

The DRY-BLOCK[®] System

DRY-BLOCK[®] is a system specially formulated to provide concrete masonry structures with outstanding integral water-repellent characteristics. The DRY-BLOCK System utilizes two individually formulated admixtures. Each is added separately to the block or mortar during manufacture to achieve water-repellent masonry components. To complement the DRY-BLOCK admixtures, INFINISEAL[™] DB, a water-based, clear, penetrating water-repellent sealer, can be field applied to provide maximum protection to the masonry wall structure.

DRY-BLOCK Block and Mortar Admixtures are chemically different and are NOT interchangeable. The differences between concrete block and mortar are extensive. A well-engineered admixture system will address the requirements of each wall component separately by providing a unique formulation for each component.

On one hand, concrete block is manufactured with low-slump concrete using relatively low cement to aggregate ratios, a wide variety of aggregates, a relatively small amount of water and special curing conditions. DRY-BLOCK Block Admixture is formulated for use in concrete masonry units and provides the block producer with a single, easy to use product that imparts water-repellency. DRY-BLOCK Block Admixture also provides other useful benefits to manufactured low-slump concrete, like improved compressive strength and absorption properties, as well as improved “machinability” or ease of manufacturing units.

Mortar, on the other hand, is produced to a more fluid consistency with higher cement to aggregate ratios, a finer aggregate, greater amounts of water and curing under open air conditions. Taking these characteristics into account, DRY-BLOCK Mortar Admixture is formulated to provide water-repellency and workability to the mortar. It is specifically formulated to work with concrete masonry units containing DRY-BLOCK Block Admixture. This combination provides a wall system with water-repellent properties able to meet and exceed the most stringent industry standards.

When a DRY-BLOCK water-repellent wall system is desired, both the block and mortar admixtures must be used. Elimination of either component will compromise the integrity of the water-repellent properties of the masonry structure and is not allowed by the DRY-BLOCK specification. However, elimination of either admixture will not affect the structural integrity of the wall.

When using water-repellent admixtures in both block and mortar, the properties of each are changed. While water-repellency may be imparted, there is potential to reduce bond strengths. The conditions that can contribute to lower bond strengths include increased amounts of entrained air in the mortar, lower absorptive characteristics of the concrete masonry unit, and increased water retention of the mortar. DRY-BLOCK Mortar Admixture contains additives specifically designed to address these differing conditions and acts to restore the bond between the mortar and the block.

INFINISEAL DB is recommended for structures constructed with DRY-BLOCK admixtures for maximum protection against water intrusion. By further reducing the water in the wall system, INFINISEAL DB minimizes the risk of efflorescence while protecting against acid rain, mold and mildew. The unique blend of silanes and siloxanes in INFINISEAL DB provides additional performance protection while maintaining the structure's breathability and leaving the appearance of the treated surface unaltered.

DRY-BLOCK is a system engineered to impart superior water-repellent properties to concrete masonry assemblies. Each admixture is designed to provide the necessary properties to both the block and mortar so that the resultant wall offers a high level of performance. DRY-BLOCK Admixtures have achieved more than 15 years of documented success in creating superior masonry structures. The application of INFINISEAL DB provides another level of protection. The DRY-BLOCK Admixtures used in conjunction with INFINISEAL DB provide a unique system of water-repellency.

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W.R. Grace & Co.-Conn. 62 Whittemore Avenue Cambridge, MA 02140

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