

Building a High Rise at High Speed

PROJECT	Mayflower Halls
CLIENT	University of Southampton
CONTRACTOR	Osborne
ARCHITECT	Architecture PLB
VALUE	£42.6m
LOCATION	Southampton
Storeys	19

"This impressive new building is the largest halls complex to be built in the city of Southampton in over a decade."

Don Nutbeam, Vice-Chancellor

Three residential tower blocks up to 19 storeys high

The client required a new 1,100 bed student accommodation comprising of three residential tower blocks ranging from 9-19 storeys. The objective was to create a superior student living environment whilst keeping energy bills low, with a target BREEAM rating of 'Excellent'.

A short build time was essential so that the accommodation could be brought into service as soon as possible. The flexibility to convert the building to another use at the end of the 38 year lease was also a consideration.

Speed, safety and simplicity through i-SIP

The architect chose a 'fabric first' approach to maximise the energy efficiency of the building by utilising the high performance envelope delivered by the i-SIP System. Innovaré Systems was commissioned to engineer and install a solution that would meet the demanding thermal performance requirements whilst enabling the high rise accommodation to be built at speed. The decision to use Structural Insulated Panels followed a detailed analysis comparing the i-SIP System to light steel frame alternatives. The study concluded that i-SIP offered significant benefits in terms of thermal

performance, build simplicity and the ability to rapidly create a watertight structure ready for fit-out. The tightly controlled build programme allowed the Innovaré installation team to make the structure watertight floor-by-floor, directly following the frame completion. Panels were delivered from the Innovaré offsite manufacturing facility on a just in time basis.

Innovaré's collaboration with other trades meant the i-SIP infill installation could follow on without needing to use the site crane, or costly and time-consuming scaffolding hire. This maximised the programme gains, allowing the windows and cladding to be completed in quick succession and providing the fastest possible water-tight build.

Bespoke solution to achieve BREEAM excellence

At the time of the topping out ceremony in Spring 2014 the project was the UK's tallest building to use i-SIP infill. The programme was delivered on time and to budget, significantly sooner than would have been possible with other methods.

All building performance targets were met and the new accommodation blocks form an iconic landmark on the university campus. The scheme has a 38 year lease, with the i-SIP System designed to be easily adaptable for another building purpose in the future.

"These New halls of residence are a fantastic addition to Southampton's landscape."

MP John Denham

