



PACIFIC GEOSOURCE ROCKGRID™

RockGrid™ reinforces aggregate material and stabilizes subgrades. This punched and drawn geogrid has high strength at low strain optimal for stiffness enhancement of aggregate layers in both paved and unpaved surfaces. High aperture stability and tensile strength leads to long-term aggregate layer stability and durability that extends pavement design life and reduces required layer thickness, accelerating project construction and lowering project costs.

Product Type: Integrally formed biaxial geogrid

Polymer: Polypropylene

Load Transfer Mechanism: Positive mechanical interlock

Standard Roll Size: 13 ft x 164 ft (237 SY per roll)

Features /

- Punched and drawn polypropylene
- High strength at low strain for optimal pavement performance
- Confined aggregate interlock for stability and durability
- Resistant to installation damage and long-term degradation

Benefits /

- Lower project costs; reduced aggregate material
- Reduced undercut and fill
- Accelerated project completion
- Extended pavement service life
- Subgrade stabilization
- Reduced carbon footprint

Site Preparation /

Remove debris, stumps, large plant growth, and other deleterious material from the site. The surface should be clean and level as possible. Care should be taken to avoid disturbing any surface crust overlying softer soil. In these cases, the geogrid should be placed directly on the unprepared subgrade.

The fill material selected should be well-graded and angular for best performance.

RockGrid Selection /

Selection of the appropriate biaxial RockGrid is primarily governed by the strength of the sub-grade (often expressed as CBR, MR, or R-Value), the magnitude of the loading, the type of fill material used and the performance required.

RockGrid Placement /

Align RockGrid in position and manually roll the grid over the subgrade material. Geogrid corners may be held with fill material, sandbags, etc. as necessary. RockGrid should be pulled taut to remove any wrinkles or waves.





Figure: Manual placement of RockGrid.

Overlap rolls of RockGrid in the direction that fill will be spread (“shingling”). Overlap the adjacent rolls in accordance with the following guideline.

Soil Type	Field Guide	CBR	Overlap (ft)
Firm	Loaded truck ruts 1-3-in.	> 3	1.0
Soft	Man walking sinks 1-in.	1 - 3	2.0
Very Soft	Man walking sinks 2-3-in.	< 1	3.0

In very soft soil conditions or where construction traffic has potential to disrupt geogrid overlap, adjacent rolls of geogrid can be fixed together with zip ties every 20 feet if deemed necessary by the contractor or engineer.

To accommodate curves, cut and overlap the RockGrid. RockGrid may be cut with sharp shears, knife, or handheld power tool. Gloves should be worn while cutting RockGrid.

Dumping, Spreading Fill /

In general, an initial lift of no less than 6-in is required. Soft soil conditions may require aggregate thickness much greater than 6-in.

Rubber-tired construction equipment can be driven directly on the geogrid at speeds of less than 5 mph. Turns and sudden starts and stops should be avoided.

Over relatively competent subgrades (CBR >2), fill may be dumped over ground that bears its weight and then pushed out over the geogrid. Work from stronger to weaker subgrade areas. The dozer blade should be gradually raised as the fill is pushed out over the geogrid. This will cause much of the fill to roll out onto the geogrid and will reduce stress on the subgrade. Back dump subsequent loads onto the leveled fill and advance forward over the fill by spreading with a dozer and proceed in this cascaded fashion.



Figure: Appropriate spreading of aggregate fill over RockGrid.



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Be aware of the directions of the overlaps of the geogrid, and do not work against the shingle pattern. If the wrinkles or waves develop in the geogrid, they will usually roll forward with the fill and out at the end of the geogrid roll.

Compaction /

The fill material over the geogrid should be well compacted. Standard compaction methods can be used, unless the soils are very soft. In these cases, static rather than vibratory compaction should be used. Compaction is normally accomplished with a light roller and moisture.

