**Biaxial Geogrid** 





# HSG Geogrid 400/400 kN/m - 5.95 X 50m

SKU: PG400/400A

The HEIGER HSG geogrid, fabricated from robust polyester (PET) yarns with exceptional tenacity, serves to reinforce soils requiring significant tensile strength alongside minimal elongation.

The HEIGER HSG geogrid, made from durable polyester (PET) yarns with exceptional strength, is coated to create a structured grid.

### **Overview:**

HEIGER HSG is utilized in soil reinforcement projects requiring high tensile strength and minimal elongation. The product range spans from 100kN to 1000kN, suitable for addressing complex engineering challenges.

### **Product Properties:**

Product strength and stiffness are influenced by temperature and loading rate or duration. Thus, it's crucial to employ standard tensile testing methods to define temperature and strain rate.

### **Quality Control:**

For quality control tensile testing of HEIGER PET High Strength Grid, the method outlined in International Standard BS EN ISO 10319:1996 is employed. This involves wide-width testing with a specimen width of 200mm, a strain rate of 20% per minute, and a test temperature of 20?C.

### **Applications:**

- Reinforcement of granular soils
- Strengthening embankments
- Supporting retaining structures
- Basal reinforcement
- Constructing piling platforms
- Improving subgrade

### Storage, Handling, Placement, Overlapping, and Installation:

**Storage:** HEIGER HSG must be sheltered from the elements, avoiding damage to the plastic wrapping. Store on pallets away from water, shielded from UV rays by opaque wrapping. **Handling:** HEIGER HSG rolls vary in length from 50m to 100m and widths from 5.0m to 5.3m, with weights ranging from 100kg to 1500kg. Some rolls can be handled manually, while others require lifting equipment. Rolls feature a core suitable for lifting with standard site handling equipment. **Placement:** Install HEIGER HSG on compacted, leveled surfaces without protrusions that could damage the geogrid. Unroll by hand or with machinery, cutting to required lengths. Ensure laying direction aligns with design specifications, as strength is often greater in the roll direction. **Overlapping:** Overlap rolls in the transverse direction for strength transfer, with overlap length in the machine direction determined by the design engineer. **Installation:** As fill is placed, ensure HEIGER HSG lays flat and wrinkle-free, securing it with pins or soil heaps to prevent movement. Sequence of work typically involves grading and compacting fill before laying HEIGER HSG, then repeating for subsequent fill layers.

## Specification

tensile-strength:	400 kN/m
roll-width:	5.95m
roll-length:	50m
colour:	Black
Material:	High Tenacity Polyester (PET)