



Innovative  
**CONSTRUCTION  
CHEMICAL**  
Creating better solutions

## The name you can trust upon

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FERROUS CRETE is one of the leading manufacturers for Polymer Modified Tile/Stone Adhesives in India under the technical support by LOTTE Fine Chemicals Co. Ltd., Korea. We have the state of the art technology production units at Faridabad (Haryana) - Unit 1 & Unit 2, Bikaner (Rajasthan) - Unit 1 & Unit 2, Nellore (A.P), & Varanasi, (Uttar Pradesh), Kathua, (Jammu) and also an AAC Block production unit at Palwal (Haryana) with annual plant capacity of 2.5 lacs cubic meter under the extensive care & surveillance of a dedicated team of professionals.

FERROUS CRETE is first amongst Indian manufactures of tile and stone installation material to obtain the prestigious ISI Mark and also an ISO 9001 : 2015 accredited company. Utilizing the advanced polymer technology in producing Exterior & Interior finish products such as AAC Blocks, Adhesives, Grouts, Sealers, Plasters, Water Proofing, Wall Putty and other building products for commercial and residential applications. It provides outstanding quality life for the tiles & stone installation products.

Ferrous Crete has diversified and ventured in the cleaning industry under the brand name FerroKlean, to provide cleaning and hygienic solutions for House Keeping, Kitchen Care, Personal Care, Building Care, Fabric Care, Food & Beverages and Infection Prevention. Through cleaning technology and our expertise that saves life, providing a tailored customer centric approach that empowers sustainable cleaning solutions.

FERROUS CRETE brand is well supported by a fully equipped modern research, development & testing facilities. Besides this, innovation in marketing & merchandising added with the experience of sales team, who are expertise in all products & in quality approvals from the Government Institutions & Prestigious Projects. It is their best endeavors to understand the market needs & demands that helps us to provide the solution with an array of products. In modern construction World, FERROUS CRETE has become a reputed Brand among its list of clients which includes Professionals, Builders, Contractors, Engineers, Architects, Municipalities, Star category Hotels and Hospitality sectors through its Pan-India Operations & Dealers network.

Focused on the Building Material / Adhesive business, now the Company has a vision of diversification into other products that fall under construction chemicals category & continue to invest in production equipments and facilities to provide our customers with top quality products at competitive prices.

## Construction Chemicals Division

FERROUS CRETE manufacture a comprehensive range of construction solutions catering the needs of new construction as well as repairs and maintainence.

With the aim to create a 'Leak free' and 'Damp free' India, FERROUS CRETE continuously works towards imparting the right knowledge and enhancing the capability of its customers. It has invested significantly in enhancing the workmanship of the applicators and contractors by giving training on the right application techniques, thus propagating healthy constructions.



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# Waterproofing



*Liquid Applied &  
Preformed Membranes  
for Waterproofing of  
Structures*

## FERRO 161

### Two Component Acrylic Cementitious Waterproofing with (Crack Bridging Capacity > 2mm)

Ferro 161 is a two component acrylic modified cementitious waterproofing coating applied by brush, roller or trowel to resurface concrete and provides an effective barrier to water borne salts and atmospheric gases. It provides a hard wearing, seamless, waterproof membrane for roofs and foundation protection, provides extreme service class structures because on curing it forms an excellent elastomeric, waterproof & protective layer over the substrate.

#### Advantages:

- Protects against carbonisation.
- Suitable for internal and external waterproofing.
- Bonds to porous substrates very strongly.
- Copes with thermal movement of concrete structures.
- Excellent lining of concrete structures.
- Sealing for "hairline" cracks in concrete structures (not subject to movement).

#### Coverage:

Two coats of mixed slurry to be applied to the set concrete @1.5 - 2 kg/ m<sup>2</sup> by a masonry brush, roller or appropriate power spray equipment.



#### Pack Size:

1. Part A - 4 ltr Liquid (Acrylic emulsion for high durability & flexibility).
2. Part B - 23 kg Powder (Cementitious polymer chemical).

#### Shelf Life:

12 months from the date of manufacturing, if kept away from frost

## FERRO 161A

### Two Component Elastomeric Acrylic Polymer Cementitious Waterproofing Coating.

Ferro 161A is a highly efficient coating against long term weathering and to protect RCC structures from CO<sub>2</sub>, Chloride & sulphate ions, oxygen water. It is a two component acrylic polymer modified cementitious coating that allows water vapour to escape from the structure and creates excellent bond with the concrete structure due to similar thermal expansion coefficient.

#### Advantages:

- Excellent weather resistance for exterior application.
- Easy to apply & Economical
- Excellent for water retaining structures
- Suitable for potable water tanks.
- Excellent bond to concrete, brick & block work substrates and both new & existing structures.
- Highly resistant to CO<sub>2</sub>, chloride and sulphate ions.

#### Coverage:

The approximate coverage per pack at even consistency for 1 mm thickness is as follows.

Packing	Brush application coverage @ 1mm thickness
15kg + 5.088kg pack	12 – 14 m <sup>2</sup>
5kg + 1.71kg pack	4 – 4.5 m <sup>2</sup>



#### Pack Size:

1. 15 kg + 5.088 kg = 20.088 kg
2. 2 kg + 1 kg = 3 kg

#### Shelf Life:

12 months from the date of manufacturing, if kept in original containers

## FERRO 2135

### Acrylic Polymer Based Special Treatment to Protect the Concrete against Damages

Ferro 2135 is an acrylic polymer modified acrylic coating when mixed with cement provides a good quality mixture having high strength and improved flexibility. It provides a highly durable surface having resistance to alkali & ultra violet rays. It generally helps in reducing the chances of salt penetration and also allows the moisture trapped in concrete to escape hence inhibits the peeling of surface.

#### Advantages:

- Provides a highly flexible but tough surface after drying.
- Allows moisture to escape from substrate.
- Uniform application.
- Excellent bonding strength.
- Reduces or prevents efflorescence.
- Highly durable in continuous wet conditions.
- Non-flammable and non-corrosive.

#### Coverage:

For one coat : 500gms cement with 250gm acrylic polymer is required for 1sqm area.

For two coats : 750gms cement with 375gm acrylic polymer is required for 1sqm area.



#### Pack Size:

1 ltr, 5 ltr, 10 ltr & 20 ltr

#### Shelf Life:

12 months from the date of manufacturing, if kept away from frost

## FERRO 2136

### Acrylic Polymer Modified Cementitious Waterproof Composite Coating Membrane

Ferro 2136 is a single component coating provides tough, impermeable waterproofing membrane and protects the concrete from natural elements such as wind, water sunlight. It is to be mixed with cement on site and applied with brush over concrete substrate.

#### Advantages:

- Forms highly impermeable & tough waterproofing waterproofing membrane.
- Effective and Economical method of waterproofing.
- Non-toxic, non-flammable and user friendly.
- Brush applied over concrete or masonry surfaces.
- Allows inside water vapour to escape.

#### Coverage:

Priming Coat – 16-17 m<sup>2</sup> /ltr  
Topcoat – 4.5 – 5.0 m<sup>2</sup>/ltr/coat



#### Pack Size:

500ml , 1 ltr, 5 Ltrs & 20 Ltrs

#### Shelf Life:

12 months from the date of manufacturing, if kept away from frost



## FERRO 2141

### Crystalline Coating System to Achieve Water Tight Concrete

Ferro 2141 is a single component, ideal for producing water tight concrete structures. It can be easily coated to the surface due to its enhanced adhesion & thixotropic property. It works on a technology in which active chemical react with moisture and form nano-particles inside the pores thus permanently inhibits the water penetration. Being resistant to alkalis & UV rays, it can be easily applied to external substrates and substrates in contact with waterbodies having high hydrostatic pressure.

#### Advantages:

- Suitable for both dry and damp areas.
- Bears high hydrostatic pressure.
- Penetrate deep in the pores.
- Crack bridging capacity of up to 0.25mm wide.
- Non-toxic and non-flammable.

#### Coverage:

1 - 2 kg/m<sup>2</sup> per coat. Coverage may vary depending upon the site conditions.

#### Shelf Life:

12 Months from the date of manufacturing in unopened condition.



#### Pack Size:

15 kg

## FERRO 2146

### Protective Bituminous Compounds Coating

Ferro 2146 is a specially formulated mix of bitumens that comes in ready to use form. It provides a thorough protection from naturally occurring chemicals. On drying it forms a high quality tough bitumen film which provides continuous barrier to the passage of water and water vapours and damp proof courses, linings to potable water tanks and pipes.

#### Advantages:

- Ready to use.
- Efficient and Economical
- Excellent bonding with the substrates.
- Taint Free when dry.
- Highly flexible and provides resistance to natural chemicals.

#### Coverage:

The approximate coverage will be 2 – 7 m<sup>2</sup>/ litre per coat. It may vary depending on the porosity and smoothness of substrate.



#### Pack Size:

20 ltrs & 200 ltrs

#### Shelf Life:

12 months from the date of manufacturing. If Kept in original closed containers in between 15 – 40 degree celcius.

## FERRO 2152

### Protective Polyurethane Membrane Coating

Ferro 2152 is a polyurethane based single component moisture cured cold applied elastomeric protective coating system having high solid content suitable for waterproofing of roof, walls and foundation. On drying, forms an elastomeric protective and waterproofing membrane. Being viscous, it can be easily applied on vertical surface. It has excellent adhesion to dry as well as primed surfaces of concrete, plaster, masonry, mastic coating and metal.

#### Advantages:

- Easy to apply.
- High bonding capability.
- Highly flexible.
- Fill cracks up to 5mm.
- Excellent resistance to alkali & fungus.

#### Coverage:

1-1.2 kg/m<sup>2</sup>@1 mm in two coats.

For heavy duty application - 1.5 mm thickness is recommended.

#### Shelf Life:

12 months from the date of manufacturing, if kept away from frost or direct sun and in original closed containers



#### Pack Size:

25 kg

## FERRO 2181

### Two Component Epoxy Bonding Agent

Ferro 2181 is a General purpose Two component Epoxy Bonding agent consists of Resin and hardener to be mixed on site and provides good bonding in between old and new cementitious substrates.

#### Advantages:

- Improves mechanical strength of concrete.
- Excellent adhesion between old and new concrete.
- Remove chances of cracks in future.
- Easily applied with brush application.

#### Coverage:

The coverage is approximately 2 – 2.5 m<sup>2</sup>/L.

Coverage may vary as per the practical site conditions such as texture and porosity of the substrate.



#### Pack Size:

1 ltr & 4 ltr

#### Shelf Life:

12 months from the date of manufacturing, if kept under 35°C in original closed containers.

## FERRO 131 (Super Latex)

### Polymer Modified Waterproofing cum Bonding Agent

Ferro 131 is a latex based milky liquid admixture for concrete repair, waterproofing coating for concrete and mortar, bonding on old to new concrete surfaces or on any building material, Screeding work and filling of cracks over concrete substrate such as grout injection work. It is U.V. resistant and non-biodegradable & water soluble which makes it easily usable with cement slurry, mortar, concrete, grouts, etc.

#### Advantages:

- Improves the flexibility, tensile strength and elasticity of cement.
- Provides waterproofing, weather resistant and removes efflorescence.
- Reduce the velocity of cement injection grout and improve bonding with substrates.
- Provides highly tough but resilient surface and resistance to toxic chemicals.
- Unmatched elongation which provides good waterproofing property.
- Most versatile polymer modified waterproofing to be used with cement.



#### Coverage:

The approximate coverage is as follows.	
When used as Waterproofing Coating	0.075 - 0.080 kg/m <sup>2</sup> in each coat
When used as Bonding Agent	0.05 kg m <sup>2</sup> in each coat
When used as Repair Concrete & Screed	10-15% by weight of cement @ water / powder ratio = 0.5.
When used as Repair Mortar	0.035 kg/m <sup>2</sup> thickness @ water / powder ratio = 0.5.
When used as Crack Filling & Grout Injection	
In case of Crack Filling	0.020 kg/m thickness @ water / powder ratio = 0.5.
In case of Grout Injection	4 - 6 kg per bag of cement

\* The consumption may vary depending upon the thickness of the coats.

#### Pack Size:

200gm, 500gm, 1 kg, 5 kg & 20 kg

#### Shelf Life:

12 months if kept in a cool dry place and remains in un-opened condition.



## FERRO 151

### Single component Micro-fibres reinforced Acrylic Water Proofing

Ferro 151 single Component 3 layer heavy duty terrace waterproof & heat reflective coating system, The Coating material specially developed with highly elastic & resilient acrylic polymers, microfibers, additives & best quality fungicidal in water medium etc. The coating in addition saves energy bills up to 20% of cooling and heating bills.

#### Advantages:

- High sheen, brilliant white colour and thick coat results in high levels of heat reflectance
- Excellent adhesion - Bonds to porous and nonporous surfaces
- Good resistance to Carbon dioxide and Chloride ion diffusion
- Flexible enough to bridge hairline crack bridge up to 2.00mm width
- The product shall exhibit at least 30% elongation at ambient temperature.
- Ease of application – can be applied by brush & roller easily

#### Coverage:

Approx 18 - 22 sqft/kg



#### Pack Size:

1 Ltr., 4Ltr., 10 Ltr., 20 Ltr.

#### Shelf Life:

12 months in unopened packs, Keep it in a dry area

## FERRO 171

### SBR Bonding Agent for CementMortar & Concrete

Ferro 171 is a styrene butadiene Rubber (SBR) polymer with high bonding characteristics is stable under wet alkaline conditions forming a reinforcing polymer matrix within cementitious mixes including concrete, screed and mortar. It is mixed with cement mixture to give higher adhesion power to all surfaces, extra bonding strength, excellent plasticity, higher impermeability and flexure resistance, higher abrasion and acid resistance and can be considered as a waterproof admixture when mixed with cement.

#### Advantages:

- Excellent adhesion to concrete, stonework, masonry, etc.
- Mortar that contains SBR provides higher compressive and flexural strength with waterproofing effect
- Reduces permeability which helps to reduce cracks by chemicals.
- Reduces shrinkage and cracking in repair and screed mixes.
- Good freeze / thaw resistance.
- Improves cohesion and workability.
- Non toxic.

#### Coverage:

The approximate coverage is as follows.	
When used as Waterproofing Coating	22-25 sqf/kg @ 2 coats
When used as Repair Mortar	6-8 kg / 50 kg of cement
When used as Screed	6-8 kg / 50 kg of cement
When used as Bonding Agent	45-50 sqf/kg @ 1 coat



#### Pack Size:

200gm, 500gm, 1 kg, 5kg & 20 kg

#### Shelf Life:

12 months if kept in a cool dry place and remains in un-opened condition.





# Concrete Repairs







*Primers, cement and resin based materials to reinstate defective concrete.*

## FERRO 3101

### Crack Filling Reinforced Compound to Stop Water Ingress

Ferro-3101 is especially designed RTU compound for crack bridging capacity of up to 3mm and inhibits water ingress through those cracks. It is suitable for both interior and exterior surfaces of plaster, wood, gypsum, POP, etc., putty and paint is easily applicable as an over coating and provide excellent adhesion.

#### Advantages:

- It provides high quality strength.
- Reinforced with glass fibers.
- Good elongation property.
- Fills upto 3mm cracks.
- Inhibits water seepage.
- Ready to use and easy to apply.

#### Coverage:

In case of 3mm plaster cracks of 5mm depth 2 coats of paste Will cover 75 – 80 running ft per kg of material

#### Shelf Life:

12 months from the date of manufacturing in unopened condition



#### Pack Size:

360 gm & 900 gm

## FERRO 3113

### Sprayable, Polymer Modified, Shrinkage Controlled, Fibre Reinforced Cementitious Repair Mortar

Ferro 3113 is a specially designed polymer modified mix of both powder and fibre reinforced repair mortar having consistency for both hand and spray application. It is a single component repair mortar suitable for most structural and load bearing repairs and is Particularly for vertical and overhead repairs.

#### Advantages:

- It is suitable for local conditions and hence user friendly.
- Achieve performance as per the placed concrete for better bonding.
- Shrinkage compensated and very low rebound saves cost.
- Extremely low permeability.
- Enhanced durability.

#### Coverage:

Yield is 13.5L per 25kg bag @ water : powder = 0.17



#### Pack Size:

25 kg

#### Shelf Life:

6 months from the date of manufacturing

## FERRO 3133

### General Purpose, High Strength, Micro Concrete for Repair Damaged Concrete Structure

Ferro 3133 is specially designed for repairing work of damaged reinforced concrete structures such as Slab, Beam & Column jacketing, honeycombing. It comes in ready to use pre-blended polymer modified cementitious powder when mixed with water produce excellent workability and high strength concrete.

#### Advantages:

- It provides good bonding between old and repaired concrete section resulting in crack free finished surface.
- Curing should be done as per the general method for concrete.
- Reduces the permeability of concrete which inhibits corrosion.
- Up to 100mm thick portions can be filled in single application.
- Negligible shrinkage.
- Pumpable to the restricted location.
- Rapid early strength gain.

#### Coverage:

- Yield is 13L per 25kg bag @ water : powder = 0.16 & Fresh Wet Density @ 20°C is 2150 kg/m<sup>3</sup>.
- Actual yield may vary as per the quantity of coarse aggregates added.



#### Pack Size:

25 kg

#### Shelf Life:

6 months from the date of manufacturing in unopened condition

## FERRO 3136

### General Purpose, High Strength, Micro Concrete for Repair Damaged Concrete Structure

Ferro 3136 is specially designed for repairing work of damaged reinforced concrete structures such as Slab, Beam & Column jacketing, honeycombing. It Comes in ready to use pre-blended polymer modified cementitious powder when mixed with water produce excellent workability and high strength concrete.

#### Advantages:

- Easily pumpable to heights for different grades of concrete.
- Provides good strength and high performance concrete.
- In case of increased dosage retardation will not be affected greatly.
- Greater elasticity modulus.
- Better resistance to carbonation and atmospheric conditions.
- Reduced shrinkage and creeps.

#### Coverage:

- Yield is 13L per 25kg bag @ water : powder = 0.16 & Fresh Wet Density @ 20°C is 2350 kg/m<sup>3</sup>.
- Actual yield may vary as per the quantity of coarse aggregates added.



#### Pack Size:

25 kg

#### Shelf Life:

6 months from the date of manufacturing.

## FERRO 3161

### Two Component Polyurethane Resin for Sealing Cracks

Ferro 3161 is specially designed two component solvent free polyurethane based concrete repair. It provide good adhesion with concrete and masonry and forms a tough & flexible resin. In case injection provides room for movement as well as good bonding.

#### Advantages:

- It penetrates and blocks fine cracks and cavities due to its low viscosity.
- Provides good bonding strength with both dry and moist substrate.
- Flexible and strong for structural movement.
- Highly impermeable for water seepage.
- Suitable for use in high temperature condition.
- Bear high hydrostatic pressures.



#### Pack Size:

1 kg, 5 kg & 20 kg

#### Shelf Life

12 months from the date of manufacturing









# Admixture





*Concrete Admixtures  
are used to modify and  
enhance the physical  
properties of Mortar*



## FERRO 4112 A

### Superplasticising Admixture

Ferro 4112 A improves the workability of the concrete without addition of extra water by efficiently placing available water to all the particles uniformly. It enhances the physical properties of concrete such as strength, consistency, durability through the production of Low permeability concrete. It is to produce high grade concrete such as M30 & above by significantly reducing water content and providing impermeable, high strength concrete.

#### Advantages:

- Enhances the durability of concrete which in turn improves the strength of concrete structure.
- Reduces the risk of segregation and bleeding.
- Helps to achieve superior grade concrete without additional cement.
- Being free from chloride makes it safer for use in RCC structures.
- Reduced water seepage due to low permeability of concrete. substrates and both new and existing structures.
- Highly resistant to CO<sub>2</sub>, chloride and sulphate ions.

#### Dosage:

0.50 - 2.0 ltr per 100 kg of cement



#### Pack Size:

5kg, 20kg, 200ltr & 250kg

#### Shelf Life:

12 months from the date of manufacturing in unopened condition

## FERRO 4112 B

### Superplasticising Admixture

Ferro 4112 B improves the workability of the concrete without addition of extra water by efficiently placing available water to all the particles uniformly. It enhances the physical properties of concrete such as strength, consistency, durability through the production of Low permeability concrete. It is to produce high grade concrete such as M30 & above by significantly reducing water content and providing impermeable, high strength

#### Advantages:

- Enhances the durability of concrete which in turn improves the strength of concrete structure.
- Reduces the risk of segregation and bleeding.
- Helps to achieve superior grade concrete without additional cement.
- Being free from chloride makes it safer for use in RCC structures.
- Reduced water seepage due to low permeability of concrete.

#### Dosage:

0.50 - 2.0 ltr per 100 kg of cement



#### Pack Size:

5kg, 20kg, 200ltr & 250kg

#### Shelf Life:

12 months from the date of manufacturing.

## FERRO 4127

### Air Entraining Admixture

Ferro 4127 is an air entraining admixture which forms the microscopic air bubbles in between water and cementitious particles, which are evenly distributed throughout the concrete. It is chloride free admixture based on neutralised Vinson resin. The entrained air improves the durability of concrete by providing protection against freezing and thawing and with the use of de-icing salts.

#### Advantages:

- Increase resistance to attack by freezing and thawing.
- Reduced problems of scaling and concrete failure.
- Entrained air provides stable cohesive mix, reducing segregation and bleeding.
- Suitable for potable water tanks.
- Enhanced workability produce a dense and uniform surface.
- Advanced air bubble stability makes it usable with a wide range of aggregate qualities.

#### Dosage:

Trails should start from 0.08 litres per 100kg of cement which will achieve an air content of 3.5 – 6.5% in a concrete having workability of 300 – 350 kg/m<sup>3</sup> cementitious materials.



#### Pack Size:

5ltr, 20ltr & 200ltr

#### Shelf Life:

12 months from the date of manufacturing in unopened condition

## FERRO 4131

### PCE Based Advanced Super Plasticiser

Ferro 4131 is a combination of advanced super plasticiser consists of long lateral chains. On mixing this special admixture develops an electrostatic repulsion and which enhances the dispersion of cement particles. It enhances the properties of water reduction and workability retention.

#### Advantages:

- Easily pumpable to heights for different grades of concrete.
- Provides good strength and high performance concrete.
- In case of increased dosage retardation will not be affected greatly.
- Greater elasticity modulus.
- Better resistance to carbonation and atmospheric conditions.
- Reduced shrinkage and creeps.

#### Dosage:

0.5 to 2.5 kg per 100 kg of cementitious material



#### Pack Size:

200 ltrs & Bulk Containers

#### Shelf Life:

12 months from the date of manufacturing.

## FERRO 4133

### PCE Based High Range Water Reducing and Retarding Super Plasticiser

Ferro 4133 is a combination of high range water reducing and retarding super plasticiser consists of long lateral chains. On mixing this special admixture develops an electrostatic repulsion and which enhances the dispersion of cement particles. It enhances the properties of water reduction and workability retention.

#### Advantages:

- Easily pumpable to heights for different grades of concrete.
- Provides good strength and high performance concrete.
- In case of increased dosage retardation will not be affected greatly.
- Greater elasticity modulus
- Better resistance to carbonation and atmospheric conditions.
- Reduced shrinkage and creeps.

#### Dosage:

0.3 to 1.3 kg per 100 kg of cementitious material



#### Pack Size:

200 kg, 250 kg & Bulk Containers

#### Shelf Life

12 months from the date of manufacturing provided the temperature should be in between 2°C and 5°C

## FERRO 4156

### Accelerating Water Reducing Admixture

Ferro 4156 is a plasticiser which is chloride free and produce exceptionally high early strengths as well as accelerate setting of Portland cement concrete. It is light straw coloured liquid that is safe in prestressed and reinforced concrete.

#### Advantages:

- Enhances the durability of concrete which in turn improves the strength of concrete structure.
- Reduces the risk of segregation and bleeding.
- Early strength improves resistance to frost.
- Suitable for bricklaying mortars.
- Highly effective at low temperatures.
- Being free from chloride makes it safer for use in RCC structures.
- Reduced water seepage due to low permeability of concrete.

#### Dosage:

2.0 to 3.0 ltrs per 100 kg of cement



#### Pack Size:

5kg, 20kg, 200kg & 250kg

#### Shelf Life:

12 months from the date of manufacturing



## FERRO 141

### Liquid Integral Waterproofing and Super Plasticising Admixture for Concrete & Masonry Work coating

When added to the mix, it spreads over the cement and aggregates, disperses the cement particles and reduces the effect of capillary action by forming dense concrete. It makes the mix hydrophobic, reduces its permeability, and thus increases the waterproofing ability. It is recommended for concrete with medium grade compressive strength, It serves as a strength generating admixture and provide excellent workability.

#### Standard:

IS 2645 : 2003

#### Advantages:

- Improves workability on the concrete.
- Helps to achieve good compatibility.
- Reduces transmissibility and porosity.
- Required at a very small dosage, hence convenient to handle and economical.
- Improves water tightness.

#### Dosage:

200ml Ferro 4166 in 50 Kg cement bag



#### Pack Size:

200ml, 500ml, 1ltr, 5ltr & 20ltr

#### Shelf Life:

12 months from the date of manufacturing, if kept away from direct sunlight.

## FERRO 4167

### Integral Waterproofing Crystalline Based Admixture

Ferro 4167 is a powdered integral waterproofing crystalline based admixture which provides water tight concrete. It consists of Portland cement in blend with other ingredients and forms a non soluble crystals into the concrete pores blocking the penetration of water from any direction.

#### Standard:

IS 2645 : 2003

#### Advantages:

- Highly Effective due to formation of crystals in the capillaries.
- Easy to use.
- Excellent for water retaining structures
- Crack filling ability up to 0.4 mm width.
- Good resistance to hydrostatic pressure from both sides.
- Reduced shrinkage & creep.
- Increase Durability.

#### Shelf Life:

6 months from the date of manufacturing when stored at 5°C to 50°C.



#### Pack Size:

30 kg

# FERRO 4168

## Integral Powder Cement Waterproofing Admixture

Ferro 4168 is a powdered integral waterproofing admixture which provides water tight concrete. It consists of Portland cement in blend with other ingredients to provide waterproofing abilities. It is available in off-white powder form.

### Standard:

IS 2645 : 2003

### Advantages:

- Provides barrier against water penetration.
- Provides watertight concrete.
- Free from chloride.
- Enhanced workability of concrete.
- Protects from salt penetration and efflorescence.

### Dosage:

1) For cement content of  $350 \text{ kg/m}^3$  and above add 0.5 kg admixture powder per 50 kg cement

2) For cement content of below  $350 \text{ kg/m}^3$  and above add 1kg admixture powder per 50 kg cement for plastering.

### Pack Size:

1 kg & 20 kg bags

### Shelf Life:

18 months from the date of manufacturing, if kept away from direct sunlight.









# Industrial Flooring





*A Complete Range of Floor  
Surfacing Products Designed  
to Enhance the Performance  
Characteristics of Both New &  
Old Concrete Floors*

## FERRO 5101 A

### Pre-Blended Floor Hardener Providing Non-Metallic Surface Finish

Ferro 5101 A is a single component, non metallic floor hardener for concrete to enhance the concrete's abrasion and chemical resistance, thus significantly improving the durability of the concrete surface. It is pre-blended dry shake hardener containing binder, admixture and other additives. It is directly applied over the fresh, wet concrete to provide hard surface properties. Floor hardener will not repair a crumbling, substandard, or weak surface, it can only extend a good floor's overall lifespan.

#### Advantages:

- Excellent abrasion resistance.
- Non metallic finish.
- Improved Compressive strength.
- Easy to use and economical.
- Non slip and dust proof surface.

#### Coverage:

Heavy duty – 7 kg/m<sup>2</sup>  
Medium duty – 5 kg/m<sup>2</sup>  
Light duty – 3 kg/m<sup>2</sup>



#### Pack Size:

25 kg

#### Shelf Life:

12 months from the date of manufacturing in unopened condition

## FERRO 5101 B

### Pre-Blended Floor Hardener Providing Non-Metallic Surface Finish

Ferro 5101 B a single component, non metallic floor hardener for concrete to enhance the concrete's abrasion and chemical resistance, thus significantly improving the durability of the concrete surface. It is pre-blended dry shake hardener containing binder, admixture and other additives. It is directly applied over the fresh, wet concrete to provide hard surface properties. Floor hardener will not repair a crumbling, substandard, or weak surface, it can only extend a good floor's overall lifespan.

#### Advantages:

- Excellent abrasion resistance.
- Non metallic finish.
- Improved Compressive strength.
- Easy to use and economical.
- Non slip and dust proof surface.

#### Coverage:

Heavy duty – 7 kg/m<sup>2</sup>  
Medium duty – 5 kg/m<sup>2</sup>  
Light duty – 3 kg/m<sup>2</sup>



#### Pack Size:

25kg

#### Shelf Life:

12 months from the date of manufacturing.



## FERRO 5107

### Three Component Self-Levelling Epoxy Underlay

Ferro 5107 is a three component, high strength epoxy underlay consists of resin, hardener and fillers designed to resist chemical attack and impact shock. It is when laid properly will provide a high strength hard surface for application of other flooring solutions. It is best suitable for application up to 5mm thickness.



#### Advantages:

- Economical
- High Strength.
- Fast and easy application.
- Highly durable.
- Provides smooth surface finish without any joints.

#### Coverage:

7.5 m<sup>2</sup>/ pack @ 2mm thickness.

#### Pack Size:

15 ltr

#### Shelf Life:

12 months from the date of manufacturing in unopened condition

## FERRO 5111

### Three Component Epoxy Floor Coatings

It is a three component epoxy floor coating system comes in appropriate quantities to mix completely on site before use. It provides hard & flexible surface floor coating having excellent adhesion to substrates of concrete, metals, etc. It provides easily cleanable impermeable surface with semi-glossy finish.



#### Advantages:

- Excellent durability.
- Highly resistant to industrial chemicals.
- Economical – low maintenance costs.
- Easily cleanable keeps it hygienic.
- Attractive appearance – available in several colors.

#### Coverage:

10 m<sup>2</sup>/litre @ 100 microns wet film thickness per coat. Coverage may vary due to nature of substrate and wastage factor.

#### Pack Size:

4.5 ltrs

#### Shelf Life:

12 months from the date of manufacturing.

## FERRO 5113

### Three Component Epoxy Floor Coatings

Ferro 5113 is a three component epoxy floor coating system consists of base, hardener & color pack that comes in appropriate quantities to mix completely on site before use. It provides hard & flexible surface floor coating having excellent adhesion to substrates of concrete, metals, etc. It provide easily cleanable impermeable surface finish.

#### Advantages:

- Excellent durability.
- Highly resistant to industrial chemicals.
- Economical – low maintenance costs.
- Solvent free odourless application.
- Available in different textures and hence slip resistant.
- Attractive appearance – available in several colors.

#### Coverage:

5 m<sup>2</sup>/litre @ 200 microns wet film thickness per coat. Coverage may vary due to nature of substrate and wastage factor.

Antislip texture – 4 m<sup>2</sup>/litre @ 250 microns wet film thickness per coat.

Coverage may vary due to nature of substrate and wastage factor.



#### Pack Size:

4.5 ltr

#### Shelf Life

12 months from the date of manufacturing provided the temperature should be in between 2°C and 5°C

## FERRO 5121 A

### Flowable Epoxy Floor Topping up to 1 – 1.5mm Thickness

Ferro 5121 A is a four component topping system consists of base, hardener, graded aggregates with color pigmented epoxy resin. It provides a smooth surface finish having good light reflective index which provides excellent resistance to chemicals. It is usually laid at a nominal thickness of 1.0 – 1.5 mm.

#### Advantages:

- Saves time - easy and fast application
- Highly resistant to wide range of chemicals.
- Excellent abrasion resistance.
- Provides easily cleanable impervious floor surface.
- Good aesthetics - available in variety of colours.

#### Dosage:

10 m<sup>2</sup> per 15 ltr pack @ 1.5 mm thickness

15 m<sup>2</sup> per 15 ltr pack @ 1 mm thickness



#### Pack Size:

15 ltr

#### Shelf Life:

12 months from the date of manufacturing

## FERRO 5121 B

### Flowable Epoxy Floor Topping up to 2mm Thickness

Ferro 5121 B is a four component topping system consists of base, hardener, graded aggregates with color pigmented epoxy resin. It provides a smooth surface finish having good light reflective index which provides excellent resistance to chemicals. It is usually laid at a nominal thickness of 2 mm.

#### Advantages:

- Excellent durability.
- Highly resistant to industrial chemicals.
- Economical – low maintenance costs.
- Solvent free odourless application.
- Available in different textures and hence slip resistant.
- Attractive appearance – available in several colors.

#### Coverage:

7.5 m<sup>2</sup> per 15 ltr pack @ 2 mm thickness



#### Pack Size:

15 lts

#### Shelf Life:

12 months from the date of manufacturing, if kept away from direct sunlight.

## FERRO 5137

### Epoxy Primer for Concrete Substrates

Ferro 5137 is a two component epoxy based primer for concrete substrates. It consists of base and hardener suitable for priming concrete before application of any floor toppings, protective coating or epoxy based repairing mortars.

#### Advantages:

- It is suitable for damp surfaces as well.
- Provide better adhesion of toppings with the substrate.

#### Coverage

5.5 - 6.5 m<sup>2</sup> / ltr



#### Pack Size:

4 ltr

#### Shelf Life:

12 months from the date of manufacturing in unopened condition.



# Grouts & Anchors







*A complete range of high cementitious & epoxy based grouts for machine foundation, bridge bearings, rail grouts and precast industry*



## FERRO 6103

### High Strength, Non Shrink, Special Additive Pre-Mixed Cementitious Grout

Ferro 6103 is especially designed for load bearing in prefabricated concrete structures, compressors and other heavy equipments subjected to vibration and for column bearing plates of heavy structures. It is a composite material typically used for filling voids under machines or other structural elements, sealing joints and openings in surfaces and reinforcing existing structures.

#### Advantages:

- It does not induce vibration and can be controlled to avoid structural damage.
- Non-toxic & non-flammable.
- Very useful for limited space and low headroom applications.
- Used for slab jacking that lifts or levels the deformed foundation.
- Shrinkage compensated.
- High final strength & excellent bonding to concrete.
- Excellent flow characteristics.

#### Coverage:

**For Pourable Consistency** - Yield is 15.5L per 30kg bag @ water : powder = 0.165 & Fresh Wet Density @ 30°C is 2220 kg/m<sup>3</sup>

**For Flowable Consistency** - Yield is 16L per 30kg bag @ water : powder = 0.180 & Fresh Wet Density @ 30°C is 2220 kg/m<sup>3</sup>



#### Pack Size:

25 kg

#### Shelf Life:

6 Months from the date of Manufacturing in unopened condition.

## FERRO 6121

### Epoxy Resin Based High Strength Grout

Ferro 6121 is a two component solvent free grout suitable for filling widths of 0.25 to 10 mm. It consists of base and hardener designed for injecting into concrete cracks, honeycombs and construction joints of width 0.25 to 9 mm. It is for base plate grouting as well as injection grouting.

#### Advantages:

- Highly versatile and suitable for quite a range of loading situations.
- Easy and fast application due to supply as per mixing ratio.
- Economical because of high early strength which reduces time consumed.
- Highly Durable due to high strengths.
- No shrinkage and hence greater bonding strength.



#### Pack Size:

1 ltr

#### Shelf Life:

12 months from the date of manufacturing, when stored below 35°C

## FERRO 6123

### Epoxy Resin Based High Strength Grout

Ferro 6123 is a three component solvent free grout suitable for filling gap widths of 10 to 75 mm. It consists of base, hardener and well graded aggregates designed for injecting into concrete cracks, honeycombs and construction joints. It comes in proper ratio that is to be used at site.

#### Advantages:

- Highly versatile and suitable for quite a range of loading situations.
- Easy and fast application due to supply as per mixing ratio.
- Economical because of high early strength which reduces time consumed.
- Highly Durable due to high strengths.
- No shrinkage and hence greater bonding strength.



#### Pack Size:

14 ltr

#### Shelf Life:

12 months from the date of manufacturing when stored below 35°C.

## FERRO 6141

### Cementitious Grout Admixture

Ferro 6141 is a plasticised cementitious grout admixture in a powder form. It is a unique blend of plasticising agent and a gas producing expansion medium. Plasticising agent allows the reduction in water/cement ratio with increase in strength and durability. The expansive medium reduces chances of natural settlement and shrinkage of grout and provides stability and cohesion.

#### Advantages:

- Low water/cement ratio gives grout high fluidity and hence easy placement or injection.
- Free from chlorides.
- Low permeability and highly durable.
- Gaseous expansion system compensates for plastic shrinkage and settlement.
- Free from iron content to cause harm to grout in any way.

#### Dosage:

OPC	Sand	Water	Ferro 6141 (gm)	Yield (Ltr)
50kg		20-22	225	36
50kg	50kg	22-24	225	57



#### Pack Size:

225 gm

#### Shelf Life:

6 months from the date of manufacturing, when stored below 35°C

# ALL YOU NEED TO KNOW ABOUT CONSTRUCTION CHEMICALS

## WATERPROOFING

- **Improves Structure Durability**  
Moisture eats up the strength of your structure if left untreated. Getting an effective waterproofing solution will increase its durability.
- **Reduces Cost of Repairs**  
Waterproofing helps save a good amount of money in the long term by reducing the cost of frequent repairs.
- **Offers Energy Efficiency**  
Waterproofing solutions not only provide an effective treatment for leaking roof but also offer great insulation. It is UV resistant and reduces temperature by 8°C. As a result, it helps you save on utility bills by reducing air conditioning costs.
- **Prevents the Onset of Health Concerns**  
Water seepage through the roof reaches out the different parts of your structure, leading to the growth of mould and mildew, which can impact the quality of the indoor air. Consequently, it may lead to several health concerns for the inhabitants of the place such as wheezing, eye infection, breathing problem, coughing, and skin irritation to name a few. Getting roof waterproofing helps prevent the onset of mentioned health concerns.
- **Improves the Life of Interior Work and Furniture**  
Once water seeps into your walls, it leads to the formation of mould and mildew which, if left untreated, gradually ruins the beauty of your interiors. Waterproofing your roof can help you improve the life of interior work and furniture.

## CONCRETE REPAIR

- The deterioration of concrete is influenced by a number of physical, chemical and environmental factors. With our wide range of repair, strengthening and protection systems, we are able to select the product best suited to your needs in terms of both usability and technical properties. Our materials are also excellent for use in new construction, from cosmetic repairs to structural repairs. We have the experience and technology to get your project back on track.

### Key Causes of Concrete Failure and Why to Fix It

#### **Deterioration of concrete is largely due to:**

**Chemical degradation**, e.g. chemical exposure, alkali aggregate reactions, bacterial action  
**Corrosion of the reinforcement steel**, e.g. carbonation, chlorides, stray electrical current

**Mechanical attack**, e.g. impact, overloading, movement, earthquake, explosion

**Physical damage**, e.g. freeze/thaw action, thermal movements, shrinkage, abrasion, wear  
Underlying contributors, e.g. poor construction, design faults, lack of maintenance

### Reasons for concrete repair:

**Replace defective concrete**  
**Restore structural integrity**  
**Restore aesthetic appearance**  
**Restore geometric appearance**  
**Restore durability**



## ADMIXTURES

- Water reducers, also known as superplasticizers are added to reduce the water in the concrete mix or alternatively to increase the workability.
- Retarders are used to delay the setting of concrete to avoid cold joints, retain the workability of concrete and retard its setting time to the desired extent.
- Accelerators are used to accelerate the setting of concrete, and used mainly low temperature regions
- Air entrainers are added to entrain air in concrete which become useful for “freeze-thaw” effect. They also improve cohesiveness of the concrete in mass pours such as in dam construction.
- Corrosion inhibitors are used to mitigate the corrosion in steel.
- Integral waterproofing admixtures are used to reduce the permeability of concrete, which in turn make the concrete waterproof.
- Shotcreting admixtures are used as accelerator for spraying concrete in tunnels and other concrete repair applications.
- Viscosity modifying agents improve the rheology of Self compacting concrete (SCC) to adjust for the poor fine aggregate grading and control the moisture variation.
- Block admixture are added in to concrete to make pre cast products such as concrete blocks, paver blocks, Pre stressed electrical poles, spun pipes and other precast elements.

## INDUSTRIAL FLOORING

- Industrial floor treatments are done to protect the concrete floor substrates from damages such as chemical and oil spillages, mechanical damage like wear and tear in tool rooms, and impact due to typical industrial activity. We provide an end-to-end solution for flooring protection with specification support and onsite application expertise, with their pool of trained and experienced applicators across the country for installations of any flooring system. The floor finishes also are hygienic, dust free and aesthetic, with wide range of colors that can reduce the illumination requirements on shop floors enhancing the work environment.

## GROUTS & ANCHORS

- Our wide range of cement and resin-based products to fill voids and resin-anchoring systems help strengthen and protect.
- These precession grouts have free-flow, non-shrink properties and exhibit high early and final strengths. They must provide very high effective bearing contact between the baseplate and concrete foundation, to transfer the loads effectively.
- Almost all critical equipment, including turbines, generators, machines in the power sector, process equipment in steel plants, and machines in any engineering industry are grouted. The range offers comprehensive solutions to grouting requirements for a variety of sectors, such as refineries, transportation, precast structures, and many more. The range offers both cementitious and epoxy grouts.



## CONSTRUCTION CHEMICAL

We manufacture a comprehensive range of construction solutions catering the needs of new construction as well as repairs and maintenance.

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