

OPTEC[®] EC-255

Efflorescence Control Admixture

Product Description

OPTEC[®]EC-255 is an innovative admixture formulated to enhance the quality and appearance of Segmental Retaining Wall (SRW) concrete units and architectural Concrete Masonry Units (CMUs) as well as other low slump concrete products.

OPTEC[®]EC-255 can enhance color dispersion and help minimize both cube and secondary efflorescence. (Cube efflorescence occurs during storage of the units, in cubes, before installation.) It provides excellent mix plasticity and machinability. OPTEC[®]EC-255R is also available to provide a textured unit with no swipe. Both admixtures are supplied as ready-to-use liquids.

Product Advantages

- Minimizes cube and secondary efflorescence
- Increased throughput
- Decreases cycle times
- Produces sharper corners and edges
- Improves feed into difficult molds
- Increases densities
- Lowers absorption
- Improves surface texture
- Increases compaction consistency throughout large units
- Improves pigment dispersion
- Increases initial and final strengths
- Reduces culls
- Improves compressive strengths

Product Uses

OPTEC[®]EC-255 may be used in plants producing architectural block, segmental retaining wall units, pavers and other low slump concrete products. OPTEC[®]EC-255 is designed to reduce cube and secondary efflorescence, provide good machinability and improve unit densities. A full line of companion products is available to provide additional qualities.

Application Information

Addition Rates:

OPTEC[®]EC-255 is generally used at a rate of 1-2 L/100 kg (16-32 oz/cwt) of cementitious materials including fly ash and other pozzolans. The addition rate is dependent upon the specific set of materials and the desired end properties.

OPTEC®EC-255 should be added separately to the mix after the initial wetting of the cement and before, or with the addition of, the final mix water. Once OPTEC®EC-255 is batched, it should be mixed for a minimum of two minutes.

If the mix time is less than two minutes, then OPTEC®EC-255 should be added to the pre-water. Mix times of less than one minute should be avoided. Never add admixtures to dry cement.

Limitations

Variables such as cement content, aggregate gradations, curing conditions and other factors may have an impact on the effectiveness of OPTEC®EC-255.

Testing with your specific material sets is necessary in order to determine the desired performance and results. Consult your GCP Masonry Products representative for more information.

Product Function

- OPTEC® EC-255 improves the dispersion of the cement throughout the mix resulting in promotion of more complete cement hydration and thus higher early and ultimate unit strengths.
- OPTEC® EC-255 may also allow for increased water in the mix which also promotes more complete cement hydration. Mixes with OPTEC® EC-255 may also be more forgiving of wet aggregate.
- OPTEC® EC-255 lowers the unit's absorption and also improves the density. OPTEC® EC-255 reduces wicking or water uptake in the unit, and at higher addition rates, water will bead on the units.
- OPTEC® EC-255 also improves the plasticity of the mix for greater machinability and reduced cycle times.

Dispensing Equipment

OPTEC®EC-255 can be dispensed using conventional diaphragm or gear pump systems. For further information, contact your local GCP Masonry Products representative.

Packaging

OPTEC®EC-255 is available in drums and returnable totes.

Health & Safety

All precautions defined on the SDS (Safety Data Sheet) for OPTEC®EC-255 must be followed.

Storage

OPTEC®EC-255 must be protected from freezing at temperatures of 0°C (32°F) and below, as the admixture is not usable once frozen.

ca.gcpat.com | North America customer service: 1-877-4AD-MIX (1-877-423-6491)

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