Vertex BD





Leading Software Solution for Cold Formed Steel Construction

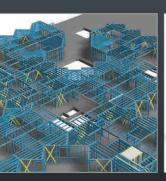






Leading Software for CFS Construction

Vertex BD software is an extremely flexible building design tool that can revolutionize how your company utilizes your architectural drawings and models. Our software is aimed directly at residential, commercial and industrial builders using cold formed steel (CFS) technology. Utilizing BIM technology, Vertex BD maximizes productivity and accuracy by generating architectural and structural drawing sets, fabrication drawings, material reports, manufacturing data, and architectural visualizations all from one building model.

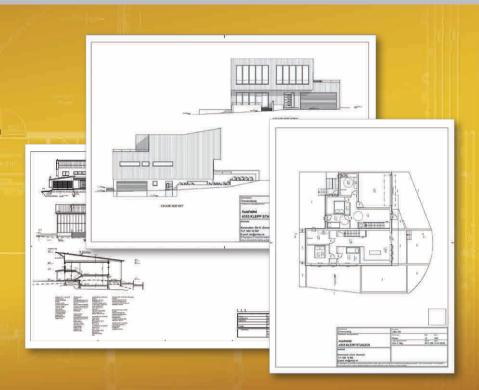






VERTEX Building Information Model (BIM)

- Reduce your design time by automatically framing your walls, floors and roof based on design criteria
- True 3D modelling ensures 100% accuracy, reducing design errors
- · Automated panel and building elevation drawings
- Project estimating through accurate cutting lists and bill of materials
- Wide range of CNC Manufacturing roll forming links to control production
- Powerful and flexible design platform that can adopt your custom framing details
- BIM integration through a powerful IFC import/export tool
- Validate your projects using Vertex truss and wall engineering



Efficiency: Shorter design cycle

Vertex BD includes a powerful 3D environment directly connected to the 2D layer, enabling many operations to be performed faster and easier. Working with intelligent building objects makes designing more efficient and allows meaningful data to be assigned to building components. With the model acting as the single source of information, changes become easy to handle, estimating is effortless, and documentation management is controlled from publishing to printing.

Flexibility: Creative solutions with an open, adaptable platform

With Vertex BD you can work in a way that best suits your business. We are dedicated to ensuring that you accomplish something extraordinary when you choose our software. Our flexible platform enables the custom configuration of features to fit your specific business needs and your process flow. Your company is unique and Vertex can be adapted to your way of designing and manufacturing.

Framing: Control equals accuracy

Do you do things differently? Vertex can handle it. Vertex BD significantly increases design productivity, improves construction details and enables change to existing designs much easier.

Choosing Vertex BD as your design solution means that you do not have to sacrifice control over your construction specifications to take advantage of automated tools. Our parametric environment puts you in control of every framing detail.

Vertex Building Information Model (BIM) - your single source for everything in your design and construction projects

- · 2D Floor plans
- · 3D Framing model
- · 3D Architectural model
- · Frame elevation drawings
- · Framing details
- · Building Elevation drawings
- Bill of materials for all building components (steel, boarding, insulation, façade, window/door schedules, screw quantities)
- · IFC model
- Manufacturing information

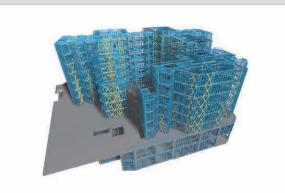


Rule-Based Wall, Floor and Roof Framing

Wall framing

Frame your walls with ease based on user defined framing rules. Vertex can handle the most complicated framing details, including a variety of customisable header, backer and corner conditions. Our flexible environment enables you to interactively apply unique details and specifications to individual walls, panels or openings. You have complete control over tolerances, blocking, extra pieces, panel breaks, rake angles, sheathing - and more.





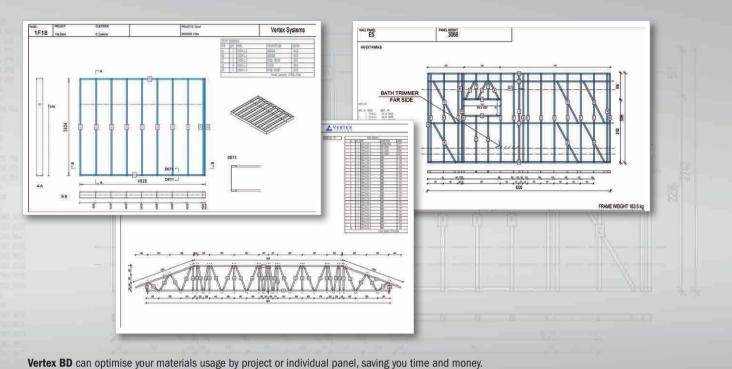
Floor & roof framing

Complete your most complicated roof designs and make changes with ease. Specialised tools designed to work specifically with roof components make it easy to handle rafters, trusses or roof panels.

Vertex creates floor systems quickly, giving you complete control over framing and floor covering materials. Use steel floor trusses, panels, or even engineered timber floors.

Manufacturing automation

Vertex makes all manufacturing data available for integration with automated equipment. Connect your designs with automated roll formers, saws and printers, panel assembly equipment, laser projection systems, scheduling or inventory control systems.



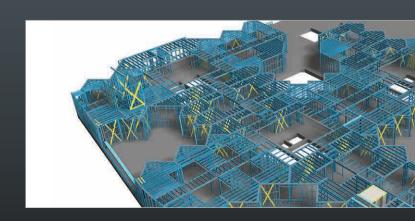
Terret BB can optimise your materials asage by project of marviadar panel, saving you time and money

Productivity and accuracy

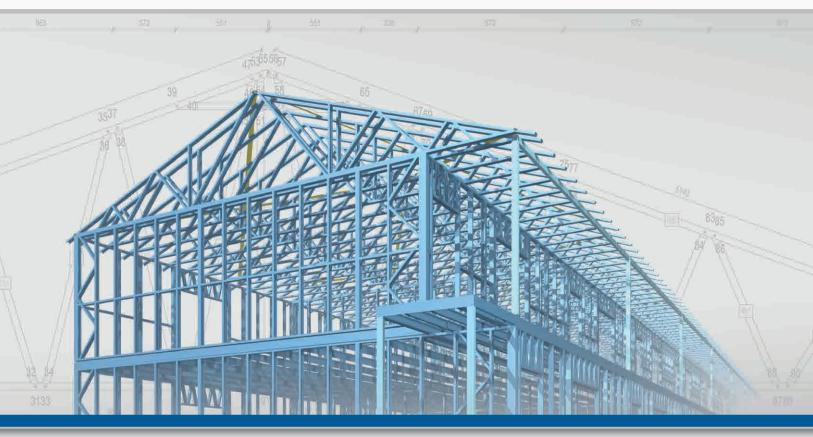
Vertex BD allows the designer to frame their project using panels or stud and track. Automatic framing tools and a wide range of advanced options provide complete control over the framing model. Panel size and weight can be optimised for easier handling and transportation. Cladding, boarding and insulation layouts can also be generated by Vertex BD completing the process. Once ready for production, automated building and frame elevation drawings can be created. Synchronisation between the 3D model, project drawings and NC manufacturing information is always maintained, ensuring no design errors and complete accuracy.

Vertex BD can create all your construction documentation automatically in a variety of formats including DWG, DXF and PDF. Custom print/plot sets can be created that can incorporate drawings from the Vertex detail book that can be updated by the designer.

Material reports can be exported into any format file defined by the customer. Standard document formats are included within the software to export material reports into text editors or Microsoft Excel® based spreadsheets.



Best Tools Ever for CFS Truss Frame Design



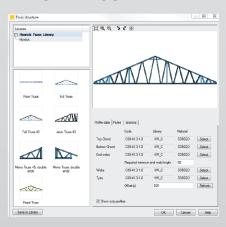
Intelligent Truss Frame Generator

- · Add vertical on ridge, in angle of top/bottom chord, at the support, at connecting truss
- · Select spacing, profile sizes, web and ties starting point and generation rules like web face direction
- · User definable default settings
- · Manage all shapes of trusses





Manage framing generation



	Code	Library	Material	
Top Chord	C89-41.3-1.0	HW_C	S350GD	Select
Bottom Chord	C89-41.3-1.0	HW_C	S350GD	Select
End webs	C89-41.3-1.0	HW_C	S350GD	Select
	Required minimum end web length		82	
Webs	C89-41.3-1.0	HW_C	S350GD	Select
Tyes	C89-41.3-1.0	HW_C	S350GD	Select
	Offset(s)	200		Refresh

Select profiles and ties position

Webs start from top Tyes start from bottom Tyes start from top Tyes start from bottom Vertical member needed if angle in top chord Vertical member needed if angle in bottom chord Vertical member needed on the Ridge point Vertical member needed at the support Vertical member needed at the support Vertical member needed at connecting truss Double end webs	
✓ Vertical member needed if angle in top chord ✓ Vertical member needed if angle in bottom chord ✓ Vertical member needed on the Ridge point ✓ Vertical member needed at the support ✓ Vertical member needed at connecting truss Double end webs	
Vertical member needed if angle in bottom chord Vertical member needed on the Ridge point Vertical member needed at the support Vertical member needed at connecting truss Double end webs	
Vertical member needed on the Ridge point Vertical member needed at the support Vertical member needed at connecting truss Double end webs	
✓ Vertical member needed at the support ✓ Vertical member needed at connecting truss ✓ Double end webs	
✓ Vertical member needed at connecting truss □ Double end webs	
Double end webs	
Set every second web face up face down	
E Ser every second web lace apriace down	
Add joints	

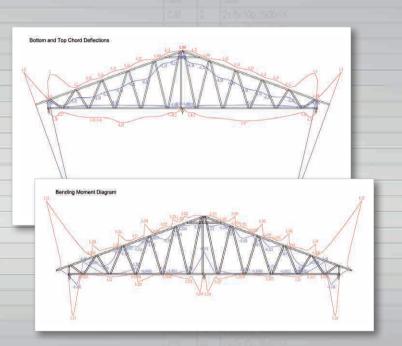
Set up generation rules. Immediate Analysis with Truss Engineering

Vertex Engineering saves money and time

In Vertex Engineering, structural analysis is available based on Australian or European codes.

After selecting the appropriate building code, loading information can be applied to the roof/truss structure and all members can be checked against their effective cross sections and the user defined load combinations. Design results are generated for each member and for each truss structure. Whether the design passes or fails, design changes are quick and easy using the Vertex roof generator and truss tools.

Once truss engineering criteria has been satisfied, transfer the load down into the wall structure. Load bearing walls are defined during the design and the appropriate wind loads can be generated based on geographical location. Wind loading as both speed and direction can then be applied to the structure and wall bracing can be checked against defined loading tables.



Building Design, Engineering, Detailing and Estimating Software

With Vertex BD software you can design residential, commercial, industrial or any offsite portable building. The largest structure designed in Vertex was 11 stories. Structural/hot roll steel can be incorporated into Vertex projects where required. Engineering and detailing is fast, simple and accurate.

Vertex BD contains the most customizable framing package available. It is delivered with standard libraries, framing details and design rules, all of which may be modified. Vertex BD is an open system that can utilize any manufacturer products. Custom and proprietary material shapes may also be added. Vertex BD allows designers to modify the framing after it has already been generated, enabling a designer to create just about any framing configuration.

Minimize production errors and produce your construction with any roll-forming machine.





Vertex BD is the leading software system for cold formed steel. Vertex provides complete architectural design and product information management solutions for commercial and residential building design and manufacturing. Vertex BD is based on a flexible platform to respond to the changing needs of the framing and manufacturing industries. This flexibility enables you to make the most of your unique building processes.

"The benefits are not limited to the design office. Since the switchover, the factory has benefited greatly from the clear fabrication drawings and precise cutting list information. The site installers have seen an improvement in the quality of the drawings and 3D detailing they are supplied, and we now have the ability to assist accounts and stock control with accurate bill of materials information."

-Kimberly Manufacturing Pty Ltd - Australia

"The information we get from Vertex is clear, concise and understandable.

99.9% of what we put out fits without any onsite modification. Brilliant!"

-Dan Miller, Senior CAD Designer, Panel Systems Inc.











Support Excellence

Vertex close collaboration with customers and partners is respected globally.

Active local presence is the key to excellent support services covering consulting, training and plan input as well as our assistance in practical implementation and easy everyday use of the system.

Vertex Systems Corporate Headquarters

Vertex Systems Oy Vaajakatu 9 FI-33720 Tampere tel. +358 3 313411 email: info@vertex.fi **Vertex Group**

Vertex Systems UK
uk.vertex.fi

Argos Systems USA
www.argos.com

Vertex Australia

Vertex Russia
vertexsystems.ru