acerta



- Location: Madrid, Spain.
- Industry: Office building- Work phase: Above Ground - Structure
- Data capture method: iPad Pro (Sitescape)- Size: 232737.27 ft²
- Project value: \$16.5M

The problem

Correct leveling of elements in the construction process requires many hours of work by highly qualified personnel, representing a high cost of multiple revisions, before and after finding any deviation. After the construction of this element, the client noticed an area where the water did not flow properly, knowing that this would represent a danger to the safety, it was necessary to review if there were deformations of the floors without structural joints.

Operation process & scope

The inspection was executed by the site-manager with point clouds taken by the client with a LIDAR camera, improving in the use of data capturing techniques through a more affordable hardware compatible with C2B Platform. Only one tool was required to:

- 1. Implement the use of different data capture techniques to prove C2B Platform versatility
- 2. Upload models (BIM & POINT CLOUD) to execute inspection from an iPad
- **3.** After having results, zoom in the deviated element and activate the heat map on the point cloud to highlight the level difference
- **4.** Making decision to solve the leveling and share the inspection to the involved stakeholders in record time



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Conclusion

The client was in the early stages of implementing new inspection techniques, therefore, a tradicional topography inspection was requested as well to compare the accuracy of the results obtained by C2B Platform. Since the result provided by the surveyor took so long, the response time was delayed and the error could not be mitigated until a week later (Although C2B got the results 4 days earlier). Negatively impacting payment terms.



Results

Upon quick inspection through the c2b platform it was clear that there was a discrepancy in several areas. But the most critical deviation was observed in the flatness of the floor:

- An area of **30ft² is uneven** and causes accumulation of water
- The deviated area has only 54% inside planned tolerance
- The responsible obtained **results 90% faster** to make decisions



Key findings

Same inspection made with traditional methods took 9 times longer than with CHECKTOBUILD. The app (used by the client) allows a wide range of set up modifications to expand the detail that the point cloud must attend to and is effective for construction inspections.

Want to know more? We're a message away! Contact us at info@checktobuild.com

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