Construction Change Management

New Techniques and Processes to Improve How You Manage Change
CONSTRUCTION CHANGE MANAGEMENT

The Greek philosopher Heraclitus must have been perched on a bluff overlooking a construction project when he observed, “The only thing constant is change.” Few professions encounter change at the level that’s common for building projects — and managing change may well be the biggest challenge among a project manager's myriad responsibilities given its impact on both schedule and budget.

If you’re a construction manager, you can’t make change go away, but you’re not helpless to deal with it, either. New processes and technologies are available today to improve how you manage change. Building information modeling (BIM) — a major example — is known to significantly reduce the number and severity of needed changes during construction because it requires precise geometry and specifications from the start, so problems can be identified and resolved during design rather than in the field. When the inevitable change order does arise, BIM again delivers benefits thanks to a new tool that provides key insight into model quantities and their pre- and post-change variances. Armed with this level of information, the construction manager now can much more effectively manage change.

OUT WITH THE OLD

What doesn’t work effectively today is the traditional process, wherein change order requests often underestimate reductions in quantities and overestimate the additions, and project managers don’t have easy access to accurate data nor the time to track it down. This makes it difficult to develop full estimates and validate change orders against these estimates — and the larger and more complex the project, the more difficult it can be to mind the details of every change order and ensure that the associated costs are accurate and fair. Without a solid foundation for discussion, the contractor’s negotiations with subcontractors — and sometimes, even relationships — can break down.

The bottom line is, well, an impact on the bottom line: The greatest consequence to this traditional approach to change management is delayed and lost revenue.
A BETTER WAY: BIM-BASED CHANGE MANAGEMENT

Fortunately, Assemble Systems has developed a model data management solution that overcomes the traditional challenges of change management and is affordable, flexible, and easy to use. Cloud-based Assemble draws on BIM data, reflecting model updates over time and allowing users to generate reports containing relevant information in a variety of formats. Tracking and analyzing project changes is dramatically simplified; you can capture and easily access quantity changes that impact costs and schedule.

Assemble's cloud-based platform facilitates collaboration among all project team members, which is critical to communicating changes and ensuring that all parties fully understand and can execute changes properly.

With detailed data within easy reach, construction project managers gain more control during subcontractor negotiations. Cooperation improves when both parties can trust project information and, not incidentally, can result in fewer contractual disputes.

Highlights of Assemble change-management capabilities include:

- **Review Quantity Variances**
  - Using Assemble to compare any two iterations of a model, users can review the quantity variances to validate subcontractor change orders. You can export this (or any) report to Microsoft Excel for easy distribution to the team.

- **Communicate Changes**
  - During a review session with subcontractors, you can use Assemble to communicate the locations of changes and discuss the impact related to actual work in place, as well as materials already ordered.

- **Better Insight to Changes**
  - Assemble can display design changes visually, along with associated quantities, to provide better insight into required changes than you can get with a spreadsheet-based estimate. You can highlight or isolate the components in the model that have been added, deleted, or changed.

TIME FOR A CHANGE

In any business endeavor, how managers deal with change directly impacts success. By responding effectively to the unexpected, a manager minimizes the negative impact on the workforce and budgets. When managers reduce the impact of change, that generally increases productivity — and that's good news for any project, not to mention the overall health of the company.

In construction, change is constant and the opportunities for projects to get off track are endless, so project managers must be constantly vigilant. Relying on the traditional, manual approach to change-order management doesn't cut it; today's complex building environment demands much greater insight and control than ever before.

So, let's face it: Change orders are a necessary part of the building process and the established, legal means of modifying a project once the contract is executed. If you can't avoid change orders, the next best option is to manage them as effectively and efficiently as possible. Tap into the latest BIM-based technology to get the edge you need to stay on top of the game.