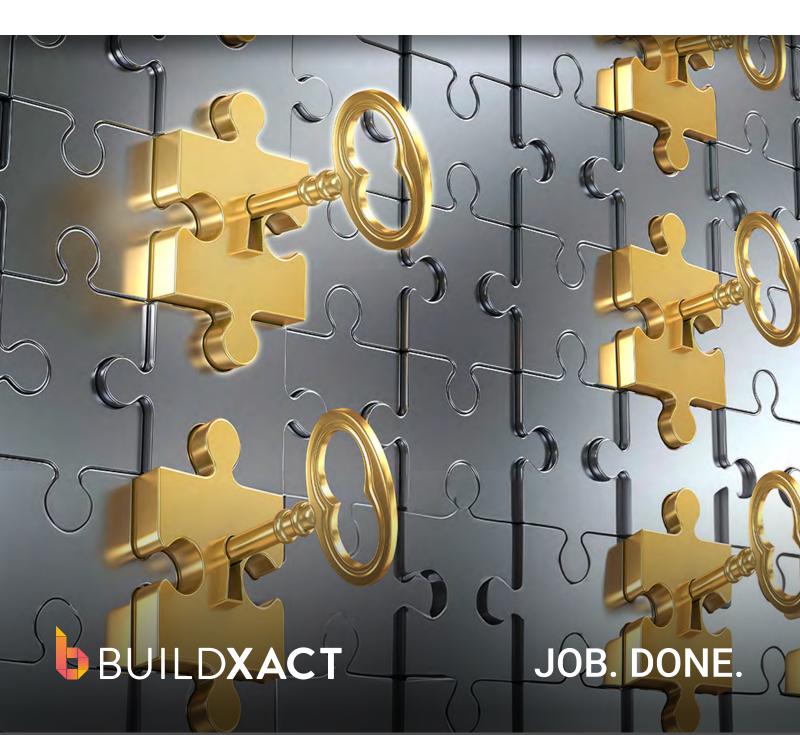


6 KEYS TO IMPROVING HOME CONSTRUCTION MANAGEMENT



Good planning and design are essential to any home construction project, as is managing a large volume of work, and often, a large project team.

To ensure success before your next construction project begins, you should improve your understanding of the phases in construction project management and how the construction project life cycle works.

Mastering the fundamentals of project management helps you stay on time and on budget and can grow your business faster. Running efficient projects also increases the number of satisfied customers who rely on you to manage the high costs of building or remodeling.

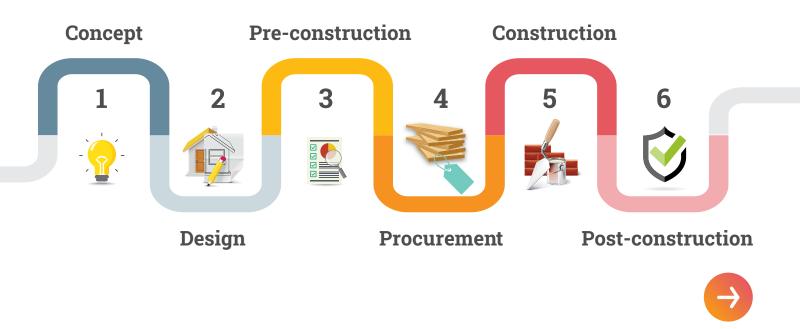
Homeowners today pay an average of \$450,000 to build a new home <u>in the</u> <u>United States</u>. That price can of course climb significantly higher when more square footage or distinctive custom features and appliances are factored into the build.

What better way to win trust than to display your mastery of the entire building process?

In this eBook we will run down the major phases of the typical home build and provide you with some key, common challenges to watch out for.

What are the main stages of a home construction project?

There are six main stages of a construction project. Let's take a quick look:





In this first stage, an architect or designer creates a rough concept to determine the homeowner's needs and a preliminary budget.

Depending on the size and scope of the structure, this project planning phase may mean consultations with town or city planners to ensure utilities can serve the proposed site of the build and that no other special requirements are needed for a building permit. For example, local governments often have zoning requirements that govern the use of land within their jurisdiction.

An important early task is a soil test of the site—this is done to look for any contaminants that prevent successful well drilling, if needed, to ensure ample room for a septic drain field, or to check that soils will not endanger the structural integrity of the home's foundation.

The concept stage is one of the most important phases in the lead up to actual construction. It gets rough ideas onto paper for the first time and forces architects, designers, home builders and homeowners to agree on needs and budget targets.



Common Challenges:

- Design flaws: You and the architect must work together with structural and civil engineers to create a documented design that's realistic to build.
- Bureaucracy: Everyone hates bureaucracy, but it can be particularly frustrating when later building phases are delayed because needed paperwork hasn't cleared. It's a common problem that needs addressing as early as possible.
- Poorly-defined objectives: Communicate requirements and limitations. Communication is paramount, and setting the tone early is vital to client satisfaction.

To truly determine if a concept is financially practical, builders require the details that come in the next step – design.



In this stage, you build the actual project specifications that a customer will approve.

First, you hammer out final concepts and settle details with architects and engineers about the materials and construction methods that the project requires.

Your design phase requires blueprints that help you figure out how large the home will be, its shape and size, the number of rooms, how the rest of the site will be used, and so on.

The design phase allows you to give the customer estimated costs for selecting materials, fixtures and appliances. With their approval, you will install their selections during the project. The colors of various materials you'll use (interior and exterior) and material pricing needs to be clearly presented in the customer bid.

A material takeoff is first needed so that you can accurately write your bid and present the cost of materials and labor. Remember, custom installations will require unique materials and skills that may cost more.



- Measurement inconsistencies: Solve for varying measurements across different types of blueprints. Your architect will need to provide final measurements that solve discrepancies
- Failure to include indirect costs: You make money by providing accurate estimates using various tools. However, this estimate is just that an estimate—and can be under or over based on factors outside of your control, like material price changes. Be sure to include markup in your estimate to cover both direct and indirect costs.
- Misreading of blueprints: Subcontractors who will do work based on designs may make mistakes without your oversight. Electricians, plumbers and framers sometimes misread each other's notes on plans.
- Structural design errors: These crop up due to misreading or misinterpreting (sometimes) vague building code language. Consult your designers and the town or city building code department if this becomes a problem.



The preconstruction stage is where you'll build your project team. The project team includes your own trades and a trusted group of subcontractors.

By this point, the building site will have been chosen and approved and your homeowner has approved your bid based on a <u>detailed estimate</u>. Your proposal should include <u>a clear process</u> for handling change orders.

Site & Foundation Preparation

Preconstruction is the last opportunity to check the site. Often, final tests are done after you pour test footings for the foundation. Once you've planned and framed your project's foundation, plumbing and drainage will also be planned and installed before the foundation is poured into place. Once cured, an inspection is needed before moving to the next step.

Rough Framing

Rough framing also occurs during this stage. Timbers go up to rough measurements, sheathing is applied to exterior walls with waterproof wrapping, and the house's exterior shape begins to take place.



- Labor shortages: One of the hurdles facing almost every home construction company nowadays is labor shortages. This shortage means that site work, such as rough framing, may be delayed considerably. Be sure to consult with subs about staffing before awarding them the contract.
- Material shortages: Another huge challenge is material shortages. It's important to plan far ahead when purchasing materials from your dealer to ensure the best price and timely delivery. Rescheduling subs plays havoc with your schedule.



Procurement is not so much a distinct stage as it is a process that takes place throughout the lifecycle of a project.

Procurement includes obtaining the price estimates for labor and materials required in the design of a home as well as the actual purchase of materials, sending RFQs (Request for Quote) to subs and the scheduling of when each subcontractor works on the job site. The timing of each of these varies depending on availability and the vendors you work with.



- Lengthy procurement cycles: Due to an uncertain market, material supply chains can experience cycles of high demand and low supply – leaving you with <u>quotes that</u> <u>contain weeks or even months-long</u> delays for specific materials.
- Cost fluctuations: Again, blame the market! You may discover that materials you were quoted a few months ago have now skyrocketed in price. This may force you to make different material choices depending on budget allowances. Don't forget to communicate those changes to the homeowner in a timely fashion.
- Quality assurance: While this is not necessarily your responsibility, one of the common challenges facing procurement is finding reliable dealers and subs who can deliver a quality product time and time again.

Construction Stage

The construction stage is where the rubber meets the road. It's where you'll start to see your project come to life with the installation of:

5

- Exterior finishes such as siding, roofing, windows, and doors.
- Interior rough-Ins such as plumbing, electrical, heating, and ventilation.
- Insulation and drywall insulation in walls, floors and ceilings, and then the drywall to create interior walls and ceilings.
- Interior finishes such as flooring, trim, cabinets, countertops and paint.

Other construction tasks in this phase include:

- Landscaping installation around the house, including grading, planting and hardscaping.
- Final touches such as installing fixtures, appliances and final cleanup.

This phase is usually one of the longest construction phases of building a house. It can take months to come to fruition. It's also the most rewarding part of the construction process. In this stage, you'll have to send frequent updates to the customer so they can see your progress and understand and approve any necessary change orders.

- Health And Safety: This is one of the biggest of any construction company owner out there. The health and safety of your employees should always be your top priority. In the construction phase, an accident can occur, which can severely injure one of your valuable team members and cause huge delays in the project. Having the right safety procedures in place is critical.
- Linear Process Delays: The construction phase of any project is the longest one. It is also a linear process, meaning that schedules must be planned and executed in the proper order.
- The Weather: Everyone who works in construction hates that they're at the mercy of Mother Nature. Certain construction phases won't continue in heavy rain or blinding heat and incremental weather can severely delay your planned construction schedule.
- Final Inspections: Local building inspectors must sign off on your work as it proceeds to ensure compliance with building codes and regulations. Catching problems early is always less expensive and ensures a high level of customer service. Keeping up to speed on task completion is best accomplished using daily logs.

6

Post-construction Stage

The post-construction stage is the final stage. The post-construction phase is where the build is completed and the new homeowner eventually takes possession. However, there are several steps to go through.

Performance and Monitoring

One of the key parts of this stage is checking the building once it's finished for any signs of faults—this may require days or weeks.

Meanwhile, other things can happen behind the scenes, such as contract closures, worker payments and equipment returns.

Team meetings or retrospectives can also occur during this time, to evaluate what went well with the project and what didn't, and what changes can be made in future projects to help things run smoother—after all, time is money.

Closure

Closing the project means delivering the keys to the new homeowner closing and sealing all contracts and getting paid for the work completed.



Common Challenges:

Despite being the end of the line, closure brings several challenges. These can include:

- Projects that wind up significantly over budget.
- Customers that are unhappy with the finished product.
- Projects that vastly underperform projected profit margins.
- Final product work that reveals gaping holes in business operations and project management.



Using Construction Software to Manage Projects

If you're struggling with any part of your construction stages, it's time to consider the solutions construction software can provide to help your building business overcome these common challenges.

Whether your problems are <u>efficiency</u>, cash flow, material supply issues, or simply a labor delegation problem—using a <u>construction project management software</u>, like <u>Buildxact</u>, can help remove the human element from your business operations. Modern construction software also makes it easy to keep customers updated with online customer portals.

Construction management software gives you a complete picture of how your project is succeeding or failing, before it's too late to solve the issue. The right construction management software also gives you insights that could prove invaluable for the next project.

Interested in learning more about how construction management software fits your proposal building needs? Begin the journey today. Book a demo with one of our Buildxact experts. They have the know-how to get you started towards an easier, more efficient way to build. Do you want to start managing the phases of your next project using construction management software to estimate and schedule your tasks? Let's get you started today.

Try Buidxact free for 14 days with our risk-free trial.

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