



# CMR 1080

## Concrete Moisture Reducer

### **TECHNICAL DATA**

#### **PRODUCT**

CMR 1080, Concrete Moisture Reducer is a colloidal Silicate base subsurface barrier. Rather than covering up the challenge of excessive moisture in concrete, CMR 1080 reduces the moisture vapor emission from the concrete matrix to acceptable levels for all types of flooring installations.

#### **MANUFACTURER**

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#### **DESCRIPTION/USE/LIMITATIONS**

CMR 1080 is a cloudy white, water base, Colloidal Silicate, which internally (integrally) seals Portland cement concrete with a subsurface barrier. CMR 1080 is a permanent application that can be applied to existing concrete or newly placed concrete. When CMR 1080 is applied to concrete, it penetrates deeply below the surface porosity and capillary system reacting with concrete's unbound (free) constituents, such as alkali and/or inactivated calcium hydroxide residue. This unique reaction converts the CMR 1080 liquid, (which is virtually zero in solids) into a 100% solids colloidal silicate precipitate (gel) that is internally generated and very insoluble. This CMR 1080 gel forms and occupies the concrete's "surface" accessible porosity and internal tiny voids. The application of CMR 1080 will enhance the concrete's overall integrity as it supplements, densifies, waterproofs, and internally detoxifies without effecting the concrete's surface traction or bond ability of other surface applications.

**CMR 1080 Application:** CMR 1080 works with and reacts only to Portland base concrete structures. CMR 1080 is NOT intended for gypsum products. When applying CMR 1080 to concrete; old adhesive, cut back, sealers, curing compounds, poorly bonded patching, or anything that would inhibit the absorption of CMR 1080 must be removed. Test the surface of the concrete with droplets of water. The water should absorb into the concrete within about one minute. Use this test method throughout the installation area. If the water does not significantly absorb into the concrete within one

minute the concrete must be treated as non-porous. Preparation methods include but are not limited to scarifying, grinding, or bead blasting according to industry standards. After the concrete surface has been prepared, apply CMR 1080 at the rate of 150 to 200 square feet per gallon. Allow CMR 1080 a minimum of 24 hours to purge the concrete of excess moisture. Some concrete structures will take longer than others. CMR 1080 is, and, will continue to work throughout the matrix of the concrete.

**CMR 1080: a sealer/densifier:** CMR 1080 can be applied to already set concrete of any age. As CMR 1080 penetrates the concrete, a reactive process begins and the free alkali is converted to a calcium silicate hydrate gel. This process permanently seals and densifies the concrete. After the application of CMR 1080, the concrete is waterproof and more resistant to ASR, oils, acids, industrial chemicals and cleaners.

**Application:** After CMR 1080 application and cure time of 24 hours, moisture tests should be used per industry standards. **Calcium Chloride ASTM F-1869 is recommended.**

1. Use a medium to high-pressure airless sprayer with a .017 to .019 tip size. NOTE: When an airless sprayer is not allowed for application, please contact the representative for alternative application methods.
2. All surface products other than concrete must be removed to allow the penetration of CMR 1080.
3. Apply CMR 1080 to the point of saturation at the rate of 150 to 200 square feet per gallon. Use an overlapping pattern of 10% to 15%.
4. Some areas of the concrete may have a larger porosity rate and the CMR 1080 will absorb at a much faster rate. These areas should have a second application of the CMR 1080.
5. When applying other coatings to the concrete, wait 24 hours. Rinsing may be needed if the CMR 1080 purged the concrete of impurities.
6. Do not apply CMR 1080 to frozen or near frozen concrete.