



# FRAMECAD™

QATAR

## Switching to steel

Spacemaker prefabricated buildings were built with timber framing up until 2007 when the company made the switch to FRAMECAD technology.

“We were looking for something that was less labour intensive and didn’t require high skill levels”, says Paul. “After looking at many options, we felt light gauge steel fitted the bill because it seemed faster and semi skilled labour could cope with the work.

“We looked at several systems including some systems where you had to pay a royalty per lineal metre of steel used. We didn’t want that. We wanted full control. The FRAMECAD machinery, service and back-up maintenance suited us much better and we were impressed with the technology.”

Spacemaker currently has two FRAMECAD machines and has now ordered two additional machines, including the compact 300i ‘Factory in a Can’. Paul believes the 300i will improve the company’s ability to service other markets throughout the Middle East.

“Basically, we can put the machine in a container and ship it to wherever it’s required and manufacture framing on site. Once again, it’s a time issue. If we can build more efficiently, we can build faster and that’s what’s required in this region.”

## EXPANDING CAPACITY

To keep up with demand and to further streamline their production process, Spacemaker has recently moved into a new purpose-designed production facility.

“Everything that goes into a Spacemaker building, whether it’s a private villa or a workforce accommodation camp, is all produced in the one place.”

A welcome advantage of switching from timber framing to cold-formed steel framing is the management and storage of the raw materials, says Paul.

“When we were building with timber, we needed a huge amount of storage space, roughly about two football fields. In comparison, the coils of steel don’t take up anywhere near as much space. All we need is just one warehouse.”

Spacemaker provides a complete system where buildings can be designed and supplied in single units, linked or stacked together in one or two storeys to form small, medium or large-scale complexes.

Paul says that material selection is critical to building high quality developments.

“All the materials we use are high quality and meet with international and GCC specifications as well as the local regulations in Qatar which are especially stringent regarding fire safety.

“There were some high profile fires in the region involving ‘temporary’ buildings a few years back and as a consequence, regulations were tightened up.

“Nowadays, all buildings have to be built of non-combustible materials and you can’t use timber framing. Fortunately, when they made the change, it didn’t affect use because we had already made the switch to steel framing and that gave us a tremendous advantage.”



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## We want it yesterday!

Using FRAMECAD technology, Spacemaker has streamlined and refined the manufacture of pre-fabricated buildings in the Middle East to a point where seemingly impossible building deadlines are being achieved on a regular basis.

Prime examples are an entire school that was designed and completed in three months and a 13000 m2 higher learning facility built in just 54 days.

“Urgent deadlines are a fact of life here in Qatar and we’ve had to adapt to be able to cope”, explains Paul Wykes who is the specialist division’s manager for Spacemaker, which is part of one of the largest construction groups in the region, Gulf Construction.

“We do a lot of work for the state of Qatar and we have learned from long experience that you have to be able work smarter, faster and more efficiently to meet their demands”, says Paul.

### PANIC JOBS

Paul makes an example of a junior school for 300 students that fell behind schedule in the planning stages and ultimately became a “panic job”.

“Basically, they started out pursuing a number of construction options, and the tender process dragged on and on until things became really critical.

“It came to the beginning of the summer holidays and they still hadn’t built the school and there was nowhere for the children, so we were briefed to do the job and it had to be done in three months.

“It was a high-pressure situation but we did it and met the deadline. Using traditional building methods, it would have taken twelve months or more.”

Another project that was completed in record time was the Qatar Leadership Centre of Excellence, a higher education and research facility completed in 2008.

“That was a massive project and we did it in 54 days. When you see the scale of the development, it’s an impressive achievement and everybody I talk to about the project can’t believe it was done in such a short time.”

