



LUL RAPIDSET

Description

LUL RAPIDSET is a fast setting and fast curing mortar with a rapid strength gain that is resistant to chloride penetration, consisting of a blend of natural cement based binder, specially selected dried graded aggregates all passing a 250 micron sieve and food grade retarders.

Uses

- Horizontal
- Vertical
- Overhead concrete repairs
- Patching floor screeds
- Repairs to sewers
- Work around the sea
- Where early strength is required
- Wherever pollution or chemical attack is likely.

Properties

- Fast setting
- Excellent adhesion
- Low shrinkage
- Low modules of elasticity, which makes it very effective on poor or friable substrates
- Excellent resistance to pure water & sulphated water
- Excellent resistance to aggressive chemicals
- Very good cohesion & mixing
- Fine compact surface
- No curing necessary. It can be coated, covered or painted as soon as setting is complete
- Can be used in wet conditions
- Can be used under water.





LUL RAPIDESET

Method of use

Preparing the surface

Do not use on frozen or over heated substrates (outside the range of 0°C- 30°C). Prepare the surface in advance to provide an adequate key. It should be clean, free from dust and thoroughly dampened. Where necessary steel or aluminium mesh can be used. Ensure that a 2mm minimum thickness of material is obtained.

Priming

There is no need to prime any reinforcement, but if priming is preferred, any conventional system may be used.

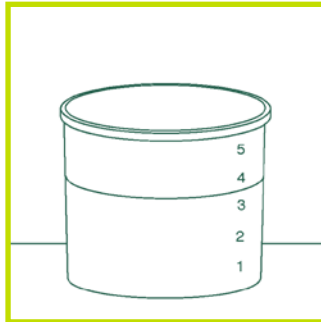
Mixing

For optimum results mix using conventional mixing machines. Add the LUL RAPIDESET gradually to no more than 3 litres of clean water per bag, whilst mixing continuously. If one bag or less is to be used it can be mixed with a rose bud type paddle attached to an electric drill (900rpm, 1000w). Mix vigorously for at least 2 minutes after adding all the mixture to the water.

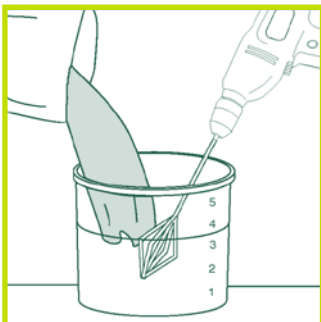
LUL RAPIDESET is designed to give a fluid mix but this only develops after sufficient mixing. The mix will appear dry at first. Continue mixing until fluidity develops. If greater fluidity is required, more water up to a maximum of 3.25 litres may be used. Exceeding this ratio will lead to lower strength, longer setting time and the risk of surface cracking. In cold weather the set can be accelerated using warm water, likewise in hot weather cold water can be used to slow down the set.



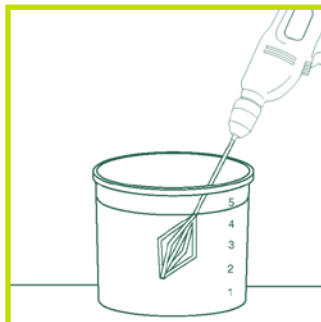
Rose bud paddle in electric drill 900rpm 1000w.



Place 3 litres of water into a container.



Add the LUL RAPIDESET to water mixing all the time.



After the LUL RAPIDESET has been added mix for at least 2 minutes.

Application

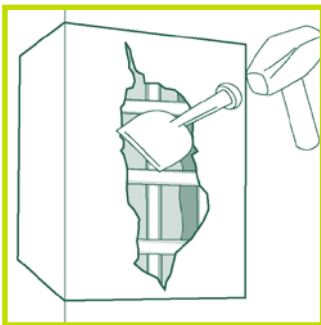
General

Place the material as quickly as possible after mixing using traditional tools. A 2mm minimum thickness of the material is always necessary. Do not apply additional water to the surface during finishing as this may cause surface cracking. Once setting has started DO NOT attempt to remix or to smooth the surface, this will cause the properties in particular strength and adhesion to be lost.

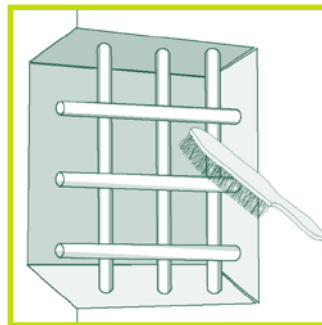
Concrete repairs

Carry out the removal of all loose material from concrete and the reinforcement. It is only necessary to remove the loose rust from the reinforcement. Prepare the surface as described previously ensuring that the surface is well dampened but ensuring there is no standing water. Fix any necessary replacement reinforcement, movement joints and formwork. Mix the material by adding the dry LUL RAPIDESET powder continuously to the water ensuring it is mixed for at

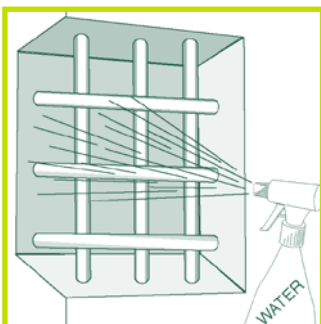
least 2 minutes after adding the last of the LUL RAPIDESET powder and apply as previously recommended ensuring that the LUL RAPIDESET is worked around the reinforcement. Protect the surface of the LUL RAPIDESET from direct sunlight or wind until setting has completed. Once the LUL RAPIDESET has set allow at least 1 hour before applying any finishes.



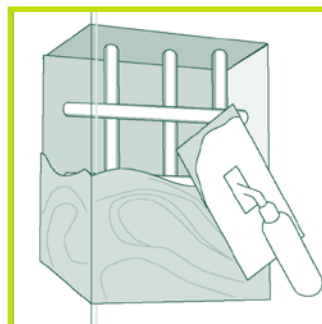
Cut back loose and spalling concrete a minimum depth of 2mm.



Wire brush any reinforcement to remove any loose rust.



Well dampen the concrete with water ensuring no standing water.



Mix LUL RAPIDESET as instructed and place the mortar, ensuring at all times a minimum thickness of 2mm.

Setting times

LUL RAPIDESET is designed to commence setting at 8 minutes and finish setting at 10 minutes at 20°C. In winter LUL RAPIDESET can be used down to 0°C. The set will be slower but can be accelerated by using warm water. In very hot temperatures the set will be faster and can be slowed by using cold water.

Cleaning

LUL RAPIDESET should be removed from tools and equipment with water immediately after use.

Storage

LUL RAPIDESET is packaged in a polythene inner bag with a re-sealable tie in a stitch sealed woven polypropylene outer bag that should be stored in dry conditions and will remain usable for at least twelve months.

Yield

Generally 1 x 15kg bag of LUL RAPIDESET mixed with 3 litres of water will produce approximately 6 litres of finished mortar.

How to specify

LUL RAPIDESET shall be mixed and applied to prepared surfaces all strictly in accordance with the manufacturer's instructions.

Precautions

We strongly recommend the use of GLOVES, GOGGLES and MASK. Please see MSDS sheet for full details.

Setting time & strength gain

Start Set End Set	8 Min 10 Min	at 20°C at 20°C
		Compressive Strength (Mpa)
1 Hour		4
3 Hours		5
24 Hours		9
7 Days		13
28 Days		32
Strength continues to develop thereafter.		

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