



## Gent provides the perfect solution to reduce false alarms at Stirling University redevelopment

Students starting the new term at Stirling University will be able to take advantage of the biggest transformation the site has seen since the campus opened in the early 1970s. During the past 18 months, contractors have been hard at work completing the first two phases of a £38 million project to develop the highest quality student accommodation.

The three year, three stage, development programme, which will be fully completed in 2015, will see the creation of 788 contemporary bedrooms in four locations around the university's main campus. This new accommodation will provide students with well-designed study bedrooms, spacious kitchens with dining space, increased social spaces and better connections to the surrounding landscape areas. >





> A major part of the redevelopment was to provide the most suitable fire detection and alarm system (FD&A) for the entire site. The university had experienced a significant problem with false alarms in the past, recording more than 200 incidents annually. The new FD&A system would have to not only provide the ultimate protection across the redeveloped properties but also help to alleviate the serious issue of on-going false alarms. An FD&A system provided by Gent by Honeywell was selected as the most efficient solution to address this critical problem.

Robert Abraham, Account Director, G4S Fire and Security System

(UK), the company that is responsible for providing fire safety across the whole of the redeveloped site said: "We have worked with Gent products for over 20 years and recognise the benefits this specific solution can bring to a university setting. One of the outstanding advantages of the Gent system is its ability to detect real fires quickly. The S-Quad devices installed throughout the redeveloped campus incorporate the most advanced form of multi-sensor detection, which will overcome the significant number of unwanted false alarms."

The university also introduced a number of additional measures to reduce false alarms across the campus, installing a perfect hob timer in the kitchen area to

automatically shut off power to the hob after thirty minutes. Additionally, a Dorwatcher device has been installed which emits a piercing scream if the kitchen door is held open for more than one minute. These will help to alleviate any activations resulting from food being allowed to burn on the hob and the resulting smoke or steam leaving the kitchen through the wedged open door from activating the nearest smoke detector.

G4S Fire and Security Systems is an Elite Technology Centre, the highest level of Approved Systems Integrators that form part of the Gent 24 Network. Gent awards the Approved Systems Integrators' status to independent fire specialist companies who have been selected,

trained and approved based on their extensive capabilities and considerable experience in the fire industry. The team at G4S have been involved in the Stirling University project from its initial stages, working closely with the developers Graham Construction and their nominated Electrical Contractor, Stothers M&E. Robert Abraham said: "We came to a commercial agreement with Stothers M&E, after being asked to cost a fire detection and alarm (FD&A) solution for each phase of the development. We chose the Gent product range because of its quality and reliability, its flexibility of programming and ultimately its ability to meet all of the requirements of the latest British Standards. We were also highly confident that the Gent technology would play a pivotal role in tackling the false alarms issue."

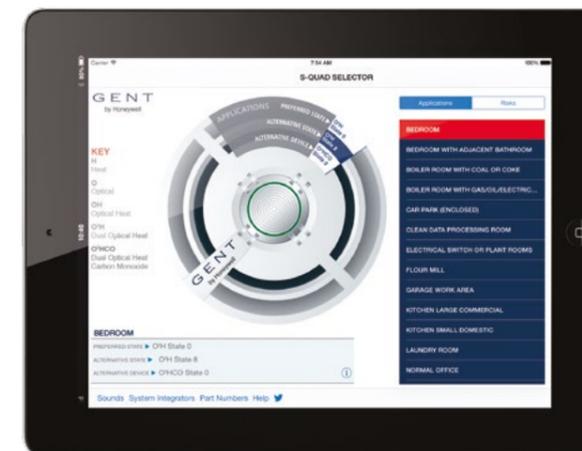
The university currently has 2,800 student bedrooms on and off campus and as part of the on-going project three properties were demolished, Murray Hall, Geddes Court and AK Davidson Hall, and brand new accommodation buildings are in the process of being constructed on the original Murray Hall and AK Davidson sites.

The FD&A solution was designed according to the specific uses of each room within the new buildings. In the student bedrooms, Gent's renowned S-Quad multi sensors were installed, which are capable of detecting

the products of combustion such as heat, smoke and carbon monoxide. The devices use patented dual optical scatter technology to enhance smoke detection, this allows it to be configured to filter specific risks such as steam and dust, resulting in significantly reduced false alarms.

The S-Quad's inherent flexibility means it can be programmed to suit specific site applications. Different sensitivity states are set to incorporate combinations of optical, dual optical, heat and CO sensing elements. For instance, in the accommodation bedrooms S4-911-ST-VO units were installed utilising carbon monoxide, dual optical smoke and heat detection technology in the same sensor to provide the optimum means of detecting a real fire whilst greatly reducing the risk of false alarms.

Robert Abraham continued: "Gent provided the design team with an S-Quad detector selection tool. This allowed the design team to select not only the best device for each application but also the optimum state that each device should be set to during commissioning. Whether it is in a bedroom or kitchen, the optimum state can be selected and the system will



be able to differentiate its response to real fires, and identify the culprits of regular false alarms such as steam or aerosol sprays."

The entire FD&A system incorporates more than 6 Vigilant Panels, 24 loops and over 1600 devices in total, including a range of different panels, smoke detectors, call points, sounders, interfaces and the S-Quad range of sensor sounder strobes. The advanced sensing

technology in the S-Quad devices will alert students using a highly visible visual alarm to ensure that all occupants are alerted to an emergency.

Robert Abraham concluded: "The whole installation was a great success. The timescales were a challenge, which is inevitable in this type of environment, when students are set to move in. The deadlines had to be met, but the process went very smoothly.

Above all, the system is proving to be highly effective. The university has a system it can trust in and instances of false alarms have been dramatically reduced. On the rare occasions there has been a false alarm incident, there has been an explanation as to why the device was triggered."

The third phase of the Stirling University redevelopment was completed at the end of August with a further three phases planned and the whole project is on track for completion by spring 2015. Once fully completed, the project will help maintain the university's enviable position as a place where student satisfaction and the all-round campus experience is very high. Students will be able to concentrate on their studies and socialising, safe in the knowledge that they are being protected by the most reliable, high performing FD&A solution, without the inconvenience of multiple false alarms.

Watch the Gent YouTube video



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Case Study **Highlight**

# Gent's Part 23 compliant devices get a first at University of Leicester

The University of Leicester's high quality academic reputation has earned it a position in the top 2% of universities in the world, and a ranking in the top 20 of UK major national league tables. Based a mile south of Leicester city centre, the University's compact campus contains a wide range of twentieth century architecture, from the oldest building, which dates back to 1837, to its three distinctive towers built in the 1960s.

Like all educational establishments, the welfare and safety of its students is the University of Leicester's highest priority, whether it is security procedures in the teaching halls or fire protection in the student accommodation. There are 23,000 students attending

the University and a significant proportion of these reside in the multiple accommodation blocks based close to the main campus.

One of the University's accommodation blocks, part of Oadby Student Village, has recently undergone a refurbishment of its fire alarm and detection (FDA) system as the existing system became obsolete. Marston Fire, based in Loughborough in Leicestershire, carried out the install having won the contract when the business was put out to tender.

Oliver Marston, managing director, Marston Fire, oversaw the installation and was involved in the tender process from the initial stages. Marston said: "The

"This was the very first installation of Gent's new S-Quad devices and when the discussions took place about the benefits of the new VADs, the customer was very keen to use them."

original brief was to replace the existing fire alarm system that was obsolete and the only solution that would meet all of the University's requirements was the Gent system that we put forward. We had to use the existing wiring that was already in place and install a brand new panel and detection devices."

The solution that was selected for the project was the Vigilon Compact panel together with Gent's brand new EN54-23 approved S-Quad devices.

Marston continued: "This was the very first installation of Gent's new S-Quad devices and when the discussions took place about the benefits of the new VADs, the customer was very keen to use them. The

student accommodation the flashing strobes were designed to meet BS5839 pt1 and EN54-23, providing 0.4lux above the ambient light levels. This allowed the VAD's to be used as the primary source of indication for the building's residents if required.

Marston carried out the installation at the end of April. As the building was occupied, one of the biggest challenges for the project was the very short timeframe for completion.

Marston said: "We installed the system in the morning and it was fully operational the same evening so it took less than a day to complete. The existing product was removed early in the morning and the new Gent solution was up and running later that day.

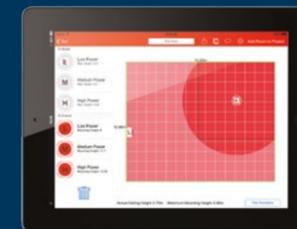
"The main challenge, apart from the speed of turnaround, was to remove all the existing equipment as it was not compatible. Once we changed over to the new system we used the new loop diagnostic software from Gent. We tested the system alongside the Gent development team which provided an extra measure of assurance and gave us a health check on the existing cabling in line with the manufacturer's recommendations."

Dan Ascough, business manager, Gent by Honeywell, said: "The FD&A solution was completed successfully and the University has since praised the speed and professionalism of the installation team. The system is providing the University with the highest possible fire detection and evacuation technology, the higher power strobe output in the new S-Quad VADs will ensure the students are safeguarded in any fire scenario."

Further upgrade plans to specific areas of the University of Leicester's FD&A system are set to take place in the summer.

Download the Gent VAD Tool for iPad

Search 'Gent VAD Tool' from the App Store or click the link below.



University is already familiar with Gent's products as their FDA systems are installed in a number of buildings across the main campus, so it was an ideal opportunity to try out the new devices."

The S-Quad devices conform to the European Standard EN54-23, which specifies the criteria for Visual Alarm Devices (VADs). Prior to EN54-23 there was no way to determine the effectiveness of a VAD, so the requirement was introduced primarily to standardise the VADs rating and performance.

The VADs usually provide a primary alert for deaf or hard of hearing people, or for areas with high background noise. In the University of Leicester's

# Charming chapel given first class protection by Gent



At the heart of the Keele University campus in Staffordshire, lies the UK's first religious building that was designed specifically to accommodate services by different Christian traditions. The Keele University Chapel was originally constructed in 1964 and has since developed a thriving, inclusive and diverse Christian community of both staff and students. During the past fifty years, the chapel has provided a venue for a multitude of university events, from concerts and graduation ceremonies to examinations and a host of other public occasions.

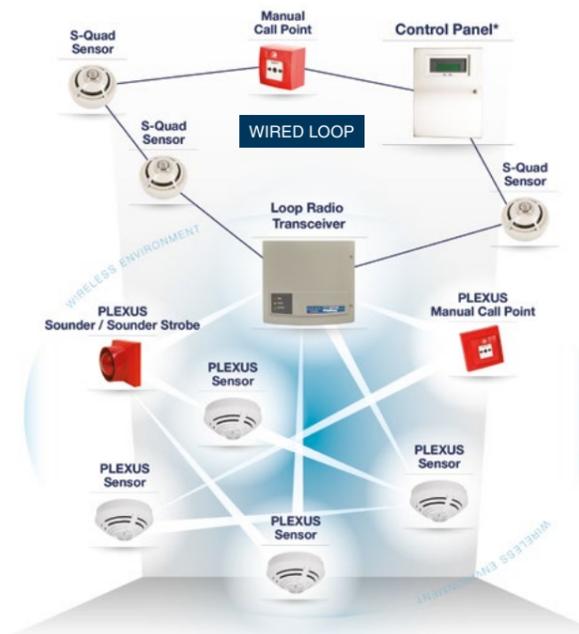
The striking architecture of the building gives it a castle-like design and includes two rounded towers with triangular spirelets at the eastern end of the structure. When designing the project back in the early sixties, the architect had a vision that the building would be a place 'where organic development could take place without the great cost of structural alterations, or causing violent disruption to a carefully wrought interior.'

That vision has been realised and any subsequent alterations have been highly sympathetic, including several interior improvements that were carried out earlier this year. One of the significant changes at the chapel took place during the last six months, and saw the installation of the building's first ever fire detection and alarm system (FD&A). Trinity Fire, specialists in the design, provision and aftercare of fire, security and life safety systems, won the tender process to provide the chapel's FD&A back in Spring 2014.

Ian Williams, account manager, Trinity Fire said: "The brief was very specific for the chapel. As well as the need for the highest performing FD&A solution, the

main requirement focused on the aesthetics of the building. They didn't want cables visible in the main chapel area, and the very high ceilings and features such as the wooden beams all had to be taken into account when designing the final solution."

Trinity Fire subsequently tailored a unique solution using a combination of systems by fire industry expert, Gent by Honeywell. Trinity Fire has a close working relationship with Gent and has earned its status as an 'Elite Technology Centre', part of the company's Gent 24 network of systems integrators.



Williams continued: "We did a survey of the building and chose one of Gent's latest products, the PLEXUS wireless system, for the main chapel area, partly because it met the brief of being unobtrusive and also it uses a patented mesh technology that provides a very high level of integrity and wireless coverage. We were able to combine this with a wired system in the back areas, and air sampling detection (ASD) in the part of the building with the highest ceilings.

"The PLEXUS system was also the most cost effective and flexible solution, particularly as it enables different devices to be turned on and off as and when required by the university."

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The combined solution incorporated three different elements of the Gent systems. The PLEXUS is a hybrid wireless system that allows the flexibility to use both wired and wireless devices on a site. Trinity Fire were able to specify wired devices for the chapel's rear areas where cables could be run cost effectively without detriment to the building fabric. The wireless devices were then selected for the main chapel so they would be sympathetic to the delicate interior design.

"In the highest parts of the chapel we chose the air sampling detectors as these would be more straightforward to maintain in such an inaccessible area. ASDs can also detect fires significantly faster than point or beam smoke detectors, with materials such as wooden beams in the building, it will play a vital role in the overall performance of the system," explained Williams.

The solution was installed in July 2014, and it was the first time Trinity Fire had fitted the Gent PLEXUS system.

Williams continued: "We were given a two week time period to complete the job, to ensure it was out of term time and wouldn't clash with any graduation ceremonies. The system was installed within a fortnight and we didn't encounter any problems. We've had very positive feedback from the university and the solution has protected the chapel's visitors and staff ever since."

Watch the Gent YouTube video



The mechanical and electrical work has begun on the prestigious O2 Arena Development on London's Greenwich peninsula, part of a £121m scheme which will see the development of a new InterContinental hotel, residential apartments building and conference centre facilities. Balfour Beatty, the construction firm behind the Greenwich development, broke ground in a ceremony last month marking the start of works to regenerate the 7.6 acre site.

## HESIS selects Gent solution for landmark O2 Arena Development

The centrepiece of the development will be 'The InterContinental London The O2', a 19-storey, 452-room five-star hotel containing a massive 4,800 square metres of space for conferences and events. The development will also include The Peninsula Tower, a 23-storey building offering 100 serviced apartments with views across the Thames and South London.

HESIS, a company that specialises in the design, installation, commissioning and maintenance for Mechanical & Electrical and Fire and Security across the UK, won the contract to provide the fire and security systems across the entire site. HESIS has worked alongside building services specialist HE Simm, when they became involved in the project in November 2013.



Barry Juggins, Managing Director, HESIS said: "We became involved in the initial stages when HE Simm were bidding for the scheme. Since then, we have worked very closely with them and offered a proactive approach to the design which was seen as a huge positive, particularly in a scheme of this size. This is one of the largest installations we have undertaken and we are delighted to be working on such a prestigious project."

HESIS has selected a Gent by Honeywell fire detection and alarm (FD&A) solution to be installed throughout the three buildings. The company is part of the Gent 24 Network and was recently awarded Elite System Integrator status. This achievement means Hesis has been recognised as supplying, designing, installing

and commissioning Gent equipment to the highest standards.

Barry Juggins said: "The whole development is Gent throughout, with more than 2,000 devices being installed across the three buildings. The system was selected to meet the customer's exacting brief – they are aiming to create the ultimate five star hotel and part of this experience will be ensuring that the guests are protected by the market leading technology."

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The specific FD&A solution incorporates a fully integrated system that includes loop Vigilon panels and Gent's innovative S-Quad sensing technology. The S-Quad range of multifunction devices includes sensors with sounder, speech and EN54-23 certified visual alarms. This allows the maximum flexibility for designers providing cover for a building. The advanced sensing technology is enhanced with a device that can alert building occupants with a highly visible visual alarm and a recorded voice message to ensure all occupants are alerted to an emergency.

Barry Juggins continued: "There will be S-Quad devices with speech throughout the hotel and apartments, with a full Gent PA/VA system in the Conference Centre. We have opted for dual optical and heat detection in the bedrooms to avoid unnecessary false alarms, due to the particular environmental conditions. We will also be utilising the Gent Air Sampling detection (ASD) systems in the voids above the conference centre and the fixed ceilings, as they will provide the earliest detection and will be much easier to maintain in the future. We're confident that the elements of speech messaging and reduction in false alarms will undoubtedly add to the quality feel and customer experience."

The hotel has been designed to be sustainable to BREEAM 'Excellent' standards and has been built on land reclaimed from previously polluted soil and will have the latest sustainable features such as 'green' roofs and surrounds to harvest water to reduce demand on the mains supply.

Construction for the project will be carried out in just two years, helped by the innovative building techniques, and the installation for the FD&A system is due to be completed at the end of this year.

Barry Juggins concluded: "The scheme has been fairly straight forward, the main challenge is the fact that it is three separate builds, the hotel, conference centre and apartments, all running concurrently and completing at the same time. The hotel is set to open in the summer 2015 and visitors, residents and employees will be safe in the knowledge that they are being given the ultimate form of protection by the most robust Gent FD&A solution."

### Gent adds the Interface Selector to its library of mobile apps!

The new Interface Selector app helps you select the right type of interface for a specific application. It's quick and easy to use, removing a lot of the complexity when selecting interfaces. Once you have decided on the correct interface you can instantly download the datasheets and email them as an attachment.

Search 'Gent Interface Selector' from the App Store or Google Play or click the links below:



The Gent Interface Selector app: quick, easy & hassle-free!



# Gent's EN54-23 Compliant Visual Alarms take centre stage at Royal Spa Centre

Fire industry expert Gent by Honeywell has installed its new class leading S-Quad Visual Alarm Devices (VADs) in Leamington Spa's renowned entertainment venue, the Royal Spa Centre.



The popular purpose built theatre and cinema, owned by Warwick District Council, recently upgraded its entire fire detection and alarm (FD&A) system to a fully integrated Gent Vigilon Compact solution, that incorporates more than 50 S-Quad VADs throughout the multi-use building.

Warwick Council had expressed interest in the use of Gent's new technology during the initial meetings with Gent approved System Integrator, Fire Safe Services Ltd.

Steven Dowell, Fire Safe Services Ltd said: "The existing FD&A system had a three minute delay utilising beacon only devices. As the Royal Spa Centre is a public building that is in continuous use, Warwick Council felt it was important to use the latest visual alarm technology to protect the hundreds of visitors, its employees and the historic building.

"The innovative solution we installed incorporated Gent's brand new S-Quad VADs with voice sounders and we programmed the system to keep the three minute delay. During the first alert, the specific solution was set to trigger key individual beacons throughout the building to act as a staff alert. After the three minute delay, or in the event of a second device being activated, the system was then programmed to give a full evacuation signal, so all of the VADs will activate

and the sounders would be used to advise occupants to leave the building."

The new S-Quad VADs meet all of the requirements of the latest EN54-23 standards and have been designed to help alert occupants in noisy environments and the hard of hearing. The industry leading devices combine Gent's renowned sensor, sounder and speech technology with high efficiency EN54-23 certified visual alarms. As these functions are incorporated into one single device, S-Quad continues to provide the most cost-effective option and helps to reduce valuable installation time.

Neil Towers, Business Manager, Gent by Honeywell said: "We are delighted that there has been another successful installation of our unique S-Quad visual alarms.

"We're confident that the outstanding performance of the new S-Quad range will match the quality of performance taking centre stage at the Royal Spa Centre. Our solution will ensure that every visitor can be safe and protected and enjoy the diverse range of entertainment the venue has to offer."

"Warwick Council felt it was important to use the latest visual alarm technology to protect the hundreds of visitors, its employees and the historic building."



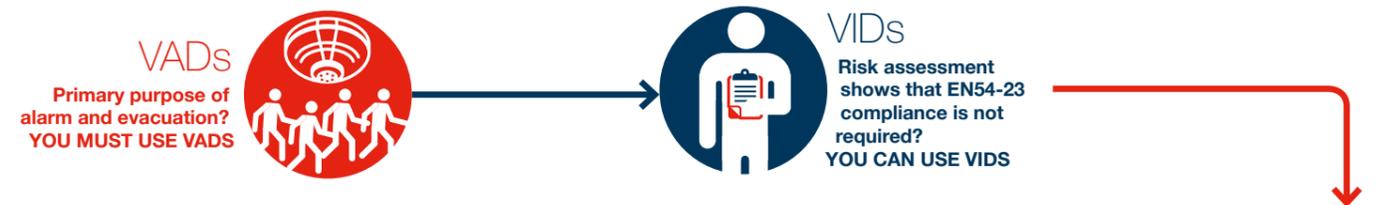
## VADS VS VIDS ARE YOU CONFUSED?

If so, here's a quick guide to clarify the difference between EN54-23 Compliant **Visual Alarm Devices** (VADs) and Non Compliant **Visual Indicating Devices** (VIDs).

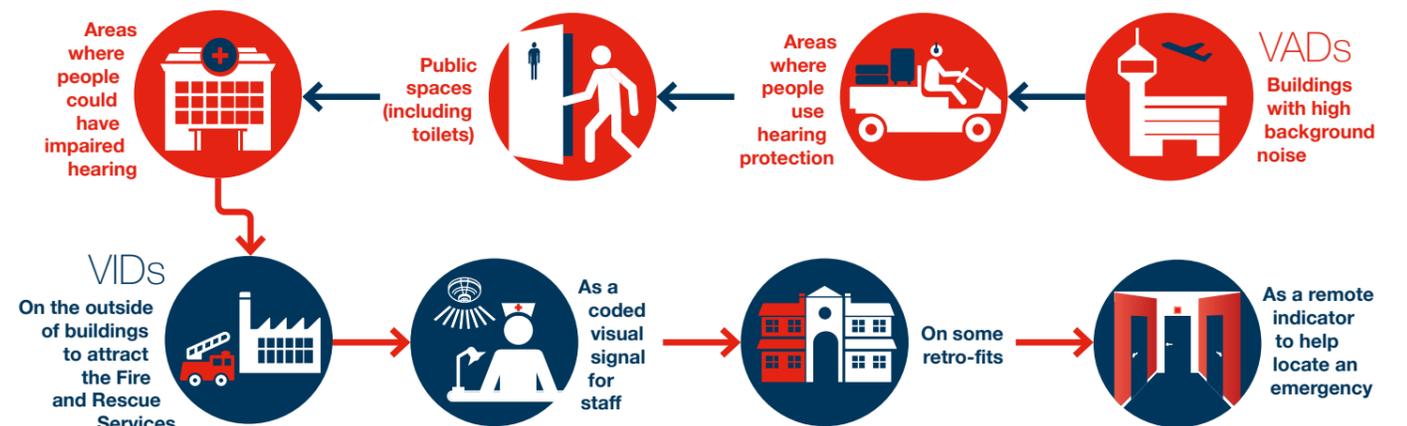
### What are VADs and VIDs?



### When should they be used?



### Where should they be installed?



## STILL CONFUSED?

You don't need to be because Gent only supplies fully certified EN54-23 compliant VADs, taking away any confusion as to what to install and where. For more information download the Gent VAD Tool for iPad [here](#), or search for **Gent Vad Tool** on the App Store.





# NHS

puts its trust in  
Gent FD&A  
Systems



“There were a number of challenges on the project, mainly because of the aesthetics of the building and its traditional features such as ornate ceilings and cornicing. The FDA had to be robust and reliable enough to protect both the staff and property, without impact on the building’s aesthetics.”

**Derbyshire Healthcare NHS Foundation Trust has more than 35 sites located across the county providing local residents with a range of services, from inpatient care and day hospitals, to community health and children’s services.**

For the last two decades, Nottingham based PWP Fire and Security has overseen the maintenance and installation for fire detection and alarm (FD&A) systems, intruder alarms, CCTV, access control and emergency lighting for all of the Foundation Trust’s properties. PWP was one of the first companies to be awarded with Systems Integrator status by fire industry experts Gent by Honeywell and has installed many of the company’s innovative FDA solutions in several of the Trust’s Derbyshire sites.

The Derbyshire Healthcare NHS Foundation Trust has several key sites in and around the city, including two large hospitals, day centres, residential units and office blocks. One of the most recent installations took place at Bramble House, the Foundation Trust’s HQ in Derby. The two storey traditional office block is the main hub for the Trust’s senior employees and it is now protected by a Gent FDA system.

Gavin Clarke, senior project manager, PWP said: “We upgraded the entire system at the Bramble House site and selected a Gent Vigilon system complete with the S-Quad multi sensor detectors as it was ideal for this property. There were a number of challenges on the project, mainly because of the aesthetics of the building and its traditional features such as ornate ceilings and cornicing. The FDA had to be robust and reliable enough to protect both the staff and property, without impact on the building’s aesthetics.”

Kedleston Low Secure Unit on The Trust’s Kingsway site, which comprises two individual units, has also recently had its FDA system upgraded. The unit delivers intensive, comprehensive, multidisciplinary treatments and care for patients who demonstrate

disturbed behaviour in the context of a serious mental disorder and who require the provision of security. A fully networked Gent solution was installed into the Kedleston Unit, which comprised a Vigilon System with over 300 devices, a fully functional repeater panel and compact repeat panels strategically located at staff workstations.

Gavin Clarke continued: “This was challenging for very different reasons. Due to the nature of the services they offer, the solution had to be tailored to suit the use of the building along with the trust’s specific HTM 05-03 Part B requirements. Site-specific, complex cause-and-effect schedules were incorporated, key-operated manual call points were installed in the more sensitive areas, and key switch interfaces were utilised to operate and monitor the high security airlock doors.

“The install took one month and there was meticulous planning involved in terms of allocating areas for each part of the upgrade. The flexibility of the Gent system enabled us to meet all of the unit’s requirements and the solution has performed faultlessly since its installation.”

The Derbyshire Trust’s Kingsway House and Albany House have recently undergone total refurbishments to the buildings with brand new Gent FDA solution installed in both locations. In addition, the Dovedale Day Hospital Unit and Dale Bank View in Swadlincote and Audrey House, which is a residential unit in the city centre, have also been installed with upgraded FDA systems to protect the patients, property and staff.

The next few months will see PWP continue its strong working relationship with the Derbyshire Healthcare NHS Foundation Trust. A number of further maintenance and upgrade plans are in the pipeline for the near future, with Gent systems in place to protect patients and employees across the county.

# Loop Diagnostics Tool –

what our customers are telling us

*“The LDT sorted an issue on a site which was causing major grief. The tool pinpointed the problem area which turned out to be a cracked cable inside conduit box. We would never have found this without the tool and would have had to replace the cable(s) – took 20 minutes to sort after days of investigating prior to using the tool.”*

*“During a student accommodation installation in Liverpool we installed a network of eight Vigilon panels using the S-Quad sensor range. When we got to the commissioning stage we used the LDT to assist us with fault finding. We found the tool to be very useful and our engineers certainly appreciated the features that the tool has to offer. Not only did the LDT speed up commissioning time, it also saved us money as tracing faults were made easier causing very little disruption.”*

*“We had an issue where we were getting intermittent loop open circuits that would clear as soon as we started fault finding. We wasted eight engineer shifts looking for this fault while the loop was healthy. We didn’t manage to find anything. We used the LDT and it located the fault in 50 minutes. The fault was caused by a broken termination screw in a base”.*



*The earth fault locator feature is, as any fire alarm engineer will agree a very useful tool in itself as the time and effort normally used in tracing earth faults is greatly reduced.”*



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Generate customised customer reports



Compare previous read outs – eliminate disputes



Give your customers peace of mind



Generate pre-contract health checks

## Vigilon Loop Diagnostics Tool

Please see your 2015 price list for order codes and bulk discounts.

For more information on ordering the LDT please [click here](#)

**Work smart:** make best use of your time on site with the Vigilon Loop Diagnostics Tool  
Smarter, specifiable service support at your fingertips



Congratulations to **Pointer Fire** who was recently awarded Gent 24 Technology Centre status!



Congratulation to **Clymac Ltd** who has been awarded Gent 24 Elite System Integrator (ESI) status!