

Technical Datasheet (TDS)

Ferrocem 521

THIN RENDERING MORTAR 0.3-10 MM.



Ferrocem 521 is a thin rendering mortar with polymer and special additives to enhance a high adhesion and good compressive strength to concrete substrate. Ferrocem 521 has a fine surface after dried and can be rendered up to 3-10 mm. It is suitable for repairing an imperfect concrete or masonry surface such as, columns or precast concrete panel.

Advantages

- High adhesion & compressive strength.
- Give a smooth fine sand surface.
- Weather resistante, Exterior.
- Paintable.

Standards and compliances

Ferrocem 521 is manufactured under standard which conform to TIS 1776 -2542 (1999).

Area of use

- Patching a uneven concrete seam after demould.
- Covering all pinhole on precast concrete panel surface.
- Smoothing a rough masonry wall surface.
- Carpark concrete column decoration .
- Interior & Exterior use.

Physical properties

Properties	Values
Appearrance	Powder
colour	Light gray
Density (kg./liter)	1.35

Technical properties

Properties	Values	Standards
Compressive strength at 28 days, MPa. (Approx.)	8	TIS 1776-2542 (1999)
Water retention, % (Approx.)	99	TIS 1776-2542 (1999)
Setting time, min. (Approx.)	275	TIS 1776-2542 (1999)
Bond strength at 28 days, MPa. (Approx.)	0.19	ASTM C952-12

Method statement

Ferrocem 521

Step 1 Surface Preparation

- Concrete surface must be cleaned, sound, free from oil, grease, old paint, curing compound
 or debris or any contaminants that may obstruct to the bonding.
- Concrete crack must be grout or repair with epoxy injection Ferrorez 717 or Ferroseal 303 Flexible mortar).
- Uneven concrete strip caused by demoulding should be smoothen by grinding wheel tools.
- New concrete or masonry should cured at least 7 days before start to render with Ferrocem 521
- Moisten concrete surface before starting a skimcoat rendering.

Step 2 Mixing and Application

- Mix Ferrocem 521 (25 kg.) with clean water 20% (5 liters) go on mixing with low speed electric driller (400-600 rpm.), mixing time around 1-2 minutes. Until reach homogenious without lump. Left a small air buble out from the mixture surface (1-2 minutes) before rendering works start.
- Bring the mixture to rendering immidietly and use all mixgure not exceed 30 minutes.
- Curing with water and left dried 3-7 days prior to paint work.



Limitations/Cautions

- Do not render Ferrocem 521 upon a high gloss surface such as ceramic tile, steel and water saturated area and concrete floor repair.
- Do not use tile adhesive mortar or plastering mortar upon Ferrocem 521 surface. Do not rendering at 10 mm. in 1 time.
- Do not apply Ferrocem 521 amidst strong sun or windy condition.

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

Approx. 1.3 kg./m²/1 mm.

Package

25 kg./bag 80 bag/pallet

Cleaning tools

Wash all tool with clean water before the mortar is dried. In case a dry mortar sticks tightly on a tool, use mechanical methods such as chiseling equipment.

Storage

- 6 months
- 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 necessay. In case of breathing difficulty is occurred continuously, should taken care by medical treament.
- 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 immedieatly.
- Ingestion : Do not induce vomiting. call physician immedieatly.

Disposal

Ferrocem 521 is composed of Cement plese do not put waste into public drainage, It is recommended to let the cement dried 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

521/25 25 kg./bag, 80 bag/pallet Code FG-IC-8858915255464

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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.



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