Contemporary lighting, complementing the modern design of the new Cape Town Stadium constructed within the rejuvenated Green Point Urban Park, was provided by Beka. Working closely with the professional team, it translated their lighting requirements for the balustrade, compression ring and podium lighting, among many other lighting applications in and around the stadium.

Balustrade and compression ring lighting
A unique architectural design element that is evident to the observer is the smooth waveform design that was applied to the balustrade of the public seating's uppermost rows around the stadium, reflecting the natural elements of the sea, which is very close to the stadium. GMP Architects, the lead architects in the joint venture of Lighting of Cape Town Stadium, Stadium Architects, requested that the underside of the circular compression ring that encompasses the 72 vertical concrete supports be illuminated. The luminaires were to be mounted on the balustrade, thus this request called for precise control of the upward light on to the underside of the compression ring and side supports, with innovative mechanical suspension and installation methods.

The Beka LEDbeam was chosen for this task. It provides precise beam control, achieved through special lenses. The task of providing a uniform level of luminance around the underside of the compression ring demanded significant lighting engineering expertise based on varying mounting distances of 2 m and 12 m between the luminaires on the balustrade and the compression ring. Subsequent lighting demonstrations to the professional team with the luminaires mounted on the lowest, middle and highest sections of the balustrade demonstrated their suitability for these tasks. Thus, the company’s development engineers were able to provide a unique lighting solution based on the latest LED technologies. The final installation included 432 LEDbeam sections of 1.8 m length with a special LED Light Tube installed between these sections. The 50 000 hour estimated lifetime of this system ensures the provision of minimum maintenance of the installation. The final result provides a superbly uniform illumination of the top section of the balustrade and the underside of the compression ring, as specified in the lighting brief.

Podium and entrance lighting
The vast podium and entrance areas demanded visually significant structural lighting statements that were provided by the installation of 70 of the new Beka Beacon column luminaires. The surface-mounted 8 m extruded glass-fibre columns with a 150 W HCI-T optical compartment enclosed with an opal diffuser, presents visual guidance from the entrance gates to the seating and merchandising areas and promotes a sense of proportion to the human scale.

Contact Alan Hughes, Beka, Tel 021 510-8900, info@beka.co.za