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Reviewed: 8/10/202

Product Name: Ultra Lightweight Mortar



Product Description:

ULW Mortar is a fine, light weight polymer modified mortar for-mulated for repairs to concrete or masonry, where a high build characteristic is required with intermediate compressive strength and thermal insulation and fire-resistant properties are desired. ULW Mortar meets 4-hour Fire Resistance Protection to as 1530.4.2019 at 25mm thickness of cover minimum.
ULW Mortar is a grey coloured patching mortar with excellent adhesion to most substrates. ULW Mortar is formulated with inert mineral fillers of low density that provide very high thermal pro-tection to repairs. ULW Mortar can be applied up to 75mm thick-ness in one operation without slumping and with negligible shrinkage.

Features & Benefits:

- One component product just add water and mix.
- High build repairs from 10mm to 75mm.
- Excellent workability.
- Easy to use.
- High bond strength to concrete substrates.
- Reduces need for reworking after finishing.
- Durable.
- Insulating characteristics.
- Reduces the need for formwork.
- Fire resistant to as 1530.4.2019 (4 hours) at 25mm greater depth of cover provides a proportionate increase in time of resistance.

Recommended Applications:

- Patching and repairing damaged concrete.
- Repairs to vertical and overhead surfaces.
- Repairs to concrete or masonry where high non slump build is required in one operation.
- Fire protection of steel joiner plates and angle brackets.

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Performance Properties

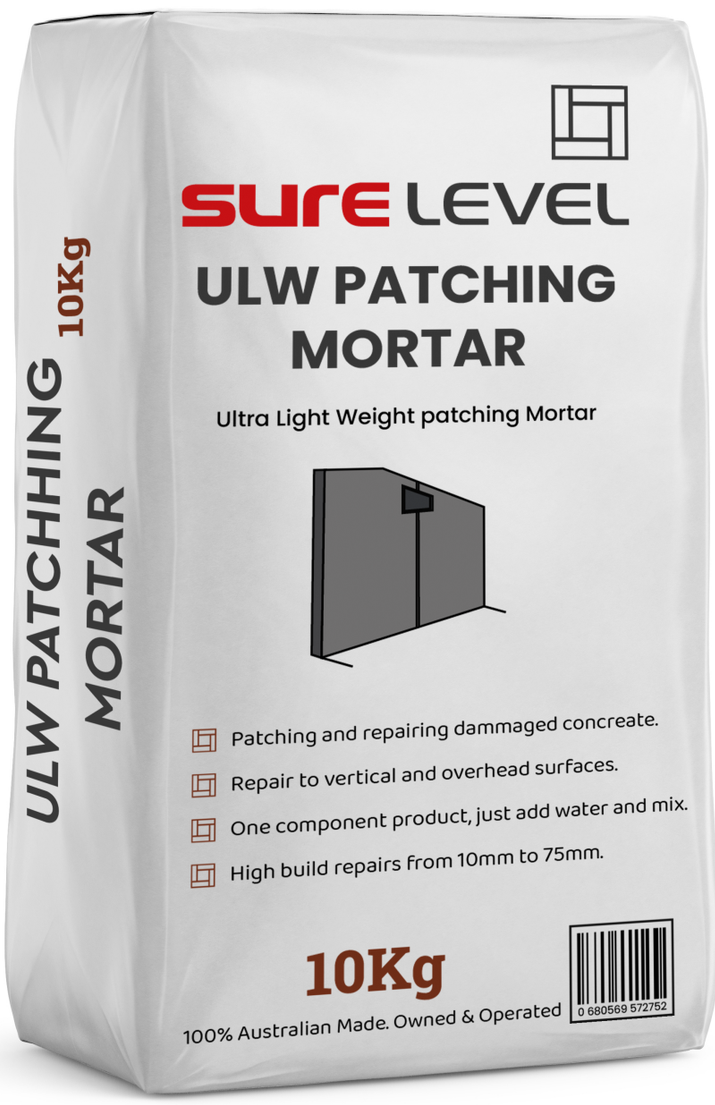
Property	Mouldable	Trowellable	Test Method
Mixing Consistency Per 10 kg Bag	1.5-1.8 Litres	2.2-3.0 Litres	-
Compressive Strength 7 Day	>15 MPa	>8-15 MPa	AS1012.9 at 20°C and AS2073

Setting Time (Minutes)

Set Type	Setting Time at 20°C	Setting Time at 30°C
Initial Set	2-3 Hours	1.5-2 Hours
Final Set	4-5 Hours	2-3 Hours

Yields: The approximate yields are obtained if mixed in accordance with recommended procedures and accurately measured water content. A 10kg bag of ULW Mortar with 3.0 litres of water will yield approximately 20 litres

Packaging: ULW Mortar is supplied in a 10kg polylined bag.

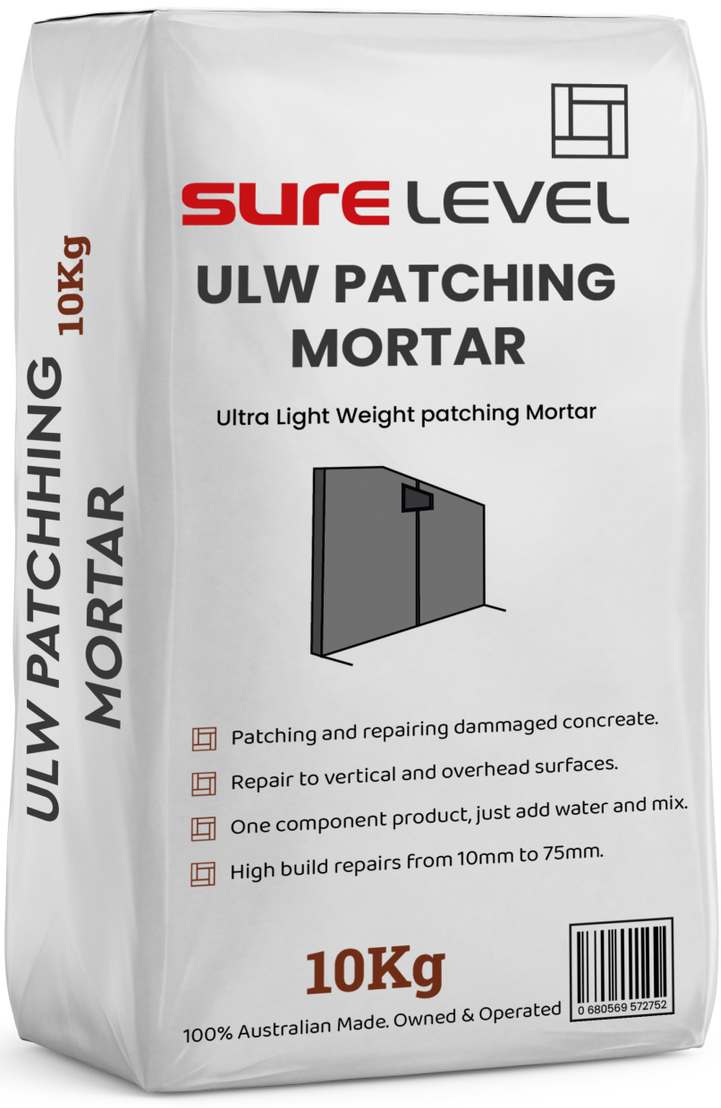


Application Instructions:

Substrate & Surface Preparation: Saw, cut or cut back the extremities of the repair locations to a depth of at least 15mm to avoid featheredging and to provide a square edge. Break out the complete repair area to a minimum depth of 15mm up to sawn edge. Clean the surface and remove any dust, unsound or contaminated material, plaster, oil, paint, grease, corrosion deposits or algae. Where breaking out is not required, roughen the surface and remove any laitance by light scabbling or grit blasting. Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. Expose fully any corroded steel in the repair area and remove all loose scale and corrosion deposits. Steel should be cleaned to a bright condition, paying particular attention to the back of exposed steel bars. Grit blasting is recommended for this purpose.

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Priming: Where the substrate is very porous, pre-dampening with water should precede then application of one coat of Primer and scrubbing it well into the surface. ULW Mortar can be applied as soon as the primer becomes tacky. If the primer is too wet, vertical build-up of the ULW Mortar may be difficult.

Low Temperature Working: In cold conditions down to 5°C, the use of warm water (up to 30°C) is advised to accelerate strength development. Normal precautions for winter working with cementitious materials should then be adopted. The material should not be applied when the substrates or air temperature is 5°C and falling.

High Temperature Working: : At ambient temperatures above 35°C, the material should not be used as this will cause premature setting and make working with the product difficult.

Mixing: Care should be taken to ensure that ULW Mortar is thoroughly mixed. ULW Mortar must be mixed with a mechanical forced action mixer with a high shear stirrer. Add the required volume of drinking quality water into the mixing vessel and, with the mixer in operation, add one full 10kg bag of ULW Mortar and mix for 3 to 5 minutes until fully homogeneous.

Note that powder must always be added to water. Dependent on the ambient temperature and the desired consistency, the amount of water required will vary slightly. DO NOT MIX BY HAND

Placing: Exposed steel reinforced bars should be firmly secured to avoid movement during the application process as this will affect mortar compaction, build and bond. Apply the mixed ULW Mortar to the prepared substrate by gloved hand or trowel. Thoroughly compact the mortar on to the primed substrate and around the exposed reinforcement. ULW Mortar can be applied to 75mm thickness in vertical sections, but up to 100mm thickness in smaller pockets or with the use of formwork. If formwork is used, it should have properly sealed faces to ensure that no water is absorbed from the repair material. In horizontal locations, ULW Mortar can be applied up to 100mm in thickness. If sagging occurs during application to vertical surfaces, the ULW Mortar should be completely removed and re-applied at a reduced thickness or lower consistency on to the correctly re-primed substrate. ***Minimum 25mm for 4-hour Fire Resistance Protection***

Note: The minimum applied thickness of ULW Mortar is 10mm.

DO NOT ADD EXCESS WATER

Finishing: ULW Mortar is finished by striking off with a straight edge and closing with a steel float. Wooden or plastic floats, or damp sponges, may be used to achieve the desired surface texture. The completed surface should not be overworked.

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Curing: All cementitious based mortars have to be protected against too rapid surface drying and evaporation. ULW Mortar must be cured immediately after finishing in accordance with good concrete practice. The use of Primer sprayed, brushed or rolled on the surface of the finished ULW Mortar in a continuous film, is recommended.

Application of Coating: ULW Mortar, when cured, has good resistance to water penetration. However, if areas are subject to continuous water immersion or chemical attack from solvents or acids etc, an Epoxy or Acrylic coating, will act as a sealer and dust proofer which may be easily cleaned and is resistant to oil or chemical spills

Recommended Applications:

- ULW Mortar should not be used when the temperature is below 5°C. ULW Mortar should not be used in temperatures greater than 35°C.
- ULW Mortar should not be applied less than 20mm thickness in any given application.
- For concrete substrates subject to rising damp or moisture, a water proof membrane is required.
- It is recommended that Surelevel Moisture Barrier be used as a primer (consult technical data sheet or Surelevel office).
- New concrete surfaces must be at least 14 days old prior to application of ULW Mortar.
- To avoid too rapid drying protect ULW Mortar from direct sunlight or drying winds during actual application, and while curing for up to 24 hours.
- If the substrate on to which ULW Mortar is applied moves or cracks, reflective cracking will occur in the ULW Mortar.

Pot Life: Setting begins after 45 minutes (at 25°C substrate and ambient temperature). ULW Mortar should not be used after 45 minutes from time of mixing. The addition of water to the mortar after it has started to stiffen is not recommended, and the product should be discarded.

Clean-up: ULW Mortar should be removed from tools and equipment with clean water immediately after use.

Storage: ULW Mortar has a shelf life of approximately 8 months, if kept in a dry environment completely away from moisture.

Health & Safety: This product is classified as hazardous according to criteria of Work Safe Australia. Material containing Portland Cement and sand now fall into this category. Continuous or extended contact with this product may cause irritation as well as respiratory issues such as bronchitis or silicosis.

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- During use avoid inhalation of dust, contact with skin and eyes.
- Suitable protective clothing, dust masks, gloves and eye protection should be worn.
- Continual or extended contact with cement products can cause skin irritation.
- If skin irritation occurs, remove contaminated clothing and flush skin thoroughly.
- with water for a minimum of 15 minutes. Contact Poisons Information Centre or consult medical adviser.
- Safety Data Sheets (SDS) are available on request from the office. Read the SDS and product data sheet carefully before using any product.

Fire: ULW Mortar is non-flammable.



DISCLAIMER

Please Note: Recommendation and advice regarding the use of this product is to be taken as a guide only and Surelevel shall not be liable for any inaccuracy in the information or for any loss, injury or damage whatsoever resulting from its use. To the full extent permitted by law, Surelevel's liability is limited at its discretion, to the replacement of the goods or the supply of equivalent goods.

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