

JE Dunn Construction Group

Customer Success Story

Autodesk® Revit® Building
Autodesk® Design Review
Autodesk® DWF™
Autodesk Consulting



“Project owners and developers are starting to understand the benefits of BIM technology. From a long-term business perspective—and in terms of winning clients and building relationships—we can’t afford not to adopt Revit Building.”

Rodd Merchant, P.E., LEED™ AP
Quality Assurance/BIM Manager
JE Dunn Construction

Build smarter. Build better.

JE Dunn Construction drives greater productivity, improves quality, and wins more business with Autodesk® Revit® Building design and documentation software.

Project Summary

JE Dunn Construction has an unwavering commitment to excellence on every project. That commitment has driven the firm to become one of the nation’s largest and most successful general building contractors, as ranked by Engineering News & Record. It’s also the reason that JE Dunn has chosen to serve as both the construction manager and the general contractor on most of its projects. “Our approach is focused on providing valuable input during the planning and design phases,” says Rodd Merchant, Building Information Modeling (BIM) Manager at JE Dunn Construction in Denver. To help facilitate this process, JE Dunn has adopted Autodesk Revit Building software, an innovative design and documentation system purpose-built for building information modeling. Since implementing the new platform, JE Dunn has begun five major projects in Colorado alone.

The Challenge

“Any new software we adopt has to drive productivity to help us build smarter and

build better,” says Merchant. “That helps us avoid problems and conflicts and, ultimately, construction defects and warranty claims.”

A Fast Start

“Because we’re generally involved very early in a project, we’re often working off incomplete schematic drawings or program documents,” says Merchant. Using traditional CAD-based solutions, JE Dunn was able to display a building model in three dimensions. “But that wasn’t enough. We really needed a database that could help us capture meaningful information for use in other areas, such as estimating or our self-perform operations.”

Mixed-Use Challenges

One of the firm’s early BIM projects was the 180,000-square-foot Residences at Belmar Plaza, part of an \$80 million urban redevelopment in Lakewood, Colo. “It’s a mixed-use project with one story of below-grade parking, ground-floor retail space, and four stories of for-sale condominiums above,” says Merchant.

Autodesk®



Using Autodesk Revit Building, JE Dunn was able to

- Streamline the Request for Information (RFI) process
- Find interferences and conflicts before construction
- Communicate more clearly with the owner and design team
- Round-trip the annotated building model with Autodesk® Design Review

The Solution

At the heart of the Revit platform is building information modeling, a digital approach to building design, delivery, and management. “Revit Building enabled us to take a 2D drawing and convert it into a building information model that allowed us to extract important project information,” says Merchant. “That is very valuable.”

Show. Don’t Tell.

“The biggest benefit that we’ve seen is in construction visualization,” says Merchant. “Using Revit Building, we’re able to show people in the field how all sorts of complex components—angle changes, corners, steps, ledges—really work. For example, on a recent self-perform contract our project foreman was responsible for ten pours around the perimeter of a building. We sent him a DWF file of the model that allowed him to clarify and communicate his expectations to his crew. It really helped the field team avoid time-consuming and expensive problems.”

Generate Accurate Estimates

“Revit Building has also helped us in our estimating and preconstruction work,” says Merchant. “We use a lot of Excel-based templates for our estimating. Revit Building helps our estimators verify all sorts of numbers, such as number of doors or square footage of brick. We’re working all the time to try to automate that process. Ultimately, we hope to create a direct link within the application programming interface to our cost estimation system.”

Understand Site Impact

Merchant has also started building a library of temporary items—such as tower cranes, scaffolding, storage containers, and perimeter

fencing—used during the construction process. “Using Revit Building, we can build a preliminary model that shows a time line. The owner can see where the crane is going to be, where the excavation shoring has to go. It really helps instill confidence.”

Win More Business

“We’ve also seen a benefit right from the start in our marketing,” says Merchant. “Revit Building has really improved our ability to communicate to the owners why they should hire us as their construction partner. In two recent interviews, our ability to show the owner what we could do with Revit Building and how we extend the information to the field played a significant role in winning those projects. Our use of technology underscores our commitment to quality.”

Learn from the Source

“To give us a jump-start, we worked directly with Autodesk Consulting,” says Merchant. “One of the consultants had a 25-year track record in construction. He really knew construction, and he was focused on how to apply technology to our business.”

The Result

“BIM and Revit Building can certainly impact every aspect of what we do as a company,” says Merchant. “From this point forward, our goal is to use Revit Building on every job. We’re starting with the features that provide the largest return on our initial investment, and as we get good at those—and bring on more people—we’ll build on that foundation. And, over time, we will also acquire Autodesk Revit Structure and Revit Systems.”

To learn more about Autodesk Revit Building, visit www.autodesk.com/revitbuilding.

