

Cox Schepp Virtual Construction

BIM

Building Information Model (ing)

At Cox Schepp, BIM is about organizing all of the information we collect about a project. The model is a collection of that information, organized by a 3 dimensional digital image that makes it easier than traditional drawings and documents to understand and navigate.

VDC

Virtual Design and Construction

At Cox Schepp, we define VDC as "a process which utilizes various digital tools, such as BIM, to integrate design and construction knowledge and leverage that information to improve all aspects of a project."



- Visualization: Modeling a project allows all team members to visualize the project for a better understanding of the owner's goal.
- Conceptual: Including Cox Schepp and using BIM in the conceptual design phase improves the accuracy of early pricing.
- Marketing: Allowing potential buyers to see the view out their future window is one of the many sales benefits of VDC.
- Communication: Creating a BIM requires improved communication between all members of a project team. Better communication = a better project.

Building Information Modeling is not just a new version of CAD. It's a tool that requires a new way of thinking about construction projects. Instead of designing and drawing a project in 2 or even 3 dimensions, design professionals build projects by assembling information rich objects into buildings.

A BIM is a collection of databases that are cross referenced and organized into a familiar format; a 3-D digital graphic of the project. Each item in the building is connected to the rest; much like it is in a real world construction project. This connectivity of information allows for expanding the use of the BIM beyond that of traditional drawings and models. Scheduling, material quantity, energy use, coordination...all of these functions and more are options you can leverage with BIM.

A BIM is a uniquely flexible tool that has the potential to impact a project in a myriad of positive ways.

Virtual Design and Construction is the process used to leverage that potential.

The benefits of BIM are restricted if it is used to print drawings and proceed in a traditional mode. The VDC process leverages the BIM beyond drawings by planning the project with those opportunities in mind. Setting BIM specific goals and responsibilities at the beginning of design allows the VDC team to support and track those goals. This helps to ensure that the project is neither over nor under modeled and the resulting BIM meets the project goals.

IPD: The Best of BIM

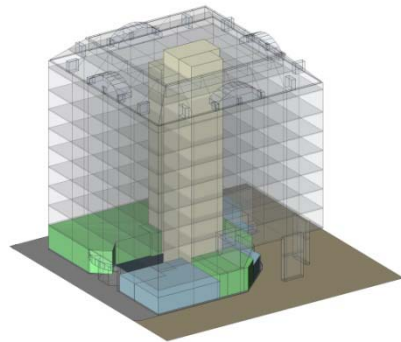
IPD

Integrated Project Delivery

IPD is a term created by the American Institute of Architects. It is defined as: "...a project delivery approach that integrates people, systems, business structures and practices into a process that collaboratively harnesses the talents and insights of all participants to optimize project results, increase value to the owner, reduce waste and maximize efficiency through all phases of design, fabrication and construction."

At Cox Schepp, we see IPD as the definitive use of BIM enabled VDC. A truly integrated project brings all the stakeholders together, creating a formidable alliance of knowledge and skill.

www.coxschepp.com



Integrated Project Delivery is a ground breaking new project delivery model. It requires a completely different approach from new contracts to an entirely different design and construction process.

IPD is a complete paradigm shift. Current project delivery models are splintered, requiring cooperation from team members while contractually pitting them against one another.

IPD unites the project team from the very beginning by not only joining the Architect, Owner and Builder in one contract, but including consulting Engineers and key Sub-contractors as well. By creating a united team, with a vested interest in project success in the beginning, IPD maximizes the knowledge and talent of all parties. With IPD, no one has a successful project unless everyone has a successful project. This approach requires all parties to participate and work for the good of the whole rather than focusing solely on their immediate portion of the work.

What's in your BIM?

- BIM is a flexible tool. Each project should have its own set of BIM goals.
- For owners who may be skeptical, starting with a detail or portion of the building is a good way to test BIM.
- For historic projects, a 3-D laser scan BIM provides great accuracy and preservation options.
- For financing dependant projects, a BIM based conceptual estimate is fast and accurate.
- For management heavy facilities, BIM provides a live, organized database of information that can be used for everything from maintenance to FF&E tracking.

Optional uses for your BIM

Energy Analysis
Live partition layout
Massing Diagrams
Crane and lay down plans
Clash Detection
Constructibility Analysis
Facilities Management
....anything you can imagine



2410 Dunavant St.
Charlotte, NC 28203
Phone 704.716.2300
Fax 704.716.2300
Fax 704.716.2300
bcutler@coxschepp.com