

# MasterBrace BAR

## High Strength and High Modulus Carbon Fiber Bars

### MATERIAL DESCRIPTION

**MasterBrace BAR** is high strength and high modulus carbon fiber bars within the MasterBrace FRP System.

### FEATURES AND APPLICATION

**MasterBrace BAR** can be used for:

- Increasing flexural strength of the concrete elements.
- Increasing flexural strength of masonry walls.
- Tie bars to lock together cracks in concrete floors etc.

### FEATURES AND BENEFITS

- Light-weight and therefore easy to transport around site.
- Easy to cut.
- Easy to design (Unidirectional laminates and similar elasticity modulus of steel).
- Excellent corrosion resistance.
- Good fatigue properties.

### WATCHPOINTS

**MasterBrace BAR** applications should only be carried out by approved and experienced experts.

- Work clothes, protective gloves, glasses and masks as required by local health and safety requirements must be used as defined in labour laws must be used during the application. Do not touch to the bars without hand gloves.
- Please contact Master Builders Solutions Technical Services for any further information that may be required.

### PACKAGING

**MasterBrace BAR** are supplied in pre-cut lengths of 3m and 5m bars.

### CLEANING OF TOOLS

After the application, all tools should be cleaned with a proper detergent or solvent such as thinner.

### STORAGE

Store in original container in cool (+5°C to 30°C) and dry indoor conditions.

### HEALTH AND SAFETY

It is dangerous to get close to the store areas with fire. The store must be well ventilated. Work clothes, protective gloves, glasses and mask defined in Labour Laws must be used during the application. Avoid from material to contact with skin and eyes. In case of contacting wash your skin with water and go to doctor immediately. Don't bring any food and drink to the application area. Store the material away from the children. For further information Material Safety Data Sheets should be read.

### NOTE

Technical support, where provided, does not constitute supervisory responsibility. For additional information contact your local MB Construction Chemicals Solutions South Africa (Pty) Ltd representative. MB Construction Chemicals Solutions South Africa (Pty) Ltd shall not be liable for technical advice provided.

MB Construction Chemicals Solutions South Africa (Pty) Ltd reserves the right to have the true cause of any difficulty determined by accepted test methods. Undertaking such tests is not, and shall not be deemed to be, an admission of liability or an assumption of any risk, loss, damage or liability.

### QUALITY AND RESPONSIBLE CARE

All products originating from MB Construction Chemicals Solutions South Africa (Pty) Ltd are manufactured under a management system independently certified to conform to the requirements of the quality standards ISO 9001, environmental and occupational health and safety standards.

\* Properties listed are based on laboratory controlled tests.

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### TYPICAL PROPERTIES\*

	MasterBrace BAR 800 CFS	MasterBrace BAR 1000 CFS	MasterBrace 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 (%)	1.7	1.7	1.7
Nominal Diameter (mm)	9	10	12
Nominal Area (mm <sup>2</sup> )	50	78	113
Ultimate Tensile Load (kN)	160	250	360
Linear Weight (g/m)	95	155	210

### DISCLAIMER

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