

Design-Build Practice Manual



Document 105: Design-Build – Now

Design-Build is a Method of Project Delivery

Design-Build is often compared to the concept of the Master Builder which existed in ancient times and in the Renaissance. Many of the great wonders of the world were created using this methodology. The Master Builder was not a contractor, an architect or an engineer. The Master Builder was the embodiment of all three disciplines. The Master Builder concept depicts the earliest model for delivering design and construction as an integrated service.

Over the years, the design and construction industry has shifted from a culture of cooperation, teamwork, trust and mutual respect to one of fragmentation and at times inefficiency. There are many historical reasons why this happened. In the past few decades, many organizations have made efforts to restore the design and construction industry to its collaborative roots. Design-Build has thrived because owners see the need for change in the way projects are delivered.

Within the construction industry there are a number of different project delivery systems that Owners may choose to complete their project. Choosing the right project delivery method is a critical part of the strategic plan that every Owner must develop when embarking on a new project. Owners can influence desired results from everyone involved by the way they strategically and proactively plan from the beginning of the project.

Among the project delivery methods that Owners may choose from are traditional design-bid-build, construction management and Design-Build.

Design-Build Project Delivery is a single source for design and construction that includes a comprehensive process including planning, design and construction required to execute and complete a building facility or other type of project.

Over the past few decades, use of Design-Build in both private and public sectors has greatly accelerated in Canada, making the Design-Build Project Delivery method one of the more effective and widely used delivery methods for design and construction.



Design-Build is Single-source Responsibility

In the Design-Build Project Delivery method, one entity, the Design-Builder, enters into a single contract with the Owner to provide both design and construction services.

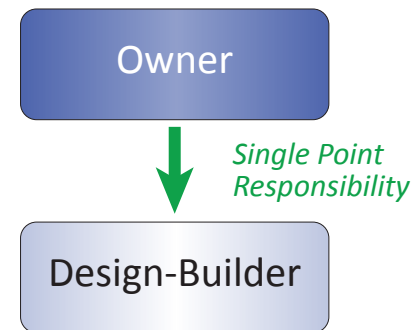
The single contract for both design and construction is the Design-Build distinction and advantage. A single contract between the Owner and the Design-Builder means that there is a single point of responsibility for both design and construction issues—this characteristic changes everything.

When the Owner deals with only one Design-Build entity, the roles of designer and constructor are integrated. This one entity leads a unified flow of work from initial concept through to completion.

The principle of a single contract between the Owner and the Design-Builder transforms the relationship between designers and builders into an alliance that

fosters collaboration, creativity, and teamwork. United from the onset of the project, an integrated Design-Build team readily works to successfully complete a project faster, more cost effectively, and with optimized project quality.

One Contract For Design AND Construction



By Contrast

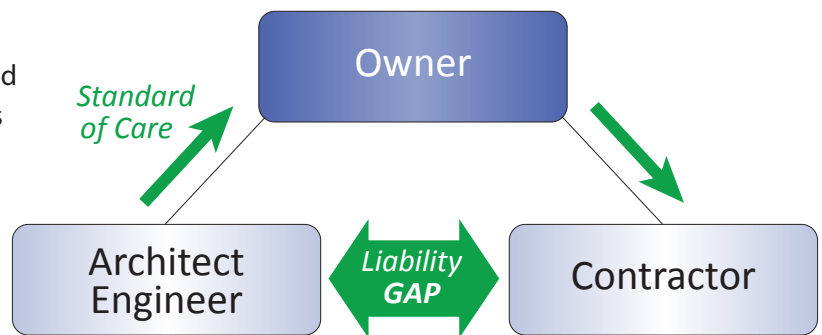
In all other project delivery methods, there are separate contracts for design and construction. This means that an Owner must manage separate contracts for these two services. As a result, the Owner could become involved in disputes between the designer(s) and the contractor(s).

For example, in the design-bid-build project delivery method, designers provide design services and prepare plans and specifications to the best of their abilities, but do not warrant those documents to be free of errors or omissions.

The designer then presents the completed plans and specifications to the Owner, who in turn, distributes those documents to the contracting industry in the form of an invitation for bids. When the Owner gives the designer's documents to the contractor, the Owner does so with an implied representation that the plans and specifications contain sufficient information for the contractor to bid and build the project.

There is a risk that in certain circumstances, traditional project delivery methods do not provide the complete information necessary to accurately bid and build a project. When this happens, disputes, claims and change orders are often the result, with the owner caught in the middle of disputes between the designer and the contractor.

Other Delivery Methods



Advantages of the Design-Build Method

- **Risk Consolidation** – A single contract for both design and construction consolidates the majority of responsibility and accountability for the completeness, accuracy and integration of the design and construction processes to the Design-Build entity.
- **Enhanced Design and Construction** – Designers and constructors form a unified, integrated team at the onset of the project. As a result, the opportunity to coordinate and optimize the design effort, with the means and methods of the construction, is greatly enhanced.
- **Early Confirmation of Price** – A fixed price can be established during the design development phase.
- **Time Compression** – With both design and construction activities overlapping, a faster delivery of the project can be achieved.

- **Reduced Owner Coordination** – Combining both design and construction into one consolidated contract reduces the Owner's requirement to coordinate the design and construction team.

Design-Build is intended to be a highly collaborative, integrated process that is built on trust, mutual respect, teamwork, innovation and creative problem solving. Design-Build unleashes the power of the team to deliver projects faster, better and for optimum cost—best value for the money, time and effort invested. Owners find that when Design-Build is done right, their level of engagement with the entire team is more meaningful than with other traditional delivery methods. Design-Build can successfully deliver construction projects with superior results.



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