



AUTODESK **CONSTRUCTION CLOUD™**



How VAICO's Outstanding Field Collaboration and Communication Helped a Community Recover from an Earthquake

Everyone knows that superior field collaboration and communication saves money, decreases project timelines, and improves project outcomes. In at least one notable case, it was also a critical component of helping an entire community recover from a devastating earthquake.

In 2011, Christchurch, the second-largest city in New Zealand, experienced a devastating 6.3 magnitude earthquake after being devastated by a 7.1 earthquake the previous year. By 2015, 1,240 buildings were demolished within four avenues surrounding the Central Business District (CBD).

VAICO, a New Zealand-based seismic bracing design and engineering company was called in to help streamline the process of seismic compliance in the rebuild of Christchurch and elsewhere in New Zealand. Their outstanding field productivity, matched with construction quality management and field collaboration and communication, created a 92% decrease in reports turnaround time, saved 250 hours per person, and eliminated 100% of paper costs as they helped the community recover from its losses.



Customer Snapshot

FIRM SIZE: <500
FIRM TYPE: SPECIALTY CONTRACTOR
REVENUE: 1 MILLION
FOCUS AREA: COMMERCIAL
HQ: AUCKLAND, NEW ZEALAND

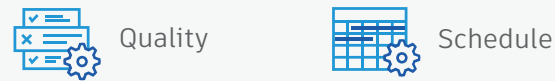
PHASE:



PRODUCTS:



VALUE DRIVERS:



Cloud-based Construction Management Compensates for Missing As-built Drawings

One of the field challenges in the Christchurch environment was that the blueprints for these older partially collapsed and demolished buildings were outdated. Some of them had no plans available at all. In those cases where plans and drawings were available, they were almost all paper.

The lack of as-built drawings made field collaboration and communication difficult and accountability for inspection and construction quality management almost impossible.

VAICO had no construction quality management software in place at the time, and they needed a smarter way to survey field conditions and relay the correct information back to the design team stationed in California. Their US partners, ISAT Seismic Bracing in California, recommended PlanGrid within Autodesk Construction Cloud™. VAICO piloted it on their first major retrofit project and immediately decided to implement it on all future projects.

“We weren’t very tech-savvy at the time,” says Caleb How, a Project Manager with VAICO. “But PlanGrid is extremely easy to learn, and we picked it up very quickly.”

Using PlanGrid to improve field collaboration and communication made a big difference. With cloud-





based construction management, it was possible for the team to survey large projects with numerous building services and systems, and share that information internationally in real-time.

Improving Field Productivity and Construction Quality Management

Today, VAICO's workflows have completely changed. Project managers upload drawings through PlanGrid and push them to superintendents and forepersons onsite. The installers understand what the engineers are trying to accomplish, and they're able to instantly access specs on new structures and link them to plans.

Their compliance inspection process has taken on new life, too. VAICO uses PlanGrid's punch tool to inspect each seismic brace location as it's installed, mark the inspection progress, and add photos directly to each item. Everyone onsite is held accountable for their work.

VAICO often works alongside structural engineers, service engineers and contractors, design consultants, and general contractors. And with PlanGrid as an inspection and reporting tool has proved invaluable to everyone.

Saving Time with Cloud-based Construction Management

Today, over 150 projects VAICO has been involved in, large and small, have used PlanGrid, and the team has seen immense time savings from keeping paperless as-built drawings on hand.

An inspection and progress report that historically would take 50-60 minutes to prepare and send now takes just moments with PlanGrid. A current VAICO job alone has had 250+ inspection and progress reports issued by a single person within 12 months—saving VAICO and the general contractor a massive 210–250 hours. Because of the up-to-date live information, field workers will often refer to PlanGrid before a report is issued, once again highlighting the superior field communication and collaboration it makes possible.

Additionally, VAICO has cut waiting times for international communication on design updates. Now that they can upload new versions of drawings and attachments, they can avoid the confusion and hassle of older paper systems.

When VAICO starts a project with non-PlanGrid users, they usually engage them in a quick conversation and a free download. Soon, everyone on the project is connected to all of VAICO's design details through PlanGrid. This forms a clear, visible relationship for all teams involved.

VAICO now helps more general contractors using PlanGrid to increase field collaboration and communication. Ultimately, they want everyone on all of their projects working from the same platform.

"It works well and truly above what anyone has ever seen before," says How. "And ultimately it provides us with a level of compliance and inspection records that haven't been seen before in New Zealand."