Expansive Component 9

theconcrete9

1. Dry-shrinkage is controllable
2. Choice of Components
3. Producer Partnership
4. Mix-Design
5. Restraint
6. Formwork
7. Placing
8. Finishing
9. Curing

Cloud number 9 is, in fact, a reference by the International Cloud Atlas--first published in 1896. Its initial purpose included aiding the training of meteorologists and promoting more consistent use of a vocabulary describing clouds, Cloud 9 being one of the highest. Many are familiar with the term as an expression of bliss and maybe that is how a design professional and craftsman feel when a concrete design comes full circle. The article that started the Concrete 9 series was published in 2011 in Specifiers Magazine, was a foundation for developing products that are more common in the marketplace today.

EC9 Nine Fundamentals for Expansive Components for Shrinkage Compensating Concrete

Using an Expansive Component, we can produce what many thought impossible; reducing or eliminating concrete curl, simplifying joint layout through reduction/elimination of control joints, and eliminating dry shrinkage cracking. This naturally found, cementitious, the inorganic powder will produce a shrinkage compensating concrete when added to standard concrete mix designs. Profiled architectural concrete floors with an expansive component promote even aggregate reveal desired by owners and design professionals and eliminate joint maintenance. In addition, it will increase the life cycle, abrasion resistance, durability, tensile strength, and water tightness of the finished concrete placement. Shrinkage compensating concrete increases the resistance to chloride intrusion and increases abrasion resistance. SCC has a concrete life cycle of up to 2 1/2 times conventional concrete for several reasons. Its mechanical bond with reinforcement, the lack of cracks, and the dense microstructure can eliminate the need for re-bar coating in the harshest of environments.

Primary Products

Cementitious inorganic powdered expansive component—Type G governed by ACI-223-21

Modified Acrylic Isometric Reinforcing Fiber

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