

# Miraval Resort and Spa

Lenox, MA Construction Cost: \$6,000,000 Size: 30 Buildings

The original fire alarm systems within the complex were not compatible with each other due to differences in manufacturers. This caused the accuracy of the alerts to be insufficient. If a fire alarm was activated, the main panel would only report which building the fire is in, not a specific room. RAN addressed this by designing a wireless radio mesh fire alarm network. This system eliminates the hardwiring from the fire alarms to the original receiver and



replaces with radio transmitters which are received by a central receiver. The receiver is connected to a monitor where the guard has an interactive display of the complex where guards can see exactly what room the fire is located in. This not only creates a safer environment for guests of the resort, but it also saved our client millions of dollars because they did not need to replace all the existing fire alarms.

One of the buildings in this complex is over 250 years old and had no existing fire protection measures. This building was originally a privately owned mansion but was being converted to a hotel and banquet facility. RAN designed a wireless fire alarm system within the building to limit disruption to the original ornate ceilings. The wireless fire alarms eliminated the need for holes in the walls to hardwire the fire alarms together, effectively preserving the building's historical integrity. The fire alarms in this building also feed into the wireless radio mesh fire alarm network. The sprinkler system was also designed strategically to maintain the aesthetics of the building. The historical building has original ornate architectural designs, so keeping these features intact was an important aspect of the project.



### Albany Hilton Hotel Lodge St Albany, NY

RAN was enlisted to assist in the evaluation of claims made, examination of the site and evidence gathering, and in identifying and explaining any information related to the claims regarding the broken coupling in the sprinkler system at the Albany Hilton hotel. Provision of fire protection engineering consulting services included expert witness consulting in determining the failure of the system.

Homewood Suites Crossgates Albany, NY Construction Cost: \$323,000 Size: 121,300 sq-ft

RAN Fire Protection Engineering performed a code analysis in regard to the requirements of a fire alarm system notification in the 5-story Tru + Homewood Dual Brand Hotel at Crossgates Mall project. The code analysis was performed to address the code stipulated mandates of the building fire alarm system notification associated with guest room smoke detection. The code analysis



incorporated the requirements of the International Building Code, International Fire Code, 2016 & 2017 NYS Supplements, and NFPA 72. A code analysis was performed to investigate sleeping unit smoke detection and occupant notification requirements and RAN was further retained to provide fire protection services for the fire alarm layout in Crossgates Mall at Homewood Suites. This project included writing memos entailing the annunciation requirements.





### **Boston Wyndham**

Boston, MA Construction Cost: \$400,000 Size: 14 Stories

The Boston Wyndham needed to be both fully operational and fully protected by a fire alarm system throughout the construction phase of this project. RAN Fire Protection Engineering evaluated the existing sprinkler system and fire alarm system in order to make sure both systems would be fully operational throughout construction.

RAN also assessed the Boston Wyndham's ancillary systems that

were connected to the existing fire alarm system. After all assessments were completed, RAN designed and implemented a new fire alarm system. RAN's Engineers evaluated the new fire alarm and sprinkler systems in order to make certain that it met code requirements, and requirements for the City of Boston and the Boston Fire Department.

### **Sheraton Hotel**

Boston, MA Construction Cost: \$700,000 Size: 80,000 sq-ft

RAN Fire Protection Engineering has been the MEP & FP engineer for 80,000 square feet of hotel space renovations, along with a Starbucks and Landau's Jewelry Store in the hotel's lobby. The renovations were completed adding more comfortable hotel accommodations, amenities and retail shopping conveniences for the hotel's patrons and clients. The space improvements help in maintaining client retention and attracting new customers.





# **Marriott Hotel NYC**

New York, NY Construction Cost: \$200,000 Size: 38,000 sq-ft

RAN performed a code analysis on the existing fire protection systems of the New York City Marriott Hotel. This project required studying the existing life safety floor plans before renovation and recommended design alterations to the 2nd and 16th floors for the compliance with existing code requirements.

### Flannagan Hotel Malone, NY Construction Cost: \$240,000 Size: 6 Stories

In 1997 someone fell asleep while smoking on their bed in their hotel room and started an uncontrollable fire. The hotel lost everything and was left undisturbed until 2007. It was partially renovated and then got foreclosed in 2009.

The historical building needed renovations and RAN Fire Protection Engineering was retained to provide fire protection design drawings. The drawings included a sprinkler and piping location plan, manual-wet standpipe design, and a fire pump design.



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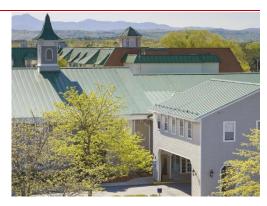
### **Oswego Holiday Inn Express**

Oswego, NY Construction Cost: \$109,000 Size: 54,000 sq-ft

The scope of this project was to design both the sprinkler and fire alarm systems for this hotel. The fire alarm devices had both automatic and manual initiation layouts and devices that monitors the sprinkler system. The fire protection drawings included sprinkler and standpipe system plans.

Sheraton Burlington Hotel Burlington, VT Construction Cost: \$150,000 Size: 309 Rooms

RAN Fire Protection Engineering provided consulting services for the smoke management systems at the Sheraton Burlington Hotel & Conference Center. RAN developed a detail code analysis which established criteria for obtaining a conditional certificate of occupancy. RAN developed the performance criteria for the existing smoke management system and outlined the parameters for the functional test. The work culminated in the granting of a full certification of occupancy.





#### Homewood Suites Albany, NY

RAN was retained to provide the design criteria information for SRI Fire Protection to develop working drawings. Additionally, RAN reviewed the working drawings to verify agreement with the design intent and stamp them in compliance with SED regulations for design delegation. RAN also reviewed all other submittals for compliance with design intent and ensured that all concerns were addressed and resolved.

# Best Western Plattsburgh Plattsburgh, NY

RAN was a part of a design/build team for the Best Western located in Plattsburgh, NY. RAN designed sprinkler system drawings and performed hydraulic calculations to ensure that the sprinklers had efficient water amounts. They then consulted with the build team to maximize installation success.





### Great Barrington Holiday Inn Great Barrington, MA Construction Cost: \$75,000 Size: 12,000 sq-ft

RAN was retained to complete fire protection engineered construction plans and consulting services for the third floor and attic additions, as well as renovations to the first and second floors. These services included fire alarm drawings, sprinkler and standpipe drawings, smoke and CO detection layout, and the

development of the Fire Protection Systems Narrative in accordance with the MA Building Code.