



# Ferroflex 423

## 2 COMPONENT CRYSTALLIZED CEMENTITIOUS WATERPROOF



Ferroflex 423 is a waterproofing material cement crystallized type and flexible contains cement, mineral powder and chemical reactive with calcium hydroxide and become crystals in porous concrete can water resistance leakage in the long term from reaction continuous crystallized affect and also has a few flexible properties can be coated for hairline crack of the concrete surface as well. Has outstanding properties that resistance both positive and negative side water pressure.

### Advantages

- Waterproof with crystallized effect and resistance positive and negative side water pressure.
- Flexible can covered hair line crack.
- Not toxic to drinking water.
- Heat vapor can pass through.

### Area of use

- Apply on concrete surface, plaster and brick.
- Interior and exterior walls of basement.
- Underground concrete structure.
- Inside swimming pool.
- Inside concrete water tank.
- Room floor before tiling.

### Standards and compliances

Ferroflex 423 is manufactured under standard meets to  
BS 1881 : Part 5 : 1970, ASTM C1042-99, ASTM C97/C97M-09.

## Physical properties

Properties	Value
General characteristics - Part A - Part B	Gray powder White liquid
Density, kg./litre (Approx.)	1.2 kg./litre
Fine mass size, mm. (Approx.)	0-0.3 mm.

## Technical properties

Properties	Values	Standards
Initial surface absorption, ml./m <sup>2</sup> /s. (Approx.) - At 10 minutes - At 30 minutes - At 60 minutes	0.02 ml./m <sup>2</sup> /s. 0.01 ml./m <sup>2</sup> /s. 0.00 ml./m <sup>2</sup> /s.	BS 1881 : Part 5 : 1970
Bond strength by slant shear at 28 days, MPa. (Approx.)	3.68 MPa.	ASTM C1042-99
Water absorption, % (Approx.)	1.45%	ASTM C97/C97M-09

## Method statement

## Ferroflex 423

### Step 1 Surface Preparation

- Concrete surface must be clean clear from dust, dirt stain, grease, oil, old paint, curing compound and another contaminants.
- Should be test waterlogging to find the concrete hole leakage point should be extract and pour repair with structural repair mortar (Ferrocem 518). Concrete crack must be repaired by epoxy injection (Ferrorez 717).
- Check for leaks around the waterproof rubber line (Waterstop).
- Grinding and finishing the concrete seams.
- Patching large hole over 5 mm. on concrete surface by using portland cement mixed with bonding agent (Ferrobond 111).
- Spray the prepared concrete surface with clean water at least 2-3 hours before apply waterproof with Ferroflex 423.
- In case of strong sunlight, shade should be covered with canvas.

### Step 2 Mixing

Mixing part A (Cement powder) 20 kg. into part B (Liquid) 5 kg. mixing with medium speed drill 300-600 rpm. for 3-5 minutes until it is reach homogeneous.

### Step 3 Using

Apply with soft brush at least 2 time in opposite direction leave time to dry for each layer 4-6 hours. Do not apply thicker than 3 mm. for each layer.



## Spraying

In normal case not necessary to spray the surface Ferroflex 423 except of windy and strong sun should be spray surface with clean water and shade with canvas.

## Limitations/Cautions

- Minimum application temperature is 30 °C.
- Must be curing the surface with clean water to resistance the breakdown of the waterproofing material which is thin and lose water quickly from the absorption of dry concrete.
- Do not apply on concrete joint moving crack or expansion joint crack.
- Do not cleaning with high pressure water jet or scrub with a brush.
- Do not cleaning the cured surface with detergent or chemicals.
- Do not apply in water treatment tank.

## Technical support

Customers can contact the sales department of the company at [sale@ferroproduct.co.th](mailto: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

Vicinity of the waterproofing	Thickness (mm.)	Coverage	Area (m <sup>2</sup> )
1) Positive side waterproof for swimming pool, water tank and general concrete structures.	1	2 kg./m <sup>2</sup>	12.50 m <sup>2</sup>
2) Positive side waterproof for exterior underground wall.	1.5	3 kg./m <sup>2</sup>	8.33 m <sup>2</sup>
3) Negative side waterproof for interior underground wall.	2	4 kg./m <sup>2</sup>	6.25 m <sup>2</sup>

## Package

25 kg./set (A = 20 kg./bag, B = 5 kg./gallon).



## Cleaning tools

Clean before waterproofing to dry (2-4 hours.)

## Storage

- 1 year
- 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

Ferroflex 423 is composed of cement please 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

- 423A/20 (20 kg./bag)  
Code FG-4IC-8858915242167
- 423B/5 (5 kg./gallon)  
Code FG-4IC-8858915242174

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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](mailto:sale@ferroproduct.co.th).



**ISO 9001 & ISO 14001**



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