



Concrete Form Release

When we have a coating, waterproofing, or air vapor barrier (AVB) being applied to new concrete, we need to ask the concrete trade contractor for the form release TDS & SDS. We provide this information to the coating, waterproofing, or AVB contractor for the their manufacturer's review and approval **BEFORE** the form release product has been installed to prevent adhesion issues down the road.

There are two different family types of form release:

Barrier Type

Petroleum based

Wax based

Silicone based

- *Can stain concrete*
- *Create surface voids*
- *Issues with form removal in cold & hot temperatures*
- ***Likely to prevent adhesion of coatings, waterproofing, or AVB***
- *Not recommended for architectural concrete*

Chemically Active / Reactive

Partially reactive (buffered)

Fully reactive

- *Both types produces a surfactant (soap) that prevents bonding to the formwork by creating a reaction with the calcium ions in the cement paste based on the reactivity.*
- *Winter grade version is available*
- *Organic chemical reaction utilizing fatty acids.*

BEST FOR COATINGS, WATERPROOFING, AND AVB

- ***Buffered*** agents produce an improved soap film that helps remove entrapped air, promoting a better flow of a thin skin of cement paste at the surface. This produces fewer bug holes, stains, and surface irregularities. *Best for architectural concrete.*
- ***Fully Reactive*** agents provides a basic soap film which produces fewer bug holes, stains, and surface irregularities than the barrier type.



More Questions?

ACI 347R "Guide to Formwork for Concrete"

ACI 303R-12 "Guide to cast-in-place Architectural Concrete Practices"

ACI 533R "Guide to precast Concrete Wall Panels"