

# ASSEMBLE SYSTEMS

## WORKFLOW GUIDE

### Model Checking Made Easy

A New Way of Model Checking and Value Verification that Results in Data You Can Count On

# BIM MODEL CHECKING

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Building information modeling (BIM) is the backbone of today's building projects. But when was the last time you had complete trust in your BIM data? Without accurate model data and the confidence it generates, you're limiting the BIM payoff – and your project success.

The solution is obvious: Simply ensure the accuracy of BIM data. Right? Unfortunately, manual BIM model checking is time-consuming and unreliable. Automated tools exist, but they can be complex, expensive, and out of reach of most AEC firms.

Fortunately, that reality is changing, and AEC professionals today have access to an automated model-checking solution that tackles traditional challenges head on to optimize BIM model data easily and affordably.

## GROWING DEMAND FOR BETTER BIM DATA

### What's happening in AEC to drive demand for thorough, accurate BIM data?

In a nutshell, it's the very growth of BIM – increasing adoption as well as growing awareness of BIM's value for more than 3D modeling and clash detection – that is spurring demand for reliable BIM data.

Architects and general contractors, driven by the recession to find new ways to build business, dove into BIM with new enthusiasm. As the software technology advanced, so did the success stories of earlier adopters, spreading the word of BIM's ability to streamline the design and construction by simplifying the RFI process, minimizing change orders, managing materials costs, and more.

But demand for BIM hasn't stopped there. Since the U.S. General Services Administration began requiring BIM for all federal building projects in late 2006, project owners both public and private have required BIM in steadily increasing numbers to improve building project efficiency and cost. More recently, owners are realizing that they can leverage model information to improve operations and facilities management. This in turn is driving demand for BIM standards that apply to parameters, not just geometry.

As recognition grows around the benefits of using BIM data, it's more important than ever that BIM users have tools to effectively check values; determine assembly code accuracy; and create clear, accessible reports to use at all stages of the AEC process.



### Growing Demand for BIM

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### BIM Software

Using your authoring software for model checking would seem practical; however, the reality is that the technology lacks the automation and flexibility needed to optimize the process.



### Manual Data Checking

This process is tedious, time-consuming, and error prone. Ultimately, if you have to check models manually, you'll likely do it only for the datasets required by the owner, and not the ones that could benefit your team.



### Model-Checking Software

Nearly all these tools are expensive, very labor intensive, and focus on the needs of designers rather than delivering the metadata needed by construction professionals.

## TRADITIONAL MODEL CHECKING COMES UP SHORT

As BIM models are populated with information during design and construction, they commonly collect incomplete or incorrect parameters. When a model holds thousands of items, finding these issues can be very difficult. The result is a model that lacks integrity and ultimately, usability.

Typical approaches to validating BIM data – if it happens at all – are inefficient and do not deliver optimum data accuracy and confidence in the model.

In the end, making decisions based on data that isn't clean and correct is a waste of time and money.

## A BETTER WAY

Assemble Systems has developed a solution that overcomes traditional model-checking challenges to deliver a level of BIM data analysis you can't find anywhere else. Affordable, flexible, and easy to use, the cloud-based software customizes and automates the model-checking process, allowing users to quickly condition data and determine where corrections are needed.

Assemble users can easily examine model parameters against a list of acceptable values to quickly identify missing or incorrect information – whether in the data you specify or across the entire model – and create an audit trail of what's wrong and how to fix it. Then you can sync corrected data back into the model to move progressively toward 100% accuracy. Assemble also generates reports containing information in a variety of formats. Model information and reports are accessible to project team members regardless of location, thanks to the cloud-based platform.

Best of all is Assemble's automation. Automated value checking not only ensures accuracy, but also efficiency. You become more productive while your model quality continually improves. Assemble's automated reporting supports better understanding, project control, and decision-making during construction.

All these benefits deliver value not only for contractors and project owners, but also for specific roles throughout design and construction.

1

**Designers** can deliver better-quality documents for construction, reducing RFIs and ultimately producing a better project outcome.

2

**Project team members** have access to reliable information that helps identify options and make decisions more quickly and easily – and with ultimate confidence.

3

**BIM staff**, ultimately responsible for the validity of BIM data, can easily produce reports that support design and construction, provide easier access to trouble spots, and deliver faster data conditioning.

# THE END RESULT

The value of BIM for any application depends directly on the accuracy and completeness of the data in the BIM model – and your ability to access and interrogate that data to optimize your building project. As builders increasingly rely on BIM and project owners increasingly demand it, model integrity is more important than ever before.

Fortunately, there's a solution to these BIM challenges that's within easy reach. Assemble Systems delivers a new level of model checking and value verification that results in data you can count on. Better data means better projects, and that's good for your business.

