LAYFIELD GEOSYNTHETICS

TECHNICAL SPECIFICATIONS

QUIKGRID™ BIAXIAL COMPOSITE - GEOGRID

Design and build with confidence; we empower you to achieve cost-effective, proven, engineered solutions. Fueled by an innovative spirit, our industry-leading technology solves the toughest soil stabilization, earth reinforcement, and site development challenges.

The composite nature of the QuikGrid™ makes it easy and fast to install and effective in maintaining the separation of imported granular fill from the fines contained in typical saturated base soils.

Material Properties	April 2023		QuikGrid™ BiAxial Composite - GeoGrid	
	Rev	Test Method	**QUIKGRID™ 30**	**QUIKGRID™ 40**
	GEOGRID		**LBX3030**	**LBX4040**
	Raw Material		PP, Black	PP, Black
	Tensile Strength, MD/TD	ASTM D6637	30 kN/m/30 kN/m	40 kN/m /40 kN/m
	Tensile Strength at 2% Elongation, MD/TD	ASTM D6637	11.0 kN/m /11.0 kN/m	18.0 kN/m /18.0 kN/m
	Tensile Strength at 5% Elongation, MD/TD	ASTM D6637	21.0 kN/m /21.0 kN/m	32.0 kN/m /32.0 kN/m
	Junction Efficiency[1,2], MD/TD	ASTM D7737/D6637	95%	95%
	Flexural Stiffness[3]	ASTM D7748	2,000,000 mg-cm	4,800,000 mg-cm
	Aperture Size, MD/TD		39 mm x 39 mm	39 mm x 39 mm
	GEOTEXTILE		**E200**	**E150**
	Raw Material		Polyester	Polyester
	Mass Per Unit Area	ASTM D5261	200 g/m^2	150 g/m^2
	Tensile Strength MD/TD	ASTM D5035	14.5 kN/m / 12 kN/m	11 kN/m / 9.5 kN/m
	Elongation at Peak MD/TD	ASTM D5035	50 %	50 %

	Grab Tensile Strength MD/TD	ASTM D4632	1030 N / 850 N	740 N / 620 N
	Trapezoidal Tear Strength	MD/TD	365 N / 365 N	300 N / 300 N
	Static Puncture Strength (CBR)	ASTM D6241	2500 N	1800 N
	Apparent Opening Size (AOS)	ASTM D4751	0.19 mm (4)	0.23 mm (4)
	Water Flow Rate		220 l/m^2/Sec	235 l/m^2/Sec
	Roll Dimensions (m)		**3.95 m x 50 m**	**3.95 m x 50 m**

(1) Expressed as a comparison of ASTM D7737 strength to ASTM D6637 strength of the same sample.
(2) ASTM D7737 performed at 10% per minute strain rate.
(3) Using specimens 2 ribs wide with ribs transverse to the specimen cut flush with the exterior edges of the ribs in the direction of the specimen.
(4) Typical value.
Unless indicated otherwise, values shown are typical roll values based on manufacturers laboratory testing @ 21+/- 1 Degree C
Layfied reserves the right to change this product specification at any time. The user is responsible to verify use/reference of the latest Product Data Sheet

INSTALLATION

The subgrade should be cleared of all vegetation and proof rolled. However, on very soft ground or muskeg, cut vegetation flush with the ground and remove all woody bushes, shrubs and large rocks. The surface of the subgrade should be levelled, and depressions or humps greater than 15 cm (6 in) should be graded out. The biaxial geogrid shall be placed directly on the prepared subgrade. It should be rolled out flat and tight with no folds. Adjacent rolls should be overlapped as a function of subgrade strength and to allow for product continuity once backfilled. For CBR 3.0 and above 20 cm (8 in) to 30 cm (12 in); for CBR 1.0 to 3.0 45 cm (18 in) to 90 cm (36 in) for CBR 1.0 or lower, please contact one of our technical specialists for installation and application recommendations. Care should be taken to ensure that the overlaps are maintained during fill placement. Should a mechanical joint be required then please consult the manufacturer for further details or refer to and follow project specific requirements in the plans, specifications and tender documents.