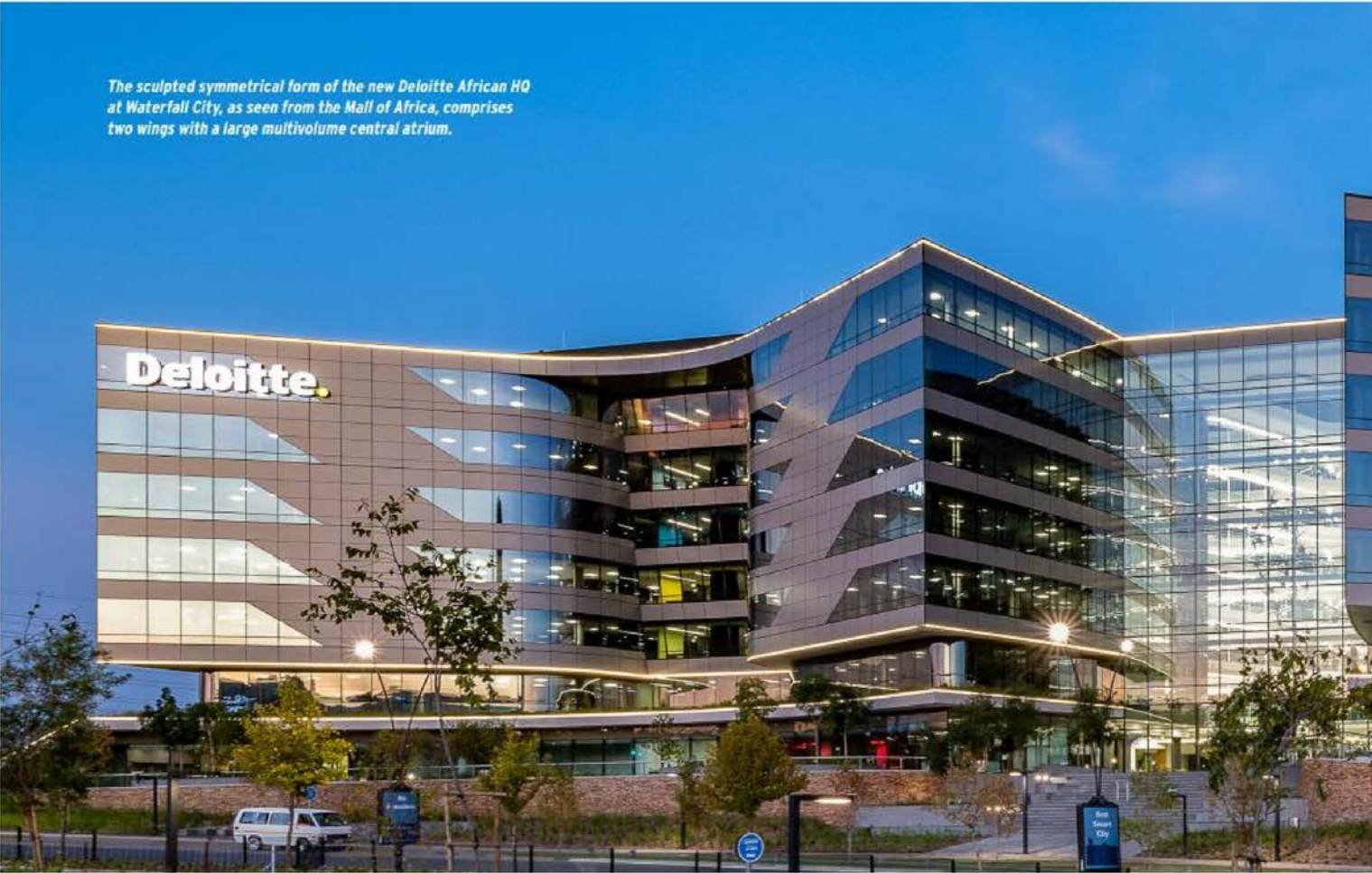




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BLUEPRINT







# Sculpted space

The new Deloitte African HQ in Waterfall, Gauteng, designed by commercial architecture practice Aevitas, consolidates Deloitte's current Woodmead and Pretoria offices in a single building.

PHOTOGRAPHY SUPPLIED

The new Deloitte African HQ in Waterfall City, close to the Allandale interchange off the N1 highway, is situated on a prominent site with major highway frontage. It comprises 42 500m<sup>2</sup> of workspace, and was designed to allow for a maximum occupancy of close to 5 000 people. The landmark new building consists of a ground floor plus six office levels and four basement parking levels with almost 2 000 parking bays. Atterbury developed the new Deloitte African HQ on behalf of a 50/50 joint venture between co-owners Atterbury and Attacq Limited (Attacq), a South-African based REIT. The architect was Aevitas Group.

A major objective of the new headquarters was to consolidate Deloitte's former Woodmead and Pretoria offices to minimise costs

and the duplication of services. Deloitte required a design that would encourage staff interaction and enhance its sense of integration as a company. As such, a large, low building with generous floorplates was required.

The long crescent-shaped site accommodated the required footprint, but its east-west orientation posed certain challenges, particularly exposure to harsh east-west light.

In addition to the shape of the site, the Waterfall City masterplan included an arterial pedestrian route that terminates on the new Deloitte African HQ's, running from the Mall of Africa to the highway, requiring the plan to maintain a visible link between the mall entrance and the highway.

Continued next page >>





*Left: Not only does the open central atrium draw natural light into the building, but it also facilitates visibility and a sense of connection between floors.*

These considerations and constraints informed Aevitas' architectural response, which was to place a large, multi-volume atrium at the heart of the building. Not only does this allow natural light to penetrate deep into the building (and allow a visual connection between the highway and the Mall of Africa), but it also facilitates a sense of connection between floors inside.

The atrium also provides the main pedestrian entrance to the building, a grand welcome space that also provides the major vertical circulation through the building.

A steep fall across the site was resolved by creating a podium of naturally ventilated basement parking levels with access at various levels, which alleviates traffic congestion. This plinth enhances the building's sense of prominence befitting the site. A VIP drop-off entrance on Magwa Crescent, on the highway side, creates alternative access to escalators leading to the atrium.

The building then forms two

Continued next page >>



  
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'wings' on either side of the atrium. To mitigate the challenges of the east-west orientation, the architects designed a series of 'fingers' orientated in a north-south direction, which forms the essential shape of the building. The form was refined by "sculpting away at the corners", as Chandler puts it, presenting a distinctive, recognisable architectural landmark.

The liquid appearance of the glass and aluminium façade articulates the sculptural forms of the building. High-spec double glazing ensures visibility and natural light from the inside, while the potentially

detrimental heat load is reduced by positioning sandwich-insulated aluminium panels in strategic areas. This material has a fluid materiality complementing that of the glazing, and also provides the distinctive patterning on the façade.

The combination of the east-west orientation of the building with the north-south 'fingers' create a series of secure outdoor spaces along the edges of the building, ideal for spill-out areas. As well as the main atrium, the ground floor includes staff restaurants, coffee shops, training facilities and a business centre. They open out onto a series

of secure break-out spaces on the western side of the building for outdoor dining. On the southwestern end, a staff pub opens onto an outdoor braai area and pizza oven, making this corner of the building - which interacts with the city and a major street corner - a lively, sociable area.

On the eastern side facing the highway, where the main training facilities are, a similar philosophy has been applied, creating spaces for the large crowds to break out during training sessions without overcrowding the atrium. The northwest corner houses a digital

experience centre with its own private spill-out area that relates to the rest of the city. An auditorium is located on the first basement level, fully integrated with the atrium above, but positioned to minimise disruption to daily activities on the ground floor of the atrium.

The varying levels on the site made it possible to control access and ensure the security of the building and its spill-out areas without walls or fences, thus allowing the building to remain fully integrated with the rest of Waterfall City and contribute to the open and friendly urban fabric of the precinct.

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*The atrium bridges on all six levels inside the building span 20m and are suspended from a two-metre-deep beam on the roof, keeping the ground floor column-free.*





The indigenous landscaping around the building is supported by efficient irrigation with 100% harvested rain/sub-soil drainage water.

The ground floor of the atrium, with its coffee shops, restaurants and reception, is largely accessible to the public. Not only does this make it unnecessary for all visitors to access the upper floors, but it also encourages employees to make use of the public facilities, meeting and interacting in these communal spaces, and catalysing chance encounters and the exchange of ideas. Private meeting rooms are located on the upper floors, too, for use when necessary.

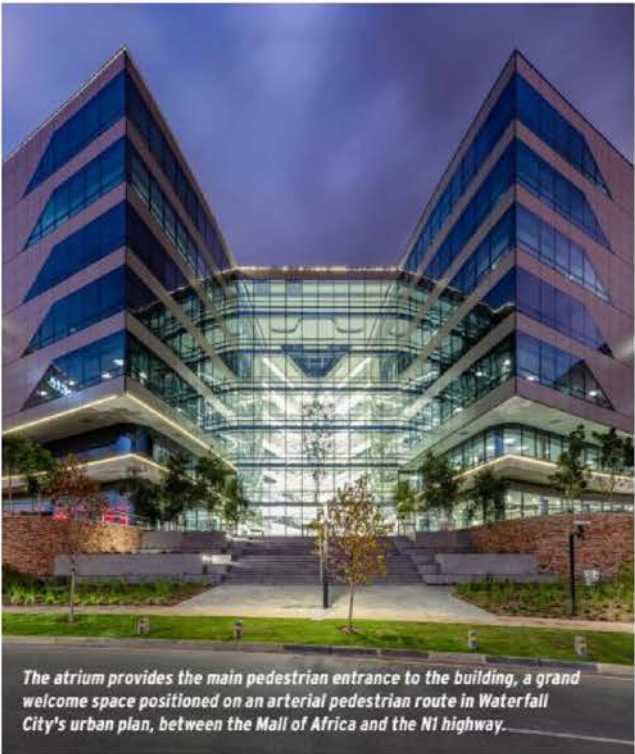
A single vertical circulation core also compels staff interaction. With each floor plate around 6 000m<sup>2</sup>, walking distances are kept short by splitting the ablation cores into two. The atrium draws light deep into the floor while a 'race-track' walkway around its perimeter creates visual connections between floors, also facilitating staff interactions. These atrium bridges inside the building span 20m and the bridges on all six levels hang from a two-metre-deep beam on the roof, keeping the ground floor column-free.

The general workspaces are mostly located on the corners at the edges of the atrium, where they are easily accessible. The deeper you move into the building, the more private the spaces become, so that the arrangement in space is layered

– from the most public to the most private in the furthest reaches.

This arrangement also helps future-proof the building, making each floor easily sub-divisible and allowing maximum flexibility if, later in its life, it has multiple tenants. It also means that departments can rearrange themselves as they please, while still allowing logical and efficient operations.

The building achieved a Silver LEED (Leadership in Energy and Environmental Design) rating on completion. At least 20% of building materials will contain post- and/or pre-consumer recycled content and 75% of construction waste has been reused/recycled. Enhanced ventilation, views and use of low-emitting materials ensure occupant well-being.



*The atrium provides the main pedestrian entrance to the building, a grand welcome space positioned on an arterial pedestrian route in Waterfall City's urban plan, between the Mall of Africa and the N1 highway.*

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*A series of 'fingers' in a north-south direction mitigate exposure to the harsh light that results from the building's east-west orientation. They have been sculpted and refined to form the essential shape of the building.*

