



Vectorworks® Fundamentals

YOUR
VISIONS.
PERFECTLY
REALIZED.

VECTORWORKS FUNDAMENTALS

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 superior 2D and 3D capabilities, Vectorworks Fundamentals is an intuitive, easy-to-use modeling and documentation platform to produce complex drawings.



On the cover: [Francisco Delgado Martin](#)

Image courtesy of Francisco Delgado Martin

Be inspired by projects like this one at www.vectorworks.net/success-stories.

CAPTURE YOUR VISION

With Vectorworks Fundamentals software, 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.

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.



Courtesy of Design & Function, Raimondo Brenni, Le Landeron

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 Fundamentals software.



Courtesy of punto design, www.punto-design.com

Completely Customizable Programming

Automate routine tasks or create add-on applications with the power of Python™ scripting, plus our own Pascal-based scripting language VectorScript™. It's simple enough for a beginner yet powerful enough for the most experienced CAD programmer.

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 Fundamentals, 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:

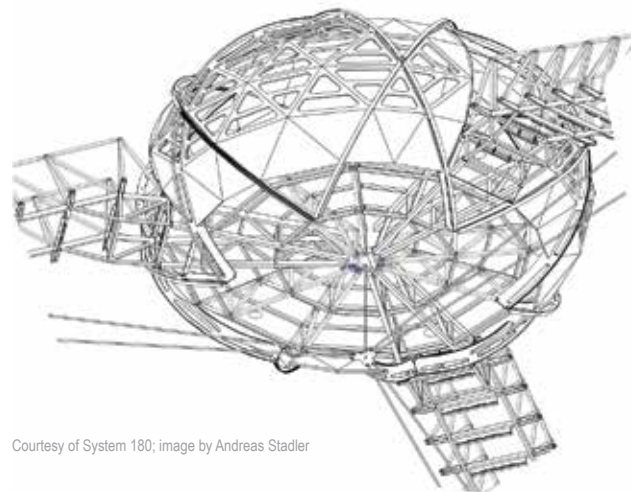
Efficient Workgroup Capabilities

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.

Interoperability

Get on the cutting edge of collaborative digital practices. Exchange 3D NURBS models with Rhinoceros® 3D. Import and export AutoCAD® 2015 (and earlier) files or exchange 2D data with DWF import and export capabilities.

See it in 3D. Send models to CAD/CAM machines, CNC routers, and other 3D printers. The Vectorworks Fundamentals package supports a number of standard 3D file formats, including Parasolid® X_T, IGES, STEP, SAT, or STL.



Courtesy of System 180; image by Andreas Stadler

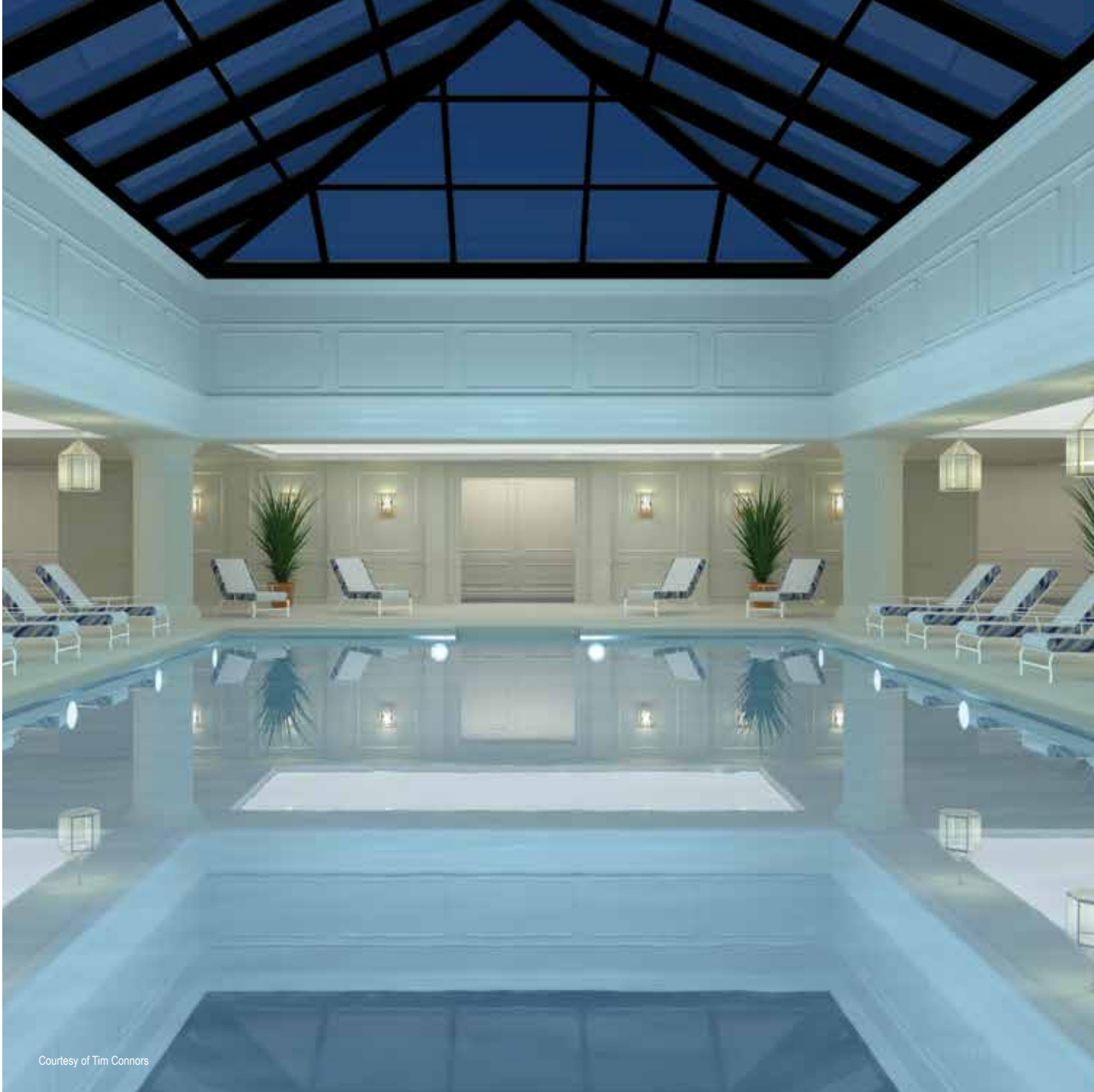


Superior 2D Documentation

Make drawing fast and fun, no matter how complicated the design. Our streamlined drafting environment includes a suite of drawing and editing tools that make quick work of any type of project. Explore parametric constraints that maintain relationships between 2D objects. Use a full spectrum of dimensioning tools that support common standards. Take advantage of text and notation capabilities that make your drawings even more powerful. For your finishing touches, stylize the text with a choice of fonts and sizes, check your spelling, and extrude text into 3D.



Courtesy of Yoshinobu Yamakawa, Polygon Architects



Courtesy of Tim Connors

YOUR VISIONS. PERFECTLY REALIZED.

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

Vectorworks Fundamentals 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 Fundamentals helps you see your visions perfectly realized.

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 Fundamentals 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 Fundamentals 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

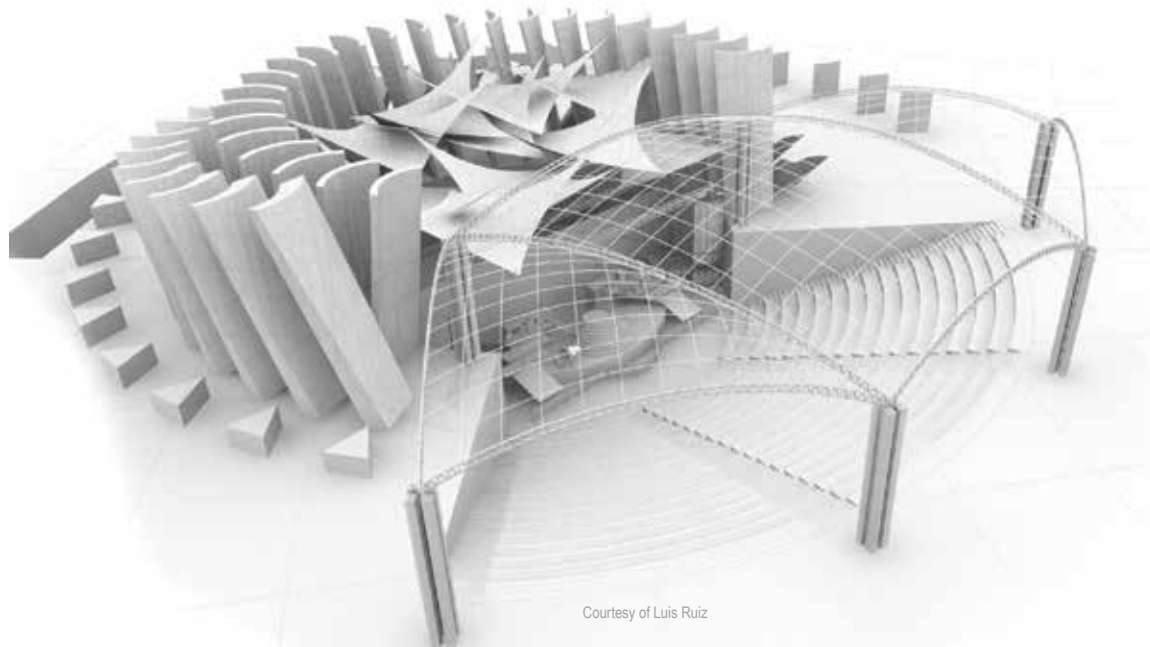
Define and communicate your signature look with our advanced, high-end technology that's famous for helping users achieve beautiful, graphically rich presentations. Tap into our large libraries of entourage and unlimited palettes of colors. Your style is not limited by "cookie-cutter" looks. Instead, 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 Fundamentals is designed to work the way you think. In addition to designing with lines, arcs, and circles, you can design with intelligent objects, surfaces, and solids. The objects are easy to edit and automatically display in both 2D and 3D views.

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 Fundamentals 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 Luis Ruiz

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 professionals who move the design world forward every day.

Vectorworks Fundamentals 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.



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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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