



The benefits of installing **MZX Technology into an Office building**

// **Overview:**

The Requirements for installing a suitable fire detection and alarm system within office premises would include a minimum of manual call points, with additional automatic detection being dependent upon the size, occupancy and risk. Often the extent of the detection will depend upon the insurer's requirements as offices are risks where the life safety aspect is covered by the manual system.

The **MZX range** of fire detection and alarm systems is a complete range from a single manufacturer, from compact conventional systems suitable for the smaller manual only systems' to the larger digital addressable systems, all designed to provide optimum performance at all times. Some of the systems key features are highlighted below.

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// **Risk:** One issue with the fire alarm system could be its inability to warn the occupants of a building, who may suffer a hearing disability, of the need to evacuate as a result of fire.

It is a misnomer to assume that such people will always be escorted from the building by others, as it may just be possible for such a person to be alone and isolated at that critical time.

// **Solution:**

By specifying and installing an **MZX technology** system, sounders and beacons can be combined within a single unit in both **the Loop powered Symphony** range of wall mounted units and the **Minerva® MZX AV Sounder Beacon Base**. Sounders and beacons are addressed which means they can be programmed, when to operate and at what volume. Volume is set in software so some sounders can be set to lower levels than others, or even turned off leaving only the flashing beacon operating. This allows the designer flexibility in his design whilst the installer and user do not incur extra costs for wiring of additional sounder circuits. Installing beacons in areas where hearing disabled personnel may be is not difficult with such technology, nor is adding beacons or sounders at some later stage if the need arises. All loop powered sounders and sounder beacons incorporate integral short circuit isolators providing the maximum integrity. A single cable fault on any loop would be unlikely to affect any of the sounders or beacons on that loop or any other.

// **Risk:** Fire Exit Doors in any building are a vital part of the life safety aspect of any fire strategy. It is often practice to secure external exits and doors between floor levels by fitting a lock controlled by some type of card reader or pin code device. Releasing secured doors in the event of fire, via the access control network would involve the use of the network cable which is not part of the fire alarm and might be disabled.

These doors are normally locked to keep out unauthorised personnel but in the event of an emergency are required to provide free

and unrestricted egress; fire door monitoring is therefore important. Is the door capable of unlocking, are all parts of the necessary linkage from detector to release device connected, powered and free from fault. The simplest way of providing a link between the detector, trigger device, and the door is via a relay. The relay however is a simple device; it needs an instruction before it can operate. How sure can you be that it will work when called upon to do so?

// **Solution:**

By specifying and installing an MZX system, all secure fire exit doors can be connected via a **TSM800 Door control module**. The TSM800 is designed especially for fire doors and shutters and has a self-monitoring system that monitors communication and detects the presence of the line voltage. It also monitors the essential secondary supply that feeds the magnetic holding device. The system will detect isolations and faults ensuring that nothing is isolated without knowing. If a fault or isolation is detected the module will release the door to its closed position thereby ensuring that if a fire were to break out the door is already closed ensuring exit routes are kept free from smoke at all times.

// **Risk:** Many of today's buildings feature a false or suspended ceiling. Installing fire detectors onto this type of ceiling has been seen as both difficult and time consuming with the installation requiring the ceiling to be in place before the detector base and associated 2nd fix can take place.

Very often, the installation of the fire detection system is held up by other trades, competition for working space and in particular, awaiting the erection of suspended ceilings. For the fire alarm installer the effect is: less time to complete, schedule overrun, delayed payment and possible contractual penalties.

// **Solution:**

This can all be avoided by using the **Time Saver Ceiling Tile Adaptor** which makes it possible to commission and hand over the fire detection system at a much earlier stage,

prior to the false ceiling installation. The Time Saver Ceiling Tile Adaptor consists of three parts, a bezel and clamp that are fitted to the ceiling tile and a back-box that carries the detector and base assembly. All the parts are designed to "snap fit" together without the need for screws. The new 4B4 detector base also snap-fits to the ceiling tile adaptor, further reducing installation time by as much as 30%.

// **Risk:** In any kind of working environment testing is always going to be a challenge. When to carry out tests without causing disruption to the work process whilst ensuring that at all times the system will, when required, operate satisfactorily.

That's why sounder testing is a vital part of the on-going procedure to ensure a fully operational system.

// **Solution:**

Every MZX control panel programme has the ability for sounder tests to be set up and run from the panel. **Reflective Sound Monitoring** enables all sounders to be tested at high volume simply by initiating a test for approximately 15 seconds, after which any sounder not operating will be reported back to the control panel. Sounders can be tested in groups, floor by floor, zone by zone depending on how the test is set up. An essential operation that could take two or more persons a full day can now be completed single handed in a matter of minutes.

ZETTLER, is a leading brand of fire detection, security, and care communications products in the European market. The ZETTLER fire detection product line includes a wide range MZX TECHNOLOGY EN54 CPD approved fire detection products carrying approvals and cross-listings, including VdS and NF, for all European countries. The ZETTLER care communications product line is a technology leader providing the latest IP based Nursecall, Emergency Call, Communication and Management solutions for care homes, hospitals, prisons, and related markets. The ZETTLER product lines are available through ZETTLER dealers as well as many ADT and Tyco offices around the world. For more information, visit www.tycoemea.com.