McCarran International Airport
Las Vegas, NV

Project Spotlight: November 2005

LOCATION: McCarran International Airport
Terminal D
Las Vegas, NV

OWNER: Clark County Nevada

ARCHITECT: Tate Snyder Kimsey Architects, Las Vegas, NV

SPECIFICATION CONSULTANT: Tate Snyder Kimsey Architects
Las Vegas, NV

GENERAL CONTRACTOR: Sletton Construction

TILE CONTRACTOR: Bottema Tile, St. George, UT

INSTALLATION SYSTEM: LATICRETE International, Inc.
Bethany, CT

LATICRETE DISTRIBUTOR: Daltile
Las Vegas, NV
Six years ago, expansion of the D terminal at McCarran International Airport in Las Vegas posed a few problems. The contractor switched the original spec for LATICRETE setting materials. Though McCarran had had good experience with LATICRETE products in the past, it accepted the low bidder’s recommendations and went with an alternative system for the southeast and southwest wing and center hub.

Unfortunately for the contractor, the other manufacturer and the airport authority, the alternate system didn’t deliver the kind of performance McCarran has specified. This according to Shelly Hayden, an architect who originally worked on the project with Tate Snyder Kimsey Architects in Las Vegas and recently joined McCarran itself.

Fast-forward to July 2004 and the northeast wing, designed to accommodate Continental, Alaska Air and Jet Blue airlines. This time, McCarran stuck with the LATICRETE spec and the assurance of the 10-year warranty the LATICRETE® System offered.

The project was awarded to Bottema Tile, a fourth-generation tile contractor based in St. George, Utah. Paul Bottema, owner of Bottema Tile, said that several contractors originally backed out of this project and he “did the entire project on a handshake” due to the “great working relationship” he has with Sletton Construction, the general contractor.

Bottema’s entire operation consists of between 10-15 employees, so this large project might well have been considered a bit of a stretch for a smaller, out-of-town company to handle. There were also legal requirements to use union labor so Bottema turned his employees into foremen to train — with the help of LATICRETE — the union crews and to oversee the job. “We had 55 employees at the peak of the job,” he said.

Union people were involved in the training too, “so that everyone knew what was expected of the product, not just my people telling [union crews]. They got to see it first hand from LATICRETE.”

This was also the first time that Bottema had used the LATICRETE systems on such a large-scale project. “We had to do a few things differently,” he said. For instance, two special cement mixers were brought inside the building to mix the mortar before applying to the 40,000 square foot space.

LATICRETE provided on-site technical support and helped to make it easy. “Before we put in the first shovelful, they were at the site,” Bottema said. “They were very good about coming out if we had questions or to make sure we were doing it right.”

McCarran kept a very close watchful eye during the entire job. “They watched us like a hawk to make sure it was installed properly,” Bottema said. “LATICRETE’s local rep, Mike Faso, was great about coming out to the site whenever we needed him.”

Hayden was pleased with what she saw. “They did a really good job, and packed it well, and did a good job back buttering. There were only about 10 hollows that resulted, and those were already pulled up and replaced.”

Bottema used the thick bed method, a 2.5 inch deep bed of LATICRETE 3701 Mortar Admix with LATICRETE 226 Thick Bed Mortar. “It took about 15,000 bags of 226,” he said.
The tile installation began in September. Bottema said they “lucked out” with the timing, past the punishing heat of the Vegas summer. “We had to take humidity and temperature readings every day to make sure it jived with the specs.”

Bottema used LATICRETE 9235 Waterproofing Membrane and LATICRETE 4237 Latex Thin-Set Mortar Additive mixed with LATICRETE 211 Crete Filler Powder for under the mortar beds. Floors were set with 24” x 24” Quarella resin-based agglomerate tiles, sourced from stone supplier, Stone Marketing and Design Services in Vegas. Bottema applied LATICRETE 1600 Series Tri-Poly Fortified Unsanded Grout.

This installation system went above and beyond the McCarran specs, which called for a five-year warranty. But the excellence of the LATICRETE system provided McCarran with the added assurance of a 10-year system warranty.

To set 24” x 48” agglomerate panels over drywall for the concourse walls, Bottema used LATICRETE 254 Platinum Multipurpose Thin-Set mortar, and finished with LATICRETE SpectraLOCK™ epoxy grout. The job finished in February of this year, and the building opened in April.

Hayden was “amazed” at how the LATICRETE products worked. On first sight, the mixed LATICRETE Mortar Bed system looked “all dry and crumbly — moist but not liquidy like concrete. It looked more like the moist sand you get when you dig down a few inches at the beach,” Hayden said. She was skeptical about how the mortar would bond. “But it was really, really strong. I was amazed at how it set.”

Hayden said, “It seems to be performing. The maintenance people like it because it is so easy to maintain,” she said. The ability to ride a mower-like polisher over the tiles makes upkeep a breeze.

The resulting building works with the existing structure, but offers a “nice open, airy feel,” said Matt Elberson, project manager at Tate Snyder Kimsey Architects. “The original terminal is built like a casino — it’s dark. The new building lets in more daylight, with lots of glass.” Agglomerate tile in light and dark grey, blue, green, black and white adds to the brightness of the space, Hayden said.

The excellence of the LATICRETE system also helped the airport lighten up about the job. “I’ve known LATICRETE for many years,” Bottema said. “I knew their products were top notch and we wouldn’t have any problems. They met my expectations and LATICRETE always stands behind the product being installed.”