



# HARDMASTER™ W616

## HIGH PERFORMANCE 40N FLOWABLE CONCRETE



### 40N FLOWABLE REPAIR CONCRETE:

**Magma HardMaster W616** Flowable Concrete is a high performance flowable concrete with a final strength of 40N. It is perfect for any application where site access is limited and bulk concrete cannot be delivered. Typical applications include the repair of concrete sections on highways and forecourts, backfill of carriageway ironwork, post and barrier erection and it is compatible for use with concrete, brick and stone substrates. **HardMaster W616** complies with Department of Transport HD 27/04 Design Manual for Roads and Bridges Vol 7 Sec 2 Clause 3.11.

### PRODUCT FEATURES:

- 40N final strength
- Preblended, one component product - just add water and mix
- Flowable material

### CUSTOMER BENEFITS:

- Easy to use
- Suitable for high impact applications
- Designed to create a quality, brushed finish

### COLOURS AVAILABLE:



Grey



### RECOMMENDED USE:



Utilities



Car Parks



Highways



Facilities

### APPLICATION METHOD:



Flowable

**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 W616** should be mixed using a steel **Meon OX Pro Mixing Paddle** coupled with a twin handled mixing unit, or a pan type mixer.

Mix each 25kg unit with 3.0 - 3.5 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.

**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 W616** Flowable Concrete should be applied at a thickness of 10mm - 300mm in a single pass. If thicker sections are required, this can be achieved using the layer-on-layer method.

**HardMaster W616** Flowable Concrete should be placed on the pre-wetted application area without delay after mixing. Once the product has reached initial set, the reinstatement process can then be continued. When backfilling around carriageway ironwork or completing patch repairs guide the material into the desired location using a trowel. Due to the flowing nature of the product good compaction should be easily achieved. **HardMaster W616** Flowable Concrete should be used to encase the flange of any ironwork and then be brought to a height 40mm below the required surface of the carriageway or footpath. **HardMaster W616** Flowable Concrete can be finished by floating using a trowel or similar.

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	
Water Addition (per 25kg)	3.0 - 3.5 litres
Workability	60 minutes
Set Time	8 hours
Shrinkage	Less than 0.001%
Density	2200 - 2300 kg/m <sup>3</sup>
Yield (per 25kg)	12.5 litres
COMPRESSIVE STRENGTH	
1 day	20 N/mm <sup>2</sup>
7 days	40 N/mm <sup>2</sup>
28 days	52 N/mm <sup>2</sup>
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 W616** Flowable Concrete 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 W616** 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, in original unopened containers, in accordance with Storage Condition guidelines listed above. Avoid exposure to water, frost or heat - high temperatures and high humidity will lead to a reduced shelf life.

**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**.