

FORMING FACT



BIERSCHBACH EQUIPMENT & SUPPLY

1101 S LYONS AVE
SIOUX FALLS, SD 57101
1-800-843-3707

3030 N PLAZA DRIVE
RAPID CITY, SD 57709
1-800-658-5437

2121 LEECH AVE
SIOUX CITY, IA 51106
1-800-243-3707

4001 MAIN AVE
FARGO, ND 58103
1-800-540-2760

SYMONS FORM RELEASE Q & A

Q. Are there different types of form releases?

A. Yes. There are 3 types of releases:

1. **Reactive** -- the fatty acids in this type of form release react with the free lime in the concrete to form a soap-like residue (this is called saponification). Excessive over-application can create severe dusting and possibly a retarded and/or punky surface.
2. **Buffered** -- the fatty acids in this type of release are 'buffered' or neutralized enough so there is still the reaction with the free lime, but not so much that can create the sometime severe problems that can happen with the reactive releases.
3. **Barrier** -- with barrier releases there is not a chemical reaction, as there are not fatty acids, rather, just a physical barrier [i.e. oil, wax, etc.] that prevents the concrete from adhering to the form surfaces.

Q. Do all reactive releases perform the same?

A. No. Some releases contain diesel fuel (the higher performing releases do not contain diesel fuel); some releases, usually those that are biodegradable, contain a vegetable oil such as soy. The qualities of the ingredients contribute greatly to the successful performance of a release, the differences in odor and their ease of application.

Q. Is there anything that has to done different in the application of a water-based release than one that is distillate-based?

A. Yes. It is essential that any water-based products, including releases, be thoroughly mixed prior to each use. As water-based products tend to separate (remember in 'the days of yore' when milk had to be shaken to integrate the cream that rose to the top of the bottle) it is necessary to mix the material so that it is homogenous and therefore perform as intended; in addition, the surface friction of a water-based product is greater than the surface friction of a distillate-based product and, as such, does not lay out as easy and is easier to over-apply.

Q. After the forms are stripped can a surface treatment be applied without any surface preparation?

A. That depends. If a quality form release is applied at the coverage rate as prescribed on the technical data sheet it should not leave any residue on the formed surface of the concrete; this, however, does not mean it is appropriate to apply a surface treatment without some type of surface preparation. First and foremost, for a successful application, one must abide by the surface preparation requirements of the manufacturer of the surface treatment that is being used. If the surface is free of residual form release there could still be laitance on the formed surface that could interfere with the subsequent adhesion of any topical surface treatment. The absence of residual form release does not mean the surface is ready for a surface treatment.

Q. How far in advance of concrete placement can I apply a form release?

A. Less than one day. It is recommended to place the concrete within 24 hours after the application of the form release.

Q. Can form releases be exposed to temperatures below freezing?

A. Yes, if it is a distillate-based release, but **No** if it is a water-based release. Another thing to remember is that as the temperatures go lower, the viscosity increases and it will be more difficult to apply and also harder to apply at the prescribed coverage rate.

Q. Are the Symons releases compatible with form liners?

A. If in doubt, call us. Symons releases are compatible with most, if not all, Symons liners.

Q. How can I determine if our release is compatible with the form liner?

A. Do a simple test. One can immerse a sample of the liner in a sample of the release to be used for a period of 24 hours. If there should be no change in color, firmness and texture they should be compatible.

Q. Are there special form releases for the high profile form liners?

A. Yes. It is best to use a higher viscosity release, such as the Symons Liner Kote, for the higher profile liners as there would be less "run-off" than with a lower viscosity release.

Q. How do I go about choosing a form release?

A. One should consider the following:

- Are there specification requirements to meet?
- Are there any requirements/concerns on the contractors part i.e. odor etc.?
- Is there an issue with storage/flammability or freeze/thaw which could dictate either a water-based or solvent-based product?
- Does the manufacturer offer a choice of releases for different applications?
- Discuss features and benefits of different releases with the manufacturer?
- Does the manufacturer have a knowledgeable-and responsive- sales staff and technical services group to assist you in the selection of the release and be there in times of problems?

Choose a Form Release according to your criteria

Symons Product	Type	Base	VOC Compliant
Action Kote	Reactive	Mineral Oil	Yes*
Environmental Release EF	Reactive	Soy	Yes*
Liner Kote	Neutral	Petroleum	Yes
Magic Kote	Neutral	Petroleum	Yes
Thrift Kote	Reactive	Petroleum	Yes

* Compliant with OTC in the Northeastern U.S. and in the State of California

