Admixtures for Concrete Blocks, Pavers, Pipes and Roofing Tiles

Holderchem Building Chemicals S.A.L. supplies admixtures for semi-dry concrete products such as paving stones, fresh slabs, masonry blocks, pipes, hollow cores, manholes, etc. Admixtures supplied for concrete blocks and pipes impart crisp edges, variable surface features, excellent early and late strengths and water repellency. For concrete pavers, products can be supplied not only to enhance strengths and product consolidation but also to minimize efflorescence and absorption.

Internal Moisture Barriers

Internal Moisture Barriers create an internal moisture vapor barrier below the surface. They are used to internally seal stones and mortars, stopping moisture intrusion and eliminating mold and mildew problems within walls. The application of a penetrating sealer should follow when internal moisture barriers are applied on stone. While Internal Moisture Barriers are designed to enhance the water resistant properties of masonry structures, they should not be construed as a substitute for good design practices and quality construction systems. Batimix admixture products notably extend service life and durability of concrete masonry by drastically minimizing absorption and increasing compressive strength.

Batimix IWR 414, a ready-to-use liquid admixture that prevents moisture migration in concrete masonry products.

Batimix IWR 416, a powder high performance integral water repellent that lowers the rate of water absorption in pavers, roofing tiles, and segmental retaining wall systems while maintaining robust color retention.

Batimix IWR 421, a liquid mortar admixture that reduces water permeability. It efficiently and effectively stops moisture from entering masonry structures.

Plasticizing Admixtures

Ready to use plasticizing admixtures enable the cost-efficient manufacture of concrete blocks, concrete bricks, paving stones, dry cast pipes and miscellaneous landscaping units. They increase early strength development allowing for significant reduction in cement content. They improve texture consistency by reducing compaction resistance thus enhancing cohesion. Their lubricating properties reduce the abrasion of mold wearing parts. By enhancing the dispersion of cement and pigment particles they improve color consistency.

Batimix MWR 602, designed to improve the workability of concrete and/or allow for the effective reduction in the water content of concrete mix design. This medium range plasticizing admixture imparts a smooth swipe finish in concrete blocks, pipes, roofing tiles, concrete bricks and pavers.

Batimix HWR 1400, a high performance plasticizing liquid admixture that yields in manufactured concrete products a smooth swipe finish.
Batimix HWR 1401, a high range water-reducing admixture that can be used to disperse integral colors evenly and provide for defined edges. It does not promote corrosion.

Batimix HWR 1500, a ready-to-use polycarboxylate-based water-reducing admixture that improves compaction and cement hydration of dry-cast concrete products.

Accelerators
Accelerators are offered in standard and customized forms. The paver block & concrete block industries use accelerators to increase turn around time and thus productivity.

Batimix Accelerator 320, a chloride free accelerating liquid admixture designed for concrete masonry products.

Batimix Accelerator 330, a calcium chloride free accelerating admixture used in the manufacture of concrete products.

Batimix Accelerator 310, a multipurpose chloride-based liquid admixture formulated to reduce initial and final setting times of mortar.

Batimix HWR 1400-A, a high performance accelerating and water-reducing admixture specifically designed to improve the properties of plastic and hardened concrete and mortars.

Masonry Sealers
Special blends of polysiloxanes, which cross link below the surface of the concrete making the concrete surface water repellant and stain resistant, allow spills to be removed more easily. Polysiloxane sealers are normally applied on all types of decorative and stained pavers, aggregate driveways and walkways, bricks, clay tiles, sandstone, limestone, marble, granite, slate and any natural stones. They can be used on above grade plaster and stucco providing a breathable barrier against water, stains and acids and will seal hairline cracks. These products can either be applied alone or on top of other Batimix sealants based on silicates to provide double protection of the concrete with both deep sealing and a repellant finish.

Batimix Repellent 160, a water based VOC compliant, deep penetrating silane / siloxane concentrate designed to block capillaries and pores of concrete and masonry products. It is used to protect concrete structures from the damaging effects of de-icing salts that can be used on both horizontal concrete and vertical walls. When properly applied, they should not cause a change in substrate appearance.

Specialty Masonry Admixtures
Efflorescence is normally the white, powdery scum that can appear on masonry walls after construction but can also be brown green or yellow, depending on the type of salts. Efflorescent salts are primarily alkalies of Sodium Sulfates (Na3S04) and Potassium Sulfates (K2S04). These alkali sulfates appear because they exist somewhere within the masonry wall, either in the brick, the mortar, or the grout, or possibly a combination of these three. These alkalies combine with sulfates from the masonry to form sulfate salts.
The alkali sulfates in the wall are dissolved by water into a solution, which then moves through the natural pores in the masonry. The solution migrates to the surface of the wall where the water evaporates, depositing the salts on the wall and generating the white powdery scum we know as efflorescence.

Three conditions must exist before efflorescence will occur: (1) There must be water-soluble salts present somewhere in the wall; (2) There must be sufficient moisture in the wall to render the salts into a soluble solution. (3) There must be a path for the soluble salts to migrate through to the surface where the moisture can evaporate, thus depositing the salts, which then crystallize, and cause efflorescence. All three conditions must exist for efflorescence to appear.

Even though the efflorescence problem is complex, it can be reduced so as to make it almost impossible to occur.

Batimix CWR M-910, a ready-to-use liquid admixture that controls primary efflorescence in concrete masonry products such as blocks, pavers, concrete bricks, roofing tiles and segmental retaining wall systems.