Plano Independent School District has over 100 schools whose buildings are overseen by just three locksmiths. Among them is Bruce Arnold, who has been maintaining the locks within the school district for the last 23 years. In that time, he’s seen an incredible amount of change to the facilities, from the installation of electronic access control systems to the construction of security traps. But perhaps the most welcome change has been the transition from concealed vertical rod exit devices to concealed vertical cables.

“As three of us locksmiths go, we don’t like any concealed vertical devices,” Arnold says candidly. “But when they came out with the concealed vertical cables, and I started installing them, and the other guys started installing them, those we kind of fell in love with.”

Arnold estimates that there are roughly 250 concealed exit devices installed on doors throughout the school district. Most are on cross-corridor fire-rated openings that are hooked up to the fire alarm system. Historically, it has taken two people a little less than an hour to install and properly adjust concealed vertical rod exit devices. Because the process is difficult and requires specialized training, the installation process was often contracted out, which created an additional cost for the school district. However, the task of maintaining the devices fell to Arnold and his coworkers.

“When we get work orders for concealed vertical rod, we just hang our head,” he says. “We hate them.”
Part of the frustration stems from the fact that in order to service the bottom portion of the rod, the door has to be removed from the frame. Performing maintenance on a single door can quickly escalate into a two-person job.

“When they start breaking down, you can’t keep them fixed as fast as they break,” he complains. “We really hate them.”

**Solution:**
Von Duprin Concealed Vertical Cable System

In 2014, the district began replacing the concealed vertical rods with Von Duprin's Concealed Vertical Cable System. “Any time we have a rod go bad, we put a cable in,” says Arnold.

This revolutionary system replaces traditional rods with proven cable technology that is easy to install and maintain. The CVC system 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 it 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.

The first few sets of CVC exit devices were installed on the front doors of the schools, which receive the most traffic and therefore the most abuse. “We’ve had those on there for two years and we’ve never been back for anything on them,” says Arnold. “Maintenance is almost nil.”

If maintenance is needed, however, the CVC system allows for adjustments to be made to the bottom latch while the door is hanging. The latch height is easily adjustable through the side of the door with a spring pin. This eliminates the need for two people to spend valuable time removing and rehanging a door. The amount of time spent on maintenance is also decreased thanks to the system's field sizeable, stainless steel cables coated with Teflon® liner to prevent corrosion and increase system strength.

“There’s really no maintenance on them,” says Arnold. “These work just perfect, and we put them to the test.”
Results:
Of the 250 concealed exit devices installed throughout the Plano Independent School District, Arnold estimates that roughly 25% are CVC. However, having seen the level of superior performance and ease of installation, he plans to eventually convert all of the district's exit devices to CVC - a fact he made clear to the district school board. “We did a little more than recommend,” he says. “We told them that’s what we’re using.”

By switching to CVC devices, the school district no longer has to spend money contracting out the installation of their exit devices. The amount of time spent on maintenance and repairs has also been decreasing as Arnold and his team continue to transition to the CVC style of exit device.

“The less work I can create for myself, the happier I am with a product,” he says. “I just love them to death.”