

Efflorescence on fibre cement roof sheets

Efflorescence, also known as 'Lime Bloom', is a natural phenomenon which can also be seen on cement-based products such as bricks, blocks and paving slabs). This is often triggered by moisture trapped between the fibre cement sheet layers during storage.

Causes of Efflorescence:

Cement-based products inherently contain free lime, soluble in water. When these products become saturated and subsequently dry, the free lime migrates to the surface, where it accumulates. Initially soluble, if left on the surface, the deposit can react with atmospheric carbon dioxide to form less soluble calcium carbonate, which is more difficult to remove. Further reactions with carbon dioxide can lead to the formation of soluble calcium bicarbonate.

Effect of Weather Exposure:

When fibre cement material is exposed to weather conditions, especially when stored in packs, it becomes more saturated than when installed on a building. This increased saturation leads to higher lime deposition on the surface, reacting with the atmosphere to create a chalky white coating.

Impact on Product Performance:

Efflorescence does not affect the performance and life expectancy of our fibre cement sheets. Over time, efflorescence naturally disappears, although it's advisable

to allow a minimum period of 12 months for this process to occur. Effective airflow and ventilation systems within the building will encourage the efflorescence to naturally reduce overtime.

Additional Causes of Efflorescence:

Efflorescence transferal can also occur during the installation of fibre cement roof sheets, particularly when walking on the sheets during construction.



Fig.1 showing Efflorescence on ridges naturally occurring

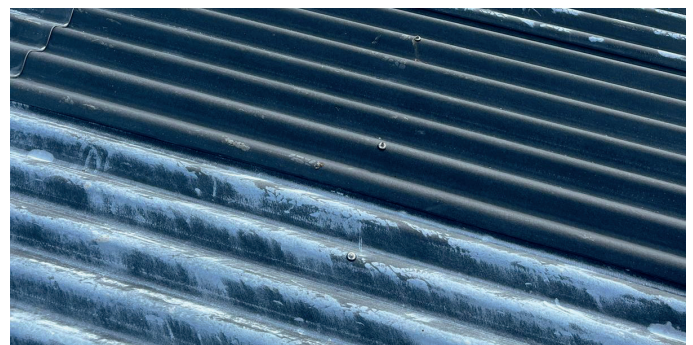


Fig.2 showing Efflorescence transferal caused by walking on the roofing sheet