

“AutoCAD Architecture has enabled us to reduce the time it takes us to go from conceptual design to a complete set of construction documents by 30 percent.”

—Tim Frost
Vice President of
Product Development
Mercedes Homes

Building for the future.

Using AutoCAD® Architecture software, Mercedes Homes automates drafting tasks and reports boosting productivity by up to 30 percent.



Project Summary

Mercedes Homes is an employee-owned homebuilder based in Melbourne, Florida. Since 1983, the firm has built more than 40,000 homes for families throughout Florida, Texas, and the Carolinas. “We build single-family homes for first-time and second time move-up homebuyers,” says Tim Frost, Vice President of Product Development at Mercedes Homes. “But we also do some high-end work.” Along with its commitment to design excellence, Mercedes is dedicated to using innovative new technologies to make new homes stronger, safer, and more energy efficient. “For years, we’ve been using AutoCAD software,” says Frost. “But recently we began looking for ways to speed up our drawing process.” After a careful search, Mercedes began migrating to AutoCAD Architecture, an AutoCAD®-based software application purpose-built for architectural drawing and design. “With all the tools AutoCAD Architecture provides to automate tedious drafting tasks, it looked like a great opportunity to be more productive, while building on a familiar platform.”

The Challenge

“We first introduced the new software to a group of eight people,” says Frost. “Our plan was to start small and run two parallel systems before moving exclusively to the AutoCAD Architecture platform.”

Integration with Third-Party Plug-Ins

Because of the extensive and highly detailed work Mercedes performs on many of the residences it designs, it also chose to implement VisionREZ software, a third-party enhancement program built on AutoCAD Architecture. Specifically designed for the residential industry, VisionREZ is optimized for those areas most likely to hinder overall performance, such as roof design, trim detailing, labeling, and framing.

The Solution

“Because the interfaces are very similar, it wasn’t at all difficult to move our architects from AutoCAD to AutoCAD Architecture,” says Frost. To complete the integration of AutoCAD Architecture with VisionREZ, Mercedes worked closely with third-party developer Ameri-CAD—An ITW Company. “They were a big factor in our solution. All we had to do was tweak it to fit our construction methods and materials.”

Increase Productivity

Using AutoCAD Architecture and VisionREZ together, Mercedes has realized stunning gains in productivity—especially when compared with architects relying solely on AutoCAD software. “For example, one of my CAD designers started work on a roughly 3,000-square-foot commercial building for a charity the company supports last Friday,” says Frost. “Just a few days later, construction documents are complete. That’s about a 30 percent increase in productivity.”

Save Time

That enables Mercedes to be more efficient—and build more homes. “In fact, using AutoCAD Architecture and VisionREZ, the turnaround time for creating repetitive building projects is only two to three days, especially if we use the Project Navigator in AutoCAD Architecture,” says Frost. “That allows us to control the entire project.”

Minimize Tedious Data Re-Entry

Using VisionREZ, the Mercedes team was able to import DWG files from AutoCAD Architecture. “All of the framing information we need is already attached to the DWG file,” says Frost. “Objects within the file point to a separate database outside AutoCAD Architecture. It’s all seamless.”

Easily Share Information

Mercedes also uses Autodesk® Design Review software to share, review, and mark up design information with end users. AutoCAD Architecture enables you to visualize everything right there on the screen, says Frost. And using Autodesk Design Review, anyone can walk through and review the documentation before we put it up in the field. We like that a lot.

“And we love DWF (file specification),” continues Frost. “All of the construction documents that we share throughout our organization have been migrated to DWF. It makes communication with our vendors so much easier.”

The Result

“Since we adopted AutoCAD Architecture, I would say that all of our new projects have been a huge success,” says Frost. “Our plan is to complete all new projects this year in AutoCAD Architecture. Over the next two years, we will be migrating everything onto the new AutoCAD Architecture/VisionREZ platform. It fits very well with the long-term strategic goals of the company.”

To learn more about AutoCAD Architecture, visit www.autodesk.com/autocadarchitecture.



“AutoCAD Architecture and VisionREZ really provide an end-to-end system and make us much more productive. We get seamless integration between the two applications, data that anyone can view with Autodesk Design Review, and easy collaboration using DWF files. It’s a very useful system.”

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