

PRINCESS TOWER – DUBAI, UNITED ARAB EMIRATES

Record-setting design in Dubai

Dubai never ceases to amaze. The prestigious Princess Tower, the tallest residential building in the world to date, is a world-class example of modern building design and construction.







After its completion in 2012, the Princess Tower was recognized by Guinness World Records and the Council on Tall Buildings and Urban Habitat (CTBUH) as the tallest residential building in the world.

“Dubai is continuously building attention-grabbing structures,” says **Daniel Abraham**, KONE Project Manager. “Standing at 414 meters, the Princess Tower is destined to be a prominent icon in the real estate sector.”

KONE has a long-standing relationship with both the developer and contractor. “After yet another landmark project together, our relationship continues to be outstanding,” says **Srinivas Pidugu**, KONE Installation Manager.

This project, started in 2008, saw a lot of firsts for KONE. New methods and procedures, and even new solutions were developed and tested to meet customer requirements.

Five-star custom solution

Tenants will be awed by the elegance of this building. The passenger elevator cabs were custom finished with veneer and stainless steel panels matching the lobby design. “The interiors really provide that luxury feeling,” says Pidugu.

Building facilities at 350 meters above ground required a custom elevator. Using both standard and tailored components, KONE installed its first high-capacity elevator to access the full height of such a tall building.

“The design, engineering and installation of the elevator were of course challenging,” recalls Abraham. “We took special measures to ensure the elevator operates during excessive building sway.”

“We also had to develop solutions on site, such as new mega high-rise roping methods, to get this 4,800 kilogram capacity elevator to work just right,” adds Pidugu.

Right from the jump

The people flow pattern at Princess Tower is similar to that of any residential building, with peak traffic in the mornings and evenings. This is an established scenario for KONE. The more challenging scenario came during construction.

Because some elevators were needed as the building was erected, KONE’s JumpLift solutions, a first for the Middle East region, were critical to the project’s vertical transportation strategy.

KONE’s temporary machine rooms, which move (jump) upwards in the hoistway as a floor is added, enabled a faster and safer construction process. The construction time elevators were the nucleus of the emerging building, operating 24 hours a day throughout the project.

“KONE executed their work with extreme professionalism, very good technical control and superb management,” affirms **Asaad Abbas**, Project Manager for Arabian Construction Company. “On many occasions, they went beyond what was required.”

With handover complete, KONE looks forward to maintaining the elevators.



SUMMARY

Challenge

- To install a high-capacity elevator that can reach the top of the building
- To complete installation of two high-rise elevators before the permanent machine rooms were ready

Solution

- Development of a mega high-rise roping method to accommodate the high-capacity elevator
- KONE JumpLift construction time elevators provided construction workers with safe and fast access to new floors once added

FAST FACTS

Princess Tower

- Completed: 2012
- Size: 170,000 sqm
- Height: 414 m
- Floors: 101 + 6 basement floors
- Architect: Eng. Adnan Saffarini Office
- Building owner: Tameer Holding Investment LLC
- Developer: Tameer Holding Investment LLC
- Contractor: Arabian Construction Company

KONE Solutions

- 11 KONE MiniSpace™ elevators
- 2 KONE MonoSpace® elevators
- 2 KONE JumpLift construction time elevators

