



## V-ROD BENT BARS Grade III (HM)

Revision: Feb 2013

		#3 GFRP	#4 GFRP	#5 GFRP	#6 GFRP	#7 GFRP	#8 GFRP
		bent bar	bent bar	bent bar	bent bar	bent bar	bent bar
Minimum tensile strength (straight portion) <i>(ASTM D7205)</i>	MPa	1022	1019	1001	1028	1005	992
	ksi	148	148	145	149	146	144
Nominal tensile modulus (straight portion) <i>(ASTM D7205)</i>	GPa	50					
	ksi	7246					
Minimum tensile strength (bent portion) <i>(ACI 440.3R B5)</i>	MPa	460	459	450	463	452	446
	ksi	67	66	65	67	66	65

Glass content <i>(ASTM D3171)</i>	% weight	77,8	78	77,5	78,9	78,4	76,1
Weight	g/m	167	292	443	651	887	1136
	lb/ft	0,112	0,196	0,298	0,437	0,596	0,763
Nominal cross-sectional area	(mm <sup>2</sup> )	71,26	126,68	197,93	285,02	387,95	506,71
	inch <sup>2</sup>	0,1105	0,1963	0,3068	0,4418	0,6013	0,7854
Effective cross-sectional area <i>(CSA S806 Annex A)</i>	(mm <sup>2</sup> )	81,60	145,70	240,29	332,96	439,40	582,72
	inch <sup>2</sup>	0,1265	0,2258	0,3725	0,5161	0,6811	0,9032

*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](http://www.vrod.ca)).*