



 **AUTODESK** Construction Cloud

PRO-CRAFT
CONSTRUCTION

How Pro-Craft Improves Operational Efficiencies Through Connected Data

Founded in 2003, Pro-Craft Construction (Pro-Craft) is a medium-sized construction company that specializes in plumbing, underground utilities, and mechanical solutions across the commercial, educational, hospitality, and institutional markets.

Customer Snapshot

FIRM SIZE: <500
FIRM TYPE: SPECIALTY CONTRACTOR
REVENUE: \$50 MILLION
FOCUS AREA: MECHANICAL, PLUMBING
HQ: REDLANDS, CA, US

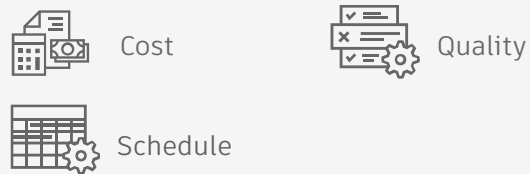
PHASE:



CAPABILITIES:

- Project Management
- Field Collaboration

OUTCOME:



Inefficient Methods of Capturing and Distributing Information to the Field

Pro-Craft was in the market for a digital construction management solution to connect data from design to handover. The company previously used Dropbox to upload and distribute models, but the process was cumbersome, slow, and led to data mismanagement.

“You’re only as good as your data,” says Chris McFayden, Operations Manager at Pro-Craft Construction. “Without the most up-to-date project information, you run the risk of working off an outdated model which causes rework, schedule delays, and cost overruns.”

With information flow not happening in real-time, Foremen were building off the wrong set of construction documents and didn’t have timely answers to RFIs. Pro-Craft was looking for an easy-to-use solution to foster greater collaboration and communication between the office and the field to build effectively and efficiently across its projects.

After a quick demo of PlanGrid within Autodesk Construction Cloud™, Pro-Craft abandoned Dropbox and never looked back. And that was three years ago.

Adopting A Unified Project Management Solution to Connect Data

On the James A. Musick project, a large-scale correctional facility in Irvine, California, Pro-Craft is contracted to deliver modernized plumbing and piping



systems for two new housing structures on the 94-acre property. To accurately design and fabricate the facility's plumbing and underground utility system, Pro-Craft combined laser scanning with building information modeling (BIM), to build virtually before building physically.

"This method lets us capture existing conditions to get a comprehensive understanding of the underground infrastructure to guarantee we're in the right spot before designing our plumbing systems," says Randy Butler, Design Manager at Pro-Craft Construction. "Once the details are confirmed, we align internally to create a shop drawing matrix to determine what gets fabricated, who's involved, and what the sequencing looks like so we can meet the project's tight schedule."

To manage some of the risk of designing and constructing for correctional facilities, Pro-Craft and their trade contractors are fabricating the plumbing offsite and then delivering the units for onsite assembly and installation. With BIM, Pro-Craft can ensure the successful development of structural elements by designing and coordinating in real-time with other trades and then seamlessly uploading that information into PlanGrid.

"We try to fabricate as much as we can to save time in the field. This way, we can control the environment and deliver the highest quality of manufacturing and craftsmanship to our clients," says Butler. "Once the models are approved, we upload the spool sheets into PlanGrid for the field staff to access. They're able to quickly mark up, create a task, and identify an issue before we begin fabrication. This process allows us to adjust in real-time to ensure accuracy in what's delivered onsite."

Connecting the Office to the Field with Digital Collaboration

With PlanGrid, Pro-Craft can quickly upload new drawings to the field in real-time to ensure that their field teams are working off the most up-to-date model. This eliminates unnecessary rework and helps keep projects on time and budget. With information accessible anywhere in the field, Pro-Craft's teams spend less time searching for information and work with more confidence.

"Having a field-first solution allows our teams to quickly and efficiently document project information and tag photos and issues documented onsite. The ability to get information into the team's hands faster has opened up their eyes to the benefits of implementing a connected solution," says Dean Ambrozich, Senior Project Engineer at Pro-Craft Construction.

Within PlanGrid, construction drawings, reports, and checklists can be uploaded and then accessed and annotated on any mobile device by users, with all changes synchronized in real-time back to the cloud, creating one source of truth. This enables real-time collaboration and eliminates the hassles and risks associated with downloading and uploading documents via Dropbox.

Turning over projects is now infinitely easier, too.

"I've been praised for how clean, thorough, and concise our handover packages are with PlanGrid. All of our RFIs, change orders, punch lists, and tasks are effortlessly managed and documented within the application, which streamlines the closeout process and saves our team valuable time," says Ambrozich.



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-Dean Ambrozich
Senior Project Engineer,
Pro-Craft Construction