



## NEXGRID NG Series

## Geogrid

Properties of NexGrid NG Series

Version: 2015/07/NG/2.1

Property	Test Standard	Unit	40/40	60/30	60/60	80/30	80/80	100/30	130/30	150/30	160/50	200/50	300/50	400/50	
<b>Physical Properties</b>															
Area / Roll		m <sup>2</sup> /roll	520	520	520	520	520	520	520	520	520	520	520	520	
Mass / Area		g/m <sup>2</sup>	296	330	400	380	450	390	430	510	596	650	940	1210	
<b>Short Term</b>															
Tensile Strength (MD)	ISO 10319	kN/m	40	60	60	80	80	100	130	150	160	200	300	400	
Tensile Strength (CD)	ISO 10319	kN/m	40	30	60	30	80	30	30	30	50	50	50	50	
Strain (MD)		%	11	11	11	11	11	11	11	11	11	12	13	14	
<b>Long Term Design Strength</b>															
60 years design life															
clay, silt, or sand		kN/m	23.7	37.8	37.8	50.4	50.4	63.0	81.9	94.5	103.7	129.6	194.4	259.2	
sandy gravel		kN/m	22.5	34.3	34.3	46.5	46.5	59.7	79.7	91.9	98.9	126.0	189.0	252.0	
gravel		kN/m	21.8	33.2	33.2	45.4	45.4	58.1	77.6	89.5	97.2	123.7	185.5	247.4	
120 years design life															
clay, silt, or sand		kN/m	21.8	34.8	34.8	46.4	46.4	58.1	75.5	87.1	95.5	119.4	179.1	238.8	
sandy gravel		kN/m	20.7	31.6	31.6	42.9	42.9	55.0	73.4	84.7	91.2	116.1	174.1	232.2	
gravel		kN/m	20.1	30.6	30.6	41.8	41.8	53.6	71.5	82.5	89.6	114.0	171.0	228.0	
<b>Partial factor - Creep rupture</b>															
60 years design life			1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	
120 years design life			1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	1.45	
<b>Creep Limited Strength</b>															
60 years design life			kN/m	28.6	42.9	42.9	57.1	57.1	71.4	92.9	107.2	114.3	142.9	214.4	285.8
120 years design life			kN/m	27.6	41.4	41.4	55.2	55.2	69.1	89.7	103.5	110.3	137.9	206.8	275.8
<b>Partial factor - Construction damage</b>															
clay, silt, or sand			1.15	1.08	1.08	1.08	1.08	1.08	1.08	1.05	1.05	1.05	1.05	1.05	
sandy gravel			1.21	1.19	1.19	1.17	1.17	1.14	1.11	1.10	1.10	1.08	1.08	1.08	
gravel			1.25	1.23	1.23	1.20	1.20	1.17	1.14	1.12	1.12	1.10	1.10	1.10	
<b>Partial factor - Environmental effects in soil environment (pH &lt; 11)</b>															
60 years design life			1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	1.05	
120 years design life			1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.10	

Note:

\*- MD - Machine Direction

\*- CM - Cross Machine Direction