RachTR®

EP 91

RachTR EP91 is an economical three components, self levelling heavy duty industrial flooring screed.

PRODUCT BENEFITS

- High strength, heavy duty screed
- Good abrasion and impact resistance
- High durability and chemically resistant
- Good anti-skid properties

PACK SIZE

- Part A (Resin): 5kg
- Part B (Hardener): 2.50kg
- Part C (Aggregate): 24kg
  (Two Bags of 12Kg each)

COVERAGE

3.2 Kgs/ Sq. mtr. for 2 mm

Mixing Ratios

A:B:C :: 5 : 2.5 : 24

TECHNICAL DATA

• Pot Life	> 40 Minutes
• Shelf Life	At least 2 year, if stored in a cool and dry place in original container
MECHANICAL PROPERTIES	
• Compressive Strength, BS 6319-2	> 40 N/mm^2
• Tensile strength, BS 6319-7	> 15 N/mm^2
• Flexural strength, BS 6319-3	> 27 N/mm^2
• Tensile adhesion, ASTM 4541	> 1.5 N/mm^2
• Shore D hardness, ASTM D 2240	> 75

INSTRUCTIONS

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 50˚C
- Recommended ambient temperature for application is between 10˚C - 40˚C
- Relative Air Humidity (RH) to not exceed beyond 80%
- Only epoxy based colorant recommended for clear composition

APPLICATION GUIDELINES

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 to ensure optimum bonding between the substrate and the coating system.

The substrate must be clean, dry and free of all contaminants such as dirt, oil, grease, coatings and surface treatments, etc. The moisture content should be less than 5% prior to application of the primer. Ensure that the substrate does not suffer from rising moisture and potential osmosis problems

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.

Old concrete floors:
Determine the general condition, soundness, presence of contaminants, and presence of moisture vapor emissions. Mechanical surface profiling by grit or shot blasting, grinding or scarifying should be done for floor preparation of old concrete floors.

Remove localized weak or deteriorated materials from the surface. Remove bond-inhibiting materials such as oils, grease, wax, fatty acids, and other contaminants. Clean with detergent scrubbing, low pressure water cleaning, 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.

Surface defects such as voids, bug holes, excess porosity, and physical and chemical damage are should be filled or repaired. Materials such as slurries, mortars, and polymer concrete are used to level, smooth and patch concrete surfaces. Floor should be made smooth by grinding.

Acid etching of the surface is not recommended.

Floor Joints

All cracks and construction joints present, should be filled either with epoxy putty or mortar after primer application

The expansion joints should not be coated with the coating and are to be treated with suitable products

INSTRUCTIONS

PRIMER APPLICATION

Surface should be primed with RachTR EP 101. or RachTR EP 402. The primer should be applied to the prepared substrate using stiff brushes and/or rollers.

Allow the primer to dry for min 24 hours; do not proceed whilst the primer is 'tacky'.

Freshly applied primer should be protected from damp, condensation and water for at least 24 hours

MIXING

RachTR EP 91 flooring is supplied in 3 pre-weighed packs (Resin, Hardener and Aggregate) which are ready for immediate on-site use.

A suitable power driven mixer such as a bucket mixer is recommended for uniform mixing of the screed material.

Stir the Resin (PartA) and hardener (PartB) separately. Blend the aggregates (PartC) in the bag. Mix hardener gradually into the base under continuous stirring.

Mix the aggregates into the mixed resin portion uniformly under continuous mechanical agitation. Mix well for 3-4 minutes till the components become homogenous. Apply after induction time and before expiry of pot life

APPLICATION

The product may be applied by a serrated/ notch trowel to the required thickness.

The entire mixed material should be poured onto the primed surface and spread slowly and evenly.

To ensure proper levelling and appearance avoid overspreading.

Tamp the laid material with a wooden float to ensure compactness. Finish the surface with a suitable steel trowel.

An overlap of 50% with adjacent paths is recommended.

To avoid roller marks prevent over rolling of the coating.

The coverage & levelling would vary significantly based on the nature & levelling of the concrete surface.

Freshly applied material should be protected from damp, 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.

INSTRUCTIONS

SAFETY MEASURES

- Use gloves, goggles & respirators while applying.

STORAGE AND HANDLING

- May be harmful if swallowed.
- May cause skin, eye and respiratory irritation.
- Do not spray.
- Avoid prolong exposure to vapors. Use in a well ventilated area.
- Do not ingest. Keep out of the reach of the children.
- Do not freeze or store above 40˚ C.
- Do not mix with other chemicals

EMERGENCY/FIRST AID

- Ingestion: Do not induce vomiting. Call a physician.
- Eye Contact: Flush thoroughly with water for at least 15 minutes. Remove contact lenses, if applicable, and continue flushing. Call a physician if eye irritation persists.
- Skin Contact: Wash skin with mild soap and water. Call a physician if skin irritation persists. Wash clothes before wearing again.
- Inhalation: Remove to fresh air. Call a physician if respiratory irritation persists

RachTR®
Global Excellence | **Local** Expertise