NEMETSCHEK
Vectorworks

Vectorworks Architect

YOUR
VISIONS.
PERFECTLY
REALIZED.

VECTORWORKS ARCHITECT

Every day, designers choose Vectorworks because of our multidisciplinary approach and because they want a solution that supports their creative process instead of replacing it. We allow great design to materialize from inspiration, exploration, and discovery. Our DNA originates in the creative part of the design process, and so we place a heavy emphasis on freedom of artistic expression through the development and documentation of each project.

With Vectorworks Architect software, you'll enjoy the robust capabilities of BIM, great documentation, and intelligent tools while maintaining your creative freedom to design in 2D or 3D. In short, with Vectorworks Architect, you can do it all, from sketch to BIM.
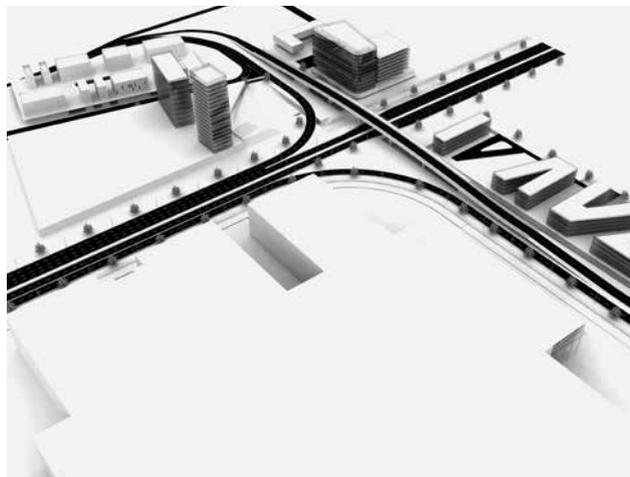

On the cover: BOLLES+WILSON
Based in Münster, Germany since 1989, BOLLES+WILSON is known for understanding architecture "as a symbiosis between the ordinary and extraordinary." It's this approach that has enabled the firm's global recognition and involvement in award-winning projects in Japan, Australia, and Europe. As a prime example of their inventive design, visitors to the upper floors of the RS+Yellow building experience an element of surprise upon discovering a beautiful lake on the rooftop.

Photo BOLLES+WILSON, ©Markus Hauschild, www.hauschild.com

To read more about this and other projects, visit: **www.vectorworks.net/success-stories**

CAPTURE YOUR VISION

With Vectorworks Architect, you have the freedom to design in your own way, use the tools you want, and capture your ideas all in one place to reduce wasteful repetition and inefficient work. Plus, you can maintain your existing workflows, incorporating your design process and making the best use of the skills you already have in house. Collaborate with coworkers and colleagues who use other software applications, and seamlessly input critical, pre-design information into Vectorworks to capture all the elements of your vision.

Powerful Conceptualization
Find your inspiration and start drawing. Or, import hand sketches, site pictures, and even documents or models from other applications. Invoke ideas in 2D, and explore them in 3D with free-form models.

Free-Form Modeling
With our intuitive interface, you can design from any 3D view using modes in modeling tools that automatically infer working planes as you move your cursor, and enjoy the superior quality that allows you to manipulate your model with ease. More accurate object information and better snapping make drawing in 3D easy. The SmartCursor™ helps by showing hints, like the angle from the previous segment, as you draw, and our patent-pending X-ray Select technology lets you see through models to select, move, and modify hidden objects with precision and ease. Plus, an advanced suite of solids and NURBS surface tools lets you create any shape and easily explore organic geometry. Push, pull, blend, twist, sculpt, deform, bulge, taper, or punch holes. Anything is possible with Vectorworks Architect.

Going Beyond the Building
Architecture is more than just the building. With Vectorworks Architect, you can design anything — graphics, interior details, hardware, furniture, fittings, site, or whatever you can imagine — without having to learn or use additional applications.

Supporting Sustainable Building

When your goal is sustainability, Vectorworks Architect is an indispensible tool. You can maximize materials and minimize energy expenditure with our built-in spreadsheets that calculate building performance through programming analysis (with parametric Space objects), detailed material take-offs, and lighting requirements. You can also conduct sun studies with the Heliodon tool. And, if you need the power of more sophisticated building performance, simulation, and energy analysis tools, leverage our partnership with Integrated Environmental Solutions Limited by exporting data-rich building models using the Industry Foundation Classes (IFC) 2x3 interoperability standard or gbXML and importing them into IESVE for Architects or IESVE for Engineers. With such comprehensive data, you'll answer all the "how many" and "how much" questions early in the process, thus ensuring a sustainable project with a smaller carbon footprint.

Courtesy of Arch & Teco

Endless Digital Images

Make your work even more compelling and easier to communicate with digital imagery. Import scans, digital photos, or web images. Import or export a wide array of image files, including Illustrator® EPS and native Photoshop® PSD files. Also, export your design for inclusion in your firm's marketing materials or website.

Cutting-Edge 3D

See your captured visions come to life in 3D. Send models to CAD/CAM machines, CNC routers, and other 3D printers. The Vectorworks Architect package supports a number of standard 3D file formats, including Parasolid® X_T, SKP, 3DM, IGES, SAT, KML, STL, and 3DS.
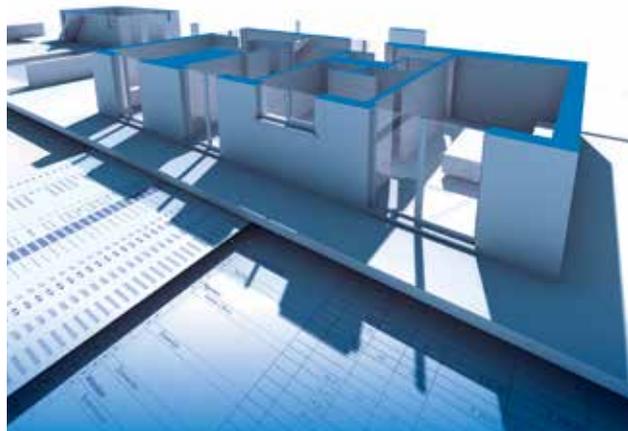
Courtesy of punto design

Courtesy of Stephan Mönninghoff, extragroup GmbH

DEVELOP WITH YOUR WORKFLOW

Delivering accurate information efficiently while remaining true to a designer's vision is the pivotal point of any artistic enterprise. As with all design tools, the fundamental purpose of software is to support and strengthen inspiration.

With Vectorworks Architect, you can move easily between tasks from design concepts to construction documentation and every phase in between. Create, model, present, and develop your designs easily and precisely with one application.

The program boasts a comprehensive set of design development tools to support your entire practice. You have complete functionality for:

Efficient Workgroup Capabilities
Break up complex projects. Whether you're a sole practitioner collaborating with other professionals or a large firm dividing work among different members of the team, workgroup referencing provides a flexible way to split even the most complicated project into manageable pieces.

Building Information Modeling (BIM)
BIM brings together design, analysis, collaboration, and documentation for the benefit of all parties involved in a building project. As BIM continues to gain increasing importance in the AEC industry, software must continually evolve in order to provide design professionals with the tools they need to successfully implement BIM in their projects.

With Vectorworks Architect, you can create building information models without changing your preferred design process. Whether you're looking to streamline costs, analyze materials, increase your energy efficiency, or just create world-class designs, the Vectorworks Architect solution is an efficient way to introduce BIM capabilities into your workflow. Enjoy the robust and flexible capabilities of BIM with the ease of design, great documentation, and intelligent tools that the software is known for — right from the start.

© Design Express

Courtesy of Luis Ruiz

"There is no doubt that the speed and quality of work we produce is an advantage over practices using an engineering CAD package. The software allows us to present our innovative designs in the best possible light." – John Lee, Founder, Arca Architects, Manchester, England

With the unsurpassed Parasolid modeling kernel from Siemens PLM Software, Vectorworks Architect has mastered BIM with design and presentation capabilities and, arguably, the best 3D modeling core in the business.

Use integrated tools, such as columns, framing members, roofs, walls, slabs, doors, and windows to effortlessly create building models. Take advantage of 3D wall and slab components that produce dynamic and accurate wall sections and material estimates. If the variety of standard parametric objects is not enough, you can create almost any shape imaginable, assign BIM data to it, and integrate it with the rest of the building model.

Our BIM workflows are further enhanced with space planning tools, wall and roof framing tools for detailed construction modeling, and our Heliodon feature to conduct solar studies.

Finally, create linked elevation, section, and detailed views of the model for documentation and presentations. With the click of a mouse, any changes made to the building model are updated in the views all at once!

For more information, check out www.vectorworks.net/BIM.

Courtesy of Henn Architekten

Interoperability
Get on the cutting edge of collaborative digital practices, and move your building information models fluidly between design, analysis, and construction packages with Vectorworks software's IFC 2x3 and gbXML translators. Exchange 3D NURBS models with Rhinoceros®. Import concept models from SketchUp®, and access thousands of models from Trimble® 3D Warehouse. Import, export, or directly reference AutoCAD® 2015 (and earlier) files. Publish drawing sets as multipage PDFs, DWFs, or DXF/DWGs. Export 3D models to Google Earth®.

Extensive Automated Reporting and Database Support

Stop manually counting items in your drawings. Automatic data tracking does the tedious work for you; built-in database worksheets continually keep tabs. Take advantage of the two-way link between database worksheets and objects, and gain the power to change object parameters directly from the worksheet. The application goes further than automated schedules and material take-offs. It provides a user-defined, quick, and accurate way to assign custom data to any object and create unique reports.

The Notes Manager database lets you store, manage, and recall document notation while the Issue Manager keeps track of what, when, and to whom drawings and files were issued. Plus, it automatically dates your title blocks.

When it is important to connect to data sources outside the Vectorworks platform, our ODBC module gives you the power to link to databases and connect objects in Vectorworks Architect to the external records and fields for bidirectional reporting and control.

Superior 2D Documentation

Produce high-quality construction documents with ease. Vectorworks Architect offers precision drafting tools, intelligent objects for building, detailing, MEP, furniture, millwork, machine parts, annotations, and thousands of free symbols from leading building product companies. Or, publish, share, and collaborate with other key stakeholders in the office or on the job site with Vectorworks Cloud Services and our mobile application Vectorworks Nomad.

Courtesy of Jean Baptiste Mirales Architecture; Image: Atypik-Studio

YOUR VISIONS. PERFECTLY REALIZED.

From vision to reality, we know the best designs are the ones that clearly communicate your inspiration.

Vectorworks Architect is inspired by you. Everything from the interface, to the tools and commands, to the superior graphic and presentation capabilities, and the workflows it supports is developed based on input from design professionals like you. Here are some of the ways Vectorworks Architect helps you see your visions perfectly realized.

The Loop Kunstwerken © Arch & Teco

Easy-to-Use Interface and Drafting Tools

Do what you like to do best — design. You won't waste time getting up to speed because Vectorworks Architect software's simple, customizable interface and what-you-see-is-what-you-get display make it easier to learn and use than standard CAD applications. No matter what you're switching from, the Vectorworks Architect interface will seem familiar. Vectorworks software's SmartCursor technology replaces manual drafting tools, so even inexperienced CAD users can make the switch easily.

renovatie Zebrastraat Gent © Restyling | ASA

"I prefer its robust capabilities over competitor products because of its powerful 2D tools and its ability to produce 3D renderings."
– Joe Andrulaitis, AIA, LEED BD+C, Partner, Cearnal Andrulaitis
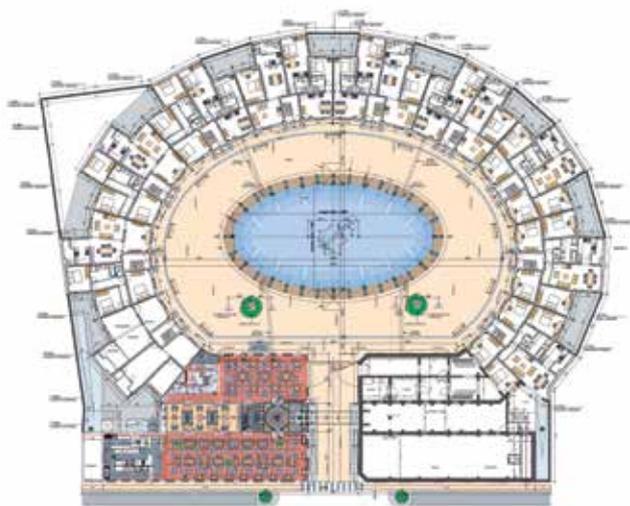
Powerful Presentations

Define and communicate your signature look with our advanced, high-end technology that's famous for helping users achieve beautiful, graphically rich presentations. Tap into our large libraries of entourage and unlimited palettes of colors. Your style is not limited by "cookie-cutter" looks. Instead, add gradients, tile and image fills, stipples, and hatching. Easily import digital images and graphics. Use our exclusive sketch rendering technology to change hard-lined drawings into soft, hand-sketched illustrations. Multiple page layout options make it simple to arrange presentation boards.

Tailored for Your Success

Work in tandem with the application. Vectorworks Architect is designed to work the way you think. In addition to designing with lines, arcs, and circles, you can design with walls, doors, windows, roofs, and slabs. The building objects are easy to edit and display in both 2D and 3D views. And, with the power of Python™ scripting, plus our own scripting language VectorScript™, you can program everything from simple scripts that automate routine tasks to full-blown commercial applications.

Renderworks

We've partnered with the award-winning CINEMA 4D render engine to provide rendering capabilities that are faster and easier to use than standalone rendering applications. When added to Vectorworks Architect software, Renderworks® is fully integrated into the software interface, so it lets you seamlessly visualize your work throughout the design process and produce clear and accurate renderings. With the click of a button, rendered viewports will update as your design evolves.

ABOUT
NEMETSCHEK VECTORWORKS, INC.

A Tradition of Excellence

The company was founded in 1985, and the Vectorworks product line now serves over a half a million professional designers worldwide. We listen to our customers and use their feedback to create products that continually exceed their expectations, delivering superior design flexibility and world-class graphics.

Vectorworks is a cross-platform line of professional CAD software and the preferred application for world-renowned and award-winning architects like Architekt Daniel Libeskind, Matteo Thun, Jeppe Utzon, Platane Beres, Oscar Bressane, Roberto and Renato Candusso, Paulo Fernandes Pedroso, and tecARCHITECTURE, as well as countless others who power the design world forward every day.

Vectorworks Architect software is produced by Nemetschek Vectorworks, Inc., a wholly owned subsidiary of the Nemetschek Group, a leading global software provider for the architecture, engineering, and construction market (AEC). Vectorworks software is translated into 10 languages and is used by design professionals in 85 countries.

Courtesy of Architekt Daniel Libeskind AG

System Recommendations
Mac OS X 10.7.5 or later operating system
Intel Core 2GHz or better processor

Windows XP SP3 | Vista SP2 | Windows 7 SP1 | Windows 8 operating system
Pentium 2GHz or better processor

RAM*
2GB minimum, 4GB highly recommended
8GB – 16GB recommended for large files and complex renderings.

Graphics
1280x800 or greater recommended
512MB VRAM minimum, 1GB+ VRAM recommended for high-quality rendering
Support for OpenGL v2.1 or greater for the best video card performance

* Like past releases, Vectorworks 2015 added improvements which placed still higher demands on graphic hardware. The performance and quality of the graphics provided by the new Vectorworks Graphics Module depend directly on the speed, memory, and supported extensions of the graphics card. These new features have the potential to provide a very fast and fluid experience if used on capable hardware, or a noticeably slower experience if used on older or incompatible hardware. In general, the more powerful your video card is, the better your Vectorworks experience will be.

For the most current and update technical information, please visit our Knowledgebase at **http://kbase.vectorworks.net**.

See **www.vectorworks.net/sysreq/** for updated information.

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