

Product Data Sheet
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KEMREPAIR L

Light weight polymer modified non shrink repair mortar

Description

KEMREPAIR L is a light weight polymer modified cementitious mortar specially designed to be used for overhead and vertical applications where high build replacement with conventional concrete is impractical.

Where to use

- **KEMREPAIR L** used to replace damaged or deteriorated concrete.
- Due to the lightweight nature of **KEMREPAIR L**, it is particularly suitable for high build repairing of vertical and overhead surfaces of reinforced concrete.

Advantages

- Easy to use.
- Excellent weathering resistance.
- Rust inhibiting properties since it does not contain calcium chloride.
- Excellent adhesion to concrete and steel.
- Breathable.
- Economic since it can be applied without the need of expensive form work.
- Water repellent.

Properties

Physical Properties:

Coefficient of thermal expansion		$8 \times 10^{-6} / ^\circ\text{C}$
Setting time	Initial	60 min.
	Final	120 min.
Density	Fresh wet	1.75 gm/cm ³

Mechanical Properties:

After 28 days cured at 20° C and R.H. of 70 ± 5%

Compressive strength	N/mm ²	30
Flexural strength	N/mm ²	7
Tensile strength	N/mm ²	1-1.5

How to use

Surface preparation:

- Remove all damaged and contaminated concrete to reach the sound core.
- Remove additional concrete surrounding and along the reinforcements.
- Formation of clean-cut edges to avoid feather edges.
- Thoroughly clean reinforcement bars to remove all rust, scale and surface contaminants. (Sand or abrasive blasting is advised.)
- If steel is heavily corroded that significant loss of section has occurred, add new steel. (Please consult a qualified engineer.)
- Clean and dampen the concrete surface with water or use **KEMBOND SBR** as a bonding agent between the old and the new layers.

Mixing:

Mix **KEMREPAIR L** with clean water to a batter consistency.
Mixing ratio 4 to 5 liters of clean water per sack.

Application:

- Apply a slurry coat by brush over reinforcing rods of concrete.
- Slush mix under and between rods and make sure all cracks and voids are filled.
- Reinforcing rods should be completely surrounded by **KEMREPAIR L** in order to avoid corrosion.
- Then mix **KEMREPAIR L** to a thicker consistency and apply by successive layers of 30-50 mm.
- Scratch each layer before applying the next in order to improve the bonding.
- Each new layer should be applied within 1-2 hour.
- Remodel to the original profile.
- Use approved curing method ,as (**KEMCURE**) or moist curing for at least 48 hours

Theoretical Coverage:

1.75 kg/ m²/1mm thick.

Packaging:

25 kg sacks.

Storage:

KEMREPAIR L has a shelf life of 12 months if maintained in dry storage conditions (unopened sacks).

Precautions

- Use only potable water.
- Do not add extra water above stated quantities.
- In case retarded drying out is required, apply a curing agent or cementitious paint immediately after application.
- KEMREPAIR L should not be applied to substrates that are exposed to running water or which are permanently wet.
- Application should not be carried out when ambient temperature is below 5 °C.
- KEMREPAIR L should not be applied in thickness less than 10 mm or width less than 50 mm.

Health and Safety

- Use gloves when handling dry powder.
- Do not breathe dust.

Additional Information

PROKEM provides the construction industry with a comprehensive range of construction chemicals and specialty products answering the queries of modern engineers for trouble free durable structure. PROKEM designs tailor made products should there be critical application that requires specific properties rather than our main range.

For our customer's satisfaction, PROKEM extends technical services to include after sales support to assist users in a proper handling of our products.