

To ensure our Customers are well informed about the outcome of moisture in blocks or concrete we have created the following fact sheet.

Efflorescence, which presents as white residue on the surface is due to the following external factors:

- Presence of salts in one of the materials of concrete. Commonly salts are found in the fine aggregate or sand taken from the river beds.
- If the concrete is not cured properly, the hydration process is incomplete on which the un-hydrated products near the surface form the efflorescence on the surface of concrete.
- Slow rate of evaporation of water allowing time for salts to permeate to the surface (this is why efflorescence tends to be more of a problem during the winter months; in summer, high temperatures may cause evaporation and hence depositing of salts within the concrete rather than on the surface)
- If the water content in the concrete mix is more, it makes the concrete porous. Thus allowing the path for water and salts to come to the surface and for efflorescence.
- In wet conditions such as rainy season, the surplus water acts as a medium for the salts to transport to the surface of concrete and form crystalline white powder.
- Variability of concrete (compaction or curing) can result in localised problems where water can permeate more easily through the concrete.

There are a few options for dealing with the removal and prevention:

- Leave alone, and in time this will fade and disappear
- Some type of efflorescence that are easily removable can be easily removed using a stiff bristle broom or brush. If the result is not satisfactory by dry brushing, scrub with clean water then lightly rinse the surface.
- For immediate results, the blocks or concrete can be re honed, re sealed and top coated
- The applying of coating does help to prevent efflorescence in Concrete, utilising clear water repellents. The coating will absorb water across a masonry surface and reduce the risk of efflorescence from recurring, however if water continues to get into the block or concrete, the efflorescence will push out again.
- Ensure the blocks are kept as dry as possible, can capped and sealed as soon as feasible.
- Direct water away from the block or concrete