Cairo International Airport Terminal Building 3

Client
Cairo Airport Company (CAC)

Scope of Work
Schematic design
Detailed design
Tender documents
Tender action
Construction supervision

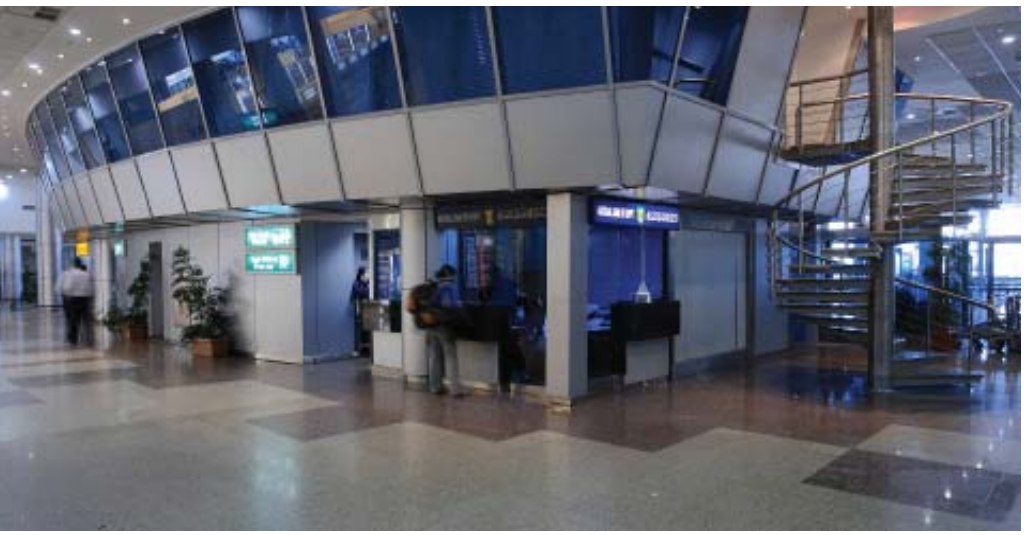
Location
Cairo, Egypt

Types of Activities
Architectural
Civil
Communications and security systems
Electrical
Landscape
Mechanical
Roads
Structural

ECG Engineering Consultants Group worked with NACO Netherlands Airport Consultants in a joint venture to complete the project. Work covered the design and construction supervision of a three-level terminal building.

The US$ 450 million Cairo International Airport Terminal Building 3 required more than 180,000 man hours of design and 430,000 man hours for construction supervision. The project components include a new terminal building and associated facilities for the Cairo International Airport, which are developed to cope with future potential expansions according to the traffic forecasts till the year 2020. The landmark terminal was developed in compliance with the latest international design solutions for airport development and executed to host an annual capacity of 12 million passengers.

The project proposes a total built-up area of 164,000 m^2,comprising latest technologies of security, safety and operational systems, with fifteen swing gate facilities



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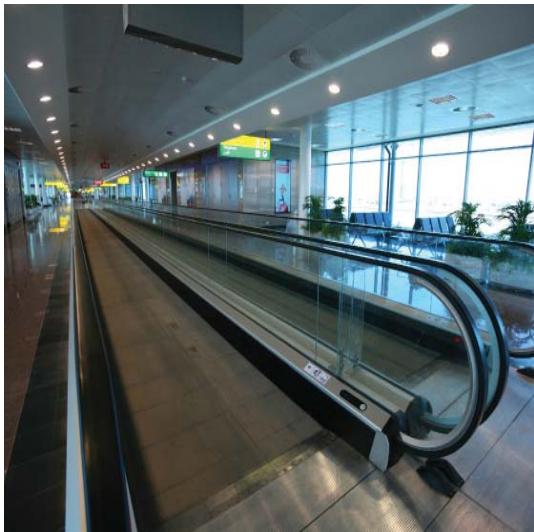

serving international and domestic flights including the A380 wide body aircrafts; airside area with taxiways serving the terminal building; landside bridges/ flyovers serving the traffic to/ from the terminal building and surface car park; automated baggage handling, screening and sorting system and ancillary buildings including apron control tower, power plant, HVAC equipment building, electrical substation, water reservoir and pumping stations. Halls are 320x150 m, for processing all arriving, departing passengers and a basement housing facilities including stores, workshops, M&E area baggage handling, etc.

Provision of a new central main building spacious enough to accommodate all passengers and facilitate arrival and departure procedures and at the same time improve the passenger facilities to a higher level of functioning comfort, convenience and spaciousness. Also provision of enough gates to cope with present and future peak hour traffic demands (aircraft and passengers).

Cladding and supporting structure were designed to withstand specific bomb blast loads. The bomb blast loading was calculated by GMW, and only limited force was considered.