

Dalpos Architects

Customer Success Story

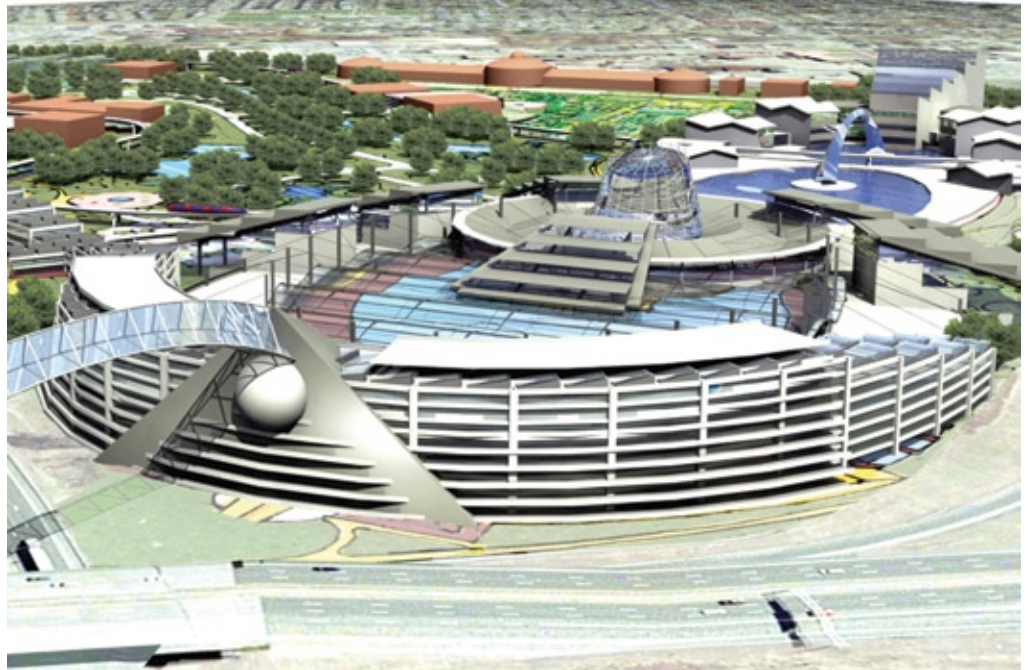
Revit® Architecture
Autodesk® Design Review

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—Scott Bloss
Senior BIM Technologist
Dalpos Architects

Increasing Productivity

Dalpos Architects transforms its design process with Revit Architecture and Autodesk Design Review software.



Project Summary

Founded in 1971, Dalpos Architects exercises its design expertise on projects ranging from regional shopping malls and corporate headquarters to theaters and government buildings and more. Part of the architectural vanguard, the firm distinguishes itself by delivering high-quality designs using the latest technology. Three years ago Dalpos Architects transitioned its design processes to use building information modeling (BIM) and 3D design. Powered by Revit® Architecture software, BIM enables the firm to design using a real-time, 3D model that incorporates all building systems. The process is supported by the design sharing, reviewing, and archiving capabilities of Autodesk® Design Review software. With Revit Architecture, Autodesk Design Review, and BIM, Dalpos is:

- Developing twice as many preliminary designs for clients
- Completing projects without paper and saving hundreds of thousands of dollars on printing
- Saving thousands of employee hours on sharing, reviewing, and changing designs
- Improving overall productivity

The Challenge

Managing Changes and Mountains of Paper

Before turning to BIM, Dalpos depended on traditional workflows and design sharing methods. When starting a job, the firm would leverage older designs as a starting point, stripping away elements that did not apply and adding relevant new features to the 2D design, a tedious process that many at Dalpos found counterintuitive. As the design progressed, it grew to include many sheets detailing different aspects of the design, such as ventilation systems or interior elevations. Changing one element required that designers modify each sheet of the design. On a large project, that could mean manually changing as many as 30 sheets. Sharing design information was equally manual, but even more time-consuming. The firm relied on paper and delivery services to disseminate drafts and collect input from clients and the dozens of consultants contributing to projects.

“Leveraging older designs required that we work backwards to align our drawings with our ideas,” explains Scott Bloss, senior BIM technologist at Dalpos. “That’s not the most natural way to think. Managing change was also a challenge. Simply moving a door on 30 sheets could take an hour. Then sharing iterations of designs and collecting

Autodesk®

Autodesk Design Review software helps keep more than 300 design consultants on the same page—without paper.

feedback so we could make additional modifications required mountains of paper and several days. In BIM technology, we saw a way to make our processes more intelligent and efficient.”

The Solution

BIM is an integrated process built on coordinated, reliable information about a project from design through construction and into operations. By adopting BIM, architects, engineers, contractors, and owners can easily create coordinated, digital design information and documentation; use that information to accurately predict performance, appearance, and cost; and reliably deliver projects faster, more economically, and with reduced environmental impact. With BIM, elements within the design change automatically as the design evolves. Upon completion, there is a single, integrated design that can be used to produce construction documents and to manage the building throughout its operational life.

Revit Architecture delivers the 3D design tools and environment Dalpos needs to conduct BIM design. To enable efficient design sharing and archiving, Dalpos depends on Autodesk Design Review, design viewing and markup software available as a free* download from Autodesk.

“The life of the design is greatly enhanced by BIM,” says Bloss. “We can continually add elements to the model, and the design documentation keeps pace automatically. When we need to produce construction documents, they are 80% complete already due to the use of Revit during the design process.”

On the topic of designs sharing, Bloss adds, “Autodesk Design Review allows us to take and share 3D snapshots of the model. Our clients and consultants mark them up, streamlining collaboration and change management. With BIM, we’re much more productive.”

Sustainable and Dynamic Design

Currently, Dalpos is using BIM to deliver a large, multi-phase project. The project features a 1.5 million-square-foot addition to a shopping center and several separate structures. These structures include a variety of retail, dining, and entertainment venues and a 1,000-plus room hotel. An example of green, or sustainable, building, the project aims for LEED Gold certification and is being completed entirely without paper.

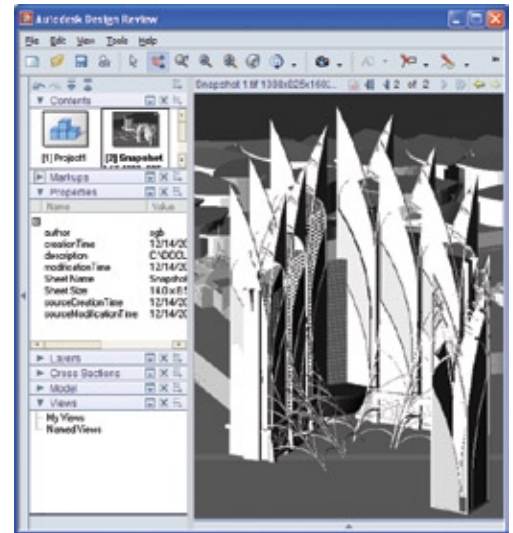
BIM technology from Autodesk is helping this ambitious project achieve its goals. Dalpos uses Revit® Architecture software to create and manage the architectural aspects of the project in a 3D model. When one aspect of the 3D model is modified, the entire design changes, accelerating the design process. As the design progresses, the engineers on the project contribute to the model using versions of Revit relevant to their discipline, such as Revit® Structure and Revit® MEP software applications.

To collect feedback from the client, Dalpos sends 2D and 3D DWF™ files, which the client views and comments on using Autodesk Design Review software. Dalpos can then overlay the comments on the live model in Revit to quickly incorporate changes. Construction teams on the ground also use Autodesk Design Review to view the latest modifications to the design.

“Large projects are changing constantly,” says Bloss. “More than 300 design consultants from around the globe have been working on the project. Autodesk Design Review helps keep all of us on the same page—without paper.”

The Result Measurable Savings

How has BIM with Revit Architecture and Autodesk Design Review benefited Dalpos and its clients? The firm’s increase in productivity is only the tip of the iceberg, according to Bloss. “BIM allows us to design more intuitively and creatively,” he says.



“Changes that once took hours now take seconds. With the time we save, we’re able to apply our creativity to developing twice as many preliminary designs for clients. Our clients are more satisfied. Plus, they are able to leverage BIM documentation to manage their buildings more effectively.”

Commenting on the advantages of electronic design reviews and archiving with Autodesk Design Review, Bloss notes, “On a large project, the cost of paper and printing could be in the hundreds of thousands of dollars. So we’re saving money and trees with Autodesk Design Review. Over the life of the project, we’re also saving thousands of employee hours by managing changes and design reviews electronically.”

Learn More

Turn to BIM for increased productivity and enhanced client satisfaction. Find out how at www.autodesk.com/revit and www.autodesk.com/designreview.



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