



## Biaxial Geogrid 40/40 kN/m - 3.95m X 100m

SKU: BG40/40B

The HEIGER Biaxial Geogrid is a firm, biaxial geogrid frequently employed in bolstering subgrade, stabilizing rocks, and managing erosion.

HEIGER Geogrids serve as robust biaxial geogrid solutions extensively applied for reinforcing subgrades, stabilizing rocks, and mitigating erosion. They offer a variety of strengths while upholding consistent isotropic tensile capabilities.

### Chemical Properties

HEIGER Geogrids, composed of polypropylene, demonstrate resilience against all chemical agents typically encountered in soil, including acids, alkalis, and salts. Being non-nutritive, they remain unaffected by soil microorganisms.

### Advantages of HEIGER GEOGRIDS:

- Load distribution that minimizes stress concentration on the soil.
- Structural features like junctions, rigid ribs, and thick walls that enhance aggregate locking, thereby boosting shear resistance.
- When subjected to vertical loads, the ribs restrain aggregate, reducing lateral deformation.
- Long-term deformation (creep) is minimized.
- Improved load distribution and enhanced bearing capacity.
- Effective control over differential settlement.

### What is the difference between Geogrids & Geotextiles?

Rigid geogrids exhibit distinct behavior compared to woven and non-woven geotextiles. While geotextiles rely on friction to transfer stresses to the soil and lack interlocking mechanisms with aggregate, rigid geogrids with thick ribs offer superior reinforcement. Geotextiles must undergo tension for reinforcement, which often requires substantial deformation and controlled wheel paths. However, this may result in separation being their sole achieved function. Effective stress transmission between soil and geogrids relies on the rigidity and integral junctions of the geogrids. Woven geogrids, although constructed with high-tensile polymer strands, may struggle to achieve this due to their non-integral structure, allowing transversal rib movement along longitudinal ribs without effective interlocking. Appropriately chosen geogrids, combined with angular rock, can alter boundary conditions through mechanisms such as the Confinement Effect (or Lateral Restraint), Load Distribution, and Tension Membrane Effect.

### Specification

tensile-strength:	40 kN/m
tensile-strength-2-strain:	17.5 kN/m
tensile-strength-5-strain:	21 kN/m
junction-efficiency:	>95%
radial-stiffness:	725 kN/m
pitch-size:	38mm
roll-width:	3.95m

**roll-length:** 100m  
**colour:** Black  
**Material:** High Tenacity Polyester (PET)