

Vectorworks® Designer

YOUR
VISIONS.
PERFECTLY
REALIZED.

VECTORWORKS DESIGNER

We know that great design begins not in a computer but in the mind of the designer. We simply provide the tools to help designers capture their ideas, develop them, and communicate them ... easily, accurately, and efficiently. 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.

Vectorworks Designer software provides a competitive edge by offering a large set of design tools in a single, intuitive interface. Whether you need to draft, model, or present, Vectorworks Designer is the ultimate solution for the professional who needs it all.



On the cover: Hillel Architecture Inc., Alan Graves Design, Duane Ensing Landscape Design, Kevin Neary, Donald Luxton, FRAIC
The Nisga'a Museum in British Columbia, Canada, is a celebration of the culture and history of the Nisga'a Nation. The design of the building was a true collaboration, and the architect, exhibit designer, and landscape design consultant all used Vectorworks software to bring their visions to life.

Image courtesy of Peter Hardcastle, Duane Ensing, Alan Graves, and Gary Feigehen.

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

CAPTURE YOUR VISION

With Vectorworks Designer, 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 new 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, or punch holes. Anything is possible with Vectorworks Designer.

Design Anything

Many CAD applications restrict your ability to design beyond a core discipline. Whether your specialty is architecture, site design, or entertainment design, Vectorworks Designer gives you the freedom to create without having to learn or use additional applications.

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. Vectorworks Designer supports a number of standard 3D file formats, including Parasolid® X_T, IGES, SAT, KML, STL, and 3DS.



Image © Design Express

"Architects are creative and sometimes want to do things a little outside of the box or to communicate things that just aren't standardized or conventional—and Vectorworks allows us the flexibility and freedom to make architectural drawings the way we want them to be."
— Mark Ostry, Principal, Acton Ostry Architects Inc., Vancouver, Canada

Supporting Sustainable Building

When your goal is sustainability, Vectorworks Designer is an indispensable 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 conduct sun studies with the Heliodon tool. If you need the power of more sophisticated building performance, simulation, and energy analysis tools, you can 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 the "how many" and "how much" questions early in the process, thus ensuring a sustainable project with a smaller carbon footprint.

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 Designer software, 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.



Courtesy of Arquitectura AG, image by Armando Gutierrez



Courtesy of Wes Gardner

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, Vectorworks Designer's workgroup referencing provides a flexible way to split even the most complicated project into manageable pieces.

Building Information Modeling (BIM)

With Vectorworks Designer, 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 Designer 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.

With the unsurpassed Parasolid modeling kernel from Siemens PLM Software, Vectorworks Designer has mastered BIM with design and presentation capabilities and arguably the best 3D modeling core in the business. Visit www.vectorworks.net/BIM for more information.

Site Information Modeling (SIM)

Vectorworks Designer also provides an efficient way to introduce SIM capabilities into your workflow. The program's tools will help you analyze your design for area, volume, slope, cut/fill, and other data such as water flow and sun/shade. Scan in planting plans and trace over them with ease. Or, simply enter your field measurements. Use the property line tool to define a site's boundaries and setbacks. Plus, building tools and site objects easily document existing structures and site conditions. In addition, you can use the program's drawing, modeling, and 2D and 3D graphics capabilities for compelling presentations.

Mapping and GIS

Integrate maps into your work with ease. Add survey data to your drawing and use it as the basis of your site model, or import CAD drawings and data from architects, builders, or engineers to use as base plans. Import geo-referenced aerial/satellite images and GIS data files from federal, city, state, or other agencies.

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® 2013 (and earlier) files. Publish drawing sets as multipage PDFs, DWFs, or DXF/DWGs. Export 3D models to Google Earth®.

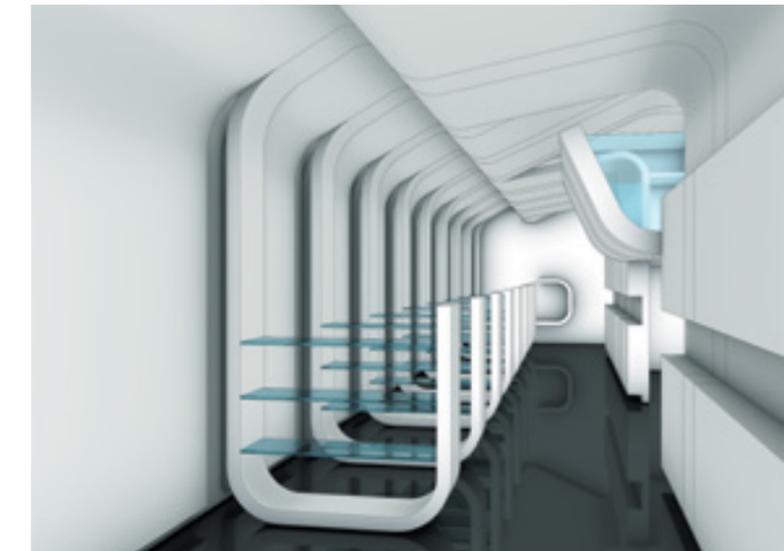


Image © Randy Brown Architects | Design Express

"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

Extensive Automated Reporting and Database Support

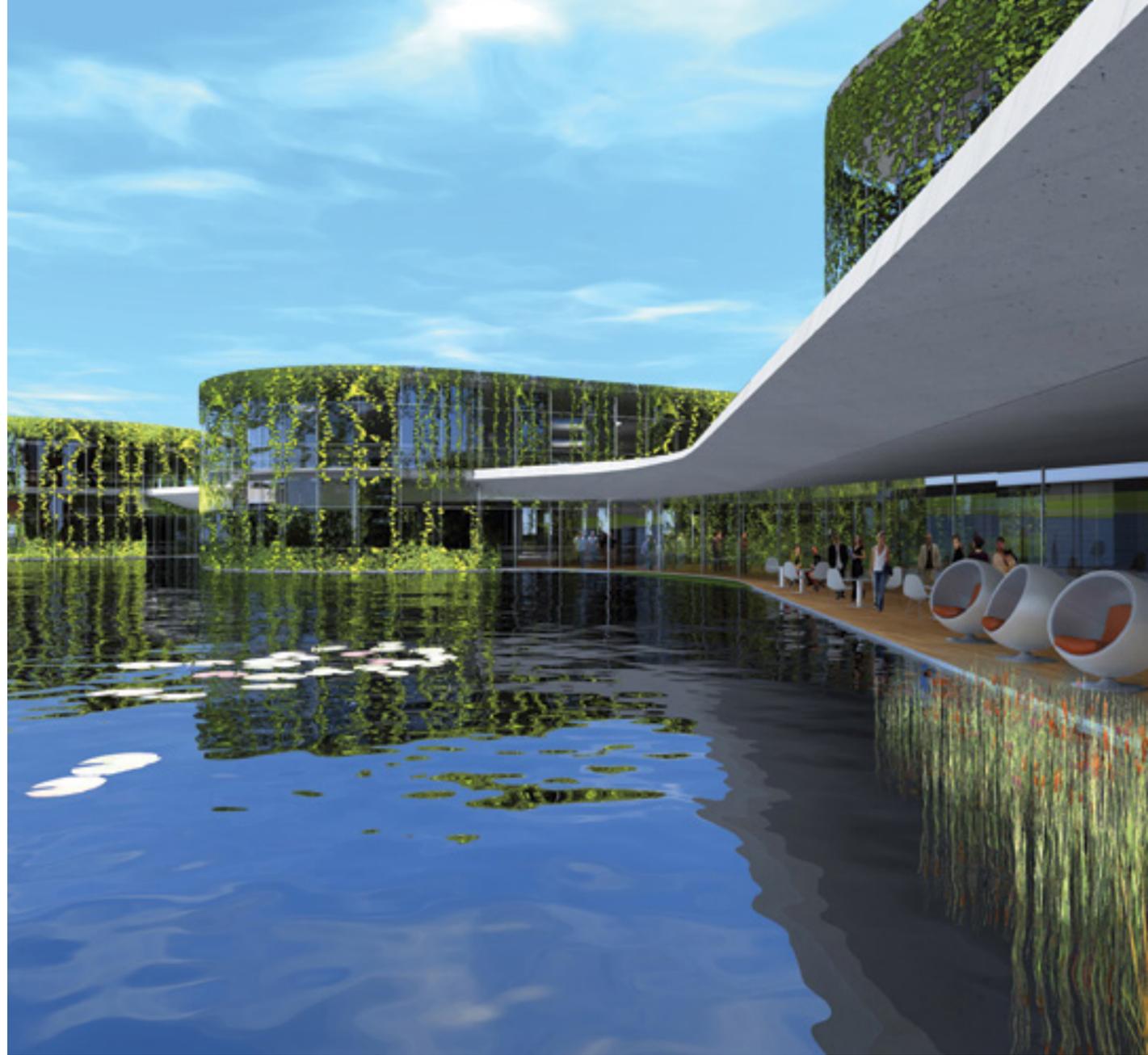
Stop manually counting items in your drawings and models. Automatic data tracking does the tedious work for you; built-in database worksheets continually keep tabs. Take advantage of the two-way link between database worksheets and objects, giving you the power to change object parameters directly from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

In addition, 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 Designer to the external records and fields for bidirectional reporting and control.

Superior 2D Documentation

Produce high-quality documentation with ease. Vectorworks Designer 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. Batch print drawing sets or export them as multipage PDFs at full or reduced sizes. 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 h4a Gessert + Randecker Architekten BDA

YOUR VISIONS. PERFECTLY REALIZED.

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

Vectorworks Designer 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.

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 the Vectorworks Designer 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 Designer application interface will seem familiar. Vectorworks software's SmartCursor technology replaces manual drafting tools, so even inexperienced CAD users can make the switch easily.

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 Designer is built to work the way you think. In addition to designing with lines, arcs, and circles, you can design with walls, doors, windows, roofs, slabs, plants, massing models, and more. The building and site 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 than standalone rendering applications. When added to Vectorworks Designer 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.



Courtesy of Steve Bösweiller

ABOUT NEMETSCHKE VECTORWORKS, INC.

A Tradition of Excellence

The company was founded in 1985, and the Vectorworks product line now serves more than 450,000 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 professionals who move the design world forward every day.

Vectorworks Designer 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 PWP Landscape Architecture

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System Recommendations

Mac OS X 10.6.8 or later operating system
QuickTime 7.7.0 to 7.7.3 Intel Core 2GHz or better processor

Windows XP SP3 | Vista SP2 | Windows 7 SP1 | Windows 8 operating system
QuickTime 7.7.0 to 7.7.3
Pentium 2GHz or better processor DVD-ROM drive (dual layer)

RAM*

4GB or greater highly recommended
8GB 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

*Vectorworks 2013 and Vectorworks 2014 contain improvements that place significantly higher demands on graphics hardware than previous versions. The performance and quality of the graphics provided by accelerated navigation and improved OpenGL shadows depend directly on the speed and memory of the graphics card. These new features have the potential to provide a very fast and fluid experience when used on capable hardware and a noticeably slower experience when 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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