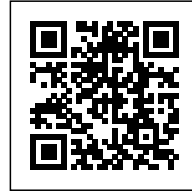




ONE AIRPORT SQUARE

Posted on January 6, 2017 by Urban UrbanNext



Categories: [africanCities](#), [Energy and sustainability](#), [High Density](#), [Mario Cucinella Architects](#), [Middle Density](#), [Project](#), [Technology and fabrication](#)

Tags: [Accra](#), [Active Building](#), [Africa](#), [africanCities](#), [Beauty](#), [Building](#), [Concrete](#), [Eco Building](#), [Ecology](#), [Efficiency measures](#), [Energetic Approach](#), [Facilities](#), [Ghana](#), [Glass](#), [Green Building Council of South Africa](#), [Infrastructure](#), [Migrations](#), [Mobility](#), [Multifunctional building](#), [On Discourse and Practices](#), [Project](#), [Sustainability](#), [Technological Approach](#), [Thermal comfort](#), [Thermodynamic practices](#), [Thermodynamics](#), [Transportation](#), [Ventilation](#), [Water harvests](#), [Water recycling](#)

urbanNext Lexicon

One Airport Square

<https://urbannext.net/one-airport-square/>

One Airport Square is a multi-functional building. It hosts commercial spaces on the ground floor and a ten-floor office block on the southwest of the lot, due to the specific form and orographic features of the site. In view of the desire for a contrast between the project area and the surrounding townscape, the rendezvous space for employees and the public received special attention. Here, the space was configured as a public square, open on the northeast side of the lot while shielded by the commercial floor, arranged as a ring (shops, restaurants, self-service catering establishments). The generously proportioned square is suitable for various events, fairs or other activities, and may be used as an exhibition space for permanently installed works of art. Such initiatives, together with the commercial activities, will bring the area to life, by day and by night.



ISSN : 2575-5374

urbanNext Lexicon

One Airport Square

<https://urbannext.net/one-airport-square/>



One Airport Square is a nine-storey building for offices, plus a ground floor designed for commercial activities, for a total of about 17,000 square meters. Aesthetic elements and architectural design are inspired by the traditional local art and by the form of the bark of the palm trees typical of that area, closely linked to environmental strategies to provide a viable solution to climate problems. The form and layouts of the office block are the outcome of ongoing design work based on the functional requirements of the principal and the formal, structural and energy requirements specified by the multi-disciplinary design group.

Thanks to their irregular form, reflecting in part the orographic features of the site, the paved surfaces link the street with the upper level of the square, where we find the main entrance to the

ISSN : 2575-5374

urbanNext Lexicon

One Airport Square

<https://urbannext.net/one-airport-square/>

offices and commercial area. A pair of escalators directly join the public space and the two floors of the underground car park. Even the underground floors are configured considering the typography to the site and present technical solutions for structural earthquake resistant.



ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



The building envelope is the key element that demonstrates the integration between form, structure and environmental strategies. The building, which is compact in form, contains within it a large hall the function of which is to provide lighting and to facilitate natural ventilation of the interiors. Variation of depth of the shafts determines the configuration of three office types: maxi, midi and mini. A defining element of the building is the movement generated by the projecting terraces, which gradually recede as they rise, floor by floor. These section variations enable increased flexibility in configuring the environments in accordance with the varying requirements of

ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>

prospective tenants.

A further defining element consists in the reinforced concrete structure, the inclined piers of which confer greater rigidity upon the building and the overhangs, while also featuring as a decorative motif for the front.

ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



One Airport Square is the first building in Ghana to have been awarded 4-Stars (Design Stage) by the

ISSN : 2575-5374

urbanNext Lexicon

One Airport Square

<https://urbannext.net/one-airport-square/>

Green Building Council of South Africa (GBCSA). The project was designed based on a detailed analysis of the site, the topographical and optimal orientation to become a point of reference and example for the new generation of office buildings in West Africa. At this latitude, the sun's path makes it particularly exposed to solar radiation fronts east and west. This, combined with medium to high temperatures present during the entire course of the year, made it necessary to adopt strategies to reduce the need to cool the building.



ISSN : 2575-5374

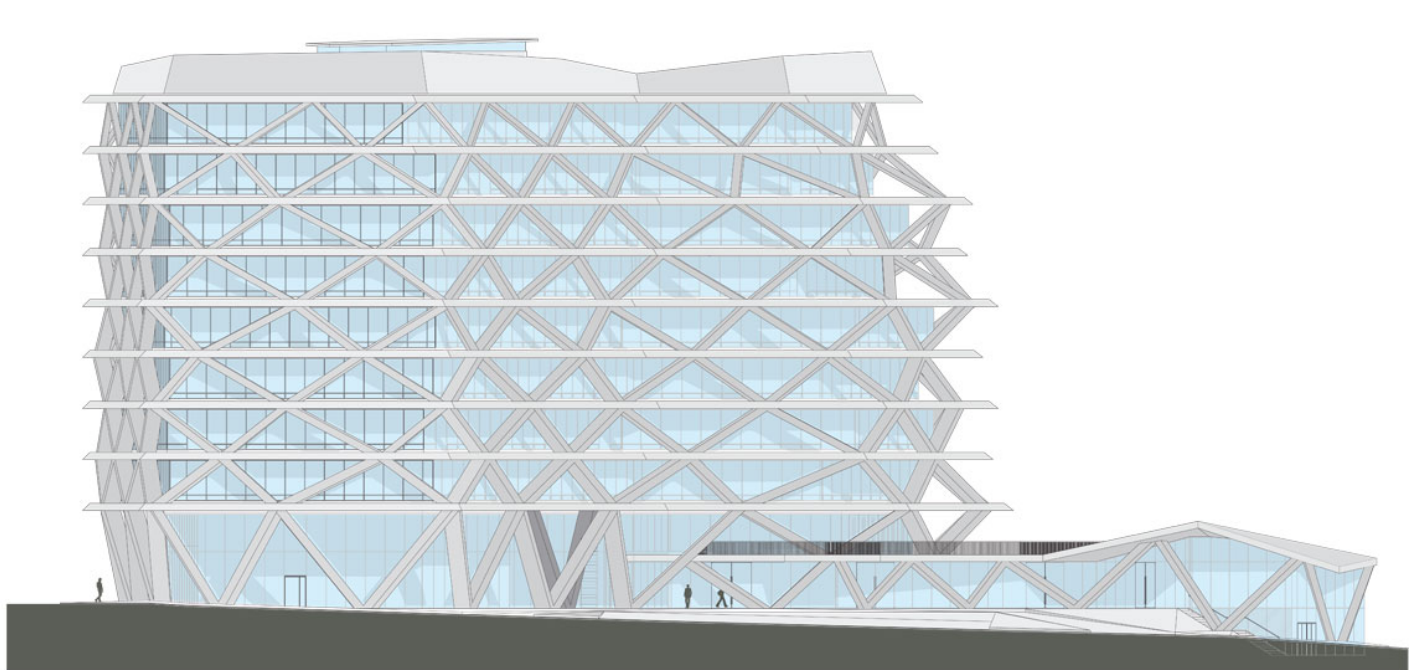
urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



ISSN : 2575-5374

Plans

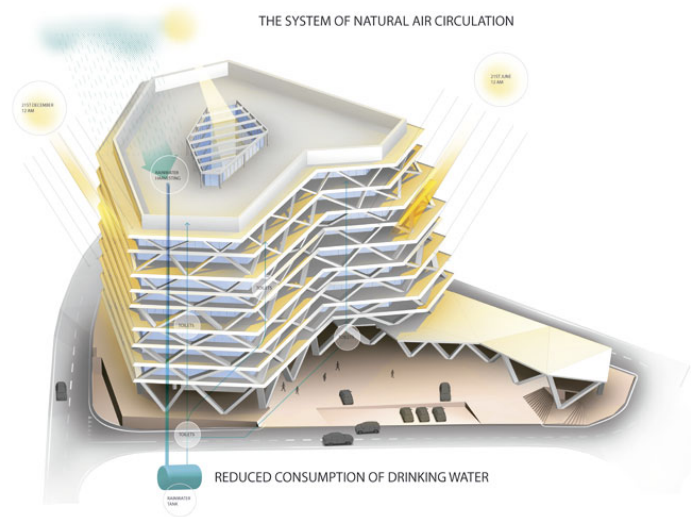
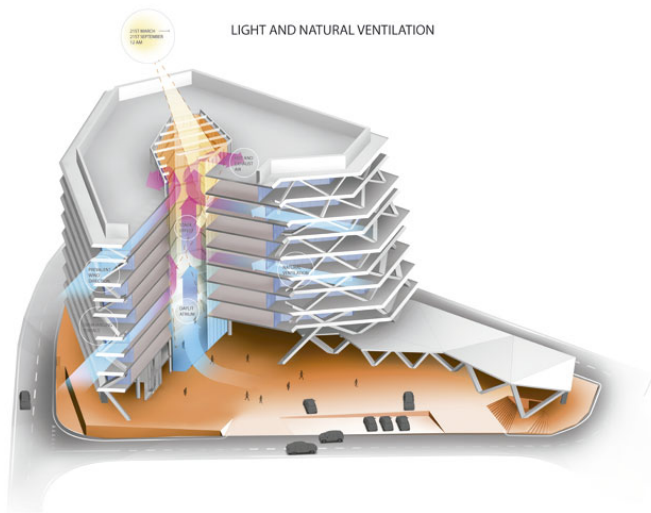


Elevation

The plant is based on a principle of distribution of the fresh air conveyed in the floating floor which reaches in a uniform manner throughout the plane. To reduce consumption of drinking water there are technologies that limit the amount of outflow, the duration and the time of delivery, while it is expected the reuse of grey water and rainwater for the toilet.

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>



Diagrams

The sum of all these elements in One Airport Square was determined by a work of integrated design that balances architectural and engineering considerations in order to reduce energy consumption of the building and optimize the use of natural light. The most advanced technologies are balanced with the local tradition, using the most efficient design. All of this brings to a new idea of beauty: the ecological beauty.

ISSN : 2575-5374

urbanNext Lexicon

One Airport Square
<https://urbannext.net/one-airport-square/>

ISSN : 2575-5374