



CUSTOM
DESIGN AND
MANUFACTURE

Custom Manufactured Feature Lighting

Crown Perth Grand Ballroom

Aglo Systems manufactures large scale RGBW LED ceiling features for Crown Perth's Grand Ballroom



*Continually improving
your lighting experience*



Onsite installation of pendants

Scope

Aglo Systems has worked with Crown Melbourne for over 5 years and was commissioned to engineer and manufacture the Grand Ballroom Flower Pendants and several other custom built pieces for the new Crown Perth re-development. We worked in parallel with Bates Smart and Electrolight to deliver the project.

Constraints

The design solution needed to incorporate and address the following:

- A cost effective design
- 9 x 6m and 36 x 3m diameter chandeliers
- Polished mirror gold finish
- Meet specified light output
- RGBW LED and DMX colour control
- Work with the weight limitations of ceiling structure

Supplied concept

The initial concept drawings were supplied to Aglo Systems by Bates Smart as part of the brief.

Prototype design and development process

The Aglo Custom Manufacturing team developed the original Bates Smart concept into 3m and 6m wide versions. The team then faced several challenges along the way in trying to balance all the requirements of the brief and with fabricating such a large item. A combination of stainless steel for strength and aluminium – which were vacuum plated in mirror gold finish – was used in the main structure to reduce weight load. As a further weight reducing method, rotomolded spheres rather than glass were used for the diffusers. After preparing shop drawings, a full size 6m prototype was constructed to test the assembly and operation.

The prototype allowed for extensive testing. Planning for installation was the next challenge to overcome as access to the fittings from above would be limited. For the stability of the design, the luminaire had to be assembled and tested at ground level before being lifted into position as a complete piece. With such a delicate structure, even cable reticulation posed difficulties with over 100 separate connections to be made during assembly.

When all the design challenges had been resolved, construction of the 45 units began. Once delivered, the Aglo team oversaw the assembly and installation onsite. Witnessing such large structures being hoisted 8m into the air to the ceiling was quite a spectacular view.

The resulting ballroom is very impressive and testament to all involved in the project.