

HARDMASTER™ W668

FIBRE REINFORCED BEDDING MORTAR



BEDDING MORTAR:

HardMaster W668 is a high-performance rapid set and rapid strength bedding mortar containing recycled glass aggregate and polypropylene fibres, which can be opened to traffic just 60 minutes after being mixed and placed. It is perfect for any application that requires high early strength gain and a quick return to service time. Its rapid set and high early strength development help reduce construction and road closure times, making it ideal for both planned and emergency repairs.

Typical applications include the bedding of inspection chamber frames/covers, gully grates, stanchion posts, kerbstones, setts and other street furniture installations. HardMaster W668 Bedding Mortar is compatible for use with concrete, brick and stone substrates. HardMaster W668 Fibre Reinforced Bedding Mortar complies with Department of Transport HD 27/04 Design Manual for Roads and Bridges Vol 7 Sec 2 Clause 3.11.

PRODUCT FEATURES:

- Early strength gain, ready to receive traffic after just 90 minutes
- Easy to use, pre-blended, one component product - just add water and mix
- Excellent bond strength

CUSTOMER BENEFITS:

- Shrinkage compensated
- High final strength
- Polypropylene fibre reinforced and contains recycled glass

COLOURS AVAILABLE:



Grey



RECOMMENDED USE:



Utilities



Car Parks



Highways



Facilities

APPLICATION METHOD:



Trowel

PREPARATION OF SUB-BASE:

All application substrates must be sound, clean and free from dust, dirt, debris, oil, grease and other contaminants. Proper surface preparation is vital to ensure the successful application and durable performance of the concrete. All substrates should be pre-wetted with water prior to the application of the concrete, however any standing water should be removed.

MIXING INSTRUCTIONS:

For best results **Magma HardMaster W668** should be mixed using a steel **Magma OX Pro Mixing Paddle** coupled with a twin handled mixing unit. Mix each 25kg unit with 2.5 - 3.0 litres of clean water (which complies with BS EN 1008 - water for concrete). Pre-measure the required volume of water into a clean mixing vessel and steadily add the powder to the water. The product should be mixed for 2-3 minutes until a smooth, homogenous mortar consistency is achieved.

Due to the rapid setting nature of **Magma HardMaster W668 FR** Bedding Mortar, only ever mix a quantity of material that can be used and placed within 5 minutes of the end of mixing.

DO NOT re-mix or add extra water to extend the working time of the material.

NOTE: Water consumption can be impacted by calcium content.

APPLICATION:

Magma HardMaster W668 FR Bedding Mortar should be applied at a thickness of 10mm - 100mm in a single pass. If thicker sections are required, this can be achieved using the layer-on-layer method.

Magma HardMaster W668 FR Bedding Mortar should be placed on the prewetted application area without delay after mixing. Apply an even bed thickness to the whole application area ensuring a nominal 5-10mm excess thickness is present to allow for bedding of the frame. Lift the frame in to position (using suitable lifting equipment as necessary) and lower the frame onto the still malleable mortar. Care should be taken to avoid creating air voids under the frame at this stage. The frame should then be tamped down to the correct height, ensuring the top of the frame sits level to surface of the road. Point up the inner and outer exposed surfaces ensuring all voids are filled.

Once the bedding mortar has reached initial set, the backfill concrete - **Magma HardMaster W610** Trowelable or **Magma HardMaster W615** Flowable can be mixed and placed.

Recommended ambient application temperature is 5°C to 25°C.

AFTERCARE AND MAINTENANCE:

Tools and equipment can easily be cleaned using water and should be carried out as soon as possible after application.

STORAGE AND PACKAGING:

Palletised **Magma HardMaster W668** Bedding Mortar should be stored in cool dry areas clear of the ground sheeted or under cover and stacked not more than two pallets high. The product should be used on a first in - first out basis. Individual bags of **Magma HardMaster W668** Bedding Mortar should be stored in sealed original packaging in a dry location at temperatures between 5°C and 25°C. Avoid exposure to water, frost or heat - high temperatures and high humidity will lead to a reduced shelf life.

SHELF LIFE:

12 months when stored under cover, subject to temperature and humidity, in original unopened containers, in accordance with Storage Condition guidelines listed above.

SIZES AVAILABLE:

25kg plastic bags or buckets.

HEALTH AND SAFETY:

Health and safety advice, which must be followed, can be found on the Material Safety Data Sheet. Users are advised to wear face mask, goggles, gloves and overalls when handling, mixing and applying cementitious products.

These products contain cement and have an alkaline reaction with moisture/water. Therefore protect hands and eyes. In case of contact with eyes consult a doctor. Familiarise yourself with the material safety data sheets before using this product. If you need a copy please call our technical team on 023 9220 0606.

TECHNICAL:

| PERFORMANCE DATA: | |
|---------------------------|-------------------------------|
| Water Addition (per 25kg) | 2.5 - 3.0 litres |
| Workability | 5 - 10 minutes |
| Set Time | < 20 minutes |
| Shrinkage | Less than 0.001% |
| Density | 2250 - 2300 kg/m ³ |
| Yield (per 25kg) | 12.2 litres |
| COMPRESSIVE | |
| 1 hour | 20.0 N/mm ² |
| 2 hours | 25.0 N/mm ² |
| 1 day | 45.0 N/mm ² |
| 7 days | 60.0 N/mm ² |
| 28 days | 75.0 N/mm ² |
| FLEXURAL | |
| 28 days | 8.5 N/mm ² |

The above figures are derived from laboratory testing at 20°C and 65% relative humidity.