



Skidmore, Owings & Merrill Standardizes Freedom Tower Project on Autodesk Revit Platform

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Groundbreaking Application of Building Information Modeling Increases Collaboration and Coordination between Architects, Designers, Engineers and Contractors

SAN RAFAEL, Calif., May 19 /PRNewswire-FirstCall/ -- Autodesk, Inc. (Nasdaq: ADSK) today announced that Skidmore, Owings & Merrill LLP (SOM) has standardized on Autodesk(R) Revit(R) software, Autodesk's Building Information Modeling (BIM) platform, for the Freedom Tower project, the first commercial building to rise on the former World Trade Center site in New York City. To enable the design team to realize their ideas faster, SOM has selected Autodesk(R) Revit(R) Building as the official design and documentation solution for the project. The entire core design team, including project engineers, Cantor Seinuk Group (CSG) and Jaros Baum & Bolles, Inc (JB&B), are collaborating within the Revit model. After experiencing Revit Building's ability to enable architects and designers to work the way they think, as well as realizing substantial time savings on revisions and redrawing, SOM's use of Revit Building expanded from the complex subgrade levels of the building to the entire project, which includes the tower's lower and main core, enclosure, structure and cable-net. In addition to using Revit Building, SOM is also relying on the Autodesk(R) Buzzsaw(R) service to create, manage and share the vast amount of digital design data required for the Freedom Tower project, and it is working with Autodesk Consulting for software implementation and training.

(Logo: <http://www.newscom.com/cgi-bin/prnh/20050415/SFF034LOGO>)

"Creating and then working in a single, comprehensive, digital model of the Freedom Tower has been a process revolution," said Carl Galoto, FAIA, partner at SOM's New York office. "Once we started using Revit Building on the project, our teams were hooked. They could explore and evaluate design options much more effortlessly than ever before."

Revit Building Provides Competitive Advantage with Minimal Risk

SOM conducted a competitive software selection process for the Freedom Tower project, evaluating solutions based on their maturity, level of support and proven history on other projects. SOM chose Autodesk Revit Building as the project's building information modeling solution because of its ease of use, fully associative views, scheduling capabilities and its ability to integrate with other applications. Since the late 1980's, when SOM developed its own software system, AES, the firm has envisioned the use of a building model, integrating all building components including building systems and structural engineering. Gradually moving from AES to AutoCAD(R) software to the Autodesk Revit platform, SOM has now come full circle, realizing its early vision of implementing a true building information modeling strategy.

To help assure their success in migrating to the new Autodesk Revit platform, SOM turned to Autodesk Consulting for assistance with implementation and training. Autodesk Consulting created the specific building components used by architects to streamline the design process, provided SOM with best practices and helped address the workflow changes required for building information modeling implementation. Revit Building stores all building data in coordinated databases rather than as individual files. As a result of moving to Revit Building, documentation for the Freedom Tower project shrank from over 20,000 CAD files to five Revit databases.

"Revit Building enables us to be successful on a project of this scale by providing the speed and flexibility to share the workload between the different members of the project team while keeping all of the building information coordinated and up to date," said James Vandezande, AIA, associate and CAD Manager at SOM. "And, as a result of the on-site guidance we received from Autodesk Consulting, new architects and designers get up to speed very quickly as the team grows."

Analysis of Building Information Model Informs Design

SOM created a digital building information model of the Freedom Tower in Revit Building, which incorporated data from third-party applications used to perform people-flow and energy analyses. It was also used to conduct form explorations for the building as a whole, as well as each individual floor. This data-rich model enabled SOM to rationalize the analytical data, make it buildable and coordinated with traditional document deliverables, and to redesign and re-engineer the building to meet safety and security benchmarks. With Revit Building's parametric change technology, these changes were immediately coordinated throughout the entire project, minimizing the time required for re-drawings.

"Innovative and forward-looking firms like SOM, who are taking on the challenges of today's most complex projects by using the best possible software tools, are the businesses driving change through our industry today," said Phil Bernstein, FAIA, Vice President, Autodesk Building Solutions Division. "We applaud them for their vision and thank them for helping show all of us the way forward."

Collaboration and Coordination across the Extended Team

Facilitating communication and managing data across the hundreds of members of the project team poses enormous challenges. When SOM hosts coordination meetings with the extended team, including structural engineer Cantor Seinuk Group (CSG), mechanical, electrical, plumbing engineer Jaros Baum & Bolles, Inc. (JB&B) and construction manager Tishman Construction Corporation, rather than reviewing drawings with red pencils, the team sits around a plasma screen monitor to look at the Revit Building model.

SOM expects the project to generate more design data than any other single project since the firm's founding almost 70 years ago. The fast-track schedule demands that the team work efficiently together, staging and accomplishing tasks quickly, and securing approvals from the project stakeholders including the owner/developer (Silverstein Properties, Inc.), the landlord (The Port Authority of New York and New Jersey), the Lower Manhattan Development Corporation (LMDC), the Mayor of New York City and the Governor of the State of New York. To manage this complex process, SOM is using the Autodesk Buzzsaw online project collaboration service as its primary tool for communicating project reports, sharing design documents, and, eventually, managing construction.

A Comprehensive Portfolio of Software Solutions for the Building Industry

With the right combination of leading-edge technologies, decades of proven industry experience and unparalleled, worldwide services, Autodesk offers the most comprehensive portfolio of products for the building industry. Ranging from the most advanced technology for building information modeling (BIM) to the most widely adopted design and documentation solutions, Autodesk supports information and management needs through the building lifecycle. Building solutions products include Autodesk Revit Building, Autodesk(R) Architectural Desktop, Autodesk(R) Building Systems, Autodesk Buzzsaw, Autodesk(R) AutoCAD(R) Revit(R) Series and the DWF(TM) file format.

About Autodesk

Autodesk, Inc. is wholly focused on ensuring that great ideas are turned into reality. With six million users, Autodesk is the world's leading software and services company for the building, manufacturing, infrastructure, digital media and wireless data services fields. Autodesk's solutions help customers create, manage and share their data and digital assets more effectively. As a result, customers turn ideas into competitive advantage by becoming more productive, streamlining project efficiency and maximizing profits.

Founded in 1982, Autodesk is headquartered in San Rafael, California. For additional information about Autodesk, please visit www.autodesk.com.

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