

Product Data Sheet



BasBar™

High Performance FRP Composite For Concrete Reinforcement



Description

BasBar™ are a high-performance composite rebar designed to reinforce concrete structures. Basalt fibers are embedded in a tough vinyl ester resin in ReforceTech's patented process to create unique and strong reinforcement bar. Det Norske Veritas (DNV) has carried out an extensive qualification test program of BFRP in concrete. This has resulted in a Certificate of Fitness and Design Guidelines and Code compliance for marine construction.

Benefits

- Zero Corrosion / Non-conductive / Non-magnetic
- Low weight (density 1/4 of steel) enables easy handling at manufacturing plant or construction site
- Reduced concrete cover layer enables less concrete weight and lighter structures
- Solutions for pre and post-tensioning
- Labor saving techniques optimize total element costs through innovative geometries
- Longer lifetime and lower life cycle costs

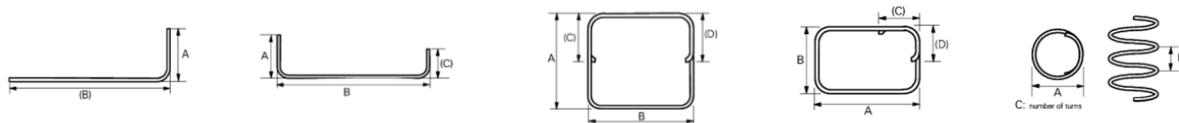
Applications

BasBars™ have been specifically designed to replace primary steel reinforcement in structural applications. 10mm (#3) in 500m Coil Packaging



How To Use

BasBars™ can be supplied in coils and cut on sight with regular tools. BasBar® bends are unique with flats on the inside of bends thus enabling all fibers to carry loads in bends. BasBars must be formed to shape in ReforceTech factory. Shape codes include 11, 21, 51, 63 and 77. Others available on request.



Quality Standards – Certification

BasBars™ are Certified by DNV-GL.

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Material Properties

Material	Bar Length	Bar Diameter	Specific Gravity	Modulus of Elasticity	Tensile Strength
Basalt Fiber Reinforced Polymer	Coils up to 1000M	2mm to 20mm	2.1 ± 0.1	43 GPa 6,091,585 psi	Varies by Diameter See Size Chart

Mechanical Performance

Size	Nominal Diameter		Nominal Area		f^*fu – Guar. Min. Tensile Strength		Ultimate Strain %
	Inch	Mm	Inch ²	Mm ²	ksi	MPa	
2	¼	6	0.049	31.67	131	904	2.1
3	⅜	10	0.110	71.26	123	848	2.0
4	½	13	0.196	126.7	115	795	1.8
5	⅝	16	0.307	197.9	108	745	1.7
6	¾	19	0.442	285.0	101	698	1.6
7	⅞	22	0.601	387.9	95	654	1.5
8	1	25	0.785	506.7	89	614	1.4
9	1⅛	29	0.994	641.3	84	576	1.3
10	1¼	32	1.227	791.7	79	542	1.2



AIT Composites

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