

Concrete Cancer in Strata Buildings: What Owners Need to Know

Rust stains on a balcony edge, a lump of concrete on the ground below, a balustrade that has gone loose. Concrete cancer is the most expensive problem in Sydney's ageing apartment stock and one of the most commonly mishandled. Here is what it is, who pays for it, and why the cheap fix costs more.

SHORT ANSWER

Concrete cancer is spalling caused by corroding reinforcement inside concrete. In NSW strata, structural concrete is generally common property and the owners corporation has a duty to repair it under section 106 of the Strata Schemes Management Act. Patching over it without treating the steel always fails.

What concrete cancer actually is

Reinforced concrete works because the steel and the concrete are bonded, and because the alkalinity of the concrete protects the steel from corroding. Over decades, water carrying carbon dioxide and, near the coast, chlorides penetrates the concrete cover and destroys that protection. The steel starts to rust, and rust takes up several times the volume of the steel it consumed. That expansion has nowhere to go, so it pushes the surrounding concrete off from the inside.

That is why the symptoms look the way they do: cracking along the line of the reinforcement, rust coloured staining, hollow sounding concrete, and eventually chunks spalling off balconies, soffits and car park ceilings. The visible damage always lags the actual damage. By the time concrete lets go, the steel has been corroding for a long time.

Why buildings from certain eras are worse

Older buildings often have less concrete cover over the reinforcement than current practice requires, so the protective barrier was thinner to start with.

Add coastal exposure and decades of water sitting on a balcony because the fall was never right or the membrane failed, and you have the classic Sydney walk-up problem. Buildings near the water, and buildings with original unwaterproofed balconies, are where we see it most.

Who pays in NSW strata

The structure of a building, including structural concrete, external walls and slabs, is generally common property. Under section 106 of the Strata Schemes Management Act the owners corporation has a duty to maintain and repair common property. It is a duty rather than a discretion, and it applies even when the damage becomes visible inside somebody's lot.

Where it gets argued is at the boundary, for instance original balcony tiling and membrane versus an owner's later renovation. The way to end those arguments is to establish the cause and the failed element in writing before anybody accepts a bill. A report identifying what failed routes the cost correctly. Delay can also create its own liability under section 106(5), where an owner suffers loss because repairs were not carried out.

Why patching over it always fails

Rendering or patching over spalling concrete without treating the steel hides the symptom while the corrosion carries on underneath. It comes back, usually within a couple of years, usually over a larger area, and the second repair costs more than the first because more steel has been lost by then.

Proper remediation means cutting back to sound concrete past the corroded zone, fully exposing the affected steel, cleaning it back to bright metal, treating or replacing sections that have lost significant section, and reinstating with a compatible repair mortar. Then the water path that caused it, whether that is a failed membrane, a wrong fall or blocked drainage, has to be fixed as well. Otherwise the process just starts again.

Getting it assessed properly

For anything structural or widespread, an engineer's assessment comes before quotes rather than after. It establishes the extent, which is almost always larger than the visible damage, specifies the repair method, and gives the owners corporation a defensible basis for the spend. Committees that skip this step routinely end up comparing three quotes for three different scopes of work, which is not a comparison at all.

For a scheme budgeting a major remediation, the assessment also feeds the capital works fund conversation with real numbers instead of estimates. That tends to make the levy discussion considerably shorter.

Common questions

How urgent is spalling concrete?

If concrete is falling, or close to falling, from a balcony soffit or a car park ceiling, it is an immediate safety issue and should be made safe now regardless of the repair timeline. The remediation can be planned. Falling concrete cannot wait for the next committee meeting.

Can concrete cancer be stopped without full remediation?

Treatments such as cathodic protection exist and get used on significant structures, but that is an engineering decision rather than a contractor's. For most residential buildings, cutting out and reinstating remains the standard approach.

Will our insurance cover it?

Usually not. Gradual deterioration is generally excluded as maintenance rather than an insured event, which is exactly why it belongs in the capital works fund, planned rather than discovered.

Want this priced, or just want a straight answer? Call 0490 191 019.

Homestead Group · carpentry, concrete and guard rail · Greater Sydney

0490 191 019 · admin@hsgroupnsw.com · www.hsgroupnsw.com · ABN 20 634 117 212

Written from the tools, not from a marketing department. General information only: your engineer, certifier or strata report governs your specific job.