



# PINE HALL BRICK

BUILD YOUR DREAMS.

2701 Shorefair Drive, Winston-Salem, NC 27105 | [pinehallbrick.com](http://pinehallbrick.com) | 1-800-334-8689

---

## Cleaning

- **Minimize cleaning:** keep brick covered with plastic; keep mortar trowelings & droppings off brick; spread straw around foundation to keep dirt off wall.
- Work out of several cubes at once to achieve a well-blended wall.
- Only tool with a metal jointer. Do not tool with brick.
- Clean brick as you go with a dry brush or next day with a brush & water.
- If performing delayed cleaning, follow these rules:

**DO NOT USE MURIATIC ACID. WE RECOMMEND SUREKLEAN 600, EACOCHEM NMD 80 OR EQUIVALENT WITH A PROPER DILUTION PER MANUFACTURERS INSTRUCTIONS.**

**WHEN CLEANING A WALL WITH COLORED MORTAR OR ADMIX COMMERCIAL BRICK (SPEKTRA) USE VANTROL, EACOCHEM NMD 80 OR EQUIVALENT.**

- **Always test on a hidden portion of the wall.**
- Prewet wall thoroughly before cleaning and rinse after with clean water.
- Pressure washers with the above mentioned cleaners can be used provided that the application pressure is limited to 30-50 psi and 50 degree fan tip is used. Rinse pressures should not exceed 200-300 psi.
- ***Do not clean Chesapeake Pearl, Stoney River or Vienna brick colors with acid cleaners or any proprietary cleaners that contain acids.***

# Efflorescence

Efflorescence is a crystalline salt deposit on the surface and in the pores of concrete, masonry, and other building products. A phenomenon reported as early as the 1870's and much studied since, it can appear as sulphate and carbonate compounds of sodium, potassium, calcium, magnesium and aluminum. Chlorides may also occur as efflorescence. This is usually a result of the use of calcium chloride as a mortar accelerator, contamination of masonry components (including sand) by sea water or the improper use of hydrochloric acids in cleaning solutions.

**There are several sources for efflorescence:** 1) the movement of groundwater that moves upwards, by capillary action or "wicking", into masonry or concrete materials. 2) salts in the soil that are in contact with paving can migrate above grade. 3) natural-state salts that are found in mortar, concrete or other building products. Although rare, some raw material used to make clay brick contain small amounts of salt. However, these small amounts are minor compared to studies that found two to seven times as much soluble material in concrete products versus fired clay material. *W.E. Brownell concluded in his research study that the most common form of efflorescence comes from the "migration of 'free-alkali' solutions from the mortar to the brick" (applicable to rigid paving applications).*

Efflorescing salts dissolve in water and are absorbed into the masonry pores. Typically, clay bricks can absorb 5% to 8% of their weight in water. Heat from the sun (or other source) begins to draw the moisture to the wall surface and as the water completely evaporates, the salt deposits are left on the surface.

Since humidity and moisture play a key role in the efflorescence process, some areas of the country will be effected more than others. Seasons will play a role as precipitation typically is heavier during season changes and will increase the likelihood of efflorescence.

The most important solution to solving efflorescence in a veneer wall is finding, locating and dealing with the source of water that is seeping behind the finished wall. The following conditions are potential sources:

- lack of proper flashing and weepholes
- poor foundation details
- poor bond between brick and mortar
- partially filled head joints
- use of poor quality mortar
- use of raked or scratched head joints
- excessive mortar droppings in cavity

As a general rule, the removal of efflorescing salts from the face of masonry is relatively easy operation. Efflorescing salts are water soluble and generally will disappear on their own with normal weathering as the free salts dissipate from their source. This is particularly true of "new building bloom". White efflorescing salts can be removed with dry brushing or with clear water and a stiff brush. Heavy accumulations or stubborn deposits may require the use of special cleaners like EacoChem or Sure Klean products. If used, always follow the manufacturer's directions and start with a non-visible test area. Never use muriatic acid as damage to the mortar joints and wall can result, in addition to severe staining in some cases.

For further reference, see BIA Technical Notes- 23, 23A, 20.

## Notices and Warnings

### IMPORTANT NOTICE:

**If upon delivery, the shipment fails to meet color and/or quality standards, the manufacturer is to be notified without delay.** The erection of a dry stack panel or field panel with delivered brick is the best method to determine color and quality standards at the job site. **USAGE OF THE PRODUCT CONSTITUTES ACCEPTANCE IN ALL CASES. MANUFACTURER DISCLAIMS ANY AND ALL RESPONSIBILITY FOR IMPROPER CLEANING.**

### GOVERNMENT WARNING

**PRECAUTIONARY STATEMENT:** Limit inhalation of clay dust. When cutting/sawing; use wet methods, perform outdoors or in well-ventilated area, and use respiratory protection. Do not eat, drink or smoke when handling this product, and wash hands after. Contaminated clothing must not be allowed out of the workplace. Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection.

**FIRST AID: IF ON SKIN:** Wash with plenty of water. **IF INHALED:** Remove person to fresh air and keep comfortable for breathing. **IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. IF exposed or concerned, or IF you feel unwell, or IF eye irritation persists, or IF skin irritation or a rash occurs; THEN get medical advice/attention. Take off contaminated clothing and wash it before reuse.