



WATERPROOFING

MiraDRAIN

Geocomposite Sheet Drain Physical Properties Chart

Property	Test Method	Unit	2000	6000/6200	6000XL/6200XL
CORE					
Thickness	ASTM D 1777	in (mm)	0.25 (6.35)	0.40 (10.16)	0.40 (10.16)
Compressive Strength	ASTM D 1621	psf (kN/m ²)	10,800 (517)	15,000 (719)	16,500 (790)
Maximum Flow Rate ¹	ASTM D 4716	gpm/ft (l/min/m)	12.5 (155)	17 (211)	17 (211)
Installed Vertically ²	ASTM D 4716	gpm/ft (l/min/m)	8.5 (106)	12.5 (155)	14.5 (180)
Installed Horizontally ³	ASTM D 4716	gpm/ft (l/min/m)	§	§	§
FABRIC			140NC	DCN04	160NC
Apparent Opening Size	ASTM D 4751	US Std Sieve (mm)	70 (0.21)	40 (0.42)	70 (0.21)
Water Flow Rate	ASTM D 4491	gpm/ft ² (l/min/m ²)	140 (5,704)	200 (8,148)	110 (4,481)
Grab Tensile Strength	ASTM D 4632	lbs (N)	100 (445)	80 (356)	160 (712)
Grab Elongation	ASTM D 4632	%	50	60	50
CBR Puncture Resistance	ASTM D 6241	lbs (N)	250 (1,113)	250 (1,113)	410 (1,825)
System Performance Index	*	N/A	14,050	18,250	24,100

Property	Test Method	Unit	8000	9000	9800	9900
CORE			TYPICAL VALUES			
Thickness	ASTM D 1777	in (mm)	0.40 (10.16)	0.40 (10.16)	0.40 (10.16)	0.25 (6.35)
Compressive Strength	ASTM D 1621	psf (kN/m ²)	18,000 (862)	18,000 (862)	18,000 (862)	33,000 (1,650)
Maximum Flow Rate ¹	ASTM D 4716	gpm/ft (l/min/m)	21 (260)	21 (260)	17.5 (219)	13 (161)
Installed Vertically ^{2†}	ASTM D 4716	gpm/ft (l/min/m)	18.5 (230)	18.5 (230)	15.5 (193)	§
Installed Horizontally ^{3†}	ASTM D 4716	gpm/ft (l/min/m)	3.8 (47)	3.8 (47)	3.0 (38)	2.4 (30)
FABRIC			FW402	FW402	180N	FW402
Apparent Opening Size	ASTM D 4751	US Std Sieve (mm)	40 (0.42)	40 (0.42)	80 (0.18)	40 (0.42)
Water Flow Rate	ASTM D 4491	gpm/ft ² (l/min/m ²)	145 (5,907)	145 (5,907)	95 (3,870)	145 (5,907)
Grab Tensile Strength	ASTM D 4632	lbs. (N)	365 (1,624)	365 (1,624)	205 (912)	365 (1,624)
Grab Elongation	ASTM D 4632	%	24	24	50	24
CBR Puncture Resistance	ASTM D 6241	lbs. (N)	675 (3,004)	675 (3,004)	500 (2,224)	675 (3,004)
System Performance Index	*	N/A	27,198	27,198	31,325	42,198

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Geocomposite Sheet Drain Physical Properties Chart

Property	Test Method	Unit	HC DRAIN	GR9400Core
CORE			TYPICAL VALUES	
Thickness	ASTM D 1777	in (mm)	1.0 (25.4)	1.40 (25.4)
Compressive Strength	ASTM D 1621	psf (kN/m ²)	9,500 (455)	9,500 (4558)
Maximum Flow Rate ¹	ASTM D 4716	gpm/ft (l/min/m)	§	82 (1,300)
Installed Vertically ^{2†}	ASTM D 4716	gpm/ft (l/min/m)	82 (1,300)	§
Installed Horizontally ^{3†}	ASTM D 4716	gpm/ft (l/min/m)	21 (260)	21 (260)
FABRIC			140NC	RETENTION
Apparent Opening Size	ASTM D 4751	US Std Sieve (mm)	70 (0.21)	100 (0.149)
Flow Rate	ASTM D 4491	gpm/ft ² (l/min/m ²)	140 (5,704)	75 (3,055)
Grab Tensile Strength	ASTM D 4632	lbs. (N)	100 (4451)	300 (1,330)
Grab Elongation	ASTM D 4632	%	50	50
CBR Puncture Resistance	ASTM D 6241	lbs. (N)	250 (1,113)	175 (780)
System Performance Index	*	N/A	12,750	N/A

All flow rates were tested at 3600 psf.

¹In plane flow rate @ gradient of 1.0 ²Installed flow rate with soil overburden @ vertical gradient of 1.0 ³Installed flow rate with concrete overburden @ vertical gradient of 1.0 ⁴Installed flow rate with soil overburden @ horizontal gradient of 0.05 ⁵Installed flow rate with concrete overburden @ horizontal gradient of 0.05 * Drainage Performance Index is a function of ASTM D 4833, D 4632 and D 1621 § Contact Carlisle Coatings & Waterproofing for performance values in these applications.