

Westmorland and Notifier meet the university challenge at Damside



For some lucky university students, gone are the days when they would reside in ramshackle accommodation in the less salubrious parts of towns and cities. Nowadays they have an opportunity to live in purpose built high-end residences that offer a wealth of innovative features providing everything they need for the best student experience.

A leading example of this type of accommodation is Damside. A £3m five-storey studio development located in Lancaster city centre, its 79 apartments are designed to the highest specification with stylish, modern interiors. Each self-contained unit includes an en-suite shower room and an integrated kitchen area, as well as comfortable bedroom and study space. Communal facilities have been especially designed for students, including a lounge with pool tables and gaming zones, study areas, a lobby with laundry room and bicycle storage units, plus two large open plan kitchen areas for dining and entertaining.

Developed by Miacom, the company has partnered with Lancaster University Student Union (LUSU) to manage and let the studios, with safety and security being built into every facet of the building. Prior to work beginning on the refurbishment of the building, Kendal based Westmorland Fire and Security was

asked to tender for the design and build of a life safety system that combined state-of-the-art fire detection with minimal potential for unwanted alarms.

Westmorland Fire and Security's Sales Manager, Mark Johnson, says, "We have carved an enviable reputation across the north west of England for the quality of our work and we knew that we could provide the very best solution for Damside. For that reason we recommended using a Notifier by Honeywell system throughout, as we have been using their products for the last 20 years, and the system we chose is based around its innovative Pearl intelligent addressable control panel."

The advanced Pearl system offers best in class performance, scalability and functionality including a host of programming options and loop devices that can be used by an experienced fire system



designer to minimise the risk of unwanted alarms, even in challenging environments where there is a high likelihood of them occurring.

One such option is *Type B Dependency*. Asked to explain how this works, Hugh McQuaid, Business Manager - North West at Notifier, replies, "Type B Dependency allows a zone to be defined for each individual room, as if it were a separate system. On receipt of an unconfirmed fire signal from a room, only the local alarm within the room is given. If the alarm is confirmed by a second signal the system proceeds to the relevant evacuation stage. Alternatively, if the confirmation signal is not given, the system may reset automatically without attendance by the warden or maintenance engineer. Confirmations may be provided by a second device in the same zone, a second signal from the same device, a device in a different zone or manually through activation of a call-point."

The Pearl control panel is linked to Notifier SMART² multi-sensors located in each room that use a combination of heat and optical smoke sensing elements that are managed by embedded software. This provides the earliest warning of the broadest range of fire conditions, whilst minimising the expense and inconvenience of unwanted alarms and ensuring rapid response. In areas where the normal daytime activities may potentially create unwanted alarms, the detector can be programmed to operate in a heat only mode, automatically reverting to full photo-thermal operation during unoccupied periods.

Perhaps the most innovative aspect of Westmorland Fire and Security's work at Damside is the way that it has integrated Pearl with an automatic opening vent (AOV) system. Mark Johnson explains, "AOV's are designed to reduce smoke build-up, helping to provide a safer escape route for occupants and access for fire and rescue personnel. When a detector or call point is triggered, the AOV system will open

"One of our main priorities was to keep our residents safe while in the building. I firmly believe that when it comes to life safety, having the very best fire detection system possible is a must, and thanks to Westmorland Fire and Security and Notifier's skill and expertise, that's exactly what we have."

Andrew Stanyon, Operations Manager, Miaccom

actuators, windows or vents to create ventilation in the escape routes. This clears smoke for people leaving the building and vents smoke out of the area that has been triggered."

With a ventilation shaft running through the middle of the building, each floor has a vent, which can be controlled by the Pearl system. All inputs and outputs go into the panel, with complex cause and effect options to give fully automated operation as well as status indication. Pearl has the capacity for 512 lines of cause and effect programming, so it can be used in even the most complex building layouts.

Fire detection and AOV usually operate as two separate systems, but what is particularly innovative about the Damside installation is that they have been configured over a single wiring infrastructure. Not only did this save time and money, it means that in an emergency the fire and rescue service can see at a glance which vents and windows are open, as well as the source of the original activation. This clear indication can rapidly reduce search times in the event of a fire or fault, while pre-alarm warnings can also be provided, giving time to investigate prior to a full alarm situation being reached.

The first students moved into Damside in early September 2015 and so far there have been no unwanted alarms.

