STRATAGRID®

HIGH STRENGTH PET GEOGRID

TECHNICAL DATASHEET	G 077 004
ISSUE NUMBER	03
DATE	JUNE 2023

StrataGrid is a geogrid made with high tenacity PET yarns. It is especially designed for reinforcement of walls, slopes and embankments on soft soils, road foundations, and supporting structures, fills and slopes.

MD = Machine direction and CD = Cross direction
Tensile Strength MD MARV can be verified with batch test data for every project
Tensile Strengths which fall between those listed may also be used with the appropriate reduction factors listed here calculated as follows
Tensile Strength MD / (RFCR*RFID*RFD) Contact Cirtex Industries Ltd to verify calculations 0800 247 839

PROPERTY	STANDARD	UNIT	SGU40	SGU60	SGU80	SGU100	SGU120	SGU150	SGU180	SGU210	SGU300	SGU400
MECHANICAL PROPERTIES												
Tensile Strength MD MARV	ASTM D6637-B	kN/m	40	60	80	100	120	150	180	210	300	400
Tensile Strength CD MARV	ASTM D6637-B	kN/m	20	20	30	30	30	30	30	30	30	30
Elongation at designated strength (+/-2%)		%	10	10	10	10	10	10	10	11	11	11
Reduction Factor CR - Creep Rupture @ 20° C 114 year design life			1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39	1.39
Reduction Factor ID - Installation damage												
Silty Sand ≤ 4.75mm			1.1	1.1	1.02	1.02	1.02	1.02	1.02	1.06	1.06	1.06
Gravelly Sand ≤ 10mm			1.12	1.12	1.06	1.06	1.04	1.04	1.04	1.1	1.1	1.1
Aggregate < 75mm			1.19	1.19	1.16	1.16	1.11	1.11	1.11	1.1	1.1	1.1
Reduction Factor D - Durability pH 4 - 9* for 100 year design life			1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
Long Term Design Strength in Silty Sand 100 years design life		kN/m	23.8	35.7	51.3	64.1	76.9	96.2	115.4	129.57	185.1	246.8
Long Term Design Strength in Gravelly Sand 100 years design life		kN/m	23.4	35	49.4	61.7	75.5	94.3	113.2	124.86	178.4	237.8
Long Term Design Strength in Aggregates < 75mm 100 years design life		kN/m	22.0	33	45.1	56.4	70.7	88.4	106.1	124.86	178.4	237.8

*These reduction factors assume 100 years at a constant pH. Degradation of PET is a function of a number of factors including time, temperature, presence of water and pH level. StrataGrid may be used in higher pH applications with an applicable reduction factor approved by the design engineer, taking into account site specific conditions.

This product has been manufactured under the controls established by a Bureau Veritas certification approved management system that conforms with ISO 9001:2015. Bureau Veritas Certification certificate number NZ001832-2

ISO 9001
BUREAU VERITAS Certification

Cirtex Industries Ltd and Strata India are ISO 9001 Quality Certified Suppliers

0800 CIRTEX (247 839) | WWW.CIRTEX.CO.NZ

CIRTEX
GAIN MORE GROUND