

10 Advantages of Architect-Led Design-Build

A Client's Guide

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Welcome!

We prepared this guide after seeing so many people struggle with understanding the differences between the **Design-Build** (DB) method of project delivery versus the traditional **Design-Bid-Build** (DBB) method. In Design-Build, the Owner contracts directly with the “Design-Builder” who provides Design and Construction under one single-source contract. In Design-Bid-Build, the owner separately hires the architects and engineers, bids out the design to bidding contractors, and then hires one of the bidders as the general contractor for construction. These are all independent people running independent businesses. Coordination of these individual teams by the Owner while keeping track of the overall performance and progress of the project can get very challenging, often long and tortuous.



◀The Brooklyn Bridge (New York) and the Parthenon (Athens, Greece) ▶
were effectively Design-Build projects.



A Brief History: Throughout the twentieth century, most projects were being executed under the traditional Design-Bid-Build system, and design professionals continued to receive training under this system. However, Design-Build, with its roots in the centuries-old figure of the **"Master Builder"** (those who had the highest respect from their peers and clients due to their mastery and knowledge), has been gaining more and more leverage as clients and architects have started to understand and realize many benefits that this delivery method brings.

Not everyone can be a Design-Builder. It takes an architect with qualities and talent as a designer, while being pragmatic, practical and technical as an engineer at the same time. It takes deep knowledge and understanding about various systems, construction process along with an unquestionable honesty and reputation.

Here we will focus on ten reasons why the Design-Build system is better and the advantages it brings the owner, and why Architect-Led Design-Build is the best of all, in our opinion.

- Eddie Gontram, Gontram Architecture & Ten Penny Construction

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Single Source Responsibility

The single greatest benefit to the Design-Build method is that both Design and Construction are provided to the owner from a single source. There is a single point of responsibility for quality, cost, and schedule maintenance. The owner does not need to worry about coordination between the design team and the construction team. Instead, the owner can focus on their own business, and how the project needs to be scoped to address those needs.

When a project is executed in the traditional Design-Bid-Build system, it is usually hard to determine who exactly is responsible if and when something goes wrong. None of the employed parties would want to take responsibility in order to avoid penalties of any kind and thus causing delays in the progress of the project.

Save Time

A Design-Build project does not lose time due to miscommunications between the teams, budget discrepancies, back and forth between contractor bids, etc. The project is often able to overlap activities of costing and budgeting with that of the design process thereby making the overall time frame shorter. Additionally, since the client hires the design-builder to perform the construction right from the start, the permits process can be initiated as soon as the design is completed and final sets of plans and copies are printed. This saves a lot of time between completion of design, sifting through several bids and finally hiring the right contractor.



*Michael Jordan Nissan, Durham, NC
0 sale days lost during construction*

Save Money

At the very early stages of a Design-Build project, design and construction personnel (often utilizing input from key subcontractors) use a team approach to evaluate alternative materials and methods effectively, providing “value engineering” so important design decisions can be made in the best interest of the owner. Constructibility is examined and adjustments are made long before the design is final. These early reviews contribute to substantial savings to the owner.



Quality

As solely responsible for the project, the Design-Build team is extremely motivated to provide a high quality project to the owner. Initial discussions with the owner produce expectations that the Design-Build team uses as performance criteria throughout design and construction. And, with team-oriented collaboration between the Architect and the Contractor, quality can be jointly pursued without contention.

Early Budget Confirmation

The Design-Build team, in concert with the Owner, develops the initial scheme based on the Owner's wants, needs and desires. The Design-Build team then produces an initial estimate of costs for the scheme at this early stage, far sooner than in the traditional DBB model. Continuous estimating throughout design confirms the original price, or the design is adjusted. This permits the firm establishment of project feasibility and financing well in advance of the drafting of final construction documents.





Better Design thru Understanding Construction

Architects, by nature are artists. Left to our own devices, we can create wonderful, but terribly expensive (assuming they're buildable) creations. We focus very strongly on our ability to create good designs and on what sets them apart. Early involvement with the contractor can provide the Architect with necessary input to avoid unnecessarily expensive or difficult creations. If the Architect has experience with construction, the Architect can use this knowledge to improve his designs. And that improvement helps produce a higher quality product for

the owner. The owner emerges a winner in this case, since not only the project is executed in a shorter time frame, with proper provisions for systems but also with integrated and smarter overall problem solving potential WITHOUT the loss of design quality, especially with Architect-Led Design-Build.

*Red Dog Office Building
Raleigh, NC*



Better Construction thru Understanding Design

In the Design-Bid-Build delivery system, the Architect hands over the design to a contractor who will eventually construct and execute the project. This requires the contractor to interpret the drawings, and build the project from a combination of information acquired from various different resources and teams. The contractor may or may not have fully understood the drawings. If there are issues that were not properly solved or addressed during the design phase, they need to be re-addressed. Usually, the contractor will have to go back to the architect and wait for a solution, taking days or weeks to create the design revisions needed which in turn causes delay in the overall duration of the project.



In the Architect-led Design-Build model however, construction can be performed without these glitches or drawbacks, since they already know the project inside out right from the start. There is nothing new that they need to understand or interpret. The project execution is fairly straightforward since most potential issues are addressed during the design phase itself. If surprises do come up during construction, they are minimized and solved relatively easily and much quicker since the design-builder IS the Architect.

*Red Dog Office Building
Raleigh, NC*



Enhanced Communication

In the traditional DBB system, the owner has to go through a series of hoops to be able to finally build and complete his project. First the owner would select and hire an Architect who will design the project, and (in concert with consulting engineers) produce the construction documents. Once the project is fully done on paper, it goes into actual construction where the client then needs to deal with the contractor. With involvement of so many different professionals in the project, it becomes difficult for the owner to coordinate, figure out the right path of action and often putting the client in the middle of discussions and debates between parties. The owner ends up spending much more time in aligning the teams and defining a plan of action than preferred.



Since the Design-Build system involves having a single firm perform the entire process, starting from design through construction and execution, the client has to deal with a single point of contact for all communication on the project making his own life much easier and hassle free. Coordination between professionals specializing in various individual aspects of the construction process is smoother since they all are from the same team or firm and know the project inside out right from the start. Also, in case coordination issues or any other technical issues arise, it is the responsibility of the Design-Builder, and not that of the owner, to tackle them.



Lower Administrative Costs

In the Traditional System, the client ends up spending a large amount of time in administrative issues, managing large amounts of paper work and bills for the project coming in from all directions. Often, the owner ends up spending so much time tending to paperwork and bills that he is left with little time to devote to the project itself. This can cause for him to make some delayed decisions affecting the progress of the project.

In a Design-Build Project, the administrative burden for the owner is reduced since all bills come from a single source; therefore the amount of time spent on checking and reviewing information is greatly reduced. The owner thus has more time to dedicate to the project itself, enabling him to make quicker choices and decisions.

Improved Risk Management

Performance aspects of cost, schedule and quality are clearly defined and responsibilities/risks are appropriately balanced (individual risks are managed by the party best positioned to manage that risk). Change orders due to "errors and omissions" are virtually eliminated, because the design-builder had responsibility for developing drawings and specifications as well as constructing a fully-functioning facility.



Now, Go! You now have the key information that will help you lay a successful foundation for understanding the **Architect-Led Design-Build** system. Unfortunately, we can't include every important piece of information about the Architect-Led Design-Build system of project delivery successfully in this guide.

Actually, that would be impossible because each project is unique and the requirements differ based on a multitude of factors. But with the 10 reasons explained in this guide, you have the critical information to help understand the advantages of the Architect-Led Design-Build system.

If you are ready to talk about your project, please give us a call. We will be happy to walk you through it. Best wishes for the success of your project!

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