

Tilt-Up Bondbreakers

TECHNICAL DATA SHEET

A bond breaker is a 'material used to prevent adhesion of the newly placed concrete to the substrate'*. When a bond breaker is needed at a construction joint, a curing compound, form release agent and the like can act as a bond breaker. Bond breakers used in tilt-wall construction, however, are specifically formulated for that purpose and the chemistry involved with these bond breakers is different than that of other "bond breakers".

*ACI Cement and Concrete Terminology

DAYTON SUPERIOR BOND BREAKERS

Sure-Lift™ with Dye J6D - solvent-based Sure-Lift™ J6WB - water-based Maxi-Tilt™ with Dye - water-based

CURING

Proper, and immediate, curing is vital to a successful tiltwall project

- 1. Timing is more critical on the cure coat than the bond breaker coat
- 2. Proper curing will help create a less porous, more dense surface
- 3. The more dense the surface the easier the panels will lift
- 4. For projects requiring an ASTM C-309 cure, use the Dayton System:

Prior to placement of the Sure Lift™ with Dye J6D cure the slab with one of the following solvent-based curing & sealing membranes:

- 1. Cure & Seal 25% J22UV @ 200-400 Ft2/Gal
- 2. Cure & Seal 30% J23UV @ 200-400 Ft2/Gal

Prior to placement of the J6WB or the Maxi-Tilt™ with Dye cure the slab with one of the following water-based or solvent-based products:

- 1. Cure & Seal 309 J18 @ 200 Ft²/Gal
- 2. Cure & Seal 309 EF @ 200 Ft²/Gal
- 3. Cure & Seal 1315 EF @ 300 Ft2/Gal

PREPARATION FOR APPLYING THE BOND BREAKER

- All surfaces must be clean
- For hot weather precautions, prior to the first bond breaker application, soak the slab to satisfy its 'thirst' and reduce its porosity; After soaking, squeegee off the excess water then immediately apply the bond breaker. Using this procedure will help to keep the bond breaker on the surface, not in the concrete.

PLACEMENT OF THE BOND BREAKER

- Always read and follow the instructions in the current data sheet
- Apply the bond breaker evenly, being sure not to leave puddles
- It is best to have several lighter applications than one heavy application

"GOOD INDICATIONS"

Three quick checks that indicate good parting of the panels:

- 1. feel a soapy residue on the surface
- 2. beading of water
- 3. observing an uniform appearance of the bond breaker

SOLVENT-BASED VS. WATER-BASED

Water has very high surface tension while solvents are low. Surface tension is directly related to wetting and adhesion. Liquids with a high surface tension, like water, are not necessarily as efficient in this respect as the lower surface tension materials like solvents. This is the reason why water-based materials do not lay down as easily as solvent-based materials and why water based are easier to over apply.

DAYTON SUPERIOR BOND BREAKER COMPARISONS

	Sure Lift™ with Dye J6D	Sure-Lift™ J6WB Maxi-Tilt™ with Dye
Shelf Life:	12 months	9 months
Mixing:	Not req'd, but good to do occasionally	Agitation required prior to each use
Flammability:	High	No
Freezable:	No	Yes
Meets ASTM C-309:	No	No
Warehouse storage Per Uniform Fire Code:	Limited Quantities	Unlimited Qty.

