



The front desk at Flashpoint Academy in the Burnham Center. Challenges on this project for Valenti Builders included installing high-tech wiring in a historical building and finishing the educational center in time for classes to begin in September. (Photos by Susan Carr; Carr Cialdella Photography)

Finished In A Flash

Valenti Builders Overcomes Time, Building Constraints To Complete High-Tech Education Complex

BY BECCA KATZ

Constructing within an already-existing building inevitably poses difficulties, but when that project calls for high-tech elements in a building constructed before World War I, a four-month timeline and a LEED Silver certification, the challenges are even more formidable.

Valenti Builders took on those challenges in constructing Flashpoint, The Academy of Media Arts and Sciences, which was completed in September of 2007. The school occupies the first, fifth and sixth floors of the historic Burnham Center. Flashpoint Academy is a two-year school in Chicago that offers degrees in cinema, recording arts, gaming and animation.

Working with a minimalist, artistic vision, Valenti constructed a steel staircase made of a cantilevered folded steel plate that is intended to appear as if it is flying off the wall. Since Valenti was building in an already-existing structure, this posed a challenge

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because previously there had not been an open atrium stairway between the fifth and sixth floors, meaning that a portion of the floor to the sixth floor had to be taken out without compromising the integrity of the structure.

Because of the age of the building, exact documentation of the piping and electrical wiring were unavailable, which meant Valenti had no way to know if pipes and wires would have to be rerouted where the floor was taken out until they actually began the construction phase of the project.

“We cut a hole between the fifth and sixth floor to create an atrium stairway, and structurally there were some unknowns in that,” Project Executive Austin Stanton of Valenti Builders said. Valenti planned ahead as much as they could to be able to accommodate for issues that arose, such as cutting through the sixth floor.

“Flashpoint had immense technological requirements,” Stanton said. “There was some pretty new equipment they were getting that we had to educate ourselves on to provide the proper backbone.”

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The project called for high-tech studios, so Valenti had to make special accommodations to allow for the cutting-edge technology. The Academy has classrooms, computer labs, recording facilities, a directing stage, a screening room, a motion-capture studio and student lounges. The screening room has three video cameras that are wired to run simultaneously, and the room is set up with various lighting controls.

The stages include sound stages, a media stage, an insert stage, a green screen stage, a multi-purpose stage and an apartment set. Each of these stages had to be fitted with cameras and audio visual and lighting equipment. Each room of each stage and set had to have different flooring installed to address the acoustic issues. Another high-tech room at the Academy is the Matrix Room, where four web-linked projector systems are projected throughout the school, and the lobby has surround sound and multiple projection surfaces. All of this technology within a 75,000 square foot area resulted in 11 miles of wiring.

Although the video cameras and computers come in after construction is done, Assistant Project Manager Natalie Valenti said constructing a building with so many technological aspects was difficult.

"Making sure we had the right equipment and video equipment and had the stages all constructed correctly was unique to this project," she said. "Even though we don't have to put all of the technology in place, it is our responsibility to make sure the room is done in time for that stuff to be added."

Many floors in the building — which originally went up in 1913 — weren't deep enough to bury the cables and electric wires. By working with the architect and

the owners and planning as far ahead as they could, however, Valenti was able to make accommodations for structural issues.

"There were definitely some mechanical issues," Stanton said. "We worked closely with the architect who rerouted and made architectural changes when there were no other options."

Currently the Flashpoint Academy has raised \$16 million in funding and has more than 130 students, but when construction started the faculty hadn't even been hired. Hiring occurred during the building phase, so during building the faculty started to request changes in instruction areas for better functionality. Valenti and the architect had to change a many things as they were building because of faculty requests.

"There were a number of scope enhancements that occurred during the building. Spaces had to grow or contract. Circulation areas changed. A lot of the technical requirements changed," Stanton said.

Material lead times sometimes contradicted the time it would take to reach LEED requirements. The window covers and the carpet had to be altered because of conflicts between the materials and the schedule, so Valenti sought new materials that would fulfill the requirements while still achieving what Flashpoint wanted aesthetically.

"The owner and the architect compromised a little bit because their original materials

didn't work, but in the end they got something they liked and it met the LEED requirements," Stanton said. "The schedule couldn't be affected, so we worked around it. We understood what we had to get done in the least amount of time possible."

While all construction projects have timelines and schedules to work within, Flashpoint's timeline was only four months because the building had to be ready in time for classes to start in September. According to Natalie Valenti, keeping up on documentation was vital to getting the project done in time.

The Burnham Center is located at the intersection of Washington Avenue and Clark Street, which is in the middle of downtown. As with any project in downtown Chicago, Valenti had to work in a limited space as efficiently as possible while creating the least amount of inconvenience possible for pedestrians and traffic.

"There's always certain challenges with building right in the Loop," Stanton said. "There are logistical challenges such as getting materials in and out. It kind of goes with the territory."

Through Flashpoint Academy of the Media Arts and other projects, Valenti has shown it can rise to meet those challenges.

