



# CURE & TILT WB BOND BREAKER

Concrete Cure And Bond Breaker

Curador y antiadherente para concreto

## PRODUCT DATA

### 1. DESCRIPTION

CMC Cure & Tilt WB concrete cure and bond-breaker is a new, innovative, unique formula of proprietary, reactive organic materials in an aqueous dispersion. Cure & Tilt WB is low-VOC formulation that does not contain wax or hydrocarbon resins. Cure & Tilt WB has excellent stability and does not require continuous mixing throughout the application process; the material must be mixed only prior to application.

### 2. USES

Cure & Tilt WB is used as a cure and bond breaker in tilt-up, lift-slab, and precast concrete construction. Cure & Tilt WB cures the concrete floor or casting slab and top sides of panels once poured. It is applied to the casting slab to function as a bond breaker between the casting slab and the tilt-up or lift-slab panel. The product should be used where appearance is a prime consideration in tilt-up and lift-slab construction.

### 3. PACKAGING

- 5 Gallon (18.93 L) Pails
- 55 Gallon (208.20 L) Drums
- 275 Gallon (1040.9 L) Drums

### 4. SHELF LIFE

When stored indoors in original, unopened containers at temperatures between 40° - 90° F, optimum performance and best use is obtained within one year of date of manufacture.

### 3. COVERAGE

- Curing: 200 - 400 sq. ft./gal
- Bond Breaking: 200 - 400 sq. ft./gal

Coverage will vary due to various amounts of different fillers, extenders, or additives in the concrete mix that can result in the concrete mass and finished surface having a higher than normal porosity and some very porous hotspots. Coverage ratios must be adjusted to compensate for resulting penetration and additional coverage coats required to provide proper surface treatment. Always apply to a test area first to determine actual coverage rate before full-scale application.

### 5. SPECIFICATIONS

- Meets the moisture retention requirements of ASTM C309 on steel-troweled surfaces.
- Complies with National AIM, OTC Phase I and II, LADCO, Utah R307-361, CARB SCM 2007, and SCAQMD maximum allowable VOC requirements.

### 6. FEATURES/BENEFITS

- Cures concrete casting slab and top of tilt-up or lift-slab panel.
- Provides effective bond breaker between casting slab and tilt-up or lift-slab panel.
- Meets the moisture retention requirements of ASTM C309 when applied to steel-troweled surface finish.
- Excellent stability; does not require continuous mixing throughout the application; the material must be mixed only prior to application.
- Leaves no staining on wall panel or casting slab floor surfaces when properly applied.
- Resistant to sunlight induced oxidation damage when panel concrete placement is delayed multiple days.

## 6. FEATURES/BENEFITS (CONT.)

- Resists wash off from normal rain and dew once dried.
- Provides both curing and bond breaking...eliminates need for double inventory and handling.
- Low VOC...VOC <5 g/L

## 7. APPLICATION

**Surface Preparation:** The casting bed should be clean and free of dust, dirt, and foreign matter. Cure & Tilt WB should be protected from all contaminants while drying.

**Mixing:** Thoroughly agitate Cure & Tilt WB prior to each use. Proper mixing of Cure & Tilt WB prior to each use is very important to ensure successful panel separation and lifting. CAUTION: TO AVOID FOAMING, DO NOT MIX EXCESSIVELY. For proper mixing procedure refer to CMC Cure & Tilt WB Proper Mixing Procedure Technical Bulletin.

**Equipment:** Application equipment must be clean and free of all previously used materials. Cure & Tilt WB may be applied with a commercial hand sprayer, such as a Chapin 1949. A spray nozzle that produces a flow of 0.4 GPM under 40 psi (.276 MPa) of pressure is recommended.

**Curing Coat Application:** Apply Cure & Tilt WB in a uniform surface film as soon as the surface water has evaporated, immediately after completion of troweling and final finishing operation.

Approval may be granted for the application of 1100 concrete cure or one of the VOCOMP series cure-and-seal products from CMC to be used as a cure coat prior to the application of Cure & Tilt WB as a bond-breaker. NOTE: The application of 1100 or VOCOMP series will interfere with the normal reaction of Cure & Tilt WB with the casting slab surface. In this scenario, Cure & Tilt WB's resistance to rain is highly reduced. Always verify the presence of a uniform bond-breaker coat as indicated by a dry, soap-like feel prior to placing panel concrete.

**First Bond Breaker Coat Application:** Apply Cure & Tilt WB to the point of rejection on the casting slab just prior to the placement of reinforcing steel. Spray at right angles to the cure coat spraying pattern.

**Second Bond Breaker Coat Application:** Wait for the first coat of Cure & Tilt WB to dry. Apply the second coat of Cure & Tilt WB at right angles to the previous coat. The number of bond breaker coats and coverage rate needed to achieve a complete uniform film is dependent on the concrete mix design, placing and finishing procedures, environmental conditions, etc.

A proper application is indicated by the presence of a dry soap feel uniformly apparent to touch over the treated surface. A grease-like feel to touch indicates overapplication and can result in panel surface discoloration, dusting, surface irregularities, etc. Any dull spots must be recoated. Questionable areas can also be tested by dropping water on the surface. If the water beads-up or forms a bubble and does not penetrate the concrete surface, it is sealed. Any areas accepting penetration of the water must be recoated until a positive seal is achieved. For both the curing and bond breaking applications, once Cure & Tilt WB is sprayed on the surface, do not track over the slab until the surface is totally dry to touch.

NOTE: Panels sticking to the casting slab is the result of insufficient or improper application of the bond-breaker, i.e. not enough product applied as the concrete panel is placed. Please ensure that enough product has been placed on the casting slab and a complete, continuous film of Cure & Tilt WB has been created. Sufficient application of the bond-breaker is the responsibility of the contractor and not CMC. The contractor and/or applicator is also responsible to ensure that application conditions are acceptable as noted on this data sheet and to ensure that the correct coverage rate is used. For further application instructions and contractor responsibilities and assurances, please contact the CMC technical services department.

**Cleanup:** To remove improperly or over-applied Cure & Tilt WB from panels, it is recommended to use a commercially available, heavy-duty, concrete degreaser/stripner.

## 8. PRECAUTIONS

DO NOT FREEZE. DO NOT DILUTE. If Cure & Tilt WB application as a cure to the casting slab is delayed for several hours or until the following day, the surface should be moistened with water before application of Cure & Tilt WB.

Cure & Tilt WB is not recommended to be used on broomed or rough surface finishes.

If it rains within 12 hours of application, Cure & Tilt WB will need to be reapplied.

Cold Weather Applications - Not recommended for application to casting slab surfaces which are frozen or when ambient temperatures are below 40° F (4° C) or expected to drop below 40° F (4° C) within 12 hours following application.

During hot weather concreting as defined in ACI 305 Guide to Hot Weather Concreting, the use of 1100, VOCOMP Series or wet curing is recommended in conjunction with Cure & Tilt WB. For more information please contact CMC technical services.

For positive bond breaking, it is essential the casting slab be 100% sealed with Cure & Tilt WB. Visually and physically inspect the slab to witness the entire surface has a definite sheen. Any dull spots must be recoated. Questionable areas can also be tested by dropping water on the surface. If the water beads-up or forms a bubble and does not penetrate the concrete surface, it is sealed. Any areas accepting penetration of the water must be recoated until a positive seal is achieved.

If, after application of the bond-breaking coat, steel, or concrete-placing operations are delayed longer than two weeks, the bond-breaking coat should be inspected carefully to determine if it still provides 100% coverage. If rain strikes the surface before the coating is dry, any damaged areas must be

## 8. PRECAUTIONS (CONT.)

recoated. After the Cure & Tilt WB film is dry, normal rain should not affect the surface. However, CMC always recommends to inspect the slab to make sure of proper coverage.

Concrete mix designs that contain in excess of 20% pozzolans such as fly ash may require additional coats of the bond breaker.

Do not under apply or over apply Cure & Tilt WB. If less than the recommended amount is applied, the film may not be continuous or of sufficient thickness to inhibit inter-slab moisture penetration which may result in panels sticking to the casting slab. Over-application can result in delays due to drying, discoloration, panel surface dusting, surface irregularities, etc.

If a curing or curing-and-sealing compound other than 1100 or VOCOMP series products are used, they must be removed prior to the application of Cure & Tilt WB. Cure & Tilt WB is not recommended to be used with any other manufacturers' bond breakers.

Prior to any full-scale application of a subsequent paint, coating, sealer, adhesives sealant, grout, etc., CMC recommends appropriate field testing be performed to verify that all desired/required appearance, performance, adhesion, etc. properties are achieved. Please refer to ACI 551.1R: Guide to Tilt-Up Concrete Construction for additional recommendations.

## 9. LEED INFORMATION

May help contribute to LEED credits:

EQc2: Low-Emitting Materials [For Healthcare and Schools (exterior-applied products) ONLY]

For most current data sheet, further LEED information, and SDS, visit [cmc.com/constructionservices.com](http://cmc.com/constructionservices.com)