Carving out a clear competitive advantage in today’s tepid housing marketing is crucial to an architect’s success. And for a homebuilder, streamlining project timelines while minimizing changes once construction has begun is a must to keep project costs within budget.

So when a firm is involved in both the design and build phases of construction projects, these challenges can easily become compounded. The need to find the best technology solutions to run the business is even more critical.

That’s why Celebrity Custom Homes, based in Englewood, Colorado, turns to 3D CAD software from Autodesk to provide realistic and accurate architectural and construction drawings, and relies on NVIDIA® Quadro® professional graphics for the best quality and highest performance when running the AutoCAD software suite.

With more than 50 years combined experience, Celebrity’s owners Dan Verdoorn and Kurt Miller rely on virtual construction to stay ahead of their competition, exceed clients’ expectations and produce high quality, yet cost-effective homes. The firm first starts with 2D plans in AutoCAD, then builds 3D models of each custom project to facilitate creative design. Clients can see the exact home they want, before construction ever begins.

Before upgrading to NVIDIA, it was difficult to meet project deadlines.

The firm blends beautiful, functional architecture with meticulous attention to detail, to build some of Colorado’s most prestigious homes. In 2009, Celebrity was honored with six awards from the Metropolitan Home Builders of Denver, and recognized for their achievement in architecture and building.

3D Design Provides Maximum Versatility

Dave Geist, Celebrity’s in-house CAD designer, works hard to meet the ever increasing demands for both speed of execution and design excellence. Previously, Geist’s biggest technology challenges occurred whenever a project’s CAD files grew large and became unwieldy. This was due to a poorly configured computer system; one that just had a CPU and integrated graphics. Without a professional graphics solution in the system, the result was poor AutoCAD performance that frustrated designer, management and customers alike.

“At the end of a project, pressure is mounting and that’s when the CAD files are at their largest size. Before upgrading to NVIDIA, it was difficult to meet project deadlines and get drawings out on time,” says Geist.
Once Geist configured his 3D workstation at Celebrity with an NVIDIA Quadro professional graphics solution, which is certified by Autodesk, the problems disappeared. “After installing the Quadro, I had no slowdowns. My drawings ran smoothly, and there were no bottlenecks in my workflow.”

Making 3D presentations to my management and clients, the Quadro works seamlessly with AutoCAD, consistently exceeding our expectations.

Saving Time and Money before “Sticks and Bricks”
“Eliminating design issues in 3D before entering the ‘sticks and bricks’ phase is invaluable,” continues Geist. At the helm of his new workstation, he easily manipulates the design of the entire house, examining details in multiple views, without waiting for rendering. “The performance of the Quadro gives me time to experiment with various design ideas, and easily fix any potential problems, before they become costly change orders in the field.”

When a change is required, due to material availability or customer preference, Geist simply does it right on the spot, without delay.

“We review and evaluate our new homes plans in rendered 3D and work out potential challenges early on, rather than experiencing costly changes during framing and finishing,” Geist continues. “My software and the graphics processor must interact flawlessly to be able to work as fast as I do. Making 3D presentations to my management and clients, the Quadro works seamlessly with AutoCAD, consistently exceeding our expectations,” Geist comments.

Giving Customers What They Want
Customer satisfaction is Celebrity’s key to staying competitive. Together, Quadro and AutoCAD deliver sophisticated 3D models to give clients an accurate representation of their home. By depicting different elevations and views, the customer becomes a partner in the process and is able to quickly make decisions in the design phase.

At Celebrity Custom Homes, meeting customers’ requirements, on time, within budget and to the highest quality is job one. This approach has given Celebrity Custom Homes the ability to thrive, despite the downturn in the housing market. From the first design meeting to delivering the keys to the front door, Celebrity Custom Homes relies on the best technology available to help make homeowners’ dreams come to life.

To learn more about NVIDIA Quadro, go to www.nvidia.com/quadro

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