

G-Net® CM Series Composite Drainage Geonets

G-Net® CM series are composite drainage geonets consist of bi-planar or tri-planar geonets heat-bonded with nonwoven needle punched geotextile on one side or both sides. The integrated core and fabric system optimizes drainage channel consistency, minimizes soil particle intrusion for maximum flow capacity, allows water to freely enter the drainage channel. It has the property of geotextile (filtration function) and geonet (drainage) and remain the certain thickness.

Features: High tensile strength, long time stable water conductivity

Applications: Landfills, Roads, Retaining wall.

Geonet Properties	Value Type	Unit	G-NT160	G-NT220	G-NT250	G-NT300	G-NT330	G-NT350	G-NT500
Polymer	high-density polyethylene (HDPE), black/other								
Thickness (20KP) [ASTM D 5199]	Marv	mm	4.0	5.0	6.0	7.0	8.0	10.0	12.0
Density [ASTM D 1505/ D 792]	Marv	g/m ³	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Carbon black [ASTM D 4218/ D 1603]	Marv	%	≥2.0	≥2.0	≥2.0	≥2.0	≥2.0	≥2.0	≥2.0
Melt Flow Index [ASTM D 1238, 190℃/2.16kg]	MaxARV	g/10min	≤1	≤1	≤1	≤1	≤1	≤1	≤1
Tensile strength, MD [ASTM D7191]	Marv	kN/m	5.4	8.0	9.2	11.6	13.7	18.4	22.2
Tensile Elongation, MD [ASTM D5035 and D7191]	Typical	%	≤15	≤15	≤15	≤15	≤15	≤15	≤15
Compressive Strength [ASTM D 6364]	Marv	kPa	450	650	1120	1530	2020	2350	2600
Transmissivity@480kPa/1.0Gradient/15min [ASTM D 4716]	Marv	m ² /sec	1×10 ⁻³	2×10 ⁻³	2.5×10 ⁻³	6×10 ⁻³	8×10 ⁻³	9×10 ⁻³	1.5×10 ⁻⁴
Composite Properties	Value Type	Unit	160-2-200	220-2-200	250-2-200	300-2-200	330-2-200	350-2-200	500-2-200
Ply Adhesion [ASTM D 7005]	Marv	g/cm	178	178	178	178	178	178	178
Transmissivity@480kPa/1.0Gradient/15min [ASTM D 4716]	Marv	m ² /sec	5×10 ⁻⁴	1×10 ⁻⁴	1.2×10 ⁻⁴	2×10 ⁻⁴	1×10 ⁻³	1.2×10 ⁻³	1.5×10 ⁻³
Geotextile Properties	Value Type	Unit	160-2-200	220-2-200	250-2-200	300-2-200	330-2-200	350-2-200	500-2-200
Mass per [ASTM D 5261]	Marv	g/m ²		200.0			270.0		
Grab Tensile [ASTM D 4632]	Marv	N		710.0			1000.0		
Grab Elongation [ASTM D 4632]	Marv	%		50.0			50.0		
Trap Tear [ASTM D 4533]	Marv	N		290.0			400.0		
CBR Puncture [ASTM D 6241]	Marv	N		2000.0			2670.0		
Water Flow [ASTM D 4491]	Marv	l/min/m		5010.0			4080.0		
Permittivity [ASTM D 4491]	Marv	sec-1		1.6			1.3		
AOS [ASTM D 4751]	MaxARV	mm		0.212			0.180		
UV Resistance (500hours) [ASTM D 4355]	Marv	mm		70.0			70.0		
Physical Identification Properties									
Grade	-	-	160-2-200	220-2-200	250-2-200	300-2-200	330-2-200	350-2-200	500-2-200
Roll Width	Typical	m(≤)	3.8	3.8	3.8	3.8	3.8	3.8	3.8
Roll Length	Typical	m	83	76	64	57	55	48	36
Approx Load Q'ty / 40' HQ		Rolls(≥)	27	27	27	27	27	27	27
		Sq. m	8,516	7,798	6,566	5,848	5,643	4,925	3,694

MARV is statistically defined as the mean minus two standard deviations and is the value which is exceeded by 97.5% of test data. The data was obtained from in-house test laboratory, National test institutes and international test institutes. GeoTrans keeps the right of data changes and the final explanation right. Liability Exclusion: This publication should not be construed as engineering advice. While information contained here is accurate to the best of our knowledge, GeoTrans does not warrant its accuracy or completeness. The only warranty made by GeoTrans for its products is set forth in our Product Test Report accompanies our shipment of the products, or such other written warranty as may be agreed by GeoTrans and customer. GeoTrans specifically disclaims all other warranties express or implied, including without agreed by GeoTrans and customer. GeoTrans specifically disclaims all other warranties, express or implied, including without limitation, warranties of merchantability or fitness for a particular purpose, or arising from provision of samples, a course of dealing or usage of trade.



Dalian GeoTrans Technology Co., Ltd.

Add: No.8888-1 Southeast Industrial Zone, Youjia, Ganjingzi District, Dalian, China P.C.: 116039

Tel: +86-(0)411 86692019

Fax: +86-(0)411 86692019

Website: www.geotranstechnology.com

E-Mail: enquiry@geo-textile.com

