Autodesk®
Revit® Architecture

Design without compromise.

Definitive Design

From conception to construction documentation, design projects within an intuitive environment.
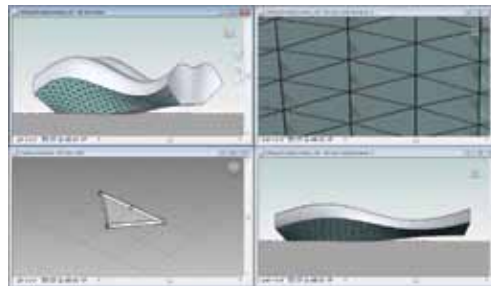
> Building information modeling and Autodesk Revit Architecture are key components of our larger strategy to provide a much more comprehensive and integrated service to our clients.
>
> —Riaan de Beer
>   Senior Project Manager
>   Reno C. Negrin Architects

Built for Building Information Modeling (BIM), Autodesk® Revit® Architecture software helps you capture and analyze your most innovative design concepts and maintain your vision through documentation. The information-rich models that the software provides support decision-making for sustainable design, clash detection, construction planning, and fabrication, while helping you work collaboratively with engineers, contractors, and owners. All design changes along the way are automatically updated throughout your evolving design and documentation, making for more coordinated processes and reliable documentation.
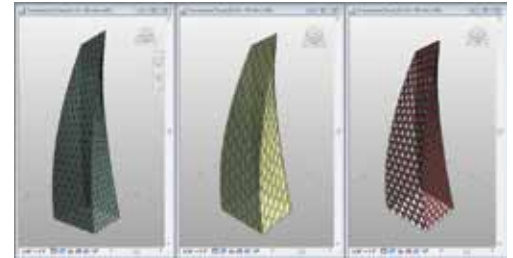
Complete Projects, One Environment

Autodesk Revit Architecture software's conceptual design features provide easy-to-use tools for free-form modeling and parametric design, enabling you to analyze designs from the earliest stages of development. Sketch freely, create 3D forms quickly, and manipulate forms interactively. Prepare your models for fabrication and construction with built-in tools for conception and clarification of complex forms. Autodesk Revit Architecture automatically builds a parametric framework around forms as you design, offering you greater levels of creative control, accuracy, and flexibility. Take your design from concept model all the way to construction documents, all within one intuitive environment.
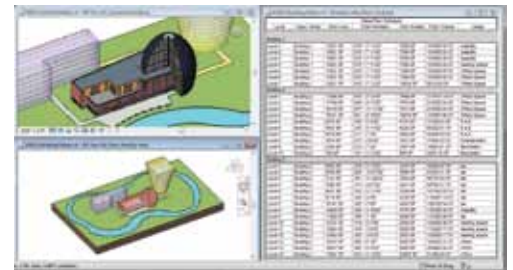

Authoritative Decisions, Sooner

Autodesk Revit Architecture software supports early analysis of your building forms so your team can make better informed decisions earlier in your project. Use this capability to clarify areas and volumes, perform daylighting and energy analysis, and gain insight into manufacturing viability and early construction material takeoffs.

Functional Forms

The Building Maker feature in Autodesk Revit Architecture helps you transform your conceptual forms into fully functional building designs. Select and add faces to design walls, roofs, floors, and curtain systems. Extract important building information, including gross area per floor. Bring conceptual massing concepts from applications such as AutoCAD® software and Autodesk® Maya® software as well as AutoDesSys form•Z, McNeel Rhinoceros®, Google™ SketchUp®, or other ACIS®- or NURBS-based applications into Autodesk Revit Architecture as mass objects, and begin schematic design.

Coordinated, Accurate Design Information

Autodesk Revit Architecture software is built to work the way architects and designers think about buildings. Work naturally, design freely, and deliver efficiently.

Autodesk Revit Architecture generates every schedule, drawing sheet, 2D view, and 3D view from a single foundational database, automatically coordinating changes as your project develops and evolves.

Bidirectional Associativity
A change anywhere is a change everywhere. In Autodesk Revit Architecture, all model information is stored in a single, coordinated database. Revisions and alterations to information are automatically updated throughout the model, minimizing errors and omissions.
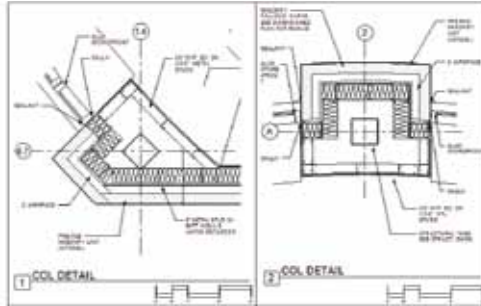

Schedules
Schedules provide another view of the comprehensive Autodesk Revit Architecture model. Changes to a schedule view are automatically reflected in all other views. Functionality includes associative split-schedule sections and selectable design elements via schedule views, formulas, and filtering.

Detailing
The extensive detail library and detailing tools provided within Autodesk Revit Architecture enable extensive presorting, easing alignment with the CSI format. Detail libraries can be created, shared, and tailored to better accommodate your office standards.

Parametric Components
Parametric components, also known as *families*, are the basis for all building components designed in Autodesk Revit Architecture. These components offer an open, graphical system for design thinking and form making, while providing the opportunity to adjust and express design intent at increasingly detailed levels. Use parametric components for elaborate assemblies, such as cabinetry and equipment, as well as for elementary building parts, such as walls and columns. Best of all, no programming language or coding is required.

Material Takeoff
Calculate detailed material quantities with Material Takeoff. Ideal for better calculation of material quantities on sustainable design projects and cost estimates, Material Takeoff helps smooth the material quantity tracking process. As projects evolve, the Autodesk Revit Architecture parametric change engine updates material takeoffs.

Interference Check
Use interference checking to scan your model for collisions between elements.

Task-Based User Interface
The Autodesk Revit Architecture user interface offers desktop organization through a large drawing window and access to the tools and commands you need. Tools are organized into a collection of tabs and panels to represent architectural workflows such as creation, annotation, or collaboration.

Better Designs, More Satisfied Clients

Deliver higher-quality designs and gain a competitive advantage through increased client satisfaction.

Design Visualization

Create and capture photorealistic design ideas and contextual environments to help you experience your project, even before it is built. Integrated mental ray® rendering software is easy to use and delivers high-quality output, faster render times, and a striking design presentation.

Collaboration

Worksharing tools help you to improve collaboration on projects containing linked files by giving you the ability to apply view filters, tag elements, and control the visibility of worksets in linked files.

Revit Server

Revit Server helps project teams in different locations more easily collaborate on shared Revit models across a wide-area network (WAN). Help maintain an integrated collection of Revit central models on a single server that can be accessed from local servers. Built-in redundancy helps provide protection in case of WAN connectivity loss.

Performance

Enjoy a smoother experience when working on large projects. More multi-threaded operations result in faster project open and load times. Native 64-bit support helps improve performance and stability for memory-intensive tasks such as rendering, printing, model upgrading, and file importing and exporting.

Sustainable Design

Conceptual energy analysis tools* help you make every design more sustainable. Use cloud-based analysis tools to quickly compare the energy consumption and lifecycle costs of design alternatives right from within Autodesk Revit Architecture software. Analysis results are presented in a highly-visual, graphical format for easy interpretation.

Export building information, including materials and room volumes, to gbXML (green building extensible markup language). Perform more in-depth energy analysis using Autodesk® Green Building Studio® web-based services*, and study building performance with Autodesk® Ecotect® Analysis software. Autodesk® 3ds Max® Design software can be used to conduct indoor lighting analysis in support of LEED® 8.1 certification.

Autodesk Revit Architecture Success Story

HNTB Corporation

Since adopting Autodesk Revit Architecture software, the HNTB Corporation has been able to successfully complete dozens of BIM projects, including the $183 million U.S. Army Human Resources Center of Excellence (HRCoE)—the largest construction project ever undertaken at Fort Knox.

To meet the challenge, HNTB teamed with Turner Universal, a well-known construction company. Together, the two firms chose to implement a design-build project delivery method supported by Autodesk BIM solutions.

HNTB and Turner Universal developed the Fort Knox HRCoE initial design in only 60 days—a notable feat given the project's scope. "One of the biggest advantages of using Revit Architecture was that we could change the design in one place and the software would automatically update the rest of the model," says Marwan Bakri, HNTB BIM federal technology manager. "That helped us see the impact of our changes immediately and take a new course of action if necessary."

Even given the constraints of the fast-track design-build process, HNTB delivered tremendous design value and flexibility. "Using the Revit platform, we worked more efficiently and with a much greater degree of coordination," says Bakri. "BIM helped us to give more—even with the restrictions of schedule."
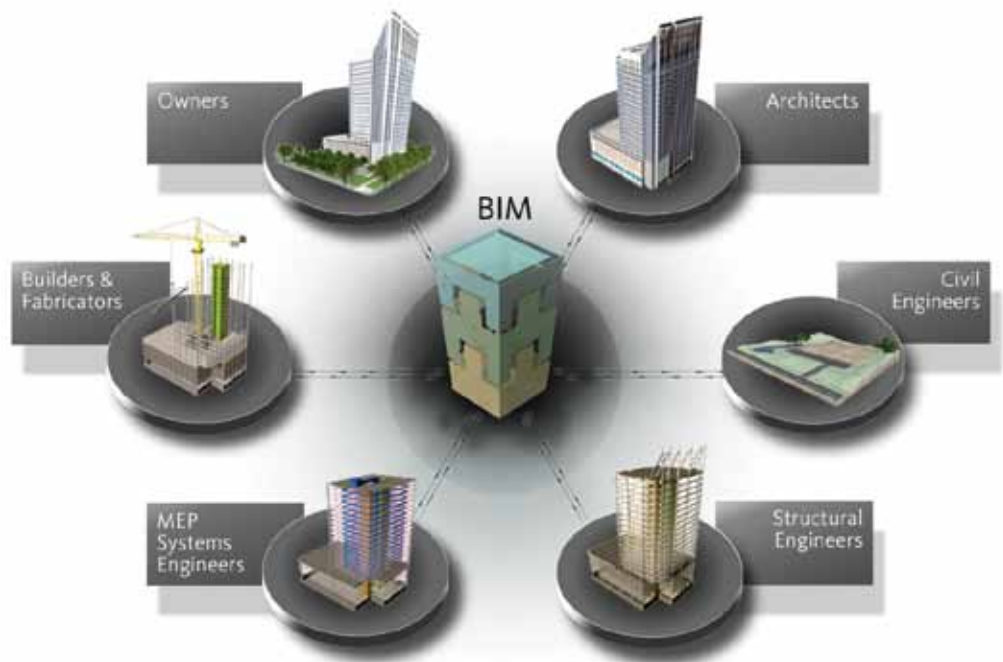
BIM—Simply a Better Way of Working

Deliver projects faster, more economically, while minimizing environmental impact.

AutoCAD Revit Architecture Suite—for Maximum Flexibility and Advantage

AutoCAD® Revit® Architecture Suite software includes AutoCAD® software, AutoCAD® Architecture software and Autodesk Revit Architecture. Utilizing this suite helps you to transition to BIM while protecting your legacy software, training, and design data investments. Autodesk Revit Architecture delivers a powerful competitive advantage by facilitating analysis for sustainable design, automatically delivering coordinated, consistent documentation, and helping speed creative design work. Support ongoing work in either AutoCAD or AutoCAD Architecture while you make the switch to BIM with Autodesk Revit Architecture, at your own pace.

Built for BIM

Autodesk Revit Architecture is built for BIM. BIM is an integrated process built on coordinated, reliable information about a project from design through construction and into operations. By adopting BIM, architecture firms can use this consistent information throughout the process to design and document innovative projects, accurately visualize appearance for better communication, and simulate real-world performance for better understanding of cost, scheduling, and environmental impact.

The BIM advantage

BIM helps building professionals stay competitive in an increasingly complex business climate by giving them the ability to better predict the outcome of a building before it is built. Using BIM helps architects and designers to create more sustainable, accurate designs with fewer errors and less waste, helping to achieve higher profits and more satisfied clients. BIM also optimizes team collaboration, enabling architects to more clearly and reliably communicate design intent to engineers, contractors, fabricators, and owners.

The confidence the BIM approach provides is a major benefit. We are really starting to reap the productivity benefits of Autodesk Revit Architecture software. It is very exciting.

—Michael Parrott
   Vice President and Senior Project Manager
   Nacht & Lewis

Learn More or Purchase
Access specialists worldwide who can provide product expertise, a deep understanding of your industry, and value that extends beyond your software. To licenseAutodesk Revit Architecture software, contact an Autodesk Authorized Reseller. Locate a reseller near you at **www. autodesk.com/reseller**.

Autodesk Learning and Education
From instructor-led or self-paced classes to online training or education resources, Autodesk offers learning solutions to fit your needs. Gain access to free* software if you are a student or educator. Get expert guidance at an Autodesk Authorized Training Center (ATC®) site, access learning tools online or at your local bookstore, and validate your experience with Autodesk Certification. Learn more at **www.autodesk.com/learning**.

Autodesk Subscription
Autodesk® Subscription is a software maintenance and support program that provides additional advantages and delivers the lowest total cost of ownership. Discover the Subscription Advantage at **www.autodesk.com/subscription**.

Autodesk®