

## MAKING A DIFFERENCE

September 21, 2004

People, Companies and Organizations Making a Difference for the Environment.

### Municipal Trash Illuminates Unique 'Green' Flooring and Countertops

A glut of old glass bottles, mirrors and windows has become the source for a chic green twist to a classic flooring concept. Publicity in July 2002 about a north Texas city's overabundance of crushed recycled glass inspired a creative solution: to combine the multi-colored crystals with epoxy resin to create recycled glass terrazzo.

It was a perfect match. The city of Plano already had a glass crusher machine that could tumble the glass trash into usable aggregate. An established terrazzo company donated installations to renovate flooring in the City of Plano's high-traffic public works building and the headquarters of their recycling partner, Trinity Waste Services. "It's a forever floor because it's



The high shine on Plano's wax-free recycled terrazzo lobby floor is achieved by buffing alone

poured into place, sanded and polished, and it's so highly durable," said Frank Sienkiewicz, plant manager at Trinity. Just as appealing as the floor's 40+ year life cycle is its exquisite beauty. "Everyone who sees the floor is amazed by it. It looks fantastic," he reports. Both projects were stunning, and the project received the Recycling Alliance of Texas's "Closing the Loop Program" award for 2003.

Glass aggregate from several north Texas recycling programs now graces floors in numerous north Texas public buildings, including a University of North Texas residence hall, the Cities of Denton and McAllen Solid Waste Divisions, Frisco's Bert & Eloise Isbell Elementary and two other Frisco ISD schools yet to be named. Portions of the DFW International Airport's new terminal D along with the 'Automated People Mover' stations have utilized recycled glass terrazzo. Local corporate



The terrazzo countertops and floors at the Highland Park Village Starbucks feature cobalt blue recycled bottle glass

The next  
logical  
progression  
in Terrazzo –  
*recycled glass*

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projects include Starbucks in Highland Park Village and Sundance Square, and the regional sales office for Sherwin Williams.

Interest in recycled glass terrazzo has broadened beyond North Texas; it was recently installed in airports in Jacksonville, Florida and Memphis, Tennessee. Ecologically-oriented architects are all the more intrigued when they learn that the US Green Building Council has approved recycled glass terrazzo for six possible points in four of their LEED (Leadership in Energy and Environmental Design) categories. Post-use glass terrazzo provides resource and reuse, recycled content, local/regional material and indoor emitting materials credits to companies who want to "build green." The U.S. government added its stamp of approval in August 2004, awarding a national patent for 'making a terrazzo surface from recycled glass.'

Still, many municipalities across the nation continue to be overloaded with recycled glass. Adams County, IN, Macon, GA, Roanoke, VA and Clovis, NM were all in the news this year due to glass recycling programs run aground because of a lack of market for their recycled glass. While glass container factories use recycled glass in the production of new



**Glass bottles and jars without a buyer pile up fast**

bottle and jars, municipal recycling programs are often unable to meet their strict requirements for cleanliness and separation. Location of interested buyers is also an issue; the weightiness of glass means transportation beyond the local region ends up canceling out any profit or even costing money. Even in north Texas, the majority of glass is not being reused. At the same time Collin County has discovered a new flooring use for recycled glass, the region has been forced to open a new mega-landfill. In about 40 years the new dump will be the tallest in Texas - as high as a 25-story building - and taller than any current building in Collin County.



**Bukhair's recycled glass floors feature stainless steel insets that represent the school district's values**

The irony of dumping old glass in new landfills while recycled glass terrazzo awaits greater acceptance begs the obvious question. Why don't more organizations embrace the opportunity to turn old glass into something beautiful and new? Those seeking aesthetic flexibility find recycled glass terrazzo provides endless options, and any quality concerns are easily put to rest by visiting a finished project or hearing from those who have installed one. The circle of advocates for a more sustainable approach to floor design grows larger each time a new floor is poured.

The latest recipient of Plano's recycled glass is Richardson ISD's Carolyn G. Bukhair Elementary School. Ecologically sound terrazzo runs throughout the two-story building in vivid blue, mustard, jade, and several shades of beige. Flowing lines criss-cross squares on the cafeteria floor, and the upstairs hallway floor is a subtle, meandering terrazzo checkerboard. The school district's values of 'fairness,' 'patriotism,' 'honesty' and others are inlaid in the main entrance and hallway, and repeated in a hanging mobile over the front desk.

HONESTY

COURAGE

"We are proud to open the school and present the community with environmentally friendly 'recycled glass' floors," states RISD's Executive Director of Facility Services Michael Longanecker, AIA. "Terrazzo has always been one of our preferred floors finishes due to its durability and ease of maintenance. The combination of good looks, reduced maintenance costs and re-use ecology makes it a win/win situation for the District," he said.

Schools in another north Texas school district have recently been declared un-usable due to roof leaks that led to moldy carpets, now disposed of in another Texas landfill. The recycled terrazzo at Bukhair is not only a sustainable surface to walk on and a more responsible use of public moneys; it will also be an educational tool. Through the support of a corporate partnership, Bukhair students will receive encouragement and instruction in ecology, recycling and sustainability. In a long-term process undertaken to inspire the next generation of green builders, generations of students will be educated as environmental emissaries to help America dispose of its throw-away mindset and remind us all that there are better uses for America's land than more new landfills.



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*Tim Whaley is President of EnviroGLAS® Products Inc....converting glass bound for the landfill into elegant, durable, environmentally friendly hard surfaces and landscaping materials. [www.enviroglas.products.com](http://www.enviroglas.products.com)*

**Bukhair hallways feature flowing lines and checkerboards of recycled glass terrazzo**