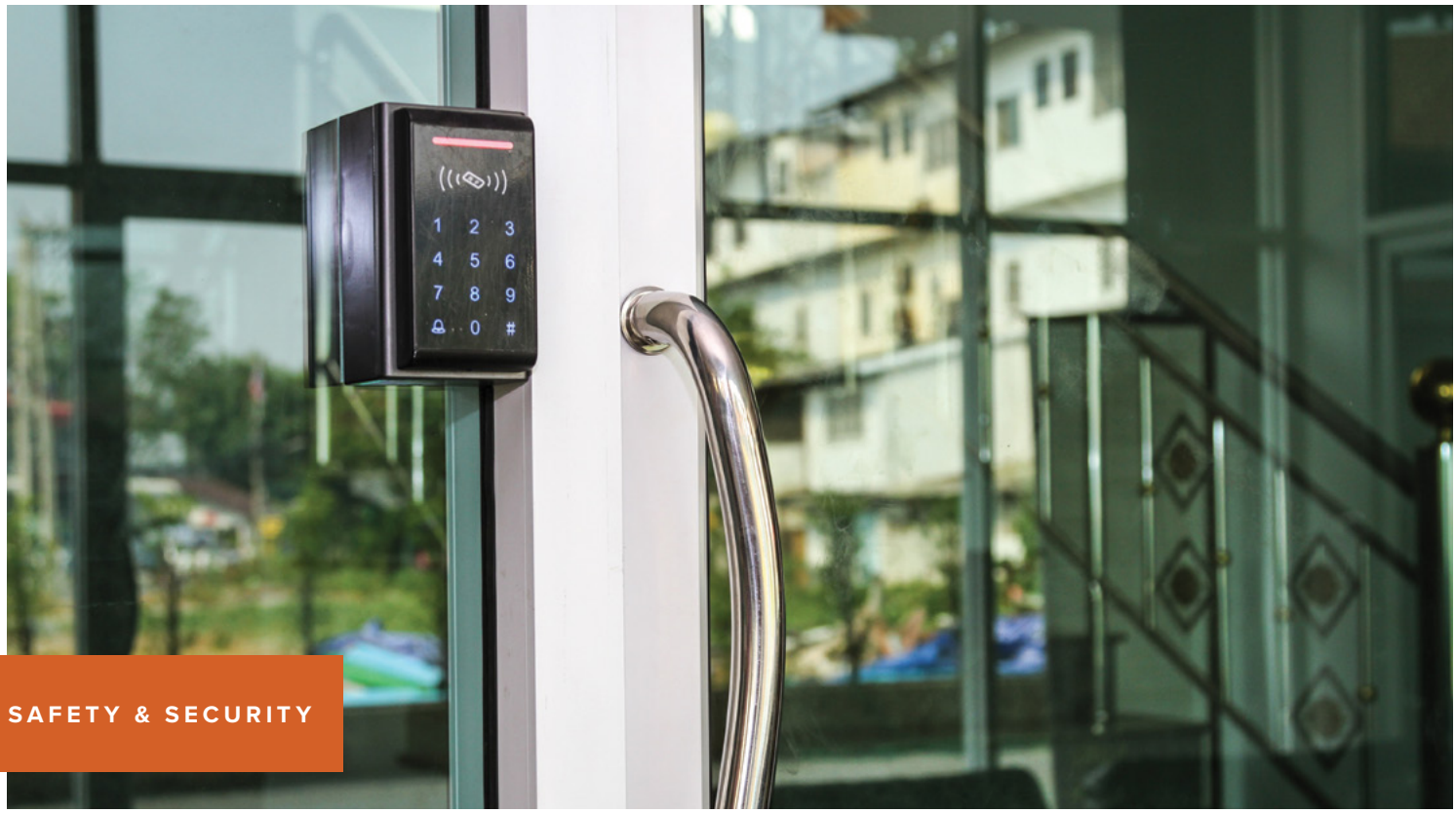


SAFETY & SECURITY

Securing School Campuses: A Modern Approach to Access Control

BY MIKE BUSBY

In education today, ensuring the safety of students, faculty, and staff has never been more important. As campuses grow and become more complex, schools are turning to comprehensive access-control systems to secure facilities, manage entry points, and provide peace of mind for everyone.

A well-designed access control system goes beyond simply locking doors. It forms the foundation of a school's overall security strategy, offering tools to manage who has access to what, when, and under which conditions. What follows is an in-depth look at the purpose, components, challenges, and best practices of implementing a comprehensive access-control system across school campuses with an emphasis on smart planning, scalable solutions, and long-term support.

The Growing Need for Campus Access Control

Schools are no longer the open environments they once were. Increased concerns around intrusions, emergencies, and unauthorized access have placed significant pressure on school administrators to take proactive security measures. While cameras, fences, and resource officers all contribute to a safer environment, electronic access control provides the agility and precision needed in today's world.

Access-control systems help schools:

- Prevent unauthorized entry
- Manage after-hours and scheduled access
- Log entry activity for investigations or audits
- Enable building lockdowns during emergencies
- Streamline access credentials for students, staff, and visitors
- Support centralized control across multiple buildings

For large or multi-site campuses, centralized management and device integration is key to effectiveness.

Key Components of a Campus-Wide System

A reliable access-control system combines hardware, software, and infrastructure into a seamless whole. The following components make up a modern access control strategy for educational facilities:

1. Controlled entry points. Electronic locks, keypads, card readers, and intercoms serve as the gatekeepers to each building. These devices can be installed at main entrances, staff-only doors, or restricted areas like data rooms or science labs.

For example, the Viking K-1770-IP combines a keypad and proximity card reader with VoIP communication, ideal for controlled access at faculty entrances or dormitories. For visitor entry, the E-32-IP stainless steel intercom offers a vandal-resistant option that provides reliable voice communication over SIP networks.

2. Credential management. Staff and student credentials come in various forms: PINs, proximity cards, or mobile credentials. The management system should allow administrators to add or remove users quickly and assign different levels of access by time or location. Compact card readers can be installed at internal doors or gates to control access by ID badge.

3. Intercom and communication systems. Entry intercoms, especially at main doors, allow staff to screen visitors and remotely unlock doors when appropriate. VoIP intercoms that integrate with existing phone systems offer cost-effective installation and centralized control.

4. Relay controllers and door interfaces. Relay modules activate electric strikes or maglocks when access is granted. For remote management, IP-based controllers like the Viking RC-4A allow doors to be triggered across the network, with scheduling and override capabilities.

5. Centralized software tools. Managing dozens, or even hundreds, of devices across a campus requires intuitive software. Systems that support remote access, batch programming, and firmware updates help IT departments operate more efficiently.

The Viking Device Manager software simplifies the setup and maintenance of IP-based Viking equipment by allowing users to manage devices in bulk from a single dashboard.

Designing for Education

Every school has its own set of requirements, depending on layout, size, population, and existing infrastructure. A successful access control strategy should include the number and type of access points into the campus; who needs access, and when; integration with existing phones or security systems; plans for expansion or future construction; and emergency response protocols. A campus may begin with securing only a few primary entrances and expand gradually to internal doors, portable classrooms, or other facilities.

Every campus also faces its own set of challenges when investing in or upgrading an access-control system, but those hurdles shouldn't prevent campuses from ensuring the safety of their communities. For instance, there may be budget limitations: many school security upgrades rely on grants or phased funding. However, modular systems that don't require licensing fees or mandatory subscriptions can reduce long-term costs.

Buy-in from all user groups—from administrators to custodians—is crucial. Including stakeholders in planning helps ensure the system is practical and effective across the board. For everyone's sake, systems must be secure but not burdensome. Keypads with backlit buttons, voice-guided intercoms, and clearly labeled entry points improve ease of use while maintaining protection.

Phased Implementation Strategy

Schools often implement access control systems

continued....

in stages to align with budget and logistics. A typical phased rollout might look like this:

- **Phase 1:** Secure main entrances with intercoms and card readers.
- **Phase 2:** Extend access control to faculty entrances, storage areas, and server rooms.
- **Phase 3:** Integrate paging and notification systems for emergency alerts.
- **Phase 4:** Centralize credential management and reporting across buildings.
- **Phase 5:** Include exterior facilities like field houses, garages, or temporary classrooms.

Each phase should maintain compatibility with the previous one, allowing the system to scale smoothly.

Integrating Emergency Communication

An effective access-control system is closely tied to emergency communication. Paging systems, panic buttons, and two-way communication are essential during drills, lockdowns, or actual emergencies.

For instance, SIP-compatible paging adapters like the Viking PA-IP can connect to existing speaker systems and broadcast alerts from any phone on the network. Devices like the 40TB-IP allow two-way audio in hallways or classrooms, doubling as both a paging speaker and intercom.

Maintenance and Support

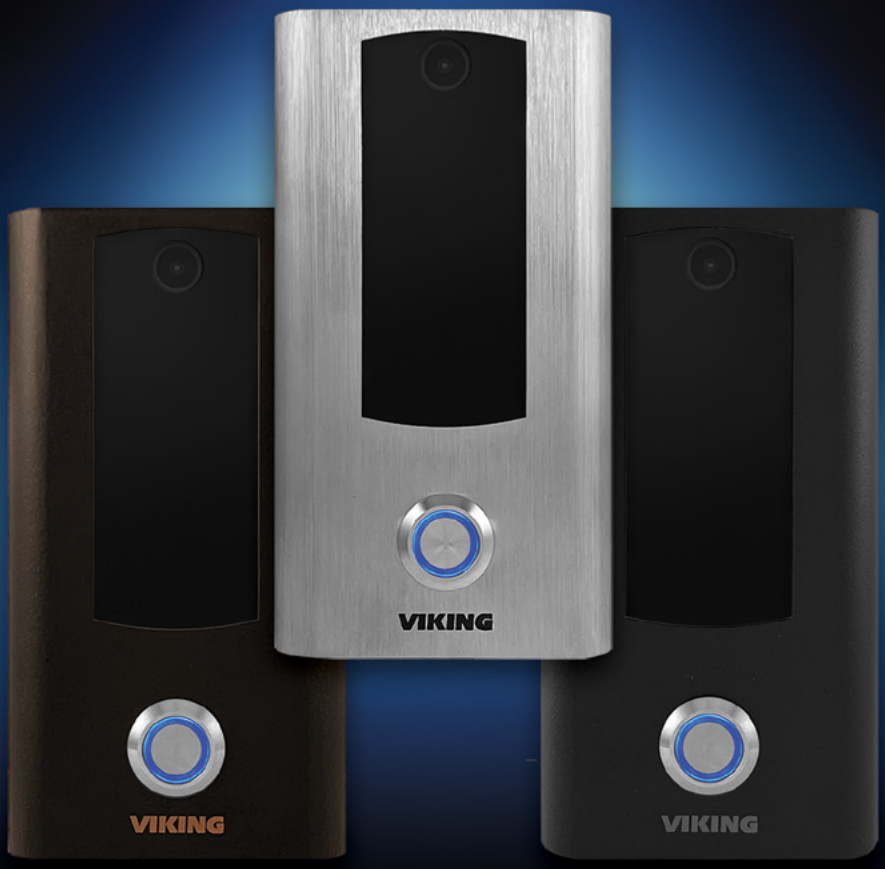
Access control isn't a "set it and forget it" system. Schools need a plan for credential management and periodic audits; firmware and software updates; routine equipment checks; and staff training and refreshers. Working with a provider that offers free lifetime support can reduce long-term maintenance burdens and provide peace of mind.

Meanwhile, access control continues to evolve alongside technology. Future enhancements may include mobile credentials and touchless access; biometric verification at high-security doors; cloud-based access management; and AI-driven alerts and data analysis. Schools that prioritize compatibility and scalability now will be better positioned to adopt these innovations as they become mainstream.

A thoughtfully designed access-control system is one of the most effective ways to enhance safety and security on school campuses. With modern technologies, clear planning, and reliable components, schools can gain greater control over who enters their buildings without disrupting day-to-day learning.

ABOUT THE AUTHOR: Mike Busby is the Sales and Marketing Manager at Viking Electronics. With a background in manufacturing and product development, he supports customers, drives marketing strategy, and represents Viking at industry events nationwide, helping shape solutions in security and communication.

THE **NEXT LEVEL** OF **ACCESS CONTROL**



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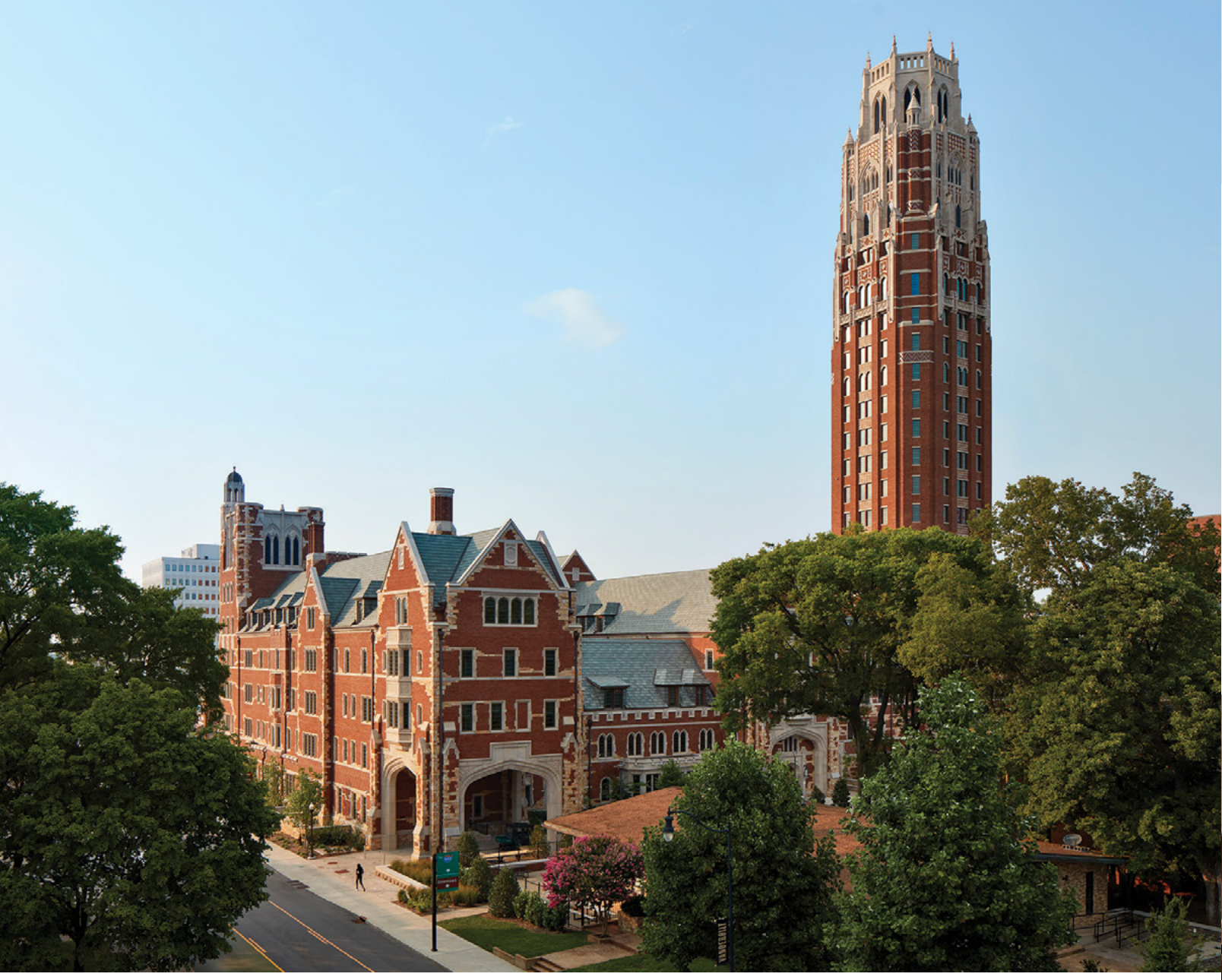

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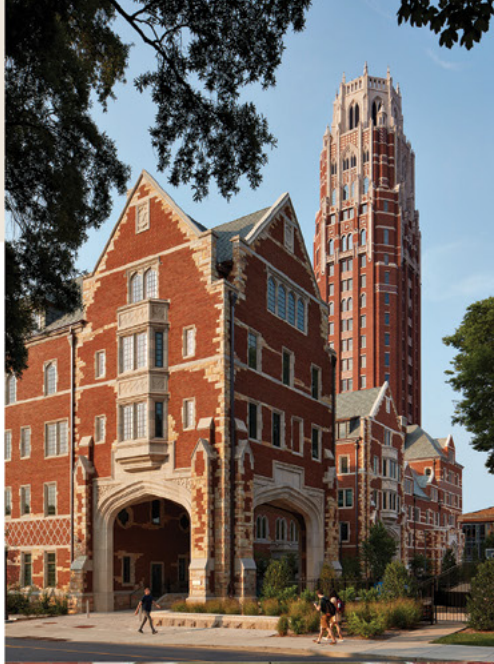
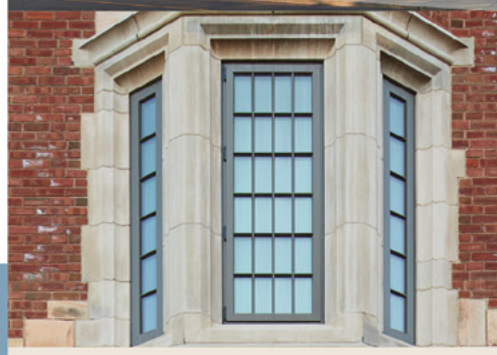
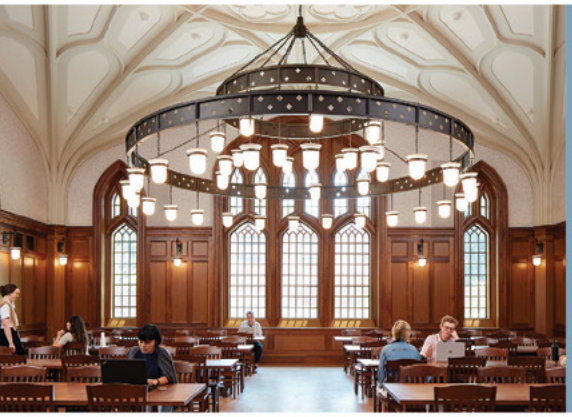




At a major university residential expansion project in the Southeast, collaboration and cooperation among the construction management firm, window and door manufacturer, and installation contractor resulted in a several stunning projects recreating the look of the surrounding century-old buildings. All totaled, Hope's Windows, Inc., supplied over 1,200 unique windows made from custom hot-rolled steel profiles and nearly 100 high traffic and fire-rated door assemblies made from 10 and 12 gauge cold-rolled steel.

According to Sean Farrell, senior project manager at Layton Construction, establishing collaborative relationships is key to successful construction projects. One of the best examples of this maxim is a multi-phase university project for which Layton Construction is serving as construction manager. Layton, part of the STO Building Group, is a nationally-ranked commercial contractor with ten offices around the United States. The firm specializes in healthcare, industrial, warehousing, and higher education projects. As construction manager, Layton hires the sub-contractors and manages and oversees the project as part of a team.



> "Since we were building windows and doors to make a brand new college, we needed a company with the methodology to produce the product like it was done 100 years ago."
>
> *— Sean Farrell, Sr Project Manager*
> *Layton Construction*

Hope's Brian Whalen, Vice President of Sales, acknowledges that the project was a real test of Hope's capabilities. He is especially proud that they Hope's was able to expedite the schedule even in the face of design changes and in the midst of the Covid-19 pandemic. The shop drawing approval process – including preparation of blueprints of windows and doors with all setting conditions, sizes, customized designs, and required testing – took longer than normal. Changes were made along the way that might have pushed back the delivery schedules for some, but Hope's made adjustments during the production process to deliver all materials on time. Whalen gave a nod to Joey Riggan and the team at Alexander Metals, the frame and glass installer team, saying the overall project went extremely smoothly once the frames were on site.

Says Whalen, "It was a fantastic collaboration among all the parties. Hope's worked closely as the manufacturer to fulfill the architect's design vision, and then the installer worked closely with us to make sure everything was installed executed properly."

PHOTOS: Steve Hall, © Hall + Merrick Photographers

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Hope's® Windows, Inc., is a business based on 100 percent customized work design and manufacturing, Hope's provides a specialized skillset to assist clients in design and production of unique window and door assemblies. Meeting the expectations of Layton Construction in combination with the aesthetic vision of the client and architect was definitely a challenge. The overall experience was a testament to the quality standards of the university and an honor to be a part of. In business since 1912, Hope's had the global experience to make it happen.

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