

Carrie A. Tuggle Elementary School, located in Birmingham, Alabama in the Eron Ridge neighborhood, was awarded the Alabama Concrete Industries Association's "Top Block Award" at the American Institute of Architect's (AIA) Annual Design Award program in Birmingham in February.

The school was founded as the Tuggle Institute by social worker Carrie A. Tuggle in 1903.

As a privately run charity, Mrs. Tuggle's passion was to provide safe housing and a good education to orphaned African-American children.

In 1926, the institute became associated with the Birmingham City Schools, and the Board of Education bought the 15-acre site with its 13 structures in 1934. It was renamed Enon Rige School.

Two years later the Board honored Mrs. Tuggle by renaming it "Tuggle Elementary." She is buried on the school grounds.

"We found it to be an honor to be commissioned to design the new Tuggle Elementary School K-5 based on the founder's legacy," says Clay Dorsey of Dorsey Architects.

The new two-story building is approximately 80,000 square feet, with 28 classrooms, a 300-seat gymnasium, and music, art and computer rooms. A cafeteria, library and media center and administrative offices are included in the design, as well as an open atrium in the lobby.

Project at a Snapshot

The new 80-square-foot Tuggle K-5 School contains:

- 28 Classrooms
- A 300 –seat gymnasium
- Music, art and computer rooms
- An open atrium area
- Poured in place concrete FEMA Storm Shelter with restrooms and emergency power backup
- A memorial plaza around the tomb of the school's namesake, Carrie A. Tuggle









Interior corridor features stained concrete floors

"We designed two towers one that is reminiscent of the one found on the school's forerunner, the Tuggle Institute, and the other a clock tower placed over the entry and library and media center," says Dorsey. "Separate areas are designated for school bus and car pick-up and drop-off points. Football and baseball fields are placed in the "bowl" area behind the school."

The project's total construction cost was \$10.2 million. Enon Ridge is a hilly neighborhood, and extensive grading work had to be done before construction started.

The design documents took seven months, with construction taking about 21 months.

Some of the unique features of the school include an open atrium with a 22'-8" high glazed opening area overlooking the hillside, and a Memorial plaza around the existing tomb of the school's namesake.

"We also we used brick veneer columns with concrete masonry unit (CMU) backup and interior brick veneer walls through the main lobby and the open atrium area overlooking the hillside," he says. CMUs are durable and economical for classrooms,



and help slow down sound transition."

Precast concrete was used around the main entrance area using precast concrete coping, bands and lintels over openings and precast concrete trim around the window below the clock tower.

"We had a very challenging site with several anomalies; however it played to our advantage particularly the steep slopes," says Dorsey. "We incorporated a cast-in-

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place concrete FEMA storm shelter on the sloping side of the site."

The monumental stair in the open atrium is also cast-in-place concrete, as well the retaining wall, which serves as the backup for the brick veneer on the curved memorial plaza wall. In addition, all of the CMU's cells throughout were filled with concrete, with re-bars every 8 inches.

"We were mindful that the school was being placed in a residential area," he says.

"We blended the design of the school into and complemented the neighborhood. The building floor elevation was set lower than the former school that was demolished, so that the two story spaces and the high volume spaces would not over power and dominate the residential area."

Dorsey said they planned the design so that the administration wing of the building was angled along a curved drive in order to break up the long linear elevation. The various elevations were articulated with slightly sloped gamble parapets with alternating flat parapets and different brick colors and patterns, which were all done with CMU backups throughout.

"The exterior and interior walls of the structure are 100% concrete block," says Dorsey. "The CMU interior walls are excellent for school construction because of its durability, maintenance and long term cost savings."

