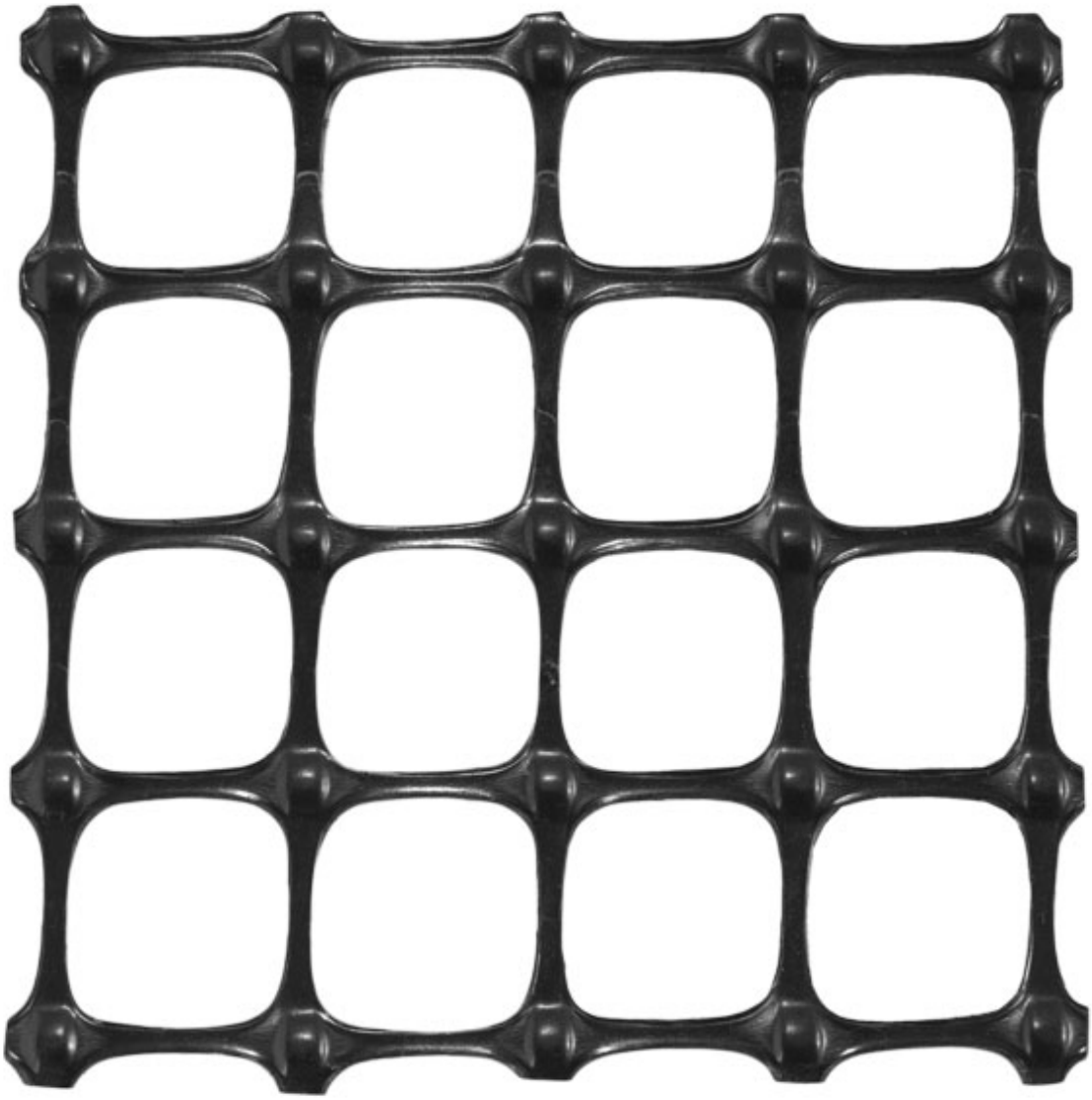
mastaGRID® Poly 20/20kN 3.95m x 50m

Product Images



Short Description

Polyfabrics recommended the mastaGRID® Poly to provide sub-grade reinforcement under the crushed rock pavement, mastaGRID® Poly is a rigid biaxial geogrid commonly used for subgrade reinforcement, rock stabilisation and erosion control.

Description

mastaGRID® Poly is a rigid biaxial geogrid commonly used for subgrade reinforcement, rock stabilisation and

erosion control. It is available in a range of strengths, while maintaining isotropic tensile strengths.

CHEMICAL & BIOLOGICAL RESISTANCE

mastaGRID® Poly is a biaxial geogrid manufactured from polypropylene which is unaffected by all chemicals, including acids, alkalis and salts, normally found in soils. It is not a nutrient, and therefore, unaffected by micro-organisms in soil.

MASTAGRID® POLY PROVIDES THE FOLLOWING BENEFITS:

- Distribution of loads and therefore reduction in stress concentration over the soil
- The geogrid's structural junctions, rigid ribs and thick walls help lock aggregate, increasing its shear resistance
- As a result when a vertical load is applied the aggregate is restrained by the ribs reducing deformation. (Lateral Restraint)
- Decrease in long term deformation (Creep)
- Increase in load distribution. (Bearing Capacity Increase)
- Controls differential settlement

GEOTEXTILES VS RIGID GEOGRIDS

Rigid geogrids behave differently to woven & non-woven geotextiles. Geotextiles transmit stresses to the soil through friction. They do not interlock with the aggregate the same way as a rigid geogrid with the thick ribs. For a geotextile to provide reinforcement it must go into tension (Tension Membrane Effect) and for this to occur it requires large deformation and fixed wheel paths. This is difficult to control and design, as a result the only function it achieves is separation.

The transmission of stress between soil and geogrid is obtainable only if the geogrid is rigid with integral junction. A woven geogrid constructed of high tensile polymer strands, can hardly develop this function, as the structure is not integral and the transversal ribs can move along the longitudinal ribs without developing any interlocking effect. A properly chosen geogrid with angular rock is able to change the boundary conditions through three main mechanisms: (a) Confinement Effect (or Lateral Restraint); (b) Load Distribution and (c) Tension Membrane Effect.

Specifications

Properties	Unit	Unit	20/20	30/30	40/40
Tensile Strength (2)	kN/m	MD TD	20 20	30 30	40 40
Tensile Strength @ 2% Strain	kN/m	MD TD	7.0 7.0	10.5 10.5	17.5 17.5
Tensile Strength @ 5% Strain	kN/m	MD TD	21.0 21.0	14.0 14.0	28.0 28.0
Junction Efficiency (4)	%		>95%	>95%	>95%
Radial Stiffness	kN/m		380	550	725
Typical Dimensions					
Pitch Size	mm	Pmd Ptd	40 40	40 40	38 38
Rib Width	mm	Wmd Wtd	2.3 3.1	2.4 3.7	2.4 1.0

Properties	Unit	Unit	20/20	30/30	40/40
Rib Depth	mm	Wmd Wtd	1.5 0.7	2.4 1.0	3.0 1.0
Standard Roll Sizes (3)			200m2 (3.9m x 50m)	200m2 (3.9m x 50m)	200m2 (3.9m x 50m)

Additional Information

CODE	GGPB2020
U.O.M	Each
Weight	250
Brand	GEOmasta
Colour	Black
Material	Polypropylene
Length	50 m