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TILT-CRETE™ W/B

Water-Based Bond Breaker

DESCRIPTION

TILT-CRETE W/B is a high performance, water-based bond-breaker engineered for consistent, reliable results in tilt-up construction. It is a low VOC, unique formula of proprietary, organic materials in an aqueous dispersion. With its dual action, film-forming, and reactive properties, TILT-CRETE W/B ensures clean, efficient panel separation in tilt-up construction.

USES

TILT-CRETE W/B is used as a cure and bond-breaker in tilt-up, lift-slab, and precast concrete construction. TILT-CRETE W/B 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.

PACKAGING

5 Gallon (18.93 L) Pails
55 Gallon (208.20 L) Drums

COVERAGE

Cure Coat:	100 - 200 ft. ² /gal.*
Bond Breaker Coat:	
1 st Coat:	400 ft. ² /gal.
2 nd Coat:	550 - 700 ft. ² /gal.

*Meets the moisture retention requirements of ASTM C309 on steel-troweled surfaces

Coverage rates will vary based on concrete mix design, environmental conditions, finishing, etc. Variations in the mix design, including supplementary cementitious materials (SCMs) such as fly ash, slag, etc. can influence the concrete's density and surface porosity. This might result in localized areas having a higher than normal porosity and some very porous hotspots. Coverage ratios must be adjusted to compensate for resulting uptake and the potential need for additional coverage coats required to provide proper surface treatment. Always apply to a test area under representative conditions first to determine the actual coverage rate before full-scale application.

SHELF LIFE

When stored indoors in original, unopened containers at temperatures between 40° - 90° F, optimum performance and best use is obtained within nine (9) months of date of manufacture.

SPECIFICATIONS/STANDARDS

- 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 2019, and SCAQMD maximum allowable VOC requirements.

FEATURES/BENEFITS

- 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.
- Resists wash off from normal rain and dew once dried.
- Provides both curing and bond breaking ... eliminates need for double inventory and handling.
- VOC <10 g/L

APPLICATION

Surface Preparation ... The casting bed should be clean and free of dust, dirt, and foreign matter. TILT-CRETE W/B should be protected from all contaminants while drying. Minimum application temperature is 40° F (4° C) and rising. Additionally, TILT-CRETE W/B should not be applied if the ambient temperature is expected to drop below 40° F (4° C) within 12 hours of application.

W. R. MEADOWS, INC.

P.O. Box 338 • Hampshire, IL 60140-0338
Phone: 847/214-2100 • Fax: 847/683-4544
1-800-342-5976
www.wrmeadows.com • info@wrmeadows.com

HAMPSHIRE, IL / CARTERSVILLE, GA / YORK, PA
FORT WORTH, TX / BENICIA, CA / POMONA, CA
GOODYEAR, AZ / MILTON, ON / SHERWOOD PARK, AB

Mixing ... Vigorously agitate TILT-CRETE W/B prior to each use. Proper mixing of TILT-CRETE W/B prior to each use is very important to ensure successful panel separation and lifting. Each drum of TILT-CRETE W/B will be supplied with an integral drum mixer. The bond-breaker must be continuously thoroughly mixed with the built-in mixer for a minimum of five minutes or longer to reach a homogeneous appearance. To ensure optimal mixing, the drum mixer's blade should be rotated in one direction for half of the mixing time, then rotated in the opposite direction for the remaining time. Improper mixing of the TILT-CRETE W/B will result in panels to stick.

During hot weather concreting as defined in *ACI 305 Guide to Hot Weather Concreting*, the use of VOCOMP series or wet curing is recommended in conjunction with TILT-CRETE W/B. For more information, please contact W. R. MEADOWS.

If any other products besides VOCOMP® series are used, they must be removed prior to the application of TILT-CRETE W/B. TILT-CRETE W/B is not recommended to be used with any other manufacturers' bond-breakers.

Equipment ... Application equipment must be clean and free of all previously used materials. TILT-CRETE W/B may be applied with a commercial hand sprayer, such as a Chapin 1949. A spray nozzle that produces a flow of 0.5 GPM under 40 psi (.276 MPa) of pressure is recommended.

Curing Coat Application ... Apply TILT-CRETE W/B 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 one of the VOCOMP series cure-and-seal products from W. R. MEADOWS to be used as a cure coat prior to the application of TILT-CRETE W/B as a bond-breaker. Always verify the presence of a uniform bond-breaker coat as indicated by a dry, soap-like feel and water beading prior to placing panel concrete.

First Bond Breaker Coat Application ... Apply TILT-CRETE W/B 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 TILT-CRETE W/B to dry. Apply the second coat of TILT-CRETE W/B 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, and beading of water. A grease-like feel to touch indicates over-application and can result in panel surface discoloration, dusting, surface irregularities, potential challenges with paint adhesion, 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 TILT-CRETE W/B 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 TILT-CRETE W/B has been created. Sufficient and proper application of the bond-breaker is the responsibility of the contractor and not W. R. MEADOWS, INC. 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 W. R. MEADOWS.

Cleanup ... Prior to drying, cleanup can be accomplished with soap and water. Once dried, use SEALTIGHT CLEANER from W. R. MEADOWS or xylene.

LIMITATIONS/PRECAUTIONS

DO NOT FREEZE. Do not use material that have frozen.
DO NOT DILUTE. If TILT-CRETE W/B 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 TILT-CRETE W/B.

TILT-CRETE is not recommended to be used on broomed or rough surface finishes.

Do not apply TILT-CRETE W/B if it rains within 12 hours of application.

For positive bond breaking, it is essential the casting slab be 100% sealed with TILT-CRETE W/B. Visually and physically inspect the slab to witness the entire surface has a definite sheen. Any dull/light spots must be recoated. Always test the bond-breaker effectiveness by sprinkling water on the casting slab. 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, 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 recoated. After the TILT-CRETE W/B film is dry, normal rain should not affect the surface. However, W. R. MEADOWS always recommends to inspect the slab to make sure of proper coverage.

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

Do not under apply or over apply TILT-CRETE W/B. 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, potential challenges with subsequent paint adhesion, etc.

Prior to any full-scale application of a subsequent paint, coating, sealer, adhesives sealant, grout, etc., W. R. MEADOWS 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.

TILT-CRETE W/B should not be applied if the ambient temperature is expected to drop below 40° F (4° C) within 12 hours of application.



LIMITED WARRANTY

W. R. MEADOWS, INC. warrants at the time and place we make shipment, our material will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. Read complete warranty. Copy furnished upon request.

Disclaimer

The information contained herein is included for illustrative purposes only, and to the best of our knowledge, is accurate and reliable. W. R. MEADOWS, INC. cannot however under any circumstances make any guarantee of results or assume any obligation or liability in connection with the use of this information. As W. R. MEADOWS, INC. has no control over the use to which others may put its product, it is recommended that the products be tested to determine if suitable for specific application and/or our information is valid in a particular circumstance. Responsibility remains with the architect or engineer, contractor and owner for the design, application and proper installation of each product. Specifier and user shall determine the suitability of products for specific application and assume all responsibilities in connection therewith.

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