

StrataGrid SG150

Stratagrid is a geogrid soil reinforcement. These high performance geogrids are constructed of high molecular weight and high tenacity knitted polyester yarns with a polymer coating. Stratagrid is engineered to be mechanically and chemically durable, in both the harsh construction installation phase and in aggressive soil environments .

		Test Method	Unit	StrataGrid SG150	
Mechanical Properties					
Nominal Tensile Strength (T _{NOM})	MD	EN ISO 10319	kN/m	40.0	
	CD	EN ISO 10319	kN/m	25.0	
Nominal Elongation at Break MD	MD	EN ISO 10319	%	15	
	CD	EN ISO 10319	%	15	
Characteristic Tensile Strength (T _{CHAR}) MD	MD	EN ISO 10319	kN/m	30	
	CD	EN ISO 10319	kN/m	20	
Creep Reduction Factor (RF _{CR}) at 60 years design life		ISO EN 20432	-	1.43	
Creep Reduction Factor (RF _{CR}) at 120 years design life		ISO EN 20432	-	1.46	
Creep Limited Strength at 60 years design life		-	kN/m	21.0	
Creep Limited Strength at 120 years design life		-	kN/m	20.5	
Partial Factor - Construction damage (RF _{ID})		BBA Procedures with BBA Compliant Soils			
Type BBA3 - Silty Sand (9.5mm minus, D ₅₀ ≤ 1mm)		-	-	1.10	
Type BBA2 - Sandy Gravel (19mm minus, D ₅₀ ≤ 2mm)		-	-	1.10	
Type BBA1 - Gravel (75mm minus, D ₅₀ ≤ 12mm)		-	-	1.35	
Partial Factor - Environmental Effects Environment, 4 ≤ pH ≤ 8 at 60 or 120 years design life		ISO EN 20432			
Chemical and Biological, RF _{CH}		-	-	1.20	
U.V. Weathering, RF _W		-	-	1.25	
Maximum Exposure Time (Uncovered) During Installation		-	-	2 Weeks	
Long term design strengths (T _D) at 60 years design life		ISO EN 20432			
Type BBA3 - Silty Sand (9.5mm minus, D ₅₀ ≤ 1mm)		-	kN/m	12.7	
Type BBA2 - Sandy Gravel (19mm minus, D ₅₀ ≤ 2mm)		-	kN/m	12.7	
Type BBA1 - Gravel (75mm minus, D ₅₀ ≤ 12mm)		-	kN/m	10.4	
Long term design strengths (T _D) at 120 years design life		EN ISO 20432			
Type BBA3 - Silty Sand (9.5mm minus, D ₅₀ ≤ 1mm)		-	kN/m	12.5	
Type BBA2 - Sandy Gravel (19mm minus, D ₅₀ ≤ 2mm)		-	kN/m	12.5	
Type BBA1 - Gravel (75mm minus, D ₅₀ ≤ 12mm)		-	kN/m	10.1	
Grid Aperture Sizes				Value	Tolerance
Grid Aperture MD		-	mm	24.1	± 1
Grid Aperture CD		-	mm	22.8	± 1
Standard Products				Value	
Roll Width		-	m	1.9	
Roll Length		-	m	100	

Notes:

- MD = Machine Direction
- CD = Cross Direction
- Reported ultimate tensile strengths (T_{NOM}) are average values obtained in accredited testing laboratories.
- $T_{CAR} = T_{NOM} - 2 \times \text{Standard Deviation}$
- $TD = TCAR / (RF_{CR} \times RF_{ID} \times RF_W \times RF_{CH})$

This information corresponds to our current knowledge on the subject. It is offered solely to provide possible suggestions for your own experimentation. It is not intended, however, to substitute for any testing you may need to conduct to determine for yourself the suitability of our products for your particular purposes. This information may be subject to revision as new knowledge becomes available. Since we cannot anticipate all variations in actual end use conditions, Geosynthetics Limited makes no warranties and assumes no liabilities in connection with this information. Nothing in this publication is to be considered as a licence to operate under or a recommendation to infringe any patent right.



StrataGrid SG200

Stratagrid is a geogrid soil reinforcement. These high performance geogrids are constructed of high molecular weight and high tenacity knitted polyester yarns with a polymer coating. Stratagrid is engineered to be mechanically and chemically durable, in both the harsh construction installation phase and in aggressive soil environments .

		Test Method	Unit	StrataGrid SG200	
Mechanical Properties					
Nominal Tensile Strength (T _{NOM})	MD	EN ISO 10319	kN/m	64.0	
	CD	EN ISO 10319	kN/m	27	
Nominal Elongation at Break	MD	EN ISO 10319	%	15	
	CD	EN ISO 10319	%	15	
Characteristic Tensile Strength (T _{CHAR})	MD	EN ISO 10319	kN/m	52.5	
	CD	EN ISO 10319	kN/m	20	
Creep Reduction Factor (RF _{CR}) at 60 years design life		ISO EN 20432	-	1.43	
Creep Reduction Factor (RF _{CR}) at 120 years design life		ISO EN 20432	-	1.46	
Creep Limited Strength at 60 years design life		-	kN/m	36.7	
Creep Limited Strength at 120 years design life		-	kN/m	36.0	
Partial Factor - Construction damage (RF _{ID})		BBA Procedures with BBA Compliant Soils			
Type BBA3 - Silty Sand (9.5mm minus, D ₅₀ ≤ 1mm)		-	-	1.10	
Type BBA2 - Sandy Gravel (19mm minus, D ₅₀ ≤ 2mm)		-	-	1.10	
Type BBA1 - Gravel (75mm minus, D ₅₀ ≤ 12mm)		-	-	1.35	
Partial Factor - Environmental Effects Environment, 4 ≤ pH ≤ 8 at 60 or 120 years design life		ISO EN 20432			
Chemical and Biological, RF _{CH}		-	-	1.20	
U.V. Weathering, RF _W		-	-	1.25	
Maximum Exposure Time (Uncovered) During Installation		-	-	2 Weeks	
Long term design strengths (T _D) at 60 years design life		ISO EN 20432			
Type BBA3 - Silty Sand (9.5mm minus, D ₅₀ ≤ 1mm)		-	kN/m	22.3	
Type BBA2 - Sandy Gravel (19mm minus, D ₅₀ ≤ 2mm)		-	kN/m	22.3	
Type BBA1 - Gravel (75mm minus, D ₅₀ ≤ 12mm)		-	kN/m	18.1	
Long term design strengths (T _D) at 120 years design life		EN ISO 20432			
Type BBA3 - Silty Sand (9.5mm minus, D ₅₀ ≤ 1mm)		-	kN/m	21.8	
Type BBA2 - Sandy Gravel (19mm minus, D ₅₀ ≤ 2mm)		-	kN/m	21.8	
Type BBA1 - Gravel (75mm minus, D ₅₀ ≤ 12mm)		-	kN/m	17.8	
Grid Aperture Sizes				Value	Tolerance
Grid Aperture MD		-	mm	18	± 1
Grid Aperture CD		-	mm	16	± 1
Standard Products				Value	
Roll Width		-	m	1.9	
Roll Length		-	m	100	
Roll Weight		-	kg	52	

Notes:

- MD = Machine Direction
- CD = Cross Direction
- Reported ultimate tensile strengths (T_{NOM}) are average values obtained in accredited testing laboratories.
- $T_{CAR} = T_{NOM} - 2 \times \text{Standard Deviation}$
- $TD = T_{CAR} / (RF_{CR} \times RF_{ID} \times RF_W \times RF_{CH})$

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