

Market Segment Commercial Buildings

*"We've been using the CF3000 system for many years, and we know it to be very reliable. Plus, Eaton provide outstanding customer support."* 

Trevor Bramham, Director, Bramham Electrical

# Eaton provides reliable, EN54-23 compliant fire safety for guests of The Ffolkes Hotel

Location King's Lynn, Norfolk, UK

### Segment

Commercial Buildings

#### Challenge

The historic Ffolkes Hotel in Kings Lynn, Norfolk underwent a complete refurbishment in 2017. As part of those renovations, the hotel needed to replace three existing fire alarm systems which were no longer compliant with current UK codes.

### Solution

Bramham Electrical provided a system based on Eaton's CF3000 intelligent addressable control panels and Eaton's new CASBB394 intelligent addressable Visual Alarm Device (VAD) sounder beacons. The latter meets the new EN54-23 requirements of VADs to compliment the audible alarm signal with a visual one. VADs may be required in areas where people are unable to hear the alarm, either due to a hearing disability or local conditions such as high noise levels or the need to wear ear defenders.

#### Results

The Ffolkes Hotel now have a proven, highly reliable fire alarm system which is compliant with the latest UK codes, is easy for the hotel staff to use and monitor, and provides the best possible fire security for guests with special needs.

## Background

The Ffolkes Hotel began serving guests over 300 years ago. Once a coaching inn, it has expanded over the years with additional buildings for guest rooms and private functions.

In 2017, the hotel decided to expand and renovate. They added six deluxe bedrooms on the first floor of the original inn while enhancing the building's period splendour. They restructured other guestrooms and upgraded the entire complex with modern conveniences and safety measures, including an outdoor children's playground.

# Challenges

Since the hotel was undergoing a complete renovation, its three existing fire alarm systems had to be removed. And because those systems were no longer compliant with current fire codes, they could not be re-installed. They had to be replaced. The Ffolkes Hotel needed a new fire alarm system which meets all current UK safety regulations, including the recently introduced EN54-23.

EN54-23 requires alarm beacons to flash slower and brighter than legacy beacons: slower to guard against triggering seizures in guests with epilepsy, brighter to alert guests with hearing problems who might be sleeping.

The Ffolkes' Hotel management wanted a single, unified system covering the entire hotel complex. They wanted it to be easy for the staff to operate, and they wanted the staff to be able to monitor the entire system from either the main building or the function pavilion. They also needed it to be operational in the function pavilion by mid-April, where a wedding would be taking place.

The hotel contacted two electrical contractors to bid for the design and installation of the new fire safety system. One of these was Trevor Bramham, Director, Bramham Electrical, who contacted his local Eaton sales representative.

"We've been using Eaton alarm systems for twenty-odd years," says Trevor Bramham. "We've always had a very good relationship with the Eaton reps and the engineers in Doncaster. So, when this project came up I went straight to Jason at Eaton, and we worked on the design together."

Trevor Bramham presented the proposed design at his first meeting with The Ffolkes' Hotel owners and they decided to proceed with it immediately.



## Solution

The system proposed by Bramham Electrical consisted of:

- Eaton CF3000 control panels
- Eaton CASBB394 intelligent addressable VAD sounder beacon bases
- Eaton CAP320 intelligent addressable optical smoke detector
- Eaton CAH330 intelligent addressable multi-mode heat detector

"We've been using the CF3000 system for many years, and we know it to be very reliable," says Trevor Bramham. "We've been down to the Eaton site in Doncaster several times. We've had training on several of the panels. We know the system, and we're very comfortable with it. Plus, Eaton provide outstanding customer support, so we always prefer to go with Eaton."

Eaton's new CASBB394 sounder beacon bases provide both an adjustable-volume audible warning and a bright, flashing LED beacon in the event of a fire emergency. They are fully compliant with EN54-23, as well as EN-54-3 and EN54-17, and can be fitted with Eaton CAP320, CAH330 or CAPT340 detectors or with cover plates. At the hotel, Bramham Electrical installed most of the sounder beacon bases with smoke or heat detectors.

The challenge of this project was to meet the deadline to ensure the safety system was successfully installed and working within the given deadline, all before the function that would be taking place in the pavilion.

The sounder beacons were a brand-new product at the time and just going into production. This would be the first application of the beacon in the UK. With an urgent deadline looming, Eaton accelerated production and sent the first fifty production beacons directly to Bramham Electrical.

In the meantime, Bramham Electrical wired the function pavilion, which was facilitated by the CF3000 addressable fire alarm control panel, a multi-loop system available in one-, two- or four-loop versions. Bramham Electrical installed one loop and one of the CE3000 panels in the function pavilion to ensure they were working ahead of the deadline. Later, Bramham Electrical ran another four loops through the other two buildings, installed a second control panel in the main building and networked the two panels together.

The CASBB394 sounder beacons also contributed to fast installation. In hotels and similar facilities - where guests include children and elderly people who might be overly disturbed by a very loud alarm -Bramham Electrical opts to install multiple sounders set at low volume within such public spaces. The volume level of the CASBB394 beacons is programmable, so they can be easily adapted to the size of the room in which they are installed

Bramham Electrical completed installation in August, having performed testing and commissioning of the system at each stage of the project. Eaton field engineers then performed their own test and commissioning procedures to ensure the system was working in accordance with Eaton design standards. Final sign-off of the project took place in September 2017.

## The result

Thanks to the flexibility of the Eaton CF3000 system and the support received from Eaton sales and engineering, Bramham Electrical was able to ensure the function pavilion was ready in time for the April wedding and complete the rest of the project for The Ffolkes' Hotel on schedule.

Now, the hotel has a reliable, state-of-the-art fire alarm system compliant with all UK safety codes. Staff members find the system very easy to understand and use, and they can control and monitor it from either the main building or the function pavilion.

Most importantly, the Eaton CF3000 fire alarm system provides the best possible safety for all The Ffolkes Hotel's guests, including children, the elderly, and those with special requirements, such as special hearing needs.





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