terrafix geosynthetics inc.
Providing Geosynthetic Solutions
455 Horner Ave, Toronto, Ontario M8W 4W9 • Tel: (416) 674-0363 • Fax: (416) 674-1159

Model Specification: 19 kN/m Biaxial Geogrid for Soil Stabilization

1. PRODUCTS

1. Measurement and Payment

1.1. Order and payment for the supply and installation of biaxial geogrid will be measured in square metres (installed, in place) of surface covered by material, by survey method. A required overlap of 10% in order to maintain soil interaction should be considered when material is requisitioned.

1.2. Biaxial geogrid shall be supplied in rolls no less than 3.95m wide x 50m long.

2. Material

2.1. Biaxial Geogrid shall be a drawn and extruded finished single layer sheet made from virgin polypropylene, free of striations, roughness, pinholes, blisters, undispersed raw materials or any other sign of contamination by foreign matter.

2.2. Acceptable product for use is Terrafix TBX2000, or an equivalent biaxial geogrid that meets or exceeds the following minimum physical properties and results:

a) Minimum Aperture size:	Measured	MD:	39mm
		XMD:	39mm
b) Ultimate Tensile Strength:	ASTMD6637	MD:	19.0 kN/m
		XMD:	19.0 kN/m
c) Tensile Strength@ 5% Strain:	ASTMD6637	MD:	14.0 kN/m
		XMD:	14.0 kN/m
d) Junction Strength:	GRI-GG2	MD:	19.0 kN/m
		XMD:	19.0 kN/m
e) Aperture Stability:	A.C.E.	3.4 kg-cm/deg (@ 20kg-cm torque)	
f) Flexural Rigidity:	ASTM D7748	MD:	1,585 g-cm
		XMD:	930 g-cm
g) Multi-Axial Tensile Test	ASTM D5617		
I. Vessel Pressure at Rupture		10.6 psi	
II. Break Resistance Strain		8.3 %	
h) Minimum Carbon Content:	ASTM D4218	2 %	

3. Delivery Storage & Handling

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3.1. During delivery and storage, protect geogrids from excessive heat, direct sunlight for extended periods of time, mud, dirt, dust, rodents and sources of ignition.

4. Installation Recommendations

4.1. Unroll biaxial geogrid manually over the prepared subgrade (for subgrade improvement applications). For base reinforcement applications, the geogrid may be located higher in the pavement section for example, at the mid-point of the aggregate layers. Overlap adjacent and end rolls a minimum of 0.3 m (12") or more, depending on the subgrade strength. It is not necessary to mechanically join rolls together at the overlap joint. In cases of very soft subgrades, plastic cable ties can be used to help maintain the overlap and alignment during placement of granular cover.

4.2. Aggregate fill is typically end-dumped and spread over the geogrid. For competent subgrades it is possible to belly dump directly over the geogrid at very slow speeds. Spreading of the aggregate fill can cause a wave to develop in front of the placement. This will usually dissipate at the end of the roll. If the wave becomes too large, the wave can be cut allowing the two ends to overlap and lay flat. This is acceptable provided that sufficient overlap is accomplished. Do not drive tracked vehicles directly on the geogrid. Where cutting of the geogrid is necessary, it is easily accomplished with a utility knife, circular saw or quick-cut saw.

4.3. Standard compaction practice is used unless soils are very soft. For these cases, it is recommended to use static (non-vibratory) compaction. In addition, compaction requirements are usually reduced for the initial lift.

5. Maintenance

5.1. Once the biaxial geogrid has been installed and the backfill carefully laid and compacted above it, there is no need for ongoing maintenance.

6. Contact Information

6.1. For product information, pricing and availability contact:

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