

LAVAPOXY

Three Component Epoxy Mortar

Description:

LAVAPOXY is a three components, solvent free, coarse finish high quality epoxy based mortar for repair of structural defects. The system is based on a two parts epoxy resin and a well graded aggregate filler. When mixed, it produces a thixotropic mortar that is applied by trowel as a durable, chemical resistant mortar suitable for concrete repair. Due to its thixotropic nature, it can be used for vertical and horizontal applications.

Applications:

LAVAPOXY is suitable for wide range of repair application including:

- General concrete repair mortar for exterior and interior application.
- Repair of structural concrete defected elements.
- Re-profiling of expansion joints and concrete edges.
- Can also be used for sewerage works and manhole lining.
- Repair for walkways, garages, residence driveways.
- Repair of Concrete floors prior to epoxy, Polyurethane systems application

Advantages:

- Pre-weighed quality controlled materials ensure consistency and reduce risk of site errors
- Excellent bonding strength with all concrete surfaces
- Non shrink mortar with High compressive strength
- High impact and erosion resistance
- Resistant to wide range of acids, alkalis and industrial chemicals

Instructions for Use:

Surface Preparation:

In concrete repairs, proper surface preparation is essential for obtaining a good results. Mark the

boundary of the damaged areas of concrete and then cut neatly by saw cutting machine or disc grinder to a depth of 10mm. Then Chip the concrete within the boundary down to sound base using sharp tools or chipping hammer. All corroded steel should be completely exposed including the rear side of the bar to enable thorough cleaning. In case that reinforcing bars section is reduced due to oxidization, integrate them with additional bar reinforcement.

The concrete substrate should be clean from all grease, contaminants, oil and loose material. After completing the chipping, clean the surface with steel brush. In case of deep rusting or contamination, it is recommended to clean using sand blasting to reinforcing steel. Particular attention should be paid to the rear of the bar to ensure all corrosion products have been removed. Once the reinforcing steel has been cleaned it should be coated immediately with one coat of LAVAZINC EP or LAVAFER.

At the time of application, the defected surface should be primed with ARMOPRIME EP 70 by a stiff brush. If the primer appears to be absorbed into the surface easily, it will be necessary to apply a second coat once the initial coat is tack free. Allow the primer to remain tacky prior to the application of LAVAPOXY.

Mixing:

LAVAPOXY is supplied as a kit containing three pre-weighed component ready for onsite mixing, resin (part A), hardener (part B) and filler (part C). First, the two resin components A and B should be stirred separately for two minutes to ensure that the contents are blended thoroughly. Then add contents of part B (hardener) to part A (base) contents, and mix thoroughly for few minutes and slowly add the contents of part C (filler) while mixing till a homogeneous lump free consistency mix is achieved.

Avoid adding thinner to the mixture, the product is designed to be ready for use.

LAVAPOXY

Application:

Apply LAVAPOXY manually with a trowel or spatula to the prepared and primed surface of concrete. The mix should be applied firmly to the surface to ensure a complete compaction and bonding to the substrate. Use a steel trowel to finish the applied mortar before it sets. The recommended applied thickness would be from 10 mm to 60 mm. If more thickness is needed, apply subsequent layers with 10 to 12 hours intervals. If the extra layers are applied beyond the re-coating time then prime the surface again.

For floor repair application, ensure proper coverage while applying to concrete surfaces and proper pushing into cracks if repairing static cracks in concrete surface of the floor. Use a clean trowel or spatula to avoid to build of lumps in the epoxy mortar layer. The application of LAVAPOXY is manual.

Standards:

LAVAPOXY conforms to:

- ASTM D4541, ASTM C 579, ASTM C 881
- BS 6319, part 7

Storage Conditions:

Store in original packing in dry conditions away from direct sunlight and in temperature controlled warehouse.

Shelf Life:

LAVAPOXY can be utilized within 12 months of production date if stored in proper conditions in unopened original packing.

Packaging:

LAVAPOXY is supplied in 8 kg two part metallic containers.

TECHNICAL PROPERTIES

Appearance	:	Light Grey
Mix Density	:	1.90 kg/ Lt.
Temp. of application	:	From +5°C to +35°C
Adhesion bond to concrete	:	≥1.8 N/mm ²
Application Thickness	:	3 - 6 mm
Pot-life-time of mixture	:	60 minutes @ 25°C
Compressive strength	:	65 N/mm ² @ 7 days
Flexural strength	:	34 N/mm ²
Tensile Strength	:	9.0 N/mm ²
Recoating interval	:	8 - 24 hours
Initial hardness (at 25°C)	:	24 hours
Full cure (at 25°C)	:	7 days
LAVAPOXY	:	Chemical resistant to mild acids, alkali solutions, sea water, oils and detergents
Chemical Resistance	:	Excellent

Coverage:

1.90 kg of LAVAPOXY achieves 1.0 square meter @ 1.0 mm thickness.

Cleaning:

Clean tools with MATEX SOLVENT prior to product hardening.

Remarks:

- Partial mixing of the product components should not be allowed under any conditions.
- It is recommended to shade the working area while mixing and placing LAVAPOXY. Used tools should be kept in shade.

Health and Safety:

- Use goggles and gloves during application. Use only in well ventilated areas.
- Avoid contact with eyes or skin.
- Avoid direct contact with flames and fire.
- In case of contact with eyes, rinse immediately with plenty of clean water and seek medical help.

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This technical data sheet is not considered as local building codes. It shall be used as general reference for the product, based on our current knowledge and experience. However the company do not accept any liability arising from the use of its products as it has no direct control on how and where the product is applied.

