

# PENAPATCH HIGH BUILD

## Cementitious Repair Mortar



### **DESCRIPTION:**

PENAPATCH HIGH BUILD is a fine-filled, lightweight, cementitious mortar specifically formulated to repair damaged concrete where a high build is required. The unique formulation allows for builds of up to 70mm without slump, maintaining exceptional adhesion to concrete and masonry materials with negligible shrinkage.

### **FEATURES AND BENEFITS:**

- High Build – up to 70mm in a single application
- Fast setting
- Durable
- Excellent adhesion
- Excellent workability
- Low permeability for protection against chloride attack and carbonation
- Shrinkage compensated

### **USES**

- High build repairs for vertical, overhead and horizontal repairs
- Repairs requiring high compressive strength
- Repairing damaged concrete panels
- Repairs to spalled or deteriorated concrete caused by corrosion of steel reinforcement
- Repairs requiring low permeability and high resistance to chlorides and carbon dioxide

### **SURFACE PREPARATION:**

Surfaces must be free of oil, grease and all other contaminants which may inhibit the bond of PENAPATCH HIGH BUILD to the substrate. Any cracked or weakened concrete to be removed to provide a solid foundation before being repaired. Scabbling or water blasting should be used to remove laitance and provide a mechanical key.

New concrete surface/substrates to be cured at least 21 days before application of PENAPATCH HIGH BUILD

### **SURFACE PREPARATION continued:**

Concrete should be broken out to expose all rust-affected/corroded steel reinforcement. If any corroded steel is present, remove all loose scale and corrosion/rust. Grit blasting effectively removes corrosion, and all steel, including re-bars, should be cleaned to a bright condition. Prime all exposed steel with [RLA ZINC PRIMER](#) to stop further oxidation and corrosion. Damaged sections of reinforcing bars should be removed and replaced. Saw cut to delineate all edges of the section to be repaired. Break concrete out if necessary and to ensure a minimum depth of 12mm is achieved and avoid feather edging

### **PRIMING**

Concrete and masonry surfaces must be primed with [RLA RENDERGRIP A](#) to ensure good adhesion and optimum build. Best results achieved when applying PENAPATCH HIGH BUILD while the primer is still tacky.

**Note:** For highly porous substrates, and applications in warmer conditions, surfaces to be pre-soaked with fresh, clean water prior to the application of [RENDERGRIP A](#)

**Important:** Ensure no excess or free standing water remains as this can reduce bond strength

### **MIXING:**

- PENAPATCH HIGH BUILD can be mixed using a forced action drill mixer and suitable paddle, or by hand where smaller quantities are required.
- Use **3.0 - 3.2 litres of water per 18kg bag** of PENAPATCH HIGH BUILD
- Place water into a clean pail and slowly add powder to the water while mixing on slow/medium speed. Continue mixing until a smooth, soft mortar consistency is formed

### **Important:**

- Always add the powder to the liquid while mixing slowly to avoid lumps
- Only mix that quantity of material that can be used within the setting time
- Do not attempt to rework/re-temper partially set product
- Excess water will reduce the final strength and make applying the product more difficult to apply

### APPLICATION:

- Apply the mixed PENAPATCH HIGH BUILD to the substrate using a trowel or gloved hand to give the required finished thickness.
- The maximum thickness applied in any singular application should be limited to 70 mm.
- Where the repair depth is greater than 70mm, the repair mortar may be built up to the required thickness in multiple layers within 24 hours between applications.
- Feather edging should be avoided in patch repairs by saw-cutting the edge of repairs to a minimum depth of 12mm.
- Consult our technical staff for advice on the most suitable means of carrying out large-scale repairs.

### CURING:

RLA recommends the application of [RENDERGIP A](#) as a curing agent over repairs applied in warmer conditions, or applications subject to direct sun or strong winds to reduce premature drying/setting

### CLEAN UP:

Clean all equipment with water immediately after use. Cured PENAPATCH HIGH BUILD can only be removed by mechanical means.

### SHELF LIFE/STORAGE :

- 12 months when stored in original unopened packaging
- Best stored in a dry area at room temperature
- Keep off cold floors and out of direct sunlight

### PACKAGING

- 20 Kg bags

### LIMITATIONS:

- PENAPATCH HIGH BUILD is not recommended for load bearing applications
- PENAPATCH HIGH BUILD is not designed or recommended for pedestrian or vehicle traffic
- Contact our Technical Staff for specific advice when temperatures less than 5°C or greater than 35°C are encountered.

### HEALTH & SAFETY

For information and advice on the safe handling, first aid, storage and disposal of chemical products, users must refer to the most recent Safety Data Sheet (SDS) containing physical, ecological, toxicological and other safety-related data.

### TECHNICAL DATA:

PRODUCT INFORMATION:	
Colour	Grey Powder
Water per 20kg bag	3.0-3.2 litres
Shelf life	12 months
Packaging	18kg Poly-lined Bags
Yield per bag	14litres
APPLICATION:	
Min Application Depth	12mm
Max Application Depth	70mm
PERFORMANCE DATA:	
COMPRESSIVE STRENGTH MPa AS1478.2-2005	
1 day	7 MPa
7 days	15 MPa
28 days	27 MPa
SETTING TIMES @ 20°C:	
Initial	1.75 hours
Final	4.5 hours

**WARRANTY STATEMENT:**

RLA Polymers guarantees this product against manufacturing defects and guarantees it to be manufactured to our published specification.

We certify that this product is suitable for use when fully cured and will perform as described in our technical data sheet or other published materials.

RLA Polymers will replace the product free of charge when purchased from any legally verifiable source and where a product is proven to have been stored, handled, and install according to instructions published on our packaging and within the stated shelf life. The Installation of all materials must be carried out in accordance with the relevant Australian Standard and the Floorcovering Manufacturer's instructions, and the floorcoverings must have been subject to normal traffic conditions.

Warranty doesn't apply if damage, loss, failure to follow instructions, or other circumstances are out of our control.

Sufficient time and access to investigate any complaint must be accorded to RLA Polymers.

The consumer is responsible for any expenses incurred in making a claim.

A claim form can be requested by:

**PHONE:** 1800 242 931

**EMAIL:** [info@rlapolymers.com.au](mailto:info@rlapolymers.com.au)

**MAIL:** 215 Colchester Road Kilsyth Victoria 3137  
(Attention Customer Service)

**WEBSITE:** [www.rlapolymers.com.au](http://www.rlapolymers.com.au)

**AUSTRALIAN CONSUMER LAW:**

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality, and the failure does not amount to a major failure. The benefits under our warranty are in addition to other rights and remedies available to the consumer under the law in relation to the goods and services to which the warranty relates.

**DISCLAIMER:**

All statements and technical information contained herein are based on tests we believe to be reliable, but the accuracy thereof is not guaranteed.

Users assume all risk and liability resulting from the use of the product and must confirm the suitability thereof by their own tests. Conditions of Sale contain a limited warranty against manufacturing defects.

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