



Crystal Admix HD Application Instructions

Instruction 2010

Product Description

Crystal Admix HD is a next generation, specially formulated, crystalline admixture used to waterproof concrete, reduce shrinkage cracks, and increase concrete durability. The secondary benefits include set retardation, water reduction, lower heat of hydration and increased compressive strength.

Considerations for Mix Design

- Crystal Admix HD will normally reduce water demand by up to 15%.
- Crystal Admix HD is compatible with most concrete admixtures such as plasticizers, water reducers, accelerators, and air-entrainers. However, care should always be taken, and batch tests should be conducted first.
- Crystal Admix HD will result in increased set retardation. Use of set retarding admixtures, and water reducing admixtures should be adjusted or removed to achieve required setting times.
- Crystal Admix HD is normally added at 2.5 kg per m³ of the concrete.
- Regional variation of cement, aggregates and supplementary materials may result in some variation in plastic and hardened properties, it is advised to test batches when determining the appropriate mix designs.

Considerations for Batching

- Eliminate all variables such as recycled water or recycled aggregate
- When adding multiple admixtures to a concrete batch, do not add other admixtures at the same time as Crystal Admix HD. Add Crystal Admix HD first and premix before adding other admixtures to eliminate intermixing and interference of the other admixtures

Batch Plant – Dry Batch Addition Instructions

Crystal Admix HD may be added directly to the ready-mix truck at dry batch operations. The following systems may be used.

- 1) Prepare a separate silo and addition system for Crystal Admix HD and add it directly to the ready-mix vehicle after the cement has been added or add Crystal Admix HD directly to the mixer or ready-mix vehicle manually after the cement has been added
- 2) Allow 10 minutes at high speed for mixing.
- 3) If slump is lower than required add a water reducer or plasticizer to increase slump to the required slump



Batch Plant – Central Mix Operation Instructions

- 1) Prepare a separate silo and addition system for Crystal Admix HD and add it directly to the mixer after the cement has been added or add Crystal Admix HD directly to the mixer manually after the cement has been added.
- 2) Mix as per mixer specification and standard practices.
- 3) If slump is lower than required add a water reducer or plasticizer to increase slump to the required slump

Job Site Addition Instructions

Crystal Admix HD may be added directly at the job site. Please note the following instructions

- 1) Add Crystal Admix HD directly to the ready-mix vehicle manually at the job site.
- 2) Allow 10 minutes at high speed for mixing before the concrete is to be placed.
- 3) If slump is lower than required add a water reducer or plasticizer to increase slump to the required slump