

# TILT-UP BONDBREAKER CONSTRUCTION UPDATE

## Recommended Application Procedures For SILCOSEAL Cure And Bondbreaker During Hot Weather Conditions

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CONSTRUCTION UPDATE



Hot Weather Application

Cure and bondbreaker application during hot weather conditions demands special consideration to ensure a successful result.

Hot weather conditions necessitate additional care for adequate curing of the casting slab. Improperly cured casting slabs typically exhibit increased surface porosity and reduced surface strength. Normal application of the tilt-up bondbreaker to improperly cured casting slabs often results in inadequate surface accumulation of the bondbreaker. The addition of certain pozzolans such as fly ash can exacerbate the problem by slowing the concrete set time, thereby delaying the application of the curing compound and resulting in critical moisture loss.

Recommended curing practices include the application of the bondbreaker cure coat IMMEDIATELY after final finishing and control joint cutting. The **SILCOSEAL Cure and Bondbreaker** cure coat application should be to the point of uniform surface film accumulation. Casting slab surfaces with increased porosity or surface area resulting from a rougher finish may require heavier applications of the cure coat to ensure adequate holdout and surface accumulation.

In order for **SILCOSEAL Cure and Bondbreaker** to perform properly it is ESSENTIAL to develop a uniform surface accumulation on the casting slab. Proper application of the cure coat is the most important step towards ensuring adequate bondbreaker holdout on the successive bondbreaker coats. **SILCOSEAL Cure and Bondbreaker** applied as a cure coat chemically reacts with the surface concrete, forming a waterproof soap barrier which prevents successive bondbreaker coats from absorbing into the casting slab, thereby ensuring uniform holdout of the bondbreaker.

If the cure coat application of **SILCOSEAL Cure and Bondbreaker** to the casting slab must be delayed or if the slab was not cured at all or is suspected of being porous, the surface should be saturated with water prior to the bondbreaker application. Excess water should be squeegeed off the surface immediately prior to the bondbreaker application. Saturating the casting slab with water in this manner will ensure that the **SILCOSEAL Cure and Bondbreaker** will achieve proper surface holdout.

Following the cure coat application, it is necessary to apply successive bondbreaker coat(s) to the casting slab until the surface is uniformly dark in appearance with the presence of a "dry soap like feel" uniformly apparent to the touch over the entire casting slab surface with no indication of greater accumulations in low spots or depressions. Variations in concrete mix designs, weather conditions, finishing procedures and curing conditions make it impossible to predict the exact number of bondbreaker coats and/or application rates necessary to ensure adequate surface accumulation.

Since each casting slab is inherently different, it is critical to the success of the project that the tilt-up contractor understands that during hot weather conditions it becomes more important than ever that the bondbreaker cure coat is properly applied and successive bondbreaker coats are applied until the "dry soap like feel" is uniformly apparent to the touch over the entire area.

THE PRIMARY REASON FOR PANELS STICKING TO CASTING SLABS IS AN INADEQUATE FILM OF BONDBREAKER ON THE CASTING SLAB SURFACE AT THE TIME OF PANEL CONCRETE PLACEMENT. IT IS YOUR RESPONSIBILITY TO VERIFY THAT A CONTINUOUS FILM OF BONDBREAKER CAN BE FELT ON THE CASTING SLAB SURFACE AS DESCRIBED ABOVE, IMMEDIATELY PRIOR TO THE PLACEMENT OF PANEL CONCRETE. PLEASE READ THE APPROPRIATE PRODUCT TECHNICAL BULLETINS AND USE INSTRUCTIONS PRIOR TO USE.

Updated 04/14/10. This version supersedes all previous versions.



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