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Introduction

For the first time, the construction world is embracing a large-scale adoption of technology in the field. This will impact everyone in the industry–from individual Drywall Subcontractors to the large General Contractors (GCs) they so often collaborate with. While those in the field have been hesitant to adopt new technology due to the cumbersome nature of early electronic devices (amidst many other challenges), easy access to modern mobile devices that are lightweight and simple to use have changed that perspective entirely.

The need for Drywall Subcontractors to adopt modern digital technologies comes from many factors, including industry demand for alternatives to drive business, a desire to increase efficiency and a need to be nimble in the modern business environment. Additionally, subcontractors face a multitude of changes in the field on a daily basis. This can include enduser driven changes to specifications, or discovering unexpected site conditions when framing or installing sheetrock. Technology can help you quickly and easily respond to those changes.

Fortunately, a new category of software exists that is proven to increase building efficiency at scale. It's called Construction Productivity Software. It streamlines document control and distribution, provides construction teams with easy access to all relevant information from any device and enables seamless collaboration within teams. With the development of modern mobile devices, software is easier to roll out to the field than ever before.

This e-book will focus on how embracing the right construction software tool can impact:

- Meeting project schedules and deadlines
- Collaborating with GCs and other trades
- Managing construction plans, documents, versions
- Preventing costly errors and rework
- Completing effective project closeouts
- · Attracting talent as the workforce ages
- Scaling as your organization grows



Time savings in the field

Most Drywall Subcontractors still connect with other trades via telephone, in person and through email. This makes it hard to track each decision or change that has been made. With the right software tool, you no longer have to search through files, emails or binders for answers.

For example, Drywall Subcontractors can't hang drywall until the HVAC systems that go behind it have been installed. Armed with the knowledge of what has been completed means your team can more efficiently execute their portion of work. The right tool also allows field teams to easily manage their own work and collaborate with the other subcontractors. Removing the ambiguity surrounding your own progress versus that of the other trades gives you the confidence to plan and ultimately saves time.

Software also allows you to manage offsite prefabrication more effectively. The tool should centralize your drawings, data sheets and other project information. This allows you to make changes and markups on the fly while remotely monitoring the work. If your onsite team makes changes to the drawings, the tool should automatically push this data to your offsite precast foam or prefabrications team and vice versa. This is especially critical if the facility is located miles away from the project site.

All the project documentation such as sheetrock submittals and cut sheets should be available via that same software tool. Ideally, it will also let your team work from any device, whether they are connected to the web or working offline.

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"It is by far the best construction tool I have in my arsenal. Ultra-convenient, ultra-quick. Plans never get damaged by misuse, overuse, or accidental spills. The absolute best part is being able to add photos exactly where the area is on page to show issues that need attention Plangrid is the ultimate tool in construction and is perfect for the production driven trade that I am in."

— Lloyd Lauer, Drywall Foreman for California Drywall Inc.



Reducing costly errors and rework

Construction sites are always changing. Subcontractors and GCs need to closely coordinate so materials are installed to meet the site conditions. Changes need to be communicated back to the home office and project trailers so they are distributed immediately. This is critical to ensure field modifications and change orders aren't needed later. It's important for subcontractors to recognize that the use of technology can achieve these goals while delivering a measurable ROI. These tools help reduce the frequency of rework, creating a benefit in the cost of the mistakes you don't make.¹

When software tools provide a central location to collaborate—one that easily manages your own work, while providing the ability to link up the home office, project trailer, field workers and other subcontractors—it reduces both the amount of time spent on coordination and the risk of installing drywall and framing to outdated specifications.

Cloud technology makes collaboration easier

Drywall Subcontractors frequently collaborate with General Contractors and other design team professionals. Fortunately, today's software tools positively impact collaboration workflows when working on markups to blueprints and during RFIs. This mobile cloud-based collaboration applies when working with GCs or any other trade that may be at the project site. It means your work flows more smoothly-with teams spending less time waiting and more time doing. The best tools allow teams to easily document framing locations and finishing details while you're working by simply pinning photos and marking up your plans.



"PlanGrid is by far the best [construction] app because it makes communicating with my team much more efficient. It makes it effortless to keep track of all of the updates or extra work that is done. PlanGrid makes it easier and very convenient because we do not have to carry any extra paperwork."

— Carlos Jimenez, California Drywall Inc.



Your whole team can work off the master set anywhere, anytime

Drawings are constantly updated. It can be tricky to keep up with all the changes and how they impact your work and schedule. It's especially tough when you're working alongside other specialty contractors. Software tools empower you with fast and seamless coordination. This helps your team stay on track, while ensuring everyone on the jobsite is accountable for their part of the work.

The importance of coordination becomes clear when using prefabricated drywall and framing products on a project. These products require extensive pre-planning to ensure the delivery and installation is properly timed.² If a Drywall Subcontractor doesn't know exactly when to deliver the prefabricated materials, much of the cost savings typically generated will be lost.

If laydown area space is limited, poorly timed deliveries can cause big headaches for the whole project when there isn't enough space to store the materials. Construction Productivity Software gives you workflows with better insight into a project, helping schedule just-in-time delivery.

Software also allows you to capture productivity data with access to measurement and overlay tools. For example, this allows you to calculate and compare how much sheetrock you've hung on a project.

Additionally, you should be sure to select a tool that stores all your project data within it. Your mantra should be "If it doesn't live in the tool, it doesn't exist!" This will ensure your teams have one place they're looking to for information. Centrally locating your documents removes the need for duplicate entry of data or an extensive and confusing search to find information.



"PlanGrid has helped us by keeping plans current with construction changes and by streamlining documents. My favorite feature is hyperlinks!"

— Sean Sullivan, Metro Walls, Inc.



Effective project closeouts and seamless as-builts

Traditional closeout packages have been insufficient for project owners.

Typically, 30% of data associated with a project is lost during turnover.³ A digital drawing set lasts for the lifetime of the building. When all the documentation is stored electronically, it creates an easy package to turn over at project completion. This ensures a happy owner and helps secure future projects. When using the right software tools, substantial data loss at turnover becomes a thing of the past. This also helps owners, GCs and subcontractors when warranty issues arise after project closeout.



"It used to take four to five people at least a week or more to get all final redlines and asbuilts put together at turnover With PlanGrid it only takes a couple of hours for us to ship our turnover package, but equally important is the fact that we're confident in the quantity and quality of the data we're sharing."

— Kalen Wallace, Mechanical Engineer, VEC Inc.



Tech attracts younger talent as the existing workforce ages

The median age of construction workers in 2000 was 37.9, while in 2010 it was 40.4.⁴ This means that the average age of drywall workers is also increasing.

As a large part of the workforce moves toward retirement, it's increasingly important to attract young talent. Ensuring that cutting-edge technology is available to them is one way of drawing in that much-needed cohort. Adopting a best-in-class software tool is one way for your company to attract this younger techdriven part of the workforce. Software tools can also facilitate the transfer of knowledge from your experienced employees through a platform that younger workers understand.

Scaling as your organization grows

When business is booming, organizations often rapidly increase in size to accommodate the new work. Growing from a small organization to a larger one can make problems in existing processes painfully obvious. This is no different for Drywall Subcontractors. Construction productivity tools are one way to make company growth successfully scale. You can rely on paper drawings and memory for small projects, but that's a recipe for disaster as projects get more complex and teams grow.



"Some of the subcontractors who perform most of the labor at constructions sites—from carpenters to plumbers to drywall installers—say they cannot find the manpower to handle the surge of homes, condominiums, apartments, hotels and retail projects under way or planned."

— John Hielscher, Herald Tribune⁵



Case Study in Drywall - The Raymond Group

The Raymond Group is a top interior and exterior contractor in the United States. In 2014, the Las Vegas division began working on a \$450M arena, similar to the Staples Center in Los Angeles. They completed all of the metal framing, drywall and painting for the arena, as well as the exterior and plaster work.

Problem

The challenges with the arena project were significant, given the building's size. Sharing information among the team via paper or email had the potential to open the team up to making mistakes based upon inaccurate or out of date details.

Kim Lorch, Vice President and Area
Manager of the Las Vegas division of
The Raymond Group said, "No one wants
to be embarrassed in the field when
they don't have up-to-date information.
But sadly, many folks feel starved for
information that helps them do their
jobs well. This is partly due to on-site
staff being used to rolls of drawings that
are cumbersome and out of date"

Solution

Kim had spent four decades in the field performing multiple roles when he decided to use PlanGrid. "I looked at other systems and it became so obvious to me that PlanGrid was the better platform."

When the arena job came along, it was a huge selling point that many of their teams were already using PlanGrid.

Kim was surprised by how easily the whole team adopted PlanGrid: "I couldn't believe it. Our guys in the field just snapped this thing up. It's a beautiful tool." The onsite team already had tablets, so it made sense to give them access to everything they needed. "It keeps everything we need right at our fingertips. It's amazing to me," said Kim.

JB Pascua, a Field Coordinator with The Raymond Group, recalls the first time he saw PlanGrid, calling it "a game changer." The team stopped using paper blueprints and learned to quickly navigate over 5,000 pages of drawings electronically. It let the foremen access all of their blueprints, wall types, layouts and locations at a moment's notice.



"It keeps everything we need right at our fingertips. It's amazing!"

— Kim Lorch, VP and Area Manager of The Raymond Group's Las Vegas division



Industry Secrets to Boost Productivity for Drywall Subcontractors

Implementation and usage

The team began using access reports that documented scope changes right on their plans, using photos, notes and dates. With PlanGrid, they were able to capture the costs of rework and present them in a way the General Contractor (GC) could understand. It meant they were able to perform high-quality work and close it out quickly.

On this particular project, the team used electronic drawings to access the same information they would have normally gotten from paper blueprints, and issue tracking to help them stay on schedule by uploading pictures of problems in the field, adding notes and assigning each issue to the responsible party. The project manager was then able to create reports for the GC, sharing key project information directly from the field. Without that real-time communication, the GC would have been out of the loop.

Results

The most significant impact PlanGrid had was the ability to document issues in the field in a way that made it easy for the customer to understand, therefore increasing their recovery of costs. Previously they had a 70% cost recovery of project delays and impacts. With PlanGrid, they drove that up to a 90% recovery—just from improved issue documentation.

The Raymond Group also saved 5 hours per week, per person. Resolving issues, updating drawings and looking for details are easier than ever before now that they have PlanGrid.

The Raymond Group also estimated that they could eliminate 90% of their drawings. Within a year of using PlanGrid, they had eliminated all of them. Those savings alone justified the tool. "We used to get a truck to deliver our plans. Six to eight sets of drawings had to be transported. That's thousands of pages printed every time we made an update. It was incredibly expensive," said JB.

During construction, a foreman was on each of the eight levels of the project. With at least 5,000 pages of blueprints stored on an iPad, each person would have needed a cart with 200 pounds of paper on it in order to carry the same number of sheets with them. It just wasn't possible—or practical. And as far as accessing the most up-to-date information easily? As Kim put it, "How can you calculate the value of your guys having the right information all the time? It's just incredibly valuable that they do."

Throughout this two-year project, PlanGrid helped The Raymond Group meet its schedule, cut costs and stay on track to successfully finish a massive project.



Subcontractors using PlanGrid

































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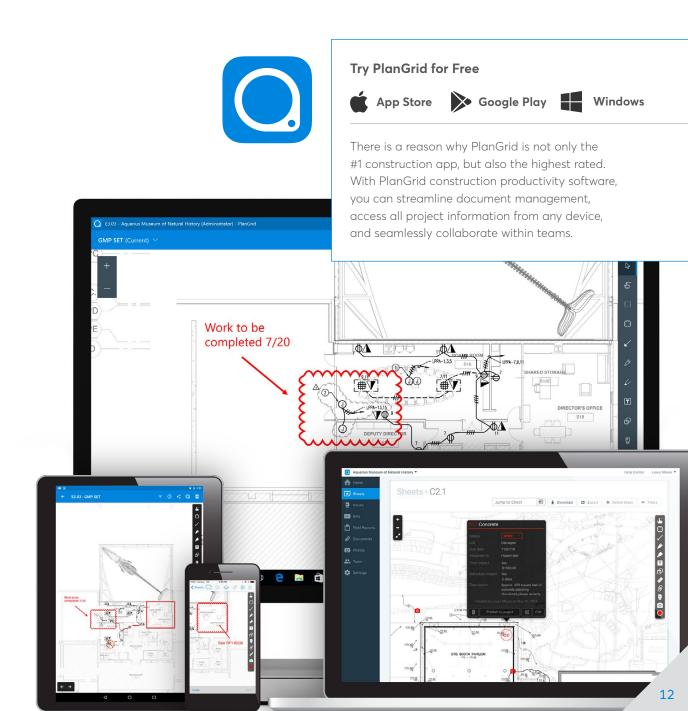


See a Live Demo

or give us a call at +1 (415) 429-1227

PlanGrid's Construction Productivity Software is the easiest and most costeffective way to get substantial return on your investment in construction mobile apps. By using PlanGrid you will:

- Complete projects faster: 90% of project costs occur in the field and not in the office. This includes wasted time and project delays. With PlanGrid, you can reduce wasteful trips to the trailer and time delays, while eliminating costly rework. PlanGrid also allows for faster collaboration and communication.
- Reduce costs: PlanGrid allows you to optimize productivity in the field, which eliminates time waste that causes project overruns. By completing projects early or on time with PlanGrid, contractors will benefit from reduced costs.
- Win more bids: The best way to bid more competitively is not just to track costs so you can provide more accurate estimates — it's to improve your overall productivity. PlanGrid's Construction Productivity Software will allow you to increase productivity so you can reduce costs and win more bids.



PlanGrid

Used on more than 1,000,000 projects around the world, PlanGrid is the first construction productivity software that allows contractors and owners in commercial, heavy civil, and other industries to collaborate, collect, and share project information from any desktop or mobile device through the entire project lifecycle.

PlanGrid increases project efficiency by streamlining document management, providing construction teams with easy access to all project information from any device, and enabling seamless collaboration within teams.

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