

# VON DUPRIN®

## Case Study

# Western Kentucky University

## Von Duprin® Concealed Vertical Cable System

### Project scope

This fall, Western Kentucky University will once again be bustling with students. The school enrolls nearly 20,000 graduates and undergraduates, with a majority attending classes on its main hilltop campus in Bowling Green, KY. As imagined, the maintenance team has their hands full. Universities of this size see high traffic and high abuse at most openings throughout the campus, especially at gathering areas like libraries, student cafeterias and sporting arenas.

### Challenge

John Theil, the university's Allegion consultant, visited the campus in 2017 to discuss potential locking solutions for an athletic building. "We were walking the E. A. Diddle Arena and I saw they had a concealed vertical rod on an opening, and they mentioned they were having a problem there."

"The top would drop and not secure," says Chris Bartley, carpenter at Western Kentucky University. "When it would secure, it would stick and not open."

Malfunctioning concealed vertical rods are a common issue across campuses, and adjustments and repairs can often be difficult. Allegion research found that, on average, 60 percent of concealed rods will require service annually, which can take roughly three hours and two people. In addition to taking up a great deal of a maintenance



team's time, they can also create safety and security risks on campus. If the rods aren't performing correctly, they can keep the door from latching, like the case in Diddle Arena. If not corrected, unlatched doors can cause security issues.

"In most cases, maintenance crews aren't fans of adjusting rods," says Theil. "When they work, they're great. But when they don't, they're hard to adjust and a thorn in their side."

### Solution

Knowing the maintenance headaches that rods can cause overtime, Theil returned to the campus with a solution: Von Duprin® Concealed Vertical Cables (CVC). This revolutionary system replaces traditional rods with proven cable technology that provides greater security for the opening, with the streamlined aesthetics that architects and customers prefer. With its unique cable system, the CVC eliminates the challenges of traditional rods and enables an opening to perform in less than ideal conditions. The flexibility and slack in the cable system allows the device to function properly even if the top latch, device centerline and bottom latch are not vertically aligned. Therefore, the concealed vertical system is not as sensitive to changing door conditions and requires significantly less maintenance than a traditional rod over its lifetime.

"This particular installation has been wonderful since it's been put in," says Bartley. "The guys knew what they were doing and showed us how to put them in."

Theil knew that this would not only solve the problem at Diddle Arena, but it would also introduce the university's team to a solution for similar issues in the future. Allegion assisted with the installation so that Chris and his team could learn how to do it themselves in the future, eliminating the need for a third-party.

### Results

The Von Duprin Concealed Vertical Cables have been installed for more than a year at Western Kentucky University, and there haven't been any issues with the solution. Mark Updegraff, Western Kentucky University's maintenance superintendent, says, "Everything is working great on our end. We're satisfied and like this for a fix versus trying to replace internal rods."

Both Updegraff and Bartley report that the CVC has successfully addressed the issue. They say the school will likely implement a similar solution when issues arise with other internal rods on campus.

## About Allegion

Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion produces a range of solutions for homes, businesses, schools and other institutions. Allegion is a \$2 billion company, with products sold in almost 130 countries. For more, visit [www.allegion.com](http://www.allegion.com).

KRYPTONITE ■ LCN ■  ■ STEELCRAFT ■ VON DUPRIN



© 2018 Allegion  
012440, Rev. 09/18  
[www.allegion.com/us](http://www.allegion.com/us)