

**DETERIORATION:**

A symptom of reduced quality or strength(or) process of changing to an inferior state(or) The process of becoming progressively worse.

**CAUSES OF DETERIORATION**

1. Deterioration due to corrosion
2. Environmental effects
3. Poor quality material used
4. Quality of supervision
5. Design and construction flaws

**1.DETERIORATION OCCURS DUE TO CORROSION****A. SPALLING OF CONCRETE COVE**

Spalling concrete is concrete that has broken up, flaked, or become pitted. This is usually the result of a combination of poor installation and environmental factors that stress the concrete, causing it to become damaged. On a low level, it can be purely cosmetic in nature, but it can also result in structural damage, such as damage to reinforcing bars positioned inside the concrete. For this reason, it is important to address spalling when it first starts to appear.

The signs of spalling are easy to spot. The surface will become rough and flaky, and may pit. In some cases, chunks of concrete break loose from the installation. The concrete can also start to crack, especially if large chunks break off. It can be repaired by totally removing the damaged section of concrete and filling it in with cement.

The best time to address spalling is when concrete is first poured, by taking steps to prevent it from occurring in the first place. The concrete should be mixed with the right amount of water, and ideally the mix kept as dry as possible because a high water content can weaken the material.

It also needs time to cure properly and should be handled carefully during curing. Sealing the concrete can also protect it from the elements. There are a number of sealants available for concrete and they can also work with a decorative finish.