



## LH800 Geogrid for Earth Reinforcement

### The Engineered Advantage®

New to Tensor's product line, LH800 Geogrid is designed to easily and efficiently reinforce soil slopes (RSS) and segmental block retaining walls (SRWs). It is manufactured using select grades of high-density polyethylene (HDPE) resins that resist elongation, or creep, when subjected to high loads for long periods of time. These geogrids carry tensile loads applied in

For RSS and SRW applications, a geogrid's length is typically between 60 – 80% of the wall or slope height. So, for example, a thirty-foot wall would need approximately 21 ft. of geogrid embedded behind it. For tall structures, like this example, it is impossible to manufacture a geogrid that can be installed parallel with the wall or slope face, while meeting this long embedment length requirement. However, this is not the case for lower height structures, thus the development of Tensor's LH800 Geogrid.

With roll widths up to 13.1 ft., a RSS may be built up to 20 ft. for certain soil conditions. In addition to primary reinforcement, the available 4 ft. wide rolls are ideal for secondary reinforcement. And in situations where 8 ft. or 9 ft. embedment is required, the 13.1 ft. wide roll can be cut in the field and converted to both the primary and secondary material.

With the average segmental retaining wall built to 6 ft. tall, LH800 Geogrid rolls are ideal for most SRW projects. For taller walls, Tensor® Uniaxial (UX) Geogrids are available in various design strengths to maximize design efficiency and meet a variety of strength requirements.

Combine the installation advantages with the durability and stability of HDPE, and LH800 Geogrid will be the first choice for your next earth reinforced grade separation project.



LH800 Geogrid is rolled out parallel with the wall or slope face for easy installation.

one direction (strength across the roll), and their open aperture structure interlocks with natural fill materials for optimum soil/geogrid interaction.

LH800 Geogrid is available in multiple widths, which, when combined with the design strength oriented across the roll, make for quick deployment of the geogrid reinforcement.

### The Installation Advantage

Tensor® LH800 Geogrid is unique to the geogrids on the market today. Unlike most that are installed perpendicular to the face of the wall or slope, LH800 Geogrid is rolled out parallel to the wall or slope face, thus maximizing the coverage of the geogrid and minimizing the amount of cutting required.



Tensor LH800 Geogrid is available in various roll widths.

## LH800 Material Properties

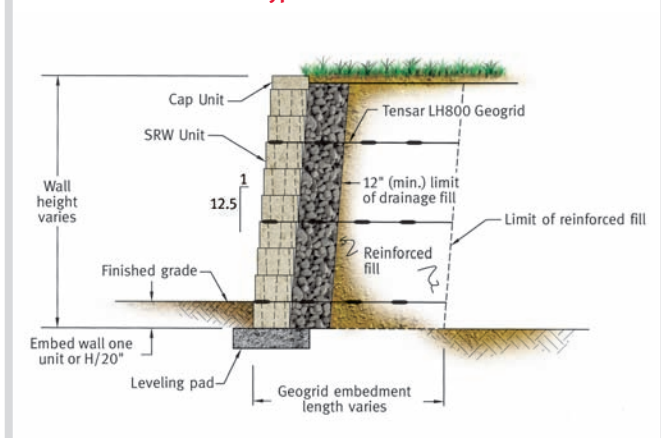
Property	Test Method	LH800
Product Type	—	Integrally Formed Structural Geogrid
Polymer	—	High-Density Polyethylene (HDPE)
Ultimate Tensile Strength	ASTM 6637	35 KN/m (2,400 lbs./ft.)
Resistance to Long-Term Degradation	EPA 9090 Immersion testing	100%
Long-Term Design Strength*	GRI-GG4	13.85 (950 lbs./ft.)

## Product Dimensions

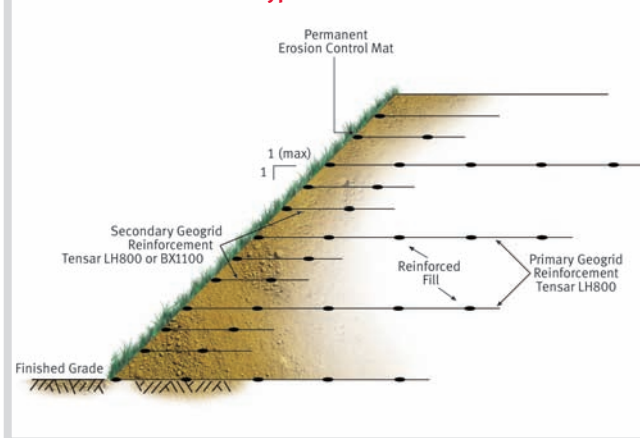
Available Roll Widths	Roll Lengths	Roll Weight
1.2 m (4 ft.)	9.1 m (30 ft.)	10 lbs.
1.8 m (6 ft.)	15.4 m (50 ft.)	27 lbs.
4 m (13.1 ft.)	50 m (164 ft.)	120 lbs.

\*Reduction factors are used to calculate the geogrid strength available for resisting force in long-term load bearing applications. Allowable strength ( $T_{allow}$ ) is determined by reducing the ultimate tensile strength ( $T_{ult}$ ) by reduction factors for installation damage ( $RF_D$ ), creep ( $RF_{CR}$ ) and chemical/biological durability ( $RF_D=RF_{CD} \cdot RF_{BD}$ ) per GRI-GG4 ( $T_{allow}=T_{ult}/(RF_D \cdot RF_{CR} \cdot RF_D)$ ). Recommended minimum reduction factors are based on product-specific testing. Project specifications, standard public agency specifications and/or design code requirements may require higher reduction factors. It is the responsibility of the designer to ensure that appropriate reduction factors are applied. Contact Tensar International Corporation for further recommendations.

**SRW Typical Cross-Section**



**RSS Typical Cross-Section**



## Experience You Can Rely On

Tensar International Corporation, the leader in geosynthetic soil reinforcement, offers a variety of solutions for foundation, retaining wall and roadway projects. Our products and technologies, backed by the most thorough quality assurance practices, are at the forefront of the industry. Highly adaptable, cost-effective and installation friendly, they provide exceptional, long-term performance under the most demanding conditions. Our support services include site evaluation, design consulting and site construction assistance. For innovative solutions to your engineering challenges, rely on the experience, resources and expertise that have set the industry standard for more than two decades.

For more information on the LH800 Geogrid or other Tensar Systems, call 800-TENSAR-1, visit [www.tensar-international.com](http://www.tensar-international.com), or e-mail [info@tensarcorp.com](mailto:info@tensarcorp.com).



**THE COMPANY YOU CAN BUILD ON®**

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