



HARDMASTER™ W660

60 MINUTE HIGH STRENGTH BEDDING MORTAR



HIGH STRENGTH BEDDING MORTAR:

Magma HardMaster W660 is a high performance rapid set and rapid strength bedding mortar 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 and gain a quick return to service time. It's 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, kerb stones, setts and other street furniture installations. **HardMaster W660** Bedding Mortar is compatible for use with concrete, brick and stone substrates, and complies with **Department of Transport HD 27/04 Design Manual for Roads and Bridges Vol 7 Sec 2 Clause 3.11**.

PRODUCT FEATURES:

- Reaches trafficable strength in 60 minutes
- Excellent bond strength
- Smooth trowelable consistency

CUSTOMER BENEFITS:

- Minimum downtime
- High performance
- Easy to use

COLOURS AVAILABLE:



Grey



RECOMMENDED USE:



Utilities



Car Parks



Highways



Facilities

APPLICATION METHOD:



Trowel

BECAUSE ROADS MATTER™

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 **HardMaster W660** should be mixed using a steel **Meon 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 **HardMaster W660 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:

HardMaster W660 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.

HardMaster W660 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 - **HardMaster W610 Trowelable** or **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.

TECHNICAL:

PERFORMANCE DATA	
Activator Addition (per 18kg)	2.3 - 2.8 litres
Workability	5 - 10 minutes
Set Time	< 20 minutes
Shrinkage	Less than 0.001%
Density	2250 - 2300 kg/m ³
Yield (per 25kg)	12.0 litres
COMPRESSIVE STRENGTH	
1 hours	20 N/mm ²
2 hours	24 N/mm ²
1 day	45 N/mm ²
7 days	60 N/mm ²
28 days	75 N/mm ²
FLEXURAL STRENGTH	
28 days	8.5 N/mm ²
The above figures are derived from laboratory testing at 20°C and 65% relative humidity	

QUALITY CONTROL:

Tested and packaged to quality control procedure in accordance with **BS EN ISO 9001**.

STORAGE CONDITIONS:

Palletised **HardMaster W660** 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 **HardMaster W660** 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 bags.

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**.