

TECHNICAL BULLETIN

Efflorescence On Masonry Veneer Systems

WHAT IS EFFLORESCENCE

Efflorescence is a crystalline deposit of salt that can form on building surfaces such as brick and stone veneer, mortar/grout joints within masonry units, concrete and stucco. It has a white or greyish chalky tint and consists of salt deposits carried out to the surface and left behind when water evaporates from the masonry or grout joints.

WHAT CAUSES EFFLORESCENCE

Efflorescence can vary in frequency and intensity throughout the country due to moisture and temperature. Water, rain and snow are the primary sources of moisture and may impact the degree of efflorescence. Condensation, groundwater wicking and interior activities also may affect the degree of moisture generation. In many instances, efflorescence may occur during construction. If masonry veneer units are left out overnight during construction, they can absorb moisture from damp soil and rain. It is essential for masonry units to be covered and left in pallets to minimize the risk of efflorescence throughout a construction project. Efflorescence is often a seasonal problem, and humidity will impact whether soluble salts appear. It usually escalates in winter, since rain, snow, sleet and other inclement weather conditions may arise. However, efflorescence can still occur in spring, fall and summer.

HOW TO REMOVE EFFLORESCENCE

Removing efflorescence can be quick and simple. In fact, efflorescing salts are water-soluble, which means efflorescence may disappear on its own due to normal weathering.

- Diluted Vinegar: mild efflorescence can be cleaned using a 50/50 mix of white vinegar and water.
- Chemical cleaning may be needed in some cases. Suppliers and manufacturers of masonry, grout, and masonry cleaning products will have information available concerning cleaning and control of efflorescence. Other sources of information concerning efflorescence include trade associations such as the Portland Cement Association (www.cement.org).