



Engineering Structures for Life



BUILDINGS - MIXED-USE

Emporium Luanda Plaza

ABOUT

The Emporium Luanda Plaza, located on the *Avenida de Portugal*, one of the most important arteries of the Angolan capital, encompasses a hotel, housing areas, offices and commerce.

The central building consists of a five-star hotel unit comprising 27 floors, 23 of which are elevated, with capacity for 212 rooms and 6 suites, and including a series of floors for executive suites, a panoramic restaurant and a spa.

With regard to the residential buildings, the complex has typologies from T2 to T6, for a total of 70 apartments.

The structure capacity to withstand the horizontal loads is assured by multiple cores with high stiffness.

Given the geotechnical characteristics of the foundation soil, two different solutions were adopted. Part of the buildings is supported by deep foundations, namely reinforced concrete piles with 1.20 m in diameter, and a raft slab working as massive pile cap allowing the distribution of effort for them.

FACTS

Year: 2008-2009

Client: Edifer Angola

Services: Detailed design, Structural Engineering, Foundations design, Mechanical, Electrical and Plumbing design, Consulting and on-site technical support

TEAM

Paulo Pimenta

LOCATION

Luanda, Angola