

Basalt Fiber Rebar

Various kinds of basalt fiber rebar are available.

The available dimension: 4 6 8 10 12 16 22 mm



Identification of Product Code

- **Eg. BFRP-22**

22—BFRP rebar Dia. of 22mm

Production Description

Basalt fiber rebar is an ideal eco-friendly advanced material to replace steel and glass rebar, which is made from high-strength basalt roving along with vinyl resin or epoxy resin by the processes of pultrusion, winding, coating and composite molding. Its high tensile strength and excellent corrosion resistance coupled with its designability and long lasting made basalt rebar widely used in civil engineering.

Usage

It was widely used in the construction of pavement, sidewalk and bridge surface, in view of its high electro-insulating properties, it also be used as insulators for high –voltage power lines, hydraulic engineering, such as seismic station and seawall, etc,.

Properties

1. High tensile strength. The tensile strength of BFRP is 2 times more than ordinary steel of the same size.
2. Excellent corrosion resistance which can't be surpassed by any other fiber fabric.
3. Low density. The density of BFRP is just about 1/4 of the ordinary steel.
4. Thermal expansion coefficient of BFRP is similar to concrete and they won't produce high temperature stress.
5. Excellent wave transparence, no shielding.
6. No conductivity, no thermal conductivity.
7. Can be prefabricated to standard curve and other shapes.
8. Environmental friendly. When using one ton basalt rebar will reduce 5.24tce carbon emission compared with using steel.

Specification

Item		Basalt Fiber Rebar
Density (g/cm ³)		1.9-2.1
Tensile strength(Mpa)		≥1000
Elongation modulus at break(Gpa)		≥40
Tensile strength at break (%)		≥1.8
Coefficient of thermal expansion $1*10^{-6}/^{\circ}\text{C}$	vertical	9--12
	lateral	21-22
Alkali resistance (%)		≥85
susceptibility($1*10^{-5}$ (CGSM))		≤ $5*10^{-7}$

Packing: in coil