



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 |
|---|-------------------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------|-------------|-------------|
| Material | | | | | | | | | | | | | |
| 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) |
| PET Yarn Properties | | | | | | | | | | | | | |
| 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 |
| Mechanical Index Properties | | | | | | | | | | | | | |
| 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) |
| Dimensional Characteristics | | | | | | | | | | | | | |
| 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.
4. An asterisk (*) appearing in this data sheet indicates that product is accredited by BBA. Please contact ACE Geosynthetics for the corresponding values accredited by BBA.

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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.
We'll be pleased to provide our best assistance.

Accurate, Collaborative, Efficient

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