

Your building can't cope alone. Be its protector.

Don't assume your concrete is fit and well without ongoing expert monitoring of its condition and of emerging threats.

Surf-side sick

You mean like from chloride ions? My building is beyond a kilometre from the coast. No salty ions here.

Not all coastlines are equal. Persistent big surf enriches the atmosphere with salts in a way that still waters don't. **Strong onshore winds carry this air a long way.**

But I'm well inland.

In the CBD, in industrial areas and along traffic corridors the air gets more than its fair share of pollutants, notably carbon dioxide. **Result: carbonation.** Just as deadly. Such pollutants are readily airborne to your structure or dumped on it in rain even from afar.

I already have protective coatings on my structure.

If they're purpose-designed systems, fine. But be on your guard if they include pebble- or texture-filled preparations. Some of these don't prevent water penetrating below the surface where its evil mischief is **hidden from view by the very coating you think is saving you from a costly disaster.**

My coating was properly chosen and applied.

But have you checked if repairers or later installers of rails and fittings **breached the integrity of the coating and failed to reinstate it?** Or have trucks worn or damaged your structure somewhere "out of sight, out of mind"?

But my structure is brand new or just renovated.

All the more reason to have made protection part of the construction or repair strategy. **You'll never get it done cheaper** than while the site is set up with safety, materials handling and access protocols. Pay particular



attention to the hard-to-get-at places like overhangs or to facades below which swimming pools or public facilities are planned for later installation. Then it's costly!

Condition survey

Last time I looked my building was doing fine.

Casual looking is not good enough. You need a periodic condition survey.

Cracking, for example, can happen in places you can't look, such as up high. Cracks provide avenues for chloride ions to penetrate to the reo, setting up hidden "concrete cancer".

Cracks also progress as structures settle throughout their lives—especially when sited near beaches or on clay soils—and **are accelerated by outside agents such as nearby excavation, traffic corridor and railway vibes.**

Then again, not all concrete cover is equal. And you can't tell if it has been poured to specs or not. If it's light on, chloride ions will in time penetrate to the reo.

And not all concrete is equal either. If your structure hails from when calcium chloride was used to speed setting, it has a baddy built in.

So many pitfalls

And there are more. Some so insidious they need ACRA skills and tools to detect.

Like health, regular checks are your best protection—**costing far less than to cure an advanced disease.** ■