



Saving You Time and Money On-Site

In-Wall QC Workflow with Use of 360 Photo Documentation

To get a close-up look at how one group integrated StructionSite documentation into their workflow, we spoke to Monica Chhatwani, LEED AP BD +C for DPR Construction®. Stationed on a major construction project in South San Francisco, she was instrumental in implementing a more efficient QC workflow to capture in-wall conditions before, during, and after wall closures. Chhatwani had a number of key takeaways for those looking to implement a similar system, so we thought we would share these with our readers as a case in point.



Monica Chhatwani
LEED AP BD+C
DPR Construction

Methodologies for optimizing the schedule

The project was a large life sciences research building project which was using the Takt methodology for scheduling. QC was assigned its own Takt, which is a 5-day activity per Takt 'area', with each area covering roughly 6000 sq. ft. To implement this documentation standard, the team made sure a roadmap was in place to know how/when/who and the use for each instance of documenting a Takt area. The workflow can be summarized as:

Workflow	
In-Wall Image Capture	QC Foreman takes pictures of all the rooms in the QC Takt Area that week using 360 Camera
Reporting on Non-Conformance	On the In-wall QC Checklist – BIM 360 Field Checklists were being used on this project to report and track issues by floor and by room
Issue Resolution	Prior to sheetrock install on framed walls
Image Capture Post Drywall	Completion – Tape & Finish Takt – photos of all the spaces taken as 360 progress photos





“...user-friendly and so intuitive...”

Implementing StructionSite

Chhatwani found the StructionSite platform user-friendly and so intuitive that almost no training was required. Two people captured the photos and they had clarified their process beforehand. Each week, they would have at least one Takt area to document. Anytime a problem arose, they could plan to add that area to their list that week, though most weeks they did not have more than two areas to document. Another great part of this process, according to Chhatwani, was that the buy-in was automatic: the superintendent had no problem using the system. In fact, if she has anything she regrets, it is that she wishes she had made more of the team aware of the photos available for them to use.

Captured 360 Site Photos Using StructionSite



Success with a process-based documentation plan

StructionSite platform had many key benefits in this implementation

Pinpointed Location-Based Photo Documentation	Helped in going back and looking at in-wall or overhead items for coordination
Well-Defined Process	Enabled a robust system of what and when to photograph
Easy Integration	Into the project’s QC workflow
Issue Resolution Efficiency	StructionSite made meetings more efficient. For example: AV subcontractors could check for rough-in completed by electrical trade partners anywhere from 3-5 months prior in the walls.
Issue Resolution Efficiency	On several occasions, the Commissioning agent and MEP coordinators referred to the 360 photos to review the overhead MEPF systems to identify and locate items prior to ceiling close up efficient.
Owner Turnover	Produce a professional, vendor-neutral, PDF + JPEG deliverable that does not require any software to access and view.



“...2,300 360° Photos...3,000 sq ft..”

Summary

In the near future, Chhatwani is looking forward to the StructionSite integration with next generation BIM360 that is coming soon, reducing the work of transferring QC items to the checklist in a second system. After her experience in using the platform on this large project, Chhatwani is clear that the robust documentation with tagged photo timelines really improved communication between all trades on the site as well as removing the waste of needless field visits or information requests to see what was behind the walls. This project ended up gathering upwards of 2,300 360° photos for this 300,000 sq ft, 9-story building. With the workflow for using StructionSite so simple to implement, DPR plans to continue to deploy the tool across many more projects and regions.

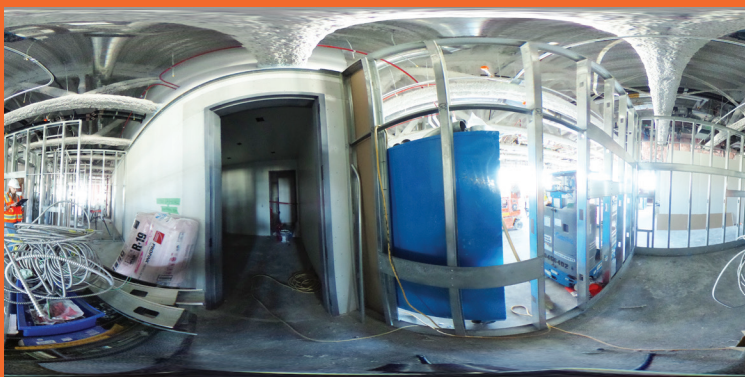
Captured 360 Site Photos Using StructionSite



In-Wall (Pre-Rock)



The QC Foreman Jumped Right In!



Electrical Capture Pre-Close Up



360° StructionSite Walkthrough Software in Use