



MasterPlas LW

Polymerised Lightweight Mortar

Properties

- Lightweight formulation enabling high build application
- One-component, polymer modified, chloride free hydraulic mortar
- Suitable for spray application
- Suitable for thickness of 5 to 100mm in single application
- Shrinkage compensated and excellent adhesion
- Ideal application and hardening times

Areas of Application

- Concrete re-surfacing repair to large and localized areas. MasterPlas LW provides excellent finishing workability. It is ideal for vertical and overhead repair operations.
- Light weight built-up in landscaping or sculpturing works for theme parks and decorative feature works.

Application

Surface Preparation

The surface must be clean and free from all loose particles dust, oil and other contaminants. The substrate must have sufficient roughness, e.g. sound aggregates should be visible.

The cleaned substrate shall be thoroughly saturated with water.

A polymer cement slurry bond coat shall then be used to prime the saturated substrate before the application of MasterPlas LW. MasterPlas LW shall be applied over this slurry bond coat on a "fresh-on-fresh" basis.

For stand-alone bulk build-up, a skeleton matrix made of wire mesh is generally recommended to enhance dimensional strength and stability of the structure.

Mixing

MasterPlas LW is a single component dry mortar which requires only mixing with water. The dry powder is slowly added to water and mixed thoroughly until a homogeneous, creamy consistency is achieved. Forced action mixers are recommended. Mixing should take approx. 3 minutes. Mixing by hand is not permitted. Use full pack-sizes only.

Mixing Ratio

For a 25 kg bag of MasterPlas LW, approximately 6.25 – 6.50 litres of water is required.

For a 20 kg bag of MasterPlas LW, approximately 5.00 – 5.20 litres of water is required

As with all cementitious products, the quantity of water needed may be vary slightly in each case.

Application

MasterPlas LW can either be applied by hand, with floats or trowels, or by wet-spray techniques.

It is recommended to apply in layers of up to 100 mm each. For thicker application, apply overcoat only after the previous coat has attained the final set. MasterPlas LW should not be applied at temperature below +5°C (air and substrate). Before application of overcoat all loose particles on the surface shall be removed.

Curing

Care must be taken to ensure MasterPlas LW is suitably protected to prevent it from drying out too rapidly, especially from the effects of direct sun and wind. As with all cementitious materials, it shall be protected from rain before its final set.

General

Coverage depends on texture and formation of the structure. To determine this exactly, a trial area should be laid and coverage noted.



Technical Data for MasterPlas LW (All values given relate to +25°C and 60% relative humidity)

Characteristic	Unit	*Value	Comments
Max grain size	mm	0.6	
Fresh Wet Mortar Density	kg/dm ³	1.40	
Dry Mortar Density	kg/dm ³	1.20	
Compressive Strength	N/mm ²	10.0	7 days
		15.0	28 days
Flexural Strength	N/mm ²	2.0	28 days
Bond Strength	N/mm ²	0.3	28 days
Linear Shrinkage			No Crack (Coutinho Ring method)
Mixing Ratio	litres	5.00 – 5.20	per 20 kg bag
		6.25 – 6.50	per 25 kg bag
Final Set	hours	6	at +25°C
Layer Thickness Per Work Step	mm	5	minimum
		100	maximum
Yield	litres	~ 18.6	per 20 kg bag
		~ 22.4	per 25 kg bag
Minimum Application Condition	°C	> +5°C	substrate and ambient temp.

Product Characteristics for MasterPlas LW

Delivery	20 kg & 25 kg bag
Storage	Can be stored in cool and dry conditions for at least 6 months in original unopened packs.
Disposal	In the interest of the environment, please empty all bags completely & dispose in accordance with local regulations.

Safety Advice

Please take note of the safety information and advice given in the packaging labels and safety information sheets.

Note: The information on this data sheet is based on our experiences and correct to the best of our knowledge. It is, however, not binding. It has to be adjusted to the individual structure, application purpose and especially to local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. This provided we are liable for the correctness of this data within the scope of our terms and conditions of sale-delivery-and-service. Recommendations of our employees which differ from the data contained in our information sheets are only binding if given in written form. The accepted engineering rules must be observed at all times.

Edition 06/14. Some technical changes have been made to this print medium. Older editions are invalid and may not be used anymore. If a technically revised new edition is issued, this edition becomes invalid.