

# MAKLEVEL RAPID PATCH

## Rapid Hardening High Strength Repair Mortar

**Maklevel Rapid Patch** is a polymer modified, rapid hardening internal/external repair mortar which is slump free and ideal for vertical and horizontal repairs.

**Maklevel Rapid Patch** dries and hardens rapidly to give a repair of exceptional strength and hardness. The mortar sets within 35-40 minutes and can be trafficked in 50-60 minutes at 20°C.

### RECOMMENDED USES

- Superior underlay for vinyl & timber floor coverings (may be used under carpet & tile if quick covering time is required)
- Reinstatement of new or existing concrete floors subject to foot traffic,
- Residential, commercial and industrial applications
- Heavy industrial traffic
- Wet areas (not immersed)
- With under subfloor heating
- Application thickness up to 100mm
- Ideal for building ramps or falls to floors

### FEATURES AND BENEFITS

- Single component, just add water
- Very fast application, single operation
- Dimensionally stable
- Rapid curing
- Rapid repair of internal and external subfloors, concrete stairs and ramps
- Receives after trade finishes in 45-60 minutes.

## TECHNICAL DATA SHEET

- Can be applied directly onto prepared concrete surfaces
- Australian Made and Australian Owned

### APPLICATION INSTRUCTIONS SUBSTRATE AND SURFACE PREPARATION

**Maklevel Rapid Patch** can be applied to dry surfaces if they have been set and hardened. The surface must be free of dust, grease, oil and other surface contamination before applying the product.

### SUBSTRATE PRIMING

Areas that are worn or trafficked surfaces must be mechanically abraded by using a diamond grinder or scarified to remove contamination and roughen concrete to expose a clean, porous surface which will ensure good adhesion.

### POROUS FLOORS

Porous substrates should be primed with **Makprime MP**. Allow primer to set at a tacky consistency before applying Maklevel Rapid Patch.

For porous substrates dilute primer **Makprime MP** primer 2:1 (2 parts water to 1 part primer).

Apply using a brush, roller or spray. Ensure uniform coverage.

A second coat may be required if the concrete is extremely porous. Apply a second coat as above mix ratio 2:1 (2 parts water to 1 part primer).

Allow **Makprime MP** to dry for 15-30 minutes then apply **Maklevel Rapid Patch**.

## NON-POROUS FLOORS

Most non-porous surfaces will not absorb water when applied on the surface. It will simply pool on the surface. This indicates a non-porous surface.

**Makprime MP** (undiluted – neat) should be used to provide high strength film over impervious surfaces that will allow bonding of levelling compounds.

Apply **Makprime MP** to the prepared substrate using a brush, broom or roller in accordance with the Technical Data Sheet.

Allow the primer to dry. Approximate drying time is 1-2 hours at 50% RH and 25°C.

## MIXING

**Maklevel Rapid Patch** requires 4.5 - 4.8 litres of potable water per 20 kg bag and is best mixed with a forced action, high shear stirrer, powered by a heavy-duty electric mixing drill at approx. 600 r.p.m.

Add pre-measured water to a clean mixing bucket.

Gradually add **Maklevel Rapid Patch** into the water whilst continuously mixing the contents of the bucket. When the entire contents of the bag have been added to the water, mix for a further 2-3 minutes to produce a smooth homogenous and fluid consistency.

## CAUTION

**DO NOT MIX BY HAND**

**DO NOT ADD EXCESS WATER**

Discard any hardened or stiffened compound that has formed in the mixing bucket. Further addition of water will **NOT** reconstitute a useable mixture.

Recently poured concrete slabs and concrete areas should be at least 3 weeks old before applying **Maklevel Rapid Patch** for optimum results.

## APPLICATION

Primed areas should receive **Maklevel Rapid Patch** as soon as possible to avoid dust and surface contamination affecting adhesion of the **Maklevel Rapid Patch** to the Primer.

Pour the mixed material on the primed substrate.

Depending on desired thickness, either allow material to seek its own level or spread **Maklevel Rapid Patch** with a steel trowel, spreader or squeegee. Keep the trowel slightly inclined to obtain desired thickness.

Pour the next mix of material. To ensure uniform consistency and flow application, it is advised that subsequent mixes are ready to enable continuous pouring.

For very large areas, **Maklevel Rapid Patch** can also be applied using an automatic pump. (Consult Makrete for further information).

## CURING

**Maklevel Rapid Patch** does not require curing. It sets within 35-40 minutes and can be used after 50-60 minutes at a temperature of 20°C.

## PRECAUTIONS

- **Maklevel Rapid Patch** must not be used in areas subject to permanent wetting or where back water pressure is likely.
- **Maklevel Rapid Patch** is not designed as a wearing coarse, scratch coat or as a water-proofing agent, and should only be used as an underlayment (if a wearing coarse is required use **Maklevel HD**).
- If substrate on to which **Maklevel Rapid Patch** is applied moves or cracks, reflective cracking will occur in the **Maklevel Rapid Patch**.
- For large and thick sections, it is advised to check the moisture content **Maklevel Rapid Patch** prior to application of floor coverings.

- Check concrete substrates for moisture content prior to application of **Maklevel Rapid Patch**.
- For new concrete surfaces, it is recommended must be at least 21 days old prior to application of **Maklevel Rapid Patch**.
- Do not mix by hand.
- Do not add excess water.
- If **Maklevel Rapid Patch** is over-watered, do not place it onto the substrate. It must be discarded.
- In all cases, test areas must be performed to ensure suitability of the product for the intended use.

Refer to TDS and SDS for all products.

## COVERAGE

A 20kg bag of **Maklevel Rapid Patch** mixed with 4.8 litres of potable water will yield approximately 12 litres.

To determine the number of bags needed per m<sup>2</sup>, use the formula:

Number of **Maklevel Rapid Patch** bags =

$$\frac{(\text{Floor Area (in m}^2\text{)} \times \text{Application Thickness (in mm)}) \text{ Mix}}{\text{Volume (in litres)}}$$

**Note:** The values are estimates only and does not include wastage.

## CLEAN UP

**Maklevel Rapid Patch** should be removed from tools and equipment with clean water immediately after use.

## PACKAGING

**Maklevel Rapid Patch** is supplied in 20kg poly lined bag.

## SHELF LIFE

**Maklevel Rapid Patch** has a shelf life of 12 months in unopened bags. Must be stored in a cool dry elevated place and protected from humidity.

## HEALTH AND SAFETY INFORMATION

Avoid contact with skin. Protective gloves and clothing are recommended when mixing or using this product. Please refer to full Safety Data Sheet for this product, which is available from **Makrete Building Solutions**.

## TECHNICAL SPECIFICATIONS - PERFORMANCE CHARACTERISTICS

TEST	TYPICAL PROPERTIES (RESULTS) MPa				
Appearance	Powder				
Colour	Grey				
Compressive Strength MPa		5 hours	1 Day	7 Days	28 Days
		7-10 MPa	25 MPa	35 MPa	≥ 45 MPa
Tensile Adhesion Strength	1 Day	≥ 2 MPa			
	28 Days	≥ 4 MPa			
Setting Time	Initial Set	Final Set		Ready for foot traffic	Ready for floor covering
	35-40 mins	45-50 mins		50-60 mins	60-70 mins
Fresh Wet Density	Approx. 1950 kg/m <sup>3</sup> - (tested in accordance with AS1012.5)				
Application Thickness					
Minimum Thickness	Feather edge – 1mm				
Maximum Thickness	50 mm				
Temperature	Working Time				
10°C	30-35 mins				
20°C	25-30 mins				
30°C	15-20 mins				
Application Temperature					
Minimum	5°C				
Maximum	30°C				
Water Requirement per 20kg Bag	4.8 Litres				
Flexural Strength MPa	1 Day	5 MPa			
	3 Days	6 MPa			
	7 Days	8 MPa			
	28 Days	10 MPa			

#### CONTACT & TECHNICAL SUPPORT

Makrete Pty Ltd  
ABN: 14619437204  
PO Box 50, Montmorency, VIC 3094  
Ph: 1300 911 161  
E: [admin@makrete.com.au](mailto:admin@makrete.com.au)  
W: [www.makrete.com.au](http://www.makrete.com.au)

PRODUCT	MAKLEVEL RAPID PATCH
Issue Date	APR 2023
Issue No:	1
Item Code	MAKL16
Pack Size	20 kg Bag

#### Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time.

The TDS should be carefully read and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied.

Our responsibility for products sold is subject to our standard terms and conditions of sale. Makrete does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

The information and any recommendations relating to the application and end-use of all MAKRETE products are provided in good faith based on MAKRETE's knowledge and experience of the products. In applications, the differences in materials, and variances of substrates and actual site conditions can vary such that no warranty in respect of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be taken as inferred either from this information, or from any written recommendations, or from any other advice offered by MAKRETE. The proprietary rights of third parties must be observed. All orders are accepted subject to our sale terms and conditions.

It is recommended that all products be properly stored, handled and applied in accordance with the printed literature (TDS).

PLEASE CONSULT OUR TECHNICAL DEPARTMENT FOR FURTHER INFORMATION.