

How to Get Change Orders in Order

5 Best Practices for Ensuring Your Construction Change Order Management Process is on Point



Overcome challenges related to change order management.

Your battle plans are always perfect on paper, until the very second they're executed in the field. As a construction project manager or project team member, you probably can relate to this more than anyone, as no project is built exactly how it's drawn up. There are always challenges and changes to deal with.

That's why change orders have been a staple of construction processes for as long as anyone can remember. If handled properly, change orders can boost a contractor's revenue and profit margins. If handled poorly, they can, at best, lead to profit fade and project delays, and, at worst, cripple a project, create costly conflicts and litigation, and permanently damage contractors' reputations.

When the change order process drags out—or worse, when there's no agreed-upon process to begin with—contractors may perform ad hoc work without approval to keep the project on schedule, taking the risk that they won't be paid for their efforts. Even if they do stick with the established process, poorly managed change orders can cause long delays as the parties haggle over costs or debate whether the requested change is truly necessary.

Managing change orders well—and anticipating likely causes for change orders in advance—can be the difference between making or losing money on a construction project. If you're looking to get a handle on change orders and keep your projects on track, this guide has everything you need.

As today's modern projects become more complex and demanding, timelines are becoming tighter, stakeholders are adding more pressure and both materials and labor costs are increasing.

Construction teams cannot afford to rely on traditional change order management for their projects.

In this article, we'll discuss five change order best practices that you should be implementing to ensure your change order processes aren't bringing your company down.



What is a Change Order in Construction?

A change order is an agreement to revise the original terms of a construction contract between a project owner and contractor. Change orders often happen when the owner requests a change or addition to the initially agreed-upon scope of work. Change orders may involve renegotiating payment terms — in response to an increase in the cost of materials, for example — or moving back the project's original scheduled completion date. And contractors might also file a change order request due to a lack of resources or other circumstances, such as changes to local regulations.

Here's a quick runthrough of a typical change order workflow:

- One party initiates a change request.
- The other party studies the request for its potential impact on the project.
- The receiving party then creates a change order proposal laying out the impact on cost and schedule.

- Both sides negotiate to arrive at mutually favorable terms.
- Finally, when they arrive at a consensus, they create and sign a change order document with the new terms and conditions, revising the original contract

There are many ways the change order process can go awry. To make change orders as smooth as possible, construction contracts usually have a clause that answers key questions:

- If both parties are not able to come to an agreement on the change order, how is the conflict resolved? Is there another party who will arbitrate the dispute?
- How much time can the contractor take to assess the change request and come up with a counter proposal?
- How far into the project can a change be requested?
- What are the steps that the parties must follow during the change order process?



Reasons for Change Orders in Construction

The complicated nature of construction projects means that change orders can arise from a wide variety of circumstances. Here's a brief list of some of the most common reasons for change orders:

- Scope and design change requests from the owner
- Inaccurate or unclear design specifications
- Poor budget or schedule planning
- Problems procuring materials or services
- Funding problems involving the contractor or owner
- Issues involving subcontractors
- Unexpected site conditions, such as unfavorable soil quality
- Acts of nature, like earthquakes or unseasonable weather conditions
- Communication problems between contractors, owners and other key parties
- New or unknown regulations that impact design, scope, price or schedule

You can plan for some of these hiccups, but others can arise out of nowhere. But whatever the reason for a change request, it's easier to contain costs and stay on schedule if you have an established, well-documented change order process in advance.

What are the Types of Change Orders?

There are four main types of change orders: zero cost, lump sum, unitary cost and time and material. A zero cost change order is used when the change will not have a cost implication, while a lump sum change order is used when the total cost change can be fully calculated. Unitary cost change orders are used when the quantity required cannot be fully calculated, and time and material change orders are used when the contractor can't calculate the cost.

Who Approves Change Orders in Construction?

Change orders are usually approved by the client or their appointed representative. This could be an architect, quantity surveyor, or someone representing the client's principal contractor. Usually, the construction contract will outline who change orders should be submitted and how they will be approved.



How Do You Write a Construction Change Order?

Legal disputes in the construction industry have a massive global cost every year. According to the 2020 Global Construction Disputes Report, the global average value of disputes is over \$30 million, with disputes running for 15 months on average.

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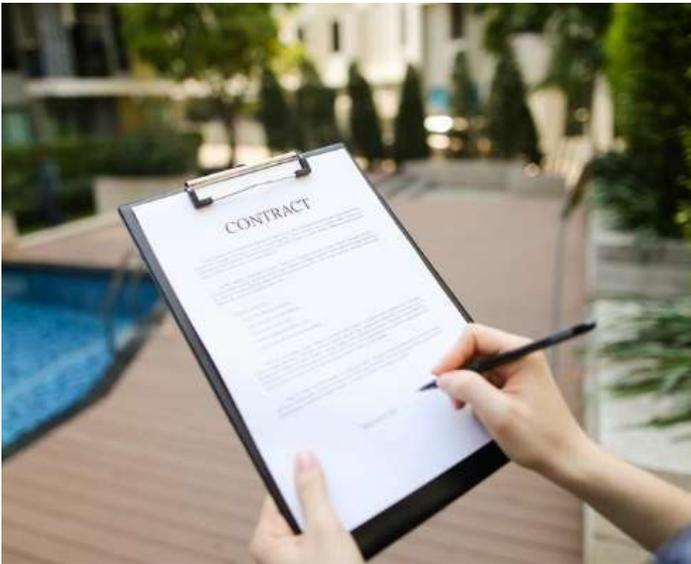
A well-drafted, comprehensive change order can nip potential conflicts in the bud. Preferably, both parties agree on a change order template before the project kicks off. Let's look at the details that any change order should include:

- **Counterparty Identification Details.** These include the parties' names, contact numbers, email addresses and postal addresses.
- **Site Identification Details.** List the site address, dimensions and legal identifiers. If the scope of construction is restricted to a specific block or floor in the site, add that information as well.
- **Contract Identification Details.** Add the original contract number, change request number and the change order

number.

- **Important Names.** Include the names of relevant project managers, architects and designers, as well as signatories on both sides. It should be clear who the requesting party is and which party is accepting the request.
- **Relevant Dates.** Include important dates in the change order, such as those for the initial change order request, the creation of the change order, the change order sign-off and when the initial request was received by the counterparty.
- **Change Details.** This section provides a detailed description of what the changes are and why they're needed. It should include relevant evidence in the form of design drawings, specs and calculations to support the need for these changes at this point of time.
- **Impact on Schedule and Price.** The change order should clearly specify the impact to the schedule, price and payment terms. This data analysis is usually provided by the contractor. In addition to the bottom-line figures, this section should answer questions, such as what additional materials and labor are required, what the revised cost breakdown looks like, and whether the payment schedule should be revised.
- **Signatures.** This final section provides a space for both parties to sign the change order. It contains details like the signatories' name and title together with the date each party signed.

Now let's take a look at five best practices that you can follow to effectively manage construction change orders as a contractor.



A contract is key to reducing miscommunications or risk of a lawsuit.

1. Check Your Contract. Check it Twice

It all starts with a very important agreement placed in writing: a contract. Whether it's payment arrangements, how to communicate and finalize changes or time to complete a job, a contract review will help both parties better understand the scope of work; creating less frustration, confusion and, ultimately, lowers the risk of a lawsuit in the long run.

The simplest way to head off change order related problems is for the parties to address the issue in the construction contract with direct, detailed provisions that everyone agrees to. It's far better to tackle this potentially sensitive topic before construction begins than when a change is urgently needed and there's no process in place to handle it. While negotiations over this part of the contract might be fraught, change requests are likely to arise at some point, and you'll be prepared with a clearly defined process when they do.



There is a price for every change. This should be clearly communicated to the customer.

2. Keep Records of All Change Orders

Have you ever thought you were on the same page with someone, only to find out later on that you couldn't have been more wrong? If only you had something in writing that you could use to support your perspective!

That's exactly why it's important to maintain a record of every change order for each project. Whether they come up in a legal dispute or during a discussion with a subcontractor, having the written order prevents miscommunications and keeps everyone on the same page.

Keeping a record of all change orders is also helpful when it comes to analyzing project performance. You can track key data points like how many change orders are created, what proportion get approved, and the average impact on cost and the schedule. This data can be used to identify problem areas (or people) to avoid in the future, offers insights you can use in future projects and creates a meticulous trail for audits.



Having a consistent digital change order audit trail is invaluable for your projects.

3. Understand the Full Cost of Change Orders

Does your client know how much they will be charged for every change? You may assume the answer is yes while your customer may assume otherwise. Whether it's changing roofing material or redesigning an entire building, make sure your customer understands the price for every change before material is ordered or the design is drawn.

Figuring out the direct costs from change requests and change orders is fairly straight-forward. Typical direct costs include materials, labor hours, equipment and other expenses relating to the change. If an entire pallet of new wood screws needs to be ordered, it will cost X. But what about the indirect costs? The timeliness of the change order comes into play here. If project delays occur or labor is temporarily reassigned because of the change, it can impact your project's bottom line and profitability. If a change is made too late and materials are misused or damaged by weather, it can add significant costs to the project. Though indirect costs are harder to measure accurately, they should be considered when implementing project changes.



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4. Make Sure Change Orders are in Writing

It might be easy to have a verbal agreement — especially under tight timelines when written contracts and addendums can seem like a burden. However, the extra effort to put an agreement or change order addendum in writing is worth the hassle. These change documents should include material cost, payments, timelines and anything else you think is necessary to provide clarity to you and the client. Don't forget to get a signature as well. While verbal changes do occur in construction, if there is a conflict or miscommunication later in the project, having that valuable audit trail will be invaluable.

While you can't anticipate every potential problem, it's possible to reduce the need for change orders with a detail-oriented, proactive approach. For instance, indirect costs that aren't accounted for in advance can result in change requests during construction. You can avoid this risk by itemizing costs at a granular level. Drawing on your own experience and that of your team, you can even come up with a formal, standardized checklist that covers different aspects of the project you should carefully evaluate, such as safety, regulations, transportation, design, site parameters, labor, equipment and materials.



Construction specific software can streamline the change order process and connect the whole project

team.

5. Make the Change Order Process Easier

One of the biggest challenges in change order management is keeping everyone informed as the project moves forward. Let's say that a contractor in the field needs to install a different water filtration system because the original system is unavailable. They send a change request to a project manager. The manager then forwards it to the designer to assess its feasibility, while also calculating cost variations and getting a sign-off from the customer. Meanwhile, the field contractor is left in the dark and loses patience. They proceed with the change either on their own or based on a verbal confirmation, which results in a conflict over the scale of the proposed change and delays the project.

Having a cloud-based, construction specific software solution can connect the entire project team in real time and automate workflows. So, change requests can be easily created, approved and processed into change orders. The end result is a reduction in communication breakdown and costly errors. Streamlining the change order process will not only help your project team operate efficiently, but it can help avoid frustration and future litigation.

Software that manages construction change orders helps to circumvent common issues by providing all parties with information on requests in real time, streamlining the change order approval process. Software can automatically route the change order to the right person and produce documentation for any future audits.

Simplify Change Orders with Trimble Construction One

Change Order Management

Trimble Construction One can make the change order process easier.

Change orders discourage frivolous requests and provide a sensible way to adjust to evolving needs. They can also disrupt productivity, delay projects and lead to cost overruns. Construction software smooths the change order process by connecting it to the rest of the construction lifecycle.

A solution like Trimble Construction One makes the change order process simple and transparent, with tools for communicating with owners and other key parties, automating the approval process and real-time information on project progress. Whether you're in the field or in the office, you can initiate change requests, respond to them and get approvals right from your mobile device. Trimble Construction One acts as a centralized hub for all your construction management needs, integrating your change order process with other key workflows like materials management, accounts payable and more.

To learn how Trimble Construction One can simplify change order management for you, try a free demo today.

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