



Ferrorez 055MB

MOISTURE BARRIER EPOXY PRIMER (SOLVENT-FREE)



Ferrorez 055MB is a 2 component epoxy primer, solvent-free with special property to block moisture from green concrete. Designed to promote adhesion strength on the new concrete floors or damp concrete that needs to be coated before 28 days. Ferrorez 055MB is produced from a special epoxy resin, after react with moisture will form effective impermeable layer. Suitable for block moisture prior to self-leveling underlayment mortar application or before wood floor adhesives installation.

Advantages

- Good adhesion on green concrete.
- Moisture control.
- Low odor.
- Solvent-Free.

Area of use

- Can be bond to green concrete floor (Aged less than 28 days).
- Control moisture on existing concrete with moisture content up to 6% (Accumulated moisture content) prior to wood floor adhesives installation, self-leveling mortar. In order to reduce risk of vinyl floor tile and wood floor swelling from moisture pressure.
- Improve mechanical bond strength of existing adhesive residues by coat with Ferrorez 055MB and make adhesion with sand.
- Improve abrasion resistance of anhydrite gypsum surface, cement substrate by absorption of Ferrorez 055MB.

Physical properties

Properties	Value
Type	2 component polyamine epoxy resin
Colour after mixing	Blue
Mixing ratio by weight, (A : B) (Approx.)	3 : 1
Potlife 30 °C, minute (Approx.)	15 minutes
Walkable 30 °C, hour (Approx.)	6 hours
Full cure, day (Approx.)	7 days

Technical properties

Properties	Value
Shore A hardness at 7 days (Approx.)	70-80
Compressive strength at 7 days, MPa. (Approx.)	60-70 MPa.
Application temperature, °C (Approx.)	15-40 °C
Service temperature, °C (Approx.)	0-70 °C

Method statement

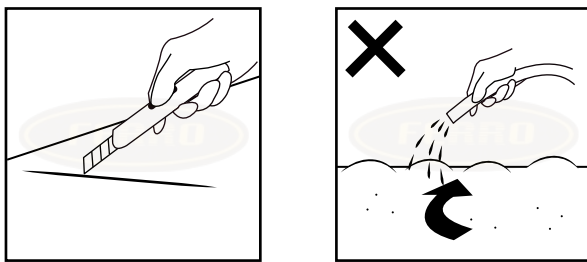
Ferrorez 055MB

Step 1 Surface preparation

Old or existing concrete surface preparation.

CASE 1 Laitance or weak or loosely concrete surface.

Surface evaluate method use a knife test method by cutting a knife blade upon a concrete surface if the depth is over 2 mm. the surface may evaluated as a weak substrate that the self-leveling mortar can't bonding properly with. Surface preparation use a concrete scarifier or shot blast machine to achieve the roughness according to standard The International Concrete Repair Institute (ICRI csp 4-6) to remove all weaken substrate and create a rough profile without dust that was a good surface for new concrete to bond however concrete floor must be 28 days cure and the compressive strength should be not less than 210 ksc. Avoid washing concrete floor with plenty of water because after placed the self-leveling mortar upon a high moisture concrete it may cause a swelled and peel surface by vapour pressure transmission inside concrete through the self-leveling mortar surface. It is recommend to preparation a concrete surface in the same method with epoxy industrial floor preparation by control a moisture not above 4%. Moistening the surface, shake off the water with black wool until is moderately moist 10-15 minutes before start the plastering work. To reduce the concrete surface temperature and reduce water absorption. Do not curing too much water.



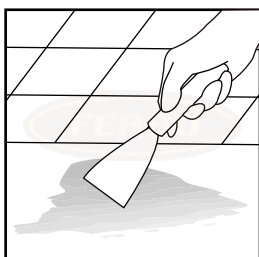
CASE 2 Old or existing concrete surface are coated with transparent film such as curing compound or oil contaminants.

Surface evaluate method use drop test method by drop some small drop of water on the existing concrete surface if the drop appears in a round ball shape and not absorb into concrete surface within 10 seconds this condition can be assumed as non-absorbant. Surface preparation use a concrete scarifier or shot blast machine to achieve the roughness according to standard The International Concrete Repair Institute (ICRI csp 4-6) to create a new clean, rough profile with minimum depth 1 mm. in order to remove a curing compound layer however it is better to retest by water drop again after finish that kind of mechanical floor surface preparation and proceed to pour approx. 1-2 m² of the self-leveling mortar for test before pour on a large area.



CASE 3 Old or existing cutback asphalt adhesive residue.

Surface evaluate method use chiselling method if the existing glue is still tacky it means to an active adhesives if crispy and dry it means to a non-active adhesives. Surface preparation use only a concrete scarifier to achieve the roughness according to standard The International Concrete Repair Institute (ICRI csp 4-6) to remove all old adhesive (More than 80% by dry debris) if there are black stain adhesives stick firmly remains somewhat (20%) Ferrarez 055MB can adhere to this type of adhesive by is the adhesive strength approx 0.5 MPa. however should be preparation for rough surfaces as clean as possible first.

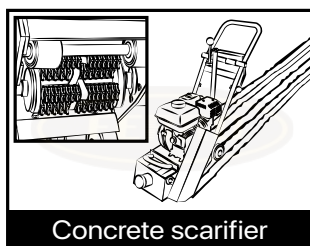


CASE Adhesive reaction to pressure and viscous regularly.

Glue this group can't be adhesion to the Ferrarez 055MB to dismantle the surface with surface milling machine (Concrete scarifier) to achieve the roughness according to standard The International Concrete Repair Institute (ICRI csp 4-6) only to see the original concrete 100%.

New concrete surface preparation

Concrete surface must be strong and free from contaminants. The compressive strength must be not less than 210 ksc. and is complete cure for at least 28 days. Use a concrete scarifier to roughen the concrete surface (Code : FG-OE-0001-01) to achieve the roughness according to standard The International Concrete Repair Institute (ICRI csp 4-6). Wash the surface with a high pressure water jet (100 bar) until it is clean without mud and saturated enough. Observe the surface closely until there is no more air bubble coming out of the surface. Once the air bubbles have depleted the surface is now ready for overlay. Pour the self-leveling mortar immediately or as soon as possible once the surface is preparation.



Step 2 Mixing

Pour part B (Hadener) 1.5 kg. into part A (Base) 3.75 kg. Pour into container thoroughly mixing with low speed drill (300-600 rpm.) and mixing until reach homogenous 2-3 minutes. Apply all mixture within 10 minutes.

Step 3 Application

Apply to a concrete surface that has been surface preparation to rough and clean. Apply with a roller in coverage 300-500 g./m². Then sprinkle fine sand 0.3 mm. (Ferosand 0.3) immediately on the Ferrarez 055MB is still wet. Sprinkle sand in coverage 200-400 g./m² let dry for approx. 3-4 hours. Sweep away any loose sand and begin pour self-leveling mortar.



Limitations/Cautions

- Do not apply Ferrarez 055MB on surface with high moisture accumulation in concrete more than 25% and is the pressure of water vapor from the soil layer.
- Do not sprinkle sand if want to apply polyurethane adhesives upon Ferrarez 055MB. In wood floor installation.
- In case of use self-leveling mortar over Ferrarez 055MB. Recommended to fully sprinkle sand total area in order to increase higher mechanical bond to self-leveling mortar.
- In case of high vapour pressure from soil layer please use moisture barrier epoxy (Ferrarez MB1200) thickness 1-2 mm.

Technical support

Customers can contact the sales department of the company at sale@ferroproduct.co.th to inquire about product usage methods. Furthermore they can also request information or organize the following activities :

1. Request for the latest updated data sheet.
2. Request for the sale conditions document and the product price list.
3. Schedule a technical staff visit to demonstrate the products at the customer's job site by filling out the "Demonstration request form" prior to the product purchase.
4. Schedule a technical staff visit to provide product usage training to the customer's workers at the job site by filling out the "Worker training request form".
5. Schedule training for the customer's foreman at the company's training center (Ferro training center) by filling out the (Foreman training request form).

Coverage

Ferrarez 055MB can be use approx. 300-500 g./m².
Sprinkle Ferrosand 0.3 can be use approx. 200-400 g./m².

Package

1 kg./set (A = 0.75 kg., B = 0.25 kg.).
5 kg./set (A = 3.75 kg., B = 1.25 kg.).

Cleaning tools

Should be wash mixing tool with xylene immediately before the Ferrarez 055MB dry.
Dry case peel off Ferrarez 055MB must be with mechanical force, such as scraping off.

Storage

- Shelf life 1 year in unopened container.
- Keep in dry shaded area, temperature 23°C + 2%, Humidity 50 + 5%RH (Conform to ISO 554)



Health and safety instructions

- May cause health effect :
- Eye : May cause eye irritation.
- Skin : May cause skin irritation.
- Ingestion : May cause vomiting or nausea if swallowed.
- Inhalation : No serious effect.
- Inhalation : Move to fresh air, oxygen support if necessary. In case of breathing difficulty is occurred continuously, should taken care by medical treatment.
- Eye : Flush with clean water at least 15 minute. if irritation still exist, see medical attention.
- Skin : Clean the irritation area with mild soap and water, if burning is still exist, see physician immediately.
- Ingestion : Do not induce vomiting. call physician immediately.



Disposal

Ferrorez 055MB is composed of epoxy disposal do not put waste into public drainage, It is recommended to let the epoxy dry with sunlight.

Transportation and shipping data

THAI DOT : Not regulated. IMO : Not regulated.
USA DOT : Not regulated. IATA : Not regulated.
RID/ADR : Not regulated.



Size

- 1 kg./set (A+B)
A = 0.75 kg., B = 0.25 kg.
Code FG-SM-00219
- 5 kg./set (A+B)
A = 3.75 kg., B = 1.25 kg.
Code FG-7IC-8858915272539

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Product warranty: The company is pleased to replace any product that is clearly proven to be defective due to manufacturing processes with a new products of equal value to the portion that is defective. Refunds are not available. Customers must be notify us of replacement within 7 days from the order date. Additionally customers can't claim damages resulting from direct or indirect using of the materials, as well as delays in delivery by the company. Furthermore replacements can't be made for errors in using that arise from customers negligence without consulting the sales staff or technical documentation provided by the company. The company reserves the right to amend manufacturing formulas or new packaging designs without prior notice. Therefore customers must be request the data sheet and sale conditions from the company before actual using and before each purchase. By doing so the company assumes that customers have understood and agreed to the company's sale conditions before using. (Company products are only allowed for using by individuals who have completed training provided by the company). *For further data please refer to the sale conditions from the company's sale department at sale@ferroproduct.co.th.



ISO 9001 & ISO 14001



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