

Refurbishment Future-proofing the Sydney building should take four years, going 24/7

Iconic MLC tower gets a new skin

Mercedes Ruehl

The \$70 million refurbishment of Sydney's iconic MLC Centre skyscraper puts a whole new spin on the phrase "slipping into a new skin".

The project, which involves large-scale remedial work on the concrete-panelled facade, has been going on more than a year now at the 67-storey Harry Seidler-designed commercial tower at Martin Place.

Night and day, seven days a week, workers are on site.

It has taken until now just to get two of the four platforms – which will run up and down the building – and the outside lift up and running.

This month, the first real repair work that is not just investigation or practice, has commenced.

Olivier Mordret – project manager for Freyssinet, the company doing the work – put it simply: "We are repairing the building's skin," he said.

We are repairing the building's skin; the structure, or body of the building itself, is very solid.

Olivier Mordret, Freyssinet

The structure or body of the building itself, Mr Mordret says, is very solid.

When it was completed in 1978, the MLC Centre was the biggest reinforced concrete building in the world.

But the 35-year old building's facade had begun breaking up. After much investigation, the joint owners, GPT Group and the Queensland Investment Corporation decided to do a full refurbishment in 2010.

The work is being done in two stages over about four years by Freyssinet. The company specialises in concrete remediation projects and it has conducted remedial and maintenance work on the Sydney Harbour Bridge and Opera House in the past.

GPT and QIC will jointly fund the work so the building stays in prime condition for decades to come.

"This is one of the few true iconic office buildings in Australia and the remediation will ensure that the building continues to dominate the Sydney skyline for generations to come," GPT's head of investment management for office and logistics and business, David Burgess, said.

By next month there will be four platforms up and running; each will span two of the eight sides of the building. The northern four sides are being done first and the platforms are then to be relocated to the remaining south sides.

Each platform covers two storeys and will do 30 cycles of repair and cleaning of the building. Having finished the first two, the remaining platforms will be ready to go by next month, according to GPT.

Not all of the 90 millimetre-thick concrete slabs covering the building will receive the same treatment, some will go through more invasive repair methods than others.

GPT's director for retail and major projects Jamie Nelson says there are five methods being applied.

The first is the most dramatic, which is the breakout and repair of the concrete mix on the facade.

Once the concrete is stripped back the team restore the stainless steel reinforcements.

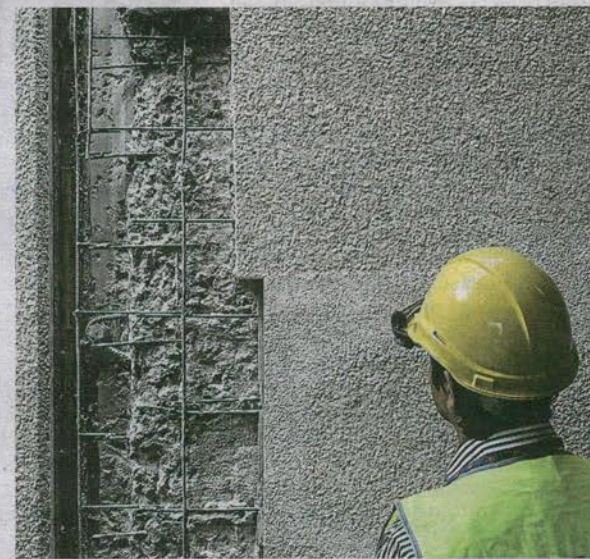
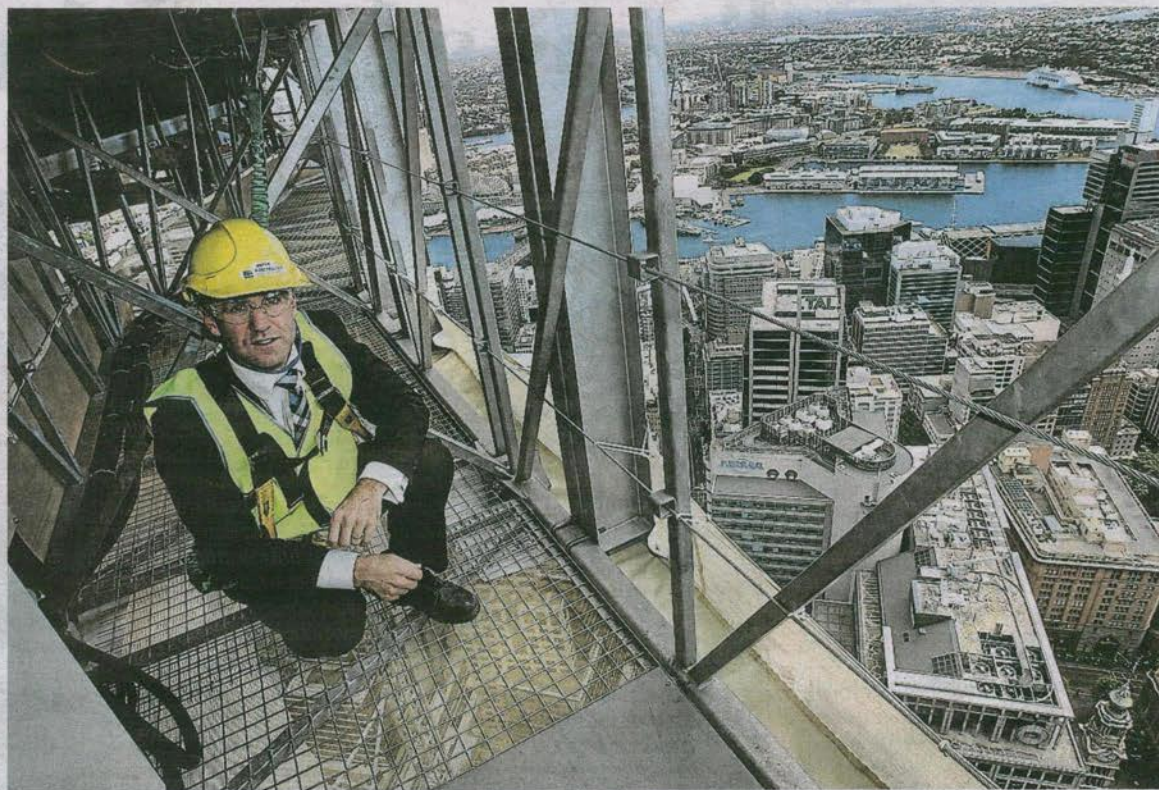
"This is happening to about 5 per cent of the building," Mr Nelson said.

The next method is called "pinning". This is where big steel pins are inserted that pin the panel back to the structure of the building as a precautionary method.

Then there is the cathodic protection step, a system used for the repair of concrete structures. A metal rod is put into the concrete panel and is deliberately corroded.

The rod acts as a sacrifice: it corrodes so the metal within the facade – which makes up the building's reinforcements – does not.

The next two steps are being done



Clockwise from left: Sydney's 67-storey Harry Seidler-designed iconic MLC Centre skyscraper; David Burgess, from GPT, on one of the working platforms; and the concrete-panelled facade that is undergoing the \$70 million refurbishment. PHOTOS: NIC WALKER, ROB HOMER

to the entire building. One is an abrasion, or Jos, clean, which will clean the facade but less roughly than sandblasting.

GPT's Mr Burgess said the process would not only clean the exterior panels but would also lighten them.

Finally, the facade will be covered with what Mr Nelson describes as a water-repellent sealer.

"Our tenants understand that the majority of the work is unobtrusive and are supportive of the remediation," Mr Burgess said.

The noisiest work is being done at night and on weekends. At its peak, there will be about 100 workers on site.

"This important work to the facade not only preserves the value of the asset but also preserves what is an iconic building for Sydney," Mr Burgess said.