

# An Ounce of Prevention

*An upgrade to the entryway at Magnolia Middle School brings greater security and peace of mind to students and faculty alike.*

**BY DAVE SWEENEY**

**U.S. schools have historically been safe and peaceful centers of academic exploration, personal development, and socialization for students and faculty members. They have also become the site of a tragic and alarming number of mass shootings and other acts of violence in the past decade or so.**





Left and above: The new secure vestibule at the entryway of Magnolia Middle School was designed and installed by Cook & Boardman sister companies Advantech and HC Quality Doors.

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That grim reality is not lost on the leadership of Magnolia Middle School in Magnolia, Delaware, part of the Caesar Rodney School District. They recently worked with Cook & Boardman companies Advantech and HC Quality Doors on the construction of a robust and aesthetically pleasing new access-controlled entryway. The school now offers an elevated degree of safety, security and peace of mind to its students, faculty members and

community at large. It is positioned for strength for years to come.

### **A DESIGN DILEMMA**

“The state of Delaware requires any new school construction or remodel supported by state funding to include a secure vestibule. That way people enter the building into a holding area where they’re screened by the main office before they can access the rest of the



The new Magnolia Middle School is located in a former high school in Magnolia, Delaware.

PHOTO COURTESY OF MAGNOLIA MIDDLE SCHOOL

school," Jimmy Pennewell, Supervisor of Facilities Management for the Caesar Rodney School District, says. "All of our schools conform to that layout except Magnolia Middle School, a building that was recently added to our district, which we had to bring into compliance."

Magnolia Middle School is a 25-year-old, single story building and was formerly a parochial high school that closed in 2020. "We wanted to create a secure vestibule so that the front office team could screen people coming into the building," Pennewell says of the

upgrade. "The building's main office was near the front door. But the space was completely open and anyone coming in had free access to all of the hallways, classrooms and common areas throughout the school."

"Our district has placed a great deal of emphasis on safety and security protocols over the years. That includes how and where we enter buildings and ensuring that building occupants have access badges that operate properly," Keith Wisher, Principal of Magnolia Middle School, says. "When we acquired this building, the district wanted to ensure that it was safe and secure for all of our stakeholders, including more than 400 students in grades 6-8 and 50 faculty members."

## WHAT'S NEW IN WEAPONS DETECTION AT SCHOOLS

"The tragic events that have occurred at schools and other public places nationwide in recent years confirm that bad actors don't discriminate and that violence can happen anywhere," Keith Wisher, Principal of Magnolia Middle School in Magnolia, Delaware, says. "A school's best defense is to investigate any security deficits and do your best to strengthen those areas."

"We've demonstrated Ceia USA's OPENGATE weapons detection systems for many schools," Ryne Johnson, Account Manager at Advantech, a Cook & Boardman company, adds. "They make the metal detectors seen in many airports and we support the commissioning and configuration of these mobile, battery-powered pillar systems in school settings."

According to Johnson, the benefit of these systems is their sensitivity. "In an effort to prevent mass casualty events, you can set them to detect only larger metal objects that could be a weapon so that they don't back up the entry process for students," he explains. "These systems are safe, mobile, aesthetically pleasing and are becoming increasingly common, especially in potentially volatile settings where schools mix outside visitors with their own student population, such as sporting events between rival teams."

Johnson notes that the OPENGATE weapons detection system is most effective when operated in combination with support staff. "Once it detects a large piece of metal going through, an onsite support staffer with a hand-held metal detector in a secondary screening area would identify its location and determine if it's a threat," he says.

"These systems are popular in schools because of their throughput; they get students through faster than a standard metal detector without the need to empty pockets or scan backpacks, especially with so many kids coming into the school building to start class all at the same time," Johnson says. "While standard metal detectors are prone to more nuisance alarms that reduce throughput of the entryway, the combination of OPENGATE systems with Advantech commissioning is far more effective and is a robust tool for identifying the presence of dangerous weapons on school property."

## AN INTEGRATED SOLUTION

Pennewell addressed Magnolia Middle School's need for a totally integrated safety and security solution by reaching out to the experts at Cook & Boardman sister companies HC Quality Doors and Advantech, a security integration company.

"We have a lot of school security experience, and we saw the immediate need to reduce the access visitors had to the entire school from the entryway," Levi Lantz, Branch Manager of HC Quality Doors, says.

Lantz explains the company was brought into the project by Advantech and assessed the space with them in August 2022. "We created a design involving the construction of a 10-foot-high, 40- to 50-foot-long, bullet-resistant glass wall incorporating two sets of doors that are always locked," he says. "With that interior structure, people can come into the lobby but can't continue into the school without being vetted and having the doors unlocked by office personnel." Lantz adds they matched the school's exterior doors for optimal aesthetics.

Ryne Johnson, Account Manager at Advantech, explains his team walked

the job with the team from HC Quality Doors because their systems work together. They addressed the need for access control within the frame that Lantz's team designed and built.

"For security, we placed a card reader on the frame of the door and an electrified crash bar controlling access to the office and hallway," Johnson says. "When someone's badge grants them access, the card reader will retract the motorized exit device and allow the person to pull on the door. Otherwise, it will remain in a locked state."

Johnson noted that the school was not originally aware of the possibility of bullet-resistant glass, but when presented with that option, they saw the value.

"Bullet-resistant window technology has improved dramatically over the years, and today you can't tell the difference," Lantz says. "We use real glass that remains clear and clean-looking and won't scratch or spider—as opposed to the polycarbonate material sometimes used in these applications. It's nice for the school and its occupants."

### A WIN-WIN ALL AROUND

After successfully working around the existing headers, columns and other infrastructure already in place in the entryway, the professionals from HC Quality Doors and Advantech completed installation of the integrated new security configuration. The project wrapped up during the school's holiday break in December 2022, just in time to welcome the school community back to a safer, more secure space in January 2023.

"The team from Cook & Boardman were very responsive and we were extremely happy with their work," Pennewell says. "The new system is doing exactly what we intended it to do operationally." Pennewell adds the team also did a great job matching the new interior structure to the maroon color of the exterior doors, to make it look like it was always there.

"We loved the fact that the structure was made of glass, which gives a better appearance by allowing a lot of natural light and visibility in the hallways, while still being thick enough to ensure our security," Wisher says. He notes his team's excitement that a hand-painted sign bearing the school's name, created by an art teacher for the opening, remains visible through the glass wall. "Our staff, faculty and students were all excited to come back in January and see the brand new system in place," he says.

According to Wisher, the new infrastructure delivers other benefits as well. "For instance, if a bus is running late and there's inclement weather, we can now have our kids wait in this new controlled area and keep everyone safe in the building," he says. "And during cold and flu season, this new holding area helps us fast-track students in and out of the building rather than through the office, where they can potentially expose others to illness."

"I was very happy with the way this job turned out," Lantz says. "In the case of most school shootings, the point of entry for the shooter is the main entrance. The project that Magnolia Middle School undertook to better secure their entryway and help prevent an incident from occurring is a great starting point. We're proud of our ability to support their objective and hopefully save lives."

Johnson couldn't agree more. "This is a job we've shared with many other schools when they ask about our door and hardware/access control capabilities," he says. "Schools derive so much security from controlling the flow of traffic within the facility through the combination of door frames, hardware and physical security/access control with card readers onsite."

"School security is more pressing than ever today, and things like secured vestibules, double-sided locks, panic buttons and other measures have been a big focus for us," Pennewell says. "The ability to provide school communities with peace of mind knowing that

### DID YOU KNOW?

- *Security.org* confirms there were nearly 1,000 gun-related incidents at K-12 schools nationwide between 1999 and 2022.
- Non-profit organization Everytown for Gun Safety confirms so far this year, there have already been more than 30 incidents of gunfire on U.S. school grounds that have resulted in eight deaths and nearly two dozen injuries.
- According to a recent study by the Pew Research Center, 57% of teens surveyed reported being either "worried" or "very worried" about the possibility of a shooting happening at their school.

anyone who enters the building has been vetted represents an invaluable layer of protection that every school wants for their students and faculty."

"We thank the Cook & Boardman team for their excellent, high-quality work and for making this one of the most seamless projects we've undertaken at our school," Wisher says.

"All schools need to place importance on safety and security because you just never know," Wisher concludes. "Thanks to Cook & Boardman, we're more aware of safety-related protocols, feel more secure that our physical space is better prepared and can now refocus on our main goal of educating our students." +

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