

HARD FACTS

by Richard Bruns

Terrazzo Prescribed for Hospital Renovation and New Construction



When administrators at Parkland Health and Hospital System in Dallas, Texas, decided to update the hospital's main lobby and public areas, project architects looked for a flooring that would contribute to a comfortable and healing environment; one that would offer a welcome to all who come through the doors; while also meeting several highly practical demands. Terrazzo fit the description in more ways than one.

"In high traffic areas that need a lot of maintenance, I don't know that there's anything better out there," said Thomas Wilkins, architect for facilities development at Parkland. "You'd be hard pressed to find a better product than Terrazzo."

Parkland Hospital's renovation of its lobby and public areas included approximately 2500 s.f. of epoxy thin-set Terrazzo.

The major constraint the hospital faced in selecting a product and plan for the renovation was the existing floor: thickset glazed brick pavers. Wilkins expected a renovation involving that substrate to be a labor-intensive, noisy, dirty proposition. To complicate matters further, few product manufacturers would warranty a product installed on top of that existing floor.

The Parkland team looked at several other flooring options, none of which could be applied with the minimum thickness possible with Terrazzo, or with its durability

and low maintenance. Terrazzo offered those advantages and others for the hospital environment.

"With minimum preparation, Terrazzo could be applied at a thickness of 3/8 in. over the existing floor without transitional problems at the doors and corridors, and with it you get the beauty of a low maintenance floor that will be there forever," Wilkins explained.

The brick pavers had served many years, but the smooth, seamless Terrazzo floor, which also meets ADA slip resistance standards, was a key improvement for the hospital environment where wheeled carts, wheel chairs and walkers make up much of the traffic.

"Any time you take a hard wheeled cart over a floor with joints it is incredibly noisy," Wilkins explained. "Second, when people in wheel chairs after surgery or after having a baby bounce across those joints it's excruciatingly painful. Several people have mentioned the improvement."

Though this installation was the first use of Terrazzo on a renovation project at Parkland, one of its facilities has Terrazzo on the stairs and corridors that is 40 to 50 years old, Wilkins noted.

"It's still serviceable, still looks good, still doing its job," he said. "It's incredible the life you get out of a Terrazzo floor."

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Renovation Challenges

“I had serious concerns about dust, odor and noise control going into the project,” Wilkins said, “but it didn’t amount to much.”

“Being able to get Terrazzo down quickly minimized those kinds of could-be problems in a hospital situation,” he stated. “It was something we could install in a short time frame and get back up and functioning.”

The minimal preparation required for the substrate helped move things forward and limit the time the hospital’s main lobby was out of service.

over a long weekend, the only after-hours work required.

Not only did Terrazzo prove to be a product that allowed the work crews to get in and out quickly, but one that could be installed in a working hospital with little disruption during the process.

As for odor and dust control in the hospital environment, the crews used dust retainer equipment since there was nowhere to exhaust dust and fumes during the grinding of the old floor and laying down the Terrazzo. That solution made for a virtually dustless process. Odor from the epoxy was also filtered as they worked.

“It was all a non-issue at the end of the day,” Wilkins said.

they specified an upgrade that would reflect positively on the hospital.

“They wanted it to exhibit timeless architecture, and the interiors, especially the public areas, to be gracious and inviting,” Tilley said.

“Hospitals have to be competitive now,” he explained. “They want amenities to attract employees. Their request was ‘Don’t use the least costly, but something extra nice.’ We held to that.”

Hospital administrators accepted the architect’s recommendation for Terrazzo as a flooring that would answer that request for the 7500 s.f. installation, which included the emergency room, critical care areas, and adjacent corridors.

Like Parkland, Spohn has an at least 50-year history with Terrazzo: it’s still in parts of the hospital’s old main building, which was built in the 1950’s, and, like the Terrazzo at Parkland, it’s still in good shape, Tilley reported.

The facility managers have experience with various floorings as most of the several facilities in the system have ceramic or porcelain tile in the public areas, sheet vinyl in the sterile areas, and VCT in others. In waiting areas, bamboo wood is installed, but it gets crushed under loads, Tilley noted. “Users don’t like the ceramic tile at all because the wheels go bumpety-bump,” Tilley reported. Like Parkland, the hospital needed a hard, smooth surface.



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For the renovation, pedestrian traffic was rerouted through an alternate, temporary entrance. Fire exits and proper access routes had to be maintained, and hospital administrators wanted the gift shop adjoining the lobby to remain open during business hours six days a week.

Wilkins reported that they were able to tackle the entire renovation at one time rather than having to break the construction up in phases. The final stages were scheduled

New Construction

Spohn Hospital in Corpus Christi, Texas, recently completed a nine-story expansion, an addition to its three-story critical care Pavilion facility built in the early 90’s.

Chuck Tilley, architect with Page Southerland Page, said that when Spohn administrators met with his design team,

The administrators mainly wanted a quality product within budget, Tilley reported. Granite was considered, but was beyond the reach of the budget. Epoxy thin-set Terrazzo seemed like a comparable and affordable alternative.

When the construction manager came up with pricing, though, the project was over budget. He suggested cost savings by changing to VCT, but Spohn administrators insisted on their original quality objectives.

"We argued that the maintenance of VCT would cost more over time than the installation of Terrazzo," Tilley reported. "VCT is chosen strictly for cost, but in certain areas you need a higher quality product than vinyl flooring."

While recognizing that the installed price of Terrazzo was higher than some alternatives, careful evaluation reaffirmed its long-term value and its role in giving the facility the level of quality as originally specified. The decision was made to keep Terrazzo as a priority item, with cost savings found elsewhere.

Simple Maintenance

For both facilities, maintenance was a major concern in long-term budgeting and planning. As in any hospital, all the floors require constant attention and more rigorous maintenance than in other facilities.

Parkland's choice of Terrazzo brought the facility not only the simplicity of the

retrofitting itself, but Terrazzo's simple maintenance program.

"The advantage of Terrazzo is low maintenance and upkeep," Wilkins said. It has been a very easy floor to maintain.

"Basically it's a damp mop clean up. It's not a complicated process; anybody can do it. It's not a three-step process you have to go to school to learn how to do. Simple is better."

Elaborate procedures for cleaning aren't practical or realistic for the degree of

"All you do is wet mop. There's no need for stripping, sealing and waxing," Tilley confirmed. "Maintenance of floors in a hospital is more frequent than other public facilities. The easier it is, the more often you will do it."

Such a simple program makes a big difference for a large facility with the need for stringent cleaning standards.

Because Terrazzo is nonporous, smooth, and seamless, it won't harbor bacteria and is free of VOC offgassing, Tilley added.



maintenance demanded in a hospital environment, and flooring has to be able to withstand the strongest cleaning agents, Wilkins explained.

"Epoxy Terrazzo flooring is impervious to all that stuff; there's not much you can do to mess it up with cleaning. That's one less headache: the cleaning person can't come along and mess it up," he added.

At Spohn, the maintenance staff is also "very happy" with the Terrazzo, Tilley reported.

"The other good thing is that it resists stains and though the initial cost is higher, in the long run, maintenance savings will more than pay for it," said Tilley.

Design Advantages

For both facilities, Terrazzo also offered the wide range of design possibilities for the architects, who considered design a part of function in creating the look and environment they envisioned for a leading hospital.

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Even with the bumpy joints in the brick paver floor in the Parkland Hospital lobby, the main reason the architect wanted to replace it, Wilkins said, was the appearance.

"The driving force for change was that it was ugly; it wasn't the floor we wanted," Wilkins explained. "We wanted a more aesthetically pleasing, cleaner, fresher looking floor."

"The wide selection of colors and patterns can work in with any interior design scheme," Tilley also said. "The look is the biggest design advantage."

palette we had developed for the renovation."

Wilkins recommended Terrazzo for its virtually unlimited color palette with various aggregates, from mirrored, to recycled glass, or marble aggregate. On top of that a variety of divider strips can be used to create designs and patterns.

"It lends itself to a lot of diverse applications because it has so many colors and varieties," Wilkins said. "It's versatile, that's what I like about it."

At Parkland, Wilkins said another 2500 s.f. renovation project is under contract for an area adjoining the newly renovated lobby, the second of several renovation phases planned to include Terrazzo.

"In the final picture, it makes sense to use Terrazzo in other areas," he noted. "Further projects are definitely candidates for more Terrazzo. You'd be hard pressed to find a flooring that will have the durability of a Terrazzo floor."



The Terrazzo product installed in the Parkland Hospital lobby contained recycled glass chips with epoxy.

"We like to recycle any time we can; it's all the better for everybody," Wilkins said. "But what we liked most about the recycled glass was the colors. The particular combination of colors worked well to enhance the color

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