

RHEOMIX® RHEOPEL™

Polymeric water repellent admixture for concrete masonry products

DESCRIPTION/USES:

RHEOMIX® RHEOPEL™ is a ready-to-use **water-repellent admixture** for use in the manufacture of normal, medium, and lightweight* concrete block. RHEOPEL admixture uses *time-proven technology* to provide a highly effective means of preventing moisture from entering concrete masonry walls. RHEOPEL admixture-treated concrete block is particularly useful in single-wythe exterior wall applications, both above and below grade. When added to a concrete masonry mix, RHEOPEL admixture disperses evenly and reacts to form a water-repellent network throughout its mass. Polymers contained in RHEOPEL admixtures provide added resistance to wind-driven rain, superior water-repellent performance, and long-lasting service life.

ADVANTAGES:

RHEOPEL admixtures improve both the quality and cost-effectiveness of concrete masonry construction by:

- Providing lasting protection from moisture damage without the use of exterior-applied sealers
- Improving the texture consistency of manufactured concrete products
- Increasing the coverage rate of applied paints and coatings
- Inhibiting the growth potential of mold and mildew
- Enhancing color intensity and uniformity
- *Potentially* reducing efflorescence**

WHERE TO USE:

RHEOPEL admixture provides water repellency, reduced absorption, and water permeation resistance for applications such as:

- Concrete block
 - *Normal weight*
 - *Medium weight*
 - *Lightweight**
- Segmental retaining wall units
- Paving stones
- Roofing tile
- Grout
- Stucco

* Depending on the aggregate type in use, some lightweight designs may not be suitable for use with RHEOPEL admixture due to their inherent absorption characteristics.

TECHNICAL INFORMATION:

RHEOPEL reduces **absorption** of concrete masonry units, paving stones, roofing tiles, and grouts by the following standards

ASTM C 67

ASTM C 140

ASTM C 642

RHEOPEL increases **compressive strength** of concrete masonry units when tested in accordance with **ASTM C 140**.

QUANTITY TO USE:

RHEOPEL admixture is recommended for use at the following dosage rates:

<i>Normal Weight Block</i>	12 to 25 fl oz/cwt (780 to 1630 mL/100kg)
<i>Medium Weight Block</i>	18 to 28 fl oz/cwt (1175 to 1825 mL/100kg)
<i>Lightweight Block</i>	25 to 36 fl oz/cwt (1630 to 2350 mL/100kg)

Note: Optimal dosage rate for a given set of conditions is determined through trial mixing, testing (ASTM, CSA procedures), and other water response observations to ensure peak water-repellent performance. Consult your local Master Builders representative for recommended dosage rates for use in other applications.

LIMITATIONS:

RHEOPEL admixtures will not compensate for flaws in building design, materials, mix proportions, improper production procedures, or improper construction methods. Master Builders is not responsible for inappropriate use of RHEOPEL admixtures. Proper block manufacturing methods, proper masonry mortar proportioning and mixing, and proper use of RHEOPEL admixture **must** be followed.

**Efflorescence is a natural occurrence resulting from salts which solubilize in initial mix water (primary efflorescence), or external sources of moisture such as rainfall or condensation (secondary efflorescence), then surface during the evaporation process. RHEOPEL admixtures resist moisture penetration from external sources, and may prove helpful in preventing such salts from migrating in solution to masonry surfaces. However, the use of RHEOPEL admixture alone does not ensure the prevention of efflorescence development.

INSTALLATION PRACTICES:

Design details regarding flashing and weep hole provisions are available upon request.

Preparatory Work - RHEOPEL admixture treated **masonry units** are manufactured by block producers using optimized mix designs and admixture dosage rates.

Methods - Design and construction details must observe all applicable design codes, incorporating the recommendations of NCMA TEK 10-1: Design of Concrete Masonry for Crack Control, TEK 19-2: Design for Dry Concrete Masonry Walls, TEK 19-4: Flashing Concrete Masonry, and TEK 19-5: Use of Flashing in Concrete Masonry Walls

Note: RHEOPEL Mortar Admixture *must* be used in the masonry mortar in order to produce a moisture penetration-resistant wall system. Failure to do so will result in compromised water repellency of the masonry structure. Consult a local Master Builders representative for applicable design details and specifications.

PRECAUTIONS:

RHEOPEL admixtures must be protected from freezing. Proper use of RHEOPEL admixtures must be observed. Raked joints should not be permitted for RHEOPEL masonry projects. Remove excess mortar promptly and clean any residue using procedures recommended in NCMA TEK 8-2: Removal of Stains from Concrete Masonry Walls. Avoid strong acids and high pressure washing. Cover the top courses of block at the end of each day to prevent water collection in cores.

PACKAGING:

RHEOPEL admixture is supplied in 55 gallon (208 liter) drums, 275 gallon (1040 liter) tote tanks, and in bulk.

TEMPERATURE PRECAUTIONS:

RHEOPEL admixtures must be protected from freezing. Store at temperatures above 40 °F (4 °C) and below 118 °F (48 °C), in tightly closed containers. RHEOPEL admixtures are no longer effective after freezing has occurred.

For more information on RHEOPEL admixtures, or on their use in developing a concrete block or cementitious mix with special performance characteristics, contact your local Master Builders representative.

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