

03 30 00	Cast-in-Place Concrete
03 40 00	Precast Concrete
03 70 00	Mass Concrete

MasterRoc[®] HR 603

High-Range Water-Reducing Admixture

Description

MasterRoc HR 603 ready-to-use high-range water reducing admixture is based on the new generation of polycarboxylate technology that incorporates state-of-the-art molecular engineering to provide fast wet-out of powder materials. MasterRoc HR 603 admixture is effective in improving the production efficiency of a concrete plant by rapidly dispersing powder materials in concrete mixtures, thereby minimizing mixing time. It is formulated to meet ASTM C 494 requirements for Type A, water-reducing, and Type F, high-range water-reducing, admixtures.

Applications

Recommended for use in:

- Concrete applications requiring high-early compressive strength development
- Concrete mixtures with low w/cm and/or high powder contents
- Concrete with varying water reduction requirements
- Self-consolidating concrete (SCC)

Features

- Dosage flexibility
- Rapid cement dispersion
- Superior early and ultimate strengths

Benefits

- Optimized mixture costs
- Shorter mixing time in central mixers
- Increased productivity
- Greater batch-to-batch consistency

Guidelines for Use

Dosage: The recommended dosage range MasterRoc HR 603 admixture is 2-12 fl oz/cwt (130-780 mL/100 kg) of cementitious materials.

For most applications, dosages in the range of 2-8 fl oz/cwt (130-520 mL/100 kg) will provide excellent performance. For very high performance and SCC mixtures, up to 12 fl oz/cwt (780 mL/100 kg) of cementitious materials can be utilized.

Because of variations in concrete materials, job site conditions, and/or applications, dosages outside of this range may be required. In such cases, please contact your local sales representative.

Application Procedure: MasterRoc HR 603 admixture can be added with the initial batch water or as a delayed addition. However, optimum water reduction is generally obtained with a delayed addition.

Product Notes

Corrosiveness – Non-Chloride, Non-Corrosive: MasterRoc HR 603 admixture will neither initiate nor promote corrosion of reinforcing steel embedded in concrete, prestressing steel, or galvanized steel floor and roof systems. Neither calcium chloride nor other chloride-based ingredients are used in the manufacture of MasterRoc HR 603 admixture.

Compatibility: MasterRoc HR 603 admixture is compatible with most admixtures used in the production of quality concrete, including normal, mid- and high-range water reducers, accelerators, retarders, extended-set control admixtures, air entrainers, corrosion inhibitors, and shrinkage reducers. **Do not use MasterRoc HR 603 admixture with admixtures containing beta-naphthalene sulfonate. Erratic behaviors in slump, workability retention and pumpability may be experienced.**

Storage and Handling

Storage Temperature: MasterRoc HR 603 admixture must be stored at temperatures above 40 °F (5 °C). If MasterRoc HR 603 admixture freezes, thaw and reconstitute by mechanical agitation. Do not use pressurized air for agitation.

Shelf Life: MasterRoc HR 603 admixture has a minimum shelf life of 6 months. Depending on storage conditions, the shelf life may be greater than stated. Please contact your local sales representative regarding suitability for use and dosage recommendations if the shelf life of MasterRoc HR 603 admixture has been exceeded.

Packaging

MasterRoc HR 603 admixture is supplied in 55-gallon (208 L) drums, 275-gallon (1040 L) totes, and by bulk delivery upon request.

Related Documents

Safety Data Sheets: MasterRoc HR 603 admixture

Additional Information

For additional information on MasterRoc HR 603 admixture, or on its use in developing concrete mixtures with special performance characteristics, contact your local sales representative.

Master Builders Solutions, a brand of MBCC Group, is a global leader of innovative chemistry systems and formulations for construction, maintenance, repair and restoration of structures. The Admixture Systems business provides advanced products, solutions and expertise that improve durability, water resistance, energy efficiency, safety, sustainability and aesthetics of concrete structures, above and below ground, helping customers to achieve reduced operating costs, improved efficiency and enhanced finished products.

Utilizing worldwide resources, the Master Builders Solutions community of experts are passionate about providing solutions to challenges within all stages of construction, as well as the life cycle of a structure. At Master Builders Solutions we create sustainable solutions for construction around the globe.

Limited Warranty Notice

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