



# SAMPSON COATINGS

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## MASONRY

All masonry surfaces must be inspected closely for potential mildew/algae contamination and pH tested before coating to eliminate potential coating failure.

Alkalinity and saponification are two major problems that effect the adhesion of a paint to a masonry surface.

### ALKALINITY

The alkalinity level of a masonry surface should always be tested prior to painting. The "pH test" is a simple test requiring litmus paper and water. For masonry surfaces with a pH between 6 and 8, a power washing of the surface is usually sufficient. Follow this surface preparation with an appropriate surface conditioner that has been recommended for use under your selected finish coat by the paint manufacturer.

Masonry surfaces with a pH higher than 8 signify an alkalinity problem. Masonry surfaces with alkalinity problems usually occur as a result of the salt and mineral content of the masonry being forced to the surface which eventually results in efflorescence. All efflorescence must be removed from the masonry surface before it can be properly coated. Even if visual efflorescence is not yet evident, if the pH of the masonry is above 8 you must prepare the surface using the same "acid etch" method outlined for efflorescence removal. [\(See Efflorescence, for proper removal\)](#)

(NOTE: A surface primer is always required following an acid wash/clean water neutralization for long service life protection of the coating system.)

### SAPONIFICATION

Saponification is the forming of a soap from the alkaline hydrolysis of fats. The coating materials resin is broken down by the alkali and moisture in the surface, becoming sticky and often discolored. This problem usually occurs when a coating is applied directly to a concrete or masonry surface that has not fully cured. The end result is total loss of adhesion and a terrible sticky mess. (NOTE: High pressure cleaning, sometime followed with a brush off abrasive sand blast, may be required to return a saponified surface to a paintable condition.

Care must be taken to completely prepare the masonry surface and insure that all problems, such as alkalinity and saponification, have been eliminated. Once again, surface preparation is the critical factor in the service life of the selected coating.

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