New Glazing Systems for Sydney and Cairns Casinos

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ABSTRACT

This paper will review the two glazing systems specially developed for the dome on top of the Cairns Casino and the Cone and Drum at Sydney Casino.

Both projects feature four sided support to the glass which gives economical glass sizing. They also use stainless steel rods, cables and castings to provide a delicate structural support to the glazing system.

The actual glazing systems are however different:

- Cairns comprises triangular panes shop fixed to an aluminium frame. The complete frame is then hung off the structure on site with a final silicone face seal applied in situ
- The Sydney structures integrate the mullions and transoms completely with the structure giving column/mullions twelve metres tall with a 60 x 60 x 40 trapezoidal cross section. The result is a system of incomparable transparency.
- Both systems explore opportunities for connecting tension only and compression only members to castings without the usual welding, bolts or pins.