PlanGrid

How VAICO vastly improved the inspection process

Seismic Inspection and Compliance | VAICO | Case Study

In 2011, Christchurch, the second largest city in New Zealand, experienced a devastating 6.3 magnitude earthquake. Already weakened by the magnitude 7.1 earthquake in September 2010 and its aftershocks, a significant percentage of the buildings in the city center were at risk for demolition due to the damage.

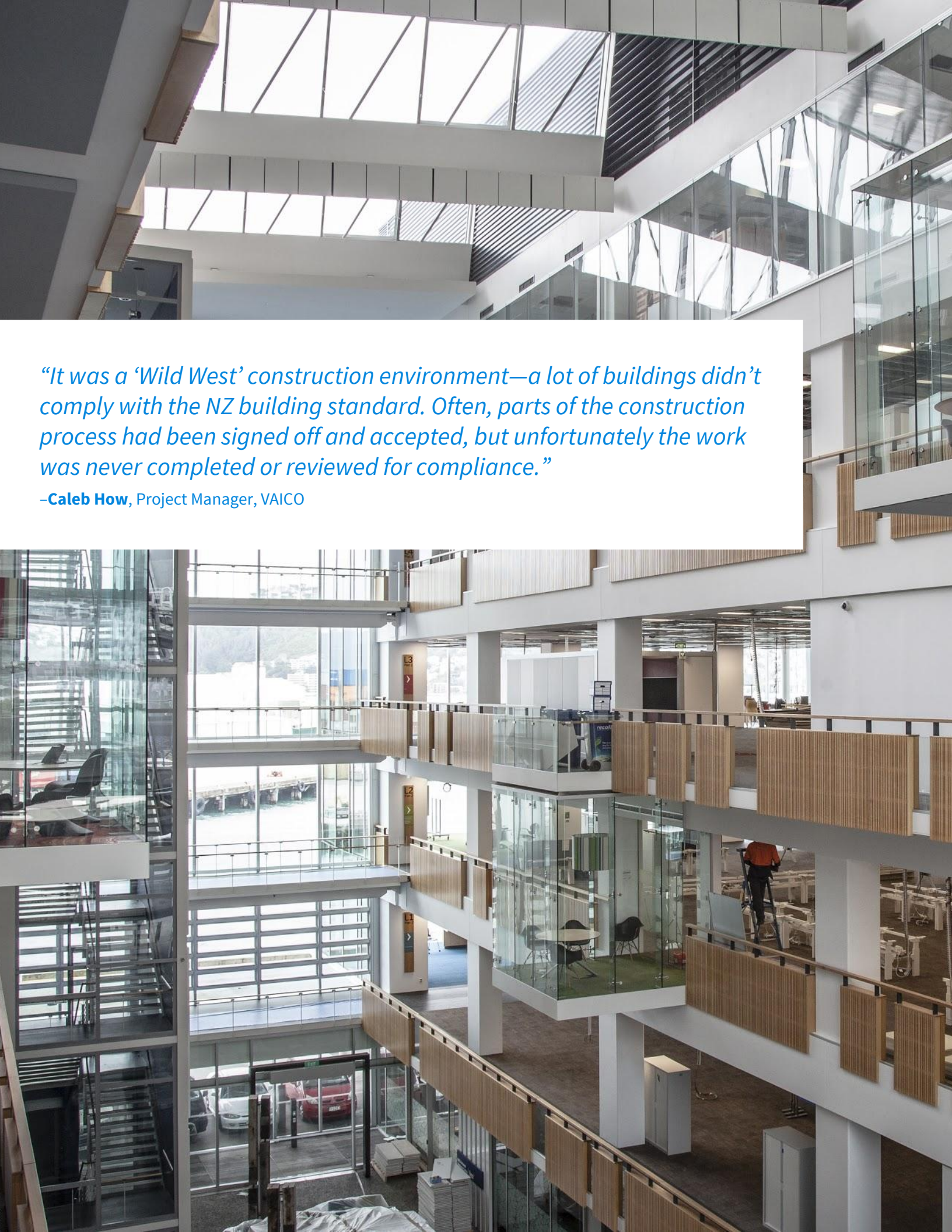
These structures were built prior to modern seismic retrofitting requirements, making them extremely vulnerable. Of the 3,000 buildings inspected by 3rd March 2011, 45% had restricted or no access stickers issued because of safety problems. As of February 2015, there had been 1,240 demolitions within the four avenues surrounding the CBD.

VAICO, a New Zealand-based seismic bracing design and engineering company, have played a major role in streamlining the process of seismic compliance for non-structural building services in the rebuild of Christchurch and further afield in New Zealand.

Problem

Blueprints for these buildings were often outdated. Some of the older buildings did not have any traceable plans. When available, paper prints were the standard, which made accountability very difficult for inspection and relaying critical information.

PlanGrid soon proved to be just what VAICO needed. In an environment where the final construction drawings often don't reflect true as-built or field conditions, VAICO needed a smarter way to survey the field conditions and relay the correct information back to their design team (predominantly based in California). The PlanGrid app made a sizeable difference when surveying large projects with numerous building services and systems by providing a cloud-based platform where information could be shared internationally in real-time.



“It was a ‘Wild West’ construction environment—a lot of buildings didn’t comply with the NZ building standard. Often, parts of the construction process had been signed off and accepted, but unfortunately the work was never completed or reviewed for compliance.”

–**Caleb How**, Project Manager, VAICO

Solution

VAICO discovered the benefits of PlanGrid through their US partners, ISAT Seismic Bracing in California. The software received overwhelming praise from their US colleagues, so VAICO decided to pilot PlanGrid on their first major retrofit project. They had no construction software systems in place at the time. As a result of such a successful implementation, PlanGrid is now the only software they use for construction designs and drawings.

Today, VAICO's workflows have completely changed. Project managers upload drawings through PlanGrid and push them to superintendents and foremen 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 the 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 progress of the inspection, and add photos directly to each item. Everyone onsite is held accountable for their work.

VAICO are often working alongside structural engineers, services engineers and contractors, design consultants and general contractors. Having PlanGrid as an inspection and reporting tool has proved invaluable to everyone.

Implementation and usage

When VAICO initially heard about PlanGrid, they decided to test the software immediately. Their PM set up a few accounts, and the team attended a webinar for training.

> *"We weren't very tech savvy at the time, but PlanGrid's extremely easy to learn, and we picked it up very quickly."*
>
> –**Caleb How**, Project Manager, VAICO

Then it was off to the races. The office discovered how easy it was to communicate with the field team and their US suppliers simultaneously, using just one platform. VAICO turned PlanGrid into a company standard, and they now use it on every project—their contract partners often buy licenses as well. When VAICO starts a project with non-PlanGrid-users, it just takes a quick conversation and a free download before they're connected to all of VAICO's design details through PlanGrid. This forms a clear, visible relationship for all teams involved.

Results

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 would often 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 superior communications and efficiencies.

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

In the future, VAICO wants to get more general contractors involved with PlanGrid to increase efficiency and collaboration. Ultimately, they want everyone on all of their projects working from the same platform. As one project manager, Caleb How, put it: “It works well and truly above what anyone has ever seen before, and ultimately it provides us a level of compliance and inspection records that hasn’t been seen before in New Zealand.”

92% decrease in time to create and send inspection reports

The process used to take an hour, and is now done in under five minutes with PlanGrid.

250 hours per year saved by a single user

A single job averages over 250 inspection and progress reports.

100% elimination of paper costs

VAICO has documented and collaborated on 150+ projects within PlanGrid.

PlanGrid

“PlanGrid has played a key role in helping VAICO lift the standard of compliance in New Zealand.”

– Caleb How, Project Manager, VAICO