

## MEDIA RELEASE

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# CONCRETE CANCER WARNING – A TIME BOMB GOING UNDETECTED IN HUNDREDS OF QUEENSLAND PROPERTIES

## ENGINEER AND MAINTENANCE CHECK LIST URGED

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Queensland apartment owners and strata title managers are being urged to double check their maintenance plans for 2015 following a new warning about “concrete cancer” problems in older high rises.

The peak body for strata and community title properties in Queensland is concerned that concrete cancer has slipped from the public eye.

“It is absolutely vital that when maintenance plans are reviewed, plans for monitoring and treating concrete cancer are updated and implemented immediately,” Strata Community Australia (Qld) President Simon Barnard said today.

“This time last year one of the State’s best known high rise blocks on the Gold Coast was found to be riddled with concrete cancer and a leading Queensland architect warned that he suspects the problem is widespread.”

“Just because this type of incident has been out of the news, does not mean that it has gone away. I would expect that dozens if not more, strata titled properties in Queensland have the beginnings of concrete cancer, and are going undetected.”

Strata Community Australia (Qld) says concrete cancer, which is also known as spalling, is a growing problem in Queensland especially for buildings situated near bodies of salt water.

“Concrete cancer is a huge issue for property owners and has the potential to financially ruin many strata title properties.” Mr Barnard said.

“When steel rusts, it takes up to 3 times its original volume. When the steel is embedded in concrete – such as reinforcing steel in apartment blocks - this swelling causes the concrete to crack, exposing more reinforcing steel and concrete to the elements. The process repeats itself and spreads until the building is not safe to live in.”

The Iluka high rise apartment complex in Surfers Paradise, built in 1972, has now been demolished for a new project and has been shown to be riddled with “concrete cancer.”

Griffith University Head of Architecture, Professor Gordon Holden, warned he expected many other high rise projects throughout Queensland also had similar problems.

There has been a gradual increase in requirements and specifications for concrete strength and concrete coverage over reinforcing steel which means older buildings are much more likely to suffer concrete cancer.

### What to look for:-

- Reddish/brown stains adjacent to cracked concrete.
- Reddish/brown stains running down any part of a building.
- Concrete lifting/exploding out. If concrete starts lifting for no apparent reason often rusting in the reinforcing steel is the cause.
- Other cracks with signs of moisture coming through often showing white crystals or fluorescence are potential problems. Basically once water is in its usually only a matter of time before the water breaks down into hydrogen and oxygen leading to oxidization.

“Slight rust stains coming out of an otherwise innocent looking concrete surface are often the first symptom of spalling. Such areas must be repaired immediately. Concrete cancer can be fixed, but if it is allowed to spread, it is a costly nightmare to address,” Mr Barnard said.

“Given what has happened at Iluka, I hope that managers and owners of every Queensland strata title building, especially those showing signs of age and especially those built before 1990, check their maintenance procedures and look for any signs of concrete cancer.”

“At the same time, they should maintain their watch for any on-going asbestos problems in older buildings.”

Professor Holden has been quoted in media reports as saying that high rises built in the 1970’s have an average lifespan of around 40 years.

“That means it’s timely to look at the overall condition of older strata title buildings and to specifically look for signs of concrete cancer,” Mr Barnard said.

“Repairing concrete cancer is done by chiselling the spalling concrete around the reinforcing bar. A rust inhibitor is then applied to the reinforcing steel and some patching is done after that,” Mr Barnard said.

The organisation advised that schemes that are affected should be treated immediately because the problem is very likely to be much more extensive than what is apparent on the concrete surface. The cancer is likely to have spread along the reinforcing in each direction and it is impossible to know the extent until the concrete is chiselled away.

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