Proudly Made in the USA
from local and imported materials

Technical Data

Mateenbar™ 46 GFRP Rebar

Mateenbar™ 46 (ASTM D7957, ACI 440.6, CSA-S807 Grade I)

	Units	#3 (9.5mm/0.375in)	#4 (12.7mm/0.5in)	#5 (15.9mm/0.625in)
Guaranteed tensile force	kN	59.2	97	130
	kip	13.3	21.8	29.1
Elastic Modulus	GPa	46.8		
	ksi	6670		
Guaranteed transverse shear capacity	MPa	150		
	ksi	21.8		
Weight	g/m	166	268	415
	lb/ft	0.112	0.180	0.279
Nominal cross-sectional area	mm^2	71	129	199
	in^2	0.11	0.20	0.31
Outer diameter (including ribs)	mm	10.3	13.0	16.1
	in	0.406	0.512	0.630
Primary Materials	Epoxy Backboned Vinylester and Corrosion Resistant E-CR Glass			

The data herein applies to straight bars only. For data on Mateenbar™rebar bends, please refer to the Mateenbar™ rebar bends data sheet.
For other sizes refer to the Mateenbar™ 60 Technical Data Sheet.

Code-Approved and Proven Performance

MATERIAL STANDARDS
Mateenbar™ 46 complies with ASTM D7957 and CSA-S807 Grade I material standards.

RESIDENTIAL CONCRETE
Mateenbar™ 46 can be used in residential concrete, including footings and foundation walls, as prescribed in ICC-EER 5548, or as designed using ACI 332 and ACI 440 design methodology.

COMMERCIAL CONCRETE
Mateenbar™ 46 can be used in commercial concrete design using concrete code ACI 440.11-22, ICC-ESR 5548 and AASHTO LRFD Bridge Design Guide Specifications for GFRP-Reinforced Concrete.

MASONRY
Mateenbar™ 46 can be used with TMS 402/602-22 Appendix D as reinforcing for masonry walls.

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