

G-Gird® PPCM Series PP Bi-axial composites Geogrid

G-Grid® PPCM series are geocomposites manufactured by polypropylene Bi-axial Geogrid heat bonded with needle punched nonwoven geotextile . Geogrid provides soil reinforcement and the nonwoven geotextile provides separation and filtration. The high elongation capacity of nonwoven geotextile ensures that the inter-locking ability between the composite geogrid and the filling material is not reduced and stress is transferred to the geogrid. Features: Versatile, High tensile strength;
 Applications: Retaining structures, basal reinforcement ,piling platforms, subgrade improvement.

Geogrid Properties	Value Type	Unit	PPBCM 20/20	PPBCM 30/30	PPBCM 40/40	PPBCM 50/50
Polymer	Polypropylene (PP), white/black					
Mechanical Properties						
Mass per Unit [ASTM D5261]	Typical	g/m ²	≥160	≥250	≥370	≥480
Tensile strength,MD / CD [ASTM D4595 or EN ISO 10319 / ASTM D6637]	Typical	kN/m	≥20 / ≥20	≥30 / ≥30	≥40 / ≥40	≥50 / ≥50
Elongation, MD / CD [ASTM D4595 or EN ISO 10319 / ASTM D6637]	Typical	%	≤15.0 / ≤13.0	≤15.0 / ≤13.0	≤15.0 / ≤13.0	≤15.0 / ≤13.0
Tensile strength at 2% elongation, MD/CD [ASTM D4595 or EN ISO 10319 / ASTM D6637]	Typical	kN/m	≥8 / ≥8	≥12 / ≥12	≥16 / ≥16	≥20 / ≥20
Tensile strength at 5% elongation, MD/CD [ASTM D4595 or EN ISO 10319 / ASTM D6637]	Typical	kN/m	≥16 / ≥16	≥24 / ≥24	≥32 / ≥32	≥40 / ≥40
LTDS Tensile strength @ 120 years design life [ASTM D 4595]	Typical	kN/m	≥13 / ≥13	≥18 / ≥18	≥26 / ≥26	≥32 / ≥32
Reduction factor - creep 120 years [ASTM D 4595]	Typical	-	≤1.43	≤1.43	≤1.43	≤1.43
Carbon black [ASTM D4218]	Typical	%	≥2	≥2	≥2	≥2
Installation damage resistance [ASTM D5818 or ISO 10722]	Typical	%	≥ 98	≥ 98	≥ 98	≥ 98
Width Deviation	Typical	%	+1.0	+1.0	+1.0	+1.0
Aperture Dimensions. MD x CD	Typical	mm	20 ≤ MD ≤ 50 , 20 ≤ CD ≤ 50			
UV-resistance [ASTM D 4355(500 hrs)]	Typical	%	>95	>95	>95	>95
Geotextile Properties	Value Type	Unit	EV-0-9(According to customization)			
Grab Strength [ASTM D 4632/AS3706.2]	Typical	N	≥500(According to customization)			
G Rating [Austroads]	Typical	-	≥890(According to customization)			
Permittivity [ASTM D 4491/AS3706.9]	Typical	Sec ⁻¹	≥2.7(According to customization)			
Composites Properties	Value Type	Unit	PPBCM 20/20	PPBCM 30/30	PPBCM 40/40	PPBCM 50/50
Geotextile Bitumen Retention [ASTM D 6140]	Typical	L/m ²	0.5~0.7			
Peel Strength [ASTM D 6496]	Typical	N/m	According to customization			
Physical Identification Properties						
Grade	Typical	g/m ²	PPBCM 20/20	PPBCM 30/30	PPBCM 40/40	PPBCM 50/50
Roll Width	Typical	m(<=)	5.9	5.9	5.9	5.9
Roll Length	Typical	m	100	100	100	100
Approx Load Q'ty / 40' HQ		Rolls(>=)	82	64	48	40
		Sq. m	48,380	37,760	28,320	23,600

Above the values listed are the average values, 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 rising 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

