

# The Fresno Bee

## **Bentley Releases U.S. and Canadian Versions of Robust Energy Performance**

**Series for 'Green' Building Design** - Hevacomp and Tas Software Products Enable Engineers, Architects, and Energy Assessors to Predict Energy Consumption, CO2 Emissions, Operating Costs, and Occupant Comfort - Tuesday, Mar. 17, 2009

Bentley Systems, Incorporated, the leading company dedicated to providing comprehensive software solutions for the infrastructure that sustains our world, today announced the immediate availability in the United States and Canada of Bentley's Energy Performance Series, the first robust software for building energy design, analysis, and simulation. Bentley's Energy Performance Series, which includes Bentley Tas Simulator V8i, Hevacomp Simulator V8i, and Hevacomp Mechanical Designer V8i, has been proven in the very demanding U.K. market for the design and construction of high performance "green" buildings, including the iconic 30 St Mary Axe, Heron Tower, Terminal 5 Heathrow, 122 Leadenhall Street, and CityPoint, London. Now engineers, architects, and energy assessors in the United States and Canada can use this software to accomplish the additional and complex work that successful "green" building projects require – to assure they perform as predicted. This release of the Energy Performance Series highlights Bentley's building performance strategy dedicated to the design, construction, and operation of better-performing, more sustainable buildings.

"In today's economy, you must be certain you are providing your clients the highest quality work for their dollars," said David J. Cusano, BIM/CAD Technology, SSOE, Inc. "This means working both harder and smarter to stretch that investment and assure the building meets expected performance goals. We feel Bentley's Energy Performance Series will help us do just that."

Shaun Ackerly, director, Parsec Consulting Engineers Ltd., said, "Parsec Consulting Engineers has used Hevacomp on many projects, and we find that it gives us an edge over the competition to provide support in our scheme designs. Our commitment to work beyond building regulations would not be achievable without the use of this software; it provides a valuable working platform for all our projects." Bentley's Energy Performance Series makes it possible to better understand and accurately predict the energy consumption, CO<sub>2</sub> emissions, operating costs, and occupant comfort of projects ranging from small and simple to very large and highly complex. It also provides the right tools to effectively and productively design, analyze, and simulate building energy systems.

Noah Eckhouse, vice president of Bentley's Building Performance Group, said, "Bentley's Energy Performance Series fills the void left by existing tools in this arena, which typically are incomplete, siloed, imprecise, and slow. It provides the fastest, most powerful, and most accurate dynamic simulation and analysis available for building load, plant energy, passive design, and thermal simulations. And, because all of the products interoperate, the Energy Performance Series ensures a collaborative process that increases reuse of information. In addition, its support of industry standards, including ASHRAE Standard 90.1-2004, ASHRAE Standard 140-2004 (BESTEST Models), LEED Energy and Atmosphere Credit 1, U.K. Building Regulations Part L2, ISO, ANSI/ASME, CIBSE, and others, facilitates required compliance checking and documentation."

In the United States, the U.S. Green Building Council's LEED program is the emerging standard for evaluating a building's energy performance. Bentley's Energy Performance Series maximizes point accumulation under LEED Energy and Atmosphere Credit 1.

EXTON, Pa. -- Bentley's Energy Performance Series uses two differently purposed simulation engines to provide building energy design and analysis: the EnergyPlus engine, the standard developed by the U.S. Department of Energy, and the independently developed and highly regarded Tas high-speed engine. The Hevacomp simulation engine is optimized for typical project configurations and to ensure compliance with regulatory requirements and industry best practices.

The Tas simulation engine is ideally suited for fast evaluation of multiple options, quick testing of concepts, and comprehensive analysis of large and complex buildings. Hevacomp and Tas simulations can be used in tandem for additional insight and complementary in-depth studies to further optimize building performance.

Users of Bentley's Energy Performance Series can not only quickly create, from 2D floor plans, 3D analysis models with detailed thermal properties, but can also predict – with unrivaled detail and accuracy – annual energy consumption, CO<sub>2</sub> emissions, and operating costs. Moreover, users can accomplish all of this in a seamless workflow for design, analysis, and simulation.

The high-speed simulation engine allows users to perform analyses more frequently, in sync with the design process. The results of the analyses are timely and actionable, supporting iterative design refinement. Real-time decisions from near-real-time analysis make for a more effective design process and better-performing buildings – setting the bar for the contributions of “green-building” professionals.

The capabilities of Bentley's Energy Performance Series far exceed those of today's typical energy modelers. Bentley Tas Simulator V8i and Hevacomp Simulator V8i enable users to perform a complete and in-depth analysis of a building's architecture and critical systems by considering the interrelationships between multiple systems and aspects of design.

“With the Energy Performance Series, users can study the energy dynamics of a building in conjunction with detailed models of the building's mechanical systems. These models are created using Hevacomp Mechanical Designer V8i, an indispensable, quick-and-easy design and analysis tool long and widely used across the U.K. to make engineering-quality building load and energy calculations, lay out systems, select equipment, and resize duct and pipe systems. All of the energy analysis and building system engineering data can then be used to develop integrated strategies that maximize efficiencies,” said Eckhouse.

Eckhouse continued, “Additionally, designers can see the effects of their decisions room by room, zone to zone, as well as on the building as a whole, and accurately predict a building's performance over any specified time. This holistic design approach improves building quality – and reduces the risk of unacceptable building performance associated with systems that only offer static snapshots – by increasing design options.”

Bentley's Energy Performance Series easily integrates with existing 2D workflows and brings detailed building analysis and simulation to Building Information Modeling (BIM). All of the products work with MicroStation, AutoCAD, and Google SketchUp, and interoperate with Bentley Architecture, Revit, and other BIM programs, facilitating collaborative streamlined workflows.

For additional information about Bentley's Energy Performance Series, visit [www.bentley.com/eps](http://www.bentley.com/eps).

EXTON, Pa. -- About Bentley Systems, Incorporated

Bentley is the global leader dedicated to providing comprehensive software solutions for sustaining infrastructure. Architects, engineers, constructors, and owner-operators are indispensable in improving our world and our quality of life; the company's mission is to improve the performance of their projects and of the assets they design, build, and operate. Bentley sustains the infrastructure professions by helping to leverage information technology, learning, best practices, and global collaboration – and by promoting careers devoted to this crucial work.

Founded in 1984, Bentley has more than 2,800 colleagues, offices in more than 50 countries, annual revenues surpassing \$500 million, and, since 1993, has invested more than \$1 billion in research, development, and acquisitions. Nearly 90 percent of the Engineering News-Record Top Design Firms are Bentley subscribers, and a 2008 Daratech study ranked Bentley as the world's #2 provider of geospatial software solutions.

For additional information about Bentley, visit [www.bentley.com](http://www.bentley.com). To view a searchable collection of the year's top infrastructure projects from the annual "Be Awards of Excellence" (which this year becomes the Be Inspired Awards), visit [www.bentley.com/yearininfrastructure](http://www.bentley.com/yearininfrastructure). For information about Be Communities, a social networking site that enables members of the infrastructure community to connect, communicate, and learn from each other, visit <http://communities.bentley.com>.

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