

# StructureCraft Creates Roof for Richmond Olympic Oval with Autodesk Inventor

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# Autodesk Inventor of the Month Behind Innovative Wave Roof

SAN RAFAEL, Calif., Feb 24, 2010 (BUSINESS WIRE) -- Autodesk, Inc. (NASDAQ: ADSK), has named StructureCraft Builders Inc., a British Columbia-based custom design-builder, the Autodesk Inventor of the Month for February 2010. The company used Autodesk Inventor software to design and develop the innovative WoodWave© roof for the Richmond Olympic Oval long-track speed skating venue.

StructureCraft relied on Inventor software to model, detail and build the WoodWave Structural Panel system for the Olympic Oval roof, using a Digital Prototyping process to quickly iterate design options and coordinate the project with subcontractors and project partners. By using Inventor software to clearly communicate the design process to stakeholders, StructureCraft streamlined fabrication of the Olympic Oval roof deck and completed the job on time and on budget.

"Inventor software really helps us manage complexity on our projects," said Santiago Diaz, a StructureCraft modeler. "By making our data manageable, allowing us to explore design changes easily and keeping complexity at bay, Inventor software frees us up to be more innovative."

While materials vary greatly from project to project, <u>StructureCraft</u> has earned particular recognition for its use of wood and timber in exposed architectural structures, which include the Olympic Oval and the Bridge of Dreams, a footbridge on the Trans-Canada Trail in Princeton, B.C. Wood structures present multiple challenges that must be addressed from design to fabrication, and Inventor software assists StructureCraft in the overall process.

Approximately 100 different types of WoodWave panels were involved in the creation of the Olympic Oval roof, each of which is a complex assembly of about 250 parts. Even so, when confronted by the need to change the wave pattern due to a conflict with the sprinkler system, StructureCraft simply altered certain parameters in the model, and each panel automatically adjusted in the Inventor model.

"It would have taken weeks to make these types of design changes the old-fashioned way," said Diaz. "In Inventor software, it took minutes."

Inventor software also helps StructureCraft balance aesthetics and function in projects. StructureCraft designers noted that not only did the Olympic Oval roof need to be beautiful, it also had to absorb excess crowd noise and hide the electrical, mechanical and sprinkler systems attached to the ceiling.

"It is clear that StructureCraft has embraced Digital Prototyping and Autodesk Inventor software to successfully bridge sophisticated engineering and modern construction techniques and create complex structures quickly and effectively," said Robert "Buzz" Kross, senior vice president, Manufacturing Industry Group at Autodesk.

## About the Autodesk Inventor of the Month Program

Each month, Autodesk selects an Inventor of the Month from the users of Autodesk Inventor software, which takes manufacturers beyond 3D to Digital Prototyping. Winners are chosen for engineering excellence and groundbreaking innovation. For more information about Autodesk Inventor of the Month, contact us at IOM@autodesk.com.

# About StructureCraft

StructureCraft is intent on bringing the centuries-old tradition of master craftsmen to bear upon the sophisticated engineering and construction techniques of the modern world. With 25 years of experience in structural engineering and architecture, the British Columbia firm designs and builds complex and carefully detailed structures in timber, steel, glass and other materials. For additional information, visit <u>http://www.structurecraft.com</u>.

## About Autodesk

Autodesk, Inc., is a world leader in 2D and <u>3D design</u>, engineering and entertainment software for the manufacturing, building and construction, and media and entertainment markets. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio of stateof-the-art software to help customers experience their ideas digitally before they are built. Fortune 100 companies -- as well as the last 14 Academy Award winners for Best Visual Effects -- use <u>Autodesk software</u> tools to design, visualize and simulate their ideas to save time and money, enhance quality, and foster innovation for competitive advantage. For additional information about Autodesk, visit <u>http://www.autodesk.com/pr-autodesk</u>.

## Editorial Note:

An interview with StructureCraft is available on the Autodesk YouTube Channel at <a href="http://www.youtube.com/watch?v=djkbla9bZ7w">http://www.youtube.com/watch?v=djkbla9bZ7w</a>.

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