



Project Portfolio

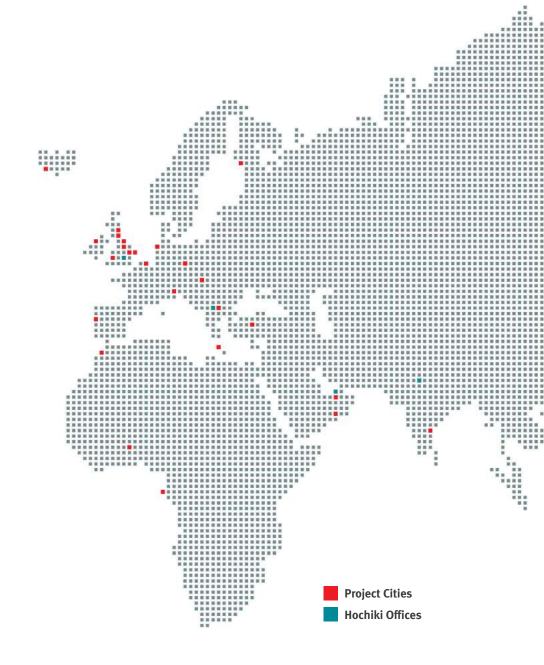
INTRODUCTION



World Class Leaders in Fire Detection Since 1918

Hochiki has a distinguished heritage of specialist technological expertise which has gained the group its international status as one of the world's leading manufacturers of commercial and industrial fire detection and emergency lighting solutions. Throughout its history, the Hochiki brand has become synonymous with high quality and high reliability, and as such, Hochiki devices have been installed in many prestigious projects throughout the world.

This portfolio contains a selection of installations that have been carried out using Hochiki products in Europe, Middle East, Africa and India.



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SCHOOL TOP OF THE FIRE SAFETY CLASS THANKS TO HOCHIKI EUROPE

English Martyrs School and Sixth Form College in Hartlepool, County Durham, is benefiting from a streamlined low maintenance and an innovative high-performance fire alarm system, provided by Hochiki Europe. The school is one of the largest in Hartlepool, with a population of 1,637 students aged 11 to 18. Founded in 1973, it comprises a number of outbuildings of varying sizes, designs and ages, all clustered around the original structure.

With such a complex site layout, the ageing closed protocol fire safety system was becoming increasingly expensive for the school to maintain, as it needed replacement components that could only be sourced from a single supplier. The school demanded an innovative solution to safeguard the well-being of students while streamlining maintenance. All this had

to be achieved within a tight time-frame of five weeks during the school holidays to minimise disruption to classes – a target that even its maintenance team didn't think was feasible.

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With so many people using the buildings every day, we were finding it more and more of a challenge to keep the fire safety technology in top condition without disrupting classes, explained Mick Dempsey, Building Manager at English Martyrs School. So it became crucial to find a solution with minimal aftercare requirements.

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Having a well-established working relationship with Hochiki Europe, David Hynes, project manager at the contractors leading the installation, Tees Fire Systems Ltd. (TFS), felt that the manufacturer had the right life safety solutions for the project. The school was particularly keen to investigate solutions to reduce false alarms, caused by the frequent use of ovens, Bunsen burners and kilns in the home economics, science and craft classrooms.



To help meet these objectives, it was decided that the school would benefit from the use of ACC-EN multi-sensors from Hochiki Europe. Installed in the rooms most at risk from alerts caused by class work, these detectors could be programmed to detect just heat by day and heat and smoke by night, ensuring optimum safety for students, while eliminating the issue of false alarms.



ACC-EN

Reflective Beam Smoke Detectors (FB-1) were installed in the ornate main halls and sports hall, due to the breadth of coverage they offered. With their advanced motorised technology, they are able to self-align to their opposing reflectors when necessary, reducing the need for intervention from maintenance teams. The beam detectors were installed directly onto the loop using Hochiki Europe's Powered Output Module (CHQ-POM) with just one point of cable termination. As a result, significantly less cabling was required compared with standard solutions which require further cabling to connect the fire and fault contacts to the rest of the safety system. Not only did this reduce the impact cable work on the aesthetics of the building interior, it also streamlined the installation for TFS.

All of the technologies installed in the school feature the manufacturer's innovative open Enhanced Systems Protocol (ESP), making them compatible with standard components from other suppliers, and cutting the cost of aftercare. The system has also been designed to automatically transmit fault or fire alerts to mobile phones, enabling the maintenance team to locate the source of any problem and rectify it before the alarm sounds, reducing aftercare time and further cutting the impact of false alarms.

David at TFS explained:

With so little wiring required, the cables were barely visible from the ground. This meant we were able to install the detectors on the ceilings of the hall and sports hall without having to hide it with casings, which significantly reduced the duration of the project.

Moreover, choosing a multi-looped system meant that we could fit the new equipment in different areas of the school in phases, which further cut installation time and allowed portions of the site to be used throughout the project, such as classrooms for summer school and the hall for exam results days.

As a result, we were able to complete the entire installation throughout the school in just five weeks, not just meeting the customer's ambitious deadline, but exceeding its expectations.

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Richard Wharram, then a Regional Sales Manager at Hochiki Europe, added:

English Martyrs School is a vast and busy site, with hundreds of students and visitors passing through the building every day. As such, it was crucial that its fire safety systems were not only reliable, but also as easy to maintain as possible, to keep disruption to the school day to a minimum.

The solutions we recommended offered the performance required with lower aftercare needs and a reduction in false alarms, saving the maintenance team time and money, while allowing students and staff to go about their day as safely as possible.

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Commenting on the project, Tony Cooney, then Technical Sales Director of TFS, said:

The team's organisation skills and hard work on this project were outstanding. We're proud to have been selected by Hochiki Europe as the only Hochiki Systems Partner in the North East of England.

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ECO-FRIENDLY OPEN ACADEMY GETS FLEXIBLE FIRE DETECTION LESSON

In September 2010, The Open Academy in Norwich moved into a new landmark building designed to be a vibrant, attractive and stimulating learning environment. Hochiki Europe's innovative fire detection products have been specified throughout the building, making the most of their unique features and advanced technology.

Out with the old

Formerly known as Heartsease High School, the current school structure was built in the 1960s and is a far cry from the modern, eye catching design of the new building. Sheppard Robson won a competition to design the new \$20m, 9,000m2 Open Academy building, which is the first of its kind in Norfolk. Norfolk County Council is responsible for overseeing the design and build of the Academy, and chose Kier Education as the preferred building developer and Kier Eastern as

the building contractor. The design draws upon the aeronautical history of the site as well as the engineering and environmental specialist status of the Academy, by conceiving the building as a series of mechanical components. The building's timber frame will save 3,000 tonnes of carbon dioxide, compared to traditional concrete or steel structures, and for every three trees used in the building, four will be planted. The curved plan of the main building was considered as a series of concentric bands. The outer perimeter houses the main teaching and learning accommodation to maximise the potential for natural daylight, views and ventilation; while the inner band provides the main circulation route, stacked as a series of open balconies that wrap around the central Open Forum.

Tender

Norfolk based fire detection installation specialist, T&P Fire, was invited to tender for, and was subsequently awarded, the contract to install the Open Academy's fire detection system by the project's M&E contractor, Dodd Group. The tender required the installation of a BS5389 compliant category L1 addressable fire detection system. An L1 system is designed for the protection of life and deploys automatic detectors throughout all areas of the building including roof spaces and voids – with the aim of providing the earliest possible warning.



Eddie Bean, at the time T&P Fire's Technical Manager commented:

Once we had planned and designed the installation we had no hesitation in suggesting the use of Hochiki's products in the Open Academy, due to their extensive range, proven reliability and excellent support service. We knew that Hochiki would act as a one-stop-shop for all of our fire detection product requirements.

Using open protocol products was a key consideration for T&P Fire. Eddie said:

We prefer to install open protocol systems and for the Academy it offers the advantage of being able to choose who it wants to work with in the future based on the service offered, rather than what it already has installed. As a company, T&P Fire has always felt that open protocol is the best option for our customers.

Many and varied

In total, the Open Academy is now home to 483 separate Hochiki devices and the addressable system uses an eight loop control panel at its centre.

A wide range of other Hochiki equipment was required, including photoelectric smoke sensors which reduce the likelihood of false alarms, multi-sensors in the science and food technology laboratories, analogue base sounders, multi-heat sensors, loop powered sounders and call points.

The tender also specified that the fire alarm sounders should incorporate a class change sound. Hochiki Europe's system is unique in that it has a programmable option which facilitates this and allows the use of a different audible tone from that of the fire alarm.

Eddie continues:

The class change tone facility is a great example of how Hochiki has put a useful and relevant feature into its product. It is this type of flexible thinking that makes Hochiki such a popular choice amongst fire detection system installers and their customers.

Installation

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The design for the Academy includes the implementation of a cross laminated timber system as its structural core, reducing the building's carbon footprint. The timber comes from managed forests, creates minimal waste and is fabricated to high tolerances.

This unique structure meant that T&P Fire had to approach the installation of the fire detection system in accordance with specific guidelines.

Eddie finally commented:

The Open Academy is oval shaped with a central area. Sheppard Robson made it clear that cables should not run across this area but should emanate from the centre and spread outwards. The cable has to follow the route of the sprinkler pipes in order to keep it neat and unobtrusive. While this did mean the use of more cable it makes the installation aesthetically pleasing.

The building contains many voids and false ceilings, which allow much of the wiring infrastructure to hidden, but also requires a greater number of detectors to be installed above them in order to comply with BS5389.

Start of Term

As a former pupil of Heartsease High School, Eddie was particularly pleased to have played a role in the construction. He summarised

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It has been a fantastic project to work on and I'm very pleased to have been able to install a state-of-the-art fire detection system in such a building. I'm sure that Hochiki's products will serve the Academy well for many years to come.





HOCHIKI EUROPE'S EMERGENCY LIGHTING SYSTEM TAKES THE UNIVERSITY CHALLENGE

Located in Middlesbrough on the south bank of the River Tees, Teesside University has become one of the UK's foremost seats of learning. It achieves consistently high rankings in surveys that assess the quality of education on offer, and in 2009 it was named as the Times Higher Education (THE) Awards University of the Year.

History Lesson

The formation of a technical college to support Middlesbrough's engineering, bridge and shipbuilding industries was first discussed in 1914 but World War One and the need to raise enough money for the work delayed developments until local shipping magnate, Joseph Constantine, offered a contribution of ◊80,000. Work on the campus finally started in 1927 and Constantine College, as it was named, was officially opened by the future King Edward VIII on 2nd July 1930.

The College then became Teesside Polytechnic in 1969, and in 1992 the Privy Council gave approval to 14 higher education institutions, including Teesside, to become new universities. Currently home to over 28,000 students, Teesside University has become renowned for the quality of its facilities and it has made a $\lozenge120m$ investment to provide a top-class learning environment. Recent developments include The Athena – a 4,000m² of studio space for computing, design and media students – and The Phoenix, which is home to the Institute of Digital Innovation.

Sky High

Middlesbrough Tower is the University campus's most imposing structure. 11 stories high, it houses the main reception area and administrative facilities, as well as teaching areas including newly equipped labs to support forensic and analytical sciences, environmental sciences and food technology.

One of the oldest buildings on the site is currently undergoing a phased refurbishment, the first phase of which has now been completed. The building's previous emergency lighting system had been in place since the late 1960s and the university's then Electrical Services Manager Electrical Services Manager, David Newton, it was time to upgrade this important part of Middlesbrough Tower's life safety infrastructure.



David said:

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The central battery system which had been installed in the basement area had become expensive to run and maintain, and it took up quite a lot of space because it was backed up with a series of uninterruptible power supplies (UPSs). Also, the 80W luminaires that the old system used needed to be changed frequently and this took a lot of time as well as being costly. Therefore, in line with the University's energy reduction targets, I wanted to install a system that would reduce overheads, whilst utilising the latest technology.

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A Perfect Fit

David was introduced to Hochiki Europe's new emergency lighting solution by its installation partner, TCS Fire Safety Services Ltd, based in Middlesbrough, and he quickly realised that it would meet all of his selection criteria.

Manufactured in the UK, it is an EN50172 compliant intelligent low voltage system which utilises light emitting diode (LED) technology. It comprises an addressable emergency lighting control panel with battery back-up, and features addressable, self-contained LED luminaires and signage connected via low voltage (40V) cabling. The luminaires are also equipped with battery back-up, making sure they will function in every situation, while the units fit directly onto a standard Hochiki sensor base (YBN-R/3), making installation simple.

Mark Smith, Hochiki Europe's UK Sales Manager, takes up the story and comments:

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When I visited David, as well as talking to him about the features and benefits of the system, I was also able to give him an accurate idea of the cost savings he could expect to make by installing this unique emergency lighting solution. Hochiki recently carried out a comparison of its emergency lighting system with a traditional manual test system and identified all the costs associated with each offering on a 1,000 luminaire system used over a 10 year period.

Mark added:

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It factored in maintenance labour, battery replacement, testing labour, recycling costs, energy use and initial capital outlay. We found that over this period of time using our emergency lighting system the end user could, extremely importantly in the current climate, save a massive amount of money and, just as essentially, make a significant CO₂ reduction.

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Lighting the Way

120 LED luminaires were installed during phase one and these were linked to an addressable controller using existing cabling. With maintenance being a major problem with the old system, Teesside University's onsite team is now able to comply with EN50172 legislation and maintain the new system without having to call in specialist installers.

David explained:

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In contrast to other systems, this system is programmable and its control panel continuously monitors and tests the functionality of the system. If there is ever a problem I can be notified straight away. It can also be pre-programmed to carry out specific monthly, six monthly and annual tests and we can then download the results from the control panel and print out the servicing and test schedules. This makes the system fully compliant with the requirements of BS5266-1:2005, while reducing our overheads considerably.

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The system's long life LED technology also means that it requires less than five per cent of the lamp changes compared with traditional fluorescent lighting. If a luminaire does need replacing, in house personnel can carry out the operation as it operates via low voltage (40V) cabling and is a simple "plug-in" device, reducing costs even further.

Looking Ahead

This is one of the first installations of Hochiki's new emergency lighting offering and David is extremely impressed with it. He concludes:

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Because Hochiki has so much experience in fire detection system design and manufacture, their emergency lighting solution has been designed along similar lines, which makes it incredibly functional. I didn't feel like I was taking any risk being one of the first to install it as it is really well thought out and I'm looking forward to installing the system in the remaining phases of the project.





HOCHIKI COMES TOP OF CLASS AT TWO EDUCATIONAL SETTINGS IN DARLINGTON

During the summer of 2021, not only were the teachers at two educational settings preparing for the start of the new school year, but both school sites were undergoing a major upgrade to their life safety systems, and Hochiki's market leading fire detection devices were the brand of choice.

Based in the Northeast of England, Darlington is home to two highly popular schools; Rydal Academy a vibrant primary and nursery setting for 2–11-year-olds and Longfield Academy offering outstanding secondary and sixth form education.

Both schools required modernisation in their life safety systems which would change the system from closed protocol to open protocol, allowing any qualified fire safety engineer to work on the system and devices rather than being fixed to one brand. For educational settings this can make the longterm use and ongoing maintenance of the system far more flexible and far

more cost effective, particularly important when educational budgets are already stretched.

Hochiki's ESP Intelligent range was prescribed for both schools. Designed and manufactured to the highest international standards, this range of projects specialises in false alarm reduction, is fully compliant and has a wide range of devices that work well within a school environment. Not only that, but the range has also extended addressing capability which can be extended from 128 to 254 for certain alarm devices, which minimises costs and allows for greater flexibility.

Optica Fire & Security Ltd won the contract to carry out the projects at both schools and Michael Shearon, the then project lead, said of the Hochiki products installed

We have a longstanding relationship with Hochiki, going back several years. We know the devices that we installed at both schools well and trust them for their reliability and ease of installation. Plus, for the end user they are cost effective and for us, should we need it, their technical support is second to none.



Both school sites are large, but Longfield had the added complexity of networking across several spread-out buildings and over multiple floors inclusive of classrooms, staffing areas, dining area, school halls, library, a sports hall, and swimming pool, which all required new cabling as well as where appropriate the upgrade of the existing. With the added pressure of the six-week summer holiday deadline looming this was quite a complex project for the team to undertake.

As well as fire and repeater panel installation, there were over 800 Hochiki devices installed across both sites, with a life safety system designed to meet a category L3 requirement - the standard for school settings where there are lots of classrooms and corridors to consider, plus outside spaces.

Longfield also required the Hochiki devices to perform multiple functions, and the entire network was programmed for 'cause and effect' to include a class change system. Based on pre-programmed timetables, to signify the end of a lesson or lunch sessions for example, the Hochiki sounders would activate, utilising a different tone to the fire alarm. This is possible via enhanced controls within the ESP products that include variable volumes and tones that allow the system to be tailored to the application specifics. Jon Quinn, then a Senior Consultant from RLB, the Building Management Consultant for the install at the school said:

The devices installed at both Rydal and Longfield Academies along with the highly professional team from Optica Fire & Security and Hochiki Europe, ensured a high-quality life safety system project was achieved with every deadline hit, and within the budgets set.





PORTSMOUTH ALL-THROUGH SCHOOL GETS LIFE SAFETY SYSTEM UPGRADE FROM HOCHIKI AND MAKES USE OF MULTI-FUNCTION' FACILITY VIA ENHANCED ESP CONTROLS

Portsmouth Mayfield School is one of the UK's only single sites 'all through' schools, meaning the school has a mix of primary and secondary school age children, all on one site, offering a unique educational experience with a single vision.

Originally opening in 1932, the school celebrates 90 years in 2022 and in the summer of 2021, a year before the celebrations, the school underwent a huge face lift with a brand-new state of the art school built replacing the old and tired building in its entirety. As part of this project the school required a new life safety system.

The brief was to protect the 2000+ students, staff and educational assets as well as designing a Class Change System with Lockdown Alert broadcasts.

The installation team was Southern Fire Alarms who have been in operation since 1999 and are one of the south coasts leading installers providing high

quality fire and life safety solutions across multiple sectors including industrial, residential, commercial, public sector, leisure, retail and education.

Hochiki Europe were selected as the life safety system and device manufacturer based on the quality and reliability of the devices, as well as the capability of the tech support team. David Fell, the then Sales Director at Southern Fire Alarms said:

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We have worked with Hochiki products for well over a decade and have a trusted relationship with the team there, we often recommend Hochiki as a well-established and reliable OPEN protocol solution.

In the case of the Mayfield School project, we needed to design, install, and commission a comprehensive yet costeffective fire alarm system. With over 600 devices including a large number of Visual Alarm Devices (VADs), Hochiki products offered us the greatest flexibility, and allow us to deliver a high-quality bespoke life safety system for the school.



A key requirement for Mayfield School, was to ensure that a category L3 was met across the entire site and false alarms were to be eliminated. The project also required networking across multiple buildings and floors, so the Hochiki ESP range was chosen for the install.

Designed and manufactured to the highest international standards, this range specialises in false alarm reduction, is fully compliant with safety standards for educational settings and has a wide range of devices that work well within a school environment.

Not only that, but the range has also extended addressing capability which can be extended from 128 to 254 for certain alarm devices, which minimises costs and allows for greater flexibility.

The Hochiki devices installed at the school were also used to perform as a class change and/or school 'lock down' if required. Utilising a different tone to the fire alarm, the entire network was programmed for Cause and Effect based on preprogrammed timetables; at the end of a lesson or break the Hochiki sounders would activate using a different tone to the fire alarm tone.

Multipurpose use of fire detection systems within schools is becoming increasingly popular as it is a far more efficient use of systems within the setting. This flexibility is made possible via enhanced, yet simple to use, controls within the ESP products that include variable volumes and tones that allow the system to be tailored to the application specifics.





HOCHIKI EUROPE PROTECTS STUDENTS FROM FALSE ALARMS

For many students, the prospect of moving away from home and living alone for the first time can be daunting. Thanks to leading manufacturer of life safety solutions, Hochiki Europe, and NSC Sicherheitstechnik, students living at two sophisticated accommodation developments in Germany have one less thing to worry about when it comes to fire safety.

The developments are eight storeys high and capable of accommodating 239 residents at each location. Both named The Flag, they provide a flexible, smart city living space for students in Frankfurt and Munich, and feature premium fire detection and alarm equipment supplied by Hochiki Europe.

One challenge that arose when specifying the life safety solutions for The Flag was the complexity of the sites. The nature of the buildings called for compliance with European EN standards including EN 54 Fire Detection and Fire Alarm Systems. It was also imperative that products selected offered optimum reliability to safeguard the wellbeing of occupants and limit the risk of false alarms.

As well as being reliable, the products had to help keep running costs down across the sites, without compromising quality. Using products that offer enhanced energy efficiency credentials was therefore essential.

To address these challenges, Hochiki Europe's German-based systems partner, NSC Sicherheitstechnik, worked with building owners to identify and provide a range of life safety solutions for the two sites. This included a Solution F1 18 loop fire alarm system with 800 multi sensor detectors, which incorporate both smoke and thermal elements, and 925 base sounders.

Multi sensors offer a number of benefits when it comes to reducing the risk of false alarms in residential environments, thanks to in-built intelligence. The sensors can be programmed in a way that ensures alarm conditions are reached only when smoke and heat are present at specific levels to minimise false alarms, and prevent unnecessary evacuations of residents.



The base sounders selected for use likewise feature inbuilt intelligence, and have an auto shutdown feature to reduce the risk of noise pollution, a common issue in large housing developments such as The Flag. In addition, the base sounders offer a low current consumption to help increase energy efficiency.

Both the multi sensors and base sounders are also compatible with Hochiki Europe's Enhanced Systems Protocol (ESP), a range which offers high performance with enhanced reliability. This ensured compliance with strict fire safety standards as required by the developers.

Frank Schade, Sales Manager at NSC Sicherheitstechnik, added:

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By using these intelligent life safety solutions from Hochiki Europe, we have been given peace of mind that our premises are fully protected and compliant with international legislation.

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Both of The Flag developments were completed in 2017.









HOCHIKI IMPROVE LIFE SAFETY AT SPECIAL EDUCATIONAL SETTING WITH THEIR FLEXIBLE AND EASY TO INSTALL RANGE OF FIRE DETECTION DEVICES

Based in Norfolk, the Fred Nicholson school meets the educational needs of 162 pupils who have Educational Health and Care Plans identifying learning difficulties and a range of associated complex needs, including some children who receive specialist Autistic Spectrum Condition (ASC) provision.

Offering a personalised curriculum with high staff to pupil ratios, the school offers national curriculum and learning experiences that are relevant to their pupils needs which enables them to achieve. The school also offers residential provision to help further the life skills of certain pupils.

Following scheduled servicing, the need to update the existing conventional and 2-wire systems was identified, and the school underwent an upgrade to an addressable life safety system.

TP Fire & Security was enlisted to help with the design and installation of the new system, and Hochiki, the leading manufacturer of life safety products, was chosen for its reliability and ease of installation of its various product ranges.

Across the school L2 safety coverage was required, wherea 'live-in' areas such as dormitories required complete L1 coverage (much the same as a hospital or hotel) which included automatic fire detection. Hochiki's ESP addressable range was installed, due to its quality, reliability and diverse range of intelligent products including; high performance sensors, flexible input and output modules and an assortment of ancillaries, perfect for a school environment where the fire detection system needs to have a bespoke and flexible design.

Hochiki's Ekho hybrid-wireless fire detection range was also installed and would interface with the main panel via a loop-powered translator module, for the schools mobile and outdoor classes.

As an educational setting with children with learning difficulties and ASC, it was extremely important to the school to keep disruption to an absolute minimum to avoid distressing the pupils.



The flexibility and ease of installation of the Hochiki products was key to the success of the project as explained by Kevin Harris, the then Technical Design Manager

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A big plus with Hochiki products is how simple they are to install – it's why they've become our go-to supplier for the past 20 years. Many other manufacturers only offer hardwire solutions, and for locations such as schools and care homes, keeping the installation simple and reducing on-site time is a huge win as this helps ultimately to reduce the disruption to both staff, and the day-to-day occupants





COMPLEX SIX FORM COLLEGE SITE GETS HOCHIKI FIRE SYSTEM UPGRADE

Founded over 400 years ago by Sir William Paston, Paston College in Norfolk, has transformed over the years from a grammar school for boys into a co-ed sixth form college dedicated to working with young people ages 16-18.

The college has a notable alumni list including Admiral Nelson who studied for a short period before joining the Royal Navy in 1771, and in more recent years - British Actor, Writer, Comedian and Broadcaster Stephen Fry. In late 2017, Paston Sixth Form College merged with City College Norwich to become Paston College. This marked a significant milestone in the history of both colleges and saw the expansion of education and training opportunities for learners and employers in North Norfolk.

Following a recommendation from Norwich Education Services, a completely new fire system was required which would need to meet BS5839 Part 1 2017 for an L2 category.

The life safety system installation project required networking across multiple sites and buildings as well as ensuring the protection of the historic Nelson Museum. And with a main road acting as a physical divide through the middle of the campus this was a complex project to undertake.

TP Fire & Security were commissioned to install the new system who selected Hochiki's ESP intelligent range of addressable fire detection and alarm equipment. Kevin Harris then from TP Fire & Security commented

This was an incredibly complex project. We were working with modern and historic buildings, we had to ensure the protection of the Nelson Museum, and of course the campus is split right down the middle by a main road.

We chose Hochiki because it afforded us the flexibility with the systems and devices that were needed, with a project such as this.

Despite the innovation that goes into the Hochiki products, they are possibly the simplest on the market when it comes to installation.

This simplicity allowed us to implement a phased approach which enabled us to keep the existing conventional 2-wire systems running whilst the new Hochiki addressable system was installed. This meant the college remained safe and operational all the while



As an educational facility, it was important to keep to strict budgets, especially when it came to the ongoing operational costs for the system, and with hundreds of pupils and staff in attendance each day a system which would be reliable and reduce false alarms was vital. Hochiki products are famed for their reliability resulting in the reduction of false alarms, and due to the simplicity of the products they are easy to operate and maintain.

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As a result of City College Norwich's merger with Paston college 2017/2018 the fire detection and life safety system needed to be updated, and we knew it would be a complex task given the fact that the Paston campus is split down the middle by a main road.

Not only that, given our historical building status this project needed to be handled carefully and the products chosen needed to be the best on the market. Working with TP Fire was easy and efficient, and we were confident in the products from Hochiki that they recommended.

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- Lionel Levinson, the then Estates and Facilities Surveyor

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BRADFORD'S BROADWAY BENEFITS FROM INTELLIGENT LIFE-SAFETY SYSTEM

A recently opened shopping centre in Bradford, West Yorkshire, is now benefitting from an innovative range of intelligent life safety systems from Hochiki Europe.

The Broadway Shopping Centre, a large mall in the centre of Bradford operated by Westfield Corporation, was opened to the public in November 2015 and currently contains 77 restaurants, cafes and shops.

As a large retail space containing more than 570,000 square feet, The Broadway required a complex multinetworked fire detection system which could be quickly and easily accessed from a number of locations across the premises. Due to the large number of stores and thousands of daily visitors, it was also vitally important for the system to be addressable so that the exact whereabouts of an incident would be known as soon as possible.

Bradford-based electrical contractors, Pitts Wilson, were brought in by Westfield Corporation to specify the most effective solutions for the project. The group chose to install an intelligent fire alarm range produced by leading life safety system manufacturer, Hochiki Europe.

As part of the project, worth around £50,000, more than 1,400 Hochiki Europe ESP devices were installed across The Broadway Shopping Centre. This included 280 optical smoke sensors, 150 wall sounder beacons, 40 base sounder beacons and more than 100 call points. Hochiki Europe's EN 54-23 compliant Visual Alarm Devices (VADs) were also installed. The products were manufactured to perform in line with recently introduced guidelines which set stricter guidelines on the installation and performance of VADs in the UK.

VADs provide a visual indication of an emergency, in the form of a bright flashing light, which helps alert people who wouldn't normally pick up on audible-based fire alarms. In large retail spaces, this can prove vital for shoppers who are deaf, hard-of-hearing or wearing headphones.

The 1,400 detectors were interfaced with the shopping centre's building management system using a range of Hochiki Europe's input and output modules, which monitor for fire and fault throughout the premises.



Mark Ellse, the then Fire Design Engineer at Pitts Wilson, said:

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We chose Hochiki Europe's innovative range of devices due to their smooth integration with Advanced electronics panels and graphics software. The plant control modules also gave us more flexibility when programming the cause and effect logic. Aesthetically, the devices fit in very well with the look of the new centre.

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Mark Smith, Hochiki Europe's then UK Sales Manager said:



The Broadway Shopping Centre in Bradford breathed new life into the city and now shoppers can be reassured that it is protected by state of-the-art life safety technology. Our intelligent and expandable ESP range is manufactured to the highest international standards, giving users freedom of choice without compromising on security.

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FIRE SAFETY IN THE BAG FOR SHOPPERS AT NEW PLOVDIV MALL

A new shopping complex in the city of Plovdiv, Bulgaria, is benefitting from a range of innovative life safety solutions produced by leading manufacturer, Hochiki Europe.

A much-anticipated addition to Plovdiv, the 60,000m² Markovo Tepe Mall has taken more than eight years to complete. As well as creating a convenient destination for shopping, leisure and dining in Bulgaria's second largest city, the development has generated over 500 jobs for residents, boosting the local economy.

Shopping centres like Markovo Tepe Mall attract high volumes of people on a daily basis, not all of whom are familiar with the layout of the stores, pedestrian walkways, entrances and exits or public spaces. This presents building owners and facilities managers with challenges in terms of life safety.

To ensure the wellbeing of staff and shoppers alike, Markove Tepe Mall required an addressable life safety system that would allow duty holders to locate and draw attention to emergency incidents as quickly as possible. An increased number of detectors were also needed across the eight-storey site to ensure any potential risks could be effectively monitored.

Reliable and easy to install

Security system specifier, Sectron Ltd, chose to install a selection of Hochiki Europe solutions which would address the challenges posed by such a large shopping centre. Having worked with the life safety system manufacturer for a number of years, Sectron Ltd was assured of the performance of Hochiki Europe's systems, which are easy to install and offer full compliance to European building standards.

The project saw the installation of products from Hochiki Europe's ESP range of intelligent devices, which all utilise the world-proven Enhanced Systems Protocol (ESP). The ESP product range offers high compliance to globally recognised safety standards whilst the open protocol gives installers the flexibility to incorporate devices from multiple manufacturers.



Optical smoke and thermal detectors, beam detectors and sounders compatible with ESP were installed as part of the project. Combined strobe and sounder beacons were also added to make sure building users are instantly notified to any safety issues within the complex.

The common areas of the Markove Tepe Mall and the majority of individual stores have been fitted with Hochiki Europe products. In total, more than 1,300 detectors were installed throughout the shopping mall.

Safeguarding shoppers with intelligent systems

Speaking about the project, Vladimir Vasilev, the then Project Manager for First Facility Bulgaria EOOD commented:

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Ensuring high standards of safety for shoppers and staffis of paramount importance. To achieve this, we needed a dependable and flexible fire detection system that would identify hazards at the earliest opportunity. By using Hochiki Europe's intelligent and addressable products, we can immediately identify any threats and notify building users.

Georgi Kolev, Product Manager for fire protection and suppression systems at Sectron Ltd. added:

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We've been using Hochiki Europe's systems for more than 20 years. Not only are the company's solutions highly reliable, they also offer superior networking capability. Because of this, we were able to easily network these products with the Kentec control panels used on this project.

Petia Simeonova, Hochiki Europe's Central/Eastern European Sales Manager said:

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Hochiki Europe has a wide range of addressable products and systems designed specifically to suit complex shopping environments like the Markovo Tepe Mall. Our ESP range offers unparalleled reliability for users in terms of performance and durability. We're happy to have played a role in protecting this new venue for the local community in Plovdiv.





HOCHIKI ITALIA PRESERVES AND PROTECTS ITALIAN HISTORY

Teatro Italia in the Cannaregio district was first built in 1914 and designed in a neo-gothic architectural style with a nod to Art Nouveau. Since construction, the building has been home to a theatre, a cinema and a conference hall, before going into disuse in the late 1990s. In 2016, a project began to restore the space and its artistic features and transform it into a supermarket.

Take a walk through the streets and across the piazzas of Italy and you are sure to find stunning architecture that dates back centuries. Even on a trip to the supermarket, you can find yourself immersed in Italian history, and for leading life safety systems manufacturer, Hochiki Italia, protecting this heritage was a priority on a recent project in Venice.

Teatro Italia in the Cannaregio district was first built in 1914 and designed in a neo-gothic architectural style with a nod to Art Nouveau. Since construction, the building has been home to a theatre, a cinema and a conference hall, before going into disuse in the late 1990s. In 2016, a project began to restore the space and its artistic features and transform it into a supermarket.

Security solutions installer, SEI Sistemi di Sicurezza srl, approached Hochiki Italia with a brief to provide a comprehensive life safety system for the site. As well as compliance with the latest European standards in life safety, it was essential that the system was energy efficient, helping to minimise the site's environmental impact. Due to the historic nature of the building, the aesthetics of the devices was also a key consideration.

Hochiki Italia specified a range of innovative sensors from its Enhanced Systems Protocol (ESP) range. As well as demonstrating the highest standards of life safety technology, this protocol also gives installers greater choice when selecting a control panel. For SEI Sistemi di Sicurezza, this meant being able to install a system that is both high performing and energy efficient.



The ALN-EN photoelectric smoke sensor was selected for Teatro Italia as it offers superior fire detection technology, and a high level of false alarm immunity thanks to its high performance chamber technology. The installation of Hochiki's ATJ-EN heat sensor complements these benefits. With its variable temperature heat element and a rate of rise heat element, both of which are controlled from the Control Panel, users can choose to make either one or both elements simultaneously to be active in making the fire decision. Hochiki Italia also supplied wireless sensors and beam detectors for the Teatro Italia installation.

Speaking about the project, Eddo Quaggia, Chairman at SEI Sistemi di Sicurezza, commented:

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Italian architecture is some of the most beautiful yet complex in the world, and in some instances, this can make specifying a life safety system challenging.

With Hochiki Italia's extensive range of solutions, we were able to find products that offer exceptional standards of life safety and can be installed without disrupting the beautiful architecture of Teatro Italia.

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Ivano Tregnago, Sales Director at Hochiki Italia, added:

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While aesthetics is a key factor, all life safety equipment must not compromise system performance or safety. It is for this reason that our sensors have been designed to fit seamlessly into any environment.

We've been working with SEI Sistemi di Sicurezza for a number of years and I'm thrilled that we were able to support them with another fantastic project.





HOCHIKI EUROPE SYSTEM PARTNER INSTALLS ESP RANGE IN SERBIA'S BIG SHOPPING MALL

Located in Srem District, Serbia, Nova Pazova is home to an impressive selection of attractions and experiences both historical and modern.

Three kilometres from highway E75, between the cities of Stara Pazova and Nova Pazova is the brand-new Shopping Centre 'BIG Pazova' operated by BIG CEE. The retail estate developer holds and operates 11 active shopping centres – 10 in Serbia and 1 in Montenegro. Established in 1994, BIG is an international owner, operator, and developer of shopping centres in Israel, the United States, India, and Serbia.

The new mall in Nova Pazova is situated on a plot of 57,000 square meters and provides a mix of leisure and dining for the local community and those who are travelling from further afield. With free parking for 645 cars as well as two outdoor playgrounds this is a destination location for families and friends looking for a fun day out. The fire safety therefore needs to be

of the highest standard ensuring that the tens of thousands of members of the public who visit every year, the hundreds of staff members and the household brands who sell their products and services are all protected.

Hochiki Europe System Partner, Unipelektra, is a trusted fire detection system and device installation company based in Serbia. The team were commissioned by Koto Ltd, a design and construction company also based in Serbia, as the fire detection specialists for the BIG project. Choosing a whole solution for fire detection, Hochiki's market leading ESP range was installed across the mall. Srdjan Vujasevic, the then project lead said

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I have worked with Hochiki products for almost 13 years now. I am confident in the whole solution from Hochiki Europe because of the high-quality design standards, all meeting the requirements of the investors and the construction company. The Hochiki devices are always so easy to install and maintain. They are also highly reliable, especially at reducing false alarms.



Over 600 devices including multi-sensors, call points and sounders were installed at BIG Pazova from Hochiki Europe's globally proven ESP range. This intelligent range of addressable fire detection and alarm equipment has been designed and manufactured to the highest international standards, including LPCB, VdS and EN 54, offering a highly reliable solution. All products use Hochiki's high integrity digital communications link 'Enhanced Systems Protocol' (ESP), giving the range its name.

The ESP range is proven to help reduce false alarms due to a host of design features including a high-performance smoke sensor chamber, adjustable sensor sensitivity settings, sensor drift compensation and extended addressing. It is also compliant to world recognised standards such as LPCB and VdS.

Regional Sales Manager for Hochiki Europe, Petia Simeonova continued

66 The customer is happy with the level of protection Hochiki products have been able to provide. Hochiki always provide the best solutions for our customers, they work across multiple scenarios, and we trust them to work. We would highly recommend the Hochiki ESP range for future fire installation projects

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As a leading international company in the manufacture of fire detection systems and products, I am proud that our customers can always trust in Hochiki to cover all their project requirements. The project at BIG was complex, but our fire detection products have helped ensure that both the businesses and the public who use this shopping mall are always kept safe.







HOCHIKI EUROPE'S FIRE DETECTION SYSTEM KEEP VICENTINI AUTO ON THE RIGHT ROAD TO SAFETY

Vicentini Auto first began trading in 1974 as a family owned and operated car dealership and is based in the northern Italian city of Verona. Since then the company has steadily grown into one of the country's most prominent outlets for the purchase of new and used vehicles, and is widely respected for the expertise of its employees.

The company specialises in the prestigious Volkswagen, Audi and Porsche marques and in 2010 it began work on the construction of a new 56,000m² state-of-the-art showroom, comprising three buildings that are designed to house models from each of these brands. The buildings took just over two years to complete and now form the largest car centre in Europe. With stock worth millions of Euros and many employees, visitors and customers on-site at any one time, Vicentini Auto recognised the importance of having a life safety infrastructure that could provide the earliest possible warning of fire.

After being contacted by Vicentini Auto, local distributor, DES, was commissioned to specify a fire detection system to protect the entire site.

Zeno Nicolis, the company's then Technical Manager, explains:

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We are also based in Verona and have supplied systems for many of the region's high profile projects. We have a number of highly qualified and experienced individuals on the team that possess in-depth knowledge of technical regulations and legislation in the sector. Since 1996 we have worked closely with Hochiki Europe and now distribute the company's industry leading solutions exclusively.



Following a visit to the site Nicolis was given a brief to configure a life safety system that adhered to strict technical and aesthetic guidelines. He commented:

Like the cars that are displayed there, these buildings are designed, built and finished to the very highest standards. Not only did the fire system have to be almost invisible, so as not to spoil the aesthetics of the showrooms, it also had to offer the very best levels of detection and reliability while reducing the likelihood of unwanted alarms. After considering the various options I felt confident that Hochiki Europe's FIRElink aspirating fire detection solution would tick all the boxes.

The FIRElink range of detectors are the only high sensitivity detectors that are routinely applied to the protection of clean, dust free environments like modern car showrooms and the very dirty and dusty environments found in industrial applications. This is achieved by using Laser Dust Discrimination (LDD) with a patented dust management and separator system. These features have greatly extended separator life service intervals. At the other extreme, FIRElink is capable of providing the very highest levels of sensitivity in environments such as computer and clean rooms. In these applications it is able to sense the very smallest amounts of smoke.

Paul Adams, Hochiki's then Marketing Manager, comments:

Most types of buildings can benefit from having an aspirating fire detection system but it tends to be particularly useful where an early warning is desirable. This is because aspirating detectors are around 10 times more sensitive than general point detectors.

Most of the system at Vicentini Auto is hidden from view, as the majority of the 1,800m of pipework is located in places such as ceiling voids. This aesthetic advantage is achieved without compromising the effectiveness of the system and a total of 10 FIRElink-400 systems were installed across the three buildings. These were configured around Hochiki's Enhanced Systems Protocol (ESP) — a robust addressable communications solution for intelligent fire detection and fully integrated systems.

Nicolis explained:

The system is linked to three control panels

– one in each building – that form part of an
integrated building automation system. Each
control panel utilises four loops, which are
all connected to a central control room from
where it is possible to manage all the panels
and associated devices on-site.

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The installation also includes a variety of other Hochiki Europe products including 325 optical smoke detectors that feature its High Performance Chamber Technology. This minimises the differences in sensitivity experienced in flaming and smouldering fires and the result is a device that is incredibly responsive and helps to reduce the possibility of unwanted alarms. In addition, 30 SPC-ET beam detectors and 101 call points were used.

While DES designed and commissioned the system, local company, Moretto, was responsible for its installation. The company's then Managing Director, Silvio Moretto, was delighted with the progress made once on-site and commented:

Hochiki products are extremely well designed. Installing Hochiki aspirating systems is incredibly quick compared to other fire detection systems, particularly when considering the building's structure.

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The installation was completed on schedule and the new system has worked perfectly, with no unwanted alarms reported. Zeno Nicolis concluded: We are very pleased to have been involved with this project which sets new standards for car dealerships, not only in Italy but around the world. We had every confidence that the demands of Vicentini Auto for a reliable, unobtrusive and bestin-class fire detection system would be met by Hochiki Europe, and this has proven to be the case.



COSMETICS FIRM PUTS FIRE SAFETY FIRST THANKS TO HOCHIKI EUROPE

Estée Lauder is benefiting from fewer false alarms and streamlined maintenance at its Greek headquarters with a new high-performance fire safety system provided by Hochiki Europe.

The cosmetics firm's base in the heart of Athens, Greece, is large and subject to heavy traffic, with more than 150 employees spread across five floors. As such, having a high quality life safety system is crucial to protect the health and well-being of employees.

In such a busy building, the ageing fire detection system was growing costly and difficult to maintain. Moreover, the technology was becoming increasingly prone to false alarms, causing significant disruption to those in the office, and preventing workers doing their jobs.

Spiros Theodorou, the then Sales Manager at the firm leading the installation, IFSAS Fire and Security, explained:

66 The sheer number of false alarms was not just having a significant negative impact on the success of the company's Greek operations, it was contributing to alarm fatigue among its workers, their response times to alerts were deteriorating as they assumed they were not serious, which could have had disastrous consequences for their safety in the event of a genuine emergency

With the challenges of false alarms in mind, Estée Lauder called for a reliable solution capable of safeguarding its employees with minimal maintenance requirements or disruption. In addition, due to the high-profile nature of its offices, the company wanted products that would not impact on the aesthetics of the building interior. IFSAS Fire and Security was certain that Hochiki Europe had the right life safety solutions for the job, so recommended a number of its solutions for use throughout the building.



ALN-EN analogue optical smoke sensors from Hochiki Europe were installed throughout the building. Incorporating innovative high performance chamber technology, the solution optimises detection sensitivity for fires in their earliest stages, extending evacuation windows for workers in an emergency, while eliminating the issue of false alarms. The manufacturer's ATJ-EN analogue heat detectors were also fitted in the kitchen area and medium voltage electric boards. The solution incorporates both variable temperature and rate-of-rise heat elements to increase sensitivity to both slow and rapidly developing fires, further improving worker safety.

In addition, Hochiki Europe's YBO-R/SCI Short Circuit Isolator Bases were integrated into the fire safety network to protect the alarm systems from short circuits. CHQ-WSB Wall Sounder Beacons with YBO-R/3(RED) Mounting Bases were included to alert occupants as quickly as possible to a fire incident, as well as HCP-E (SCI) Addressable Call Points to enable individuals to raise alarms manually.

The technologies chosen are small and unobtrusive, minimising their impact on the visual appearance of the office interior, and can be monitored and set up from a central control panel, streamlining operating and maintenance procedures for Estée Lauder's facilities managers.

Moreover, they feature Hochiki Europe's cutting-edge open Enhanced System Protocol (ESP), making them compatible with standard components from other suppliers, and cutting the cost of aftercare. It also significantly reduced the duration and complexity of the installation project for installers, CORE Contractors, by simplifying the supply chain for parts.

George Lolis, the then Project Engineer at CORE Contractors, said:



The compatibility of Hochiki Europe's systems with other products meant that we didn't have to wait for any specialist components to become available before installing, enabling us to carry out the project without any delay or disruption.

This significantly reduced the duration of the project, allowing us to deliver well within the tight deadline specified by Estée Lauder.

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Hochiki Europe, added:



With so many workers using the building every day, not to mention visitors, Estée Lauder needed a life safety system that was reliable to keep any impact on its operations to a minimum and to protect its employees.

The solutions selected for the project delivered this reliability for the company, lowering aftercare needs and virtually eliminating false alarms. This has helped to save the facilities management team considerable time and money, while ensuring Estée Lauder's team remain safe and well as they go about their working day.

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ESP EIRElink





HOCHIKI EUROPE 'PANDAS TO WWF'S FIRE DETECTION NEEDS'

One of the world's largest and most respected independent conservation organisations, with a global network active in over 100 countries, WWF's mission is to stop the degradation of the earth's natural environment. It aims to build a future in which humans live in harmony with nature, by conserving the world's biological diversity and ensuring that the use of renewable natural resources is sustainable.

Instantly recognisable thanks to its famous panda logo, WWF was originally set up in 1961 for the purpose of campaigning to save species endangered by human activity. With Prince Charles as the current president of WWF-UK, the organisation currently supports around 1,300 conservation and environmental projects around the world.

Prior to October last year WWF's base had been at Panda House in Godalming since 1987. However, as the end of the lease approached, some big decisions had to be made. Following a large donation form the Rufford Foundation, WWF determined to create its own exemplar building where it could work more effectively and spread its message. After carrying out an extensive search a brownfield site, on land that had previously been a car park owned and run by Woking Borough Council, was chosen for the new build.

Completed and opened in November 2013 by WWF Ambassador, Sir David Attenborough, the £20m Living Planet Centre is at the forefront of sustainable design and construction, incorporating a wide range of renewable energy technologies such as ground source heat pumps and solar photovoltaic (PV) panels. One of the greenest buildings in the UK, it is an impressive timber framed structure that as well as housing WWF's administrative facilities is also home to the WWF Experience – an exciting interactive exhibition that brings to life the secrets of the natural world and the threats it faces.

Ensuring the safety of the Living Planet Centre's occupants was a key concern of WWF during the design process. Although the life safety system would obviously need to give the earliest possible warning in the event of a fire, it would also need to be sympathetic to the unique design features and minimise any disruption to the fabric of the building.



With a reputation for excellence as a result of its work on high profile projects across the UK, Cheshire based Fire Bright Solutions, a BAFE accredited Hochiki Systems Partner, was invited to tender for the project and present its recommendations.

Its then Sales Director, Haydn Greeves, said:

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Formed in 2003, Fire Bright Solutions aims to demonstrate the highest levels of technical competency, professional working practices and ethical conduct, so that our clients can be convinced about our quality of service. To do this we need to be 100 per cent confident in the reliability of the products we install and that's why we suggested the use of a fire detection system from Hochiki Europe for the WWF.

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Specialising in system design, installation, commissioning and maintenance, Fire Bright Solutions has worked with all types of fire detection technology.

Greeves went on to say:

66 Given the design of the building, the aesthetic considerations and the spaces that had to be covered, I felt confident that Hochiki Europe's FIRElink-400 aspirating fire detection solution would tick all the boxes.



The FIRElink-400 aspirating unit consists of an enclosure that houses the electronics that are powered from a supply, and a fan inside it that draws air in via four pipes that are connected to the unit. The air that is drawn in then goes into an aspirating chamber after passing through a filter. The air then passes across a laser light source that is projected into the air itself and if enough smoke particles are detected an alarm condition will be activated. All detectors in the FIRElink range have been approved to EN 54-20:2006 Classes A, B & C by LPCB.

Paul Adams, Hochiki Europe's then Marketing Manager, explained:



Most types of buildings can benefit from having an aspirating fire detection system but it tends to be particularly useful where an early warning is desirable. The system provides the very highest levels of sensitivity and is able to give warning at the very slightest trace of smoke. This is because aspirating detectors are around 10 times more sensitive than general point detectors.

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Most of the system at the Living Planet Centre is hidden from view, as the majority of the pipework is located in ceiling voids and the roof fabrication.

Greeves stated:



This aesthetic advantage is achieved without compromising the effectiveness of the system, which is configured around Hochiki Europe's Enhanced Systems Protocol (ESP) - A robust addressable communications solution for intelligent fire detection and fully integrated systems.

The system comprises a three loop Advanced MX4403 control panel, which enables a programmed phased evacuation alarm strategy to meet the specific client and local fire authorities' requirements. This is complemented by a wide range of Hochiki Europe devices including 4 FIRElink-400 aspiration detection systems, 63 optical smoke sensors, 16 HCP-E(SCI) call points with integral short-circuit isolators, 11 YBO-BSB base sounder beacons, 39 YBO-BS base sounders and 9 multi-heat sensors, which incorporate a variable temperature heat element and a rate of rise heat element, allowing either thermal element or both elements simultaneously to be active in making the fire decision.

Part of the original car park has also been incorporated into the new building and Hochiki Europe technology has been installed here too in the form of 55 IP67 rated ACB-EW waterproof multi-heat sensors.

The Living Planet Centre has proved immensely popular with WWF staff and visitors alike, and it is being held as an exemplar of modern construction practice.

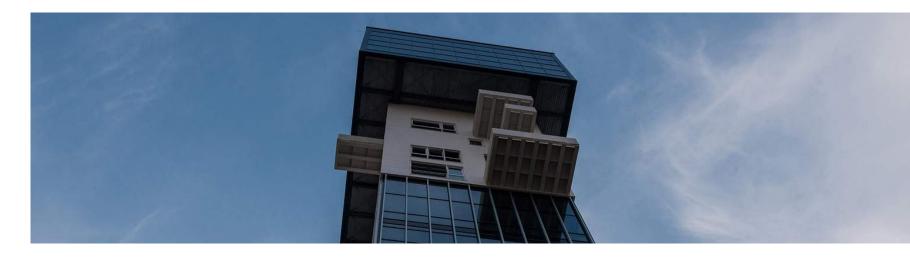
The last word goes to then WWF spokesman Richard Eaton, who concluded:



It is essential that a state-of-the-art building like this has an equally innovative life safety infrastructure. I'm delighted with the sound advice and skilled craftsmanship that Fire Bright Solutions provided us with in the installation of a fire detection system from Hochiki Europe.

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HOCHIKI ITALIA REACHES NEW HEIGHTS AT THE HTM HYBRID TOWER

HTM Hybrid Tower is the tallest building in the Venice metropolitan area, standing at 84 metres tall. The redevelopment of the tower, which was previously occupied by one of Italy's most prevalent transport providers, cost €18 million in total.

As part of a project to revitalise a semi-abandoned Venetian suburb, and transform the district of Mestre from industrial precinct to recreational hotspot, HTM Hybrid Tower has undergone an extensive redevelopment. The project was supported by Hochiki Italia, the Italian arm of leading life safety systems manufacturer, Hochiki, who were selected to provide solutions that would protect this now iconic building and its occupants.

The 19 floors of the HTM Hybrid Tower are comprised of commercial offices, a beauty centre and residential and retail environments, as well as dining and garage spaces. Comin Impianti srl, a local civil and industrial systems installer, was selected to specify solutions which would meet the needs of such a versatile building.

The installers chose to specify Hochiki fire detection systems which would suit each of the different environments within the tower. Working closely with Comin Impianti srl, Hochiki Italia identified a need to use solutions that could be networked with one another via multiple control panels, programmed in a way so that each device is interconnected.

It was also essential that the system was capable of identifying issues and reasons for alarm quickly, to give building occupants as much warning as possible.

Hochiki Italia specified a range of solutions from the Enhanced Systems Protocol (ESP) range to meet these challenges. The collection of intelligent, addressable fire detection and alarm equipment offers HTM Tower high performance and reliability, combined with an enhanced open protocol, giving building owners the added control of their systems.



Over 180 ALN-EN smoke detectors and ten ACC-EN multisensors were installed throughout HTM Hybrid Tower. The devices can all be controlled from eight panels networked so that, in instances where there is cause for alarm and/ or evacuation, only affected zones will be notified.

In addition, Hochiki's devices offer both visual and audio alerts, which can be individually managed so only one operates in a given zone when needed, reducing the need for a full building evacuation for minor incidents.

Ezio Danese, the then Project Manager at Hochiki Italia noted:

66 Mixed use sites like the HTM Hybrid Tower require a range of complex devices. As well as solutions that offer unrivalled reliability, it is essential to use products that can be networked to suit specific environmental considerations.

A restaurant kitchen will require very different levels of monitoring compared to a garage space, and these variables need to be monitored and controlled. The Hochiki ESP range allows building owners to do just that, giving them a control system that can be tailored to ensure optimum performance.

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Angelo Comin, owner of Comin Impianti srl said:

The HTM Hybrid Tower is a contemporary, hybrid project, where multiple functional levels co-exist. Protecting such a complex structure from the risk of fire was a challenge.

structure from the risk of fire was a challenge. However, the fact that Hochiki systems are able to communicate on the network was a key element in the specification process

It is also an added benefit that the solution's audio and visual capabilities can be managed separately which helps avoid unnecessary panic in case of a false alarm.

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FIREscapeNepto

ESP



HOCHIKI MIDDLE EAST PROTECTS LUXURY BUILDING IN DUBAI

A luxury residential and commercial building has recently been built in the Nad Al Hammar district of Dubai. This new development is in a prime location only 15 minutes to Sheikh Zayed Road and Dubai International Airport and 20 minutes to 'new' Dubai.

The contemporary residential and commercial building is spread over 12 floors and can accommodate approximately 800 occupants. With the building being designed for mixed use, it was essential that an efficient and reliable fire detection and emergency lighting solution was installed to ensure the safety of all occupants.

Torontec Engineering Consultants who are a building service and system design company were approached to work on Vista Star by the multidisciplinary Hassani Group of Companies, who were overseeing the design and installation of the buildings fire safety systems. Following a joint presentation from Hochiki Middle East and installers Dafoos, Torontec decided to specify Hochiki products for the project.

One of the special requirements for this job was the need for high quality products; Hochiki has led the way in the design and manufacture of life safety solutions for over 100 years, and as such their devices are world renowned for high-integrity and long-term reliability.

The consultant required the products specified to be fully compliant as well as of a high standard. Hochiki work closely with all major approval bodies across the world to ensure quality and environmental compliance is a top priority. As such, Hochiki fire detection and emergency lighting products fully conform to all the latest standards and regulations.

In 2018 Hochiki were awarded Dubai Civil Defence (DCD) approval for its fire detection and emergency lighting products. The new certification, which was granted following a year-long approval process, means that Hochiki's solutions can be used in fire safety and construction projects in every kingdom throughout the entire United Arab Emirates.



Sathish Kumar, the then Sales Manager at Hochiki Middle East commented:

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Our Japanese-designed products are built to be ultra-reliable and come with a three-year warranty as standard. The fact that we are now able to supply these robust and dependable solutions across the UAE means we can ensure greater levels of occupant safety in the region while also reducing false alarms. Considering the number fire safety emergencies in recent years, especially in high-rise properties, this should be seen as paramount for specifying decision-makers.

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Half way through the project, design and support services company Lead Consult were brought in to finish the project alongside Dafoos and Hochiki.

For this project over 900 addressable detectors were installed along with three 4-loop Fire Alarm control panels as well as Hochiki's emergency lighting solution FIREscape.

The original design featured a single panel, but it was clear once the project was underway that the size and complexity of the building necessitated three control panels on a network, to support the number of devices fitted. Working in close partnership with Hochiki Middle East allowed Dafoos to upgrade the installation quickly, supplying and installing the system within the programmed completion date.



HOCHIKI EUROPE SCORES A WINNER WITH CARDIFF CITY FC

After being based at Ninian Park for the previous 99 years, in 2009 the team played its first game at the 28,000 capacity Cardiff City Stadium, a perfect example of a state-of-the-art sporting environment where life safety is a top priority.

Promotion Challenge

The second largest stadium in Wales after the Millennium Stadium, Cardiff City Stadium was built on the site of the former Cardiff Athletics Stadium. Tiger Fire & Security Limited was approached by the project's electrical contractor, NG Bailey, at the planning stages of the development to provide its expertise in designing and installing the life safety infrastructure at the ground and work began in 2007.

Gareth Pezzack, Tiger Fire and Security's then Managing Director explained:

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We became involved at design and concept stage for both the fire detection and combined public address/voice alarm (PA/VA) systems. Our level of input was considerable and we advised on the fire standards that had to be adhered to, including The Green Guide (Guide to Safety at Sports Grounds) and other relevant British Standards for the Fire, PA/VA and Disabled Refuge Systems.

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The Green Guide is a government funded guidance book on spectator safety at sports grounds. It was created in the aftermath of the Hillsborough disaster and provides detailed guidance to ground management design in respect to increasing safety at sports grounds and stadiums, including how many spectators can be safely accommodated within a sports ground.

Half Time

Tiger Fire & Security Limited designed and specified the installation of a BS5839-1: 2002 compliant Category L5 addressable fire detection system. A Category L5 system is one in which the protected area(s) and/or the location of detectors is designed to satisfy a specific fire safety objective. Often the design is based on a fire risk assessment or forms part of a fire engineering solution.



Tiger Fire & Security Limited selected a system based around Hochiki's Enhanced Systems Protocol (ESP). ESP is a total communications solution for intelligent fire detection and fully integrated systems. It has a multi-purpose structure that provides the flexibility and expansion to accommodate simple addressable systems through to sophisticated integrated building management and safety systems.

Gareth commented:

Hochiki's proven reliability made it the obvious choice for this installation and I knew that it would act as a one stop shop for all the Stadium's fire detection needs. The ESP protocol is extremely robust and we've never experienced any issues or problems with it.

All Levels

The Stadium's West Stand has five levels with Hospitality Suites, Player / Changing areas, Media Rooms, Club Shops, and Chief Executive Suite, whilst the general concourse area is effectively an outside environment. In this area Tiger Fire & Security Limited used Hochiki's multi-sensors and addressable beacons to reduce the likelihood of unwanted alarms. The fire detection system was fully integrated with the PA/VA system and it operates in two modes – match day and non-match day, each specifically designed to ensure maximum safety at different times.

To get the scale of the installation into perspective, the fire detection system and PA/VA system used a combined total of 20km of cable and 350 Hochiki devices, including smoke detectors, multi-sensors, loop base sounders and beacons, and input/output units. These components are linked to four networked panels located around the stadium, with the master control panel located in the Stadium's match control room.

Taking the lead

Hochiki's optical smoke sensors were also installed which feature the company's High Performance Chamber Technology. Hochiki's chamber design minimises the differences in sensitivity experienced in flaming and smouldering fires. The result is a high performance optical chamber that is equally responsive to all smoke types and helps to reduce the possibility of unwanted alarms.

As a modern stadium with very strong design values, aesthetics were a key consideration. Gareth summarised:

Although they are a functional part of the building's infrastructure, Hochiki's fire detection products have the added bonus of looking good. In modern buildings this is an important quality.

Wayne Nash, then then Stadium Manager at Cardiff City added:

small space, accessibility is very important and compliance with the guidelines as set out in the Disability Discrimination Act (DDA) is a definite must for us. We have to consider the needs of people of all abilities and so we made sure that all the areas have the requisite number of beacons and beacon/sounders in order to comply.

Back of the net

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This was the first football stadium that Tiger Fire & Security Limited had worked on but since then it has received a number of tender invitations from football clubs around the country for similar work, due to the high level of design expertise that the company can offer.

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ACC-EN

A measure of the company's contribution was noted when The Cardiff City Stadium won the Local Authority Building Control Wales Award for public/community buildings.

Graham Bond, the then Senior Building Control Surveyor at The Building Control Safety Advisory Group, concluded:

Tiger Fire & Security's input was greatly appreciated by myself and the rest of the design team in delivering design experience and solutions to what was a particularly complex and challenging project.

h HOCHIKI

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ESP



HOCHIKI EUROPE RECEIVES A STANDING OVATION AT THE HARPA REYKJAVÍK **CONCERT HALL AND CONFERENCE CENTRE**

Aspectacular addition to the Icelandic cultural landscape, when the Harpa Reykjavík Concert Hall and Conference Centre opened its doors to the public in May 2011 it was unanimously acclaimed as one Iceland's most important contemporary buildings. As the city's first purpose built concert hall, it successfully combines being used as a classical music venue - serving as the home to the Iceland Symphony Orchestra and The Icelandic Opera with hosting conferences and exhibitions.

The Harpa was the brainchild of Henning Larsen Architects and Batteríið, while the renowned artist, Ólafur Elíasson, designed the façade. It consists of a steel framework clad with 10,000 irregularly shaped glass panels of different colours that reference the columnar basalt common in Iceland's terrain. The use of the glass panels provides a dramatic effect when the unique daylight in Iceland - which ranges from almost 24 hours in summer to the briefest glimpse of the sun above the horizon in winter covers the building in a myriad of different colours.

It consists of four halls, three of which are used for concerts. These comprise a main concert hall seating up to 1,600 people, a rehearsal hall that can also be used for concerts seating up to 450, and a chamber music hall seating 200. With events taking place on a daily basis, protecting the public and staff is vital and the building's fire detection system plays an important role in keeping them safe.

The project's main contractor, IAV, began work in early 2008 and asked Iceland's leading fire safety specialist, ARK Security, to design, specify and commission the fire detection system.

Kjartan Scheving, the then Managing Director of ARK Security, explained:

We have worked with IAV on many projects over the years, so when it came to implementing the life safety infrastructure at the Harpa they asked us to get involved. It was clear to me that the only way to ensure the level of reliability, quality and safety demanded was to install state-of-the-art products from Hochiki Europe.



Scheving and his team knew that traditional point detection would not be possible due to the Harpa's very high ceilings. He commented:

Some of ceilings are over 70m high so three Hochiki Europe FIRElink aspirating fire detection systems were needed to provide the requisite level of cover above 10m. These are linked to four control panels which have 1,600 addresses assigned to them in 24 separate zones.

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Aspirating detectors are around 10 times more sensitive than general point detectors and are suitable where there is a high density of people and an early warning is desired.

Explaining how the system works, Paul Adams, Hochiki's then Marketing Manager, stated:

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The FIRElink aspirating unit consists of an enclosure that houses the electronics that are powered from a supply, and a fan inside it that draws air in via pipes that are connected to the unit.

The air then passes across a laser light source that is projected into the air itself and if enough smoke particles are detected an alarm condition will be activated.

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The FIRElink systems are configured around Hochiki's Enhanced Systems Protocol (ESP) – a robust addressable communications solution for intelligent fire detection and fully integrated systems. ESP delivers exceptionally secure signalling and also incorporates error-checking technology to safeguard the integrity of the data and ensure correct communication. The system also has features drift compensation technology that, when activated by the control panel, automatically recalibrates the detectors every 24 hours.

The use of smoke machines within the auditoria necessitated the ability to turn off the detectors in these areas for up to four hours at a time. Scheving further explained:

for any premises but for concert halls they can be particularly disruptive, leading to the evacuation of the building and the interruption of the event taking place. Being able to deactivate the detectors in specific zones gives designated personnel a chance to investigate the cause of the alarm before taking further action.

Aesthetics at the Harpa are very important and design continuity has to be maintained at all times. Being able to install the FIRElink systems' pipework in the ceiling voids helped ensure this, as did the availability of optical smoke detectors in black to match the colour of the ceilings in some of the rooms. The system also utilises a wide variety of other addressable devices from Hochiki Europe including manual call points, YBO-BSB base sounder beacons, multi-heat sensors, CHQ-DIM dual input modules and CHQ-DRC dual relay controllers.

The flexibility that the fire detection system boasts means that it can control many other aspects of the building services infrastructure such as the elevators, ventilation system, smoke curtains, smoke hatches and sprinkler system. It is also integrates and controls a public address/voice alarm (PA/VA) system that has 1,032 speakers that can also be isolated in specific zones. ARK Security spent a total of three years working at the Harpa and Scheving is delighted with what his team achieved.

He concluded:

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When we talked to the Reykjavík fire service they said that it was the most sophisticated fire detection system in Iceland. Since the Harpa opened it has proven 100 per cent reliable with no unwanted alarms, which goes to show that specifying products from Hochiki Europe was the right decision.





HOCHIKI EUROPE USE CUTTING EDGE TECHNOLOGY TO PROTECT A LEGENDARY LOCATION

A new boutique hotel has recently opened its doors in one of Northern Ireland's most iconic and culturally-significant buildings in Belfast's Titanic Quarter. This historic location, now known as the Titanic Hotel, is benefitting from a range of cutting-edge life safety technology from manufacturer, Hochiki Europe.

Throughout the early 20th century, the now-listed site was the headquarters for world-leading ocean-liner builders, Harland and Wolff, making it the nerve-centre of the largest shipyard in the world. The company was responsible for the design and construction of dozens of 'floating hotels', the most famous of which being the ill-fated Titanic.

In more recent years, the area around the listed building has been transformed by property developers, Harcourt, to create the 'Titanic Quarter', a prestigious new water-front regeneration. This includes the creation of the Titanic Hotel, designed as an homage to Belfast's shipbuilding history as well as its namesake ocean-liner. The building features an art-deco style interior that mirrors the craftsmanship and precise attention to detail paid when designing the RMS Titanic's interior.

There were various considerations to take into account when designing a life safety system for the hotel. The project called for a solution that could be easily installed with minimal disruption, and networked to suit the various environments inside the hotel including bedrooms, kitchens, a public-accessed museum, and conference spaces.

To meet these requirements, Hochiki Europe supplied a range of products from its Enhanced Systems Protocol (ESP) range. This intelligent, addressable fire detection and alarm equipment is designed and manufactured to the highest international standards, so staff and building owners can rest assured that all products installed are ultra-reliable.



Sensors in the ESP range are designed to utilise an electronics-free, 'twist-fit' mounting base. This gives installers, in this case Belfast-based Atlas World, the opportunity to fix the bases at "first fix" stage, with sensors added at a later stage, once the environment is clean. The 'twist-fit' feature also allows greater flexibility when fitting at height or in hard to reach areas. This also makes it easier for facilities managers to carry out maintenance as the sensor heads can be accessed from ground level using specialised smoke poles without the need to employ expensive and disruptive mobile platforms or "cherry-pickers".

Over 200 sensors from Hochiki Europe's ESP range were installed throughout the Titanic Hotel. Using a combination of ACC-EN multi-sensors and ALN-EN smoke sensors, Atlas World were able to programme the devices to suit the different environments within the hotel and their differing life safety considerations.

Richard Wharram, then a Regional Sales Manager at Hochiki Europe, noted:

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Hotels present a very unique set of requirements when it comes to life safety, even more so when they are listed buildings like the Titanic Hotel. The need to find solutions that match the different spaces and uses within the hotel, from restaurant kitchens and bars to bedrooms, public areas and lounges, while also ensuring ease of installation, can prove challenging.

Our ESP range is incredibly versatile and can be installed and networked in a way that works perfectly for each of these environments, ensuring optimum system monitoring across the entire building. It's fantastic to see how new technology is helping protect such an iconic project and a unique part of Belfast's history.

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Robert Creagmile, then Key Account Director at Atlas World, added:

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Installations in buildings with high ceilings and heritage features require specialist solutions. Hochiki Europe's range of sensors can be fitted in two parts so they were ideal for use in the Titanic Hotel. Thanks to Hochiki Europe, we were able to install the system with greater efficiency with little disruption to day-to-day operations.

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Adrian McNally, then General Manager of Titanic Hotel Belfast commented:

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The restoration of the former Harland and Wolff Offices into a luxury hotel has been very complex. It is vital we have all current fire and life safety systems in place to ensure the comfort and safety of our guests is not compromised. However, we also wanted to make sure we preserved the architectural and visible integrity of yesteryear. We believe we have achieved this as our hotel has the most advanced technology to allow this safety, while being nearly invisible to our guests.







WORLD FAMOUS ATLANTIC HOTEL GETS THE HOCHIKI MAGIC TOUCH

SET IN 10 ACRES OF BREATH-TAKING HEADLAND, STEEPED IN MAGICAL HISTORY, WITH SENSATIONAL VIEWS OF THE NORTH CORNISH COAST, SITS ONE OF CORNWALL'S BEST-KEPT SECRETS, THE ATLANTIC HOTEL. THE HOTEL IS LOCATED JUST A SHORT STROLL TO THE CENTRE OF NEWQUAY, AND MINUTES FROM SOME OF THE UK'S FINEST SURF BEACHES, INCLUDING THE WORLD-FAMOUS SURF MECCA FISTRAL BEACH. THIS AA FOUR-STAR HOTEL WAS ONCE HOME TO THE WORLD'S BIGGEST BAND THE BEATLES WHILST THEY FILMED THEIR NOW-ICONIC MOVIE THE MAGICAL MYSTERY TOUR IN 1967.

Recognising the existing life safety system needed a complete upgrade, Adrian McNally, then General Manager of Titanic Hotel Belfast commented:

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This project was a big one, we had close to 200 devices to install, and with the size of the building and the fact that the hotel was made of granite meant that cabling was going to be tricky so we knew we needed to use wireless devices. Wireless is quicker to install minimising the impact on the hotel, we knew that Hochiki's Ekho devices were the best for the job because they are incredibly quick and easy to install.

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With over 100,000 people visiting Newquay during the summer months, getting this installation completed on time was crucial for the hotel to not miss its peak trading season. The project was scheduled to start in February and was completed in just a few short weeks.

Hochiki Europe's Martin Green consulted on this project and visited the hotel alongside the team at Action Fire Southwest to carry out detailed surveys.



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The last two years have been incredibly hard for the hotel industry, so I wanted to make sure for the end client we got this job done efficiently with minimal impact on their business and quests. After the initial site visit and carrying out the project survey we knew our wireless Ekho devices would be the perfect solution. They were each fitted in minutes within the individual hotel spaces and bedrooms with no on-site programming required, as this had been carried out way in advance off-site. So, it really was as simple as getting the device out of its box, attaching it in place and the system was good to go

Andrew Berry adds "There were a few hotel quests during the install, but we were able to work around them and get the job done auickly – this was one of the main concerns for the hotel, that those quests were not to be disrupted and there was to be zero impact on peak trading. Working with Hochiki devices meant we were able to achieve this.

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In many public buildings, there may be dozens of different types of audible warning devices; are alarm systems, emergency exit alarms, lifts/elevators, intrusion alarm systems, and each can have their own audible warning device.

With so many different types of audible devices, it can be confusing to the occupants when an alarm sound especially for hotel guests who might be fast asleep in their rooms. Is it a real alarm or a false alarm? To counter these conflicting responses, voice sounders are now an established and effective solution. Research has shown that voice alarm messages result in quicker reaction times than when sirens or bells are used, in fact 75% of people react in a timely manner to voice messages. This has resulted in VA Systems becoming more commonplace as the primary means of evacuation in public buildings.

As part of the install at The Atlantic Hotel, staff training was provided on how the new system and devices operated, and what to expect when an alarm sounded.

66 The Ekho devices we prescribed have an additional feature of voice messaging, which can be critical during an emergency in a hotel as people tend to respond quickly when they hear a voice command to exit the building. The hotel management were very keen to take up this additional voice functionality built into Ekho, so they now have a fully functioning, voice evacuation system.

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Following the completion of the installation and commissioning process, along with the device training, the team from Action Fire Southwest now visit the site on a six-monthly basis for ongoing maintenance as well as to update new staff on the system and devices. Andrew Berry said he would happily recommend Hochiki on future customer projects.

66 I have worked with Hochiki since 2011, and have a great relationship with my account manager, I trust Hochiki to consult on the best for every project. The tech support team, on the rare occasion I need them, are second to none. I would happily say 9 times out of 10, Hochiki are my go-to manufacturer. They design and build incredibly reliable and easy to install products which I know my customers can trust, and when it comes to the safety of people and assets, we never compromise on life safety device quality.

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ESP INTELLIGENT RANGE

UNITED KINGDOM | LINCOLN |



HOCHIKI EUROPE PROTECTS WORLD WAR II HISTORY

Lincolnshire is a county that contributed heavily to the United Kingdom's efforts in World War II. It is for this reason that the Lord Lieutenant of Lincolnshire, Tony Worth CVO, wanted to create a facility that would recognise and commemorate those who served in the Bomber Command Unit.

As part of the estimated £16million building project, local providers of fire and security systems, Freedom, were brought on board to specify and install a fire alarm system that would offer unparalleled performance without disrupting the aesthetics of the space.

Working closely with Hochiki Europe, Freedom selected a range of products from the company's ESP range. The ESP collection of intelligent addressable fire detection and alarm equipment offers high performance and reliability, combined with an enhanced open protocol.

Recognising that many specifiers need to consider the aesthetics of life safety solutions as well as performance when selecting products, Hochiki Europe's ESP range features ivory, black and white sensors.

Freedom opted to use black sensors to minimise their visual presence throughout the centre. It was for this same reason that the sensors had to be carefully positioned throughout the building. Having carried out multiple site surveys, Freedom fit the sensors so that both design and safety regulations were successfully met.

In total, 58 optical smoke sensors were installed throughout the site, along with three heat sensors, 23 remote LED indicators and 14 manual call points. All devices are controlled by one intelligent fire panel provided by Kentec Electronics, part of the Hochiki group of companies.

Images courtesy of IBCC.

To find about more abut the International Bomber Command Centre, visit: www.internationalbcc.co.uk



Speaking about the project, James Slater, the then Manager at Freedom Fire and Security, commented:

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These innovative solutions from Hochiki Europe have allowed us to offer the centre reliable and flexible solutions that protect these important records from behind the scenes.

The fact that the ESP range features an open protocol is an added bonus for us, as it gives us even more flexibility on system design and installation.

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Neil Eves, then Systems Sales Manager at Hochiki Europe, noted:

Due to high occupancy levels and complex layouts, museums and other large facilities, such as the International Bomber Command Centre, are particularly challenging environments when it comes to life safety. Our ESP range ensures all spaces can be

In buildings where aesthetics and design are also important, it's vital to consider equipment which doesn't compromise on the overall look and feel of the space. Using black sensors from our ESP range was key to achieving this in the new Lincoln memorial.

protected to regulations efficiently, ensuring the safety of visitors and employees.

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HOCHIKI'S LATITUDE SYSTEM IMPROVES LIFE SAFETY AT THE PALAZZO DUCALE DI REVERE

Starting life as a fort in 1125, the building, which now houses the museum of the river po, was first built by the people of Modena, then conquered by the people of Mantua, who finished the construction. Over the next 500 years it was transformed from a fort to a grand residence, it survived a siege from Napoleonic Troops in the late 1700s and remained under french rule until 1814. Following the congress of vienna, the building remained in austrian hands where tall venetian-style fireplaces and the courtyard was added, with a beautiful well in the center, surrounded by a portico with columns and capitals..

The building now hosts the Museum of the River Po which was founded by the city in 1983. The Museum tells the story of the river, the flora and fauna that inhabited it and how the local people used it and is recognised as a building of regional importance.

The museum is made up of a main reception hall with rooms scattered across several floors. Due to regional interest in the building and the artefacts and collections which are houses within its walls, the life safety system needed to be of the highest quality.

The Municipality of Borgo Mantovano, the property owners, requested an update of the old fire protection system, whilst respecting strict architectural requirements, typical of historic buildings, it was important that the system was discreetly designed so as not to affect the aesthetics of the building.

Hochiki were drafted in to consult on the project by the installer Calanca Luca Impianti Elettrici. The project required a new system to upgrade the existing fire detection system, and so Hochiki Europe's market leading control panel, Latitude was recommended. Combining the very latest hardware and software to produce an approved control and indication system, which is powerful and sophisticated, yet simple to use and understand.



The flexibility of the Latitude platform is such that it can be re-configured to realise many other control and indication applications, with direct integration into many types of applications, including this historic building. The modular nature of the Latitude system allows all field wiring to be connected to a passive mother board enabling addition, re-configuration or replacement of all electronic hardware without the need to disconnect any field wiring.

This modularity also allows each panel to be customised, perfect for the Museum application. Hochiki's range of ESP detectors, beam detectors and wireless detectors were also installed and provided the best and most reliable coverage for this project.

Alberto Ferrari, the then Technical Sales Manager at Hochiki Italia said:

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The environmental requirements of historic buildings blend perfectly with the features of Hochiki's Latitude detection System. In the case of the museum, we opted for a wired system with beam detectors and SCI detectors, and where there was difficulty in laying cables our hybrid wireless devices meant we were able to guarantee the same reliability as a fully wired system. The innovative technology within the Latitude panel allows it to manage the two systems simultaneously and on the same loop

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Luca Calanca, then project manager and owner of the installation company, said:

Being commissioned by the Municipality of Borgo Mantovano to protect the Ducal Palace and its history was a great responsibility, and we are truly satisfied with the end result. Hochiki's system proved to be highly efficient, easy to install and reliable.

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NEW FIRE SAFETY SYSTEM FROM HOCHIKI INSTALLED AT THE HISTORIC AND **BEAUTIFUL CORTE REGIA RELAIS & SPA.**

Located in the picturesque village of Borghetto di Valeggio sul Mincio, Italy, the Corte Regia Relais and Spa overlooks the river Mincio, with views across to the imposing Scaliger Castle and the Visconteo Bridge and a short journey to Lake Garda. For its guests this hotel is an escape from the outside world and is famed for providing a relaxing experience.

In 2020 the hotel underwent a massive transformation with the renovation of historical barns originally built in circa 800. The aim of the renovation project was to conserve the building and to improve the functional use of the building while maintaining the original integrity and structure.

As part of the renovation project a fully compliant fire detection and life safety system was to be designed and installed throughout the hotel's luxury rooms and spa. The installer, Cressoni Impianti Tecnolgici chose Hochiki Italia as the manufacturer who designed the successful solution for the hotel.

The biggest challenge with the project was the fact that the hotel was a listed historical building. The original stone walls date from the 800s and the ceilings with wooden beams had to be kept. This made the wiring for the project quite complex, hence the need for a wireless solution.

To keep with the aesthetics of the building and to minimise additional building changes the Hochiki Italia team worked closely to collaborate with the installer and the architect to satisfy the client's request to be sympathetic and respect the historical building.



The ideal solution was to install both Hochiki's ESP range and Ekho wireless systems. Products from the ESP range included multi-heat sensors, intelligent photoelectric smoke sensors with short circuit isolators and high performing chamber technology. This allowed for sensor threshold levels to be increased, thereby improving the signal to noise ratio which reduced the susceptibility to costly false alarms happening within the hotel.

Hochiki's Ekho system raises wireless fire detection and alarm system gave the hotel new levels of reliability and flexibility. The hybrid system utilises the latest MESH net technology to provide the client with absolute and an economic wireless fire system installation with the minimum of disturbance to the surroundings – particularly important in keeping to the aesthetics of the Corte Regia Relais and Spa where installation of fire cabling would have been difficult, overly expensive or even prohibited in some parts. The wireless solution installed could be easily expanded around the entire site and worked particularly well with the original solid walls of the building.

Ezio Danese, then Project manager at Hochiki Italia commented:

66 The project had to comply with both architectural and standards requirements. The standards state that inside each room, in addition to a smoke detector, an alarm must be installed with a sound level of 75dB (A) in addition to an optical system capable of reaching even hearing impaired people. For this reason, the EKWL8-OV detectors were chosen as they are equipped with an EN54-23 certified VAD and an EN54-3 certified voice sounder. The translators, connected to Hochiki's ESP loop, were installed in the false ceilings in the corridors; their considerable range (1,200m in free area) made it possible to reach all the different wireless devices installed in the rooms. The Ekho system proved to be a perfect solution for the Corte Regia Relais and Spa project.

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The Corte Regia Hotel Manager told us:



We are really happy to have found such a technologically advanced solution which is able to guarantee the best fire protection for our guests and hotel staff whilst also fully respecting the particular architectural and aesthetic requirements of our hotel.





HOCHIKI ITALIA PRODUCTS CHOSEN FOR PRESTIGIOUS WINERY FIRE SAFETY UPDATE

In the heart of Franciacorta, at the top of the hill overlooking Bornato, sits the historic headquarters of the Società Agricola Monte Rossa srl. Owned by the Rabotti family since 1972, the Winery is famous for its fine wines that can satisfy even the most demanding palates.

Producing 500,000 bottles per year and with 70 hectares of managed vineyards, Monte Rossa is considered a leader for the quality level of the Franciacorta wines it produces.

Last May, the new Winery by Monte Rossa was inaugurated - just a few kilometres from the historical headquarters. This was an ambitious project, using the latest in wine making technology, that also included an innovative fire detection system designed with the support of the installation company Eurodue srl of Brescia, a leading distributor of fire-fighting equipment and Hochiki dealer.

Just like many other wineries in Italy, and indeed around the world, Monte Rossa is made up of different buildings for processing, storage, and packaging, which are mostly made of reinforced concrete and masonry. In terms of fire, the room that is the most at risk is the storage and packaging areas, since copious quantities of combustible materials are often stored in this room. In the wine industry, substances (such as nitrogen) contained in pressure vessels (cylinders) are commonly used, so particular care must be taken when using them, and the produces must ensure the room can be sealed in an emergency, to avoid explosions and fires.

The new fire detection system was to cover an area of 20,000 sqm, divided across four levels with indoor and outdoor areas. The automatic and manual fire detection systems were installed in offices, laboratory, vinification areas, the Barrique cellar, the "sur lattes" bottle ageing rooms



and the disgorging and bottling areas. The new Hochiki fire detection system also controls the fire doors of the compartmentalised processing and production areas of the building.

Products chosen to protect the building, contents, staff and visitors include Hochiki's SCI Sensors which are part of the ESP (Intelligent Range) which are trusted worldwide to reduce false alarms and allow systems to be tailored to achieve optimum performance.

Ezio Danese, then Project manager at Hochiki Italia explained:

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The UNI 9795 standard requires the installation of a short-circuit isolator for each zone in a building. SCI detectors with integrated isolator and various installed devices such as call points and I/O modules with double isolator ensure that the system complies with the regulatory requirements, without having to install additional isolators. This is definitely an advantage for the installer

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Visual Alarm Devices (VADs) were also installed. These were a key component to the install because they provide a visual indication of an alarm condition, essential for areas where the public might be visiting, or in areas where staff might be wearing ear defenders.

Filippo Piubeni, co-owner of Eurodue srl, commented:

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It is always a pleasure to be able to complete such an important fire detection system project. We are proud to have made secure a site such as the Monte Rossa Winery, which is not only technologically advanced but equally linked to the winemaking tradition of the Franciacorta region.

This top-quality system will provide the best possible protection for staff and the facility's many visitors. The system was installed by the company Bignetti Salvato and carefully programmed by FYS srl di Gregorelli Francesco, Hochiki's Technical Assistance Centre, which was able to optimise the various operational requirements in accordance with the project and current regulations

The Hochiki fire detection system installed at Monte Rossa is a feather in our company's cap for the foreseeable future

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HOCHIKI EUROPE MARINE LIFE SAFETY SYSTEMS HELP PERENCO HOTEL BARGE SET SAIL

Innovative fire safety systems from Hochiki Europe have been used to protect the residents of a renovated hotel barge operated by oil and gas company Perenco in Gabon.

Able to accommodate up to 120 people, the barge has been designed to offer a comfortable home away from home for Perenco employees while they are working on the company's oil exploration projects out at sea. Operating in such remote locations, having an advanced, reliable life safety system specially designed for marine environments is vital to protect the ship and uphold the health and well-being of everyone on board.

When renovating the barge, Perenco wanted to replace the ageing life safety technology used throughout the vessel, to ensure it continued to comply with relevant Gabonese regulations and, at the same time, was suitable for use in challenging marine environments.

The company tasked fire protection installers, Autochim, to select and fit the most appropriate solutions for the needs of the barge, while ensuring it remained compatible with the existing cabling.

Jean-Marie Rabier, then Sales Manager at Autochim recommended solutions from Hochiki Europe:

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The barge didn't just have sleeping quarters, it had a wide range of zones, from the kitchens to the engine room, which all had unique life safety requirements that needed to be addressed, explained Rabier. Hochiki Europe offered equipment specially developed for the marine environment that would be capable of meeting the needs of every space on the barge, ensuring the new system would offer the best possible protection for residents.



Hochiki Europe's ESP Marine Approved Intelligent range of analogue addressable fire safety systems were chosen for use on the project. In addition to having Loss Prevention Certification Board (LPCB) and Germanischer Lloyd approval to EU Marine Equipment Directive requirements, the range consists of analogue addressable equipment that allows fire incidents to be precisely located and dealt with quickly. In doing so, they can help minimise damage to the vessels on which they are installed, as well as reduce the risk to residents. Moreover, the ESP Intelligent range's reliability and software enhancements can virtually eliminate the risk of false alarms, helping to cut disruption to the daily routines of the barge's residents.

Hochiki Europe, added:

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The barge has a high turnover of residents, as workers leave at the end of their cycles and new ones arrive to take over. As a result, many of the people on the ship may not be familiar with the layout of the vessel. This makes life safety system reliability even more important, to ensure residents are not unduly alarmed by false alerts and to ensure they remain relaxed and comfortable while they are living on the ship.

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In total, more than 139 optical smoke detectors were fitted across each deck of the ship, in addition to 17 rate of rise (ROR) heat detectors. Some 20 manual call points were installed at strategic points throughout the barge, as well as 20 audible alarms and nine visual alarms. An addressable, marine approved fire panel was also installed, providing a single, central location from which the entire life safety system could be controlled and monitored, simplifying the maintenance process for the crew in charge of fire safety.

All of the products from Hochiki Europe were integrated quickly and effectively into the existing cabling system. This significantly streamlined the project, which saved time and resources, and kept the time the barge spent out of use to a minimum.

Astrid Bouchardie, then HSE Manager, Perenco concluded:

66 Hochiki Europe and Autochim both worked hard to carry out the renovation of the barge's life safety system on time and they more than delivered.

The installation was completed quickly, minimising the amount of time the barge was out of action, as well as cutting the disruption to Perenco's operations in Gabon. As a result, we now have a fully compliant, reliable fire safety system on the barge, ensuring we can continue to keep our workers comfortable and, above all, safe while they are out at sea.





HOCHIKI EUROPE TAKES TO THE SEA ON THE DUTCH EX-NAVY SHIP

Having been moored in the fishing town of Urk for several years, The Castor's glory days as one of the Dutch Navy's premier vessels were a distant memory and the 46m long, 8.5m wide ship was a shadow of its former self. Once the pride of the Dutch shipbuilding industry, it was in a state of complete disrepair – a rusting hulk that served as a home to a group of squatters.

That was until 2007 when a group of maritime enthusiasts led by Mario van Parijs joined forces with the sole intention of restoring the ship.

The Castor was taken to the Rijnhaven in Rotterdam and a restoration project began in earnest. Fast forward to early 2011 and as a result of the gargantuan efforts of a team of sponsors and volunteers, the vessel had been transformed to its original state.

After being approached by AF-X Fire Solutions, which had furnished the ship's engine room with fire extinguishers, Fire Products & Solutions Netherlands (FSN), one of the country's leading providers of life safety equipment, was asked to contribute its expertise and configure a suitable fire detection system.

Ruud Benjamins, FSN's then Manager, explained:

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We agreed to supply, design, commission and help with the installation of a system for The Castor based on Hochiki Europe's market leading range of products.

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The design that FSN came up with was based on Hochiki's innovative Enhanced Systems Protocol (ESP). ESP is a total communications solution for intelligent and integrated fire detection and provides the flexibility and expansion to accommodate simple addressable variants through to sophisticated integrated building management and safety systems.



For obvious reasons devices from the company's range of marine approved products were chosen.

Paul Adams, then Marketing Manager at Hochiki Europe, commented:

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Our marine approved products have an enhanced IP rating and are designed to offer the best levels of environmental protection. Only products that have been approved for marine use by a recognised marine approvals body should be used for this type of application.

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Hochiki's ESP analogue addressable marine approved range has Lloyd's Register approval, and the products have also been tested and approved to the Marine Equipment Directive (MED) standard by Germanischer Lloyd (GL).

The Castor's fire detection system comprises a range of smoke and heat detectors along with manual call points configured around a Kentec control panel.

Benjamins said:

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We installed a total of 40 ALG-ENM optical smoke sensors which feature the Hochiki's High Performance Chamber Technology. This chamber design minimises the differences in sensitivity experienced in flaming and smouldering fires and the result is a high performance optical chamber that is equally responsive to all smoke types and helps to reduce the possibility of unwanted alarms.

Five marine approved multi-heat detectors were installed in the galley and food preparation areas. These products incorporate a variable temperature heat element and a rate of rise heat element, both of which are controlled from the control panel, allowing either thermal element or both elements simultaneously to be active in making the fire decision. These were complemented by a total of eight marine approved manual break glass call points, which are operated by pressing an EN54 compliant plastic element that produces a high level ESP interrupt, allowing the control panel to respond very quickly.

The installation went very smoothly and FSN's experts were on hand to assist the volunteers wherever possible. Asked what proved to be the biggest challenge, Benjamins replied:

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The ship is made of iron and steel, so drilling holes into thick metal was sometimes tricky and always time consuming. This was the first time we had installed a fire detection system on a ship, so it was a learning curve that necessitated a great deal of patience.

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The installation was completed in December 2011 and this graceful and powerful ship is now available to hire as a unique venue for parties, events and promotions. Even though it is now open for public use, work is ongoing and the fire detection system has been called into action on more than one occasion.

Benjamins explained:

Recently, when some welding was being carried out, a section of dry teak decking caught alight. The situation was quickly brought under control with only minor damage but I was delighted with the fast response of the Hochiki system.

The Castor is a prime example of what can happen when a group of like-minded individuals set their sights on achieving an objective. The ship is now one of the focal points of Rotterdam's Rijnhaven and is open for viewing.

For Mario van Parijs this represents the culmination of a long journey and he concludes:

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Bringing The Castor back to life has not been an easy task but it has been immensely satisfying. It would not have been possible without all the help that we received and I'd like to thank FSN for installing the ship's state-of-the-art Hochiki fire detection system that will ensure the safety of all those on board.

MARGATE





HOCHIKI LIFE SAFETY PRODUCTS ARE THE 'GO TO' BRAND WHEN IT COMES TO KEEPING ONE OF THE UK'S BIGGEST OFFSHORE WIND FARMS **OPERATING SAFELY.**

For a country once solely reliant on coal to power its homes and businesses, the UK is now the leader in offshore wind energy. Encouragingly, today 44% of the UK's electricity comes from renewable sources a figure expected to grow to meet the UK's climate goals of net-zero emissions by 2050 and 40 GW of offshore wind by 2030.

ESP

One of the facilities helping to achieve this greener goal is the Margate offshore Wind Farm, operated by London Array. Generating about £1million worth of electricity a day when all 175 turbines are in operation, this wind farm produces enough electricity to power half a million UK homes a year and reduces harmful CO2 emissions by around 925,000 tons per year. But with this incredible achievement, comes the awesome responsibility of keeping the people who are helping to make this green energy production a reality, safe, KM Security Solutions are the contractors responsible for the security, fire safety and evacuation systems on board the offshore and onshore substations, and for them life safety is the number one priority. Therefore, they say Hochiki are their 'go to' manufacturer when it comes to the installation of fire detection products at the sites they operate.

Dan Smith, the then Technical Services Manager for KM Security Solutions explained:

The constant change in weather combined with sea-salt spray makes offshore wind farms an incredibly hostile environment to work in, not only for people but also for the systems, cabling and devices that help to run it and keep it safe. Anyone who steps foot on one of the wind farm rigs must be highly skilled and trained. All my teams undergo intensive, and ongoing, training to ensure they keep themselves and those around them safe. Therefore, it's imperative we install life safety devices that won't let the teams and premises down in an emergency.



Having worked with Hochiki for well over a decade, Smith described this latest project at the wind farm which paved the way for the current generation of even larger wind farms being built around Britain's coastline, as a refresh of the existing Hochiki technology and systems.

We have been using Hochiki products for well over a decade now. Not only do we trust them to work, but we also trust the devices to last. When you are out at sea, even a few miles off the coast, the weather can change in an instant, and decay is a big problem to tackle. You need to ensure that the life safety products you install are fit for purpose and more importantly weatherproof. The Hochiki products specified are designed to be waterproof and have lasted extremely well. Which is incredible considering the environment they are operating in.

Flexibility is key

For this unique and vital project Visual Alarm Devices (VADs) combined with the CHQ-WPK Weatherproofing Kit, IP-rated manual call points and the Hochiki FIREvac Voice Alarm system was installed across the windfarm's sub-stations. As well as being simple to install, one of the USPs of Hochiki Life Safety devices is the flexibility to be able to operate alongside other brand products via Hochiki's open protocol, ESP. Although Hochiki do manufacture their own fire control panels, such as the L@titude platform, in the case of the Margate Wind Farm project, a control system was already in place, and it was the devices which needed the upgrade.

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We do look at other companies, to ensure we are using the best in class, however every time we come back to Hochiki products for several reasons - the main one being the innovation in technology and flexibility the Hochiki range offers us

The other benefit is the fact that Hochiki provide isolating devices. When you consider the scale of a life safety system on board a Wind Farm Rig, you can imagine the chaos that would ensue should part of the system fail.

Failures can arise from parts of the system experiencing erosion from the weather, where plastic parts can break down, allowing water ingress, causing short-circuits which could impact the entire life safety system onboard. Using the isolating devices from Hochiki prevents an entire system from going down, isolating only the part that has failed, saving time, money, and materials. It allows us to go in as part of our ongoing maintenance project and upgrade parts as and when needed without the need for huge overhauls.

The other added benefit of Hochiki isolating devices is, and particularly prudent in a facility which is helping protect the environment, is the reduction in waste, as only the part that no longer works is replaced, not an entire system. When asked if Smith would recommend Hochiki

absolutely, 10 out 10. We are about to start new projects on several other offshore wind farms around the UK and Hochiki will once again be our go to brand for life safety systems.

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HOCHIKI SUPPORTS DRAGON'S HEART HOSPITAL

When plans were revealed to turn Cardiff's Principality Stadium into a 2,000-bed field hospital to ease pressure on the NHS from the coronavirus pandemic, the Fire Division of Ceaton Security Services Limited, based in Cardiff, were contracted to design and install the vital fire detection system, utilising Hochiki products.

The temporary hospital is key for providing additional capacity to support the NHS and was named "Dragon's Heart Hospital", a name chosen by staff and the public from over 2,000 responses. It becomes the second biggest hospital in the UK, after the Nightingale Hospital in London which was also set up to deal with the pandemic. Designed and operational in incredibly tight timescales, The Dragon's Heart hospital will help fight the COVID-19 pandemic with the first operational beds already up and running in dedicated areas within the existing stadium. Work is continuing at pace to complete the new ward infrastructure on and around the pitch. This includes building one of Europe's largest tented structures under the stadium's closed roof and constructing large raised platforms over the lower stands. Angie Beasley, the then Managing Director from Ceaton Security Services admits the project was a challenge:

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This has been an amazing project to work on, with the whole Ceaton team pulling together to achieve something amazing – designing, installing and commissioning a completed fire detection system in just 10 days is an amazing feat and we're continuing to work with the main contractors to do our utmost to support this project"



One of the main challenges faced by the design team at Ceaton was the requirement for a fire detection and alarm system to be installed throughout the tented structure, with no solid wall or ceilings to support the usual cables and detection devices. Ceaton's system designers soon realised that the best approach to provide a compliant system in such a short space of time would be to install air-sampling detection. This would reduce any potential disruption to the critical services in operation inside the buildings, with the detection units all being installed outside of the protected area and just lightweight sampling pipework inside the wards. The Ceaton team worked closely with their counterparts at Hochiki Europe, who were also able to support on some of the design challenges, utilising the flexibility and reliability of Hochiki's FIRElink Aspirating Smoke Detection system to meet the unique requirements of this project. Paul Biggs, the then Acting Fire Division Manager, thanked Hochiki for its advice and assistance during the early stage of the project, saying

Hochiki's support went way beyond any expectations and with their assistance and the rest of the team working so hard to complete this urgent project, we have been able to deliver a reliable system, in very tight timescales, that will protect staff and patients alike

Martin Green, Hochiki's then Regional Sales Manager for the South West added:

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I was asked to get involved in this project by Ceaton right at the start as they needed advice and assurance that we could support them in terms of stock availability and quick delivery – it has been unlike anything I've worked on before, the sheer scale of the build and the extremely short schedule were major challenges to all involved. But I was pleased to assist Angie, Paul and their team and was able to assure them that Hochiki remains fully operational during the current crisis and is ready to support any of our customers, on any project where a level of advice is required

Ceaton Security Services remain on site whilst the rest of the hospital comes together, extending the fire detection system as and when required in what is continuing to be a complex install. Angie concludes,

We'll carry on putting everything we have into getting this installation completed, it's such an important build for the Cardiff area. We love the fact that we are involved in a scheme that combines two well-established Welsh institutions – the NHS, born in Wales, and the home of Welsh rugby





HOCHIKI PROTECTS NHS FILTON BLOOD CENTRE

A reputation for reliability and flexibility led to Hochiki Europe fire detection equipment being selected to safeguard the UK's National Blood Service's Filton Blood Centre near Bristol. The £60 million purpose-built, two-storey facility, processes 600,000 units of blood each year. It is the largest blood processing centre in the world and home to the University of Bristol's MSc in Transfusion and Transplantation Sciences. In addition to training facilities, the new building also houses administrative offices, laboratories, clean rooms and blood product manufacturing areas.

A total of 891 Hochiki ESP – Enhanced System Protocol – open-protocol devices were installed by Bristolbased MAT Fire Systems Ltd. They include: 615 optical smoke sensors that incorporate Hochiki's unique Flat Response Technology; 94 analogue addressable, looppowered beacons that utilise the latest high-intensity LED technology; and 79 manual call points.

The Hochiki solution also comprised 75 Input/Output modules for monitoring and controlling ancillary equipment from the loop. The Hochiki devices are linked to three Advanced Electronics fire detection and alarm control panels, one with a two-loop configuration and two with four-loop configurations.

Commenting on the Hochiki devices, Rick Coles, then Managing Director of MAT Fire Systems, said:

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The new Filton Blood Centre does critical life support work and is in operation around the clock every day of the year, so there could be absolutely no compromise on equipment reliability. We have used Hochiki equipment several times in the past and have found nothing on the market that compares with its dependability and zero false alarms record. The Hochiki devices can also easily accommodate the inevitable reconfiguration of the open-plan working spaces that are likely to be made to meet the Centre's future needs.

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Selecting Hochiki's products enabled the MAT Fire Systems installation to incorporate the very latest technological advances in enhanced detection speed and accuracy, and the avoidance of false alarms.



For example, Hochiki's ESP analogue addressable open protocol has three features that contribute significantly towards a high immunity to false alarms. It provides what is called full digital transmission for exceptionally secure signalling; it incorporates Hochiki's Checksum error checking to safeguard the integrity of the data and ensure reliably correct communication; and has high immunity from electrical noise, so there are no false alarms due to corruption.

To further boost immunity from false alarms, Hochiki also has a suite of false alarm management tools called ARM – which stands for Alarm Reduction Management – within the ESP system. Some elements of ARM are initiated automatically, while others are programmable to satisfy specific site needs.

UNITED KINGDOM | OXFORD | ESP INTELLIGENT RANGE



HOCHIKI PROTECTS THE WELLCOME TRUST CENTRE FOR HUMAN GENETICS

The Wellcome Trust Centre for Human Genetics (WTCHG) is a research institute of the University of Oxford, funded by the University, the Wellcome Trust and numerous other sponsors.

Its scientific objective is to explore all aspects of the genetic susceptibility of disease, including the understanding of how DNA variants contribute to the risk of disease in the population. Research activities include bioinformatics, cardiovascular disease, genomics, immunity and inflammation, metabolism, neurogenetics, statistical genetics and transgenics.

Since 1999 the WTCHG has been based in the Henry Wellcome Building of Genomic Medicine, which is located on the University of Oxford's Old Road Campus. The WTCHG houses more than 400 occupants spread over three floors.

The original fire alarm and detection system installation, which was more than 10 years old, was in need of replacement. This was driven not only by the age of the system, but by the dwindling availability of spares, very significant costs involved with all maintenance and attendance issues, all of which was brought about by the need for full reliance upon a particular manufacturer because the system was closed protocol.

The University of Oxford Safety Office insists upon open protocol systems, together with commonality of equipment. The reason for this requirement is to be able to have a central maintenance contract with a competent contractor for the whole of the University estate, negating any problems with accessing software or equipment availability. The use of Hochiki devices and Kentec control panels for all replacement and new systems has been the norm for the past twenty years.

Oxfordshire based Pyrotec Services was asked to look at the existing system with a view to total replacement, which included renewing all existing devices and control panels, the retention wherever possible of all existing wiring, the provision of loop powered sounders, the enhancement of detection coverage, and improvement of access for maintenance purposes in certain areas, particularly within ceiling voids and lift shafts.



Following detailed proposals and costs the installation of a new analogue addressable fire alarm and detection system was agreed and funded by the University Safety Office. It was agreed that the new system be based around the Enhanced Systems Protocol (ESP).

Paul Adams, Hochiki's then Marketing Manager, commented:

solution for intelligent fire detection and fully integrated systems. It has a multipurpose structure that provides the flexibility and expansion to accommodate simple addressable systems through to integrated building management and safety systems. It is a robust system and perfectly suited for organisations such as WTCHG, where maximum reliability and minimum disruption from unwanted alarms are essential.

The project involved installing a 12 loop, 96 zone, analogue control panel and associated devices utilising the existing cabling infrastructure. Approximately 1,000 devices were installed including nearly 500 intelligent multi-heat sensors, which incorporate a variable temperature heat element and a rate of rise heat element – both of which are controlled from the control panel, allowing either one or both elements to be active in making the fire decision.

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Asked why multi-sensors were the preferred option, the then spokesperson for Pyrotec, Paul Slater, commented:

Due to the diversity of work being carried out at WTCHG, it was important to have the option of being able to switch between detection modes on a daily basis. This provides versatility without compromising on safety.

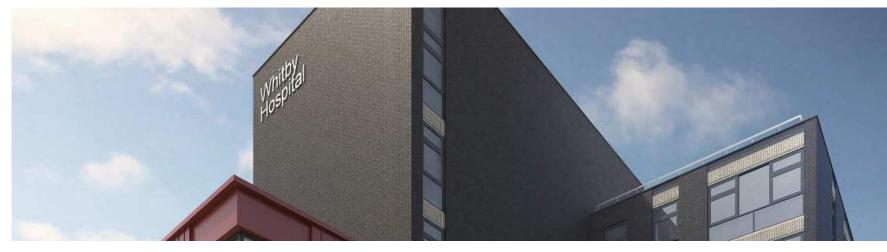
Access for visual inspection and the maintenance of smoke and heat detectors is essential. The University of Oxford Safety Office specifies that if point detection cannot be installed within a lift shaft in a manner that allows safe access (without the need to stand or ride on the lift car roof) a single zone airsampling detector is to be installed outside the shaft with a short run of pipe work into the shaft. Consequently this requirement resulted in the installation of an Hochiki FIRElink aspirating system.

As a result of careful planning the installation went very smoothly and was completed with minimal disruption to the activities within the building. Fire detection cover was maintained 24/7 during the installation by carefully interfacing between the new and old systems as the work progressed.





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HOCHIKI EUROPE LIFE SAFETY SYSTEM RECOMMENDED FOR WHITBY COMMUNITY HOSPITAL BY SYSTEMS PARTNER, TEES FIRE.

Whitby Community Hospital provides inpatient, outpatient and community services to the town of whitby and the surrounding area. In october 2021 work was completed on the tower block section of a larger renovation project. The new tower block contains services from Humber teaching NHS foundation trust, York and Scarborough teaching hospitals NHS foundation trust, Harrogate and District NHS foundation trust, and Tees, Esk and Wear Valleys NHS foundation trust.

A range of services are delivered from this newly refurbished area of the hospital, including a new urgent treatment centre, podiatry services, physiotherapy, audiology and much more. The Tower Block is also home to the Memorial Ward, where those who need to stay on the ward (and their families) will have access to accessible and comfortable spaces and facilities.

Tees Fire is one of Hochiki Europe's System Partners, a

nationwide network of trained, professional and accredited fire alarm companies, recognised in the UK for their high levels of expertise, workmanship, customer service and quality. Having worked with Hochiki Europe for over a decade, the team at Tees Fire, led by Managing Director David Hynes, said:

We have used Hochiki Europe products for well over a decade now and having worked on several hospital installation projects over the years, each time we recommend Hochiki because they are always reliable and cost effective

For the project at Whitby Community Hospital, Hochiki Europe's Latitude system was chosen because it has a powerful cause-and-effect capacity, ideal because hospitals often require a system which allows for phased evacuations. Because of the number of vulnerable people within a hospital, avoiding widespread panic is essential, and with a Hochiki Latitude system in place should a fire break out, the area which is immediately impacted can be evacuated, whilst simultaneously triggering warning signals to neighbouring areas. This would automatically alert nurses and doctors to a possible emergency, giving them time to prepare for an evacuation avoiding panic.



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Latitude worked seamlessly with other systems too, such as the lifts and the plant room, via the building management system. This means a controlled and safe evacuation can be achieved, keeping patient safety the number one priority if an emergency should arise.

We installed LCD touchscreen repeaters at nurses' stations using the Hochiki Latitude Vision repeaters, and trained staff how to use and understand the repeaters, using the intuitively designed interface. They are also very compact in their design compared to others on the market, at not much bigger than a tablet they don't take up lots of room in a busy nurse's station.

The added benefit of using Hochiki Europe devices in a hospital environment is that they can be flexible depending on the use of the rooms or wards they are placed in. Using a universal, electronics-free mounting base, sensors, sounders and beacons can easily 'clip in and clip out' allowing for flexible fire safety design and easier device maintenance.

With the installation project completed in October 2021, the team faced the challenge of working alongside other contractors during the global pandemic, meaning careful management of teams. "In one respect it was tricky because of the pandemic, but it worked in our favour because we were able to have an entire floor to ourselves to install and test the system, working our way through the building methodically."

Commenting on the successful installation Hynes said:

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I wouldn't hesitate to recommend Hochiki Europe, especially for healthcare estate projects. The team are knowledgeable and always ready to help should we need it, especially the technical support team. Our account manager has lots of experience in the industry and we trust him and the team to provide us with a cost effective and compliant solution.

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Mick Hall, System Sales Manager at Hochiki Europe said



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Tees Fire are one of our biggest independent system's partners and have worked with Hochiki Europe for a long time, so there is a trusted relationship there. The install went so well that we have helped Tees Fire to deliver a CPD to the staff at the hospital on False Alarm Management, something that is critical to understand for the responsible person(s), especially in a healthcare environment







CORNERSTONE GROUP AND HOCHIKI PARTNER TO DELIVER LIFE SAFETY SYSTEM FOR ROYAL FREE HOSPITAL, LONDON

The Royal Free Hospital is a major teaching hospital in the Hampstead area of the London borough of Camden. The hospital is part of the Royal Free London NHS Foundation Trust, which also runs services at Barnet hospital, Chase Farm hospital and several other sites.

The Royal Free Hospital is a major teaching hospital in the Hampstead area of the London Borough of Camden. The hospital is part of the Royal Free London NHS Foundation Trust, which also runs services at Barnet Hospital, Chase Farm Hospital and several other sites.

Established in 1828 by William Marsden, a newly qualified surgeon, after he found a penniless young woman who was in desperate need of medical care. None of the local hospitals would take her, and so sadly she died two days later. Shocked by these events Marsden set up the Royal Free Hospital on the founding principle that they would take in anyone who needed treatment – the first hospital in London to do so and the only London hospital to stay open during the 19th-century cholera epidemics.

Today the hospital continues to lead improvements in healthcare and have some of the best clinical outcomes in the country.

With demand for the hospital's facilities growing, a new building was proposed and in June 2021 the brand new 60million pound Pears Building was opened. A groundbreaking collaboration between the Royal Free Charity, UCL and the Royal Free London NHS Foundation Trust, this new building brings together the theory and implementation of research as well as allow the public easy access to the latest discoveries in immunology. Cornerstone Group Fire and Security Systems, who are a valued member of the Hochiki System partners network were commissioned by a major London based mechanical and electrical contractor to scope, design and install



the life safety systems in this new facility, which is now one of the largest patient-focused immunology centres in Europe.

The equipment installed at the site was Hochiki HFP range of devices which utilise the globally proven open protocol ESP technology. Famed for its quality and ease of installation reduction, the ESP range is adaptable to a broad range of environments and applications. From small to very large areas, the range can be utilised to fit almost any environment, and because the range benefits from false alarm reduction technology, it was particularly suited to this sensitive and complex hospital and research environment.

Neil Eves, the then Head of System Sales at Hochiki Europe shared:

There was a very extensive cause and effect requirement for this project and significant witness testing required subsequently, however it is testament to the skilful installation by Cornerstone and the quality of the product that has led to there being no unwarranted false alarms on the project to date

Neil Thurgood, the then Project Manager at Cornerstone explained:

A state of the art building like this requires the very best in fire detection technology to protect the patients, staff and assets. Cornerstone have worked with Hochiki Europe for several years now so we knew their devices would be the best for this project. The system at Royal Free's Pear Building is run off four panels and eight loops. We've installed Hochiki sounders, as well as heat and smoke detectors and call points.

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Hochiki devices are world famous for their ease of install and reliability, particularly in reducing false alarms. The system has been in for a year now and there have been no issues at all

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Cornerstone group also commented that the cost for this project was competitive;

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when you are dealing with buildings such as this, which are operating to strict NHS budgets, it's essential to work with manufacturers who understand this. Our Hochiki rep understood the brief and is among the most professional and helpful I've ever worked with. We also own the service contract for this building, so it's good to know the Hochiki devices that are installed are easy to maintain







SACRO CUORE DON CALABRIA HOSPITAL AN EXCELLENCE IN MEDICINE AND IN SECURITY

The hospital is made up of eight buildings with more than 30 medical departments, operating theatres, offices, canteens, and conference rooms. In recent years, the hospital has undergone considerable renovation and expansion and along with this the improvement and adaption of the life safety system. The update to the fire detection system is to ensure the best possible protection for the thousands of people who visit the facility every day as well as the preservation of property, patient data and vital medical equipment.

The healthcare sector has a duty of care for its patients, staff and visitors as well as having to provide constant protection of its property and assets from the threat of fire. After extensive assessments and a rigorous qualifying stage by the Hospital technical team and Amperia srl, the installation company, Hochiki fire detection systems and equipment were found to offer the best solution and offered the highest quality standards for the hospital.

Hochiki is a well-respected name in healthcare across Europe and famed for its reliability in Italy, particularly when it comes to reduction in false alarms. Minimising this risk was critical to the hospital who wanted to avoid unnecessary and hugely problematic evacuation situations, especially where some patients may find moving around independently difficult and, in some cases, impossible, especially for patients in critical care departments.

Following consultation, 26 fire detection panels, including Syncro and Hochiki's Latitude system, and two Vision remote panels were installed in the hospital, all of which were networked.

The project brief stated that it was important the systems and any devices used must be installed with minimum impact on the day to day running of the hospital. Hochiki ESP range was recommended because these devices have been specifically designed to be quick and easy to install and therefor ensured minimal disruption was achieved by the team at Amperia srl.

Another priority for the project was that any fire detection system needed to be able to alert every person in the building to an emergency, including visually and hearing-impaired visitors. Hochiki's range of VADs (visual alarm devices) were used to provide a visual indication of an alarm condition to those people who would not normally be alerted to a fire by standard audible-only devices such as sounders and bells.

The final key priority was the ability for the entire system to be continuously monitoring 24 hours a day. During the consultation period between the installers and Hochiki, the fire detection system was designed to provide 24/7 monitoring. This was thanks to the I/O modules and technological fault alarm signals which were also implemented and connected to the fire control panel loop. These were then monitored by the personnel 24 hours a day thanks to two supervision systems, one for the fire detection system and one for the technological alarms.



This project at the IRCCS Sacro Cuore Don Calabria Hospital was one of the largest and most complex projects that Hochiki have ever been involved in Italy involving the installation of multiple detectors, Detectors, 10 fire extinguishing systems, 14 gas detection panels and 10 aspirating panels.

Davide Montoli, Product Manager at Hochiki Italia, explains:

"Bridge" communication between different generations of fire alarm control panels. In the case of this Hospital, the possibility of connecting the new Latitude control panels to the existing network of Syncro control panels made it possible to expand the system even though many years had passed since the installation of the original control panel. In fact, Hochiki's Latitude platform can adapt its communication protocol to ensure backward compatibility with previous generation control panels.

Thanks to the expert Hochiki team working closely with both the installer and the technical team at the hospital a high-quality installation was achieved, with the best products on the market installed ensuring that fire safety for patients and staff is kept as a top priority.

Loris Fornaser, Technical Manager at the installer company Amperia srl, commented:

of this project were extremely high due to the complex environment in which a hospital operates. This led us to choose a technologically advanced life safety product that would guarantee the client excellent performance and long-term reliability. The manufacturer's technical support was always precise and Hochiki proved to be the ideal solution"

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HOCHIKI EUROPE'S FIRE DETECTION SOLUTION SENDS THE RIGHT SIGNALS AT ASHFORD INTERNATIONAL

Located just a short walk from the centre of Ashford in Kent, Ashford International railway station is well known to European travellers as one of the primary UK transport hubs for Eurostar services to Paris and Brussels.

The station was built in 1995 and opened in 1996 prior to the completion of Section 1 of the now fully operational HS1 high-speed rail link from London to the Channel Tunnel. It is used for international services, currently only operated by Eurostar, between London and France and Belgium. The station is operated by Eurostar on behalf of HS1 Limited.

Over recent years Tim Garrett, Ashford International's then Maintenance Manager, began experiencing significant problems with the station's fire detection system. He explained:

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We started to get an increasing number of unwanted alarms and because it was a closed protocol system, we found that replacement parts were becoming difficult and expensive to source.

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Although they didn't originally install the system, Gillingham based Senseco Systems was recently procured by Eurostar and with the support from Tim Garrett Senseco was engaged to maintain it. Steve Thomas, the company's then Business Development Director, commented:

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We are a specialist fire detection and security solutions provider and our team has worked at Ashford International for a number of years. During our planned maintenance regime we found that we were spending an increasing amount of time sourcing spare components. This situation was untenable, so we discussed with Tim the benefits of installing a new system that would eliminate these problems.



After Tim issued a tender document in March 2011 Senseco outlined its proposal which, following a rigorous procurement strategy, was duly accepted. Central to its plan was replacing the existing system with a solution based around Hochiki Europe's Enhanced Systems Protocol (ESP).

Steve based this decision on a number of criteria and said:

Hochiki is well known and respected within the rail sector and its products are used in some of the busiest stations in the UK. We also know that ESP is one of the most resilient protocols on the market and is able to utilise an existing cabling infrastructure without experiencing any deterioration in performance. These factors meant that Hochiki's products could offer the requisite level of reliability, quality and performance required for this project.

ESP is a robust total communications solution for intelligent fire detection and fully integrated systems. It has a multi-purpose structure that provides the flexibility and expansion to accommodate simple addressable systems through to integrated building management and safety systems.

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Products from Hochiki's HFP range were utilised and the analogue addressable system comprises of an eight loop main control panel that is supplemented by two repeater panels and a number of mimic panels sited in various locations in the main terminal.

A total of over 700 HFP devices were installed including 90 interfaces, 13 heat sensors, and 77 call points including weatherproof call points. A number of combined smoke and heat detectors, single and dual input modules, and dual relay controllers were also used.

Railway stations can be very dirty and dusty environments so it was important to use devices that have a high resistance to unwanted alarms. To account for this Senseco installed over 500 Hochiki optical smoke sensors. These

devices feature the company's unique High Performance Chamber Technology, which minimises the differences in sensitivity experienced in flaming and smouldering fires. The result is a high performance optical chamber that is equally responsive to all smoke types and helps to reduce the possibility of unwanted alarms at Ashford International.

The installation went incredibly smoothly and according to Senseco Systems' Steve Thomas, many of the possible obstacles were surveyed and expertly managed by our contracts department and therefore avoided. He said:

For an upgrade project like this in a public building maintaining detection coverage during the installation is important. To make sure this happened we replaced one loop at a time so that the entire station was continually covered and the protection of those on the premises was maintained at all times.

The project was a huge success and we are very proud of our contract performance, our product partnership with Hochiki and our excellent relationship with a high profile client such as Eurostar.

Ashford International's Tim Garrett is delighted with the result. He concluded:

In a busy environment like this carrying out this type of installation work discreetly and with minimal disruption can be difficult, however, Senseco Systems managed this with apparent ease. After the problems we'd experienced previously our new state-of-the-art fire detection system from Hochiki Europe has had a positive impact on the smooth running of the station and I'm confident that staff and passengers now have the best possible protection.





HOCHIKI FULLY NETWORKED INTO NETWORK RAIL

Hochiki Europe detectors are integrated to a fully networked fire detection and alarm system at Edinburgh Waverley station.

A fully networked fire detection and alarm system has been developed and installed for Network Rail, providing centralised control of fire monitoring at Edinburgh Waverley station, as part of a major enhancement programme.

In excess of 500 Hochiki detection devices have been integrated into the system by specialist contractors, Dante Fire & Security, and the system comprises four main panels from Advanced Electronics.

Central to the network's system design is the flexibility to accommodate cause-and-effect scenarios within complex fire strategies. For such a demanding project, system reliability and integrity are of paramount concern, and Dante affirms that 'Hochiki's warranted product quality and reliability' were deciding factors in determining Hochiki as the preferred technology for this prestigious installation programme.

The quality assured, interference-free performance of Hochiki's ESP range detectors is just one aspect of the efficient functionality demanded of the installation by the Network Rail specifiers.

Dante highlighted the ease with which Hochiki's analogue addressable sensing devices can be sub-addressed as of particular benefit during system configuration. In addition, Dante emphasised the advantage of Hochiki products in permitting a more flexible interface by allowing more devices to be added to the loop compared with any other competitive technology. Commenting on the installation Neil Corney then of Dante Fire & Security said:

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The installation of the system was challenging due to the demands of working in a busy capital city railway station, with minimal impact on the operation of the station of paramount importance to the customer, however the flexibility of the system installed in conjunction with the efforts of the Dante Fire & Security and Network Rail project teams ensured this was achieved.

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The advanced system design, together with compatible products for trouble-free integration, combined to fulfill the demands of a project where, as Network Rail comments, 'quality, efficiency, reliability and longevity of the systems were high on Network Rail's requirements'.

Renowned for its specialist expertise, Hochiki has gained the reputation as one of the world's leading manufacturers of high quality commercial and industrial fire detection solutions. Hochiki's products can be found in numerous prestigious locations including state parliaments, metro systems, airports, banks, commercial centres, hospitals and hotels. All products are approved to UK and International standards.



HOCHIKI LIFE SAFETY DEVICES REDUCE FALSE ALARMS AND HELP MAKE THE 75KM LONG DUBAI METRO TRANSPORT NETWORK SAFE FOR PASSENGERS.

Famed for its luxury shopping and extraordinary architecture, the city of Dubai in the United Arab Emirates is home to over 3.3 million people, and the world's longest driverless single metro line - the Dubai Metro.

Designed to take up to 13,380 passengers an hour on its green line, and 11,675 passengers an hour on its red line at peak time, the Dubai Metro is almost 75 km long and operated by RTA and Serco. Under contract to the Dubai Roads & Transport Authority, the network is run by a team of 2000 staff with 57 trains running at peak times.

Dafoos Fire and Security were commissioned to run the fire detection installation project on the entirety of the Dubai Metro. Trusted as a market leader in the Fire Protection Industry in the United Arab Emirates, Dafoos specialises in providing end-to-end design, erection and commissioning and maintenance of both active and passive Fire Protection Systems, and partners with some of the best OEMs in the world, including Hochiki. With tens of thousands of passengers using the network daily and the system itself operating in a hot and sandy environment, any false alarm could potentially cause mass disruption

and cost the operator financially, especially during peak service times. The company's Marketing Director, Vijay Chandran said about the project:

66 it was especially important as part of the life safety system design process to negate false alarms. Hochiki fire detection devices were chosen as they have a reputation for being the best in the market for their quality and their reliability when it comes to false alarm reduction. Our selection of Hochiki was confidently backed by the operators RTA and Serco

The Hochiki sensors were to be installed inside the metro and tram coaches. This is considered an extremely sensitive area with thousands of people transiting at a time, thus posing a higher chance of triggering false alarms. Any fire alarm trigger was programmed to send a command to the central station, and this would halt the operations within the entire network until the problem is rectified.

The Hochiki technical team also worked closely with the Dafoos team to negate the challenge of frequent dust build up in the chambers. It was advised that periodic maintenance of the sensors was moved from every 6 months to every two instead, which is customary practice for commercial buildings in the region.

66 Hochiki Smoke Sensors have been installed across the entire Dubai Metro and tram coaches; they have been functioning with minimal issues for the last three years. with Hochiki's technical team recommendation. Our team would not hesitate to recommend Hochiki life safety systems and products to be used in other projects within the transport industry





ST PANCRAS INTERNATIONAL NINETEENTH-CENTURY STATION DELIVERING A TWENTY-FIRST CENTURY HIGH-SPEED RAILWAY SAFELY WITH THE HELP OF HOCHIKI.

Designed by William Barlow in1863, it gained instant fame for its "Barlow Shed" train shed arch that spans 73 metres and is over 30 metres high at its apex; at the time, the largest enclosed space in the world. The Grade 1 listed red brick Gothic landmark façade fronting the station was the result of an architectural competition in 1865 and became the Midland Grand Hotel. In 1935, the hotel was closed and the building became railway offices, renamed as the St Pancras Chambers.

One of the largest transport hubs in Europe, St Pancras International has 13 platforms, six of which are around one kilometre long and are devoted to international Eurostar services. The station also incorporates 47 retail outlets and designer boutiques on the undercroft, plus stylish Eurostar arrivals and departure lounges, and a further ten shops on the station platform level. It also boasts a daily farmers' market and, at 90 metres, the longest champagne bar in Europe. However, thanks to careful attention to detail and a sensitive understanding of the architectural importance of the National Heritage building, St Pancras International remains one of the greatest Victorian buildings in London.

FAST & RELIABLE SOLUTION

System design and product selection, installation, testing and commissioning of the new and extensive fire safety solution for the station was undertaken by the Infrastructure and Rail Services division of EMCOR as part of its £310 million contract with Union Railways North for the refurbishment of St Pancras International. The team was headed by Peter Patrick, head of EMCOR's fire division and an expert at undertaking major infrastructure capital projects such as the Jubilee Line and Russian pipelines who, on this contract, managed four project managers, five commissioning engineers and more than 50 electricians.



Following a site safety upgrade, the Eurostar terminus at St Pancras International in London bristles with the latest high-performance fire detection and alarm technology, including no fewer than 5,000 Hochiki ESP – Enhanced System Protocol – analogue addressable devices, installed throughout the site. A variety of Hochiki devices were selected, each chosen for its proven ability to combat fire risks in the huge multi-activity station. They included optical smoke sensors for back office and main passenger concourse areas; multisensors for more challenging environments such as plant rooms and workshops; heat detectors in kitchens and toilets; audio visual devices and base sounder beacons.

They are all automatically re-calibrated every 24 hours by the Syncro panels to compensate for any environmental contamination and to ensure that they continue to operate reliably at the specified sensitivity. Indeed, a key factor cited by the installer for the decision to opt for the Hochiki solution was the flexibility of the devices to be compatible with other products already installed. For example, Hochiki's ESP protocol devices are configured to share system information and event details on a highly fault-tolerant secure network.

The success of the installation can be judged by the fact that the same solutions were also adopted to protect two other stations on the UK side of the London-to-Paris rail link. The Ebbsfleet International Station near Dartford in Kent, and the Stratford International Station near the City and Canary Wharf that was also central to the 2012 Olympic transport strategy, with forecasted passenger volumes of 25,000 a day to and from the Olympic Games' venues.

However, technical performance was not the only consideration with which the installer had to contend:

We had to take great care when installing the fire detection equipment, as it was vital to minimise any adverse aesthetic impact on the highly decorative Victorian architecture. Another major challenge was the need to install the new system in a station that was to remain open and be used daily by thousands of passengers. So, the fire safety system had to be always fully functional.

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ERROR-FREE DETECTION

The life safety installation is managed in the station's main control room where, around the clock, a 1.2-metre LCD screen displays the entire station and its fire detection system. This provides an overview of the whole installation, or a drill-down showing various levels of detail; if necessary pinpointing information on any specific device. If, for example, a fire is signalled, the precise location can be viewed on screen, and devices can be interrogated. The screen can even display the best evacuation routes.

With huge numbers of people converging on the station's platforms at peak travel times, and the travelling public's ever-present concerns regarding terrorist activities, ensuring the minimum disruption from false alarms was a paramount consideration.

In the event of a confirmed fire, the Syncro system directly controls and monitors the station's voice evacuation system, which is audible in all of the station's public areas. However, in places where high levels of ambient noise may make it difficult to hear voice alarms, such as toilets, beacons are also fitted.

Famous for helping to reduce false alarms, Hochiki's ESP protocol uses a combination of sophisticated algorithms that reduce data corruption. Additionally, with parity and checksum error detection principles applied to every set of data, unwanted external "noise", such as EMC interference is eliminated.

Hochiki optical smoke sensors are designed for both efficient detection and the virtual elimination of false alarms. The sensor's chamber incorporates uniquely angled baffles which allow air and smoke to circulate within the chamber but reduce the ambient light entering the chamber, thus improving the response of the optical elements. The sophistication of the sensing elements in the chamber enables it to also sense a wider range of fire types, so providing a more balanced response to different types of smoke particles. This is an Hochiki-developed technology that the company calls its "high-performance chamber".

The sensitivity of each device is set to match the prevailing conditions additionally, to allow the most suitable sensing mode to be adopted for a particular environment, the multi-sensors can be set to heat.

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AN INTEGRATED SOLUTION

The main control panel was designed and engineered to meet High Speed 1 requirements. It incorporated 196 fire zone indicators, and several firefighters' control switches to allow the plant to be managed anywhere in the network via Hochiki loop output relays. A repeater panel, with an emergency fire telephone, was incorporated into the system for use by the fire brigade should an emergency condition occur within the main control suite.

Summarising on the St Pancras International project the installer said:

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Over the years we have used many different fire detection devices and we can truly say that Hochiki has time and time again proved to be the most reliable and best performing of them all". Explaining in more detail: "The key elements that we look for in a fire system are reliability, flexibility, good quality control, high performance and false alarm management. The last thing we need on a site such as St Pancras International is unwanted false alarms. Hochiki have delivered superior product performance and hands-on technical support.

Just as Eurostar trains speeding out of the rejuvenated St Pancras International have established Britain's credentials in world-class high speed rail travel, so too has a new European benchmark for railway station fire safety been established.



HISTORIC HELSINKI COURTHOUSE PROTECTED BY HOCHIKI EUROPE

Historic Helsinki Courthouse Protected by Hochiki Europe An impressive building of great historical significance to the Finnish capital, Helsinki, underwent a complete renovation including the conversion of a floor area of about 25,000 square metres to house the Helsinki District Court & Prosecuting Authority, containing 30 courtrooms and offices for about 500 employees.

To guarantee security and operational safety, a comprehensive fire alarm system comprising Hochiki sensors was installed in the building, implemented by Oy Hedpro Ab Security (Hedengren Group) through their local retail dealer Tekmanni Oy, Espoo.

Special features of this fire alarm system included sensors sensitive to smoke and combustion gas installed in the ventilation ducts in the cell department. In the first phase, eight Prodex central fire alarm units and approximately 2,500 Hochiki heat and smoke sensors, duct and line sensors, base sounders and manual call points were installed. In the next phase, four networked Prodex fire alarm central units and 1,500 Hochiki sensors were added.

The complete installation comprised 4,000 Hochiki sensors and twelve Prodex-500 central fire alarm units, networked into one integrated system by the Prodex Expander. Operation and maintenance of the central units is performed by a general operating panel, separate MUP operating panels containing graphics display, or remote programming from the control room.

In addition to ordinary fire alarm transmissions to the fire brigade, the event data (false, prealarms and fire alarms) is sent to guards' and doormen's GSM telephones via protocol adapter Pronode and Nokia-30 transmitter. SMS transmissions can be arranged according to fire groups and sent to 16 different mobile phone numbers. In an alarm situation, the Prodex fire alarm system also controls the PA system giving instructions to people in the building.

The specification of Hochiki for this prestigious project is due to the ideal combination of quality and reliability featured by Hochiki's ESP fire products, and Hochiki's ESP protocol that also ensures lowest cost of maintenance. According to the specifiers, Hochiki satisfied their commitment to high quality products that provide the best possible life protection for staff and public in the Courthouse.

MOROCCO | CASABLANCA | ESP INTELLIGENT RANGE

CASABLANCA COURT



HIGH STANDARD FOR THE HIGH COURT

The Court of Appeal in Casablanca is one of the top divisions of Morocco's judicial system, with over 200 staff members working across four storeys. Because of the high profile nature of the building and its occupants, it is essential that all life safety systems are of a superior quality, while simultaneously complying with strict regulations.

When the need to replace the existing fire detection solutions arose, Marrakech-based safety systems retailer S.A.S. Equipment recommended the use of Hochiki Europe products because of their proven reliability.

S.A.S. Equipment was able to demonstrate that Hochiki Europe's products complied with the project requirements and necessary building regulations. This allowed for the installation of a Hochiki Europe system comprising three analogue addressable panels controlling a total of 234 ALN-EN photoelectric smoke sensors.

Part of Hochiki Europe's Enhanced System Protocol (ESP) range, these sensors help to provide a system that is both secure and expandable; manufactured to the highest international standards, offering life safety products and systems of incomparable reliability. Other products installed as part of the project include 40 manual call points 18 conventional sounder beacons.

Soufiane Benhadda, the then Sales Director at S.A.S. Equipment, said:

As part of this project, Elec Omar was keen to use CMSI products, however, Hochiki Europe products can be used as an equivalent. When we demonstrated that Hochiki Europe products offered the same functional capability as CMSI at an improved specification, Elec Omar was happily persuaded.

Hochiki Europe, explained:

Our products boast exceptional safety standards and comply with different regulations across Europe. Thanks to our reliable, state-of-the-art life safety systems, users of the Court of Appeal are safe in the knowledge that they are protected in the event of a fire.

Upon completion, Morocco's Minister of Justice is set to officially open the building as part of an inauguration ceremony.





HOCHIKI MIDDLE EAST HELPS ROYAL OMAN POLICE MAINTAIN ORDER

The Royal Oman Police (ROP) is the main law and order agency in Oman. The concept of a modern police force is relativity new to Oman, around 30 years ago no internal security force existed. Now the ROP are regarded as one of the best in the region.

In 2018, a new police station was built in the growing desert town of Marmul. The station is located within the Petroleum Development Camp which is the leading oil and gas exploration & production company in Oman. The Marmul police station is spread across nine buildings and can accommodate in the region of 200 people; it was therefore vital to install an efficient and reliable fire detection solution.

Project management company Dolphin Trading & Investment L.L.C. were enlisted to oversee the build, and they hired fire detection specialists, Be One Safety, to design and install the new fire detection system.

Product quality was high on the specification; they required a system with long term reliability and superior performance; Be One Safety therefore decided that Hochiki would be able to provide the perfect solution.

Hochiki devices have been optimised to reduce false alarms, but also provide a quick response in the event of a real fire. The devices are renowned for being robust, reliable and having an extremely long life span; making them a very cost-effective solution. For this reason, Hochiki devices have been first choice for many prestigious buildings around the world.

Be One Safety installed nine EN 54 approved fire panels, one in each of the nine buildings, networked together with over 700 Hochiki analogue addressable sensors.

Due to the complexity of the project, the onsite engineers relied heavily upon assistance from the regional Hochiki technical support team at Hochiki Middle East FZE. This high-quality technical support is another reason why distributors repeatedly place their trust in the Hochiki brand.

The Marmul Police Station was completed and handed over successfully in 2018. Since then, Fire Protection specialists Proline Safety, Security & Gas have taken over all ROP projects and have been working alongside Hochiki Middle East on an EN system for Mirbat Police Station and a UL system for Al Awabi Police Station.

FIREbeamXtra



ESP





HOCHIKI EUROPE KEEPS TRACK OF FIRE DETECTION FOR MICHELIN IN SERBIA

Currently one of the two largest tyre manufacturers in the world, Michelin has come a long way since two French brothers, Édouard and André Michelin, formed the company in 1888. Having continually innovated and pushed the boundaries of tyre technology, its products are now found on vehicles ranging from family hatchbacks to Formula One racing cars, and were even used on the NASA space shuttle.

As a multinational organisation, Michelin has operations throughout the globe and in mid-December 2009 it became the sole owner of the Tigar Tires car tyre factory in Pirot, Serbia. In 2010 Michelin announced that it would invest €10m in Serbia over the next 18 months, including a new logistics centre that has created over 100 new jobs, and since then it has doubled production at the Pirot factory to 12 million tyres annually.

Work on the logistics centre began five years ago and was finally completed in 2011. To protect those working in this complex of buildings, Michelin knew that it would need to have a rigorous life safety infrastructure in place. To achieve this objective, the company called on the services of leading fire detection system design and installation expert, Quadel, to specify a suitable solution.

After conducting a site survey Dejan Ciric, Quadel's then Technical Manager, had no hesitation in recommending the installation of a fire detection system from Hochiki Europe. He explained:

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Quadel was founded in Nis in 1992 and since then we have built an enviable reputation for the specification and installation of the highest quality life safety systems. We first began working with Hochiki in 1996 and have enjoyed a close working relationship by installing their products in a variety of locations in Serbia. It was obvious that only their products would offer the requisite level of performance required for this project.



The Michelin logistics centre utilises an addressable fire detection system based around Hochiki's Enhanced Systems Protocol (ESP).

Paul Adams, Hochiki's then Marketing Manager, commented:

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ESP is a robust total communications solution for intelligent fire detection and fully integrated systems. It has a multipurpose structure that provides the flexibility and expansion to accommodate simple addressable systems through to integrated building management and safety systems. It is a robust system and is perfect for use in harsh and hazardous environments such as the Michelin site.

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The system is based around nine addressable control panels and a number of devices that are linked via a local area network (LAN) and connected to an off-site remote monitoring centre. Due to the large quantities of smoke and dust particles created in the production and storage of tyres, as well as the high ceilings in the buildings, the team from Quadel decided to use Hochiki's ESP FIREbeam reflective beam smoke detectors, which feature advanced motorised technology allowing them to self-align to the centre of the reflector when commissioning.

Dejan Ciric explained:

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Using beam detection allows us to cost effectively cover a large area. Once commissioned the Hochiki detector continually monitors alignment and will automatically realign itself back to the centre of the reflector if any movement occurs. The detector comes with a separate controller unit that allows our engineers to commission, monitor and maintain from ground level.

Even with this automatic alignment technology, regular maintenance is crucial to a fire detector's correct operation and the physical removal of dust and dirt will eventually become necessary. The design of Hochiki's detectors means that it is possible to simply and quickly dismantle the detector and clean or replace it on site.

Other Hochiki products used included base sounder beacons, multi-heat sensors and optical smoke detectors, which feature Hochiki's unique High Performance Chamber Technology. This minimises the differences in sensitivity experienced in flaming and smouldering fires, resulting in a high performance optical chamber that is equally responsive to all smoke types and helps to reduce the possibility of unwanted alarms. This has enormous benefits for Michelin as the costs associated with evacuation of personnel and subsequent loss of production are immense and must be avoided.

The development of the state-of-the-art logistics centre represents a massive investment for Michelin in this region and the company was determined to use best in class solutions throughout. Reliable and high performance fire detection is a fundamental requirement for a facility of this kind and Michelin is confident that this is provided by the system from Hochiki.





HOCHIKI LIFE SAFETY PRODUCTS CHOSEN TO PROTECT UPGRADED SUDAN **CEMENT FACTORY**

A key factory in Sudan's cement making industry has recently undergone a significant expansion that will allow the plant to considerably increase its production capacity. As part of the upgrade, the factory was fitted with a variety of custom life safety solutions from leading life safety manufacturer. Hochiki Europe, to guarantee safety for all members of staff at the plant, and prevent hazards that could cause disruption to production.

Social and economic development is transforming The Republic of The Sudan, providing a much-needed boost to industries in the construction sector. This considered. there is now a growing demand for the cement needed to complete building projects. As a result, its manufacture and supply has built a booming industry for the country, with production undertaken by both the private sector and foreign investors.

Sudan is also well placed to make Portland cement – the most common type, because of the abundance of essential raw materials such as limestone, a key ingredient in the manufacture of the binding substance and one of the country's natural resources. To meet the construction sector's growing demand for the product, the cement plant outside of Berber was redeveloped in order to increase production on site.

A complete life safety system

Located outside of Berber town center, it was essential that the factory was upgraded with a full range of life safety solutions to ensure that workers were protected from any fire risks. The plant is home to a significant amount of machinery which can increase the risk of these hazards, therefore, to guarantee worker protection and avoid interruption to production, a Hochiki addressable system was installed. The HFP system is an extremely versatile, complete life safety system which incorporated a range of control panels, extinguishant panels, smoke sensors, call points, heat sensors and audio/visual alarms - covering all of the plant's fire detection requirements.



The range is fully compliant to world-recognised standards and includes a high-performance chamber which allows for adjustable sensitivity settings, reducing the likelihood of false alarms and any unnecessary ceasing of production.

Mark Jones, the then Export Sales Manager at Hochiki Europe said:

In sites like the Berber cement factory it is extremely important to reduce the probability of false alarms to ensure that production goes undisturbed. This is why Hochiki systems were the perfect choice for this project as they are produced to meet the demands of the world's industrial sector.

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Project challenges

However, the installation of the system in the upgraded factory was not without its challenges. For suppliers, this was only the second time installing the system in a power plant, and this factor coupled with the hot and dusty environment meant that the project was a complex one. The plant is also located in a remote part of Sudan, an hour outside of the nearest city and several hours from Khartoum, meaning installers faced long journeys while working on the project, meaning that complications during the project needed to be minimised.

Environmental considerations

When choosing the system, the developers had to take into consideration Sudan's dusty climate, coupled with the dust produced on site at the cement plant, and install products that could be quickly fitted to withstand these challenging conditions. Typically, dust can often cause severe interference to devices and result in false alarms being raised or device malfunction. However, Hochiki life safety solutions have a high tolerance to extreme dust and heat conditions — making the manufacturer a preferred supplier in Sudan and the perfect choice for this project.

Hisham Hassan Abuzeid, then of Sorouh Advanced Works, Hochiki's partner in the Sudan region, said:

We recommended the Hochiki HFP system for the cement factory because of its versatility and reliability. The system features solutions that are perfect for demanding environments – making it the best choice of solution for the environmental conditions at the plant. "Since the completion of the redeveloped plant, the customer has told us that there hasn't been a single false alarm on site. They have also been extremely impressed with how userfriendly the interface and language of the panels are, as they are very easy to deal with for people unfamiliar with this sort of technology

FIREscapeNepto



PORTUGAL | COSTA VERDE | FIRESCAPE EMERGENCY LIGHTING & FIREWAVE RANGE **COSTA VERDE**



HOCHIKI EUROPE PROVIDES LIFE SAFETY FOR PORCELAIN MANUFACTURER

One of Europe's leading producers of fine porcelain is now protected by a range of innovative new life-safety solutions from Hochiki Europe.

To protect the 340 people who work at Porcelanas da Costa Verde SA (Costa Verde) porcelain manufacturing facility in North West Portugal, the porcelain producer required the quick installation of enhanced automatic fire detection devices and energy-efficient emergency lighting. Hochiki Europe products were chosen due to the company's commitment to environmental responsibility and product innovation.

As part of the project a new FIREscape emergency lighting (EL) system was installed, enabling Costa Verde to reduce maintenance costs, and decrease energy consumption.

FIREscape is an environmentally friendly EL system that is simple to install and requires little maintenance or manual testing. When compared to traditional lighting, a FIREscape system uses less than 5 per cent electricity, cutting costs significantly for the end user.

In addition to FIREscape, Hochiki Europe's hybrid wireless fire detection system, FIREwave was also specified for the ceramics factory. The FIREwave range of products do not require cabling and run off standard lithium batteries, making them more economical and environmentally friendly than traditional detection units.

The products installed at the site in Costa Verde comply with all applicable international standards as well as Portuguese regulations, such as the Security Technical Regulation Fire in Buildings, Decree No. 1532/2008. As periodic checks are also being carried out on-site by installers, Costa Verde is able to ensure that all products are being adequately maintained.



A spokesperson from Costa Verde said:

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We're already seeing the benefits of our new safety devices from Hochiki Europe, which have reduced our energy consumption and carbon emissions.

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Hochiki Europe commented:

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It's fantastic to see Costa Verde benefiting both financially and environmentally through the installation of our FIREscape and FIREwave systems. Following the recent climate conference in Paris, corporate environmental responsibility is at the top of the agenda for businesses in Europe.

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The systems were installed by Portuguese electrical contractors, Unifogo. A spokesperson from the company commented:

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Hochiki Europe's devices were ideally suited for this large-scale contract. The fact that the FIREwave systems don't require complex cabling and are easy to install allowed us to complete the works ahead of schedule.

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The FIREscape solution considers the useful life of the entire emergency lighting system, from manufacture and installation, right through to recycling. The system is produced from fully recyclable materials, and incorporates LED technology that reduces its impact on the environment to an absolute minimum.

INDIA | CHENNAI | ESP INTELLIGENT RANGE





HOCHIKI EUROPE REVS UP FIRE SAFETY FOR MOTORCYCLE FACTORY

The Yamaha motorcycle factory in Chennai, India, is protecting its employees with a low maintenance, high performance fire alarm system, provided by Hochiki Europe.

With a population of 6,000 workers in eight large buildings spread across a vast 147,450m² site, Yamaha's building designers faced a challenge when developing a centralised fire safety and emergency lighting network. The distance between the buildings and the number of devices needed made it impossible to use a single control panel for the entire plant. At the same time, installing a separate control panel in each structure would be expensive and make it more difficult to look after long term. The company had no doubt that a system from Hochiki Europe was the ideal solution.

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With such a large site and so many workers, we needed a life safety solution that could be easily monitored from a remote location to help us pinpoint and correct potential performance issues as quickly and efficiently as possible. The final system had to help us centralise control, while also minimising disruption due to false alarms.

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Technical experts from Hochiki Europe worked closely with life safety installers, Bell Automation, and Yamaha's designers to develop an effective solution that could be easily integrated into their computer aided design (CAD) models. Hochiki Europe recommended dividing the site's buildings into four separate groups, each connected to a centralised control panel – provided by the manufacturer. This would overcome the challenge presented by the site's complexity, while simplifying maintenance and monitoring procedures.

Photoelectric Smoke Sensors from Hochiki Europe were selected for use in all buildings across the site. Offering high-precision chamber technology, rather than standard ionisation sensors, the solution has a greater particle sensor threshold than traditional products, minimising the risk of false alarms.



Hochiki Europe's Intrinsically Safe Photoelectric Smoke Detectors were selected for the site's paint store area. These detectors have been specially designed to operate on a reduced current and have been third-party approved for use in hazardous areas. They are installed in conjunction with a barrier, which reduces the energy entering the hazardous zone and their components are encapsulated in a non-conductive material, negating the chance of sparking and igniting a flammable atmosphere.

In the canteen kitchen, Hochiki Europe recommended the installation of its Water-Proof Heat Detectors. Featuring a variable Fixed Temperature heat element, these sensors are able to overcome the issue of excessive smoke from cooking food. Their water-proof casing means that they are able to withstand the humidity of the kitchen, increasing durability and cutting maintenance needs. Weather-Proof Sounders and Weather-Proof Manual Call Points were chosen for external assembly areas.

The safety products installed in each building were linked to the relevant network each controlled by one of four centralised control panels provided by Hochiki Europe, meeting the requirement for streamlined monitoring.

Alok Chaturvedi, then Director of Bell Automation, added:

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Thanks to Hochiki Europe's innovative open Enhanced Systems Protocol (ESP), all of the equipment was compatible with the network loop modelled by Yamaha's designers. This really simplified the installation process and enabled us to complete the work in just four months, well within the company's strict deadline.

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Rohit Harjani, then Country Manager for India at Hochiki Europe, concluded:

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The Yamaha Chennai site is complex. It has many buildings, each housing hundreds of workers every day. With this in mind, it is vital that the final life safety system was both reliable and effective with minimal maintenance needs to reduce disruption to the business of the plant.

The technologies recommended offered the high performance required combined with compatibility to a wider safety network. These streamlined maintenance and monitoring needs for the company, saving it time and money, while enabling workers to do their jobs in a safe environment.

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TECHNICAL METALS, A HIGH-RISK METALS MANUFACTURING ENVIRONMENT, INSTALLS HOCHIKI PRODUCTS TO IMPROVE FIRE SAFETY

Established in 1984, and with several awards including the queen's award for enterprise, technical metals, based in Northern Ireland, offers anodising and surface preparation processes to a wide range of customers across the aerospace industry, defence, telecommunications, electronics, computer, pharmaceutical, street furniture, architectural, wind turbine and general engineering sectors.

Specialised Fire and Security were awarded the contract to update Technical Metals existing fire detection system which required completely modernising. Established in 2013 by two experienced fire and security professionals with a combined 65 years industry experience, the company has grown to be one of the best known and respected independent specialist fire and security providers in Northern Ireland and have quickly earned a reputation for delivering tailored solutions for clients.

Situated on an industrial park, Technical Metals consists of a group of buildings including offices, goods in, packaging and high-risk manufacturing environments with acid baths, heat and smoke and corrosive atmospheres. This presented a unique challenge for the team at Specialised Fire and Security, led by Tom Skates, who chose Hochiki Europe products to help keep this hazardous facility safe.

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Originally, we were presented with a plan that included multisensors situated at high-level points in the adonising department block. However, during a site inspection we realised this would be an issue. Some of the light fixings were corroding due to the chemical fumes rising from adonising equipment below. We recommended that Hochiki flame detectors were fitted at a low level, pointing to the area above. This meant the area was secured without risk of deterioration



Hochiki multi-sensors were then fitted throughout the rest of the building allowing for heat and smoke to be detected night or day.

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This kind of manufacturing plant is naturally prone to dust and smoke, which can cause false alarms. A key requirement to this project was to reduce and even eliminate false alarms. Hochiki was chosen because they offer the most reliable products to help protect against false alarms. Multi-sensors are particularly good at this and allow for a flexible approach to fire detection. We have set up an ongoing maintenance programme with Technical Metals which means, should they need to change parts of the building, the Hochiki multi-sensors devices we have fitted can be easily switched to the most applicable detection method required. This is a future proofed project.

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Products with integrated short-circuit isolators (SCIs) were also fitted. On a healthy addressable fire system, the voltage from the fire control panel is driven one way around the loop, both powering devices and carrying data. But if a fire loop cable is accidentally damaged by tools, equipment or chemicals for example, particularly if not mechanically protected by conduit, and the result of that damage is that the positive and negative conductors within the cable make contact with each other, that vital voltage level drops. This is a short-circuit and at this point this entire loop is instantly out of action, which of course puts the whole building and its occupants at risk.

Hochiki's SCI-enabled devices recognise this voltage drop and when they activate, they divert the loop voltage back along one of the conductors, maintaining the flow of power and data for the rest of the loop.

At the same time, because it is programmed to recognise when it's no longer receiving a return loop drive voltage, the fire control panel will automatically switch to driving voltage from both ends of the loop, using both conductors. In high-risk manufacturing environments such as Technical Metals, this innovative technology makes all the difference.

1've worked with Hochiki products for nearly all my career, and in fact when I moved to Specialised Fire and Security four years ago, it was a big tick for me that they were already recommending Hochiki kit to their customers. The reliability is second to none, the devices are innovative and easy to install, plus they are flexible to a range of applications

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The installation project at Technical Metals is a fantastic example of how Hochiki Europe's range of products can be used in high-risk environments to help reduce the risk fire poses to people and assets.



HOCHIKI INSTALLED AT HISTORIC THOMSON DOCK'S TITANIC DISTILLERS, INSTALLS HOCHIKI PRODUCTS TO IMPROVE FIRE SAFETY

The year is 1911, and the empty hull of the Titanic has moved into Belfast's Thompson Dry Dock for its fit-out, painting and installation of the propellers. Adjacent to the dry dock sits the Pumphouse, where powerful pumps can drain the Thomson Dock of 26 imperial gallons of water in just 90 minutes, the equivalent of two swimming pools per minute. With the ship in place, the caisson gate closes, the pumps kick into life and the dock drains to reveal its beautiful Victorian architecture.

Today, 112 years after the Titanic made her fateful maiden voyage, the Pumphouse has been bought back to its former glory, with every red brick and arched window lovingly restored to host Belfast's first working distillery in almost 90 years. Opening to the public in April 2023 Titanic Distillery housed in this historic building will welcome tourists hoping to learn a little more about the heritage of Belfast's famous docks and sample some traditional Irish whiskey.

Atlas World, a leading fire installation company also based in Belfast, were commission for this prestigious project by the consulting company who specified Hochiki products.

With experience in fire security projects in both modern and listed buildings, including Belfast's Royal Victoria Hospital, Queens University, Belfast MET College and Lidl's Northern Ireland Distribution HQ the team led by Gavin Nesbitt, the then technical sales manager knew this would be a complex job not only because the building was listed, but also because of the methods used during the distilling process:

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Although Atlas World have been using Hochiki products for several years now, my experience has only been in the last 18 months or so. I loved how easy the products were to fit out, especially in comparison to competitors, plus the range is vast so you can pick and mix depending on the requirements of the project



The process of making whiskey is quite dangerous, with the potential for fire occurring from the release of flammable compounds such as ethanol (alcohol). Although the essence of whiskey distilling is steeped in heritage and tradition, when it comes to safety there is no room for nostalgia. It was important that Atlas World were able to use a range of products that were suitable for the use of the room, ensuring the safety of staff and visitors and of course protecting this world heritage site.

66 Hochiki's ESP range was installed including multi-sensors and optical sensors. This enabled us to programme the sensitivity of the devices depending on the environment, for example steam and heat. With Hochiki's products we could adapt the parameters to not only to keep everyone safe, but also to reduce the risk of false alarms. Once that alarm goes off everyone must leave immediately because there is a high risk of explosion in this type of environment. For a distillery which is also operating as a tourist venue, false alarms are not only hugely disruptive to the operation itself but can cost the distillery a lot of money and be damaging to their reputation as a safe tourist spot. Hochiki Europe's products have dramatically reduced the risk of false alarms for our customer.

We also installed Hochiki's range of loop powered sounders and beacons. These visual devices were critical for the parts of the building where noise levels might cover the sound of an alarm for workers using ear defenders and of course they are vital in facilities such as disabled toilets. The other bonus is they consume exceptionally low levels of electrical current and maximise the loop's capacity.

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A key priority for the distillery owners was to ensure that this listed building was not damaged in any way, and so the National Trust and a specialist archaeologist was recruited to ensure that any works carried out would be done so empathetically.

We needed to ensure that all the work we carried out complied with the specifications set out by the heritage experts. Aesthetically the design of Hochiki products is modern yet simple, so they can just slip into the background, do their job, all without detracting from or impacting on the surroundings. This was a feature that was important to Titanic Distillery.

As with many fire installation projects over the last few years, frustrations have been felt when projects have been delayed due to supply chain issues. Unfortunately, this project was not immune from this. However, as Nesbitt explains Hochiki were able to handle the issue

We knew we would have some issues over call point availability, however our contact at Hochiki Europe was excellent at keeping us informed at every step and he came up with an alternative solution that worked well and meant we could still deliver the project on time.

Following the project at Titanic Distillery Hochiki are now my go-to supplier. We did use alternative manufacturers for the panels and aspirators but only because we weren't familiar with these products from Hochiki, however going forward having now seen the standard, reliability, and ease of install I would not hesitate to recommend Hochiki Europe next time.

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THE BEST OF CARE - MALTESE CARE HOME PROVIDER INSTALLS PIONEERING FIRE DETECTION FROM HOCHIKI

The CareMalta Group is Malta's largest private care provider and operates six facilities across the island. The company employs a team of over 500 highly qualified personnel who are focused on providing quality care services and facilities management.

In 1993 CareMalta was the first private company in Malta to invest in developing a privately owned facility for the elderly and its latest development is Roseville, which has beautiful surroundings, state-of-the-art residential facilities, recreational areas and a peaceful garden designed to offer maximum comfort to its residents.

When carrying out renovation work at Roseville, CareMalta wanted the very best fire detection system to be installed in order to offer an unsurpassed level of protection for those working and living there.

Malta's leading fire detection installation specialist, Firetech, was invited to tender for, and was subsequently awarded, the contract to install Roseville's fire detection system by the project's M&E contractor. The company was commissioned to install a BS5389 compliant category L1 addressable fire detection system.

Firetech's then Managing Director, Brian Vassallo, had no hesitation in recommending the installation of Hochiki Europe's products throughout. He said:

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Firetech has been an installer of Hochiki's fire detection systems for 19 years and due to their extensive range, proven reliability and excellent support service, we knew that they would act as a one-stop-shop for all Roseville's fire detection product requirements.



Roseville is a four storey, early 20th century house and is one of Malta's few Art Nouveau villas. This unique architectural gem, with floral sculpted windows surrounded by painted motifs is architecturally stunning. In order to maintain the aesthetic integrity of the building, the fire rated cables were installed in a way to make them as discreet as possible during the first fix. Firetech installed cables between the bricks and any other visible cables were hidden in stone coloured trunking. Where possible, false ceilings were also created which could house the cables and keep them out of sight.

To enhance the safety of the building Firetech integrated Roseville's heating, ventilation and air conditioning (HVAC) system into the control panel. Authorised staff can now control the closure of all fire doors and shut off the air conditioning system to reduce the spread of fire, should the need arise.

A wide variety of Hochiki products were installed including heat sensors, mains relay controllers, call points, sounders and sensor bases. Over 220 of Hochiki's innovative ALG-EN optical smoke sensors were also installed which feature the company's High Performance Chamber Technology. By redesigning the internal optical angle and chamber structure within the photoelectric smoke detector, Hochiki's chamber design minimises the differences in sensitivity experienced in flaming and smouldering fires.

The result is a high performance optical chamber that is equally responsive to all smoke types, helping to reduce the possibility of unwanted alarms. Chamber design minimises the differences in sensitivity experienced in flaming and smouldering fires. The result is a high performance optical chamber that is equally responsive to all smoke types, helping to reduce the possibility of unwanted alarms.

All of the installed sounders are fitted with flashing beacons which are activated first in the event of an alarm condition. This gives staff a specified amount of time to investigate the alarm after which the beacons can be deactivated or the sounder activated to initiate an evacuation of the premises. The sounders themselves have been limited in order to ensure that the alarms are heard but do not cause unnecessary distress.

Unwanted alarms are a serious problem for any premises but for care homes they are particularly problematic because of the logistics involved in getting infirm and disabled people to safety.

Brian Vassallo commented:

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To minimise the possibility of an unwanted alarm we used Hochiki's inbuilt product technology to reduce alarm sensitivity thresholds in certain areas of Roseville such as the corridors. We also programmed the system so that the different sensitivity conditions for day and night are taken into account.

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Firetech also had to make sure that the fire detection system met the requirements stipulated in The Disability Discrimination Act (DDA), which makes it unlawful for building owners and service providers to treat disabled people less favourably for a reason related to their disability. In practice, this means that Roseville's call points can be easily reached and identified and that the fire detection system is able to guide residents of all abilities to safety.





NURSING HOME OPTS FOR HOCHIKI PROTECTION

Hochiki fire detection and alarm equipment has been installed throughout the new purpose-built 64-bedroom Hatchmoor Nursing Home in Great Torrington, North Devon.

It is currently home to approximately 50 residents, who are protected by Hochiki's leading-edge ESP or Enhanced System Protocol analogue addressable sensors, call points and sounders.

The design, installation and commissioning of the system was undertaken by Barnstable-based Challenge Alarm Services, which has also been entrusted with the installation's ongoing maintenance. The company, which is accredited to BAFE (British Approvals for Fire Equipment) SP203 for the design, installation, commissioning and maintenance of fire detection, alarm and suppression systems, recommended Hochiki to Hatchmoor's then owner, Solomon Singh because of the reliability of its devices.

Challenge Alarm Services' then Managing Director, Justin Dennis said:

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We have never had an Hochiki device failure on any of the projects where they have been installed. The company's equipment has never caused a false alarm, which is particularly important in a building that is home to elderly and potentially easily confused or panicked residents.

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HOCHIKI SAFEGUARDS NATIONAL TRUST AT BLICKLING AND FELBRIGG HALL

The National Trust is custodian of more than 250 historic properties attracting over 50 million visitors a year. In consequence, such a vast national heritage imposes immense responsibilities for both public safety and the protection and preservation of the precious fabric of ancient buildings.

In East Anglia, the Trust's Blickling Hall and Felbrigg Hall are just two of many UK heritage sites protected by Hochiki's ESP (Enhanced System Protocol) and ESP fire detection products in applications where safety and aesthetic considerations are of paramount importance.

Both properties near Norwich are country houses on a grand scale, dating from the 17th Century, and a particular requirement of the National Trust's territorial fire officer was for discreet, low-profile detectors with a proven track record for error-free performance.

Hochiki answered this need with their ESP fire products range which, together with their ESP protocol, is recognised internationally for overcoming the problem of false alarms through the combination of quality and reliability, while also ensuring the lowest cost of maintenance.

Both Blickling and Felbrigg are protected by BS5839-1-compliant Fire Detection and Alarm Systems installed by Defensor Fire Detection Limited and, in total, the systems comprise over 600 Hochiki ESP analogue addressable devices, including over 400 photoelectric smoke sensors (these sensors feature Hochiki's unique 'High Performance Optical Technology' which allows the sensor threshold level to be increased, thus extending sensitivity to a much wider range of combustible materials).

The reliability of these systems is synonymous with the Hochiki brand that includes the ESP digital communications protocol, incorporating ARM capability (Alarm Reduction Management), which, in conjunction with the Advanced MX4808 control panels, significantly minimises the potential for false or unwanted alarms.

According to the specifiers, their choice of Hochiki satisfied their commitment to high quality products that provide the best possible life protection for staff and public in these important historic buildings.

ESP **FIREbeam**Xtra





PROTECTING BRITISH HISTORY: HOCHIKI EUROPE SAFEGUARDS MAGNA CARTA AT LINCOLN CASTLE

As part of a £22 million restoration of Lincoln Castle, Hochiki Europe has been drafted in by Reflex Systems to provide the fire safety system that will guard the castle and its precious consignment - one of only four surviving, original 1215 Magna Carta.

The Lincolnshire County Council site - which includes the 947 year old castle, perimeter wall and Victorian prison, as well as the new David P J Ross Magna Carta Vault - is the only location worldwide where the Magna Carta and its sister document, the Charter of the Forest (1217), can be viewed together. Four years of painstaking restoration has now been completed, ahead of Magna Carta's 800th anniversary in June 2015.

To ensure the best possible protection for Lincoln Castle, the Council called upon security and fire systems specialist, Reflex Systems, to design commission and supply a new, integrated fire safety system. Given a challenging brief – to provide high level fire security in an architecturally sensitive environment -John Pye, the then MD at Reflex Systems, turned to leading fire safety solutions provider, Hochiki Europe:

Due to the complex nature of the buildings, there were a number of restrictions and requirements set out by English Heritage. We selected Hochiki Europe for its innovative, open Enhanced Systems protcol (ESP) that would allow Lincoln Castle to be future-proofed.

The versatility of the ESP system meant we could mix and match Hochiki Europe products with components from other suppliers – ultimately this flexibility will help the Council reduce ongoing maintenance costs.



Jayne Griffiths, then Regional Sales Manager at Hochiki Europe, continued:

Historical buildings, such as Lincoln Castle, often come with the challenge of balancing the need for top of the range fire safety solutions with preserving the aesthetics of the building, so that the guest experience is conserved. Choosing products that have minimal wiring requirements is one way to address the approach, and the use of our FIREbeam system in the sites' larger spaces has helped to achieve this.

FIREbeam is a highly specialised, reflective beam smoke detector which is able to detect smoke scattered over wide areas thanks to the use of infra-red light beams; measuring their obscuration by smoke particles to identify any fire before it can spread. This system not only reduces the amount of cabling required but, thanks to its advanced motorised technology, means that should any building movement occur, the detectors will automatically realign ensuring the system is always providing optimal detection.

To further reduce the amount of cabling required on-site, and minimise the disruption to the fabric of the historical buildings, hybrid wireless fire detection products were installed. Combining a wired translator unit with battery operated detectors, the hybrid system helped to overcome some of the architectural challenges of the buildings as the individual components did not need to be wired together.



In addition, it was vital that the products installed blended with the background.

As well as hiding wiring and our equipment during the installation, we also had to make sure the rest of the system was sensitive to the environment,

In this case, that included spray painting the heat and smoke detectors in the Magna Carta Vault and prison so that they would disappear against the walls.

Mary Powell, the then Programme Manager at Lincoln Castle, concluded:

The restoration marks a huge investment for Lincoln Castle, and ensuring that we had the very best in fire protection was a key consideration to securing its future. We're confident that the Hochiki Europe solution specified by Reflex Systems will do just that; safeguarding our site for individuals and families to enjoy for years to come.

ESP INTELLIGENT & ESP FIREBEAM RANGE UNITED KINGDOM | PETERBOROUGH |



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PETERBOROUGH CATHEDRAL SINGS THE PRAISES OF ITS HOCHIKI EUROPE LIFE SAFETY SYSTEM

With a history dating back over 1,350 years Peterborough Cathedral is one of the UK's top landmarks and one of the finest Norman buildings in Europe today. The cathedral is an amalgam of archaeological, architectural, cultural, musical and artistic treasures that visitors from all over the world come to discover and enjoy.

Within its rich and varied history fire has, unfortunately, been a recurring theme, dating back to 1116 when an accidental blaze destroyed large parts of the building and its contents. It was rebuilt in its present form between 1118 and 1238 and became the Cathedral of the new Diocese of Peterborough in 1541. More recently, in 2001 it experienced another fire - believed to have been started deliberately - in plastic chairs stored in the North Choir Aisle. It was spotted by one of the vergers, which led to a swift response by emergency services, however, the oily smoke given off was particularly damaging, coating much of the building with a sticky black layer.

Not surprisingly, due to a combination of precious artefacts and the high numbers of worshippers and other visitors that use the building on a daily basis, a fire detection system is a key part of its infrastructure. It means that in the event of another fire people and property will be kept as safe as possible thanks to an early warning.

In late 2011 Peterborough Cathedral recognised that its fire detection system was coming towards the end of its life and an increasing number of highly disruptive unwanted alarms made the installation of a new one an urgent requirement. Having had its services recommended by one of the other companies working at the Cathedral, Walsall based fire and security solutions specialist, Lyrico Systems, was invited to visit and outline its recommendations as part of a competitive tender.



Lyrico Systems has developed an enviable reputation for its expertise and the quality of its work.

Mike Palmer, the company's then Managing Director, explained:

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It was clear that the previous system needed replacing and, given the size and scale of the area that needed to be covered, we knew that only state-of-the-art technology could ensure the requisite level of protection. As a result, our proposal centred on the installation of a Hochiki Europe addressable fire detection system which would offer Peterborough Cathedral excellent reliability and performance.

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Lyrico Systems was awarded the contract in early 2012 and began work in the April. The fire detection system is based around the innovative Enhanced Systems Protocol (ESP) and Jayne Griffiths, Hochiki Europe's then Regional Sales Manager, commented:

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ESP is a total communications solution for intelligent fire detection and fully integrated systems. It has a multi-purpose structure that provides the flexibility and expansion to accommodate simple addressable systems through to building management and other safety systems. It is also highly robust and therefore perfectly suited for Peterborough Cathedral, as maximum reliability and minimum disruption from unwanted alarms are essential.

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The system comprises a wide variety of Hochiki Europe devices, including the YBO-R/3 mounting base, which is coloured red for easy identification and designed specifically for use with the company's range of wall sounders – such as the CHQ-WS2 wall sounder and the CHQ-WSB wall sounder beacon – which were used extensively throughout.

These were complemented by the use of optical smoke sensors that feature High Performance Chamber Technology. This minimises the differences in sensitivity experienced in flaming and smouldering fires and the result is a high performance device that is incredibly responsive and helps to reduce the possibility of unwanted alarms. In addition, Lyrico Systems specified a number of CHQ-POM powered-output modules and CHQ-AB loop powered addressable beacons.

Although there were some problems accessing and utilising the existing cabling, the ease of installation and flexibility offered by Hochiki Europe's products helped ensure that the project was completed on time.

Mike Palmer commented:



The ability to use a standard YBN-R/3 base unit offered us significant time and cost savings. However, while fast installation is obviously a good thing, with Hochiki Europe it's also backed up with excellent levels of reliability.

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Work was completed in June 2012 and the system has since lived up to all expectations, with no unwanted alarms reported.

Richard Cattle, the then Assistant to the Dean and Head of Fundraising for Peterborough Cathedral concluded:

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Its somewhat troubled history is part of what gives our Cathedral such a rich and wonderful heritage, as well as its blend of diverse and interesting architecture. We obviously want to protect it so that many more people can experience this fantastic building and I'm confident that our new Hochiki fire detection system will ensure they remain safe while they do so.

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HOCHIKI PROTECTING AND PRESERVING HISTORY AT BULGARIAN NATIONAL LIBRARY

Sofia has been the home of the Bulgarian National Library since 1881. In that time, the building and its historic contents have become treasures with significant national importance. Earlier this year, leading life safety systems manufacturer, Hochiki Europe, was appointed to protect these relics and preserve this slice of Bulgarian History.

Sofia has been the home of the Bulgarian National Library since 1881. In that time, the building and its historic contents have become treasures with significant national importance. Earlier this year, leading life safety systems manufacturer, Hochiki Europe, was appointed to protect these relics and preserve this slice of Bulgarian History.

The library was first founded in 1878 by Mikhail Bobotiniv, a teacher and secretary of the City Council in Sofia, as a cultural and educational resource for the city's residents. In 1944, a bombing raid during WW2 destroyed the library, and it was almost ten years later that it reopened in 1953, under the new name "Vasil Kolarov". Now, it is known as St. Cyril and Methodius, named after the creators of the ancient Glagothic alphabet.

Sectron Ltd, a security solutions provider based in Sofia, was tasked with replacing the library's twenty-year-old life safety system which was no longer fit for purpose.



Historic buildings often pose a challenge when it comes to specifying life safety solutions, and for the Bulgarian National Library, this was no exception. Project leaders, Sectron Ltd, recognised that it was essential that the installation of a life safety system could offer enhanced performance and reliability without compromising the aesthetics of the building. It was also necessary that the new system had the functionality to network a range of devices, as multiple solutions were required for this installation.

Sectron's safety systems experts specified Hochiki Europe's hybrid, wireless fire detection range, FIREwave. FIREwave uses the latest radio technology to provide a simple yet effective fire detection solution, with minimal disruption to the fabric of a building. The FIREwave products integrated seamlessly with the cabled fire system, as they too operate on Hochiki Europe's Enhanced Safety Protocol (ESP). This allowed Sectron more choice when it came to selecting the appropriate field device for the environment.

Georgi Kolev, Product Manager at Sectron noted:

The Bulgarian National Library is a jewel in the crown of our capital city. When specifying a new life safety system for this project, we had to address a number of different challenges, from the age and structure of the building, to the need for simple installation and ongoing maintenance.

Working closely with our design and engineering team, Hochiki Europe was able to recommend and supply a range of solutions to meet these specific project requirements. This means our national relics are now protected with the highest standards of life safety equipment.

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Petia Simeonova, then Regional Sales Manager at Hochiki Europe, added:

FIREwave is one of our most flexible product ranges when it comes to architecturally-challenging installations. By removing the need for hard-wired cabling in our life safety systems, we're able to provide a solution that is ideal for a wide range of buildings, from busy hotels to heritage buildings like the Bulgarian National Library.

The new installation looks fantastic and I'm delighted that we were able to support in a project of such national importance.

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ADDITIONAL INFORMATION

For more information visit our range pages on the Hochiki Europe website by scanning the QR codes below.



CDX www.hochikieurope.com/cdx



EKHO www.hochiki-ekho.com



ESP www.hochikieurope.com/esp



FIREBEAM www.hochikieurope.com/beamdetection



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SIL2 www.hochikieurope.com/sil



HOCHIKI www.hochikieurope.com

ADDITIONAL INFORMATION

For more information visit our sector pages on the Hochiki Europe website by scanning the QR codes below, or to view our case studies online visit: www.hochikieurope.com/case-studies



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