EFFLORESCENCE



ARTO Brick and California Pavers 15209 S. Broadway St. Gardena, CA 90248-1823 Phone: (310) 768-8500 Fax: (310) 768-8544

www.artobrick.com

WHAT IS EFFLORESCENCE?

Efflorescence is a normal phenomenon, which can occur in any masonry product including clay, terracotta, concrete, and other materials.

Efflorescence is water soluble salts carried from below by water, which then evaporates and leaves white, powdery salts on the surface. The amount of salts in any products will vary due to the use of natural materials but is finite and will eventually be exhausted.

There are two kinds of efflorescence.

- 1. Regular "powdery" efflorescence as described above
- "Crystalline" efflorescence. When powdery efflorescence goes through
 cycles of being deposited on the surface it can form crystals that become
 tightly bonded to the surface. The crystals do not have to be thick. A light
 haze that is still there after using "Efflorescence Treatment" will be light
 crystal formation and is treated as described below.

Water sources can be:

- <u>In/out</u> Entering at the surface (rain or sprinklers), penetrating and then returning to the surface carrying the salts.
- <u>Through</u> Entering from behind or underneath (water from the earth migrating up) and traveling through.

HOW TO PREVENT OR MINIMIZE EFFLORESCENCE

Efflorescence can also come from the mortar bed, planters, lawns, or other adjacent areas if there is a source of water to transport these salts. In these instances efflorescence may recur because the salts in these areas will not be exhausted. Sprinkler, drains, and irrigation systems should be carefully designed to minimize or avoid saturation of masonry surfaces.

Proper sealing with a penetrating sealer will create a barrier below the surface that will allow water vapor transmission while usually preventing salts from reaching the surface.

HOW TO CLEAN EFFLORESCENCE

EFFLORESCENCE



There are many available efflorescence cleaners that can easily remove powdery efflorescence and sometimes crystalline efflorescence as well. Make sure to test all products on a loose piece or unobtrusive area to ensure desired results. Carefully follow the directions provided by the manufacturer and avoid acid-based products that may affect the surface. The list of products below is not comprehensive and is provided solely as a courtesy; inclusion or omission of a specific product should not be construed as an endorsement or otherwise by ARTO.

Aldon Efflorescence Cleaner

AquaMix Eff-Ex

DuPont Stonetech Restore

TechniSeal Efflorescence Cleaner