

MasterPel[®] 210E

Powdered Masonry Water-Repellent Admixture

Description

MasterPel 210E admixture is a highly efficient powdered water-repellent admixture for use in dry-blended facilities that produce masonry mortar mixes. This water-redispersible silane-based water-repellent admixture contains a fine mineral filler that provides excellent water repellency.

MasterPel 210E admixture is compatible with the MasterPel Water Repellent Admixture System, an innovative technology available from Master Builders Solutions. Masonry mortar treated with MasterPel 210E admixture demonstrates outstanding resistance to moisture migration and wind-driven rain as per ASTM E 514. MasterPel 210E admixture has also been tested for bond strength as per ASTM C 1072.

Applications

Recommended for use in the masonry mortar mixes as part of the water-repellent system to increase water repellency.

Features

- Outstanding water repellency
- High efficiency (low dosage rate)
- Excellent ability to mix with water (water redispersible technology)
- Compatible with the MasterPel Water Repellent Admixture System from Master Builders Solutions

Benefits

- Improves water repellency characteristics
- Reduces water absorption rate
- Helps control efflorescence by reducing water ingress into the masonry assembly
- Minimizes the need for post-applied sealers

Performance Characteristics

Technical Data

Appearance	Light beige powder
Bulk density	250 - 500 lb/yd ³ (150 - 300 kg/m ³)

Guidelines for Use

Dosage: Use MasterPel 210E admixture at a dosage of 0.5% of total cementitious materials by mass. Tests should be conducted to determine the optimal dosage rates for your specific needs. Consult your local sales representative if dosages outside the recommended range are being considered.

Mixing: Prepare masonry mortar in accordance with ASTM C 270. Mortars can be mixed by hand or machine. Hand mixing generates low shear forces compared to mechanical mixing. Hence, if the mortar is hand mixed, it should be remixed after a five-minute rest period.

Product Notes

Design and Construction Considerations: Water tightness of the mortar joint is influenced by its ability to resist moisture wicking, block the flow of water and integrate with the associated masonry units. The addition of MasterPel 210E admixture imparts water repellency throughout the mortar. However, proper joint tooling is critical to the performance of exterior walls. Both the National Concrete Masonry Association (NCMA) and The Brick Institute of America (BIA) recognize a concave-tooled mortar joint as being the least prone to allowing water penetration. Therefore, concave tooling is recommended whenever MasterPel 210E admixture is used in the mortar.

Preparatory Work: Concrete masonry units treated with MasterPel 240 admixture are manufactured by producers using performance optimized mixture proportions and qualified admixture dosages.

Methods: Design and construction details must observe all applicable design codes incorporating the recommendations of NCMA TEK 10-1A, Crack Control in Concrete Masonry Walls; TEK 19-2A, Design for Dry Single Wythe Concrete Masonry Walls; TEK 19-4A, Flashing Strategies For Concrete Masonry Walls; and TEK 19-5A, Flashing Details For Concrete Masonry Walls.

MasterPel 210E admixture will not compensate for flaws in building design, materials, mixture proportions, improper construction procedures or improper construction methods. Master Builders Solutions is not responsible for inappropriate use of MasterPel 210E admixture.

Rake joints should not be permitted for water-repellent masonry projects. Remove excess mortar promptly and clean any residue using procedures recommended in NCMA TEK 8-2A, Removal of Stains From Concrete Masonry.

Note: All MasterPel water repellent admixture specified water-repellent masonry projects must incorporate MasterPel 240MA admixture or MasterPel 210E admixture (or other Master Builders Solutions-approved equivalent) in the accompanying masonry mortar to produce a moisture-resistant wall system. Failure to do so will result in compromised water repellency of the masonry structure and will be in violation of the MasterPel Water Repellent Admixture System guide specifications.

Storage and Handling

Storage Temperature: MasterPel 210E admixture should be stored at a temperature between 35 °F and 105 °F (2 °C and 40 °C) and should be protected from moisture. If the product is stored under pressure or in damaged/opened packaging, the powder may cake.

Shelf Life: MasterPel 210E admixture has a minimum shelf life of 18 months. Depending on the storage conditions, the shelf life may be greater than stated. Contact your local sales representative regarding suitability for use and dosage recommendations if the shelf life has been exceeded.

Packaging

MasterPel 210E admixture is available in 33 lb (15 kg) bags and 990 lb (450 kg) bulk bags.

Related Documents

Safety Data Sheets: MasterPel 210E admixture

Additional Information

For additional information on MasterPel 210E admixture or its use in developing a mortar mixture 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

Master Builders Solutions Admixtures US, LLC ("Master Builders Solutions") warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. MASTER BUILDERS SOLUTIONS MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive remedy of Purchaser for any claim concerning this product, including but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is shipment to purchaser of product equal to the amount of product that fails to meet this warranty or refund of the original purchase price of product that fails to meet this warranty, at the sole option of Master Builders Solutions. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. MASTER BUILDERS SOLUTIONS WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

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