



BUILDING INFORMATION MODELING (BIM)

Construction costs are on the rise annually, growing by at least 5% in 2018. Controlling costs is a high priority for every owner and developer and is becoming more important every year. Building Information Modeling (BIM) is growing in popularity as a way to help reduce costs by minimizing change orders, design conflicts and requests for information during the construction phase of a project.

BIM is a process used for design or integration of design that uses 3D modeling, incorporates 4D scheduling, 5D cost estimating capabilities, and XD analyses (such as spatial coordination, energy, sustainability, facility management, etc.) to digitally design, construct and operate a structure over its entire life cycle. Incorporating BIM at the start of a project creates a holistic package of information about the design and functionality of the structure and allows owners, designers and developers to have more control of project design, timeline and budget. They can identify design conflicts and efficiencies early in the process, minimizing costly RFIs, change orders and time delays.

The BIM process brings owners, architects, mechanical, electrical and plumbing (MEP) designers, and contractors together early in the project to facilitate collaboration and decision making for optimal project results. At **Dialectic** we prioritize team communication and collaboration with our clients and our project partners on every project. BIM is an efficient way for us to achieve transparent communication on projects and takes our standard approach further by applying the information gathered to aspects of construction beyond design.

As each discipline on the project develops their systems and uploads to the "Central" or "Federated" model, the full design progressively matures with higher levels of intelligence. The information provided in the BIM process can be used for construction logistics/coordination, facilities management, systems & energy analysis, and more. Using the BIM process with **Dialectic** can be a powerful time and cost savings tool for every construction project, as well as facilitate more sophisticated analysis like energy modeling.

BIM SERVICES

- 3D MEP Coordination
- 4D Visualization (including schedule automation)
- BIM Execution Planning
- Scope Clarification/Rendering
- Construction Documents



Dialectic
ENGINEERING