

# Low carbon train station, with rapid delivery



PROJECT	Whitton Railway Station
CLIENT	South West Trains
CONTRACTOR	Osborne
ARCHITECT	Hyder Consulting
VALUE	£3m
LOCATION	Greater London
GIFA	217m <sup>2</sup>

*"Whitton goes some way to show the potential i-SIP panel buildings can provide."*

Bruce Williams, Site Manager, Osborne

## New station in 6 months

South-West Trains needed an upgraded rail station to be ready for the Rugby World Cup. The construction work had to be to a robust design, completed rapidly and without risks to the safety or convenience of staff and passengers. Access to the site in a busy town centre location was constrained so a pre-assembled structure was not feasible.

The project was split into two phases: a larger booking hall with a new retail unit, ticket office and accessible toilet; followed by the main station redevelopment with improved access. Sustainability and fire safety were important considerations as well as a very tight timetable.

## Robust design, meticulous planning and rapid installation

Working closely with the developer, Innovaré designed a solution using the offsite manufactured i-SIP System of structural insulated panels and roof cassettes. Delivered as kits of parts, it was easy to quickly establish a watertight structure ready for fit-out and service connection. The off-site construction method simplified the project and quickly provided a highly energy-efficient building for the public to use.

The i-SIP System is manufactured by Innovaré at

our production facility in Coventry under ISO 9001 QMS conditions. On-site assembly was quick and simple, smaller panels were designed to enable the site team to manual handle them into place using minimal equipment. The i-SIP System for this project used an external 12mm MgO board to give an attractive finish with a 1 hour plus fire rating.

Innovaré engineers worked closely with the Osborne team using BIM level 2 processes to coordinate the design elements and enable the first phase to be completed within days compared with the several weeks, that would be required with traditional techniques. The thermal performance of i-SIP combined with the sustainable materials used in manufacture mean they offer the lowest energy consumption of any building material across its lifecycle to reduce whole-life costs.

## Delivered on programme (3 weeks) and on budget with no disruption

The new booking hall structure was created within one week, compared to the 8 weeks required for traditional techniques and the station superstructure was completed on budget within a 3 week programme to reduce impact on commuters using the station.

Using the i-SIP System meant that all work could be carried out during daytime hours to avoid unnecessary night time disturbance for local residents.

Innovaré worked closely with South West Trains, Network Rail and Osborne to deliver a brand new station, while helping them maintain customer access with no disruption to rail services. The rail sector supports the fast delivery and environmental benefits of i-SIP in reducing CO<sub>2</sub> in the built environment.

*"Our Innovaré colleagues provided great support to get the project to this stage. Having the same focus allowed our teams to form together quickly and perform. One Team Wessex is looking for further opportunities to deliver modular station replacements, Whitton goes some way to show the potential SIP panel buildings can provide."*

Bruce Williams, Site Manager, Osborne

