

Product Data Sheet – Biaxial Geogrid BX1100

Product Type:	Integrally Formed Biaxial Geogrid
Polymer:	Polypropylene
Load Transfer Mechanism:	Positive Mechanical Interlock
Primary Applications:	Subgrade Improvement and Base Stabilization

This product has been tested for quality control purposes in a GAI-LAP accredited laboratory, it is part of the AASHTO SSGEO Product Evaluation and Audit Solutions program (formerly known as NTPEP), and it is made in the USA.

Product Properties

Index Properties	Units	MD Values	XMD Values
• Aperture Dimensions ²	mm (in)	25 (1.0)	33 (1.3)
• Rib Thickness ²	mm (in)	0.76 (0.03)	0.76 (0.03)
• Junction Thickness ²	mm (in)	2.80 (0.11)	2.80 (0.11)
• Minimum True Initial Modulus in Use ³	kN/m (lb/ft)	278 (19,057)	412 (28,246)
• Tensile Strength @2% Strain ³	kN/m (lb/ft)	4.1 (280)	6.6 (450)
• Tensile Strength @5% Strain ³	kN/m (lb/ft)	8.5 (580)	13.4 (920)
• Ultimate Tensile Strength ³	kN/m (lb/ft)	12.4 (850)	19.0 (1,300)
Structural Integrity			
• Junction Efficiency ⁴	%		93
• Overall Flexural Rigidity ⁵	mg-cm		250,000
• Aperture Stability ⁶	m-N/deg		0.32
Durability			
• Resistance to Long Term Degradation ⁷	%		100
• Resistance to UV Degradation ⁸	%		95

Dimensions and Delivery

The biaxial geogrid shall be delivered to the job site in roll form with each roll individually identified and nominally measuring 12.5 feet (3.8 meters) in width and 328 feet (100 meters) in length.

Notes

1. Unless indicated otherwise, values shown are minimum average roll values determined in accordance with ASTM D4759-02.
2. Nominal dimensions.
3. Determined in accordance with ASTM D6637-10 Method A. This product is intended for soil stabilization purposes only. The long-term creep performance of this product has not been characterized, and therefore, it is not suitable for long-term load support applications.
4. Load transfer capability determined in accordance with ASTM D7737-11.
5. Resistance to bending force determined in accordance with ASTM D7748/D7748M-14.
6. Resistance to in-plane rotational movement measured in accordance with ASTM D7864/D7864M-15.
7. Resistance to loss of load capacity or structural integrity when subjected to chemically aggressive environments in accordance with EPA 9090 immersion testing.
8. Resistance to loss of load capacity or structural integrity when subjected to 500 hours of ultraviolet light and aggressive weathering in accordance with ASTM D4355-05.

Tensar reserves the right to change its Product Data Sheet at any time. It is the responsibility of the person specifying the use of this product and of the purchaser to ensure that Product Data Sheet relied upon for procurement purposes are current and that the product is suitable for its intended use in each instance.

