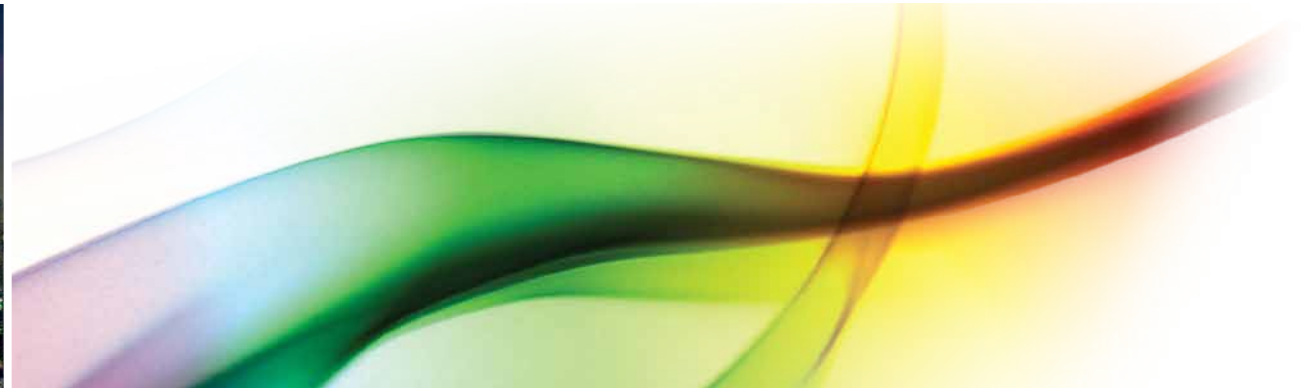


Vectorworks.Architect | Better Designs with Better BIM





Courtesy of Roberto Candusso,
Roberto Candusso Arquitetos Associados Ltda., Sao Paulo, Brazil.

We've Done BIM Better

With Vectorworks® Architect software, you can create building information models without giving up the design freedom you need. Whether you're looking to streamline costs, analyze materials, increase your energy efficiency, or just create world-class designs, with the Vectorworks Architect solution, BIM just works. 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.

Vectorworks Architect software is flexible, so your workflow is continuous—you can get to BIM from wherever you are in the design process. It's versatile, since just one application addresses all phases of design.

It's intuitive, so you can work the way you think. And it's a smart investment with robust feature sets. The Vectorworks Architect design tools help you create, model, analyze, and present—all within a BIM framework.

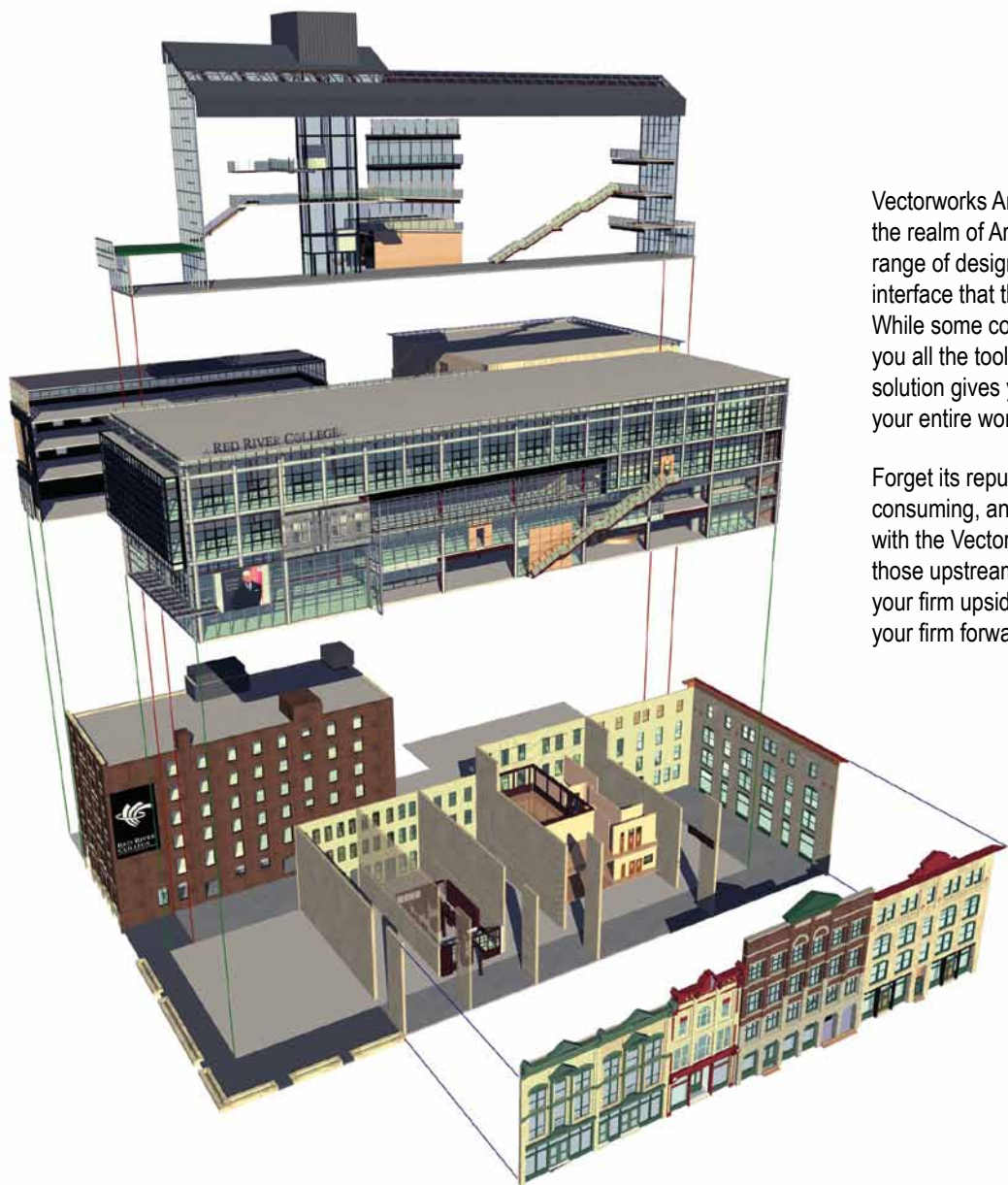
With its unique Parasolid® modeling kernel from Siemens PLM Software, the Vectorworks Architect program has mastered BIM with design and presentation capabilities and arguably the best 3D modeling core in the business. So you can create almost any shape imaginable and maintain a parametric model with the Dimensional Constraint Manager functionality. Everything is associated, so all geometry links to dimensions and vice versa. With the click of a mouse, all views are updated... all at once!

What exactly is BIM?

There are several ways to look at BIM.
(Building Information Modeling)

- *"BIG BIM,"* also known as Integrated Project Delivery (IPD): A business model for design, execution, and delivery of buildings by collaborative, integrated, and productive teams composed of key project participants. Building upon early-phase contributions of team members' expertise, these teams are guided by principles of trust, transparent processes, effective collaboration, open information sharing, team success tied to project success, shared risk and reward, value-based decision making, and utilization of full technological capabilities and support. The outcome is the opportunity to design, build, and operate as efficiently as possible. The goal of IPD is to reduce errors, waste, and cost during the entire design, construction, and occupancy process.
- *"little bim":* A design process in which the 2D plan, 3D model, and all associated design and construction information are linked in a single digital representation. A design is built as a 3D model. The components of the construction information—all plans, elevations, perspectives, and cross sections are derived from this associated 3D model. This 3D model can be exchanged in whole or in part with other stakeholders in the "big BIM" process.





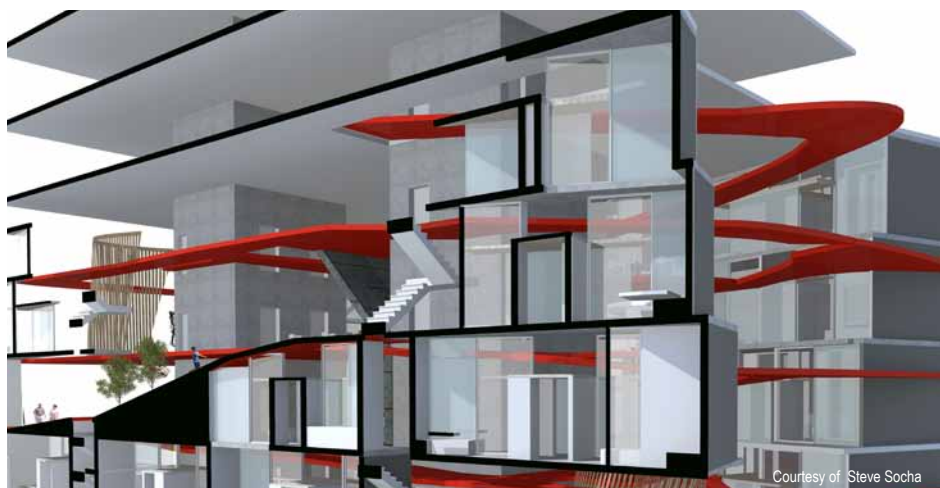
Vectorworks Architect software is a premier BIM provider in the realm of Architecture. No other BIM application offers the full range of design capabilities from start to finish or the user-friendly interface that the all-about-design Vectorworks application does. While some competitors bundle incompatible applications to give you all the tools you need to do your job, the Vectorworks Architect solution gives you one application, with one interface, that delivers your entire workflow.

Forget its reputation for being daunting, frustrating, time-consuming, and expensive. BIM can be simpler than you think—with the Vectorworks product line. It aptly serves the needs of those upstream and downstream from you. So you won't turn your firm upside down by incorporating BIM—you'll propel your firm forward.

BIM's a Win-Win

With Vectorworks BIM, you'll discover:

- Freedom to design with no restrictions
- A very flexible workflow
- Open and interoperable exchange of information with various stakeholders
- An optimized approach with virtual modeling and analysis



Courtesy of Steve Socha

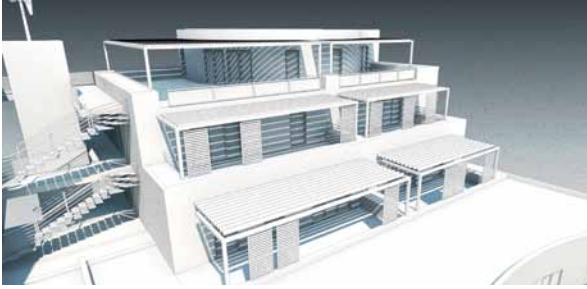


Courtesy of Empreinte Architecture, Image: Atypik-Studio

Where BIM Comes In

Renew Your Creative License

Here's where the Vectorworks Architect program really shines. If you can dream a shape, you can make it. Model freeform, organic building forms at the conceptual and detailed design stages. Whether you're creating building shells, building components, or building fixtures and furnishings, you can model them at any stage, at any time, and at any level of detail. With the power of the Parasolid modeling engine, you'll have easy-to-use tools for extrusions, surfaces of rotation, sweeps, NURBS curves and surfaces, variable edge radiusing, protrusion, shape projection, shelling, drape surfaces, manifold solids from surfaces, and constructive solid geometry. The only limit is your imagination.



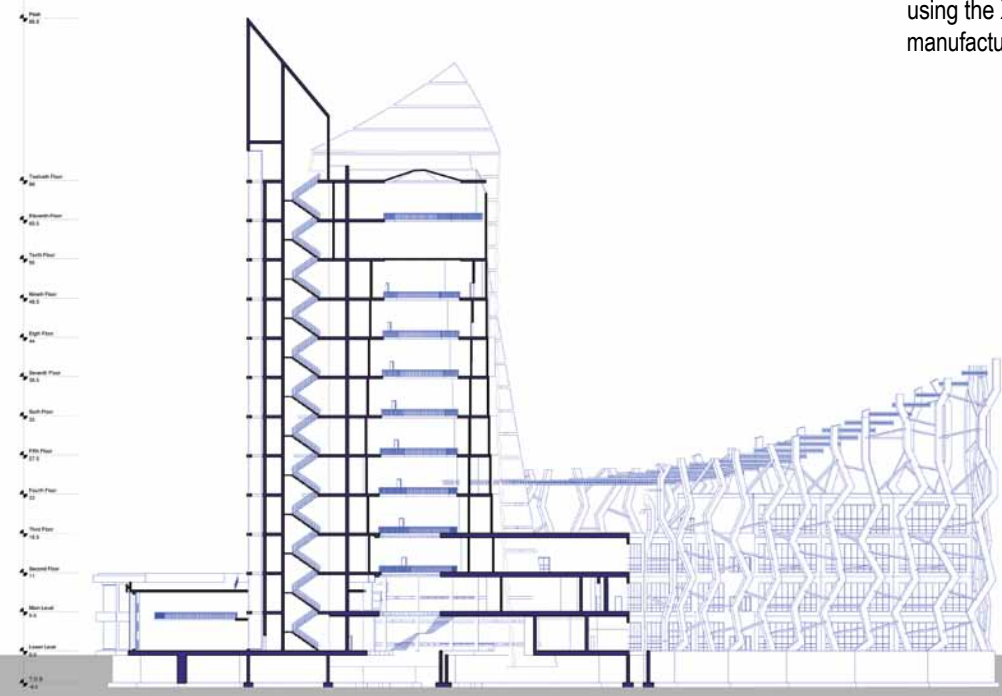
Courtesy of Jean Baptiste Miralles Architecture; Image: Atykik-Studio.

With Intelligent Objects, Your Designs are Smarter, Too

With the software's "open-ended intelligent design," complex forms can be recognized or specified as building components and not just geometry; so they can be communicated in the correct syntax. Even a complex form can be assigned its semantic building identity, so that the entire IFC 2x3 data structure applies to any geometry in the model. So if you create a free-form object and assign IFC data sets, it can intelligently be shared "downstream."

Make Change Easy

You're in control of your design. With this completely parametric program, change made to one element changes associated elements automatically, reducing human errors, and saving you great time and money. For instance, walls can be dynamically linked to the height of the story they occupy. Walls "know" about the walls they're joined to, and thus maintain a network of walls that can be drag-edited and reshaped, and objects inserted into walls know the height, thickness, material layers, and other information about that wall; they accommodate changes when the wall is reset. With all of these automatic accuracy checks, you make the change, and the software makes it work.



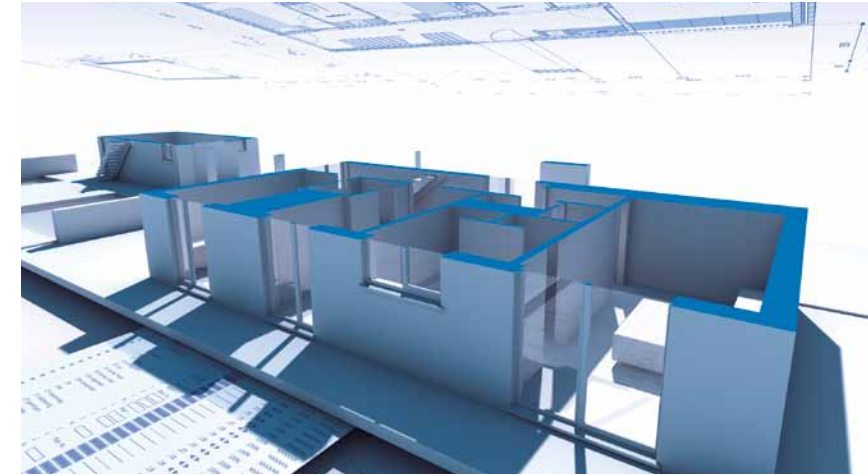
Work Well with Others

The Vectorworks Architect application can easily import and export IFC 2x3 files. With our intuitive modeling tools, you can create any architectural element you dream up and then export it to IFC with full data fidelity.

Your Vectorworks Architect BIM model can also be used for construction. If you create millwork with InteriorCAD, you'll have direct fabrication control of CNC cutting machines. Any 3D solid created in the product may be rapid-prototyped on 3D printing devices for manufacturers. The application can export 3D solids to all other Parasolid-kernel-based applications (e.g. SolidWorks) using the X_T file format, so our models seamlessly move into manufacturing and advanced mechanical design systems.

Vectorworks Architect BIM models can be exchanged with many other IFC 2x3 compatible applications, including the following:

- Scia Engineer [Structural]
- Tekla [Structural]
- MagiCAD® [MEP]
- DDS-CAD®
- ArchiCAD
- Bentley Microstation
- AutoCAD® Architecture
- Revit®
- Solibri Model Checker™
- NavisWorks®



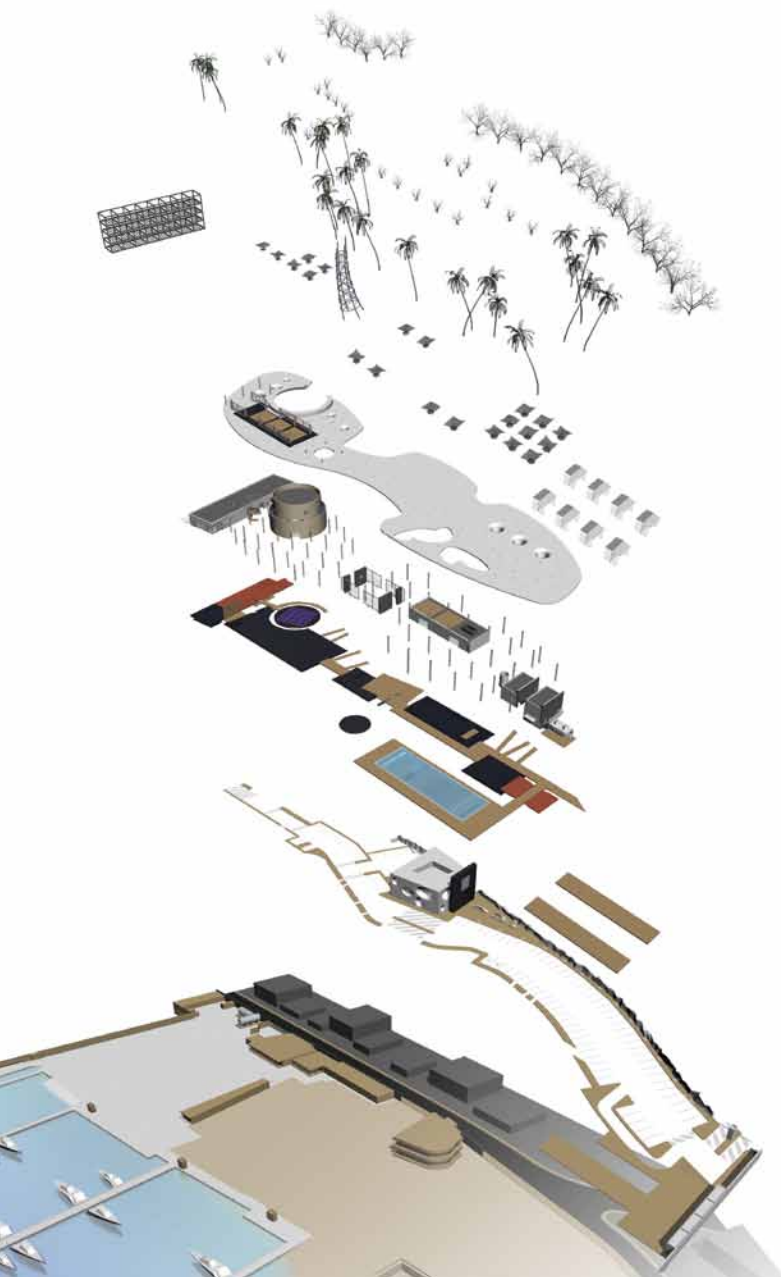
Courtesy of © Design Express



Courtesy of Adam Hodge, Stephenjohn Design Ltd

Room Name	Floor Level	Length	Width	Room Volume	Net Area	Area Perimeter	Area	Area
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Room 2	1	12.00	12.00	144.00	144.00	48.00	144.00	144.00
Room 3	1	12.00	12.00	144.00	144.00	48.00	144.00	144.00
Room 4	1	12.00	12.00	144.00	144.00	48.00	144.00	144.00
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Room 71	1	12.00	12.00	144.00	144.00	48.00	144.00	144.00
Room 72	1	12.00	12.00	144.00	144.00	48.00	144.00	144.00





Vectorworks Architect software integrates smoothly with other disciplinary applications, including structure, MEP, and civil engineering. Here are a few examples:

- Landscape architecture, urban planning, GIS (shapefiles): Use the Vectorworks Landmark product with a VWX file exchange
- Complete 2D and 3D machine parts and mechanical components: Use the Vectorworks product with a VWX or Solidworks with Parasolid X_T file exchanges
- Millwork/Cabinetry design and CAM production: Use InteriorCAD with a VWX file exchange

Get Built-In BIM Content

When you receive your Vectorworks Architect software, you'll discover a vast collection of architectural BIM content thanks to our prolific content staff. The application supports a large variety of ready-made BIM objects that feature embedded IFC data to ensure competent export to open-standards-based BIM applications, and they enable quick and accurate detailed architectural design.

Choose from equipment, appliances, furniture and fixtures, HVAC, sanitary fixtures, steel structural shapes, concrete structural shapes, as well as space, wall, slab/floor, roof/roof face, column, framing member, window wall/storefront, door, window, stair, ramp, electrical objects, and many, many more. You'll see premium manufacturers like Sub-Zero, Wolf, AGA, Herman Miller, Knoll™, Marvin® Windows and Doors, Jeld-Wen® Windows and Doors, Loewen, and Kohler®.



Rendering courtesy of Stephan Mönninghoff, extragroup GmbH.

And if you want to create something that you don't see in our content libraries, it's easy to do so with our full array of 2D and 3D freeform, parametric tools. With the "Create Symbol" command, you've created a coordinated 2D/3D symbol. Just add IFC data to that symbol definition, and you've created a building component. The resulting object is a resource that you can share and reference among an entire office. It's that easy.

Render in the Best Light

We've built a state-of-the-art rendering engine called Renderworks®, that works seamlessly with our Vectorworks software. So you'll enjoy world-class designs that beautifully integrate artistic and photorealistic effects and also perform animations like walk-throughs and orbital and solar simulations. Use it for advanced sky, area, and goniometric light sources that can be rendered or updated faster than conventional ray-tracer engines. Get ready for accurate, compelling designs that really shine.

Customize Your Work

The Vectorworks application features two customization APIs to create point-defined, line-defined, or area-defined parametric architectural objects, menu commands, and other tools. VectorScript™, a "lightweight" scripting language that manages many programming functions for the user (e.g. memory management) excels at rapid prototyping of features and office-standard issues. The more complex C++ based API offers more flexibility for building data structures, debugging tools, and maintaining operating system infrastructure. We also provide a command for the non-programming user for generating prototype VectorScripts that can be changed easily.

Get Your Team Together

The Vectorworks Architect solution supports distributed teams and work processes. With a flexible file-based form of what we call "workgroup referencing," one person can edit each file at a time, and any number of files may be combined into a unified project file. The user establishes the updating protocol, and changes are updated on command. With a coordinated workflow, everyone moves forward together.



Courtesy of Lennin Mireles, LM Cad Estudios de Animacion



Courtesy of h4a Gessert + Randecker Architekten BDA

Cross Platform

The software runs on Windows XP SP3, Windows Vista SP2, Windows 7, and Mac OS X 10.5.7 and later.

Pricing and Licensing

We offer very competitive pricing and licensing options. You may purchase professional licenses on a per-seat basis. The licenses are flexible—they're easy to manage in a multiple-user format and can be easily managed on networks. We honor a discounted rate and network licensing options for schools. Students are eligible to receive a free copy of Vectorworks software from student.vectorworks.net.

Pricing varies by country, and some distributors provide added tools and functionality to the Vectorworks software in their languages. For more information, check out www.vectorworks.net/international.

We're Here for You

Nemetschek Vectorworks' technical support upholds a reputation for providing responsive quality service and support. We provide free technical support over the telephone or e-mail to any user with an active license for one of the two most recent versions. And we constantly post high-quality, free support resources online to supplement an active community board and knowledge base system. Check out techboard.nemetschek.net and kbase.nemetschek.net.

Support offerings vary by country. For more information, visit www.vectorworks.net/international.

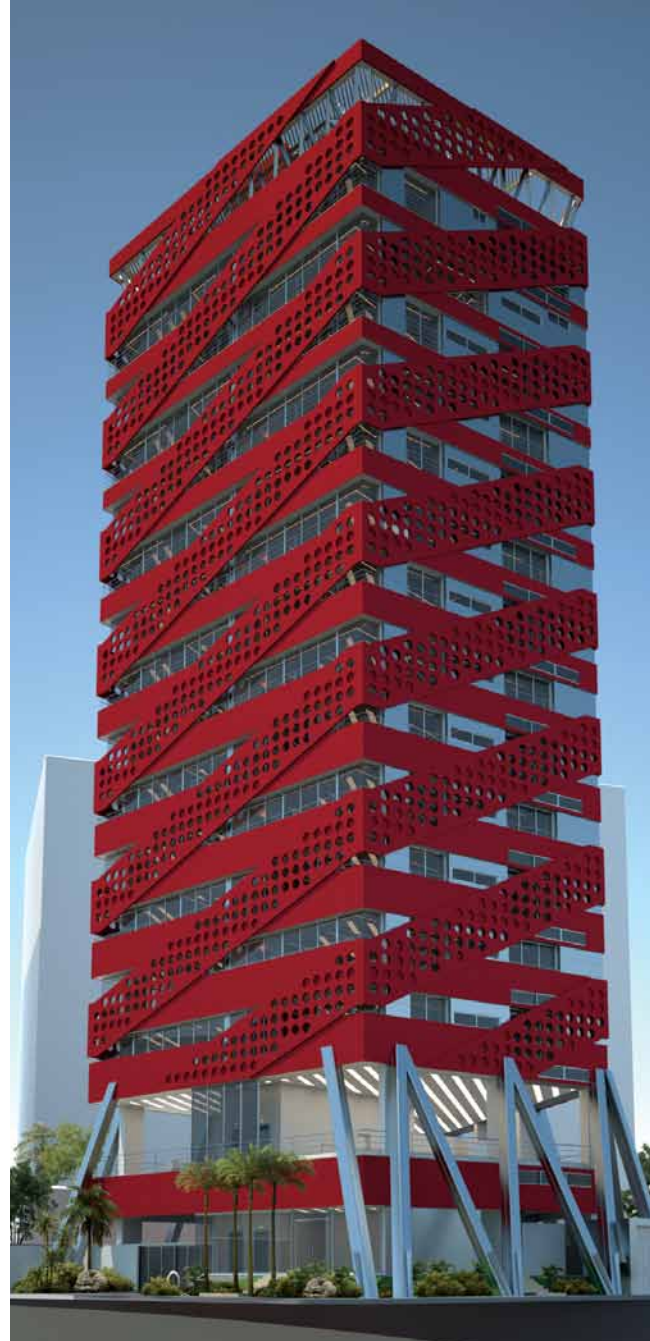
BIM is Better with Vectorworks Architect

Vectorworks Architect software makes BIM better. It keeps its continued focus on design first, and BIM provides added efficiencies, accuracy, and the ability to work fluidly with upstream or downstream colleagues. With the Vectorworks Architect solution, you'll enjoy limitless design backed by cutting-edge technology. And you'll discover how good BIM can really be.

[Vectorworks Architect](#)
[Realize Your Most Inspired Visions](#)



Imagery courtesy of Modo Forma





Nemetschek Vectorworks, Inc.
7150 Riverwood Drive, Columbia, MD 21046-1295 USA
www.vectorworks.net | T 410-290-5114 | F 410-290-8050

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BIM in practice page - www.vectorworks.net/bim
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