award winners and outstanding projects

Masonry Takes Center Stage in Red Bank

By John C. Bachenski

The Two River Theater in Red Bank, NJ was presented a Grand Award of the 2005 New Jersey Golden Trowel Awards program of the International Masonry Institute (IMI), as well as top honors in the Community Projects category. IMI, which is a joint labor/management alliance of the International Union of Bricklayers and Allied Craftworkers (BAC) and contractors dedicated to craft training and quality design and construction, sponsors the awards program to recognize the highest quality in masonry architecture and craftsmanship throughout the country. Projects must use masonry materialsbrick, stone, tile, terrazzo, concrete or glass block, marble, mosaic and plaster—asdominant exterior and/or interior components.

For its stunning new theater, the New Jersey town of Red Bank returned to its architectural roots, adorning its prize-winning project with terra cotta, or structural facing tile (SFT), and brick. Less than a century ago, terra cotta was the masonry industry's product of choice, and New Jersey was at the heart of it. The state boasted 48 terracotta and brick companies that supplied terracotta all over New York, New Jersey and Pennsylvania, and as far away as Chicago.

The use of terracotta or structural clay tile (SCT) and Norman brick for the new 300seat arts center allows for a modern interpretation of masonry that blends well with the historical brick buildings surrounding it. The dimensions of the brick (2- inches high by 12 inches long) and one-third bond emphasize the theater's horizontal lines, which create a structural choreography with the main street and the brick buildings facing the theater. The effect is further heightened with glazed brick and pattern banding around street level windows.

Further enhancing the choreographic effect is clever masonry detailing on the brick facades, which change in looks depending on the time of day and position of the sun. Rectangular cast stone accent segments in a three-unit module, randomly placed, break up an otherwise expansive brick wall. The modules were tied to the cmu backup wall with stainless steel adjustable stone anchors, with two per stone at quarter points.

The typical cavity wall in the building surrounding the theater is a 19 1/4-inch-thick wall, consisting of 4-inch veneer brick, 2-inch air space, 2-inch ridged insulation, vapor retarder and 12-inch grout-filled cmu. The in-



side cmu facing the theater is veneered with 4-inch terracotta. The structural clay tile was also reinforced with veneer wall ties 16 inches o.c.

Theater-goers are welcomed into the new space by a onestory freestanding ticket office and entrance of 4-inch wide

smooth face and comb face structural clay tile, jutting out dramatically from a two-story glass veneer.

Inside, the building's two main spaces are the theater plus offices and mechanical areas. Like any theater, sound engineering was key. Double and triple masonry walls were used to prevent sound entering the theater space from the exterior. Inside, further sound control came from manipulating the interior finish. For extra measure, perlite was added to the cells of the terracotta as well.

Masonry's inherent qualities of density and reflectivity lend themselves well to theater design. Masonry in a theater setting offers several advantages beyond controlling sound transmission and echoing. It is easy to work with and predictable, which allows for manipulation around absorption panels, while shaped masonry units help high octave instruments sound fluent. In addition, masonry's design versatility, durability, economy as well as fire resistance capabilities make using masonry products the choice for many projects.

The use of 12-inch backup block provided the best choice for the brick back-up as well as bracing for the steel. The standard 2-inch air space and the additional veneer of SCT further isolated the interior of the theater from exterior noise. Stretchers of 8 x 8 x 12-inch structural clay tile surrounded all steel columns in the wall. Filling the units with perlite achieved a two-hour fire rating, plus sound control. Masonry proved a wise budget decision as well, offering a cost-effective solution compared to the other wall systems considered. Most importantly, masonry gives Red Bank the promise of an architectural jewel that will shine for 100 years or more.

Even before its completion, the theater brought excitement to those involved in its construction. "We have young apprentices on this job that may never get the opportunity to work on a project like this again," said Foreman Joe Skalanka, a member of BAC Local 4 NJ who has been with Speranza Brickwork for 30 years. "Terracotta is a beautiful material to work with, and we want to see this material used more often." Skalanka said even the masons were impressed at how well the terracotta absorbed moisture from the mortar, which allowed ample time for set up. "Certain types of glazed facing tile tends to float when laid, but this terracotta set well," he said. The use of mast climbing scaffolding on the exterior enabled speedy erection on the large expanses of brick walls.

In a true measure of artistic collaboration, the Two River Theatre of Red Bank brought together innovative design, impeccable craftsmanship, and the highest quality masonry materials to create Red Bank's newest landmark.

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Project Team

Two River Theatre Company H3 Hardy Collaboration Architecture Structural Engineer - Harrison-Hamnet MEPF - The Princeton Engineering Group Theatre Engineer - Davis Crossfield Torcon, Inc. Speranza Brickwork, Inc. BAC Local #5 NJ Clayton Block Co., Inc. Consolidated Brick & Building Suppliers, Inc. Continental Cast Stone East by Russell D'Hanis Clay Products Lehigh Cement Company The McAvoy Brick Co. Riverside Supply Company

Stark Ceramics