG60	GG80	GG100	GG120	GG150	GG200	GG300	GG400
Mean Ultimate Tensile Strength MD	ISO 10319	kN/m	45	70	90	110	130	165	215	320	420
Characteristic Ultimate Tensile Strength MD (95% confidence level [mean-0.83SD])	ISO 10319	kN/m	42	65	84	106	121	157	206	308	408
Strain at Short Term UTS MD	ISO 10319	%	10	10	10	10	10	10	10	10	10
<b>Partial Factor - Creep Rupture - fc</b>											
at 10 years design life			1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37	1.37
at 60 years design life			1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41
at 120 years design life			1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43	1.43
<b>Creep Limited Strength MD</b>											
at 10 years design life		kN/m	31	47	61	77	88	115	150	225	298
at 60 years design life		kN/m	30	46	60	75	86	111	146	218	289
at 120 years design life		kN/m	29	45	59	74	85	110	144	215	285
<b>Partial Factor - Construction Damage - fd</b>											
In coarse gravel less than 50mm			1.1	1.1	1.1	1.1	1.1	1.1	1.05	1.05	1.05
<b>Partial Factor - Environmental 2&lt; pH&lt;10 - fe</b>											
not exceeding 10 years design life			1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01	1.01
at 60 years design life			1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
at 120 years design life			1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05
<b>Long Term Design Strength (LTDS) MD . (Characteristic 95% confidence values) - td.</b>											
In soil type coarse gravels less than 50mm (other partial factors will be applicable for other soil gradings).											
at 10 years design life		kN/m	28	43	56	70	80	104	143	212	281
at 60 years design life		kN/m	26	41	53	66	76	98	135	201	267
at 120 years design life		kN/m	25	39	51	64	73	95	131	195	258
<b>Typical Physical Properties</b>											
	Nominal Roll Size (Width x Length)	m x m	4x50	4x50	4x50	4x50	4x50	4x50	4x50	3.9x50	3.9x50
	<i>Bespoke lengths &amp; widths to 5m options are available from the factory subject to production lead time</i>										
	Nominal Roll Mass	kg	55	60	65	80	95	108	140	210	280

ACEGrid® is a registered trademark of ACE Geosynthetics of Taiwan.

ACEGrid® is manufactured by ACE Geosynthetics under ISO Certified Quality procedures and tested to international standards through accredited in-house laboratory and independent third party accredited laboratories. ACE hold BBA and CE mark approvals for ACEGrid®.

ACEGrid® is manufactured using high molecular weight PET yarns with Mn>30,000 and a Carboxyl End Group, CEG of <14 mmol/kg. ACEGrid® uses a highly durable polymer coating which reduces installation damage, UV degradation and handling is made safe and clean compared to bituminous type coatings. All CD strengths are 30kN/m for ACEGrid® grades up to and including GG200 and thereafter CD strengths are 50kN/m.

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