

Hamad Medical City

Client: Qatar Government
Contractor: J&P
Location: Doha, Qatar
Products: Alshor Plus

Case Study

With a large dose of formwork and shoring from RMD Kwikform Middle East, construction specialist J and P have brought to life one of the largest hospital complexes in the world, situated in Doha, Qatar. Replacing the original Hamad Hospital the new \$118 million Hamad Medical City and Car Park is set to become a centre of excellence in many ways and a welcome edition to the flourishing city of Doha.

Funded by the Qatar Government, the construction of the new hospital complex commenced in August 2005 with the main concrete construction completed in June 2006. The hospital itself supplies free healthcare to all and has become home to a world class Oncology department.

Capable of housing over a thousand patients/beds at any one time, the vast site comprises numerous buildings, including apartment blocks for on-site nursing and staff accommodation, shops and hundreds of car parking spaces. With a footprint of more than 350,000 square metres, the main framework of the structure consists of three tower blocks departments connected by three podium levels and an underground car park, all of which were constructed using Alshor Plus falsework from RMD Kwikform Middle East.

The vast scale of the project saw 1,100 tonnes of RMD Kwikform Middle East equipment used to form 285,000 square meters of slabs 285mm to 1,000mm thick. Averaging 18,000 square metres a month for 16 months, the largest pour in any one month saw 26,000 square metres of slab formed.

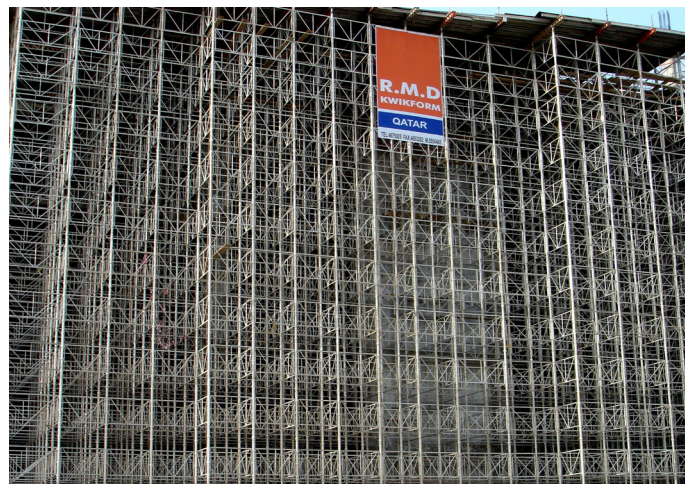
With the availability of skilled labour and time being a key issue in the project, the use of RMD Kwikform's industry leading aluminium shoring system, Alshor Plus was specified as the main equipment for the job. Using the product for the first time, J and P soon recognised the numerous possibilities made available by the versatile Alshor Plus system, figuring out additional uses for the system before the first delivery arrived on-site. In addition to the more traditional use of the product, flying tables, mobile back propping tables and heavily loaded 26m high supports were designed to assist with the construction.

Commenting on the use of Alshor Plus, J and P Project Manager, Ken Patterson said: "We recently worked with RMD Kwikform Middle East on a large project in Dubai, using their Kwikstage Propping and Decking product, which we purchased to compliment our existing stock. Having completed the Dubai project we were looking for a cost effective solution for

Hamad Medical City. A timely introduction to Alshor Plus was made by RMD Kwikform Middle East before the project formwork and falsework designs had been signed off. Comparing alternative solutions with Alshor Plus, we were able to make serious reductions in erection time and labour cost that made the hire of Alshor Plus much more cost effective than other available options."

Outlining the construction method used for the project, RMD Kwikform Sales Representative, Werner Wellmanns said; "The main building and attached car park were a post tension construction, making it a rapid construction cycle. Unlike other similar projects there was no duplication until J and P reach the typical floors of the tower block, so on 70% of the project, every pour area was different. In order to reduce the programme management time the project required a product that was versatile enough to handle all the building design changes. By using Alshor Plus, J and P were able to erect and dismantle the system in a quarter of the time it would have taken other options."

Due to the scale of the project, RMD Kwikform not only had a team of engineers on hand to ensure the safe use of equipment and erection to the correct plans, the sheer volume of equipment called for a specially located supply yard, housing more than 80 trailers of equipment, weighing some 1,100 tonnes. With changing stock and equipment constantly being delivered or removed from site, the management of the whole supply chain process was both complex and time critical.



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