

Product Showcase

Technologies for Enhancing Durability

W. R. MEADOWS' AIR-SHIELD TMP

W. R. MEADOWS' AIR-SHIELD™ TMP is a water-based air/liquid moisture barrier that cures to form a thin, tough, seamless elastomeric membrane. AIR-SHIELD TMP exhibits excellent resistance to air leakage. It is formulated to act as an air and liquid moisture barrier, allowing vapor to pass through it. It can be applied to most common surfaces and integrated into various wall systems. AIR-SHIELD TMP can be used for both new construction and retrofit applications. This user-friendly, single-component, liquid-applied membrane allows for a safe and simple sprayable application on rough or smooth surfaces as well as easy cleanup. AIR-SHIELD TMP is highly flexible and bridges cracks with ease while adhering with a firm bond even over damp surfaces.

—W. R. MEADOWS, www.wrmeadows.com



Simpson Strong-Tie Titen HD

Simpson Strong-Tie's stainless steel Titen HD® heavy-duty screw anchor (THDSS) for concrete and masonry can be used in exterior applications and in severely corrosive environments. The THDSS combines the corrosion resistance of Type 316 stainless steel with the cutting ability of heat-treated carbon steel—a carbon-steel helical-coil thread is brazed onto the stainless steel shank of the anchor. When installed, the THDSS thread cuts and securely interlocks with the concrete. Because carbon steel is confined to the helical-coil thread, minimal concrete damage occurs when it corrodes.

—Simpson Strong-Tie, www.strongtie.com



Kryton Hard-Cem

Kryton International Inc.'s Hard-Cem® is an integral hardening admixture used to increase abrasion and erosion resistance of concrete. Its technology extends concrete wear life up to six times, overcomes deficiencies of surface-applied hardeners, and allows use in horizontal, vertical, or inclined concrete and shotcrete surfaces.

—Kryton International Inc., www.kryton.com

Earth Shield Waterstop Profiles JP637, JP638, and JP938

Earth Shield Waterstop Profiles JP637, JP638, and JP938 are designed for environmental engineering concrete structures such as waste and water treatment plants. All three profiles are 3/8 in. (10 mm) thick and have many ribs to interlock with freshly placed concrete. The three profiles comply with NSF/ANSI 61, Drinking Water System Components – Health Effects. The thermoplastic vulcanizate (TPV) polymer construction is resistant to chemicals, ozone to 600 parts per hundred million, and ultraviolet radiation. The TPV polymer is also heat weldable, ensuring that waterstop splices and intersections will provide a continuous barrier.

—J P Specialties, Inc., <https://jpspecialties.com>



Bomanite's Sandscape Texture used at Delo Apartments

The development objective for the Delo Apartments in Louisville, CO, was to foster easy access to the city's revitalized commercial district and to give equal priority to all modes of transportation, including motorized vehicle, bicycle, and pedestrian. Street and sidewalk are seamlessly merged into a single, almost flat surface. The central concept behind the design: continual human interaction (eye contact) is a more effective means of creating a safe, pedestrian-friendly environment than curbs and signs. The design integrates several aesthetically pleasing architectural concrete techniques, colors, and patterns with small, raised truncated domes to delineate street and sidewalk. Changes in color and texture were accomplished using Bomanite decorative concrete products. The roadway at Delo incorporates Bomanite's Sandscape® Texture, which combines locally sourced aggregates, Black Beauty® sand, and seed colored glass to create a granulated surface speckled with shiny jewels. Chosen for both durability and aesthetics, Sandscape's textured effect is similar in appearance to sandblasted concrete, except the finish is more uniform and the glass jewels don't get frosted by the blasting sand. Bomanite's Sandscape Refined technique incorporates a Cappuccino color hardener with flecks of mirror and cobalt glass to add a sparkle to seat walls, planter walls, and concrete columns.

—Bomanite, <http://bomanite.com>



Consolideck LSGuard

PROSOCO's Consolideck® LSGuard® is a copolymer formulation that improves the surface sheen and stain resistance of conventional concrete, hardened concrete, or cement terrazzo floors. Consolideck LSGuard has been reformulated for faster water resistance. Surfaces treated with LSGuard resist damage from water, chemical attack, and surface abrasion. The glossy sealer protects and enhances the color intensity of integrally colored and color-stained concrete. LSGuard provides a long-lasting, high-gloss finish that maximizes light reflectance.

—PROSOCO, <https://prosoco.com>

BASF Elastocoat Spray-Applied Protective Coatings

BASF's Elastocoat® spray-applied protective coatings can be used in various demanding environments. These zero-VOC polyurea and polyurethane coatings are formulated for exceptional abrasion, corrosion, and impact resistance properties. The 100% solids polyurea and polyurethane coatings are compatible with a variety of substrates, exhibiting excellent adhesion to concrete and metal. Elastocoat treatments can improve the service life of concrete and metal, protecting against major deterioration agents such as rain, chlorides, and carbon dioxide.

—BASF, www.performance-materials.basf.us

Dramix Steel Fiber Reinforcement

Bekaert has redesigned and expanded its Dramix® range of steel fiber reinforcement for concrete. The company's existing steel fiber reinforcement for slabs, precast, residential, and tunnel applications has been rebranded as the Dramix 3D series. The new Dramix 4D and 5D fibers have unique shapes and provide previously unavailable levels of anchorage, tensile strength, and ductility. Tensile strength and anchorage of the 4D series are engineered specifically to affect cracks between 0.1 and 0.3 mm (0.004 and 0.01 in.), enabling the creation of durable and liquid-tight structures. Typical applications for the 4D series include floors, underwater concrete, motorways, and harbor pavements, as well as applications where steel fibers are combined with traditional reinforcement. The 5D series has a nondeformable hook, a high-ductility wire, and a high tensile strength. It provides a unique solution for structural applications, including foundation systems, structural precast elements, and suspended structures.

—Bekaert, <https://www.bekaert.com>