RAEL Automatic Sprinkler Company

Iconic Manhattan Skyscraper Streamlines Fire Protection Inspection and Repair

Fire protection is a tall order at one of lower Manhattan’s most iconic office buildings, requiring regular inspection and maintenance of its massive, sprawling industrial sprinkler system. RAEL Automatic Sprinkler Company worked with HID Global and local integrator Automated Decision to digitize, streamline and track the entire sprinkler inspection and repair process. The result: faster, more efficient inspections and repairs, improved first-time fix rates and fewer repeat visits. Perhaps most important, property management can now more accurately track and confirm all physical on-site inspections and repairs, ensuring the sprinkler system complies with all New York Fire Department’s fire and safety regulations.

Challenges

RAEL Automatic Sprinkler Company, an 85-year-old full-service fire protection provider, sought to streamline and track their inspection, maintenance and repair process of the extensive industrial sprinkler system of a well-known client, an iconic skyscraper in Lower Manhattan. Its goals included digitizing inspection records to improve traceability, automating maintenance schedules and providing proof of compliance with federal and local fire and safety regulations.

The company’s existing inspection process, which employed laptop-equipped inspectors, was only partially digitized. However, it was a time-consuming and inefficient way to provide “proof of presence,” which confirms that an inspector or service technician was physically at the site when they claimed to be and reported or addressed all needed sprinkler repairs. “Proof of presence was critical to improve upon,” said David Israel, President, RAEL Automatic Sprinkler Company, “as property managers are now expected to deliver a much higher level of compliance reporting.”

RAEL approached Automated Decision to help them deploy an innovative work order management solution and automate its extensive sprinkler system inspection and service process.

Solution

Automated Decision partnered with HID Global to deliver a comprehensive solution that meets all of RAEL’s goals. It consists of HID Trusted Tag® Services, which includes an HID Cloud Authentication Service and HID’s Trusted HF/NFC Seal eTamper tags, that are integrated tightly with Automated Decision’s work order management solution and a mobile inspection app.
The iconic New York City building has deployed HID’s NFC trusted, tamper-evident tags on every component of every wet and dry RAEL sprinkler requiring inspection. Each of the more than two thousand coin-shaped tags has a printed QR-code and logo, and the tags can be affixed to metal objects such as alarm and control valves. If an HID Seal eTamper Tag is removed, the electronic componentry deactivates and renders the tag unusable. This physical tamper-evident functionality proves each trusted tap transaction is valid on the specified equipment and at the exact location. As service technicians move throughout a building, they use their mobile device to tap on HID Trusted tags that are affixed to each sprinkler component.

Each HID tag generates a unique encrypted code appended to a URL that changes with each tap – a unique feature of HID Trusted Tag Services. With the help of HID’s Cloud Authentication Service, the CMMS Software from Automated Decision then identifies, authenticates and logs the inspected item, the user, the tap time and the date into the RAEL’s work order management system. Additionally, the solution verifies that the user’s credentials align with the qualifications needed to service the equipment. To protect privacy, the HID Cloud Service verifies only the cryptographic code of the tapped tag and passes this info securely to the CMMS software which keeps all the other business process related data in its own context.

Once the service technician is authenticated into the system, they gain instant mobile online access to the equipment’s service request history and maintenance records, specifications, diagrams, and photographs. A connection to troubleshooting guides, supportive videos and even a live expert to help troubleshoot equipment problems, is planned for phase 2 of the system.

Automated Decision’s integrated solution provides work order management, access to an equipment intelligence database for planning and managing maintenance schedules as well as a mobile app for service technicians in the field. Its user portal equips RAEL staff and RAEL clients with direct access to a building’s entire equipment inventory, inspection and service history, together with real-time compliance, trusted proof-of-presence, service and credential tracking and reporting. “Deploying the entire solution and training our technicians was pretty easy,” says Israel.

Benefits

- Incorporating HID Trusted Tag Services into Automated Decision’s work order management solution has provided peace of mind for RAEL and their property management clients by providing a more comprehensive solution to ensure that all fire and safety systems are inspected, maintained, functioning and compliant with regulations.
- RAEL has significantly improved their first-time fix rates, reduced the number of repeat visits and decreased equipment downtime.
- Technicians now complete 20% of all work orders 34% faster on average, thanks to being able to access the additional information the system provides.

“The HID Trusted Tag Service is a real competitive differentiator for us when we bid for projects now,” said Israel. “We plan to deploy it in other noteworthy NYC buildings and we’re looking at using it for other mission-critical types of equipment that we inspect and repair as well.”