MasterBrace Laminate® (formerly known as MBrace laminate)

Ready to use Carbon Fibre Reinforced Polymer laminates

DESCRIPTION

MasterBrace Laminates are ready to use pultruded carbon fibre laminates (plates) that provide high tensile strength for flexural reinforcement (plate bonding) of concrete, metal, wood and other construction materials.

RECOMMENDED USES

- Increase the load-bearing capacity (e.g. structural conversion following a change in capacity load).
- Reduce deflection to structural elements (increase in rigidity).
- Increase fatigue resistance.
- Limit or cover the fissuring (cracking) states (increase in durability).

FEATURES AND BENEFITS

- High strength to weight ratio – provides additional strength without adding to the ‘dead load’ of a structure.
- Small profile – does not reduce overhead clearance in buildings or parking structures.
- Available in a range of cross sections – allows for cost effective design.
- Lightweight – easily applied using hand application techniques.
- Fast curing adhesive – quick installation avoiding costly downtime of structures or buildings.
- Simple installation – can be applied in situ to structures in use.

APPLICATION

Substrate preparation

Remove from all grease, oil, dust residual curing compound, mould release agent or other contaminants that could impair adhesion.

For concrete laitance should be removed preferably by light sweep blasting or hydro-jetting. Mechanical wire brushing may be appropriate for small areas.

Spalled concrete should be cut back to sound concrete and made good with MasterBrace 2200 or suitable MasterEmaco repair products.

Installation of MasterBrace Laminates

Remove protective peel ply film from the surface of Laminate to be adhered. If the grade of laminate being used does not have a peel ply then clean the laminate surface with Solvent No. 2.

Apply one layer of MasterBrace 4000 approximately 1 – 2 mm thick onto the substrate & laminate surfaces.

Apply the MasterBrace Laminate to the substrate and using a roller, exert a constant pressure by moving the tool both ways in the longitudinal direction of the laminate.

PACKAGING

MasterBrace Laminates are available in 50m & 100m rolls with the following width/thickness (mm/mm):

<table>
<thead>
<tr>
<th>Reference Width (in mm)</th>
<th>Thickness (in mm)</th>
<th>Section (in mm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15x2.5*</td>
<td>15</td>
<td>2.5</td>
</tr>
<tr>
<td>20x2*</td>
<td>20</td>
<td>2</td>
</tr>
<tr>
<td>20x3*</td>
<td>20</td>
<td>3</td>
</tr>
<tr>
<td>50x1.2</td>
<td>50</td>
<td>1.2</td>
</tr>
<tr>
<td>50x1.4**</td>
<td>50</td>
<td>1.4</td>
</tr>
<tr>
<td>80x1.4</td>
<td>80</td>
<td>1.4</td>
</tr>
<tr>
<td>100x1.4**</td>
<td>100</td>
<td>1.4</td>
</tr>
<tr>
<td>150x1.4</td>
<td>150</td>
<td>1.4</td>
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</tbody>
</table>

MasterBrace Laminate 460/1500:

<table>
<thead>
<tr>
<th>Reference Width (in mm)</th>
<th>Thickness (in mm)</th>
<th>Section (in mm²)</th>
<th>Weight (gm/m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50x2</td>
<td>50</td>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>50x4</td>
<td>50</td>
<td>4</td>
<td>200</td>
</tr>
<tr>
<td>100x2</td>
<td>100</td>
<td>2</td>
<td>200</td>
</tr>
<tr>
<td>100x4</td>
<td>100</td>
<td>4</td>
<td>400</td>
</tr>
</tbody>
</table>

MasterBrace Laminates are also available in other customer sizes based on the project requirement. Please consult your local BASF representative for such requirements.
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**STATEMENT OF RESPONSIBILITY**

The technical information and application advice given in this BASF publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

**NOTE**

Field service where provided does not constitute supervisory responsibility. Suggestions made by BASF either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not BASF, are responsible for carrying out procedures appropriate to a specific application.

**SHELF LIFE**

Store under cover, out of direct sunlight and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment.

**PRECAUTIONS**

For the full health and safety hazard information and how to safely handle and use this product, please make sure that you obtain a copy of the BASF Material Safety Data Sheet (MSDS) from our office or our website.