

Technical Datasheet (TDS)

Ferropatch 552

FAST SETTING CONCRETE FOR COLD STORAGE FLOOR RENOVATION



Ferrofast 552 is a fast-setting dry mixed concrete suivable for placing as a topping upon old or existing cold storage floor without decreasing temperture during applacition (Max. application temp. -10°C)

Advantages

- Fast-setting
- High compressive strength

Standards and compliances

Ferrofast 552 is manufactured under standard which conform to ASTM C109 $\,$

Area of use

- Road & rail repairs (traffic after 6 hours) office & retail flooring
- Ready to accept floor (covering after 48 hours)
- Street-furniture & signs
- Setting in security fencing, posts and gates
- Cold weather concreting down to -10oC (protect from freezing prior to set)
- Industrial floor

Physical properties

Properties	Value
Appearance	Gray powder
Dry Density	Approx. 1.5 kg./litre
Wet Density (With 15% water)	Approx. 2.0 kg./litre
Particle size	0.7-9.5 mm.

Technical properties

Properties	Values	Standard
Compressive Strength (28 days)	Approx. >380 ksc.	ASTM C109
Pot Life (Air 30oC) Mix with normal water Temp. 30°C Pot Life (Air 30oC) Mix with cold water Temp. 8-10°C	Approx. 5-7 minutes Approx. 10-15 minutes	ASTM C807

Method statement

Ferropatch 552

Step 1 Surface preparation

Old or existing concrete surface preparation.

CASE 1 Old cement concrete surface water dry is not strong, not suitable for adhesion on the surface (laitance) or a glossy topping. (Loose Mortar Topping) ready to disintegration

How to assess the surface using slit with a knife (Knife Test) if the dust is easy. Depth of tapping. Up to 2 mm. or shovel with a knife into easy dust so I bath mortar was weak. Not suitable for cement leveling slash Surface preparation at the weak will be bitten by the machining surface (Concrete Scarifier) until the strong, the Scanfier machine. To make rough surface (Rough Profile) suitable for adhesion, the topping disintegration of concrete surface. To extract and pour the topping. Normal should be worth getting weight less than 210 KSC. 28 days. Vacuum cleaner and wipe with a damp cloth, mop, avoid injection curing water quantity, on the surface of prepared. Since the furore C 713 furniture chemicals prevent stealing water. And the primer with a mixture of water, which will infiltrate into the adhesion on the surface of concrete. If the ground is dry milk bath too. The primer will not be inserted into it. And water curing will never vent may push the sheet surface of the furniture. The furore C 713 to swelling is the point, because the fast set lower drain moisture of cement normal. Therefore prepare surface like flooring epoxy.







CASE 2 Old surface coating substances hinders the adhesion and easily seen and observed difficult, such as bath medicine curing, bath, 4-8 bath and epoxy.

How to assess the surface using drops with the water (Drop Test) if the experiment on the surface and water drops Drops of water round like a bath on the lotus leaf. Absorbed slowly within 10 seconds. Also do not absorb all the show should have the coating. Surface preparation using polishing machine (Floor Grinding) is a leaf insulator diamond polishing on the surface to peel spin coating surface water. Or use the machine to shoot the iron pellets (Shot blast) to bite the surface off about 1 mm. to rough skin clean. The drop of water should be tested again after prepare the skin and experiment of cement leveling test 1-2 m² Before pouring large panel.



CASE 3 Old surface stain glue tiles stuck.

Method to estimate the surface in case of adhesive, asphalt cut-back. asphalt adhesive-non asbitos surface are basically black rubber to observe the dry or moist, sticky frame. Surface preparation using machining surface (Scarifier) to dismantle the old surface for the most. Should prepare the surface for rough as clean first.





This group can glue adhesion to the Ferrorez 713 To dismantle the surface with surface milling machine (Scarifier), only to see the original concrete 100% clean surface.

New concrete surface preparation

Concrete surface polishing (Trowel Floor) should have been weight not less than 210 kg./cm² And dry set perfect not less than 28 days. In case of need to Tate on concrete curing is not perfect (Green Concrete) concrete shall be had water up to the maximum 95% RH. Or shipping through the moisture, higher 0.07 kg./m² at 24 hours will not push the sheet surface mortar leveling to poured down.

Step 2 Mixing

Prepare the water about 15% (3.75 litre) per Ferrofast 552 1 bag (25 kg.) slowly pour into the mixing container is a metal or Plastic drill around medium (650 round/min) for long periods 2 - 3 minutes or until the cement is homogeneous. The composite material to pour the plaster immediately onto the surface paint epoxy primers foundation and (Ferrorez 713) by the primer is not completely dry.





Limitations/Cautions

- Minimum thickness of Ferrofast 552 must be 5 cm. and sould be bonding with epoxy bonding agent (Ferrorez 713)
- Maximum thickness of Ferrofast 552 must be 30 cm. if thickness above 5 cm. It is recommanded to rainforced with steel mesh.
- If pot life is too shot it is recommended to use cold water to extend setting time.
- Placing in large area must have expansion joint design.
- Avoid placing over old existing joint.



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. 80 bag. (25 kg.)/m³(After added water 15%)

Package

25 kg./bag

Cleaning tools

Should wash with water immediately before mortar start to dry. Chesiling tool is required in case of dried mortar stich to tools.

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

Ferropatch 551 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

10 kg./bag Code FG-5IC-8858915256508



Equipment

- 1) Scarifier machine Code FG-OE-0001-01
- 2) Drill and mixing paddle Code FG-OE-0002

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