

GRAPHISOFT ARCHICAD 17

ArchicAD 17 offers a one-of-a-kind, BIM-based construction documentation solution. It simplifies the modeling and documentation of buildings even when the model contains an unprecedented level of detail. ArchicAD's end-to-end BIM workflow allows the model to stay live until the very end of the project.

ArchicAD's improved Energy Evaluation engine supports multiple thermal blocks. This allows users to evaluate their designs with standard-compliant technology and makes ArchicAD the "greenest" BIM solution available on the market today.

Direct access to "Best-in-class Manufacturer Content" on the BIMobject.com and BIMcomponents.com portals offers users the broadest range of intelligent BIM components.

ArchicAD 17 supports the creation and manipulation of large complex models by featuring industry-first "Background Processing Support" for faster generation of complex model details.

Building Information Modeling (BIM) and Open BIM have created unprecedented potential for design collaboration between architects and engineers. With intelligent, model-based workflows between the various trades, coordination errors can be reduced to virtually zero before the construction phase begins.



BIM

LIVES IN THE
DETAILS

BIM LIVES IN THE DETAILS

From the outset, ArchiCAD was developed specifically to address the architect's desire for great design without compromising on practical needs. GRAPHISOFT ArchiCAD's innovative BIM solution helps you win more business while letting you concentrate on your core skill – creating inspiring designs.



BIM

Working with ArchiCAD, you will discover the pleasures and the benefits of designing in a 3D architectural environment with extraordinary design freedom. Based on a profound knowledge of the architectural process, ArchiCAD's Building Information Model simulates the way a real building is constructed. From town planning to intricate details, from functional studies to complex designs, 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 Building Information Model – all the necessary documentation and images are created automatically. The project comes to life and evolves on the screen simultaneously with your thoughts, allowing you to concentrate on your strength – creating inspiring designs. Building Information Modeling is a natural and intuitive process that is both inspiring and enjoyable. With the clarity of 3D, your clients will truly appreciate good design.

DESIGN

ArchiCAD allows architects to freely explore design ideas without compromising on documentation precision and quality. With ArchiCAD, you can model and shape freely, easily creating the forms you want and change even complex elements in the most appropriate view. ArchiCAD enables you to combine creative freedom with the well-known efficiency of its robust Building Information Model. A comprehensive set of tools supports the creative process within the context of the project. ArchiCAD 17 enhances its direct modeling capabilities in the native BIM environment with its end-to-end BIM workflow using Priority Based Connections and Intelligent Building Materials, and an improved MORPH™ tool. Cloud-integration helps users create and find the custom objects and components they need to make their BIM models complete. GRAPHISOFT continues to innovate in "green" as well, uniquely offering the best workflow for sustainable design, integrated into its BIM authoring tool.

DOCUMENTATION

With ArchiCAD, you create a 3D Building Information Model – all the necessary documentation and images are created automatically. New, priority-based junctions and intelligent building materials ensure correct graphical representation of elements and materials in sections (cut fills), surfaces in 3D views, and thermal properties throughout the building energy evaluations. ArchiCAD offers a native BIM design and documentation workflow for Renovation and Refurbishment projects common in developing parts of the world. ArchiCAD's powerful view setting possibilities, its unique drawing handling, together with the integrated publishing capabilities, ensure that printing or saving the various drawing sets of a project won't require extra time and will be derived from the same Building Information Model.

INSIDE ARCHICAD

ArchiCAD BIM

Design in the 3D Building Information Modeling environment and all the documentation will be generated and kept up-to-date automatically based on model data.



MORPH™ and Shell tools

ArchiCAD presents direct modeling capabilities in the native BIM environment with its Shell tool and improved MORPH tool, allowing element creation with any custom geometry in an intuitive graphical way.



Helen & Hard, Venne's Library, Photo: © Emile Ashley

Real Manufacturer Content

More than a thousand real, up-to-date manufacturer specific objects are provided by BIMobject® among the thousands of generic and premium building components found on BIMcomponents.com.



Helen & Hard, Venne's Library



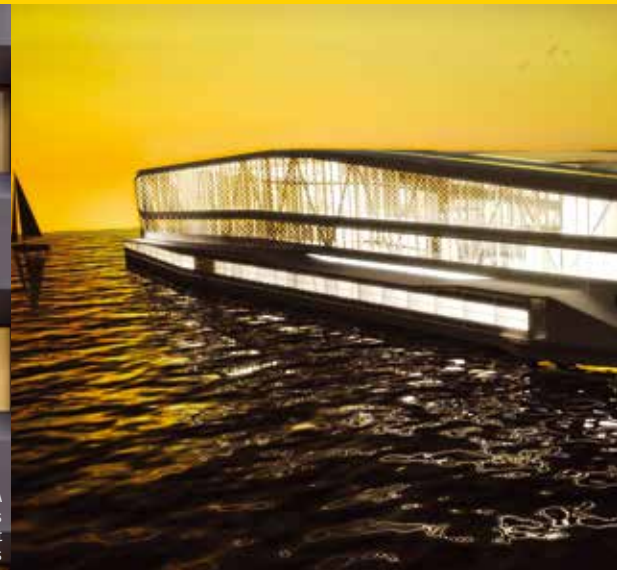
Sede Usiminas
FarKasVölgyi arquitetura, Brazil
www.fkvg.com.br



Arizona State University Health Services Tempe, Arizona
Orcutt | Winslow
www.owp.com
Photo © Bill Timmerman Photography

BIM LIVES IN THE DETAILS

Building Information Modeling (BIM) and Open BIM have created unprecedented potential for design collaboration among architects and engineers. With intelligent, model-based workflows between the various trades, coordination errors have been reduced to virtually zero. ArchiCAD offers architects industry-first open design collaboration workflows with leading engineering solutions worldwide.



Edifício MPA
Lousinha Arquitectos
www.lousinhaarquitectos.pt
Photo © Luís Ferreira Alves

COLLABORATION

When implementing BIM on a large scale, architects often run into bottlenecks in model accessibility and workflow management. The GRAPHISOFT BIM Server – with leading edge Delta Server technology – dramatically decreases network traffic, allowing team members to collaborate on BIM models in real time. The new, expanded Teamwork backup options allow you to continue your work even if the connection to the BIM Server is lost. Automatically-created Server Data backup and local project backups make sure that you never lose your data in an emergency. “Solo” mode provides extended flexibility, while the TravelPack™ option lets you take your Teamwork projects anywhere, with the ability to access the BIM Server from any remote computer. The BIM Server Performance Monitor function provides project leaders and CAD/BIM managers with powerful management tools to get all the information necessary for decisions required, resulting in optimal Teamwork project workflow.

OPEN BIM

BIM and Open BIM bring an unprecedented level of coordination between different views of the 3D model, and among BIM models from various disciplines. ArchiCAD improves open design collaboration by refining the interdisciplinary collaboration workflow with a wide range of IFC database and property management improvements, turning IFC properties into easily searchable and assignable native ArchiCAD properties. Support for multiple, international IFC standards ensures that ArchiCAD’s IFC solution can be used globally. Model-based version tracking, for best-in-class coordination workflow with engineers, allows architects to compare IFC model versions and to import only the differences. Thanks to Publisher, IFC models of varying content can be exported with just one click to the different professions (for example, the load-bearing structure to the structural engineer, the entire model to the MEP engineer). Smart DXF/DWG data exchange supports roundtrip conversion with consultants using these formats. The combination of these comprehensive capabilities makes ArchiCAD an extremely efficient coordination tool.

CONTROL

The dynamic nature of design projects requires parallel processes, smooth workflow and tight control. With ArchiCAD, you can achieve all these with the confidence that your documents are synchronized and that the right type of document is at hand to clearly illustrate your thoughts. You maintain total control of the process, while your clients receive the highest quality design. Controlling the workflow of larger teams is one of the most challenging tasks project leaders face on a regular basis. The industry-first GRAPHISOFT BIM Server technology provides an unmatched collection of workflow management and backup tools for project leaders and CAD/BIM managers. User roles and project access can be fully-customized to help control the design project with extremely flexible workflow options. The GRAPHISOFT BIM Server with the BIM Server Performance Monitor provides project leaders with powerful management tools necessary for optimal Teamwork project workflow decision-making.

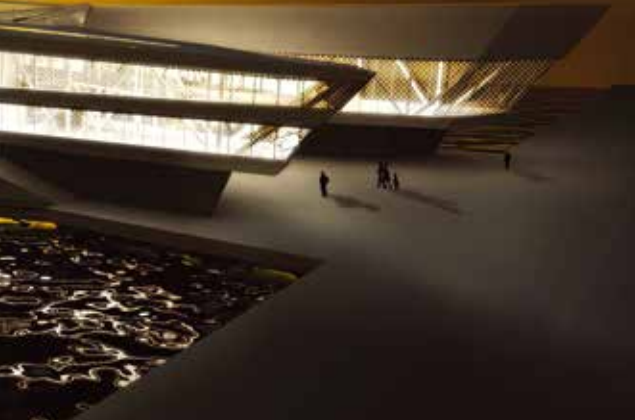
INSIDE ARCHICAD

Teamwork

Teamwork technology allows your team to work simultaneously on various aspects of the same project, while keeping your project safe and all team members updated on project progress.



Nautical Museum, Croatia
Nikola Rubic
2012 Spring winner of the
Architects Jury competition



OPEN BIM™

ArchiCAD's integrated model change management and native IFC property management and DXF/DWG roundtrip conversion solutions offer a smooth, model-based coordination workflow.



The Nuclear Advanced
Manufacturing Research Centre UK
Bond Bryan Architects
www.bondbryan.com

Performance

To dramatically boost performance on large, complex models and further enhance your BIM productivity, ArchiCAD features industry-first background processing support and optimized Scaling of Multiple-core CPUs.

Improved Central Graphics Unit Performance makes 3D navigation in OpenGL mode even smoother when working with extra large and complex models.

Both ArchiCAD and the BIM Server provide full 64-bit support on both Windows and Macintosh operating systems.



Orfanato Metro Station, Sao Paulo
Sistran Engenharia, José Garcia
www.sistransp.com.br



WORKFLOW

ArchiCAD's workflow gives you more control over your design and enables you to make changes at any time, while maintaining accuracy and efficiency in documentation. From the central database of the 3D model data, you can extract all the information necessary to complete all plans, sections and elevations, details, bills of quantities, window/door/finish schedules, renderings, animations and 3D documents.

Modeling – Design – Design Evaluation

3D TOOLS

Wall
Door
Window
Column
Beam
Slab
Stair
Roof
Shell
Skylight
Curtain Wall
Morph
Object
Zone
Mesh
Lamps
Wall End
Corner Window

LIVE PROJECT VIEWS

Stories, Sections, Elevations, Interior Elevations, Worksheets, Details, 3D Documents, 3D Views, Schedules, Lists

PERSONALIZED 3D TOOLS AND WORK ENVIRONMENT

Custom GDL Objects, Favorites, Custom Materials, Work Environment

SPECIAL MODELING TOOLS

Solid Element Operations, Connections, Walls/Beams/Columns with Complex Profiles, Walls/Roofs/Slabs/Shells with Composite Structures, Slanted/Double Slanted Walls, Parametric Objects, Standard Steel Profiles, Magic Wand

2D TOOLS

Line/Polyline
Fill
Arc/Circle
Spline
Hotspot
Text
Label
Dimensions
Figure

PERSONALIZED

DRAWING TOOLS

Custom Line Types
Custom Vector Fills
Custom Symbol Fills
Custom Image Fills

Workviews

VIEW FILTERS

Layer Combinations, Scale, Partial Structure Display, Pen Sets, Model View Options, Renovation Filters, Dimensions, Zoom Level, 3D Cut Planes
3D Marquee, Representation of Cut and Uncut Elements, Sun/Shadow Settings

VIEW TYPES

Plans, Sections, Elevations, Interior Elevations, Worksheets, Details, 3D Views, 3D Documents, Rendered Views, Schedules, Lists

Open Design Collaboration – Incorporate ArchiCAD's collaboration capabilities in your workflow. Share 3D models and 2D drawings. Work seamlessly with your structural, MEP and other consultants, visualization artists or fellow architects regardless of the software they use.

Madison Traditional Academy Phoenix, Arizona
Orcutt | Winslow www.owp.com
Photo © Shaun Kurry



Coordination | Passion | Modeling | Freedom | Communication | Evaluation | Co

INSIDE ARCHICAD

Layouts

Publishing

LAYOUTS/ MASTER LAYOUTS

- Saved Views as Drawings
- Auto/Manually Updated
- Frames, Lines, Logos
- Automatic Textual Data
 - Titles
 - Date
 - Address
 - Scales
 - Project Data
 - Drawing IDs

PUBLISHER SETS

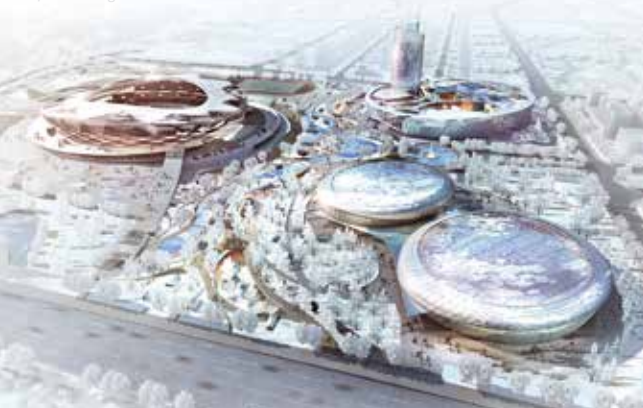
Auto Updated
Layout Collections,
Project Reviewer
Environment,
Save/Print/Plot in
Various Formats

FORMATS

DWF, DXF, DWG,
DGN, PMK, PNG,
JPEG, GIF, TIFF, BMP,
MOD, PDF
(multipage DWGs
and PDFs can be
merged into one
single file)

Drawings with a click

Zaozhuang Culture Center, China
UDG, www.udg.com.cn



Confidence | Workflow | Integration

Energy Evaluation

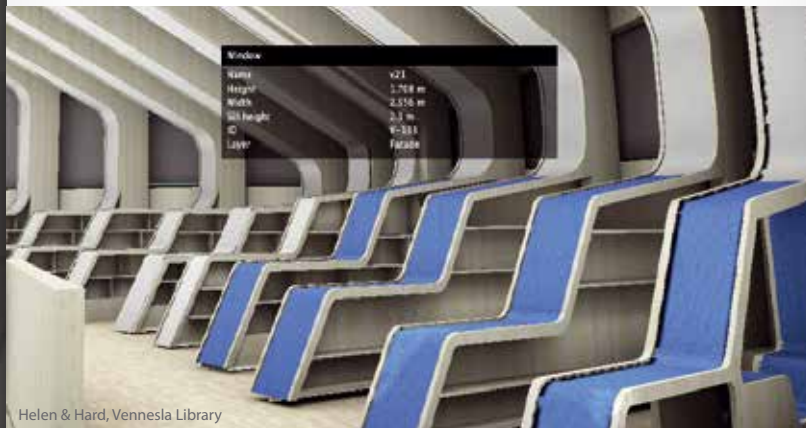
In today's environment, sustainability is an imperative for all building projects. The built-in, improved Energy Evaluation functionality of ArchiCAD 17 supporting multiple thermal blocks allows architects to perform reliable dynamic energy evaluation with standard-compliant technology.



Helen & Hard, Vennesla Library, Photo: © Emile Ashley

GRAPHISOFT BIMx

With GRAPHISOFT ArchiCAD, GRAPHISOFT BIMx, and its cloud-integrated model sharing service, architects and designers can explore, communicate, and share their project designs like never before.



Helen & Hard, Vennesla Library

MEP Modeler

GRAPHISOFT MEP Modeler is for architectural practices and architectural departments of A/E firms to create, edit or import 3D MEP networks and coordinate them with the ArchiCAD Building Information Model.



SYSTEM REQUIREMENTS

Operating System:

Microsoft Windows 7, Microsoft Windows 8, Microsoft Windows Vista®*.

QuickTime® 7 or later, and Java 1.7.0 or later required.

Mac® OS X 10.7 Lion, 10.8 Snow Lion, 10.6 Snow Leopard*

* Suitable for running ArchiCAD 17, but not tested by GRAPHISOFT.

CPU:

64-bit processor is required (Core 2 Duo or later) for both operating systems.

Processor with 4–8 (or more) cores is recommended to fully exploit ArchiCAD 17 performance capabilities.

On Mac, only case insensitive file-system volumes are supported.

RAM:

4 GB RAM is required. 8 GB or more is recommended for complex models.

Hard Drive:

5 GB free hard disk space required for a full installation of ArchiCAD.

Additional 10 GB hard disk space per project required for work with complex models and 3D visualization.

Display:

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

Video card:

Open GL-compatible graphic card with on-board video memory of 256 MB required,

512 MB or more 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 plotter brands, printers and digitizers can be used with ArchiCAD.

GRAPHISOFT and ArchiCAD are registered trademarks of GRAPHISOFT.
All other trademarks are property of their respective owners.

Cover image:

Multifunctional dwelling complex on Mosfilmovskaya street, Moscow, Russia
Sergey Skuratov Architects – www.skuratov-arch.ru
Photo © Ilya Ivanov

GRAPHISOFT®

**FOR MORE DETAILS, CONTACT ANY GRAPHISOFT OFFICE,
OR VISIT: WWW.GRAPHISOFT.COM**

Japan

GRAPHISOFT Japan Co., Ltd.

Phone: +81 3 55 45 3800

E-mail: info@graphisoft.co.jp

Web: www.graphisoft.co.jp

United States & Canada

GRAPHISOFT North America, Inc.

Phone: +1 617 485 4200

E-mail: info@graphisoft.com

Web: www.graphisoftus.com

United Kingdom

GRAPHISOFT UK Ltd.

Phone: +44 1895 876 222

E-mail: mail@graphisoft.co.uk

Web: www.graphisoft.co.uk

Germany

GRAPHISOFT Deutschland GmbH.

Phone: +49 89 746 430

E-mail: mail@graphisoft.de

Web: www.graphisoft.de

Spain & Latin America

GRAPHISOFT España, SL.

Phone: +34 91 535 8750

E-mail: info@graphisoft.es

Web: www.graphisoft.es

China

GRAPHISOFT Beijing Rep. Office

Phone: +86 10 6310 2808

E-mail: mail@graphisoft.cn

Web: www.graphisoft.cn

South-East Asia

GRAPHISOFT Hong Kong Ltd.

Phone: +852 3975 3260

E-mail: mail@graphisoft.hk

Web: www.graphisoft.hk

Russia

GRAPHISOFT Representative Office

Phone: +7 495 510 2503

E-mail: russia@graphisoft.com

Web: www.graphisoft.ru

Singapore

GRAPHISOFT Singapore

Phone: +65 6549 7601

E-mail: singapore@graphisoft.com

Web: www.graphisoft.com.sg