



## PENATECH LA GROUT

# HIGH PERFORMANCE GROUT FOR LARGE OR DEEP POUR APPLICATIONS



#### **DESCRIPTION:**

**RLA PENATECH LA GROUT** is a high performance, micro concrete, high flow (Class C) cementitious grout designed for large or deep pour applications

#### **RECOMMENDED USE:**

- Cementitious grouting where high flow, high application thickness is required
- · Heavy duty support beneath machine base plates
- · Bridge bearing and crane rails
- · Anchoring bolts, bars and fittings
- Underpinning
- Applications subject to continuous vibrations and dynamic loads
- · Precision grouting application

#### **FEATURES AND BENEFITS:**

- Can be applied in thicknesses from 10mm-800mm in a single application
- Dual expansion compensates for shrinkage in the plastic and hardened state
- Excellent flow retention for large application thicknesses
- Ready to use requires only the addition of water
- · Can be mixed flowable or fluid
- · No metallic content that may cause staining

#### **SURFACE/SUBSTRATE PREPARATION:**

All surfaces must be clean, sound and free from oil, grease, curing compound, loose materials and general contaminants All contaminants to be mechanically abraded back to a sound concrete surface. Bolts or anchor holes must be clean and free from dust or loose material. This can be achieved by blowing clean the hole.

Base plates must be free of all rust, oil or grease. It is essential to provide air pressure relief holes for venting.

#### **APPLICATION INSTRUCTIONS:**

#### PRESOAKING:

All prepared areas must be saturated with water for a minimum of 6 hours before grouting.

Immediately before pouring, the excess water should be removed. In the case of bolt/anchor holes, the holes must be blown out to ensure no traces of free water are present whilst grouting.

#### **FORMWORK:**

The formwork to be constructed must be leakproof and watertight. To achieve this, it is recommended that foam rubber strips or a suitable sealant such as polyurethane or silicone be used underneath the formwork.

The formwork should be constructed, which will allow and ensure a grout head is maintained on the side above the level of the underside at the base plate. The formwork should allow for gravity flow of grout with a suitable grout head allowing for a continuous flow between the base plate and the concrete substrate.

To ensure ease of formwork removal, the formwork should be coated with form oil or released before grouting.

#### **UNRESTRAINED SURFACES:**

Penatech LA Grout is an expanding grout and therefore advisable not to leave any unrestrained areas

#### **LOW TEMPERATURE WORKING:**

At temperatures below 5°C the cure rate and strength development rate will be dramatically reduced. If early strength is required, it is advisable to use heated water and condition Penatech Grout LA to 25°C. Do not exceed this temperature.

#### **HIGH TEMPERATURE WORKING:**

At temperatures above 30°C, it is advisable to use water below 20°C when mixing grout. All materials must be kept cool and away from direct sunlight. If practical, the installation area should be shaded by erecting shade screens. If ambient temperatures are excessive, grouting should be scheduled for early morning or late afternoon.





#### **MIXING:**

- Penatech Grout LA requires between 2.9 3.2L of water per 20kg bag, depending on the desired consistency.
- Mixing should be performed using a forced action high shear stirrer powered by a heavy duty electric mixing drill.
- Add pre-measured water to a clean mixing bucket.
- Gradually add powder into the water whilst continuously mixing the contents of the bucket.
- When the entire contents of the bags have been added to the water, mix for a further 5 minutes to produce a smooth homogenous consistency
- It is essential that the grouting operation is continuous hence ensure sufficient labour and mixing capacity is available.

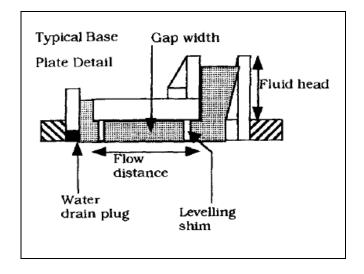
CAUTION DO NOT MIX BY HAND DO NOT ADD ADDITIONAL WATER DISCRAD ANY UNUSED GROUT THAT HAS HARDENDED OR STIFFENED

Litres of water per 20kg bag		
Flowable	Fluid	
2.5 – 2.9	2.9 – 3.2	

#### **POURING:**

The desired ambient temperature for pouring is around 20°C. At this temperature grout is to be placed within 25 minutes of mixing as this will ensure the expansion process is maximised.

- Ensure the entire area to be grouted is completely filled
- Use a suitable head box to ensure continuous flow of grout
- Place/ pour grout from one side, minimizing the likelihood of trapped air
- The grout head must be maintained at all times so that a continuous grout front is achieved
- Do not mechanical vibrators to assist in flow as this will cause segregation of aggregate



#### **CURING:**

On completion of grouting the exposed area should be covered with wet hessian, plastic sheeting or **RENDERGRIP A** to prevent excessive moisture loss. At ambient temperature, formwork should be removed no sooner than 24 hours after completion of grouting. The covering should stay in place for a further 6 days. Lack of sufficient curing could result in plastic cracking and drying shrinkage on the surface.

#### **COVERAGE/YIELD**

	Flowable	Fluid
Litres per 20kg bag	12.5	13
Fresh wet density kg/m3	1900	1918
Bags required per cubic metre	80	77

#### **CLEAN UP:**

- Wash all tools and equipment with fresh, clean water immediately after use.
- Cured LA Grout can only be removed mechanically.

#### **SHELF LIFE/STORAGE:**

- 8 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:**

- Do not apply when surface or ambient temperatures are below 5°C or above 35°C
- Unrestrained area must be kept to a minimum
- · Do not add additional water other than what is specified
- Never apply mixed grout to a dry porous substance
- Always apply grout in a continuous operation and ensure grout head is maintained
- Al low temperatures, grout setting time and strength gain will be extended
- At very high temperatures, grout will set and cure faster potentially causing cracking and delamination

#### **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	
Shelf life	8 months	
Packaging	20kg bags	

SETTING TIMES @ 20°C		
	Flowable	Fluid
Initial Set	4.5hours	5.5hours
Final Set	6hours	7hours
Time for Expansion Start (plastic state)	12-25mins	15-30mins
Time for Expansion Finish (plastic state)	2-4hours	2-4hours
Unrestrained Expansion	1.5%	1.5%
Bleeding	0%	0%

COMPRESSIVE STRENGTH Tested as per AS1012.9, AS2073 @ 20°C		
Age	Fluid	
1 Day	18MPa	
3 Days	40MPs	
7 Days	52MPa	
28 Days	63MPa	

FLOW CHARACTERISTICS		
Using CRD-C flow core (Efflux time) Initial Flow	20-30 seconds	
Flow after 15 minutes	25-35 seconds	
Flow after 25 minutes	35-45 seconds	







#### **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 relevant Australian Standards.

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

**WEBSITE:** 

**EMAIL:** info@rlapolymers.com.au

MAIL: 215 Colchester Road Kilsyth Victoria 3137

(Attention Customer Service) 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.

Version: 01 Issue date: 15/07/2024

### RLA Polymers Pty Ltd ACN 004 709 915

Head Office 215 Colchester Road Kilsyth, Victoria, 3137 Tel: 1800 242 931 New South Wales 5A 246 Miller Road Villawood, NSW, 2163

Queensland 57 Fulcrum Street Richlands, QLD, 4077 South Australia Unit 2/7 Berger Road Wingfield ,SA, 5013 Western Australia 24 Hanwell Way Bassendean, W.A, 6054 Tel: 08 9279 8911