

BOND – FC-105

ECO- FRIENDLY AQUVA EPOXY FLOORING SYSTEM



Conventional epoxy coating on green (Fresh) concrete is failed due to De bonding, blistering and delamination

FC-105 is a Eco-friendly high performance 2 component self leveling FLOOR SCREEDING. And is available in colors also. It provides seamless coating, that is extremely hard wearing and durable, smooth, Semi gloss finish durable, Impact resistance, and chemical resistance properties.

EPOXY FLOORING FOR IMPACT, ABRASION, CHEMICAL, CORROSION RESISTANCE, HEAVY DUTY, DUST PROOF, VIBRATION, THERMAL MOVEMENT, ANTI FUNGAL, ANTI MOSS, ANTI BACTERIAL IN PHARMA, FOOD, ELCTRIC, ELECTRONICS, , AUTO, CHEMICAL, TEXTILE, SURGICAL, INSTRUMENTS, DAIRY, ENGINEERING, SUGAR, PAPER, PICKELING, , OPTICAL, METAL, INDUSTRIES, OPERATION THEATER, HOSPITALS, GODOWNS, GARAGESLABORATORIES, WALKWAYS , SHOPS & MALLS, RAILWAYS, PAINT SHOPS, BATTERY ROOMS, COMPUTER ROOMS, KITCHENS, EXIBITION HALLS, CANTEENS, ELECTROPLATING UNITS,ETC. AND FOR DAM , CANALS, RAILWAY PLATFORM.

SPECIAL CHERECTERISTICS:-

Conventional Epoxy Coating, paints and Flooring formulations are typically applied after the concrete is completely cured. After 28 days residual moisture is minimized and does not interfere with adhesion.

Than we can apply conventional Epoxy. Application prior to this period with 100% solids formulations has often resulted in complete failure at the EPOXY / CONCRETE interfere.

AQUVA EPOXY formulations are designed to allow an Epoxy Primer to apply over freshly poured concrete (Green concrete)

ZERO MAINTAINANCE, EXCELLENT DURABILITY & CHEMICAL RESISTANCE, CHOICE SMOOTH OR ANTI SKID PROPERTIES , EXCELLENT MECHANICAL STRENGTH, DUST PROOF AND EASY TO CLEAN, CHEMICAL RESISTANCE.

Extra properties on request :- Surface or Total thickness Water repelency will provided of Surface or Total thickness.

MOISTURE VAPOR TRANSMISSION:-

Self level Aquva Epoxy Floor formulations developed which cured at >3 mm thickness are a allowing breathable floor covering. This breathability Allows application to problem floors with high Moisture vapor Transmission rate were conventional 100% solid Epoxy formulations delaminate. This unique properties address the limitations of conventional 100 % solid Epoxy formulations and earlier Epoxy formulations. Presence of Water, salt, Water soluble organics, play

together there is a high probability of Osmosis Occurring that can lead to blister formation.

SURFACE PREPARATION:-

Clean the surface to be bonded, free of dirt, oil, grease, rust, loose deposits, wax, paints and damaged materials. The roughen the surface by sanding, grinding and emerging. Surface should be sound and tough. Concrete floor should be cured minimum 28 days. Clean CC surface using diluted 20-25 % phosphoric Acid or muriatic Acid or BOND CLEANER-CLR-01.

Neutralize to the acid mix 1 parts household ammonia to 32 parts water by volume and apply on floor , than rinse by water 4 to 5 times . let it to dry for 48 hours before applying FC-105. For wooden clean the floor thoroughly with a strong detergent to remove old soap, oils, and fat, etc. Apply Roughening, grinding if required. Remove all previous coating by sanding.

MIXING:- (Applications and calculation for just guidance only)

1. **PRIMING:-** Mix **BOND PRIMER FC-105** Part-A & Part-B in 1:1 pbv and apply on prepared surface by brush, roller, Airless spray, etc..

COVERAGE (Theoretically and practically in Lab) :- 80-100 sq. Feet in undiluted.

2. **PUTTY :-** Apply **BOND PUTTY** on priming surface if required. Prepared putty mixing Part-A + Part-B + Part-C In ratio of 1 : 1: 2 to 4 Part by Volume.

COVERAGE (Theoretically and practically in Lab) :- 40-60 sq. Feet in undiluted.

3. **RE PRIMING:-** Apply re priming on the putty surface.

COVERAGE (Theoretically and practically in Lab) :- 40-60 sq. Feet in undiluted.

4. **SELF LEVEL AQUVA EPOXY SCREEDING:-** Mix Part-A : Part-B : Part-C Part-D (Add Part-D color paste if required) is 1:1:600-700 : 5-10 pbv and pour eighther lay down on prepared primed surface.

COVERAGE (Theoretically and practically in Lab) :- 9-11 sq. Feet for 5mm thickness in undiluted.

OR

AQUVA EPOXY MORTAR :- Mix Part-A : Part-B : Part-C Part-D (Add Part-D color paste if required) is 1:1:700-800 : 5-10 pbv and pour eighther lay down on prepared primed surface

COVERAGE (Theoretically and practically in Lab) :- 9-11 sq. Feet for 5mm thickness in undiluted.

5. **FINISHED SEAL COAT:-** Apply one coat of colored Epoxy on above coat by brush, roller, Airless spray, etc.. Part-A & Part-B in 1:1 pbv and apply on prepared surface by brush, trowel , roller, Airless spray, etc..

COVERAGE (Theoretically and practically in Lab) :- 70-80 sq. Feet in undiluted.

Final calculation

Theoretically:- Rs. 16/- per mm for Aquva Epoxy Self Level flooring and mortaring.

SPECIAL NOTE :-

The above calculation are for general guidance only actual Coverage are depend on the surface smoothness and method of use. And the rate are for bulk minimum one tone quantity.

Quantity Of The Mix Should Be As Low As Possible To Increase The Usable Life Of The Mix System. Pot life are depend on temperature of the mix and quantity of the mix. Less quantity , low temperature long pot life.

SPECIFICATIONS

PROPERTIES		RESULTS
Color		Grey, Red, Blue, Green, Yellow, Off White
Total solid % of the mix		80 +-5%
Mixing ratio Part-A : Part-B : Part-C (Quartz Sand)		100:100 : 600-800 by volume
Freeze Thaw stability		Satisfy
Service Temp.		-20-80oC
Pot life of mix at R.T.		40-50 minutes
Recoat Time		12 – 24 hours
Cure schedule	Foot Traffic	24-72 hrs
	Full Service	72 hrs at 25 oC
	Full Chemical cure	7 Days
Primer Adhesion on 24 hour cured concrete Bond Strength After 7 and 30 days cure		Greater than 1.7 MPa.
Hardness shore D @25 oC		24 hours – 70 7 days – 80
Compressive Strength after 7 Days cured		Maximum 5400 Psi
Coefficient of Friction		0.28
Abrasion Resistance [wt loss (mg/1000 cycles)]		156
Coverage may very depends on surface roughness.		2 Kg Part-A & B + 600 part –C are covered 1 Sq. mtr for 4.5 - 5 mm thickness.
CHEMICAL SPOT RESISTANCE 1 HOUR AND 18 HR EXPOSURE		RESULT
WATER		Excellent

Sulphuric Acid 10%	No Change
Lectic Acid	No Damaged
Vinegar	No Damaged
Acetic Acid 10 %	Blister
Acetic Acid 3 %	No Change
Ethanol	No Change
Toluene	No Change
Lemon Juice	No Damaged
Mustard	Excellent
Red Wine	Slight stain
Ketchup	Excellent
Coffee	Excellent
	12 MONTHS
Shelf Life	12 months in sealed pack in cool and dry place.
Packing's in carboys / Bucket	Part-A is 50 Kg and Part- B is 50 kg Part-C 50 kg bag. Part-D (Color paste) 1 Kg

SPECIAL COMMENT :-

The above results are obtained if followed standard application methods and standard composition of base concrete and complete cleaned surfaces.

The information contain here in is reliable and accurate the best of our knowledge. Technical services will provided for guidance when required. However conditions of uses and methods of application are beyond our control, no warranty is expressed or implied.

ALSO AVAILABLE CONSTRUCTION CHEMICALS FOR REPAIRS, REHABILATION OF BUILDING, BRIDGE, DAM, CANAL, TUNNEL & MARINE STRUCTURES, ETC.

RESINS	PAINTS	GROUTS	CONCRETE ADMIXTURE	FLOORINGS	WATERPROOFING	ADHESIVE	LACQUERS
EPOXY	EPOXY	CEMENT-POLYMER	MICRO CONCRETE	EPOXY	ACRYLIC COPOLYMER	EPOXY	SOLVENTE D
POLYURAT HANE	POLYURAT HANE	EPOXY	PLASTICIZER S	POLYURATHANE	POLYMER POWDER	ACRYLICS	WATER BASE
ACRYLICS	ANTI CORROSIVE	EXPANSIVE GROUT		NON METTALIC CEMENT	WATERREPPALLE NT		NC-ACRYLICS

TECHNICAL SERVICES & Technical assistance

Information is available by calling the Mr Bond Technical Service at:

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