

Roundtower Ultra-Low Strength Masonry Grout

A dry ready mixed lime mortar for void filling in walls.



Product Description

Factory blended mortar using graded powdered mineral fillers, non-hydraulic CL90 hydrated Lime and pozzolans combined with carefully selected additives to improve the grout's physical properties, flowability and mechanical performance, whilst maintaining all of the virtues of a Lime grout.

Mix Ratio

1:1.5 as standard, other mix ratios available on request.

Binder

Lhoist CL90 & Metakaolin.

Aggregates

Sub 300-micron powdered minerals.

Usage

Ultra-Low Strength Masonry Grout is suitable for pouring, pumping and needle injection into solid wall masonry. It can be used to fill voiding within walls to prevent pooling of water inside the masonry and fill tunnels created by pests.

Suitable for applications in construction where the binder strength is appropriate for the host background or surface. This mix is primarily for void filling and will have little to no structural strength.

Do not use this product below 5°C, do not use this product if freezing conditions are predicted within the following few weeks. Do not use this product in temperatures above 30°C.

Yield

After mixing, a 12.5kg bag will produce approximately 14.5-16 litres of mortar depending on the water addition rate.

Performance

Measured Figure	Test Result
Water Addition Rate	0.63 L/Kg
Dry Hardened Density	1.03 Kg/L
Flexural Strength	0.20 N/mm ²
Compressive Strength	0.22 N/mm ²
Water Absorption	W0*

*All figures given above are mean measurements and do not constitute a guaranteed strength. This was done with a custom curing methodology to give as high as strength as achievable by this mix at 28 days. *Invalid result – bars hit saturation approximately 59 minutes into the test.*

Advantages

- Quality controlled production and product consistency.
- High stability for pumping, tested to 3 scaffold lifts height with no segregation or blocking.
- Very high flow and fine texture to fill the smallest of gaps.

Preparation

Walls should be stitch drilled to determine the degree of voiding, and preparatory work with water flushing done to identify which holes link to one another. Pointing should be assessed and holes filled with cotton or clay before starting this process.

Dense impervious backgrounds/materials are unlikely to be very absorbent and require little to no dampening, whereas more absorbent backgrounds/materials require adequate dampening in order to prevent rapid drying. Walls should always be thoroughly flushed with water before grouting occurs.

Mixing

A 12.5kg bag of mortar will require 7 to 11 litres of clean potable water, most applications work well at around 8L per bag. Higher water addition rates can contribute to grout shrinkage and means multiple passes of grouting may be needed to completely fill voiding.

Only mix with a Whisk, drum mixers or forced action mixers like Barons are not suitable.

As a dry mixed material, it is possible that some settlement or separation may occur in the bag during transit; when mixing part bags, it is especially important that the dry contents are thoroughly blended prior to mixing with water.

Best Practice/Advised Mixing: First add 80-90% water of the total water into the mixing bucket, and turn the whisk on at medium to high speed whilst adding the grout gradually. Allow the grout to mix until the water is thoroughly distributed, then add additional water to achieve desired consistency. A smooth lump free consistency should be achieved.

Mixing Time: Mix for a minimum of 2 minutes, but for no longer than 8 minutes.

Thickening: This mortar has some mild thixotropic properties, therefore if it is not agitated for a while it can thicken in buckets, mixers, pipes etc. This should not pose and problem as with some small agitation it becomes fluid



Roundtower Lime

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again. This is not the material setting and should not cause any issues with blocking.

Once water has been added, this grout has an open time of at least 36 hours. Longer in colder weather.

Usage

There are several methods for mass grouting, below are example methods, however these do not constitute a specification;

Large void pump filling method: Always wet out the centre of the wall by flushing through the pre-drilled holes with plenty of water.

Mix the first mix very wet at around 11-12 litres of water per 12.5Kg bag depending on the level of substrate suction, pump this in from the bottom holes in the pre-drilled grid using a hand operated grout pump. This very wet mix should fill all of the finest crevices and cracks and reduce the amount of shrinkage for the main filling pass of thicker grout.

After this first wet pass a much thicker pass of grout should be pumped through, ideally at around 9.8L of water per bag (or less if your pump setup allows for it). Once the grout has found its way to the next row of holes up in the drilled grid the bottom hole should be plugged.

As the grout is pumped it will likely leak in multiple places around the wall (both internally and externally) so people should be ready with cotton wool and small tools to plug the gaps.

Leave at least a week between grout lifts, keep filling until you've reached the top of the wall. Then point to hide the drilled holes.

Gravity fill method: This method is more suited to smaller localised voids. Drill a hole as close to the top of the identified void as possible, then fill the void with water to pre-wet the area. The grout can then be poured in either using a watering can with a hose attached to the spout or a cup made of clay can be moulded under the hole to permit any pouring instrument to be used.

Injection fill method: This style of application is best suited to filling delamination where renders or plasters want to be preserved. First inject water into the area to be filled, then mix the grout to the a medium to wet consistency and fill the small void whilst it's still wet/damp.

Set time is variable depending on the substrate suction. Stiffening occurs in after 3-5 days in non-porous environments but will occur substantially faster in porous masonry.

Packaging

This product is supplied in 12.5kg polythene lined paper bags, palletised for shipping and handling. The packaging is a mixed material and should be recycled accordingly.

Also available as ½ tonne bags for 2 Tonne or higher order quantities.

Storage

This product should be stored in dry conditions, in unopened bags and clear from the ground. Always protect bags from water and damp. Reseal part bags after opening if unused product is present.

Use within 6 months of manufacturing date (provided on each bag).

Health and Safety

RISK PHRASES: R36 / R37 / R38 / R43

- Avoid contact with skin and eyes.
- Contact with wet mortar may cause irritation, dermatitis and/or burns.
- Contact between lime powder and body fluid (sweat, eye fluid etc.) may cause skin burns and respiratory irritation, dermatitis or burns.

SAFETY PHRASES: S2 / S24/25 / S26 / S37

- Avoid eye and skin contact by wearing suitable eye protection, protective clothing and gloves.
- Avoid breathing dust.
- Keep out of reach of children.
- On contact with skin and/or eyes, rinse immediately with clean water and seek medical attention.

Declaration

Roundtower lime mortars are manufactured to the requirements of BS EN 998-2: 2016.

This product will contain no Portland Cement whatsoever.

Document Control

Datasheet version 1.3, issued Jan 2026. Any more modern versions will supersede this datasheet, with no exclusions.