

# MasterStrength® BAR

High Strength and High Modulus Carbon Fiber Bars

## Material Description

MasterStrength® BAR is high strength or high modulus carbon fiber bar in MasterStrength® FRP System.

## Areas of Application

- Increasing the flexural strength of the concrete beams
- Increasing the flexural strength of the masonry walls
- Repair of the cracks as tie bars

## Characteristics and Benefits

- Light and easy to carry
- East to cut
- Easy to design (Unidirectional laminates and similar elasticity modulus with steel)
- Does not increase the gravity of the structure
- Does not requires to empty the structure and strengthening works can be done with temporary stops
- Excellent corrosion resistance
- Good fatigue properties

## Packaging

Pre-cut  
6, 12 m bars

## Point to Consider

- MasterStrength® FRP applications should be done by approved experts.
- Work clothes, protective gloves, glasses and mask defined in Labour Laws must be used during the application. Do not touch to the fibers without hand gloves.
- Consult to the MBT Tech Technicians for special applications aren't defined in this data sheet.

## Storage

Store in its unopened original packaging in a cool (+5°C to +30°C), dry, well-ventilated area, away from moisture, fire, open flames, and direct sunlight.

## Health and Safety

It is dangerous to approach the application sites. During the application, a protective apparel, protective gloves, goggles and masks which comply with the Occupational Health and Safety Rules should be used. Due to the irritation effect of the uncured materials, the mixture should not come into contact with skin and eyes; in case of a contact, the affected area should be washed with plenty of water and soap; in case of swallowing, a physician should be consulted immediately. No food or beverages should be brought to the application area.

Technical Properties			
	MasterStrength® BAR 800 CFS	MasterStrength® BAR 1000 CFS	MasterStrength® BAR 1200 CFS
Elasticity Modulus (N/mm <sup>2</sup> )	165,000	165,000	165,000
Tensile Strength (N/mm <sup>2</sup> )	3,000	3,000	3,000
Elongation at Break (%)	1,5	1,5	1,5
Nominal Diameter (mm)	8	10	12
Nominal Area (mm)	50	78	113
Ultimate Tensile Load (kN)	125	195	282
Linear Weight (g/m)	80	126	183

Part of

**MASTER®**  
**BUILDERS**  
SOLUTIONS

Group



# MasterStrength® BAR

High Strength and High Modulus Carbon Fiber Bars

The product should be stored and kept out of reach of children. For detailed information please consult the Material Safety Data Sheet.

## Disclaimer

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is only responsible for the quality of the product **MBT Teknik Yapı Kimyasalları Sanayi ve Ticaret A.Ş.** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones.

## Contact

MBT Teknik Yapı Kimyasalları San. ve Tic. A.Ş.  
Eyüp Sultan Mah. Sekmen Cad. Hayy 1000A No:26/8  
Sancaktepe, İstanbul  
Tel: 0216 561 35 45 www.mbt-tech.tr

Part of

**MASTER®**  
**BUILDERS**  
SOLUTIONS

Group

