

TWO COMPONENT SOLVENTED EPOXY RESIN FLOOR COATING

PURPOSE

- Provides protection for concrete substrates.
- Provides a durable surface with tenacious bond to correctly prepared concrete surfaces.
- Provides excellent light advantage through reflectance.
- As a wall coating can be used in public thoroughfares, chemical rooms where frequent splashes of grease, chemicals are experienced.

PROPERTIES

- As a unique monolithic coating to protect concrete and building materials against chemical exposure.
- Application friendly- Applied by roller or brush in a range of colors in two layers to 300 micron thickness
- High strength – Pull off tests prove performance beyond the tensile strength of the host concrete.
- Specially formulated for use in Gulf region environment.
- Not recommended for food environments

TECHNICAL DATA

Solid Content	62% by weight 53% by volume
Wet Density	1.5 kg/lit
Bond Strength (ASTM 4541-1)	>3Mpa failure in concrete
Tensile Strength (ASTM D412)	20Mpa
Comprehensive Strength (BS 6319 Part 2)	126Mpa
Flexural Strength	3.8Mpa
Impermeability (Chloride and Oxygen Ion)	excellent
Shore Hardness (ASTM D2240)	99 Shore A
Resistance to Pressure (Positive Pressure) (Negative Pressure)	excellent 10 Bars (102 m head)

CHEMICAL RESISTANCE

Fully cured material has excellent chemical resistance to most chemicals commonly used in the industrial environment and tested at temperatures up to 35°C. The performance of material tested during constant immersion gave the following result:

Sodium Hydroxide 10%	resists
Ammonia 10%	resists
Hydrochloric Acid 5%	resists
Sulphuric Acid 5%	resists
Lactic Acid 2%	resists
Xylene	resists
Skydrol, Butanol	occasional spillage

NB: Enquiries can be raised through Rezcoat Technical office for information on other Chemical exposures.

Mixing Ratio (A:B)	3:1 by volume
Pot Life	
@20°C	120mins.
@30°C	60mins.
Over-coating Time	10hrs.
Initial Hardness	
@20°C	48hrs.
@35°C	24hrs.
Dry Film Thickness	150 micron
Full Cure @30°C	7 days@20° C 5 days@35° C

TECHNICAL SUPPORT

Rezcoat provides technical service support, to professional bodies, consulting Engineers, specifying bodies and on-site contractors, and applicators throughout the Middle-East.

APPLICATION REQUIREMENTS

SURFACE PREPARATION

All surfaces must be clean and free from oil, grease, water and other contaminants which may inhibit bond. For best results, surface should be dry.

NEW CONCRETE

New Concrete should be 28 days old and have a minimum compressive strength of 20 Mpa. Wood float or slightly broom finish the surface must be free from laitance, oil and curing compounds. Laitance on new concrete should be removed by mechanical means such as light grit blasting, grinding or scabbling.

OLD CONCRETE

Concrete must be sound, remove oil, old paints, protective coatings and attacked or deteriorated concrete, chemically clean surface to remove any contaminants. Mechanical cleaning and removal of laitance using abrasive blast or high pressure water blast to provide uniform, textured surface. For heavy contamination by oil and grease, which may well be absorbed through the concrete surface, heavy scrubbing is essential to completely remove it. Finally vacuuming the surface is essential prior to applying Resicoat EPS.

STEEL SURFACE

Grit blasting should be used to produce a bright surface (Sa2½, BS4232), immediately followed by priming with **Rezkem EP** steel primer to the surface prior to **Resicoat EPS** application.

PRIMING

FOR DAMP CONCRETE

Rezkem EP Concrete Primer should be well mixed using a drill and mixing paddle. Remix each liquid container of base and hardener prior to emptying the entire contents of the smaller hardener can into the base can and thoroughly mixed for 1-2 minutes. Apply **Rezkem EP** immediately after mixing to the clean prepared surfaces using short piller roller or nylon brush in a thin continuous film. Use a stiff brush to finish off with and scrub the primer well onto the surface (use a stippling action to penetrate into crevices), avoid over application and ponding.

FOR POROUS SURFACE

It is necessary to double prime surface of porous concrete as first coat will be absorbed by surface porosity. If observe dry patches after first coat, it is advised to apply a second priming coat.

FOR DRY CONCRETE SURFACE

Rezkem EPS (solvented Primer) may be used. However adequate ventilation should be provided. The primer should be allowed to cure for 4 hours prior to applying any overlay, to ensure adequate time has passed for releasing the solvent from the resin primed surface. Solvented primer should be allowed to release all the solvent from the resin surface. Therefore the **Rezkem EPS** should be allowed to stand for 4 hours before overlaying.

MIXING

Resicoat EPS should be mechanically mixed. Mix liquid and hardener thoroughly for 1 to 2 minutes by emptying completely the hardener can into the base drum. At end of the mixing period, all material should be wetted out completely until a uniform color and unstriated condition is achieved. Do not add solvent to any component or to the mixed material. Discard any material which has begun to harden. **Resicoat EPS** should be placed immediately after mixing and laid to the desired Wet film thickness in each application whilst the **Rezkem EP** is tack free.

A wet film thickness of 200 to 300 micron might be achieved in one single coat depending on porosity of the concrete. Avoid pools of liquid on the surface by removing while wet.

The primer should reach a cured touch dry condition prior to any overlay. The curing window generally will reach a touch dry condition after 2 hours at 35°C. However the curing surface should never be allowed to exceed 24 hours at 20°C before overlaying. The container should be covered when not in use to eliminate a tough film developing on the surface.

TOPPING

In areas where specific color, improvement in chemical resistance, or an increase in the degree of cleanliness is required, apply the color coat topping within 24 hours at 30°C.

PACKAGING

Resicoat EPS	4 Kg. /pack
Rezkem EP	
On concrete	4 Kg. /pack
On steel	4 Kg. /can
Rezkem EPS	
On concrete	4 Kg. /pack
On steel	4 Kg. /pack
Coverage	
Resicoat EPS	290 micron WFT produces 150 micron DFT, covers 3.3m ² /kg or 13 m ² /pack at 150 micron DFT
Rezkem EP	
On concrete	5-7m ² / kg
On steel	12-15m ² / kg
Rezkem EPS	5-7m ² / kg

CLEANING

Tools and equipment should be cleaned with **REZKEM SC111** Cleaning Solvent. Do not use the solvent for thinning, as it will inhibit the material properties.

FIRE

Rezkem EP is non-flammable products, however **Resicoat EPS, Rezkem EPS and Rezkem Solvent SC111** are flammable materials.

HEALTH & SAFETY

Resicoat EPS, Rezkem Primer and Rezkem Solvent SC111 should not come in contact with skin and eyes. Some people are sensitive to resin. Use chemical goggles, PVC gloves and barrier cream. Avoid contact with skin and eyes when handling the products. Do not use solvent to remove resin from the skin instead use a barrier cream before the resin hardens. Should accidental eye contamination occur, wash thoroughly with plenty of water and seek medical advice. Ensure plenty of ventilation when using resin and solvent containing materials.

DISCLAIMER

This product is specially formulated and manufactured by Rezayat Protection Coatings Company Ltd (Rezcoat) and sold subject to its standard terms and conditions. The information presented herein is accurate to the best of our knowledge. All technical properties quoted forthwith are from laboratory prepared samples and RPCCL reserve the right to alter any of the detail herewith without notice. The users are advised to ensure they possess the latest issue of the datasheet. The information given must not be taken in any way to form a specification. RPCCL will not accept any liability for any consequent or incidental damage arising out of use of the product. All guarantees offered are limited to replacement of defective material only. The use of the products outside of RPCCL recommendation is under user own risk.



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