

PIOT NO: 50 & 61, RUDRA INDUSTRIAL ESTATE, B/H. N.K.-1 ESTATE, BAKROL (BUJARANG) TA: DASCROI - AHMEDABAD - 382440

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TOP COAT

(MR-213/MH-313)

FEATURES:

- Self levelling coatings with excellent flow & levelling characteristics
- · Provides a hygienic and dust free environment
- · High abrasion and chemical resistance
- · Attractive, easy to clean and maintain
- · Finds application in automobile, pharmaceutical units, food processing plants and chemical plants

2 TECHNICAL DATA: \rangle

Colour	Clear
Gloss	Glossy
Recommended Thickness	Approx.1 mm
Consumption	1.7 - 1.9 kg /sq.mtr @ Appx.1 mm
Drying Time	Surface Dry: 6 hours
	Hard Dry: 24 hours
	Full Cure: 7 days
Mixing Ratio (By weight)	Base : Hardener : Aggregate
	05 : 2.5 : 10
Pot life	30 minutes

3 MECHANICAL PROPERTIES:

Compressive Strength (ASTM C 579)	40 ±5% MPa
Flexural Strength (ASTM C 580)	10± 5% MPa
Tensile Strength (ASTM C 307)	8 ±5% MPa

The data given is for guideline only. The physical values are subject to normal manufacturing tolerances, colour and testing variances.

The coverage & consumption figures are theoretical and do not allow for any additional material required due to surface porosity, surface profile, variations in level or wastage etc.

The actual drying time/ overcoat interval may be shorter or longer, depending on film thickness, ventilation, humidity, temperature etc.

The information provided above is at 30°C and 65% relative humidity.





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4 APPLICATIONS INSTRUCTIONS:

Substrate Quality

- Concrete substrates must be sound and of sufficient compressive strength (minimum 20 MPa) with a minimum tensile strength of 1.5 MPa
- A sound, clean and dry substrate is absolutely essential for successful coating application and ensuring maximum bonding between the substrate and coating system
- The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treat ments, etc. and have a moisture content less than 5% prior to application of the primer. Ensure that the substrate does not suffer from rising moisture and potential osmatic pressure.

5 SURFACE PREPARATION:

New Concrete Floors:

Should be at least 28 days old or have a moisture content of less than 5% before proceeding with epoxy primer application. Laitance and deposits on new concrete floors are preferably removed by light grit/ shot blasting, mechanical scarifying or grinding to achieve an open textured surface.

Old Concrete Floors:

- Determine the general condition, soundness, presence of contaminants, presence of moisture vapour emissions Basis the observations, prepare the surface accordingly. Mechanical surface profiling by grit or shot blasting, grinding or scarifying are the preferred floor preparation methods on old concrete floors
- · Hydrophobic contaminants can be identified by a simple water drop test
- Remove localized weak or deteriorated materials from the surface. Remove bond-inhibiting materials such as
 oils, grease, wax, fatty acids, and other contaminants. This can be accomplished by the use of detergent scrub
 bing, low pressure water cleaning (less than 5000 psi), steam cleaning, or chemical cleaning. Acids and alkalis
 can be removed by neutralizing to form a water soluble salt and then high pressure water cleaning and
 mopping it off to dry state
- In the areas where the contaminants cannot be removed, complete removal and replacement of the contaminated surface is typically considered.
- Surface defects such as voids, bug holes, excess porosity, and physical and chemical damage are usually
 filled or repaired prior to the installation of the floor coating system. Materials such as slurries, mortars, and
 polymer concrete are used to level, smooth and patch concrete surfaces. High spots must be removed by
 grinding.

6 GROOVE OPENING

- Retaining grooves must be prepared [1 mm X 1 mm] to prevent curling of the Topcoat during hardening and curing.
- Open grooves twice as wide and twice as deep as the topcoat thickness. Use a suitable double blade saw with connection to an industrial vacuum cleaner.
- Retaining groves must be located in the perimeter and throughout horizontal surface of the application area and also around columns, plinths, drains etc. or any singular element that represents a discontinuity in the Topcoat.



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7 FLOOR JOINTS

- All surfaces to be primed with MR- 212 / MH 312 designed for maximum absorption and adhesion to
 concrete substrates. The primer should be applied immediately to the prepared substrate using stiff brushes
 and/or rollers. The primer should be well 'scrubbed' into the substrate to ensure full coverage, but care should
 be taken to avoid over application or 'pounding'
- Allow the primer to dry before proceeding to the next stage; do not proceed whilst the primer is 'tacky' as this will lead to unsightly marks in the finished surface.
- Porous substrates may require a second primer coat when the first coat is directly absorbed into the substrate, but minimum over-coating times must still be observed.
- Freshly applied primer should be protected from damp, condensation and water for atleast 24 hours.

8 PRIMING

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 should be well 'scrubbed' into the substrate to ensure full coverage, but care should be taken to avoid over
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9 MIXING

- TOP COAT flooring is supplied in 3 pre-weighed packs (Base, Hardener and Aggregate) which are ready for immediate on-site use. Part mixing of these components is not recommended and will affect both performance and appearance of the finished floor
- A suitable power driven mixer such as a bucket mixer is recommended for uniform mixing of the material. Stir
 the base and hardener separately. Mix hardener gradually into the base under continuous stirring. Blend the
 aggre gates in the bag. Mix the aggregates into the mixed base + hardener uniformly under continuous
 stirring. Mix well for 3-4 minutes till the components become homogenous. Apply before expiry of pot life i.e.
 within 20 30 min mechanical agitation. Mix well for 3-4 minutes till the components become homogenous.
 Apply after induction time and before expiry of pot life

10 APPLICATION

- The product may be applied by a serrated/ notch trowel to the required thickness. The entire mixed material should be poured onto the prepared and primed surface and spread slowly and evenly. To ensure proper leveling and appearance avoid overspreading. The laid material should be rolled firmly with a spike roller to ensure compactness and de-aeration of the film. Always wear spike shoes when rolling with spike roller. The rolling should be carried out using a 'back and forth' technique along the same path. An overlap of 50% with adjacent paths is recommended. Further light rolling may be required to remove surface imperfections, or for subsequent release of trapped air. This should be done prior to the setting of the product. To avoid roller marks prevent over rolling of the coating
- The coverage & leveling would vary significantly based on the nature & levelling of the concrete surface
- Freshly applied TOP COAT should be protected from any condensation and water for at least 24 hours
- At low temperatures, the chemical reactions are slowed down; this lengthens the pot life, open time & curing times. High temperatures speed up the chemical reactions thus the time frames mentioned above are shortened accordingly



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11 APPLICATION CONDITIONS

- Residual moisture content of the concrete substrate should not exceed 5%
- · No rising moisture & potential osmosis problems
- Substrate temperature should be at least 3°C above dew point but not above 45°C
- Recommended ambient temperature for application is between 10°C 40°C
- Relative Air Humidity (RH) to not exceed beyond 80%

12 CLEANING

All tools and equipment can be cleaned with Thinner T 141 immediately after use.

PACK SIZE	17.5 Kgs (Base: 5 Kgs, Hardener: 2.5 Kgs, Aggregate: 10 Kgs)
STORAGE	Shelf Life: At least 12 months if stored properly in original, unopened and undamaged sealed packaging, in dry conditions at temperatures between 5°C to 35°C, subject to inspection thereafter. Store in a cool, dry place and in accordance with local regulations
REGULATORY INFORMATION	Flash Point: Base - Not less than 24°C; Hardener - Not less than 24°C

13 SAFETY INFORMATION

•As a general safety measure, inhalation of solvent vapours or paint mist and contact of liquid paint with skin & eyes should be avoided. Forced ventilation should be provided when applying paint in confined spaces or stagnant air. Even when ventilation is provided, respiratory, skin and eye protection is always recommended while spraying paint

Please refer our Material Safety Data Sheet prior to using the product.

