THE Beacon
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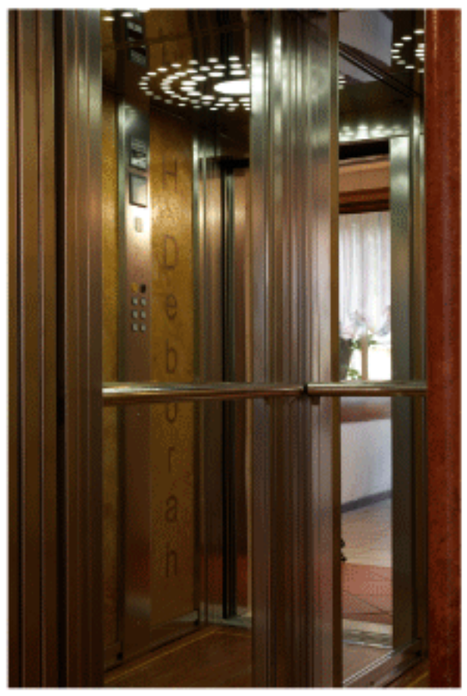
News and views from Fire & Security Consultancy Limited

Fire risk management & evacuation

Have you really considered how you would help others?

Ecocell® is the only solution for self evacuation in the event of a fire available today. M V Lifts have been installing Ecocell® evacuation lifts for more than 10 years, with over 200 units now installed throughout the UK. Ecocell® self evacuation lifts offer unrivalled quality and performance in this sector

The latest health and safety and fire regulations as quoted in the The Regulatory Reform (Fire Safety) Order 2005 state a 'responsible person' for all buildings, commercial or residential 'must carry out a fire safety risk assessment, implement appropriate fire precaution and protection measures that arise from the risk assessment, and maintain a fire emergency plan' whilst the Disability Discrimination Act 'provides for the safe and adequate provision of evacuation procedures for all who are mobility impaired'



Not having safe evacuation procedures in place can be potentially dangerous not only for you, your staff and third party visitors in any commercial premises but also your family and friends in any residential environment.

Would an evacuation chair be your first choice or last resort?

In the event of a fire, it is considered that lifts should not be used at all. As an independent UK leading lift installer and service & maintenance company, M V Lifts would say that this is generally true for all non-evacuation lifts. However there are instances where people who have a mobility impairment, a disability or who have become injured in the event of the fire that would benefit from having access to the EcoCell® particularly in an evacuation situation.

One common and considered cost effective option is to use evacuation chairs, solely for use in conjunction with staircases. They are often seen as the 'simplest, most practical solution' because of the limited knowledge of cost efficient alternative solutions.

Despite being light weight and easy to use devices evacuation chairs rely on the assistance of others for the quick and safe removal of people who are mobility impaired - putting not only the evacuees at risk but also those enabling the evacuation – and often at times of heightened stress and anxiety.

More importantly evacuation chairs only offer one-way transport (downwards), with the enabler only recommended to lift someone of their own body weight or less making the use of an evacuation chair somewhat a 'lottery' decision in an emergency situation. This puts not only the evacuee at risk but also those enabling the process. The costs associated with fitting the EcoCell® are highly competitive when you consider:

- the scale of personal injury claims brought forward by evacuees and / or enablers using evacuation chairs under duress and which are rising year on year. Repudiation rates have historically been high for public liability claims and the Compensation Recoveries Unit data shows an increase from 44% in 2011 to 50% in 2014.
- Repudiation rates continued to increase into 2015 (53%) according to the report 'An analysis of the personal injury claims market' by Weightmans Market Affairs Group 2015
- the EcoCell® is able to function daily as normal lift, helping individuals seeking assistance travelling up and down, whilst offering unique assistance in times of emergency evacuation
- the Ecocell® self evacuation lift can offer significant operating cost reductions and energy savings whilst being relatively easy to install as an upgrade
- the EcoCell® lift also continues to run in the event of total power loss to the building and not only when required for evacuation purposes

The Ecocell®

- can operate for up to 100 journeys on battery backup
- the batteries can be trickle charged from a single phase supply or from eco-friendly photo voltaic panels and/or wind turbine sources
- can be readily converted to fully compliant evacuation lifts
- can contribute towards BREEAM credits under Ene 8 'energy efficient lifts'
- only requires a 900mm pit depth when retro-fitting older less efficient lifts

Through extensive research, listening to our client feedback, and working with our supply chain M V Lifts have recently developed a number of innovative design changes. These include PV Cells for battery charging, visual battery monitoring and our latest innovation - the integrated access control for 'self' evacuation – making it the market leading option for the safe evacuation of mobility impaired individuals in the event of a fire.

With its' own in-built secondary power supply, which meets the requirement for 20 minutes of standby power (BS 9999), the integrated access control for self evacuation has been designed for use with all standard types of proximity detection systems. This is particularly effective for those systems used by the disabled or those with limited mobility at all times, as well as for evacuation purposes.

Moreover, installing the Ecocell® will also allow evacuees to reduce their waiting time in the designated refuge area and occupants could be starting to evacuate the building from the moment that the fire alarm is activated.

The Ecocell® self evacuation lift is fully compliant to BS 9999 and carries a strong BREEAM rating. With its' unique self evacuation qualities and energy efficiency, the Ecocell® is the only solution for those considering self evacuation at any stage of their project.

It's time to move lifts up your agenda!

For more information please visit **www.mvlifts.co.uk/ecocell** email **ecocell@mvlifts.co.uk** or call our sales team directly on **0115 973 7550.**

Ecocell
Evacuation Lifts

LEARN THE RULES

This year see's a revision of the BS 5266 standards to align itself with the European emergency lighting luminous requirement specification standard, BS EN 1838:2013. The changes provide guidance on the practice and application of emergency lighting and include the following additions to the existing standards.

- Risk assessments are needed for all premises, and that the risk assessment must identify the risk to people entering a premises and that a safe means of escape for all people including those with disabilities and visual impairments must be measured and identified.
- Illumination to be provided by covered high risk task lighting for people involved in potentially dangerous situations or processes and to enable proper shut-down procedures for the safety of the operator and other occupants within the premises.
- Guidance on the implementation of requirements and solutions, particularly around suitability and energy usage.
- Guidance on election and planning the scheme of required equipment.
- Reference to development of new system types.
- Guidance on illumination of external 'open balcony' approaches to flats/maisonettes within blocks.
- Swimming areas and swimming pool illumination guidance.
- Additional guidance on installation process, testing and commissioning.

The standards were created to provide detailed guidance on the application and practice of emergency lighting and to encourage uniformity of application. As well as to provide a wider understanding of emergency lighting systems and give guidance on how these different systems can be used within varying premises and with varied requirements.The standards have been produced for Lighting Engineers and Electrical Contractors to protect building occupants from hazards identified by risk assessments and also for 'responsible persons' for the following types of premises, and also include common access routes within blocks of flats or maisonettes.

- Hotels, guest homes, hospitals, care homes, colleges and boarding schools, where occupants will be sleeping.
- Recreational, non-residential premises such as exhibition halls, cinemas, theatres, pubic houses and restaurants.
- Non-residential premises used for teaching, training, research, offices, laboratories, schools and colleges.
- Public premises, non-residential such as libraries, shops, shopping centres, museums and art galleries.
- Sports Stadiums.
- Covered car parks.
- Manufacturing, processing or storage facilities.

The standard covers recommendations and guidance on factors to be considered during design, installation and wiring of electrical emergency escape lighting systems and gives recommendations for lighting areas with fixed seating (stadiums, concert halls, football and sports grounds).

For more information visit the Channel Safety Systems website or call **0845 8847000**

Strict sentencing means there's nowhere to hide on health and safety compliance

With stiffer sentencing guidelines for health and safety and corporate manslaughter now in force for England and Wales, the building industry must be even more vigilant when it comes to health and safety compliance, says Gary Plant, Managing Director of Altius.

While businesses may have robust procedures internally, what about health and safety processes across your supply chain, particularly sub contractors?

New sentencing guidelines, which came into force last year, aim to create a consistent, fair and proportionate approach to sentencing organisations or individuals convicted of corporate manslaughter and health and safety offences.

Hitherto, guidance for the courts in dealing with less serious health and safety has been lacking. The comprehensive new guidelines cover the most commonly sentenced health and safety offences in England and Wales.

Large organisations (taking into account turnover or other measures of financial health) committing serious offences are feeling the full force of the changes in higher penalties. The Sentencing Council has stated that some offenders will be subject to higher penalties, particularly large organisations responsible for more serious offences. But it says that fines will be *"fair and proportionate to the seriousness of the offence and the means of offenders."* As such, the guidelines set out sentencing ranges that reflect the varied levels of risk of harm that can result from such offences.

The guidelines provide a starting point and a range of possible fines dependent on the seriousness of the offence and how culpable the offender is judged to be. This could range from minor failings in procedures to deliberately dangerous acts. For serious health and safety breaches, individual company directors could face prison sentences and heavy fines.

The new guidelines mean there is nowhere to hide when it comes to facing up to health and safety breaches and even if procedures and policies are robust in your own organisation, you could face exposure from contractors and sub contractors. It is critical for organisations to scrutinise their health and safety policies, training and compliance, and ensure that risk is assessed across the entire supply chain and standards are applied and continuously monitored.

It's more crucial than ever before to robust compliance procedures. This might mean swapping archaic spreadsheet-based compliance systems for more agile compliance software systems that provide total supply chain visibility and a complete health and safety compliance audit trail that is easily accessible and retrievable should a company end up defending itself.

Altius' managed compliance services and software solutions help building firms to manage compliance across their entire supply chain.

Altius Exigo software, enables building firms to manage, monitor and maintain continuous contractor and sub contractor compliance. Exigo includes a host of features and tools to help you manage areas such as contractor on-boarding, risk profiling, pre-qualification, contractual compliance, audit management and performance monitoring.

For more information call **01332 960320** or email: **enquiries@altiusva.com**

BUSINESS AND PROPERTY PROTECTION PORTAL

The FPA's Business and Property Protection Portal utilises 'big-data' and real-life statistical sources, to allow all businesses access to state-of-the-art insurance style underwriting tools to deliver an intelligently generated risk report on any UK postcode and business type.

Furthermore, subscribing organisations are able to have their own liveried website and reporting output which can be augmented with their own library of resources.

Business and property protection, distinct from life-safety, is not a government responsibility. With the removal of the last of the local acts for fire in April 2015 the last provision for legally mandating for property protection disappeared and, with focus firmly on 'evacuation before collapse', building regulations and fire engineering, by default, provide little or no assistance.

"Responsibility for business and property protection and resilience-building is well defined within the job description of all those who define themselves as managing directors or CEOs. How much this is understood is difficult to quantify, but with the majority of surveys conducted investigating the uptake of business continuity planning within the SME market showing shockingly little is done, it is probably safe to assume that this element of the job description is both misunderstood and neglected" **Dr Jim Glockling**, FPA Technical Director.

The brain of the portal takes the UK postcode and simple inputs on business and building type, and queries crime, flood, fire, geo-environmental and many other datasets to determine critical risk factors. A bespoke report of resource content specifically aimed at addressing the identified risks pertinent to the location, historic business loss statistics, and business/building type is produced, removing all superfluous advice.

The scale of both 'big-data' input and availability of use is unique in the UK. The Business and Property Protection Portal could revolutionise the UK's approach to the provision of business continuity and resilience advice for all perils including fire, flood, and criminal activity such as vandalism and cybercrime.

For more information visit **www.thefpa.co.uk**

Parliament burned down 183 years ago. Only 24-hour patrols are stopping another fire.

Engineers urge immediate work on 'antiquated' alarms in £3.5bn restoration

Toby Helm
Observer political editor

Photograph: Maurice Flickr.com

It was, said the Illustrated London News edition of April 1847, *"without doubt the finest specimen of gothic civil architecture in Europe: its proportions, arrangement, and decoration being perfect, and worthy of the great nation at whose cost it has been erected"*. Queen Victoria was equally approving, writing in her diary that year that *"the building is indeed magnificent, in gothic style very elaborate and gorgeous…the whole effect is very dignified and fine"*.

Designed by the architect Charles Barry, in collaboration with Augustus Pugin, who was responsible for the detail on the exteriors and most of the interior design, the new Palace of Westminster met with almost universal approval as a replacement for its ancient predecessor, large parts of which had been razed to the ground by a fire in 1834. Tsar Nicholas I called it *"a dream in stone"*.

Caroline Shenton, author of a recent book, Mr Barry's War, an account of the reconstruction, says the fire had been *"an accident waiting to happen"*. It was, she found, *"caused by the burning of two large cartloads of wooden tally sticks (a form of receipt for government income kept in the Exchequer, whose offices were in the old palace) in the underfloor heating furnaces beneath the House of Lords chamber on 16 October 1834. The labourers were unsupervised and a chimney fire smouldered in the flues for much of the day. No one went to check when there were warning signs, and at six in the evening the fire broke out and quickly engulfed the whole building."* Lord Melbourne, in the subsequent inquiry, described the fire as *"the greatest instance of stupidity on record"*.

Now, 183 years on, the Observer has seen a confidential report by fire safety engineers showing the extent to which Barry and Pugin's masterpiece is at risk of a similar fate because of seriously inadequate and failing safety systems, as the palace prepares for a huge refurbishment that is not due to start until after the 2020 general election. The work is likely to mean MPs and peers evacuating to temporary accommodation in Westminster for a minimum of five to six years and is estimated to cost at least £3.5bn. But some MPs say that total evacuation is unnecessary and will be too disruptive, and back options for only a partial exodus that will delay.

The Commons authorities are, however, increasingly worried about further delay, having been warned in the secret report they commissioned from fire safety engineers last autumn of a "life safety risk". On Sunday the all-party Treasury select committee announced its own report into the restoration, saying that insufficient evidence and information has been provided to MPs on the costs and potential disruption from the options and timetables so far suggested.

The Observer can also reveal that, unbeknown to MPs and peers, the palace is only able to comply with a 2005 fire safety order – which makes it legal for use – because of 24-hour fire safety patrols that are now carried out behind the scenes by 24 fire patrol officers on the parliamentary estate, who do six-hour shifts around the clock.

The report states that the fire alarm systems are inadequate and require *"immediate work"*. The engineers said: *"It is imperative that these works are procured and delivered quickly."* They also reported a lack of escape routes. *"There is a lack of coverage in areas, particularly means of escape routes. This is considered a noncompliance for life safety and therefore additional detection should be provided to these routes as a priority."* The cost of the 24-hour patrols makes up a large part of the annual bill for keeping the palace in a usable state, which hit £49m at the last count.

A Westminster source said fire alarm cabling and systems were *"so antiquated that they fail regularly and replacement parts are no longer available. The poor disabled access in the palace means emergency evacuation procedures for people with mobility impairments do not meet acceptable standards."*

Some 60 incidents with potential to cause a serious fire have been recorded since 2008. *"A fire above one of the plant rooms recently was caused by an old electrical cable, and was only detected by chance,"* said the source. *"Had it occurred at night or at the weekend it is highly likely that it would have caused major damage."* The Observer has also been told that high levels of asbestos are expected to be found – including behind the wood panelling of the Commons chamber.

In a report last year a joint parliamentary committee of MPs and peers appointed to examine the refurbishment options concluded that the restoration and repair works were essential to mitigate fire risks, and warned of the potential for catastrophe. The committee backed the *"full decant"* option of evacuating the palace completely.

Chris Bryant, a Labour MP on the committee, said: *"All the evidence points to having to move out of the whole palace simultaneously. That is the lowest-risk, most cost-effective and quickest option."*

A Commons vote on whether to press ahead with a full or partial evacuation is expected in the comings weeks.