IOSH Fire Risk Management Group
Back-to-Basics Webinar 5: FRMG Principal 5: Designing for fire safety.
1230-1330. 10 February 2022.
Questions received from Zoom participants and suggested answers offered.

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1	Are you circulating slides after the event ? A copy of the presentation will be available on the FRMG IOSH webpage and a recording of this webinar available on our YouTube page: https://www.youtube.com/playlist?list=PL0kuRSI454qIgBvn2rRdYuFRZQPxPYGK7
2	Can you let me know what the legality is for having Fire Extinguishers in open sided Multi-Storey Car Parks (MSCP)? The **Regulatory Reform (Fire Safety) Order 2005** (RRO) would be the fundamental legislation affecting fire safety within an open-sided MSCP. In this there would be a requirement for provision of fire fighting equipment including fire extinguishers. However, it is now a significant point, in the light of growing numbers of 'alternative-fuelled vehicles' (AFVs) as to what the fire extinguisher medium should be. (See the section in Webinar 6 to be held on 10 March at 12:30 on electric vehicles). Fire safety standards would include **Approved Document B, Part 2** table B4 page 6 in the Amendments and NHS HTM 05-02. Fire extinguishers would be expected to be deployed at fire call points on pedestrian fire exits from floors of the building. Following the King's Dock, Liverpool fire in December 2017 the FRS Report contains very useful information and commentary. Merseyside-FRS-Car-Park-Report.pdf (bafsa.org.uk)
3	What competency does is a "responsible person" supposed to have? The new Fire Safety Act 2021 introduces some changes to duty holders and accountable persons. As with all safety competency issues knowledge, approach, training and experience (KATE) are the fundamental tenets of established fire safety competencies. Any responsible person needs to have the knowledge, experience and training, and on-going CPD, to undertake their role properly.
4	Can tenants be considered as an occupier? A tenant or tenants are those who sign a lease contract with the lessor. They alone carry the associated financial obligations, such as rent payment and repairs. An occupant resides in the tenant's leased space with the owner's permission. These could be family members, a friend, or their partners and dependents etc. Occupiers do not pay the rent and are not entitled to tenant's rights under the law. So, a tenant could occupy a property but an occupier is unlikely to be a tenant.
5	Is there is any available material or document for HTF fire firefighting system in solar thermal power plants? Thank you for this interesting question regarding fire fighting in Heat Transfer Fluids that are used as a heat transfer medium in solar power plants, as opposed to PV solid-state systems. Various types of heat transfer fluids including air, water/steam, thermal oils, organic fluids,

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	molten-salts and liquid metals are reviewed in detail, particularly regarding the melting temperature, thermal stability limit and corrosion issues. Eight parameters for interpreting the state of HTF fluids in thermal solar power plants | Lubrication Management (lubrication-management.com). The key issue is that HTF fluids, such as aqueous propylene glycol (PG) mixtures or silicone fluids, that transport heat in solar thermal power plants, degrade with use. To determine the status of such fluids, a series of periodic analyses must be carried out in order to evaluate various parameters and to determine whether the fluid has the capacity to continue its function or otherwise needs to be replaced. Tests focus on appearance, viscosity, acidity, water content, particulates, high and low boiling point contaminants and flash-point. PG antifreeze fluid systems may need changing as often as every three years. Heat Transfer Fluids for Solar Water Heating Systems | Department of Energy FPRF_FireFitherSafety.pdf (solsmart.org)
6	What is the name of the document Michael mentioned, and where can we get the download please? There are a series of UK Government documents on fire risk assessment in particular industrial and commercial sectors. These excellent no-cost assessment guides may be found at the following website. Fire safety in the workplace: Fire risk assessments - GOV.UK (www.gov.uk)
7	Can Michael comment on the proposed Irish COP for Fire Safety Assessments, especially the issue of competence and if there is any update on when it may be issued? The draft Code of Practice was issued for public consultation, during 2021. The National Directorate for Fire and Emergency Management has confirmed that following consideration of observations received by the Department, a revised draft is under preparation for publication. Other than what is defined in the Safety, Health and Welfare at Work Act 2005, we are not aware of any law that addresses the competency requirements that are needed for Fire Risk Assessors in Ireland. **However, please note the following from Part 1, page 10 of the Health and Safety Authority's Guide to the 2005 Act. Health and Safety Authority, 10 Hogan Place, Dublin 2. www.hsa.ie ISBN: 1-84496-028-5:** *(2) (a) For the purposes of the relevant statutory provisions, a person is deemed to be a competent person where, having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in which he or she undertakes work, the person possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken.*

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	There may be confusion with the Code of Practice for Inspecting and Certifying Buildings and Works. However the Code of Practice makes no reference to "fire risk assessment,". The Assigned Certifier must confirm compliance with the building regulations, not just fire safety. Currently there is no "Fire Risk Register of Assessors" in Ireland. Members looking to expand their knowledge in Fire Engineering can explore college courses at many locations throughout Ireland.
8	Can Michael recommend Fire Safety Management courses (Operational rather than Engineering)? Many organisations such as IOSH, NEBOSH and IFE offer professional fire safety training courses, either in person or on-line presently due to Covid restrictions. There are many commercial organisations who also offer general and specialised training in particular areas of fire safety. The Fire Safety College in Moreton-in-Marsh, UK, has an extensive prospectus of courses. Training (fireservicecollege.ac.uk)
9	Referring to the King's Cross Underground fire, the complexity of the underground station and its high level of use, how frequently should the design of the facility, maintenance and fire precautions should be carried out? Thankfully we have come a long way in terms of fire safety since the King's Cross fire on 18 November 1987 and standards and approach have improved. With so much emphasis now on FRA and Integrated Fire Risk Management Systems measuring fire safety performance and on-going monitoring should be readily available within the system. There are at least three numerical suggestions as to the frequency of this monitoring: in each case the frequency is a function of the incident data reporting system, which should be at least monthly. Keep a track of the performance of the FRMS each month. There should be an annual maintenance programme with a complementary renewals and upgrade programme, monitored on a quarterly basis. Design issues should be part of the continuous monitoring process but as often fewer aspects of design change regularly design reviews may be on a more reactive basis, initiated for example coincidentally with changes in legislation and guidance, or at least three-yearly. The fire risk assessment will advise if more frequent servicing or testing is required.
10	What fire safety measures would you expect for server rooms? Common causes of fires in server rooms include failure of electrical equipment, overheating electronics, sub-floor power cables, 'daisy-chained' distribution boards and fires in ancillary ventilation equipment the standard list of fire precautions would include: - Complete a Fire Risk Assessment. - Undertake regular inspections.

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	- Follow-up with good housekeeping and waste management, particularly with respect to storage of combustibles. - Keep equipment cool and well ventilated. - Design and install well designed charging facilities for Li-ion batteries etc and battery back-up systems. - Install well engineered fire detection and fire fighting equipment. - Spot checks/ inspections of area to ensure controls are being maintained. - Review of the fire risk assessment. Regarding fire fighting equipment, 'clean' extinguisher systems are common now. 'Clean' refers to the effect that there is no residue remaining from the extinguishing medium, as often media are gas systems, such as CO_2, IG-55 (Argonite: Ar + N_2), IG-541 (Inergen: N_2 + Ar + CO_2) and FM200 and 3M Novec 639/1230 'dry water' fluorinated ketone. FM200 fire suppression systems, safety, applications, longevity, extinguishing capabilities Novec 1230 Fire Suppression & Protection | 3M United Kingdom
11	Some commercial landlords argue that they are not the responsible person where they have tenants and FM companies in place. Surely the landlord also has responsibility and is one of the responsible persons and should have the R38 file, building strategy etc. Would you not agree that the landlord should pay for any missing information to be provided to its tenants, where it does not yet have the information? Thank you for the interesting question. The R38 file you refer to is in relation to Approved Document B, Volume 2, 2019 & 20 which addresses Fire Safety Information. ADB_Vol2_Buildings_other_than_dwellings_2019_edition_inc_2020_amendments.pdf Regulation 38 is concerned with building work in relation to construction or extension of buildings or work carried out in connection with change of use of the building. The person carrying out the work shall give fire safety information to the responsible person not later than the date of completion of the work, or the date of occupation of the building or extension, whichever is the earlier. "Fire safety information" means information relating to the design and construction of the building or extension, and the services, fittings and equipment provided in or in connection with the building or extension which will assist the responsible person to operate and maintain the building or extension with reasonable safety. Other defined terms such as relevant building, relevant change of use and responsible person follow definitions or application of the Regulatory Reform (Fire Safety) Order 2005. Note also that there is an iOS and Android App for compliance with Reg 38. Regulation 38 app - Building Regulations Compliance | Regulation 38 The aim of this Regulation is to ensure that the person responsible for the building has sufficient information relating to fire safety to enable them to manage the building effectively.

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	The aim of Regulation 38 will be achieved when the person responsible for the building has all the information to enable them to do all of the following: a) Understand and implement the fire safety strategy of the building. b) Maintain any fire safety system provided in the building. c) Carry out an effective fire risk assessment of the building. For building work involving the erection or extension of a relevant building (i.e. a building to which the Regulatory Reform (Fire Safety) Order 2005 applies or will apply), or the relevant change of use of a building, fire safety information should be given to the responsible person at one of the following times: a) When the project is complete. b) When the building or extension is first occupied. Basic information on the location of fire protection measures may be sufficient. An as-built plan of the building should be provided showing all of the following: a) Escape routes. This should include exit capacity (i.e. the maximum allowable number of people for each storey and for the building). b) Location of fire-separating elements (including cavity barriers in walk-in spaces). c) Fire doorsets. Fire doorsets fitted with a self-closing device and other doors equipped with relevant hardware. d) Locations of fire and/or smoke detector heads, alarm call points, detection/alarm control boxes, alarm sounders, fire safety signage, emergency lighting, fire extinguishers, dry or wet fire mains and other firefighting equipment, and hydrants outside the building. e) Any sprinkler systems, including isolating valves and control equipment. f) Any smoke control systems, or ventilation systems with a smoke control function, including mode of operation and control systems. g) Any high risk areas (e.g. heating machinery). Details should be provided of all of the following: a) Specifications of any fire safety equipment provided, including routine maintenance schedules. b) Any assumptions regarding the management of the building in the design of the fire safety arrangements. c) Any provision enabling the evacuation of disabled people, which can be used when designing suitable personal emergency evacuation plans. A detailed record should be provided of both of the following: a) The fire safety strategy. b) Procedures for operating and maintaining any fire protection measures. This should include an outline cause and effect matrix/strategy for the building.

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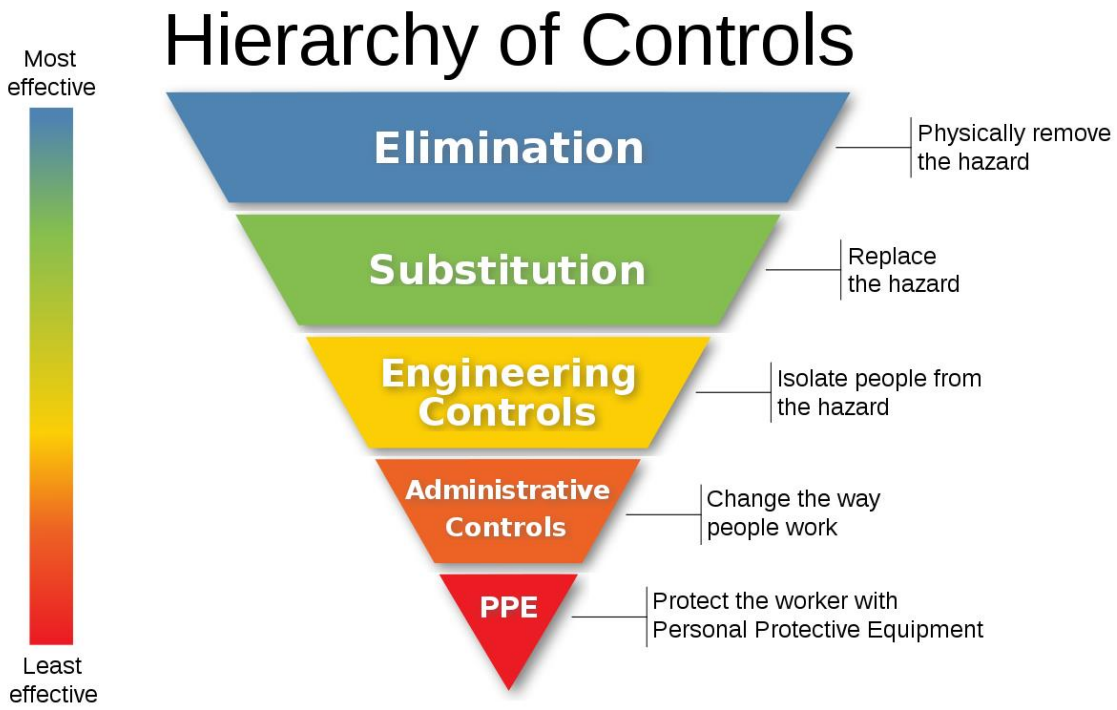
	From the above extracts from the Regulation it is abundantly clear that the landlord has a duty as a responsible person to provide in a timely manner this statutory information and to maintain the information up-to-date. Coincidentally, the landlord should also fund the replacement of missing information and that information handed on to tenants and other interested parties should be available in hard copy upon request where appropriate. Information should not require special technology, which may be out of the reach for some people to read it.
12	I am working in Qatar. Before I joined that project a newly under construction rice silo caught fire on top of the silo due to careless work with a grinding wheel. The silos were insulated by foam and some chemicals. As a result of the grinder work the silo caught fire at night and burnt for up to 3 days. It was huge loss for the client and the contractor. How would we minimise the risk of fire? Suggestions are required! Thank you. Thank you for the question. What you have described sadly is still so common in industrial fire safety. The description suggests that a hot work operation has gone wrong and caused a smouldering fire in insulation material. Fundamentally you could simply prohibit hot work and that would remove the risk of fire from this cause, by removing the original hazard at source. If elimination of hot work is judged to be impossible, with a view to completing the task in a timely manner, then safe ways of undertaking hot work should be found. This may involve other aspects of the **hierarchy of controls** as well as a hot-works permit**.** 

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	If hot work cannot be eliminated 'cold cutting' techniques would have to be substituted or materials fabricated off-site in a factory or in a yard at ground floor level and subsequently lifted into place. In terms of isolation, can hot work not be done away from high risk areas? Isolation and other engineering controls can be used for isolating sparks and igniferous debris from falling onto flammable materials and combustible solids etc. Examples here are using fire blankets to control the sparks which could fall onto the insulation foam. We should be trying to engineer out hot work as much as possible and also use administrative controls (including a permit-to-work or hot works permit) to plan, account for and undertake the job safely too, with special effort being placed on employee and contractor training including maintaining a fire watch for at least an hour after the last work activity has been judged to have 'gone cold' on the completion of the task.
13	Can you explain why IOSH are referring to Zurich standards? Yes, certainly! One of the TOR of the IOSH FRMG is to keep up-to-date with as many aspects of the ever fluid fire safety industry so we can monitor developments and pass-on relevant data and information to members, as we do in update and CPD sessions. In April 2021 there was a virtual fire safety conference sponsored by Zurich Insurance. As insurers, Zurich promotes the importance to recognising the benefits of protecting properties within holistic fire prevention strategies. That way, if an incident did occur, the impacts are likely to be reduced.
14	Shepperton studios are to be tripled in size. Fire risks in terms of design and use are complex. It is likely that combustible materials and sources of ignition will be wide and varied. What is the prime requirement for managing this complex development at Shepperton Studios? Fortunately for you this sounds to be an exciting new project! The fundamental requirement for successful project management in a project of this scale would be to establish a Fire Risk Management System which integrates with the Corporate Safety Management System, the Environmental / Sustainability Management System, Principles of Risk Management, as summed up in a Risk Register, Building Information Modelling (BIM) and the CDM Regulations project plan and adopts modern methods of constructions with modern materials that are 'factory built' before delivery to site. At the top of the FRMS will be the Fire Safety Strategy for the new build and the site and alongside will be the essential links to the contractors with the Principal Designer and Principal Contractor and the workforce that will be undertaking the work. Their competence and particularly training in safe working will be fundamental to minimise fire risks throughout the construction phase of the work. Monitoring and reporting systems must be in place throughout as well as strong controls in terms of fire prevention. If resources are not free in-house to run this project consider handing over day-to-day management to a fire safety consultant. You could even use the presentations in these IOSH FRMG Webinars as training aids for the Principles of fire safety.

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	One useful guide is referenced below. 16-Steps-To-Fire-Safety-v4.3Oct2017.pdf (taylor-lane.co.uk) For some of the suggested details, see the answers to questions 15 and 31 below.
15	What are your thoughts around fire safety strategy drawings? Fire strategy drawings play a vital part in managing the fire safety in any building. They help the occupants and owners understand the building, and also help external organisations such as the Fire Service or contractors working in the building. **Article 11 of the RRFSO** requires the Responsible Person to provide "effective planning, organisation, control, monitoring and review of the preventative and protective measures" and "to record the arrangements". Also **Regulation 38 of the Building Regulations** requires that a package of fire safety information must be assembled and given to the Responsible Person, and building owners that do not have this information should have a strategy created and also generate the information that they should have. The majority of new build developments will have a fire strategy as part of the design process, which is typically reviewed and revised as necessary during the project, right up until completion. However, this fire strategy will need to be reviewed after the building is in use, and it may be necessary to tailor the strategy to the requirements depending on the use of the building. The simplest graphic means to capture this information is by producing fire safety strategy drawings and plans. Fire Strategy plans are generally used by Fire Risk Assessors to create a strategy for a building which will reduce the risks of fire and improve the safety of the occupants. You will often find fire compartmentation lines drawn on these with specific colours for the number of minutes each compartment wall is. It can also include other fire safety equipment such as fire doors, fire detection systems and suppression systems if installed. Evacuation plans are crucial, particularly in buildings where persons could potentially be unfamiliar with the layout and where to go. The evacuation plans are normally designed in accordance with the Fire Strategy. They would normally be displayed in necessary areas depending on use of the building. It would also show routes to assembly points and locations of firefighting equipment. This is useful for those looking to fight the fire, as well as those looking to run for it. Drawings and plans will be digitised now with computer aided design systems and should integrate also with Building Information Modelling. Building Information Modeling - an overview | ScienceDirect Topics See below for a typical relational diagram for the contributors to a Building Information Model.

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16	I see people writing about designing out fire risk at preconstruction phase and can you further explain and give examples of this. Designing out fire risks at the pre-construction phase of a project is within the duties undertaken by the Principal designer of the works. Principal designers must plan, manage,

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	monitor and coordinate health and safety in the pre-construction phase. In doing so they must take account of relevant information (such as an existing health and safety file) that might affect design work carried out both before and after the construction phase has started. The PD would need to take specialist advice from fire safety engineers and other experts, help and advise the client in bringing together pre-construction information, and provide the information designers and contractors need to carry out their duties. They need to work with any other designers on the project to **eliminate** foreseeable health and safety risks to anyone affected by the work and, where that is not possible, take steps to **reduce or control** those risks ensure that everyone involved in the pre-construction phase communicates and cooperates, coordinating their work wherever required. PDs liaise with the principal contractor, keeping them informed of any risks that need to be controlled during the construction phase. The concept of Designing for Fire Safety goes a long way to eliminating the fire risks and certainly minimises risks through careful selection of materials and processes for safe working. Construction - Principal designers: roles and responsibilities CDM 2015 (hse.gov.uk) Using concepts such as modern methods of construction are excellent at minimising fire risks during the actual construction processes especially when M&E contractors are able to avoid hot works by using compression fittings and cold cutting techniques.
17	What is the maximum distance for a disabled refuge point to be placed in respect of the external exit from the building? A refuge is a safe place for disabled people to wait for assistance in evacuation from the building. It should be an enclosed area of at least 30 minutes of fire-resisting construction and be served with a safe route of exit. The refuge will often be in a fire compartment of its own such as a protected route or fire resisting staircase. In Table 2.1 (Limitations on travel distance) in Approved Document B for residential buildings and assembly and recreational buildings primarily for disabled people maximum travel distances from the person's location to a place of relative safety, such as in horizontal evacuation to the next compartment, are given as 9 metres and 18m, for one direction and multiple direction escape routes. This would suggest that where there are true alternative means of escape from the refuge in the final compartment or protected route to a final exit from the building then the maximum distance would be 18 metres. 9446 DCLG Fire Risk Means of Escape Insides.indd (publishing.service.gov.uk) Fire safety risk assessment: means of escape for disabled people (accessible version) - GOV.UK (www.gov.uk) Note also the special case in Residential Care Homes that every protected area should have a minimum of two exits to adjoining protected areas. Maximum travel distances within a protected area should be both of the following: (a) to the exit to the adjoining protected area:

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	as shown in Table 2.1 and (b) from any point to a storey exit or a final exit: 64 metres. Approved Document B: section 2.37, page 25. 2019 edition.
18	What are the best suitable detectors in high moisture area especially in the poultry industry where we normally receive a false alarms due to smoke detectors sensing the fog as smoke. Heat detectors, or more accurately rate of temperature rise detectors are more appropriate for applications where there is high moisture content in the atmosphere.
19	What about houses with multiple tenants but shared facilities? Are these multiple premises? A house in multiple occupation (HMO), or a house of multiple occupancy, is a term which refers to residential properties where 'common areas' exist and are shared by more than one household, for example a family. You must have a licence, valid for 5 years, if you're renting out a large HMO in England or Wales. Your property is defined as a large HMO if all of the following apply: - it is rented to 5 or more people who form more than 1 household. - some or all tenants share toilet, bathroom or kitchen facilities. - at least 1 tenant pays rent (or their employer pays it for them). Renting out your property: Houses in Multiple Occupation (HMO) - GOV.UK (www.gov.uk) House in multiple occupation licence - GOV.UK (www.gov.uk) So, No! There is nothing within the standard definition of a House in Multiple Occupation to suggest that it would be multiple premises. Each HMO could be one property.
20	What are the requirements in regards to the number of fire extinguishers and distances between them? There are a few factors that need to be considered, firstly what is the building being used for, what type of process work is being undertaken and with what materials and what are the dimensions from work rooms or work stations to final exits. All this data, and much more should be found in the fire risk assessment for the building / property. Fire extinguishers are often located near fire alarm call points so that someone can raise the alarm and then pick up an extinguisher. Fire Alarm Call Points are often located beside exits from buildings or where you move through fire doors from one fire compartment in a building to another compartment. Extinguishers should be sited so that it is not necessary to travel more than 30 metres to reach one. So, therefore, as a somewhat variable 'rule-of-thumb' extinguishers can be 60 metres apart. This information can be found in the free guidance provided on the government page below. There is specific guidance depending on the area you are referring to.

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	https://www.gov.uk/government/collections/fire-safety-law-and-guidance-documents-for-business
21	Please can you add the link to the Building Safety Bill into this webinar please? I am currently reviewing a doc which is dated 2020 - I want to ensure I am using the correct document please. The following websites are the starting point for all enquiries about the Building Safety Bill. Building Safety Bill - GOV.UK (www.gov.uk) Building Safety Bill: draft regulations - GOV.UK (www.gov.uk)
22	I'm seeing a fair bit of push back on the Building Safety Manager role and that this is should be a business function rather than a role. Do you have any thoughts? Yes. The Building Safety Manager role should certainly be a business function for most enterprises.
23	How far away should combustible materials be kept away from buildings, if not specified from the insurance perspective? There are no commonly available tables of data to indicate the safe distance from buildings for the storage of combustible materials, as may be available for flammable liquids, gases and safety distances for explosives. To calculate a safety distance for combustibles could be possible but it would depend heavily on the variables: the mass, type and physical state of the combustible fuel, the receptor; what is the structure of the target or outer surface of the building, the heat flux available from the fuel and the transmissibility between the source and the target. Construction - Fire safety regulations industry health & safety (hse.gov.uk) As a general figure a safe distance between combustible materials and building would be between 5 and 10 metres, and nearer to the 10 metre value if the building was clad with timber to ground level for example. However, the Scottish Government has re-emphasised some well-established general purpose advice: Practical fire safety guidance for existing non-residential premises - gov.scot (www.gov.scot) The main focus of this question has historically been in terms of waste management and where the waste material has been combustible packaging. The golden rules are: - Ensure that waste is NOT stacked up outside a building and in contact with outside walls, particularly near doors, windows and ventilators - NEVER permit any waste materials to be stored under eaves, or in covered loading bays etc which could become smoke logged. - Be vigilant about house keeping. Use locked external bins, lidded skips and storage containers to prevent arson or criminal damage and theft.

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	- Loose materials should be stored in separated stacks with sufficient space to prevent communication of a fire from one stack to another. - Minimise sources of ignition and carelessly discarded smoking materials.
24	Thank you Michael for the presentation and information, good coverage of the subject. Thank you.
25	Is there a CPD Certificate for this course? There is no individual CPD certificate for this course but you can use the slides and recording of the webinar as your evidence.
26	Thank you very much for the presentation. How can individuals implement personal fire safety in our homes in regards to Modern Methods of Construction? I will like your advice in regards to costs and effectiveness too. Thank you. Your question makes an interesting discussion point. With some specific exceptions MMC is not currently focussed on the domestic market and not in any retrospective way in making modifications and amendments to 'as-built' property. For new build apartments MMC techniques are certainly used in off-site manufacturing and assembly of component parts. In larger homes, wooden construction and timber framing is used extensively, especially in Scotland. Costs of this technology will be lower than traditional 'brick, block, stone and slate' and with proper insulation, bult in from new energy efficiency will be higher. The specific exceptions, at an operational level could focus on choice of fuel technology for heating homes and cooking equipment etc. In Webinar 6 we shall be looking at this with developments in hydrogen as an energy source.
27	Would we expect to see an increase in sprinkler systems being requested? What are general thoughts on them? Yes. It will be inevitable soon that more sprinkler systems will be installed in both commercial and domestic properties. In October 2013 the National Assembly for Wales passed new regulations that require fire sprinkler systems to be installed in new and converted houses and flats. The Assembly also amended Approved Document B, volumes 1 and 2 with new guidance. The fundamental advantages are in life safety and property protection and although the expense is not slight the CBA suggests there are outright benefits in cost effectiveness of having an intrinsic automated Fire Protection System. In addition to saving lives, there are advantages in reducing the risks of material damage after a fire with a system that has minimal maintenance. Advantages are said to include reduced insurance costs and an increased value in the property.
28	As the presentation is aimed at the less experienced, can you just clarify that the Regulatory Reform (Fire Safety) Order 2005 is commonly referred to as the FSO, not the RRO. There are several other Regulatory Reform Orders under the Regulatory Reform Act 2001.

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	Yes! Thank you for the observation. You are absolutely correct. We all lapse into jargon so easily and so often groups of people have their own terminology. But at the end of the day, we all know what these common terms mean.
29	What's the difference between a fire safety policy and a fire strategy? In general, a safety policy is broken down into three components: 1) A General Statement of Intent which outlines the organisation's overall vision and values in relation to management of health and safety. 2) An Organisation section dealing with people and their duties. This will outline health and safety responsibilities and who is responsible for each arrangement within the organisation. a. It should detail how accountability is fixed so as to ensure that delegated responsibilities are undertaken? b. How is the policy implementation monitored? c. It should also include individual job descriptions having a safety content; details of specific safety responsibilities; and role and function of the safety officer and a management chart clearly showing the lines of responsibility and accountability in terms of health and safety management. 3) Arrangements for Systems and Procedures. This part of the policy deals with the practical arrangements by which the policy will be effectively implemented. a. These include: safety training; safe systems of work; environmental control; safe place of work; house keeping; internal communication/participation; fire safety and prevention; first aid procedures and accident reporting. b. The findings of your Risk Assessments will form the basis of this part. Exactly the same model can be utilised for a fire safety policy. However, this is not simply adding the adjective 'fire' in front of all references to safety but adding-in all the strategic, tactical, operational, managerial and engineering aspects of firefighting and fire safety. A fire safety strategy could be described as a high-level plan that is designed to focus the organisation on meeting strategic objectives or goals in fire safety, such as no outbreaks of fire, no product or material losses, no risk of injury to staff and contractors etc from fire, fire induction training to be held on day 1 for new employees, routine management and maintenance of fire protection measures each quarter etc. The strategy can be developed for an individual company, site, workplace or production area.
30	Hi, Is there a presentation for part 2? Yes. All the webinar Presentations have been made available on the YouTube page via the IOSH FRMG portal. https://youtu.be/_u8N0s8_dmI https://www.youtube.com/playlist?list=PL0kuRSI454qIgBvn2rRdYuFRZQPxPYGK7

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31	Thank you very much for your presentation. I am currently working in a developed country and currently there are no local regulations regarding fire safety in terms of planning to construct a new building. My holding company back in my home country have an established standard which are supported by local regulations, but due to historical backgrounds, my managers tend not to fully refer to the standards. Any suggestions to make a comprehensive summary which could fulfil both standards and management's considerations? In the circumstances I think that even if there are no specific regulations for fire safety and fire precautions there must be some general safety related guidance to follow. If you cannot enable the principles and practices from your home country, which may be entirely foreseeable, then you should set about writing your own 'Corporate Standards' which hopefully your managers will commend you for. To build up your fire safety strategy which will go into your fire risk management system you should start with the over-arching values of fire safety. These are the needs to safeguard life, protect property and establish and maintain ongoing continuity of business. As we have described in these webinars the IOSH FRMG has established its SIX 'back-to-basic' principles of fire safety. The following diagram illustrates the component parts. NOTES: The Fire Risk Management System should comprise at least the following six themes. 1) A risk strategy 2) Values 3) Principles 4) A safety framework 5) Standards to be achieved and upheld 6) Ability to demonstrate competence Each is based on the Plan-Do-Check-Act cycle. IOSH FRMG Principals 1) Understanding the science of fire 2) Fire prevention 3) Fire precautions 4) Fire investigation 5) Designing for fire safety 6) Keeping knowledge and CPD up-to-date

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The safety framework needs to include:

- Leadership and commitment
- Planning
- Support
- Operation
- Induction and training
- Supervision
- Performance evaluation
- Monitoring
- Reporting
- Auditing and
- Review.

Standards, visions, values and expectations should be focussed upon:

- Personal goals and visions
- Professional standards, i.e. compliance with IOSH Values
- Corporate standards
- Project standards
- Local and cultural standards
- Global standards
- International standards
- National standards
- Regional standards, where applicable
- Industry based standards

No.	Questions and answers
	- Sector standards. Two significant standards which will assist you are British Standard BS 9997:2019: Fire Risk Management System (FRMS) and BS 9999:2017 on Fire Safety in Design. BS 9997 was developed to address management system failings which have been identified as contributors to a number of major fires. Implementing and independently certifying a FRMS gives organisations robust assurance that they are meeting the requirements of all relevant fire safety legislation. It also shows a commitment by senior leaders to provide resources, support and awareness to manage fire risk. Whilst primarily intended for designers, fire engineers and fire safety managers, it is expected that BS 9999 will also be of use to: - specifiers, contractors, site supervisors and site safety officers - owners, tenants, occupants, facility managers, safety officers and security - staff - regulators and enforcers, including building control bodies, fire authorities, - health and safety inspectors, environmental health officers, and - environmental agencies. BS 9999 is designed as a coordinated package covering the four main areas that influence fire safety measures: 1) fire safety management 2) the provisions of means of escape 3) the structural protection of escape facilities and the structural stability of the building in the event of a fire and 4) the provision of access and facilities for fire-fighting.

Keywords:

Building Safety Manager
Competency
Design review
Fire extinguisher
Fire safety management training
Fire Safety Policy
Fire Safety Standards
Fire Safety Strategy
Heat Transfer Fluids
HMO
Hot works
Irish COP
IT server rooms
King's Cross fire
MMC
MSCP
Occupiers
Pre-construction phase fire risk
Rate of temperature rise detectors
Refuge points
Regulation 38
Safety distance
Sprinkler system
Tenants