



# ALLIED

## GEOGRID 1100

(TYPE 1)

Allied Geogrid 1500 is engineered polypropylene geogrid designed primarily for use in soil stabilization and reinforcement applications. Manufactured utilizing a distinct punching and drawing process, Allied Geogrids feature high tensile strength and stiffness, superior resistance to construction damage and, a geometry which allows for a strong mechanical interlock with the soil material being reinforced. Allied Geogrid is made from 100% virgin polypropylene and provides superior resistance to UV light degradation. It is unaffected by natural exposure to chemicals, alkalis, acids, and soil micro-organisms.

TYPICAL APPLICATION: Base Reinforcement | Subgrade Stabilization | Soil Reinforcement

MATERIALS CHARACTERISTICS: Polymer – Polypropylene  
Carbon Black Content (> 1 % - ASTM 4218)

MECHANICAL PROPERTIES	TEST METHOD	UNIT	MD	XMD	NOTES
Ultimate Tensile Strength	ASTM D 6637	kN/m	21.4	21.2	a
Tensile Strength @ 2% Strain	ASTM D 6637	kN/m	11.4	11.6	a
Tensile Strength @ 5% Strain	ASTM D 6637	kN/m	19.2	19.8	a

STRUCTURAL INTEGRITY	TEST METHOD	UNIT	DATA	NOTES
Junction Efficiency	GRI GG2	%	> 93	b,c
Flexural Stiffness/Rigidity	ASTM D 1388, mod.	mg-cm	865,378	d
Aperture Stability	COE METHOD	m-N/deg	0.70	b,e

DIMENSIONAL CHARACTERISTICS	UNIT	DATA	NOTES
Aperture Size MD (XMD)	mm	35 x 35	b
Minimum Rib Thickness	cm	01 (.4)	
Roll Size	M (ft)	3.95m x 50m (12.9 ft x 164ft)	b
Roll Area 197	sqM (sqft)	197 (2125)	b

Notes: MD (Machine direction – longitudinal to the roll), XMD (cross machine direction – across the roll).

- a. Minimum Average Roll Value (Marv) calculated as typical minus 2 x Standard deviation.
- b. Typical (Average).
- c. Load transfer capability expressed as a percentage of ultimate tensile strength.
- d. Resistance to bending force calculated as the square root of the product of MD and XMD Flexural Stiffness typical values.
- e. Resistance to in-plane rotational movement..

Seller's and manufacturer's only obligation shall be to replace such quantity of the product proved to be defective. Neither seller nor manufacturer shall be liable for any injury, loss or damage, direct or consequential, arising out of the use or the inability to use the product. Before using, user shall determine the suitability of the product for his/her intended use, and user assumes all risk and liability whatsoever in connection therewith.