

Innovative Tile and Stone
Installation Systems

New Jersey Performing Arts Center Project Spotlight: February 2010



LOCATION

New Jersey Performing Arts Center
Newark, NJ

ARCHITECT

Barton Myers Associates, Inc.
Los Angeles, CA

STONE MEDALLION FABRICATOR

Creative Edge Mastershop
Fairfield, IA

LEVELING SYSTEM SUPPLIER

Tuscan Leveling System
Fairfield, IA

TILE & STONE INSTALLER

Tiede Zoeller Inc.
Long Beach, MS

TILE INSTALLATION SYSTEM:

LATICRETE International Inc., Bethany, CT

Stone Medallion Installed with LATICRETE at New Jersey Performing Arts Center

By Eric Carson

Any tile or stone artwork must be installed with top quality materials and methods by skilled contractors.

This explains why the beautifully fabricated, 2,470 square-foot (229 m²) stone medallion just inside the main entrance of the New Jersey Performing Arts Center (NJ PAC) was installed with LATICRETE® products by professional tile and stone contractors from Tiede-Zoeller, all the way from Mississippi.

Water-jet cut with exquisite precision by Creative Edge Mastershop in Fairfield, Iowa, Tiede-Zoeller carefully installed 385 pieces of Uba Tuba granite slabs in three different styles with LATICRETE installation products. And since these slabs were large format, some 8' x 5' (2.44 m x 1.52 m) and all heavy, with the design quite intricate, Tiede-Zoeller also used the Tuscan Leveling System for this sprawling stone medallion as the entrance to the NJ PAC in Newark, New Jersey.

The NJ PAC opened in 1997 as the sixth-largest performing arts center in the U.S., and this world-class cultural complex has played a key role in jumpstarting the revitalization of urban Newark, attracting nearly six-million guests to its 12-acre campus in just 11 years.

The elaborate stone medallion for this non-profit organization was funded largely through donations that were recognized in the form of sand-carved and color-filled names and inscriptions on the actual granite slabs. The size of each donation dictated where the name or inscription was placed in the design, working by amount toward the larger, more prominent center-pieces of the medallion.

The stone medallion measures a full 56 feet (17 m) in diameter, and was installed over an existing terrazzo floor that had to be demolished and properly prepared for heavy granite slabs. In addition, the remaining concrete slab needed 1.2 inch (3 cm) holes cut out and corresponding conduit channels for each of the 70 lights installed to illuminate this stone artwork.

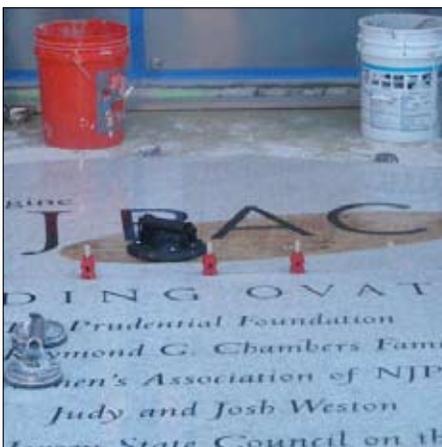
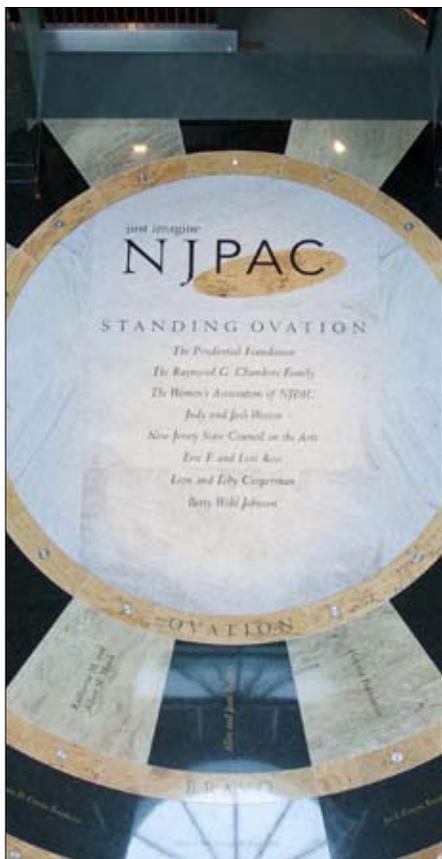
Peter Lord, project manager for Tiede-Zoeller, has years of experience installing tile and stone with LATICRETE products, but had to learn a whole new system before he could get to this stage at the NJ PAC. Destroying the existing terrazzo floor and the weight and size of the granite slabs resulted in the decision to utilize the Tuscan Leveling System, supplied by Pearl Abrasive Co., the products exclusive distributor.

The Tuscan Leveling System is designed to create a virtually lippage-free installation with stone or ceramic tiles. The system interlocks the granite slabs with a series of caps connected by proprietary blended nylon composition straps to a bottom plate. The bottom plates, nylon straps and caps on top work to clamp down on the edge of each tile and the edge of the next tile in the layout as the installer goes. The system of spaced out caps are tightened during installation to create a single flat, slab-like surface while the LATICRETE® setting materials were bonding and curing to the stone. This process reduces, and in most cases, eliminates shrinkage and warping, along with the need to pick up the tiles and add additional mortar for leveling purposes.

“Tiede-Zoeller was under very rigid time constraints,” said Mick Volponi of Tuscan Leveling Systems. “The leveling system speeds up installations like this by eliminating the ‘re-lift and set’ step. When this system is used in combination with LATICRETE products and installed by skilled contractors the result is a completely flat surface.”

The new stone medallion was designed by NJ PAC’s original architect, Barton Myers, FAIA, in collaboration with David Karp and Peter Robinson. This ambitious project and impressive medallion needed to be installed with precision in order to capture the true elegance and Tiede-Zoeller, all the way from Mississippi, was charged with making sure this happened.

The first step after stripping down the old terrazzo flooring to the original mud bed was to level the



substrate with LATICRETE® 86 LatiLevel™ to ensure a smooth and level base for tiling.

When LATICRETE 86 LatiLevel had dried to a smooth finish, Tiede-Zoeller applied LATICRETE Hydro Ban™ to eliminate the threat of water intrusion, and of equal importance for the medallion at NJPAC, to provide anti-fracture protection for the finished installation. LATICRETE Hydro Ban is a thin, load bearing waterproofing and anti-fracture membrane that does not require the use of fabric in the field, coves or corners*. LATICRETE Hydro Ban bonds directly to a wide variety of substrates, including metal and PVC plumbing fixtures*.

Easily applied with no special techniques, LATICRETE Hydro Ban has a fast-cure formula that can be flood tested in just two hours at 70°F (21°C) or higher**. The time and labor-saving benefits offered by LATICRETE Hydro Ban helps tile and stone contractors submit far more competitive bids on large scale, fast-paced projects, and its revolutionary characteristics and unmatched performance make this product ideal for intricate installations of tile and stone works of art, too.

“We use a great deal of LATICRETE products,” said Lord, Tiede-Zoeller’s project manager at NJPAC. “We use LATICRETE extensively and are very happy with the products. We used rollers and applied LATICRETE Hydro Ban very easily. The product has a very fast cure time. To me, those are very good benefits. There’s no question the product speeds up installations considerably. It can literally take days off certain projects.”

LATICRETE Hydro Ban cures to a light sage or olive green color when ready for flood testing, and once this process was complete Tiede-Zoeller set the granite slabs with LATICRETE 220 Marble & Granite Mortar, a medium-bed adhesive that’s specifically formulated for projects just like this one, providing a one-step installation for large-format tile or stone hard surfaces for interior or exterior applications.

The mortar bed consisting of LATICRETE 220 Marble & Granite Mortar also served as the adhesive to bond the Uba Tuba water-jet cut stone pieces. Each heavy tile, all 385 pieces, were back-buttered with LATICRETE 220 Marble & Granite Mortar and set

over the mud bed with the Tuscan Leveling System clamping each piece of stone together to form one continuous slab-like surface to avoid shrinkage, and ultimatelylippage between the tiles.

When the LATICRETE materials had cured and the stone pieces were firmly set in place, the top part of the straps are effectively snapped off (along with the reusable caps of the Tuscan Leveling System) at a separation point below the surface of the tile. After this process was completed the grout joints were cleared out in preparation for the final step. For this elaborate stone medallion, LATICRETE 1500 Sanded Grout was mixed with LATICRETE 1776 Grout Enhancer and used to fill the 1/8" (3.175 mm) grout joints between each piece of stone. LATICRETE 1500 Sanded Grout is a premium, factory prepared grout formulated from a blend of high-strength portland cement, graded aggregates, polymers and color-fast pigments. When LATICRETE 1500 Sanded Grout is mixed with LATICRETE 1776 Grout Enhancer instead of water, the product characteristics improve with colorfast, dense and durable grout joints, fortified with antimicrobial protection from Microban® to further inhibit stain causing mold and mildew for enhanced performance and aesthetics.

“Tiede-Zoeller did an outstanding job with some difficult situations to overcome,” said Robert Sawyer from Creative Edge Mastershop, the water-jet cut fabrication company for this medallion. “With Tiede-Zoeller and Mick’s (Volponi) team, I’ve never worked with a better crew. This was not a standard installation by any means and it turned out gorgeous.”

Stop by the New Jersey Performing Arts Center and witness the second coming of Newark, and when you do enjoy the elegant stone medallion just inside the main entrance.

The entire process was orchestrated to perfection.



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* See Data Sheet 663.0 complete product information
** LATICRETE® Hydro Ban™ can be flood tested in just two hours when cured at 70°F (20°C) or above 50% R.H. It can be flood tested in 24 hours when cured at 50-69°F (10-20.6°C) and up to 70% R.H. The time for flood testing starts when the second coat has cured from a light sage green to a darker olive green color.