



Riverside Centre – reglazing a classic

The Harry Seidler-designed Riverside Centre at 123 Eagle Street, Brisbane, is widely recognised as a landmark of Australian architectural history. Construction was completed in 1986, and the 40-storey, 146-metre-high building received an update for the ages when its elaborate glazed awning was replaced in 2016, working precisely to the architect's guidelines.

Clint Francis, Operations Manager for the GPT Group – Riverside Centre, and Cameron Marles, Manager of G.James's 'Specialised Glazing' division, discuss how a master's vision was carefully preserved.

First, Seidler's creation had to be brought into the present day. 'We wanted the awning refurbished and the lights replaced, with the feature refurbished to meet current Australian standards,' Francis begins. 'Harry Seidler & Associates, to this day, plays an active role in all aspects of our upgrades, further to the usual "moral rights" over the building's architecture; we consulted them about all specific finishes and provided samples before commencing any works, and they worked extensively to resolve buildability issues with the design team.'

After GPT put the project out to tender, G.James successfully bid on the glass replacement component. As Clint confirms, the entire process and response from G.James inspired confidence in their professional abilities and high standard of work, coupled with the additional benefits of local supply.

'We have enjoyed a longstanding relationship with G.James; so much so that they are our preferred base building glazier. We received increased confidence in working with a local manufacturer, including guaranteed compliance, minimal risk

of delay if any breakages occur during installation or in the future if replacement glass is needed, and faster turnaround.'

Staying faithful to the original design while incorporating the latest glazing technology was a balancing act. 'The existing awning was a make-up of 19 millimetre annealed glass, with safety film applied to the underside,' Marles observes. 'Over time, the film had weathered, bubbled and discoloured. GPT asked us if we could replace the entire awning with new glass.'

The building is tenanted to high-end clients, making discretion essential. The job called for the safe removal and installation of the new glass awning in one of Brisbane's busiest CBD areas – all with minimal disruption. G.James secured road closures and did all crane work after hours, taking the extra step in accommodating ground-floor tenants' requests by doing out-of-hours work, limited to Sunday to Thursday nights. Public safety was a key consideration in planning; every step was taken to ensure the safety of all pedestrians and visitors to the building.

Significant structural engineering was also required for this complex project. 'The Riverside Building's awning is cantilevered, with glazing hanging off the side of the main entrance,' says Francis. 'Removing such a massive amount of glass required significant structural considerations, so specialist engineers were also consulted.'

After assessing the situation, G.James recommended replacing the original glazing with a heat-strengthened laminate, GJ OptiLam Plus. The G.James engineering team specified a special 21.52-millimetre laminate to ensure current glazing standards were met. 'This was a far superior option to the original installation, which no longer met the current code



Image courtesy of The GPT Group

requirements,' notes Marles. 'The new glazing system, utilising structurally glazed laminated glass, is designed for ease of ongoing maintenance and durability, while also improving light transmittance.

'The logistics and level of complexity involved with each glass panel was immense,' says Marles. 'Each bespoke piece of glass in the awning was removed, photographed, templated, then manufactured again to meet the new specifications – it was a real-life jigsaw puzzle! G.James took great care to document each panel, going to the extent of carefully logging and measuring each glass panel on arrival at the G.James Brisbane manufacturing site.'

G.James manufactured a total of 89 21.52-millimetre heat-strengthened laminated replacement panels. 'As it was a Seidler building, there could be no deviation from our original plan – absolute precision was required,' says Marles. 'Replacing 19-millimetre glass with 21.52 millimetres caused weight distribution issues, so our in-house engineers did the calculations in collaboration with Built, the lead contractor and construction group.'

The project's scope extended beyond reglazing. 'Once we removed all the glass, the steel fabrication structure had to be refurbished, including sanding and painting,' says Francis. 'Built reconditioned the steel, enhancing the appearance with speciality paint and replacing the lighting, including associated wiring.'

Further problems arose when completing the other components. 'We removed the aluminium profiles underneath the glass, then stripped, numbered and re-anodised them,' says Marles. 'The aluminium framing was screw-fixed to the steel, and structural silicon was used for the glazing. The glass panels were glazed using special vacuum lifters attached to a mobile crane. Everything was removed before the next morning, leaving the area spick and span.'

'The facade took several weeks to remove and reglaze,' Francis confirms. 'The superb efforts of the G.James manufacturing and installation teams working on the project were complemented by the skilled team at Built, their painters, electricians, plumbers, CCTV specialists, abseilers, spotters, and the ground crew in an elevated work platform.'

Riggers, ground crew and abseilers were required during construction due to the slope on the top of the structure. After completion, we require abseilers to clean it going forward.

The outcome is optimal for all involved with the building. The restoration has resulted in increased light entering the building, and increased safety and access for the public and tenants. The new glazed awning is visually striking, and – most importantly for GPT and all Riverside tenants – now fully compliant.

The painstaking process of preserving a 1980s icon has paid off. 'Meeting the timeframes was a real challenge,' Francis notes. 'We got everything ready with ample time for the council, who required one month's notice at a minimum. The replacement took four to six weeks to manufacture, and that time again to install. The combined experience and skill of the G.James manufacturing and installation group has significantly impacted the end result.' Clint and the GPT Group couldn't be happier, describing it as 'a fantastic outcome that immeasurably improved the building's facade.'

It's a fairytale ending for this gem of Australian architectural history. ■

For an obligation-free discussion about the glass compliance at your commercial premises in the South East Queensland area, call Cameron on 0416 193 349.

