

Boosting site efficiency at 3 Merchant Square with Field View



Mace deployed the Viewpoint Construction Software's Field View, formally Priority 1, mobile reporting at European Land's £100m Merchant Square development in west London, creating a single standardised system, which accelerated snagging and other site processes and improved reporting

and visibility of site progress issues. As a pilot implementation, the project has also developed prototype mobile forms and procedures that can be rolled-out on other Mace projects.

Background

Mace was appointed by client European Land as design and build contractor for 3 Merchant Square, a £100m mainly residential development overlooking London's Paddington basin. Construction on site began in June 2012 and was scheduled to last 24 months. The scheme features two towers, one of 19 and one of 21 storeys and each with three basement levels. In total, the development includes 159 private premium apartments and 42 affordable apartments, with a high degree of repetition in structure, cladding and fit-out. The project also incorporated a five-star hotel style main entrance, ground-floor retail space, a nursery, business centre and screening room, plus landscaping, a water feature and a new footbridge.

Mace has routinely deployed information and communications technology to support design, construction and handover of its projects. The senior project manager wanted his team to use mobile 'snagging' tools to accelerate location-specific capture and reporting of quality issues, having used PDA-based devices from Field View on another Mace project. Moreover, he was keen to use the devices to do more than standard defects management, knowing that residential projects featured a lot of repetitive processes involving the main contractor and work package subcontractors.

Implementation of tablet solution

In January 2013, Viewpoint Construction Software, the provider of Field View, launched a new version of the software that could be accessed via standard tablet devices running the Android operating system, just in time for it to be deployed on the Merchant Square project. As a result, the Mace project team could then work with the software development team to ensure the applications replicated Mace's work processes, and as they were trained in using the system, they could, in turn, train other users (a "train the trainer" approach that helped ensure the training was tailored to the project and to the supply chain firms involved).

MCS initially provided full-time on-site support, but once the early configuration and training issues were resolved, a rapid-response remote support system took over.

During the first year, around 50 tablets were supplied to the project, being used by all Mace managers and trade contractors; the client's team, which included a resident clerk of works, also had five tablets. Across the team, the devices enforced a single standard system for managing all site-based approval and handover processes, simplifying reporting and improving visibility of the latest status of every procedure.

Process support at 3 Merchant Square

During the first 12 months of operation, the Field View tablets were deployed to support procedures including:

- approvals relating to the sub- and superstructure
- off-site inspection of bathroom pods in Germany
- work package handover processes
- handovers between trade contractors
- site diaries
- sample benchmark approvals

Where issues were identified, photographs could be taken and annotated with additional information explaining the issue, with every submission securely time- and date-stamped so that there was a permanent audit trail record.

Involving the Mace team also helped ensure the data capture processes and outputs matched the Mace way of doing things, creating a library of forms that can be developed further by Mace for future projects.

Benefits achieved at 3 Merchant Square

- Faster handover processes – for example, snagging processes that used to take around two hours per apartment could be completed and signed off in around 30 minutes; working with one centralised mobile system also cut out the time lags previously associated with email-based issues and responses managed via desktops
- Less paperwork and so less printing
- Faster reporting – electronic reports could be collated automatically, streamlining communications
- More consistent, standardised reporting in line with Mace's usual systems
- Better audit trails – once digitised, 'paperwork' could not be lost; Field View also avoided reliance on emails shared across different company email systems.