



VT-500 Epoxy Mortar

APPEARANCE

Grey mortar (Resin)
Black mortar (Hardener)

PACKAGING

5.0 kg/ set

SHELF LIFE

24 months

STORAGE

Provided the adhesive is stored dry and cool in air-tight containers, the storage stability will be at least 24 months (before mixing) from day of delivery.

APPLICATION TEMPERATURE

20 °C – 40 °C

DESCRIPTION



VT-500 Epoxy Mortar is a solvent-free, thixotropic 2-component adhesive and repair mortar, based on a combination of epoxy resins and specially selected high-strength fillers. It features high-strength, high-modulus, moisture-tolerant properties for structural purposes.

| TECHNICAL DATA | DESCRIPTION | STANDARD |
|---|---|--------------|
| Main ingredients | : Epoxy resin (Part A) : Polyamine hardener (Part B) | |
| Mixing ratio (Part A : Part B) | : 2 : 1 (by volume) | |
| Flexural strength | : 20 – 30 N/mm ² | ASTM C580-02 |
| Compression strength | : >55.0 N/mm ² | ASTM C579-01 |
| Shore D hardness (Cylindrical sample; diameter = 51 mm; thickness = 3 mm) | : 60 – 80 | ASTM D2240 |
| Working time at 25 °C | : ~45 minutes | |
| 100% curing time at 25 °C | : 24 hours | |
| Solid content | : 100% | |

APPLICATION Reinforce structural bonding of concrete, masonry, metals, wood, anchoring of grout bolts, dowels, vertical and overhead. As a patching mortar for concrete, stone, ceramics, mortar, plasterwork, steel, iron, aluminium, wood, wood-fibre chip board, asbestos cement, polyester, epoxy and glass. Repair of joint corners and be a rigid connection of narrow joint.

- ADVANTAGES**
- Application on dry or damp concrete surfaces
 - Can be applied on vertical and horizontal surfaces
 - Good workability and excellent adhesive strength to various materials
 - Non-flammable
 - Fast curing
 - High mechanical strength
 - High abrasion and impact resistance
 - Excellent toughness
 - Excellent chemical resistance
 - Shrinkage free
 - Component of different colors, therefore good control of homogeneity during mixing

- APPLICATION DIRECTION**
1. Surfaces must be clean, free of dirt, grease, oil and other surface contaminations. It may be dry or damp, but free of standing water.
 2. Concrete should be cleaned and prepared by mechanically abrade the surface with a needle gun, wire brush, sandblast or grind. For metal surface, it should be cleaned thoroughly by blast cleaning and where required, apply the primer before application.
 3. Do not mix each of the Vital Mortar set partially. Prepare Part A (Resin) and Part B (Hardener) according to 2:1 ratio and mix thoroughly for 3 minutes until a uniform grey color is observed. Mix using a low speed drill (400 – 600 rpm) fitted with screw type paddle.
 4. After mixing, apply mixture within 45 minutes before cure. Apply by trowel, serrated spreader, spatula or stiff brush (minimum thickness per layer 1mm and maximum thickness per layer 30mm, on vertical it is non-sag up to 10 mm thickness).
 5. Work Vital Mortar well into the substrate, especially if the substrate is damp. Bond any subsequent materials onto Vital Mortar whilst it is still tacky.



VITAL TECHNICAL SDN. BHD.

Technical Data Sheet

VT-500 Epoxy Mortar



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APPLICATION DIRECTION (Cont.)

6. Clean up uncured material and equipment immediately after use with warm soapy water, or alternatively, with thinner. Wash hands thoroughly with an industrial hand cleaner. Cured Vital Mortar can only be removed by mechanical means.

Important notes:

- Minimum age of the new concrete shall be between 3 to 6 weeks depending on the climate, for mortar application.
- Do not thin VT-500 Vital Mortar. Addition of solvent will prevent proper cure.
- Not resistant to high temperature of prolonged periods.
- Not for sealing cracks under hydrostatic pressure at time of application.
- Layer thickness:
 - Minimum 1 mm
 - Maximum 30 mm
 - Non-sag on vertical surfaces up to 10 mm

CAUTION

Contains epoxy resin and polyamine hardener. May cause severe eye and skin irritation. Avoid prolonged contact with eyes or skin. In case of eye contact, flush with water for 15 minutes and seek medical attention immediately. In case of skin contact, wipe off and wash with soap and water.

LEGAL NOTES

Every endeavour has been made to ensure that the information given herein is true and reliable but it is given only for the guidance of our customers. The company cannot accept any responsibility for the loss or damage that may result from the use of the information, due to the possibility of variations of processing or working conditions and of workmanship outside our control. Users are advised to confirm suitability of this product by their own tests.