



DOWELS

Product Data Sheet - V•ROD DOWELS

REVISION : DÉC. 2020

		#8 GFRP	#9 GFRP	#10 GFRP	#11 GFRP	#12 GFRP	#13 GFRP	#14 GFRP
		Ø25.4 mm	Ø28.6 mm	Ø31.8 mm	Ø34.9 mm	Ø38.1 mm	Ø41.3 mm	Ø44.5 mm
Guaranteed transverse shear strength <i>(ACI 440.3R B4)</i>	MPa	160						
	ksi	23						
Minimum Tensile Modulus <i>(ASTM D7205)</i>	GPa	53						
	ksi	7 687						
Longitudinal coefficient of thermal expansion <i>(ASTM E831)</i>	$\times 10^{-6}/^{\circ}\text{C}$	7.5						
	$\times 10^{-6}/^{\circ}\text{F}$	4.2						
Transverse coefficient of thermal expansion <i>(ASTM E831)</i>	$\times 10^{-6}/^{\circ}\text{C}$	25.4						
	$\times 10^{-6}/^{\circ}\text{F}$	14.1						
Water absorption <i>(ASTM D570, 24h)</i>	%	0.15						
Glass transition temperature <i>(ASTM D3418)</i>	$^{\circ}\text{C}$	110						
	$^{\circ}\text{F}$	230						
Minimum cure ratio <i>(ASTM D5028)</i>	%	98						
Fibre content <i>(ASTM D3171)</i>	% vol.	63	62.9	63.2	61.7	62.6	62.6	62.4
	% weight	81.3	81.2	81.4	80.5	81.1	81.1	80.9
Linear weight	g/m	1028	1354	1610	1925	2307	2708	3137
	lb/ft	0.691	0.910	1.082	1.294	1.550	1.820	2.108
Nominal cross-sectional area	mm ²	506.7	642.4	794.2	956.6	1140.1	1339.6	1555.3
	in ²	0.7854	0.9957	1.2310	1.4827	1.7672	2.0764	2.4107

It is the responsibility of the design engineers to contact the bar manufacturer to get the latest updates of this technical data sheet (also available at www.vrod.ca).

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