

Technical Data Sheet



# LAVAREP 2P

# **Two Component Polymer Modified Cementitious Mortar**

# **Description:**

LAVAREP 2P is a two-components cement based polymer modified non shrink mortar with high plastic consistency, formulated to be used as a high-quality repairing mortar. It is composed of component A (powder): high resistant hydraulic binder, silica, graded aggregate, fiber, special additives, and component B (liquid): synthetic polymer latex. Once mixed, the product will produce a high consistent, workable mortar that will turn into a flexible layer with excellent mechanical properties on curing.

#### Uses:

LAVAREP 2P is designed to act as a flexible repair product in several applications including:

- General concrete repair up to 6 mm thickness per coat.
- To produce a smooth surface repair.
- As a re-profiling layer over large areas.
- For filling pinholes or honeycombing over cement surfaces.
- Repair of defected precast concrete.
- Repair in areas subject to movement.
- For fair face thin layer as a skim coat.
- To level off irregular surfaces.

# Advantages:

- Shrinkage controlled, easy to use.
- Excellent bond to all concrete substrates.
- Flexible at application.
- High impact resistant.
- Workable, low permeable with smooth finish.
- Resistant against atmospheric gas, frost and thaw cycles.
- Excellent resistance to chloride, salts and chemical attack.
- Excellent mechanical strength.
- Fully compatible with concrete and all cementitious products.

# Instructions for Use:

#### Surface Preparation:

All surfaces must be sound, clean, compact, free from dust, grease substances and inconsistent parts. As part of surface preparation it is strongly recommended to expose the fine aggregates of the concrete surfaces by brushing it with a steel brush or light blasting.

Once the surface is ready, clean with blown compressed air and then saturate the surface thoroughly with clean water. Allow excess water to evaporate or use sponge to ensure a saturated surface dry condition "SSD" prior to application of the repair mortar. Application over dry concrete surfaces without saturation with clean water will result in failure of product and defect in repair.

# Mixing:

LAVAREP 2P is supplied in a pre-measured two component kit. Pour component B (Liquid) into a suitable mixing container. Add component A (Powder) to the container and Mix using spiral paddle in slow speed heavy duty mixer for 2-3 minutes till a homogeneous lump free consistency mix is achieved. Keep the mix to rest for 3 minutes and then remix before application. Partial mix can be done if needed provided that the two components are mixed in ratio stated in LAVAREP 2P Technical Data Sheet only. Avoid adding additional water after the mixture is homogenous and ready for use, or when the mix starts to dry.

# Application:

Apply LAVAREP 2P manually with a trowel or spatula to the saturated surface of concrete "SSD". To level off irregularities on large areas, apply the mix to the prepared substrates by using a steel trowel for up to a maximum thickness of 6 mm. If more thickness is required, keep the first layer rough and apply a second layer as required, in 4 to 6 hours interval.



For filling pin holes or fine honeycombs, use steel trowel. Once the applied mix starts to partially set, trowel the whole surface to obtain a smooth finish.

Curing cementitious repair products is essential, after application, avoid rapid evaporation of applied mortar. Cure the applied coat for two days using clean water or apply a coat of a recommended MATEX curing agent. Consult with MATEX Technical Department for further instructions.

#### Standards:

BS EN 1504-3, class R1

TECHNICAL PROPERTIES	
Appearance	Comp A: Cement Grey
	Comp B: Milky White
Dry Density	1.40 ± 0.05 kg/lit
Wet Density	1.65 ± 0.05 kg/lit
Temperature of	From +5°C to +35°C
Application	
Adhesion bond to	>1.0 N/mm <sup>2</sup>
concrete	
Water Absorption	NIL
Workability	40-45 minutes @25°C
Maximum layer thickness	6 mm per coat
Thermal Expansion	11 x 10-6/°C
Compressive Strength	>10 N/mm <sup>2</sup>
Rapid Chloride	Very low
Permeability	

\*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

#### **Coverage:**

LAVAREP 2P achieves coverage of 1.62 Kg/square meter @ 1mm thickness.

\*Coverage rate is an approximate value, and subject to actual site conditions.

#### Packaging:

LAVAREP 2P is packed in 30.0 Kg. kit consists of 23 Kg. from Comp. A (Powder) and 7.0 Kg. from Comp. B (Liquid).

#### Storage:

LAVAREP 2P to be stored in original packing in dry conditions away from direct sunlight and high humidity levels.

#### Shelf Life:

LAVAREP 2P can be utilized within 12 months of production date if stored in proper conditions in an unopened original packing.

#### Cleaning:

Clean tools with water prior to product hardening. Hardened materials can only be removed mechanically.

#### **Remarks:**

- Protect the applied repairing coat from high temperatures or drying winds. The applied mortar must be cured with water or CEMCURE curing agent.
- Do not apply LAVAREP 2P when the surface temperature is less than 5°C or more that 35°C.
- During summer season, it is recommended to cover the working area to prevent direct sun effect on the substrate or the applied coat. Keep used tools in shade.
- Mix enough material that can be applied during the product open wet time.



#### Health and Safety:

 Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

#### FIRST AID:

Eyes:	In the event of accidental splashes,	
	flush with warm water and seek	
	medical advice.	
Skin:	Wash skin thoroughly with soap	
	and water	
Inhalation:	Remove to fresh air, keep patient	
	rested	

Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to LAVAREP 2P Material Safety Data Sheet.

MATEX Rev.04-0222

MATEX warrants that its products are free from material and manufacturing defects. Instructions on how to use the product should be strictly followed to ensure effectivity and safe use. MATEX shall not be liable either directly or indirectly for any damages to personal, equipment or products that may occur as a consequence of the failure of any products application because it has no direct or continuous control over where or how its products are applied. It is the user's responsibility to acquire always the updated version of datasheets.

