



ULW Mortar

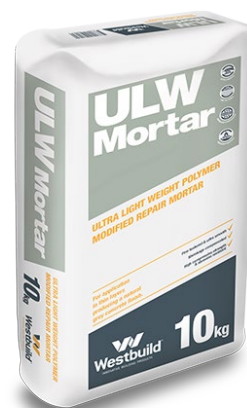
Ultra Light Weight Polymer Modified Repair Mortar

Ultra Light Weight (ULW) Mortar is a fine, light weight polymer modified mortar formulated 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 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 protection to repairs. ULW Mortar can be applied up to 75mm thickness in one operation without slumping and with negligible shrinkage.

Advantages

- 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.
- Fire resistant.



Product Attributes

Uses

- Recommended For*
- 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.

Performance

- Residential, commercial and medium industrial.
- For more information on suitable uses or uses that are not listed above, please contact a Westbuild representative.

Yield

- 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 20kg bag - 50 bags per pallet (1.2t). Multi wall paper bag.

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

Technical Data

Product Identity

Form Powder
Colour Grey

Compressive Strength

Age	Mouldable	Trowelable
28 Days	>15 MPa	>8 - 15 MPa

Tested in accordance with AS1012.9 at 20°C and AS2073

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.

Setting Times

Initial Set	20°C	2 - 3 Hours
	30°C	1.5 - 2 Hours
Final Set	20°C	4 - 5 Hours
	30°C	2 - 3 Hours

Vicat setting times at 20°C

Installation

Surface Preparation Saw, cut or cut back the extremities of the repair locations to a depth of at least 15mm to avoid feather-edging 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 gritblasting. Oil and grease deposits should be removed by steam cleaning, detergent scrubbing or the use of a proprietary degreaser. Fully expose 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. Gritblasting is recommended for this purpose.

Priming Where the substrate is very porous, pre-dampening with water should precede the application of one coat of Westbuild PRO™ Flexible Additive Fortifier &



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 buildup of the ULW Mortar may be 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. Dependant on the ambient temperature and the desired consistency, the amount of water required will vary slightly.

Do not mix by hand.

Water Ratio

The table is a guide to the typical water addition requirements for various consistencies.

Do not add excess water.

Litres of water per 10kg bag:	Mouldable	Trowelable
	1.5 – 1.8	2.2 – 3.0

Application

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.

Placement and Layer Thickness

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.

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

Application thickness:	Minimum	10mm
	Maximum	75mm Vertical 100mm smaller pockets / use of formwork

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.



Application Temperature

Low Temperature Working	High 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.	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.

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.

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.

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 Westbuild PRO™ Flexible Additive Fortifier & Primer sprayed, brushed or rolled on the surface of the finished ULW Mortar in a continuous film, is recommended.

Applying Coatings

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.

Cleaning

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

Attention

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 10mm thickness in any given application.

For concrete substrates subject to rising damp or moisture, a water proof membrane is required.

It is recommended that Westbuild PRO™ Flexible Additive Fortifier & Primer be used as a primer (consult technical data sheet or Westbuild office).

New concrete surfaces must be at least 14 days old prior to application of ULW Mortar.



To prevent ULW Mortar from drying too quickly, protect the applied 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.

Risk

All cement-based products are alkaline and can cause irritation. This product is considered hazardous according to criteria of Work Safe Australia. A dust mask should be worn when handling the material. Continuous or extended contact with this product may cause irritation, as well as respiratory issues such as bronchitis or silicosis. Contact with the eyes and repeated and prolonged skin contact should be avoided.

Safety Precautions

All cement-based products are alkaline and can cause irritation. Although this product is not considered hazardous, a dust mask should be worn when handling the material. Contact with the eyes and repeated and prolonged skin contact should be avoided.

Technical/Safety Data

TECHNICAL DATA SHEETS (TDS) AND SAFETY DATA SHEETS (SDS) are available on request and should always be referenced before handling this product and before the commencement of any works. A WESTBUILD Representative is always available should you require further information. Visit our website for further information on the use of this product and suitability for your application.

Guarantee

WESTBUILD Products Pty Ltd guarantees this product for 10 years after the project completion date subject to terms and conditions. The product must be used for the purpose intended and all tiling works must be to the applicable Australian standards at the time of use. Please refer to WESTBUILD'S full guarantee documentation available on request.

Related Products

Westbuild PRO™ Flexible Additive Fortifier & Primer
Westbuild PRO™ Wet Area Waterproofing
Level It – Self Smoothing, Self levelling underlay

It is the responsibility of the user to ensure that products are used in accordance with the Westbuild Products Pty Ltd instructions for use, and Australian Standard procedures in applications for which they are intended. Westbuild Products Pty Ltd and its associated companies cannot guarantee and are not liable for the use of their products outside of Australian Standards guidelines and the Westbuild Products Pty Ltd instructions for use. The technical details and recommendations contained in this data sheet are given in good faith and represent the best of our knowledge at time of printing. Freedom from patent restrictions should not be assumed.

WESTBUILD CONTACT DETAILS
PHONE: 08 9309 2029
Email: technical@westbuildgroup.com