

MasterPolyheed[®] 8121

(Formerly known as Polyheed 1721)
High range water reducing and retarding admixture

MATERIAL DESCRIPTION

MasterPolyheed[®] 8121 is a chloride free, high range water reducing and retarding admixture formulated to produce low slump loss rheoplastic concrete. Rheoplastic concrete is fluid, workable, or easily flowing concrete but at the same time free from segregation.

MasterPolyheed[®] 8121 reduces the quantity of mixing water required to produce concrete of a given workability with greater economy for a given strength. The retarding nature of the admixture also aids placing and finishing of concrete. The slump retention characteristics of rheoplastic concrete allow the addition of **MasterPolyheed[®] 8121** at the batching plant.

MasterPolyheed[®] 8121 meets ASTM C-494 requirements for Type G admixture and AS 1478 requirements for type HRWR.

MasterPolyheed[®] 8121 can be used with high content of manufactured sand and with air entraining admixtures approved under ASTM. When used in conjunction with another admixture, each admixture must be dispensed separately into the mix. By itself, **MasterPolyheed[®] 8121** admixture does not entrain air.

Concrete produced with **MasterPolyheed[®] 8121** admixture will have appreciable strength development after initial set occurs.

FIELDS OF APPLICATION

- Mass concrete pours
- Long distance transport
- High manufactured sand concrete
- Pumped concrete
- Concrete in hot climates
- Central batch plants for concrete to be transported for more than 1 hour
- Concrete to be pumped over a distance of more than 200 meter or to a considerable height

FEATURES AND BENEFITS

MasterPolyheed[®] 8121 considerably improves the properties of fresh and hardened concrete

- High reliability
- Good workability and surface finish

- Impermeability
- Durability
- Dimensional stability
- High elastic modulus
- Low shrinkage and creep

APPLICATION

MasterPolyheed[®] 8121 can be added at the batch plant or on site. When adding at the batch plant, delay the addition until the cement has been thoroughly wetted and at least 80% of water added. When introduced on site, mix for further 2 minutes after addition.

DOSAGE

MasterPolyheed[®] 8121 is normally dosed at 0.4–1.8 L per 100 kg of cementitious. Other dosages may be used, depending on the mix design of the concrete and ambient conditions. The actual dose depends on the degree of water reduction or flow required.

SHELF LIFE

MasterPolyheed[®] 8121 admixture has a minimum shelf life of 12 months. Depending on storage conditions, the shelf life may be greater than stated. If found to be frozen, thaw it and reconstitute by stirring.

RATE OF HARDENING

Setting time is influenced by the chemical and physical composition of the basic ingredients of the concrete, temperature of the concrete and climatic conditions.

Trial mixes should be made with job materials to determine the optimum dosage required for a specified setting time and a given strength requirement.

PACKAGING

MasterPolyheed[®] 8121 is supplied in 205 liter sealed drums and bulk delivery.

For additional information on **MasterPolyheed[®] 8121** and its use in developing a concrete mix with special performance characteristics, contact your local **Master Builders Solutions** representative.

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STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Master Builders Solutions either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Master Builders Solutions, are responsible for carrying out procedures appropriate to a specific application.

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