

FIRE ALARM RETROFIT PROTECTS HISTORIC HOTEL'S PRESTIGE

BACKGROUND

The historic Radnor Hotel, located in the Philadelphia suburbs, in the heart of prestigious “Main Line” is notorious for hosting famous guests. Golf legend Arnold Palmer, former New York City Mayor Rudy Giuliani, former President George W. Bush and President Barack Obama; when he was running for office in October 2008.

However, it's not only a hotel for presidents, sports superstars and celebrities. The multi-use establishment accommodates many others as well. With its 170 guest rooms, restaurant and banquet/meeting facilities (107,500 square feet), it is a renowned wedding venue, and prime location for banquets, conferences, luncheons and many other gatherings. With an additional 30,400 square feet of office and retail space, people can get away at the spa or spend the afternoon shopping for fine jewelry. In fact, the Radnor Hotel is the only full-service hotel in Philadelphia's Main Line Suburbs. It “provides comfort and charm for the business traveler.” That comfort, however, and the security of all its occupants, is reliant upon a cutting edge fire alarm system that is second-to-none.

CHALLENGE

Hotel personnel decided they needed to replace and update their fire alarm system. Eric Burroughs from Phoenix Security Systems, Inc., The Radnor Hotel's fire alarm service provider, explained that obsolete parts and an outdated fire alarm control panel made operation, service and repair extremely difficult.



“Every single trouble and alarm would have to be individually acknowledged. And in the event of an alarm—real or false—reset didn't always work,” Burroughs explained. “It was at the point where I'd have to get creative.”

The Hotel was also working on a plan to build a new wing with more than 40 guest rooms and a fitness center—all of which required fire protection. The hotel also needed the new system to be easily expandable and capable of integrating carbon monoxide (CO) detection.

One of the more challenging aspects of the project involved installation of the new system while the hotel remained in full operation. Meaning the old fire alarm had to remain functional to prevent any lapse in detection capability, while the new fire alarm was being installed.

SOLUTION

Phoenix did not hesitate to take this obstacle head on and replaced the old system with two Farenhyt IFP-2000 addressable fire alarm control panels from Silent Knight. Nearly 500 detectors and other field devices were needed to cover the entire facility. Photoelectric smoke detectors with sounder bases, for local notification, were installed in each of the hotel's guest rooms. The jumpstart programming feature of Silent Knight's system helped Burroughs bring 100 devices onto the new system per day, which could have taken hours to program individually.

"The IFP-2000 is the cream of the crop. It's easy to service and install – just a really solid platform," Burroughs said. "Whether the job requires 10 smokes or 500, it's the same process, same fundamentals from job to job, which is why we use Silent Knight. We can do whatever the code requires with it."

The addition of CO detectors, throughout key areas of the facility, could have been an expensive and time-consuming proposition. However, Phoenix used IDP-FIRE-CO detectors, which are made to detect both fire and CO. Accompanying this with local sounder bases made this a smart combination.

During installation, Phoenix discovered detectors and other fire alarm field devices in the hotel guest rooms were supported with undersized wire. So, mid-install they came up with a solution to creatively program the panel, which allowed them to move forward with the installation and correct the issue after the install was complete.

To be code compliant and adhere to the Americans with Disabilities Act (ADA), the new system included new sounder bases, notification appliances, and strobe synchronization. To power these devices, Silent Knight 5496 power supplies and RPS-1000 units were used, which allowed Phoenix to place them in the most effective areas of the system. This flexibility helped to prevent voltage drop issues and costly notification appliance circuit wire runs back to the main control panel.

RESULTS

Craig Miller and Carmen Giangliulio of S. W. Bajus, Ltd., The Radnor Hotel's real estate development and Management Company reported that the installation went smoothly without any downtime.

"We are very pleased with the work that was performed," said Miller and Giangliulio. "The system is user-friendly and intuitive for end users."

Phoenix successfully kept the hotel fully covered throughout the entire installation, keeping the old system alive while bringing the new system online. The hurdle of adding CO detection was also easily overcome.

"It's becoming more and more mandated to integrate CO detection, and becoming easier to implement," Burroughs said. "With other systems we weren't able to add carbon monoxide, but Silent Knight makes it easy to integrate, so it's a no-brainer. To have that combo is huge and it's well worth it to have that safety assurance. You can't play around with something like that."

The Radnor hotel can now confidently operate knowing that all of their fire alarm needs are up-to-date and working efficiently for years to come.