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A MAJESTIC DISPLAY

Lighting up the facade of a delicate heritage structure in Perth which houses a theatre, Klaasen Lighting Design have used energy efficient lights and modern technology, while respecting the venerable Edwardian building known as His Majesty's Theatre. Devyani Jayakar talks to Martin Klaasen about the intricacies of the exercise.

“There wasn’t enough money,” says Martin Klaasen of Klaasen Lighting Design. “Despite our good relationship with the Heritage Council which had a grant for lighting heritage buildings in the city, overall it was a bureaucratic process which took a long time and was even open to public commentary.” The nature of city politics, state government and approval processes meant that much time was spent in getting all stakeholders (the city, the state, the theatre and the heritage trust, occupational health and safety to name a few) on the same page.

Even after negotiating all the red tape, although the lighting concept was ready, a sponsor was required to pick up the tab for the shortfall in the funds. Klaasen used his longstanding relationship with iGuzzini and local supplier Mondoluce, and once they were on board, he found a way to reaffirm Perth’s title of ‘City of Light’.

His Majesty’s Theatre is Australia’s only remaining working Edwardian theatre and is listed as a State Heritage Icon. This 1905 theatre needed an imaginative lighting solution that not only met modern standards but respected its delicate heritage façade. “We reviewed the old infrastructure. We had to find a way to

get the power cables to the façade,” says Klaasen. “The heritage fabric of the building obviously meant that no structures or light fixtures could be mounted directly on to its face, resulting in serious limitations for the running of cables and conduits. Since the theatre is home to an impressive stage having hosted world class performances, power provision was no issue, but getting the power to the façade was the main challenge.” The solution arrived at by Klaasen was to run wires from the interiors to the balconies. And thus, there is zero wiring on the façade.

“Actually, the design turned out to be quite simple. It was the implementation which was complex. The scaffolding on the walkway, the safety considerations, the permits to detour people...all these other costs were double the cost of the lighting,” he recalls. What were the cost cutting measures in the lighting itself?

“The theatre is located on a rather narrow street, where the top of the building is hardly visible from the ground level. So we decided to leave the illumination of the roof, such as the stone lions, to be implemented at a later date. The cost of the scaffolding required for installation was excessive, with a relatively limited

opportunity to view the end result,” says Klaasen.

Klaasen believes that while the structure may be a heritage one, the lighting should be of today. That does not mean any gimmicky colours. “We dismissed that thought as being inappropriate for a 100 year old building. Architecture always comes first. The lighting should validate the building,” he says. Only static neutral white light (3000K) was used to bring out architectural features such as the balconies and columns. The design team decided on a two-fold approach to provide a subtle contrast in lighting levels with the brightness distributions slowly increasing towards the top of the building for the balconies and window frames, and decreasing (fading) for the columns. Along the way, the light fixtures specified were upgraded to keep up with the ever improving lighting technology, in pace with the latest upgrades available.

“The ornamental balconies and columns strongly determined the architectural signature of the building and hence dedicated and localised lighting to enhance those was conceptualised with careful positioning and coverage,” says Klaasen. Every part of the lighting design was developed in careful



consideration of minimising energy, glare and spill light (in compliance with the 'Light Up Perth' guidelines). "As much as possible, the light fitting installation is located outside of general public view, adding magic to the final light effect."

However, the dynamism of theatre had to be combined with the static feel of heritage. An awning at street level which had been added to the building in the 1960s or 70s offered a perfect opportunity for this unlikely alliance. It is inside the semi-transparent canopy of this awning that colours change (initially only blue, later RGB) to reflect the theme of the show in the theatre. "Unavoidably, the only visible lights are the column floodlights mounted on the canopy. Coloured in the same white, they blend in with the building's finishes," says Klaasen.

"The theatrical side of the venue could be expressed on the awning, since it has a lesser heritage value. This adds a touch of modernism commensurate with the dynamic street activities and today's theatre performances. The colour option also gives the opportunity to blend the building with seasonal festivities, city celebrations and corporate events, as well expressing ongoing performances in the theatre," he

says. Also in the offering is a series of Gobo projectors under the awning which will create a dynamic feature like an animated 'Walk of Fame,' by projecting images of famous artists on the walkway. Since His Majesty's Theatre is such an old building, is it deteriorating from several hours of exposure to the illumination which is on every night from dusk to dawn? "Not at all," clarifies Klaasen. "The building is more likely to suffer damage from sunlight, although the façade was renovated a few years back and treated to be UV resistant. We have used LEDs which cause minimum damage and the electrical loading is less than 1 KW for the entire façade!" Amidst all this, Klaasen qualifies the achievement. "The success of a project does not come from the design alone. The capability of the contractor to execute the design, thinking with us about problem solving, his knowledge and experience... all are important. If the contractor is not motivated and committed, there are issues on the site. We have been lucky to have a wonderful contractor; Tech Works - Electrical Solutions led by Todd Chapman," says Klaasen, generous and quick to give credit. "Using low energy consuming LED technology,

the lighting design fully complies with the sustainable guidelines of the 'Light up the City' program and has managed to validate the building's architectural features without compromising its heritage façade," says Klaasen. The result is a happy combination of technical expertise with artistry and aesthetic appeal - all within a budget. www.kldesign.co

PROJECT DETAILS

His Majesty's Theatre, Perth, Australia
 Client: Perth Theatre Trust / Heritage Perth
 Lighting Designer: Klaasen Lighting Design
 Design Team: Martin Klaasen, Stan White
 Electrical Consultant: ETC
 Heritage Architect Consultant: Phil Griffiths
 Installation Contractor: Todd Chapman, Tech Works - Electrical Solutions

LIGHTING SPECIFIED

iGuzzini: iPro BG36, 30W LED 3000K
 iGuzzini: iPro BK19, 6.4W LED 3000K
 iGuzzini: iPro BK25, 6.4W LED 3000K
 iGuzzini: iPro BK23, 6.4W LED 3000K
 iGuzzini: LED Tube, 19W LED RGB
 iGuzzini: Linealuce Mini, 4.1W LED 3000K
 iGuzzini: Linealuce Mini, BM78 6.8W LED 3000K
 Lighting Supplier: Mondoluce