



MINIMIZE EFFLORESCENCE

International Masonry Institute

The James Brice House
42 East Street
Annapolis, MD 21401
phone 410.280.1305
fax 301.261.2855
toll free 800.803.0295
www.imiweb.org

Masonry Hotline

800.IMI.0988 (800.464.0988)
masonryquestions@imiweb.org

Training Hotline

800.JOBS.IMI (800.562.7464)
training@imiweb.org

Efflorescence, the powdery or chalky white deposits that sometimes stain brick or block walls, occurs when water reaches and dissolves soluble salts within the wall, migrates to the surface and evaporates. The salts can be present naturally in masonry units and mortar materials, or may be carried in with rain or groundwater. When efflorescence appears soon after construction, caused mainly by water in fresh mortar, it's called "new building bloom." Though usually temporary and harmless, new building bloom is unsightly and upsetting to building owners.

Efflorescence that appears later in a building's life is a sign that water has penetrated the wall through cracks, gaps or vapor migration and that drainage details are missing or ineffective. Unless these problems are identified and corrected, efflorescence will persist and other deterioration is likely to occur.

Tips for Minimizing New Building Bloom During Construction

- Store materials off the ground and keep them covered to reduce exposure to rain, snow, and groundwater
- Cover the tops of unfinished walls with water-resistant material during inclement weather and at the end of each workday
- Use clean, potable water for mortar, grout, wetting brick and cleaning purposes

Tips for Building More Water-Resistant Masonry Walls

- Fill head and bed joints adequately and tool the joints when thumbprint hard
- Minimize mortar droppings in cavity wall air space and keep weep holes clear to allow water to drain
- Carefully install flashings, drip edges, joint sealants and caulk where needed to close gaps between masonry and other building elements

As always, the keys are sound construction practices and careful workmanship.