McCrory Construction Wows Customers with Fast, Accurate Models and Estimates

In continual operation as a general contractor since 1918 and with as much as 90 percent of its business coming from repeat customers, McCrory Construction for decades used traditional spreadsheet-based estimating methods for most projects. But for preconstruction and design-build projects that called for collaboration with architects and owners earlier in the process, the firm sensed that spreadsheets and drawings weren’t enough and sought a more integrated, visual option.

“We would go through the process from schematic design and drawings to final drawings and implementation in the field, but we never had a visual representation of what we were doing beyond the architect drawing,” says Matt Solomon, an estimator for McCrory with nearly two decades of experience.

To maintain and expand McCrory’s position as a leading force in the Southeast construction market across 13 states, the company invested in Beck Technology’s DESTINI® Profiler in 2009. The small, fourth-generation, privately-owned firm is the first of its size in the region to embrace this next-level estimating technology, gaining a competitive advantage with faster, more accurate estimates and impressive visualization capabilities.

“Customers respond with shock and awe when presented with a detailed 3D model, complete with pricing, in a matter of days.”

“We are at the forefront of technology in our area overall and especially for a firm of our size,” says Solomon. “Incorporating DESTINI Profiler in the preconstruction process has, and does, serve as a strong point of difference for our firm.

Customers respond with shock and awe when presented with a detailed 3D model, complete with pricing in a matter of days, making DESTINI Profiler a valuable marketing tool. The technology speeds collaboration and improves transparency with owners and architects for projects.”
Design on the Fly

Combining 3D modeling with pricing, DESTINI Profiler allows the McCrory team and their clients to visualize in 3D how different design elements affect pricing and creates more accurate estimates than could be achieved with 2D drawings.

“The technology gives a true visualization of everything we are doing,” says Solomon. “It’s very impressive to owners that we can make changes on the fly, with the click of a button. We’re able to explore in real-time how changing a finish option or room configuration will impact the visual model as well as the overall project cost.”

By pulling topography data from Google Maps into DESTINI Profiler, Solomon can visualize exactly how a building would sit on the contours of the land. This application was particularly helpful for one multifamily project, in which two stories of parking were to be built beneath the building on a sloped site.

“The ability to pull in images from Google Maps and set the project on the exact site to show the elevations from a true vantage point wows our clients,” Solomon says. “It’s hard to envision two stories of parking with half in the ground and half above ground on one site. When you are able to take a building and lay it on a site using the actual layout perspective, that’s priceless.”

Working with subcontractors, he established specific pricing for each type of unit in the building, then assigned those values to each unit in the model. As Solomon built out the 3D model, he worked on the conceptual design with the owner, who was able to visualize via DESTINI Profiler each unit and floor within the building and what was included in the pricing. The entire model and estimate was complete within three weeks.

Another project, a small office building, took just five days to model and price, including creation of several site concepts with different building skins, window arrangements, and finishes. The result was a clear view into how the various options would affect pricing.

Rather than simply viewing a list of numbers and trying to imagine a building in his head, he is now able to visualize every angle of a finished structure, price out various
options, and clearly show owners what they are getting for their money so they can make informed decisions.

A former construction superintendent and project manager, Solomon is also pleased that DESTINI Profiler catches measurement and other errors that might have been overlooked in drawings, avoiding problems during construction.

Cost Database Under Construction

With each project Solomon estimates using DESTINI Profiler, additional cost data are built into a growing database. As he estimates different types of projects – from multifamily properties to commercial, industrial, medical, or retail facilities – all cost data for specific elements stay in the system, making estimating similar projects in the future faster and easier. Solomon predicts estimated to actual project cost accuracy is better than 10 percent improved using the software.

To further build out the DESTINI Profiler database, Solomon has reverse-engineered projects that have already been bid or built, transforming lump-sum pricing into square-footage and per-room macro BIM pricing that can be quickly applied to future estimates. He has created several pre-programmed packages with specific line items for different types of rooms, such as a women’s restroom or hospital room, and across various building formats. In one instance, he selected a multi-floor university alumni center project where the technology allowed him to create a 3D model and accurately apply cost to each office space, common area and room, taking into account everything from ceiling height to cabinetry and flooring.

He is also upgrading and converting the company’s existing database into a new master format that will seamlessly integrate with DESTINI Profiler, work with any architect’s systems, and feed information directly into McCrory’s accounting software.

“The idea is to build a robust database, so when we have a client that comes to us with a similar project, I’ve already got the data in the system and can build the model on the fly, providing an accurate market price,” he says. “We’re able to estimate more projects in less time and reduce any learning curve.”

As the pricing database grows along with Solomon’s skills using the software, he has turned around small-building estimates in just a few days and large, highly complex
projects within three weeks, allowing McCrory to get owners the estimates they need faster.

Building on two days of initial training in 2014 at Beck Technology’s headquarters in Dallas, Solomon receives ongoing support from Beck Technology via individual web conferences, adding to his arsenal of techniques for tackling specific challenges.

“It’s been very productive,” Solomon says. “They can see what stage I’m at on a project and offer the pointers I need to keep moving forward and developing my skills.”

Currently, McCrory is training additional estimators on the system and integrating DESTINI Profiler with DESTINI Estimator, streamlining the entire end-to-end construction process from estimating through project management, accounting, and production. Per Solomon, the combination will yield powerful results by embedding estimate line items with intelligence directly from the 3D models they were born from.

Learn More

During a Beck Technology webinar, Estimator Matt Solomon of McCrory Construction showcased a few projects he modeled and estimated using DESTINI Profiler, explaining how the system creates accurate estimates and 3D models that “shock and awe” customers.

We invite you to watch the full webinar.