



ACEGrid® GG-Series is woven by high-tenacity, multifilament polyester yarns and coated with durable polymer which provides the best resistance of UV and durability. ACEGrid® GG-Series provides a wide range of strength with high quality advantages - high tensile modulus and low creep behaviors etc. ACEGrid® GG-Series is suitable to stabilize the earth structures, such as MSE Wall or Steep Slope, Road, Bridge or Pavement Construction.

## Product Properties

Physical Properties	Test Method	Unit	GG30-I	GG40-I	GG60-I	GG80-I	GG100-I	GG150-I	GG200-I	GG300-I	GG400-I	GG600-I	GG800-I
<b>Material</b>													
High Tenacity Polyester Yarns Coated with Durable Polymer													
Aperture Size - MD ± 20%		mm (inch)	25 (1.0)	25 (1.0)	24 (0.9)	23 (0.9)	21 (0.8)	20 (0.8)	19 (0.7)	26 (1.0)	23 (0.9)	40 (1.6)	18 (0.7)
Aperture Size - CD ± 20%		mm (inch)	28 (1.1)	28 (1.1)	28 (1.1)	28 (1.1)	28 (1.1)	28 (1.1)	28 (1.1)	28 (1.1)	26 (1.0)	15 (0.6)	24 (0.9)
<b>PET Yarn Properties</b>													
Carboxyl End Group (CEG)	GRI GG7	mmol/kg	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30
Molecular Weight	GRI GG8	Mn	>25000	>25000	>25000	>25000	>25000	>25000	>25000	>25000	>25000	>25000	>25000
<b>Mechanical Index Properties</b>													
Tensile Strength , $T_{ult}$ - MD min	ASTM D6637 ISO 10319	kN/m (lb/ft)	30 (2053)	40 (2737)	60 (4106)	80 (5475)	100 (6844)	150 (10266)	200 (13687)	300 (20531)	400 (27375)	600 (41062)	800 (54749)
Tensile Strength , $T_{ult}$ - CD min	ASTM D6637 ISO 10319	kN/m (lb/ft)	30 (2053)	30 (2053)	30 (2053)	30 (2053)	30 (2053)	30 (2053)	30 (2053)	30 (2053)	50 (3422)	100 (6844)	100 (6844)
Elongation - MD	ASTM D6637 ISO 10319	%	10	10	10	10	10	10	10	12	13	14	16
Tensile Strength at 5% Strain- MD min	ASTM D6637 ISO 10319	kN/m (lb/ft)	15 (1027)	20 (1369)	30 (2053)	40 (2737)	50 (3422)	75 (5133)	100 (6844)	120 (8212)	160 (10950)	180 (12319)	240 (16425)
Long Term Design Strength , $T_{al}^2$	FHWA NHI 00-043	kN/m (lb/ft)	18 (1232)	24 (1642)	36 (2464)	48 (3285)	60 (4106)	91 (6228)	121 (8281)	182 (12456)	243 (16630)	364 (24911)	486 (33260)
<b>Dimensional Characteristics</b>													
Width		m (yd)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)	3.9 (4.3)
Length		m (yd)	50/100 (55/109)	50/100 (55/109)	50/100 (55/109)	50/100 (55/109)	50/100 (55/109)	50/100 (55/109)	50/100 (55/109)	50/100 (55/109)	50 (55)	50 (55)	50 (55)

Note.

1. ACEGrid® uniaxial geogrid is available in range from 20kN/m to 1000kN/m, and the maximum width is up to 5m.
2. LTDS (Long-Term Design Strength) of ACEGrid® is calculated based on FHWA-NHI-00-043. The long-term design strength is determined by compounding the reduction factors for creep, installation damage, and environmental effects.
3. The values given are indicative and correspond to MARV obtained in ACE laboratory. The right is reserved to make changes without notice.

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Thank you for your interests in our products,  
We can customize the product to fulfill different project requirement. If you require more detail information,  
please feel free to contact us directly at [sales@geoace.com](mailto:sales@geoace.com).  
We'll be pleased to provide our best assistance.

**Accurate, Collaborative, Efficient**

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