

## GUARDIAN TOWER 2 Abu Dhabi (UAE)

## **NEW BUILDING**

Client: Guardian Real Estate, Portland (USA)

Contractor: Polensky + Zoellner W.L.L., Abu Dhabi

Master Developer: Al Qudra Holding, Abu Dhabi

Architectural Consultant: Erga, Abu Dhabi

Our services: Optimization of building time and building

costs for the existing concept design

Full structural design Establishing the basis Preliminary design

Developing static design concept

Schematic design Architecture

General project management

Control

Schedules and project acconting General site supervision of all disciplines

and all construction works

Brief desciption: New building of a high rise with 23 upper floors and 5 basement floors

- 2 podiums for retail, 4 office floors

- 17 floors typical (residential) and

multistorey car-parking

 walls, columns, beams, stair flights and typical floors constructed as conventional, cast in-situ reinforced concrete

- floor slabs constructed as post-tensioned

slab

- transfer slab (1,4 m) and supporting system are designed considering the structural

irregularity.

 basement floors are reinforced concrete slabs (22.5 cm) with column drops of additional 10 cm thickness which rest on reinforced concrete columns and walls

 lateral load resisting system consists of shear walls and columns in both orthogonal

directions

- lateral load is transferred to the shear walls by means of horizontal diaphragm

(floor slabs)

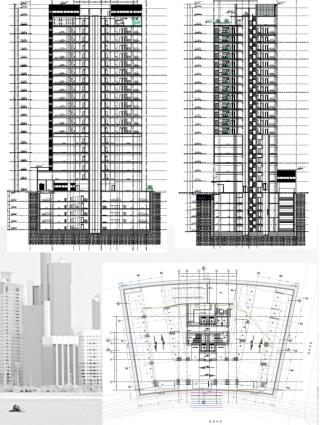
- structure rests on raft foundation, complemented by tension piles to resist the

water uplift

- raft general thickness is 1.5 m







 ${\sf Pictures / Illustrations: Professor \textbf{Pfeifer} and Partner \ PartGmbB, \ Ergantines \ Professor \textbf{Pfeifer} and Partner \ PartGmbB, \ Ergantines \ Professor \textbf{Pfeifer} and \ Partner \ PartGmbB, \ Ergantines \ Professor \textbf{Pfeifer} and \ Partner \ PartGmbB, \ Ergantines \ Professor \textbf{Pfeifer} and \ Partner \ PartGmbB, \ Ergantines \ Professor \textbf{Pfeifer} and \ Partner \ PartGmbB, \ Ergantines \ Professor \textbf{Pfeifer} and \ Partner \ PartGmbB, \ Professor \textbf{Pfeifer} and \ Partner \ PartGmbB, \ Professor \textbf{Pfeifer} and \ Partner \ Pa$