

ALDAR Headquarters Building

Client: Aldar Properties
Contractor: Laing O'Rourke
Location: Abu Dhabi, UAE
Products: Airodek



Case Study

ALDAR Properties' new HQ building is perhaps one of the most unique designs in the world today, and RMD Kwikform Middle East supplied its Airodek soffit support system for one of the buildings key amenities.

The impressive structure simply known as 'HQ' stands in the luxury Al Raha Beach development in Abu Dhabi. Having already picked up an award for the 'Best Futuristic Design' it will make a fitting headquarters for one of the region's most inventive developers.

RMD Kwikform Middle East's involvement in the project comes with the buildings fully serviced car park, namely providing the formwork for the slabs across four floors, each consisting of 2400 m².

For ALDAR Laing O'Rourke the challenge was to find a formwork solution that could meet the exacting requirements of this build. The fact that the perimeter of the basement slabs are fully enclosed by retaining walls, combined with the irregular geometry of the slabs themselves, meant that an easy to erect, versatile soffit support system was needed.



After considering many competitors systems, Temporary Works Coordinator Lee Richardson recommended the Airodek system to the HQ Project Management Team. "With the slabs having few internal and no external drop beams, the Airodek Prop and Panel system seemed the perfect solution to me. Once RMD Kwikform Middle East came in and demonstrated the efficiency and safety benefits of the system it also quickly became clear to the rest of the Project Management Team that Airodek was perfect for this project."

The Airodek Panel and Prop system consists of lightweight aluminium framed plywood panels and adjustable props. Each prop then has a crown at the top capable of safely locking into place four of the aluminium panels to form the soffit. Each floor was split into four pours covering approximately 600m² per pour. Due to the nature of Airodek the soffit support formwork was quickly in place, erection of the system is incredibly simple and all work is carried out at ground level, eliminating any risk of leading edge or working at height safety issues.

Once erected, the concrete could be poured; after curing, the entire soffit support formwork was dropped by striking the quick release pins on the props and moved to the next section. This system has allowed for a finished deck cycle time of 100m² per day, allowing steel fixers to come on to the deck and work safely.

This project represents a continuation of the successful relationship between RMD Kwikform Middle East and developers ALDAR Laing O'Rourke, working on several other projects throughout the Al Raha Beach development, including both the Interchange and Precinct bridges.

Andy Teesdale, Key Account Manager at RMD Kwikform Middle East comments, "When a customer you've worked with on previous projects gets to know your product and highly recommends it on new jobs you know you're doing something right. The Airodek Prop and Panel system has performed excellently on this site, giving a fantastic cycle time from slab to slab, which has had a positive impact on the builds overall schedule."

The ALDAR HQ development was completed in December 2009, taking its place on the evolving Abu Dhabi skyline.