

GeoGrid Product Data

Geostar soil reinforcement geogrids are proudly made in the USA and are composed of high molecular weight, high tenacity multifilament polyester yarns and coated with PVC. They are inert to biological degradation and are resistant to naturally encountered chemicals, alkalies, and acids.

| Materials | Symbol | Test Method | MG100 | HP100 | HP200 | HP300 | HP500 | HP700 | HP1000 |
|-----------|--------|-------------|---------|---------|---------|---------|---------|---------|---------|
| Polymer | - | - | PET/PET | PET/PET | PET/PET | PET/PET | PET/PET | PET/PET | PET/PET |
| Coating | - | - | PVC | PVC | PVC | PVC | PVC | PVC | PVC |

| Tensile Properties | | | MG100 | HP100 | HP200 | HP300 | HP500 | HP700 | HP1000 |
|---------------------------|------------------|----------------------|-------|-------|-------|-------|-------|--------|--------|
| MD-Ultimate Strength | T _{ULT} | ASTM D 6637 (lbs/ft) | 1,680 | 2,014 | 3,588 | 4,991 | 7,681 | 10,340 | 20,510 |
| MD-Creep Limited Strength | T _L | ASTM D 5262 (lbs/ft) | 1,076 | 1,337 | 2,376 | 3,301 | 5,004 | 6,832 | 13,605 |

| Reduction Factors | | | MG100 | HP100 | HP200 | HP300 | HP500 | HP700 | HP1000 |
|--|------------------|-------------|-------|-------|-------|-------|-------|-------|--------|
| Creep Reduction Factor | RF _{CR} | ASTM D 5262 | 1.51 | 1.51 | 1.51 | 1.51 | 1.51 | 1.51 | 1.51 |
| Durability Reduction Factor | RF _D | ASTM D 2455 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 | 1.10 |
| Installation Damage Reduction Factor (Soil Type 3) | RF _{ID} | ASTM D 2455 | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 | 1.05 |

| Design Strength Properties | | | MG100 | HP100 | HP200 | HP300 | HP500 | HP700 | HP1000 |
|----------------------------|------|------------------|-------|-------|-------|-------|-------|-------|--------|
| Long Term Design Strength | LTDS | NCMA 97 (lbs/ft) | 963 | 1,155 | 2,057 | 2,862 | 4,404 | 5,929 | 11,760 |

| Physical Properties | | Units | MG100 | HP100 | HP200 | HP300 | HP500 | HP700 | HP1000 |
|---------------------|---|-----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Aperture | - | in | .08 x .08 | 1.0 x 0.8 | 0.8 x 1.0 | 0.8 x 1.0 | 0.8 x 1.0 | 0.6 x 1.0 | 0.4 x 1.0 |
| Weight | - | lbs | 61 | 46 / 92 | 46 / 92 | 62 / 116 | 73 / 147 | - / 199 | - / 275 |
| Length | - | ft | 150' | 150' | 150' | 150' | 150' | 150' | 150' |
| Width | - | ft | 8' | 6' / 12' | 6' / 12' | 6' / 12' | 6' / 12' | - / 12' | - / 12' |
| Area | - | yd ² | 133 | 100 / 200 | 100 / 200 | 100 / 200 | 100 / 200 | - / 200 | - / 200 |

Note: Higher strength and custom sizing available upon request.

Updated as of July 2020

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