



Case Study

Rush University Medical Center

Landscape

Rush University Medical Center, a 664-bed hospital, wanted to increase security and simplify its key system, starting with its new 14-story, 375-bed Tower hospital building. The project was part of a long-term, comprehensive effort to enhance security at all Rush facilities, which also included Rush University, Rush Oak Park Hospital and Rush Health.

Desired outcome

As part of its master plan, Rush wanted an access control system that could expand to meet its needs over the next ten years, not only for the Tower but also across its other 25 buildings. Additionally, it needed to regain control of and simplify its key system. Both required solutions that were flexible, dependable and straightforward so they could be handled by the health network's technical engineering team.

Solutions

Wireless Access Control

The health network's interest in wireless electronic security began several years prior with a central kitchen project that required a large amount of wiring to install the system. Since then, wireless has been their first choice. It provides savings in both cost and time—and offers the most convenience.

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AD-Series locks were added to openings that separate public areas from restricted areas, such as private offices or cross corridors between buildings.

The AD-400 locks provide online, real-time access control and are uniquely designed with easily changeable reader modules—ideal for future upgrades since they don't require changing the entire lock. All required hardware components are combined into a single integrated design that incorporates the electrified lock, credential reader, request-to-exit switch, door position switch, tamper guard and more.

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Mike Craig, Medical Center Engineering Assistant Director, says he has them in about half of the complex. "Any time we have a new capital project, whether they're doing an entire floor or suite, we put a wireless reader on areas where we have issues with access and key control." He says departments within the organization also request the electronic locks for the convenience of not having to use keys and to have better control over security.

Key Management System

In addition to improving its electronic access control, Rush wanted to upgrade its key system. Mechanical keys were used in many applications throughout the hospital for overrides on the electronic locks and in areas where the user numbers were small and not often changed. According to Craig, the previous system had been expanded to more than 8,000 cylinders and included more than a half dozen different keyways—making it increasingly difficult to know who had the keys and masters.

To regain key control and simplify management of an ever-expanding system, the health network worked with Allegion to develop a new plan based on the Schlage Everest 29™ patent-protected keyway. The keyway's new, patent-protected undercut design offers protection through 2029. It delivers the highest level of mechanical security available because it cannot be duplicated without authorization.

Allegion key consultants helped Rush develop a system that will be expandable for at least the next ten years—all without creating another master. To keep track of the new keys, the hospital uses a key management software system that manages key distribution. Over a two-year process, Rush is converting its buildings with mechanical access to the Everest 29.

Additional hardware solutions

Other Allegion hardware solutions implemented at Rush include:

- LCN® Senior Swing automatic door operators and 4041 door closers
- Von Duprin® 98/99 series exit devices
- Glynn-Johnson® hospital push/pull locks and hold-opens
- Ives® hinges



Glynn-Johnson® hospital push/pull locks and hold-opens are used on patient rooms in the new Tower hospital building.

Result

The Tower project provided an opportunity to achieve greater savings by incorporating wireless security on a larger scale.

“Once we install a panel to interface with our security system, we can handle up to 16 locks on that single panel without installing conduit and pulling wires,” says Craig. “We save the cost of these materials and the time it takes to put them in place.”

Additionally, because the system is modular in design, it provides flexibility for future upgrades and expansions.

All of these solutions have become part of the product specification guide used to unify door and security hardware throughout all Rush facilities. Products included in the guide are chosen for expected life, service needs, parts availability, cost and more.

“Standardizing also makes it easier for the hospital’s staff to stock parts and to perform maintenance when needed,” says Craig.



Rush is a not-for-profit healthcare, education and research enterprise based in Chicago that includes Rush University Medical Center, Rush University, Rush Oak Park Hospital and Rush Health. The Medical Center encompasses 25 buildings and has a 664-bed hospital that serves adults and children. The new Tower building is the largest new construction healthcare project in the world to earn LEED (Leadership in Energy and Environmental Design) Gold certification.

About Allegion

Allegion (NYSE: ALLE) creates peace of mind by pioneering safety and security. As a \$2 billion provider of security solutions for homes and businesses, Allegion employs more than 8,000 people and sells products in more than 120 countries across the world. Allegion comprises more than 25 global brands, including strategic brands CISA®, Interflex®, LCN®, Schlage® and Von Duprin®. For more, visit www.allegion.com.



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