

The Silicon Valley Wire

The latest news from the electrical industry in Silicon Valley

3rd Quarter 2010

Dynaletric, ICS and Rosendin Build Electrical Infrastructure For The New San Jose Airport

From Digital Platforms for Public Art to Baggage Handling and Security Systems, IBEW-NECA Contractors Create Connection at San Jose International Airport



Inside This Issue

Special Report: Norman Y. Mineta San Jose International Airport

- Airport Electrical Contractors
- Overview of Airport
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- North Concourse
- Rental Car Facility
- Wiring Airport Roads
- Interactive Public Art/Digital Platforms

Also In This Issue

- Pull Out Directory of Silicon Valley Electrical Contractors

Highlights

- 1.2 (DC) solar array installed on 1.8 million square foot Rental Car Facility rooftop
- Five million feet of cable and fiber in new terminal
- Hundreds of electricians work over 1 million man hours



ICS Connects Interactive Public Art In New Airport Terminal

Time Travel, Tweets and Audio Clips Accompany Passengers

If you take a stroll in the Arrivals Hall in the new Terminal B, you can go backward or forward in time!

And no, it's not a magical trip back to the future. The time travel is part of an interactive public art display of San Jose's history called "The Reactive Wall" that is triggered by your personal interaction with the art. If you walk by, your body movement will trigger the wall to show videos of San Jose in the past, pulling you through time as it moves. Walk by again, and your presence will cause the reactive wall to update itself to a video from today.



Camille Utterback,
Reactive Wall Artist

ENGINEERED and installed by Integrated Communication Systems (ICS), an IBEW-NECA electrical contractor in San Jose, the reactive wall is one of the most popular spots in the airport. It was designed as part of a unique \$6 million digital public art program through a master plan created by Gorbet and Banerjee Public Art Consultants of Toronto. The artist for the reactive wall, also called "Shifting Time San Jose" is Camille Utterback of San Francisco.

Utterback designed "Shifting Time San Jose" by pairing 20 pieces of historical video with clips of contemporary content of San Jose. "As you move in front of the piece in any one of the clips, the path will come more into view, so your actual movement creates the flow of time in the video," says Utterback, a digital and video artist who also created the software. "You may see one of San Jose's old canning factories, where women are sorting fruit, paired with women typing at their laptops at Cisco Systems."



To install the reactive wall, ICS formed a blended image on a wall that is 7 feet high and 15 feet wide. ICS project manager Mark Berlo used two projectors mounted in the ceiling to make a single image that's run at 1080p. Infrared cameras pick up people that walk by the screen or stand in front of it, changing the video content. ICS was responsible for the projector configuration; the video processing required to blend a single image into two; the edge blending; hardware installation and installation of the racks in the ceiling to house the

hardware. The computer that drives the art is remoted to a different location, with ICS running cable for that.

ICS also connected several other interactive public art displays at the airport, including "Convey" in Terminal B at the Baggage Carousel 2, by Banny Banerjee, Matt Gorbet and Susan LK Gorbet, and "Sonic Gateway" by Bill Fontana at the Terminal B Jetways, Gates 18-26.

INTERACTIVE ART PROJECT TEAM:

ELECTRICAL CONTRACTOR:
ICS, San Jose

ELECTRICIANS:
15 technicians from IBEW Local 332, San Jose

ICS PROJECT TEAM:
Mark Berlo, Project Manager

PUBLIC ART PROGRAM BUDGET:
\$6 million

ART MASTER PLAN:
City of San Jose

ART ACTIVATION INFRASTRUCTURE:
Gorbet + Banerjee Public Art Consultants, Toronto

REACTIVE WALL ARTIST:
Camille Utterback,
"Shifting Time San Jose",
Terminal B Arrivals Hall

"SONIC GATEWAY" ARTIST:
Bill Fontana, Terminal B
Jetways, Gate 18-Gate 26

"CONVEY" ARTISTS:
Banny Banerjee, Matt
Gorbet and Susan LK Gorbet,
Terminal B, Baggage Carousel

Rosendin Builds Public Art Platforms Throughout Airport

Innovative Public Art Program Combines Art and Technology

VIEWING the new public art collection at the San Jose Airport isn't like going to an exhibit at the Met or another typical art museum. Instead, as befits Silicon Valley, all of the public art—14 pieces currently—is digital.

"This is artwork that uses technology, artwork that is inspired by technology and artwork that is fabricated or manufactured using technology," said Matt Gorbet, of Gorbet + Banerjee, the public art consulting company that designed the art activation infrastructure. "It is designed to be part of the passenger experience."

The airport's public art is built on a foundation of flexible platforms for artists to use in creating technology and data-driven art. The digital platforms were installed by Rosendin Electric throughout the airport as part of the electrical infrastructure. Most of the art is in Terminal B or the North Concourse.

SAN JOSE AIRPORT PUBLIC ART SNAPSHOT:

ART MASTER PLAN:
City of San Jose

PUBLIC ART CONSULTANT:
Gorbet + Banerjee

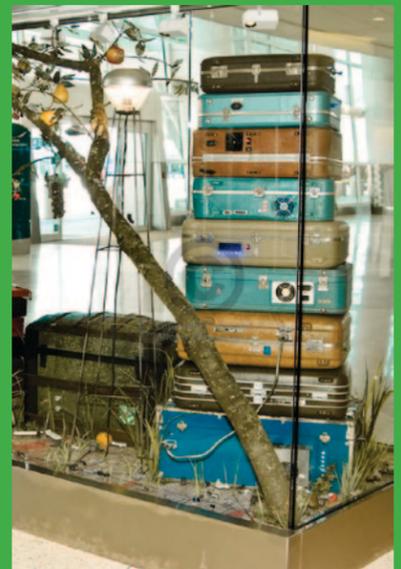
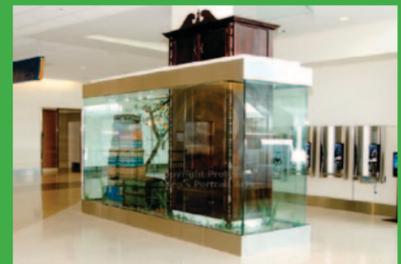
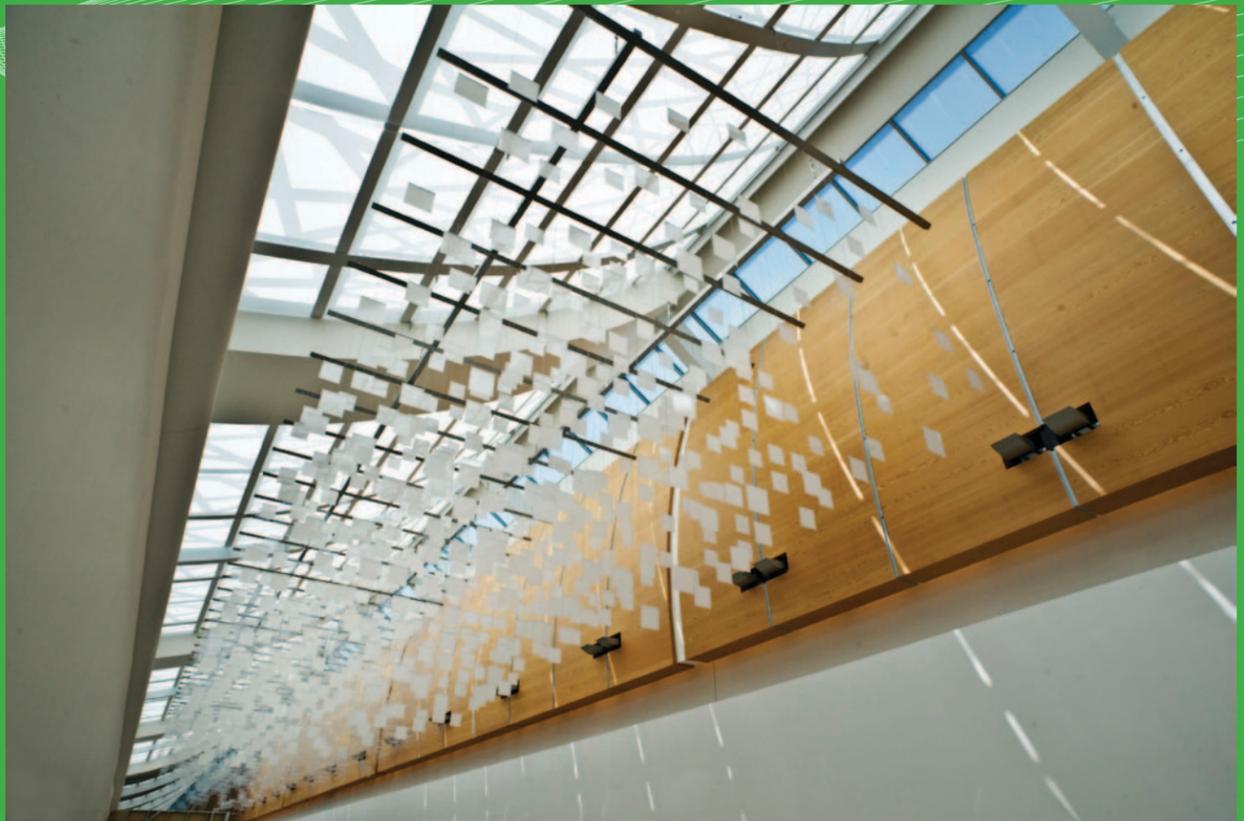
ELECTRICAL CONTRACTOR:
Rosendin Electric

ART CURRENTLY ACTIVE:
14 pieces

PUBLIC ART PROGRAM BUDGET:
\$6 million

ARTISTS:

"Hands," Christian Moeller; "Space Observer," Bjorn Schulke; "eCLOUD," Nik Hafermaas, Dan Goods and Aaron Koblin; "Convey," Banny Banerjee, Matt Gorbet and Susan LK Gorbet; "The Wunderkammer," SuttonBeresCuller; "Small Wonders," curated by ZERO1: The Art and Technology Network; "Shifting Time-San Jose," Camille Utterback; "CONNECTED: Silicon Valley + Bangalore," Angela Buening Flo; "Wave Matter Tessellation," Gregory Kucera; "Dreaming F.I.D.S.," Ben Hooker and Shona Kitchen; "Courtesy of Nature," Banny Banerjee, Matt Gorbet and Susan LK Gorbet; "Chronos and Kairos," Banny Banerjee, Matt Gorbet, Susan LK Gorbet and Margaret Orth; "Sonic Gateway," Bill Fontana; "Wall of Recognition," Carlos Perez/ArtOrigin.



This art is just as likely to employ software instead of paint, and usually includes video, audio, programming and electrical engineering, as well as traditional design and fabrication. It's most often expressed in pixels—in fact, in the "Hands" artwork that stretches for 1200 feet outside the rental car facility, there are 107 prefabricated panels that include 370,000 white plastic disks or "pixels."

The \$6 million public art project is the brainchild of the San Jose Public Art Department, which designed

a master plan for artwork at the airport. The city wanted to create a public art program that would showcase San Jose as a global center of creativity with technology. The San Jose Public Art Program at the airport is one of the most extensive displays of digital art in the U.S.

Gorbet + Banerjee designed a series of flexible platforms for artists to use in creating technology and data-driven art. The infrastructure accommodates projection based digital and data-driven

artworks and can be changed over time in keeping with the inevitable technological changes of the future.

The art program has its own dedicated LAN so that art pieces can be updated or reprogrammed as needed by the artists. Rosendin installed some 200 network drops throughout the entire airport dedicated to art. Not all of the drops are active at once; drops have also been placed at sites throughout the airport where they might be fully activated in the future.