Construction and Real Estate Industry: Construction

AutoCAD® Revit® Architecture Suite Autodesk® Constructware® Autodesk® NavisWorks®

During our weekly meetings, we pull up the model, spin it around, and look at all of the architectural, structural, and mechanical elements. Catching obvious clashes, like a duct running through a beam, is very easy.

—Todd Bovey Associate CDI Engineers

Interference Management

Detect Clashes at Any Level across Systems and Trades.



The traditional 2D design process, involving multiple disciplines working with different systems, can result in inconsistencies or conflicts that construction teams must resolve. Because each discipline works in its own system, it can be difficult to identify conflicts before they show up in the field.

Challenge

Manual Clash Detection Takes Too Long
Today, many construction teams perform clash
detection manually, either by overlaying individual
drawings on a light table or by using 2D CAD tools
to overlay CAD layers to visually identify potential
conflicts. This approach is slow, costly, and errorprone.

- Too many RFIs and corrections in the field lead to numerous, expensive, time-consuming change orders
- Frequent callbacks result in high warranty costs
- Lack of coordination among designers and contractors results in errors and omissions
- There are limited opportunities for prefabricating materials offsite
- Updating designs in paper-based systems is an unreliable process

Opportunity

Identify Conflicts before ConstructionManaging potential interferences using Building

Managing potential interferences using Building Information Modeling (BIM) allows you to combine automatic geometry-based clash detection with semantic and rule-based clash analysis for identifying qualified and structured interferences. These tools let contractors selectively check clashes between specified systems—such as mechanical and structural systems—at any level of detail across systems and trades.

- Use a virtual 3D building information model as the source for all 2D and 3D drawings
- Check time and space coordination to improve site and workflow planning
- Identify conflicts before sign-off and fabrication
- Maintain a complete record of all interferences found throughout a project

Summary

Autodesk software solutions provide professionals on 3D construction projects with the control and peace of mind of advanced interference management, analysis, and coordination.

For more information, dial 866-815-3501, email sales@autodesk.com or visit www.autodesk.com/construction.