

Stories in Stone

National Terrazzo &



Mosaic Association

Terrazzo LEEDS the Way: Sustainably healthy and healing environments in children's hospitals

Passport to Custom Designed Sustainability at University of Minnesota Amplatz Children's Hospital

When young patients check in at the University of Minnesota Amplatz Children's Hospital in Minneapolis, they receive a passport to discovery.

Then, standing on the image of a compass in the terrazzo floor, they embark on a journey. The hospital's interior design portrays a theme of Passport to Discovery, and at the heart of that theme is the graphic terrazzo floor in the public spaces, engaging and orienting visitors. Each floor has its own theme, with an animal "storyteller" to guide visitors through images of grasslands, ocean, desert or tropics.

"We were able to create a crisp, complex design," explained Interior designer Jennifer Mango, IIDA, ASID, whose firm, Tsoi/Kobus & Associates in Cambridge, MA, specializes in healthcare facility design. This assignment was the first time a client had requested a themed design, she noted.

"The ability to customize with terrazzo is unparalleled," Mango said. "It's an extremely flexible product."

Epoxy over cement was specified for the project, for its color capabilities and range of aggregate choice. The floor's graphics incorporate recycled glass, mirror chips, mother of pearl and domestic stone, enhanced with water-jet cut brass details.



Not Just Another Pretty Floor

Though Mango noted that the number one reason for the choice of terrazzo was its design capacities, she also considers it to offer the best possible return on investment for high traffic public zones.

Specifying terrazzo contributed significantly to LEED certification at Amplatz, and the floor continues to lend its anti-microbial properties to a healthy indoor environment where children are contending with germs.

The urgency in recent years for LEED certification and indoor air quality has driven designers increasingly toward durable, low-maintenance products without VOC off-gassing.

“Terrazzo is perfect in that regard,” Mango said, with only a buff and seal, regularly damp mopping, and a buff and shine once or twice a year.

Comparing terrazzo to VCT, for example, terrazzo requires far less maintenance, and “is maintained in a much healthier way, without chemicals and off gassing,” Mango contends.

“This product was the best choice for return on investment for its life cycle, compared to VCT, which is headed to the landfill and has a much more significant impact,” Mango stated. “Terrazzo uses recycled and sustainable materials from the start.”

Defying Dirt & Abuse for a Lifetime at Children's Mercy Hospital, Kansas City

Look, Mommy, I'm riding a whale!” can be heard in the halls at Children's Mercy Hospital Kansas City, MO.

Patients checking in here step into a fantasy water world in terrazzo. A walking water mural depicts a kaleidoscope and ocean scape featuring three whales up to 45 feet long, in company with some 20 fish. The effect achieved clearly helps administrators meet their goal of creating an inviting environment.

“I have seen children go so far as lying down on the floor pretending to be a fish alongside the whales. I don't think you can get a better showing of honest approval,” said Scribe Ross, the in-house artist who designed the floor.

The hospital's 6,000-square-foot remodel,

completed in 2009, brought in terrazzo to replace rubber-backed carpet that had required replacement every three years.

Winning the War on Germs

Because high traffic areas in a children's hospital endure so much abuse, floors demand constant maintenance, and environmental services struggled to keep the carpet presentable, reported Lonnie Breaux, Vice President of Facilities Management at the hospital.

The constant traffic flow in a hospital serving the public 24/7 every day of the year also meant that carpets weren't getting dry after deep cleaning before people came through again. Since damp carpet is a magnet for mold and dirt, the result was extreme wear and shortened life even for the best quality carpet, according to Breaux.

“Floors are dirty, there are always germs, and nothing you can do about that, but the new floor is easy to keep clean,” said Nurse Cindy Olson Burgess,



Director of Infection Prevention and Control, who has been in her position for 22 years.

“Terrazzo doesn’t show normal wear and tear. It doesn’t show stains; there aren’t those kinds of issues with it,” Burgess added, noting that this floor is her first experience with terrazzo.

“It’s a dream for infection control,” said Carl Palermo, with three decades in his position as Director of Plant Operations at Children’s Mercy Hospital. “Terrazzo is a solid surface and absorbs nothing. There are no infection concerns.”

Furthermore, other than keeping it clean, it’s been maintenance free, Palermo added.

Longer Life, Less Loss

Compounding the cost savings of lower maintenance, terrazzo’s longevity adds up to even greater benefits long term for the hospital.

Like carpet, VCT presents its own set of long-term maintenance headaches, in Palermo’s experience. Vinyl fails, it wears out, and can be easily damaged, he explained. But he compares terrazzo to 8,000-pound highway concrete.

“It doesn’t wear out unless maybe you hit it with a wrecking ball,” Palermo stated.

“Nothing compares to terrazzo for durability,” Palermo said. “This thing will last my lifetime and maybe a couple others.”

Investment in permanent flooring is an easy choice, clearly the right choice, in Palermo’s opinion.

“Even if payback takes a little longer, at the end you still have a floor that’s like brand new,” he concluded.

Since the completion of the installation, the hospital has installed similar floors with the same terrazzo system in three other high traffic areas within its system.

Cost comparison of carpet to terrazzo

“While terrazzo is three times the cost of carpet, we save money over time with:

1. Less maintenance
2. Fewer disruptions from repeated installations (a major factor in a hospital)
3. Ten times the life span of carpet, providing material savings.”

— *Lonnie Breaux, Vice President of Facilities Management at Children’s Mercy Hospital*

