BASTECH

Basalt Technologies UK Limited
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Bastech BFRP Rebar

TECHNICAL DATA SHEET · BASALT FIBRE REINFORCED POLYMER REINFORCEMENT



Bastech basalt FRP rebar is non-metallic reinforcement for concrete, produced by pultrusion with epoxy resin at our UK facility in Leighton Buzzard. It is naturally resistant to alkali, rust and acids and is a cost-effective alternative to stainless steel, epoxy-coated and galvanised rebar in corrosive environments such as sea defences, ports, bridges, car parks and water treatment works.

Typical properties

Property	Value
Diameter	4–32 mm
Length	Up to 12 m (Ø up to 8 mm also in coils of 50–100 m)
Tensile strength	1,200–1,400 MPa
Modulus of elasticity	50,000–55,000 MPa
Density	2 g/cm³
Thermal conductivity	< 0.46 W/(m·K)
Elongation at break	2.5%
Electrical conductivity	Dielectric (non-conductive)
Magnetic properties	Non-magnetic
Corrosion and chemical resistance	Very high
Heat stability	Up to 300 °C

Typical values for guidance only. Confirm project-specific design values with Bastech's engineering team.

Standards

- Manufactured in the UK (Leighton Buzzard) to meet ISO 10406-1:2008, Fibre-reinforced polymer (FRP) reinforcement of concrete – Test methods – Part 1: FRP bars and grids.
- Design guidance for FRP-reinforced concrete: ACI 440.1R.
- BBA accreditation: in progress.

Key benefits

- 100% non-corrosive: no rust, no spalling from moisture penetration, no special coating required.
- Around 4× lighter than steel: savings on logistics, handling and installation.
- Thermal expansion coefficient close to that of concrete; low thermal conductivity, no thermal bridging.
- Non-conductive and non-magnetic: suitable for MRI suites, data centres and radar installations.
- Cut to length with regular tools.

Supply

- UK stock available. Can be offered as an equivalent of A393 fabric in different lengths.
- Prices ex works Leighton Buzzard, UK. Quotations: info@basalt.tech · +44 7789 551966.