



What's happening

IN MASONRY



Gary Porter, Executive Director of the Masonry Advisory Council is called upon with questions about construction concerns and for masonry advice from a variety of Architects, Engineers, Contractors, Developers and Distributor sources. He is dedicated to ongoing education of masonry and shares helpful tips from his professional experience that may be beneficial to you.

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Masonry & Efflorescence

As buildings in Chicago experience the harsh elements of winter and below zero temperatures with multiple freezing and thawing cycles, we sometimes see what looks like snow on face brick or concrete block. This is called efflorescence.

Efflorescence appears as a white crystalline deposit on face brick or concrete block. These deposits may be efflorescence, water-soluble salts that occasionally occur on the surface of masonry. Although undesirable, efflorescence is usually not harmful to masonry. Efflorescence is relatively easy to clean from masonry.

The cause of efflorescence, the water soluble salts, may come from the materials, the brick, the mortar, cement in the mortar, lime in the mortar, mortar additives, backing materials, soil from below grade or some adjacent material. Along with the material, there must be a source of water in contact with the salts for a period of time sufficient to dissolve them. The masonry must have a pore structure that allows the migration of salt solutions to the surface or other locations where evaporation of water can occur.



The design of a masonry wall may contribute to efflorescence. If the cavity is not at least 1" (we prefer 2"), if water penetrates the masonry from roof or trip issues, this may contribute to efflorescence.

Other factors are the workmanship. Filling all the head joints and tooling joints properly with no voids in mortar joints, correct flashing installation, clean cavities, all these things contribute to a non-efflorescing masonry wall.

Covering the masonry wall at the end of a day helps to keep water from entering the system. Covering the piles of brick or block can help to keep unwanted moisture out of the materials. The water used for mixing mortar must be clean, potable water free of salts, deleterious acids, alkalis' or organic materials should be used at all times.

Efflorescence can be easily removed from masonry. This is usually preformed in warm weather as cooler temperatures can prohibit drying of the masonry. Sometimes a sealer is recommended to help stop efflorescence. It is usually best to call or [Ask Mac](#) on our website. It is best to use an experienced professional with masonry for recommendations on efflorescence and sealing.



Efflorescence can be seen on buildings from a distance, while a close up of brick reveals uneven color on the surface of the brick.



The Masonry Advisory Council is a non-profit organization that markets and promotes the benefits of building with masonry. Our vast network of industry professionals are available through MAC as a source of education, technical support, promotion, and market outreach.

Visit our website masonryadvisorycouncil.org

For immediate masonry support call us at 847-297-6704

