STRATAGRID®

HIGH STRENGTH PET GEOGRID

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	SGU200	SGU300	SGU400
MECHANICAL PROPERTIES												
Tensile Strength MD MARV Tensile Strength CD MARV Elongation at designated strength (+/-2%)	ASTM D6637-B ASTM D6637-B	kN/m kN/m %	40 20 10	60 20 10	80 30 10	100 30 10	120 30 10	150 30 10	180 30 10	200 30 11	300 30 11	400 30 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 Gravelly Sand ≤ 10mm Aggregate < 75mm			1.1 1.12 1.19	1.1 1.12 1.19	1.02 1.06 1.16	1.02 1.06 1.16	1.02 1.04 1.11	1.02 1.04 1.11	1.02 1.04 1.11	1.06 1.1 1.1	1.06 1.1 1.1	1.06 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	123.4	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	118.9	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	118.9	178.4	237.8

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*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.

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

Controls established by Bureau Veritas certification approved management system that conforms with ISO 9001:2015.

Bureau Veritas Certification certificate number NZ 001784-1





TECHNICAL DATASHEET

ISSUE NUMBER

DATE

G 007 005

SEPTEMBER 2021

02