

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 creates technologies for the construction industry inspiring people to build better. We are active in ~40 countries and operate 35 production sites with over 1,600 employees. We develop, produce, and market high-quality chemical admixtures, as well as adjacent core technologies, to master the challenges of today and support a decarbonized future. Our people are pivotal and pair leading technologies and a strong brand heritage to surpass our customers' expectations and drive continuous value creation.

Limited Warranty Notice

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