



## **Design-Build Advantages / Disadvantages**

The design build process is a construction project delivery system that appoints a single sole member full responsibility to design and build a construction project. This method is employed in both new home construction and home renovation as an alternative to the traditional design-bid-build method. The design-bid-build method is the generally accepted home building procedure where the owner directly hires the home designer to design the home. When the plans and product selections are complete, the owner will invite general contractors to prepare bids for the home's construction.

The design build home construction delivery method has become the generally accepted home contraction and remodeling practice for the last decade. This project delivery system has become a preferred contracting method for owners to rely on due to the greater advantages over the traditional delivery methods. We will discuss the advantages and disadvantages of this home design to build process.

### **What is Design Build**

The design to build construction process is a project delivery method that begins with the owners contracting with a general contractor to be fully responsible for both design and the construction their home project. General contractors will either directly hire a third party home designer and structural engineer or have an internal staff to conduct the home design. This method is fundamentally different then the traditional design-bid-build method because this process requires the general contractor to be fully responsible to the owner for both design and construction. Thereby dramatically reducing the owners overall risk and expense in the project .

### **Advantages**

**Single Source Responsibility** - At the very heart of the definition of design build is the single source accountability of your general contractor. The general contractor and the owner enter into a design build contract that requires the general contractor to facilitate the home design (new home construction or home renovation) project. The general



contractor (master builder) in turn designs and builds to the architectural, lifestyle and financial criteria provided by the owner.

The design build process effectively transfers the owners risk normally associated with the traditional design-bid-build method to the general contractor. If there are design errors or omissions in the construction documents, the general contractor is fully accountable for these mistakes instead of the owner. If there are incomplete design documents that result in additional expense, the general contractor will absorb the consequences.

**Cost Savings** - The design build process reduces overall project cost through the efficiency of the complete process. It saves expense by streamlining the entire home design ,therefore reducing both the timeline and general contractors claims for design errors. Plan errors and omissions would normally be charged at the expense of the owner by the general contractor in the form of change orders.

This delivery method also contributes to cost savings by the inherent ability of the general contractor and home designer to collaborate in value engineering the design. By working in a cooperating tandem, the home designer has a viable partner in quantifying and qualifying conceptual design construction cost.

**Time Savings** - The time savings contribution from the design build method are principally the results of the process efficiencies. The general contractor provides the design budget pricing throughout the entire design process. As the home design and product selection evolves so does the construction budget accuracy. The efficiency occurs by eliminating both the bid procurement and any time required to redesign to maintain budget goals.

In the design-bid-build method, if the owners initial construction budget is not realized after bids are accepted, the owner must request the home designer to either re-design the plans or value engineer the plans and specifications to reduce construction cost to meet the budget or accept and live with the higher pricing.

**Reduced Claims Exposure** - Change orders are a common occurrence in construction projects caused by both design and owners. Some change orders result from owners changing their minds, while others result from design errors and omissions. The design build method reduces these types of cost exposures by transferring them to the general

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contractor. The design build contracting method makes the general contractor principally responsible to the owner for these claim expenses as previously discussed.

***Value Engineering*** - As the design process evolves the owner may insist on specific architectural features or design elements while wanting to maintain the construction budget. The general contractor will be required at these times to value engineer the design in an effort to reduce construction or product cost in other areas of the home design.

The value engineering is also commonly done by the master builder and home designer as the design evolves. The general contractor will identify highly expensive features and discuss their perceived value with the client during design. The owner then is able to approach the home design concept from a value proposition perspective.

***Optimum Project Efficiency*** - The design build method is a more efficient process than the traditional design-bid-build method. The design build method is a collaborating process between owner, general contractor and home design members. This collaborating effort is often referred to as the design team. The master builder leads the design team to achieve the desired goals developed during the conceptual design phase.

Quite frequently the traditional design-bid-build method in contrast is often burdened by ego conflicts and finger pointing between builder and home designer. The architect blames the builder for not following fine print construction specifications and the builder will blame the home designer for design problems. This conflict can lead to either or both parties not representing the best interest of the owner and focusing on turf protecting. Anyone that has experienced a one of a kind design and build has usually witnessed this occurrence at some point during the design or construction phases.

***Greater Owner Project Control*** - The design build method provides the owner greater control over the entire design and construction cost than the traditional design-bid-build method. As has been presented, that there are greater cost savings, time savings and lesser risk of claims and liability experienced by the owner during design and construction.



## **Disadvantages**

**Owners Lesser Control over Design** - The owner may sacrifice some control over the complete design as they experience trade-offs between the budget and design. This is not an characteristic unique to the design build process. Owners face the same sacrifice decisions in the design-bid-build method, although at a greater expense when plans are completed before they discover these factors.

**Lack of Competitive Pricing** - Critics say that the lack of competitive bidding by the design build process points to its greatest flaw in serving the interest of the client. By the mere fact of the design build method contracting with a single source appointment, by default eliminates the traditional competitive bidding component from the process. The nature of the design build method is a best value approach instead of a competitive bid solicitation approach.

This very issue is what the design build method critics suggest as the primary limitation of this project delivery approach. The critics claim that design build inherently allows the master builder to ignore competitive subcontractor bidding which results in price escalation.

There are many different structured contract methods that can be used to mitigate such risk for the owner. They run the full gamut of shared risk from such higher builder risk contracts like lump sum to lower shared risk contracts such as project management contracts.

The fundamental nature in construction contracting is managing the alignment and risk associated with the unknowns of a construction project. It is the owners responsibility to access and evaluate these risks in determining their risk tolerance. These findings guide them to a contracting method that makes them comfortable with acceptance of price and risk.

The Construction Industry Institute has studied the merits of each of the project delivery approaches. The Institute concluded that the design build process was the most economical and efficient project delivery system in the building and construction industry. The Institute found that the greatest obstacle that the design build system faces in popular acceptance is educating owners of the benefits and merits.