GRAPHISOFT®

ARCHICAD 12
a Virtual Building Solution

The best reward for the passionate architect is to see their design ideas take on a physical form. With Graphisoft ArchiCAD® Virtual Building™, you can explore your design ideas with the full confidence that every detail is being captured and all your documents are synchronized. ArchiCAD 12 reinforces its position as the most complete and flexible design solution in the BIM category. ArchiCAD 12 focuses on speed, design and documentation by introducing multi-processor support; the brand new Curtain Wall system and the 3D Document, a first for a BIM application.

ACCELERATING THE DESIGN EXPERIENCE

ACCELERATING THE DESIGN EXPERIENCE

ArchiCAD was built from the outset to specifically address the architect's desire for great design without compromising on practical needs. Graphisoft ArchiCAD's innovative Virtual Building solution helps you win more business while letting you concentrate on your core skill – creating inspiring designs.

Austria House of the Year

World Architectural News Award
House of the Year

Schnitzer Bruch residence, Maaars architecture, Austria

Aatrial House, KWK Promes, Poland

VIRTUAL BUILDING

DESIGN

DOCUMENTATION

Working with ArchiCAD, you will discover the pleasures and the benefits of designing in a 3D architectural environment with extraordinary modeling freedom. Based on a profound knowledge of the architectural process, ArchiCAD's Virtual Building simulates the way a real building is constructed. From town planning to intricate details, from functional study to complex design, ArchiCAD's specialized tools are always available and extremely easy to use, ensuring that there are no boundaries to your creativity. With ArchiCAD, you create a 3D virtual model: all the necessary documentation and images are derived automatically.

The project lives and evolves on the screen simultaneously with your thoughts, allowing you to concentrate on your strength – creating inspiring designs. Virtual modeling is a natural and intuitive process which is both inspiring and enjoyable. Watch your building model evolve before your eyes. With the clarity of 3D, your clients can truly appreciate good design.

Any architect with the passion to freely explore design ideas can fulfill their wish without compromising on documentation precision and quality. With ArchiCAD you can model and shape freely, easily creating the forms you want and change naturally even complex elements in the most appropriate view. Like editing Curtain Walls in an innovative 3D edit mode: based upon a flexible hierarchical structure of schemes, physical members and additional accessories, users can easily change and conrol the entire system or the smallest detail throughout the entire project.

ArchiCAD enables you to combine creative freedom with the well-known efficiency of the robust Virtual Building. A comprehensive set of tools support the creative process within the context of the project – so while you design your project all documents will be generated as a by-product, assuring smooth workflow and real-time evaluation.

2D and 3D documentation enhancements such as the new Fill Management and the 3D Document, a first for a BIM application – help users win new business and explain their design intent to owners, consultants and contractors.

The innovative 3D Document capability enables users to use any 3D view of the model as the basis for creating a document where dimensions, annotations and even additional 2D drawing elements may be added. This helps designers more easily communicate their design intent. This new level of clarity in communication helps users to spend less time on design iteration with owners and reduce the number of construction issues which increase cost and lengthen project schedule.

ArchiCAD 12 introduces new Fill capabilities, including translucent solid and image fills and transparent gradient fills. These capabilities enable architects to remain in the ArchiCAD environment while preparing documents for competitions and client presentations.

INSIDE ARCHICAD

Design in a 3D Virtual Building environment and get all documentation generated as a by-product.
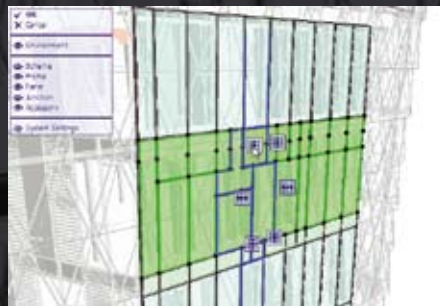
paastudio, NHS Building

Wesleyan University, Robert Olson + Associates LLC, Photography: Anton Grassi/Esto, USA

Create Curtain Walls in a special 3D environment. Based upon a flexible hierarchical structure of schemes, physical members and additional accessories, easily control & change both the entire system and the smallest detail.

> " **When we showed the client how we present our projects, through rendering, virtual reality scenes, animations and models, they immediately wanted to work with us. For them, it was incredible.** "

Michel Rojkind, Rojkind
Arquitectos, Mexico

Speed up your work with
ArchiCAD's support for multi-core processor technology.

Liljewall Arkitekter AB
Biomedicinskt Forskningscentrum

Create cutting-edge presentations with the integrated
state-of-the-art rendering engine.

ACCELERATING THE DESIGN EXPERIENCE

ArchiCAD Virtual Building, including industry-first Virtual Trace technology, provides full coordination of all project drawings and seamless integration of workflow across disciplines and roles. Final documentation is created with an unprecedented level of control – even in 3D, faster than ever and with unparalleled quality.

Tomohiko Yamanashi
Nikkei Sekkei, Jimbocho Theater, Tokyo

Helin & Co Architects, Finland – Jåttåvågen area, Sweden – Competition entry

WORKFLOW

A typical architectural project can contain multiple models and hundreds of drawings. Creating and managing this mass of information is a major and highly important task in a firm's workflow. The automation of such procedural tasks is essential to improving this process and making it error-free. With ArchiCAD you will experience a smooth design-documentation workflow and a substantial boost to productivity. Moreover, using the ArchiCAD hybrid 3D/2D environment, you can fully integrate documentation teams into the Virtual Building process and have full control over the balance between 3D and 2D work. ArchiCAD's fully integrated publishing process enables creation and constant updating of your published documentation sets as soon as the project begins to evolve. As you develop the 3D model, the drawing sheets are automatically updated and ready to be plotted. Working with ArchiCAD, you will be able to quickly perform all routine tasks, dramatically decrease reworking, improve quality and ensure a shorter time to market.
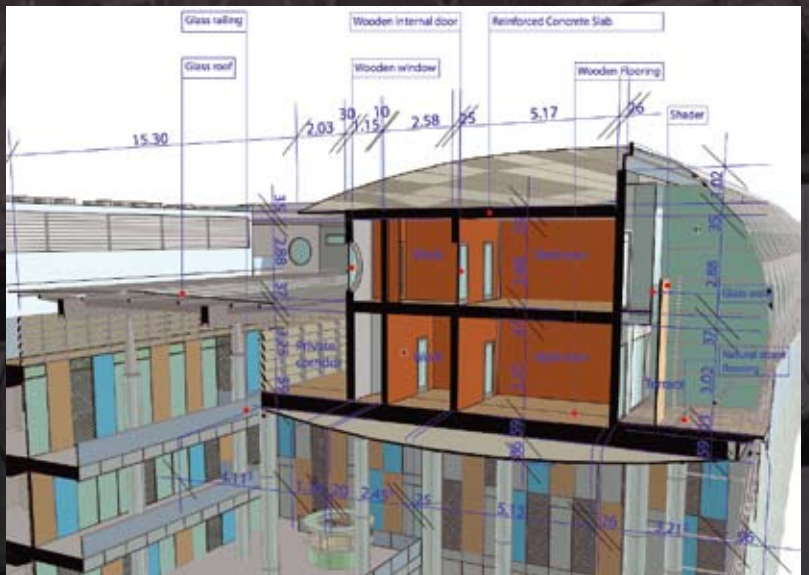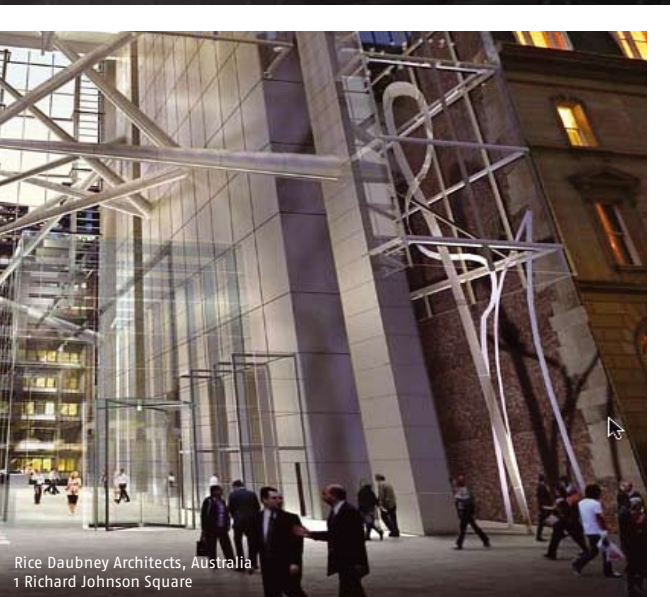
COORDINATION

The Virtual Building automatic update capabilities make coordination between documents effortless. When you create a 3D model, which all the building components are shown, you can check every part and any aspect of your project. And this is not the only way ArchiCAD supports the crucial goal of coordination. ArchiCAD's innovative Vitual Trace™ technology enables you to easily coordinate your work and track design changes both internally and with multi-disciplinary teams.

Working with ArchiCAD, you can quickly and visually analyze differences between your 3D model, 3D and 2D documents and consultants' documents. It becomes much easier to detect clashes between different building systems before construction starts. The combination of these comprehensive capabilities makes ArchiCAD an extremely efficient coordination tool.

CONTROL

ArchiCAD's renowned Virtual Building, together with the industry first Virtual Trace technology, provide unmatched control over the design project within an extremely flexible workflow. Using ArchiCAD, architects can define and control the balance between 3D and 2D work according to their preferences, project type or team members' knowledge, thus making the most of their team's expertise and tailoring the technology to fit their workflow. As the project evolves and consultants from various disciplines contribute their data, designers can effectively control their input by virtually tracing changes, comparing drawings and clearly identifying and communicating any design problems. The dynamic nature of design projects requires parallel processes, smooth workflow and tight control. Using ArchiCAD, you can achieve all these with the confidence that your documents are synchronized and you can always use the right document types to clearly visualize your thoughts. You keep control over the process and your clients get the highest quality design.

INSIDE ARCHICAD

Rice Daubney Architects, Australia
1 Richard Johnson Square

Use any 3D view of the model for creating a 3D Document, where dimensions, annotations and 2D drawing elements may be added. This new level of clarity in communication helps reduce construction issues, which can increase cost and lengthen project schedule.
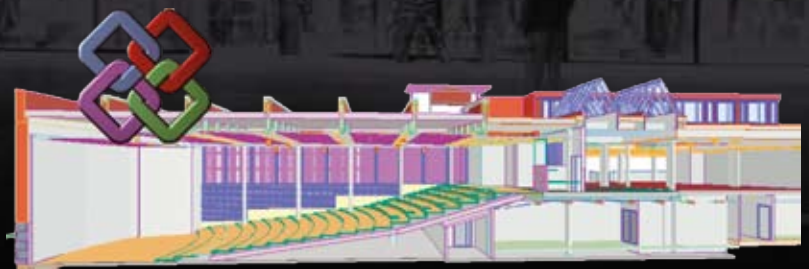

Change the drawing scale and the level of detail of every element will be updated automatically.

A69 – Architects, Czech Republic
Central Park, Prague

Analyze differences between any documents using the industry–first Virtual Trace technology.

A-Konsultit Architects, Finland

Optimizing design and construction by using IFC technology. ArchiCAD offers seamless sharing of the Virtual Building model across disciplines, simulations and analyses. It expands the architectural model's usability, delivers a more accurate and efficient construction phase and a shorter time to market.

ARCHICAD 12 WORKFLOW

ArchiCAD offers an approach to your workflow process, which gives you more control over your design, while maintaining accuracy and efficiency in documentation. From the central database of the 3D model data, you can extract all the information needed to complete architectural and structural plans, sections and elevations, details, bills of quantities window/door/finish schedules, renderings, animations and virtual reality scenes. The Virtual Building approach also enables you to make changes at any time, whilst maintaining the integrity of your documents automaticaly.

Modeling – Design – Design Evaluation

Workviews

3D TOOLS

Walls
Doors
Windows
Skylights
Roofs
Curtain Walls
Beams
Columns
Slabs
Stairs
Mesh
Zones
Objects
Lamps
Cameras

LIVE PROJECT VIEWS
Stories, Sections, Elevations
Interior Elevations, Worksheets
Details, 3D, Schedules etc.

PERSONALIZED 3D TOOLS
and Work Environment
Custom Objects – GDL
Favorites
Work Environments

SPECIAL MODELING TOOLS
Solid Element Operations
Complex Walls – Custom Profiles
Slanted Walls – Double Slanted
Walls Parametric Objects,
Magic Wand

2D TOOLS
Lines
Fills
Arc/Circle
Polyline
Text
Dimensions

VIRTUAL TRACE

**PERSONALIZED
DRAWING TOOLS**
Templates
Pen Sets
Fill Types
Image Fills
Line Types

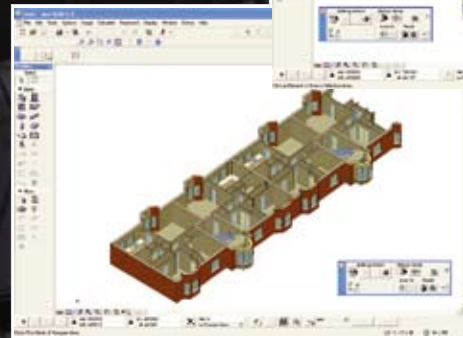**SAVED VIEWS**
Layer Combos
Scale
Zoom level
View Options
3D Cut planes

VIEW TYPES
Plans, Sections
Elevations,
Int. Elev.
Worksheets
Details
3D Views
3D Documents
Rendered Views
Schedules
Lists

Cej Architects, Helsinki, Finland
Econia Business Park – ecological office building

ML Design, Brisbane, Australia, www.mldesign.com.au

Capella Garcia Arquitectos, Spain

oordination | Passion | Modeling | Freedom | Communication | Evaluation | Con

INSIDE ARCHICAD

Use TeamWork technology to enable your team to work simultaneously on various aspects of the same project, while keeping all team members updated on project progress.

Layouts ➤ Publishing

Master Layouts

Predrawn Elements
Frames
Associative
  Textual Data
  – Names
  – Numbers
  – Scales
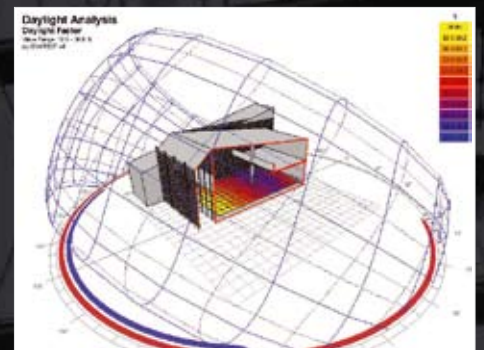 – Project Info
Auto Updated
  Drawings

Publisher Sets

– Compiled of
  Layouts
– Auto
  update
– Folder
  hierarchy

File types
DWG, JPG,
PDF, TIF, PSD
DGN, PMK....

Easily perform thermal analyses to ensure optimal energy consumption and sustainable design by combining the ArchiCAD Virtual Building with Graphisoft's partner applications, such as ArchiPHYSIK.

Gillard Associates

Drawings with a click

Építész Stúdió, Hungary – Renovation of Modernist Bus Station

Építész Stódió, Hungary

Experience the smooth design–documentation workflow, including 3D Documents, dynamic indexes and parametric drawing titles. The fully integrated publishing system will automatically update the complete documentation set.

fidence | Workflow | Integration

SYSTEM REQUIREMENTS

Operating System:
   Microsoft® Windows® XP Pro or XP Pro x64 edition, Microsoft Windows Vista® Business, Enterprise and Ultimate Edition (32-bit
   and 64-bit), QuickTime 7 or later, and Java 1.6.0 or later required.
   Mac® OS X v10.4 and v10.5

CPU:
   Windows: Intel® Pentium® 4 or higher recommended.
   Macintosh®: Macintosh PowerPC G5 series or Macintosh with any Intel processor

RAM:
   1 GB of RAM is required. 2GB or more is recommended for complex models

Hard Drive:
   About 1 GB free disk space is required for a full installation of ArchiCAD.
   Free hard disk space is required according to model complexity (over 2 GB recommended for complex models and 3D visualization).

Display:
   Resolution of 1024 x 768 is required. 1280x1024 or higher is recommended.

Video card:
   Windows: Open GL and DirectX 9 compatible graphic card with 256 MB or more on-board video memory is recommended to fully
   exploit hardware acceleration capabilities
   Macintosh: Open GL compatible graphic card with 256 MB or more on-board video memory is recommended to fully exploit
   hardware acceleration capabilities
   You can find a list of recommended video cards at: http://archicadwiki.com/Video_Cards

Optional Hardware Peripherals:
   All major plotters, printers and digitizers can be used with ArchiCAD

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Virtual Building Solutions

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