

Certificates

- Certificate of conformance
№ POCC RU.MH05.H00254,
№ POCC RU.AГ43.H00537.
- GOST P 54923-2012 Composite
wall ties for multilayer enclosure
structures. Technical Specifications
- BBA Certificate (The British Board
of Agrément) No.09/4697.

Structure

ROCKBAR®: Sand coated or bare BFRP bars
of a circular section and specified length.



ROCKBAR[®] COMPOSITE REBARS

Intended use

ROCKBAR[®] composite rebars are intended for reinforcement of prestressed and non-prestressed construction structures and elements, such as foundations of buildings and structures, concrete floors and road surface.

Areas of application

ROCKBAR[®] should be used in accordance with the following design solutions:

RESIDENTIAL CONSTRUCTION AND CIVIL ENGINEERING	■ Foundations of buildings and structures
	■ Repair and reinforcement of bearing capacity of brick and reinforced concrete structures
INDUSTRIAL CONSTRUCTION	■ Reinforcement of concrete reservoirs, storages of treatment facilities, lids of sewage wells
	■ Elements of chemical production infrastructure
	■ Reinforcement of concrete floors
	■ Hydraulic structures
ROAD ENGINEERING	■ Reinforcement of road surface
	■ Overhead poles
	■ Road, airfield slabs; sulfur concrete slabs
BRIDGE ENGINEERING AND STRENGTHENING	■ Bridge deck slabs
	■ Bridge guardrails
	■ Pedestrian footpaths
	■ Reinforcement of onshore structures
RAILROAD CONSTRUCTION	■ Elements of concrete sleepers for high speed railroads and metro railways

Advantages

The use of ROCKBAR[®] allows for increase of structure's lifetime, reduction of maintenance, reduction of costs for transportation due to the following characteristics:

**ABSOLUTE CORROSION RESISTANCE, ALKALI RESISTANCE;
HIGH STRENGTH;
LIGHT WEIGHT;
LOW THERMAL CONDUCTIVITY;
DURABILITY;
ABSOLUTE ECO-FRIENDLINESS, FIRE SAFETY.**

BFRP bar with
uniform sand coating

Technical characteristics

Characteristic	BFRP rebars
Length -----	up to 12 m (Ø up to 10 mm – in coils)
Diameter -----	2 – 16 mm
Tensile modulus, not less than -----	50 GPa
Density -----	2.0 g/cm ³
Thermal conductivity coefficient -----	< 0.46 W/(m°C)
Elongation coefficient -----	2.5 %
Heat resistance -----	300 °C

Physical and mechanical properties depending on rebars' diameter

Rebars' diameter	BFRP rebars	
	Ultimate tensile stress, MPa, not less than	Bending stress, MPa, not less than
2	1000	1000
4	1000	1000
5	1000	1000
6	1000	1000
8	1000	900
10	1000	900
12	900	900
14	800	900
16	800	800