Terminal B at Silicon Valley’s Airport Becomes the First New Terminal in the Western U.S. to Earn LEED® Silver Fentress’ design recognized for sustainable innovations

SAN JOSE --- Terminal B at Mineta San José International Airport (SJC) has achieved LEED® Silver certification from the U.S. Green Building Council in recognition of the airport’s significant commitment to environmentally sustainable design and construction. It is the first brand-new passenger terminal west of the Mississippi River to be awarded LEED Silver.

Along with Terminal B Concourse that was awarded LEED Silver in September 2010, this distinction completes the sustainability rating for SJC’s entire new terminal at the recently modernized airport.

Fentress Architects’ bold architectural design expresses the innovative spirit of the Silicon Valley region, with the 140,135-square-foot, $115 million Terminal B as the major focal point of SJC’s comprehensive $1.3 billion modernization program that is now substantially completed.

“Our new airport is a great example of how our San José Green Vision is leading the way for sustainable design in great public buildings,” said San José Mayor Chuck Reed. “This project has successfully woven innovative green features into a beautiful and convenient building that supports the Silicon Valley economy.”

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The Terminal B design team included Fentress Architects, based in Denver with a design studio in San Jose. Fentress partnered with Hensel Phelps Construction Co., the project’s principal design/build contractor.

Ambient Energy, a Denver and San Francisco-based energy and sustainability consulting firm, also facilitated the airport’s efforts to achieve LEED Silver from initial design through completion of construction.

“Terminal B sets the standard in sustainable design for all airports throughout the United States,” said Curtis Fentress, Principal-in-Charge of Design. “As the nation’s most technologically advanced airport, SJC provides a convenient, world-class passenger experience while greatly reducing its impact on the environment.”

Although Terminal B and its adjoining Terminal B Concourse were designed and built as two separate buildings, they were successfully integrated as a unified, sustainably designed building that opened for full service on June 30, 2010.

“With each new LEED-certified building, we get one step closer to USGBC’s vision of a sustainable built environment within a generation,” said Rick Fedrizzi, President, CEO & Founding Chair, U.S. Green Building Council. “As the newest member of the LEED family of green buildings, Silicon Valley’s new airport is an important addition to the growing strength of the green building movement.”

Sustainability features in Terminal B include:

- Extensive use of natural light with ample windows and skylights that take advantage of Silicon Valley’s sunny climate. The outer layer of the building’s exterior acts as a shading device that protects the inner core of the building and enables it to operate with greater energy efficiency.

- Energy efficiency measures exceed energy standards by 16.2% through the use of occupancy sensors for lighting, a programmable lighting control system, high efficiency programmable “smart” heating and cooling system, and energy-conserving windows.

- A low-energy, high-efficiency ventilation system features the first “air chairs” in the U.S., specifically designed for SJC. The seating in waiting lounges both support energy-efficient ventilation and provide convenient power outlets built into the armrests for passengers to plug in their computers and other devices to take advantage of SJC’s free Wi-Fi.

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The construction of Terminal B used recycled material as much as practical, and nearly 13.5 percent of total building materials content was manufactured using recycled materials. Approximately 76 percent of the structural steel has recycled content, carpets have 27 percent, and ceramic tile 23 percent. Seventy percent of the wood used in the project was Forest Stewardship Council Certified.

Nearly 921 tons of construction debris representing more than 90% of jobsite waste was diverted from landfill through recycling or reusing scrap drywall, metal, plywood, carpet, and other materials.

Water conservation measures achieve 75% less water use than in a similar conventional building. The terminal and concourse were built with a dual plumbing system to allow for the use of recycled water for toilet flushing and landscape irrigation. Landscape design primarily uses regional native species and plant material with low water requirements and drip irrigation. San José’s recycled water system was extended two miles from Coleman Avenue to reach the Airport and provide recycled water for the terminal area.

LEED certification provides independent, third-party verification that a building project meets the highest green building and performance measures. Points are earned across six categories: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, and innovation and design process. The number of points the project earns determines the level of LEED certification the project receives, ranging from Certified to Silver, Gold, or Platinum.

**Terminal B Fast Facts**
Start of construction: 2007  
Full activation: June 2010  
Cost: $115 million  
Floor area: 140,135 square feet  
Height of entry hall: 69 feet  
Number of aircraft gates: 2 in Terminal B plus 10 in Terminal B Concourse for 12 total

**Terminal B Project Partners**
Hensel Phelps Construction Co.: Design/Build contractor  
Fentress Architects: Design Architect  
Magnusson Klemencic Associates: Structural Engineer  
AECOM: Civil Engineer and Mechanical, Electrical, Plumbing Engineer  
Critchfield Mechanical  
Rosendin Electric
About Mineta San José International Airport

Mineta San José International Airport is a self-supporting enterprise owned and operated by the City of San José, the Capital of Silicon Valley. SJC currently has approximately 120 flights a day on 13 domestic and international carriers to 27 nonstop destinations. SJC served 8.2 million passengers in 2010. SJC is located in San José, California’s third largest and the nation’s tenth largest city (population 1,023,000). For more airport information, visit www.flysanjose.com.

About U.S. Green Building Council

The U.S. Green Building Council (USGBC) is a non-profit organization based in Washington, D.C., that is committed to a prosperous and sustainable future for the nation through cost-efficient and energy-saving green buildings. USGBC leads a diverse constituency of builders and environmentalists, corporations and nonprofit organizations, elected officials and concerned citizens, and teachers and students to promote greater building efficiency. Visit www.usgbc.org for more information.

About Fentress Architects

Fentress Architects is an international design firm that passionately pursues the creation of sustainable and iconic public architecture. Curtis Fentress, FAIA, RIBA, was honored in 2010 by the American Institute of Architects (AIA) National with the highest award for public architecture, the Thomas Jefferson Award. Fentress also won the 2010 Silver Medal for architectural achievement from the AIA Western Mountain Region. He has designed $26 billion of architectural projects worldwide, visited by 300 million people each year.

Designs by Fentress have been honored with more than 350 awards and accolades for innovation and design excellence. Founded by Curtis Fentress in 1980, Fentress Architects has design studios in Denver, Colorado; Los Angeles, California; San Jose, California; and Washington, D.C. Visit us online at www.fentressarchitects.com.

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