

HEALTH AND SAFETY – FIRE ALERTS



Despite a welcomed reduction in the number of site fatalities in recent years, construction remains one of Britain's most dangerous industries with over 2,800 deaths in the last 25 years.

The issue of health and safety is now as prevalent as ever and is a top priority for construction managers who are legally obliged to ensure a safe environment for site staff. In September 2010, the Health and Safety Executive (HSE) signed an agreement with the Building Control Alliance (BCA) in a bid to work more closely to improve health and safety standards in the construction industry, proving that health and safety is still at the top of the industry's agenda.

According to insurance company, You Claim, there are around ten construction fires every day in the UK. They can injure and kill people and often tend to cause serious financial loss, making them the most dangerous and expensive of all construction accidents. They are particularly severe when high risk activities are involved, such as hot work, and in environments where fires can spread quickly and where escape may be difficult.

Construction fire safety needs to be managed from the earliest stages of design and procurement. The construction manager's main concern is preventing fires from starting in the first place, often achieved through



One area that has been under particular scrutiny is that of fire safety. Recent spectacular fires, such as the Basingstoke care home site fire in September, have raised the profile of fire risk across all projects in the industry. The HSE has stated that 'we will ensure that fire precautions – both process and general fire precautions – are in place'. But, despite this, construction sites across the UK were served with over 200 enforcement or improvement notices related to fire matters between 2009 and 2010.



the use of proper technology and common sense, and then ensuring people's safety if they do.

Identifying the components that present a fire hazard, such as ignition, fuel and oxygen and planning ways of reducing their risk is often the first port of call in preventing fires. The ignition of a fire could come from smokers' materials, electrical items, heat sources and so on whilst fuel could be anything from volatile flammable substances such as paint

thinner, to packaging and rubbish. Oxygen seems like an obvious one, but anything from the air around us to the oxidising agents used in chemical work can all feed the fire.

The long list of rules and regulations currently in place in construction reflects the endless number of risks there are, some even yet to be discovered. But even after all measures have been taken, fires do start so fighting the fire, alerting everybody on site and ensuring people have means of escape are the next most important things.

Before anybody even sets foot on site, there should always be clearly accessible fire fighting equipment and a way of raising the alarm in the event of a fire – the latter often being the most expensive part of the health and safety planning process. The alarm needs to be clearly audible at all parts of the site, the size of which can vary considerably (and therefore requires extensive cabling and programming.)

In the economic climate we currently operate within, construction managers are desperate to minimise costs, without cutting corners that could potentially cost people's lives. There have been a number of solutions designed for the industry to help businesses meet the increasing health and safety requirements. From portable fire fighting equipment, to powder re-fillers for extinguishers, entrepreneurs have responded to the growing need for reliable yet cost effective equipment. The latest product to take the industry by storm is the new wireless emergency system, WES, from wireless communication specialists – Ramtech, which has revolutionised onsite fire alarms.

It is wireless, so it doesn't require electricians to install or power because it is battery operated with a built-in low battery warning LED. The wireless feature also means that it can be moved quickly and effectively from project to project making it re-usable and cost effective.

One of the requirements of the law is that construction sites need an alarm that can alert everybody in conditions where they may not see or hear an alarm. The WES system has an alarm, an integrated strobe as well as a siren, ticking all of the boxes.

One of the problems often faced by site managers using traditional fire alert systems is downtime caused by the need for routine testing. WES has a silent test feature which can be used to ensure the system is working, without the need for a full site evacuation. Other features include its ability to be able to reset the system from any fire point and the whole system can be programmed easily using a USB on a laptop through a very straightforward software utility.

Sceptics would say that a wireless re-usable system of this nature would become obsolete before long, but when put to the test, the WES system, which is housed in a robust and waterproof casing, can withstand the harshest weather conditions. Health and Safety Manager for Kier Partnership Homes, Ben Buttarazzi said: 'WES is the best and most effective system on the market. It has been tested in the most difficult of conditions on site, interacting within masses of steelwork and concrete structures and performed well above expectation'.

The quick installation and simple testing facility gives you peace of mind and enables health and safety requirements to be met at a cost much lower than that of traditional fire alarm systems. Once the industry starts to recognise the benefits of WES, it is likely that its wireless element will be exploited and rolled out into other health and safety solutions, bringing down the costs of health and safety in construction and improving the standard.

● For more information about fire safety visit www.hse.gov.uk For more information about WES visit www.ramtech.co.uk/wes