

TECHNICAL DATA SHEET - LOGIK CWPA 800

ASTM C494, Type S Admixture; 3-D Densifier, Shrinkage Reduction, Corrosion Inhibiting, Porosity Reducing under hydrostatic pressures (PRAH) concrete admixture.



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DESCRIPTION

Logik CWPA 800 is a non-toxic, volatile organic compound (VOC) free, liquid admixture formulated to react with the hydroxides produced by the cement hydration process. In doing so, Logik CWPA 800 creates additional hydration (secondary) product, calcium-silicate-hydrate (c-s-h) within the cement paste. This process severely reduces and disrupts the capillary pores, effectively shutting down moisture/water movement through the concrete. Manufactured with deionized water to remove trace minerals and containing no chloride based materials, Logik CWPA 800 will not promote nor contribute to corrosion of embedded or reinforcing steel.

USES

CWPA 800 has been specifically formulated for use in normal and light weight concrete mixes to produce ultra low permeability concrete across a wide spectrum of mix designs; 0.34 - 0.60 w/cm ratio mixes. *Mixes outside of this range require specific consult with Technical Services Department; dosage will change outside of the limits placed in this document.

CWPA 800 can be used in the following applications:

- Below-grade foundations; parking structures, cast-in-place and structural shotcrete walls, spread footings, and mat/raft slabs - both vertical and horizontal applications.
- At and above-grade exposed decks, plazas, patios, balconies.
- Tunnels, Bridges, Dams & Reservoirs.
- Water tanks, Elevator pits, and Cisterns.
- Pool decks, water parks, and any concrete application where egress/ingress of water (or any deleterious fluids) is unwanted - a highly effective corrosion inhibiting process.
- Classified under CSI & NRMCA sections as a certified MVRA (moisture vapor reducing admixture); the simplest way to guarantee on-time flooring, roofing, and expensive coatings.
*Warranties can be provided for both adhesive bonding AND moisture/vapor emissions failures.

BENEFITS

CWPA 800 is manufactured under some of the most exacting chemical manufacturing processes available and has been proven to significantly enhance the physical properties of ready-mixed concrete through extensive independent testing. Including, but not limited to:

- Reduced Permeability (per ASTM D5084): on average 98% less permeable as compared to non-treated specimens - a true Permeability Reducing Admixture under Hydrostatic pressure (PRAH); i.e. 10 times improvement, 20 US Perms becomes 0.2 US Perms with CWPA 800.
- Because of the efficient use of the "water of convenience" being used, natural long-term drying shrinkage is reduced between 15 - 25% (local Southern California material, versus control mix, at 35 Days).
- Per ASTM C494, Type S (Specialty) certified admixture.
- The quick and permanent capillary break in concrete lends superior corrosion inhibiting characteristics; including chlorides, sulfates, Microbial Induced Corrosion, and ASR inhibition,
- Per CRD C48-92, BS EN 12390-8, and DIN 1048, part 5 protocols; Completely blocked water migration through all specimens; starting at Day 9.
- Environmental Product Declaration (EPD).

BENEFITS (Continued)

- Full Product Transparency; Independently published Health Product Declaration (HPD).
- Can eliminate waterproofing membranes and coatings under certain conditions. *A full one-year Performance Warranty can be combined with the CWPA 800 admixture. Upon significant completion, Durability Consultants (the local Distributor for CWPA 800 in California and Hawaii) will warrant against any “leaking” with the state-of-the-art technologies; polyurethane foam injection and/or waterproof coatings. If the owner/developer would like to extend this coverage beyond one-year, a separate, third party insurance policy can be achieved; usually in the \$1.20 a sq.ft. range.
- CWPA 800 is considered both a siliceous liquid and water conditioner, and in most circumstances will noticeably improve the rheology characteristics of the mix; acting as a Viscosity Modifying admixture (VMA).

DOSING/HANDLING

CWPA is a liquid admixture is primarily dosed with portable dosing units (air and power is required) or permanent ready-mix plant equipment; ideally tied to the batch control panel. Dosing is recommended at:

0.34 - 0.39 w/cm - 6 ounces per 100 weight, cementitious,
0.40 - 0.45 w/cm - 8 ounces per 100 weight, cementitious,
0.46 - 0.52 w/cm - 10 ounces per 100 weight, cementitious,
0.53 - 0.60 w/cm - 12 ounces per 100 weight, cementitious.

CWPA 800 should be introduced into commercial ready mix concrete with the head waters (pre-loaded). *CWPA 800 can be added at the tail end, or any sequence during batching (or at the jobsite) given a minimum of 7 minutes at mixing speed is achieved.

CWPA 800 is a clear liquid and offered in 275-gallon IBC totes, 55-gallon drums and bulk delivered quantities; with substantial inventories in Southern California, always available. Portable and permanent dosing equipment is also available through Durability Consultants.

CWPA 800 is VOC Free, “set neutral”, and can be used with any other commercially available admixtures (EXCEPT CONVENTIONAL SRAs - methylpentane based products). Proper care should be used in introducing each admixture without contaminating the other admixture in sequencing.



Certified to
NSF/ANSI 61



*Durability Consultants is always willing to perform “pre-project” testing to discern the maximum performance for any mix design requirements. And we’re equally open to expand our testing protocols to those you or your engineer may prefer.



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