

Concrete Cancer Guide

B i M
REMEDIAL BUILDING MAINTENANCE

Early diagnosis can minimise potentially catastrophic effects. The remediation bill can be startling if a building gets concrete cancer, so it pays to be able to identify the early indications of trouble. Concrete cancer, also known as concrete spalling, is an insidious condition that lurks beneath the surface and causes a building to become ‘sick.

WHAT IS IT?

Steel and iron bars are used to reinforce the concrete in buildings and, if proper construction processes are followed, there is usually nothing to worry about. However, if this steel is exposed to air and water through cracks and leaks, a carbonic acid can form, causing the bars to corrode. Once this process starts, the steel keeps expanding and the concrete progressively deteriorates. Without remedial action, the issue will only get worse and the building’s structural integrity can be compromised.

WHAT ARE THE IMPLICATIONS?

A small area of concrete that is in great condition prevents further damage but if it gets weaker or cracked, it will start to break into pieces. In winter water can also freeze inside the concrete which causes it to expand which can result in further damage. Large cracks or damage on concrete floors becomes dangerous because it can cause many accidental injuries. Cracks on concrete may indicate some important structural problems. So, it’s crucial to fix concrete spalling or cracked concrete areas on time before it becomes dangerous to others.

WHAT YOU NEED TO DO?

Procrastination in concrete repair will lead to larger, more expensive repairs over time. You need to ensure that the repair is done with efficiency and quality and that the workmanship guarantees longevity. From driveways and walkways to patios, no matter the project, a skilled concrete contractor will be able to deliver professional results. Whatever you do if you see possible signs of concrete cancer, do not ignore the issue. Leaving the cancer to spread will only add to the building’s problems – and the cost of repairs – over the long-term.

WHAT TO LOOK OUT FOR DURING REGULAR CHECKS

1. CRACKING AND FLAKING

Unfortunately, it can take many years for concrete cancer to become obvious to the untrained eye, and by then the damage to a building may be extensive. Cracks in the concrete of soffits, beams and columns are an early sign of potential problems.

So, if such cracks appear, no time should be wasted in getting a proper inspection by a concrete spalling repair company. A relatively small amount of money spent on the problem now can avert significant future repair bills.

2. RUST STAINS

Reddish or brown stains on the surface of concrete are a clear sign of deterioration underneath. If the steel reinforcements are exposed to air, it can create iron oxide, or rust, that looks as though it is bleeding from the concrete. Steel reinforcing materials need to have been properly treated before being incorporated into a slab.

In cases of concrete cancer, the steel can expand many times its normal diameter inside the concrete, leading inevitably to cracking and crumbling.

3. BUBBLING

Bubbling, or plating, of concrete render or paint is also an indication of concrete cancer. Inadequate water-proofing is often to blame.

4. MOISTURE AND LEAKS

If you see evidence of leaks in internal walls or overhead concrete surfaces, initiate an inspection. Rising moisture coming through cracks in the concrete may be a consequence of poor workmanship or inferior waterproofing materials.

You may also see a white, crystal-like substance that looks similar to salt. Concrete in coastal areas is more vulnerable to concrete cancer because of the higher salt content in the air, which can also speed up rusting. Area with humid climates or high rainfall are more susceptible, too.

Any of the above symptoms may be an indication that your building has concrete cancer. If you spot them, call BIM immediately to have the condition properly diagnosed and, if necessary, treated. The only conclusive way to distinguish between concrete cancer and something less worrying is to get a professional opinion.

Whatever you do if you see possible signs of concrete cancer, do not ignore the issue. Leaving the cancer to spread will only add to the building's problems – and the cost of repairs – over the long-term.

If it is not treated early and definitively, concrete cancer can be an expensive headache for building owners. **So, call (02) 9938 1740** to contact Sydney's leading remedial building contractor to have your building diagnosed and repaired.