University of New Mexico Children's Hospital Expansion

Project Spotlight: September 2007

LOCATION:
University of New Mexico Children's Hospital
Albuquerque, New Mexico

ARCHITECT:
Studio Southwest Architecture

GENERAL CONTRACTOR:
JE Dunn, Rocky Mountain Region, Denver, Colorado in a Joint Venture with The Jaynes Corporation, Albuquerque, New Mexico

TILE CONTRACTOR:
Ray's Flooring, Albuquerque, New Mexico

TILE SUPPLIER:
Santa Regina Terrazzo Tile

TILE INSTALLATION SYSTEM:
LATICRETE International, Inc., Bethany, CT

LATICRETE DISTRIBUTOR:
Daltile Albuquerque, New Mexico

Children's Hospital Expansion

By Eric Carson

In the state of New Mexico it seems all roads, and even rivers, lead to Albuquerque. Located at the intersection of Interstate 25 and Interstate 40, New Mexico's largest city is split in half by the Rio Grande as it makes its way to the Gulf of Mexico.

While the state capital lies 60 miles north in Santa Fe, Albuquerque remains New Mexico's fasting growing city, with a rate far exceeding the national average for several decades. By all accounts, Albuquerque has received high marks for its ability to manage the growing pains associated with the influx of new people and new businesses, continually popping up on those lists of best places to live and work in America.

And with this rising population, eclipsing 500,000 in 2007, it was time to expand the city's main healthcare facility: The University of New Mexico Hospital.

In October of 2004, the Jaynes Company, one of New Mexico's largest construction companies, joined forces with JE Dunn Construction, breaking ground on a new six-story expansion project developed by the award-winning firm Studio Southwest Architecture. The $233.8 million project focuses on a new children's hospital and critical care pavilion, and will house 70 new beds, 400 new employees, and most importantly, create the necessary space for new equipment and technology that is vital to healthcare in the 21st Century.

Along the way the project encountered its share of issues, mainly budgetary, but with some value engineering and innovative building products from LATICRETE, the University of New Mexico Children's Hospital and Barbara and Bill Richardson Pavilion is slated to open late in 2007. Bill Richardson, a 2008 Democratic presidential candidate, is the only Hispanic governor in the United States. His wife Barbara has been actively involved in improving the lives of children in New Mexico.

The new wing of the hospital adds 466,000 square feet of space and sits suspended 120 feet off the ground, allowing vehicles easy access to the emergency room entrance. The structure is a metal deck frame supporting above grade concrete slabs, with steel beams and columns.

In order to finish the project as close to the initial planning budget as possible, several material changes were made during construction. For the interior floor covering of the expansive main lobby, the original plan of poured terrazzo was scrapped and replaced with lightweight, large format terrazzo tiles. LATICRETE, a world leader in the manufacturing of innovative systems for the installation of tile and stone, quickly became an even more important piece of the project than originally planned.

Driven by the desire to innovate, and with a concentrated focus on not only creating world-class setting materials, but products that provide significantly reduced installed costs, LATICRETE® Hydro Ban™ was launched in February of 2007. Over four decades ago, LATICRETE set the industry standard for waterproofing with the introduction of the first thin, load bearing, liquid applied membrane: LATICRETE 9235 Waterproofing Membrane. But once again LATICRETE has reinvented the category with the revolutionary new LATICRETE Hydro Ban, a one-component, roller, trowel, paint brush or sprayer applied waterproofing membrane that also acts to suppress cracks in the substrate up to 1/8". LATICRETE Hydro Ban bonds directly to metal drains and PVC pipe penetrations, and allows for flood testing in just 24 hours*. But at the top of its impressive list of product features, LATICRETE Hydro Ban does not require the use of fabric* in the field, coves or corners, an attribute that greatly reduces the most time-consuming phase of installing a liquid applied membrane.

After consulting with LATICRETE contractor sales representative Tim Evans, Gerald Lucero, vice president of commercial at Ray's Flooring in Albuquerque, was charged with installing the large format terrazzo tiles with the LATICRETE system. This project encompassed a 21,000 square foot lobby, as well as ceramic tiles on the floors and walls of all new patient rooms, and a 23,000 square foot perimeter wall of Sandstone that runs the length of the backside of the new expansion.

* See Data Sheet 663.0 for more information.

The first step for Lucero and his Ray's Flooring crew of 15 people was to install the water-jet cut terrazzo tiles in the main lobby over an above grade concrete slab substrate. For the first step, LATICRETE® Hydro Ban™ was rolled on, in this case more for its elastomeric properties and ability to suppress cracks than to protect against moisture in a wet area. Complicating the next step of applying thin-set mortar, was the low absorption rate of concrete and the dense, non-porous 24" x 24" Santa Regina terrazzo tiles provided by Daltile. In order to achieve the necessary bond with two dense materials, Lucero once again consulted with Tim from LATICRETE. The solution was LATICRETE 101 Rapid Latex Admix with its high-strength, quick setting properties, combined with LATICRETE 220 Medium Bed Mortar. The tiles were then set in place with 3/8" grout joints, and grouted with LATICRETE 1500 Sanded Grout and LATICRETE 1776 Grout Enhancer. All expansion joints were treated with LATICRETE Latasil™, a 100 percent silicone sealer that inhibits cracks and also protects against mold and mildew with Microban® protection.

After five weeks working on the lobby floor, Ray's Flooring moved on to the new patient rooms on the next five floors. GREENGUARD certified for better indoor air quality, LATICRETE Hydro Ban was roller applied over cement backerboard, this time more for its waterproofing capabilities. The membrane [LATICRETE Hydro Ban] was tied in with the terrazzo shower pan, and used to join the pan and the shower drain. With a more traditional substrate, LATICRETE 255 MultiMax™, a lightweight thin-set mortar, GREENGUARD certified and reinforced with Kevlar® for unmatched non-sag performance, was used for all patient rooms. To grout the 6" x 6" glazed ceramic Citta Series tile from Marazzi, LATICRETE SpectraLOCK™ PRO Grout was the proper solution. GREENGUARD Certified, LATICRETE SpectraLOCK PRO Grout is a revolutionary three-part epoxy offering unmatched performance, color uniformity and stain resistance, with extraordinary ease of use.

"We've been using SpectraLOCK PRO Grout for three years now, ever since Tim (Evans) joined LATICRETE," said Lucero at Ray's Flooring, a firm with over 34 years of experience in the industry. "We've never had a problem. I'm very happy with all the LATICRETE products. I've known Tim personally for many years. He came in here asking for a chance and everything has gone really well. I push for LATICRETE as much as I can. It's great to have a single source supplier."

The same ceramic tile from Marazzi was installed on every wall in all patient rooms over cement backerboard using LATICRETE 255 MultiMax and LATICRETE 1500 Sanded Grout with LATICRETE 1776 Grout Enhancer.

Besides all of the floor covering applications at the new University of New Mexico Children's Hospital and Critical Care Pavilion, the LATICRETE system was also used to adhere large-format Sandstone tiles to the 23,000 square foot perimeter wall on the backside of the building, and on a smaller, 6,000 square foot interior wall in the main lobby. The Radiant Red, 24" x 36" Sandstone from India was installed over a PermaBase CBU made by the National Gypsum Company. Using a 30-foot scissor lift, Ray's Flooring rolled on LATICRETE 9235 Waterproofing Membrane, then troweled on LATICRETE 254 Platinum, a one-step, polymer-fortified thin-set with unmatched strength for virtually every application. The tiles were set with 3/8" grout joints, and grouted with LATICRETE 1500 Sanded Grout and LATICRETE 1776 Grout Enhancer. All expansion joints were treated with LATICRETE Latasil. By utilizing the entire LATICRETE system for the exterior install, the University of New Mexico Children's Hospital receives peace of mind with the LATICRETE 10 Year System Warranty†, the most comprehensive warranty available in the industry.

After three full years of construction, not to mention the initial planning phase, New Mexico residents will soon be receiving family-centered healing in a new, state-of-the-art facility. And on every level and in every patient room, LATICRETE system materials will serve to enhance the beautiful designs and materials chosen for this ultra-important project. Just as the doctors and healthcare professionals at the University of New Mexico Children's Hospital remain a trusted resource for the people of New Mexico, LATICRETE remains the name known and trusted for industry leading expertise in the permanent, problem-free installation of tile and stone.

† See Data Sheet 230.12 for complete warranty information.

Corporate Headquarters:
LATICRETE International, Inc.

One LATICRETE Park North
Bethany, CT 06524-3423 USA
800.243.4788
203.393.0010

www.laticrete.com

Asia Pacific: 852.2526.6660

Australia: 61.3.9933.6111

China: 86.21.139.1812.3215

Europe: 34.96.649.1908

India: 91.40.2337.8775

Latin America: 1.203.393.0010

Middle East: 971.7.244.6396

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