

TB-0009B — Longevity of the DRY-BLOCK® System Technical Bulletin

Standard concrete masonry units (CMU) with smooth surface texture have long been used for both structural and non-structural construction. The use of color and surface textures (split face, ground face, etc.) has produced a wide variety of attractive masonry units that are desired by the design community for their beauty and design flexibility.

When CMU are used in exterior walls, the absorptive nature of the units as well as the mortar is a concern. In single width construction water can wick from the wall's exterior face to its interior face utilizing the webs and the mortar as the migration path. This wicking is driven by capillary suction in the internal voids of the CMU and mortar.

The DRY-BLOCK® System of admixtures was developed from extensive laboratory and field experience to address water penetration into masonry walls. The DRY-BLOCK® System utilizes two admixtures, one specifically formulated for block and the other specifically formulated for mortar. The admixtures are added to the block and mortar during manufacturing to produce water repellent masonry components. Developed during the late 1970's, the DRY-BLOCK® System was introduced in the early 1980's and has been the industry's most widely specified and top performing integral water repellent system since its inception.

DRY-BLOCK®'s unsurpassed performance is achieved through unique proprietary blends of plasticizing agents, dispersants, workability enhancers and superior water repellent materials. When added to the concrete mix the DRY-BLOCK® admixtures effectively disperse throughout the concrete. During the curing process DRY-BLOCK® is either deposited in the capillaries or activated within the matrix of the block and mortar creating durable water repellent pore structure that will last for the life of the masonry. This water repellent pore structure repels water throughout the masonry and will not allow water to wick through the CMU or mortar. Longevity of the DRY-BLOCK® System

The DRY-BLOCK® System was developed to address concerns of longevity. When used alone, post-applied coatings require periodic re-application to perform properly. On the other hand, DRY-BLOCK® admixtures are added integrally and are mixed throughout the CMU or mortar. Also, post-applied coatings only work as a barrier on the surface of the wall, while the DRY-BLOCK® admixtures perform throughout the CMU and mortar. Even if the wall surface areas were to be damaged, the DRY-BLOCK® System will act to repel any further water penetration.

Since its inception in 1980, thousands of buildings have been successfully constructed with DRY-BLOCK®, making it the leading water repellent system on the market. When used in the block and mortar of properly designed and constructed concrete masonry walls, the system continues to perform and is expected to do so for the life of the wall.

North America customer service: 1-877-4AD-MIX (1-877-423-6491)

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