



THE CONCURE GROUP
PERMANENT CONCRETE SOLUTIONS

Concure MVRA1000 Admixture

Certified ASTM C494, Type S

Integral Concrete Moisture/Vapor Reducing Admix (MVRA)

TECHNICAL DATA SHEET

DESCRIPTION

Concure MVRA1000 Admixture is an integrally added chemical admixture, added to ordinary Portland-cement based concrete. It automatically creates a “capillary break” throughout the entire matrix of the concrete mass by naturally producing additional (secondary cement hydration) c-s-h throughout the concrete. It is severe and permanent enough to disrupt the capillary system that naturally occurs in concrete, to the point of “moisture proofing” concrete that receives “moisture in-sensitive” flooring, coatings and roofing materials; with an emphasis on Resilient Flooring applications.

APPLICATIONS

Concure MVRA1000 Admixture is/will:

- Priced, supplied, and introduced into the concrete mix by your ready-mix producer; under the direction of a certified weight master in your state.
- Provide a proven and documented record of providing flawless flooring, coatings, and roofing systems, in long-term service.
- Take the risk out of construction schedule delays & expense with additional post-installed epoxies, overlays, etc. necessary to meet today’s resilient flooring requirements; guaranteeing critical paths.
- Provide a “Lifetime of Concrete” Warranty against any and all moisture vapor emissions; both original and any “re-purposing” of concrete areas.
- A naturally occurring, non-toxic (VOC Free) concrete admixture, that merely “enhances” the normal process of cement hydration mechanisms in your concrete.

ADVANTAGES/FEATURES

- Capillary Break formed in concrete by Concure MVRA1000 Admixture is a permanent part of the concrete,
- There are no mix design restrictions. Normal range of effectiveness is between 0.38 - 0.52 w/cm ratio. Any mix designs outside of this range require adjustments to Concure MVRA1000 dosage,
- Concure MVRA1000 Admixture reduces overall concrete permeability to an ultra-low level,
- Provides positive ancillary benefits to concrete; lowers shrinkage strain (less long-term shrinkage), enhances binder paste to allow for better flooring tolerances, and does not lower the compressive & flexural strengths, and is suitable for either non-structural or structural concrete applications,
- A logical “fix” for using structural lightweight aggregate in mixes involving suspended slabs that usually require extra “drying time”,
- 28 days, pour-to-floor; with proper drying/curing conditions is within this admixtures scope.

TECHNICAL

Basics: Concure MRVA1000 Admixture is environmentally safe and contains no VOCs.

Appearance: Colorless

Odor: None

Toxicity: None

Flammability: None

Shelf Life: 2 years, if not allowed to freeze

Weight: 9 lbs. 2 ozs. per gallon

Storage: Cool, dry space

Solvent: Water-based

Hazardous Vapor: None

Membrane Type: Integral c-s-h capillary break

TECHNICAL - CONTINUED

ASTM	METHOD	RESULTS
D5084	Coefficient of Permeability	1.04 x 10 ⁻⁸ cm/sec
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C1567	Alkali-Silica Reaction	-0.010% Control +0.024%
C39	Compressive Strength	119% over Control
C78	Flexural Strength	110% over Control
C157	Drying Shrinkage	20% Reduction over Control

MIXING & DOSAGE

Concure MVRA1000 Admix is dosed at 10 ounces per hundred weight of cementitious materials; cement, fly ash, slag, or any other SCMs. Concure Admix should be added with the 'head waters' for optimum dispersion. But it also can be added at any point, even "tail loaded" given a minimum of 7 minutes at mixing speed. Concure MVRA1000 Admix is compatible with any other available commercial admixture, given they are added separately during the batching process.

If a mix design is outside of the recommended 0.38 to 0.52 w/cm ratio range, please contact the technical contact/distributor below, for proper dosing requirements.

PACKAGING

Concure MVRA1000 Admix is packaged and sold in 275-gallon standard IBC-Totes, 55-gallon drums and 15-gallon drums. With adequate notice, any "custom" quantity can be provided as well.

LIMITATIONS & PRECAUTIONS

The industry standard as put forth by ACI 302.1R-15; Guide to Concrete Floor and Slab Construction, as well as various other ACI Committees, ASTM F06 - Committee on Resilient Floor Coverings, and NRMCA in both the actual reports and commentary recommend starting at a 0.45 w/cm ratio starting point and working from there. If greater "workability

LIMITATIONS & PRECAUTIONS, CONT.

or slump" is required for a mix, a water reducer/plasticizer is always recommended to achieve that workability. Any mix with over a 0.50 w/cm ratio is simply counter-productive to the effort of defeating moisture/vapor emissions; issues that foul flooring, roofing, and coatings installations.

As well, these same groups recommend a "vapor retarder" to be installed, over the sub-base and directly in contact with the concrete. There are several manufacturers and Concure Admix also recommends the use of these barriers to shield from potential moisture sources from the sub-base/soil.

As well, per ACI guidelines "wet curing" may be provided by adequate "curing compounds". Concure Admix strongly suggest following these recommendations as well. And although most curing compounds are "self-desiccating" or eliminated by uv sunlight and normal construction traffic wear, often light surface abrasion/sanding is required to remove any lingering cure that may act as a "bond breaker" between the concrete and adhesive/flooring. This can be included in any proper flooring preparation movement. This issue should be addressed whether Concure Admix is utilized or not; as the mechanics are the same.

Finally, Concure MVRA1000 Admix recommends ASTM F3191 - Water Droplet test to determine either non-porous or porous substrate. Non-porous substrate means, "special, distinct adhesive".

DISCLAIMER

This technical data is to the best of our knowledge true and accurate as of the publication of this technical data sheet. Pre-project testing of a mix design including Concure MVRA1000 Admix is always encouraged. For all Warranty documents or in areas of concern or conflict with other products and systems, reach out to the Technical Distributor below.



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