



How Design-Build Delivers A Faster, Better Project



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Using the Design-Build Process Can Effectively:

- simplify construction drawings
- reduce change requests
- reduce total design time
- eliminate last-minute surprises or changes
- encourage communication and collaboration
- create more accountability
- allow for cost efficient alternatives
- allow for easy customization to actual site conditions
- speed up project completion
- produce a repeatable project plan
- optimize innovation and quality
- create a more streamlined process
- eliminate litigation claims for owners



Understanding the Design-Build Process

The design-build process is a popular and successful approach to commercial construction projects that is used nationwide and around the world to deliver high quality commercial projects, including office buildings, storage facilities, educational institutions, sports arenas, transportation systems, and more. To fully understand the advantages of the design-build process over other methods, as well as how these advantages can lead to better project delivery, we need to dive into the philosophy and strategy behind it.

The 5 Phases of the Design-Build Process

There are essentially five phases involved in the design-build process, and while this may sound like a lot of steps for a simplified process, it's important to understand that the phases

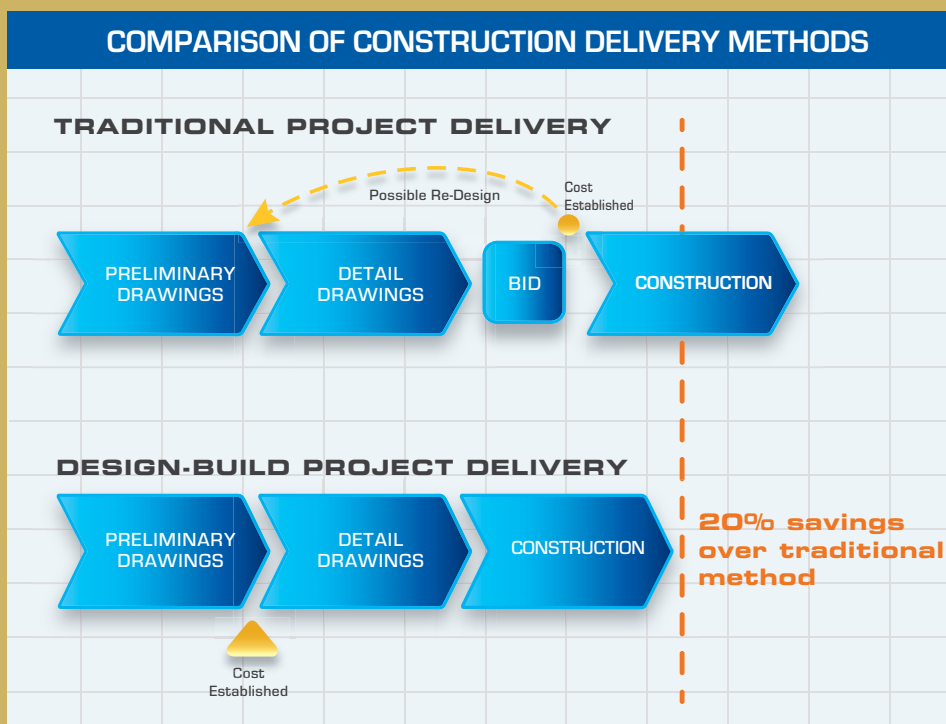
often overlap. Other construction methods often consist of several steps, which are typically performed by separate entities, and upon completion of the last, whereas the design-build process is much more fluid. Each member of the design-build team works together during each step of the process to help move things along more quickly, and more smoothly. The basic steps include:

1 Design-Build Team Selection

The first step of the design-build process is for the owner to choose a design-build team. Owners carefully vet potential candidates, and often choose the contractor or contractor-architect team with the most design-build experience and the team that best understands the company's vision, needs and budget.

Though cost is an important factor to consider, it is not (nor should it be) the only factor that influences the final decision. While it may be tempting for owners to choose the lowest price, a smart owner will understand the value of working with a qualified design-builder, and will often choose based primarily on the experience and skills the design-builder offers.

Understanding the value of the design-build method is beneficial to everyone involved—designers, contractors and owners—since designers and contractors can compete based on their skill level, and owners can expect to receive a better quality project, from start to finish. Often times, the design-builder selection process overlaps with the next phase, the pre-construction phase, as the design-builder team selected will likely



The design/build approach replaces the traditional method of awarding separate contracts for design and construction. The contractor, designers, subcontractors and owner work together as one to build a project that meets or exceeds the owner's expectations. Team members focus on solving problems together rather than placing blame.

What Are Design-Build's Advantages?

- Early cost input from the contractor
- A guaranteed maximum price
- Time is saved by compressing schedule
- Eliminates change orders
- Design and contractor fees are kept to a minimum
- Legal fees are kept to a minimum
- Owner can occupy the facility earlier

have already done a significant amount of research and analysis of the building site.

2 Pre-Construction

Though it may seem like a short phase, the pre-construction step is just as important, if not more so, than any other part of the process. Attention to detail during this phase is critical, as this is when the design-builder will learn about the owner's business, including its goals, challenges, budget, and overall vision for the project. It's a time for asking as many questions as necessary, so as to get a solid picture of what is expected to be delivered.

During this phase, architects,

engineers, designers and other consultants will work together to assess current structures, electrical systems, and more, in order to determine what needs to be done before construction can begin. These assessments allow for a thorough analysis of the construction site, which helps the design-build team to maximize efficiency throughout the project.

3 Architectural Design

Once the project parameters have been clearly defined, including the timeline, budget and location, the architectural design phase can begin. At this point, some of the initial design strategy work may have already begun during the pre-construction

phase. From here, all project team members will work together to develop the best possible design to help the project succeed.

The design-build team will assess areas for cost savings and optimized productivity, while also meeting functional requirements and style preferences. The overall project vision is established during this phase, and preliminary drawings are presented to the owner. Pricing estimates can be established during this phase as well, and a Guaranteed Maximum Price (GMP) is provided to the owner.

In addition, the project schedule is set, and initial

Benefits of the Design-Build Process

By simplifying the process, the design-build method has various advantages to the traditional design-bid-build method. To begin, the estimated cost of the project is established very early on in the process, which eliminates the risk of going over budget later on during construction. The design-build process allows for more simplified project management, since all team members are working together under a single contract.

Perhaps one of the most beneficial aspects of using the design-build method is the speed at which projects can be completed. By simplifying every part of the process—from the design-build team selection, to the design process, to construction—the entire project can be more efficiently managed and completed much faster than with the design-bid-build method. And, because the project can be completed faster, the building can be occupied sooner, and used for its intended purpose.

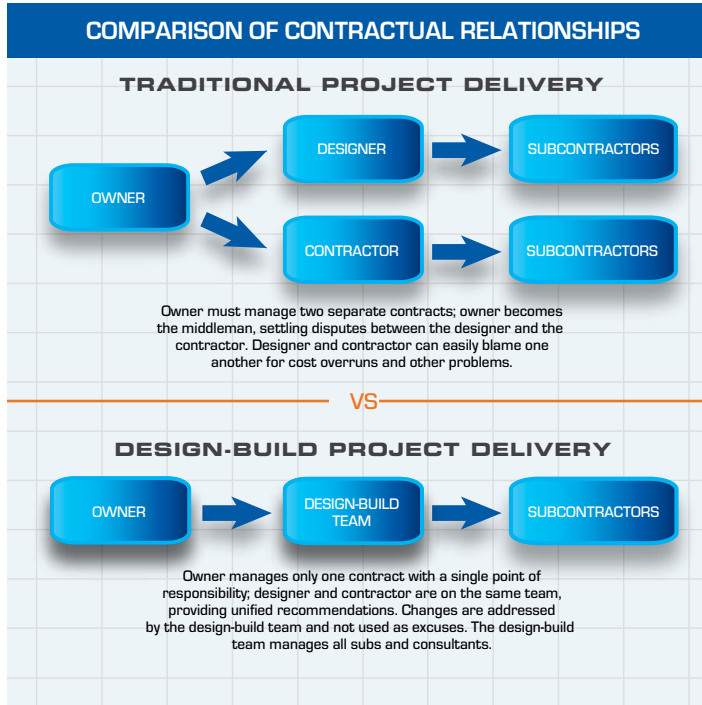
In addition, there is significant potential for costs savings to occur throughout the project. Fewer design changes and mistakes are made due to miscommunication. An increase in collaboration enables customization and innovation, which results in less time and fewer materials being wasted at each stage of the project. The result is often a smoother, better quality deliverable, with no surprises, ultimately resulting in higher customer satisfaction.

The design-build process also allows design-build teams to produce a repeatable project plan, which can be altered slightly for additional projects for the same client, or they can be customized to meet other client projects. This can be beneficial to both design-build teams, and owners.





building drawings are presented during this phase of the project. All expectations for the project are established at this point, and the project can begin upon agreement. Since the designer and contractor are working together, there are no additional bids to be set, and the project can begin even more quickly.



4 Construction
 If the design-build team has not already begun initial construction during the design phase, then it can begin immediately after. However, it is common during design-build projects for there to be some overlap between the design and construction phase, which can speed up the project considerably. Communication is simplified throughout the construction process, as there is typically just one point of contact for the project. Accountability is also established, as all workers are on the same team, moving toward the same goals and deadlines, and therefore any issues or concerns are often quickly and efficiently resolved.

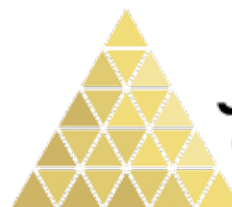
5 Post-construction
 Upon completion of the project, the design-build team typically provides an overview of the project deliverables, as well as various training materials, such as instructional videos, documented procedures, and in-person training presentations for applicable personnel. Because all of the work is done by a single entity, the post-construction process is often much more streamlined than when the designers and contractors are working separately.

Interested In Learning More About Design-Build?

We would be happy to speak with you about your ideas and how J.A. Wagner Construction and the design-build process can help you build you a better project. Contact us today.

“The expertise, planning capabilities, flexibility and professional personnel the Wagner team provided was greatly appreciated and a pleasure to work with. They became a valuable partner in our business and we look forward to working with them on future projects.”

—David Pairitz, CEO
 Global Link Distribution



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