

Westfield Group

Customer Success Story

AutoCAD®

Autodesk® Revit® Structure

Autodesk Navisworks®

“We knew that BIM would transform our design processes. What we didn’t know was how the technologies would prove themselves so quickly in both improved efficiency and increased productivity. Our executive management team is excited that we are on the cutting-edge of construction design and is planning to invest in more Autodesk BIM solutions.”

—David Reitz,
Vice President, Project
Management and Technical
Design,
Westfield Group

On Time, Under Budget, & On the Cutting Edge

World’s largest global retail property group transforms design processes, completing coordination tasks 10 times faster using Autodesk BIM solutions.



Image courtesy of Westfield Group.

Project Summary

As the world’s largest retail property owner and manager, the Westfield Group’s global portfolio includes 119 high-quality shopping centers in Australia, New Zealand, the United States, and the United Kingdom. Its holdings are valued at more than \$62 billion, and it provides approximately 23,600 retailers with 10 million square meters of retail space. With increasing pressure to complete design and construction projects faster and more cost-effectively, Westfield uses AutoCAD along with Autodesk building information modeling (BIM) solutions to continually improve efficiency and productivity.

Using Autodesk software, Westfield has:

- Reduced costs by more than \$100,000 per project
- Completed coordination tasks an estimated 10 times faster
- Reduced on-site staffing
- Met customer deadlines and avoided financial penalties

The Challenge

The Westfield Group is unique in the retail industry. In addition to developing retail space, the company owns the property, employs its own architects, and serves as the general contractor on projects. With such a breadth of services, Westfield must combine design data with construction information and intelligent building models seamlessly—all while maintaining clear and concise documentation.

In the past, Westfield lost valuable time cross-referencing paper drawings and searching for missing information. The company’s project managers wanted tools to automatically integrate drawings, making the process more fluid and helping staff focus on the project’s next tasks. And, the team desired advanced BIM tools that would help them detect and resolve design and construction conflicts before breaking ground.

“We need design and construction information to flow freely among departments,” explains David Reitz, vice president of project management and technical design, Westfield Group. “By integrating data from other teams early in the process with BIM solutions, we saw an opportunity to create much more concise designs and improve our time to completion.”

Autodesk®

MEP contractors report saving tens of thousands of dollars by coordinating efforts before construction began.

The Solution

Already familiar with AutoCAD software, implementing BIM with Autodesk Revit Structure and Autodesk Navisworks software was a logical next step. “We were able to reuse and integrate archived AutoCAD drawings easily, which greatly helped with renovations and expansions,” explains Reitz. “AutoCAD is an important part of our workflow. It helps to streamline our move to a BIM approach by helping us to feed the process with data and to document the resulting model. We’ll always have designers and consultants using AutoCAD to create a final product, but more importantly, it’s a valuable arrow in our quiver of tools.”

Autodesk Revit Structure enables Westfield staff to work on a single, integrated digital model. Navisworks, in turn, offers tools that track the project over time and detect clashes within the design. Errors in design and piping that conflicts with air ducts, for instance, are quickly identified long before construction begins. “Revit and Navisworks automatically coordinate work and design changes across the entire building model, right down to the AutoCAD construction documents,” says Reitz.

Transforming Design

Westfield proved the power of its BIM implementation while working on a tenant improvement project for a retailer in Culver City, California. The team needed to bring additional utilities into the building to accommodate the retailer’s needs. This required coordinating new and existing mechanical, electrical, and plumbing (MEP) information with the building’s current structural plans. The group used Navisworks software to combine the tenant’s new fit-out with Westfield’s Revit Structure model as well as MEP and architectural information. In addition, the team integrated the fire department’s AutoCAD data. Using this integrated model, the team identified and addressed potential conflicts.

Andrew Vu, the project architect, explains, “We brought all the subcontractors into a room and displayed the integrated model on a screen with

Navisworks. Together, we addressed design conflicts, such as fire service assets cutting into mechanical ducts, well before construction. We resolved most of the conflicts in a single meeting and significantly reduced change orders.”

The Result

Before implementing AutoCAD many years ago, Westfield waited days for paper drawings to arrive in the mail. “I think having our files available electronically has increased our productivity by at least 10 times,” says Reitz. “In fact, I would argue that we couldn’t complete these projects at all, given the volume of data we use each day and the speed that is necessary to retrieve, change, and approve it.”

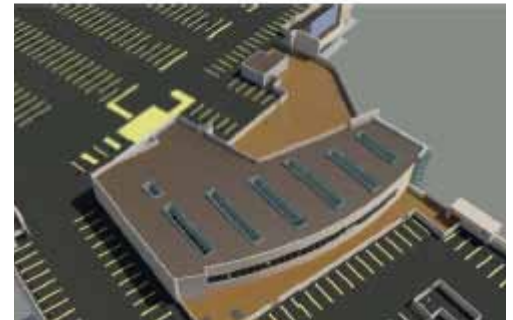
In its Culver City property alone, Westfield estimates that Autodesk tools have helped it to reduce total costs by more than \$100,000 on this single project. “Fewer change orders in the field meant we didn’t need full-time support staff overseeing changes,” says Reitz. “We saved almost \$50,000 by eliminating that position.”

In addition, the MEP subcontractors on the contract report saving at least that much. “They told me that they saved tens of thousands of dollars by coordinating efforts before construction began,” Vu adds.

“We knew that BIM would transform our design processes,” says Reitz. “What we didn’t know was how the technologies would prove themselves so quickly in both improved efficiency and increased productivity. Our executive management team is excited that we are on the cutting-edge of construction design and is planning to invest in more Autodesk BIM solutions.”

Improved Service

“Identifying conflicts before construction begins is one of the best ways to keep projects on schedule and make tenants happy,” says Reitz. “Navisworks’ clash detection eliminated much of the finger pointing and animosity that comes from deciding who



Images courtesy of Westfield Group.

should pay to resolve a conflict. It seldom gets that far anymore.”

And, completing tasks faster helps projects stay within budget. With tight timelines, retail developers often pay penalties for each day the project is overdue. Reitz concludes, “Because we’re responsible for all aspects of a development or renovation, we appreciate that these tools help us complete a broad spectrum of design and construction tasks faster and more efficiently. We rely on Autodesk software to help ensure our projects are on time and under budget.”

Learn more about how Autodesk BIM software can save time and money on design and visualization projects at www.autodesk.com/bim.

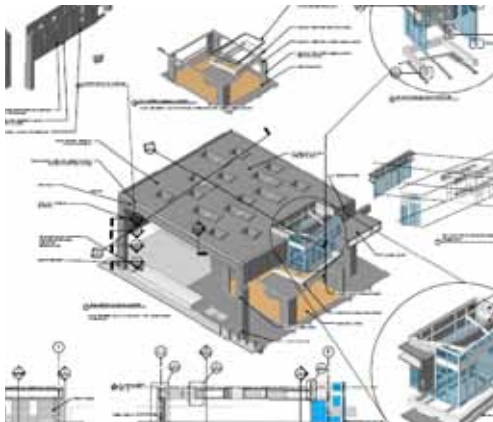


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