

Chief Architect X13 for Deck Builders

by Matthew Breyer

Our residential remodeling company primarily designs and builds custom backyard environments consisting of decks, patios, pergolas, and enclosures. Over the course of a year, about 75% of our work fits that description, with most projects involving more than one component, such as a deck with a roof over part of it and a patio below. We have four designers on staff; among us, we use a variety of computer-aided design tools, augmented with old-fashioned pen and paper, first during the “concept capture” with prospective clients and then again while working through the plans, orders, and permitting stage prior to construction.

For example, in the past, we used Viz-Terra from Structure Studio for much of our design work, largely because of its unmatched rendering capability. However, this software is too intensive and detail orientated for the many simpler, straightforward decks we build. Now we occasionally use an older version of Visionscape but have largely transitioned to Realtime Landscaping Pro from Idea

Spectrum for the bulk of our design work (see Clemens Jellema’s review of Realtime Landscaping Architect, on page 9).

For structural drawings, we generally turn to Chief Architect, so we were eager to try out the latest version, Chief Architect X13, and compare it with our current programs and practices. While it promises a number of new features, what caught our eye was the company’s claim that it had dramatically improved the software’s 3D rendering.

Power User

Our production manager, Ryan LeBon, has grown up using Chief Architect and is familiar with all the menus, boxes, tools, and catalogs. Typically, he creates basement 3D renderings and technical structural drawings for decks, roofs, and remodeling projects and works with Chief Architect X12 in these capacities on a weekly basis. He runs a Windows Surface Pro 7 with an Intel i5 processor, 8 gigabytes of RAM, and the built-in graphics card.

Ryan enjoys the software’s ability to create a simplified building diagram quickly, while he has the option to dive into a robust library of videos and training if needed and infinitely refine the details. As he notes, this is a company that supports its products and their users. I asked him to look at the X13 version and identify any new features that might stand out for our uses.

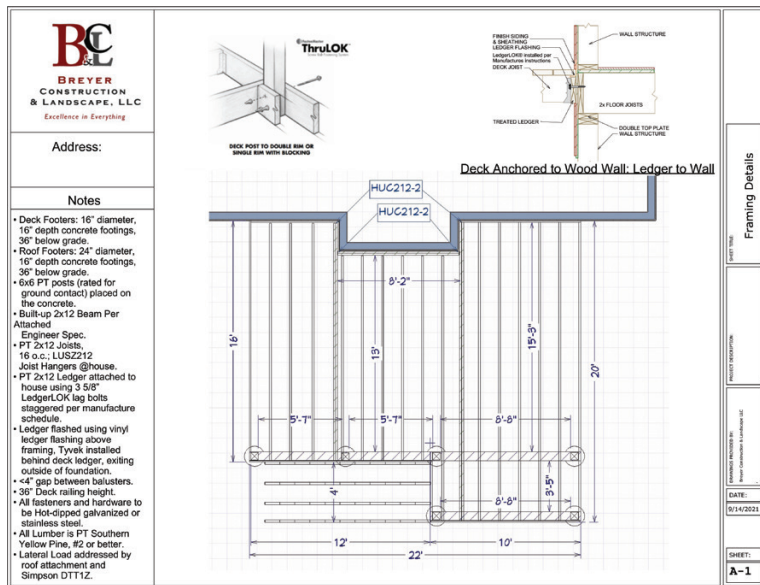
He found that the smaller menu/interface refinements were a nice improvement and was also excited that the all-new graphics engine allowed his Surface Pro to again create 3D renderings—the X12 version had stopped working several months before on his machine. It moved a little slowly in the renderings, but he thought that may have been because of his limited RAM. Ryan’s impression was that the software is an excellent fit for us, but, because most of his work uses just the 2D and structural-drawing functions, the upgrade wasn’t mandatory for our company. Still, it would be a welcome improvement if we decided to pull the trigger.

Renderings

Zach Daller, our design consultant, designs both basements and backyards, typically working with Realtime Landscaping Architect loaded on a Dell Precision with an Intel i7 processor, 16 GB of RAM, and an NVIDIA GeForce GTX

New features in Chief Architect X13 include a dynamic task-linked help menu that can be toggled on and off, thumbnail previews for saved elevations and schedules, 3D shape editing, and a text library that allows general descriptions to be used in future projects. Attributes from one wall can now be applied to other walls as well.





Like previous versions, Chief Architect X13 is well-suited for creating construction drawings with framing and connection details. Shown above is the structural design for one of the author's projects that is currently in build.



While Chief Architect X13 boasts a new “engine” that speeds up 3D renderings, the author found that the learning curve is steeper than with simpler CAD programs for decks. Shown here is his initial attempt at a deck design after taking a brief X13 tutorial.

1060 graphics card. Zach focuses on client-facing interactions, so I asked him to see how quickly he could get around in this program intuitively, and in what scenarios it might be possible to rely more heavily on the rendering capabilities of the software.

Zach is often sitting in front of a client, working to turn their vision into a rendering that can be handed off to Ryan

for technical drawings once the project is confirmed. With a client looking over his shoulder, speed and agility, as well as an attractive 3D rendering, are critical for him.

He commented that the program was less intuitive compared with a simpler design program solely focused on outdoor living spaces, but that the additional tools and sections would be invaluable

to a design-build firm working on a whole house or on a more intensive remodeling project with multiple layers and connections to account for. He said that with a bit more time on the mouse, his speed and results with the program would certainly have improved.

Mock-ups

I do most of my design work on an Origin PC with an i7 processor, 32 GB RAM, and an NVIDIA GeForce GTX 1070 graphics card, typically using an old version of Visionscape or Structure Studios. I usually work either with repeat clients or on unusual projects, and often use design software to mock up concepts that the software was not intended for. I decided to try mocking up a quick concept—without a lot of preparation and training—using Chief Architect X13.

To better appreciate the basics of what the software can do and to learn a little bit about what has been improved upon, I started by watching the introduction video for a prior version (X12), and then the video for this new release. Then, as is my habit, I simply jumped in and attempted to design a rather basic deck, with a set of steps, railings, and a glass wall or rail along the front section. I've included a screenshot of my attempts so you can have a laugh at my expense (see image, left). It took me perhaps 30 minutes of working with the program, trying to figure out the tools and menus, to get to this point ... which is about 10 times longer than it would have taken me to deliver a completed 3D design for a deck this size in Visionscape. That may be an unfair comparison, but my point is that this is not a fast, “jump right in” program; it's a “spend weeks learning this before ever using it for client work” kind of program.

If I were planning on using this software full-time, I'd invest in watching the training on setting elevations, making sure stairways properly connect, and applying finishes to walls and deck floors before ever creating designs for clients.

Chief Architect X13 has a ton of tools and power, but it is a bulky program, and it forces you to design in a 2D environment before rendering in 3D—whereas my background is mostly in designing in a dynamic 3D environment before generating static 2D drawings as needed.

Conclusions

Our shared consensus is that this software is unmatched in the industry for power, detail, and capabilities—but that it requires purchase of the “complete package.” You can’t simply purchase the “exte-

rior tools” that would most benefit a deck building business. For a residential or commercial remodeling firm that builds more involved projects than a typical deck builder does, or for a ground-up custom home builder, this is probably the best design option on the market for delivering accurate plans, take-offs, and renderings. For deck builders and those with an eye toward expanding into additional areas of service, it’s also worth considering—especially for the detailed and accurate construction drawing capabilities.

Available now for both Mac and Win-

dows, Chief Architect Premier (for full residential design) sells for about \$3,000 and the Interiors version (for kitchen and bath designers) sells for \$2,200. Both products can be rented monthly for \$200 (chiefarchitect.com).

Matthew Breyer is president of Breyer Construction and Landscape, in Reading, Pa., and current president of NADRA (the North American Deck and Railing Association). He’s a former chairman of NADRA’s Education & Codes Committee and a regular PDB contributor.

Realtime Landscaping Architect

by Clemens Jellema

These days, most of my clients expect computer-generated drawings—including 3D renderings—to help them to visualize their project. As a professional deck builder, I need tools that help me to quickly and easily create these presentations. The ability to generate images that “tell a story” and create a concept within a reasonable time frame adds value to the services I offer to my clients, and that’s just as true now as it was in 2010, when three colleagues and I teamed up to test several different CAD programs that could serve the specific needs of deck builders (see “Deck Design Software,” *PDB*, November 2010). What we found then is also still true—most CAD programs are either too simple or too complicated.

The exception then, and now, was a program targeted for landscape designers called Realtime Landscaping Architect (ideaspectrum.com). More than a decade later, I’m still using RTL to create all my renderings for outdoor projects like porches, gazebos, pavilions, pergolas, and more. There are other options, but I haven’t yet had a design challenge this software couldn’t handle,

no matter how complicated.

Don’t let the name of the software fool you. Sure, it’s loaded with an extensive library of landscaping features, such as climate zone-specific plantings and trees, and water features, such as ponds, pools, and hot tubs, and the library of deck options is limited compared with what more deck-specific software offers.

But it’s also capable of producing amazingly lifelike 3D renderings of decks, houses, patios, gardens, and other outdoor living features to create a realistic view of your design. In addition, you can do the following:

- Illuminate the design with post lights, stair lights, and many other features

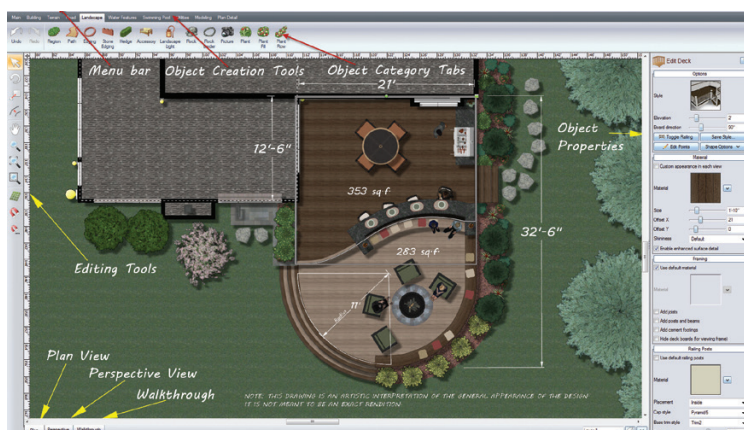


Figure 1. Plan view mode in Realtime Landscaping Architect (indicated in the bottom left corner of the screen) includes all the information shown in the screen shot above, such as the menu bar, object category tabs, and object creation tools. On the left side of the screen are icons for editing tools, view tools, and grid/snap on and off. On the right-hand side of the screen, all the information about a highlighted object is shown. This information will not show up in the 3D renderings in either Perspective or Walkthrough views.

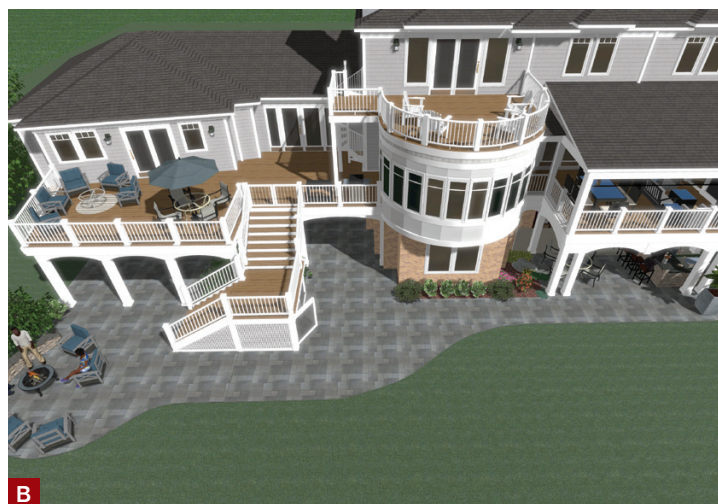


Figure 2. Renderings of a project in 3D can be made in either Perspective view (A) or in Walkthrough view (B), where shadows and other realistic environmental details are added to the rendering. In either mode, realistic renderings can be made from different angles, allowing clients to compare actual photos of their existing home (C) with multiple design possibilities and finish options, as illustrated by rendering B, above.

- Produce foundation plans and construction drawings, including elevations
- Create roof plans for gazebos, porches, and pavilions
- Import CAD models
- Import plot plans and add your structure in scale for permitting
- Create videos, adding 3D text and dimensions

Three Versions

Realtime Landscaping comes in Plus (\$100) and Pro (\$150) versions but best for deck builders is the Architect version (\$400), which gives you the ability to create landscape plans and CAD drawings with the powerful Plan Detail tool. More of a drafting tool than a 3D rendering tool, this feature allows me to create almost anything as a 2D design, including construction plans, elevation views, roof plans, cross sections, HOA forms for my clients, and draft plot plans—pretty much anything I would need for a permit application.

Then, when I've completed my design in Plan view, I have several options. If I want to send my client a Top view plan showing square footage, field measurements, material info, and other details, I can capture what is displayed on the screen by clicking on the "Export Viewport to File" option in the File menu. Here, the quality of the image can be adjusted by choosing a higher or lower resolution (**Figure 1**).

Designs can be created in either Plan view or Perspective view, and you can easily toggle between the two modes—by selecting the desired tab at the bottom left of the screen—to add details and see how they affect the overall look of the design.

Renderings in 3D can be created in either Perspective view or Walkthrough view. In Perspective view (as in Plan view), an image can be captured by going to the File menu and clicking on "Export Viewport to File" (**Figure 2**).

In Walkthrough view, the environment can be activated by choosing the time of day and adding a skyline and other features. In this dynamic view, you will see trees and shrubs blowing in the wind, light fixtures that are turned on or off, and even a flickering fire pit. ❖

Clemens Jellema owns Fine Decks, in Calvert County, Md.