

MasterRheobuild[®] RMC 80

High range water reducing / superplasticising concrete admixture

DESCRIPTION

MasterRheobuild RMC 80 is a high range, high performance superplasticiser and water reducing agent specifically designed for the production of rheoplastic concrete required for piling etc. **MasterRheobuild RMC 80** disperses and deflocculates cement particles thereby increasing the workability and flowability of the concrete mixes.

PRIMARY USES

- For all piling applications including C.F.A.
- For the production of flowing concrete.
- To increase workability.
- For hot weather concreting.
- For controlled delays to initial and final setting of concrete mixes.

TYPICAL APPLICATIONS

MasterRheobuild RMC 80 is recommended for use wherever the following situations are encountered:

- For piling concrete.
- Concrete containing pozzolanic materials.
- In areas of congested reinforcement where high workability and cohesion are of benefit.

COMPOSITION

A multi-component admixture based upon high molecular weight polymers and refined lignosulphonates.

ADVANTAGES

- Effective over high range of cement contents and types.
- Improves pumpability, durability and impermeability.
- Extended slump retention time - maintains workability in excess of concrete produced utilising conventional superplasticisers
- Reduces placing problems in hot weather by improved workability retention in conjunction with controlled setting times.

ACTION

MasterRheobuild RMC 80 acts on the cement particles by its powerful deflocculating and sequestering action to retard and maximise the hydration of the cement paste. Its powerful plasticising action results in high workability concrete which is responsive and cohesive. This action enables concrete with low or reduced water contents to be produced.

PACKAGING

MasterRheobuild RMC 80 is available in 1000ltr. bulk.

TYPICAL PROPERTIES

Colour:	Dark brown liquid
Specific gravity:	1.18 ± 1.190 at 25°C
Chloride content:	Nil to BS 50752
Nitrate content:	Nil
Freezing point:	0°C
Flashpoint:	N/A

STANDARDS

ASTM C-494 Types B, D and G
BS 5075: Part 1. Retarding / Superplasticising

DIRECTIONS FOR USE

MasterRheobuild RMC 80 should be added to the concrete mix during the mixing cycle at the same time as the water. Never add **MasterRheobuild RMC 80** to the dry cement. Alternatively when using **MasterRheobuild RMC 80** to produce flowing concrete at site using transit mixer trucks, it can be added to the concrete via the feed hopper at the rear of the truck. Ensure at least 5 minutes mixing before discharge - minimum drum revolution of 10 rpm - to produce a fully homogenous mix.

MasterRheobuild® RMC 80

DOSAGE

Field trials should be conducted to determine the optimum addition rates of **MasterRheobuild RMC 80**. The following figures should be utilised as a starting point for these trials.

FLOWING CONCRETE:

An addition rate of 0.5 to 8lt/100kg cement is usually required to produce flowing concrete from a concrete with an initial slump in the range of 50-70mm.

HIGH STRENGTH, HIGH WORKABILITY CONCRETE:

Using **MasterRheobuild RMC 80** at 750 - 1000ml per 100kg, concrete mixes can be produced with a reduction in water in the region of 10 to 15% and an increase in workability of between 100 to 150%.

COMPATIBILITY

MasterRheobuild RMC 80 can be used with all types of Portland cement including Sulphate Resisting and modified cement (Type II). For use with special cements, contact Master Builders Solutions 's Technical Services Department.

MasterRheobuild RMC 80 should not be premixed with other admixtures. If other admixtures are to be used in the concrete containing **MasterRheobuild RMC 80**, they must be dispensed separately. Contact Master Builders Solutions 's Technical Services Department for further advice.

EFFECTS OF OVER DOSAGE

A severe over dosage of **MasterRheobuild RMC 80** will result in the following:

- Retardation of initial and final set.
- Increase in air entrainment.
- Increase in workability.

Providing it is properly cured, the ultimate strength of the concrete will not be adversely affected and will generally be higher than for normal concrete. The effect of over dosage will be exaggerated with SRC cement.

DISPENSING

MasterRheobuild RMC 80 should be dispensed through a proprietary dispenser, such as is available from Master Builders Solutions . Details available upon request.

SAFETY PRECAUTIONS

MasterRheobuild RMC 80 contains no hazardous substances requiring labelling. For further information, refer to material safety data sheet.

STORAGE

Store under cover, out of direct sunlight and protect from extremes of temperature. Shelf life is up to 2 years when stored as above. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. For specific storage advice consult Master Builders Solutions 's Technical Services Department.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Master Builders Solutions representative.

Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All products manufactured by Master Builders Solutions Egypt, or imported from Master Builders Solutions affiliate companies world-wide, are manufactured to procedures certified to conform to the quality, environment, health & safety management systems described in the ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 standards.

* Properties listed are based on laboratory controlled tests.

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