# **The Knickerbocker Hotel,** *Times Square, New York City*



# At a Glance

This case study concerns The Knickerbocker Hotel, a historical New York City landmark located in the heart of Times Square. This historic property underwent a major renovation involving the complete replacement of the interior of the building. **The renovation and reconstitution as an operating hotel meant the dated fire protection system had to be replaced. The project managers chose Mircom intelligent fire solutions to outfit and protect the new hotel.** 

Safer • Smarter • More Livable Buildings





## **Project Background**

The Knickerbocker Hotel is a historic building located in the heart of Times Square at the southeast corner of Broadway and 42<sup>nd</sup> Street in New York City. It is situated mere blocks from Fifth Avenue, the Metropolitan Opera, Rockefeller Plaza, the Grand Central Terminal, and Central Park. Built in 1906 by John Jacob Astor IV, the building is representative of Beaux-Arts style with red-brick construction, terracotta details and a prominent mansard roof. The hotel was placed on the National Register of Historic Places in 1980 and was designated a New York City Landmark in 1988.

The Knickerbocker played host to the world's biggest names in entertainment, politics, culture and high society in the earliest years of the 20th century. Prominent longtime residents of the hotel included famous opera singer Enrico Caruso and American entertainer George M. Cohan. The hotel's legendary ballroom was known as "The 42nd Street Country Club." Sadly, a decline in business meant the hotel was eventually sold and used for various other purposes.

The building was returned to use as a hotel in 2012 after the property was purchased by FelCor Lodging Trust, a U.S. real estate investment company. FelCor completely gutted the interior of the building, leaving the historic façade intact. The hotel reopened on February 12, 2015, under its original name. Today, the Knickerbocker Hotel offers 300 rooms, including 27 Junior Suites and 4 Signature Suites. It also features a critically acclaimed restaurant, a coffee shop, and a rooftop lounge overlooking Times Square.

# Challenge

The location of the building in the heart of Times Square proved to be a unique challenge. Activity and construction in the building could disrupt the regular flow of traffic in New York City. Therefore, the team had to ensure that our work and installation had as little impact as possible on the city's streets.

It was also important that the presence of Mircom products did not detract from the posh décor of the hotel. For example, the command center for the FleX-Net system is located on the first floor of the hotel, in compliance with NYC Fire Department regulations. We were able to honor the client's request and position the box in an inconspicuous area so that its presence did not interfere with the beautiful hotel features.

## **The Mircom Solution**

The obstacles that Mircom faced during preconstruction and installation were overcome by persistence and attention to detail. The distributor and Mircom representative attended several project meetings with the hotel owners, their representatives, the building engineers, architects, and other tradesmen before beginning installation. In order to prevent any problems, the entire system was racked and tested in Mircom's Head Office prior to shipment. With over 1000 peripheral devices, this testing was a huge undertaking. However, it was necessary in order to ensure the functionality of the product.

The distributor and Mircom representative also visited the site frequently during the installation process to address any issues immediately.

# **Benefits and Value Added**

The command center in this installation utilized every component part that Mircom has to offer. If a fire marshal were to enter the building in an emergency, he or she would have immediate access to all necessary controls including emergency phones, fire switches, purge functions, shutdown functions and pressurization functions. The immediacy and availability of these features ensures that an emergency can be controlled as quickly and safely as possible.

Lastly, the client benefitted from using Mircom because they received our team's undivided attention. Mircom staff, in a collaborative effort with our distributor, ensured that the engineers, end users and building owners were comfortable with the project and its progress. All parties involved felt confident knowing that the local Mircom representative was visible on the project and, when not on site, was readily available by phone. The Mircom presence ensured that if any problems arose with the product, they could be dealt with directly by the manufacturer of those parts without dealing with a "middle-man." This provided added peace of mind.

## The System

Mircom's FleX-Net is designed for the most demanding fire protection and emergency communications applications. The installation of the FleX-Net system in the Knickerbocker Hotel is particularly notable because it utilized every feature and function of the system, including purge and stairwell pressurization functions. Pressurized staircases keep exit routes smoke free in the event of a fire, providing precious minutes to building occupants during an evacuation. The pressures specified to keep a stairwell pressure positive vary by code, but the universal goal is to restrain smoke while still allowing the opening of doors in the stairwell shaft.

The FleX-Net base panel consists of one intelligent loop controller capable of supporting 99 Analog sensors and 99 addressable Modules which can be wired in Class A (style 6 or 7) or Class B (Style 4). The system can be expanded through the use of additional analog Loop Controller Modules.

The system is equipped with a back-lit alphanumeric LCD display and utilizes a simple Menu system complete with directional keypad, common control switches and LEDs, Alarm Queue switches and two configurable input switches.

FleX-Net is a very flexible system which supports both internal and external annunciation modules.





## System Summary The Main Panel Command Centre

BB-5014, DOX-5014MR, CCH-5014, FX-2009-12NDS, QMT-5302N, QMP-5101N, QAZT-5302DS, ANC-5000, TNC-5000, FNC-2000, FDX-008, FDX-008KI, UDACT-300A, ALCN-792M, ALCN-792D RAXN-LCD

## **The Nodes**

BBX-FXMNSR, FX-2000MNS, DSPL-420, PS-2040, QMB-5000N, FNC-2000, ANC-5000, TNC-5000, ALCN-792M, ALCN-792D, QAA-5415-70, QAA-4CLA

### **Peripherals / Field Devices**

DNR, DST5, CO1224T, MIX-2251B, MIX-2251RB, RA100Z, MIX-5251B, B210LP, B200SR, MIX-M500M, MIX-M500DM, MIX-M500R, MR-101/C/R, MIX-M501M, MIX-M500FP, INX-10A, MS-710ADU, SPSR, SR, SPR, SSU00535-AX-FW, SSU00530

# Installation and Team

The successful completion of this contract was a result of cooperation between Mircom and Metro Electric, a Mircom Engineered Systems Distributor in New York City. The Metro team supplied twenty technicians for the two-year long project.

## Conclusion

The successful completion of this project in downtown New York, amidst the hustle and bustle of the city, is a unique achievement for Mircom. The installation of our state-of-the-art FleX-Net system complements the modernization and renovation of the interior of the Knickerbocker Hotel, while preserving the famed façade of the building. As a result, guests can enjoy twenty-first century security and amenities while continuing to enjoy the historical importance of the property. This concerted effort to retrofit the existing building not only satisfied our client, but also resulted in a safer, smarter, more livable environment for hotel guests.

## About Mircom

Founded in 1991, Mircom is a global designer, manufacturer and distributor of Intelligent Building Solutions. Reaching customers in over 100 countries worldwide, Mircom's portfolio includes: fire detection & alarm, communications & security, mass notification, nurse call, and building automation & smart technologies. Mircom's vision is to make buildings worldwide safer, smarter, and more livable.



#### mircom.com

25 Interchange Way Vaughan, Ontario L4K 5W3 Canada T: 888.647.2665 | F: 888.660.4113