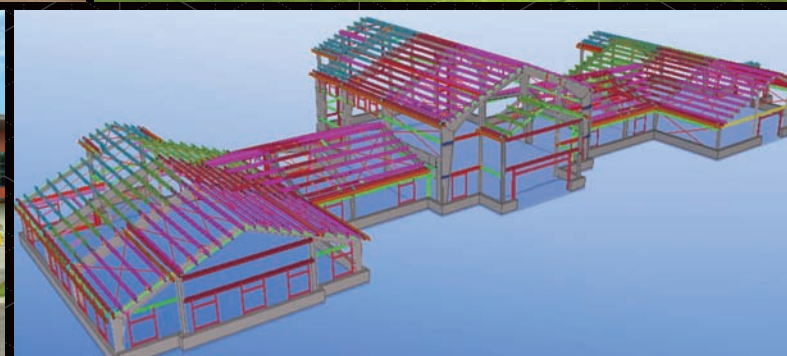


# ABC&BIM:

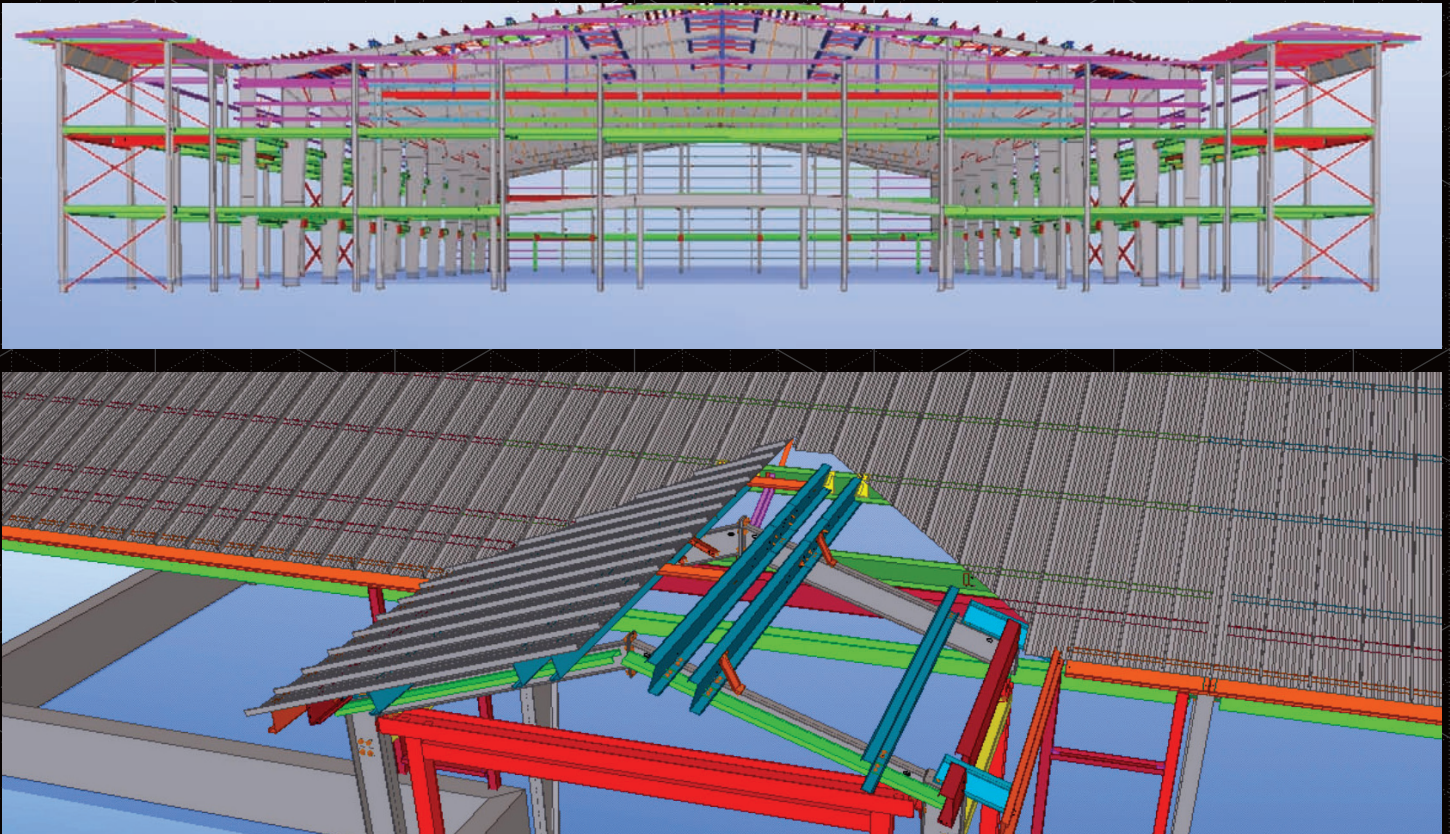
Consider The Game Changed

## Building Tomorrow with BIM 3D Digital Modeling

Providing powerful value, Building Information Modeling, or BIM, is driving an unparalleled revolution in the construction industry using 3D digital modeling software to more effectively design, detail, manufacture and erect buildings.







## WHAT IS BIM?

Building Information Modeling is the process of generating and managing building data and its various components throughout the building's life cycle. Using three dimensional, real-time, dynamic building modeling software to increase productivity in building design and construction, the process produces the Building Information Model.

Unlike past 3D innovations in the building industry, BIM is more than a conceptual modeling tool. BIM encompasses building geometry, spatial relationships, geographic information, quantities and properties of building components. When the modeling software is used by manufacturers and principles involved in a building project, the resulting BIM is usable for fabrication. It involves ground-up reality rather than top-down theory.

### Why use BIM?

American Buildings Company is pairing its proven track record of quality and service with the future of 3D modeling to give Builders, general contractors,

engineers and architects an edge over competitors in the market. Providing customers with a modeling system that can display an exact replica of their building leads to confidence and peace of mind for the life cycle of the project.

### Digital prototype

The BIM process produces a digital prototype of your project, allowing you to build it virtually before building it in reality. A BIM project is not "drawn" in the traditional sense; rather it's "built" digitally as a database in BIM software. Instead of having to look at hundreds or thousands of separate drawings, schedules, specs and cut sheets for all the information on a particular element, all the pertinent information is built into the object in the BIM.

In addition, the building owner gets a digital copy of the completed project model that can be used for decades of operation and maintenance. Considering that 85% of the cost of a building over 30 years is in maintenance and operation, having a digital copy of the completed project that includes all information related to the building eases the task of ongoing maintenance. This is why virtually all governments require building contractors to use BIM for public construction.

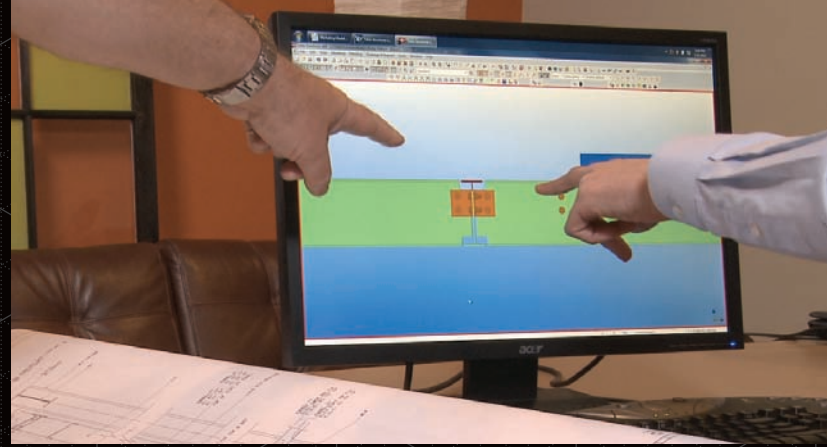




### IPD = greater communication

BIM seamlessly bridges gaps in communications between Builders, owners, architects, engineers and contractors. Utilizing BIM with an Integrated Project Delivery system, or IPD, leverages the power of modeling to facilitate collaborative decision-making.

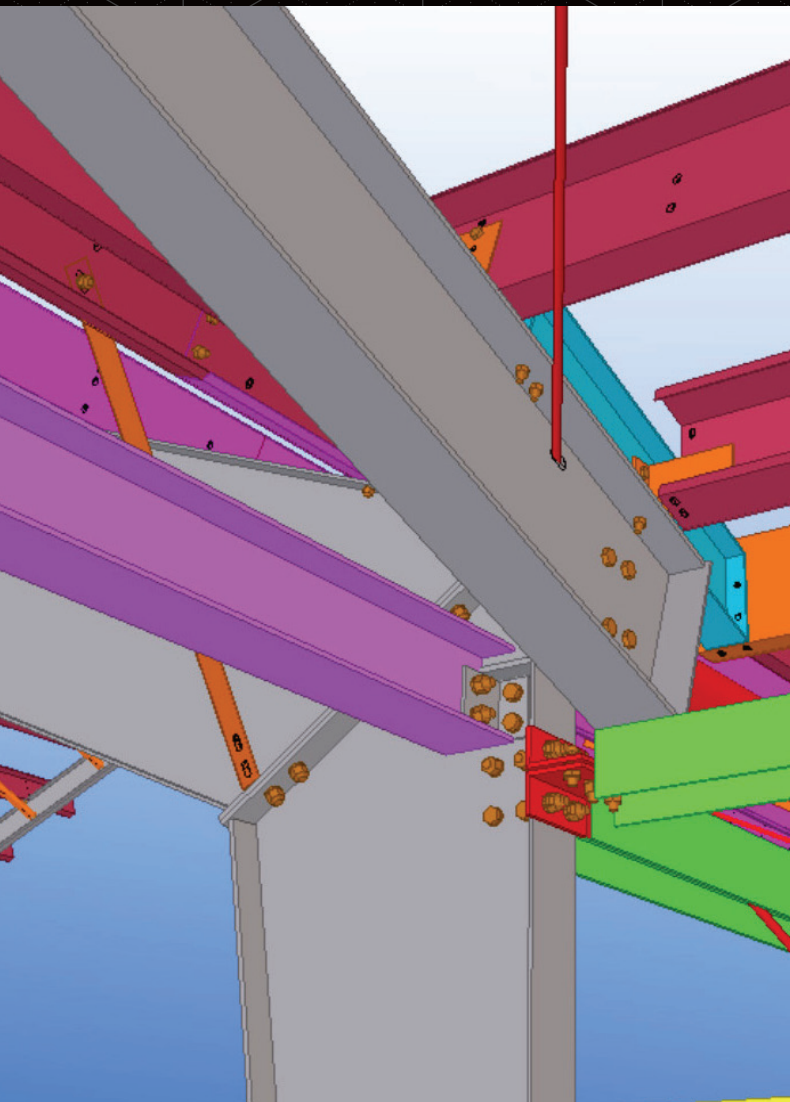
IPD allows the project principals to produce a design that is optimized for quality, aesthetics, constructability, affordability, timeliness and seamless flow into life-cycle management. The ability to collaborate and fix problems in the early stages of development, before construction has begun, means resolving issues virtually before money is lost on the job site.



**Be a hero** By offering this added value to their projects, ABC Builders gain a huge advantage over competitors still building the traditional way.

### Solve problems before breaking ground

Design issues can be addressed and modified early in the process, saving time and money. Visual representations of potential issues enable you to identify clashes and conflicts between architectural, structural, and MEP systems. This means you can resolve potential problems before a building is actually built.



## BIM BENEFITS

BIM is the choice of leading Builders, Architects, Fabricators, Erectors, Engineers, Designers, Manufacturers and Owners because it:

- Allows for easier coordination of various software and project personnel through Integrated Project Delivery (IPD) systems
- Serves as a significant resource for erectors
- Produces a working model usable for fabrication
- Leads to increased productivity
- Enables improved communication across project team members, which can significantly reduce change order costs
- Enhances quality control, including clash detection
- Provides comprehensive life-cycle management





## WHY ABC?

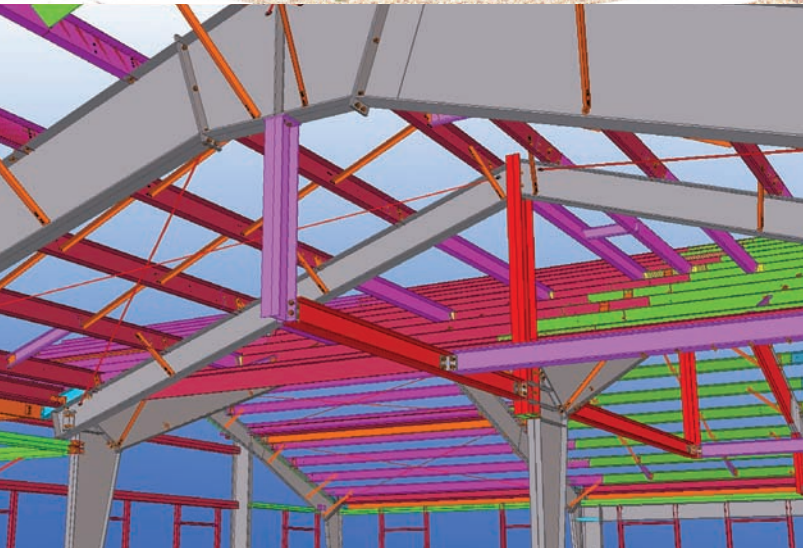
### BIM and American Buildings Company

For more than 65 years American Buildings Company has been pioneering the design, manufacture and delivery of metal buildings and roofing systems that set the industry standard. From industrial and commercial structures to tailored projects for the automotive, retail and transportation industries, the ABC family of more than 850 authorized Builders has the expertise

to exceed expectations for custom engineered metal building projects in a variety of industry segments. Headquartered in Eufaula, Ala., with engineering and manufacturing centers located throughout the U.S., ABC delivers a proven combination of products, technology and customer service to accurately execute projects on time and on budget.







A TRIMBLE COMPANY

### **Tekla BIM software for interoperability**

American Buildings Company proudly partners with Tekla, a leading modeling software solutions provider. Utilizing Tekla Structures as a BIM software solution, ABC has ensured the interoperability of 3D with 2D systems to verify that all modeling is cohesive. Tekla Structures makes it possible to share model and drawing information with all IFC-compliant architectural modeling programs, creating open collaboration and interoperability and 3D building information models that can be utilized and shared by all building and construction disciplines.

Tekla BIMsight is a free software application for building information model-based project cooperation. With Tekla BIMsight everyone involved with a project is able to view the BIM, at no charge. Enabled for Windows-based tablet devices, Tekla BIMsight is available for downloading at [www.teklabimsight.com](http://www.teklabimsight.com).

Tekla Structures provides an accurate, detailed, intelligent and data-rich 3D building information modeling environment.

A unique XML link between Tekla Structures and Graphisoft® ArchiCAD®, allows architects and engineers to share and coordinate project information. Tekla software supports legacy formats, such as DGN and DWG with an AutoCAD® drawing export, allowing engineers to create DWG files. The drawings can then be imported into the architectural drawing environment for production or referencing.





## ABC and Nucor Are Committed to the Construction Industry

Nucor is committed to advancing technology and productivity in the construction industry through continued investment in BIM technology. Nucor companies with major BIM initiatives include the Vulcraft Group, American Buildings Company, Harris Rebar and Fischer & Ludlow.

### **The impact of BIM on the Vulcraft Group**

Vulcraft, the leading manufacturer of joists and deck in North America, is pairing their proven track record of quality and service with the future of 3D modeling to give fabricators, erectors, general contractors, engineers and architects an edge over competitors in the market.

When viewing the Building Information Model provided by Vulcraft, replicas of the steel joists represent the "as-built" product that will be delivered to the job site. While viewing designs of the joists in BIM, contractors and other parties have the advantage of reviewing the actual size of the member and panel layouts.

### **The impact of BIM on Harris Rebar**

Harris Rebar is North America's leading fabricator, installer and distributor of concrete reinforcing steel and related products.

Harris Rebar's team of BIM experts utilize BIM 3D modeling technology to provide concise and reliable infor-

mation to work collaboratively, reduce risks, quantify feedback and truly add value to customer projects. BIM increases productivity, provides cost saving information and enables better decision making.

BIM visualization provides clearer RFIs by showing 3D representations, resulting in a faster decision process. The same visualization helps internally for detailers and externally for contractors and with placing crews.

### **The impact of BIM on Fisher & Ludlow**

Fisher & Ludlow is a supplier of high quality gratings for major capital projects around the world. Tru-weld and Fishlow products may be found in places as far as Asia and South America, and in environments as diverse as the arctic or the tropics.

Armed with BIM 3D software the company can take requirements from structural drawings to detailed grating drawings and then on to completely fabricated ready-to-install grating.

### **Collaboration**

BIM provides true 3D connectivity and integration between Nucor Divisions to facilitate collaboration on projects and processes.

**The ultimate ABC goal: To leverage technological leadership into market leadership.**

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