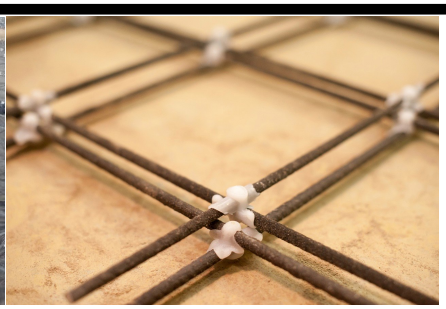
Black Bar™ - Basalt reinforcement bars






Black Bar™ - Basalt Rebars

- Made of 100% crushed Basalt, a type of volcanic rock
- The rock is melted at 1600°C and then extruded
- The Basalt rebars are sanded and profiled for better adhesion in concrete, reaching a 16MPa bond stress
- Naturally resistant to external influences
- Non corrosive, non magnetic, non conductive
- 4 times lighter than steel rebar same diameter

ADVANTAGES

- Resistant to extreme temperatures
- Three times the strength of steel at a quarter of the weight
- Non-corrosive
- Does not need to be removed before recycling or disposal since it is completely natural
- Light weight
- Available in SL mesh series

TECHNICAL PARAMETERS

BASALT PROPERTIES

Melt Temperature	1450°C
Density	2.6 - 2.8 g/cm³
Modulus of Elasticity	70 - 110 GPa
Moisture Absorption	< 0.1%
Thermal Conductivity	2 W/mK
Elongation Factor	6 x 10^{-7}/K

PRODUCT AVAILABILITY

Diameter	Strength	Weight
6 mm	1500 MPa	60 g/m
8 mm	1480 MPa	110 g/m
10 mm	1460 MPa	170 g/m
12 mm	1440 MPa	240gm
16mm	1400Mpa	300g/m

REBAR PROPERTIES

Strength	1500 MPa
Density	2.2 g/cm³
Modulus of Elasticity	71 GPa
Strain	4%
Fiber Content	80%

REBAR COMPARISON

Product	Density	Tensile Strength	E-Modulus
Steel Rebar (St37)	7.9 g/cm³	500 MPa	206 GPa
Basalt Rebar	2.2 g/cm³	1500 MPa	71 GPa
Glass Rebar	2.0 g/cm³	1000 MPa	45 GPa
Carbon Rebar	1.6 g/cm³	1750 MPa	100 GPa

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