

MBrace[®] ADHESIVE 220

Adhesive for MBrace[®] FRP laminate

Description of product

MBrace[®] Adhesive 220 is the adhesive for MBrace[®] FRP laminate

MBrace[®] FRP laminate system is based on ready to use carbon fibre laminate (pultruded plate) that provides high tensile strength combined with light-weight and is used for flexural reinforcement of concrete and other building materials.

Fields of application

For use as a structural adhesive when used in conjunction with MBrace[®] FRP laminate system

Features and benefits

- High Strength
- Non-Slump
- Strong Adhesion
- Chemical Resistant
- Easy to use

Supplied in pre-weighed units.

Technical data / Typical properties

Performance of MBrace [®] Adhesive 220	
Composition	Two component epoxy based adhesive
Colour	Grey
Specific gravity @ 25°C	1.75
Compressive strength	>80 N/mm ²
Flexural strength	>20 N/mm ²
Tensile strength	>15 N/mm ²
Bond strength to Concrete	>3 N/mm ² (failure in concrete)
Pot life @ 40°C	45 Minutes

Packaging

MBrace[®] Adhesive 220 is available in 6 kg units.

Application procedure

Preparation:

The surfaces of the elements to be strengthened should be ground or treated by abrasive blasting to remove any existing coatings, laitance and other loose material.

The prepared substrates should be free of all oils, grease, dust or any curing membranes.

Following preparation the elements to be strengthened should be vacuumed to ensure the removal of all dirt and dust before application of the MBrace[®] Adhesive 220

Clean the surface of the MBrace[®] Laminate with suitable solvent (Cleaning Solvent No 2, MEK or Acetone) to ensure all carbon dust, and any oil or grease is removed.

Note: The minimum adhesive tensile strength of the substrate should be 1.5 N/mm².

Mixing:

Mechanically mix component A and Component B for approximately 3 minutes until a smooth mix has been obtained and no streaks are visible in the material.

Application:

Apply one layer of MBrace[®] Adhesive 220 a minimum of 1.5 mm thick onto both the surface of the substrate and MBrace[®] Laminate.



The Chemical Company

MBrace[®] ADHESIVE 220

Immediately install the MBrace[®] Laminate by hand onto the substrate. Using a roller, exert a constant pressure onto the installed by moving the tool both ways in the direction of the fibres so that the adhesive squeezes out of the sides of the laminate.

Remove excess adhesive.

Cleaning:

Tools must be cleaned immediately after use with CLEANING SOLVENT No 2.

Curing

MBrace[®] Adhesive 220 will cure at temperatures as low as 5°C although at lower temperatures cure is retarded.

Coverage

A 6 kg pack will be sufficient to bond @ 3mm thickness approximately 14 Lm of 80mm wide MBrace[®] laminate (excluding wastage).

Storage

Store at ambient temperatures in cool, dry warehouse conditions in manufacturer's sealed containers.

Shelf life

Up to 12 months if stored according to manufacturer's instructions.

Watchpoints

Surfaces exposed to U.V. rays should be protected within two days (maximum seven days) with the special product from the MASTERSEAL[®] range in order to ensure perfect bonding between the protective layer and FRP.

03/2001 BASF-UAE revised 03/2005

MBrace[®] ADHESIVE 220

Health and Safety

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Solvent Based Products

Use in well ventilated areas; avoid inhaling. Suitable respiratory equipment may be needed, e.g. when spraying. Can cause skin, eye irritation. Wear protective eye shields and gloves during use. Do not smoke or allow sparks or naked lights when stored or in use.

Powder Products

Should be handled to minimize dust formation; use light mask if excessive dust unavoidable. Cement powders when wet or moistened can cause burns to skin and eyes which should be protected during use.

Resin Products

Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

Spillage

Chemical products can cause damage; clean spillage immediately.

Disclaimer

The information given here is true, represents our best knowledge and is based not only on laboratory work, but also on field experience.

However, because of numerous factors affecting results we offer this information without any guarantee and no patent liability is assumed.

All products should be used in accordance with the Manufacturer's instructions. No responsibility can be taken by the manufacturer where conditions of use are beyond our control.

It is the responsibility of the user to obtain the most up-to-date datasheet which supersedes all previous literature.

For additional information or questions, contact your local BASF representative.

Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, our representatives or distributors, as the conditions of use and the competence of any labour involved in the application are beyond our control.

As all BASF technical datasheets are updated on a regular basis it is the user's responsibility to obtain the most recent issue.